

TR-AC-0052

002

サブバンド信号処理に基づくアダプティブアレー
アンテナ制御アルゴリズムのDSP化に関する検討
並びに、エスパアンテナの解析
及びその制御アルゴリズムの開発

廣 獵 優 治 (学外実習生)
神 谷 幸 宏 大 平 孝

2001. 2.20

ATR環境適応通信研究所



目次

1.	はじめに	4
2.	サブバンド信号処理を行うアダプティブアレー	
2.1	はじめに	
2.1.1	目的	5
2.1.2	動作原理	5
2.2	計算機シミュレーション	
2.1.1	動作原理をシミュレーションで評価する	8
2.1.2	DSP(16bit 固定小数点型)による実装をシミュレーションで 評価する	11
2.3	まとめ	14
3.	エスパアンテナ	
3.1	はじめに	
3.1.1	目的	15
3.1.2	エスパアンテナの構成	16
3.2	アドミタンスの計算	
3.2.1	モーメント法 (MOM 法)	17
3.2.2	エスパアンテナのアドミタンス	21
3.3	指向性制御の検討	
3.3.1	Hooke と Jeeves のパターン探索法	22
3.3.2	パターン探索法によるエスパアンテナ	26
3.4	エスパアンテナエミュレータの製作	
3.4.1	エスパアンテナエミュレータの概要	29
3.4.2	Simulink による試作とその動作確認	31
3.5	まとめ	33
4	むすび	34

5 付録

5.1 MATLAB のプログラム (モーメント法によるエスパアンテナのアドミタンス計算) 35

5.2 Simulink のプログラム (Simulink によるエスパアンテナエミュレータの試作) 62

謝辞

63

参考文献

64

1.はじめに

近年，特に移動体通信システムなどへの応用を目的として，適応型アレーアンテナが注目を集めている．適応型アレーアンテナは，時々刻々と変化する電波環境に適応し，希望波到来方向にアンテナパターンのピークを向けるとともに，干渉波到来方向にヌルを形成して，空間フィルタリングを実現する事が可能である．ゆえに，周波数有効利用の観点から期待が高い[1]．このような適応型アレーアンテナとして，サブバンド信号処理を行うアダプティブアレーとエスパアンテナが挙げられる．

まず，サブバンド信号処理を行うアダプティブアレーの特徴について述べる．サブバンド信号処理を行うアダプティブアレーは，信号処理を行う信号を一度サブバンドに分割して，サブバンド単位で独立に信号処理することで，並列信号処理を行う．RLS法の計算量は，制御する重み係数の数の2乗に比例して増大するので，サブバンドごとに別々のRLS法を適応すると，計算量を軽減できる．これまで，膨大な計算量が壁となっていたが，サブバンド信号処理はこの解決策として有効であり，実用化も十分期待できる．

しかし，サブバンド信号処理を行うアダプティブアレーのような複雑なシステムは無線端末アンテナにはコスト的にも不向きであり，基地局用の適応型アレーアンテナといえる．

これに対し，エスパアンテナはサブバンド信号処理を行うアダプティブアレーと比較して非常に低コストで，無線端末アンテナのアダプティブ化を実現する可能性を持っているが，デジタルビームフォーミング (DBF) と違い各素子の入力がモニター出来ず，各素子のウエイトを直接制御できない．このようなことから，従来のDBFの制御アルゴリズムが使用ないので，新たな制御アルゴリズムが必要という課題がある．

このような背景から，本報告では基地局用の適応型アレーアンテナとしてサブバンド信号処理を行うアダプティブアレーについて，ユーザ端末の適応型アレーアンテナとしてエスパアンテナについて実用化を念頭に置き検討した．

2.サブバンド信号処理を行うアダプティブアレー

2.1 まえがき

2.1.1 目的

サブバンド信号処理を行うアダプティブアレーの実用化に向けて、アダプティブアレーの制御部分を 16Bit 固定小数点型の DSP で実装した場合の性能についてシミュレーションを用いて検討し、16Bit 固定小数点型の DSP による実装で十分な性能が得られる事を明らかにする。

2.1.2 動作原理

図 2.1 に、サブバンド信号処理を行うアダプティブアレーの動作原理をブロック線図として示す。

送信アンテナから送信される信号 $s(t)$ を次式で表す。

$$s(t) = e^{-j(\omega t + \phi(t) + \Phi)} \quad (2.1.1)$$

ここで、 ω は搬送波角周波数、 $\phi(t)$ は変調位相、 Φ は初期位相を示す。

受信側において、 N 素子の線形アレーアンテナによって受信された信号を次式で表す。

$$\mathbf{x}(t) = s(t)\mathbf{V}(\theta) \quad (2.1.2)$$

ここで、信号到来角 θ の関数をして定義される $\mathbf{V}(\theta)$ はステアリングベクトルであり、次式で表される。

$$\mathbf{V}(\theta) = \begin{bmatrix} 1 & e^{j\pi \sin \theta} & \dots & e^{j\pi(N-1)\sin \theta} \end{bmatrix} \quad (2.1.3)$$

以上のように定義される、各時刻の受信信号 $\mathbf{x}(t)$ は、各素子アンテナに接続された TDL (Tapped Delay Line) に 1 サンプル周期 T_{sample} だけ保持される。

このとき、全タップに保持されるサンプルを、次式で表す。

$$\mathbf{X}_{top}(t_1) = \begin{bmatrix} x_{1,1} & \dots & x_{1,N} \\ \vdots & \ddots & \vdots \\ x_{M,1} & \dots & x_{M,N} \end{bmatrix} \quad (2.1.4)$$

タップに保持されるサンプルが更新される時刻 t_1 は、

$$t_1 = \alpha M T_{sample} \quad (2.1.5)$$

で表される。ここで、 α は整数である。

次に、FFT をほどこすことにより、周波数領域でのサンプル行列 $\mathbf{X}_{top}(t_1)$ を

得る.

$$\mathbf{X}_{top}(t_1) = \left[\text{FFT} \begin{bmatrix} x_{1,1} \\ \vdots \\ x_{M,1} \end{bmatrix} \quad \dots \quad \text{FFT} \begin{bmatrix} x_{1,N} \\ \vdots \\ x_{M,N} \end{bmatrix} \right] \quad (2.1.6)$$

ここで、 $\text{FFT}[\bullet]$ は括弧内に示された要素に対して FFT を施すことを示す。周波数領域でのサンプル行列に、サブバンド毎に独立に算出された重み係数を乗算することにより、周波数領域でのアンテナ出力 $\mathbf{Y}(t_1)$ が次式のように得られる。

$$\mathbf{Y}(t_1) = \mathbf{X}_{top}(t_1)\mathbf{W}(t_1) \quad (2.1.7)$$

ここで、重み係数行列 \mathbf{W} は、各サブバンド毎の重み係数 \mathbf{w} から構成される行列として次式で表される。

$$\mathbf{W}(t_1) = [\mathbf{w}_1 \quad \mathbf{w}_2 \quad \dots \quad \mathbf{w}_M] \quad (2.1.8)$$

尚、 \mathbf{w} はアンテナ素子数 N に等しい要素を持つ重み係数ベクトルであり、

$$\mathbf{w}_m = [w_1 \quad w_2 \quad \dots \quad w_N]^T \quad (2.1.9)$$

で表される。

最後に、周波数領域の出力信号行列 $\mathbf{Y}(t_1)$ に逆 FFT を施すことにより、時間領域の出力信号行列 $\mathbf{y}(t_1)$ が得られる。

一方、図 2.1 に示したように、重み係数ベクトルは適応的に与えられる。ここでは、重み係数更新アルゴリズム RLS (Recursive Least Squares) を用い、サブバンド毎に独立に動作させて重み係数の探索を行う。このため、参照信号も帯域分割されている必要がある。RLS のような高機能・高負荷のアルゴリズムは、すべての重み係数をひとつのプロセッサで制御するよりも、細かく分割して複数のプロセッサで対処の方が計算量を非常に小さく抑えられる [2]。

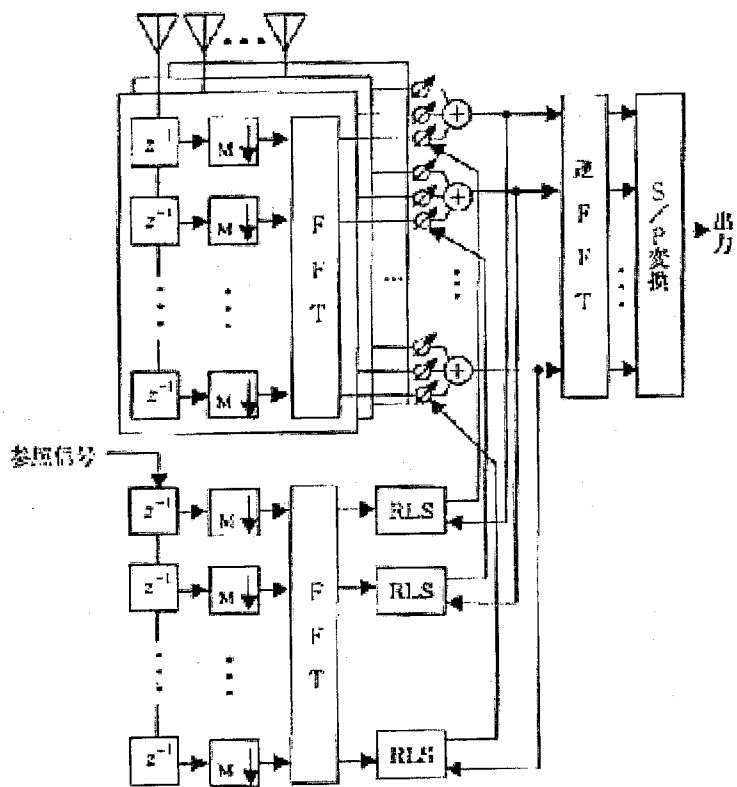


図 2.1 サブバンド信号処理を行うアダプティブアレー

2.2 計算機シミュレーション

2.2.1 動作原理をシミュレーションで評価する

ここでは、4素子のサブバンド信号処理に基づくアダプティブアレーの SINR の改善と指向性合成について、シミュレーション結果を用いて検討する。

まず、表 2.1 のようなパラメータのサブバンド信号処理に基づくアダプティブアレーを、

- i) 希望波が-30度、妨害波が30度から入射。
- ii) 希望波が15度、妨害波が30度から入射

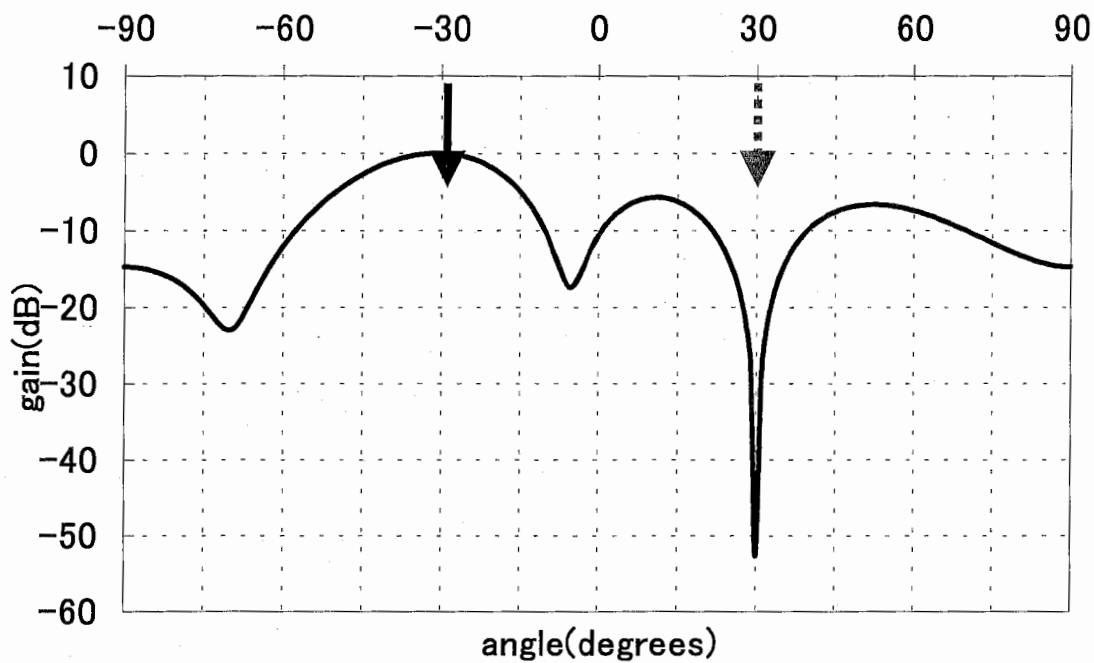
SNR20dB, 0dB の条件で動作させる。

表 2.1 サブバンド信号処理に基づくアダプティブアレーのパラメータ

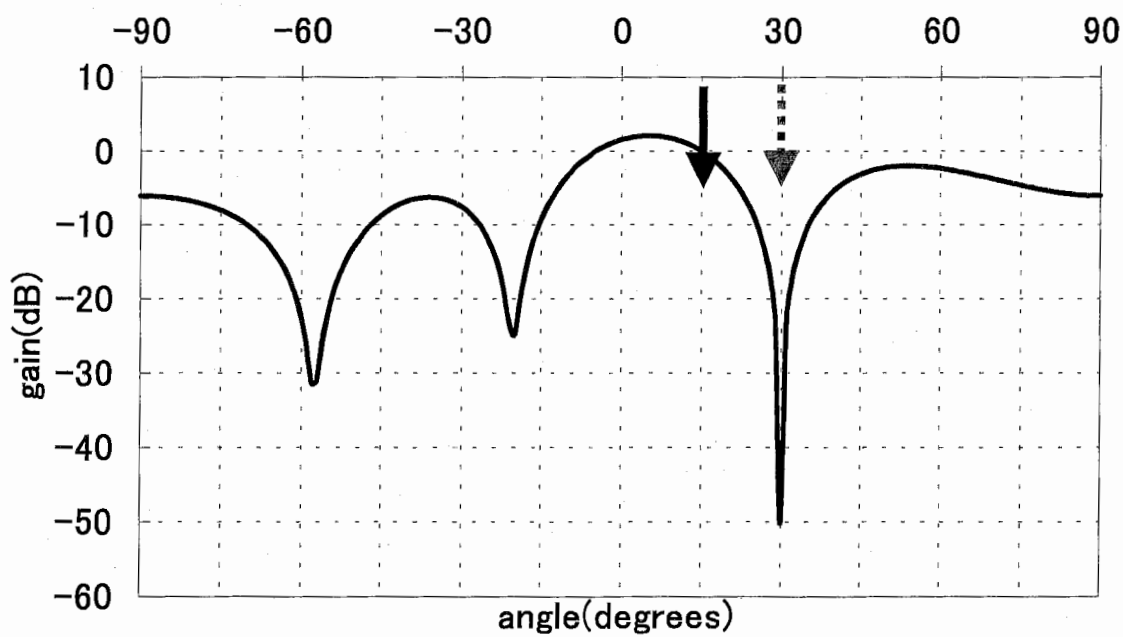
アンテナ素子数	4
サンプリング	4samples/symbol
FFT	32次
受信信号	帯域制限した等価低域系信号
シンボル	M系列
希望波対妨害波電力	0dB
重み係数計算アルゴリズム	RLS法(忘却係数1)

これらの条件におけるアレーの指向性を示めしたのが図 2.2(a)~(d)である。ここで、縦軸 Gain は、希望波方向の受信レベルを 0dB として設定した。

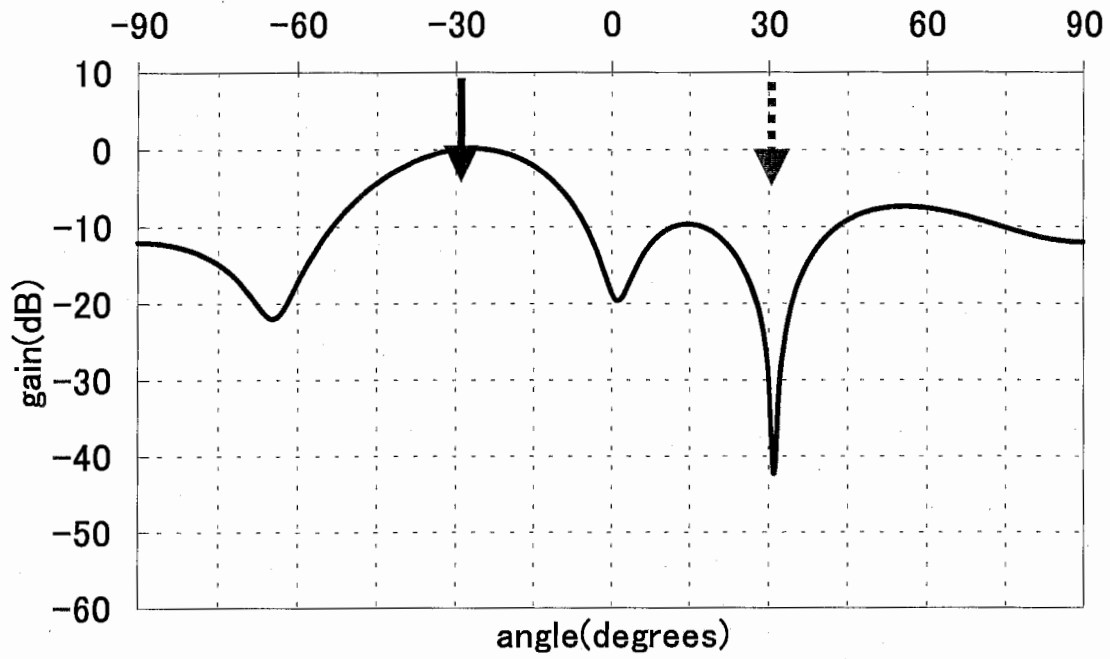
条件 i と条件 ii を合成された指向性で比較すると、条件 i では希望波方向に主ビームが、妨害波方向にヌルが形成されている。それに対して、条件 iv では、妨害波方向にヌルが形成されているが、主ビームは正確には希望波方向を向いていない。これは、希望波と妨害波の入射角が近いためである。



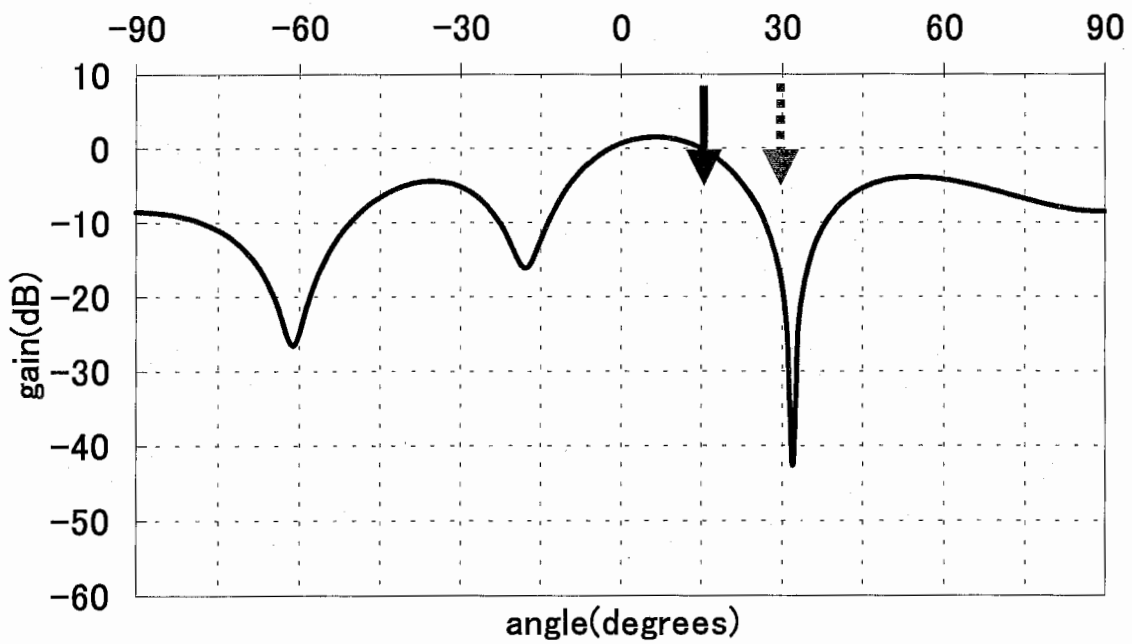
(a) SNR: :20dB 条件 i



(b) SNR: :20dB 条件 ii



(c) SNR: 0dB 条件 i



(d) SNR: 0dB 条件 ii

図 2.2 サブバンド信号処理に基づくアダプティブアレーの指向性合成

2.2.2 DSP(16bit 固定小数点型)による実装をシミュレーションで評価する

ここでは、表 2.1 のようなパラメータのサブバンド信号処理に基づくアダプティブアレーの制御部分である RLS を、16bit 固定小数点型の DSP を用いて実装した場合、どの程度の SINR の改善が見込まれるか、そして、適切な指向性合成が可能かについて、数値シミュレーションにより評価した。

次のような条件で、動作原理に基づく SINR と制御部分を 16bit 固定小数点型の DSP で実装した場合の SINR を比較したのが、表 2.2 である。

- i) 希望波が-30度, 妨害波が30度から入射.
- ii) 希望波が0度, 妨害波が45度から入射.
- iii) 希望波が15度, 妨害波が45度から入射.
- iv) 希望波が15度, 妨害波が30度から入射

表 2.2 16bit 固定小数点型の DSP を用いたことによる、サブバンド信号処理に基づくアダプティブアレーの SINR の劣化

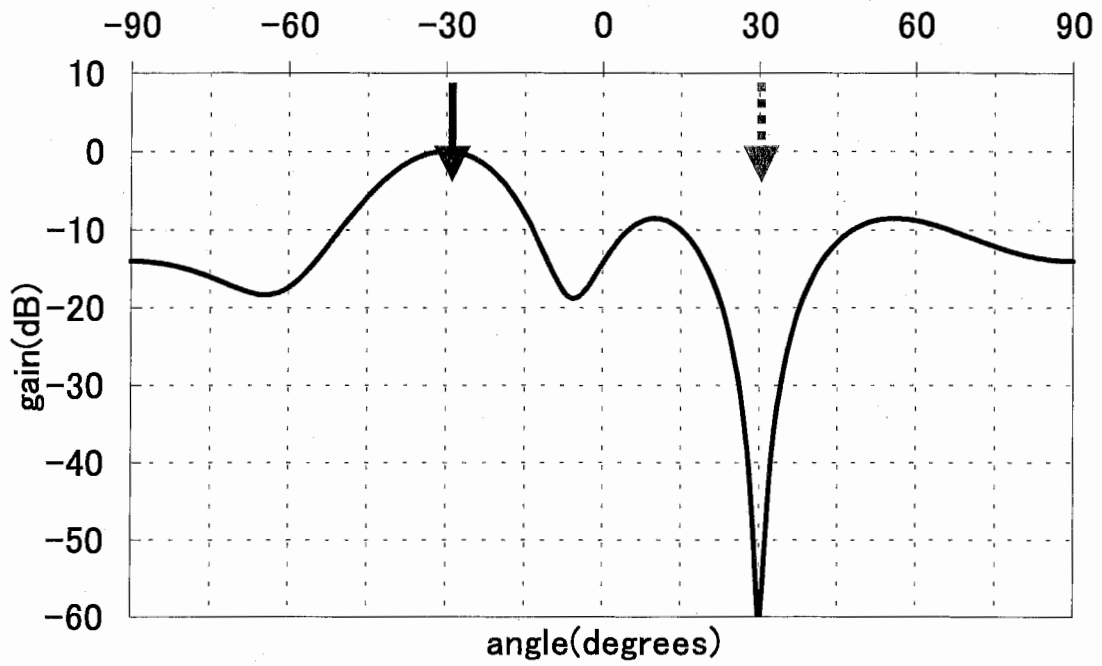
条件	SNR::20dB	SNR::10dB	SNR::0dB
i	-0.4	-0.9	0.0
ii	-1.5	-1.3	-0.1
iii	-0.4	-0.9	-0.1
iv	-2.9	-0.9	-0.1

単位は dB

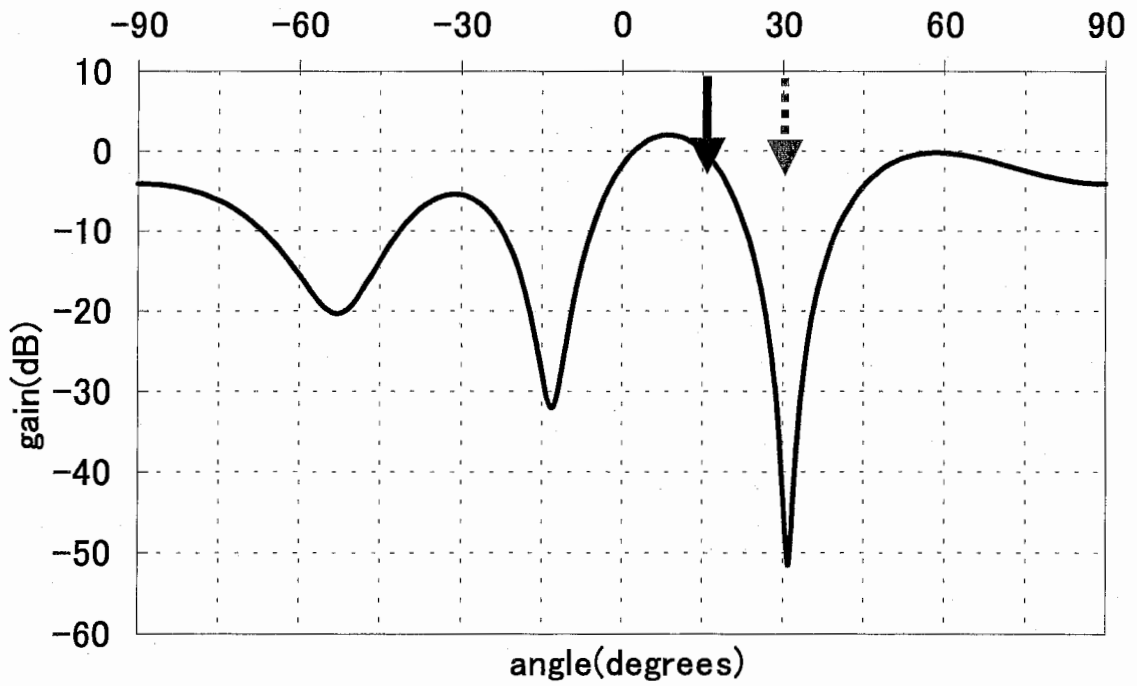
また、SNR20 dB, 0 dB での、条件 i と条件 iv におけるアレーの指向性を示めたのが図 2.3(a)~(d)である。ここで、縦軸 Gain は、希望波方向の受信レベルを 0 dB として設定した。

2.2.1 節で示した、動作原理の数値シミュレーション結果と比較すると、合成される指向性は同様の特徴が見て取れる。しかし、SINR の改善の差を示す表 2.2 より比較すると、制御部分である RLS を 16bit 固定小数点型 DSP で実装した場合の方が劣るものの十分な SINR の改善している。

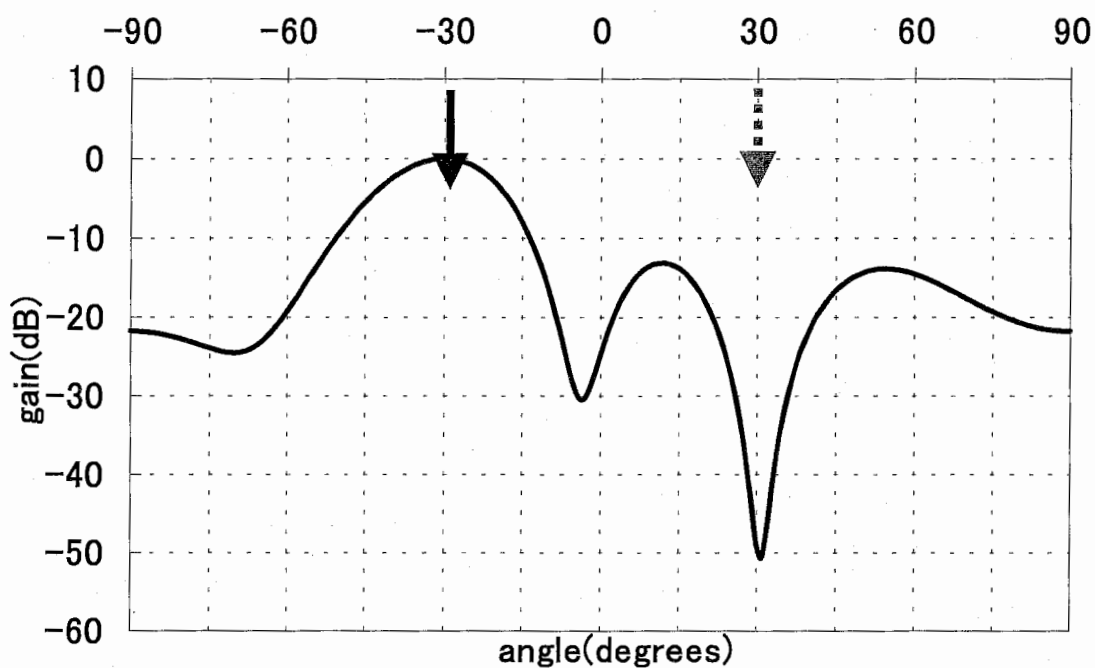
また、動作原理の数値シミュレーション結果との差は、SNR が高い電波環境ほど大きくなり、SNR が低い電波環境ほど動作原理に基づく SINR に近い改善が得られる事が分かった。このことから、実際の SNR が非常に低い電波環境では、動作原理に基づく SINR と同等の SINR の改善が得られるものと考えられる。



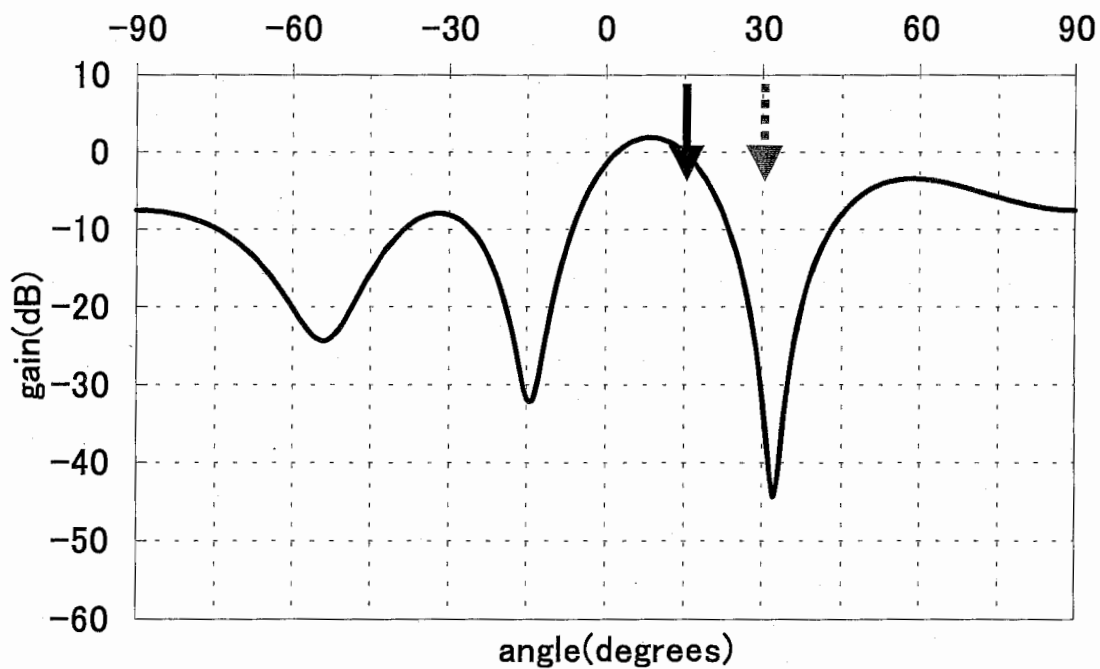
(a) SNR: :20dB 条件 i



(b) SNR: :20dB 条件 iv



(c) SNR: 0dB 条件 i



(d) SNR: 0dB 条件 iv

図 2.3 16bit 固定小数点型の DSP を用いた場合のサブバンド信号処理に基づくアダプティブアレーの指向性合成

2.3 まとめ

サブバンド信号処理を行うアダプティブアレーの制御部分を 16Bit 固定小数点型の DSP で実装すると、動作原理に基づく SINR よりやや劣るものの、実用上は十分な改善である。

また、SNR が高い電波環境ほど、動作原理に基づく SINR との差が大きくなり、SNR が低い電波環境ほど動作原理に基づく SINR に近い改善が得られる事が分かった。このことから、実際の SNR が非常に低い電波環境では、動作原理に基づく SINR と同等の SINR の改善が得られるものと考えられる。

これらの結果から、サブバンド信号処理を行うアダプティブアレーの制御部分を実装するに使用する DSP は 16Bit 固定小数点型で十分であると言える。

3. エスパアンテナ

3.1 はじめに

3.1.1 目的

この章では，エスパアンテナの指向性制御に必要となるパラメータであるアドミタンスをモーメント法により計算する．そして，エスパアンテナの指向性制御の新しいアルゴリズムとしてパターン探索法を提案し，その有効性の検討を行う．最後に，エスパアンテナエミュレータの試作を **Simulink** で行い，その動作確認の結果を報告する．

3.1.2 エスパアンテナの構成

エスパアンテナは給電素子 1 本と無給電素子 n 本の計 $n+1$ 本のモノポール素子で構成される。例として、図 3.1 に $n=4$ の場合の構成を示す。接地導体円板の中央に給電素子を配置する。これは $1/4$ 波長のモノポールアンテナで、底部から同軸ケーブルを接続して給電する。その他の n 本の無給電素子は給電素子を中心とする円周上に等間隔で配置する。これらの底部には可変リアクタを装荷し、そのリアクタはバラクタダイオードと 2 個の直並列固定インダクタで構成する。バラクタダイオードに印加する直流電圧を変化させることによりリアクタンス値 $X_i (i=1, \dots, n)$ を正負の範囲で変化させることができ、放射パターンを制御することが可能である [3]。

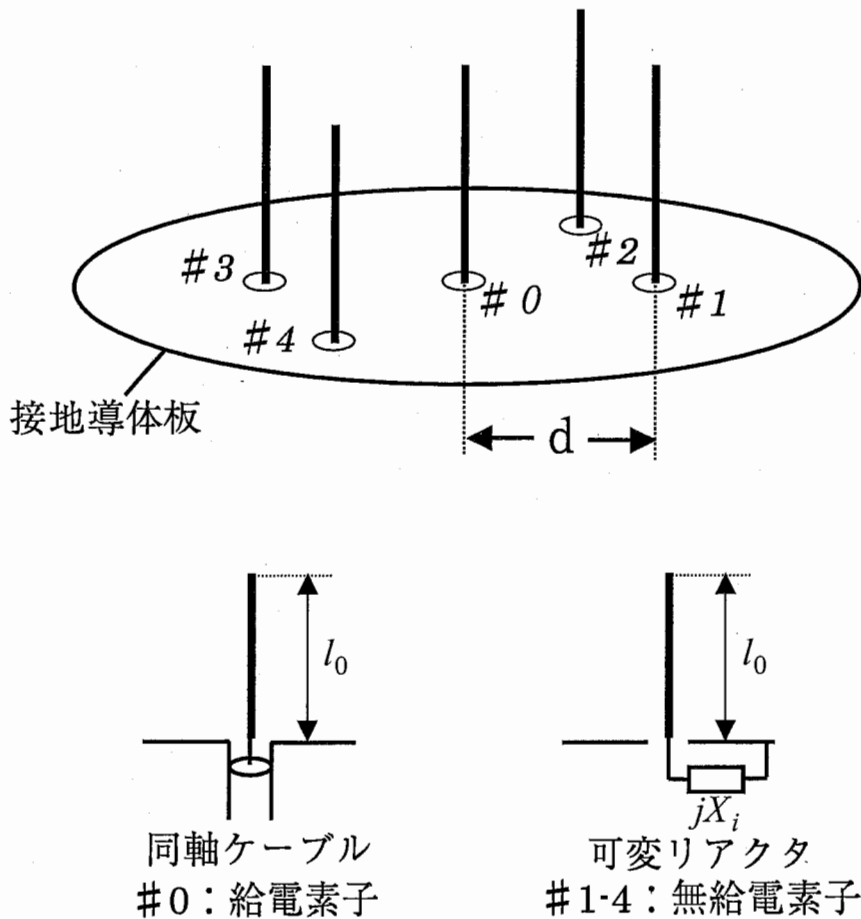


図 3.1 エスパアンテナの構造

3.2 アドミタンスの計算

3.2.1 モーメント法 (MOM 法)

・モーメント法について

電磁波のアンテナからの放射，あるいは散乱物体に関する問題は，マックスウェルの電磁方程式を満足するベクトル場の境界値問題を解くことに帰着する。

近年，電子計算機を利用して，このような問題は数値的に厳密な解が得られるようになり，現在ではこの数値計算法は電磁波散乱問題などの解法として重要な位置を占めている。

一般に，計算機を使用する数値計算法では，特定の問題を解析するための手法を求めることだけでなく，汎用性のある演算法を得ることに重点がおかれている。

1960年代前半までは，アンテナの諸問題を解析的に解こうとしていたが，1960年代後半になって大型電子計算機の発達に伴い，アンテナの諸問題は線型方程式に置き換え行列計算による数値解法が広く用いられ，特に1967年にハリントン (R.F.Harrington) 氏によって提唱されたモーメント法により，かなり厳密な解が得られるようになった。このモーメント法は細い線状導体で構成された任意形状のアンテナの電流分布を求めるために有効であり，導かれた微分・積分方程式を行列方程式に変換し，この行列方程式を数値計算し電流分布の近似解を求める方法である。

・積分法と未知電流

図 3.2 は，誘電率 ϵ ，透磁率 μ の媒質中に置かれている細線状アンテナとする（完全導体でできていると仮定）とき，このアンテナに流れる電流分布は以下に示す積分方程式の解として求まる。

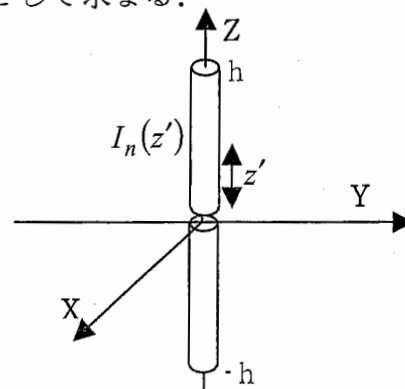


図 3.2 細線状アンテナ

図 3.2 のアンテナの表面上に流れている電流を $I_z(z')$, これによる電界を E_z とする。

ベクトルポテンシャル A_z は次の式で与えられる。

$$A_z = \frac{\mu}{4\pi} \int_{-h}^h I_z(z') G(z, z') dz' \quad (3.2.1)$$

$$\left(G(z, z') \equiv \frac{e^{-jkR(z, z')}}{R(z, z')}, \quad R(z, z') = \sqrt{(z, z')^2 + a^2} \right)$$

A_z が定義されると, 電界 E_z は

$$E_z = j\omega \left(A_z + \frac{1}{k^2} \frac{d^2 A_z}{dz^2} \right) \quad (3.2.2)$$

ここで k は伝播定数である。式(3.2.2)に式(3.2.1)を代入すると

$$\int_{-h}^h I_z(z') \left[\frac{\partial^2}{\partial z^2} + k^2 \right] G(z, z') dz' = j\omega \epsilon E_z \quad (3.2.3)$$

式(3.2.3)の E_z は $I_z(z')$ による電界だから, 入射電界 (または印加電界) を E_z^i とすると, このアンテナ表面では, $E_z + E_z^i = 0$ の境界条件が成り立つ。

これにより, 式(3.2.3)は

$$\frac{1}{j\omega \epsilon} \int_{-h}^h I_z(z') \left[\frac{\partial^2}{\partial z^2} + k^2 \right] G(z, z') dz' + E_z^i(z) = 0 \quad (3.2.4)$$

これをポクリントン形積分方程式と呼んでいる。ここで $G(z, z')$, $E_z^i(z)$ は既知であるから, 結局この積分方程式の解として, 電流 $I_z(z')$ を求めることになる。

・コンピュータによるモーメント法

コンピュータでは, 数値解析の手法を使って, 式(3.2.4)の積分方程式を解き易い形に近似して計算する。

いま積分の形を線形演算子と呼ばれている L を使って

$$L(I_z) = E_z^i(z) \quad (3.2.12)$$

と表す。

積分方程式のままでは解を求めるのが難しいので, 未知の関数 $I_z(z')$ を

$$I_z(z') = \sum_{n=1}^N I_n f_n(z') \quad (3.2.13)$$

と表す.

$$f_n(z') = \begin{cases} f_n(z') \cdots \text{小区間} \Delta Z_n \text{内} \\ 0 \cdots \text{それ以外} \end{cases}$$

$f_n(z')$ は展開関数, I_n は展開関数と呼ばれている.

式(3.2.13)を, 式(3.2.12)に代入すると

$$\sum_{n=1}^N I_n L(f_n(z')) = E_z^i(z) \quad (3.2.14)$$

二つの空間ベクトルがあるとき, これらが等しくなるためには座標軸へ投影 (ベクトルの内積) した値を等しくすればよい.

いま, 関数 u と v の内積を

$$(u, v) = \int u(z)v(z)dz \quad (3.2.15)$$

と定義する.

これに新たな関数 $W_m(z)$ を用いて, 式(3.2.14)の両辺の $W_m(z)$ への投影量が等しくなるように, 近似的に次のように表す.

$$\sum_{n=1}^N I_n \langle W_m, L(f_n) \rangle = \langle W_m, E_z^i \rangle \quad (3.2.16)$$

これは I_n に対する N 元連立方程式を与える.

式(3.2.16)は次のような行列で表される.

$$[Z_{mn}][I_n] = [V_m] \quad (3.2.17)$$

$$\begin{cases} Z_{mn} = \int_{\Delta Z_m} W_m(z) \int_{\Delta Z_{nm}} f_n(z') \Pi(z, z') dz' dz \\ V_m = - \int_{\Delta Z_m} W_m(z) E_z^i(z) dz \end{cases}$$

$$\text{ただし } \Pi(z, z') = \frac{1}{j\omega\epsilon} \left[\frac{\partial^2}{\partial z^2} + k^2 \right] V(z, z')$$

未知の展開係数 I_n は,

$$[I_n] = [Z_{mn}]^{-1} [V_m] \quad (3.2.18)$$

の逆行列により求まる.

重み関数と展開関数に同じ関数を使う場合

$$W_n(z) = f_n(z) \quad (n=1,2,\dots,N) \quad (3.2.19)$$

としたときをガレルキン (Galerkin) 法とよぶ. 重み関数の選び方などによっては、逆行列を持たない場合もある. したがって、モーメント法では、項数 N を増したとき、解が求まらないこともありうる.

3.2.2 エスパアンテナ（無給電素子数6）のアドミタンス

ここでは、エスパアンテナの形状を変化させた際の、エスパアンテナ（無給電素子数6）におけるアドミタンスの変化について報告する。なお、エスパアンテナのアドミタンスは、モーメント法によって解析した。

まず、エスパアンテナの形状について述べると、素子の長さを 0.19λ から 0.24λ に変化させ、給電素子と無給電素子の間隔を 0.25λ を中心に $\pm 10\%$ 変化させた。また、素子の半径は、 0.0075λ 、 0.01λ 、 0.0125λ とし、それぞれについて、モーメント法で解析した。

次に、モーメント法による解析の条件は、簡略化のために接地導体板を無限大と仮定することで、エスパアンテナの各素子を自由空間中のダイポールアレーとして扱い、各素子の分割数を5とした(図3.3)。

このような条件で解析した結果を巻末の表に示す。ここで、 L は素子の長さ、 d は給電素子と無給電素子の間隔、 Y_{00} は中央素子入力アドミタンス、 Y_{01} は中央周辺結合アドミタンス、 Y_{11} は周辺素子入力アドミタンス、 Y_{21} は隣接素子結合アドミタンス、 Y_{31} は隣接素子結合アドミタンス、 Y_{41} は対向素子結合アドミタンスを示している。

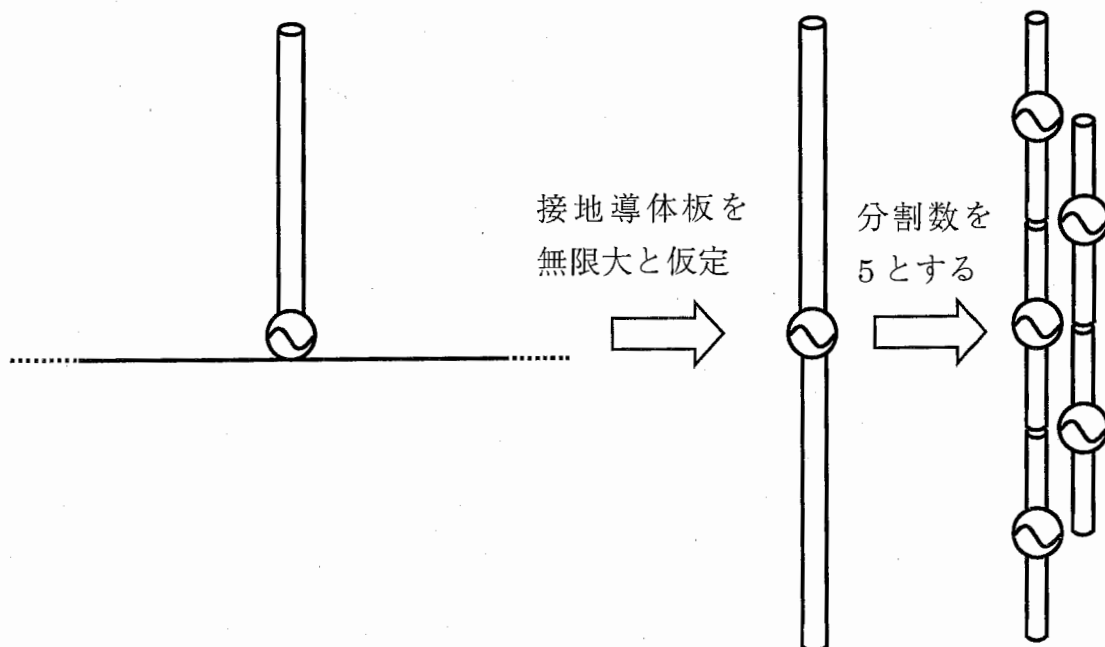


図 3.3 モーメント法による解析

3.3 指向性制御の検討

3.3.1 Hooke と Jeeves のパターン探索法

この手法は探索移動とパターン移動と呼ばれる2つの主要部分を含んでいる。

n 個の直交単位ベクトルの組 $\mathbf{e}^{(i)}$ が与えられているものとする。普通はこれらを座標軸と平行に選ぶ。繰返しを開始するためには最初のステップの大きさ k と $\mathbf{x}^{(0)}$ の推定とか指定される必要がある。このアルゴリズムでは各方向を順次探索する。

$$\mathbf{x} := \mathbf{x}^{(i)} + k\mathbf{e}^{(i)} \quad (3.3.1)$$

最初の繰返しでは、点 $\mathbf{x}^{(i)}$ をはじめての推定値 $\mathbf{x}^{(0)}$ と同じにする。探索が成功であれば、すなわち

$$f(\mathbf{x}) < f(\mathbf{x}^{(i)}) \quad (3.3.2)$$

であれば、この点を受け入れて

$$\mathbf{x}^{(i+1)} := \mathbf{x} \quad (3.3.3)$$

とする。探索が不成功であれば、探索の方向を逆にして次のようにする。

$$\mathbf{x} := \mathbf{x}^{(i)} - k\mathbf{e}^{(i)} \quad (3.3.4)$$

それから (3.3.2) のテストを繰り返して、もし今度は成功であれば

$$\mathbf{x}^{(i+1)} := \mathbf{x} \quad (3.3.5)$$

とし、そうでなければ、

$$\mathbf{x}^{(i+1)} := \mathbf{x}^{(i)} \quad (3.3.6)$$

とする。 n 個の方向を全部探索したとき探索移動は完了する。

パターン移動は探索移動が成功であるかどうかを決める事からはじまる。探索移動が成功であるとき、すなわち

$$f(\mathbf{x}^{(n+1)}) < f(\mathbf{x}^{(0)}) \quad (3.3.7)$$

の場合には

$$\mathbf{x}^{(1)} := \mathbf{x}^{(n+1)} + (\mathbf{x}^{(n+1)} - \mathbf{x}^{(0)}) \quad (3.3.8)$$

へのパターン移動を行ない、新しい基点を

$$\mathbf{x}^{(0)} := \mathbf{x}^{(n+1)} \quad (3.3.9)$$

におく。もし、条件 (3.3.7) が満足されていないくて、しかも

$$\mathbf{x}^{(1)} \neq \mathbf{x}^{(0)} \quad (3.3.10)$$

であれば

$$\mathbf{x}^{(1)} = \mathbf{x}^{(0)} \quad (3.3.11)$$

として探索移動を繰り返す。

しかし、式 (3.3.10) が満足されていないければ、式 (3.3.11) のようにすると

前のサイクルが繰り返されることになるから、この場合にはステップの大きさ k を縮小する。

$$k := k/10 \quad (3.3.12)$$

繰返しは k があらかじめ決めた値より小さくなったときに停止する。

流れ図は図 3.6 のようになり、図 3.4 および図 3.5 にこの手法を示してある。図 3.4 では、順次に基点 0, 2, 5, 8 から成功の探索移動がなされている。点 8 からの移動によって新しい基点 13 が定まり、この点からのパターン移動によって点 14 に達する。それから探索移動は点 16 のほうにもどるが、依然として不成功である。そこで、基点 13 から探索移動を繰り返して、もっと良い点 19 に達する。20 へのパターン移動および 19 からの探索移動はいずれも失敗するから、次には k の値を小さくすることになる。

分水線上でのこの手法の進行を図 3.5 に示してある。この図は探索移動によってパターン移動の方向が分水線に沿うように回転していく様子を示している。点 20 において、 k の値を縮小することになるであろう [4]。

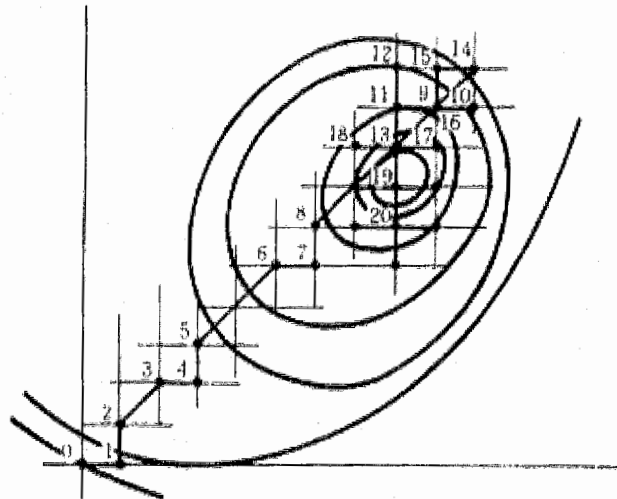


図 3.4 円に近い関数の場合

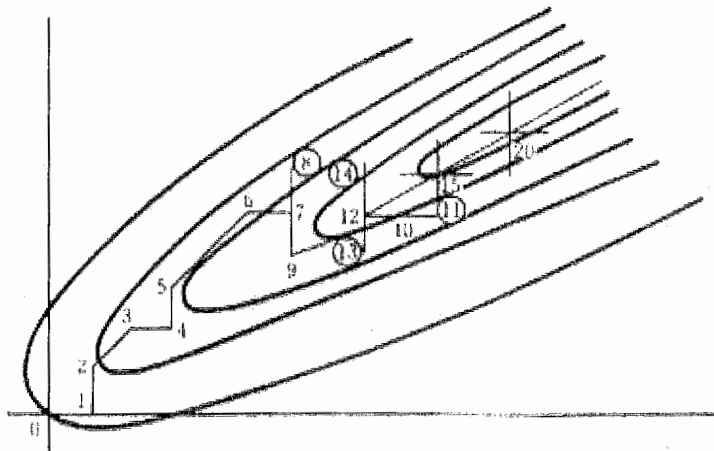


図 3.5 分水線の場合

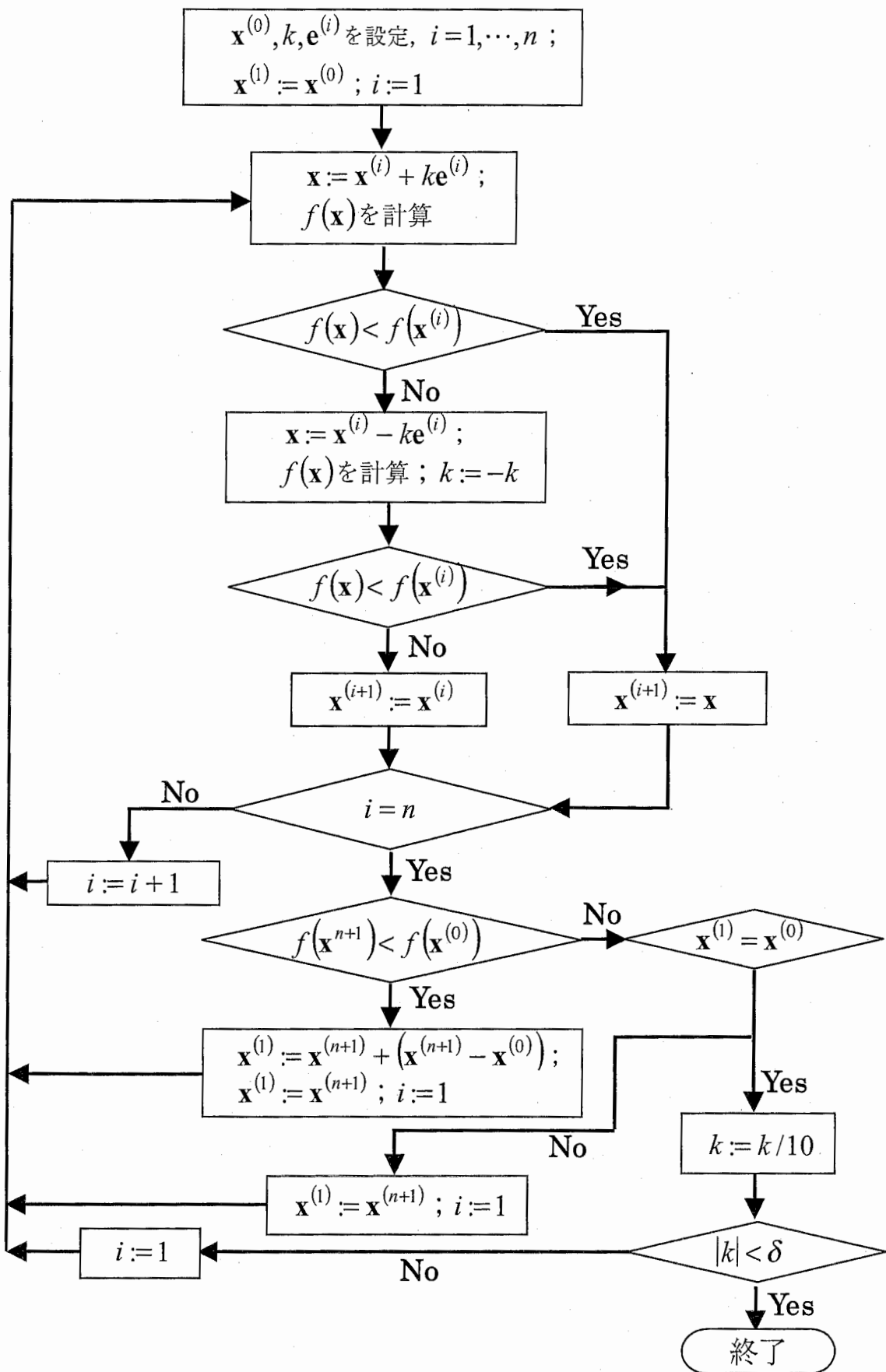


図 3.6 Hooke と Jeeves のパターン探索法

3.3.2 パターン探索法によるエスパーアンテナ

パターン探索法を用いたエスパーアンテナ（無給電素子数 6）による指向性合成（方向拘束付き）をシミュレーションにより検討する。また、パターン探索法の評価関数を SINR の逆数とし、無給電素子のリアクタンスの値を制御した。つまり、SINR が最大となるように無給電素子のリアクタンスの値を制御することになる。

シミュレーションを次のような条件で行った（SIR=0 dB）。

- i) 希望波が 0 度から入射。
- ii) 希望波が 0 度，妨害波が 90 度から入射。
- iii) 希望波が 0 度，妨害波が 120 度から入射
- iv) 希望波が 0 度，妨害波が 180 度から入射

まず，表 3.1 にそれぞれの条件で動作させた場合の SINR を示す。

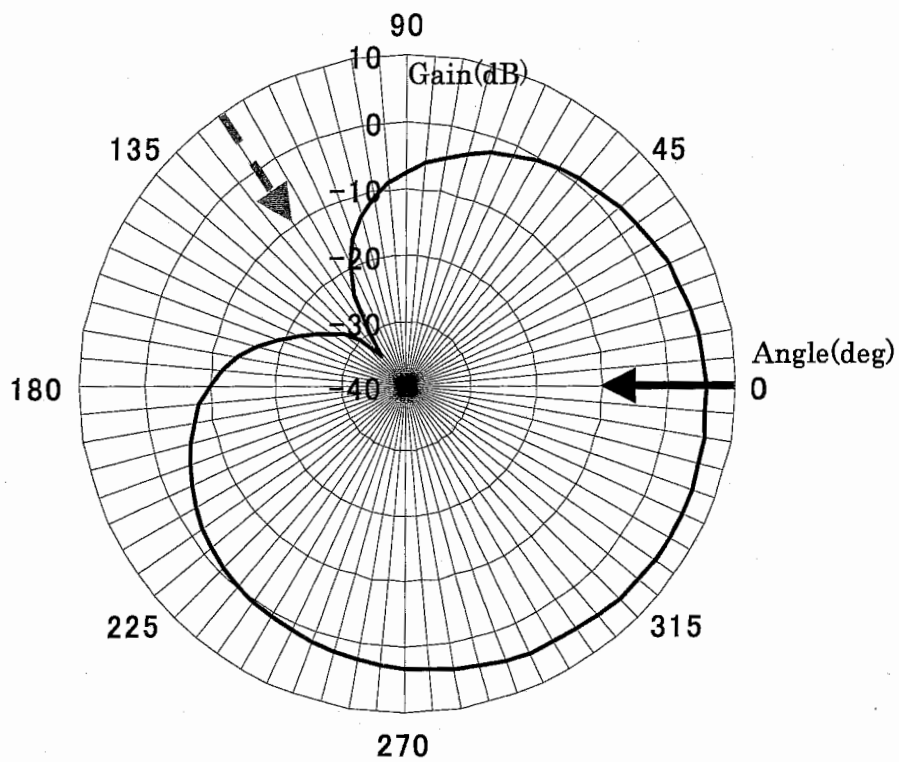
表 3.1 パターン探索法によるエスパーアンテナの SINR

条件	SNR::20dB	SNR::10dB	SNR::0dB
i	30.5	20.5	10.5
ii	22.4	12.5	6.1
iii	24.2	16.1	7.8
iv	18.4	15.1	8.1

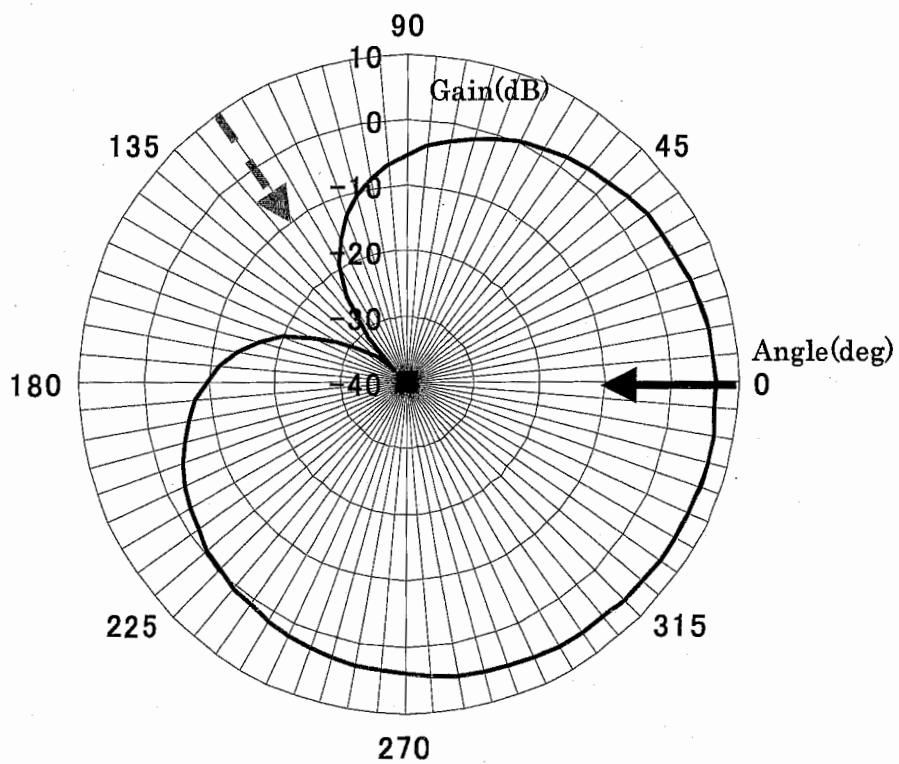
単位は dB

また，SNR 20 dB，10 dB，0 dB での，条件 iii) におけるエスパーアンテナの指向性を示めしたのが図 3.7(a)~(c)である。

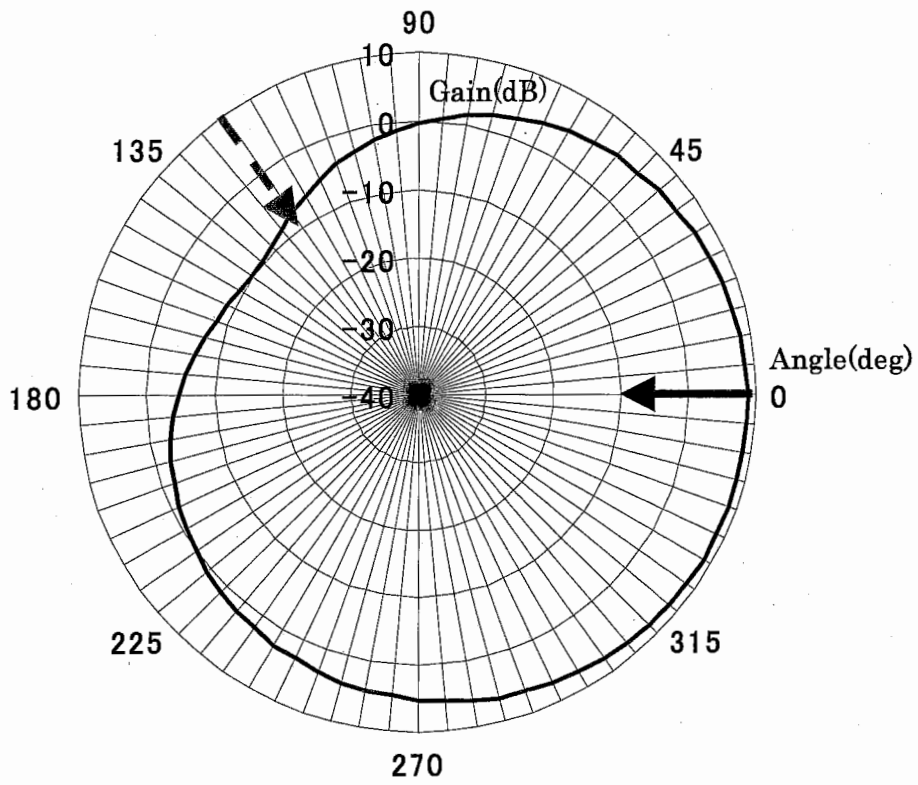
図 3.7 より，SNR が低い場合は，ビームを希望波方向に向ける事が優先し，SNR が高い場合は，妨害波方向へのヌル形成が優先することで，SINR が最大になるよう動作しているのが分かる。



(a) SN比 20 d B 条件 iii



(b) SN比 10 d B 条件 iii



(b) SN比 10 dB 条件 iii

図 3.7 エスパーアンテナによるの指向性合成

3.4 エスパアンテナエミュレータの製作

3.4.1 エスパアンテナエミュレータの概要

エスパアンテナ制御装置（以下、制御装置）の試作を行うに当たり、制御装置の動作の検証を行うために、エスパアンテナの動作を擬似的に行うエミュレータ（以下、エミュレータ）が必要となる。以下に、その動作の概要をまとめる。

エミュレータの概念図を図 3.8 に示す。

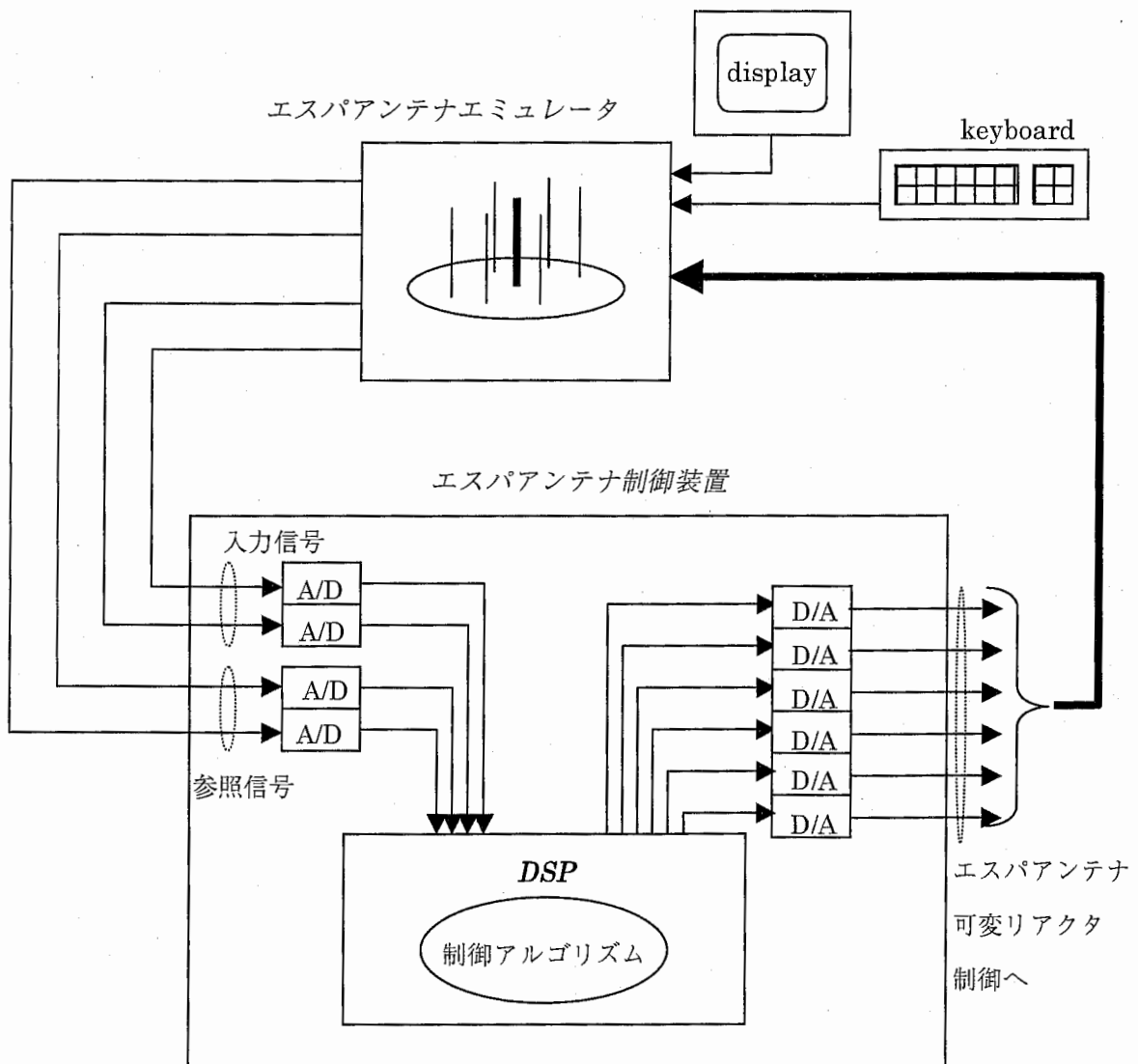


図 3.8 試作装置の構成の概念図

本装置は、制御装置の D/A 変換器から加えられる可変リアクタ制御のための

電圧を入力され、後述する方法によって算出したエスパアンテナ疑似受信信号を制御装置に A/D 変換器にフィードバックする。また、装置にはディスプレイ、キーボードが接続され、後述するパラメータの設定が行える構造になっていることとする。

また、図 3.9 に、エミュレータの動作のイメージを示す。希望信号を送信する 1 つの局と、干渉波を送信する Q 局が存在する。これら合計 $(Q+1)$ 個の送信機はそれぞれ帯域制限された信号を送信し、それが受信アンテナとしてエスパアンテナで受信され、アンテナの熱雑音を加えられ、受信フィルタにより帯域制限されてベースバンドの I/Q 直交信号として受信信号がエミュレータの出力となる。また、エスパアンテナは、エミュレータに入力される電圧により変化する、可変リアクタのリアクタンスで制御される。更に、参照信号を希望波送信機の送信フィルタから外部に出力する。

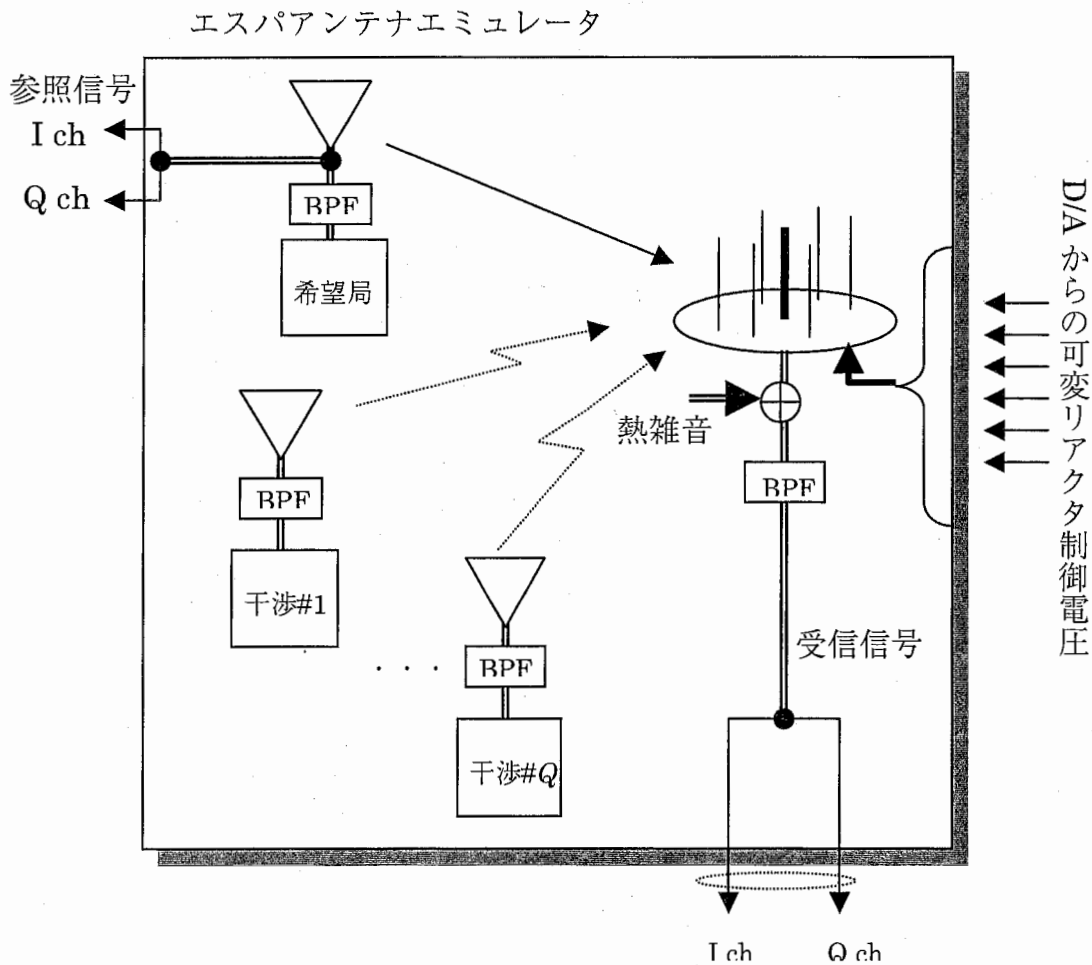


図 3.9 エスパアンテナエミュレータの動作のイメージ(2重線は複素数)

3.4.2 Simulink による試作とその動作確認

ここでは、Simulink により試作したエスパアンテナエミュレータについて述べる。Simulink により試作したエスパアンテナエミュレータの第一段階として製作したのが図 5.1 に示すプログラムである。このプログラムでは簡単化のため、可変リアクタンスの値でエスパアンテナを制御している（リアクタ制御電圧で ESPAR アンテナを制御するには、リアクタ制御電圧とリアクタンスの関係が必要）。

まず、図 5.1 に示されるプログラムに使われているパラメータを表 3.2 に示す。

表 3.2 プログラムに使われているパラメータ

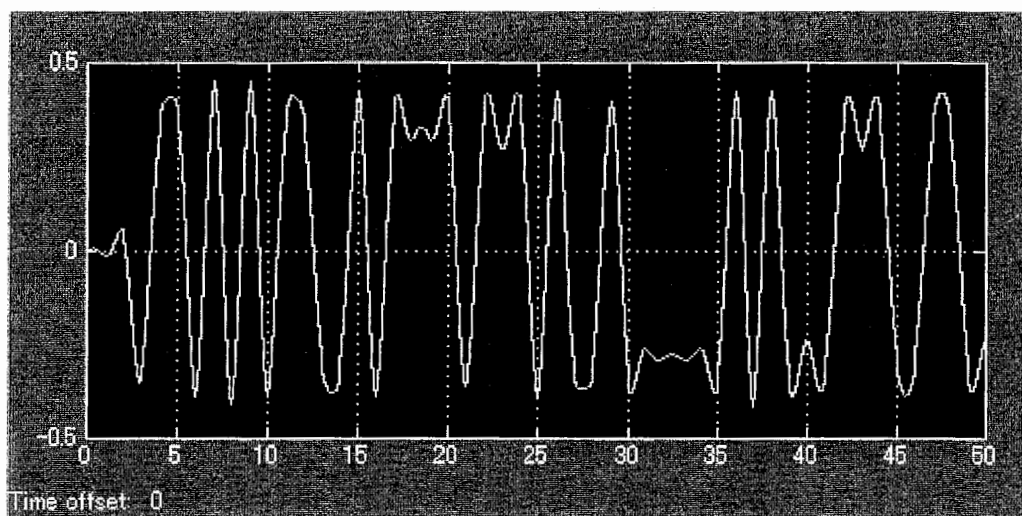
load	給電素子の負荷インピーダンス
x 1 ~ x 6	可変リアクタンスの値
Y, y 0	アドミタンス行列
angle_d(degrees)	希望波の到来角（度）
angle_i(degrees)	干渉波の到来角（度）

続いて、subsystem について説明する。図 5.1 においてバックシャドーを表示しているブロックは subsystem であり、それぞれの役割を表 3.3 に示す。

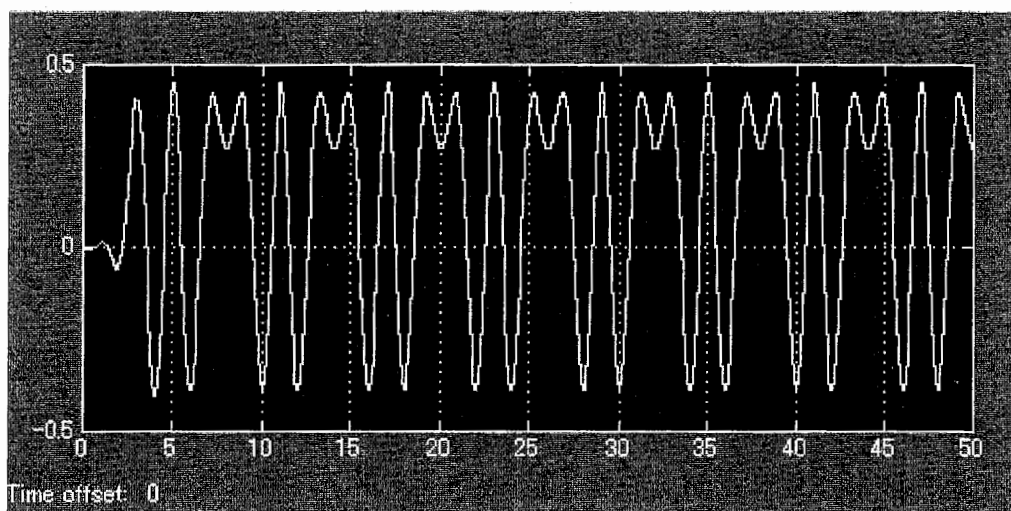
表 3.3 subsystem の役割

matrix_X	リアクタンスベクトルを設定
us(t) 及び ui(t)	BPSK 変調された M 系列を生成
steering vector	ステアリングベクトルを求める

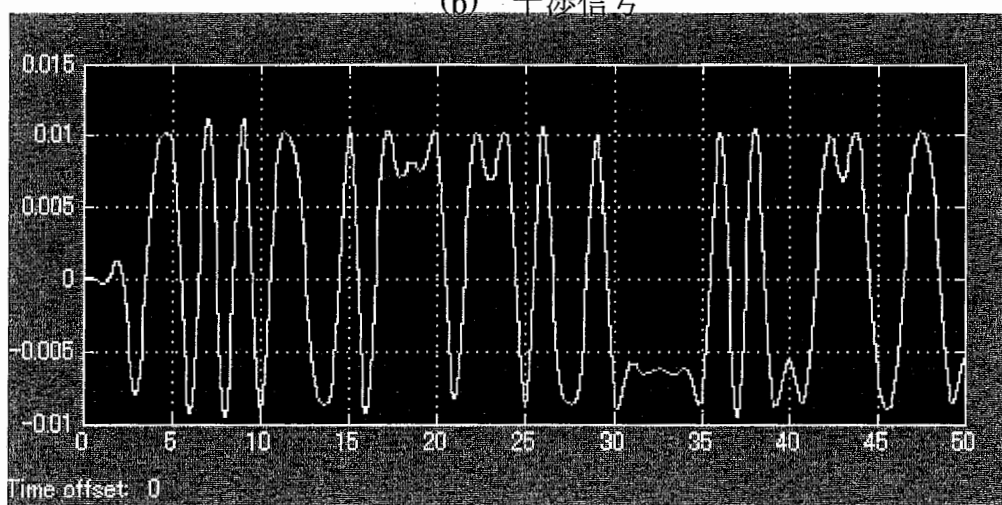
次に、このような Simulink により試作したエスパアンテナエミュレータの動作確認をおこなう。プログラムの実行例として、希望波が 0 度から、干渉波が 180 度から入射した場合の入出力波形を図 3.10 に示す。また、x 1 ~ x 6 は、文献 [5] の値を代入している。



(a) 希望信号



(b) 干渉信号



(c) エスパアンテナの出力

図 3.10 エスパアンテナの入出力波形

3.5 まとめ

本章では，エスパアンテナの指向性制御に必要となるパラメータであるアドミタンスをモーメント法により計算を行い，パターン探索法によるエスパアンテナの指向性の制御について検討した．パターン探索法を用いる事で，電波環境に適応した指向性が合成できる．

しかし，パターン探索法は初期値を上手く選ばなければならないという欠点があり，この点を解決する必要がある．

また，このパターン探索法で得られた最適リアクタンスの組み合わせを，**Simulink** で試作したエスパアンテナエミュレータに代入しところ，妨害波が除去された出力波形が現れた．このことから，パターン探索法によるエスパアンテナの指向性の制御が有効であるといえるだろう．

また，**Simulink** で試作したエスパアンテナエミュレータに文献 [5] で記されているリアクタンス値を代入しところ，妨害波が除去された出力波形が現れた．このことから，**Simulink** で試作したエスパアンテナエミュレータが正常に動作している事が分かった．

さらに，パターン探索法で得られた最適リアクタンスの組み合わせを，**Simulink** で試作したエスパアンテナエミュレータに代入しところ，妨害波が除去された出力波形が現れたが，文献 [5] のリアクタンス値を代入した場合の方が良好だった．これは，エスパアンテナエミュレータにおけるステアリングベクトルには相互結合が考慮されていないが，本報告でのパターン探索法によるリアクタンスの制御は，ステアリングベクトルに相互結合が考慮したためと考えられる．

4. むすび

本報告では基地局用の適応型アレーアンテナとしてサブバンド信号処理を行うアダプティブアレーについて、無線端末用の適応型アレーアンテナとしてエスパアンテナについて実用化を念頭に置き検討した。それぞれについてまとめると、まずサブバンド信号処理を行うアダプティブアレーでは、実用化に向け制御部分の DSP 化を検討し、16Bit 固定小数点型の DSP で十分な SINR の改善が得られる事が分かった。また、SNR が低い実際の電波環境においては、動作原理と同等の SINR の改善が期待できる。

続いて、エスパアンテナでは、アドミタンスの計算、指向性制御アルゴリズムの提案、Simulink によるエスパアンテナエミュレータ試作を行った。これらの考察より、パターン探索法によるエスパアンテナの指向性の制御が有効であることを明らかにした。しかし、パターン探索法は初期値を上手く選ばなければならないという欠点があり、この点を解決する必要がある。

これらの検討より、適応型アレーアンテナの実用化に向けた重要な知見が得られた。

5 付録

5.1 MATLAB のプログラム (モーメント法によるエスパアンテナのアドミタンス計算)

ここでは、3.2 節で述べたエスパアンテナのアドミタンスの計算に使用したプログラムを示す。

メインプログラム

```
%
%      espar Version 1.01  2000.10.12
%
% 制作者      : 廣狹優治(ひろがり ゆうじ)
% E-mail      : hrfe@mail.goo.ne.jp
%
% 用途        : espar の形状を変化させたときのアドミタンスの変化を知る
%
% 使用法      : ☆マークおよび★マークの部分を適切に変えれば、他は触
%               らなくて良いです。
%               また、無給電素子の本数を変える場合は、テキストへの出力
%               に関する部分(★マーク)が大きく変わりますので、その
%               時々で書きなおして下さい。また、ファンクションは書き
%               換えしないで下さい。絶対に！！

clear;
global A0
global M
global PX      %アンテナの形状を示すための X 座標
global PY      %アンテナの形状を示すための Y 座標
global PZ      %アンテナの形状を示すための Z 座標
global RMD
global ETA
global GAM

fid2=fopen('Y.dat','w'); %'Y.dat'(テキスト) に保存する

ER=1.0;          %空気中の誘電率
```

```

FREQ=300.0;          %周波数 300[MHz] (波長=1m) ☆
SQRTER=sqrt(ER);    %sqrt(空気の誘電率)
RMD=300.0/FREQ/SQRTER; %波長
ETA=120.0*pi/SQRTER; %空気中の特性インピーダンス
GAM=j*2.0*pi/RMD;   %伝搬定数

M=5;                %分割数(分割数は奇数にして下さい。) ☆
ele=6;              %無給電素子の本数 ☆
allele=ele+1;       %全素子数

io=0;
for i=1:3            % 繰返し回数☆
    for ii=1:21      % 繰返し回数☆
        for iii=1:51 % 繰返し回数☆
            io=io+1 % 計算状況を知らせる
            AL=0.38+0.1/50.0*(iii-1); % アンテナの長さ[m]☆
            A0=0.01*(0.5+0.25*i); % アンテナの太さ(半径)[m]☆
            d=0.25*(0.89+ii*0.01); %給電素子と無給電素子の間隔[m]☆

%アンテナの形状・配列を設定
DL=AL/(M+1);
MM=M*allele;
MS=(M+1)/2;
%給電素子の配置設定
for im=1:1
    for II=1:M
        for JJ=1:3
            L=(im-1)*M+II;
            PX(L,JJ)=0.0;
            PY(L,JJ)=0.0;
            PZ(L,JJ)=DL*(II+JJ-MS-2);
        end
    end
end
end

```

```

end
%無給電素子の配置設定
for im=2:ele+1
    for II=1:M
        for JJ=1:3
            L=(im-1)*M+II;
            PX(L,JJ)=sin(2.0*pi/ele*(im-2))*d;

            PY(L,JJ)=cos(2.0*pi/ele*(im-2))*d;
            PZ(L,JJ)=DL*(II+JJ-MS-2);
        end
    end
end
% アンテナの形状・配列設定終了

%モーメント法
ZZ=MATRIX(MM);    %相互インピーダンスを計算
YY=inv(ZZ);    %相互インピーダンス→相互アドミタンス

%'Y.dat'への保存の形式★
fprintf(fid2,.....省略.....);

% ★★★★★ save ymat 用★★★★★
dat(1,io)=YY(MS,MS);    %Y00:中央素子入力アドミタンス
dat(2,io)=YY(MS,MS+M);%Y10:中央周辺結合アドミタンス
dat(3,io)=YY(MS+M,MS+M);%Y11:周辺素子入力アドミタンス
dat(4,io)=YY(MS+M,MS+M*2);%Y21:隣接素子結合アドミタンス
dat(5,io)=YY(MS+M,MS+M*3); %Y31:隣接素子結合アドミタンス
dat(6,io)=YY(MS+M,MS+M*4); %Y41:対向素子結合アドミタンス

end
end
save ymat
end

```

```
fclose(fid2);
ファンクション (EXPJ) 書き換えないで下さい.
```

```
%
%           Version 1.00  1999.11.23
%
% 制作者           : 廣獵優治(ひろがり ゆうじ)
% E-mail          : hrfc@mail.goo.ne.jp
%
```

```
function W12=EXPJ(V1,V2)
V=[0.2228467E00,0.1188932E01,0.2992736E01,0.5775144E01,0.9837467E0
1,0.1598287E02,0.9330781E-01,0.4926917E00,0.1215595E01,0.2269950E01,
0.3667623E01,0.5425337E01,0.7565916E01,0.1012023E02,0.1313028E02,0.
1665441E02,0.2077648E02,0.2562389E02,0.3140752E02,0.3853068E02,0.48
02609E02];
W=[0.4589646E00,0.4170008E00,0.1133734E00,0.1039920E-01,0.2610172E-
03,0.8985479E-06,0.2182349E00,0.3422102E00,0.2630276E00,0.1264258E0
0,0.4020687E-01,0.8563878E-02,0.1212436E-02,0.1116744E-03,0.6459927E-
05,0.2226317E-06,0.4227430E-08,0.3921897E-10,0.1456515E-12,0.1483027
E-15,0.1600595E-19];
D=[0.2249584E02,0.7441157E02,-0.4143158E03,-0.7875434E02,
0.1125474E02,0.1602176E03,-0.2386220E03,-0.5009469E03,-0.6848785E02,
0.1225478E02,-0.1016198E02,-0.4721959E01, 0.7972968E01,-0.2106957E02,
0.2204649E01, 0.8972824E01];
E=[0.2110311E02,-0.3795979E03,-0.9748922E02,                0.1290067E03,
0.1794923E02,-0.1291093E03,-0.5570557E03,                0.1352480E02,
0.1469672E03,0.1794953E02,-0.3298101E00,                0.3102884E02,
0.8165766E01,0.2223696E02, 0.3912489E02, 0.8163680E01];
Z=V1;
for JIM=1:1
    X=real(Z);
    Y=imag(Z);
    E15=0.0;
    AB=abs(Z);

    if AB<0.000001
```

```

    if JIM==1 W12=E15;end
    Z=V2;
    break;
end

```

```

if X>=0.0 & AB>10.0

```

```

E15=.409319/(Z+.193044)+.421831/(Z+1.02666)+.147126/(Z+2.56788)...
    +.206335E-1/(Z+4.90035)+.107401E-2/(Z+8.18215)...
    +.158654E-4/(Z+12.7342)+.317031E-7/(Z+19.3957);
E15=E15*exp(-Z);
if JIM==1 W12=E15;end
Z=V2;
break;
end

```

```

YA=abs(Y);
if X<=0.0 & YA>10.0

```

```

E15=.409319/(Z+.193044)+.421831/(Z+1.02666)+.147126/(Z+2.56788)...
    +.206335E-1/(Z+4.90035)+.107401E-2/(Z+8.18215)...
    +.158654E-4/(Z+12.7342)+.317031E-7/(Z+19.3957);
E15=E15*exp(-Z);
if JIM==1 W12=E15;end
Z=V2;
break;
end

```

```

if(YA-X>=17.5 | YA>=6.5 | X+YA>=5.5 | X>=3.)

```

```

    J1=1;
    J2=6;
    S=0.0;
    YS=Y*Y;
    for I=J1:J2
        XI=V(I)+X;
        CF=W(I)/(XI*XI+YS);
    end

```



```

        S=S+(XI*CF+j*-YA*CF);
    end
    EX=exp(-X);
    T=EX*(cos(YA)+j*-sin(YA));
    E15=S*T;
    if Y<0.0 E15=conj(E15);end
    if JIM==1 W12=E15;end
    Z=V2;
    break;
end

if X<=-9.0 %%GO TO 40
    %%40
    T3=X*X-Y*Y;
    T4=2.*X*YA;
    T5=X*T3-YA*T4;
    T6=X*T4+YA*T3;

UC=(D(11)+D(12)*X+D(13)*T3+T5·E(12)*YA-E(13)*T4)+j*(E(11)+E(12)*X+
E(13)*T3+T6+D(12)*YA+D(13)*T4);

VC=(D(14)+D(15)*X+D(16)*T3+T5·E(15)*YA-E(16)*T4)+j*(E(14)+E(15)*X+
E(16)*T3+T6+D(15)*YA+D(16)*T4);
    EC=UC/VC;
    S=EC/(X+j*YA);
    EX=exp(-X);
    T=EX*(cos(YA)+j*-sin(YA));
    E15=S*T;
    if Y<0.0 E15=conj(E15);end
    if JIM==1 W12=E15;end
    Z=V2;
    break;
end

if YA·X>=2.5
    T3=X*X-Y*Y;

```

```

T4=2.*X*YA;
T5=X*T3·YA*T4;
T6=X*T4+YA*T3;
T7=X*T5·YA*T6;
T8=X*T6+YA*T5;
T9=X*T7·YA*T8;
T10=X*T8+YA*T7;

```

```

UC=(D(1)+D(2)*X+D(3)*T3+D(4)*T5+D(5)*T7+T9·(E(2)*YA+E(3)*T4+E(4)*
T6+E(5)*T8))+j*(E(1)+E(2)*X+E(3)*T3+E(4)*T5+E(5)*T7+T10+(D(2)*YA+D(
3)*T4+D(4)*T6+D(5)*T8));

```

```

VC=(D(6)+D(7)*X+D(8)*T3+D(9)*T5+D(10)*T7+T9·(E(7)*YA+E(8)*T4+E(9)*
T6+E(10)*T8))+j*(E(6)+E(7)*X+E(8)*T3+E(9)*T5+E(10)*T7+T10+(D(7)*YA+
D(8)*T4+D(9)*T6+D(10)*T8));

```

```

EC=UC/VC;
S=EC/(X+j*YA);
EX=exp(-X);
T=EX*(cos(YA)+j*·sin(YA));
E15=S*T;
if Y<0.0 E15=conj(E15);end
if JIM==1 W12=E15;end
Z=V2;
break;
end

```

```

if X+YA>=1.5
J1=7;
J2=21;
S=0.0;
YS=Y*Y;
for I=J1:J2
XI=V(I)+X;
CF=W(I)/(XI*XI+YS);
S=S+(XI*CF+j*·YA*CF);
end

```

```

    EX=exp(-X);
    T=EX*(cos(YA)+j*-sin(YA));
    E15=S*T;
    if Y<0.0 E15=conj(E15);end
    if JIM==1 W12=E15;end
    Z=V2;
    break;
end

N=round(6.+3.*AB-0.5);
E15=1./(N-1.)-Z/N^2;
while N >= 3
    N=N-1;
    E15 = 1.0 / (N - 1.0) - Z * E15 / N;
end
E15=Z*E15-(.577216+log(AB)+j*atan2(Y,X));
if JIM==1 W12=E15;end
Z=V2;
break;
end

for JIM=2:2
    X=real(Z);
    Y=imag(Z);
    E15=0.0;
    AB=abs(Z);

    if AB<0.000001
        if JIM==1 W12=E15;end
        Z=V2;
        break;
    end

    if X>=0.0 & AB>10.0

```

```
E15=.409319/(Z+.193044)+.421831/(Z+1.02666)+.147126/(Z+2.56788)+.2063
35E-1/(Z+4.90035)+.107401E-2/(Z+8.18215)+.158654E-4/(Z+12.7342)+.31703
1E-7/(Z+19.3957);
```

```
    E15=E15*exp(-Z);
    if JIM==1 W12=E15;end
    Z=V2;
    break;
```

```
end
```

```
YA=abs(Y);
if X<=0.0 & YA>10.0 %%GO TO 80
```

```
E15=.409319/(Z+.193044)+.421831/(Z+1.02666)+.147126/(Z+2.56788)+.2063
35E-1/(Z+4.90035)+.107401E-2/(Z+8.18215)+.158654E-4/(Z+12.7342)+.31703
1E-7/(Z+19.3957);
```

```
    E15=E15*exp(-Z);
    if JIM==1 W12=E15;end
    Z=V2;
    break;
```

```
end
```

```
if (YA-X>=17.5 | YA>=6.5 | X+YA>=5.5 | X>=3.)
```

```
    J1=1;
    J2=6;
    S=0.0;
    YS=Y*Y;
    for I=J1:J2
        XI=V(I)+X;
        CF=W(I)/(XI*XI+YS);
        S=S+(XI*CF+j*-YA*CF);
```

```
    end
```

```
    EX=exp(-X);
    T=EX*(cos(YA)+j*-sin(YA));
    E15=S*T;
    if Y<0.0 E15=conj(E15);end
    if JIM==1 W12=E15;end
```

```

Z=V2;
break;
end

```

```

if X<=-9.0

```

```

    T3=X*X-Y*Y;
    T4=2.*X*YA;
    T5=X*T3-YA*T4;
    T6=X*T4+YA*T3;

```

```

UC=(D(11)+D(12)*X+D(13)*T3+T5-E(12)*YA-E(13)*T4)+j*(E(11)+E(12)*X+
E(13)*T3+T6+D(12)*YA+D(13)*T4);

```

```

VC=(D(14)+D(15)*X+D(16)*T3+T5-E(15)*YA-E(16)*T4)+j*(E(14)+E(15)*X+
E(16)*T3+T6+D(15)*YA+D(16)*T4);

```

```

    EC=UC/VC;
    S=EC/(X+j*YA);
    EX=exp(-X);
    T=EX*(cos(YA)+j*-sin(YA));
    E15=S*T;
    if Y<0.0 E15=conj(E15);end
    if JIM==1 W12=E15;end
    Z=V2;
    break;

```

```

end

```

```

if YA-X>=2.5

```

```

    T3=X*X-Y*Y;
    T4=2.*X*YA;
    T5=X*T3-YA*T4;
    T6=X*T4+YA*T3;
    T7=X*T5-YA*T6;
    T8=X*T6+YA*T5;
    T9=X*T7-YA*T8;
    T10=X*T8+YA*T7;

```

```
UC=(D(1)+D(2)*X+D(3)*T3+D(4)*T5+D(5)*T7+T9*(E(2)*YA+E(3)*T4+E(4)*
T6+E(5)*T8))+j*(E(1)+E(2)*X+E(3)*T3+E(4)*T5+E(5)*T7+T10+(D(2)*YA+D(
3)*T4+D(4)*T6+D(5)*T8));
```

```
VC=(D(6)+D(7)*X+D(8)*T3+D(9)*T5+D(10)*T7+T9*(E(7)*YA+E(8)*T4+E(9)*
T6+E(10)*T8))+j*(E(6)+E(7)*X+E(8)*T3+E(9)*T5+E(10)*T7+T10+(D(7)*YA+
D(8)*T4+D(9)*T6+D(10)*T8));
```

```
EC=UC/VC;
```

```
S=EC/(X+j*YA);
```

```
EX=exp(-X);
```

```
T=EX*(cos(YA)+j*-sin(YA));
```

```
E15=S*T;
```

```
if Y<0.0 E15=conj(E15);end
```

```
if JIM==1 W12=E15;end
```

```
Z=V2;
```

```
break;
```

```
end
```

```
if X+YA>=1.5
```

```
J1=7;
```

```
J2=21;
```

```
S=0.0;
```

```
YS=Y*Y;
```

```
for I=J1:J2
```

```
    XI=V(I)+X;
```

```
    CF=W(I)/(XI*XI+YS);
```

```
    S=S+(XI*CF+j*-YA*CF);
```

```
end
```

```
EX=exp(-X);
```

```
T=EX*(cos(YA)+j*-sin(YA));
```

```
E15=S*T;
```

```
if Y<0.0 E15=conj(E15);end
```

```
if JIM==1 W12=E15;end
```

```
Z=V2;
```

```
break;
```

```
end
```

```

N=round(6.+3.*AB*0.5);
E15=1./(N-1.)-Z/N^2;
while N >= 3
    N=N-1;
    E15 = 1.0 / (N - 1.0) - Z * E15 / N;
end
E15=Z*E15-(.577216+log(AB)+j*atan2(Y,X));
if JIM==1 W12=E15;end
Z=V2;
break;
end

Z=V2/V1;
TH=atan2(imag(Z),real(Z))-atan2(imag(V2),real(V2))+atan2(imag(V1),real(V
1));
AB=abs(TH);
if(AB<1.) TH=.0;end
if(TH>1.) TH=6.2831853;end
if(TH<-1.) TH=-6.2831853;end
W12=W12-E15+(0.0+j*TH);
Return

```

ファンクション (GFF) 書き換えしないで下さい.

%

% Version 1.00 1999.11.23

%

%制作者 : 廣狹優治(ひろがり ゆうじ)

%E-mail : hrfc@mail.goo.ne.jp

%

function

[ET1,ET2,EP1,EP2]=GFF(XA,YA,ZA,XB,YB,ZB,D,CGD,SGD,CTH,STH,CP
H,SPH,GAM,ETA)

FP=12.56637;

```

XAB=XB·XA;
YAB=YB·YA;
ZAB=ZB·ZA;
CA=XAB/D;
CB=YAB/D;
CG=ZAB/D;
G=(CA·CPH+CB·SPH)*STH+CG·CTH;
GK=1.0·G·G;
ET1=0.0;
ET2=0.0;
EP1=0.0;
EP2=0.0;
if GK < 0.001
    return
end
FA=(XA·CPH+YA·SPH)*STH+ZA·CTH;
FB=(XB·CPH+YB·SPH)*STH+ZB·CTH;
EGFA=exp(GAM·FA);
EGFB=exp(GAM·FB);
EGGD=exp(GAM·G·D);
CST=ETA/(GK·SGD·FP);
ESA=CST·EGFA·(EGGD·G·SGD·CGD);
ESB=CST·EGFB·(1.0/EGGD+G·SGD·CGD);
T=(CA·CPH+CB·SPH)*CTH·CG·STH;
P=-CA·SPH+CB·CPH;
ET1=T·ESA;
ET2=T·ESB;
EP1=P·ESA;
EP2=P·ESB;
Return

```

ファンクション (GGMM) 書き換えしないで下さい。

%

% Version 1.00 1999.11.23

%

%制作者 : 廣嶺優治(ひろがり ゆうじ)


```

%E-mail : hrfc@mail.goo.ne.jp
%
function
[P11,P12,P21,P22]=GGMM(S1,S2,T1,T2,D,CGDS,SGD1,SGD2,CPSI,ETA,G
AM)

DSQ=D*D;
SGDS=SGD1;
if S2<S1
    SGDS=-SGD1;
end
SGDT=SGD2;
if T2<T1
    SGDT=-SGD2;
end

if abs(CPSI)>0.9999
    if CPSI<0.0
        TA=-T1;
        TB=-T2;
        SGDT=-SGDT;
    end
    if CPSI>=0.0
        TA=T1;
        TB=T2;
    end
    SI=S1;
    for I=1:2
        TJ=TA;
        for J=1:2
            ZIJ=TJ-SI;
            R=sqrt(DSQ+ZIJ*ZIJ);
            W=R+ZIJ;
            if ZIJ<0.0
                W=DSQ/(R-ZIJ);
            end
        end
    end
end

```

```

V=R*ZIJ;
if ZIJ>0.0
    V=DSQ/(R+ZIJ);
end
if J==1
    V1=V;
end
if J==1
    W1=W;
end
EGZ(I,J)=exp(GAM*ZIJ);
TJ=TB;
end
%%CALL EXPJ(GAM*V1,GAM*V,GP(I));
GP(I)=EXPJ(GAM*V1,GAM*V);
%%CALL EXPJ(GAM*W1,GAM*W,GM(I));
GM(I)=EXPJ(GAM*W1,GAM*W);
SI=S2;
end

CST=-ETA/(8.*pi*SGDS*SGDT);

P11=CST*(GM(2)*EGZ(2,2)+GP(2)/EGZ(2,2)-CGDS*(GM(1)*EGZ(1,2)+GP(1)/EGZ(1,2)));

P12=CST*(-GM(2)*EGZ(2,1)-GP(2)/EGZ(2,1)+CGDS*(GM(1)*EGZ(1,1)+GP(1)/EGZ(1,1)));

P21=CST*(GM(1)*EGZ(1,2)+GP(1)/EGZ(1,2)-CGDS*(GM(2)*EGZ(2,2)+GP(2)/EGZ(2,2)));

P22=CST*(-GM(1)*EGZ(1,1)-GP(1)/EGZ(1,1)+CGDS*(GM(2)*EGZ(2,1)+GP(2)/EGZ(2,1)));
return
end

```

```

ES1=exp(GAM*S1);
ES2=exp(GAM*S2);
ET1=exp(GAM*T1);
ET2=exp(GAM*T2);
DD=D;
DPSI=CPSI;
TD1=T1;
TD2=T2;
CPSS=DPSI*DPSI;
CD=DD/sqrt(1.D0-CPSS);
C=CD;
BD=CD*DPSI;
B=BD;
EB=exp(GAM*j*B);
EC=exp(GAM*j*C);
for K=1:2
    for L=1:2
        E(K,L)=0.0;
    end
end

TS1=TD1*TD1;
TS2=TD2*TD2;
DPQ=DD*DD;
SI=S1;
for I=1:2
    FI=(-1)^I;
    SDI=SI;
    SIS=SDI*SDI;
    ST1=2.0*SDI*TD1*DPSI;
    ST2=2.0*SDI*TD2*DPSI;
    R1=sqrt(DPQ+SIS+TS1-ST1);
    R2=sqrt(DPQ+SIS+TS2-ST2);
    EK=EB;
    for K=1:2
        FK=(-1)^K;
    end
end

```

```

SK=FK*SDI;
EL=EC;
for L=1:2
    FL=(-1)^L;
    EKL=EK*EL;
    XX=FK*BD+FL*CD;
    TL1=FL*TD1;
    TL2=FL*TD2;
    RR1=R1+SK+TL1;
    RR2=R2+SK+TL2;

    EXPA=EXPJ(GAM*(RR1+j*-XX),GAM*(RR2+j*-XX));

    EXPB=EXPJ(GAM*(RR1+j*XX),GAM*(RR2+j*XX));
    E(K,L)=E(K,L)+FI*(EXPA*EKL+EXPB/EKL);
    EL=1.0/EC;
end
EK=1.0/EB;
end
ZD=SDI*DPSI;
ZC=ZD;
EGZI=exp(GAM*ZC);
RR1=R1+ZD*TD1;
RR2=R2+ZD*TD2;
%%CALL EXPJ(GAM*RR1,GAM*RR2,EXPB);
EXPB=EXPJ(GAM*RR1,GAM*RR2);
RR1=R1-ZD+TD1;
RR2=R2-ZD+TD2;
%%CALL EXPJ(GAM*RR1,GAM*RR2,EXPA);
EXPA=EXPJ(GAM*RR1,GAM*RR2);
F(I,1)=2.*SGDS*EXPA/EGZI;
F(I,2)=2.*SGDS*EXPB*EGZI;
SI=S2;
end

CST=ETA/(16.*pi*SGDS*SGDT);

```

```

P11=CST*(( F(1,1)+E(2,2)*ES2-E(1,2)/ES2)*ET2+(-F(1,2)-E(2,1)*ES2+E(1,1)
/ES2)/ET2);
P12=CST*((-F(1,1)-E(2,2)*ES2+E(1,2)/ES2)*ET1+( F(1,2)+E(2,1)*ES2-E(1,1)
/ES2)/ET1);
P21=CST*((-F(2,1)-E(2,2)*ES1+E(1,2)/ES1)*ET2+( F(2,2)+E(2,1)*ES1-E(1,1)
/ES1)/ET2);
P22=CST*(( F(2,1)+E(2,2)*ES1-E(1,2)/ES1)*ET1+(-F(2,2)-E(2,1)*ES1+E(1,1)
/ES1)/ET1);
return

```

ファンクション (GGS) 絶対には書き換えないで下さい.

```

%
%           Version 1.00   1999.11.23
%
%制作者           : 廣  獵  優  治  (ひろがり ゆうじ)
%E-mail           : hrfc@mail.goo.ne.jp
%
function
[P11,P12,P21,P22]=GGS(XA,YA,ZA,XB,YB,ZB,X1,Y1,Z1,X2,Y2,Z2,AM,DS,C
GDS,SGDS,DT,SGDT,INT,ETA,GAM)

```

```

FP=12.56637;
CA=(X2-X1)/DT;
CB=(Y2-Y1)/DT;
CG=(Z2-Z1)/DT;
CAS=(XB-XA)/DS;
CBS=(YB-YA)/DS;
CGS=(ZB-ZA)/DS;
CC=CA*CAS+CB*CBS+CG*CGS;

```

```

if abs(CC)>0.997   %%%GO TO 200;

```

```

    SZ1=(X1-XA)*CAS+(Y1-YA)*CBS+(Z1-ZA)*CGS;

```

```

RH1=sqrt((X1-XA-SZ1*CAS)^2+(Y1-YA-SZ1*CBS)^2+(Z1-ZA-SZ1*CGS)^2);

```

```

SZ2=SZ1+DT*CC;

RH2=sqrt((X2-XA-SZ2*CAS)^2+(Y2-YA-SZ2*CBS)^2+(Z2-ZA-SZ2*CGS)^2);
DDD=(RH1+RH2)/2.0;
if and(DDD > 20.0*AM , INT > 0.0) %goto 20;
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%20
SZ=(X1-XA)*CAS+(Y1-YA)*CBS+(Z1-ZA)*CGS;%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
SZ=(X1-XA)*CAS+(Y1-YA)*CBS+(Z1-ZA)*CGS;
if INT <= 0 %%%%%%%%%goto300
    SS=sqrt(1.0-CC*CC);
    CAD=(CGS*CB-CBS*CG)/SS;
    CBD=(CAS*CG-CGS*CA)/SS;
    CGD=(CBS*CA-CAS*CB)/SS;
    DK=(X1-XA)*CAD+(Y1-YA)*CBD+(Z1-ZA)*CGD;
    DK=abs(DK);
    if DK < AM
        DK=AM;
    end
    XZ=XA+SZ*CAS;
    YZ=YA+SZ*CBS;
    ZZ=ZA+SZ*CGS;
    XP1=X1-DK*CAD;
    YP1=Y1-DK*CBD;
    ZP1=Z1-DK*CGD;
    CAP=CBS*CGD-CGS*CBD;
    CBP=CGS*CAD-CAS*CGD;
    CGP=CAS*CBD-CBS*CAD;
    P1=CAP*(XP1-XZ)+CBP*(YP1-YZ)+CGP*(ZP1-ZZ);
    T1=P1/SS;
    S1=T1*CC-SZ;
    %CALL
GGMM(S1,S1+DS,T1,T1+DT,DK,CGDS,SGDS,SGDT,CC,ETA,GAM,P11,P12
,P21,P22)

[P11,P12,P21,P22]=GGMM(S1,S1+DS,T1,T1+DT,DK,CGDS,SGDS,SGDT,C

```

```
C,ETA,GAM);
```

```
    return
```

```
end
```

```
INS=round(2*(INT/2)-0.5);
```

```
if INS<2
```

```
    INS=2;
```

```
end
```

```
IP=round(INS+1-0.5);
```

```
DELT=DT/INS;
```

```
T=0.0;
```

```
DSZ=CC*DELT;
```

```
P11=0.0;
```

```
P12=0.0;
```

```
P21=0.0;
```

```
P22=0.0;
```

```
AMS=AM*AM;
```

```
SGN=-1.0;
```

```
for IN=1:IP
```

```
    ZZ1=SZ;
```

```
    ZZ2=SZ*DS;
```

```
    XXZ=X1+T*CA-XA-SZ*CAS;
```

```
    YYZ=Y1+T*CB-YA-SZ*CBS;
```

```
    ZZZ=Z1+T*CG-ZA-SZ*CGS;
```

```
    RS=XXZ^2+YYZ^2+ZZZ^2;
```

```
    R1=sqrt(RS+ZZ1^2);
```

```
    if R1<=AM
```

```
        R1=AM;
```

```
    end
```

```
    EJA=exp(-GAM*R1);
```

```
    EJ1=EJA/R1;
```

```
    R2=sqrt(RS+ZZ2^2);
```

```
    if R2<=AM
```

```
        R2=AM;
```

```
    end
```

```
    EJB=exp(-GAM*R2);
```

```

EJ2=EJB/R2;
ER1= EJA*SGDS+ZZ1*EJ1*CGDS-ZZ2*EJ2;
ER2=-EJB*SGDS+ZZ2*EJ2*CGDS-ZZ1*EJ1;
FAC=0.0;
if RS>AMS
    FAC=(CA*XXZ+CB*YYZ+CG*ZZZ)/RS;
end
ET1=CC*(EJ2-EJ1*CGDS)+FAC*ER1;
ET2=CC*(EJ1-EJ2*CGDS)+FAC*ER2;
C=3.0+SGN;
if or(IN==1,IN==IP)
    C=1.0;
end
EGD=exp(GAM*(DT-T));
C1=C*(EGD-1./EGD)/2.0;
EGD=exp(GAM*T);
C2=C*(EGD-1./EGD)/2.0;
P11=P11+ET1*C1;
P12=P12+ET1*C2;
P21=P21+ET2*C1;
P22=P22+ET2*C2;
T=T+DELT;
SZ=SZ+DSZ;
SGN=-SGN;
end

CST=-ETA*DELT/(3.0*FP*SGDS*SGDT);
P11=CST*P11;
P12=CST*P12;
P21=CST*P21;
P22=CST*P22;
return

end
if DDD<AM

```



```

      DDD=AM;
    end
    %CALL
GGMM(.0,DS,SZ1,SZ2,DDD,CGDS,SGDS,SGDT,1.0,ETA,GAM,P11,P12,P21
,P22)

[P11,P12,P21,P22]=GGMM(.0,DS,SZ1,SZ2,DDD,CGDS,SGDS,SGDT,1.0,ET
A,GAM);
return
end

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%20
SZ=(X1-XA)*CAS+(Y1-YA)*CBS+(Z1-ZA)*CGS;%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
SZ=(X1-XA)*CAS+(Y1-YA)*CBS+(Z1-ZA)*CGS;
if INT <= 0   %%%goto300
    SS=sqrt(1.0-CC*CC);
    CAD=(CGS*CB-CBS*CG)/SS;
    CBD=(CAS*CG-CGS*CA)/SS;
    CGD=(CBS*CA-CAS*CB)/SS;
    DK=(X1-XA)*CAD+(Y1-YA)*CBD+(Z1-ZA)*CGD;
    DK=abs(DK);
    if DK < AM
        DK=AM;
    end
    XZ=XA+SZ*CAS;
    YZ=YA+SZ*CBS;
    ZZ=ZA+SZ*CGS;
    XP1=X1-DK*CAD;
    YP1=Y1-DK*CBD;
    ZP1=Z1-DK*CGD;
    CAP=CBS*CGD-CGS*CBD;
    CBP=CGS*CAD-CAS*CGD;
    CGP=CAS*CBD-CBS*CAD;
    P1=CAP*(XP1-XZ)+CBP*(YP1-YZ)+CGP*(ZP1-ZZ);
    T1=P1/SS;

```

```

S1=T1*CC-SZ;

[P11,P12,P21,P22]=GGMM(S1,S1+DS,T1,T1+DT,DK,CGDS,SGDS,SGDT,C
C,ETA,GAM);
    return
end

INS=round(2*(INT/2)-0.5);
if INS<2
    INS=2;
end
IP=round(INS+1-0.5);
DELT=DT/INS;
T=0.0;
DSZ=CC*DELT;
P11=0.0;
P12=0.0;
P21=0.0;
P22=0.0;
AMS=AM*AM;
SGN=-1.0;
for IN=1:IP
    ZZ1=SZ;
    ZZ2=SZ-DS;
    XXZ=X1+T*CA-XA-SZ*CAS;
    YYZ=Y1+T*CB-YA-SZ*CBS;
    ZZZ=Z1+T*CG-ZA-SZ*CGS;
    RS=XXZ^2+YYZ^2+ZZZ^2;
    R1=sqrt(RS+ZZ1^2);
    if R1<=AM
        R1=AM;
    end
    EJA=exp(-GAM*R1);
    EJ1=EJA/R1;
    R2=sqrt(RS+ZZ2^2);

```

```

if R2<=AM
  R2=AM;
end
EJB=exp(-GAM*R2);
EJ2=EJB/R2;
ER1= EJA*SGDS+ZZ1*EJ1*CGDS-ZZ2*EJ2;
ER2=-EJB*SGDS+ZZ2*EJ2*CGDS-ZZ1*EJ1;
FAC=0.0;
if RS>AMS
  FAC=(CA*XXZ+CB*YYZ+CG*ZZZ)/RS;
end
ET1=CC*(EJ2-EJ1*CGDS)+FAC*ER1;
ET2=CC*(EJ1-EJ2*CGDS)+FAC*ER2;
C=3.0+SGN;
if or(IN==1,IN==IP)
  C=1.0;
end
EGD=exp(GAM*(DT-T));
C1=C*(EGD-1./EGD)/2.0;
EGD=exp(GAM*T);
C2=C*(EGD-1./EGD)/2.0;
P11=P11+ET1*C1;
P12=P12+ET1*C2;
P21=P21+ET2*C1;
P22=P22+ET2*C2;
T=T+DELT;
SZ=SZ+DSZ;
SGN=-SGN;
end

CST=-ETA*DELT/(3.0*FP*SGDS*SGDT);
P11=CST*P11;
P12=CST*P12;
P21=CST*P21;
P22=CST*P22;
Return

```

ファンクション (GNF) 書き換えしないで下さい.

%

% Version 1.00 1999.11.23

%

% 制作者 : 廣狹優治(ひろがり ゆうじ)

% E-mail : hrfc@mail.goo.ne.jp

%

function

[EX1,EY1,EZ1,EX2,EY2,EZ2]=GNF(XA,YA,ZA, XB,YB,ZB,X,Y,Z,AM,DS,CG
DS,SGDS,ETA,GAM)

CAS=(XB-XA)/DS;

CBS=(YB-YA)/DS;

CGS=(ZB-ZA)/DS;

SZ=(X-XA)*CAS+(Y-YA)*CBS+(Z-ZA)*CGS;

ZZ1=SZ;

ZZ2=SZ-DS;

XXZ=X-XA-SZ*CAS;

YYZ=Y-YA-SZ*CBS;

ZZZ=Z-ZA-SZ*CGS;

RS=XXZ^2+YYZ^2+ZZZ^2;

R1=sqrt(RS+ZZ1^2);

EJA=exp(-GAM*R1);

EJ1=EJA/R1;

R2=sqrt(RS+ZZ2^2);

EJB=exp(-GAM*R2);

EJ2=EJB/R2;

ES1=EJ2-EJ1*CGDS;

ES2=EJ1-EJ2*CGDS;

ER1=0.0;

ER2=0.0;

AMS=AM*AM;

if RS<AMS

CST=ETA/(4.0*pi*SGDS);

EX1=CST*(ES1*CAS+ER1*XXZ);

```

EY1=CST*(ES1*CBS+ER1*YYZ);
EZ1=CST*(ES1*CGS+ER1*ZZZ);
EX2=CST*(ES2*CAS+ER2*XXZ);
EY2=CST*(ES2*CBS+ER2*YYZ);
EZ2=CST*(ES2*CGS+ER2*ZZZ);
return
end

CTH1=ZZ1/R1;
CTH2=ZZ2/R2;
ER1=(EJA*SGDS+EJA*CGDS*CTH1-EJB*CTH2)/RS;
ER2=(-EJB*SGDS+EJB*CGDS*CTH2-EJA*CTH1)/RS;
CST=ETA/(4.0*pi*SGDS);
EX1=CST*(ES1*CAS+ER1*XXZ);
EY1=CST*(ES1*CBS+ER1*YYZ);
EZ1=CST*(ES1*CGS+ER1*ZZZ);
EX2=CST*(ES2*CAS+ER2*XXZ);
EY2=CST*(ES2*CBS+ER2*YYZ);
EZ2=CST*(ES2*CGS+ER2*ZZZ);
return

```

ファンクション (MATRIX) 書き換えしないで下さい

%

% Version 1.00 1999.11.23

%

%制作者 : 廣獵優治(ひろがり ゆうじ)

%E-mail : hrfc@mail.goo.ne.jp

%

function ZZ=MATRIX(MM)

global A0

global M

global PX

global PY

global PZ

global RMD

```
global ETA
global GAM
```

```
ZZ=zeros(MM,MM);
```

```
for II=1:MM
```

```
    for JJ=1:MM
```

```
        for K=1:2
```

```
            for L=1:2
```

```
                DI=sqrt((PX(II,K)-PX(II,K+1))^2+(PY(II,K)-PY(II,K+1))^2+(PZ(II,K)-PZ(II,K+1))^2);
```

```
                DJ=sqrt((PX(JJ,L)-PX(JJ,L+1))^2+(PY(JJ,L)-PY(JJ,L+1))^2+(PZ(JJ,L)-PZ(JJ,L+1))^2);
```

```
                    EGDJ=exp(GAM*DJ);
```

```
                    EGDJ=exp(GAM*DJ);
```

```
                    CGDI=(EGDI+1.0/EGDI)/2.0;
```

```
                    SGDI=(EGDI-1.0/EGDI)/2.0;
```

```
                    SGDJ=(EGDJ-1.0/EGDJ)/2.0;
```

```
                    %CALL GGS
```

```
                [P(1,1),P(1,2),P(2,1),P(2,2)]=GGS(PX(II,K),PY(II,K),PZ(II,K),PX(II,K+1),PY(II,K+1),PZ(II,K+1),PX(JJ,L),PY(JJ,L),PZ(JJ,L),PX(JJ,L+1),PY(JJ,L+1),PZ(JJ,L+1),A0,DI,CGDI,SGDI,DJ,SGDJ,0,ETA,GAM);
```

```
                    ZZ(II,JJ)=ZZ(II,JJ)+P(3-K,3-L);
```

```
            end
```

```
        end
```

```
    end
```

```
end
```

```
return
```

5.2 Simulink のプログラム (Simulink によるエスパアンテナエミュレータの試作)

ここでは、3.4 節で述べた Simulink によるエスパアンテナエミュレータの試作のプログラムを図 5.1 に示す。

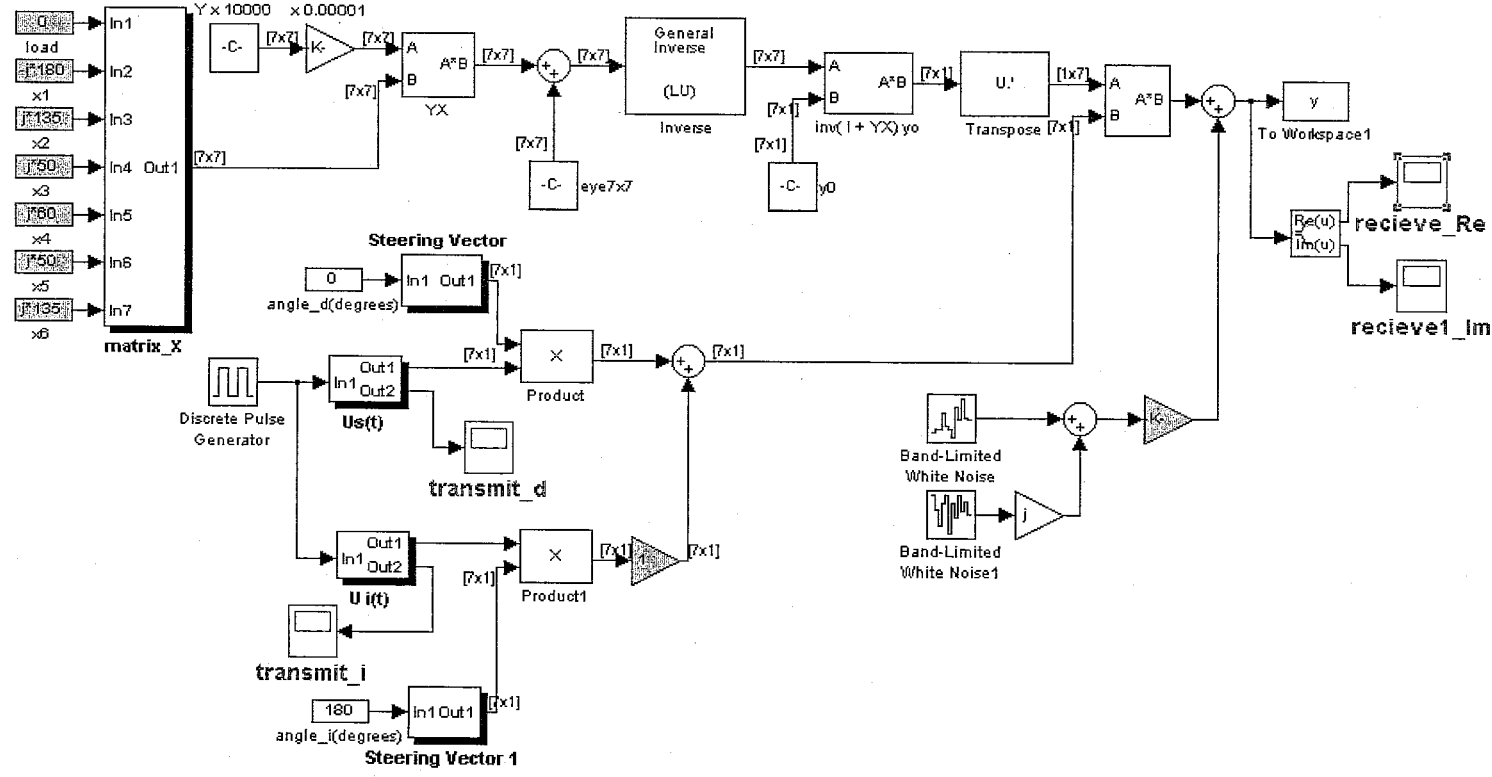


図5.1 Simulinkによるエスパアンテナエミュレータ

cut

謝辞

本報告をまとめるにあたり、数々の御指導と御配慮を賜った株式会社エイ・ティ・アール環境適応通信研究所の皆様へ深く感謝の意を表します。

最後に、研究を進めるにあたり直接御指導頂きました神谷幸宏博士には感謝にたえません。

参考文献

- [1] 神谷, 唐沢 “帯域分割信号処理に基づくビームスペースアダプティブアレー” 信学技報, AP97-208, pp51-59, July 1998
- [2] 神谷, 田野, 水口, 片山, 小川, 唐沢 “サブバンド信号処理に基づくアダプティブアレーアンテナの開発” 信学論 (A), Vol. J83-A No.12 pp1413-1424, Nov 2000
- [3] 小松崎, 斎藤, 行田, 大平 “高次元アルゴリズムによる ESPAR アンテナのリアクタンス最適化”, 信学技報, AP2000-13, pp17-22, May 2000
- [4] L.C.W.ディクソン “非線形最適化計算法”, 培風館 1973 年
- [5] 大平, 行田, 秋山, 楊 “エスパアンテナの等価ウエイトベクトルとアレーファクタ表現式” 信学技報, AP2000-44, pp7-14, July 2000

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001776956	0.012004983	0.000513819	-0.001531715	0.003329611	0.010889941
0.191	0.001859604	0.012315725	0.000521467	-0.001601335	0.003469463	0.011082000
0.192	0.001948637	0.012645237	0.000528926	-0.001675338	0.003614308	0.011283566
0.193	0.002044825	0.012995308	0.000536143	-0.001754139	0.003764505	0.011496118
0.194	0.002149067	0.013367957	0.000543054	-0.001838208	0.003920573	0.011721407
0.195	0.002262407	0.013765471	0.000549579	-0.001928080	0.004083235	0.011961498
0.196	0.002386074	0.014190453	0.000555622	-0.002024367	0.004253500	0.012218818
0.197	0.002521516	0.014645879	0.000561063	-0.002127767	0.004432740	0.012496197
0.198	0.002670454	0.015135159	0.000565753	-0.002239088	0.004622811	0.012796927
0.199	0.002834917	0.015662241	0.000569521	-0.002359251	0.004826211	0.013124815
0.200	0.003017423	0.016231646	0.000572105	-0.002489371	0.005046214	0.013484240
0.201	0.003220940	0.016848693	0.000573224	-0.002630709	0.005287202	0.013880213
0.202	0.003449125	0.017519584	0.000572502	-0.002784766	0.005554941	0.014318428
0.203	0.003706462	0.018251636	0.000569457	-0.002953329	0.005857029	0.014805296
0.204	0.003998584	0.019053478	0.000563458	-0.003138504	0.006203554	0.015347887
0.205	0.004332519	0.019935457	0.000553686	-0.003342861	0.006607855	0.015953880
0.206	0.004717177	0.020909924	0.000539060	-0.003569488	0.007087677	0.016631173
0.207	0.005164057	0.021991875	0.000518124	-0.003822177	0.007666792	0.017387273
0.208	0.005688132	0.023199560	0.000488910	-0.004105606	0.008377085	0.018227884
0.209	0.006309210	0.024555387	0.000448705	-0.004425602	0.009261343	0.019154267
0.210	0.007053928	0.026087072	0.000393716	-0.004789507	0.010376590	0.020158254
0.211	0.007958773	0.027829143	0.000318536	-0.005206670	0.011797205	0.021213144
0.212	0.009074736	0.029824824	0.000215304	-0.005689119	0.013615391	0.022257684
0.213	0.010474749	0.032128392	0.000072311	-0.006252507	0.015932184	0.023170287
0.214	0.012265774	0.034807681	-0.000128331	-0.006917364	0.018824233	0.023734230
0.215	0.014609171	0.037945920	-0.000414779	-0.007710725	0.022261171	0.023612840
0.216	0.017755943	0.041640006	-0.000832828	-0.008667935	0.025958747	0.022398893
0.217	0.022109361	0.045986578	-0.001459667	-0.009833616	0.029245018	0.019849958
0.218	0.028337510	0.051030301	-0.002430245	-0.011257901	0.031201495	0.016306129
0.219	0.037569226	0.056597981	-0.003987816	-0.012974255	0.031269556	0.012881021
0.220	0.051677278	0.061794063	-0.006573206	-0.014912854	0.029837061	0.010968104
0.221	0.073307069	0.063576230	-0.010918001	-0.016608785	0.028115155	0.011528903
0.222	0.103527390	0.053782776	-0.017742522	-0.016445494	0.027646952	0.015001851
0.223	0.131648617	0.019867961	-0.025612411	-0.011182505	0.030318387	0.022096275
0.224	0.130462738	-0.031337765	-0.028501917	-0.000560512	0.042486949	0.036766333
0.225	0.098959019	-0.064887458	-0.024061601	0.008280246	0.115747258	0.038537127
0.226	0.065862875	-0.072287845	-0.017691082	0.011829448	0.069212755	-0.072608917
0.227	0.043110966	-0.067593203	-0.012711450	0.012252187	0.027758190	-0.050731738
0.228	0.029006386	-0.060014445	-0.009337329	0.011550700	0.017913812	-0.037679838
0.229	0.020247242	-0.052711063	-0.007081802	0.010578431	0.013789620	-0.030445808
0.230	0.014630844	-0.046432749	-0.005536873	0.009624827	0.011460085	-0.025830300
0.231	0.010892255	-0.041200920	-0.004443153	0.008771814	0.009920853	-0.022584855
0.232	0.008314419	-0.036860280	-0.003643351	0.008031323	0.008807667	-0.020149414
0.233	0.006480823	-0.033239891	-0.003041154	0.007393646	0.007955384	-0.018237157
0.234	0.005141099	-0.030193689	-0.002576014	0.006844024	0.007276985	-0.016685481
0.235	0.004139377	-0.027605641	-0.002208700	0.006368096	0.006721520	-0.015394755
0.236	0.003375372	-0.025385662	-0.001913023	0.005953444	0.006256791	-0.014300131
0.237	0.002782605	-0.023464088	-0.001671013	0.005589787	0.005861254	-0.013357330
0.238	0.002315812	-0.021786832	-0.001470029	0.005268752	0.005519854	-0.012534924
0.239	0.001943428	-0.020311557	-0.001300969	0.004983552	0.005221698	-0.011809888
0.240	0.001642977	-0.019004866	-0.001157155	0.004728684	0.004958695	-0.011164923

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001137706	-0.002374961	-0.001378388	-0.000556455	-0.001840919	0.001126107
0.191	0.001154505	-0.002528463	-0.001448145	-0.000542178	-0.001884332	0.001284159
0.192	0.001167484	-0.002693502	-0.001520568	-0.000525939	-0.001921448	0.001456804
0.193	0.001175849	-0.002870955	-0.001595828	-0.000507833	-0.001950795	0.001645052
0.194	0.001178693	-0.003061772	-0.001674175	-0.000488010	-0.001970689	0.001849968
0.195	0.001174977	-0.003266995	-0.001755953	-0.000466679	-0.001979201	0.002072684
0.196	0.001163505	-0.003487764	-0.001841642	-0.000444117	-0.001974101	0.002314411
0.197	0.001142890	-0.003725345	-0.001931899	-0.000420667	-0.001952805	0.002576462
0.198	0.001111514	-0.003981151	-0.002027608	-0.000396747	-0.001912285	0.002860267
0.199	0.001067484	-0.004256775	-0.002130026	-0.000372885	-0.001848932	0.003167472
0.200	0.001008480	-0.004554013	-0.002240587	-0.000349541	-0.001758511	0.003499706
0.201	0.000931753	-0.004874912	-0.002361443	-0.000327342	-0.001635778	0.003858979
0.202	0.000833900	-0.005221795	-0.002495343	-0.000306882	-0.001474292	0.004247439
0.203	0.000710672	-0.005597303	-0.002645916	-0.000288697	-0.001265977	0.004667421
0.204	0.000556675	-0.006004352	-0.002817950	-0.000273170	-0.001000548	0.005121323
0.205	0.000364968	-0.006446161	-0.003017795	-0.000260326	-0.000664705	0.005611433
0.206	0.000126517	-0.006926048	-0.003253898	-0.000249531	-0.000241046	0.006139462
0.207	-0.000170615	-0.007447147	-0.003537543	-0.000238921	0.000293500	0.006705677
0.208	-0.000542298	-0.008011718	-0.003883848	-0.000224423	0.000969734	0.007307268
0.209	-0.001009711	-0.008619836	-0.004313054	-0.000198028	0.001828908	0.007935329
0.210	-0.001600970	-0.009266910	-0.004852030	-0.000144736	0.002925958	0.008569335
0.211	-0.002352624	-0.009939137	-0.005535589	-0.000037205	0.004332474	0.009167262
0.212	-0.003309765	-0.010605497	-0.006406349	0.000173377	0.006136962	0.009648478
0.213	-0.004521310	-0.011204877	-0.007509548	0.000571904	0.008435414	0.009866230
0.214	-0.006022958	-0.011628710	-0.008875338	0.001299262	0.011297460	0.009570313
0.215	-0.007795076	-0.011708697	-0.010475484	0.002568652	0.014682599	0.008378201
0.216	-0.009687674	-0.011241924	-0.012146256	0.004647065	0.018291274	0.005817862
0.217	-0.011350332	-0.010109768	-0.013514423	0.007747585	0.021427168	0.001551879
0.218	-0.012296244	-0.008490521	-0.014053439	0.011836855	0.023130511	-0.004224922
0.219	-0.012192042	-0.006966667	-0.013356195	0.016566076	0.022767451	-0.010632777
0.220	-0.011125814	-0.006316402	-0.011361962	0.021558619	0.020575614	-0.016679775
0.221	-0.009517881	-0.007284050	-0.008155186	0.026818352	0.017428925	-0.022152453
0.222	-0.007990544	-0.010910539	-0.003468989	0.032856823	0.013980077	-0.028164599
0.223	-0.008379774	-0.019608028	0.003851427	0.040957286	0.009123082	-0.037701946
0.224	-0.019412993	-0.038373958	0.019918678	0.055667565	-0.005625651	-0.056355169
0.225	-0.094532800	-0.044223101	0.096342301	0.056946765	-0.083724584	-0.061572550
0.226	-0.051093506	0.064879774	0.052345569	-0.054950624	-0.042638705	0.048409622
0.227	-0.012376957	0.042456659	0.012927811	-0.033927602	-0.005775183	0.026956976
0.228	-0.004615951	0.029528369	0.004729012	-0.021747122	0.000522795	0.015005373
0.229	-0.002045774	0.022661175	0.001947251	-0.015357723	0.001931286	0.009077628
0.230	-0.000896077	0.018479305	0.000724928	-0.011539261	0.002152246	0.005777806
0.231	-0.000276452	0.015665868	0.000109318	-0.009035234	0.002024034	0.003781563
0.232	0.000101080	0.013635991	-0.000224770	-0.007284296	0.001795223	0.002503332
0.233	0.000350991	0.012095584	-0.000412835	-0.006001780	0.001550359	0.001651750
0.234	0.000526065	0.010881776	-0.000519259	-0.005028832	0.001319367	0.001068252
0.235	0.000653576	0.009897322	-0.000577571	-0.004270169	0.001111924	0.000660474
0.236	0.000748945	0.009080591	-0.000606447	-0.003665355	0.000929796	0.000371706
0.237	0.000821552	0.008390583	-0.000616835	-0.003174320	0.000771674	0.000165641
0.238	0.000877444	0.007798920	-0.000615412	-0.002769522	0.000635165	0.000018241
0.239	0.000920715	0.007285288	-0.000606383	-0.002431447	0.000517648	-0.000086864
0.240	0.000954243	0.006834753	-0.000592460	-0.002145932	0.000416609	-0.000161066

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001809945	0.012037587	0.000510699	-0.001538703	0.003331542	0.010899239
0.191	0.001895180	0.012350887	0.000518207	-0.001609125	0.003471942	0.011094224
0.192	0.001987073	0.012683220	0.000525499	-0.001684018	0.003617682	0.011299146
0.193	0.002086431	0.013036409	0.000532519	-0.001763809	0.003769209	0.011515513
0.194	0.002194200	0.013412514	0.000539197	-0.001848983	0.003927149	0.011745108
0.195	0.002311480	0.013813872	0.000545444	-0.001940090	0.004092355	0.011990022
0.196	0.002439565	0.014243142	0.000551157	-0.002037758	0.004265984	0.012252702
0.197	0.002579986	0.014703364	0.000556203	-0.002142712	0.004449590	0.012535991
0.198	0.002734559	0.015198029	0.000560419	-0.002255782	0.004645244	0.012843183
0.199	0.002905435	0.015731181	0.000563609	-0.002377937	0.004855673	0.013178089
0.200	0.003095279	0.016307445	0.000565506	-0.002510298	0.005084524	0.013545009
0.201	0.003307231	0.016932287	0.000565795	-0.002654196	0.005336525	0.013948910
0.202	0.003545209	0.017612050	0.000564060	-0.002811168	0.005617945	0.014395338
0.203	0.003813996	0.018354246	0.000559771	-0.002983069	0.005936983	0.014890486
0.204	0.004119574	0.019167764	0.000552243	-0.003172106	0.006304454	0.015441095
0.205	0.004469485	0.020063228	0.000540570	-0.003380941	0.006734661	0.016054273
0.206	0.004873280	0.021053342	0.000523581	-0.003612774	0.007246570	0.016736962
0.207	0.005343345	0.022153551	0.000499640	-0.003871598	0.007865339	0.017495264
0.208	0.005895830	0.023382633	0.000466586	-0.004162278	0.008624597	0.018332459
0.209	0.006552174	0.024763650	0.000421413	-0.004490909	0.009568927	0.019245940
0.210	0.007341310	0.026325109	0.000359907	-0.004865178	0.010756721	0.020221355
0.211	0.008302998	0.028102436	0.000276043	-0.005294873	0.012262016	0.021222295
0.212	0.009493051	0.030139868	0.000161026	-0.005792598	0.014171918	0.022173207
0.213	0.010991612	0.032492581	0.000001708	-0.006374732	0.016571690	0.022933839
0.214	0.012916745	0.035228751	-0.000222091	-0.007062690	0.019501675	0.023270596
0.215	0.015447335	0.038430167	-0.000542282	-0.007884477	0.022865760	0.022852344
0.216	0.018862733	0.042187387	-0.001010999	-0.008876144	0.026297931	0.021340838
0.217	0.023612834	0.046577796	-0.001716454	-0.010081599	0.029101214	0.018656501
0.218	0.030441862	0.051592793	-0.002813042	-0.011545235	0.030496827	0.015322605
0.219	0.040593083	0.056915804	-0.004577434	-0.013278737	0.030203522	0.012471261
0.220	0.056049584	0.061275442	-0.007498494	-0.015142295	0.028805391	0.011305010
0.221	0.079226308	0.060755357	-0.012318466	-0.016476078	0.027524506	0.012588229
0.222	0.109314766	0.046079698	-0.019445708	-0.015312249	0.027879872	0.016739030
0.223	0.131403007	0.007320000	-0.026413346	-0.008673027	0.032136061	0.024870470
0.224	0.121612474	-0.040410637	-0.027347106	0.001798637	0.051220561	0.041341853
0.225	0.089088350	-0.066304693	-0.022226251	0.009166260	0.132564098	-0.001078516
0.226	0.059232356	-0.070020525	-0.016281091	0.011783212	0.051836426	-0.065049531
0.227	0.039225647	-0.064643833	-0.011808121	0.011909267	0.024727389	-0.045690750
0.228	0.026746385	-0.057346758	-0.008772314	0.011171238	0.016940314	-0.034967412
0.229	0.018891185	-0.050492689	-0.006720060	0.010237865	0.013347080	-0.028721526
0.230	0.013785152	-0.044618968	-0.005297086	0.009336565	0.011220137	-0.024605541
0.231	0.010345234	-0.039711339	-0.004278599	0.008531591	0.009778765	-0.021650835
0.232	0.007949114	-0.035622843	-0.003526824	0.007831173	0.008720343	-0.019402312
0.233	0.006230178	-0.032198169	-0.002956332	0.007225950	0.007901788	-0.017619083
0.234	0.004965187	-0.029305134	-0.002512769	0.006702450	0.007245556	-0.016161259
0.235	0.004013577	-0.026838388	-0.002160539	0.006247616	0.006705344	-0.014941563
0.236	0.003284018	-0.024715709	-0.001875653	0.005850121	0.006251459	-0.013902385
0.237	0.002715433	-0.022873192	-0.001641529	0.005500540	0.005863835	-0.013003949
0.238	0.002265939	-0.021260936	-0.001446408	0.005191162	0.005528317	-0.012217765
0.239	0.001906135	-0.019839714	-0.001281775	0.004915703	0.005234599	-0.011522805
0.240	0.001614965	-0.018578421	-0.001141347	0.004669040	0.004974979	-0.010903160

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001106002	-0.002396836	-0.001382446	-0.000537899	-0.001793758	0.001171716
0.191	0.001120107	-0.002551098	-0.001452321	-0.000523657	-0.001832275	0.001330344
0.192	0.001130176	-0.002716886	-0.001525015	-0.000507537	-0.001864105	0.001503415
0.193	0.001135395	-0.002895082	-0.001600739	-0.000489630	-0.001887747	0.001691929
0.194	0.001134831	-0.003086643	-0.001679792	-0.000470082	-0.001901471	0.001896940
0.195	0.001127410	-0.003292615	-0.001762581	-0.000449091	-0.001903287	0.002119571
0.196	0.001111893	-0.003514149	-0.001849653	-0.000426913	-0.001890887	0.002361022
0.197	0.001086836	-0.003752521	-0.001941749	-0.000403867	-0.001861584	0.002622591
0.198	0.001050547	-0.004009155	-0.002039851	-0.000380329	-0.001812216	0.002905693
0.199	0.001001027	-0.004285652	-0.002145266	-0.000356734	-0.001739032	0.003211876
0.200	0.000935845	-0.004583807	-0.002259709	-0.000333538	-0.001637486	0.003542839
0.201	0.000852079	-0.004905668	-0.002385443	-0.000311222	-0.001502056	0.003900444
0.202	0.000746105	-0.005253504	-0.002525429	-0.000290233	-0.001325899	0.004286676
0.203	0.000613393	-0.005629881	-0.002683569	-0.000270894	-0.001100405	0.004703617
0.204	0.000448189	-0.006037602	-0.002864992	-0.000253272	-0.000814599	0.005153275
0.205	0.000243084	-0.006479628	-0.003076474	-0.000236950	-0.000454295	0.005637285
0.206	-0.000011541	-0.006958856	-0.003327082	-0.000220659	-0.000000878	0.006156364
0.207	-0.000328360	-0.007477728	-0.003628557	-0.000201442	0.000569945	0.006708989
0.208	-0.000724090	-0.008037340	-0.003996836	-0.000173716	0.001290675	0.007289743
0.209	-0.001220803	-0.008635865	-0.004452882	-0.000127069	0.002204244	0.007885453
0.210	-0.001847281	-0.009265651	-0.005023993	-0.000042778	0.003366785	0.008468837
0.211	-0.002639855	-0.009908069	-0.005744460	0.000112190	0.004849325	0.008987383
0.212	-0.003640978	-0.010524984	-0.006653783	0.000394990	0.006734876	0.009344987
0.213	-0.004891496	-0.011046000	-0.007788462	0.000901502	0.009103076	0.009374577
0.214	-0.006408619	-0.011354215	-0.009159131	0.001783434	0.011986325	0.008806621
0.215	-0.008139195	-0.011284328	-0.010702421	0.003254721	0.015276845	0.007260415
0.216	-0.009891145	-0.010668474	-0.012209821	0.005553125	0.018590719	0.004327091
0.217	-0.011299222	-0.009470879	-0.013288568	0.008818335	0.021201971	-0.000177379
0.218	-0.011942066	-0.007965230	-0.013468729	0.012937778	0.022281790	-0.005891192
0.219	-0.011616918	-0.006753939	-0.012455828	0.017572159	0.021455787	-0.011945541
0.220	-0.010498251	-0.006550959	-0.010234822	0.022466867	0.019117184	-0.017597262
0.221	-0.009015682	-0.008092246	-0.006793398	0.027758768	0.016044837	-0.022954702
0.222	-0.007925143	-0.012622333	-0.001661469	0.034056091	0.012530527	-0.029452302
0.223	-0.009953300	-0.022968016	0.006861445	0.043000787	0.006410568	-0.040445446
0.224	-0.028601569	-0.043707648	0.029527415	0.059460139	-0.015642053	-0.061020077
0.225	-0.112178279	-0.004866316	0.113793011	0.016568864	-0.101962436	-0.021567245
0.226	-0.034427483	0.057467533	0.035426565	-0.048100838	-0.026394036	0.041594006
0.227	-0.009845164	0.037718806	0.010226944	-0.029533287	-0.003542596	0.022753880
0.228	-0.003979105	0.027150526	0.003993637	-0.019618604	0.000947291	0.013100838
0.229	-0.001831494	0.021258528	0.001676295	-0.014159213	0.001995102	0.008091698
0.230	-0.000813071	0.017550662	0.000607930	-0.010788303	0.002129047	0.005215626
0.231	-0.000243427	0.015001014	0.000054259	-0.008529319	0.001982686	0.003439348
0.232	0.000112413	0.013133229	-0.000251882	-0.006925431	0.001755186	0.002285334
0.233	0.000352104	0.011700001	-0.000426451	-0.005737234	0.001516788	0.001508316
0.234	0.000522167	0.010561116	-0.000526125	-0.004827897	0.001292914	0.000971668
0.235	0.000647246	0.009631345	-0.000581045	-0.004113848	0.001091854	0.000594380
0.236	0.000741548	0.008855910	-0.000608270	-0.003541328	0.000915033	0.000326004
0.237	0.000813838	0.008197957	-0.000617932	-0.003074273	0.000761194	0.000133888
0.238	0.000869845	0.007631742	-0.000616279	-0.002687670	0.000628073	-0.000003803
0.239	0.000913478	0.007138699	-0.000607280	-0.002363659	0.000513202	-0.000102046
0.240	0.000947510	0.006705078	-0.000593521	-0.002089182	0.000414218	-0.000171348

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001843644	0.012070516	0.000507322	-0.001545962	0.003334384	0.010909837
0.191	0.001931551	0.012386402	0.000514670	-0.001617203	0.003475555	0.011107769
0.192	0.002026398	0.012721587	0.000521776	-0.001693007	0.003622434	0.011316046
0.193	0.002129036	0.013077931	0.000528576	-0.001773814	0.003775566	0.011536206
0.194	0.002240456	0.013457535	0.000534994	-0.001860119	0.003935684	0.011770058
0.195	0.002361813	0.013862778	0.000540937	-0.001952491	0.004103746	0.012019717
0.196	0.002494484	0.014296388	0.000546284	-0.002051577	0.004281112	0.012287637
0.197	0.002640075	0.014761467	0.000550896	-0.002158124	0.004469494	0.012576668
0.198	0.002800510	0.015261583	0.000554593	-0.002272989	0.004671189	0.012890094
0.199	0.002978053	0.015800888	0.000557163	-0.002397180	0.004889175	0.013231707
0.200	0.003175552	0.016384100	0.000558311	-0.002531843	0.005127445	0.013605730
0.201	0.003396347	0.017016813	0.000557691	-0.002678351	0.005391114	0.014017023
0.202	0.003644575	0.017705565	0.000554852	-0.002838320	0.005686936	0.014470995
0.203	0.003925351	0.018458048	0.000549213	-0.003013664	0.006023721	0.014973555
0.204	0.004245076	0.019283411	0.000540017	-0.003206679	0.006413054	0.015531028
0.205	0.004611786	0.020192520	0.000526280	-0.003420124	0.006870150	0.016149809
0.206	0.005035781	0.021198489	0.000506684	-0.003657362	0.007415127	0.016835835
0.207	0.005530364	0.022317170	0.000479465	-0.003922515	0.008074575	0.017593409
0.208	0.006112969	0.023567879	0.000442216	-0.004220682	0.008883594	0.018423116
0.209	0.006806811	0.024974315	0.000391609	-0.004558234	0.009888137	0.019318036
0.210	0.007643310	0.026565717	0.000322963	-0.004943206	0.011147132	0.020257068
0.211	0.008665818	0.028378371	0.000229562	-0.005385844	0.012732585	0.021193691
0.212	0.009935418	0.030457344	0.000101567	-0.005899331	0.014723623	0.022038295
0.213	0.011540182	0.032858396	-0.000075787	-0.006500759	0.017185243	0.022634528
0.214	0.013610378	0.035649371	-0.000325224	-0.007212355	0.020116793	0.022739656
0.215	0.016344232	0.038909217	-0.000682962	-0.008062990	0.023357474	0.022044631
0.216	0.020052220	0.042719025	-0.001208271	-0.009088959	0.026479653	0.020299449
0.217	0.025234911	0.047129820	-0.002001763	-0.010332286	0.028805194	0.017583564
0.218	0.032716857	0.052063074	-0.003239383	-0.011828478	0.029725072	0.014550568
0.219	0.043851291	0.057019874	-0.005233129	-0.013559065	0.029199485	0.012291215
0.220	0.060675780	0.060272275	-0.008514133	-0.015293668	0.027944034	0.011824165
0.221	0.085117339	0.056957473	-0.013787522	-0.016144800	0.027179317	0.013772119
0.222	0.113921141	0.037176138	-0.021000104	-0.013854908	0.028461077	0.018598147
0.223	0.128845970	-0.004724276	-0.026723782	-0.006105801	0.034843128	0.027920025
0.224	0.112205743	-0.047291004	-0.025942906	0.003764273	0.064720653	0.043950831
0.225	0.080192714	-0.066546363	-0.020509492	0.009765257	0.117429518	-0.040167955
0.226	0.053473220	-0.067571416	-0.015028860	0.011652751	0.041333375	-0.057640256
0.227	0.035839768	-0.061822065	-0.011007195	0.011564443	0.022487030	-0.041570961
0.228	0.024750492	-0.054845461	-0.008265779	0.010810475	0.016131620	-0.032618840
0.229	0.017676667	-0.048414926	-0.006391555	0.009917478	0.012957792	-0.027172666
0.230	0.013018323	-0.042913654	-0.005076768	0.009065434	0.011002736	-0.023480318
0.231	0.009844089	-0.038303941	-0.004125883	0.008305033	0.009647963	-0.020780052
0.232	0.007611615	-0.034448033	-0.003417766	0.007641778	0.008639310	-0.018698692
0.233	0.005997022	-0.031204829	-0.002876382	0.007066752	0.007851957	-0.017032662
0.234	0.004800647	-0.028454560	-0.002452797	0.006567661	0.007216492	-0.015661084
0.235	0.003895391	-0.026101431	-0.002114634	0.006132623	0.006690702	-0.014507251
0.236	0.003197888	-0.024070303	-0.001839882	0.005751295	0.006247155	-0.013519856
0.237	0.002651939	-0.022302453	-0.001613196	0.005415030	0.005867115	-0.012663092
0.238	0.002218715	-0.020751806	-0.001423628	0.005116715	0.005537262	-0.011911094
0.239	0.001870790	-0.019381966	-0.001263204	0.004850527	0.005247836	-0.011244631
0.240	0.001588414	-0.018163954	-0.001126006	0.004611699	0.004991503	-0.010649064

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001073606	-0.002417985	-0.001386831	-0.000519558	-0.001745512	0.001215578
0.191	0.001085002	-0.002572957	-0.001456924	-0.000505329	-0.001779123	0.001374666
0.192	0.001092142	-0.002739447	-0.001529994	-0.000489287	-0.001805661	0.001548046
0.193	0.001094191	-0.002918340	-0.001606302	-0.000471524	-0.001823579	0.001736702
0.194	0.001090185	-0.003110595	-0.001686195	-0.000452174	-0.001831099	0.001941678
0.195	0.001079012	-0.003317274	-0.001770114	-0.000431425	-0.001826188	0.002164100
0.196	0.001059389	-0.003539517	-0.001858727	-0.000409507	-0.001806411	0.002405117
0.197	0.001029811	-0.003778618	-0.001952832	-0.000386704	-0.001768993	0.002666026
0.198	0.000988503	-0.004036002	-0.002053518	-0.000363351	-0.001710622	0.002948207
0.199	0.000933366	-0.004313282	-0.002162212	-0.000339810	-0.001627357	0.003253169
0.200	0.000861832	-0.004612224	-0.002280770	-0.000316456	-0.001514407	0.003582519
0.201	0.000770808	-0.004934853	-0.002411626	-0.000293638	-0.001365946	0.003937988
0.202	0.000656443	-0.005283400	-0.002557983	-0.000271635	-0.001174671	0.004321391
0.203	0.000513921	-0.005660321	-0.002724004	-0.000250518	-0.000931450	0.004734482
0.204	0.000337115	-0.006068243	-0.002915159	-0.000230000	-0.000624607	0.005178772
0.205	0.000118169	-0.006509813	-0.003138636	-0.000209148	-0.000239092	0.005655113
0.206	-0.000153133	-0.006987444	-0.003403914	-0.000185889	0.000244723	0.006162942
0.207	-0.000490131	-0.007502740	-0.003723500	-0.000156199	0.000852582	0.006698926
0.208	-0.000910298	-0.008055469	-0.004113855	-0.000112711	0.001618313	0.007254550
0.209	-0.001436379	-0.008641682	-0.004596422	-0.000042353	0.002586070	0.007811887
0.210	-0.002097397	-0.009250378	-0.005198495	0.000077623	0.003812350	0.008336320
0.211	-0.002928611	-0.009857907	-0.005952917	0.000286243	0.005365838	0.008764315
0.212	-0.003968371	-0.010419145	-0.006894562	0.000648948	0.007321126	0.008984480
0.213	-0.005247179	-0.010855713	-0.008048805	0.001271456	0.009736896	0.008811828
0.214	-0.006761324	-0.011046291	-0.009404332	0.002312521	0.012603576	0.007965146
0.215	-0.008424614	-0.010836913	-0.010862510	0.003979024	0.015746630	0.006081443
0.216	-0.010012750	-0.010104606	-0.012179544	0.006470216	0.018717508	0.002833766
0.217	-0.011167284	-0.008895034	-0.012963742	0.009854957	0.020803428	-0.001813499
0.218	-0.011546846	-0.007552140	-0.012814225	0.013968773	0.021334470	-0.007386596
0.219	-0.011061021	-0.006671824	-0.011526072	0.018512707	0.020154971	-0.013091937
0.220	-0.009941009	-0.006916715	-0.009087827	0.023350898	0.017736579	-0.018437684
0.221	-0.008640322	-0.009062902	-0.005366967	0.028727575	0.014712620	-0.023821404
0.222	-0.008167850	-0.014601294	0.000337538	0.035359850	0.010927760	-0.030987876
0.223	-0.012562462	-0.026701242	0.010643609	0.045343196	0.002777944	-0.043583880
0.224	-0.042677053	-0.046966316	0.043820973	0.061325487	-0.030465254	-0.063647442
0.225	-0.097842118	0.034075535	0.099237224	-0.023240832	-0.088164958	0.017982933
0.226	-0.024570847	0.050242190	0.025344106	-0.041362097	-0.016923262	0.034927994
0.227	-0.008056346	0.033901803	0.008292031	-0.026025891	-0.002029602	0.019439081
0.228	-0.003477245	0.025124963	0.003406664	-0.017824619	0.001252221	0.011520936
0.229	-0.001652136	0.020018011	0.001447538	-0.013111298	0.002034168	0.007244680
0.230	-0.000741130	0.016709356	0.000505972	-0.010115875	0.002101508	0.004721328
0.231	-0.000214296	0.014388891	0.000005355	-0.008068831	0.001941880	0.003133542
0.232	0.000122347	0.012665059	-0.000276228	-0.006594864	0.001716658	0.002088175
0.233	0.000352770	0.011328564	-0.000438731	-0.005491316	0.001484651	0.001377372
0.234	0.000518207	0.010258131	-0.000532302	-0.004639759	0.001267585	0.000882817
0.235	0.000641009	0.009378798	-0.000584135	-0.003966621	0.001072594	0.000533179
0.236	0.000734298	0.008641743	-0.000609862	-0.003423937	0.000900845	0.000283450
0.237	0.000806286	0.008013766	-0.000618873	-0.002979181	0.000751086	0.000104162
0.238	0.000862401	0.007471470	-0.000617027	-0.002609588	0.000621202	-0.000024549
0.239	0.000906383	0.006997857	-0.000608079	-0.002298783	0.000508870	-0.000116420
0.240	0.000940902	0.006580259	-0.000594492	-0.002034713	0.000411859	-0.000181149

素子間隔d[λ]=0.2325 アンテナ半径[λ]=0.0075

アンテナ長 L[λ]	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001878058	0.012103760	0.000503683	-0.001553499	0.003338140	0.010921630
0.191	0.001968722	0.012422260	0.000510853	-0.001625580	0.003480290	0.011122513
0.192	0.002066620	0.012760330	0.000517750	-0.001702318	0.003628546	0.011334132
0.193	0.002172649	0.013119864	0.000524306	-0.001784164	0.003783545	0.011558051
0.194	0.002287850	0.013503007	0.000530437	-0.001871629	0.003946133	0.011796096
0.195	0.002413446	0.013912192	0.000536038	-0.001965297	0.004117426	0.012050394
0.196	0.002550876	0.014350193	0.000540985	-0.002065837	0.004298892	0.012323412
0.197	0.002701830	0.014820196	0.000545122	-0.002174024	0.004492447	0.012617998
0.198	0.002868366	0.015325833	0.000548252	-0.002290731	0.004700627	0.012937402
0.199	0.003052883	0.015871350	0.000550140	-0.002416997	0.004926686	0.013285369
0.200	0.003258372	0.016461596	0.000550470	-0.002554024	0.005174924	0.013666059
0.201	0.003488382	0.017102294	0.000548865	-0.002703227	0.005450845	0.014084226
0.202	0.003747339	0.017800150	0.000544824	-0.002866279	0.005761744	0.014545012
0.203	0.004040688	0.018563053	0.000537715	-0.003045165	0.006117031	0.015054027
0.204	0.004375265	0.019400393	0.000526709	-0.003242273	0.006529041	0.015617083
0.205	0.004759678	0.020323327	0.000510721	-0.003460471	0.007013912	0.016239778
0.206	0.005204985	0.021345329	0.000488305	-0.003703262	0.007592863	0.016926800
0.207	0.005725502	0.022482678	0.000457515	-0.003974942	0.008293728	0.017680496
0.208	0.006340054	0.023755212	0.000415690	-0.004280835	0.009152837	0.018498399
0.209	0.007073768	0.025187229	0.000359147	-0.004627591	0.010216993	0.019368846
0.210	0.007960787	0.026808682	0.000282684	-0.005023611	0.011544599	0.020263607
0.211	0.009048383	0.028656582	0.000178814	-0.005479600	0.013203837	0.021125926
0.212	0.010403408	0.030776637	0.000036534	-0.006009315	0.015262833	0.021853103
0.213	0.012122637	0.033224783	-0.000160739	-0.006630548	0.017762315	0.022276488
0.214	0.014349791	0.036067713	-0.000438668	-0.007366311	0.020657893	0.022153845
0.215	0.017304267	0.039379710	-0.000838182	-0.008246008	0.023730281	0.021213364
0.216	0.021330562	0.043228564	-0.001426651	-0.009305648	0.026514894	0.019305750
0.217	0.026983718	0.047630170	-0.002318552	-0.010583830	0.028390556	0.016652972
0.218	0.035170917	0.052415879	-0.003713366	-0.012103147	0.028928467	0.013986073
0.219	0.047342348	0.056859173	-0.005959026	-0.013804651	0.028286874	0.012316576
0.220	0.065503447	0.058693955	-0.009616905	-0.015344358	0.027266391	0.012500464
0.221	0.090768964	0.052111311	-0.015288208	-0.015584526	0.027092482	0.015067837
0.222	0.117011912	0.027361064	-0.022318348	-0.012106856	0.029452706	0.020593294
0.223	0.124290263	-0.015694922	-0.026566746	-0.003614487	0.038866164	0.031171451
0.224	0.102776871	-0.052191596	-0.024407542	0.005343912	0.083509213	0.040098518
0.225	0.072267528	-0.065944384	-0.018930397	0.010142068	0.089841525	-0.056801610
0.226	0.048461591	-0.065044719	-0.013916354	0.011465219	0.034582190	-0.051337418
0.227	0.032874803	-0.059137144	-0.010294082	0.011223687	0.020764229	-0.038135253
0.228	0.022979238	-0.052499097	-0.007809608	0.010468216	0.015447466	-0.030559003
0.229	0.016584282	-0.046465511	-0.006092027	0.009615864	0.012612282	-0.025770391
0.230	0.012320487	-0.041307252	-0.004873627	0.008810074	0.010804828	-0.022441152
0.231	0.009383564	-0.036971792	-0.003983724	0.008091067	0.009527256	-0.019965198
0.232	0.007298980	-0.033330856	-0.003315426	0.007462329	0.008564045	-0.018034143
0.233	0.005779633	-0.030256234	-0.002800844	0.006915444	0.007805646	-0.016475019
0.234	0.004646423	-0.027639265	-0.002395803	0.006439197	0.007189675	-0.015182967
0.235	0.003784150	-0.025392723	-0.002070787	0.006022765	0.006677543	-0.014090377
0.236	0.003116561	-0.023447846	-0.001805559	0.005656694	0.006243854	-0.013151454
0.237	0.002591842	-0.021750609	-0.001585900	0.005333041	0.005871086	-0.012333915
0.238	0.002173948	-0.020258423	-0.001401603	0.005045238	0.005546693	-0.011614242
0.239	0.001837260	-0.018937488	-0.001245188	0.004787886	0.005261421	-0.010974827
0.240	0.001563231	-0.017760782	-0.001111075	0.004556544	0.005008281	-0.010402192

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001040534	-0.002438423	-0.001391497	-0.000501307	-0.001696285	0.001257637
0.191	0.001049206	-0.002594060	-0.001461892	-0.000487051	-0.001724995	0.001417065
0.192	0.001053398	-0.002761206	-0.001535440	-0.000471038	-0.001746233	0.001590628
0.193	0.001052249	-0.002940746	-0.001612441	-0.000453352	-0.001758411	0.001779294
0.194	0.001044765	-0.003133645	-0.001693294	-0.000434115	-0.001759697	0.001984092
0.195	0.001029796	-0.003340959	-0.001778527	-0.000413493	-0.001747963	0.002206112
0.196	0.001006005	-0.003563848	-0.001868831	-0.000391692	-0.001720729	0.002446517
0.197	0.000971823	-0.003803610	-0.001965117	-0.000368955	-0.001675076	0.002706560
0.198	0.000925390	-0.004061652	-0.002068567	-0.000345565	-0.001607548	0.002987568
0.199	0.000864497	-0.004339579	-0.002180731	-0.000321810	-0.001514001	0.003290981
0.200	0.000786439	-0.004639157	-0.002303619	-0.000297957	-0.001389384	0.003618314
0.201	0.000687938	-0.004962370	-0.002439815	-0.000274233	-0.001227559	0.003971176
0.202	0.000564926	-0.005311353	-0.002592792	-0.000250678	-0.001020764	0.004351057
0.203	0.000412287	-0.005688437	-0.002766966	-0.000227105	-0.000759326	0.004759367
0.204	0.000223527	-0.006096026	-0.002968133	-0.000202817	-0.000430885	0.005197025
0.205	-0.000009662	-0.006536403	-0.003203883	-0.000176300	-0.000019538	0.005663970
0.206	-0.000298042	-0.007011389	-0.003484159	-0.000144614	0.000495366	0.006158222
0.207	-0.000655571	-0.007521644	-0.003821977	-0.000102451	0.001140722	0.006674256
0.208	-0.001100331	-0.008065443	-0.004234247	-0.000040510	0.001951463	0.007200160
0.209	-0.001655473	-0.008636493	-0.004742625	0.000057172	0.002972456	0.007712808
0.210	-0.002349724	-0.009220263	-0.005373805	0.000217643	0.004259415	0.008169762
0.211	-0.003216361	-0.009788018	-0.006158232	0.000486011	0.005876862	0.008496326
0.212	-0.004288100	-0.010288140	-0.007124545	0.000935626	0.007887862	0.008566653
0.213	-0.005583057	-0.010636195	-0.008284839	0.001680285	0.010326011	0.008181482
0.214	-0.007075214	-0.010711285	-0.009603927	0.002881385	0.013136546	0.007056998
0.215	-0.008648243	-0.010378516	-0.010951075	0.004731093	0.016084502	0.004863223
0.216	-0.010057809	-0.009566286	-0.012058450	0.007384598	0.018680484	0.001366550
0.217	-0.010971007	-0.008394081	-0.012552900	0.010848850	0.020261743	-0.003338040
0.218	-0.011131290	-0.007251327	-0.012104742	0.014934756	0.020325024	-0.008720222
0.219	-0.010539170	-0.006712928	-0.010570798	0.019403393	0.018883596	-0.014104694
0.220	-0.009464751	-0.007411977	-0.007908673	0.024226940	0.016424328	-0.019240839
0.221	-0.008420215	-0.010209700	-0.003847097	0.029737827	0.013388031	-0.024792135
0.222	-0.008826422	-0.016864345	0.002608288	0.036792884	0.009045962	-0.032799034
0.223	-0.016647628	-0.030678965	0.015638674	0.047912964	-0.002229287	-0.046990551
0.224	-0.062117372	-0.043642405	0.063330913	0.056767031	-0.050582709	-0.059727978
0.225	-0.071009123	0.050650961	0.072178974	-0.040555681	-0.061822950	0.035129338
0.226	-0.018407313	0.044148536	0.018980457	-0.035693644	-0.011113748	0.029359203
0.227	-0.006743326	0.030765549	0.006852399	-0.023170809	-0.000971215	0.016774903
0.228	-0.003073667	0.023376526	0.002929146	-0.016292094	0.001472983	0.010192479
0.229	-0.001500232	0.018911484	0.001252275	-0.012186758	0.002055197	0.006509983
0.230	-0.000678337	0.015942671	0.000416444	-0.009509788	0.002071112	0.004283424
0.231	-0.000188525	0.013822848	-0.000038337	-0.007647473	0.001901909	0.002858453
0.232	0.000131015	0.012227605	-0.000298202	-0.006288988	0.001679645	0.001908729
0.233	0.000353000	0.010978821	-0.000449862	-0.005261789	0.001453900	0.001257056
0.234	0.000514155	0.009971169	-0.000537890	-0.004462938	0.001243332	0.000800516
0.235	0.000634823	0.009138511	-0.000586902	-0.003827456	0.001054105	0.000476075
0.236	0.000727153	0.008437227	-0.000611253	-0.003312436	0.000887160	0.000243457
0.237	0.000798856	0.007837352	-0.000619675	-0.002888484	0.000741290	0.000076026
0.238	0.000855078	0.007317589	-0.000617667	-0.002534845	0.000614499	-0.000044338
0.239	0.000899400	0.006862355	-0.000608783	-0.002236479	0.000504600	-0.000130255
0.240	0.000934394	0.006459966	-0.000595375	-0.001982249	0.000409488	-0.000190688

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001913224	0.012137293	0.000499771	-0.001561312	0.003342900	0.010934519
0.191	0.002006734	0.012458434	0.000506742	-0.001634253	0.003486242	0.011138348
0.192	0.002107786	0.012799418	0.000513409	-0.001711946	0.003636110	0.011353283
0.193	0.002217322	0.013162177	0.000519695	-0.001794856	0.003793238	0.011580909
0.194	0.002336438	0.013548896	0.000525509	-0.001883509	0.003958586	0.011823065
0.195	0.002466410	0.013962068	0.000530740	-0.001978514	0.004133395	0.012081895
0.196	0.002608778	0.014404510	0.000535247	-0.002080543	0.004319313	0.012359850
0.197	0.002765330	0.014879475	0.000538862	-0.002190397	0.004518446	0.012659764
0.198	0.002938213	0.015390694	0.000541372	-0.002308992	0.004733541	0.012984865
0.199	0.003129984	0.015942501	0.000542520	-0.002437396	0.004968136	0.013338831
0.200	0.003343810	0.016539862	0.000541960	-0.002576850	0.005226868	0.013725720
0.201	0.003583478	0.017188643	0.000539277	-0.002728821	0.005515683	0.014150096
0.202	0.003853674	0.017895705	0.000533930	-0.002895039	0.005842313	0.014616894
0.203	0.004160213	0.018669143	0.000525224	-0.003077569	0.006216802	0.015131317
0.204	0.004510402	0.019518588	0.000512248	-0.003278887	0.006652234	0.015698574
0.205	0.004913462	0.020455490	0.000493814	-0.003501979	0.007165630	0.016323341
0.206	0.005381242	0.021493671	0.000468334	-0.003750492	0.007779188	0.017008955
0.207	0.005929197	0.022649837	0.000433653	-0.004028900	0.008521883	0.017755436
0.208	0.006577625	0.023944319	0.000386840	-0.004342756	0.009430905	0.018557024
0.209	0.007353751	0.025401998	0.000323811	-0.004699002	0.010553257	0.019396986
0.210	0.008294668	0.027053451	0.000238788	-0.005106406	0.011945671	0.020239723
0.211	0.009451921	0.028936294	0.000123430	-0.005576136	0.013670529	0.021018506
0.212	0.010898673	0.031096610	-0.000034574	-0.006122518	0.015782049	0.021619271
0.213	0.012741233	0.033590000	-0.000253837	-0.006763997	0.018293549	0.021865989
0.214	0.015138043	0.036480945	-0.000563287	-0.007524229	0.021116846	0.021526848
0.215	0.018331672	0.039836907	-0.001009219	-0.008432906	0.023984250	0.020381100
0.216	0.022703470	0.043707542	-0.001668045	-0.009524934	0.026420950	0.018384102
0.217	0.028866123	0.048062960	-0.002669586	-0.010833503	0.027891498	0.015875130
0.218	0.037808710	0.052620353	-0.004238512	-0.012363233	0.028142171	0.013616261
0.219	0.051053627	0.056374986	-0.006757285	-0.014002368	0.027486283	0.012520738
0.220	0.070449407	0.056449986	-0.010796936	-0.015269342	0.026781590	0.013309855
0.221	0.095926284	0.046203666	-0.016770362	-0.014773232	0.027281053	0.016464410
0.222	0.118352953	0.017042606	-0.023324516	-0.010132502	0.030954138	0.022731293
0.223	0.118197083	-0.025193916	-0.026006282	-0.001308970	0.044822528	0.034290295
0.224	0.093700359	-0.055410286	-0.022833460	0.006571919	0.102497051	0.023430936
0.225	0.065258302	-0.064755486	-0.017493885	0.010349892	0.067649764	-0.058385802
0.226	0.044090615	-0.062510363	-0.012926945	0.011240189	0.029983932	-0.046133021
0.227	0.030267627	-0.056591772	-0.009656853	0.010890903	0.019398618	-0.035224805
0.228	0.021401189	-0.050296850	-0.007397319	0.010143941	0.014860405	-0.028735561
0.229	0.015598586	-0.044633858	-0.005818095	0.009331722	0.012303377	-0.024493973
0.230	0.011683833	-0.039791714	-0.004685878	0.008569301	0.010623908	-0.021478228
0.231	0.008959544	-0.035709115	-0.003851146	0.007888769	0.009415563	-0.019200964
0.232	0.007008954	-0.032267193	-0.003219252	0.007292138	0.008494002	-0.017405492
0.233	0.005576728	-0.029349413	-0.002729396	0.006771519	0.007762546	-0.015944104
0.234	0.004501764	-0.026857074	-0.002341595	0.006316680	0.007164919	-0.014725504
0.235	0.003679401	-0.024710638	-0.002028884	0.005917757	0.006665746	-0.013689935
0.236	0.003039751	-0.022847108	-0.001772618	0.005566101	0.006241476	-0.012796431
0.237	0.002534962	-0.021216709	-0.001559605	0.005254403	0.005875692	-0.012015842
0.238	0.002131522	-0.019780039	-0.001380312	0.004976598	0.005556568	-0.011326754
0.239	0.001805469	-0.018505683	-0.001227716	0.004727674	0.005275321	-0.010713030
0.240	0.001539365	-0.017368420	-0.001096553	0.004503490	0.005025287	-0.010162242

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001006807	-0.002458136	-0.001396494	-0.000483128	-0.001646094	0.001297918
0.191	0.001012736	-0.002614390	-0.001467282	-0.000468804	-0.001669895	0.001457567
0.192	0.001013957	-0.002782143	-0.001541404	-0.000452763	-0.001685819	0.001631186
0.193	0.001009580	-0.002962279	-0.001619208	-0.000435079	-0.001692233	0.001819728
0.194	0.000998578	-0.003155767	-0.001701142	-0.000415859	-0.001687245	0.002024201
0.195	0.000979762	-0.003363671	-0.001787796	-0.000395242	-0.001668652	0.002245678
0.196	0.000951735	-0.003587138	-0.001879932	-0.000373408	-0.001633879	0.002485281
0.197	0.000912860	-0.003827459	-0.001978545	-0.000350555	-0.001579884	0.002744223
0.198	0.000861191	-0.004086057	-0.002084924	-0.000326894	-0.001503047	0.003023783
0.199	0.000794405	-0.004364510	-0.002200742	-0.000302634	-0.001399018	0.003325308
0.200	0.000709654	-0.004664551	-0.002328155	-0.000277921	-0.001262482	0.003650184
0.201	0.000603477	-0.004988092	-0.002469966	-0.000252807	-0.001086922	0.003999790
0.202	0.000471567	-0.005337192	-0.002629800	-0.000227133	-0.000864210	0.004375378
0.203	0.000308523	-0.005714007	-0.002812364	-0.000200374	-0.000584106	0.004777875
0.204	0.000107488	-0.006120670	-0.003023779	-0.000171382	-0.000233574	0.005207509
0.205	-0.000140282	-0.006559034	-0.003272004	-0.000137980	0.000204100	0.005663163
0.206	-0.000446053	-0.007030272	-0.003567346	-0.000096308	0.000750434	0.006141324
0.207	-0.000824306	-0.007533920	-0.003923322	-0.000039558	0.001433405	0.006633873
0.208	-0.001293564	-0.008066634	-0.004357065	0.000043639	0.002288651	0.007125245
0.209	-0.001877050	-0.008619614	-0.004890069	0.000172352	0.003361036	0.007586724
0.210	-0.002602616	-0.009174678	-0.005547819	0.000378079	0.004704339	0.007967778
0.211	-0.003500554	-0.009698147	-0.006357306	0.000711960	0.006376870	0.008182716
0.212	-0.004596467	-0.010132786	-0.007339366	0.001254495	0.008427171	0.008092846
0.213	-0.005894478	-0.010390590	-0.008491052	0.002125247	0.010860457	0.007489370
0.214	-0.007346140	-0.010356129	-0.009753115	0.003483406	0.013576610	0.006095666
0.215	-0.008809958	-0.009920613	-0.010966960	0.005500075	0.016289648	0.003627787
0.216	-0.010034701	-0.009066122	-0.011853192	0.008284732	0.018495357	-0.000051184
0.217	-0.010727091	-0.007974190	-0.012069721	0.011795702	0.019608221	-0.004742389
0.218	-0.010712594	-0.007058623	-0.011351844	0.015843218	0.019283098	-0.009908190
0.219	-0.010062234	-0.006869210	-0.009589709	0.020258151	0.017651191	-0.015016266
0.220	-0.009080640	-0.008036392	-0.006682592	0.025106729	0.015163721	-0.020042111
0.221	-0.008394920	-0.011544829	-0.002199685	0.030798716	0.012014586	-0.025899362
0.222	-0.010045475	-0.019406082	0.005267353	0.038369613	0.006723439	-0.034888092
0.223	-0.022820207	-0.034514819	0.022477189	0.050376229	-0.009235619	-0.050279801
0.224	-0.081795734	-0.027382740	0.082977046	0.039428425	-0.070876534	-0.042906261
0.225	-0.049522559	0.052247291	0.050473733	-0.042785210	-0.040785419	0.037262381
0.226	-0.014343374	0.039170203	0.014740370	-0.031090609	-0.007375599	0.024874266
0.227	-0.005750670	0.028149389	0.005750006	-0.020811954	-0.000214259	0.014603306
0.228	-0.002743954	0.021853198	0.002535146	-0.014970877	0.001632544	0.009065564
0.229	-0.001370341	0.017919026	0.001084307	-0.011366654	0.002062710	0.005869407
0.230	-0.000623180	0.015241599	0.000337479	-0.008961678	0.002038779	0.003894290
0.231	-0.000165619	0.013298266	-0.000077476	-0.007261123	0.001862885	0.002610580
0.232	0.000138605	0.011818260	-0.000318061	-0.006005603	0.001644086	0.001745298
0.233	0.000352876	0.010649185	-0.000459953	-0.005047411	0.001424453	0.001146526
0.234	0.000510053	0.009699205	-0.000542938	-0.004296708	0.001220091	0.000724353
0.235	0.000628716	0.008909790	-0.000589370	-0.003695920	0.001036345	0.000422886
0.236	0.000720133	0.008241869	-0.000612457	-0.003206555	0.000873967	0.000205961
0.237	0.000791563	0.007668358	-0.000620350	-0.002802019	0.000731806	0.000049484
0.238	0.000847889	0.007169833	-0.000618207	-0.002463343	0.000607973	-0.000063127
0.239	0.000892539	0.006731990	-0.000609401	-0.002176693	0.000500409	-0.000143486
0.240	0.000927995	0.006344041	-0.000596179	-0.001931765	0.000407124	-0.000199893

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001949169	0.012171093	0.000495577	-0.001569400	0.003348718	0.010948406
0.191	0.002045617	0.012494901	0.000502328	-0.001643221	0.003493460	0.011155160
0.192	0.002149929	0.012838827	0.000508740	-0.001721892	0.003645172	0.011373371
0.193	0.002263081	0.013204849	0.000514731	-0.001805899	0.003804677	0.011604641
0.194	0.002386253	0.013595181	0.000520198	-0.001895768	0.003973068	0.011850811
0.195	0.002520787	0.014012365	0.000525020	-0.001992126	0.004151724	0.012114024
0.196	0.002668282	0.014459293	0.000529047	-0.002095681	0.004342437	0.012396732
0.197	0.002830640	0.014939279	0.000532093	-0.002207252	0.004547517	0.012701741
0.198	0.003010129	0.015456138	0.000533929	-0.002327785	0.004769943	0.013032229
0.199	0.003209460	0.016014301	0.000534271	-0.002458382	0.005013534	0.013391794
0.200	0.003431989	0.016618851	0.000532744	-0.002600327	0.005283263	0.013784366
0.201	0.003681741	0.017275793	0.000528894	-0.002755139	0.005585489	0.014214315
0.202	0.003963703	0.017992154	0.000522130	-0.002924612	0.005928440	0.014686274
0.203	0.004284091	0.018776246	0.000511687	-0.003110891	0.006322772	0.015205000
0.204	0.004650675	0.019637891	0.000496576	-0.003316538	0.006782255	0.015774983
0.205	0.005073375	0.020588880	0.000475483	-0.003544666	0.007324768	0.016399879
0.206	0.005564922	0.021643360	0.000446661	-0.003799066	0.007973442	0.017081339
0.207	0.006141914	0.022818445	0.000407745	-0.004084402	0.008758021	0.017817102
0.208	0.006826295	0.024134940	0.000355490	-0.004406459	0.009716223	0.018597712
0.209	0.007647543	0.025618256	0.000285376	-0.004772475	0.010894481	0.019401151
0.210	0.008645970	0.027299507	0.000190984	-0.005191591	0.012346595	0.020184425
0.211	0.009877778	0.029216743	0.000063018	-0.005675433	0.014127146	0.020871551
0.212	0.011422966	0.031416108	-0.000112275	-0.006238880	0.016273943	0.021339765
0.213	0.013398360	0.033952210	-0.000355807	-0.006900966	0.018770803	0.021411123
0.214	0.015978446	0.036886024	-0.000700152	-0.007685825	0.021488433	0.020874376
0.215	0.019430973	0.040275469	-0.001197617	-0.008623026	0.024124368	0.019569884
0.216	0.024176811	0.044146253	-0.001934676	-0.009745360	0.026218926	0.017554020
0.217	0.030888417	0.048409838	-0.003057932	-0.011078078	0.027340637	0.015253844
0.218	0.040631589	0.052641227	-0.004818284	-0.012601585	0.027395347	0.013425954
0.219	0.054960045	0.055503447	-0.007628213	-0.014137060	0.026814957	0.012880915
0.220	0.075398947	0.053460175	-0.012037461	-0.015043201	0.026501154	0.014233841
0.221	0.100315183	0.039301122	-0.018173607	-0.013703556	0.027773167	0.017955014
0.222	0.117863368	0.006694489	-0.023968196	-0.008020530	0.033126095	0.024997649
0.223	0.111083177	-0.033027887	-0.025131098	0.000737212	0.053472110	0.036375264
0.224	0.085205559	-0.057268785	-0.021286109	0.007496327	0.109057778	-0.004792805
0.225	0.059083670	-0.063174503	-0.016195889	0.010431250	0.052800599	-0.054675302
0.226	0.040267045	-0.060014835	-0.012045316	0.010991708	0.026689730	-0.041828604
0.227	0.027965405	-0.054184353	-0.009085356	0.010568423	0.018288773	-0.032723105
0.228	0.019989819	-0.048228151	-0.007023331	0.009836999	0.014350432	-0.027107182
0.229	0.014706289	-0.042910258	-0.005566786	0.009063872	0.012025398	-0.023325828
0.230	0.011101481	-0.038359694	-0.004511896	0.008342066	0.010457891	-0.020582766
0.231	0.008568320	-0.034510600	-0.003727230	0.007697329	0.009311962	-0.018482402
0.232	0.006739453	-0.031253220	-0.003128702	0.007130602	0.008428718	-0.016809686
0.233	0.005387089	-0.028481581	-0.002661704	0.006634530	0.007722400	-0.015437901
0.234	0.004365934	-0.026105917	-0.002289960	0.006199780	0.007142064	-0.014287289
0.235	0.003580685	-0.024053613	-0.001988779	0.005817351	0.006655207	-0.013304900
0.236	0.002967164	-0.022266859	-0.001740975	0.005479300	0.006239965	-0.012454012
0.237	0.002481107	-0.020699786	-0.001534251	0.005178948	0.005880898	-0.011708272
0.238	0.002091308	-0.019315883	-0.001359715	0.004910660	0.005566863	-0.011048152
0.239	0.001775329	-0.018085923	-0.001210761	0.004669781	0.005289521	-0.010458847
0.240	0.001516757	-0.016986351	-0.001082418	0.004452449	0.005042510	-0.009928893

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000972442	-0.002477116	-0.001401834	-0.000464968	-0.001594983	0.001336416
0.191	0.000975609	-0.002633940	-0.001473101	-0.000450526	-0.001613865	0.001496164
0.192	0.000973833	-0.002802248	-0.001547894	-0.000434393	-0.001624459	0.001669709
0.193	0.000966198	-0.002982937	-0.001626606	-0.000416625	-0.001625080	0.001857990
0.194	0.000951637	-0.003176953	-0.001709734	-0.000397316	-0.001613775	0.002061982
0.195	0.000928914	-0.003385363	-0.001797931	-0.000376578	-0.001588264	0.002282727
0.196	0.000896581	-0.003609327	-0.001892033	-0.000354547	-0.001545866	0.002521321
0.197	0.000852926	-0.003850124	-0.001993121	-0.000331371	-0.001483411	0.002778919
0.198	0.000795911	-0.004109160	-0.002102588	-0.000307189	-0.001397111	0.003056724
0.199	0.000723096	-0.004387988	-0.002222229	-0.000282114	-0.001282406	0.003355979
0.200	0.000631484	-0.004688296	-0.002354349	-0.000256155	-0.001133707	0.003677906
0.201	0.000517430	-0.005011918	-0.002501928	-0.000229184	-0.000944156	0.004023648
0.202	0.000376392	-0.005360789	-0.002668808	-0.000200783	-0.000705194	0.004394106
0.203	0.000202676	-0.005736867	-0.002859951	-0.000170068	-0.000406045	0.004789673
0.204	-0.000010906	-0.006141957	-0.003081775	-0.000135388	-0.000033046	0.005209786
0.205	-0.000273521	-0.006577430	-0.003342573	-0.000093823	0.000431272	0.005652127
0.206	-0.000596871	-0.007043650	-0.003653057	-0.000040411	0.001009307	0.006111309
0.207	-0.000995858	-0.007539034	-0.004026915	0.000033140	0.001729633	0.006576644
0.208	-0.001489229	-0.008058423	-0.004481372	0.000140499	0.002628280	0.007028475
0.209	-0.002099900	-0.008590407	-0.005037338	0.000303992	0.003749315	0.007432234
0.210	-0.002854199	-0.009113144	-0.005718408	0.000559627	0.005143265	0.007729215
0.211	-0.003778419	-0.009588374	-0.006547034	0.000964297	0.006860167	0.007823358
0.212	-0.004889806	-0.009954582	-0.007534808	0.001604401	0.008931352	0.007565684
0.213	-0.006177340	-0.010122992	-0.008662587	0.002602739	0.011331506	0.006743085
0.214	-0.007571439	-0.009988774	-0.009847995	0.004111439	0.013917503	0.005095971
0.215	-0.008912127	-0.009474451	-0.010910744	0.006275826	0.016365447	0.002395986
0.216	-0.009953759	-0.008614397	-0.011571394	0.009162004	0.018180694	-0.001401691
0.217	-0.010451550	-0.007638473	-0.011525816	0.012695038	0.018871238	-0.006025486
0.218	-0.010305280	-0.006969251	-0.010562241	0.016703293	0.018230192	-0.010970153
0.219	-0.009640786	-0.007135802	-0.008577579	0.021089633	0.016459351	-0.015857341
0.220	-0.008805520	-0.008793812	-0.005390301	0.026000011	0.013930287	-0.020873726
0.221	-0.008620920	-0.013078841	-0.000381462	0.031919194	0.010520752	-0.027169389
0.222	-0.012023508	-0.022185843	0.008489793	0.040081397	0.003747426	-0.037220218
0.223	-0.031818805	-0.037266488	0.031929854	0.051832192	-0.018990403	-0.052509788
0.224	-0.089056522	0.000543843	0.090140343	0.010567041	-0.078698413	-0.014449374
0.225	-0.035326909	0.048603177	0.036072652	-0.039686531	-0.027001581	0.034123075
0.226	-0.011535542	0.035102429	0.011778033	-0.027356784	-0.004868345	0.021270699
0.227	-0.004981284	0.025935572	0.004885392	-0.018834746	0.000336438	0.012808491
0.228	-0.002470681	0.020513973	0.002205811	-0.013821502	0.001747221	0.008100934
0.229	-0.001258264	0.017023747	0.000938673	-0.010634931	0.002060226	0.005307471
0.230	-0.000574430	0.014598044	0.000267442	-0.008464013	0.002005325	0.003546956
0.231	-0.000145163	0.012810781	-0.000112702	-0.006905852	0.001824976	0.002386462
0.232	0.000145275	0.011434448	-0.000336101	-0.005742495	0.001609996	0.001596033
0.233	0.000352467	0.010338027	-0.000469165	-0.004846864	0.001396301	0.001044742
0.234	0.000505941	0.009441150	-0.000547549	-0.004140249	0.001197861	0.000653719
0.235	0.000622715	0.008691874	-0.000591614	-0.003571489	0.001019328	0.000373245
0.236	0.000713234	0.008055122	-0.000613493	-0.003105918	0.000861236	0.000170762
0.237	0.000784405	0.007506374	-0.000620908	-0.002719526	0.000722614	0.000024419
0.238	0.000840832	0.007027886	-0.000618657	-0.002394897	0.000601613	-0.000080983
0.239	0.000885801	0.006606513	-0.000609941	-0.002119291	0.000496291	-0.000156150
0.240	0.000921706	0.006232283	-0.000596909	-0.001883162	0.000404766	-0.000208779

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.001985828	0.012205330	0.000491112	-0.001577838	0.003355572	0.010963314
0.191	0.002085307	0.012531840	0.000497622	-0.001652560	0.003501917	0.011172971
0.192	0.002192986	0.012878750	0.000503754	-0.001732235	0.003655699	0.011394413
0.193	0.002309903	0.013248065	0.000509419	-0.001817352	0.003817849	0.011629247
0.194	0.002437272	0.013642060	0.000514506	-0.001908469	0.003989559	0.011879329
0.195	0.002576522	0.014063319	0.000518884	-0.002006223	0.004172357	0.012146788
0.196	0.002729338	0.014514795	0.000522389	-0.002111346	0.004368199	0.012434062
0.197	0.002897729	0.014999873	0.000524819	-0.002224681	0.004579595	0.012743918
0.198	0.003084093	0.015522451	0.000525923	-0.002347204	0.004809755	0.013079472
0.199	0.003291303	0.016087061	0.000525391	-0.002480055	0.005062783	0.013444222
0.200	0.003522916	0.016698900	0.000522817	-0.002624564	0.005343992	0.013841945
0.201	0.003783211	0.017364115	0.000517702	-0.002782300	0.005660148	0.014276777
0.202	0.004077497	0.018089900	0.000509402	-0.002955125	0.006019973	0.014753004
0.203	0.004412403	0.018884767	0.000497080	-0.003145262	0.006434707	0.015274856
0.204	0.004796241	0.019758782	0.000479651	-0.003355374	0.006918796	0.015846044
0.205	0.005239632	0.020724012	0.000455676	-0.003588695	0.007490879	0.016469036
0.206	0.005756255	0.021794950	0.000423229	-0.003849170	0.008174837	0.017143729
0.207	0.006363986	0.022989099	0.000379707	-0.004141653	0.009000995	0.017865240
0.208	0.007086522	0.024327710	0.000321527	-0.004472170	0.010007077	0.018620281
0.209	0.007955797	0.025836665	0.000243680	-0.004848262	0.011238143	0.019381418
0.210	0.009015620	0.027547507	0.000139037	-0.005279442	0.012743724	0.020098509
0.211	0.010327270	0.029498518	-0.000002759	-0.005777790	0.014568696	0.020687482
0.212	0.011978332	0.031735489	-0.000197099	-0.006358699	0.016732153	0.021019597
0.213	0.014096920	0.034311283	-0.000467422	-0.007041716	0.019188205	0.020922011
0.214	0.016875078	0.037281791	-0.000850403	-0.007851238	0.021771527	0.020212909
0.215	0.020607814	0.040692101	-0.001405065	-0.008816178	0.024160386	0.018799529
0.216	0.025757970	0.044536932	-0.002229018	-0.009965923	0.025932120	0.016829260
0.217	0.033058476	0.048653804	-0.003486984	-0.011314626	0.026767442	0.014787327
0.218	0.043640687	0.052443709	-0.005456181	-0.012810969	0.026711589	0.013398999
0.219	0.059029603	0.054182862	-0.008570650	-0.014193203	0.026286450	0.013377805
0.220	0.080219226	0.049668103	-0.013316241	-0.014643599	0.026438422	0.015259624
0.221	0.103690187	0.031552869	-0.019437525	-0.012386470	0.028615208	0.019538715
0.222	0.115639252	-0.003234267	-0.024236357	-0.005866821	0.036217174	0.027324133
0.223	0.103430871	-0.039204492	-0.024036913	0.002493246	0.065283687	0.035481669
0.224	0.077397623	-0.058079789	-0.019805979	0.008172004	0.098184314	-0.030029300
0.225	0.053642687	-0.061349463	-0.015025535	0.010421274	0.043015721	-0.049853562
0.226	0.036903132	-0.057588543	-0.011256070	0.010730815	0.024220780	-0.038228767
0.227	0.025918265	-0.051909803	-0.008569582	0.010258081	0.017363709	-0.030543630
0.228	0.018718622	-0.046281798	-0.006681939	0.009546515	0.013900555	-0.025640134
0.229	0.013892943	-0.041284613	-0.005334811	0.008811014	0.011772397	-0.022250315
0.230	0.010565128	-0.037003308	-0.004349706	0.008127185	0.010304050	-0.019746321
0.231	0.008204828	-0.033370277	-0.003610724	0.007515775	0.009214944	-0.017804395
0.232	0.006487215	-0.030284405	-0.003042944	0.006976942	0.008367242	-0.016243359
0.233	0.005208501	-0.027649242	-0.002597188	0.006503852	0.007684551	-0.014954039
0.234	0.004237357	-0.025383053	-0.002240474	0.006087985	0.007120630	-0.013866568
0.235	0.003486835	-0.023419454	-0.001950157	0.005721126	0.006645558	-0.012933922
0.236	0.002897908	-0.021705346	-0.001710334	0.005396007	0.006238959	-0.012123147
0.237	0.002429571	-0.020198389	-0.001509598	0.005106437	0.005886400	-0.011410352
0.238	0.002052737	-0.018864736	-0.001339607	0.004847223	0.005577322	-0.010777729
0.239	0.001746371	-0.017677173	-0.001194146	0.004614036	0.005303799	-0.010211684
0.240	0.001495012	-0.016613683	-0.001068517	0.004403269	0.005059758	-0.009701634

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000937465	-0.002495464	-0.001407536	-0.000446747	-0.001542954	0.001373157
0.191	0.000937848	-0.002652810	-0.001479365	-0.000432132	-0.001556905	0.001532879
0.192	0.000933047	-0.002821624	-0.001554922	-0.000415834	-0.001562147	0.001706217
0.193	0.000922115	-0.003002792	-0.001634639	-0.000397896	-0.001556944	0.001894080
0.194	0.000903950	-0.003197277	-0.001719073	-0.000378384	-0.001539277	0.002097425
0.195	0.000877266	-0.003406134	-0.001808934	-0.000357379	-0.001506780	0.002317254
0.196	0.000840556	-0.003630516	-0.001905132	-0.000334975	-0.001456667	0.002554616
0.197	0.000792031	-0.003871689	-0.002008836	-0.000311258	-0.001385633	0.002810601
0.198	0.000729560	-0.004131039	-0.002121541	-0.000286288	-0.001289719	0.003086320
0.199	0.000650581	-0.004410083	-0.002245164	-0.000260064	-0.001164146	0.003382885
0.200	0.000551948	-0.004710448	-0.002382159	-0.000232450	-0.001003053	0.003701330
0.201	0.000429826	-0.005033874	-0.002535679	-0.000203107	-0.000799238	0.004042515
0.202	0.000279447	-0.005382143	-0.002709774	-0.000171334	-0.000543721	0.004406930
0.203	0.000094832	-0.005756978	-0.002909649	-0.000135845	-0.000225213	0.004794362
0.204	-0.000131533	-0.006159819	-0.003141990	-0.000094423	0.000170542	0.005203342
0.205	-0.000409188	-0.006591472	-0.003415392	-0.000043340	0.000661700	0.005630217
0.206	-0.000750202	-0.007051452	-0.003740812	0.000023535	0.001271285	0.006067607
0.207	-0.001169755	-0.007536895	-0.004132067	0.000116168	0.002028319	0.006501894
0.208	-0.001686579	-0.008040754	-0.004606150	0.000250631	0.002968654	0.006909156
0.209	-0.002322869	-0.008548944	-0.005182952	0.000452604	0.004134726	0.007248802
0.210	-0.003102753	-0.009036090	-0.005883447	0.000762545	0.005572422	0.007454126
0.211	-0.004047552	-0.009459949	-0.006724499	0.001242601	0.007321512	0.007419767
0.212	-0.005164908	-0.009756134	-0.007707277	0.001983867	0.009393832	0.006989005
0.213	-0.006428625	-0.009838601	-0.008795882	0.003108961	0.011732899	0.005951286
0.214	-0.007750397	-0.009617693	-0.009887003	0.004758818	0.014157389	0.004072515
0.215	-0.008959381	-0.009050359	-0.010785669	0.007050466	0.016320388	0.001185100
0.216	-0.009826263	-0.008218810	-0.011221957	0.010012136	0.017757524	-0.002674724
0.217	-0.010158683	-0.007387748	-0.010931168	0.013551029	0.018076046	-0.007194200
0.218	-0.009921233	-0.006978791	-0.009739071	0.017526846	0.017181253	-0.011929826
0.219	-0.009284584	-0.007510971	-0.007525566	0.021911470	0.015303115	-0.016659247
0.220	-0.008661533	-0.009692154	-0.004008107	0.026918042	0.012691610	-0.021767778
0.221	-0.009175415	-0.014819799	0.001668977	0.033110715	0.008814384	-0.028622841
0.222	-0.015032498	-0.025100614	0.012537717	0.041864146	-0.000167498	-0.039696713
0.223	-0.044081937	-0.036964197	0.044475625	0.050335914	-0.031942279	-0.051710658
0.224	-0.078872134	0.025578174	0.079820799	-0.015275798	-0.069027777	0.011085433
0.225	-0.026145473	0.043887845	0.026702174	-0.035445686	-0.018199458	0.029883074
0.226	-0.009510805	0.031744555	0.009617809	-0.024299279	-0.003122114	0.018350192
0.227	-0.004368566	0.024036481	0.004189666	-0.017154885	0.000745398	0.011304906
0.228	-0.002239686	0.019325431	0.001925682	-0.012811841	0.001829641	0.007266761
0.229	-0.001159835	0.016210643	0.000810518	-0.009977263	0.002050813	0.004810482
0.230	-0.000530517	0.014004202	0.000204400	-0.008009418	0.001971511	0.003234694
0.231	-0.000126433	0.012355843	-0.000144926	-0.006577417	0.001788289	0.002182428
0.232	0.000151415	0.011073284	-0.000352800	-0.005497016	0.001577273	0.001458773
0.233	0.000352013	0.010043378	-0.000477776	-0.004658365	0.001369285	0.000950334
0.234	0.000501978	0.009195585	-0.000551894	-0.003992293	0.001176469	0.000587697
0.235	0.000616933	0.008483696	-0.000593744	-0.003453213	0.001002882	0.000326505
0.236	0.000706644	0.007876178	-0.000614603	-0.003009963	0.000848999	0.000137429
0.237	0.000777542	0.007350757	-0.000621558	-0.002640582	0.000713746	0.000000514
0.238	0.000834047	0.006891226	-0.000619198	-0.002329184	0.000595447	-0.000098146
0.239	0.000879309	0.006485491	-0.000610563	-0.002064022	0.000492271	-0.000168433
0.240	0.000915639	0.006124330	-0.000597709	-0.001836244	0.000402437	-0.000217494

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002023434	0.012239591	0.000486321	-0.001586474	0.003363650	0.010978886
0.191	0.002126048	0.012568813	0.000492565	-0.001662116	0.003511801	0.011191392
0.192	0.002237211	0.012918715	0.000498389	-0.001742815	0.003667875	0.011415987
0.193	0.002358016	0.013291342	0.000503697	-0.001829072	0.003832904	0.011654281
0.194	0.002489739	0.013689012	0.000508370	-0.001921463	0.004008201	0.011908129
0.195	0.002633884	0.014114362	0.000512263	-0.002020644	0.004195434	0.012179649
0.196	0.002792232	0.014570403	0.000515198	-0.002127368	0.004396727	0.012471248
0.197	0.002966900	0.015060592	0.000516955	-0.002242506	0.004614786	0.012785644
0.198	0.003160428	0.015588910	0.000517262	-0.002367064	0.004853060	0.013125875
0.199	0.003375858	0.016159987	0.000515781	-0.002502222	0.005115934	0.013495320
0.200	0.003616962	0.016779139	0.000512069	-0.002649352	0.005409059	0.013897572
0.201	0.003888288	0.017452650	0.000505581	-0.002810082	0.005739607	0.014336495
0.202	0.004195489	0.018187881	0.000495614	-0.002986338	0.006116776	0.014815975
0.203	0.004545640	0.018993545	0.000481251	-0.003180428	0.006552360	0.015339650
0.204	0.004947620	0.019879931	0.000461307	-0.003395114	0.007061435	0.015910341
0.205	0.005412815	0.020859391	0.000434198	-0.003633757	0.007663287	0.016529224
0.206	0.005955919	0.021946735	0.000397811	-0.003900458	0.008382371	0.017194279
0.207	0.006596180	0.023159835	0.000349275	-0.004200266	0.009249271	0.017897834
0.208	0.007359193	0.024520334	0.000284634	-0.004539450	0.010301169	0.018622641
0.209	0.008279546	0.026054500	0.000198343	-0.004925852	0.011580858	0.019335892
0.210	0.009404836	0.027794159	0.000082486	-0.005369353	0.013132260	0.019980840
0.211	0.010801856	0.029777546	-0.000074476	-0.005882466	0.014988822	0.020466976
0.212	0.012566364	0.032049594	-0.000289739	-0.006481045	0.017149672	0.020663508
0.213	0.014838820	0.034660422	-0.000589580	-0.007185020	0.019540225	0.020408787
0.214	0.017830182	0.037658871	-0.001015226	-0.008018749	0.021966685	0.019557961
0.215	0.021864538	0.041073173	-0.001633129	-0.009009787	0.024104108	0.018086399
0.216	0.027448284	0.044858595	-0.002553044	-0.010182456	0.025583789	0.016217861
0.217	0.035372628	0.048760934	-0.003958742	-0.011535902	0.026198475	0.014468674
0.218	0.046814516	0.051972025	-0.006152252	-0.012978181	0.026110190	0.013517585
0.219	0.063184258	0.052335615	-0.009574673	-0.014148671	0.025913529	0.013990492
0.220	0.084704925	0.045044459	-0.014593501	-0.014048657	0.026610913	0.016368371
0.221	0.105797295	0.023215262	-0.020491245	-0.010854908	0.029874093	0.021193884
0.222	0.111883046	-0.012308575	-0.024137919	-0.003773423	0.040551550	0.029470369
0.223	0.095645785	-0.043797147	-0.022808990	0.003945268	0.078893793	0.028483578
0.224	0.070334315	-0.058076283	-0.018419689	0.008640280	0.080156764	-0.042767126
0.225	0.048867385	-0.059373238	-0.013975648	0.010341701	0.036408849	-0.045240637
0.226	0.033948169	-0.055246651	-0.010550701	0.010463039	0.022320572	-0.035185570
0.227	0.024101978	-0.049762804	-0.008104988	0.009959959	0.016587042	-0.028629067
0.228	0.017577935	-0.044450375	-0.006371253	0.009271496	0.013504731	-0.024313059
0.229	0.013155570	-0.039751331	-0.005121628	0.008572198	0.011544033	-0.021258393
0.230	0.010074658	-0.035718946	-0.004199376	0.007923979	0.010163242	-0.018964670
0.231	0.007870090	-0.032286006	-0.003501951	0.007343675	0.009125554	-0.017164848
0.232	0.006253621	-0.029359576	-0.002962385	0.006830910	0.008310550	-0.015705415
0.233	0.005042404	-0.026851856	-0.002536271	0.006379362	0.007649865	-0.014491969
0.234	0.004117398	-0.024688335	-0.002193545	0.005981261	0.007101373	-0.013463092
0.235	0.003399095	-0.022808258	-0.001913392	0.005629099	0.006637453	-0.012576927
0.236	0.002833093	-0.021162798	-0.001681088	0.005316212	0.006239108	-0.011803834
0.237	0.002381341	-0.019712838	-0.001486001	0.005036890	0.005892769	-0.011122142
0.238	0.002016683	-0.018426968	-0.001320314	0.004786324	0.005588447	-0.010515586
0.239	0.001719369	-0.017279824	-0.001178170	0.004560486	0.005318601	-0.009971663
0.240	0.001474818	-0.016250815	-0.001055122	0.004356009	0.005077429	-0.009480599

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000901870	-0.002512953	-0.001413582	-0.000428458	-0.001490131	0.001408057
0.191	0.000899446	-0.002670766	-0.001486052	-0.000413607	-0.001499139	0.001567625
0.192	0.000891591	-0.002840027	-0.001562457	-0.000397063	-0.001499011	0.001740613
0.193	0.000877327	-0.003021618	-0.001643274	-0.000378851	-0.001487956	0.001927905
0.194	0.000855511	-0.003216498	-0.001729112	-0.000359011	-0.001463883	0.002130424
0.195	0.000824810	-0.003425715	-0.001820743	-0.000337586	-0.001424341	0.002349128
0.196	0.000783650	-0.003650412	-0.001919152	-0.000314619	-0.001366434	0.002585010
0.197	0.000730168	-0.003891837	-0.002025592	-0.000290130	-0.001286716	0.002839080
0.198	0.000662133	-0.004151345	-0.002141660	-0.000264085	-0.001181055	0.003112342
0.199	0.000576863	-0.004430407	-0.002269396	-0.000236363	-0.001044453	0.003405751
0.200	0.000471060	-0.004730574	-0.002411395	-0.000206656	-0.000870776	0.003720114
0.201	0.000340704	-0.005053472	-0.002570979	-0.000174399	-0.000652487	0.004055972
0.202	0.000180801	-0.005400703	-0.002752396	-0.000138572	-0.000380197	0.004413341
0.203	-0.000014893	-0.005773718	-0.002961066	-0.000097446	-0.000042146	0.004791317
0.204	-0.000254198	-0.006173538	-0.003203928	-0.000048183	0.000376486	0.005187427
0.205	-0.000546967	-0.006600348	-0.003489790	0.000013829	0.000894386	0.005596535
0.206	-0.000905549	-0.007052734	-0.003829764	0.000095977	0.001535035	0.006009103
0.207	-0.001345237	-0.007526464	-0.004237609	0.000210012	0.002327559	0.006408386
0.208	-0.001884470	-0.008012540	-0.004729783	0.000374500	0.003307055	0.006766032
0.209	-0.002544267	-0.008494229	-0.005324664	0.000618492	0.004513393	0.007035425
0.210	-0.003345874	-0.008942895	-0.006039861	0.000986684	0.005986412	0.007142335
0.211	-0.004304762	-0.009313153	-0.006885685	0.001545724	0.007753806	0.006973658
0.212	-0.005418345	-0.009539726	-0.007852013	0.002389539	0.009806442	0.006368728
0.213	-0.006645646	-0.009542431	-0.008886514	0.003637725	0.012057547	0.005125375
0.214	-0.007883361	-0.009250664	-0.009868188	0.005416466	0.014294708	0.003042190
0.215	-0.008957686	-0.008656718	-0.010594518	0.007814194	0.016163274	0.000012977
0.216	-0.009663957	-0.007883996	-0.010811943	0.010828992	0.017244607	-0.003860696
0.217	-0.009862182	-0.007220125	-0.010292044	0.014364088	0.017241961	-0.008253926
0.218	-0.009571546	-0.007082211	-0.008881391	0.018318252	0.016143671	-0.012804279
0.219	-0.009006598	-0.007992204	-0.006422203	0.022726082	0.014170936	-0.017442721
0.220	-0.008682051	-0.010732791	-0.002509776	0.027857439	0.011405718	-0.022741017
0.221	-0.010162741	-0.016745578	0.004029462	0.034358441	0.006780351	-0.030244321
0.222	-0.019410977	-0.027868088	0.017744379	0.043478609	-0.005368830	-0.042036335
0.223	-0.058216527	-0.030464014	0.058757327	0.042759851	-0.046704347	-0.044736817
0.224	-0.061508255	0.038197196	0.062302522	-0.028591040	-0.052134195	0.024177496
0.225	-0.020092831	0.039413120	0.020478332	-0.031385141	-0.012495825	0.025856631
0.226	-0.008015625	0.028946470	0.008004410	-0.021772282	-0.001884473	0.015964773
0.227	-0.003877971	0.022395046	0.003627024	-0.015716806	0.001046701	0.010037242
0.228	-0.002045708	0.018267024	0.001688859	-0.011922021	0.001885037	0.006543942
0.229	-0.001074903	0.015471480	0.000699416	-0.009385785	0.002034818	0.004371337
0.230	-0.000492198	0.013456517	0.000149009	-0.007594596	0.001936892	0.002954820
0.231	-0.000110245	0.011931870	-0.000173367	-0.006274452	0.001752377	0.001997573
0.232	0.000156330	0.010734060	-0.000367484	-0.005268640	0.001545626	0.001333324
0.233	0.000350939	0.009764984	-0.000485220	-0.004481817	0.001343232	0.000863442
0.234	0.000497691	0.008962488	-0.000555510	-0.003852951	0.001155832	0.000526565
0.235	0.000610979	0.008285353	-0.000595381	-0.003341308	0.000986987	0.000282995
0.236	0.000699922	0.007705160	-0.000615286	-0.002918750	0.000837069	0.000106210
0.237	0.000770592	0.007201663	-0.000621862	-0.002565271	0.000705052	-0.000021994
0.238	0.000827199	0.006760027	-0.000619441	-0.002266301	0.000589354	-0.000114389
0.239	0.000872768	0.006369104	-0.000610920	-0.002010981	0.000488250	-0.000180129
0.240	0.000909529	0.006020357	-0.000598269	-0.001791097	0.000400052	-0.000225854

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002061893	0.012274047	0.000481226	-0.001595382	0.003372883	0.010995152
0.191	0.002167744	0.012606000	0.000487179	-0.001671966	0.003523033	0.011210453
0.192	0.002282520	0.012958919	0.000492664	-0.001753710	0.003681638	0.011438108
0.193	0.002407348	0.013334883	0.000497583	-0.001841134	0.003849784	0.011679752
0.194	0.002543582	0.013736256	0.000501800	-0.001934832	0.004028921	0.011937227
0.195	0.002692807	0.014165726	0.000505166	-0.002035473	0.004220871	0.012212615
0.196	0.002856898	0.014626366	0.000507482	-0.002143836	0.004427921	0.012508294
0.197	0.003038095	0.015121704	0.000508511	-0.002260820	0.004652975	0.012826919
0.198	0.003239082	0.015655803	0.000507954	-0.002387464	0.004899720	0.013171432
0.199	0.003463083	0.016233393	0.000505445	-0.002524985	0.005172824	0.013545070
0.200	0.003714099	0.016859906	0.000500500	-0.002674803	0.005478270	0.013951213
0.201	0.003996965	0.017541768	0.000492526	-0.002838604	0.005823622	0.014393418
0.202	0.004317711	0.018286513	0.000480751	-0.003018385	0.006218549	0.014875119
0.203	0.004683845	0.019103002	0.000464183	-0.003216528	0.006675335	0.015399263
0.204	0.005104905	0.020001802	0.000441511	-0.003435910	0.007209635	0.015967732
0.205	0.005593076	0.020995513	0.000411005	-0.003680018	0.007841257	0.016580272
0.206	0.006164144	0.022099249	0.000370339	-0.003953111	0.008595018	0.017232818
0.207	0.006838837	0.023331212	0.000316353	-0.004260438	0.009501395	0.017914788
0.208	0.007644797	0.024713385	0.000244678	-0.004608512	0.010596439	0.018604930
0.209	0.008619486	0.026272325	0.000149176	-0.005005475	0.011919758	0.019265280
0.210	0.009814606	0.028039960	0.000021057	-0.005461566	0.013508389	0.019833315
0.211	0.011302931	0.030054153	-0.000152523	-0.005989701	0.015382971	0.020214156
0.212	0.013189083	0.032358372	-0.000390773	-0.006606130	0.017522171	0.020279008
0.213	0.015626881	0.034998808	-0.000723123	-0.007330992	0.019825425	0.019883447
0.214	0.018847613	0.038014912	-0.001195848	-0.008188229	0.022079480	0.018924755
0.215	0.023206109	0.041413268	-0.001883576	-0.009203154	0.023971181	0.017443552
0.216	0.029253065	0.045099745	-0.002909166	-0.010392983	0.025197111	0.015723181
0.217	0.037832578	0.048708137	-0.004475892	-0.011737150	0.025656114	0.014288844
0.218	0.050136428	0.051185050	-0.006906923	-0.013093149	0.025607818	0.013764921
0.219	0.067349709	0.049910256	-0.010629658	-0.013986533	0.025709203	0.014702849
0.220	0.088675732	0.039621863	-0.015830335	-0.013250350	0.027043839	0.017548671
0.221	0.106525816	0.014597802	-0.021289270	-0.009162330	0.031654130	0.022892583
0.222	0.106940096	-0.020267420	-0.023723026	-0.001816721	0.046515278	0.030937785
0.223	0.088030271	-0.047023671	-0.021521800	0.005116176	0.089477937	0.013385102
0.224	0.063992001	-0.057486940	-0.017137086	0.008947754	0.064075421	-0.046039002
0.225	0.044662822	-0.057326674	-0.013032437	0.010214168	0.031747854	-0.041171700
0.226	0.031335929	-0.053001103	-0.009916902	0.010194563	0.020808105	-0.032578170
0.227	0.022479098	-0.047736354	-0.007683841	0.009674792	0.015921233	-0.026929216
0.228	0.016547033	-0.042724163	-0.006086677	0.009011179	0.013151192	-0.023103854
0.229	0.012482287	-0.038301965	-0.004924447	0.008346417	0.011335265	-0.020338755
0.230	0.009622886	-0.034499978	-0.004059136	0.007731536	0.010032793	-0.018231259
0.231	0.007559461	-0.031252714	-0.003399722	0.007180290	0.009042196	-0.016559619
0.232	0.006035556	-0.028474818	-0.002886193	0.006691906	0.008257564	-0.015193055
0.233	0.004886595	-0.026086348	-0.002478342	0.006260577	0.007617554	-0.014049667
0.234	0.004004436	-0.024019310	-0.002148705	0.005879211	0.007083683	-0.013075335
0.235	0.003316228	-0.022218036	-0.001878117	0.005540946	0.006630407	-0.012232721
0.236	0.002771750	-0.020637579	-0.001652922	0.005239662	0.006239985	-0.011495124
0.237	0.002335636	-0.019241763	-0.001463200	0.004970093	0.005899647	-0.010842864
0.238	0.001982498	-0.018001411	-0.001301611	0.004727780	0.005599932	-0.010261061
0.239	0.001693781	-0.016892875	-0.001162636	0.004508975	0.005333663	-0.009738220
0.240	0.001455715	-0.015896879	-0.001042061	0.004310530	0.005095290	-0.009265302

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000865686	-0.002529695	-0.001419982	-0.000410036	-0.001436526	0.001441192
0.191	0.000860430	-0.002687923	-0.001493165	-0.000394878	-0.001440582	0.001600473
0.192	0.000849498	-0.002857562	-0.001570526	-0.000377989	-0.001435037	0.001772925
0.193	0.000831864	-0.003039509	-0.001652532	-0.000359396	-0.001418097	0.001959482
0.194	0.000806349	-0.003234709	-0.001739846	-0.000339091	-0.001387589	0.002160974
0.195	0.000771572	-0.003444199	-0.001833350	-0.000317082	-0.001340941	0.002378333
0.196	0.000725892	-0.003669105	-0.001934076	-0.000293351	-0.001275160	0.002612470
0.197	0.000667367	-0.003910651	-0.002043363	-0.000267843	-0.001186660	0.002864304
0.198	0.000593666	-0.004170156	-0.002162909	-0.000240422	-0.001071129	0.003134711
0.199	0.000501985	-0.004449030	-0.002294873	-0.000210829	-0.000923352	0.003424462
0.200	0.000388877	-0.004748735	-0.002441986	-0.000178571	-0.000736927	0.003734108
0.201	0.000250138	-0.005070760	-0.002607730	-0.000142826	-0.000503998	0.004063816
0.202	0.000080553	-0.005416502	-0.002796537	-0.000102226	-0.000214774	0.004413074
0.203	-0.000126354	-0.005787091	-0.003014027	-0.000054564	0.000142931	0.004780210
0.204	-0.000378685	-0.006183101	-0.003267324	0.000003687	0.000584401	0.005161630
0.205	-0.000686545	-0.006604028	-0.003565394	0.000078089	0.001128745	0.005550592
0.206	-0.001062450	-0.007047461	-0.003919376	0.000177368	0.001799669	0.005935245
0.207	-0.001521626	-0.007507740	-0.004342765	0.000315143	0.002626015	0.006295567
0.208	-0.002081915	-0.007973898	-0.004851153	0.000512526	0.003641502	0.006598697
0.209	-0.002762694	-0.008426661	-0.005460895	0.000801877	0.004882470	0.006792161
0.210	-0.003581678	-0.008834561	-0.006185518	0.001231775	0.006381369	0.006794959
0.211	-0.004547774	-0.009150121	-0.007027962	0.001872424	0.008152327	0.006488205
0.212	-0.005647892	-0.009309230	-0.007966368	0.002818683	0.010164576	0.005711169
0.213	-0.006827578	-0.009240663	-0.008932992	0.004184284	0.012303485	0.004275846
0.214	-0.007972947	-0.008895615	-0.009793072	0.006078327	0.014334063	0.002018269
0.215	-0.008914622	-0.008300646	-0.010343017	0.008562419	0.015908008	-0.001109936
0.216	-0.009478153	-0.007612796	-0.010349380	0.011613264	0.016661931	-0.004959872
0.217	-0.009573224	-0.007133492	-0.009613445	0.015141455	0.016385267	-0.009218926
0.218	-0.009266418	-0.007275936	-0.007985822	0.019088140	0.015120651	-0.013617517
0.219	-0.008821960	-0.008580543	-0.005252307	0.023542690	0.013045616	-0.018234323
0.220	-0.008910182	-0.011919416	-0.000859549	0.028823572	0.010019054	-0.023814086
0.221	-0.011717538	-0.018816561	0.006816475	0.035642886	0.004271918	-0.032002832
0.222	-0.025539398	-0.029953172	0.024506294	0.044429150	-0.012247415	-0.043707094
0.223	-0.069368170	-0.015769140	0.069958396	0.027108137	-0.058430075	-0.029591652
0.224	-0.046057184	0.041417060	0.046691192	-0.032413108	-0.037115323	0.027844569
0.225	-0.015940899	0.035504679	0.016172694	-0.027842127	-0.008666281	0.022371387
0.226	-0.006873954	0.026584133	0.006759351	-0.019656915	-0.000981887	0.013992280
0.227	-0.003475478	0.020960491	0.003161642	-0.014472051	0.001272651	0.008956378
0.228	-0.001879256	0.017316936	0.001484767	-0.011131430	0.001921703	0.005912069
0.229	-0.000999905	0.014795460	0.000601168	-0.008850448	0.002014951	0.003980417
0.230	-0.000457789	0.012948947	0.000099200	-0.007214045	0.001902533	0.002702272
0.231	-0.000095712	0.011535171	-0.000199111	-0.005993679	0.001717603	0.001828983
0.232	0.000160581	0.010414369	-0.000380826	-0.005055306	0.001515192	0.001217939
0.233	0.000349645	0.009501157	-0.000491971	-0.004315832	0.001318200	0.000782936
0.234	0.000493387	0.008740620	-0.000558750	-0.003721247	0.001135974	0.000469558
0.235	0.000605099	0.008095902	-0.000596801	-0.003235058	0.000971650	0.000242177
0.236	0.000693311	0.007541342	-0.000615833	-0.002831808	0.000825517	0.000076751
0.237	0.000763764	0.007058508	-0.000622070	-0.002493243	0.000696594	-0.000043362
0.238	0.000820473	0.006633798	-0.000619610	-0.002205967	0.000583393	-0.000129922
0.239	0.000866340	0.006256939	-0.000611212	-0.001959950	0.000484280	-0.000191399
0.240	0.000903522	0.005920015	-0.000598765	-0.001747551	0.000397660	-0.000233983

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002101251	0.012308679	0.000475802	-0.001604566	0.003383335	0.011012010
0.191	0.002210448	0.012643380	0.000481437	-0.001682112	0.003535676	0.011230035
0.192	0.002328939	0.012999331	0.000486560	-0.001764928	0.003696972	0.011460681
0.193	0.002457932	0.013378653	0.000491057	-0.001853546	0.003868461	0.011705553
0.194	0.002598840	0.013783753	0.000494788	-0.001948574	0.004051695	0.011966481
0.195	0.002753333	0.014217370	0.000497583	-0.002050709	0.004248630	0.012245532
0.196	0.002923389	0.014682639	0.000499230	-0.002160750	0.004461726	0.012545029
0.197	0.003111390	0.015183158	0.000499464	-0.002279622	0.004694115	0.012867517
0.198	0.003320145	0.015723073	0.000497974	-0.002408401	0.004949667	0.013215889
0.199	0.003553086	0.016307213	0.000494352	-0.002548343	0.005233350	0.013593184
0.200	0.003814454	0.016941129	0.000488069	-0.002700920	0.005551471	0.014002557
0.201	0.004109389	0.017631375	0.000478488	-0.002867867	0.005911985	0.014447183
0.202	0.004444314	0.018385653	0.000464761	-0.003051259	0.006324983	0.014930004
0.203	0.004827242	0.019213011	0.000445802	-0.003253563	0.006803219	0.015453234
0.204	0.005268368	0.020124236	0.000420177	-0.003477763	0.007362820	0.016017693
0.205	0.005780752	0.021132179	0.000385988	-0.003727476	0.008023976	0.016621613
0.206	0.006381350	0.022252230	0.000340681	-0.004007127	0.008811619	0.017258775
0.207	0.007092489	0.023502885	0.000280773	-0.004322161	0.009755725	0.017915620
0.208	0.007944016	0.024906398	0.000201442	-0.004679338	0.010890586	0.018566960
0.209	0.008976498	0.026489488	0.000095894	-0.005087094	0.012251720	0.019170078
0.210	0.010246082	0.028283970	-0.000045622	-0.005556010	0.013868144	0.019657795
0.211	0.011832011	0.030326941	-0.000237406	-0.006099365	0.015746750	0.019933272
0.212	0.013848496	0.032659662	-0.000500891	-0.006733703	0.017846210	0.019873862
0.213	0.016463735	0.035322979	-0.000869005	-0.007479164	0.020044107	0.019357578
0.214	0.019930683	0.038344141	-0.001393593	-0.008358777	0.022117512	0.018326480
0.215	0.024636205	0.041702406	-0.002158202	-0.009394518	0.023777985	0.016880211
0.216	0.031174637	0.045242688	-0.003299585	-0.010593986	0.024793446	0.015344641
0.217	0.040432966	0.048464281	-0.005040192	-0.011911363	0.025159610	0.014236976
0.218	0.053573973	0.050033465	-0.007717823	-0.013142788	0.025218017	0.014125537
0.219	0.071421443	0.046861863	-0.011717955	-0.013688779	0.025686988	0.015499959
0.220	0.091935749	0.033485377	-0.016980168	-0.012250248	0.027771477	0.018785920
0.221	0.105849388	0.006041350	-0.021800390	-0.007375233	0.034098336	0.024560721
0.222	0.101172984	-0.026965320	-0.023053391	-0.000051767	0.054337645	0.030754847
0.223	0.080783749	-0.049105974	-0.020229765	0.006036214	0.090943172	-0.006253977
0.224	0.058328039	-0.056480845	-0.015960673	0.009130291	0.052103394	-0.044859926
0.225	0.040953819	-0.055262356	-0.012184488	0.010053454	0.028331556	-0.037659971
0.226	0.029018143	-0.050856911	-0.009345663	0.009929117	0.019576745	-0.030317529
0.227	0.021023650	-0.045823579	-0.007300810	0.009402666	0.015344118	-0.025407526
0.228	0.015612301	-0.041095320	-0.005825241	0.008764771	0.012833742	-0.021996279
0.229	0.011865805	-0.036930129	-0.004741600	0.008132821	0.011143956	-0.019483183
0.230	0.009205768	-0.033341581	-0.003928020	0.007549140	0.009911811	-0.017541452
0.231	0.007270772	-0.030266750	-0.003303486	0.007025017	0.008964294	-0.015985752
0.232	0.005831753	-0.027627433	-0.002814036	0.006559472	0.008207962	-0.014704303
0.233	0.004740318	-0.025350703	-0.002423195	0.006147144	0.007587425	-0.013625752
0.234	0.003898008	-0.023374448	-0.002105825	0.005781564	0.007067442	-0.012702285
0.235	0.003237948	-0.021647606	-0.001844249	0.005456453	0.006624344	-0.011900539
0.236	0.002713695	-0.020128763	-0.001625782	0.005166191	0.006241542	-0.011196426
0.237	0.002292317	-0.018784429	-0.001441150	0.004905917	0.005907007	-0.010572057
0.238	0.001950096	-0.017587477	-0.001283469	0.004671488	0.005611761	-0.010013790
0.239	0.001669549	-0.016515843	-0.001147524	0.004459418	0.005348973	-0.009511056
0.240	0.001437663	-0.015551473	-0.001029319	0.004266764	0.005113333	-0.009055492

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000828934	-0.002545659	-0.001426739	-0.000391397	-0.001382153	0.001472448
0.191	0.000820821	-0.002704244	-0.001500710	-0.000375856	-0.001381239	0.001631305
0.192	0.000806769	-0.002874219	-0.001579048	-0.000358553	-0.001370311	0.001803150
0.193	0.000785728	-0.003056455	-0.001662322	-0.000339463	-0.001347459	0.001988799
0.194	0.000756472	-0.003251895	-0.001751244	-0.000318558	-0.001310448	0.002189089
0.195	0.000717561	-0.003461564	-0.001846709	-0.000295793	-0.001256641	0.002404869
0.196	0.000667293	-0.003686566	-0.001949847	-0.000271090	-0.001182917	0.002636983
0.197	0.000603652	-0.003928079	-0.002062112	-0.000244276	-0.001085515	0.002886175
0.198	0.000524190	-0.004187403	-0.002185236	-0.000215161	-0.000960008	0.003153297
0.199	0.000425990	-0.004465865	-0.002321521	-0.000183306	-0.000800935	0.003438852
0.200	0.000305453	-0.004764822	-0.002473799	-0.000148011	-0.000601666	0.003743087
0.201	0.000158207	-0.005085600	-0.002645767	-0.000108181	-0.000353969	0.004065774
0.202	-0.000021170	-0.005429366	-0.002841982	-0.000062062	-0.000047741	0.004405792
0.203	-0.000239377	-0.005796903	-0.003068230	-0.000006918	0.000329595	0.004760623
0.204	-0.000504742	-0.006188278	-0.003331779	0.000061506	0.000793694	0.005125460
0.205	-0.000827551	-0.006602253	-0.003641661	0.000149793	0.001363928	0.005491830
0.206	-0.001220365	-0.007035366	-0.004008901	0.000268079	0.002063965	0.005845443
0.207	-0.001698137	-0.007480498	-0.004446503	0.000431906	0.002921943	0.006162906
0.208	-0.002277796	-0.007924745	-0.004968842	0.000664935	0.003969541	0.006406876
0.209	-0.002976616	-0.008346502	-0.005589735	0.001002679	0.005238611	0.006519366
0.210	-0.003808198	-0.008712039	-0.006317969	0.001497100	0.006752996	0.006413654
0.211	-0.004774396	-0.008973010	-0.007148501	0.002220850	0.008512196	0.005967359
0.212	-0.005851811	-0.009068597	-0.008047736	0.003267767	0.010464072	0.005023670
0.213	-0.006974520	-0.008939229	-0.008934193	0.004743297	0.012469928	0.003413678
0.214	-0.008022870	-0.008559427	-0.009663562	0.006738373	0.014281374	0.001013060
0.215	-0.008838274	-0.007987353	-0.010036430	0.009291196	0.015568273	-0.002175720
0.216	-0.009279526	-0.007406186	-0.009840255	0.012365902	0.016026285	-0.005974800
0.217	-0.009302043	-0.007125104	-0.008897177	0.015888842	0.015516896	-0.010103078
0.218	-0.009015749	-0.007557764	-0.007045852	0.019843352	0.014109407	-0.014389681
0.219	-0.008749948	-0.009277631	-0.003997770	0.024365013	0.011903358	-0.019054365
0.220	-0.009402660	-0.013247958	0.000986694	0.029813001	0.008465104	-0.024994113
0.221	-0.014008874	-0.020938223	0.010183153	0.036894648	0.001109962	-0.033808575
0.222	-0.033633150	-0.030353742	0.033060940	0.043744917	-0.021026779	-0.043707590
0.223	-0.071420317	0.003556541	0.071991792	0.006939281	-0.061008774	-0.009837816
0.224	-0.034677892	0.040239572	0.035154213	-0.031758520	-0.026134372	0.027089880
0.225	-0.012992127	0.032169200	0.013086997	-0.024831509	-0.006016136	0.019435561
0.226	-0.005982877	0.024566586	0.005777981	-0.017865689	-0.000313372	0.012343195
0.227	-0.003141410	0.019696139	0.002772709	-0.013385421	0.001441616	0.008026886
0.228	-0.001735660	0.016459343	0.001308144	-0.010424970	0.001943410	0.005356358
0.229	-0.000933636	0.014174875	0.000514295	-0.008363985	0.001991789	0.003630866
0.230	-0.000426980	0.012477338	0.000054550	-0.006863937	0.001868296	0.002473613
0.231	-0.000082570	0.011163236	-0.000222576	-0.005732876	0.001684090	0.001674842
0.232	0.000164298	0.010112604	-0.000393062	-0.004855646	0.001486030	0.001111578
0.233	0.000348200	0.009250816	-0.000498173	-0.004159530	0.001294230	0.000708204
0.234	0.000489108	0.008529220	-0.000561715	-0.003596589	0.001116934	0.000416305
0.235	0.000599321	0.007914786	-0.000598081	-0.003134056	0.000956912	0.000203820
0.236	0.000686829	0.007384304	-0.000616299	-0.002748848	0.000814379	0.000048901
0.237	0.000757056	0.006920979	-0.000622189	-0.002424297	0.000688358	-0.000063685
0.238	0.000813864	0.006512306	-0.000619706	-0.002148049	0.000577550	-0.000144788
0.239	0.000860023	0.006148812	-0.000611437	-0.001910832	0.000480354	-0.000202266
0.240	0.000897616	0.005823155	-0.000599198	-0.001705536	0.000395255	-0.000241891

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002141530	0.012343457	0.000470046	-0.001614024	0.003395005	0.011029357
0.191	0.002254183	0.012680922	0.000475335	-0.001692553	0.003549722	0.011250029
0.192	0.002376529	0.013039925	0.000480061	-0.001776462	0.003713935	0.011483547
0.193	0.002509834	0.013422624	0.000484099	-0.001866300	0.003888986	0.011731506
0.194	0.002655587	0.013831471	0.000487299	-0.001962692	0.004076552	0.011995714
0.195	0.002815547	0.014269258	0.000489473	-0.002066355	0.004278730	0.012278199
0.196	0.002991802	0.014739179	0.000490395	-0.002178113	0.004498150	0.012581225
0.197	0.003186849	0.015244903	0.000489782	-0.002298920	0.004738113	0.012907282
0.198	0.003403694	0.015790661	0.000487282	-0.002429885	0.005002776	0.013259070
0.199	0.003645956	0.016381382	0.000482458	-0.002572307	0.005297353	0.013639468
0.200	0.003918134	0.017022721	0.000474742	-0.002727703	0.005628474	0.014051339
0.201	0.004225706	0.017721390	0.000463423	-0.002897878	0.006004449	0.014497506
0.202	0.004575475	0.018485206	0.000447590	-0.003084967	0.006435742	0.014980316
0.203	0.004976057	0.019323427	0.000426039	-0.003291531	0.006935556	0.015501111
0.204	0.005438288	0.020247052	0.000397220	-0.003520668	0.007520352	0.016059735
0.205	0.005976189	0.021269159	0.000359034	-0.003776130	0.008210544	0.016652761
0.206	0.006607973	0.022405383	0.000308692	-0.004062496	0.009030919	0.017271709
0.207	0.007357686	0.023674464	0.000242352	-0.004385418	0.010010520	0.017900062
0.208	0.008257553	0.025098838	0.000154692	-0.004751897	0.011181244	0.018508879
0.209	0.009351493	0.026705242	0.000038197	-0.005170654	0.012573664	0.019051286
0.210	0.010700449	0.028525111	-0.000117954	-0.005652588	0.014207859	0.019456833
0.211	0.012390653	0.030594300	-0.000329660	-0.006211281	0.016076565	0.019629352
0.212	0.014546634	0.032950973	-0.000620825	-0.006863448	0.018119892	0.019456342
0.213	0.017351982	0.035628932	-0.001028232	-0.007628945	0.020198797	0.018842282
0.214	0.021082509	0.038639891	-0.001609835	-0.008529284	0.022090435	0.017774152
0.215	0.026157814	0.041929124	-0.002458801	-0.009581732	0.023541268	0.016402087
0.216	0.033213256	0.045267401	-0.003726294	-0.010781260	0.024392194	0.015078668
0.217	0.043162749	0.047995472	-0.005652468	-0.012050429	0.024725459	0.014301389
0.218	0.057080980	0.048469388	-0.008579621	-0.013113110	0.024953635	0.014584502
0.219	0.075274652	0.043168731	-0.012815816	-0.013240461	0.025863597	0.016366905
0.220	0.094309897	0.026781843	-0.017995730	-0.011064134	0.028842613	0.020058049
0.221	0.103850851	-0.002126691	-0.022016391	-0.005565707	0.037389574	0.026037513
0.222	0.094930144	-0.032376687	-0.022196566	0.001491280	0.063584427	0.027418588
0.223	0.074023866	-0.050263510	-0.018971028	0.006740709	0.082962592	-0.022742890
0.224	0.053285056	-0.055187167	-0.014887480	0.009216845	0.043569881	-0.042103444
0.225	0.037674130	-0.053215593	-0.011421049	0.009870393	0.025739094	-0.034638994
0.226	0.026954305	-0.048814672	-0.008829201	0.009669089	0.018553685	-0.028336970
0.227	0.019713963	-0.044017042	-0.006951352	0.009143292	0.014838229	-0.024035486
0.228	0.014762357	-0.039556273	-0.005584405	0.008531382	0.012546781	-0.020976984
0.229	0.011300035	-0.035629778	-0.004571658	0.007930538	0.010967873	-0.018684615
0.230	0.008819946	-0.032239265	-0.003805209	0.007376086	0.009799291	-0.016891112
0.231	0.007001944	-0.029324905	-0.003212730	0.006877357	0.008891500	-0.015440729
0.232	0.005640947	-0.026815039	-0.002745591	0.006433227	0.008161574	-0.014237481
0.233	0.004602773	-0.024643131	-0.002370620	0.006038775	0.007559392	-0.013219044
0.234	0.003797590	-0.022752383	-0.002064764	0.005688098	0.007052605	-0.012343084
0.235	0.003163898	-0.021095907	-0.001811688	0.005375450	0.006619241	-0.011579734
0.236	0.002658684	-0.019635501	-0.001599597	0.005095660	0.006243762	-0.010907231
0.237	0.002251278	-0.018340143	-0.001419817	0.004844239	0.005914821	-0.010309284
0.238	0.001919406	-0.017184601	-0.001265866	0.004617347	0.005623913	-0.009773414
0.239	0.001646628	-0.016148262	-0.001132818	0.004411732	0.005364517	-0.009289873
0.240	0.001420635	-0.015214208	-0.001016886	0.004224639	0.005131552	-0.008850917

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000791629	-0.002560843	-0.001433840	-0.000372502	-0.001327075	0.001501858
0.191	0.000780634	-0.002719728	-0.001508663	-0.000356493	-0.001321180	0.001660145
0.192	0.000763437	-0.002889963	-0.001588078	-0.000338660	-0.001304822	0.001831179
0.193	0.000738952	-0.003072411	-0.001672697	-0.000318946	-0.001276029	0.002015734
0.194	0.000705907	-0.003268003	-0.001763285	-0.000297284	-0.001232489	0.002214593
0.195	0.000662808	-0.003477746	-0.001860796	-0.000273575	-0.001171473	0.002428537
0.196	0.000607887	-0.003702719	-0.001966429	-0.000247670	-0.001089741	0.002658319
0.197	0.000539035	-0.003944075	-0.002081689	-0.000219334	-0.000983423	0.002904625
0.198	0.000453723	-0.004203030	-0.002208465	-0.000188194	-0.000847859	0.003168009
0.199	0.000348905	-0.004480843	-0.002349133	-0.000153672	-0.000677413	0.003448800
0.200	0.000220841	-0.004778743	-0.002506688	-0.000114846	-0.000465164	0.003746926
0.201	0.000064984	-0.005097886	-0.002684892	-0.000070309	-0.000202653	0.004061673
0.202	-0.000124257	-0.005439167	-0.002888468	-0.000017901	0.000120550	0.004391277
0.203	-0.000353764	-0.005802964	-0.003123378	0.000045754	0.000517394	0.004732172
0.204	-0.000632083	-0.006188855	-0.003396887	0.000125568	0.001003723	0.005078473
0.205	-0.000969574	-0.006594801	-0.003717995	0.000229253	0.001598985	0.005419767
0.206	-0.001378702	-0.007016248	-0.004097528	0.000368413	0.002326591	0.005739236
0.207	-0.001873933	-0.007444618	-0.004547723	0.000560541	0.003213483	0.006010081
0.208	-0.002470961	-0.007865170	-0.005081371	0.000831786	0.004288627	0.006190621
0.209	-0.003184517	-0.008254268	-0.005709258	0.001220564	0.005578471	0.006217895
0.210	-0.004023614	-0.008576627	-0.006434868	0.001781597	0.007097243	0.006000757
0.211	-0.004982827	-0.008784379	-0.007244804	0.002588758	0.008829257	0.005415844
0.212	-0.006029127	-0.008822049	-0.008094185	0.003732999	0.010702207	0.004314071
0.213	-0.007087684	-0.008643857	-0.008889952	0.005309640	0.012558153	0.002549360
0.214	-0.008037880	-0.008247965	-0.009482346	0.007391610	0.014144359	0.000036690
0.215	-0.008736956	-0.007720424	-0.009679812	0.009998222	0.015157671	-0.003179970
0.216	-0.009077935	-0.007263894	-0.009288921	0.013089089	0.015351670	-0.006911001
0.217	-0.009058052	-0.007192244	-0.008142555	0.016611792	0.014643344	-0.010920932
0.218	-0.008830933	-0.007926188	-0.006052301	0.020589086	0.013102310	-0.015139444
0.219	-0.008816331	-0.010083902	-0.002636449	0.025193884	0.010713051	-0.019919086
0.220	-0.010233039	-0.014700532	0.003086837	0.030812794	0.006661298	-0.026272411
0.221	-0.017236854	-0.022923287	0.014321274	0.037956713	-0.002914471	-0.035478103
0.222	-0.043237845	-0.027545254	0.042981243	0.039923459	-0.031259621	-0.040513850
0.223	-0.064027949	0.019813874	0.064535794	-0.010057018	-0.054100548	0.006826547
0.224	-0.026698208	0.037527183	0.027024256	-0.029502627	-0.018522598	0.024777639
0.225	-0.010829309	0.029335359	0.010802671	-0.022288696	-0.004130438	0.016979655
0.226	-0.005272825	0.022825936	0.004988969	-0.016333621	0.000189197	0.010951287
0.227	-0.002860401	0.018573619	0.002443702	-0.012429865	0.001568050	0.007221817
0.228	-0.001610582	0.015681406	0.001153984	-0.009790516	0.001953929	0.004865161
0.229	-0.000874618	0.013603216	0.000436937	-0.007920347	0.001966464	0.003317156
0.230	-0.000399221	0.012038037	0.000014288	-0.006540953	0.001834523	0.002265968
0.231	-0.000070815	0.010813918	-0.000243784	-0.005490142	0.001651538	0.001533534
0.232	0.000167417	0.009827395	-0.000404114	-0.004668497	0.001457846	0.001013304
0.233	0.000346530	0.009013045	-0.000503721	-0.004012171	0.001271063	0.000638681
0.234	0.000484781	0.008327647	-0.000564296	-0.003478492	0.001098490	0.000366456
0.235	0.000593581	0.007741543	-0.000599116	-0.003037973	0.000942585	0.000167702
0.236	0.000680432	0.007233701	-0.000616605	-0.002669646	0.000803512	0.000022529
0.237	0.000750479	0.006788780	-0.000622263	-0.002358242	0.000680381	-0.000083046
0.238	0.000807383	0.006395310	-0.000619768	-0.002092400	0.000571866	-0.000159045
0.239	0.000853826	0.006044528	-0.000611632	-0.001863514	0.000476509	-0.000212766
0.240	0.000891820	0.005729617	-0.000599599	-0.001664962	0.000392876	-0.000249600

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002182760	0.012378356	0.000463945	-0.001623753	0.003407906	0.011047097
0.191	0.002298985	0.012718597	0.000468859	-0.001703286	0.003565176	0.011270325
0.192	0.002425316	0.013080665	0.000473154	-0.001788313	0.003732499	0.011506597
0.193	0.002563086	0.013466757	0.000476696	-0.001879398	0.003911323	0.011757493
0.194	0.002713862	0.013879367	0.000479320	-0.001977184	0.004103446	0.012024787
0.195	0.002879496	0.014321341	0.000480825	-0.002082409	0.004311108	0.012310464
0.196	0.003062191	0.014795933	0.000480964	-0.002195922	0.004537106	0.012616715
0.197	0.003264585	0.015306882	0.000479429	-0.002318707	0.004784940	0.012945927
0.198	0.003489858	0.015858503	0.000475838	-0.002451910	0.005058990	0.013300651
0.199	0.003741845	0.016455815	0.000469718	-0.002596868	0.005364738	0.013683548
0.200	0.004025319	0.017104593	0.000460447	-0.002755153	0.005709112	0.014097181
0.201	0.004346103	0.017811677	0.000447254	-0.002928629	0.006100754	0.014543939
0.202	0.004711444	0.018585031	0.000429142	-0.003119506	0.006550484	0.015025557
0.203	0.005130503	0.019434101	0.000404806	-0.003330441	0.007071829	0.015542612
0.204	0.005614926	0.020370063	0.000372532	-0.003564635	0.007681530	0.016093578
0.205	0.006179710	0.021406210	0.000330037	-0.003825973	0.008400023	0.016673415
0.206	0.006844421	0.022558392	0.000274240	-0.004119209	0.009251637	0.017271437
0.207	0.007634951	0.023845529	0.000200920	-0.004450190	0.010264048	0.017868205
0.208	0.008586136	0.025290100	0.000104193	-0.004826143	0.011466035	0.018431162
0.209	0.009745405	0.026918734	-0.000024227	-0.005256078	0.012882643	0.018910373
0.210	0.011178920	0.028762147	-0.000196348	-0.005751167	0.014524298	0.019233566
0.211	0.012980437	0.030854382	-0.000429859	-0.006325224	0.016369772	0.019308018
0.212	0.015285531	0.033229439	-0.000751351	-0.006994961	0.018342918	0.019034865
0.213	0.018294139	0.035912062	-0.001201859	-0.007779607	0.020294000	0.018347727
0.214	0.022305876	0.038894511	-0.001845983	-0.008698387	0.022009312	0.017276404
0.215	0.027772928	0.042080374	-0.002787118	-0.009762208	0.023277439	0.016011780
0.216	0.035366420	0.045151568	-0.004190921	-0.010949842	0.024010682	0.014919529
0.217	0.046003810	0.047265886	-0.006312243	-0.012145181	0.024368038	0.014470092
0.218	0.060596281	0.046449955	-0.009483442	-0.012989843	0.024827367	0.015127476
0.219	0.078770159	0.038840621	-0.013893905	-0.012631868	0.026260028	0.017287792
0.220	0.095667158	0.019711630	-0.018834406	-0.009722181	0.030323873	0.021327270
0.221	0.100704611	-0.009632520	-0.021951530	-0.003802023	0.041718988	0.027011805
0.222	0.088510372	-0.036567284	-0.021216786	0.002804034	0.072404169	0.019490709
0.223	0.067806045	-0.050694986	-0.017770035	0.007265127	0.070946554	-0.032175130
0.224	0.048800880	-0.053703883	-0.013911613	0.009230580	0.037448071	-0.039000864
0.225	0.034766227	-0.051210413	-0.010732396	0.009673120	0.023712813	-0.032028359
0.226	0.025110188	-0.046872870	-0.008360835	0.009416123	0.017689439	-0.026585352
0.227	0.018531615	-0.042309688	-0.006631568	0.008896293	0.014390736	-0.022790439
0.228	0.013987376	-0.038100214	-0.005361965	0.008310204	0.012286024	-0.020034933
0.229	0.010779625	-0.034395521	-0.004413364	0.007738797	0.010805288	-0.017937042
0.230	0.008462414	-0.031188975	-0.003689963	0.007211742	0.009694419	-0.016276651
0.231	0.006751287	-0.028424132	-0.003127016	0.006736801	0.008823338	-0.014922209
0.232	0.005462142	-0.026035362	-0.002680590	0.006312779	0.008118123	-0.013790986
0.233	0.004473357	-0.023961914	-0.002320448	0.005935168	0.007533287	-0.012828396
0.234	0.003702812	-0.022151795	-0.002025412	0.005598579	0.007039065	-0.011996879
0.235	0.003093847	-0.020561910	-0.001780365	0.005297751	0.006615027	-0.011269651
0.236	0.002606569	-0.019156992	-0.001574321	0.005027928	0.006246603	-0.010627029
0.237	0.002212353	-0.017908276	-0.001399155	0.004784958	0.005923081	-0.010054168
0.238	0.001890305	-0.016792268	-0.001248763	0.004565277	0.005636384	-0.009539627
0.239	0.001624926	-0.015789708	-0.001118491	0.004365852	0.005380295	-0.009074416
0.240	0.001404557	-0.014884728	-0.001004739	0.004184105	0.005149943	-0.008651367

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000753787	-0.002575236	-0.001441274	-0.000353294	-0.001271335	0.001529403
0.191	0.000739886	-0.002734358	-0.001517010	-0.000336729	-0.001260449	0.001686973
0.192	0.000719514	-0.002904784	-0.001597566	-0.000318256	-0.001238645	0.001857028
0.193	0.000691547	-0.003087365	-0.001683598	-0.000297786	-0.001203888	0.002040294
0.194	0.000654669	-0.003283017	-0.001775920	-0.000275206	-0.001153788	0.002237497
0.195	0.000607331	-0.003492723	-0.001875548	-0.000250359	-0.001085522	0.002449337
0.196	0.000547695	-0.003717533	-0.001983747	-0.000223016	-0.000995735	0.002676464
0.197	0.000473572	-0.003958553	-0.002102100	-0.000192840	-0.000880415	0.002919421
0.198	0.000382335	-0.004216934	-0.002232584	-0.000159321	-0.000734739	0.003178572
0.199	0.000270820	-0.004493835	-0.002377686	-0.000121699	-0.000552856	0.003453984
0.200	0.000135151	-0.004790351	-0.002540500	-0.000078808	-0.000327627	0.003745215
0.201	-0.000029373	-0.005107436	-0.002724909	-0.000028911	-0.000050330	0.004051040
0.202	-0.000228508	-0.005445697	-0.002935749	0.000030595	0.000289736	0.004368985
0.203	-0.000469321	-0.005805135	-0.003179017	0.000103629	0.000705721	0.004694607
0.204	-0.000760425	-0.006184688	-0.003462070	0.000196054	0.001213670	0.005020406
0.205	-0.001112203	-0.006581530	-0.003793766	0.000316646	0.001832919	0.005334166
0.206	-0.001536882	-0.006990013	-0.004184417	0.000478501	0.002586167	0.005616483
0.207	-0.002048213	-0.007400141	-0.004645298	0.000701057	0.003498748	0.005837198
0.208	-0.002660242	-0.007795429	-0.005187274	0.001012965	0.004596217	0.005950328
0.209	-0.003384936	-0.008150715	-0.005817618	0.001454955	0.005898849	0.005889086
0.210	-0.004226311	-0.008429929	-0.006534085	0.002083895	0.007410490	0.005559211
0.211	-0.005171738	-0.008587092	-0.007314773	0.002973597	0.009100231	0.004838976
0.212	-0.006179666	-0.008573903	-0.008104467	0.004210493	0.010877739	0.003590353
0.213	-0.007169273	-0.008359841	-0.008800924	0.005878621	0.012571241	0.001692438
0.214	-0.008023453	-0.007965971	-0.009252551	0.008034158	0.013931845	-0.000903100
0.215	-0.008618894	-0.007502030	-0.009277615	0.010682581	0.014688949	-0.004121381
0.216	-0.008882454	-0.007184832	-0.008697967	0.013785734	0.014649029	-0.007776070
0.217	-0.008850375	-0.007332463	-0.007346562	0.017315220	0.013766945	-0.011686991
0.218	-0.008725528	-0.008380188	-0.004993426	0.021328589	0.012086835	-0.015883423
0.219	-0.009054519	-0.010996677	-0.001141345	0.026026364	0.009435360	-0.020838815
0.220	-0.011492889	-0.016236310	0.005515910	0.031792364	0.004507730	-0.027615402
0.221	-0.021599912	-0.024431898	0.019429862	0.038520706	-0.008007627	-0.036674397
0.222	-0.052479746	-0.020076862	0.052421984	0.031526639	-0.041078381	-0.032675253
0.223	-0.052588471	0.029086054	0.053005276	-0.019975345	-0.043107272	0.016485664
0.224	-0.021091716	0.034501910	0.021277625	-0.026878280	-0.013256652	0.022131351
0.225	-0.009198301	0.026918968	0.009064161	-0.020134861	-0.002757098	0.014921005
0.226	-0.004697184	0.021310156	0.004344230	-0.015011017	0.000571074	0.009765914
0.227	-0.002621470	0.017570439	0.002162717	-0.011583976	0.001662035	0.006519875
0.228	-0.001500870	0.014972553	0.001018621	-0.009218086	0.001955821	0.004428905
0.229	-0.000821814	0.013074966	0.000367776	-0.007514410	0.001939627	0.003034597
0.230	-0.000374128	0.011627898	-0.000022129	-0.006242246	0.001801348	0.002076881
0.231	-0.000060219	0.010485263	-0.000263095	-0.005263771	0.001620073	0.001403709
0.232	0.000170061	0.009557462	-0.000414194	-0.004492790	0.001430711	0.000922339
0.233	0.000344705	0.008786960	-0.000508755	-0.003873053	0.001248757	0.000573903
0.234	0.000480454	0.008135269	-0.000566593	-0.003366481	0.001080699	0.000319729
0.235	0.000587914	0.007575703	-0.000599987	-0.002946476	0.000928725	0.000133650
0.236	0.000674133	0.007089177	-0.000616801	-0.002593961	0.000792953	-0.000002482
0.237	0.000743996	0.006661667	-0.000622218	-0.002294936	0.000672540	-0.000101522
0.238	0.000800999	0.006282621	-0.000619730	-0.002038919	0.000566231	-0.000172740
0.239	0.000847721	0.005943937	-0.000611736	-0.001817926	0.000472650	-0.000222929
0.240	0.000886110	0.005639280	-0.000599914	-0.001625780	0.000390434	-0.000257131

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002224972	0.012413346	0.000457488	-0.001633752	0.003422046	0.011065127
0.191	0.002344888	0.012756374	0.000461996	-0.001714310	0.003582039	0.011290812
0.192	0.002475342	0.013121517	0.000465825	-0.001800480	0.003752658	0.011529713
0.193	0.002617736	0.013511012	0.000468830	-0.001892838	0.003935453	0.011783379
0.194	0.002773718	0.013927399	0.000470833	-0.001992048	0.004132345	0.012053554
0.195	0.002945240	0.014373572	0.000471615	-0.002098869	0.004345716	0.012342165
0.196	0.003134628	0.014852847	0.000470908	-0.002214177	0.004578528	0.012651321
0.197	0.003344665	0.015369032	0.000468379	-0.002338985	0.004834473	0.012983288
0.198	0.003578717	0.015926521	0.000463613	-0.002474474	0.005118154	0.013340448
0.199	0.003840849	0.016530432	0.000456094	-0.002622027	0.005435304	0.013725226
0.200	0.004136123	0.017186646	0.000445148	-0.002783266	0.005793130	0.014139850
0.201	0.004470731	0.017902129	0.000429932	-0.002960120	0.006200578	0.014586238
0.202	0.004852391	0.018684992	0.000409360	-0.003154874	0.006668766	0.015065469
0.203	0.005290880	0.019544841	0.000382008	-0.003370276	0.007211480	0.015577207
0.204	0.005798649	0.020493028	0.000345999	-0.003609640	0.007845580	0.016118667
0.205	0.006391769	0.021543028	0.000298831	-0.003876988	0.008591328	0.016683110
0.206	0.007091254	0.022710858	0.000237122	-0.004177237	0.009472294	0.017257619
0.207	0.007924975	0.024015537	0.000156227	-0.004516430	0.010514345	0.017820003
0.208	0.008930471	0.025479535	0.000049672	-0.004902033	0.011742771	0.018334865
0.209	0.010159149	0.027129044	-0.000091730	-0.005343287	0.013176134	0.018749522
0.210	0.011682680	0.028993732	-0.000281269	-0.005851605	0.014815050	0.018991913
0.211	0.013602866	0.031105141	-0.000538570	-0.006440926	0.016625070	0.018975305
0.212	0.016067080	0.033491871	-0.000893240	-0.007127770	0.018516892	0.018617608
0.213	0.019292542	0.036167101	-0.001390958	-0.007930254	0.020335811	0.017882742
0.214	0.023603046	0.039099283	-0.002103423	-0.008864445	0.021885932	0.016839399
0.215	0.029482133	0.042141466	-0.003144740	-0.009932869	0.023002008	0.015709219
0.216	0.037628019	0.044870781	-0.004694511	-0.011093991	0.023664171	0.014859962
0.217	0.048929558	0.046239117	-0.007017323	-0.012185544	0.024100264	0.014731036
0.218	0.064043394	0.043942128	-0.010416372	-0.012759394	0.024852649	0.015740228
0.219	0.081764184	0.033925698	-0.014918709	-0.011860773	0.026903276	0.018243535
0.220	0.095939682	0.012510632	-0.019463557	-0.008266813	0.032301276	0.022525330
0.221	0.096645145	-0.016281701	-0.021638167	-0.002141060	0.047187671	0.026947486
0.222	0.082146989	-0.039660677	-0.020169403	0.003894319	0.077593874	0.007241504
0.223	0.062142548	-0.050570504	-0.016640766	0.007642217	0.059483161	-0.035780084
0.224	0.044813894	-0.052103936	-0.013025682	0.009189726	0.032953724	-0.036015086
0.225	0.032180512	-0.049262445	-0.010109834	0.009467660	0.022088752	-0.029755857
0.226	0.023456845	-0.045028462	-0.007934810	0.009171270	0.016948977	-0.025023158
0.227	0.017460942	-0.040694758	-0.006338100	0.008661207	0.013991766	-0.021654176
0.228	0.013278908	-0.036720918	-0.005156006	0.008100472	0.012047978	-0.019160913
0.229	0.010299912	-0.033222463	-0.004265610	0.007556889	0.010654735	-0.017235301
0.230	0.008130519	-0.030187032	-0.003581628	0.007055530	0.009596494	-0.015694916
0.231	0.006517246	-0.027561692	-0.003045948	0.006602900	0.008759437	-0.014428130
0.232	0.005294394	-0.025286348	-0.002618783	0.006197783	0.008077403	-0.013363396
0.233	0.004351486	-0.023305489	-0.002272520	0.005836055	0.007508987	-0.012452783
0.234	0.003613301	-0.021571480	-0.001987666	0.005512798	0.007026747	-0.011662902
0.235	0.003027553	-0.020044675	-0.001750209	0.005223193	0.006611655	-0.010969701
0.236	0.002571188	-0.018692483	-0.001549904	0.004962861	0.006250032	-0.010355355
0.237	0.002175460	-0.017488213	-0.001379133	0.004727962	0.005931757	-0.009806324
0.238	0.001862742	-0.016409978	-0.001232143	0.004515187	0.005649156	-0.009312110
0.239	0.001604408	-0.015439764	-0.001104528	0.004321703	0.005396292	-0.008864422
0.240	0.001389412	-0.014562686	-0.000992869	0.004145098	0.005168500	-0.008456615

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000715428	-0.002588825	-0.001449022	-0.000333719	-0.001214992	0.001555063
0.191	0.000698595	-0.002748120	-0.001525727	-0.000316502	-0.001199108	0.001711760
0.192	0.000675016	-0.002918662	-0.001607484	-0.000297276	-0.001171833	0.001880662
0.193	0.000643533	-0.003101292	-0.001694988	-0.000275910	-0.001131094	0.002062437
0.194	0.000602781	-0.003296905	-0.001789106	-0.000252243	-0.001074410	0.002257745
0.195	0.000551155	-0.003506457	-0.001890908	-0.000226052	-0.000998865	0.002467197
0.196	0.000486749	-0.003730962	-0.002001725	-0.000197023	-0.000900993	0.002691325
0.197	0.000407295	-0.003971471	-0.002123219	-0.000164708	-0.000776638	0.002930517
0.198	0.000310067	-0.004229058	-0.002257451	-0.000128446	-0.000620813	0.003184923
0.199	0.000191792	-0.004504777	-0.002406994	-0.000087281	-0.000427490	0.003454314
0.200	0.000048466	-0.004799567	-0.002575041	-0.000039781	-0.000189314	0.003737845
0.201	-0.000124753	-0.005114160	-0.002765571	0.000016142	0.000102660	0.004033739
0.202	-0.000333759	-0.005448853	-0.002983496	0.000083570	0.000459345	0.004338750
0.203	-0.000585735	-0.005803210	-0.003234845	0.000167062	0.000894039	0.004647376
0.204	-0.000889344	-0.006175560	-0.003526906	0.000273348	0.001422779	0.004950660
0.205	-0.001254867	-0.006562248	-0.003868270	0.000412355	0.002064559	0.005234422
0.206	-0.001694130	-0.006956539	-0.004268628	0.000598690	0.002841102	0.005476668
0.207	-0.002219947	-0.007347091	-0.004738009	0.000853678	0.003775640	0.005644001
0.208	-0.002844608	-0.007716018	-0.005284975	0.001208031	0.004889748	0.005686980
0.209	-0.003576672	-0.008036907	-0.005912942	0.001704869	0.006196724	0.005535014
0.210	-0.004415137	-0.008273883	-0.006613622	0.002402172	0.007689648	0.005092772
0.211	-0.005340510	-0.008384189	-0.007356883	0.003372492	0.009323066	0.004242622
0.212	-0.006304248	-0.008328322	-0.008078144	0.004696332	0.010991162	0.002860435
0.213	-0.007222290	-0.008091863	-0.008668448	0.006446162	0.012513735	0.000851142
0.214	-0.007985456	-0.007717050	-0.008977456	0.008663265	0.013653143	-0.001801003
0.215	-0.008491964	-0.007333174	-0.008833462	0.011344474	0.014173464	-0.005001236
0.216	-0.008701457	-0.007167442	-0.008068271	0.014459031	0.013926225	-0.008578922
0.217	-0.008688435	-0.007543641	-0.006504016	0.018003036	0.012886095	-0.012415134
0.218	-0.008716265	-0.008918479	-0.003854831	0.022062791	0.011045378	-0.016635537
0.219	-0.009506953	-0.012006942	0.000520722	0.026853975	0.008021737	-0.021815193
0.220	-0.013290847	-0.017776914	0.008367622	0.032689115	0.001888144	-0.028950421
0.221	-0.027197110	-0.024900824	0.025616971	0.038052538	-0.014275470	-0.036836304
0.222	-0.058134518	-0.008213964	0.058185612	0.018824656	-0.047264114	-0.020457157
0.223	-0.041681346	0.032591824	0.041992283	-0.024046182	-0.032612297	0.020359320
0.224	-0.017075659	0.031619066	0.017132817	-0.024349817	-0.009556470	0.019607710
0.225	-0.007938424	0.024844927	0.007709361	-0.018299242	-0.001737253	0.013185907
0.226	-0.004223446	0.019979133	0.003809977	-0.013859677	0.000863556	0.008748227
0.227	-0.002416368	0.016668614	0.001920714	-0.010830689	0.001731024	0.005904165
0.228	-0.001404029	0.014324013	0.000899118	-0.008699436	0.001951055	0.004039735
0.229	-0.000774371	0.012585413	0.000305716	-0.007141819	0.001911782	0.002779240
0.230	-0.000351384	0.011244171	-0.000055150	-0.005965341	0.001768857	0.001904232
0.231	-0.000050660	0.010175552	-0.000280707	-0.005052271	0.001589666	0.001284167
0.232	0.000172274	0.009301669	-0.000423394	-0.004327579	0.001404574	0.000837974
0.233	0.000342742	0.008571776	-0.000513319	-0.003741555	0.001227263	0.000513443
0.234	0.000476131	0.007951520	-0.000568632	-0.003260132	0.001063521	0.000275857
0.235	0.000582317	0.007416848	-0.000600706	-0.002859270	0.000915302	0.000101495
0.236	0.000667935	0.006950413	-0.000616901	-0.002521583	0.000782690	-0.000026236
0.237	0.000737623	0.006539379	-0.000622105	-0.002234215	0.000664881	-0.000119175
0.238	0.000794724	0.006174032	-0.000619635	-0.001987484	0.000560692	-0.000185913
0.239	0.000841721	0.005846871	-0.000611788	-0.001773973	0.000468820	-0.000232779
0.240	0.000880498	0.005552005	-0.000600177	-0.001587916	0.000387972	-0.000264493

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002268197	0.012448401	0.000450660	-0.001644021	0.003437427	0.011083360
0.191	0.002391928	0.012794222	0.000454729	-0.001725626	0.003600306	0.011311391
0.192	0.002526648	0.013162448	0.000458055	-0.001812960	0.003774395	0.011552774
0.193	0.002673831	0.013555354	0.000460481	-0.001906619	0.003961349	0.011809036
0.194	0.002835209	0.013975521	0.000461815	-0.002007282	0.004163207	0.012081870
0.195	0.003012844	0.014425900	0.000461818	-0.002115733	0.004382493	0.012373142
0.196	0.003209183	0.014909861	0.000460201	-0.002232873	0.004622334	0.012684862
0.197	0.003427173	0.015431283	0.000456602	-0.002359748	0.004886604	0.013019165
0.198	0.003670370	0.015994640	0.000450570	-0.002497574	0.005180122	0.013378244
0.199	0.003943086	0.016605141	0.000441544	-0.002647780	0.005508855	0.013764264
0.200	0.004250700	0.017268784	0.000428790	-0.002812043	0.005880279	0.014179093
0.201	0.004599760	0.017992619	0.000411397	-0.002992346	0.006303576	0.014624122
0.202	0.004998523	0.018784928	0.000388172	-0.003191062	0.006790139	0.015099757
0.203	0.005457408	0.019655455	0.000357563	-0.003411029	0.007353896	0.015604693
0.204	0.005989729	0.020615706	0.000317520	-0.003655673	0.008011691	0.016134856
0.205	0.006612705	0.021679304	0.000265299	-0.003929153	0.008783394	0.016681799
0.206	0.007348900	0.022862374	0.000197188	-0.004236549	0.009691503	0.017230450
0.207	0.008228311	0.024183951	0.000108078	-0.004584094	0.010759644	0.017756106
0.208	0.009291428	0.025666307	-0.000009165	-0.004979467	0.012009008	0.018220915
0.209	0.010593823	0.027334995	-0.000164693	-0.005432126	0.013451409	0.018570841
0.210	0.012213115	0.029218160	-0.000373219	-0.005953658	0.015077636	0.018735701
0.211	0.014259700	0.031344042	-0.000656507	-0.006558004	0.016841379	0.018637264
0.212	0.016893411	0.033734351	-0.001047431	-0.007261220	0.018643762	0.018212305
0.213	0.020349235	0.036388193	-0.001596659	-0.008079843	0.020332095	0.017454653
0.214	0.024975562	0.039244540	-0.002383559	-0.009025540	0.021732933	0.016466887
0.215	0.031284219	0.042096308	-0.003533092	-0.010090163	0.022730017	0.015491960
0.216	0.039987583	0.044399257	-0.005237415	-0.011207245	0.023366880	0.014891300
0.217	0.051903774	0.044880652	-0.007763327	-0.012160979	0.023934305	0.015071425
0.218	0.067332232	0.040928808	-0.011361282	-0.012410304	0.025044555	0.016407000
0.219	0.084121522	0.028513847	-0.015854944	-0.010934245	0.027827762	0.019208335
0.220	0.095132725	0.005425054	-0.019864536	-0.006748446	0.034874594	0.023531004
0.221	0.091931024	-0.021967269	-0.021120142	-0.000623996	0.053592705	0.025066378
0.222	0.076006851	-0.041808417	-0.019098556	0.004780278	0.076821390	-0.006281094
0.223	0.057017893	-0.050030176	-0.015589688	0.007900692	0.050191535	-0.036057546
0.224	0.041266097	-0.050440911	-0.012221765	0.009108491	0.029563532	-0.033293774
0.225	0.029874423	-0.047381322	-0.009545679	0.009258449	0.020758979	-0.027761681
0.226	0.021969730	-0.043277470	-0.007546170	0.008935151	0.016306863	-0.023619459
0.227	0.016488570	-0.039165864	-0.006068052	0.008437518	0.013633598	-0.020611890
0.228	0.012629651	-0.035412697	-0.004964860	0.007901465	0.011829763	-0.018347162
0.229	0.009856818	-0.032106156	-0.004127422	0.007384162	0.010514958	-0.016574921
0.230	0.007821915	-0.029230084	-0.003479621	0.006906924	0.009504903	-0.015143121
0.231	0.006298430	-0.026735074	-0.002969165	0.006475243	0.008699471	-0.013956643
0.232	0.005136857	-0.024566103	-0.002559943	0.006087920	0.008039226	-0.012953419
0.233	0.004236627	-0.022672413	-0.002226688	0.005741190	0.007486380	-0.012091265
0.234	0.003528714	-0.021010321	-0.001951426	0.005430563	0.007015580	-0.011340447
0.235	0.002964792	-0.019543320	-0.001721154	0.005151624	0.006609079	-0.010679336
0.236	0.002510392	-0.018241272	-0.001526302	0.004900339	0.006254021	-0.010091774
0.237	0.002140495	-0.017079388	-0.001359721	0.004673156	0.005940832	-0.009565400
0.238	0.001836646	-0.016037264	-0.001215983	0.004466996	0.005662215	-0.009090576
0.239	0.001585029	-0.015098044	-0.001090915	0.004279219	0.005412500	-0.008659648
0.240	0.001375163	-0.014247765	-0.000981265	0.004107565	0.005187215	-0.008266462

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000676566	-0.002601593	-0.001457071	-0.000313730	-0.001158068	0.001578819
0.191	0.000656777	-0.002760994	-0.001534793	-0.000295758	-0.001137180	0.001734484
0.192	0.000629967	-0.002931579	-0.001617797	-0.000275652	-0.001104452	0.001902044
0.193	0.000594934	-0.003114168	-0.001706824	-0.000253242	-0.001057720	0.002082114
0.194	0.000550270	-0.003309637	-0.001802786	-0.000228310	-0.000994440	0.002275276
0.195	0.000494312	-0.003518911	-0.001906807	-0.000200562	-0.000911603	0.002482042
0.196	0.000425088	-0.003742958	-0.002020286	-0.000169591	-0.000805623	0.002702814
0.197	0.000340251	-0.003982771	-0.002144948	-0.000134824	-0.000672224	0.002937802
0.198	0.000236983	-0.004239337	-0.002282932	-0.000095443	-0.000506263	0.003186921
0.199	0.000111904	-0.004513589	-0.002436894	-0.000050275	-0.000301539	0.003449622
0.200	-0.000039111	-0.004806297	-0.002610107	0.000002395	-0.000050510	0.003724620
0.201	-0.000221008	-0.005117950	-0.002806618	0.000065025	0.000255939	0.004009544
0.202	-0.000439808	-0.005448514	-0.003031386	0.000141205	0.000628896	0.004300325
0.203	-0.000702757	-0.005797098	-0.003290402	0.000236172	0.001081669	0.004590344
0.204	-0.001018496	-0.006161400	-0.003590801	0.000357546	0.001630146	0.004869142
0.205	-0.001397092	-0.006536936	-0.003940783	0.000516429	0.002292743	0.005120546
0.206	-0.001849813	-0.006915920	-0.004349225	0.000728916	0.003089865	0.005320024
0.207	-0.002388315	-0.007285791	-0.004824650	0.001018134	0.004042164	0.005431143
0.208	-0.003022778	-0.007627485	-0.005373010	0.001416748	0.005166639	0.005401280
0.209	-0.003758286	-0.007913997	-0.005993523	0.001969528	0.006469141	0.005157485
0.210	-0.004588759	-0.008110536	-0.006671746	0.002734849	0.007931882	0.004604873
0.211	-0.005488496	-0.008178864	-0.007369684	0.003782850	0.009495929	0.003632242
0.212	-0.006403716	-0.008089438	-0.008014891	0.005187160	0.011043305	0.002131275
0.213	-0.007250704	-0.007843803	-0.008494223	0.007008713	0.012391368	0.000032389
0.214	-0.007930318	-0.007503574	-0.008660063	0.009277040	0.013317591	-0.002653836
0.215	-0.008364077	-0.007213696	-0.008349746	0.011984711	0.013620861	-0.005822723
0.216	-0.008543398	-0.007209528	-0.007398709	0.015111850	0.013188009	-0.009329001
0.217	-0.008582663	-0.007823227	-0.005607719	0.018677644	0.011995444	-0.013118066
0.218	-0.008824060	-0.009537514	-0.002619208	0.022789383	0.009954882	-0.017405749
0.219	-0.010225794	-0.013094805	0.002390334	0.027659600	0.006413932	-0.022837046
0.220	-0.015744691	-0.019185095	0.011748749	0.033386272	-0.001322175	-0.030144705
0.221	-0.033816253	-0.023529127	0.032685859	0.035775488	-0.021511915	-0.035164375
0.222	-0.057851441	0.004994751	0.057944774	0.004865190	-0.047470841	-0.006908032
0.223	-0.032920408	0.032820895	0.033119394	-0.024770394	-0.024232868	0.020938241
0.224	-0.014128829	0.029020200	0.014068931	-0.022066236	-0.006903206	0.017349549
0.225	-0.006944757	0.023051245	0.006631981	-0.016723366	-0.000967588	0.011713645
0.226	-0.003828400	0.018801557	0.003361885	-0.012849880	0.001088778	0.007868074
0.227	-0.002238793	0.015853597	0.001710719	-0.010156245	0.001780598	0.005361135
0.228	-0.001318061	0.013728448	0.000793096	-0.008227693	0.001941152	0.003691154
0.229	-0.000731583	0.012130513	0.000249843	-0.006798853	0.001883319	0.002547736
0.230	-0.000330722	0.010884446	-0.000085163	-0.005708078	0.001737109	0.001746190
0.231	-0.000042033	0.009883254	-0.000296794	-0.004854318	0.001560285	0.001173856
0.232	0.000174098	0.009058990	-0.000431798	-0.004172016	0.001379384	0.000759584
0.233	0.000340654	0.008366776	-0.000517456	-0.003617113	0.001206536	0.000456914
0.234	0.000471813	0.007775882	-0.000570432	-0.003159058	0.001046922	0.000234600
0.235	0.000576789	0.007264589	-0.000601286	-0.002776084	0.000902294	0.000071085
0.236	0.000661835	0.006817111	-0.000616912	-0.002452316	0.000772704	-0.000048831
0.237	0.000731357	0.006421684	-0.000621926	-0.002175936	0.000657392	-0.000136068
0.238	0.000788557	0.006069356	-0.000619487	-0.001937988	0.000555241	-0.000198603
0.239	0.000835824	0.005753178	-0.000611791	-0.001731574	0.000465016	-0.000242339
0.240	0.000874982	0.005467672	-0.000600393	-0.001551313	0.000385491	-0.000271700

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002312468	0.012483485	0.000443449	-0.001654555	0.003454043	0.011101695
0.191	0.002440141	0.012832102	0.000447044	-0.001737229	0.003619965	0.011331953
0.192	0.002579275	0.013203415	0.000449829	-0.001825752	0.003797689	0.011575670
0.193	0.002731416	0.013599733	0.000451632	-0.001920737	0.003988976	0.011834340
0.194	0.002898392	0.014023687	0.000452243	-0.002022886	0.004195985	0.012109605
0.195	0.003082369	0.014478270	0.000451408	-0.002133001	0.004421377	0.012403248
0.196	0.003285934	0.014966916	0.000448811	-0.002252013	0.004668435	0.012717179
0.197	0.003512197	0.015493568	0.000444060	-0.002380998	0.004941216	0.013053383
0.198	0.003764922	0.016062779	0.000436666	-0.002521211	0.005244737	0.013413847
0.199	0.004048678	0.016679845	0.000426018	-0.002674126	0.005585187	0.013800449
0.200	0.004369171	0.017350864	0.000411321	-0.002841472	0.005970269	0.014214664
0.201	0.004733364	0.018083002	0.000391581	-0.003025301	0.006409389	0.014657348
0.202	0.005150051	0.018884665	0.000365499	-0.003228061	0.006914110	0.015128171
0.203	0.005630346	0.019765727	0.000331379	-0.003452686	0.007498428	0.015624845
0.204	0.006188484	0.020737823	0.000286979	-0.003702715	0.008179009	0.016141983
0.205	0.006842911	0.021814681	0.000229298	-0.003982441	0.008975106	0.016669467
0.206	0.007617851	0.023012473	0.000154259	-0.004297103	0.009907836	0.017190194
0.207	0.008545573	0.024350138	0.000056248	-0.004653116	0.010998189	0.017677270
0.208	0.009669731	0.025849571	-0.000072597	-0.005058351	0.012262849	0.018091044
0.209	0.011050348	0.027535385	-0.000243481	-0.005522447	0.013706663	0.018377304
0.210	0.012771389	0.029433669	-0.000472677	-0.006057082	0.015311031	0.018469528
0.211	0.014952365	0.031568417	-0.000784289	-0.006676041	0.017019608	0.018300090
0.212	0.017766171	0.033952724	-0.001214750	-0.007394595	0.018727866	0.017825941
0.213	0.021466089	0.036568293	-0.001820110	-0.008227010	0.020290263	0.017069442
0.214	0.026424203	0.039318873	-0.002687717	-0.009179258	0.021561394	0.016161195
0.215	0.033175782	0.041926483	-0.003953259	-0.010229776	0.022473886	0.015356968
0.216	0.042429242	0.043709142	-0.005818912	-0.011282147	0.023130296	0.015005712
0.217	0.054879624	0.043158322	-0.008543439	-0.012060358	0.023881696	0.015480393
0.218	0.070361162	0.037411819	-0.012296967	-0.011933901	0.025420251	0.017112913
0.219	0.085731076	0.022734234	-0.016669063	-0.009869341	0.029077147	0.020142143
0.220	0.093323164	-0.001316537	-0.020034722	-0.005219510	0.038135500	0.024136363
0.221	0.086813064	-0.026663369	-0.020445940	0.000725040	0.060117786	0.020549469
0.222	0.070197868	-0.043168426	-0.018037102	0.005485712	0.070903926	-0.017295987
0.223	0.052400308	-0.049186970	-0.014618242	0.008065015	0.043072061	-0.034776987
0.224	0.038104612	-0.048753738	-0.011492021	0.008997867	0.026937885	-0.030862781
0.225	0.027811536	-0.045572495	-0.009033201	0.009048727	0.019650147	-0.025997767
0.226	0.020627968	-0.041615441	-0.007190656	0.008708077	0.015744183	-0.022349778
0.227	0.015603032	-0.037717049	-0.005818931	0.008224685	0.013310083	-0.019651433
0.228	0.012033266	-0.034170384	-0.004787082	0.007712508	0.011628970	-0.017587104
0.229	0.009446755	-0.031042575	-0.003997953	0.007220015	0.010384868	-0.015952021
0.230	0.007534523	-0.028315074	-0.003383420	0.006765438	0.009419101	-0.014618797
0.231	0.006093591	-0.025941978	-0.002896344	0.006353449	0.008643143	-0.013506083
0.232	0.004988761	-0.023872884	-0.002503866	0.005982895	0.008003422	-0.012559880
0.233	0.004128296	-0.022061348	-0.002182819	0.005650343	0.007465362	-0.011742979
0.234	0.003448738	-0.020467276	-0.001916605	0.005351695	0.007005500	-0.011028858
0.235	0.002905356	-0.019057024	-0.001693137	0.005082901	0.006607259	-0.010398046
0.236	0.002466043	-0.017802700	-0.001503472	0.004840248	0.006258542	-0.009835879
0.237	0.002107365	-0.016681266	-0.001340887	0.004620445	0.005950286	-0.009331066
0.238	0.001811952	-0.015673686	-0.001200260	0.004420631	0.005675549	-0.008874751
0.239	0.001566741	-0.014764182	-0.001077633	0.004238338	0.005428913	-0.008459866
0.240	0.001361782	-0.013939637	-0.000969914	0.004071451	0.005206085	-0.008080705

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000637223	-0.002613526	-0.001465394	-0.000293271	-0.001100628	0.001600648
0.191	0.000614456	-0.002772962	-0.001544177	-0.000274439	-0.001074737	0.001755113
0.192	0.000584386	-0.002943507	-0.001628474	-0.000253326	-0.001036541	0.001921142
0.193	0.000545772	-0.003125963	-0.001719065	-0.000229718	-0.000983812	0.002099286
0.194	0.000497160	-0.003321178	-0.001816907	-0.000203336	-0.000913934	0.002290038
0.195	0.000436831	-0.003530041	-0.001923183	-0.000173809	-0.000823796	0.002493806
0.196	0.000362750	-0.003753471	-0.002039344	-0.000140628	-0.000709717	0.002710844
0.197	0.000272489	-0.003992393	-0.002167180	-0.000103089	-0.000567292	0.002941170
0.198	0.000163146	-0.004247698	-0.002308899	-0.000060198	-0.000391240	0.003184440
0.199	0.000031242	-0.004520187	-0.002467224	-0.000010557	-0.000175205	0.003439758
0.200	-0.000127449	-0.004810444	-0.002645490	0.000047850	0.000088505	0.003705368
0.201	-0.000317975	-0.005118702	-0.002847786	0.000117883	0.000409141	0.003978258
0.202	-0.000546433	-0.005444583	-0.003079061	0.000203662	0.000797846	0.004253499
0.203	-0.000820088	-0.005786709	-0.003345227	0.000311116	0.001267894	0.004523311
0.204	-0.001147478	-0.006142150	-0.003653165	0.000448784	0.001834823	0.004775700
0.205	-0.001538346	-0.006505605	-0.004010543	0.000628938	0.002516228	0.004992515
0.206	-0.002003241	-0.006868307	-0.004425241	0.000869125	0.003330854	0.005146784
0.207	-0.002552459	-0.007216635	-0.004904023	0.001194141	0.004296334	0.005199321
0.208	-0.003193858	-0.007530689	-0.005449955	0.001638311	0.005424609	0.005094933
0.209	-0.003928929	-0.007783473	-0.006057836	0.002247523	0.006713770	0.004759413
0.210	-0.004746714	-0.007942204	-0.006707108	0.003079720	0.008135429	0.004100002
0.211	-0.005616195	-0.007974277	-0.007352545	0.004201664	0.009618740	0.003013886
0.212	-0.006480282	-0.007860883	-0.007915330	0.005679561	0.011037058	0.001409632
0.213	-0.007258110	-0.007619183	-0.008279986	0.007563752	0.012209735	-0.000758787
0.214	-0.007863558	-0.007327625	-0.008302825	0.009874701	0.012933245	-0.003460527
0.215	-0.008241799	-0.007143727	-0.007827709	0.012604796	0.013038276	-0.006590475
0.216	-0.008415680	-0.007310109	-0.006686752	0.015746937	0.012435976	-0.010035864
0.217	-0.008544619	-0.008170329	-0.004648431	0.019340251	0.011085754	-0.013806985
0.218	-0.009074397	-0.010233069	-0.001266187	0.023503337	0.008786695	-0.018199703
0.219	-0.011273265	-0.014221307	0.004517066	0.028410524	0.004543884	-0.023872850
0.220	-0.018957642	-0.020233307	0.015757336	0.033679609	-0.005232751	-0.030974515
0.221	-0.040627035	-0.019481142	0.039825758	0.030871732	-0.028892134	-0.030824244
0.222	-0.052432643	0.015763495	0.052520996	-0.006570909	-0.042504954	0.004186469
0.223	-0.026303231	0.031533602	0.026390239	-0.023918334	-0.017969747	0.019983580
0.224	-0.011914003	0.026726297	0.011748506	-0.020054621	-0.004961744	0.015379043
0.225	-0.006146679	0.021488219	0.005760156	-0.015360378	-0.000378922	0.010455692
0.226	-0.003495083	0.017752744	0.002982051	-0.011958246	0.001262729	0.007101828
0.227	-0.002083847	0.015113524	0.001527274	-0.009549447	0.001814998	0.004879838
0.228	-0.001241334	0.013179693	0.000698619	-0.007797093	0.001927299	0.003377769
0.229	-0.000692849	0.011706784	0.000199392	-0.006482310	0.001854540	0.002337252
0.230	-0.000311910	0.010546603	-0.000112499	-0.005468570	0.001706141	0.001601168
0.231	-0.000034244	0.009607000	-0.000311508	-0.004668739	0.001531894	0.001071856
0.232	0.000175570	0.008828500	-0.000439478	-0.004025340	0.001355093	0.000686615
0.233	0.000338456	0.008171306	-0.000521201	-0.003499216	0.001186534	0.000403976
0.234	0.000467506	0.007607876	-0.000572015	-0.003062908	0.001030869	0.000195742
0.235	0.000571331	0.007118569	-0.000601738	-0.002696668	0.000889674	0.000042283
0.236	0.000655831	0.006688995	-0.000616841	-0.002385981	0.000762980	-0.000070354
0.237	0.000725197	0.006308366	-0.000621689	-0.002119966	0.000650064	-0.000152259
0.238	0.000782496	0.005968421	-0.000619289	-0.001890331	0.000549871	-0.000210846
0.239	0.000830029	0.005662718	-0.000611748	-0.001690655	0.000461233	-0.000251631
0.240	0.000869561	0.005386159	-0.000600563	-0.001515906	0.000382985	-0.000278767

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002357816	0.012518568	0.000435840	-0.001665354	0.003471885	0.011120042
0.191	0.002489565	0.012869981	0.000438927	-0.001749116	0.003640995	0.011352396
0.192	0.002633265	0.013244380	0.000441128	-0.001838852	0.003822510	0.011598290
0.193	0.002790542	0.013644109	0.000442260	-0.001935191	0.004018292	0.011859168
0.194	0.002963319	0.014071841	0.000442096	-0.002038854	0.004230618	0.012136615
0.195	0.003153879	0.014530621	0.000440359	-0.002150667	0.004462284	0.012432331
0.196	0.003364952	0.015023939	0.000436709	-0.002271589	0.004716725	0.012748106
0.197	0.003599823	0.015555803	0.000430720	-0.002402727	0.004998167	0.013085762
0.198	0.003862475	0.016130840	0.000421861	-0.002545376	0.005311817	0.013447060
0.199	0.004157749	0.016754432	0.000409470	-0.002701055	0.005664062	0.013833573
0.200	0.004491697	0.017432772	0.000392681	-0.002871550	0.006062804	0.014246357
0.201	0.004871724	0.018173126	0.000370414	-0.003058975	0.006517621	0.014685703
0.202	0.005307192	0.018984015	0.000341254	-0.003265860	0.007040175	0.015150519
0.203	0.005809959	0.019875420	0.000303349	-0.003495232	0.007644416	0.015637513
0.204	0.006395239	0.020859076	0.000254250	-0.003750743	0.008346672	0.016139999
0.205	0.007082790	0.021948769	0.000190670	-0.004036818	0.009165359	0.016646249
0.206	0.007898604	0.023160632	0.000108141	-0.004358849	0.010119913	0.017137316
0.207	0.008877386	0.024513391	0.000000490	-0.004723418	0.011228353	0.017584515
0.208	0.010066163	0.026028349	-0.000140938	-0.005138566	0.012502560	0.017947136
0.209	0.011529706	0.027728818	-0.000328500	-0.005614058	0.013940435	0.018172007
0.210	0.013358718	0.029638214	-0.000580174	-0.006161566	0.015514779	0.018197940
0.211	0.015682307	0.031775182	-0.000922612	-0.006794520	0.017161428	0.017969584
0.212	0.018686913	0.034142207	-0.001396081	-0.007527012	0.018774168	0.017464522
0.213	0.022644186	0.036699931	-0.002062370	-0.008370253	0.020219527	0.016731156
0.214	0.027948217	0.039310250	-0.003017009	-0.009322933	0.021383352	0.015922137
0.215	0.035150245	0.041613024	-0.004405756	-0.010347006	0.022246268	0.015298813
0.216	0.044930701	0.042773734	-0.006436881	-0.011310913	0.022966213	0.015193259
0.217	0.057799683	0.041048802	-0.009347793	-0.011873522	0.023954830	0.015944288
0.218	0.073024942	0.033420629	-0.013199033	-0.011327026	0.026000796	0.017836899
0.219	0.086516461	0.016746212	-0.017331895	-0.008692308	0.030702495	0.020987803
0.220	0.090642857	-0.007524778	-0.019985605	-0.003729034	0.042116956	0.024028105
0.221	0.081510067	-0.030405169	-0.019662117	0.001896407	0.065244837	0.013138092
0.222	0.064780640	-0.043887620	-0.017007621	0.006035427	0.062694117	-0.024189001
0.223	0.048249760	-0.048127528	-0.013724333	0.008155016	0.037667111	-0.032892560
0.224	0.035281822	-0.047070384	-0.010828889	0.008866449	0.024856244	-0.028703558
0.225	0.025960418	-0.043838459	-0.008566411	0.008840930	0.018711750	-0.024425766
0.226	0.019413537	-0.040037658	-0.006864493	0.008490205	0.015247041	-0.021194604
0.227	0.014794290	-0.036342725	-0.005588483	0.008022210	0.013016539	-0.018762842
0.228	0.011484103	-0.032989210	-0.004621329	0.007533010	0.011443741	-0.016875229
0.229	0.009066595	-0.030027967	-0.003876407	0.007063901	0.010263544	-0.015363181
0.230	0.007266480	-0.027439220	-0.003292570	0.006630628	0.009338602	-0.014119747
0.231	0.005901601	-0.025180305	-0.002827204	0.006237172	0.008590184	-0.013074954
0.232	0.004849403	-0.023205095	-0.002450372	0.005882439	0.007969831	-0.012181708
0.233	0.004026040	-0.021471066	-0.002140797	0.005563303	0.007445837	-0.011407131
0.234	0.003373078	-0.019941388	-0.001883127	0.005276025	0.006996446	-0.010727531
0.235	0.002849046	-0.018585030	-0.001666113	0.005016893	0.006606155	-0.010125358
0.236	0.002424011	-0.017376150	-0.001481374	0.004782481	0.006263570	-0.009587291
0.237	0.002075981	-0.016293343	-0.001322604	0.004569744	0.005960105	-0.009103012
0.238	0.001788599	-0.015318831	-0.001184955	0.004376019	0.005689149	-0.008664378
0.239	0.001549499	-0.014437841	-0.001064670	0.004199005	0.005445521	-0.008264865
0.240	0.001349238	-0.013638019	-0.000958806	0.004036709	0.005225106	-0.007899164

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000597420	-0.002624608	-0.001473963	-0.000272292	-0.001042727	0.001620525
0.191	0.000571653	-0.002784006	-0.001553845	-0.000252487	-0.001011835	0.001773618
0.192	0.000538299	-0.002954427	-0.001639466	-0.000230233	-0.000968180	0.001937917
0.193	0.000496078	-0.003136651	-0.001731654	-0.000205266	-0.000909461	0.002113901
0.194	0.000443488	-0.003331495	-0.001831407	-0.000177243	-0.000832987	0.002301974
0.195	0.000378758	-0.003539810	-0.001939955	-0.000145706	-0.000735568	0.002502417
0.196	0.000299786	-0.003762456	-0.002058801	-0.000110040	-0.000613418	0.002715329
0.197	0.000204076	-0.004000284	-0.002189795	-0.000069397	-0.000462018	0.002940517
0.198	0.000088641	-0.004254080	-0.002335200	-0.000022599	-0.000275960	0.003177358
0.199	-0.000050086	-0.004524501	-0.002497795	0.000031996	-0.000048763	0.003424581
0.200	-0.000216419	-0.004811933	-0.002680954	0.000096722	0.000227388	0.003679928
0.201	-0.000415479	-0.005116339	-0.002888775	0.000174856	0.000561818	0.003939713
0.202	-0.000653401	-0.005436975	-0.003126158	0.000271069	0.000965663	0.004198108
0.203	-0.000937418	-0.005771979	-0.003398856	0.000392008	0.001452008	0.004446143
0.204	-0.001275881	-0.006117788	-0.003713401	0.000547133	0.002035880	0.004670284
0.205	-0.001678097	-0.006468326	-0.004076792	0.000749874	0.002733805	0.004850444
0.206	-0.002153740	-0.006813932	-0.004495722	0.001019155	0.003562533	0.004957372
0.207	-0.002711578	-0.007140137	-0.004974975	0.001381272	0.004536292	0.004949488
0.208	-0.003356990	-0.007426580	-0.005514498	0.001871881	0.005661599	0.004769721
0.209	-0.004087869	-0.007646905	-0.006104554	0.002537425	0.006928675	0.004343749
0.210	-0.004888762	-0.007771211	-0.006718663	0.003434648	0.008299146	0.003582506
0.211	-0.005724424	-0.007773436	-0.007305151	0.004626181	0.009692154	0.002393079
0.212	-0.006536429	-0.007645894	-0.007780262	0.006170662	0.010975798	0.000701149
0.213	-0.007249223	-0.007420389	-0.008027752	0.008109130	0.011975474	-0.001518608
0.214	-0.007791502	-0.007189850	-0.007907822	0.010455866	0.012508014	-0.004221566
0.215	-0.008132390	-0.007121991	-0.007267474	0.013206122	0.012431337	-0.007310081
0.216	-0.008326998	-0.007466769	-0.005928170	0.016365906	0.011669094	-0.010708699
0.217	-0.008588586	-0.008581434	-0.003614968	0.019989495	0.010144052	-0.014490705
0.218	-0.009499049	-0.010992924	0.000228695	0.024193392	0.007505722	-0.019015031
0.219	-0.012718677	-0.015325106	0.006957408	0.029054545	0.002336887	-0.024866184
0.220	-0.022967720	-0.020587190	0.020431748	0.033257866	-0.009886979	-0.031107499
0.221	-0.046095692	-0.012487277	0.045523064	0.023082727	-0.034886809	-0.023546409
0.222	-0.044719361	0.022471788	0.044770251	-0.013870353	-0.035211004	0.011206779
0.223	-0.021371107	0.029676419	0.021349440	-0.022445508	-0.013366459	0.018443144
0.224	-0.010213177	0.024714830	0.009953003	-0.018297522	-0.003516044	0.013674665
0.225	-0.005496197	0.020116192	0.005044787	-0.014173020	0.000075359	0.009373379
0.226	-0.003211376	0.016813027	0.002657571	-0.011166265	0.001396559	0.006430723
0.227	-0.001948003	0.014438682	0.001366394	-0.009001216	0.001837073	0.004451343
0.228	-0.001172735	0.012672585	0.000614327	-0.007402886	0.001910129	0.003095082
0.229	-0.000657691	0.011311164	0.000153690	-0.006189433	0.001825682	0.002145313
0.230	-0.000294746	0.010228772	-0.000137437	-0.005245155	0.001675974	0.001467799
0.231	-0.000027210	0.009345572	-0.000324973	-0.004494484	0.001504451	0.000977362
0.232	0.000176724	0.008609362	-0.000446487	-0.003886862	0.001331651	0.000618579
0.233	0.000336159	0.007984771	-0.000524576	-0.003387396	0.001167211	0.000354326
0.234	0.000463212	0.007447067	-0.000573384	-0.002971352	0.001015325	0.000159094
0.235	0.000565941	0.006978457	-0.000602060	-0.002620786	0.000877416	0.000014968
0.236	0.000649921	0.006565809	-0.000616695	-0.002322409	0.000753501	-0.000090886
0.237	0.000719141	0.006199220	-0.000621398	-0.002066182	0.000642885	-0.000167799
0.238	0.000776539	0.005871062	-0.000619047	-0.001844421	0.000544576	-0.000222674
0.239	0.000824335	0.005575361	-0.000611663	-0.001651148	0.000457469	-0.000260675
0.240	0.000864233	0.005307358	-0.000600690	-0.001481644	0.000380452	-0.000285704

素子間隔 $d[\lambda]=0.2650$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002404286	0.012553625	0.000427815	-0.001676415	0.003490938	0.011138328
0.191	0.002540250	0.012907834	0.000430353	-0.001761288	0.003663371	0.011372648
0.192	0.002688675	0.013285312	0.000431927	-0.001852260	0.003848820	0.011620546
0.193	0.002851274	0.013688445	0.000432338	-0.001949980	0.004049245	0.011883427
0.194	0.003030050	0.014119937	0.000431347	-0.002055185	0.004267034	0.012162783
0.195	0.003227444	0.014582900	0.000428642	-0.002168730	0.004505120	0.012460261
0.196	0.003446319	0.015080867	0.000423861	-0.002291598	0.004767081	0.012777499
0.197	0.003690146	0.015617915	0.000416543	-0.002424932	0.005057302	0.013116145
0.198	0.003963137	0.016198729	0.000406112	-0.002570063	0.005381169	0.013477710
0.199	0.004270437	0.016828800	0.000391845	-0.002728563	0.005745240	0.013863461
0.200	0.004618428	0.017514363	0.000372812	-0.002902264	0.006157559	0.014273986
0.201	0.005015018	0.018262815	0.000347828	-0.003093354	0.006627848	0.014709007
0.202	0.005470162	0.019082759	0.000315354	-0.003304439	0.007167785	0.015166651
0.203	0.005996511	0.019984264	0.000273373	-0.003538641	0.007791154	0.015642615
0.204	0.006610321	0.020979125	0.000219207	-0.003799722	0.008513786	0.016128950
0.205	0.007332745	0.022081125	0.000149260	-0.004092236	0.009353039	0.016612420
0.206	0.008191669	0.023306275	0.000058632	-0.004421718	0.010326403	0.017072479
0.207	0.009224385	0.024672925	-0.000059451	-0.004794901	0.011448643	0.017479107
0.208	0.010481515	0.026201545	-0.000214513	-0.005219960	0.012726695	0.017791342
0.209	0.012032872	0.027913730	-0.000420171	-0.005706722	0.014151765	0.017958259
0.210	0.013976273	0.029829500	-0.000696255	-0.006266731	0.015689177	0.017925483
0.211	0.016450851	0.031960874	-0.001072181	-0.006912821	0.017269417	0.017651095
0.212	0.019656890	0.034297438	-0.001592321	-0.007657432	0.018788438	0.017132955
0.213	0.023884005	0.036774654	-0.002324480	-0.008507779	0.020128873	0.016442371
0.214	0.029545360	0.039205321	-0.003372365	-0.009453446	0.021209780	0.015748211
0.215	0.037197604	0.041135750	-0.004890497	-0.010436529	0.022058308	0.015311422
0.216	0.047462731	0.041567433	-0.007087633	-0.011285302	0.022885350	0.015443971
0.217	0.060596920	0.038538974	-0.010163598	-0.011591524	0.024166626	0.016448929
0.218	0.075221388	0.029012352	-0.014041301	-0.010592473	0.026810507	0.018552606
0.219	0.086450343	0.010727123	-0.017822973	-0.007437177	0.032756746	0.021650343
0.220	0.087263944	-0.013065062	-0.019741396	-0.002318084	0.046690599	0.022773898
0.221	0.076201314	-0.033272682	-0.018810828	0.002892607	0.067319693	0.003779697
0.222	0.059781693	-0.044099196	-0.016025008	0.006454056	0.054536788	-0.027505276
0.223	0.044523295	-0.046920851	-0.012904213	0.008187226	0.033528028	-0.030853725
0.224	0.032756464	-0.045409704	-0.010225499	0.008720493	0.023168254	-0.026784870
0.225	0.024294895	-0.042179149	-0.008140230	0.008636553	0.017905646	-0.023014605
0.226	0.018311643	-0.038539074	-0.006564556	0.008281339	0.014803584	-0.020137599
0.227	0.014054215	-0.035037558	-0.005374889	0.007829448	0.012748449	-0.017937313
0.228	0.010977683	-0.031864751	-0.004466549	0.007362302	0.011272053	-0.016206400
0.229	0.008713431	-0.029059009	-0.003762098	0.006915326	0.010150217	-0.014805525
0.230	0.007016057	-0.026599926	-0.003206608	0.006502101	0.009263025	-0.013644083
0.231	0.005721388	-0.024448073	-0.002761439	0.006126101	0.008540382	-0.012661955
0.232	0.004718098	-0.022561211	-0.002399252	0.005786310	0.007938331	-0.011817974
0.233	0.003929410	-0.020900378	-0.002100473	0.005479882	0.007427728	-0.011083032
0.234	0.003301428	-0.019431716	-0.001850883	0.005203408	0.006988368	-0.010435938
0.235	0.002795706	-0.018126596	-0.001640008	0.004953474	0.006605732	-0.009860824
0.236	0.002384170	-0.016961050	-0.001459978	0.004726939	0.006269082	-0.009345654
0.237	0.002046254	-0.015915153	-0.001304853	0.004520972	0.005970271	-0.008880947
0.238	0.001766521	-0.014972309	-0.001170054	0.004333096	0.005703003	-0.008459215
0.239	0.001533262	-0.014118677	-0.001052018	0.004161159	0.005462321	-0.008074431
0.240	0.001337496	-0.013342637	-0.000947935	0.004003294	0.005244273	-0.007721666

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000557175	-0.002634827	-0.001482720	-0.000250747	-0.000984457	0.001638427
0.191	0.000528389	-0.002794111	-0.001563720	-0.000229851	-0.000948589	0.001789968
0.192	0.000491729	-0.002964322	-0.001650694	-0.000206317	-0.000899486	0.001952333
0.193	0.000445877	-0.003146211	-0.001744496	-0.000179826	-0.000834799	0.002125920
0.194	0.000389289	-0.003340561	-0.001846199	-0.000149948	-0.000751714	0.002311015
0.195	0.000320133	-0.003548182	-0.001957018	-0.000116165	-0.000647050	0.002507796
0.196	0.000236252	-0.003769872	-0.002078538	-0.000077730	-0.000516879	0.002716177
0.197	0.000135078	-0.004006397	-0.002212647	-0.000033643	-0.000356589	0.002935736
0.198	0.000013551	-0.004258426	-0.002361675	0.000017458	-0.000160643	0.003165564
0.199	-0.000131976	-0.004526470	-0.002528408	0.000077496	0.000077515	0.003403965
0.200	-0.000305871	-0.004810696	-0.002716250	0.000149122	0.000365779	0.003648167
0.201	-0.000513322	-0.005110792	-0.002929274	0.000236056	0.000713506	0.003893777
0.202	-0.000760457	-0.005425638	-0.003172279	0.000343532	0.001131727	0.004134040
0.203	-0.001054413	-0.005752885	-0.003450785	0.000478926	0.001633214	0.004358784
0.204	-0.001403278	-0.006088359	-0.003770874	0.000652616	0.002232300	0.004552950
0.205	-0.001815804	-0.006425254	-0.004138738	0.000879154	0.002944194	0.004694601
0.206	-0.002300664	-0.006753145	-0.004559704	0.001178744	0.003783350	0.004752415
0.207	-0.002864940	-0.007056949	-0.005036375	0.001578979	0.004760247	0.004682850
0.208	-0.003511459	-0.007316262	-0.005565412	0.002116479	0.005875741	0.004427702
0.209	-0.004234632	-0.007505994	-0.006132523	0.002837691	0.007112315	0.003913668
0.210	-0.005015053	-0.007599911	-0.006705638	0.003797479	0.008422501	0.003056749
0.211	-0.005814470	-0.007579162	-0.007227504	0.005053829	0.009717555	0.001774927
0.212	-0.006575046	-0.007447177	-0.007610737	0.006658041	0.010863559	0.000010416
0.213	-0.007228631	-0.007249200	-0.007739270	0.008643406	0.011694830	-0.002244874
0.214	-0.007720010	-0.007090427	-0.007476319	0.011020670	0.012048369	-0.004938813
0.215	-0.008042639	-0.007147148	-0.006667909	0.013789982	0.011803354	-0.007987618
0.216	-0.008286386	-0.007677236	-0.005117254	0.016969338	0.010883426	-0.011355839
0.217	-0.008731276	-0.009051889	-0.002494161	0.020621506	0.009153450	-0.015174943
0.218	-0.010134950	-0.011796765	0.001893576	0.024840973	0.006071284	-0.019839256
0.219	-0.014630840	-0.016302395	0.009769569	0.029501794	-0.000281053	-0.025718432
0.220	-0.027645046	-0.019794671	0.025648843	0.031691186	-0.015160124	-0.030094152
0.221	-0.048552204	-0.003489804	0.048128046	0.013356650	-0.037830284	-0.014273961
0.222	-0.037048095	0.025657224	0.037040805	-0.017578584	-0.027928872	0.014690726
0.223	-0.017675477	0.027692054	0.017550923	-0.020802125	-0.009976976	0.016760338
0.224	-0.008878362	0.022951683	0.008533418	-0.016764947	-0.002419443	0.012203566
0.225	-0.004957269	0.018903313	0.004448593	-0.013131380	0.000430461	0.008436044
0.226	-0.002966843	0.015966157	0.002377107	-0.010458618	0.001500211	0.005839559
0.227	-0.001827621	0.013820634	0.001223851	-0.008503618	0.001850195	0.004068115
0.228	-0.001110763	0.012202406	0.000538331	-0.007040669	0.001891026	0.002839136
0.229	-0.000625767	0.010941122	0.000112332	-0.005917937	0.001796750	0.001969937
0.230	-0.000279133	0.009929357	-0.000160134	-0.005036474	0.001646478	0.001344936
0.231	-0.000020915	0.009097923	-0.000337235	-0.004330714	0.001477808	0.000889708
0.232	0.000177545	0.008400862	-0.000452824	-0.003756047	0.001308910	0.000555071
0.233	0.000333741	0.007806665	-0.000527563	-0.003281305	0.001148441	0.000307717
0.234	0.000458907	0.007293083	-0.000574519	-0.002884165	0.001000185	0.000124504
0.235	0.000560619	0.006843938	-0.000602288	-0.002548240	0.000865513	-0.000010986
0.236	0.000644102	0.006447313	-0.000616468	-0.002261443	0.000744249	-0.000110497
0.237	0.000713184	0.006094059	-0.000621044	-0.002014464	0.000635841	-0.000182729
0.238	0.000770683	0.005777129	-0.000618751	-0.001800167	0.000539345	-0.000234114
0.239	0.000818737	0.005490978	-0.000611527	-0.001612976	0.000453712	-0.000269486
0.240	0.000858999	0.005231168	-0.000600766	-0.001448474	0.000377887	-0.000292518

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002451887	0.012588599	0.000419368	-0.001687731	0.003511182	0.011156429
0.191	0.002592205	0.012945591	0.000421318	-0.001773735	0.003687067	0.011392563
0.192	0.002745518	0.013326137	0.000422220	-0.001865966	0.003876581	0.011642288
0.193	0.002913626	0.013732659	0.000421858	-0.001965091	0.004081783	0.011906952
0.194	0.003098657	0.014167910	0.000419968	-0.002071870	0.004305175	0.012187993
0.195	0.003303147	0.014635031	0.000416225	-0.002187180	0.004549806	0.012486914
0.196	0.003530132	0.015137619	0.000410229	-0.002312032	0.004819396	0.012805233
0.197	0.003783280	0.015679807	0.000401483	-0.002447603	0.005118479	0.013144403
0.198	0.004067047	0.016266356	0.000389363	-0.002595266	0.005452587	0.013505686
0.199	0.004386851	0.016902807	0.000373093	-0.002756637	0.005828427	0.013889954
0.200	0.004749521	0.017595495	0.000351646	-0.002933604	0.006254184	0.014297409
0.201	0.005163437	0.018351894	0.000323742	-0.003128424	0.006739627	0.014727145
0.202	0.005639194	0.019180681	0.000287706	-0.003343780	0.007296374	0.015176498
0.203	0.006190282	0.020091983	0.000241336	-0.003582888	0.007937927	0.015640175
0.204	0.006834071	0.021097610	0.000181711	-0.003849616	0.008679459	0.016109018
0.205	0.007593198	0.022211278	0.000104895	-0.004148642	0.009537063	0.016568433
0.206	0.008497560	0.023448763	0.000005523	-0.004485632	0.010526053	0.016996559
0.207	0.009587205	0.024827871	-0.000123842	-0.004867447	0.011657752	0.017362561
0.208	0.010916571	0.026367947	-0.000293665	-0.005302354	0.012934151	0.017626056
0.209	0.012560799	0.028088385	-0.000518934	-0.005800164	0.014340250	0.017739512
0.210	0.014625165	0.030004972	-0.000821489	-0.006372137	0.015835278	0.017656594
0.211	0.017259166	0.032121638	-0.001233714	-0.007030219	0.017346972	0.017349447
0.212	0.020677002	0.034412479	-0.001804350	-0.007784637	0.018777010	0.016835151
0.213	0.025185135	0.036783153	-0.002607369	-0.008637504	0.020027225	0.016204272
0.214	0.031211415	0.038989734	-0.003754383	-0.009567244	0.021050961	0.015636686
0.215	0.039303718	0.040474110	-0.005406531	-0.010492519	0.021920287	0.015387970
0.216	0.049988676	0.040067937	-0.007765571	-0.011197048	0.022898163	0.015747247
0.217	0.063196950	0.035630104	-0.010975171	-0.011207743	0.024531212	0.016978068
0.218	0.076861121	0.024272011	-0.014797756	-0.009739949	0.027877219	0.019223865
0.219	0.085554536	0.004853709	-0.018131886	-0.006142001	0.035279596	0.021988564
0.220	0.083372245	-0.017861288	-0.019333697	-0.001016973	0.051441297	0.019922497
0.221	0.071020722	-0.035368983	-0.017926808	0.003724176	0.065718014	-0.005549999
0.222	0.055202859	-0.043916261	-0.015097763	0.006764013	0.047486335	-0.028481391
0.223	0.041178080	-0.045618957	-0.012152958	0.008174841	0.030305671	-0.028860939
0.224	0.030491728	-0.043785519	-0.009675537	0.008565103	0.021774885	-0.025073969
0.225	0.022791851	-0.040593783	-0.007750124	0.008436874	0.017205767	-0.021739819
0.226	0.017308956	-0.037115144	-0.006288019	0.008081389	0.014405649	-0.019165924
0.227	0.013375215	-0.033796864	-0.005176444	0.007645935	0.012502797	-0.017167895
0.228	0.010509609	-0.030793112	-0.004321710	0.007199889	0.011112632	-0.015576580
0.229	0.008385054	-0.028132575	-0.003654464	0.006773782	0.010044036	-0.014276189
0.230	0.006781986	-0.025794843	-0.003125208	0.006379444	0.009191893	-0.013189868
0.231	0.005552223	-0.023743506	-0.002698857	0.006019911	0.008493458	-0.012265714
0.232	0.004594429	-0.021939880	-0.002350398	0.005694247	0.007908751	-0.011467662
0.233	0.003838173	-0.020348244	-0.002061790	0.005399873	0.007410929	-0.010769908
0.234	0.003233666	-0.018937451	-0.001819843	0.005133676	0.006981201	-0.010153475
0.235	0.002745117	-0.017681047	-0.001614774	0.004892533	0.006605954	-0.009604061
0.236	0.002346385	-0.016556823	-0.001439225	0.004673531	0.006275052	-0.009110653
0.237	0.002018086	-0.015546220	-0.001287585	0.004474055	0.005980768	-0.008664613
0.238	0.001745649	-0.014633726	-0.001155519	0.004291799	0.005717099	-0.008259048
0.239	0.001517974	-0.013806363	-0.001039640	0.004124753	0.005479300	-0.007888386
0.240	0.001326515	-0.013053201	-0.000937271	0.003971163	0.005263580	-0.007548053

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000516516	-0.002644160	-0.001491693	-0.000228586	-0.000925794	0.001654338
0.191	0.000484695	-0.002803251	-0.001573842	-0.000206477	-0.000884956	0.001804144
0.192	0.000444711	-0.002973157	-0.001662186	-0.000181518	-0.000830426	0.001964361
0.193	0.000395210	-0.003154605	-0.001757616	-0.000153329	-0.000759795	0.002135300
0.194	0.000334598	-0.003348343	-0.001861212	-0.000121420	-0.000670228	0.002317151
0.195	0.000261000	-0.003555123	-0.001974286	-0.000085149	-0.000558378	0.002509924
0.196	0.000172198	-0.003775680	-0.002098433	-0.000043656	-0.000420279	0.002713358
0.197	0.000065561	-0.004010687	-0.002235588	0.000004217	-0.000251221	0.002926792
0.198	-0.000062035	-0.004260698	-0.002388096	0.000060052	-0.000045604	0.003148983
0.199	-0.000214294	-0.004526039	-0.002558830	0.000126048	0.000203295	0.003377797
0.200	-0.000395650	-0.004806683	-0.002751099	0.000205160	0.000503276	0.003609971
0.201	-0.000611302	-0.005102022	-0.002968935	0.000301585	0.000863692	0.003840348
0.202	-0.000867338	-0.005410555	-0.003216991	0.000421135	0.001295388	0.004061232
0.203	-0.001170737	-0.005729455	-0.003500478	0.000571914	0.001810687	0.004261249
0.204	-0.001529242	-0.006053965	-0.003824921	0.000765206	0.002423046	0.004423858
0.205	-0.001950949	-0.006376627	-0.004195570	0.001016625	0.003146122	0.004525397
0.206	-0.002443402	-0.006686399	-0.004616223	0.001347536	0.003991791	0.004532735
0.207	-0.003011906	-0.006967850	-0.005087137	0.001786595	0.004966537	0.004400841
0.208	-0.003656724	-0.007200963	-0.005601583	0.002371011	0.006065461	0.004071155
0.209	-0.004369020	-0.007362519	-0.006140788	0.003146706	0.007263625	0.003472469
0.210	-0.005126118	-0.007430618	-0.006667528	0.004166099	0.008505608	0.002526966
0.211	-0.005888050	-0.007394042	-0.007119844	0.005482266	0.009696957	0.001164003
0.212	-0.006599370	-0.007267013	-0.007407798	0.007139713	0.010704571	-0.000658957
0.213	-0.007200983	-0.007106793	-0.007415931	0.009165623	0.011373549	-0.002936628
0.214	-0.007654817	-0.007029054	-0.007008734	0.011569443	0.011559354	-0.005615038
0.215	-0.007979441	-0.007217602	-0.006026660	0.014357206	0.011155433	-0.008629161
0.216	-0.008303998	-0.007938713	-0.004246822	0.017556332	0.010072158	-0.011984211
0.217	-0.008992553	-0.009574078	-0.001270754	0.021228943	0.008093023	-0.015861016
0.218	-0.011023732	-0.012611141	0.003760155	0.025416354	0.004437942	-0.020645397
0.219	-0.017061745	-0.016999362	0.012998050	0.029614793	-0.003366681	-0.026279535
0.220	-0.032568051	-0.017387652	0.030998041	0.028529892	-0.020635122	-0.027467976
0.221	-0.047357940	0.005536560	0.047020124	0.003669392	-0.037087645	-0.004981828
0.222	-0.030467604	0.026548871	0.030389946	-0.018932724	-0.021710164	0.015867858
0.223	-0.014868063	0.025775394	0.014647663	-0.019189525	-0.007455096	0.015130867
0.224	-0.007812909	0.021401598	0.007392405	-0.015425008	-0.001576930	0.010931261
0.225	-0.004505846	0.017824374	0.003946731	-0.012211844	0.000709248	0.007619242
0.226	-0.002754721	0.015199290	0.002133391	-0.009823253	0.001579587	0.005316188
0.227	-0.001720609	0.013252677	0.001097286	-0.008050399	0.001855829	0.003724055
0.228	-0.001054755	0.011765422	0.000469852	-0.006707007	0.001870187	0.002606715
0.229	-0.000596515	0.010594127	0.000074516	-0.005665495	0.001768273	0.001809117
0.230	-0.000264766	0.009646713	-0.000181056	-0.004841029	0.001617975	0.001231374
0.231	-0.000015179	0.008862923	-0.000348601	-0.004176417	0.001452195	0.000808129
0.232	0.000178157	0.008202190	-0.000458727	-0.003632186	0.001287086	0.000495616
0.233	0.000331289	0.007636387	-0.000530348	-0.003180427	0.001130416	0.000263831
0.234	0.000454657	0.007145465	-0.000575571	-0.002800956	0.000985623	0.000091753
0.235	0.000555352	0.006714762	-0.000602377	-0.002478877	0.000853878	-0.000035630
0.236	0.000638365	0.006333309	-0.000616155	-0.002202995	0.000735169	-0.000129224
0.237	0.000707321	0.005992726	-0.000620625	-0.001964757	0.000628885	-0.000197068
0.238	0.000764923	0.005686497	-0.000618399	-0.001757536	0.000534138	-0.000245168
0.239	0.000813234	0.005409470	-0.000611341	-0.001576128	0.000449931	-0.000278058
0.240	0.000853853	0.005157505	-0.000600792	-0.001416388	0.000375259	-0.000299200

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002500660	0.012623463	0.000410480	-0.001699301	0.003532587	0.011174281
0.191	0.002645478	0.012983227	0.000411801	-0.001786456	0.003712040	0.011412077
0.192	0.002803849	0.013366825	0.000411982	-0.001879970	0.003905737	0.011663443
0.193	0.002977663	0.013776716	0.000410792	-0.001980526	0.004115833	0.011929665
0.194	0.003169159	0.014215691	0.000407945	-0.002088906	0.004344936	0.012212098
0.195	0.003381010	0.014686937	0.000403090	-0.002206012	0.004596213	0.012512131
0.196	0.003616419	0.015194101	0.000395794	-0.002332883	0.004873511	0.012831129
0.197	0.003879266	0.015741366	0.000385517	-0.002470730	0.005181503	0.013170340
0.198	0.004174252	0.016333566	0.000371587	-0.002620968	0.005525847	0.013530760
0.199	0.004507157	0.016976311	0.000353151	-0.002785259	0.005913386	0.013912936
0.200	0.004885163	0.017675990	0.000329112	-0.002965548	0.006352359	0.014316532
0.201	0.005317201	0.018440146	0.000298071	-0.003164158	0.006852549	0.014740055
0.202	0.005814550	0.019277511	0.000258204	-0.003383849	0.007425425	0.015180068
0.203	0.006391592	0.020198237	0.000207112	-0.003627927	0.008084089	0.015630314
0.204	0.007066818	0.021214099	0.000141622	-0.003900368	0.008842852	0.016080449
0.205	0.007864545	0.022338662	0.000057406	-0.004205958	0.009716447	0.016514811
0.206	0.008816766	0.023587349	-0.000051403	-0.004550482	0.010717786	0.016910515
0.207	0.009966444	0.024977213	-0.000192954	-0.004940900	0.011854649	0.017236465
0.208	0.011372053	0.026526145	-0.000378739	-0.005385518	0.013124241	0.017453678
0.209	0.013114330	0.028250777	-0.000625229	-0.005894032	0.014506056	0.017519052
0.210	0.015306314	0.030161703	-0.000956433	-0.006477233	0.015954805	0.017395220
0.211	0.018108070	0.032253100	-0.001407906	-0.007145834	0.017398077	0.017068510
0.212	0.021747450	0.034480657	-0.002032958	-0.007907181	0.018746406	0.016573620
0.213	0.026546066	0.036715305	-0.002911817	-0.008757048	0.019923341	0.016016849
0.214	0.032939836	0.038648361	-0.004163245	-0.009660367	0.020916582	0.015583857
0.215	0.041449832	0.039607987	-0.005951884	-0.010508778	0.021841947	0.015520979
0.216	0.052464628	0.038258376	-0.008463047	-0.011038330	0.023015286	0.016091565
0.217	0.065521870	0.032340837	-0.011764494	-0.010718864	0.025064355	0.017512111
0.218	0.077876912	0.019308273	-0.015444886	-0.008785992	0.029230629	0.019799473
0.219	0.083896844	-0.000714400	-0.018259093	-0.004845175	0.038268091	0.021803128
0.220	0.079148463	-0.021891377	-0.018797397	0.000155375	0.055603627	0.015233448
0.221	0.066061003	-0.036805729	-0.017037162	0.004406526	0.061281211	-0.013068482
0.222	0.051030040	-0.043432725	-0.014229821	0.006985013	0.041739435	-0.028146131
0.223	0.038173275	-0.044261082	-0.011465164	0.008128383	0.027749784	-0.026994037
0.224	0.028455650	-0.042206663	-0.009173305	0.008404055	0.020605897	-0.023540937
0.225	0.021431594	-0.039080306	-0.007392140	0.008242677	0.016591976	-0.020581315
0.226	0.016394150	-0.035761237	-0.006032432	0.007890099	0.014046379	-0.018268682
0.227	0.012750835	-0.032616163	-0.004991672	0.007471153	0.012276850	-0.016448446
0.228	0.010076175	-0.029770657	-0.004185931	0.007045258	0.010964226	-0.014982113
0.229	0.008079140	-0.027245872	-0.003552939	0.006638862	0.009944456	-0.013772947
0.230	0.006562827	-0.025021828	-0.003048010	0.006262331	0.009124919	-0.012755610
0.231	0.005393183	-0.023064957	-0.002639221	0.005918344	0.008449253	-0.011885182
0.232	0.004477784	-0.021339824	-0.002303644	0.005606054	0.007880996	-0.011130011
0.233	0.003751911	-0.019813661	-0.002024628	0.005323120	0.007395382	-0.010467188
0.234	0.003169499	-0.018457796	-0.001789922	0.005066708	0.006974906	-0.009879699
0.235	0.002697229	-0.017247777	-0.001590387	0.004833949	0.006606791	-0.009354620
0.236	0.002310634	-0.016162995	-0.001419111	0.004622159	0.006281464	-0.008881927
0.237	0.001991480	-0.015186157	-0.001270802	0.004428913	0.005991586	-0.008453710
0.238	0.001725997	-0.014302773	-0.001141355	0.004252066	0.005731432	-0.008063629
0.239	0.001503660	-0.013500637	-0.001027548	0.004089731	0.005496461	-0.007706518
0.240	0.001316325	-0.012769498	-0.000926828	0.003940271	0.005283026	-0.007378144

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000475468	-0.002652597	-0.001500813	-0.000205763	-0.000866841	0.001668231
0.191	0.000440597	-0.002811412	-0.001584122	-0.000182315	-0.000821062	0.001816113
0.192	0.000397276	-0.002980920	-0.001673844	-0.000155781	-0.000761139	0.001973962
0.193	0.000344112	-0.003161816	-0.001770900	-0.000125717	-0.000684607	0.002141997
0.194	0.000279469	-0.003354807	-0.001876404	-0.000091553	-0.000588568	0.002320289
0.195	0.000201423	-0.003560590	-0.001991704	-0.000052544	-0.000469605	0.002508695
0.196	0.000107703	-0.003779828	-0.002118428	-0.000007698	-0.000323680	0.002706754
0.197	-0.000004381	-0.004013095	-0.002258539	0.000044314	-0.000146010	0.002913546
0.198	-0.000138004	-0.004260819	-0.002414402	0.000105291	0.000069072	0.003127494
0.199	-0.000296930	-0.004523166	-0.002588848	0.000177683	0.000328262	0.003346062
0.200	-0.000485608	-0.004799862	-0.002785215	0.000264859	0.000639455	0.003565337
0.201	-0.000709231	-0.005090011	-0.003007407	0.000371449	0.001011847	0.003779458
0.202	-0.000973802	-0.005391738	-0.003259859	0.000503850	0.001455983	0.003979777
0.203	-0.001286086	-0.005701755	-0.003547396	0.000670890	0.001983601	0.004153742
0.204	-0.001653366	-0.006014738	-0.003874937	0.000884779	0.002607166	0.004283307
0.205	-0.002083043	-0.006322715	-0.004246568	0.001162024	0.003338457	0.004343405
0.206	-0.002581417	-0.006614181	-0.004664446	0.001525050	0.004186578	0.004299324
0.207	-0.003151958	-0.006873645	-0.005126356	0.002003328	0.005153843	0.004105066
0.208	-0.003792434	-0.007081908	-0.005622138	0.002634274	0.006229645	0.003702486
0.209	-0.004491106	-0.007218172	-0.006128709	0.003462806	0.007382152	0.003023427
0.210	-0.005222806	-0.007265401	-0.006604182	0.004538475	0.008549281	0.001997079
0.211	-0.005947158	-0.007220192	-0.006982716	0.005909409	0.009632985	0.000564147
0.212	-0.006612722	-0.007107001	-0.007172589	0.007614072	0.010503259	-0.001304452
0.213	-0.007170966	-0.006993826	-0.007058663	0.009675186	0.011016711	-0.003593959
0.214	-0.007601641	-0.007005039	-0.006504607	0.012102526	0.011044551	-0.006253619
0.215	-0.007950080	-0.007331454	-0.005340183	0.014907940	0.010486558	-0.009240464
0.216	-0.008391547	-0.008247388	-0.003308220	0.018124165	0.009225623	-0.012598831
0.217	-0.009395674	-0.010135677	0.000072673	0.021799891	0.006937918	-0.016544314
0.218	-0.012209010	-0.013383939	0.005861883	0.025873718	0.002558383	-0.021386769
0.219	-0.020016181	-0.017201860	0.016644265	0.029197235	-0.006929100	-0.026338417
0.220	-0.036961546	-0.013112815	0.035717957	0.023534745	-0.025540773	-0.022976912
0.221	-0.043342196	0.012807211	0.043044017	-0.004196470	-0.033491453	0.002545283
0.222	-0.025171017	0.026168432	0.025016872	-0.018962132	-0.016750494	0.015760418
0.223	-0.012699944	0.024001678	0.012391244	-0.017688385	-0.005553701	0.013630778
0.224	-0.006948773	0.020032768	0.006461029	-0.014248693	-0.000921738	0.009826813
0.225	-0.004123546	0.016858805	0.003519974	-0.011395187	0.000929215	0.006903236
0.226	-0.002569348	0.014501623	0.001920198	-0.009250052	0.001639743	0.004850555
0.227	-0.001625004	0.012728952	0.000984402	-0.007636096	0.001855521	0.003413956
0.228	-0.001003950	0.011358302	0.000407941	-0.006398847	0.001848087	0.002395056
0.229	-0.000569748	0.010268241	0.000040015	-0.005430390	0.001740138	0.001661369
0.230	-0.000251604	0.009379604	-0.000200248	-0.004657769	0.001590277	0.001126261
0.231	-0.000010012	0.008639746	-0.000359043	-0.004030926	0.001427423	0.000732124
0.232	0.000178524	0.008012772	-0.000464123	-0.003514841	0.001265983	0.000439884
0.233	0.000328763	0.007473524	-0.000532852	-0.003084469	0.001112962	0.000222461
0.234	0.000450424	0.007003909	-0.000576463	-0.002721527	0.000971486	0.000060710
0.235	0.000550171	0.006590591	-0.000602427	-0.002412411	0.000842625	-0.000059152
0.236	0.000632732	0.006223527	-0.000615831	-0.002146830	0.000726361	-0.000147206
0.237	0.000701568	0.005895001	-0.000620207	-0.001916871	0.000622114	-0.000210926
0.238	0.000759274	0.005598985	-0.000618053	-0.001716373	0.000529047	-0.000255926
0.239	0.000807838	0.005330683	-0.000611156	-0.001540466	0.000446210	-0.000286466
0.240	0.000848811	0.005086241	-0.000600819	-0.001385273	0.000372652	-0.000305808

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002550646	0.012658175	0.000401131	-0.001711118	0.003555126	0.011191801
0.191	0.002700117	0.013020692	0.000401778	-0.001799444	0.003738253	0.011431101
0.192	0.002863720	0.013407321	0.000401189	-0.001894263	0.003936239	0.011683915
0.193	0.003043443	0.013820552	0.000399112	-0.001996275	0.004151330	0.011951462
0.194	0.003241643	0.014263217	0.000395240	-0.002106284	0.004386237	0.012235007
0.195	0.003461133	0.014738544	0.000389195	-0.002225217	0.004644235	0.012535817
0.196	0.003705295	0.015250228	0.000380507	-0.002354142	0.004929290	0.012855095
0.197	0.003978218	0.015802507	0.000368595	-0.002494306	0.005246191	0.013193876
0.198	0.004284900	0.016400274	0.000352724	-0.002647164	0.005600720	0.013552873
0.199	0.004631421	0.017049167	0.000331978	-0.002814420	0.005999780	0.013932246
0.200	0.005025433	0.017755665	0.000305162	-0.002998081	0.006451669	0.014331199
0.201	0.005476412	0.018527348	0.000270755	-0.003200534	0.006966098	0.014747618
0.202	0.005996359	0.019372974	0.000226776	-0.003424617	0.007554299	0.015177305
0.203	0.006600603	0.020302681	0.000170612	-0.003673722	0.008228860	0.015613092
0.204	0.007308941	0.021328150	0.000098781	-0.003951920	0.009003188	0.016043694
0.205	0.008147263	0.022462706	0.000006589	-0.004264105	0.009890322	0.016452367
0.206	0.009149865	0.023721259	-0.000112396	-0.004616154	0.010900729	0.016815646
0.207	0.010362814	0.025119869	-0.000267106	-0.005015088	0.012038652	0.017102751
0.208	0.011848802	0.026674616	-0.000470135	-0.005469193	0.013296816	0.017276908
0.209	0.013694310	0.028398757	-0.000739530	-0.005987938	0.014649895	0.017300259
0.210	0.016020564	0.030296531	-0.001101672	-0.006581407	0.016050112	0.017145124
0.211	0.018998168	0.032350521	-0.001595456	-0.007258675	0.017427274	0.016811631
0.212	0.022867930	0.034494784	-0.002278905	-0.008023435	0.018703430	0.016350079
0.213	0.027963714	0.036560174	-0.003238342	-0.008863685	0.019825443	0.015878704
0.214	0.034721008	0.038165580	-0.004598506	-0.009728430	0.020815392	0.015584844
0.215	0.043611717	0.038518780	-0.006523246	-0.010478889	0.021832135	0.015701939
0.216	0.054839621	0.036129880	-0.009170132	-0.010802352	0.023246999	0.016463685
0.217	0.067494721	0.028709639	-0.012511901	-0.010125828	0.025782211	0.018026101
0.218	0.078230626	0.014246741	-0.015963699	-0.007753259	0.030895403	0.020207035
0.219	0.081581112	-0.005846728	-0.018214892	-0.003582197	0.041625934	0.020845279
0.220	0.074754554	-0.025175920	-0.018167010	0.001190152	0.058233059	0.008985220
0.221	0.061381031	-0.037692054	-0.016162021	0.004957098	0.055524074	-0.018098055
0.222	0.047240301	-0.042724790	-0.013422113	0.007133867	0.037149230	-0.027154200
0.223	0.035471581	-0.042876596	-0.010835481	0.008056173	0.025685553	-0.025278638
0.224	0.026620759	-0.040678801	-0.008713803	0.008240211	0.019611341	-0.022160657
0.225	0.020197373	-0.037636244	-0.007062885	0.008054489	0.016048929	-0.019523172
0.226	0.015557557	-0.034473093	-0.005795701	0.007707194	0.013720213	-0.017437085
0.227	0.012175529	-0.031491464	-0.004819312	0.007304630	0.012068259	-0.015773915
0.228	0.009674091	-0.028794023	-0.004058413	0.006897938	0.010825764	-0.014419759
0.229	0.007793727	-0.026396280	-0.003457027	0.006510164	0.009850929	-0.013293681
0.230	0.006357378	-0.024278868	-0.002974697	0.006150436	0.009061804	-0.012339854
0.231	0.005243518	-0.022410873	-0.002582325	0.005821142	0.008407595	-0.011519316
0.232	0.004367686	-0.020759837	-0.002258856	0.005521522	0.007854967	-0.010804246
0.233	0.003670312	-0.019295683	-0.001988899	0.005249460	0.007381026	-0.010174278
0.234	0.003108718	-0.017991997	-0.001761059	0.005002371	0.006969447	-0.009614147
0.235	0.002651848	-0.016826166	-0.001566788	0.004777625	0.006608223	-0.009112163
0.236	0.002276773	-0.015779053	-0.001399591	0.004572745	0.006288303	-0.008659200
0.237	0.001966326	-0.014834541	-0.001254471	0.004385481	0.006002718	-0.008248010
0.238	0.001707483	-0.013979074	-0.001127536	0.004213837	0.005745999	-0.007872758
0.239	0.001490251	-0.013201198	-0.001015720	0.004056049	0.005513800	-0.007528665
0.240	0.001306872	-0.012491261	-0.000916585	0.003910580	0.005302614	-0.007211799

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000434052	-0.002660119	-0.001510036	-0.000182236	-0.000807667	0.001680083
0.191	0.000396121	-0.002818573	-0.001594510	-0.000157319	-0.000756983	0.001825846
0.192	0.000349453	-0.002987585	-0.001685605	-0.000129055	-0.000691711	0.001981103
0.193	0.000292618	-0.003167816	-0.001784273	-0.000096935	-0.000609336	0.002145972
0.194	0.000223939	-0.003359926	-0.001891657	-0.000060302	-0.000506901	0.002320397
0.195	0.000141449	-0.003564556	-0.002009133	-0.000018302	-0.000380929	0.002504071
0.196	0.000042826	-0.003782289	-0.002138353	0.000030196	-0.000227320	0.002696323
0.197	-0.000074664	-0.004013599	-0.002281300	0.000086699	-0.000041236	0.002895962
0.198	-0.000214254	-0.004258775	-0.002440341	0.000153235	0.000183030	0.003101051
0.199	-0.000379723	-0.004517803	-0.002618281	0.000232537	0.000452168	0.003308608
0.200	-0.000575540	-0.004790184	-0.002818389	0.000328350	0.000774011	0.003514122
0.201	-0.000806852	-0.005074725	-0.003044421	0.000445769	0.001157564	0.003710983
0.202	-0.001079530	-0.005369186	-0.003300540	0.000591773	0.001612976	0.003889605
0.203	-0.001400066	-0.005669840	-0.003591109	0.000775898	0.002151273	0.004036291
0.204	-0.001775279	-0.005970910	-0.003920237	0.001011130	0.002783634	0.004131769
0.205	-0.002211679	-0.006263930	-0.004290905	0.001314977	0.003519978	0.004149431
0.206	-0.002714303	-0.006537150	-0.004703445	0.001710672	0.004366383	0.004053467
0.207	-0.003284785	-0.006775317	-0.005153061	0.002228236	0.005320886	0.003797439
0.208	-0.003918548	-0.006960477	-0.005626195	0.002904928	0.006367365	0.003324368
0.209	-0.004601259	-0.007074717	-0.006095725	0.003784348	0.007467765	0.002569804
0.210	-0.005306314	-0.007106271	-0.006515537	0.004912719	0.008554700	0.001470727
0.211	-0.005994122	-0.007059519	-0.006816640	0.006333461	0.009528456	-0.000021411
0.212	-0.006618667	-0.006968412	-0.006905965	0.008079881	0.010263801	-0.001924407
0.213	-0.007143086	-0.006910299	-0.006668027	0.010171670	0.010628675	-0.004217854
0.214	-0.007565992	-0.007017124	-0.005962816	0.012619958	0.010506157	-0.006858238
0.215	-0.007962055	-0.007486116	-0.004604131	0.015441225	0.009793804	-0.009826515
0.216	-0.008561978	-0.008597476	-0.002291919	0.018667612	0.008331697	-0.013201960
0.217	-0.009965970	-0.010717178	0.001554505	0.022316051	0.005660642	-0.017212018
0.218	-0.013728613	-0.014038215	0.008227234	0.026145156	0.000391031	-0.021990946
0.219	-0.023401012	-0.016645632	0.020616070	0.028002775	-0.010879274	-0.025633271
0.220	-0.039869676	-0.007239795	0.038867813	0.016985076	-0.028924924	-0.016891493
0.221	-0.038010053	0.017640563	0.037717573	-0.009563354	-0.028549799	0.007625858
0.222	-0.021009477	0.025164282	0.020777058	-0.018322145	-0.012903298	0.015017373
0.223	-0.010997865	0.022392819	0.010608567	-0.016325177	-0.004101217	0.012282795
0.224	-0.006238014	0.018818632	0.005690576	-0.013211786	-0.000407127	0.008864522
0.225	-0.003796581	0.015990376	0.003153857	-0.010666344	0.001103305	0.006272605
0.226	-0.002406213	0.013864514	0.001732583	-0.008731002	0.001684598	0.004434747
0.227	-0.001539145	0.012244700	0.000883283	-0.007256342	0.001850526	0.003133695
0.228	-0.000957727	0.010978102	0.000351808	-0.006113490	0.001825081	0.002201716
0.229	-0.000545213	0.009961622	0.000008476	-0.005210966	0.001712417	0.001525272
0.230	-0.000239544	0.009126816	-0.000217875	-0.004485630	0.001563364	0.001028738
0.231	-0.000005376	0.008427556	-0.000368639	-0.003893533	0.001403449	0.000661156
0.232	0.000178659	0.007832010	-0.000469053	-0.003403525	0.001245565	0.000387540
0.233	0.000326166	0.007317637	-0.000535094	-0.002993087	0.001096048	0.000183390
0.234	0.000446205	0.006868082	-0.000577205	-0.002645629	0.000957753	0.000031231
0.235	0.000545048	0.006471202	-0.000602389	-0.002348712	0.000831658	-0.000081614
0.236	0.000627181	0.006117793	-0.000615449	-0.002092857	0.000717740	-0.000164477
0.237	0.000695907	0.005800747	-0.000619746	-0.001870739	0.000615452	-0.000224319
0.238	0.000753718	0.005514479	-0.000617668	-0.001676625	0.000524001	-0.000266394
0.239	0.000802533	0.005254530	-0.000610936	-0.001505959	0.000442488	-0.000294708
0.240	0.000843856	0.005017301	-0.000600809	-0.001355104	0.000370005	-0.000312339

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002601875	0.012692694	0.000391306	-0.001723178	0.003578762	0.011208913
0.191	0.002756155	0.013057940	0.000391232	-0.001812694	0.003765657	0.011449552
0.192	0.002925171	0.013447571	0.000389819	-0.001908839	0.003968024	0.011703616
0.193	0.003111014	0.013864109	0.000386795	-0.002012332	0.004188194	0.011972252
0.194	0.003316163	0.014310420	0.000381828	-0.002123997	0.004428975	0.012256625
0.195	0.003543581	0.014789773	0.000374509	-0.002244786	0.004693746	0.012557873
0.196	0.003796835	0.015305907	0.000364333	-0.002375798	0.004986576	0.012877029
0.197	0.004080244	0.015863106	0.000350669	-0.002518314	0.005312355	0.013214902
0.198	0.004399093	0.016466312	0.000332722	-0.002673830	0.005676954	0.013571911
0.199	0.004759821	0.017121211	0.000309500	-0.002844095	0.006087328	0.013947839
0.200	0.005170541	0.017834322	0.000279707	-0.003031175	0.006551762	0.014341406
0.201	0.005641317	0.018613254	0.000241692	-0.003237520	0.007079837	0.014749893
0.202	0.006184916	0.019466762	0.000193299	-0.003466042	0.007682466	0.015168371
0.203	0.006817665	0.020404923	0.000131685	-0.003720216	0.008371610	0.015588833
0.204	0.007560686	0.021439255	0.000053055	-0.004004202	0.009159593	0.015999120
0.205	0.008441638	0.022582735	-0.000047717	-0.004322983	0.010057729	0.016381759
0.206	0.009497203	0.023849602	-0.000177659	-0.004682508	0.011073932	0.016713059
0.207	0.010776686	0.025254683	-0.000346541	-0.005089820	0.012209007	0.016963139
0.208	0.012347242	0.026811747	-0.000568164	-0.005553093	0.013451657	0.017098124
0.209	0.014301510	0.028529885	-0.000862319	-0.006081410	0.014773148	0.017086247
0.210	0.016768651	0.030405897	-0.001257809	-0.006683925	0.016124310	0.016909553
0.211	0.019929760	0.032408598	-0.001797058	-0.007367573	0.017439734	0.016581272
0.212	0.024037421	0.034446922	-0.002542866	-0.008131506	0.018655191	0.016165074
0.213	0.029433715	0.036306127	-0.003587264	-0.008954366	0.019741973	0.015787581
0.214	0.036542432	0.037525953	-0.005059101	-0.009766769	0.020755930	0.015634263
0.215	0.045760262	0.037190817	-0.007115986	-0.010396551	0.021899787	0.015921752
0.216	0.057058217	0.033683797	-0.009874984	-0.010484023	0.023604452	0.016848542
0.217	0.069046458	0.024794257	-0.013197612	-0.009434312	0.026702122	0.018487811
0.218	0.077918208	0.009218407	-0.016341789	-0.006668489	0.032883498	0.020347080
0.219	0.078733818	-0.010451437	-0.018017468	-0.002382512	0.045111791	0.018862232
0.220	0.070324929	-0.027767057	-0.017473973	0.002087196	0.058659424	0.002053423
0.221	0.057012045	-0.038128935	-0.015315324	0.005393825	0.049674382	-0.020911434
0.222	0.043805187	-0.041853418	-0.012673345	0.007224771	0.033486223	-0.025874793
0.223	0.033038748	-0.041487114	-0.010258603	0.007964815	0.023989541	-0.023714404
0.224	0.024962937	-0.039205044	-0.008292498	0.008075731	0.018754667	-0.020911182
0.225	0.019074553	-0.036258559	-0.006759328	0.007872604	0.015564756	-0.018551836
0.226	0.014790667	-0.033246491	-0.005575942	0.007532344	0.013422676	-0.016663428
0.227	0.011644358	-0.030418931	-0.004658208	0.007145895	0.011875105	-0.015139734
0.228	0.009300509	-0.027860222	-0.003938478	0.006757498	0.010696278	-0.013886794
0.229	0.007527106	-0.025581481	-0.003366306	0.006387327	0.009762934	-0.012836591
0.230	0.006164593	-0.023564181	-0.002905005	0.006043471	0.009002247	-0.011941353
0.231	0.005102563	-0.021779892	-0.002527998	0.005728078	0.008368294	-0.011167220
0.232	0.004263704	-0.020198865	-0.002215921	0.005440475	0.007830537	-0.010489698
0.233	0.003593094	-0.018793480	-0.001954526	0.005178753	0.007367777	-0.009890666
0.234	0.003051132	-0.017539397	-0.001733201	0.004940556	0.006964763	-0.009356415
0.235	0.002608841	-0.016415687	-0.001543944	0.004723472	0.006610205	-0.008876367
0.236	0.002244709	-0.015404572	-0.001380643	0.004525215	0.006295539	-0.008442206
0.237	0.001942554	-0.014491031	-0.001238576	0.004343704	0.006014136	-0.008047298
0.238	0.001690058	-0.013662346	-0.001114050	0.004177068	0.005760782	-0.007686253
0.239	0.001477715	-0.012907796	-0.001004147	0.004023667	0.005531303	-0.007354666
0.240	0.001298129	-0.012218282	-0.000906538	0.003882056	0.005322331	-0.007048881

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0075$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000392297	-0.002666712	-0.001519318	-0.000157963	-0.000748340	0.001689874
0.191	0.000351299	-0.002824718	-0.001604951	-0.000131442	-0.000692796	0.001833321
0.192	0.000301279	-0.002993135	-0.001697406	-0.000101292	-0.000622234	0.001985756
0.193	0.000240772	-0.003172583	-0.001797660	-0.000066931	-0.000534089	0.002147192
0.194	0.000168062	-0.003363678	-0.001906878	-0.000027613	-0.000425355	0.002317437
0.195	0.000081141	-0.003566994	-0.002026459	0.000017634	-0.000292504	0.002496011
0.196	-0.000022356	-0.003783033	-0.002158072	0.000070085	-0.000131387	0.002682020
0.197	-0.000145203	-0.004012162	-0.002303705	0.000131431	0.000062869	0.002873989
0.198	-0.000290668	-0.004254529	-0.002465709	0.000203937	0.000295980	0.003069614
0.199	-0.000462546	-0.004509938	-0.002646842	0.000290633	0.000574595	0.003265443
0.200	-0.000665289	-0.004777656	-0.002850268	0.000395639	0.000906429	0.003456367
0.201	-0.000903967	-0.005056202	-0.003079553	0.000524520	0.001300219	0.003635027
0.202	-0.001184278	-0.005342984	-0.003338528	0.000684827	0.001765623	0.003790915
0.203	-0.001512384	-0.005633874	-0.003631015	0.000886783	0.002312812	0.003909250
0.204	-0.001894541	-0.005922686	-0.003960268	0.001144146	0.002951588	0.003969563
0.205	-0.002336361	-0.006200626	-0.004327968	0.001475223	0.003689737	0.003944084
0.206	-0.002841558	-0.006455890	-0.004732551	0.001903921	0.004530219	0.003796196
0.207	-0.003409972	-0.006673770	-0.005166616	0.002460553	0.005466827	0.003479564
0.208	-0.004034907	-0.006837928	-0.005613255	0.003181879	0.006478199	0.002939028
0.209	-0.004700191	-0.006933774	-0.006041498	0.004109652	0.007520861	0.002114792
0.210	-0.005378256	-0.006954975	-0.006401673	0.005286995	0.008523503	0.000951250
0.211	-0.006031646	-0.006913483	-0.006622132	0.006752776	0.009386410	-0.000590027
0.212	-0.006621036	-0.006851940	-0.006608507	0.008536046	0.009990109	-0.002517874
0.213	-0.007122256	-0.006855824	-0.006243771	0.010654607	0.010212765	-0.004809724
0.214	-0.007553758	-0.007063851	-0.005381241	0.013121435	0.009944766	-0.007432540
0.215	-0.008023888	-0.007678444	-0.003812966	0.015954967	0.009072109	-0.010391202
0.216	-0.008830420	-0.008980694	-0.001186927	0.019178642	0.007375466	-0.013792378
0.217	-0.010730870	-0.011289511	0.003194333	0.022750832	0.004231570	-0.017840729
0.218	-0.015605513	-0.014466853	0.010871602	0.026134919	-0.002090476	-0.022354568
0.219	-0.026973629	-0.015063415	0.024675756	0.025780589	-0.014978171	-0.023898829
0.220	-0.040610629	-0.000639320	0.039780670	0.009757167	-0.030108952	-0.010083159
0.221	-0.032581848	0.020304291	0.032271182	-0.012704105	-0.023485593	0.010527665
0.222	-0.017752637	0.023899972	0.017443001	-0.017382513	-0.009940186	0.014002788
0.223	-0.009640088	0.020945404	0.009177661	-0.015100296	-0.002977341	0.011084199
0.224	-0.005645943	0.017736085	0.005045548	-0.012293107	0.000000568	0.008022007
0.225	-0.003514477	0.015205306	0.002837250	-0.010012489	0.001241275	0.005714263
0.226	-0.002261786	0.013280406	0.001566594	-0.008259056	0.001717183	0.004061827
0.227	-0.001461728	0.011795615	0.000792373	-0.006907144	0.001841801	0.002879506
0.228	-0.000915516	0.010622392	0.000300762	-0.005848761	0.001801485	0.002024775
0.229	-0.000522651	0.009672740	-0.000020427	-0.005005899	0.001685194	0.001399733
0.230	-0.000228456	0.008887337	-0.000234101	-0.004323778	0.001537244	0.000938166
0.231	-0.000001200	0.008225660	-0.000377481	-0.003763696	0.001380260	0.000594846
0.232	0.000178604	0.007659412	-0.000473574	-0.003297878	0.001225816	0.000338358
0.233	0.000323524	0.007168363	-0.000537115	-0.002906038	0.001079666	0.000146483
0.234	0.000442021	0.006737710	-0.000577827	-0.002573096	0.000944420	0.000003238
0.235	0.000540001	0.006356385	-0.000602283	-0.002287660	0.000820976	-0.000103058
0.236	0.000621724	0.006015945	-0.000615027	-0.002040994	0.000709309	-0.000181057
0.237	0.000690349	0.005709836	-0.000619259	-0.001826310	0.000608906	-0.000237251
0.238	0.000748265	0.005432875	-0.000617261	-0.001638256	0.000519010	-0.000276566
0.239	0.000797329	0.005180923	-0.000610694	-0.001472583	0.000438773	-0.000302771
0.240	0.000838998	0.004950614	-0.000600774	-0.001325866	0.000367331	-0.000318778

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002293442	0.014403830	0.000561188	-0.001976775	0.004158777	0.012571688
0.191	0.002410302	0.014807073	0.000566864	-0.002068583	0.004321241	0.012813983
0.192	0.002537445	0.015237012	0.000572000	-0.002166627	0.004491339	0.013073647
0.193	0.002676254	0.015696399	0.000576476	-0.002271557	0.004670525	0.013353358
0.194	0.002828360	0.016188371	0.000580144	-0.002384116	0.004860721	0.013656184
0.195	0.002995695	0.016716517	0.000582823	-0.002505160	0.005064432	0.013985620
0.196	0.003180564	0.017284964	0.000584287	-0.002635680	0.005284932	0.014345634
0.197	0.003385735	0.017898479	0.000584252	-0.002776824	0.005526470	0.014740695
0.198	0.003614554	0.018562592	0.000582364	-0.002929935	0.005794546	0.015175802
0.199	0.003871061	0.019283777	0.000578199	-0.003096567	0.006096313	0.015656484
0.200	0.004160341	0.020069552	0.000571134	-0.003278624	0.006440978	0.016188757
0.201	0.004488571	0.020928863	0.000560454	-0.003478303	0.006840601	0.016778988
0.202	0.004863534	0.021872299	0.000545198	-0.003698258	0.007310898	0.017433602
0.203	0.005295047	0.022912526	0.000524111	-0.003941709	0.007872444	0.018158519
0.204	0.005795786	0.024064681	0.000495506	-0.004212523	0.008552323	0.018957950
0.205	0.006382113	0.025347190	0.000457129	-0.004515503	0.009386032	0.019832534
0.206	0.007075511	0.026782348	0.000405912	-0.004856557	0.010419794	0.020775556
0.207	0.007904781	0.028397552	0.000337586	-0.005243084	0.011712862	0.021766734
0.208	0.008909047	0.030226459	0.000246138	-0.005684406	0.013338002	0.022761498
0.209	0.010142520	0.032310563	0.000122921	-0.006192380	0.015376817	0.023674137
0.210	0.011681919	0.034700907	-0.000044767	-0.006782205	0.017901821	0.024354459
0.211	0.013638356	0.037459585	-0.000276045	-0.007473454	0.020931294	0.024565313
0.212	0.016176828	0.040659794	-0.000600462	-0.008291277	0.024342396	0.023988817
0.213	0.019549121	0.044381318	-0.001065055	-0.009267476	0.027757604	0.022322871
0.214	0.024149985	0.048692336	-0.001747040	-0.010440177	0.030511756	0.019522835
0.215	0.030613222	0.053593482	-0.002777033	-0.011848165	0.031887820	0.016085726
0.216	0.039967282	0.058857832	-0.004380877	-0.013507385	0.031609738	0.013036299
0.217	0.053830732	0.063590356	-0.006946815	-0.015332051	0.030148677	0.011465786
0.218	0.074349410	0.065104744	-0.011081030	-0.016899282	0.028526837	0.012077651
0.219	0.102374551	0.056787742	-0.017362345	-0.016897737	0.027969330	0.015192642
0.220	0.130345120	0.028329444	-0.024860942	-0.012740973	0.029891434	0.021285107
0.221	0.136658506	-0.018801811	-0.029034103	-0.003414104	0.037851987	0.032905432
0.222	0.112657286	-0.057601276	-0.026450140	0.006044140	0.077827606	0.052114599
0.223	0.079757790	-0.072189343	-0.020555296	0.011054135	0.121671562	-0.059069158
0.224	0.054024877	-0.071334454	-0.015195982	0.012443596	0.040609680	-0.062334000
0.225	0.037007931	-0.065083892	-0.011304379	0.012189174	0.022629827	-0.044679117
0.226	0.026094173	-0.057965763	-0.008618064	0.011383652	0.016403292	-0.035094206
0.227	0.018978997	-0.051439301	-0.006750965	0.010468399	0.013248744	-0.029250478
0.228	0.014199682	-0.045824543	-0.005421076	0.009598601	0.011290476	-0.025278294
0.229	0.010886668	-0.041083144	-0.004446794	0.008819399	0.009926462	-0.022368483
0.230	0.008521915	-0.037086908	-0.003713536	0.008135953	0.008906859	-0.020123140
0.231	0.006789582	-0.033702643	-0.003148056	0.007540077	0.008108218	-0.018324420
0.232	0.005491382	-0.030815545	-0.002702479	0.007020203	0.007461691	-0.016842625
0.233	0.004499091	-0.028332490	-0.002344690	0.006564957	0.006925313	-0.015595318
0.234	0.003727450	-0.026179534	-0.002052604	0.006164297	0.006471767	-0.014527309
0.235	0.003118296	-0.024298269	-0.001810667	0.005809734	0.006082351	-0.013600066
0.236	0.002631023	-0.022642456	-0.001607689	0.005494213	0.005743752	-0.012785749
0.237	0.002236687	-0.021175278	-0.001435455	0.005211913	0.005446190	-0.012063662
0.238	0.001914257	-0.019867200	-0.001287829	0.004958030	0.005182294	-0.011418047
0.239	0.001648207	-0.018694349	-0.001160153	0.004728591	0.004946399	-0.010836658
0.240	0.001426879	-0.017637277	-0.001048835	0.004520300	0.004734062	-0.010309823

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001205623	-0.003331064	-0.001787796	-0.000483249	-0.002029018	0.002080184
0.191	0.001195707	-0.003541631	-0.001869765	-0.000461134	-0.002026335	0.002310484
0.192	0.001177710	-0.003767043	-0.001955636	-0.000438128	-0.002009332	0.002558818
0.193	0.001150314	-0.004008431	-0.002046100	-0.000414577	-0.001975540	0.002826324
0.194	0.001111985	-0.004267054	-0.002142075	-0.000390886	-0.001922079	0.003114247
0.195	0.001060925	-0.004544322	-0.002244752	-0.000367503	-0.001845571	0.003423952
0.196	0.000994993	-0.004841822	-0.002355694	-0.000344921	-0.001741979	0.003756945
0.197	0.000911613	-0.005161339	-0.002476925	-0.000323647	-0.001606428	0.004114881
0.198	0.000807643	-0.005504882	-0.002611067	-0.000304170	-0.001432950	0.004499558
0.199	0.000679218	-0.005874694	-0.002761626	-0.000286967	-0.001214067	0.004912978
0.200	0.000521414	-0.006273232	-0.002932792	-0.000272139	-0.000940577	0.005356848
0.201	0.000328069	-0.006703129	-0.003130396	-0.000259642	-0.000600533	0.005832965
0.202	0.000091242	-0.007167048	-0.003361912	-0.000248751	-0.000178615	0.006342431
0.203	-0.000199348	-0.007667422	-0.003637124	-0.000237664	0.000345100	0.006885039
0.204	-0.000557122	-0.008205836	-0.003968844	-0.000222751	0.000996667	0.007457914
0.205	-0.000999608	-0.008782143	-0.004373869	-0.000197212	0.001810267	0.008053299
0.206	-0.001549552	-0.009392555	-0.004874003	-0.000148917	0.002830398	0.008654518
0.207	-0.002236026	-0.010026548	-0.005497005	-0.000056660	0.004114045	0.009229115
0.208	-0.003094597	-0.010661500	-0.006276603	0.000115915	0.005731053	0.009717459
0.209	-0.004164841	-0.011254280	-0.007249733	0.000429832	0.007759195	0.010014789
0.210	-0.005481126	-0.011729592	-0.008446901	0.000984030	0.010265854	0.009946291
0.211	-0.007049583	-0.011968806	-0.009868465	0.001928940	0.013262213	0.009242210
0.212	-0.008803811	-0.011813244	-0.011439271	0.003466862	0.016615345	0.007540415
0.213	-0.010546527	-0.011112968	-0.012948239	0.005809196	0.019932584	0.004476883
0.214	-0.011930027	-0.009849019	-0.014025272	0.009064082	0.022525050	-0.000082512
0.215	-0.012568157	-0.008279489	-0.014246138	0.013107705	0.023636352	-0.005775191
0.216	-0.012271345	-0.006944041	-0.013352694	0.017611958	0.022920627	-0.011787987
0.217	-0.011180259	-0.006467486	-0.011352521	0.022304711	0.020714788	-0.017382263
0.218	-0.009650920	-0.007434837	-0.008316354	0.027232694	0.017754654	-0.022486113
0.219	-0.008171945	-0.010669377	-0.004031745	0.032813915	0.014563251	-0.028019816
0.220	-0.008027054	-0.017978936	0.002319304	0.039983551	0.010453209	-0.036251684
0.221	-0.014448702	-0.033048574	0.014070120	0.051777990	0.000416730	-0.051352387
0.222	-0.055438746	-0.056404971	0.057185466	0.070631161	-0.043536961	-0.074221107
0.223	-0.102013880	0.052159504	0.103596124	-0.041191359	-0.092502760	0.035102917
0.224	-0.023746268	0.054410288	0.024627849	-0.045226211	-0.016153370	0.038234098
0.225	-0.008029469	0.036615821	0.008362437	-0.028384504	-0.001976818	0.021353307
0.226	-0.003535788	0.027266754	0.003550022	-0.019606940	0.001275274	0.012902720
0.227	-0.001710081	0.021796485	0.001572256	-0.014538980	0.002094663	0.008290503
0.228	-0.000790257	0.018232738	0.000602626	-0.011298721	0.002193902	0.005532630
0.229	-0.000256258	0.015723885	0.000077211	-0.009072406	0.002054641	0.003773377
0.230	0.000085414	0.013855636	-0.000224383	-0.007461756	0.001840709	0.002598598
0.231	0.000319454	0.012405062	-0.000402726	-0.006250832	0.001613717	0.001787732
0.232	0.000487668	0.011242242	-0.000508823	-0.005312922	0.001397467	0.001214302
0.233	0.000612761	0.010286511	-0.000570617	-0.004569020	0.001200527	0.000801509
0.234	0.000708055	0.009485154	-0.000604331	-0.003967432	0.001025032	0.000500555
0.235	0.000781875	0.008802237	-0.000619814	-0.003473001	0.000870396	0.000279277
0.236	0.000839705	0.008212393	-0.000623263	-0.003061040	0.000734944	0.000115833
0.237	0.000885311	0.007697169	-0.000618690	-0.002713738	0.000616663	-0.000004988
0.238	0.000921380	0.007242800	-0.000608754	-0.002417952	0.000513531	-0.000094000
0.239	0.000949880	0.006838793	-0.000595255	-0.002163786	0.000423667	-0.000159037
0.240	0.000972294	0.006477002	-0.000579422	-0.001943670	0.000345373	-0.000205847

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002343218	0.014451340	0.000557084	-0.001988513	0.004167897	0.012598697
0.191	0.002464242	0.014858576	0.000562451	-0.002081618	0.004333409	0.012846009
0.192	0.002596037	0.015292949	0.000567222	-0.002181106	0.004507430	0.013111187
0.193	0.002740064	0.015757275	0.000571265	-0.002287648	0.004691580	0.013396906
0.194	0.002898047	0.016254764	0.000574420	-0.002402014	0.004887986	0.013706225
0.195	0.003072035	0.016789094	0.000576488	-0.002525087	0.005099409	0.014042614
0.196	0.003264474	0.017364495	0.000577221	-0.002657893	0.005329415	0.014409987
0.197	0.003478306	0.017985855	0.000576310	-0.002801623	0.005582615	0.014812726
0.198	0.003717094	0.018658850	0.000573367	-0.002957667	0.005864954	0.015255690
0.199	0.003985152	0.019390139	0.000567908	-0.003127665	0.006184084	0.015744217
0.200	0.004287907	0.020187431	0.000559285	-0.003313549	0.006549977	0.016283906
0.201	0.004631955	0.021059958	0.000546699	-0.003517642	0.006975464	0.016880635
0.202	0.005025703	0.022018568	0.000529085	-0.003742681	0.007477327	0.017539936
0.203	0.005479729	0.023076293	0.000505057	-0.003992024	0.008077372	0.018266399
0.204	0.006007649	0.024248766	0.000472761	-0.004269741	0.008804052	0.019062209
0.205	0.006627209	0.025554918	0.000429696	-0.004580840	0.009694347	0.019924745
0.206	0.007361723	0.027017673	0.000372483	-0.004931474	0.010795662	0.020842200
0.207	0.008242594	0.028665174	0.000296312	-0.005329452	0.012167017	0.021786847
0.208	0.009312598	0.030531864	0.000194488	-0.005784509	0.013877959	0.022703029
0.209	0.010631249	0.032660000	0.000057314	-0.006309057	0.015999860	0.023490494
0.210	0.012283115	0.035101100	-0.000129518	-0.006918969	0.018581732	0.023983851
0.211	0.014391139	0.037916775	-0.000387624	-0.007634579	0.021597704	0.023940415
0.212	0.017138666	0.041177381	-0.000750575	-0.008481755	0.024860364	0.023070499
0.213	0.020806284	0.044953860	-0.001272011	-0.009492496	0.027936648	0.021164777
0.214	0.025834397	0.049291044	-0.002040232	-0.010703273	0.030187194	0.018332677
0.215	0.032927575	0.054130711	-0.003204532	-0.012145563	0.031059242	0.015191926
0.216	0.043212220	0.059100054	-0.005020863	-0.013811845	0.030504028	0.012729299
0.217	0.058382302	0.062952967	-0.007916482	-0.015549072	0.029119930	0.011862625
0.218	0.080346238	0.062256010	-0.012498099	-0.016765131	0.027921536	0.013146683
0.219	0.108428887	0.049481345	-0.019091076	-0.015861664	0.028110414	0.016890970
0.220	0.131591530	0.016016935	-0.025944699	-0.010375990	0.031327498	0.023857878
0.221	0.129331788	-0.029768652	-0.028302461	-0.000772238	0.043558266	0.037323635
0.222	0.102115969	-0.061322996	-0.024620721	0.007430121	0.104711201	0.042589823
0.223	0.071578874	-0.070906742	-0.018895219	0.011294380	0.086838536	-0.069386412
0.224	0.048843762	-0.068468528	-0.014040589	0.012190729	0.033826344	-0.054952284
0.225	0.033864189	-0.062157269	-0.010550560	0.011807124	0.020826415	-0.040781615
0.226	0.024160399	-0.055405297	-0.008124358	0.011006492	0.015666151	-0.032746790
0.227	0.017752822	-0.049292703	-0.006419351	0.010134457	0.012868426	-0.027646275
0.228	0.013396307	-0.044038092	-0.005191559	0.009313133	0.011068080	-0.024086740
0.229	0.010344067	-0.039588420	-0.004283281	0.008577682	0.009787545	-0.021432740
0.230	0.008145527	-0.035823796	-0.003593938	0.007931145	0.008817458	-0.019359170
0.231	0.006522423	-0.032623291	-0.003058519	0.007365705	0.008050620	-0.017682765
0.232	0.005298002	-0.029882973	-0.002634054	0.006870790	0.007425674	-0.016292026
0.233	0.004356773	-0.027518313	-0.002291440	0.006436058	0.006904540	-0.015114880
0.234	0.003621236	-0.025461888	-0.002010484	0.006052354	0.006462087	-0.014102426
0.235	0.003038097	-0.023660176	-0.001776859	0.005711905	0.006080931	-0.013220157
0.236	0.002569893	-0.022070596	-0.001580181	0.005408222	0.005748585	-0.012442917
0.237	0.002189728	-0.020659109	-0.001412799	0.005135929	0.005455832	-0.011751870
0.238	0.001877973	-0.019398277	-0.001268950	0.004890567	0.005195673	-0.011132578
0.239	0.001620058	-0.018265850	-0.001144247	0.004668436	0.004962706	-0.010573769
0.240	0.001404995	-0.017243619	-0.001035291	0.004466451	0.004752677	-0.010066485

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001157800	-0.003356789	-0.001794464	-0.000465083	-0.001952829	0.002128399
0.191	0.001144042	-0.003568074	-0.001877672	-0.000443330	-0.001943205	0.002358453
0.192	0.001121857	-0.003794219	-0.001965181	-0.000420713	-0.001918641	0.002606352
0.193	0.001089871	-0.004036367	-0.002057757	-0.000397544	-0.001876573	0.002873222
0.194	0.001046474	-0.004295783	-0.002156411	-0.000374183	-0.001813982	0.003160282
0.195	0.000989770	-0.004573881	-0.002262455	-0.000351025	-0.001727303	0.003468863
0.196	0.000917494	-0.004872243	-0.002377582	-0.000328476	-0.001612269	0.003800402
0.197	0.000826912	-0.005192635	-0.002503982	-0.000306936	-0.001463708	0.004156456
0.198	0.000714675	-0.005537024	-0.002644478	-0.000286744	-0.001275267	0.004538661
0.199	0.000576652	-0.005907578	-0.002802716	-0.000268108	-0.001039056	0.004948667
0.200	0.000407608	-0.006306602	-0.002983396	-0.000250953	-0.000745095	0.005387966
0.201	0.000200962	-0.006736514	-0.003192630	-0.000234751	-0.000380719	0.005857654
0.202	-0.000051744	-0.007199549	-0.003438332	-0.000218178	0.000070355	0.006357847
0.203	-0.000361409	-0.007697507	-0.003730825	-0.000198536	0.000629226	0.006886841
0.204	-0.000742149	-0.008231004	-0.004083529	-0.000170847	0.001323296	0.007439478
0.205	-0.001212222	-0.008798284	-0.004513821	-0.000126319	0.002188107	0.008004437
0.206	-0.001794923	-0.009393053	-0.005044025	-0.000049859	0.003269320	0.008559633
0.207	-0.002519231	-0.010001057	-0.005701250	0.000084318	0.004623305	0.009064240
0.208	-0.003419008	-0.010594174	-0.006517313	0.000318921	0.006316500	0.009446811
0.209	-0.004528590	-0.011122038	-0.007523413	0.000723478	0.008416027	0.009586816
0.210	-0.005870366	-0.011501821	-0.008737339	0.001406251	0.010965104	0.009292476
0.211	-0.007427976	-0.011612256	-0.010135913	0.002522844	0.013929809	0.008285990
0.212	-0.009102006	-0.011309068	-0.011609224	0.004264990	0.017110963	0.006229580
0.213	-0.010666073	-0.010489404	-0.012914329	0.006802837	0.020057672	0.002846167
0.214	-0.011782964	-0.009213025	-0.013686842	0.010175119	0.022102146	-0.001853639
0.215	-0.012144305	-0.007802612	-0.013571580	0.014209009	0.022643592	-0.007402146
0.216	-0.011666777	-0.006789922	-0.012399446	0.018611816	0.021546294	-0.013051702
0.217	-0.010545172	-0.006742936	-0.010194869	0.023220248	0.019237146	-0.018289113
0.218	-0.009137647	-0.008251156	-0.006939306	0.028183314	0.016352983	-0.023297964
0.219	-0.008037399	-0.012305626	-0.002259281	0.033992410	0.013127716	-0.029250963
0.220	-0.009151218	-0.021045532	0.005025153	0.041835706	0.008114641	-0.038712771
0.221	-0.020434354	-0.038281942	0.020736141	0.055406688	-0.006478994	-0.055911358
0.222	-0.083116134	-0.047329577	0.084784699	0.060321983	-0.071885797	-0.064476083
0.223	-0.067982524	0.062492560	0.069294175	-0.052251661	-0.058963529	0.046064884
0.224	-0.017573987	0.047281632	0.018238450	-0.038531606	-0.010341064	0.031679316
0.225	-0.006656821	0.033048632	0.006851514	-0.025114948	-0.000867435	0.018301961
0.226	-0.003099184	0.025257251	0.003030145	-0.017830589	0.001519355	0.011353514
0.227	-0.001541442	0.020512731	0.001353073	-0.013453593	0.002122682	0.007416303
0.228	-0.000718799	0.017337094	0.000499140	-0.010579098	0.002162987	0.005001306
0.229	-0.000225920	0.015059166	0.000025143	-0.008567010	0.002010948	0.003433180
0.230	0.000096492	0.013339755	-0.000251489	-0.007091472	0.001798816	0.002372450
0.231	0.000320872	0.011991103	-0.000417008	-0.005970574	0.001577880	0.001633165
0.232	0.000484073	0.010901447	-0.000516319	-0.005095268	0.001368372	0.001106457
0.233	0.000606571	0.010000233	-0.000574498	-0.004396402	0.001177636	0.000725110
0.234	0.000700601	0.009240735	-0.000606324	-0.003828119	0.001007455	0.000445848
0.235	0.000773923	0.008590757	-0.000620883	-0.003358890	0.000857219	0.000239837
0.236	0.000831708	0.008027365	-0.000623951	-0.002966374	0.000725330	0.000087311
0.237	0.000877539	0.007533749	-0.000619303	-0.002634322	0.000609928	-0.000025585
0.238	0.000913997	0.007097290	-0.000609461	-0.002350670	0.000509095	-0.000108783
0.239	0.000942983	0.006708317	-0.000596140	-0.002106285	0.000421054	-0.000169508
0.240	0.000965936	0.006359275	-0.000580528	-0.001894133	0.000344202	-0.000213100

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002394255	0.014499405	0.000552599	-0.002000655	0.004179271	0.012626957
0.191	0.002519603	0.014910682	0.000557624	-0.002095088	0.004348196	0.012879183
0.192	0.002656230	0.015349545	0.000561993	-0.002196057	0.004526526	0.013149722
0.193	0.002805683	0.015818873	0.000565562	-0.002304254	0.004716072	0.013441249
0.194	0.002969788	0.016321953	0.000568155	-0.002420474	0.004919168	0.013756799
0.195	0.003150699	0.016862541	0.000569559	-0.002545632	0.005138783	0.014099822
0.196	0.003351042	0.017444987	0.000569495	-0.002680788	0.005378877	0.014474124
0.197	0.003573928	0.018074298	0.000567630	-0.002827175	0.005644382	0.014883991
0.198	0.003823156	0.018756294	0.000563538	-0.002986237	0.005941706	0.015334100
0.199	0.004103305	0.019497834	0.000556691	-0.003159690	0.006279030	0.015829534
0.200	0.004420223	0.020306796	0.000546374	-0.003349513	0.006667041	0.016375432
0.201	0.004780980	0.021192656	0.000531708	-0.003558120	0.007119376	0.016977012
0.202	0.005194554	0.022166626	0.000511527	-0.003788400	0.007653813	0.017638864
0.203	0.005672359	0.023242078	0.000484300	-0.004043835	0.008293304	0.018364014
0.204	0.006229120	0.024435111	0.000447974	-0.004328683	0.009067556	0.019152301
0.205	0.006883971	0.025765094	0.000399793	-0.004648159	0.010014573	0.019997447
0.206	0.007662332	0.027255644	0.000335956	-0.005008749	0.011182206	0.020882322
0.207	0.008598375	0.028935528	0.000251174	-0.005418553	0.012628208	0.021771062
0.208	0.009738891	0.030839880	0.000137936	-0.005887785	0.014416609	0.022597126
0.209	0.011149225	0.033011508	-0.000014640	-0.006429408	0.016605180	0.023247204
0.210	0.012922554	0.035501933	-0.000222660	-0.007059935	0.019215399	0.023545348
0.211	0.015194901	0.038371497	-0.000510569	-0.007800389	0.022175263	0.023254056
0.212	0.018169765	0.041685918	-0.000916472	-0.008677126	0.025240765	0.022127880
0.213	0.022159271	0.045503621	-0.001501466	-0.009721785	0.027949986	0.020060879
0.214	0.027652979	0.049838108	-0.002366187	-0.010967744	0.029726703	0.017297394
0.215	0.035428877	0.054554730	-0.003680581	-0.012435798	0.030191524	0.014523848
0.216	0.046702991	0.059096727	-0.005731661	-0.014086469	0.029480286	0.012650370
0.217	0.063185523	0.061795911	-0.008978528	-0.015680659	0.028269864	0.012438980
0.218	0.086317384	0.058421061	-0.013984717	-0.016430753	0.027563684	0.014341851
0.219	0.113424864	0.040926711	-0.020698772	-0.014500561	0.028588000	0.018708519
0.220	0.130519950	0.003782882	-0.026564850	-0.007868087	0.033478482	0.026683011
0.221	0.120816378	-0.038638769	-0.027201941	0.001535237	0.052432138	0.041423564
0.222	0.092299084	-0.063385393	-0.022830930	0.008448636	0.125452460	0.011763340
0.223	0.064421860	-0.069127069	-0.017404176	0.011379546	0.063573213	-0.065925738
0.224	0.044346306	-0.065633785	-0.013018329	0.011906772	0.029283770	-0.049040389
0.225	0.031110262	-0.059392833	-0.009879529	0.011436228	0.019412607	-0.037515668
0.226	0.022444391	-0.053008047	-0.007679869	0.010649991	0.015039108	-0.030686418
0.227	0.016651094	-0.047280993	-0.006117327	0.009820514	0.012530688	-0.026196605
0.228	0.012666583	-0.042357468	-0.004980347	0.009044575	0.010865817	-0.022989540
0.229	0.009846689	-0.038175915	-0.004131452	0.008349694	0.009659452	-0.020560000
0.230	0.007797876	-0.034624969	-0.003482040	0.007737386	0.008734433	-0.018640062
0.231	0.006274104	-0.031594778	-0.002974200	0.007200252	0.007997003	-0.017074631
0.232	0.005117327	-0.028991152	-0.002569257	0.006728640	0.007392250	-0.015767412
0.233	0.004223244	-0.026737248	-0.002240768	0.006313136	0.006885507	-0.014655173
0.234	0.003521245	-0.024771497	-0.001970232	0.005945385	0.006453601	-0.013694471
0.235	0.002962399	-0.023044789	-0.001744428	0.005618262	0.006080342	-0.012854336
0.236	0.002512065	-0.021517873	-0.001553715	0.005325794	0.005754015	-0.012111998
0.237	0.002145246	-0.020159226	-0.001390933	0.005063008	0.005465904	-0.011450285
0.238	0.001843579	-0.018943341	-0.001250679	0.004825761	0.005209364	-0.010855957
0.239	0.001593376	-0.017849457	-0.001128813	0.004610606	0.004979242	-0.010318622
0.240	0.001384269	-0.016860524	-0.001022115	0.004414655	0.004771464	-0.009829985

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001109128	-0.003381543	-0.001802045	-0.000446867	-0.001875391	0.002174210
0.191	0.001091471	-0.003593488	-0.001886652	-0.000425367	-0.001858746	0.002403869
0.192	0.001065029	-0.003820307	-0.001975962	-0.000402994	-0.001826529	0.002651165
0.193	0.001028360	-0.004063143	-0.002070831	-0.000380028	-0.001776048	0.002917200
0.194	0.000979777	-0.004323264	-0.002172366	-0.000356777	-0.001704141	0.003203157
0.195	0.000917278	-0.004602095	-0.002281947	-0.000333579	-0.001607100	0.003510343
0.196	0.000838473	-0.004901173	-0.002401493	-0.000310730	-0.001480329	0.003840050
0.197	0.000740459	-0.005222249	-0.002533315	-0.000288509	-0.001318392	0.004193729
0.198	0.000619678	-0.005567221	-0.002680446	-0.000267088	-0.001114530	0.004572810
0.199	0.000471739	-0.005938169	-0.002846779	-0.000246427	-0.000860357	0.004978637
0.200	0.000291066	-0.006337183	-0.003037308	-0.000226123	-0.000545273	0.005412196
0.201	0.000070680	-0.006766391	-0.003258488	-0.000205161	-0.000155876	0.005873831
0.202	-0.000198380	-0.007227586	-0.003518708	-0.000181529	0.000325128	0.006362574
0.203	-0.000527580	-0.007721818	-0.003828755	-0.000151507	0.000919882	0.006874980
0.204	-0.000931661	-0.008248556	-0.004202550	-0.000108616	0.001656951	0.007403269
0.205	-0.001429383	-0.008804243	-0.004657843	-0.000041855	0.002572824	0.007932146
0.206	-0.002044273	-0.009379934	-0.005216795	0.000067195	0.003713313	0.008433520
0.207	-0.002804579	-0.009957361	-0.005905804	0.000248910	0.005133501	0.008858058
0.208	-0.003741350	-0.010502977	-0.006753330	0.000552499	0.006893888	0.009122329
0.209	-0.004881971	-0.010959938	-0.007783036	0.001055358	0.009047476	0.009091394
0.210	-0.006234796	-0.011240218	-0.008997869	0.001872844	0.011609230	0.008561051
0.211	-0.007759926	-0.011225337	-0.010349806	0.003160648	0.014497853	0.007255811
0.212	-0.009328803	-0.010793551	-0.011697774	0.005092166	0.017455627	0.004877958
0.213	-0.010699104	-0.009894642	-0.012779541	0.007791423	0.019999524	0.001247274
0.214	-0.011562433	-0.008658104	-0.013254002	0.011237745	0.021519388	-0.003500979
0.215	-0.011692404	-0.007446600	-0.012836494	0.015236382	0.021576448	-0.008848635
0.216	-0.011090525	-0.006768220	-0.011421068	0.019549896	0.020197929	-0.014156231
0.217	-0.009984505	-0.007151691	-0.009016134	0.024115102	0.017840333	-0.019127261
0.218	-0.008751895	-0.009231607	-0.005497909	0.029162496	0.015004740	-0.024174526
0.219	-0.008186311	-0.014201109	-0.000312112	0.035267519	0.011568557	-0.030716876
0.220	-0.011111819	-0.024491334	0.008320618	0.043959498	0.005063153	-0.041570475
0.221	-0.029744935	-0.043126641	0.030479020	0.058754704	-0.016610531	-0.060117400
0.222	-0.104659110	-0.016819207	0.106178003	0.028753702	-0.094038094	-0.033336858
0.223	-0.045456358	0.059112952	0.046515960	-0.049492835	-0.036886845	0.043274787
0.224	-0.013584243	0.041636304	0.014059493	-0.033269577	-0.006682170	0.026572380
0.225	-0.005633731	0.030105839	0.005709230	-0.022444336	-0.000087721	0.015844119
0.226	-0.002746891	0.023521814	0.002605789	-0.016313135	0.001692740	0.010051896
0.227	-0.001398783	0.019370106	0.001166266	-0.012498570	0.002134059	0.006660682
0.228	-0.000656581	0.016523639	0.000408599	-0.009933077	0.002129246	0.004532984
0.229	-0.000199091	0.014446866	-0.000021185	-0.008106754	0.001968123	0.003129035
0.230	0.000106226	0.012859643	-0.000275833	-0.006750584	0.001758562	0.002168043
0.231	0.000321845	0.011602864	-0.000429888	-0.005710384	0.001543609	0.001492249
0.232	0.000480417	0.010579919	-0.000523065	-0.004891829	0.001340548	0.001007435
0.233	0.000600485	0.009728864	-0.000577953	-0.004234156	0.001155703	0.000654534
0.234	0.000693316	0.009008164	-0.000608056	-0.003696562	0.000990565	0.000395037
0.235	0.000766158	0.008388901	-0.000621777	-0.003250698	0.000844513	0.000203023
0.236	0.000823893	0.007850299	-0.000624514	-0.002876301	0.000716053	0.000060575
0.237	0.000869938	0.007377020	-0.000619815	-0.002558525	0.000603403	-0.000044983
0.238	0.000906769	0.006957479	-0.000610079	-0.002286277	0.000504775	-0.000122773
0.239	0.000936223	0.006582747	-0.000596945	-0.002051111	0.000418489	-0.000179477
0.240	0.000959699	0.006245820	-0.000581555	-0.001846493	0.000343025	-0.000220056

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002446569	0.014548011	0.000547722	-0.002013214	0.004192835	0.012656296
0.191	0.002576399	0.014963378	0.000552373	-0.002109010	0.004365503	0.012913308
0.192	0.002718045	0.015406787	0.000556301	-0.002211498	0.004548517	0.013189043
0.193	0.002873140	0.015881182	0.000559351	-0.002321394	0.004743866	0.013486157
0.194	0.003043617	0.016389923	0.000561331	-0.002439518	0.004954103	0.013807654
0.195	0.003231776	0.016936865	0.000562003	-0.002566816	0.005182497	0.014156905
0.196	0.003440373	0.017526449	0.000561071	-0.002704386	0.005433235	0.014537659
0.197	0.003672711	0.018163831	0.000558171	-0.002853519	0.005711654	0.014954057
0.198	0.003932877	0.018854947	0.000552828	-0.003015685	0.006024640	0.015410527
0.199	0.004225768	0.019606828	0.000544465	-0.003192665	0.006380936	0.015911816
0.200	0.004557577	0.020427606	0.000532305	-0.003386546	0.006791865	0.016462598
0.201	0.004935887	0.021326991	0.000515383	-0.003599826	0.007271852	0.017067391
0.202	0.005370385	0.022316502	0.000492409	-0.003835510	0.007839664	0.017729497
0.203	0.005873347	0.023409868	0.000461695	-0.004097231	0.008519266	0.018450255
0.204	0.006460670	0.024623620	0.000420977	-0.004389432	0.009341350	0.019226871
0.205	0.007153077	0.025977624	0.000367200	-0.004717561	0.010344564	0.020049122
0.206	0.007978182	0.027496060	0.000296146	-0.005088395	0.011576376	0.020894094
0.207	0.008973228	0.029208286	0.000201921	-0.005510396	0.013091755	0.021717810
0.208	0.010189404	0.031149981	0.000076128	-0.005994232	0.014946983	0.022443365
0.209	0.011698415	0.033364190	-0.000093430	-0.006553397	0.017183112	0.022946670
0.210	0.013602937	0.035901966	-0.000324891	-0.007205013	0.019791081	0.023047334
0.211	0.016053350	0.038821240	-0.000645883	-0.007970656	0.022654039	0.022524045
0.212	0.019275237	0.042180937	-0.001099622	-0.008876868	0.025483824	0.021188828
0.213	0.023614975	0.046022408	-0.001755577	-0.009954183	0.027817489	0.019040774
0.214	0.029614446	0.050318057	-0.002728265	-0.011231165	0.029169247	0.016432370
0.215	0.038124943	0.054835602	-0.004209555	-0.012713370	0.029325917	0.014071604
0.216	0.050434484	0.058790974	-0.006517143	-0.014319175	0.028565290	0.012773737
0.217	0.068180579	0.060025104	-0.010128508	-0.015702935	0.027611228	0.013170306
0.218	0.092051130	0.053526982	-0.015504083	-0.015865364	0.027466504	0.015650792
0.219	0.117014546	0.031367047	-0.022098807	-0.012837679	0.029456113	0.020657907
0.220	0.127294803	-0.007757741	-0.026712055	-0.005349833	0.036660472	0.029747537
0.221	0.111741891	-0.045433419	-0.025857443	0.003471867	0.065821112	0.043258794
0.222	0.083346909	-0.064180093	-0.021132015	0.009167487	0.120072363	-0.026910775
0.223	0.058169161	-0.067039102	-0.016070268	0.011353019	0.049258978	-0.059448863
0.224	0.040426490	-0.062872333	-0.012111065	0.011605638	0.026059806	-0.044240489
0.225	0.028685603	-0.056786474	-0.009279462	0.011078839	0.018271936	-0.034730087
0.226	0.020914408	-0.050761089	-0.007277901	0.010313250	0.014497983	-0.028857939
0.227	0.015657086	-0.045392215	-0.005841155	0.009525090	0.012228454	-0.024877129
0.228	0.012001396	-0.040773361	-0.004785299	0.008791581	0.010681081	-0.021974123
0.229	0.009389348	-0.036838706	-0.003990043	0.008134358	0.009541097	-0.019742955
0.230	0.007475889	-0.033485268	-0.003377058	0.007553838	0.008657264	-0.017961198
0.231	0.006042734	-0.030613236	-0.002894598	0.007043074	0.007947111	-0.016496897
0.232	0.004948152	-0.028137134	-0.002507754	0.006593253	0.007361292	-0.015266562
0.233	0.004097709	-0.025987007	-0.002192444	0.006195799	0.006868156	-0.014214553
0.234	0.003426936	-0.024106554	-0.001931686	0.005843079	0.006446288	-0.013302186
0.235	0.002890822	-0.022450658	-0.001713256	0.005528557	0.006080587	-0.012501613
0.236	0.002457292	-0.020983095	-0.001528185	0.005246725	0.005760043	-0.011792194
0.237	0.002103065	-0.019674640	-0.001369775	0.004992979	0.005476412	-0.011158254
0.238	0.001810949	-0.018501562	-0.001232947	0.004763471	0.005223378	-0.010587641
0.239	0.001568069	-0.017444473	-0.001113792	0.004554983	0.004996022	-0.010070764
0.240	0.001364631	-0.016487396	-0.001009259	0.004364812	0.004790437	-0.009599936

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001059614	-0.003405338	-0.001810430	-0.000428398	-0.001796849	0.002217500
0.191	0.001038006	-0.003617888	-0.001896565	-0.000407018	-0.001773130	0.002446596
0.192	0.001007233	-0.003845313	-0.001987827	-0.000384729	-0.001733167	0.002693097
0.193	0.000965789	-0.004088757	-0.002085152	-0.000361770	-0.001674150	0.002958069
0.194	0.000911901	-0.004349485	-0.002189744	-0.000338390	-0.001592763	0.003242646
0.195	0.000843465	-0.004628892	-0.002303144	-0.000314835	-0.001485055	0.003548027
0.196	0.000757949	-0.004928517	-0.002427325	-0.000291318	-0.001346265	0.003875457
0.197	0.000652288	-0.005250063	-0.002564813	-0.000267961	-0.001170590	0.004226197
0.198	0.000522702	-0.005595317	-0.002718829	-0.000244743	-0.000950889	0.004601402
0.199	0.000364531	-0.005966216	-0.002893513	-0.000221355	-0.000678270	0.005002036
0.200	0.000171883	-0.006364661	-0.003094161	-0.000196999	-0.000341511	0.005428527
0.201	-0.000062634	-0.006792442	-0.003327524	-0.000170170	0.000073494	0.005880438
0.202	-0.000348422	-0.007250759	-0.003602463	-0.000137980	0.000584972	0.006355341
0.203	-0.000697473	-0.007739833	-0.003930149	-0.000095621	0.001216001	0.006847913
0.204	-0.001125014	-0.008257844	-0.004324860	-0.000034954	0.001996032	0.007347459
0.205	-0.001650117	-0.008799291	-0.004804479	0.000057432	0.002962068	0.007834349
0.206	-0.002296089	-0.009352359	-0.005390713	0.000203426	0.004159354	0.008274169
0.207	-0.003089732	-0.009894754	-0.006108190	0.000438224	0.005639922	0.008608736
0.208	-0.004058125	-0.010387789	-0.006980925	0.000817279	0.007456113	0.008743201
0.209	-0.005220116	-0.010769287	-0.008023424	0.001424778	0.009643672	0.008530422
0.210	-0.006568479	-0.010949132	-0.009222044	0.002380341	0.012186068	0.007759603
0.211	-0.008040347	-0.010817185	-0.010504287	0.003834381	0.014955722	0.006168399
0.212	-0.009484120	-0.010280996	-0.011703627	0.005935685	0.017648421	0.003511889
0.213	-0.010655245	-0.009344132	-0.012551550	0.008761778	0.019776117	-0.000292408
0.214	-0.011287566	-0.008193169	-0.012741676	0.012246939	0.020811669	-0.005013197
0.215	-0.011232693	-0.007209033	-0.012054241	0.016198030	0.020469413	-0.010130497
0.216	-0.010556306	-0.006871523	-0.010419006	0.020442816	0.018890145	-0.015136719
0.217	-0.009509235	-0.007693118	-0.007802666	0.025005476	0.016512566	-0.019936986
0.218	-0.008522271	-0.010390336	-0.003962882	0.030183683	0.013665343	-0.025155919
0.219	-0.008716591	-0.016375508	0.001882125	0.036663461	0.009769600	-0.032449002
0.220	-0.014251660	-0.028253188	0.012536800	0.046344742	0.000940990	-0.044764593
0.221	-0.043687220	-0.045605372	0.044656955	0.059874365	-0.031295305	-0.061992060
0.222	-0.100062764	0.021652838	0.101393436	-0.010622388	-0.089995988	0.005725960
0.223	-0.031819885	0.052765249	0.032649388	-0.043679618	-0.023661707	0.037480116
0.224	-0.010861308	0.037110078	0.011171673	-0.029085038	-0.004263787	0.022551718
0.225	-0.004848621	0.027634931	0.004820894	-0.020223794	0.000472146	0.013829502
0.226	-0.002457737	0.022005637	0.002253873	-0.015001322	0.001815508	0.008944880
0.227	-0.001276813	0.018345024	0.001005437	-0.011651102	0.002133414	0.006001509
0.228	-0.000602063	0.015780558	0.000328808	-0.009349313	0.002093808	0.004117005
0.229	-0.000175330	0.013880330	-0.000062625	-0.007685306	0.001926384	0.002855211
0.230	0.000114735	0.012411227	-0.000297813	-0.006435278	0.001719943	0.001982062
0.231	0.000322373	0.011237667	-0.000441563	-0.005467792	0.001510847	0.001362913
0.232	0.000476662	0.010275796	-0.000529170	-0.004700913	0.001313939	0.000915868
0.233	0.000594452	0.009471056	-0.000581049	-0.004081071	0.001134684	0.000588833
0.234	0.000686150	0.008786428	-0.000609575	-0.003571862	0.000974333	0.000347440
0.235	0.000758533	0.008195885	-0.000622531	-0.003147737	0.000832258	0.000168325
0.236	0.000816220	0.007680573	-0.000624967	-0.002790281	0.000707049	0.000035203
0.237	0.000862470	0.007226479	-0.000620236	-0.002485913	0.000597029	-0.000063522
0.238	0.000899662	0.006822952	-0.000610613	-0.002224417	0.000500514	-0.000136255
0.239	0.000929572	0.006461743	-0.000597669	-0.001997972	0.000415915	-0.000189180
0.240	0.000953557	0.006136349	-0.000582502	-0.001800502	0.000341792	-0.000226915

素子間隔 $d[\lambda]=0.2350$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002500225	0.014597116	0.000542436	-0.002026187	0.004208683	0.012686530
0.191	0.002634706	0.015016621	0.000546676	-0.002123379	0.004385431	0.012948186
0.192	0.002781565	0.015464629	0.000550123	-0.002227425	0.004573497	0.013228925
0.193	0.002942529	0.015944148	0.000552607	-0.002339063	0.004775054	0.013531378
0.194	0.003119643	0.016458616	0.000553918	-0.002459141	0.004992874	0.013858503
0.195	0.003315324	0.017011996	0.000553801	-0.002588650	0.005230474	0.014213609
0.196	0.003532541	0.017608801	0.000551926	-0.002728700	0.005492386	0.014600304
0.197	0.003774809	0.018254311	0.000547893	-0.002880627	0.005784328	0.015022548
0.198	0.004046435	0.018954648	0.000541193	-0.003045985	0.006113610	0.015484541
0.199	0.004352669	0.019717007	0.000531186	-0.003226609	0.006489540	0.015990622
0.200	0.004700134	0.020549727	0.000517024	-0.003424665	0.006924095	0.016544879
0.201	0.005096988	0.021462782	0.000497639	-0.003642755	0.007432519	0.017150885
0.202	0.005553587	0.022467973	0.000471624	-0.003884004	0.008034332	0.017810762
0.203	0.006083173	0.023579394	0.000437113	-0.004152203	0.008754396	0.018523849
0.204	0.006702918	0.024813986	0.000391606	-0.004451984	0.009624103	0.019284457
0.205	0.007435269	0.026192084	0.000331717	-0.004789033	0.010682209	0.020078143
0.206	0.008310180	0.027738379	0.000252773	-0.005170425	0.011974851	0.020876216
0.207	0.009368330	0.029482713	0.000148190	-0.005604987	0.013552722	0.021626376
0.208	0.010665650	0.031461108	0.000008599	-0.006103827	0.015462091	0.022242627
0.209	0.012280864	0.033716528	-0.000179686	-0.006680955	0.017724616	0.022593375
0.210	0.014327024	0.036298838	-0.000437075	-0.007354027	0.020299388	0.022500556
0.211	0.016970221	0.039262251	-0.000794770	-0.008145003	0.023028930	0.021769655
0.212	0.020460092	0.042656193	-0.001301728	-0.009080198	0.025596633	0.020279067
0.213	0.025179813	0.046499342	-0.002036752	-0.010188066	0.027564175	0.018126362
0.214	0.031725624	0.050711158	-0.003129492	-0.011489999	0.028551824	0.015740793
0.215	0.041018491	0.054936992	-0.004794962	-0.012970974	0.028495359	0.013817483
0.216	0.054387664	0.058117963	-0.007378550	-0.014495096	0.027777726	0.013072095
0.217	0.073273710	0.057548413	-0.011354423	-0.015589784	0.027153186	0.014033012
0.218	0.097290150	0.047559845	-0.017005169	-0.015046771	0.027646221	0.017061904
0.219	0.118929837	0.021172039	-0.023210751	-0.010927579	0.030797659	0.022746047
0.220	0.122271273	-0.018107050	-0.026422190	-0.002944252	0.041342824	0.032884717
0.221	0.102613220	-0.050335300	-0.024379905	0.005040889	0.083738487	0.038523838
0.222	0.075298736	-0.064036583	-0.019551825	0.009648518	0.096637168	-0.049213345
0.223	0.052707733	-0.064776183	-0.014879350	0.011247188	0.040203095	-0.053148785
0.224	0.036997605	-0.060209559	-0.011303525	0.011296987	0.023666845	-0.040283094
0.225	0.026541986	-0.054331899	-0.008740831	0.010736278	0.017331084	-0.032323319
0.226	0.019545277	-0.048652840	-0.006913122	0.009995329	0.014025619	-0.027222801
0.227	0.014757565	-0.043616177	-0.005587877	0.009246903	0.011956188	-0.023670515
0.228	0.011393581	-0.039277974	-0.004604766	0.008552980	0.010511689	-0.021031472
0.229	0.008968029	-0.035571037	-0.003858100	0.007930748	0.009431442	-0.018976400
0.230	0.007177241	-0.032400462	-0.003278427	0.007379795	0.008585397	-0.017319312
0.231	0.005826925	-0.029675521	-0.002819365	0.006893633	0.007900617	-0.015947377
0.232	0.004789623	-0.027318550	-0.002449327	0.006464218	0.007332592	-0.014787938
0.233	0.003979632	-0.025265777	-0.002146331	0.006083730	0.006852344	-0.013791893
0.234	0.003337965	-0.023465653	-0.001894757	0.005745189	0.006440047	-0.012924717
0.235	0.002823143	-0.021876673	-0.001683285	0.005442590	0.006081591	-0.012161323
0.236	0.002405419	-0.020465378	-0.001503560	0.005170857	0.005766619	-0.011482973
0.237	0.002063079	-0.019204635	-0.001349307	0.004925717	0.005487319	-0.010875346
0.238	0.001780009	-0.018072352	-0.001215745	0.004703594	0.005237687	-0.010327272
0.239	0.001544084	-0.017050408	-0.001099182	0.004501482	0.005013022	-0.009829894
0.240	0.001346045	-0.016123823	-0.000996723	0.004316850	0.004809579	-0.009376082

素子間隔 $d[\lambda]=0.2350$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001009266	-0.003428142	-0.001819671	-0.000409631	-0.001717174	0.002258287
0.191	0.000983644	-0.003641231	-0.001907474	-0.000388232	-0.001686305	0.002486641
0.192	0.000948463	-0.003869185	-0.002000835	-0.000365858	-0.001638495	0.002732137
0.193	0.000902147	-0.004113145	-0.002100775	-0.000342695	-0.001570807	0.002995797
0.194	0.000842835	-0.004374362	-0.002208595	-0.000318928	-0.001479766	0.003278689
0.195	0.000768315	-0.004654228	-0.002325958	-0.000294708	-0.001361214	0.003581927
0.196	0.000675911	-0.004954211	-0.002454968	-0.000270136	-0.001210138	0.003906597
0.197	0.000562381	-0.005275946	-0.002598318	-0.000245173	-0.001020416	0.004253755
0.198	0.000423739	-0.005621145	-0.002759435	-0.000219563	-0.000784497	0.004624270
0.199	0.000255057	-0.005991560	-0.002942694	-0.000192695	-0.000493000	0.005018645
0.200	0.000050123	-0.006388827	-0.003153669	-0.000163337	-0.000134108	0.005436641
0.201	-0.000198828	-0.006814291	-0.003399492	-0.000129332	0.000307060	0.005876751
0.202	-0.000501628	-0.007268585	-0.003689254	-0.000086996	0.000849381	0.006335220
0.203	-0.000870688	-0.007750960	-0.004034489	-0.000030230	0.001516755	0.006804491
0.204	-0.001321575	-0.008258175	-0.004449672	0.000050909	0.002339220	0.007270663
0.205	-0.001873395	-0.008782642	-0.004952527	0.000172410	0.003353731	0.007709463
0.206	-0.002548794	-0.009309676	-0.005563729	0.000359660	0.004603916	0.008080121
0.207	-0.003372299	-0.009812875	-0.006305455	0.000652860	0.006137342	0.008315319
0.208	-0.004365904	-0.010249044	-0.007196023	0.001113109	0.007995826	0.008310004
0.209	-0.005538550	-0.010552338	-0.008239263	0.001829898	0.010194999	0.007907926
0.210	-0.006866733	-0.010633968	-0.009404110	0.002923842	0.012685413	0.006898316
0.211	-0.008266650	-0.010397532	-0.010595346	0.004535033	0.015297145	0.005042229
0.212	-0.009571383	-0.009784504	-0.011628240	0.006783513	0.017694707	0.002155936
0.213	-0.010546779	-0.008849370	-0.012239750	0.009704039	0.019409812	-0.001752716
0.214	-0.010976433	-0.007821059	-0.012164374	0.013201903	0.020012555	-0.006389045
0.215	-0.010781334	-0.007083841	-0.011234515	0.017103788	0.019349078	-0.011269117
0.216	-0.010074553	-0.007092303	-0.009390900	0.021304836	0.017628950	-0.016027125
0.217	-0.009131674	-0.008367904	-0.006538603	0.025903018	0.015234939	-0.020754144
0.218	-0.008488008	-0.011739446	-0.002301108	0.031256413	0.012278760	-0.026275323
0.219	-0.009757209	-0.018828568	0.004424086	0.038196239	0.007584199	-0.034456111
0.220	-0.019047688	-0.032111365	0.018157272	0.048826646	-0.004742942	-0.048077272
0.221	-0.062233917	-0.041398889	0.063293344	0.054458205	-0.050516025	-0.057214246
0.222	-0.077377214	0.043847759	0.078504101	-0.033590274	-0.067816349	0.028476597
0.223	-0.023383611	0.046629394	0.024006249	-0.038008317	-0.015603063	0.031863988
0.224	-0.008923389	0.033429105	0.009090353	-0.025711529	-0.002607013	0.019346377
0.225	-0.004232327	0.025533756	0.004115135	-0.018354394	0.000879448	0.012158451
0.226	-0.002217113	0.020670760	0.001958523	-0.013858817	0.001901047	0.007996590
0.227	-0.001171513	0.017420999	0.000865899	-0.010895716	0.002123971	0.005424025
0.228	-0.000553992	0.015099646	0.000258197	-0.008820239	0.002057360	0.003746542
0.229	-0.000154176	0.013355055	-0.000099791	-0.007298668	0.001885809	0.002608342
0.230	0.000122204	0.011991823	-0.000317682	-0.006143293	0.001682889	0.001812761
0.231	0.000322542	0.010893812	-0.000452149	-0.005241462	0.001479504	0.001244240
0.232	0.000472855	0.009987946	-0.000534689	-0.004521706	0.001288470	0.000831282
0.233	0.000588505	0.009226022	-0.000583816	-0.003936643	0.001114527	0.000527777
0.234	0.000679124	0.008574960	-0.000610895	-0.003453701	0.000958725	0.000302964
0.235	0.000751068	0.008011289	-0.000623155	-0.003049808	0.000820437	0.000135730
0.236	0.000808701	0.007517866	-0.000625319	-0.002708185	0.000698322	0.000011223
0.237	0.000855149	0.007081878	-0.000620572	-0.002416410	0.000590820	-0.000081146
0.238	0.000892689	0.006693515	-0.000611072	-0.002165047	0.000496332	-0.000149154
0.239	0.000923040	0.006345147	-0.000598320	-0.001946849	0.000413358	-0.000198536
0.240	0.000947521	0.006030733	-0.000583378	-0.001756155	0.000340528	-0.000233594

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002555273	0.014646689	0.000536724	-0.002039575	0.004226845	0.012717483
0.191	0.002694582	0.015070376	0.000540515	-0.002138198	0.004408000	0.012983618
0.192	0.002846858	0.015523030	0.000543437	-0.002243841	0.004601475	0.013269146
0.193	0.003013907	0.016007744	0.000545308	-0.002357278	0.004809614	0.013576677
0.194	0.003197935	0.016528001	0.000545892	-0.002479360	0.005035443	0.013909081
0.195	0.003401507	0.017087853	0.000544910	-0.002611112	0.005282746	0.014269572
0.196	0.003627729	0.017691954	0.000542010	-0.002753708	0.005556340	0.014661645
0.197	0.003880363	0.018345695	0.000536752	-0.002908521	0.005862338	0.015089038
0.198	0.004163997	0.019055349	0.000528578	-0.003077159	0.006208501	0.015555641
0.199	0.004484240	0.019828286	0.000516788	-0.003261528	0.006604677	0.016065340
0.200	0.004848170	0.020673058	0.000500452	-0.003463880	0.007063466	0.016621551
0.201	0.005264535	0.021599888	0.000478399	-0.003686920	0.007600817	0.017226859
0.202	0.005744465	0.022620871	0.000449078	-0.003933901	0.008236990	0.017881930
0.203	0.006302249	0.023750468	0.000410432	-0.004208777	0.008997531	0.018583975
0.204	0.006956357	0.025005932	0.000359709	-0.004516359	0.009914101	0.019324164
0.205	0.007731188	0.026408111	0.000293148	-0.004862593	0.011024997	0.020083686
0.206	0.008659303	0.027982088	0.000205553	-0.005254843	0.012374018	0.020827617
0.207	0.009784952	0.029758078	0.000089614	-0.005702307	0.014005916	0.021496569
0.208	0.011169346	0.031772207	-0.000065152	-0.006216519	0.015954920	0.021996771
0.209	0.012898838	0.034066907	-0.000274082	-0.006811966	0.018221352	0.022193160
0.210	0.015097842	0.036690015	-0.000560136	-0.007506735	0.020732931	0.021917171
0.211	0.017949562	0.039690376	-0.000958525	-0.008322937	0.023298655	0.021010212
0.212	0.021729497	0.043104679	-0.001524580	-0.009286131	0.025591170	0.019421054
0.213	0.026860055	0.046922041	-0.002347490	-0.010421419	0.027216979	0.017332497
0.214	0.033992332	0.050994893	-0.003573211	-0.011740117	0.027907938	0.015220399
0.215	0.044107785	0.054817713	-0.005440120	-0.013199989	0.027726683	0.013743075
0.216	0.058529400	0.057008383	-0.008314985	-0.014597325	0.027132898	0.013522247
0.217	0.078338930	0.054286773	-0.012637145	-0.015315189	0.026907020	0.015008972
0.218	0.101758451	0.040584201	-0.018427777	-0.013967054	0.028131289	0.018568772
0.219	0.119040027	0.010793101	-0.023976240	-0.008850805	0.032753103	0.024966731
0.220	0.115917445	-0.026949868	-0.025766448	-0.000745559	0.048177872	0.035585513
0.221	0.093789670	-0.053617162	-0.022857372	0.006272239	0.100928280	0.021885030
0.222	0.068128799	-0.063221384	-0.018101633	0.009944921	0.074011862	-0.054968344
0.223	0.047931731	-0.062432272	-0.013816402	0.011086088	0.034170063	-0.047702919
0.224	0.033986358	-0.057659824	-0.010582458	0.010987351	0.021824137	-0.036965538
0.225	0.024638957	-0.052021396	-0.008255579	0.010408962	0.016540731	-0.030218436
0.226	0.018315577	-0.046672469	-0.006581011	0.009695047	0.013609456	-0.025749328
0.227	0.013941051	-0.041943622	-0.005354976	0.008984588	0.011709789	-0.022561528
0.228	0.010836797	-0.037864190	-0.004437236	0.008327744	0.010355824	-0.020153401
0.229	0.008579101	-0.034367617	-0.003734716	0.007738057	0.009329612	-0.018255428
0.230	0.006899777	-0.031366621	-0.003185580	0.007214641	0.008518357	-0.016711236
0.231	0.005625355	-0.028778685	-0.002748138	0.006751462	0.007857241	-0.015423906
0.232	0.004640907	-0.026533159	-0.002393734	0.006341179	0.007305973	-0.014329988
0.233	0.003868473	-0.024571826	-0.002102261	0.005976656	0.006837955	-0.013386039
0.234	0.003253973	-0.022847428	-0.001859325	0.005651503	0.006434794	-0.012561179
0.235	0.002759118	-0.021321744	-0.001654426	0.005360200	0.006083290	-0.011832770
0.236	0.002356277	-0.019963815	-0.001479789	0.005098032	0.005773712	-0.011183772
0.237	0.002025171	-0.018748465	-0.001329491	0.004861092	0.005498602	-0.010601098
0.238	0.001750676	-0.017655090	-0.001199047	0.004646021	0.005252273	-0.010074463
0.239	0.001521363	-0.016666740	-0.001084963	0.004450013	0.005030230	-0.009595685
0.240	0.001328467	-0.015769358	-0.000984492	0.004270693	0.004828880	-0.009158142

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000958089	-0.003449933	-0.001829764	-0.000390468	-0.001636395	0.002296533
0.191	0.000928391	-0.003663487	-0.001919361	-0.000368900	-0.001598300	0.002523950
0.192	0.000888724	-0.003891884	-0.002014960	-0.000346255	-0.001542542	0.002768213
0.193	0.000837441	-0.004136269	-0.002117667	-0.000322659	-0.001466049	0.003030294
0.194	0.000772585	-0.004397845	-0.002228876	-0.000298229	-0.001365184	0.003311163
0.195	0.000691828	-0.004677971	-0.002350363	-0.000273017	-0.001235583	0.003611816
0.196	0.000592361	-0.004978093	-0.002484381	-0.000246976	-0.001071968	0.003933188
0.197	0.000470763	-0.005299748	-0.002633782	-0.000219889	-0.000867894	0.004276079
0.198	0.000322835	-0.005644516	-0.002802187	-0.000191250	-0.000615418	0.004641002
0.199	0.000143388	-0.006013946	-0.002994198	-0.000160099	-0.000304678	0.005027936
0.200	-0.000074095	-0.006409362	-0.003215648	-0.000124723	0.000076706	0.005435878
0.201	-0.000337726	-0.006831643	-0.003473949	-0.000082287	0.000544251	0.005862202
0.202	-0.000657700	-0.007280717	-0.003778469	-0.000028146	0.001117491	0.006301516
0.203	-0.001046764	-0.007754799	-0.004140948	0.000045174	0.001820900	0.006743872
0.204	-0.001520607	-0.008249102	-0.004575843	0.000149529	0.002684681	0.007171944
0.205	-0.002098085	-0.008753880	-0.005100376	0.000303634	0.003745108	0.007556573
0.206	-0.002800590	-0.009251370	-0.005733798	0.000536636	0.005043317	0.007850155
0.207	-0.003649677	-0.009711648	-0.006494686	0.000893156	0.006620430	0.007977404
0.208	-0.004661144	-0.010087699	-0.007394666	0.001439381	0.008505744	0.007824278
0.209	-0.005833035	-0.010312059	-0.008425766	0.002268208	0.010692715	0.007229304
0.210	-0.007125749	-0.010300900	-0.009539493	0.003497823	0.013099253	0.005988703
0.211	-0.008438011	-0.009976230	-0.010621048	0.005253672	0.015519858	0.003895699
0.212	-0.009596376	-0.009315652	-0.011475489	0.007625322	0.017604702	0.000831266
0.213	-0.010386880	-0.008418527	-0.011854326	0.010611944	0.018924695	-0.003120760
0.214	-0.010645500	-0.007542234	-0.011533301	0.014105385	0.019150456	-0.007634130
0.215	-0.010351884	-0.007065252	-0.010381702	0.017964399	0.018233257	-0.012288016
0.216	-0.009655474	-0.007426297	-0.008329355	0.022148543	0.016412183	-0.016859111
0.217	-0.008869795	-0.009180648	-0.005203366	0.026817192	0.013980309	-0.021611063
0.218	-0.008705754	-0.013289884	-0.000468414	0.032389644	0.010772743	-0.027559198
0.219	-0.011488340	-0.021532342	0.007468928	0.039865694	0.004817610	-0.036716455
0.220	-0.026140733	-0.035510023	0.025845869	0.050896800	-0.012640865	-0.050953454
0.221	-0.080093491	-0.025173297	0.081140436	0.037171216	-0.068989325	-0.040448683
0.222	-0.055458502	0.049571059	0.056380587	-0.039976150	-0.046360768	0.034722820
0.223	-0.017916376	0.041372656	0.018354780	-0.033158651	-0.010483444	0.027096021
0.224	-0.007494989	0.030387565	0.007537267	-0.022948456	-0.001438794	0.016752651
0.225	-0.003739153	0.023725079	0.003544293	-0.016760952	0.001178258	0.010755517
0.226	-0.002014693	0.019486081	0.001708308	-0.012855366	0.001958591	0.007177390
0.227	-0.001080143	0.016583539	0.000744338	-0.010218315	0.002107716	0.004914926
0.228	-0.000511348	0.014473396	0.000195360	-0.008338899	0.002020545	0.003415192
0.229	-0.000135250	0.012866716	-0.000133296	-0.006942963	0.001846547	0.002385006
0.230	0.000128793	0.011598750	-0.000335750	-0.005872327	0.001647417	0.001658200
0.231	0.000322430	0.010569535	-0.000461826	-0.005029960	0.001449580	0.001135079
0.232	0.000469040	0.009715152	-0.000539745	-0.004353284	0.001264149	0.000752969
0.233	0.000582673	0.008992889	-0.000586346	-0.003800259	0.001095253	0.000470921
0.234	0.000672268	0.008373117	-0.000612095	-0.003341669	0.000943772	0.000261322
0.235	0.000743789	0.007834626	-0.000623718	-0.002956633	0.000809087	0.000105053
0.236	0.000801335	0.007361798	-0.000625581	-0.002629778	0.000689857	-0.000011462
0.237	0.000847971	0.006942913	-0.000620834	-0.002349841	0.000584766	-0.000097912
0.238	0.000885848	0.006568921	-0.000611462	-0.002108037	0.000492225	-0.000161503
0.239	0.000916627	0.006232758	-0.000598906	-0.001897641	0.000410814	-0.000207561
0.240	0.000941591	0.005928804	-0.000584189	-0.001713378	0.000339234	-0.000240097

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002611633	0.014697020	0.000530603	-0.002053495	0.004247254	0.012749200
0.191	0.002755950	0.015124952	0.000533907	-0.002153588	0.004433133	0.013019645
0.192	0.002913853	0.015582324	0.000536259	-0.002260871	0.004632362	0.013309745
0.193	0.003087273	0.016072279	0.000537457	-0.002376133	0.004847492	0.013622047
0.194	0.003278502	0.016598411	0.000537253	-0.002500276	0.005081743	0.013959371
0.195	0.003490281	0.017164848	0.000535338	-0.002634349	0.005339181	0.014324806
0.196	0.003725910	0.017776354	0.000531329	-0.002779566	0.005624941	0.014721678
0.197	0.003989390	0.018438445	0.000524744	-0.002937349	0.005945509	0.015153481
0.198	0.004285611	0.019157546	0.000514974	-0.003109368	0.006309093	0.015623749
0.199	0.004620562	0.019941205	0.000501252	-0.003297598	0.006726056	0.016135848
0.200	0.005001814	0.020798184	0.000482561	-0.003504380	0.007209584	0.016692437
0.201	0.005438748	0.021738951	0.000457613	-0.003732526	0.007776255	0.017295001
0.202	0.005943326	0.022775888	0.000424704	-0.003985422	0.008446928	0.017942600
0.203	0.006530943	0.023923783	0.000381565	-0.004267183	0.009247571	0.018630141
0.204	0.007221561	0.025200259	0.000325156	-0.004582822	0.010209756	0.019345526
0.205	0.008041600	0.026626530	0.000251316	-0.004938529	0.011370593	0.020065414
0.206	0.009026452	0.028228041	0.000154273	-0.005341973	0.012770452	0.020749087
0.207	0.010224346	0.030035211	0.000025884	-0.005802709	0.014446681	0.021330529
0.208	0.011702207	0.032083988	-0.000145558	-0.006332682	0.016419692	0.021710596
0.209	0.013554740	0.034415737	-0.000377244	-0.006946798	0.018667538	0.021755169
0.210	0.015918746	0.037075252	-0.000694989	-0.007663447	0.021088884	0.021312163
0.211	0.018996023	0.040104021	-0.001138482	-0.008504589	0.023468412	0.020265684
0.212	0.023090113	0.043521872	-0.001770219	-0.009494308	0.025483784	0.018633622
0.213	0.028663960	0.047280389	-0.002690673	-0.010652808	0.026803209	0.016667875
0.214	0.036422237	0.051148277	-0.004063125	-0.011977719	0.027266543	0.014864296
0.215	0.047390790	0.054437314	-0.006148339	-0.013391718	0.027040725	0.013830750
0.216	0.062818771	0.055396411	-0.009323763	-0.014608758	0.026643069	0.014105986
0.217	0.083232994	0.050188032	-0.013951955	-0.014856884	0.026886414	0.016087109
0.218	0.105209883	0.032747831	-0.019711385	-0.012636900	0.028967732	0.020171551
0.219	0.117389815	0.000678663	-0.024371918	-0.006699508	0.035540219	0.027276058
0.220	0.108723045	-0.034183887	-0.024834552	0.001192974	0.057847417	0.036651856
0.221	0.085484980	-0.055592289	-0.021351932	0.007214023	0.106314718	-0.004636852
0.222	0.061763346	-0.061948053	-0.016779937	0.010103181	0.057746896	-0.053259826
0.223	0.043736196	-0.060074015	-0.012864742	0.010888955	0.029929710	-0.043120845
0.224	0.031323748	-0.055229567	-0.009934730	0.010681933	0.020355808	-0.034139681
0.225	0.022937162	-0.049845329	-0.007815486	0.010097225	0.015862905	-0.028356608
0.226	0.017203082	-0.044808459	-0.006276598	0.009411408	0.013237405	-0.024411383
0.227	0.013194505	-0.040364661	-0.005139364	0.008736964	0.011484025	-0.021536615
0.228	0.010323036	-0.036524213	-0.004280797	0.008114666	0.010210930	-0.019331872
0.229	0.008217400	-0.033222381	-0.003618619	0.007555277	0.009234080	-0.017574884
0.230	0.006640006	-0.030379010	-0.003097636	0.007057544	0.008455137	-0.016133421
0.231	0.005435559	-0.027918984	-0.002680280	0.006615876	0.007816265	-0.014923903
0.232	0.004500202	-0.025777954	-0.002340501	0.006223565	0.007280896	-0.013890766
0.233	0.003762865	-0.023902702	-0.002059869	0.005874094	0.006824567	-0.012995465
0.234	0.003173896	-0.022249852	-0.001825102	0.005561608	0.006430194	-0.012210342
0.235	0.002697896	-0.020784168	-0.001626448	0.005281026	0.006085411	-0.011514942
0.236	0.002309172	-0.019476991	-0.001456625	0.005028012	0.005781016	-0.010893763
0.237	0.001988762	-0.018304915	-0.001310113	0.004798896	0.005509997	-0.010334805
0.238	0.001722461	-0.017248721	-0.001182663	0.004590571	0.005266905	-0.009828609
0.239	0.001499486	-0.016292543	-0.001070968	0.004400414	0.005047441	-0.009367607
0.240	0.001311537	-0.015423185	-0.000972416	0.004226197	0.004848157	-0.008945651

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000906106	-0.003470851	-0.001840716	-0.000370781	-0.001554485	0.002332245
0.191	0.000872268	-0.003684796	-0.001932233	-0.000348882	-0.001509085	0.002558519
0.192	0.000828034	-0.003913546	-0.002030203	-0.000325769	-0.001445273	0.002801302
0.193	0.000771680	-0.004158216	-0.002135813	-0.000301508	-0.001359845	0.003061489
0.194	0.000701160	-0.004420013	-0.002250560	-0.000276122	-0.001248991	0.003339967
0.195	0.000614028	-0.004700237	-0.002376336	-0.000249552	-0.001108134	0.003637583
0.196	0.000507331	-0.005000269	-0.002515526	-0.000221601	-0.000931739	0.003955073
0.197	0.000377474	-0.005321543	-0.002671143	-0.000191845	-0.000713040	0.004292948
0.198	0.000220046	-0.005665481	-0.002846996	-0.000159496	-0.000443708	0.004651306
0.199	0.000029612	-0.006033396	-0.003047897	-0.000123211	-0.000113425	0.005029533
0.200	-0.000200633	-0.006426257	-0.003279910	-0.000080742	0.000290707	0.005425758
0.201	-0.000479109	-0.006844417	-0.003550684	-0.000028506	0.000784757	0.005836111
0.202	-0.000816306	-0.007287027	-0.003869778	0.000039188	0.001388769	0.006253400
0.203	-0.001225171	-0.007751172	-0.004249001	0.000131284	0.002127523	0.006665100
0.204	-0.001721331	-0.008230458	-0.004702558	0.000261684	0.003030964	0.007050244
0.205	-0.002323021	-0.008712900	-0.005246828	0.000451886	0.004134007	0.007374668
0.206	-0.003049867	-0.009177874	-0.005898927	0.000734656	0.005474024	0.007584264
0.207	-0.003919631	-0.009592187	-0.006673169	0.001158871	0.007084315	0.007596177
0.208	-0.004941045	-0.009906217	-0.007573418	0.001794699	0.008979717	0.007289659
0.209	-0.006100748	-0.010053113	-0.008579269	0.002736352	0.011130448	0.006502280
0.210	-0.007344148	-0.009957570	-0.009625664	0.004096286	0.013423846	0.005043970
0.211	-0.008557015	-0.009563532	-0.010582339	0.005982168	0.015627644	0.002746509
0.212	-0.009566978	-0.008884460	-0.011251468	0.008454196	0.017393102	-0.000446471
0.213	-0.010188763	-0.008057067	-0.011405580	0.011484244	0.018345266	-0.004392143
0.214	-0.010308799	-0.007355459	-0.010857312	0.014964612	0.018249232	-0.008761426
0.215	-0.009954995	-0.007149010	-0.009496580	0.018793142	0.017132987	-0.013213935
0.216	-0.009308965	-0.007873550	-0.007223644	0.022987913	0.015231551	-0.017664996
0.217	-0.008747412	-0.010141039	-0.003772013	0.027760005	0.012713661	-0.022540615
0.218	-0.009252428	-0.015051081	0.001596376	0.033596318	0.009055278	-0.029029884
0.219	-0.014154935	-0.024411378	0.011248415	0.041632835	0.001210934	-0.039159612
0.220	-0.036188033	-0.037218096	0.036295332	0.051357553	-0.023420920	-0.052162611
0.221	-0.086162206	0.001040194	0.087130403	0.010032339	-0.075619374	-0.013724919
0.222	-0.039853848	0.047889185	0.040578903	-0.038866646	-0.031181991	0.033533477
0.223	-0.014193563	0.036995994	0.014468652	-0.029142856	-0.007082050	0.023179653
0.224	-0.006405649	0.027834597	0.006339199	-0.020650132	-0.000591313	0.014621961
0.225	-0.003334897	0.022149734	0.003072256	-0.015386800	0.001400930	0.009563532
0.226	-0.001840850	0.018425914	0.001492450	-0.011966694	0.001996455	0.006463300
0.227	-0.000999086	0.015819731	0.000636442	-0.009606940	0.002087337	0.004462735
0.228	-0.000472714	0.013894417	0.000138558	-0.007898292	0.001983945	0.003116625
0.229	-0.000117832	0.012410730	-0.000164027	-0.006613892	0.001808653	0.002181509
0.230	0.000134915	0.011228948	-0.000352514	-0.005619541	0.001613405	0.001516065
0.231	0.000322301	0.010262672	-0.000470891	-0.004831299	0.001420889	0.001033896
0.232	0.000465396	0.009455822	-0.000544516	-0.004194196	0.001240767	0.000679872
0.233	0.000577086	0.008770432	-0.000588751	-0.003670807	0.001076653	0.000417497
0.234	0.000665675	0.008179925	-0.000613244	-0.003234884	0.000929272	0.000221940
0.235	0.000736767	0.007665104	-0.000624260	-0.002867492	0.000798016	0.000075848
0.236	0.000794291	0.007211742	-0.000625971	-0.002554664	0.000681693	-0.000033157
0.237	0.000841090	0.006809059	-0.000621215	-0.002285893	0.000578902	-0.000114061
0.238	0.000879277	0.006448724	-0.000611960	-0.002053137	0.000488225	-0.000173495
0.239	0.000910460	0.006124190	-0.000599587	-0.001850148	0.000408315	-0.000216410
0.240	0.000935883	0.005830228	-0.000585081	-0.001672005	0.000337937	-0.000246553

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002669657	0.014747408	0.000523977	-0.002067711	0.004270111	0.012781047
0.191	0.002819178	0.015179598	0.000526748	-0.002169305	0.004461019	0.013055581
0.192	0.002982936	0.015641702	0.000528478	-0.002278266	0.004666332	0.013349975
0.193	0.003162970	0.016136931	0.000528949	-0.002395404	0.004888793	0.013666712
0.194	0.003361709	0.016668955	0.000527888	-0.002521656	0.005131848	0.014008522
0.195	0.003582058	0.017241997	0.000524960	-0.002658102	0.005399829	0.014378359
0.196	0.003827522	0.017860925	0.000519746	-0.002806000	0.005698184	0.014779352
0.197	0.004102359	0.018531384	0.000511720	-0.002966824	0.006033769	0.015214714
0.198	0.004411778	0.019259946	0.000500218	-0.003142303	0.006415218	0.015687571
0.199	0.004762180	0.020054335	0.000484399	-0.003334488	0.006853379	0.016200703
0.200	0.005161657	0.020923515	0.000463150	-0.003545809	0.007361966	0.016755926
0.201	0.005620273	0.021878190	0.000435057	-0.003779187	0.007958083	0.017353512
0.202	0.006150885	0.022931014	0.000398245	-0.004038143	0.008663023	0.017990793
0.203	0.006770084	0.024097083	0.000350214	-0.004326958	0.009502876	0.018660235
0.204	0.007499422	0.025394325	0.000287611	-0.004650845	0.010508669	0.019346343
0.205	0.008367531	0.026844277	0.000205824	-0.005016243	0.011715553	0.020021343
0.206	0.009412856	0.028472610	0.000098447	-0.005431116	0.013159397	0.020639110
0.207	0.010687945	0.030309733	-0.000043583	-0.005905363	0.014868750	0.021128239
0.208	0.012265929	0.032391043	-0.000233340	-0.006451301	0.016848954	0.021386911
0.209	0.014250568	0.034756150	-0.000490077	-0.007084171	0.019055984	0.021286707
0.210	0.016792059	0.037445521	-0.000842781	-0.007822474	0.021363609	0.020698253
0.211	0.020112145	0.040490821	-0.001336113	-0.008687609	0.023542822	0.019552319
0.212	0.024543786	0.043890225	-0.002040406	-0.009701292	0.025291935	0.017930569
0.213	0.030591173	0.047548011	-0.003068340	-0.010876813	0.026348933	0.016135184
0.214	0.039007307	0.051130244	-0.004600874	-0.012193742	0.026653444	0.014660999
0.215	0.050835737	0.053732958	-0.006918084	-0.013530739	0.026456509	0.014059836
0.216	0.067159752	0.053202999	-0.010391361	-0.014505677	0.026322354	0.014800547
0.217	0.087734209	0.045234773	-0.015254870	-0.014194341	0.027111940	0.017246330
0.218	0.107381730	0.024308596	-0.020783301	-0.011089032	0.030222396	0.021848061
0.219	0.114127858	-0.008710559	-0.024394125	-0.004577139	0.039449768	0.029487089
0.220	0.101129083	-0.039788228	-0.023712446	0.002836193	0.070230887	0.033732491
0.221	0.077838554	-0.056506688	-0.019907248	0.007904774	0.096126235	-0.027980569
0.222	0.056150117	-0.060354363	-0.015585457	0.010152820	0.046812694	-0.049272652
0.223	0.040059567	-0.057738241	-0.012015057	0.010666110	0.026838345	-0.039275990
0.224	0.028974638	-0.052919530	-0.009354067	0.010382558	0.019168315	-0.031706503
0.225	0.021420466	-0.047796516	-0.007417504	0.009800366	0.015280747	-0.026699563
0.226	0.016201555	-0.043053939	-0.005998733	0.009143310	0.012906788	-0.023192810
0.227	0.012516429	-0.038874344	-0.004940863	0.008503100	0.011279443	-0.020588311
0.228	0.009852875	-0.035254833	-0.004135691	0.007913133	0.010078163	-0.018563195
0.229	0.007884342	-0.032133406	-0.003510238	0.007382020	0.009146069	-0.016932856
0.230	0.006399612	-0.029436580	-0.003015085	0.006908289	0.008396857	-0.015584873
0.231	0.005259234	-0.027095947	-0.002616285	0.006486777	0.007778679	-0.014446876
0.232	0.004369085	-0.025052830	-0.002290093	0.006111361	0.007258222	-0.013470040
0.233	0.003664251	-0.023258541	-0.002019588	0.005776086	0.006812934	-0.012620111
0.234	0.003099029	-0.021673212	-0.001792485	0.005475582	0.006426904	-0.011872249
0.235	0.002640635	-0.020264326	-0.001599711	0.005205172	0.006088532	-0.011207942
0.236	0.002265134	-0.019005322	-0.001434456	0.004960844	0.005789127	-0.010613062
0.237	0.001954772	-0.017874426	-0.001291529	0.004739190	0.005522035	-0.010076607
0.238	0.001696188	-0.016853698	-0.001166922	0.004537314	0.005282059	-0.009589864
0.239	0.001479191	-0.015928271	-0.001057498	0.004352761	0.005065084	-0.009145821
0.240	0.001295915	-0.015085748	-0.000960773	0.004183441	0.004867798	-0.008738771

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000853291	-0.003490529	-0.001852455	-0.000350530	-0.001471613	0.002365263
0.191	0.000815247	-0.003704769	-0.001946000	-0.000328126	-0.001418836	0.002590161
0.192	0.000766367	-0.003933758	-0.002046455	-0.000304333	-0.001346880	0.002831190
0.193	0.000704849	-0.004178588	-0.002155090	-0.000279146	-0.001252401	0.003089157
0.194	0.000628552	-0.004440431	-0.002273499	-0.000252491	-0.001131415	0.003364832
0.195	0.000534913	-0.004720534	-0.002403686	-0.000224182	-0.000979137	0.003658895
0.196	0.000420835	-0.005020197	-0.002548169	-0.000193854	-0.000789773	0.003971850
0.197	0.000282554	-0.005340729	-0.002710115	-0.000160851	-0.000556246	0.004303877
0.198	0.000115455	-0.005683369	-0.002893502	-0.000124078	-0.000269860	0.004654602
0.199	-0.000086133	-0.006049161	-0.003103336	-0.000081765	0.000080123	0.005022738
0.200	-0.000329270	-0.006438672	-0.003345876	-0.000031079	0.000507057	0.005405455
0.201	-0.000622633	-0.006851673	-0.003628944	0.000032373	0.001027453	0.005797511
0.202	-0.000976918	-0.007286473	-0.003962195	0.000115411	0.001661684	0.006189769
0.203	-0.001405126	-0.007738962	-0.004357329	0.000228534	0.002434508	0.006566967
0.204	-0.001922587	-0.008201072	-0.004828077	0.000387762	0.003375180	0.006904368
0.205	-0.002546524	-0.008658631	-0.005389501	0.000617389	0.004516378	0.007162813
0.206	-0.003294251	-0.009088351	-0.006056025	0.000953631	0.005890637	0.007282059
0.207	-0.004179026	-0.009454402	-0.006836905	0.001449069	0.007521953	0.007172834
0.208	-0.005201864	-0.009705924	-0.007727489	0.002176587	0.009409340	0.006710278
0.209	-0.006338059	-0.009779099	-0.008694828	0.003229457	0.011499796	0.005735594
0.210	-0.007520049	-0.009610343	-0.009659037	0.004711458	0.013653957	0.004078398
0.211	-0.008625877	-0.009167687	-0.010479137	0.006710729	0.015622936	0.001612588
0.212	-0.009492015	-0.008498120	-0.010961106	0.009261005	0.017073657	-0.001661490
0.213	-0.009965702	-0.007767173	-0.010901014	0.012316714	0.017692022	-0.005562096
0.214	-0.009979966	-0.007256985	-0.010141020	0.015781236	0.017325870	-0.009780293
0.215	-0.009602746	-0.007329122	-0.008575776	0.019593952	0.016052038	-0.014065478
0.216	-0.009050986	-0.008430931	-0.006059883	0.023823858	0.014071514	-0.018465326
0.217	-0.008802863	-0.011248326	-0.002215426	0.028726330	0.011388296	-0.023558022
0.218	-0.010232973	-0.017000602	0.003970867	0.034860987	0.007010808	-0.030671619
0.219	-0.018067424	-0.027238024	0.016062526	0.043312029	-0.003555340	-0.041559179
0.220	-0.049042166	-0.034857737	0.049391729	0.047856202	-0.036942193	-0.049325391
0.221	-0.076647811	0.024172134	0.077495980	-0.013899711	-0.066618090	0.009890164
0.222	-0.029531361	0.043976580	0.030072041	-0.035449304	-0.021250565	0.030085732
0.223	-0.011574276	0.033368858	0.011705564	-0.025836799	-0.004759252	0.019986812
0.224	-0.005564204	0.025670683	0.005403357	-0.018719504	0.000025973	0.012856770
0.225	-0.003003951	0.020770133	0.002682444	-0.014195260	0.001562919	0.008546503
0.226	-0.001693377	0.017475003	0.001308272	-0.011177925	0.002016974	0.005840337
0.227	-0.000928931	0.015122932	0.000542619	-0.009055140	0.002062513	0.004061815
0.228	-0.000439055	0.013359686	0.000088667	-0.007495636	0.001947003	0.002848657
0.229	-0.000102858	0.011985711	-0.000191084	-0.006310272	0.001771642	0.001997120
0.230	0.000139770	0.010881835	-0.000367187	-0.005384532	0.001580509	0.001386285
0.231	0.000321487	0.009973053	-0.000478686	-0.004645466	0.001393218	0.000940918
0.232	0.000461376	0.009209973	-0.000548475	-0.004044596	0.001218227	0.000612312
0.233	0.000571287	0.008558792	-0.000590596	-0.003548545	0.001058697	0.000367879
0.234	0.000658960	0.007995590	-0.000613980	-0.003133651	0.000915245	0.000185198
0.235	0.000729673	0.007502958	-0.000624478	-0.002782709	0.000787276	0.000048482
0.236	0.000787159	0.007067906	-0.000626019	-0.002482937	0.000673665	-0.000053609
0.237	0.000834139	0.006680530	-0.000621296	-0.002224661	0.000573091	-0.000129361
0.238	0.000872647	0.006333139	-0.000612183	-0.002000439	0.000484212	-0.000184914
0.239	0.000904238	0.006019653	-0.000600013	-0.001804454	0.000405757	-0.000224890
0.240	0.000930125	0.005735206	-0.000585735	-0.001632112	0.000336547	-0.000252789

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002729215	0.014798146	0.000516882	-0.002082341	0.004295280	0.012813092
0.191	0.002884138	0.015234628	0.000519076	-0.002185473	0.004491504	0.013091497
0.192	0.003053998	0.015701502	0.000520127	-0.002296149	0.004703249	0.013389871
0.193	0.003240917	0.016202043	0.000519809	-0.002415210	0.004933380	0.013710691
0.194	0.003447482	0.016740006	0.000517813	-0.002543627	0.005185592	0.014056563
0.195	0.003676775	0.017319698	0.000513788	-0.002682506	0.005464496	0.014430251
0.196	0.003932519	0.017946097	0.000507270	-0.002833155	0.005775840	0.014834674
0.197	0.004219242	0.018624974	0.000497686	-0.002997098	0.006126837	0.015272726
0.198	0.004542499	0.019363048	0.000484309	-0.003176129	0.006526524	0.015747072
0.199	0.004909126	0.020168213	0.000466219	-0.003372373	0.006986195	0.016259845
0.200	0.005327778	0.021049629	0.000442199	-0.003588353	0.007520019	0.016811932
0.201	0.005809254	0.022018232	0.000410694	-0.003827104	0.008145508	0.017402301
0.202	0.006367391	0.023086945	0.000369641	-0.004092288	0.008884209	0.018026441
0.203	0.007019988	0.024271061	0.000316300	-0.004388336	0.009761960	0.018674242
0.204	0.007790413	0.025588865	0.000246952	-0.004720684	0.010808769	0.019326862
0.205	0.008709648	0.027062094	0.000156498	-0.005096009	0.012057063	0.019952238
0.206	0.009819450	0.028716499	0.000037830	-0.005522563	0.013537168	0.020499506
0.207	0.011177052	0.030582237	-0.000119139	-0.006010569	0.015267687	0.020893426
0.208	0.012862317	0.032693705	-0.000329001	-0.006572666	0.017238251	0.021032513
0.209	0.014988811	0.035087944	-0.000613298	-0.007224316	0.019384110	0.020798687
0.210	0.017721166	0.037799568	-0.001004544	-0.007983897	0.021559694	0.020090226
0.211	0.021302382	0.040847485	-0.001552887	-0.008871727	0.023533183	0.018885562
0.212	0.026096011	0.044202476	-0.002337215	-0.009906036	0.025035682	0.017321570
0.213	0.032646722	0.047710254	-0.003483141	-0.011090755	0.025878341	0.015732960
0.214	0.041746544	0.050913105	-0.005188990	-0.012382222	0.026089358	0.014598466
0.215	0.054418492	0.052658611	-0.007748618	-0.013605297	0.025988003	0.014414016
0.216	0.071464751	0.050378544	-0.011504239	-0.014270433	0.026182698	0.015591753
0.217	0.091655671	0.039472661	-0.016504608	-0.013321675	0.027609579	0.018477632
0.218	0.108162183	0.015576969	-0.021597825	-0.009377016	0.031999266	0.023572007
0.219	0.109571237	-0.017076341	-0.024084764	-0.002565481	0.044852799	0.031210606
0.220	0.093499149	-0.043928899	-0.022483359	0.004192583	0.082917486	0.023972270
0.221	0.070885287	-0.056629182	-0.018547427	0.008395410	0.079443809	-0.040233551
0.222	0.051194944	-0.058567322	-0.014507418	0.010124663	0.039354837	-0.044998399
0.223	0.036818936	-0.055458474	-0.011253023	0.010429064	0.024491042	-0.036021378
0.224	0.026887322	-0.050728832	-0.008830262	0.010091994	0.018182021	-0.029584007
0.225	0.020058653	-0.045865675	-0.007055179	0.009518238	0.014771428	-0.025211118
0.226	0.015293172	-0.041399191	-0.005743377	0.008889809	0.012608643	-0.022075597
0.227	0.011895878	-0.037464424	-0.004756868	0.008281959	0.011091570	-0.019706448
0.228	0.009419288	-0.034049442	-0.004000167	0.007722217	0.009954891	-0.017841054
0.229	0.007575205	-0.031095465	-0.003408348	0.007217503	0.009063845	-0.016325104
0.230	0.006175281	-0.028535189	-0.002937037	0.006766228	0.008342293	-0.015062576
0.231	0.005093910	-0.026306271	-0.002555470	0.006363641	0.007743598	-0.013990606
0.232	0.004245709	-0.024355108	-0.002241982	0.006004128	0.007237263	-0.013066120
0.233	0.003571189	-0.022637127	-0.001980993	0.005682261	0.006802496	-0.012258632
0.234	0.003028224	-0.021115653	-0.001761124	0.005393110	0.006424461	-0.011545805
0.235	0.002586399	-0.019760643	-0.001573923	0.005132365	0.006092260	-0.010910861
0.236	0.002223388	-0.018547461	-0.001413010	0.004896313	0.005797680	-0.010340907
0.237	0.001922548	-0.017455833	-0.001273503	0.004681786	0.005534397	-0.009825851
0.238	0.001671292	-0.016468995	-0.001151613	0.004486083	0.005297455	-0.009357652
0.239	0.001459992	-0.015573018	-0.001044364	0.004306905	0.005082911	-0.008929825
0.240	0.001281178	-0.014756242	-0.000949395	0.004142291	0.004887581	-0.008537056

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000799677	-0.003509125	-0.001864980	-0.000329617	-0.001387768	0.002395666
0.191	0.000757363	-0.003723564	-0.001960650	-0.000306523	-0.001327549	0.002618944
0.192	0.000703769	-0.003952657	-0.002063739	-0.000281801	-0.001247319	0.002857862
0.193	0.000636995	-0.004197502	-0.002175511	-0.000255416	-0.001143676	0.003113252
0.194	0.000554811	-0.004459213	-0.002297652	-0.000227158	-0.001012462	0.003385667
0.195	0.000454541	-0.004738968	-0.002432361	-0.000196709	-0.000848616	0.003675629
0.196	0.000332948	-0.005037970	-0.002582238	-0.000163510	-0.000646122	0.003983355
0.197	0.000186099	-0.005357386	-0.002750595	-0.000126655	-0.000397609	0.004308651
0.198	0.000009186	-0.005698246	-0.002941566	-0.000084706	-0.000094038	0.004650614
0.199	-0.000203673	-0.006061287	-0.003160322	-0.000035431	0.000275705	0.005007209
0.200	-0.000459761	-0.006446635	-0.003413273	0.000024641	0.000725351	0.005374551
0.201	-0.000767950	-0.006853431	-0.003708337	0.000100776	0.001271715	0.005745913
0.202	-0.001139054	-0.007279084	-0.004055166	0.000200995	0.001935315	0.006110078
0.203	-0.001585930	-0.007718222	-0.004465174	0.000337402	0.002740534	0.006448945
0.204	-0.002123380	-0.008161127	-0.004951293	0.000528195	0.003715358	0.006733937
0.205	-0.002767219	-0.008591518	-0.005526876	0.000800396	0.004889472	0.006921052
0.206	-0.003531920	-0.008983781	-0.006203063	0.001193392	0.006289468	0.006944506
0.207	-0.004425645	-0.009300242	-0.006983383	0.001762760	0.007928804	0.006710090
0.208	-0.005441350	-0.009490329	-0.007854197	0.002582691	0.009789907	0.006091708
0.209	-0.006543619	-0.009495633	-0.008770449	0.003743326	0.011797698	0.004938655
0.210	-0.007654642	-0.009266864	-0.009639813	0.005337481	0.013791338	0.003104891
0.211	-0.008650083	-0.008796855	-0.010315368	0.007433505	0.015515613	0.000506968
0.212	-0.009381231	-0.008162299	-0.010611817	0.010043253	0.016664199	-0.002807370
0.213	-0.009729522	-0.007549680	-0.010348402	0.013112858	0.016985186	-0.006636515
0.214	-0.009669555	-0.007243873	-0.009387474	0.016564361	0.016393650	-0.010709031
0.215	-0.009304465	-0.007603433	-0.007613659	0.020377923	0.014989481	-0.014867995
0.216	-0.008897598	-0.009101631	-0.004821197	0.024665680	0.012911135	-0.019286868
0.217	-0.009081640	-0.012507612	-0.000496076	0.029722330	0.009947217	-0.024683647
0.218	-0.011781869	-0.019100557	0.006771569	0.036166081	0.004492398	-0.032455407
0.219	-0.023595435	-0.029585759	0.022293221	0.044517560	-0.009861688	-0.043492309
0.220	-0.062261050	-0.025566136	0.062732830	0.037538084	-0.050771119	-0.039579648
0.221	-0.060617354	0.036293233	0.061324522	-0.026713328	-0.051058859	0.022468069
0.222	-0.022638632	0.039811855	0.023010234	-0.031717231	-0.014718705	0.026359557
0.223	-0.009658979	0.030338600	0.009663978	-0.023095149	-0.003118879	0.017366331
0.224	-0.004895419	0.023812183	0.004652253	-0.017076433	0.000486152	0.011375201
0.225	-0.002726535	0.019549975	0.002353558	-0.013151825	0.001682467	0.007669729
0.226	-0.001565356	0.016615733	0.001147915	-0.010472491	0.002025945	0.005292259
0.227	-0.000866596	0.014483497	0.000459198	-0.008553981	0.002035501	0.003703691
0.228	-0.000408715	0.012863400	0.000043656	-0.007125670	0.001910749	0.002606474
0.229	-0.000089300	0.011587886	-0.000215746	-0.006028773	0.001736057	0.001828909
0.230	0.000144057	0.010554799	-0.000380642	-0.005165057	0.001549048	0.001266964
0.231	0.000320451	0.009698800	-0.000485762	-0.004470899	0.001366659	0.000854852
0.232	0.000457334	0.008976217	-0.000552028	-0.003903374	0.001196561	0.000549415
0.233	0.000565563	0.008356884	-0.000592203	-0.003432641	0.001041399	0.000321432
0.234	0.000652363	0.007819244	-0.000614567	-0.003037330	0.000901691	0.000150624
0.235	0.000722714	0.007347481	-0.000624595	-0.002701779	0.000776862	0.000022596
0.236	0.000780164	0.006929716	-0.000625989	-0.002414273	0.000665846	-0.000073060
0.237	0.000827319	0.006556840	-0.000621309	-0.002165891	0.000567399	-0.000143998
0.238	0.000866139	0.006221741	-0.000612347	-0.001949734	0.000480253	-0.000195921
0.239	0.000898128	0.005918780	-0.000600381	-0.001760390	0.000403198	-0.000233131
0.240	0.000924466	0.005643418	-0.000586331	-0.001593563	0.000335116	-0.000258908

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002790398	0.014849205	0.000509275	-0.002097393	0.004322800	0.012845141
0.191	0.002950933	0.015290005	0.000510843	-0.002202098	0.004524623	0.013127169
0.192	0.003127100	0.015761676	0.000511171	-0.002314534	0.004743028	0.013429288
0.193	0.003321183	0.016267563	0.000510000	-0.002435565	0.004981142	0.013753820
0.194	0.003535902	0.016811495	0.000507008	-0.002566189	0.005242858	0.014103258
0.195	0.003774527	0.017397874	0.000501798	-0.002707562	0.005533029	0.014480218
0.196	0.004041011	0.018031783	0.000493872	-0.002861030	0.005857708	0.014887349
0.197	0.004340203	0.018719114	0.000482595	-0.003028168	0.006224474	0.015327108
0.198	0.004677968	0.019466730	0.000467191	-0.003210841	0.006642684	0.015801792
0.199	0.005061635	0.020282692	0.000446645	-0.003411249	0.007124052	0.016312755
0.200	0.005500470	0.021176356	0.000419612	-0.003632015	0.007683107	0.016859915
0.201	0.006006038	0.022158850	0.000384411	-0.003876277	0.008337655	0.017440771
0.202	0.006593224	0.023243344	0.000338762	-0.004147842	0.009109228	0.018048930
0.203	0.007281206	0.024445363	0.000279647	-0.004451310	0.010023119	0.018671693
0.204	0.008095222	0.025783405	0.000202960	-0.004792320	0.011107730	0.019286891
0.205	0.009068826	0.027279330	0.000103058	-0.005177791	0.012392026	0.019858539
0.206	0.010247357	0.028958801	-0.000027943	-0.005616249	0.013899863	0.020331921
0.207	0.011693119	0.030851415	-0.000201264	-0.006118208	0.015639071	0.020629808
0.208	0.013493254	0.032990030	-0.000433178	-0.006696562	0.017583639	0.020654203
0.209	0.015771900	0.035408139	-0.000747770	-0.007366849	0.019650549	0.020301592
0.210	0.018709138	0.038132668	-0.001181447	-0.008147018	0.021681421	0.019501241
0.211	0.022570360	0.041166275	-0.001790379	-0.009055655	0.023451900	0.018277495
0.212	0.027750262	0.044445604	-0.002662673	-0.010106113	0.024734639	0.016812014
0.213	0.034831224	0.047744922	-0.003937313	-0.011290019	0.025413006	0.015456372
0.214	0.044629299	0.050460060	-0.005828601	-0.012534518	0.025592094	0.014663529
0.215	0.058094628	0.051161571	-0.008635361	-0.013600642	0.025648457	0.014877128
0.216	0.075612608	0.046885879	-0.012640706	-0.013885337	0.026239269	0.016464499
0.217	0.094797716	0.033005638	-0.017652433	-0.012244097	0.028417757	0.019765552
0.218	0.107521298	0.006896562	-0.022122906	-0.007567636	0.034441628	0.025271682
0.219	0.104069611	-0.024230282	-0.023499929	-0.000727250	0.052047897	0.031655122
0.220	0.086091413	-0.046801175	-0.021211644	0.005283107	0.090393083	0.007111387
0.221	0.064618296	-0.056163550	-0.017284281	0.008726339	0.064248643	-0.043793781
0.222	0.046818824	-0.056669906	-0.013535490	0.010039686	0.034097854	-0.041053868
0.223	0.033953281	-0.053252043	-0.010567824	0.010184672	0.022651865	-0.033238463
0.224	0.025025524	-0.048654064	-0.008356162	0.009811584	0.017349738	-0.027713423
0.225	0.018831549	-0.044044839	-0.006724258	0.009250379	0.014322285	-0.023864959
0.226	0.014466681	-0.039836658	-0.005508036	0.008650040	0.012338732	-0.021046662
0.227	0.011326420	-0.036128838	-0.004585894	0.008072713	0.010918752	-0.018883790
0.228	0.009018473	-0.032903412	-0.003873319	0.007541233	0.009840400	-0.017161081
0.229	0.007287661	-0.030105062	-0.003312377	0.007061186	0.008987077	-0.015748808
0.230	0.005965543	-0.027672154	-0.002863118	0.006630931	0.008291261	-0.014564596
0.231	0.004938780	-0.025547824	-0.002497615	0.006246095	0.007710818	-0.013553623
0.232	0.004129551	-0.023683125	-0.002196021	0.005901572	0.007217883	-0.012677898
0.233	0.003483345	-0.022037150	-0.001943985	0.005592383	0.006793163	-0.011910175
0.234	0.002961261	-0.020576125	-0.001730952	0.005314002	0.006422803	-0.011230336
0.235	0.002535044	-0.019272268	-0.001549036	0.005062450	0.006096554	-0.010623153
0.236	0.002183838	-0.018102713	-0.001392257	0.004834293	0.005806646	-0.010076855
0.237	0.001892001	-0.017048562	-0.001256007	0.004626584	0.005547070	-0.009582176
0.238	0.001647718	-0.016094137	-0.001136716	0.004436794	0.005313082	-0.009131679
0.239	0.001441848	-0.015226377	-0.001031554	0.004262778	0.005100913	-0.008719362
0.240	0.001267296	-0.014434318	-0.000938269	0.004102689	0.004907502	-0.008340285

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000745290	-0.003526574	-0.001878258	-0.000307889	-0.001302979	0.002423236
0.191	0.000698642	-0.003741103	-0.001976153	-0.000283909	-0.001235248	0.002644633
0.192	0.000640241	-0.003970208	-0.002081884	-0.000258074	-0.001146746	0.002881254
0.193	0.000568124	-0.004214913	-0.002196883	-0.000230208	-0.001033851	0.003133688
0.194	0.000479959	-0.004476295	-0.002322929	-0.000200012	-0.000892237	0.003402408
0.195	0.000372948	-0.004755457	-0.002462241	-0.000167006	-0.000716705	0.003687686
0.196	0.000243720	-0.005053489	-0.002617582	-0.000130426	-0.000500968	0.003989452
0.197	0.000088204	-0.005371363	-0.002792435	-0.000089030	-0.000237334	0.004306974
0.198	-0.000098621	-0.005709928	-0.002990986	-0.000041123	0.000083465	0.004638980
0.199	-0.000322811	-0.006069558	-0.003218577	0.000016087	0.000472900	0.004982511
0.200	-0.000591826	-0.006449908	-0.003481657	0.000086751	0.000944921	0.005332532
0.201	-0.000914661	-0.006849419	-0.003788294	0.000177064	0.001516644	0.005680744
0.202	-0.001302122	-0.007264576	-0.004147916	0.000296302	0.002208376	0.006013745
0.203	-0.001766771	-0.007688733	-0.004571460	0.000458236	0.003043785	0.006310507
0.204	-0.002322581	-0.008110542	-0.005070768	0.000683211	0.004049018	0.006538672
0.205	-0.002983586	-0.008511795	-0.005657054	0.001000852	0.005249970	0.006649688
0.206	-0.003760941	-0.008865006	-0.006337635	0.001453324	0.006666293	0.006573058
0.207	-0.004657284	-0.009131595	-0.007109790	0.002098348	0.008299990	0.006211384
0.208	-0.005657518	-0.009262892	-0.007950754	0.003009940	0.010116817	0.005440363
0.209	-0.006716708	-0.009208071	-0.008804312	0.004273135	0.012021834	0.004121409
0.210	-0.007749996	-0.008933931	-0.009568509	0.005968295	0.013838858	0.002135847
0.211	-0.008635734	-0.008457505	-0.010094845	0.008145084	0.015315923	-0.000559355
0.212	-0.009244345	-0.007880541	-0.010209771	0.010798937	0.016180916	-0.003880299
0.213	-0.009491134	-0.007403874	-0.009752819	0.013875685	0.016240611	-0.007622566
0.214	-0.009387547	-0.007312928	-0.008596325	0.017320600	0.015460162	-0.011564277
0.215	-0.009071304	-0.007970227	-0.006601342	0.021151626	0.013938624	-0.015642556
0.216	-0.008871789	-0.009887441	-0.003486830	0.025516475	0.011721928	-0.020149668
0.217	-0.009646109	-0.013912757	0.001434429	0.030743686	0.008318172	-0.025922555
0.218	-0.014068830	-0.021258814	0.010151982	0.037444631	0.001320179	-0.034293891
0.219	-0.031027080	-0.030630307	0.030247567	0.044458823	-0.018004651	-0.044135645
0.220	-0.070304390	-0.009082599	0.070810838	0.020142281	-0.059373681	-0.022663606
0.221	-0.046043689	0.039787808	0.046601693	-0.030808435	-0.036918953	0.026395021
0.222	-0.017902685	0.036003106	0.018121052	-0.028289360	-0.010316436	0.022965148
0.223	-0.008215829	0.027783468	0.008109988	-0.020801382	-0.001931082	0.015198448
0.224	-0.004355275	0.022199554	0.004040375	-0.015663645	0.000831609	0.010119107
0.225	-0.002492061	0.018463136	0.002074133	-0.012231445	0.001769004	0.006908239
0.226	-0.001453876	0.015835497	0.001008013	-0.009838386	0.002025445	0.004807425
0.227	-0.000811282	0.013894700	0.000385171	-0.008097141	0.002006488	0.003382436
0.228	-0.000381542	0.012401657	0.000003296	-0.006784796	0.001874876	0.002386838
0.229	-0.000077207	0.011214830	-0.000237970	-0.005767219	0.001701496	0.001675002
0.230	0.000147696	0.010246254	-0.000392779	-0.004959753	0.001518668	0.001156994
0.231	0.000319270	0.009438761	-0.000492276	-0.004306654	0.001341259	0.000775039
0.232	0.000453320	0.008753711	-0.000555291	-0.003769870	0.001175819	0.000490750
0.233	0.000559948	0.008164082	-0.000593662	-0.003322625	0.001024810	0.000277877
0.234	0.000645911	0.007650406	-0.000615080	-0.002945577	0.000888664	0.000118034
0.235	0.000715910	0.007198294	-0.000624672	-0.002624445	0.000766826	-0.000001931
0.236	0.000773318	0.006796869	-0.000625932	-0.002348474	0.000658284	-0.000091595
0.237	0.000820625	0.006437755	-0.000621261	-0.002109443	0.000561817	-0.000158030
0.238	0.000859747	0.006114347	-0.000612452	-0.001900923	0.000476336	-0.000206540
0.239	0.000892126	0.005821418	-0.000600691	-0.001717884	0.000400633	-0.000241143
0.240	0.000918906	0.005554733	-0.000586868	-0.001556303	0.000333642	-0.000264914

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002853246	0.014900534	0.000501147	-0.002112862	0.004352619	0.012877032
0.191	0.003019608	0.015345677	0.000502037	-0.002219177	0.004560300	0.013162423
0.192	0.003202354	0.015822173	0.000501577	-0.002333412	0.004785679	0.013467927
0.193	0.003403897	0.016333432	0.000499483	-0.002456460	0.005032069	0.013795764
0.194	0.003627119	0.016883362	0.000495407	-0.002589349	0.005303583	0.014148281
0.195	0.003875487	0.017476455	0.000488915	-0.002733276	0.005605324	0.014527889
0.196	0.004153202	0.018117898	0.000479467	-0.002889632	0.005943631	0.014936953
0.197	0.004465391	0.018813704	0.000466379	-0.003060051	0.006326370	0.015377605
0.198	0.004818366	0.019570874	0.000448784	-0.003246456	0.006763291	0.015851448
0.199	0.005219931	0.020397633	0.000425581	-0.003451133	0.007266408	0.016359133
0.200	0.005679984	0.021303498	0.000395315	-0.003676793	0.007850541	0.016899462
0.201	0.006210971	0.022299834	0.000356108	-0.003926707	0.008533596	0.017468547
0.202	0.006828813	0.023399942	0.000305481	-0.004204803	0.009336813	0.018057966
0.203	0.007554298	0.024619577	0.000240082	-0.004515856	0.010284560	0.018652289
0.204	0.008414555	0.025977395	0.000155414	-0.004865717	0.011403162	0.019226527
0.205	0.009445972	0.027495244	0.000045203	-0.005261536	0.012717378	0.019741179
0.206	0.010697737	0.029198474	-0.000099262	-0.005712081	0.014243832	0.020138673
0.207	0.012237637	0.031115762	-0.000290470	-0.006228121	0.015979160	0.020341885
0.208	0.014160655	0.033277781	-0.000546555	-0.006822713	0.017882513	0.020259421
0.209	0.016602266	0.035713296	-0.000894407	-0.007511288	0.019855991	0.019805853
0.210	0.019758940	0.038439366	-0.001374717	-0.008310971	0.021735377	0.018943012
0.211	0.023919312	0.041438280	-0.002050200	-0.009237811	0.023312750	0.017737158
0.212	0.029508857	0.044604729	-0.003018742	-0.010298590	0.024407688	0.016403708
0.213	0.037142224	0.047627167	-0.004432699	-0.011469142	0.024971940	0.015298295
0.214	0.047637317	0.049731894	-0.006519472	-0.012640795	0.025176944	0.014842851
0.215	0.061803722	0.049193020	-0.009570087	-0.013501431	0.025450663	0.015433975
0.216	0.079462991	0.042716598	-0.013772755	-0.013336985	0.026510935	0.017403768
0.217	0.096988181	0.026000258	-0.018650209	-0.010981695	0.029590594	0.021086263
0.218	0.105539352	-0.001401217	-0.022349594	-0.005733576	0.037733832	0.026790029
0.219	0.097975336	-0.030107423	-0.022705173	0.000899248	0.060881935	0.029501820
0.220	0.079075185	-0.048618580	-0.019945363	0.006138416	0.088338381	-0.011510060
0.221	0.059002083	-0.055273073	-0.016121409	0.008931899	0.052685533	-0.043048770
0.222	0.042949122	-0.054722015	-0.012659191	0.009914000	0.030257084	-0.037576450
0.223	0.031410742	-0.051129402	-0.009950035	0.009937948	0.021173268	-0.030833115
0.224	0.023359021	-0.046689961	-0.007925668	0.009541948	0.016636723	-0.026050037
0.225	0.017722344	-0.042325922	-0.006421113	0.008996090	0.013922584	-0.022640096
0.226	0.013712715	-0.038359081	-0.005290581	0.008423059	0.012092938	-0.020095054
0.227	0.010802727	-0.034861820	-0.004426675	0.007874500	0.010759126	-0.018114037
0.228	0.008647322	-0.031812330	-0.003754379	0.007369470	0.009733733	-0.016519346
0.229	0.007019848	-0.029158845	-0.003221848	0.006912506	0.008915224	-0.015201350
0.230	0.005769250	-0.026844946	-0.002793025	0.006501966	0.008243457	-0.014089108
0.231	0.004792971	-0.024818726	-0.002442493	0.006133837	0.007680256	-0.013134683
0.232	0.004020017	-0.023035411	-0.002152052	0.005803457	0.007200040	-0.012304445
0.233	0.003400300	-0.021457445	-0.001908451	0.005506267	0.006784914	-0.011574025
0.234	0.002897837	-0.020053693	-0.001701886	0.005238107	0.006421921	-0.010925277
0.235	0.002486344	-0.018798441	-0.001524989	0.004995307	0.006101409	-0.010344364
0.236	0.002146315	-0.017670437	-0.001372146	0.004774681	0.005816020	-0.009820524
0.237	0.001863074	-0.016652065	-0.001239020	0.004573484	0.005560034	-0.009345234
0.238	0.001625425	-0.015728659	-0.001122217	0.004389365	0.005328929	-0.008911644
0.239	0.001424733	-0.014887957	-0.001019055	0.004220306	0.005119084	-0.008514179
0.240	0.001254255	-0.014119640	-0.000927389	0.004064574	0.004927554	-0.008148238

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000690145	-0.003542858	-0.001892245	-0.000285278	-0.001217325	0.002447991
0.191	0.000639105	-0.003757363	-0.001992442	-0.000260202	-0.001142029	0.002667222
0.192	0.000575836	-0.003986322	-0.002100939	-0.000232976	-0.001045149	0.002901138
0.193	0.000498298	-0.004230715	-0.002219245	-0.000203322	-0.000922922	0.003150198
0.194	0.000404061	-0.004491556	-0.002349227	-0.000170815	-0.000770857	0.003414693
0.195	0.000290216	-0.004769858	-0.002493201	-0.000134802	-0.000583560	0.003694648
0.196	0.000153261	-0.005066581	-0.002654038	-0.000094296	-0.000354516	0.003989655
0.197	-0.000011043	-0.005382544	-0.002835290	-0.000047814	-0.000075822	0.004298633
0.198	-0.000207839	-0.005718281	-0.003041343	0.000006856	0.000262136	0.004619446
0.199	-0.000443357	-0.006073825	-0.003277585	0.000072990	0.000671032	0.004948351
0.200	-0.000725183	-0.006448301	-0.003550578	0.000155466	0.001165079	0.005279096
0.201	-0.001062372	-0.006839460	-0.003868192	0.000261462	0.001761258	0.005601690
0.202	-0.001465558	-0.007242804	-0.004239608	0.000401532	0.002479502	0.005900506
0.203	-0.001946779	-0.007650372	-0.004675115	0.000591278	0.003342403	0.006151333
0.204	-0.002519018	-0.008049389	-0.005185076	0.000852880	0.004373657	0.006318612
0.205	-0.003194117	-0.008419944	-0.005778120	0.001218456	0.005594547	0.006349513
0.206	-0.003979505	-0.008733208	-0.006457418	0.001732474	0.007017096	0.006169828
0.207	-0.004872074	-0.008950750	-0.007213591	0.002453840	0.008631245	0.005680932
0.208	-0.005849049	-0.009027405	-0.008014950	0.003454939	0.010386712	0.004763290
0.209	-0.006857627	-0.008921766	-0.008795496	0.004814071	0.012171801	0.003293735
0.210	-0.007809337	-0.008617672	-0.009446596	0.006598528	0.013801475	0.001182209
0.211	-0.008589641	-0.008154679	-0.009821755	0.008841495	0.015035139	-0.001578438
0.212	-0.009090795	-0.007654769	-0.009760280	0.011527680	0.015638677	-0.004880056
0.213	-0.009260438	-0.007328205	-0.009117257	0.014608992	0.015470508	-0.008529666
0.214	-0.009143460	-0.007461372	-0.007764626	0.018055912	0.014528332	-0.012362596
0.215	-0.008916415	-0.008428668	-0.005527212	0.021919692	0.012887589	-0.016408207
0.216	-0.009003813	-0.010788456	-0.002031524	0.026376177	0.010467333	-0.021068829
0.217	-0.010576223	-0.015442344	0.003639505	0.031775357	0.006411994	-0.027262172
0.218	-0.017295841	-0.023291714	0.014305491	0.038543413	-0.002716794	-0.036007307
0.219	-0.040191108	-0.029028366	0.039779846	0.041817725	-0.027820318	-0.042146670
0.220	-0.068831567	0.009247545	0.069312014	0.001007981	-0.058414765	-0.003921749
0.221	-0.035067099	0.039030919	0.035476265	-0.030574140	-0.026342574	0.026047611
0.222	-0.014541909	0.032680776	0.014622596	-0.025304845	-0.007264858	0.020034647
0.223	-0.007100992	0.025606886	0.006897944	-0.018863049	-0.001053881	0.013388205
0.224	-0.003911715	0.020787737	0.003534165	-0.014438027	0.001093249	0.009044989
0.225	-0.002291527	0.017489002	0.001834214	-0.011414517	0.001830781	0.006242772
0.226	-0.001355897	0.015123907	0.000884952	-0.009265836	0.002018036	0.004376593
0.227	-0.000761796	0.013350798	0.000318992	-0.007679308	0.001976371	0.003093270
0.228	-0.000357002	0.011971020	-0.000033176	-0.006469914	0.001839743	0.002187118
0.229	-0.000066310	0.010864351	-0.000258181	-0.005523697	0.001668132	0.001533880
0.230	0.000150813	0.009954719	-0.000403828	-0.004767368	0.001489446	0.001055436
0.231	0.000317848	0.009191959	-0.000498094	-0.004151937	0.001316716	0.000700864
0.232	0.000449246	0.008541755	-0.000558129	-0.003643544	0.001155740	0.000435920
0.233	0.000554364	0.007979865	-0.000594846	-0.003218119	0.001008703	0.000236953
0.234	0.000639535	0.007488681	-0.000615400	-0.002858124	0.000875966	0.000087253
0.235	0.000709201	0.007055091	-0.000624603	-0.002550514	0.000756996	-0.000025221
0.236	0.000766581	0.006669122	-0.000625763	-0.002285403	0.000650841	-0.000109287
0.237	0.000814068	0.006323044	-0.000621193	-0.002055178	0.000556390	-0.000171503
0.238	0.000853484	0.006010763	-0.000612537	-0.001853892	0.000472508	-0.000216804
0.239	0.000886241	0.005727404	-0.000600979	-0.001676840	0.000398105	-0.000248948
0.240	0.000913452	0.005469016	-0.000587379	-0.001520254	0.000332166	-0.000270821

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002917818	0.014952087	0.000492476	-0.002128747	0.004384702	0.012908599
0.191	0.003090233	0.015401591	0.000492634	-0.002236708	0.004598487	0.013197075
0.192	0.003279819	0.015882930	0.000491322	-0.002352784	0.004831095	0.013505621
0.193	0.003489129	0.016399581	0.000488233	-0.002477894	0.005086026	0.013836338
0.194	0.003721215	0.016955526	0.000482987	-0.002613102	0.005367603	0.014191410
0.195	0.003979754	0.017555348	0.000475113	-0.002759643	0.005681172	0.014573021
0.196	0.004269210	0.018204333	0.000464021	-0.002918956	0.006033337	0.014983218
0.197	0.004595038	0.018908615	0.000448968	-0.003092730	0.006432252	0.015423697
0.198	0.004963969	0.019675328	0.000429006	-0.003282959	0.006887955	0.015895464
0.199	0.005384333	0.020512838	0.000402933	-0.003492006	0.007412725	0.016398329
0.200	0.005866725	0.021430836	0.000369154	-0.003722681	0.008021532	0.016929982
0.201	0.006424492	0.022440856	0.000325611	-0.003978374	0.008732213	0.017485014
0.202	0.007074744	0.023556364	0.000269582	-0.004263152	0.009565501	0.018053014
0.203	0.007839816	0.024793280	0.000197392	-0.004581969	0.010544502	0.018616256
0.204	0.008749110	0.026170264	0.000104047	-0.004940854	0.011692783	0.019146542
0.205	0.009841941	0.027709025	-0.000017353	-0.005347177	0.013030345	0.019601701
0.206	0.011171686	0.029434371	-0.000176501	-0.005809947	0.014566040	0.019922805
0.207	0.012812018	0.031373621	-0.000387256	-0.006340119	0.016285342	0.020034877
0.208	0.014866421	0.033554378	-0.000669826	-0.006950768	0.018133656	0.019855853
0.209	0.017482260	0.035999452	-0.001054141	-0.007657023	0.020002996	0.019321305
0.210	0.020873292	0.038713389	-0.001585589	-0.008474688	0.021729868	0.018425338
0.211	0.025351868	0.041653306	-0.002333963	-0.009416276	0.023130123	0.017270629
0.212	0.031372514	0.044663042	-0.003407237	-0.010479963	0.024072476	0.016095532
0.213	0.039573256	0.047329692	-0.004970526	-0.011621764	0.024571789	0.015250117
0.214	0.050743130	0.048688381	-0.007259535	-0.012690167	0.024857464	0.015123237
0.215	0.065468506	0.046712998	-0.010540324	-0.013292681	0.025407962	0.016069900
0.216	0.082864645	0.037899768	-0.014867024	-0.012618730	0.027022046	0.018392907
0.217	0.098106131	0.018674987	-0.019456063	-0.009569151	0.031201877	0.022397424
0.218	0.102389636	-0.009037805	-0.022291637	-0.003943933	0.042071652	0.027821297
0.219	0.091602519	-0.034743084	-0.021765641	0.002298449	0.070054530	0.023211335
0.220	0.072546811	-0.049586824	-0.018717616	0.006792601	0.078821155	-0.025314979
0.221	0.053985894	-0.054084869	-0.015057082	0.009040314	0.044298856	-0.040652928
0.222	0.039520708	-0.052765919	-0.011868418	0.009759829	0.027355988	-0.034550794
0.223	0.029147305	-0.049095892	-0.009391446	0.009692472	0.019958644	-0.028732740
0.224	0.021862229	-0.044830865	-0.007533557	0.009283388	0.016018360	-0.024559116
0.225	0.016716655	-0.040701542	-0.006142621	0.008754697	0.013564334	-0.021519553
0.226	0.013023125	-0.036959982	-0.005089156	0.008208028	0.011868122	-0.019211637
0.227	0.010320078	-0.033658243	-0.004278091	0.007686565	0.010611268	-0.017391807
0.228	0.008303022	-0.030772265	-0.003642653	0.007206310	0.009634169	-0.015912436
0.229	0.006770046	-0.028253814	-0.003136322	0.006770971	0.008847892	-0.014680433
0.230	0.005585322	-0.026051252	-0.002726472	0.006378942	0.008198643	-0.013634485
0.231	0.004655836	-0.024117160	-0.002389923	0.006026547	0.007651729	-0.012732562
0.232	0.003916694	-0.022410541	-0.002109955	0.005709527	0.007183612	-0.011944828
0.233	0.003321786	-0.020896877	-0.001874311	0.005423707	0.006777666	-0.011249453
0.234	0.002837779	-0.019547441	-0.001673871	0.005165261	0.006421756	-0.010630046
0.235	0.002440186	-0.018338411	-0.001501743	0.004930800	0.006106784	-0.010074021
0.236	0.002110744	-0.017250026	-0.001352653	0.004717368	0.005825777	-0.009571530
0.237	0.001835646	-0.016265847	-0.001222505	0.004522412	0.005573289	-0.009114734
0.238	0.001604316	-0.015372142	-0.001108086	0.004343733	0.005344995	-0.008697302
0.239	0.001408570	-0.014557397	-0.001006845	0.004179439	0.005137422	-0.008314062
0.240	0.001241989	-0.013811895	-0.000916735	0.004027900	0.004947738	-0.007960731

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000634264	-0.003557940	-0.001906891	-0.000261691	-0.001130872	0.002469863
0.191	0.000578776	-0.003772298	-0.002009458	-0.000235301	-0.001047968	0.002686628
0.192	0.000510577	-0.004000961	-0.002120786	-0.000206421	-0.000942659	0.002917482
0.193	0.000427546	-0.004244860	-0.002242457	-0.000174665	-0.000811048	0.003162729
0.194	0.000327161	-0.004504934	-0.002376421	-0.000139465	-0.000648482	0.003422462
0.195	0.000206407	-0.004782094	-0.002525082	-0.000099984	-0.000449384	0.003696429
0.196	0.000061656	-0.005077155	-0.002691408	-0.000054991	-0.000207032	0.003983849
0.197	-0.000111462	-0.005390734	-0.002879046	-0.000002677	0.000086699	0.004283130
0.198	-0.000318228	-0.005723081	-0.003092458	0.000059599	0.000441629	0.004591438
0.199	-0.000564993	-0.006073828	-0.003337098	0.000135687	0.000869633	0.004904080
0.200	-0.000859410	-0.006441559	-0.003619482	0.000231234	0.001384945	0.005213506
0.201	-0.001210487	-0.006823287	-0.003947307	0.000354429	0.002004356	0.005507994
0.202	-0.001628590	-0.007213544	-0.004329312	0.000517139	0.002747126	0.005769640
0.203	-0.002125145	-0.007603219	-0.004774818	0.000736500	0.003634290	0.005971585
0.204	-0.002711633	-0.007978016	-0.005292560	0.001036921	0.004686589	0.006074432
0.205	-0.003397482	-0.008316725	-0.005888277	0.001452519	0.005920138	0.006022041
0.206	-0.004186147	-0.008589899	-0.006560349	0.002029430	0.007338420	0.005737784
0.207	-0.005068754	-0.008760328	-0.007292734	0.002826777	0.008919341	0.005123808
0.208	-0.006015304	-0.008787811	-0.008045264	0.003914142	0.010597627	0.004067799
0.209	-0.006967605	-0.008641816	-0.008743973	0.005361575	0.012249032	0.002464943
0.210	-0.007836748	-0.008323321	-0.009276309	0.007223695	0.013685768	0.000253032
0.211	-0.008518966	-0.007892043	-0.009500243	0.009520132	0.014684752	-0.002545293
0.212	-0.008929537	-0.007485642	-0.009267487	0.012230331	0.015050427	-0.005809297
0.213	-0.009046533	-0.007320716	-0.008442633	0.015316834	0.014683443	-0.009368562
0.214	-0.008947024	-0.007686941	-0.006887034	0.018775202	0.013596736	-0.013119871
0.215	-0.008856052	-0.008978125	-0.004376893	0.022684512	0.011819172	-0.017181413
0.216	-0.009332823	-0.011800352	-0.000424224	0.027240357	0.009101573	-0.022052304
0.217	-0.011971129	-0.017048905	0.006201483	0.032781900	0.004121063	-0.028661984
0.218	-0.021666294	-0.024864577	0.019435857	0.039159514	-0.007829833	-0.037263864
0.219	-0.049765583	-0.023225077	0.049596143	0.035055225	-0.037993161	-0.035970906
0.220	-0.059894239	0.022838592	0.060308971	-0.013288695	-0.049950810	0.010061133
0.221	-0.027230158	0.036666194	0.027496079	-0.028666355	-0.018875712	0.024070914
0.222	-0.012083029	0.029824075	0.012040758	-0.022749954	-0.005093085	0.017548824
0.223	-0.006221197	0.023734459	0.005932920	-0.017209090	-0.000395645	0.011862681
0.224	-0.003542493	0.019541790	0.003110159	-0.013366214	0.001292202	0.008119219
0.225	-0.002118477	0.016610953	0.001626602	-0.010685251	0.001873498	0.005657838
0.226	-0.001269257	0.014472325	0.000776137	-0.008746716	0.002005365	0.003992081
0.227	-0.000717338	0.012846900	0.000259615	-0.007295955	0.001945597	0.002832104
0.228	-0.000334779	0.011568514	-0.000066216	-0.006178336	0.001805425	0.002005007
0.229	-0.000056482	0.010534525	-0.000276593	-0.005296523	0.001635929	0.001404181
0.230	0.000153467	0.009678889	-0.000413906	-0.004586808	0.001461332	0.000961466
0.231	0.000316267	0.008957449	-0.000503374	-0.004005990	0.001293103	0.000631820
0.232	0.000445166	0.008339652	-0.000560663	-0.003523864	0.001136393	0.000384604
0.233	0.000548852	0.007803708	-0.000595850	-0.003118740	0.000993145	0.000198452
0.234	0.000633267	0.007333661	-0.000615607	-0.002774689	0.000863664	0.000058145
0.235	0.000702615	0.006917548	-0.000624456	-0.002479775	0.000747437	-0.000047359
0.236	0.000759965	0.006546216	-0.000625529	-0.002224896	0.000643564	-0.000126200
0.237	0.000807614	0.006212531	-0.000621030	-0.002003008	0.000550996	-0.000184461
0.238	0.000847318	0.005910844	-0.000612534	-0.001808579	0.000468658	-0.000226744
0.239	0.000880446	0.005636619	-0.000601181	-0.001637216	0.000395514	-0.000256567
0.240	0.000908082	0.005386165	-0.000587806	-0.001485385	0.000330596	-0.000276641

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002984175	0.015003816	0.000483239	-0.002145046	0.004419004	0.012939674
0.191	0.003162877	0.015457693	0.000482608	-0.002254689	0.004639117	0.013230939
0.192	0.003359577	0.015943886	0.000480377	-0.002372648	0.004879190	0.013542168
0.193	0.003576974	0.016465938	0.000476214	-0.002499867	0.005142897	0.013875321
0.194	0.003818300	0.017027906	0.000469707	-0.002637447	0.005434766	0.014232402
0.195	0.004087458	0.017634457	0.000460343	-0.002786661	0.005760369	0.014615343
0.196	0.004389190	0.018290982	0.000447479	-0.002949000	0.006126557	0.015025850
0.197	0.004729298	0.019003718	0.000430306	-0.003126208	0.006541738	0.015465141
0.198	0.005114956	0.019779927	0.000407791	-0.003320346	0.007016188	0.015933576
0.199	0.005555070	0.020628120	0.000378617	-0.003533864	0.007562356	0.016430102
0.200	0.006060967	0.021558128	0.000341041	-0.003769668	0.008195242	0.016951235
0.201	0.006646963	0.022581635	0.000292808	-0.004031266	0.008932425	0.017490035
0.202	0.007331445	0.023712231	0.000230926	-0.004322866	0.009793844	0.018034139
0.203	0.008138466	0.024965904	0.000151351	-0.004649586	0.010800904	0.018563488
0.204	0.009099763	0.026361252	0.000048576	-0.005017641	0.011974016	0.019047406
0.205	0.010257860	0.027919654	-0.000085024	-0.005434604	0.013327877	0.019441753
0.206	0.011670616	0.029665058	-0.000260187	-0.005909671	0.014863295	0.019687547
0.207	0.013418012	0.031622890	-0.000492292	-0.006453913	0.016555079	0.019714098
0.208	0.015612414	0.033816986	-0.000803780	-0.007080327	0.018337811	0.019451467
0.209	0.018414116	0.036262217	-0.001228002	-0.007803357	0.020096466	0.018857115
0.210	0.022054595	0.038947759	-0.001815391	-0.008636924	0.021675236	0.017956102
0.211	0.026869632	0.041800041	-0.002643161	-0.009588811	0.022918770	0.016880852
0.212	0.033339647	0.044602144	-0.003829626	-0.010646193	0.023745467	0.015883546
0.213	0.042112734	0.046823252	-0.005551101	-0.011740643	0.024227006	0.015302294
0.214	0.053908517	0.047290464	-0.008044342	-0.012671035	0.024645980	0.015491679
0.215	0.068995592	0.043696453	-0.011528935	-0.012961117	0.025534909	0.016770148
0.216	0.085667813	0.032507968	-0.015886801	-0.011732994	0.027804017	0.019410900
0.217	0.098099805	0.011279173	-0.020039691	-0.008052905	0.033346175	0.023621175
0.218	0.098307176	-0.015813908	-0.021981186	-0.002256553	0.047567629	0.027834787
0.219	0.085205288	-0.038240958	-0.020739446	0.003472728	0.076759080	0.012308002
0.220	0.066548526	-0.049889694	-0.017549309	0.007279120	0.067129438	-0.032518477
0.221	0.049512832	-0.052695997	-0.014086413	0.009074316	0.038205112	-0.037813252
0.222	0.036476226	-0.050830940	-0.011153794	0.009586392	0.025099469	-0.031919719
0.223	0.027125643	-0.047153380	-0.008884947	0.009450758	0.018942568	-0.026881334
0.224	0.020513478	-0.043070834	-0.007175341	0.009035942	0.015476418	-0.023213371
0.225	0.015802195	-0.039164831	-0.005886084	0.008525516	0.013241215	-0.020489468
0.226	0.012390874	-0.035633459	-0.004902141	0.008004165	0.011661685	-0.018388707
0.227	0.009874349	-0.032513450	-0.004139155	0.007508215	0.010473958	-0.016712448
0.228	0.007983093	-0.029779638	-0.003537525	0.007051185	0.009541076	-0.015337343
0.229	0.006536720	-0.027387229	-0.003055404	0.006636130	0.008784726	-0.014184002
0.230	0.005412787	-0.025288962	-0.002663202	0.006261504	0.008156609	-0.013199259
0.231	0.004526746	-0.023441483	-0.002339735	0.005923943	0.007625106	-0.012346172
0.232	0.003819163	-0.021807215	-0.002069612	0.005619557	0.007168515	-0.011598217
0.233	0.003247519	-0.020354408	-0.001841482	0.005344522	0.006771364	-0.010935808
0.234	0.002780891	-0.019056528	-0.001646848	0.005095317	0.006422272	-0.010344121
0.235	0.002396434	-0.017891491	-0.001479257	0.004868808	0.006112656	-0.009811697
0.236	0.002077028	-0.016840906	-0.001333746	0.004662255	0.005835900	-0.009329517
0.237	0.001809671	-0.015889421	-0.001206447	0.004473278	0.005586815	-0.008890365
0.238	0.001584365	-0.015024174	-0.001094312	0.004299822	0.005361266	-0.008488388
0.239	0.001393342	-0.014234345	-0.000994915	0.004140111	0.005155920	-0.008118784
0.240	0.001230492	-0.013510780	-0.000906301	0.003992614	0.004968048	-0.007777564

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000577677	-0.003571785	-0.001922136	-0.000237031	-0.001043718	0.002488781
0.191	0.000517690	-0.003785865	-0.002027127	-0.000209099	-0.000953176	0.002702764
0.192	0.000444501	-0.004014071	-0.002141340	-0.000178296	-0.000839386	0.002930177
0.193	0.000355917	-0.004257280	-0.002266413	-0.000144108	-0.000698362	0.003171151
0.194	0.000249324	-0.004516348	-0.002404378	-0.000105821	-0.000525282	0.003425555
0.195	0.000121604	-0.004792069	-0.002557719	-0.000062395	-0.000314396	0.003692836
0.196	-0.000030982	-0.005085102	-0.002729478	-0.000012335	-0.000058809	0.003971805
0.197	-0.000212922	-0.005395836	-0.002923386	0.000046511	0.000249804	0.004260317
0.198	-0.000429606	-0.005724215	-0.003143956	0.000117244	0.000621421	0.004554791
0.199	-0.000687462	-0.006069457	-0.003396624	0.000204322	0.001067979	0.004849524
0.200	-0.000994150	-0.006429577	-0.003687808	0.000314186	0.001603634	0.005135621
0.201	-0.001358534	-0.006800843	-0.004024913	0.000456061	0.002244769	0.005399585
0.202	-0.001790564	-0.007176832	-0.004416066	0.000643133	0.003009661	0.005621250
0.203	-0.002300788	-0.007547299	-0.004869439	0.000894146	0.003917389	0.005771001
0.204	-0.002899062	-0.007896746	-0.005391765	0.001235327	0.004985180	0.005806391
0.205	-0.003592090	-0.008203038	-0.005985535	0.001702539	0.006223348	0.005668537
0.206	-0.004379183	-0.008436795	-0.006644229	0.002342961	0.007626606	0.005279678
0.207	-0.005245940	-0.008563119	-0.007345176	0.003214934	0.009161130	0.004544760
0.208	-0.006156702	-0.008548124	-0.008040669	0.004383754	0.010749015	0.003361562
0.209	-0.007049138	-0.008372921	-0.008650287	0.005911273	0.012256629	0.001643787
0.210	-0.007837463	-0.008055100	-0.009060138	0.007840046	0.013499481	-0.000644377
0.211	-0.008431180	-0.007671708	-0.009134254	0.010179559	0.014276122	-0.003457682
0.212	-0.008769199	-0.007372469	-0.008734329	0.012908519	0.014427068	-0.006672945
0.213	-0.008857926	-0.007379322	-0.007727982	0.016003120	0.013884495	-0.010150643
0.214	-0.008808727	-0.007987781	-0.005956123	0.019482040	0.012659877	-0.013850843
0.215	-0.008910453	-0.009617133	-0.003133232	0.023445869	0.010710624	-0.017975273
0.216	-0.009907964	-0.012910533	0.001373250	0.028097978	0.007568821	-0.023097503
0.217	-0.013947681	-0.018642349	0.009222712	0.033690861	0.001320817	-0.030037355
0.218	-0.027290932	-0.025419251	0.025662669	0.038764291	-0.014136667	-0.037507524
0.219	-0.056922296	-0.012737350	0.056895502	0.023695692	-0.045700562	-0.025125352
0.220	-0.048769030	0.029895623	0.049093979	-0.020963851	-0.039262624	0.017491061
0.221	-0.021649370	0.033891570	0.021780682	-0.026293490	-0.013637871	0.021664221
0.222	-0.010234198	0.027371598	0.010082577	-0.020568994	-0.003511364	0.015447708
0.223	-0.005513986	0.022108876	0.005150975	-0.015784903	0.000104635	0.010565914
0.224	-0.003231456	0.018434357	0.002751156	-0.012422166	0.001443627	0.007315637
0.225	-0.001967939	0.015815492	0.001445688	-0.010030868	0.001901442	0.005140970
0.226	-0.001192219	0.013873517	0.000679465	-0.008274247	0.001988700	0.003647527
0.227	-0.000677246	0.012378810	0.000206163	-0.006943220	0.001914509	0.002595477
0.228	-0.000314607	0.011191532	-0.000096219	-0.005907724	0.001771970	0.001838521
0.229	-0.000047612	0.010223643	-0.000293392	-0.005084212	0.001604850	0.001284716
0.230	0.000155703	0.009417590	-0.000423105	-0.004417089	0.001434270	0.000874349
0.231	0.000314543	0.008734392	-0.000508164	-0.003868143	0.001270367	0.000567440
0.232	0.000441084	0.008146783	-0.000562917	-0.003410357	0.001117733	0.000336496
0.233	0.000543410	0.007635140	-0.000596689	-0.003024150	0.000978103	0.000162173
0.234	0.000627103	0.007184981	-0.000615710	-0.002695024	0.000851734	0.000030578
0.235	0.000696146	0.006785377	-0.000624238	-0.002412041	0.000738132	-0.000068435
0.236	0.000753470	0.006427917	-0.000625240	-0.002166813	0.000636448	-0.000142390
0.237	0.000801277	0.006106011	-0.000620818	-0.001952812	0.000545690	-0.000196940
0.238	0.000841263	0.005814421	-0.000612484	-0.001764887	0.000464839	-0.000236381
0.239	0.000874754	0.005548921	-0.000601336	-0.001598932	0.000392909	-0.000264010
0.240	0.000902806	0.005306059	-0.000588185	-0.001451632	0.000328979	-0.000282380

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003052381	0.015055671	0.000473409	-0.002161759	0.004455475	0.012970109
0.191	0.003237614	0.015513927	0.000471928	-0.002273122	0.004682123	0.013263853
0.192	0.003441712	0.016004979	0.000468709	-0.002393001	0.004929863	0.013577376
0.193	0.003667529	0.016532432	0.000463390	-0.002522377	0.005202547	0.013912500
0.194	0.003918489	0.017100413	0.000455527	-0.002662379	0.005504892	0.014271021
0.195	0.004198734	0.017713683	0.000444557	-0.002814327	0.005842683	0.014654601
0.196	0.004513296	0.018377716	0.000429786	-0.002979757	0.006222992	0.015064565
0.197	0.004868354	0.019098863	0.000410328	-0.003160475	0.006654436	0.015501633
0.198	0.005271555	0.019884500	0.000385059	-0.003358609	0.007147468	0.015965484
0.199	0.005732412	0.020743263	0.000352538	-0.003576694	0.007714619	0.016454160
0.200	0.006263063	0.021685128	0.000310857	-0.003817740	0.008370798	0.016962991
0.201	0.006878788	0.022721830	0.000257556	-0.004085357	0.009133068	0.017483486
0.202	0.007599414	0.023867097	0.000189333	-0.004383909	0.010020361	0.018001445
0.203	0.008450812	0.025136886	0.000101752	-0.004718662	0.011051974	0.018494691
0.204	0.009467222	0.026549599	-0.000011262	-0.005096009	0.012244749	0.018930559
0.205	0.010694614	0.028126070	-0.000158132	-0.005523697	0.013607727	0.019263848
0.206	0.012195644	0.029889030	-0.000350740	-0.006011063	0.015133694	0.019436987
0.207	0.014057030	0.031861402	-0.000606139	-0.006569196	0.016787739	0.019385572
0.208	0.016400648	0.034062062	-0.000949236	-0.007210805	0.018495815	0.019053569
0.209	0.019400115	0.036496186	-0.001417053	-0.007949321	0.020141146	0.018421148
0.210	0.023305015	0.039134020	-0.002065453	-0.008796040	0.021580789	0.017541331
0.211	0.028473568	0.041865040	-0.002979417	-0.009752574	0.022691778	0.016569616
0.212	0.035406455	0.044400791	-0.004287234	-0.010792325	0.023440550	0.015763780
0.213	0.044743168	0.046077693	-0.006173692	-0.011817760	0.023951326	0.015444209
0.214	0.057083987	0.045503317	-0.008866847	-0.012571612	0.024555445	0.015934420
0.215	0.072279294	0.040139549	-0.012514544	-0.012496694	0.025849623	0.017517631
0.216	0.087740500	0.026657667	-0.016795505	-0.010692534	0.028898771	0.020425599
0.217	0.096995182	0.004065652	-0.020386304	-0.006486322	0.036129852	0.024616237
0.218	0.093553535	-0.021618997	-0.021462488	-0.000713474	0.054036666	0.026047928
0.219	0.078972167	-0.040742326	-0.019674345	0.004436632	0.078121687	-0.001101089
0.220	0.061085623	-0.049683531	-0.016452189	0.007628481	0.056618285	-0.034939759
0.221	0.045525584	-0.051179585	-0.013202917	0.009051926	0.033689848	-0.035013679
0.222	0.033765751	-0.048937043	-0.010506842	0.009400607	0.023299247	-0.029621653
0.223	0.025314060	-0.045301364	-0.008424376	0.009214540	0.018079369	-0.025235438
0.224	0.019294350	-0.041403891	-0.006847155	0.008799463	0.014997119	-0.021991065
0.225	0.014968422	-0.037709429	-0.005649164	0.008307872	0.012948166	-0.019538397
0.226	0.011809856	-0.034374138	-0.004728121	0.007810744	0.011471454	-0.017619711
0.227	0.009461924	-0.031423208	-0.004008993	0.007338814	0.010346144	-0.016071914
0.228	0.007685336	-0.028831185	-0.003438448	0.006903578	0.009453896	-0.014791405
0.229	0.006318498	-0.026556581	-0.002978742	0.006507569	0.008725409	-0.013710213
0.230	0.005250767	-0.024556131	-0.002602982	0.006149323	0.008117164	-0.012782099
0.231	0.004405126	-0.022790172	-0.002291770	0.005825765	0.007600269	-0.011974516
0.232	0.003727041	-0.021224230	-0.002030915	0.005533341	0.007154674	-0.011263844
0.233	0.003177240	-0.019829072	-0.001809889	0.005268545	0.006765957	-0.010632484
0.234	0.002726993	-0.018580171	-0.001620764	0.005028138	0.006423435	-0.010067015
0.235	0.002354961	-0.017457036	-0.001457491	0.004809221	0.006118999	-0.009556993
0.236	0.002045078	-0.016442539	-0.001315397	0.004609249	0.005846371	-0.009094152
0.237	0.001785086	-0.015522337	-0.001190824	0.004426005	0.005600603	-0.008671847
0.238	0.001565525	-0.014684371	-0.001080879	0.004257566	0.005377736	-0.008284662
0.239	0.001379016	-0.013918472	-0.000983252	0.004102268	0.005174571	-0.007928138
0.240	0.001219735	-0.013216019	-0.000896077	0.003958671	0.004988479	-0.007598563

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000520407	-0.003584349	-0.001937928	-0.000211219	-0.000955902	0.002504681
0.191	0.000455875	-0.003798012	-0.002045383	-0.000181506	-0.000857707	0.002715550
0.192	0.000377653	-0.004025598	-0.002162499	-0.000148484	-0.000735470	0.002939115
0.193	0.000283467	-0.004267914	-0.002290990	-0.000111525	-0.000585037	0.003175331
0.194	0.000170624	-0.004525723	-0.002432947	-0.000069741	-0.000401469	0.003423815
0.195	0.000035907	-0.004799698	-0.002590919	-0.000021878	-0.000178872	0.003683685
0.196	-0.000124522	-0.005090316	-0.002768025	0.000033839	0.000089828	0.003953311
0.197	-0.000315248	-0.005397733	-0.002968028	0.000099933	0.000413069	0.004229955
0.198	-0.000541738	-0.005721566	-0.003195456	0.000179988	0.000800928	0.004509244
0.199	-0.000810454	-0.006060596	-0.003455685	0.000279090	0.001265320	0.004784422
0.200	-0.001128998	-0.006412266	-0.003754945	0.000404507	0.001820170	0.005045203
0.201	-0.001505960	-0.006772087	-0.004100228	0.000566491	0.002481211	0.005276330
0.202	-0.001950764	-0.007132735	-0.004498894	0.000779539	0.003265488	0.005455413
0.203	-0.002472877	-0.007482953	-0.004957719	0.001063913	0.004189649	0.005550287
0.204	-0.003080315	-0.007806285	-0.005481182	0.001447442	0.005266969	0.005515904
0.205	-0.003776873	-0.008080137	-0.006068264	0.001967325	0.006501532	0.005291486
0.206	-0.004557715	-0.008275950	-0.006707433	0.002671107	0.007879190	0.004799530
0.207	-0.005403368	-0.008362175	-0.007369661	0.003615431	0.009355148	0.003949649
0.208	-0.006273517	-0.008312265	-0.008000622	0.004860600	0.010840942	0.002651211
0.209	-0.007104429	-0.008119420	-0.008515380	0.006459779	0.012198118	0.000837243
0.210	-0.007815967	-0.007816686	-0.008800563	0.008445151	0.013249958	-0.001505169
0.211	-0.008332813	-0.007495662	-0.008726492	0.010819425	0.013818547	-0.004315472
0.212	-0.008617142	-0.007315199	-0.008161822	0.013564406	0.013776179	-0.007477100
0.213	-0.008703631	-0.007501448	-0.006970033	0.016670915	0.013075219	-0.010887126
0.214	-0.008741372	-0.008361354	-0.004961694	0.020177831	0.011707811	-0.014568258
0.215	-0.009105887	-0.010340660	-0.001774783	0.024199306	0.009532439	-0.018797504
0.216	-0.010790349	-0.014090524	0.003409261	0.028925334	0.005801602	-0.024184518
0.217	-0.016629153	-0.020063593	0.012816805	0.034365577	-0.002119182	-0.031233884
0.218	-0.033975401	-0.024150123	0.032807287	0.036576981	-0.021449317	-0.035934548
0.219	-0.058767911	0.000328896	0.058809026	0.009846057	-0.048054123	-0.011715804
0.220	-0.038803445	0.032227756	0.039025828	-0.023837679	-0.029701390	0.020178107
0.221	-0.017611411	0.031183545	0.017618322	-0.023940792	-0.009918376	0.019305307
0.222	-0.008810244	0.025258528	0.008561693	-0.018701750	-0.002336393	0.013667806
0.223	-0.004936327	0.020685742	0.004507763	-0.014548312	0.000488706	0.009454740
0.224	-0.002966642	0.017443739	0.002444300	-0.011585292	0.001558595	0.006613633
0.225	-0.001836037	0.015091544	0.001287054	-0.009440919	0.001917878	0.004682036
0.226	-0.001123375	0.013321374	0.000593208	-0.007842731	0.001969028	0.003337626
0.227	-0.000640966	0.011942902	0.000157897	-0.006617782	0.001883371	0.002380442
0.228	-0.000296257	0.010837787	-0.000123522	-0.005656035	0.001739408	0.001685941
0.229	-0.000039604	0.009930181	-0.000308741	-0.004885448	0.001574851	0.001174445
0.230	0.000157561	0.009169762	-0.000431507	-0.004257332	0.001408205	0.000793433
0.231	0.000312690	0.008522024	-0.000512508	-0.003737789	0.001248459	0.000507304
0.232	0.000437004	0.007962580	-0.000564915	-0.003302596	0.001099722	0.000291325
0.233	0.000538037	0.007473727	-0.000597376	-0.002934038	0.000963548	0.000127935
0.234	0.000621040	0.007042303	-0.000615718	-0.002618898	0.000840153	0.000004431
0.235	0.000689792	0.006658309	-0.000623953	-0.002347141	0.000729065	-0.000088529
0.236	0.000747091	0.006314007	-0.000624899	-0.002111022	0.000629481	-0.000157911
0.237	0.000795053	0.006003308	-0.000620561	-0.001904487	0.000540463	-0.000208975
0.238	0.000835316	0.005721346	-0.000612390	-0.001722736	0.000461045	-0.000245738
0.239	0.000869164	0.005464184	-0.000601448	-0.001561926	0.000390289	-0.000271293
0.240	0.000897625	0.005228597	-0.000588519	-0.001418949	0.000327317	-0.000288045

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003122495	0.015107591	0.000462964	-0.002178882	0.004494047	0.012999741
0.191	0.003314513	0.015570224	0.000460568	-0.002292000	0.004727414	0.013295638
0.192	0.003526305	0.016066129	0.000456285	-0.002413842	0.004983003	0.013611065
0.193	0.003760891	0.016598971	0.000449724	-0.002545419	0.005264832	0.013947679
0.194	0.004021899	0.017172958	0.000440396	-0.002687898	0.005577800	0.014307061
0.195	0.004313716	0.017792913	0.000427700	-0.002842638	0.005927880	0.014690567
0.196	0.004641692	0.018464411	0.000410874	-0.003011226	0.006322332	0.015099129
0.197	0.005012404	0.019193899	0.000388956	-0.003195527	0.006769942	0.015532934
0.198	0.005434000	0.019988859	0.000360718	-0.003397742	0.007281269	0.015990952
0.199	0.005916641	0.020858033	0.000324587	-0.003620487	0.007868827	0.016470297
0.200	0.006473306	0.021811494	0.000278480	-0.003866870	0.008547265	0.016965100
0.201	0.007120381	0.022861060	0.000219698	-0.004140621	0.009332987	0.017465396
0.202	0.007879161	0.024020471	0.000144620	-0.004446234	0.010243561	0.017955246
0.203	0.008777486	0.025305573	0.000048362	-0.004789129	0.011295907	0.018410671
0.204	0.009852276	0.026734419	-0.000075763	-0.005175854	0.012502941	0.018797593
0.205	0.011153186	0.028327048	-0.000237053	-0.005614297	0.013867877	0.019070728
0.206	0.012747987	0.030104546	-0.000448647	-0.006113875	0.015375802	0.019175369
0.207	0.014730553	0.032086608	-0.000729424	-0.006685573	0.016983436	0.019055141
0.208	0.017232750	0.034285892	-0.001106981	-0.007341579	0.018611003	0.018669216
0.209	0.020441942	0.036695644	-0.001622297	-0.008093863	0.020144370	0.018019974
0.210	0.024625693	0.039263208	-0.002336981	-0.008950228	0.021457892	0.017184744
0.211	0.030162511	0.041834152	-0.003343911	-0.009904429	0.022462835	0.016335570
0.212	0.037565057	0.044037208	-0.004780519	-0.010912979	0.023171394	0.015729365
0.213	0.047439651	0.045061689	-0.006835951	-0.011844129	0.023755895	0.015666686
0.214	0.060207377	0.043298149	-0.009716617	-0.012380217	0.024597725	0.016439693
0.215	0.075205083	0.036063575	-0.013471542	-0.011893821	0.026372202	0.018295687
0.216	0.088980634	0.020502665	-0.017559324	-0.009520329	0.030356810	0.021392952
0.217	0.094885335	-0.002737905	-0.020496625	-0.004922844	0.039648297	0.025152615
0.218	0.088379663	-0.026422003	-0.020783542	0.000660147	0.060703515	0.021628325
0.219	0.073030430	-0.042402150	-0.018606857	0.005212021	0.073812534	-0.013219876
0.220	0.056139250	-0.049097077	-0.015431300	0.007867547	0.048219502	-0.034748703
0.221	0.041969022	-0.049590080	-0.012399260	0.008987501	0.030262934	-0.032423359
0.222	0.031345705	-0.047097338	-0.009919830	0.009207781	0.021832826	-0.027601135
0.223	0.023685356	-0.043538099	-0.008004401	0.008985059	0.017336861	-0.023761317
0.224	0.018189123	-0.039824241	-0.006545686	0.008573681	0.014569813	-0.020874713
0.225	0.014206248	-0.036329518	-0.005429850	0.008101110	0.012681050	-0.018656827
0.226	0.011274741	-0.033177162	-0.004565870	0.007627090	0.011295576	-0.016899056
0.227	0.009079603	-0.030383698	-0.003886851	0.007177777	0.010226901	-0.015466677
0.228	0.007407781	-0.027923957	-0.003344944	0.006763011	0.009372125	-0.014272263
0.229	0.006114135	-0.025759592	-0.002906031	0.006384909	0.008669649	-0.013257411
0.230	0.005098470	-0.023850969	-0.002545600	0.006042098	0.008080135	-0.012381793
0.231	0.004290455	-0.022161820	-0.002245884	0.005731771	0.007577107	-0.011616680
0.232	0.003639977	-0.020660467	-0.001993765	0.005450684	0.007142016	-0.010941001
0.233	0.003110709	-0.019319967	-0.001779461	0.005195621	0.006761398	-0.010338920
0.234	0.002675918	-0.018117635	-0.001595568	0.004963597	0.006425212	-0.009798273
0.235	0.002315651	-0.017034439	-0.001436409	0.004751932	0.006125794	-0.009309535
0.236	0.002014809	-0.016054420	-0.001297579	0.004558262	0.005857177	-0.008865124
0.237	0.001761830	-0.015164167	-0.001175615	0.004380519	0.005614642	-0.008458915
0.238	0.001547751	-0.014352370	-0.001067771	0.004216905	0.005394398	-0.008085896
0.239	0.001365559	-0.013609465	-0.000971846	0.004065857	0.005193373	-0.007741927
0.240	0.001209700	-0.012927321	-0.000886055	0.003926020	0.005009033	-0.007423546

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000462494	-0.003595596	-0.001954193	-0.000184163	-0.000867544	0.002517491
0.191	0.000393380	-0.003808693	-0.002064135	-0.000152422	-0.000761701	0.002724897
0.192	0.000310083	-0.004035480	-0.002184172	-0.000116894	-0.000631009	0.002944200
0.193	0.000210261	-0.004276687	-0.002316071	-0.000076811	-0.000471201	0.003175152
0.194	0.000091138	-0.004532979	-0.002461977	-0.000031108	-0.000277219	0.003417101
0.195	-0.000050585	-0.004804884	-0.002624509	0.000021695	-0.000043020	0.003668812
0.196	-0.000218831	-0.005092697	-0.002806812	0.000083675	0.000238569	0.003928179
0.197	-0.000418260	-0.005396317	-0.003012673	0.000157742	0.000576083	0.004191838
0.198	-0.000654385	-0.005715024	-0.003246585	0.000247982	0.000979612	0.004454586
0.199	-0.000933647	-0.006047149	-0.003513804	0.000360135	0.001460937	0.004708581
0.200	-0.001263505	-0.006389553	-0.003820282	0.000502299	0.002033585	0.004942136
0.201	-0.001652206	-0.006737034	-0.004172474	0.000685766	0.002712440	0.005138239
0.202	-0.002108471	-0.007081429	-0.004576781	0.000926282	0.003512926	0.005272407
0.203	-0.002640533	-0.007410604	-0.005038419	0.001245497	0.004449017	0.005310186
0.204	-0.003254392	-0.007707454	-0.005559361	0.001672591	0.005529579	0.005204463
0.205	-0.003950834	-0.007949428	-0.006134896	0.002245650	0.006752213	0.004893486
0.206	-0.004721030	-0.008109542	-0.006748503	0.003011917	0.008094101	0.004301383
0.207	-0.005541087	-0.008160513	-0.007365252	0.004025532	0.009500627	0.003344056
0.208	-0.006367469	-0.008083871	-0.007925298	0.005341239	0.010875339	0.001943589
0.209	-0.007137217	-0.007884834	-0.008340819	0.007003851	0.012078796	0.000051578
0.210	-0.007778092	-0.007610408	-0.008500224	0.009037054	0.012945502	-0.002326038
0.211	-0.008231078	-0.007364159	-0.008279416	0.011439942	0.013321089	-0.005120495
0.212	-0.008481255	-0.007312120	-0.007550024	0.014200101	0.013103719	-0.008229068
0.213	-0.008591951	-0.007686127	-0.006164182	0.017322885	0.012253896	-0.011588840
0.214	-0.008759005	-0.008806686	-0.003892179	0.020862791	0.010726819	-0.015283079
0.215	-0.009473504	-0.011141926	-0.000277292	0.024937410	0.008249348	-0.019650539
0.216	-0.012050247	-0.015294390	0.005740402	0.029683986	0.003723589	-0.025272989
0.217	-0.020121131	-0.021061721	0.017085099	0.034578455	-0.006310451	-0.032003083
0.218	-0.040930686	-0.020207558	0.040099544	0.031765446	-0.028983836	-0.031695580
0.219	-0.054956383	0.012174163	0.055011367	-0.002697773	-0.044712218	0.000458276
0.220	-0.030924752	0.031995195	0.031039706	-0.024080918	-0.022197716	0.020283213
0.221	-0.014628003	0.028705048	0.014521354	-0.021778557	-0.007231398	0.017158124
0.222	-0.007691640	0.023426776	0.007357407	-0.017093960	-0.001450412	0.012152103
0.223	-0.004458410	0.019430626	0.003972472	-0.013466684	0.000785049	0.008495763
0.224	-0.002738995	0.016552570	0.002179791	-0.010839147	0.001645350	0.005996851
0.225	-0.001719674	0.014429969	0.001147162	-0.008906795	0.001925336	0.004272768
0.226	-0.001061548	0.012810725	0.000515942	-0.007447349	0.001947129	0.003057951
0.227	-0.000608016	0.011536048	0.000114197	-0.006316776	0.001852387	0.002184502
0.228	-0.000279520	0.010505272	-0.000148410	-0.005421475	0.001707752	0.001545796
0.229	-0.000032366	0.009652788	-0.000322773	-0.004699059	0.001545890	0.001072468
0.230	0.000159074	0.008934449	-0.000439186	-0.004106748	0.001383085	0.000718140
0.231	0.000310721	0.008319648	-0.000516444	-0.003614379	0.001227332	0.000451041
0.232	0.000432929	0.007786522	-0.000566678	-0.003200188	0.001082322	0.000248844
0.233	0.000532731	0.007319070	-0.000597923	-0.002848117	0.000949452	0.000095575
0.234	0.000615075	0.006905312	-0.000615637	-0.002546101	0.000828902	-0.000020407
0.235	0.000683550	0.006536092	-0.000623608	-0.002284914	0.000720223	-0.000107716
0.236	0.000740827	0.006204283	-0.000624511	-0.002057402	0.000622655	-0.000172814
0.237	0.000788942	0.005904252	-0.000620262	-0.001857940	0.000535311	-0.000220600
0.238	0.000829476	0.005631478	-0.000612257	-0.001682052	0.000457273	-0.000254836
0.239	0.000863673	0.005382290	-0.000601519	-0.001526141	0.000387650	-0.000278428
0.240	0.000892536	0.005153670	-0.000588810	-0.001387283	0.000325603	-0.000293644

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003194586	0.015159521	0.000451876	-0.002196411	0.004534643	0.013028427
0.191	0.003393650	0.015626520	0.000448497	-0.002311320	0.004774891	0.013326137
0.192	0.003613446	0.016127264	0.000443071	-0.002435166	0.005038480	0.013643060
0.193	0.003857162	0.016665475	0.000435173	-0.002568989	0.005329586	0.013980668
0.194	0.004128641	0.017245424	0.000424276	-0.002713995	0.005653273	0.014340307
0.195	0.004432540	0.017872019	0.000409722	-0.002871583	0.006015678	0.014723018
0.196	0.004774540	0.018550913	0.000390685	-0.003043393	0.006424217	0.015129312
0.197	0.005161638	0.019288642	0.000366119	-0.003231350	0.006887794	0.015558818
0.198	0.005602520	0.020092780	0.000334684	-0.003437724	0.007417000	0.016009778
0.199	0.006108037	0.020972159	0.000294662	-0.003665216	0.008024224	0.016478368
0.200	0.006692068	0.021936923	0.000243775	-0.003917034	0.008723712	0.016957550
0.201	0.007372172	0.022998910	0.000179071	-0.004197017	0.009530990	0.017435945
0.202	0.008171214	0.024171807	0.000096576	-0.004509789	0.010462028	0.017896069
0.203	0.009119138	0.025471238	-0.000009077	-0.004860908	0.011531057	0.018312504
0.204	0.010255727	0.026914725	-0.000145250	-0.005257055	0.012746850	0.018650403
0.205	0.011634563	0.028521212	-0.000322198	-0.005706220	0.014106819	0.018865420
0.206	0.013328845	0.030309640	-0.000554428	-0.006217815	0.015588962	0.018907081
0.207	0.015440001	0.032295642	-0.000862818	-0.006802574	0.017143317	0.018728453
0.208	0.018110288	0.034484189	-0.001277866	-0.007471881	0.018687414	0.018304562
0.209	0.021541015	0.036854036	-0.001844784	-0.008235707	0.020113749	0.017658662
0.210	0.026017026	0.039325153	-0.002631161	-0.009097325	0.021317325	0.016888274
0.211	0.031933534	0.041691655	-0.003737645	-0.010040699	0.022244256	0.016176045
0.212	0.039803585	0.043488213	-0.005309240	-0.011002050	0.022949991	0.015773085
0.213	0.050169205	0.043746873	-0.007533642	-0.011810665	0.023652452	0.015958254
0.214	0.063205899	0.040659415	-0.010579910	-0.012087007	0.024786745	0.016992324
0.215	0.077660697	0.031522306	-0.014372082	-0.011153845	0.027128178	0.019079252
0.216	0.089334281	0.014224426	-0.018152145	-0.008249033	0.032237189	0.022236127
0.217	0.091922407	-0.008949143	-0.020387023	-0.003411598	0.043915755	0.024869295
0.218	0.083010720	-0.030258110	-0.019992295	0.001854287	0.066047089	0.014249985
0.219	0.067456667	-0.043369208	-0.017562899	0.005822912	0.066200922	-0.021580899
0.220	0.051677546	-0.048231645	-0.014487236	0.008018408	0.041759302	-0.033362303
0.221	0.038793261	-0.047966250	-0.011668158	0.008891766	0.027593800	-0.030086964
0.222	0.029179419	-0.045319230	-0.009386073	0.009011512	0.020613799	-0.025812080
0.223	0.022217064	-0.041859838	-0.007620393	0.008762877	0.016689774	-0.022431364
0.224	0.017184147	-0.038326216	-0.006267956	0.008358297	0.014186571	-0.019850160
0.225	0.013507668	-0.035019651	-0.005226289	0.007904640	0.012436734	-0.017836867
0.226	0.010780759	-0.032038014	-0.004414223	0.007452611	0.011132654	-0.016222020
0.227	0.008724474	-0.029391350	-0.003771977	0.007024598	0.010115543	-0.014893723
0.228	0.007148600	-0.027055173	-0.003256515	0.006629069	0.009295400	-0.013777886
0.229	0.005922559	-0.024994090	-0.002836949	0.006267799	0.008617203	-0.012824084
0.230	0.004955164	-0.023171843	-0.002490874	0.005939550	0.008045359	-0.011997238
0.231	0.004182243	-0.021555140	-0.002201957	0.005641741	0.007555518	-0.011271828
0.232	0.003557637	-0.020114897	-0.001958081	0.005371408	0.007130473	-0.010629035
0.233	0.003047691	-0.018826266	-0.001750144	0.005125603	0.006757641	-0.010054595
0.234	0.002627500	-0.017668242	-0.001571224	0.004901575	0.006427573	-0.009537473
0.235	0.002278381	-0.016623141	-0.001415987	0.004696844	0.006133017	-0.009068973
0.236	0.001986145	-0.015676073	-0.001280266	0.004509212	0.005868303	-0.008642137
0.237	0.001739847	-0.014814510	-0.001160802	0.004336753	0.005628922	-0.008251319
0.238	0.001531002	-0.014027828	-0.001054974	0.004177781	0.005411246	-0.007891878
0.239	0.001352939	-0.013307038	-0.000960684	0.004030832	0.005212318	-0.007559971
0.240	0.001200362	-0.012644440	-0.000876226	0.003894621	0.005029703	-0.007252355

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000403976	-0.003605488	-0.001970849	-0.000155780	-0.000778750	0.002527141
0.191	0.000330249	-0.003817865	-0.002083291	-0.000121757	-0.000665279	0.002730723
0.192	0.000241852	-0.004043669	-0.002206233	-0.000083417	-0.000526182	0.002945329
0.193	0.000136373	-0.004283544	-0.002341506	-0.000039849	-0.000357071	0.003170494
0.194	0.000010966	-0.004538046	-0.002491301	0.000010200	-0.000152779	0.003405279
0.195	-0.000137743	-0.004807554	-0.002658264	0.000068457	0.000092825	0.003648063
0.196	-0.000313743	-0.005092164	-0.002845568	0.000137311	0.000387004	0.003896243
0.197	-0.000521746	-0.005391508	-0.003056981	0.000220076	0.000738324	0.004145794
0.198	-0.000767270	-0.005704517	-0.003296919	0.000321363	0.001156805	0.004390658
0.199	-0.001056684	-0.006029068	-0.003570450	0.000447572	0.001653981	0.004621885
0.200	-0.001397232	-0.006361455	-0.003883151	0.000607638	0.002242813	0.004826392
0.201	-0.001796703	-0.006695793	-0.004240820	0.000813864	0.002937105	0.004985475
0.202	-0.002262990	-0.007023176	-0.004648745	0.001083172	0.003750402	0.005072713
0.203	-0.002802944	-0.007330788	-0.005110369	0.001438447	0.004693618	0.005051700
0.204	-0.003420424	-0.007601204	-0.005624981	0.001909928	0.005770946	0.004873859
0.205	-0.004113217	-0.007812442	-0.006184088	0.002536121	0.006973425	0.004477422
0.206	-0.004868785	-0.007939806	-0.006766327	0.003363329	0.008270037	0.003789434
0.207	-0.005659652	-0.007961046	-0.007331447	0.004442555	0.009597784	0.002733371
0.208	-0.006440556	-0.007866197	-0.007815210	0.005822725	0.010854879	0.001244511
0.209	-0.007151314	-0.007672031	-0.008128248	0.007541021	0.011904221	-0.000708581
0.210	-0.007729338	-0.007437860	-0.008161327	0.009614661	0.012593706	-0.003105596
0.211	-0.008132576	-0.007277013	-0.007794355	0.012041830	0.012790890	-0.005876009
0.212	-0.008368986	-0.007361690	-0.006897360	0.014817484	0.012412741	-0.008936416
0.213	-0.008532975	-0.007930642	-0.005303896	0.017960032	0.011415743	-0.012265597
0.214	-0.008879661	-0.009319144	-0.002733223	0.021533656	0.009698536	-0.016002644
0.215	-0.010051986	-0.012003165	0.001388953	0.025644240	0.006818572	-0.020525793
0.216	-0.013764776	-0.016438180	0.008431506	0.030302894	0.001251968	-0.026284820
0.217	-0.024441013	-0.021254143	0.022047699	0.033971493	-0.011276169	-0.031965418
0.218	-0.046619651	-0.013254587	0.046023394	0.024004784	-0.035208054	-0.024454791
0.219	-0.047844438	0.020325472	0.047875279	-0.011469194	-0.038034997	0.008924810
0.220	-0.024956785	0.030606752	0.024964312	-0.023111860	-0.016577896	0.019216537
0.221	-0.012370653	0.026496112	0.012160920	-0.019852875	-0.005250128	0.015264171
0.222	-0.006794551	0.021828524	0.006384454	-0.015700895	-0.000770704	0.010854172
0.223	-0.004056940	0.018315578	0.003520478	-0.012513672	0.001016318	0.007662274
0.224	-0.002542052	0.015746801	0.001950537	-0.010170533	0.001709533	0.005452088
0.225	-0.001616698	0.013823196	0.001023489	-0.008421452	0.001925369	0.003906332
0.226	-0.001005998	0.012337208	0.000446714	-0.007084120	0.001923307	0.002804773
0.227	-0.000578155	0.011155576	0.000074706	-0.006037833	0.001821473	0.002005522
0.228	-0.000264343	0.010192259	-0.000171000	-0.005202572	0.001676811	0.001416814
0.229	-0.000025841	0.009390220	-0.000335637	-0.004524014	0.001517930	0.000977946
0.230	0.000160280	0.008710789	-0.000446194	-0.003964624	0.001358858	0.000647967
0.231	0.000308652	0.008126635	-0.000519994	-0.003497411	0.001206940	0.000398325
0.232	0.000428864	0.007618133	-0.000568213	-0.003102770	0.001065494	0.000208842
0.233	0.000527493	0.007170802	-0.000598328	-0.002766122	0.000935781	0.000064954
0.234	0.000609206	0.006773721	-0.000615461	-0.002476429	0.000817955	-0.000044027
0.235	0.000677415	0.006418495	-0.000623192	-0.002225206	0.000711584	-0.000126056
0.236	0.000734675	0.006098554	-0.000624079	-0.002005837	0.000615960	-0.000187143
0.237	0.000782941	0.005808687	-0.000619925	-0.001813082	0.000530226	-0.000231846
0.238	0.000823740	0.005544687	-0.000612086	-0.001642767	0.000453519	-0.000263696
0.239	0.000858283	0.005303133	-0.000601552	-0.001491523	0.000384993	-0.000285428
0.240	0.000887539	0.005081188	-0.000589060	-0.001356593	0.000323839	-0.000299184

素子間隔 $d[\lambda]=0.265$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003268741	0.015211412	0.000440109	-0.002214344	0.004577180	0.013056058
0.191	0.003475132	0.015682765	0.000435672	-0.002331081	0.004824442	0.013355242
0.192	0.003703253	0.016188320	0.000429018	-0.002456970	0.005096154	0.013673240
0.193	0.003956479	0.016731865	0.000419684	-0.002593085	0.005396630	0.014011343
0.194	0.004238844	0.017317720	0.000407110	-0.002740665	0.005731069	0.014370594
0.195	0.004555355	0.017950887	0.000390561	-0.002901158	0.006105774	0.014751787
0.196	0.004912013	0.018637080	0.000369149	-0.003076252	0.006528267	0.015154946
0.197	0.005316264	0.019382919	0.000341734	-0.003267932	0.007007509	0.015579135
0.198	0.005777359	0.020196036	0.000306860	-0.003478537	0.007554063	0.016021835
0.199	0.006306915	0.021085373	0.000262642	-0.003710862	0.008180069	0.016478336
0.200	0.006919694	0.022061037	0.000206608	-0.003968192	0.008899180	0.016940428
0.201	0.007634581	0.023134898	0.000135512	-0.004254492	0.009725907	0.017395465
0.202	0.008476087	0.024320480	0.000045001	-0.004574498	0.010674368	0.017824634
0.203	0.009476404	0.025633052	-0.000070817	-0.004933890	0.011755888	0.018201503
0.204	0.010678358	0.027089394	-0.000220044	-0.005339456	0.012974992	0.018491153
0.205	0.012139703	0.028707004	-0.000413977	-0.005799230	0.014323508	0.018651178
0.206	0.013939381	0.030502111	-0.000668618	-0.006322522	0.015773240	0.018636563
0.207	0.016186696	0.032485288	-0.001006997	-0.006919632	0.017269429	0.018410840
0.208	0.019034596	0.034652147	-0.001462738	-0.007600796	0.018729934	0.017964907
0.209	0.022698227	0.036964049	-0.002085517	-0.008373343	0.020057322	0.017340904
0.210	0.027478262	0.039308646	-0.002949025	-0.009234814	0.021169577	0.016652301
0.211	0.033781278	0.041420655	-0.004161203	-0.010157198	0.022047418	0.016087138
0.212	0.042105241	0.042730267	-0.005872173	-0.011052871	0.022787324	0.015886926
0.213	0.052890354	0.042108262	-0.008260423	-0.011708171	0.023652093	0.016307463
0.214	0.065998044	0.037586705	-0.011439794	-0.011684473	0.025137536	0.017575964
0.215	0.079544647	0.026599891	-0.015187904	-0.010285289	0.028147285	0.019835340
0.216	0.088799306	0.008012503	-0.018557773	-0.006917225	0.034596683	0.022836729
0.217	0.088289632	-0.014444838	-0.020084876	-0.001992097	0.048754050	0.023295217
0.218	0.077628666	-0.033205877	-0.019131274	0.002870987	0.068367368	0.004802070
0.219	0.062289672	-0.043781444	-0.016560170	0.006294059	0.057924116	-0.026089560
0.220	0.047661662	-0.047168791	-0.013617911	0.008099896	0.036812258	-0.031517341
0.221	0.035952677	-0.046337500	-0.011002576	0.008773495	0.025468744	-0.027997002
0.222	0.027234601	-0.043607703	-0.008899601	0.008814770	0.019585155	-0.024216845
0.223	0.020889298	-0.040263341	-0.007268357	0.008548513	0.016120847	-0.021224293
0.224	0.016268290	-0.036904279	-0.006011547	0.008152792	0.013840124	-0.018905229
0.225	0.012866247	-0.033774755	-0.005037018	0.007717769	0.012211985	-0.017071380
0.226	0.010324159	-0.030952559	-0.004272296	0.007286654	0.010981062	-0.015584126
0.227	0.008394327	-0.028442928	-0.003663833	0.006878717	0.010011170	-0.014350071
0.228	0.006906480	-0.026222332	-0.003172835	0.006501297	0.009223189	-0.013306188
0.229	0.005742670	-0.024258159	-0.002771235	0.006155927	0.008567852	-0.012408954
0.230	0.004820150	-0.022517178	-0.002438585	0.005841428	0.008012715	-0.011627476
0.231	0.004080014	-0.020968878	-0.002159830	0.005555472	0.007535424	-0.010939228
0.232	0.003479691	-0.019586509	-0.001923739	0.005295354	0.007119995	-0.010327376
0.233	0.002987953	-0.018347140	-0.001721841	0.005058363	0.006754651	-0.009779054
0.234	0.002581570	-0.017231308	-0.001547653	0.004841968	0.006430493	-0.009284243
0.235	0.002243076	-0.016222584	-0.001396171	0.004643865	0.006140654	-0.008834975
0.236	0.001959000	-0.015307056	-0.001263443	0.004462025	0.005879735	-0.008424915
0.237	0.001719073	-0.014472991	-0.001146375	0.004294642	0.005643435	-0.008048824
0.238	0.001515231	-0.013710425	-0.001042482	0.004140139	0.005428272	-0.007702405
0.239	0.001341121	-0.013010896	-0.000949765	0.003997141	0.005231406	-0.007382083
0.240	0.001191692	-0.012367135	-0.000866588	0.003864437	0.005050489	-0.007084835

素子間隔 $d[\lambda]=0.2650$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000344889	-0.003613996	-0.001987766	-0.000125998	-0.000689701	0.002533578
0.191	0.000266530	-0.003825499	-0.002102679	-0.000089428	-0.000568674	0.002732958
0.192	0.000173016	-0.004050129	-0.002228498	-0.000047968	-0.000421239	0.002942426
0.193	0.000061876	-0.004288446	-0.002367077	-0.000000549	-0.000242944	0.003161273
0.194	-0.000069790	-0.004540869	-0.002520699	0.000054312	-0.000028444	0.003388208
0.195	-0.000225435	-0.004807649	-0.002691928	0.000118541	0.000228306	0.003621289
0.196	-0.000409090	-0.005088656	-0.002883986	0.000194881	0.000534693	0.003857350
0.197	-0.000625487	-0.005383252	-0.003100577	0.000287069	0.000899236	0.004091681
0.198	-0.000880116	-0.005689999	-0.003346024	0.000400228	0.001331844	0.004317361
0.199	-0.001179217	-0.006006349	-0.003625080	0.000541473	0.001843612	0.004524297
0.200	-0.001529718	-0.006328030	-0.003942881	0.000720521	0.002446778	0.004698073
0.201	-0.001938881	-0.006648545	-0.004304441	0.000950670	0.003153873	0.004818364
0.202	-0.002413643	-0.006958356	-0.004713784	0.001249912	0.003976291	0.004857029
0.203	-0.002959355	-0.007244188	-0.005172411	0.001642183	0.004921607	0.004776096
0.204	-0.003577681	-0.007488652	-0.005676797	0.002158464	0.005989166	0.004526174
0.205	-0.004263503	-0.007670855	-0.006214657	0.002837215	0.007163551	0.004046425
0.206	-0.005001018	-0.007769043	-0.006760038	0.003723244	0.008406259	0.003267942
0.207	-0.005760089	-0.007766575	-0.007268047	0.004863948	0.009647535	0.002122691
0.208	-0.006495240	-0.007662130	-0.007671092	0.006302479	0.010782810	0.000558975
0.209	-0.007150813	-0.007483279	-0.007879237	0.008069384	0.011679998	-0.001439905
0.210	-0.007675196	-0.007299981	-0.007785513	0.010177415	0.012201295	-0.003843852
0.211	-0.008043724	-0.007233590	-0.007271571	0.012625969	0.012233255	-0.006586177
0.212	-0.008287841	-0.007462065	-0.006200933	0.015417889	0.011703915	-0.009606711
0.213	-0.008537742	-0.008232263	-0.004381069	0.018581887	0.010552794	-0.012925706
0.214	-0.009124592	-0.009891857	-0.001468241	0.022183929	0.008600232	-0.016729994
0.215	-0.010885681	-0.012895169	0.003258038	0.026293989	0.005191488	-0.021401308
0.216	-0.016005549	-0.017391830	0.011544688	0.030667970	-0.001690145	-0.027094324
0.217	-0.029407516	-0.020150079	0.027531553	0.032075620	-0.016840113	-0.030632169
0.218	-0.049326323	-0.004174885	0.048883161	0.014184591	-0.038410288	-0.015096362
0.219	-0.040059917	0.024680987	0.040041637	-0.016373806	-0.030653848	0.013582057
0.220	-0.020473289	0.028791723	0.020376991	-0.021667973	-0.012418386	0.017707955
0.221	-0.010627975	0.024545199	0.010325396	-0.018157137	-0.003765209	0.013612686
0.222	-0.006064439	0.020424576	0.005587343	-0.014485862	-0.000244207	0.009735701
0.223	-0.003716524	0.017318981	0.003135672	-0.011668879	0.001196797	0.006933493
0.224	-0.002369677	0.015014537	0.001749657	-0.009568227	0.001756920	0.004968443
0.225	-0.001524593	0.013264498	0.000913017	-0.007978569	0.001920308	0.003576859
0.226	-0.000955542	0.011896766	0.000383994	-0.006749260	0.001898675	0.002574765
0.227	-0.000550756	0.010798883	0.000038542	-0.005778555	0.001791266	0.001841525
0.228	-0.000250354	0.009896991	-0.000191858	-0.004997733	0.001647017	0.001297768
0.229	-0.000020002	0.009141464	-0.000347341	-0.004359468	0.001490802	0.000890265
0.230	0.000161158	0.008498044	-0.000452536	-0.003830410	0.001335379	0.000582505
0.231	0.000306455	0.007942444	-0.000523147	-0.003386515	0.001187156	0.000348898
0.232	0.000424779	0.007457009	-0.000569496	-0.003010091	0.001049122	0.000171142
0.233	0.000522297	0.007028612	-0.000598569	-0.002687879	0.000922440	0.000035956
0.234	0.000603412	0.006647286	-0.000615172	-0.002409770	0.000807228	-0.000066502
0.235	0.000671387	0.006305294	-0.000622742	-0.002167894	0.000703153	-0.000143628
0.236	0.000728631	0.005996644	-0.000623594	-0.001956218	0.000609380	-0.000200934
0.237	0.000777046	0.005716467	-0.000619538	-0.001769825	0.000525196	-0.000242732
0.238	0.000818107	0.005460852	-0.000611866	-0.001604809	0.000449773	-0.000272328
0.239	0.000852987	0.005226602	-0.000601534	-0.001458009	0.000382304	-0.000292297
0.240	0.000882632	0.005011064	-0.000589259	-0.001326832	0.000322019	-0.000304665

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003344977	0.015263160	0.000427652	-0.002232670	0.004621567	0.013082430
0.191	0.003558973	0.015738832	0.000422084	-0.002351267	0.004875955	0.013382717
0.192	0.003795748	0.016249161	0.000414113	-0.002479237	0.005155876	0.013701357
0.193	0.004058873	0.016797988	0.000403240	-0.002617686	0.005465774	0.014039436
0.194	0.004352657	0.017389705	0.000388845	-0.002767891	0.005810987	0.014397773
0.195	0.004682336	0.018029353	0.000370152	-0.002931342	0.006197906	0.014776728
0.196	0.005054322	0.018722727	0.000346186	-0.003109779	0.006634137	0.015175914
0.197	0.005476532	0.019476506	0.000315707	-0.003305247	0.007128649	0.015593803
0.198	0.005958829	0.020298396	0.000277127	-0.003520160	0.007691860	0.016027162
0.199	0.006513536	0.021197338	0.000228412	-0.003757387	0.008335544	0.016470259
0.200	0.007156554	0.022183455	0.000166828	-0.004020307	0.009072718	0.016913982
0.201	0.007908057	0.023268528	0.000088836	-0.004312990	0.009916606	0.017344487
0.202	0.008794330	0.024465835	-0.000010331	-0.004640281	0.010879305	0.017741909
0.203	0.009849950	0.025790133	-0.000137142	-0.005007958	0.011969086	0.018079265
0.204	0.011120978	0.027257212	-0.000300499	-0.005422879	0.013186251	0.018322277
0.205	0.012669572	0.028882721	-0.000512834	-0.005893056	0.014517462	0.018431439
0.206	0.014580694	0.030679503	-0.000791767	-0.006427576	0.015929433	0.018368214
0.207	0.016971820	0.032651957	-0.001162653	-0.007036083	0.017364650	0.018107211
0.208	0.020006705	0.034784421	-0.001662441	-0.007727256	0.018744136	0.017654634
0.209	0.023913827	0.037017619	-0.002345450	-0.008505027	0.019983371	0.017069106
0.210	0.029007276	0.039201514	-0.003291418	-0.009359821	0.021024773	0.016475895
0.211	0.035697510	0.041003403	-0.004614646	-0.010249263	0.021882984	0.016064022
0.212	0.044447811	0.041740495	-0.006466858	-0.011058367	0.022693913	0.016062426
0.213	0.055553183	0.040127263	-0.009007543	-0.011527987	0.023766097	0.016702008
0.214	0.068497758	0.034098993	-0.012276590	-0.011168733	0.025667043	0.018171041
0.215	0.080777055	0.021408243	-0.015892753	-0.009304300	0.029462894	0.020516825
0.216	0.087425622	0.002046688	-0.018771433	-0.005565842	0.037467968	0.023017690
0.217	0.084179704	-0.019161957	-0.019624227	-0.000692436	0.053655226	0.019969239
0.218	0.072370669	-0.035368549	-0.018235853	0.003720604	0.066945791	-0.004739978
0.219	0.057540102	-0.043757936	-0.015609358	0.006648416	0.050458978	-0.027839703
0.220	0.044050440	-0.045971033	-0.012819459	0.008127172	0.032983604	-0.029569563
0.221	0.033406888	-0.044724343	-0.010395919	0.008639317	0.023742116	-0.026129927
0.222	0.025483701	-0.041964767	-0.008455165	0.008619648	0.018705167	-0.022784935
0.223	0.019685227	-0.038744627	-0.006944800	0.008342184	0.015616343	-0.020122652
0.224	0.015431343	-0.035553522	-0.005774226	0.007956812	0.013525551	-0.018030363
0.225	0.012275852	-0.032590363	-0.004860631	0.007539987	0.012004709	-0.016354763
0.226	0.009901184	-0.029917133	-0.004139192	0.007128731	0.010839814	-0.014981881
0.227	0.008086799	-0.027535535	-0.003561836	0.006739721	0.009913282	-0.013833420
0.228	0.006679893	-0.025423164	-0.003093513	0.006379357	0.009155220	-0.012855579
0.229	0.005573766	-0.023549998	-0.002708685	0.006048967	0.008521330	-0.012010634
0.230	0.004692996	-0.021885587	-0.002388620	0.005747472	0.007982029	-0.011271461
0.231	0.003983514	-0.020401938	-0.002119432	0.005472754	0.007516710	-0.010618066
0.232	0.003405992	-0.019074434	-0.001890707	0.005222342	0.007110506	-0.010035372
0.233	0.002931419	-0.017881890	-0.001694540	0.004993754	0.006752380	-0.009511769
0.234	0.002538096	-0.016806266	-0.001524857	0.004784652	0.006433941	-0.009038149
0.235	0.002209587	-0.015832262	-0.001376934	0.004592909	0.006148679	-0.008607254
0.236	0.001933294	-0.014946913	-0.001247061	0.004416628	0.005891459	-0.008213214
0.237	0.001699446	-0.014139221	-0.001132291	0.004254126	0.005658168	-0.007851221
0.238	0.001500389	-0.013399824	-0.001030259	0.004103929	0.005445469	-0.007517295
0.239	0.001330071	-0.012720754	-0.000939053	0.003964744	0.005250629	-0.007208111
0.240	0.001183663	-0.012095145	-0.000857111	0.003835429	0.005071385	-0.006920848

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000285291	-0.003621066	-0.002004963	-0.000094731	-0.000600367	0.002536726
0.191	0.000202288	-0.003831523	-0.002122336	-0.000055346	-0.000471832	0.002731520
0.192	0.000103657	-0.004054780	-0.002250980	-0.000010448	-0.000316162	0.002935385
0.193	-0.000013129	-0.004291301	-0.002392780	0.000041198	-0.000128825	0.003147360
0.194	-0.000151034	-0.004541394	-0.002549988	0.000101255	0.000095504	0.003365872
0.195	-0.000313540	-0.004805114	-0.002725269	0.000171973	0.000363072	0.003588476
0.196	-0.000504714	-0.005082129	-0.002921758	0.000256407	0.000681171	0.003811494
0.197	-0.000729282	-0.005371519	-0.003143082	0.000358725	0.001058241	0.004029522
0.198	-0.000992654	-0.005671501	-0.003393344	0.000484606	0.001503896	0.004234738
0.199	-0.001300858	-0.005979038	-0.003677094	0.000641858	0.002028892	0.004415878
0.200	-0.001660509	-0.006289416	-0.003998754	0.000840903	0.002644364	0.004557387
0.201	-0.002078196	-0.006595568	-0.004362477	0.001096006	0.003361400	0.004637381
0.202	-0.002559811	-0.006887469	-0.004770892	0.001426120	0.004189032	0.004626241
0.203	-0.003109127	-0.007151622	-0.005223427	0.001856019	0.005131294	0.004484863
0.204	-0.003725617	-0.007371045	-0.005713663	0.002417100	0.006182622	0.004163709
0.205	-0.004401463	-0.007526439	-0.006225593	0.003147342	0.007321434	0.003603764
0.206	-0.005118136	-0.007599544	-0.006729023	0.004089580	0.008502638	0.002741108
0.207	-0.005843852	-0.007579713	-0.007175107	0.005287347	0.009651449	0.001516676
0.208	-0.006534349	-0.007474136	-0.007493804	0.006778319	0.010662829	-0.000108934
0.209	-0.007139990	-0.007320265	-0.007595160	0.008587561	0.011411593	-0.002140314
0.210	-0.007621123	-0.007197156	-0.007373773	0.010725167	0.011774011	-0.004541994
0.211	-0.007970943	-0.007232927	-0.006710221	0.013193178	0.011651661	-0.007255706
0.212	-0.008245964	-0.007611265	-0.005456345	0.016001827	0.010975288	-0.010246964
0.213	-0.008619094	-0.008587254	-0.003385944	0.019185953	0.009653803	-0.013575263
0.214	-0.009518993	-0.010513236	-0.000078117	0.022802411	0.007404606	-0.017461941
0.215	-0.012023066	-0.013770676	0.005367600	0.026845425	0.003315411	-0.022235737
0.216	-0.018815666	-0.017963440	0.015117510	0.030605542	-0.005150685	-0.027513026
0.217	-0.034504891	-0.017272059	0.033033268	0.028431154	-0.022491048	-0.027527357
0.218	-0.048317649	0.005057256	0.047964099	0.004280485	-0.037861254	-0.005594794
0.219	-0.033073131	0.026327142	0.032990287	-0.018506001	-0.024042024	0.015516968
0.220	-0.017079717	0.026899646	0.016885214	-0.020105899	-0.009326841	0.016107869
0.221	-0.009256610	0.022825664	0.008870773	-0.016668810	-0.002634886	0.012178007
0.222	-0.005461778	0.019183317	0.004925558	-0.013419334	0.000167430	0.008765971
0.223	-0.003425051	0.016423207	0.002805190	-0.010915750	0.001337755	0.006292624
0.224	-0.002218108	0.014346383	0.001573015	-0.009023425	0.001790519	0.004537174
0.225	-0.001442054	0.012748564	0.000814249	-0.007573211	0.001910886	0.003279606
0.226	-0.000909736	0.011486216	0.000327259	-0.006439859	0.001873234	0.002365236
0.227	-0.000525696	0.010463959	0.000005567	-0.005537150	0.001761542	0.001690915
0.228	-0.000237552	0.009618137	-0.000210968	-0.004805811	0.001618093	0.001187682
0.229	-0.000014680	0.008905375	-0.000358195	-0.004204404	0.001464740	0.000808633
0.230	0.000161828	0.008295374	-0.000458432	-0.003703357	0.001312837	0.000521213
0.231	0.000304216	0.007766436	-0.000526077	-0.003281127	0.001168149	0.000302374
0.232	0.000420747	0.007302651	-0.000570691	-0.002921719	0.001033391	0.000135498
0.233	0.000517198	0.006892101	-0.000598786	-0.002613048	0.000909599	0.000008405
0.234	0.000597738	0.006525683	-0.000614891	-0.002345843	0.000796884	-0.000087965
0.235	0.000665454	0.006196316	-0.000622213	-0.002112889	0.000694857	-0.000160432
0.236	0.000722689	0.005898406	-0.000623057	-0.001908501	0.000602876	-0.000214198
0.237	0.000771253	0.005627471	-0.000619106	-0.001728143	0.000520186	-0.000253260
0.238	0.000812572	0.005379870	-0.000611604	-0.001568166	0.000446005	-0.000280726
0.239	0.000847787	0.005152618	-0.000601475	-0.001425602	0.000379561	-0.000299026
0.240	0.000877814	0.004943224	-0.000589415	-0.001298004	0.000320116	-0.000310076

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003423377	0.015314717	0.000414471	-0.002251386	0.004667692	0.013107456
0.191	0.003645273	0.015794670	0.000407690	-0.002371877	0.004929288	0.013408483
0.192	0.003891048	0.016309723	0.000398308	-0.002501967	0.005217473	0.013727330
0.193	0.004164477	0.016863767	0.000385785	-0.002642791	0.005536803	0.014064869
0.194	0.004470124	0.017461247	0.000369448	-0.002795666	0.005892720	0.014421637
0.195	0.004813541	0.018107261	0.000348457	-0.002962124	0.006291696	0.014797631
0.196	0.005201536	0.018807658	0.000321752	-0.003143959	0.006741368	0.015192002
0.197	0.005642541	0.019569157	0.000287981	-0.003343272	0.007250650	0.015602627
0.198	0.006147038	0.020399517	0.000245422	-0.003562550	0.007829737	0.016025563
0.199	0.006728259	0.021307679	0.000191834	-0.003804740	0.008489993	0.016454290
0.200	0.007403065	0.022303696	0.000124270	-0.004073311	0.009243513	0.016878586
0.201	0.008193101	0.023399183	0.000038842	-0.004372422	0.010102159	0.017283694
0.202	0.009126543	0.024607064	-0.000069669	-0.004707014	0.011075858	0.017649025
0.203	0.010240500	0.025941405	-0.000208357	-0.005082942	0.012169764	0.017947541
0.204	0.011584316	0.027416743	-0.000386962	-0.005507088	0.013379935	0.018146193
0.205	0.013225004	0.029046367	-0.000619202	-0.005987350	0.014688767	0.018209436
0.206	0.015253705	0.030838996	-0.000924423	-0.006532453	0.016059021	0.018105923
0.207	0.017796239	0.032791567	-0.001330458	-0.007151116	0.017432489	0.017821542
0.208	0.021027067	0.034874996	-0.001877756	-0.007849982	0.018735930	0.017376774
0.209	0.025186967	0.037005797	-0.002625375	-0.008628706	0.019899949	0.016844044
0.210	0.030599867	0.038990605	-0.003658817	-0.009469049	0.020892192	0.016356559
0.211	0.037670146	0.040421668	-0.005097237	-0.010311740	0.021760404	0.016100605
0.212	0.046802414	0.040498017	-0.007089194	-0.011011260	0.022679165	0.016290000
0.213	0.058100353	0.037794403	-0.009763832	-0.011262671	0.024006418	0.017128177
0.214	0.070620245	0.030236842	-0.013068934	-0.010540521	0.026394476	0.018752810
0.215	0.081308700	0.016079234	-0.016464978	-0.008233810	0.031108558	0.021055410
0.216	0.085307181	-0.003519686	-0.018799579	-0.004234063	0.040818623	0.022535878
0.217	0.079775325	-0.023091068	-0.019041364	0.000470967	0.057746100	0.014717416
0.218	0.067332099	-0.036858676	-0.017333709	0.004418559	0.062564617	-0.012519754
0.219	0.053199794	-0.043398838	-0.014716035	0.006906547	0.044250805	-0.027949533
0.220	0.040803060	-0.044686184	-0.012087063	0.008112490	0.029971792	-0.027677616
0.221	0.031120195	-0.043141057	-0.009842096	0.008494351	0.022313751	-0.024457975
0.222	0.023902936	-0.040390632	-0.008048137	0.008427641	0.017943318	-0.021491409
0.223	0.018590320	-0.037299535	-0.006646664	0.008143923	0.015165595	-0.019112033
0.224	0.014664622	-0.034269154	-0.005554060	0.007769905	0.013238546	-0.017217253
0.225	0.011731269	-0.031462229	-0.004695914	0.007370747	0.011812951	-0.015681959
0.226	0.009508653	-0.028928279	-0.004014141	0.006978337	0.010707932	-0.014412027
0.227	0.007799909	-0.026666437	-0.003465489	0.006607182	0.009821351	-0.013341560
0.228	0.006467587	-0.024655563	-0.003018230	0.006262905	0.009091176	-0.012424528
0.229	0.005414929	-0.022867961	-0.002649066	0.005946659	0.008477479	-0.011628083
0.230	0.004573069	-0.021275763	-0.002340812	0.005657471	0.007953204	-0.010928409
0.231	0.003892293	-0.019853273	-0.002080645	0.005393418	0.007499316	-0.010307738
0.232	0.003336216	-0.018577818	-0.001858891	0.005152243	0.007101966	-0.009752550
0.233	0.002877846	-0.017429818	-0.001668168	0.004931670	0.006750799	-0.009252356
0.234	0.002496893	-0.016392535	-0.001502777	0.004729541	0.006437896	-0.008798876
0.235	0.002177917	-0.015451727	-0.001358267	0.004543889	0.006157083	-0.008385471
0.236	0.001909031	-0.014595282	-0.001231128	0.004372945	0.005903469	-0.008006747
0.237	0.001680985	-0.013812893	-0.001118561	0.004215143	0.005673121	-0.007658266
0.238	0.001486500	-0.013095777	-0.001018315	0.004069100	0.005462836	-0.007336342
0.239	0.001319815	-0.012436392	-0.000928563	0.003933594	0.005269989	-0.007037870
0.240	0.001176304	-0.011828287	-0.000847810	0.003807558	0.005092394	-0.006760233

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000225233	-0.003626676	-0.002022291	-0.000061914	-0.000510956	0.002536535
0.191	0.000137587	-0.003835919	-0.002142070	-0.000019439	-0.000375017	0.002726347
0.192	0.000033851	-0.004057603	-0.002273459	0.000029219	-0.000211251	0.002924141
0.193	-0.000088548	-0.004292090	-0.002418361	0.000085471	-0.000015070	0.003128690
0.194	-0.000232620	-0.004539555	-0.002579031	0.000151197	0.000218892	0.003338078
0.195	-0.000401874	-0.004799881	-0.002758115	0.000228925	0.000496884	0.003549419
0.196	-0.000600388	-0.005072512	-0.002958684	0.000322061	0.000826143	0.003758474
0.197	-0.000832849	-0.005356242	-0.003184232	0.000435208	0.001214937	0.003959126
0.198	-0.001104544	-0.005648951	-0.003438629	0.000574587	0.001672539	0.004142678
0.199	-0.001421295	-0.005947215	-0.003725948	0.000748601	0.002208983	0.004296899
0.200	-0.001789218	-0.006245798	-0.004050081	0.000968548	0.002834507	0.004404815
0.201	-0.002214205	-0.006537202	-0.004414117	0.001249480	0.003558447	0.004443314
0.202	-0.002701024	-0.006811079	-0.004819150	0.001611172	0.004387252	0.004381584
0.203	-0.003251836	-0.007053968	-0.005262433	0.002079014	0.005321293	0.004179851
0.204	-0.003863881	-0.007249618	-0.005734702	0.002684607	0.006350192	0.003788907
0.205	-0.004527125	-0.007380857	-0.006216246	0.003464839	0.007446572	0.003152693
0.206	-0.005220859	-0.007433337	-0.006673075	0.004460314	0.008559822	0.002212822
0.207	-0.005912686	-0.007402605	-0.007053056	0.005710610	0.009611815	0.000919299
0.208	-0.006560874	-0.007304020	-0.007284398	0.007248422	0.010498995	-0.000756165
0.209	-0.007123036	-0.007183893	-0.007277270	0.009094530	0.011104207	-0.002808921
0.210	-0.007572267	-0.007129032	-0.006926607	0.011257864	0.011316569	-0.005202130
0.211	-0.007920361	-0.007273445	-0.006108711	0.013743824	0.011047914	-0.007889499
0.212	-0.008251711	-0.007806522	-0.004658386	0.016568472	0.010222775	-0.010863187
0.213	-0.008792118	-0.008990049	-0.002307076	0.019767224	0.008704252	-0.014217436
0.214	-0.010091952	-0.011164489	0.001458834	0.023371505	0.006080155	-0.018186874
0.215	-0.013511990	-0.014557305	0.007755239	0.027235133	0.001138502	-0.022961623
0.216	-0.022168071	-0.017893680	0.019121964	0.029875228	-0.009106955	-0.027284383
0.217	-0.038849205	-0.012434076	0.037683697	0.022865273	-0.027349031	-0.022466137
0.218	-0.044363560	0.012583404	0.044051819	-0.003851055	-0.034334192	0.002191366
0.219	-0.027325083	0.026374936	0.027169144	-0.018984515	-0.018643105	0.015841025
0.220	-0.014475422	0.025083947	0.014189402	-0.018585097	-0.007004546	0.014570472
0.221	-0.008158616	0.021307260	0.007698330	-0.015361030	-0.001762629	0.010930741
0.222	-0.004958028	0.018078971	0.004369616	-0.012477266	0.000491738	0.007920073
0.223	-0.003173292	0.015613775	0.002519107	-0.010240704	0.001447706	0.005725979
0.224	-0.002084019	0.013734253	0.001416834	-0.008528554	0.001813150	0.004150904
0.225	-0.001367777	0.012270653	0.000725602	-0.007200968	0.001898052	0.003010454
0.226	-0.000868038	0.011102622	0.000275794	-0.006153222	0.001847283	0.002173783
0.227	-0.000502742	0.010148891	-0.000024560	-0.005311894	0.001732366	0.001552238
0.228	-0.000225819	0.009354430	-0.000228509	-0.004625710	0.001590039	0.001085694
0.229	-0.000009890	0.008681135	-0.000368167	-0.004058162	0.001439551	0.000732562
0.230	0.000162259	0.008102192	-0.000463827	-0.003583023	0.001291060	0.000463791
0.231	0.000301900	0.007598176	-0.000528718	-0.003180944	0.001149765	0.000258568
0.232	0.000416725	0.007154729	-0.000571711	-0.002837438	0.001018134	0.000101761
0.233	0.000512160	0.006761017	-0.000598897	-0.002541476	0.000897111	-0.000017803
0.234	0.000592150	0.006408713	-0.000614541	-0.002284544	0.000786789	-0.000108484
0.235	0.000659636	0.006091307	-0.000621684	-0.002059975	0.000686799	-0.000176615
0.236	0.000716863	0.005803629	-0.000622527	-0.001862495	0.000596536	-0.000227046
0.237	0.000765574	0.005541520	-0.000618683	-0.001687876	0.000515284	-0.000263525
0.238	0.000807149	0.005301592	-0.000611348	-0.001532702	0.000442298	-0.000288973
0.239	0.000842690	0.005081046	-0.000601417	-0.001394176	0.000376839	-0.000305684
0.240	0.000873097	0.004877557	-0.000589570	-0.001270005	0.000318210	-0.000315473

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003504026	0.015365997	0.000400525	-0.002270480	0.004715451	0.013131016
0.191	0.003734128	0.015850181	0.000392446	-0.002392899	0.004984310	0.013432412
0.192	0.003989260	0.016369893	0.000381554	-0.002525143	0.005280778	0.013751029
0.193	0.004273416	0.016929070	0.000367263	-0.002668382	0.005609507	0.014087510
0.194	0.004591427	0.017532204	0.000348847	-0.002823970	0.005976019	0.014442107
0.195	0.004949178	0.018184440	0.000325392	-0.002993484	0.006386832	0.014814443
0.196	0.005353899	0.018891671	0.000295750	-0.003178767	0.006849568	0.015203200
0.197	0.005814542	0.019660655	0.000258453	-0.003381983	0.007373013	0.015605684
0.198	0.006342315	0.020499157	0.000211616	-0.003605685	0.007967089	0.016017245
0.199	0.006951251	0.021416040	0.000152814	-0.003852886	0.008642546	0.016430547
0.200	0.007659423	0.022421293	0.000078818	-0.004127147	0.009410553	0.016834539
0.201	0.008489959	0.023526260	-0.000014615	-0.004432711	0.010281427	0.017213697
0.202	0.009473033	0.024743376	-0.000133195	-0.004774589	0.011262829	0.017547043
0.203	0.010648425	0.026085807	-0.000284694	-0.005158679	0.012356829	0.017807984
0.204	0.012069198	0.027566456	-0.000479828	-0.005591823	0.013555891	0.017965601
0.205	0.013806973	0.029195810	-0.000733584	-0.006081728	0.014838274	0.017988639
0.206	0.015959438	0.030977530	-0.001067200	-0.006636564	0.016164417	0.017853592
0.207	0.018660861	0.032899605	-0.001511155	-0.007263802	0.017477436	0.017557465
0.208	0.022095976	0.034917226	-0.002109515	-0.007967503	0.018712061	0.017133654
0.209	0.026515957	0.036919023	-0.002925992	-0.008742087	0.019815191	0.016665736
0.210	0.032249997	0.038662212	-0.004051386	-0.009558868	0.020780876	0.016291169
0.211	0.039683548	0.039657526	-0.005607469	-0.010339161	0.021688950	0.016190405
0.212	0.049134534	0.038985570	-0.007733561	-0.010904453	0.022752886	0.016559545
0.213	0.060468385	0.035112430	-0.010515650	-0.010906787	0.024384817	0.017569687
0.214	0.072288025	0.026063500	-0.013794902	-0.009805989	0.027339143	0.019288424
0.215	0.081126252	0.010755098	-0.016889426	-0.007102051	0.033106709	0.021354128
0.216	0.082569051	-0.008569585	-0.018658047	-0.002956271	0.044486665	0.021106180
0.217	0.075237030	-0.026263483	-0.018371323	0.001491678	0.060038222	0.007971240
0.218	0.062574052	-0.037786582	-0.016445484	0.004982368	0.056754593	-0.017778997
0.219	0.049249742	-0.042786211	-0.013882336	0.007086149	0.039250800	-0.027192896
0.220	0.037881428	-0.043350503	-0.011415688	0.008065604	0.027561120	-0.025906780
0.221	0.029061761	-0.041597483	-0.009335712	0.008342512	0.021113621	-0.022955671
0.222	0.022472115	-0.038884480	-0.007674553	0.008239816	0.017276914	-0.020316614
0.223	0.017592251	-0.035924082	-0.006371353	0.007953664	0.014760179	-0.018180978
0.224	0.013960725	-0.033046867	-0.005349408	0.007591643	0.012975521	-0.016459171
0.225	0.011228020	-0.030386622	-0.004541831	0.007209566	0.011634979	-0.015048823
0.226	0.009143814	-0.027982976	-0.003896484	0.006835029	0.010584496	-0.013871864
0.227	0.007531931	-0.025833255	-0.003374367	0.006480727	0.009734849	-0.012872646
0.228	0.006268425	-0.023917555	-0.002946685	0.006151620	0.009030782	-0.012011622
0.229	0.005265414	-0.022210489	-0.002592172	0.005848744	0.008436135	-0.011260253
0.230	0.004459872	-0.020686468	-0.002295021	0.005571217	0.007926137	-0.010597523
0.231	0.003806017	-0.019321884	-0.002043371	0.005317293	0.007483179	-0.010007618
0.232	0.003270132	-0.018095852	-0.001828223	0.005084915	0.007094334	-0.009478409
0.233	0.002827073	-0.016990259	-0.001642677	0.004871993	0.006749882	-0.009000410
0.234	0.002457848	-0.015989565	-0.001481378	0.004676539	0.006442343	-0.008566089
0.235	0.002147935	-0.015080503	-0.001340130	0.004496728	0.006165856	-0.008169371
0.236	0.001886110	-0.014251756	-0.001215609	0.004330916	0.005915758	-0.007805298
0.237	0.001663606	-0.013493661	-0.001105157	0.004177638	0.005688289	-0.007469771
0.238	0.001473500	-0.012797961	-0.001006629	0.004035599	0.005480374	-0.007159374
0.239	0.001310297	-0.012157547	-0.000918277	0.003903652	0.005289487	-0.006871218
0.240	0.001169570	-0.011566323	-0.000838668	0.003780789	0.005113518	-0.006602863

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000164763	-0.003630789	-0.002039638	-0.000027480	-0.000421615	0.002532949
0.191	0.000072486	-0.003838645	-0.002161754	0.000018361	-0.000278402	0.002717377
0.192	-0.000036327	-0.004058553	-0.002295783	0.000071105	-0.000106717	0.002908628
0.193	-0.000164288	-0.004290767	-0.002443636	0.000132340	0.000098066	0.003105195
0.194	-0.000314437	-0.004535324	-0.002607553	0.000204178	0.000341321	0.003304803
0.195	-0.000490301	-0.004791931	-0.002790137	0.000289428	0.000629266	0.003504114
0.196	-0.000695938	-0.005059806	-0.002994364	0.000391855	0.000969023	0.003698319
0.197	-0.000935961	-0.005337471	-0.003223559	0.000516500	0.001368625	0.003880594
0.198	-0.001215513	-0.005622461	-0.003481292	0.000670129	0.001836903	0.004041361
0.199	-0.001540089	-0.005910967	-0.003771161	0.000861757	0.002383120	0.004167394
0.200	-0.001915327	-0.006197358	-0.004096312	0.001103419	0.003016321	0.004240572
0.201	-0.002346316	-0.006473786	-0.004458713	0.001410911	0.003743974	0.004236662
0.202	-0.002836654	-0.006729757	-0.004857832	0.001804676	0.004569816	0.004123978
0.203	-0.003386895	-0.006952104	-0.005288685	0.002310493	0.005490515	0.003862540
0.204	-0.003992423	-0.007125748	-0.005739051	0.002959631	0.006490978	0.003404463
0.205	-0.004640957	-0.007235898	-0.006185963	0.003787961	0.007538758	0.002696645
0.206	-0.005310456	-0.007272476	-0.006691969	0.004833425	0.008578790	0.001686958
0.207	-0.005968941	-0.007237251	-0.007302197	0.006131720	0.009531132	0.000334211
0.208	-0.006578384	-0.007153269	-0.007943575	0.007711186	0.010295242	-0.001380284
0.209	-0.007104353	-0.007074788	-0.0086926235	0.009589598	0.010762321	-0.003445660
0.210	-0.007533966	-0.007095064	-0.0096443590	0.011775527	0.010832320	-0.005826881
0.211	-0.007898638	-0.007353441	-0.0105464212	0.014277815	0.010421868	-0.008492267
0.212	-0.008314867	-0.008044510	-0.0113800312	0.017115690	0.009439723	-0.011460057
0.213	-0.009073499	-0.009431828	-0.01232172	0.020317213	0.007686991	-0.014851237
0.214	-0.010874042	-0.011816227	0.003164831	0.023864506	0.004593458	-0.018881580
0.215	-0.015387443	-0.015150407	0.010447440	0.027370209	-0.001378226	-0.023478414
0.216	-0.025901461	-0.016881437	0.023400273	0.028194098	-0.013401804	-0.026109505
0.217	-0.041440111	-0.006059685	0.040498173	0.015810255	-0.030417446	-0.015872893
0.218	-0.038984911	0.017641449	0.038680188	-0.009451884	-0.029353028	0.007500085
0.219	-0.022764403	0.025591696	0.022531852	-0.018583810	-0.014408122	0.015322132
0.220	-0.012445986	0.023405668	0.012075703	-0.017171699	-0.005238894	0.013157616
0.221	-0.007266038	0.019962606	0.006739410	-0.014209246	-0.001081820	0.009844386
0.222	-0.004532251	0.017091303	0.003897829	-0.011640905	0.000748684	0.007178626
0.223	-0.002954083	0.014879250	0.002269725	-0.009633118	0.001533115	0.005222915
0.224	-0.001964678	0.013171673	0.001278052	-0.008077637	0.001827044	0.003803866
0.225	-0.001300611	0.011826935	0.000645729	-0.006858354	0.001882599	0.002766183
0.226	-0.000829921	0.010743597	0.000228959	-0.005887227	0.001821092	0.001998551
0.227	-0.000481632	0.009852120	-0.000052168	-0.005101448	0.001703816	0.001424393
0.228	-0.000215070	0.009104697	-0.000244626	-0.004456406	0.001562823	0.000990980
0.229	-0.000005597	0.008467906	-0.000377330	-0.003920032	0.001415187	0.000661512
0.230	0.000162460	0.007917879	-0.000468757	-0.003468898	0.001269999	0.000409875
0.231	0.000299506	0.007437195	-0.000531087	-0.003085593	0.001131963	0.000217231
0.232	0.000412711	0.007012879	-0.000572570	-0.002756970	0.001003329	0.000069768
0.233	0.000507177	0.006635071	-0.000598908	-0.002472951	0.000884958	-0.000042778
0.234	0.000586642	0.006296146	-0.000614127	-0.002225706	0.000776931	-0.000128137
0.235	0.000653911	0.005990110	-0.000621111	-0.002009072	0.000678899	-0.000192198
0.236	0.000711135	0.005712186	-0.000621962	-0.001818145	0.000590288	-0.000239489
0.237	0.000759992	0.005458510	-0.000618226	-0.001648981	0.000510420	-0.000273526
0.238	0.000801819	0.005225925	-0.000611059	-0.001498379	0.000438587	-0.000297060
0.239	0.000837684	0.005011814	-0.000601326	-0.001363711	0.000374084	-0.000312261
0.240	0.000868465	0.004813996	-0.000589688	-0.001242813	0.000316242	-0.000320848

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003586984	0.015416922	0.000385787	-0.002289946	0.004764720	0.013153009
0.191	0.003825607	0.015905273	0.000376319	-0.002414322	0.005040867	0.013454401
0.192	0.004090469	0.016429565	0.000363811	-0.002548756	0.005345603	0.013772349
0.193	0.004385790	0.016993772	0.000347629	-0.002694447	0.005683655	0.014107265
0.194	0.004716683	0.017602429	0.000326986	-0.002852788	0.006060600	0.014459100
0.195	0.005089389	0.018260714	0.000300893	-0.003025400	0.006482967	0.014827103
0.196	0.005511579	0.018974550	0.000268101	-0.003214177	0.006958313	0.015209492
0.197	0.005992769	0.019750705	0.000227019	-0.003421339	0.007495238	0.015603007
0.198	0.006544890	0.020596919	0.000175594	-0.003649505	0.008103288	0.016002336
0.199	0.007182902	0.021521978	0.000111187	-0.003901756	0.008792545	0.016399422
0.200	0.007926092	0.022535683	0.000030275	-0.004181731	0.009573105	0.016782498
0.201	0.008799179	0.023649030	-0.000071772	-0.004493739	0.010453655	0.017135515
0.202	0.009834445	0.024873810	-0.000201198	-0.004842845	0.011439563	0.017437457
0.203	0.011074477	0.026222050	-0.000366506	-0.005234947	0.012529928	0.017662685
0.204	0.012576092	0.027704666	-0.000579429	-0.005676784	0.013713847	0.017782901
0.205	0.014415915	0.029328692	-0.000856376	-0.006175740	0.014966607	0.017771927
0.206	0.016698206	0.031091776	-0.001220579	-0.006739230	0.016247624	0.017614293
0.207	0.019565535	0.032971445	-0.001705271	-0.007373135	0.017503212	0.017317627
0.208	0.023212219	0.034904376	-0.002358234	-0.008078242	0.018677951	0.016926545
0.209	0.027897789	0.036746897	-0.003247784	-0.008842537	0.019737170	0.016532814
0.210	0.033949260	0.038201960	-0.004468827	-0.009625232	0.020699724	0.016275315
0.211	0.041717850	0.038693709	-0.006142837	-0.010325743	0.021677821	0.016325614
0.212	0.051403698	0.037190782	-0.008392553	-0.010731279	0.022925245	0.016858996
0.213	0.062591774	0.032097415	-0.011247659	-0.010457458	0.024915165	0.018006298
0.214	0.073439422	0.021661579	-0.014434129	-0.008976721	0.028521042	0.019734102
0.215	0.080254394	0.005574275	-0.017159141	-0.005939734	0.035455760	0.021281928
0.216	0.079352182	-0.013029350	-0.018369538	-0.001759245	0.048128312	0.018477201
0.217	0.070695359	-0.028739774	-0.017645378	0.002371624	0.059947670	0.000760697
0.218	0.058129262	-0.038254744	-0.015585505	0.005430167	0.050793846	-0.020755895
0.219	0.045663663	-0.041986314	-0.013107780	0.007202334	0.035251632	-0.026026396
0.220	0.035249828	-0.041991097	-0.010800111	0.007994322	0.025597832	-0.024276031
0.221	0.027204291	-0.040099899	-0.008871807	0.008186805	0.020091216	-0.021599340
0.222	0.021173543	-0.037444484	-0.007330843	0.008056905	0.016688679	-0.019243815
0.223	0.016680157	-0.034614171	-0.006116517	0.007771246	0.014393392	-0.017319531
0.224	0.013313062	-0.031882486	-0.005158766	0.007421586	0.012733547	-0.015750091
0.225	0.010762082	-0.029359926	-0.004397425	0.007055959	0.011469388	-0.014451518
0.226	0.008804169	-0.027078292	-0.003785603	0.006698373	0.010468777	-0.013358832
0.227	0.007281286	-0.025033660	-0.003288064	0.006359990	0.009653372	-0.012424892
0.228	0.006081421	-0.023207409	-0.002878630	0.006045218	0.008973756	-0.011615663
0.229	0.005124573	-0.021576217	-0.002537838	0.005754993	0.008397113	-0.010906252
0.230	0.004352972	-0.020116617	-0.002251134	0.005488524	0.007900704	-0.010278117
0.231	0.003724382	-0.018806913	-0.002007530	0.005244232	0.007468204	-0.009717172
0.232	0.003207526	-0.017627844	-0.001798648	0.005020240	0.007087543	-0.009212519
0.233	0.002778950	-0.016562643	-0.001618026	0.004814629	0.006749580	-0.008755580
0.234	0.002420851	-0.015596884	-0.001460631	0.004625567	0.006447242	-0.008339496
0.235	0.002119561	-0.014718199	-0.001322503	0.004451363	0.006174966	-0.007958709
0.236	0.001864471	-0.013916007	-0.001200492	0.004290485	0.005928302	-0.007608657
0.237	0.001647261	-0.013181256	-0.001092071	0.004141569	0.005703651	-0.007285562
0.238	0.001461355	-0.012506144	-0.000995193	0.004003393	0.005498066	-0.006986240
0.239	0.001301492	-0.011884008	-0.000908188	0.003874886	0.005309109	-0.006708019
0.240	0.001163440	-0.011309071	-0.000829682	0.003755096	0.005134746	-0.006448616

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0100$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000103944	-0.003633381	-0.002056897	0.000008627	-0.000332494	0.002525926
0.191	0.000007061	-0.003839675	-0.002181257	0.000058114	-0.000182167	0.002704567
0.192	-0.000106786	-0.004057603	-0.002317796	0.000115269	-0.000002776	0.002888801
0.193	-0.000240237	-0.004287307	-0.002468416	0.000181867	0.000210316	0.003076831
0.194	-0.000396353	-0.004528683	-0.002635326	0.000260251	0.000462466	0.003266014
0.195	-0.000578655	-0.004781255	-0.002821060	0.000353527	0.000759817	0.003452549
0.196	-0.000791161	-0.005044022	-0.003028468	0.000465815	0.001109323	0.003631054
0.197	-0.001038381	-0.005315232	-0.003260656	0.000602596	0.001518702	0.003794001
0.198	-0.001325257	-0.005592106	-0.003520845	0.000771159	0.001996245	0.003930977
0.199	-0.001656936	-0.005870492	-0.003812081	0.000981123	0.002550340	0.004027805
0.200	-0.002038497	-0.006144426	-0.004136685	0.001245183	0.003188691	0.004065354
0.201	-0.002474183	-0.006405833	-0.004495413	0.001579782	0.003916768	0.004018480
0.202	-0.002966402	-0.006644254	-0.004886031	0.002005874	0.004735513	0.003854946
0.203	-0.003514160	-0.006847088	-0.005301287	0.002549387	0.005637904	0.003535045
0.204	-0.004111062	-0.007000709	-0.005726149	0.003241088	0.006604467	0.003012593
0.205	-0.004743209	-0.007093112	-0.006134507	0.004115348	0.007598275	0.002238309
0.206	-0.005387864	-0.007118672	-0.006485903	0.005207415	0.008560949	0.001166368
0.207	-0.006014425	-0.007085261	-0.006723243	0.006549332	0.009412169	-0.000236222
0.208	-0.006589616	-0.007022984	-0.006772304	0.008165740	0.010055363	-0.001980276
0.209	-0.007088462	-0.006992867	-0.006542305	0.010072083	0.010389792	-0.004051134
0.210	-0.007511852	-0.007094014	-0.005923470	0.012277762	0.010323332	-0.006419034
0.211	-0.007913115	-0.007470317	-0.004772814	0.014793927	0.009771518	-0.009068011
0.212	-0.008446730	-0.008320003	-0.002874104	0.017638990	0.008617021	-0.012039934
0.213	-0.009483247	-0.009898808	0.000153281	0.020822622	0.006581406	-0.015469837
0.214	-0.011896776	-0.012425265	0.005062595	0.024242801	0.002910333	-0.019508077
0.215	-0.017657266	-0.015408573	0.013446202	0.027122953	-0.004246146	-0.023648089
0.216	-0.029668441	-0.014661166	0.027612286	0.025312528	-0.017691420	-0.023724657
0.217	-0.041681784	0.000825120	0.040895995	0.008296695	-0.031103647	-0.008774265
0.218	-0.033452219	0.020464508	0.033129977	-0.012760317	-0.024190885	0.010564563
0.219	-0.019182477	0.024428122	0.018873144	-0.017761023	-0.011130488	0.014411483
0.220	-0.010839182	0.021880236	0.010391918	-0.015885402	-0.003879184	0.011885409
0.221	-0.006530319	0.018766472	0.005944655	-0.013190553	-0.000545026	0.008894448
0.222	-0.004168761	0.016203119	0.003493759	-0.010894265	0.000953138	0.006525150
0.223	-0.002761862	0.014209707	0.002050953	-0.009083725	0.001598956	0.004774158
0.224	-0.001857938	0.012652841	0.001154180	-0.007665265	0.001833930	0.003490836
0.225	-0.001239677	0.011413856	0.000573540	-0.006542081	0.001865109	0.002543754
0.226	-0.000795010	0.010406860	0.000186247	-0.005639790	0.001794826	0.001837701
0.227	-0.000462205	0.009572111	-0.000077497	-0.004904438	0.001675904	0.001306228
0.228	-0.000205185	0.008867977	-0.000259471	-0.004297113	0.001536447	0.000902954
0.229	-0.000001733	0.008265001	-0.000385771	-0.003789483	0.001391634	0.000595120
0.230	0.000162477	0.007741929	-0.000473276	-0.003360618	0.001249640	0.000359241
0.231	0.000297065	0.007283116	-0.000533227	-0.002994820	0.001114733	0.000178223
0.232	0.000408727	0.006876813	-0.000573300	-0.002680137	0.000988970	0.000039437
0.233	0.000502267	0.006514036	-0.000598848	-0.002407349	0.000873141	-0.000066568
0.234	0.000581230	0.006187798	-0.000613672	-0.002169243	0.000767316	-0.000146949
0.235	0.000648292	0.005892578	-0.000620513	-0.001960116	0.000671164	-0.000207188
0.236	0.000705516	0.005623955	-0.000621378	-0.001775405	0.000584142	-0.000251522
0.237	0.000754520	0.005378342	-0.000617755	-0.001611430	0.000505609	-0.000283252
0.238	0.000796594	0.005152786	-0.000610752	-0.001465180	0.000434886	-0.000304974
0.239	0.000832779	0.004944850	-0.000601215	-0.001334194	0.000371306	-0.000318740
0.240	0.000863928	0.004752483	-0.000589783	-0.001216424	0.000314226	-0.000326180

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002909401	0.017012289	0.000592166	-0.002472936	0.005001220	0.014377619
0.191	0.003073198	0.017527569	0.000594365	-0.002591566	0.005200042	0.014697906
0.192	0.003253248	0.018080020	0.000595406	-0.002718933	0.005414491	0.015046526
0.193	0.003451968	0.018673777	0.000595040	-0.002856032	0.005648333	0.015427367
0.194	0.003672253	0.019313595	0.000592956	-0.003004019	0.005906382	0.015844735
0.195	0.003917587	0.020004967	0.000588768	-0.003164234	0.006194766	0.016303355
0.196	0.004192202	0.020754274	0.000581989	-0.003338250	0.006521336	0.016808327
0.197	0.004501274	0.021568962	0.000572002	-0.003527913	0.006896140	0.017365029
0.198	0.004851189	0.022457768	0.000558020	-0.003735409	0.007332080	0.017978897
0.199	0.005249841	0.023431033	0.000539068	-0.003963313	0.007845816	0.018655013
0.200	0.005707352	0.024500902	0.000513744	-0.004214811	0.008458717	0.019397388
0.201	0.006236393	0.025681988	0.000480347	-0.004493649	0.009198504	0.020207612
0.202	0.006853352	0.026991776	0.000436558	-0.004804425	0.010100771	0.021082594
0.203	0.007579555	0.028451399	0.000379256	-0.005152808	0.011210710	0.022010735
0.204	0.008443390	0.030086286	0.000304144	-0.005545725	0.012584354	0.022965322
0.205	0.009482896	0.031927559	0.000205259	-0.005991919	0.014287311	0.023894655
0.206	0.010750018	0.034012835	0.000074179	-0.006502301	0.016387670	0.024706916
0.207	0.012317369	0.036387793	-0.000101298	-0.007090696	0.018936337	0.025251949
0.208	0.014288270	0.039106866	-0.000339169	-0.007774601	0.021923684	0.025308152
0.209	0.016813172	0.042232753	-0.000666648	-0.008576078	0.025206255	0.024599993
0.210	0.020116386	0.045831772	-0.001125960	-0.009522422	0.028424711	0.022891118
0.211	0.024540337	0.049958228	-0.001784414	-0.010645625	0.031000466	0.020180243
0.212	0.030618282	0.054610197	-0.002752076	-0.011977677	0.032335608	0.016905719
0.213	0.039188478	0.059612197	-0.004212449	-0.013533303	0.032185747	0.013922112
0.214	0.051538432	0.064312473	-0.006470590	-0.015256311	0.030894989	0.012155692
0.215	0.069419135	0.066847212	-0.010000739	-0.016868742	0.029268149	0.012245052
0.216	0.094143569	0.062673545	-0.015349534	-0.017513634	0.028293771	0.014492788
0.217	0.122545833	0.043552934	-0.022364561	-0.015299983	0.029039847	0.019147325
0.218	0.140129280	0.004368508	-0.028367500	-0.008292271	0.033177668	0.027348653
0.219	0.130251637	-0.040091756	-0.029028697	0.001471112	0.048651346	0.043337979
0.220	0.100781011	-0.066761159	-0.024569532	0.008756128	0.124652083	0.039960096
0.221	0.071314000	-0.073714852	-0.018913760	0.011975688	0.083984283	-0.076405078
0.222	0.049648110	-0.070623100	-0.014256489	0.012650143	0.033868011	-0.057536869
0.223	0.035138369	-0.064299482	-0.010878556	0.012223572	0.021234536	-0.042860600
0.224	0.025531120	-0.057623977	-0.008490189	0.011426684	0.016088121	-0.034497799
0.225	0.019055245	-0.051543517	-0.006783710	0.010562299	0.013266529	-0.029154060
0.226	0.014572998	-0.046267817	-0.005537261	0.009742761	0.011440613	-0.025409816
0.227	0.011384639	-0.041759831	-0.004604310	0.009002933	0.010137150	-0.022611350
0.228	0.009058122	-0.037915337	-0.003889441	0.008347568	0.009146839	-0.020421472
0.229	0.007321246	-0.034624397	-0.003329839	0.007770536	0.008361996	-0.018649041
0.230	0.005998094	-0.031790107	-0.002883370	0.007262532	0.007720934	-0.017177307
0.231	0.004972064	-0.029332061	-0.002521094	0.006814066	0.007185248	-0.015930631
0.232	0.004163915	-0.027185187	-0.002222719	0.006416535	0.006729586	-0.014857614
0.233	0.003518556	-0.025297202	-0.001973709	0.006062506	0.006336393	-0.013921948
0.234	0.002996884	-0.023626094	-0.001763449	0.005745694	0.005993050	-0.013097151
0.235	0.002570612	-0.022137978	-0.001584048	0.005460830	0.005690213	-0.012363384
0.236	0.002218922	-0.020805360	-0.001429540	0.005203512	0.005420791	-0.011705441
0.237	0.001926255	-0.019605784	-0.001295354	0.004970056	0.005179291	-0.011111442
0.238	0.001680811	-0.018520779	-0.001177934	0.004757371	0.004961384	-0.010571945
0.239	0.001473537	-0.017535050	-0.001074482	0.004562854	0.004763615	-0.010079339
0.240	0.001297389	-0.016635853	-0.000982771	0.004384308	0.004583179	-0.009627420

素子間隔 $d[\lambda]=0.2250$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001129037	-0.004426140	-0.002208532	-0.000395144	-0.001954115	0.003229971
0.191	0.001077133	-0.004697949	-0.002308988	-0.000371999	-0.001875649	0.003533823
0.192	0.001011265	-0.004988326	-0.002417136	-0.000349655	-0.001771685	0.003859017
0.193	0.000929170	-0.005298797	-0.002534772	-0.000328556	-0.001637939	0.004206945
0.194	0.000828120	-0.005631062	-0.002664193	-0.000309129	-0.001469212	0.004579107
0.195	0.000704783	-0.005987010	-0.002808316	-0.000291729	-0.001259156	0.004977080
0.196	0.000555035	-0.006368696	-0.002970881	-0.000276569	-0.000999866	0.005402438
0.197	0.000373725	-0.006778313	-0.003156671	-0.000263593	-0.000681434	0.005856597
0.198	0.000154343	-0.007218085	-0.003371824	-0.000252278	-0.000291296	0.006340531
0.199	-0.000111375	-0.007690083	-0.003624407	-0.000241414	0.000186737	0.006854419
0.200	-0.000434101	-0.008195841	-0.003924266	-0.000228178	0.000773063	0.007396163
0.201	-0.000827459	-0.008735735	-0.004284677	-0.000207873	0.001494415	0.007960786
0.202	-0.001308945	-0.009307827	-0.004722451	-0.000172129	0.002385009	0.008537319
0.203	-0.001900731	-0.009905977	-0.005258867	-0.000106710	0.003488338	0.009104756
0.204	-0.002630206	-0.010516501	-0.005920023	0.000012155	0.004858153	0.009625070
0.205	-0.003529310	-0.011113295	-0.006736110	0.000223582	0.006557291	0.010032514
0.206	-0.004630819	-0.011650237	-0.007737435	0.000590318	0.008650273	0.010217750
0.207	-0.005958284	-0.012052115	-0.008943939	0.001209356	0.011183232	0.010008085
0.208	-0.007503941	-0.012208136	-0.010342583	0.002220343	0.014140085	0.009152461
0.209	-0.009191330	-0.011980863	-0.011849019	0.003799716	0.017368299	0.007335886
0.210	-0.010832936	-0.011253228	-0.013263640	0.006118471	0.020495262	0.004267753
0.211	-0.012126065	-0.010027672	-0.014264583	0.009250817	0.022922065	-0.000130071
0.212	-0.012748206	-0.008531527	-0.014497940	0.013081834	0.024018295	-0.005531730
0.213	-0.012535100	-0.007213749	-0.013744983	0.017334332	0.023484027	-0.011254403
0.214	-0.011584163	-0.006595913	-0.012002783	0.021762047	0.021562012	-0.016647021
0.215	-0.010175809	-0.007157364	-0.009350791	0.026354586	0.018855164	-0.021539751
0.216	-0.008669346	-0.009480371	-0.005698724	0.031392334	0.015901558	-0.026492394
0.217	-0.007766827	-0.014725290	-0.000575058	0.037464195	0.012594805	-0.033005471
0.218	-0.009916814	-0.025295687	0.007415894	0.046130006	0.006761210	-0.043902036
0.219	-0.025074867	-0.045235973	0.026154009	0.061984229	-0.011491225	-0.063579364
0.220	-0.102989949	-0.045289654	0.104870908	0.058123351	-0.091952472	-0.063032228
0.221	-0.065066964	0.069239617	0.066448966	-0.058908598	-0.056105944	0.052272041
0.222	-0.017463482	0.049736920	0.018190967	-0.040789632	-0.010192408	0.033617666
0.223	-0.006844100	0.035046002	0.007102253	-0.026885003	-0.000950948	0.019788776
0.224	-0.003264259	0.026940288	0.003248779	-0.019281964	0.001500947	0.012524980
0.225	-0.001668263	0.021956822	0.001517956	-0.014667659	0.002169009	0.008345320
0.226	-0.000817826	0.018599602	0.000619954	-0.011613493	0.002251947	0.005745215
0.227	-0.000306156	0.016181436	0.000112496	-0.009462278	0.002125382	0.004034436
0.228	0.000029227	0.014351352	-0.000189375	-0.007876540	0.001927268	0.002862147
0.229	0.000263005	0.012913466	-0.000374124	-0.006666624	0.001712904	0.002034344
0.230	0.000433329	0.011750411	-0.000488232	-0.005718140	0.001505148	0.001436441
0.231	0.000561500	0.010787751	-0.000557949	-0.004958245	0.001313039	0.000997156
0.232	0.000660231	0.009976017	-0.000598879	-0.004338424	0.001139479	0.000670262
0.233	0.000737572	0.009281029	-0.000620700	-0.003825195	0.000984595	0.000424746
0.234	0.000798873	0.008678396	-0.000629621	-0.003394752	0.000847306	0.000239211
0.235	0.000847841	0.008150218	-0.000629733	-0.003029734	0.000726055	0.000098543
0.236	0.000887128	0.007683046	-0.000623796	-0.002717209	0.000619171	-0.000008150
0.237	0.000918689	0.007266560	-0.000613705	-0.002447359	0.000525033	-0.000088851
0.238	0.000944004	0.006892702	-0.000600784	-0.002212611	0.000442142	-0.000149500
0.239	0.000964207	0.006555076	-0.000585968	-0.002007032	0.000369151	-0.000194573
0.240	0.000980193	0.006248544	-0.000569921	-0.001825930	0.000304860	-0.000227475

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.002981802	0.017079493	0.000586301	-0.002491152	0.005030337	0.014428330
0.191	0.003152150	0.017600798	0.000587892	-0.002611770	0.005236820	0.014755364
0.192	0.003339607	0.018159987	0.000588213	-0.002741362	0.005460622	0.015111091
0.193	0.003546741	0.018761297	0.000586992	-0.002880961	0.005705810	0.015499315
0.194	0.003776634	0.019409611	0.000583888	-0.003031764	0.005977584	0.015924217
0.195	0.004033006	0.020110572	0.000578478	-0.003195164	0.006282553	0.016390324
0.196	0.004320378	0.020870738	0.000570228	-0.003372795	0.006629129	0.016902442
0.197	0.004644296	0.021697767	0.000558460	-0.003566579	0.007028060	0.017465497
0.198	0.005011614	0.022600645	0.000542308	-0.003778795	0.007493095	0.018084242
0.199	0.005430836	0.023590030	0.000520667	-0.004012165	0.008041824	0.018762785
0.200	0.005912862	0.024678395	0.000492048	-0.004269941	0.008696920	0.019503443
0.201	0.006471359	0.025880842	0.000454547	-0.004556102	0.009487244	0.020305508
0.202	0.007124193	0.027215264	0.000405577	-0.004875409	0.010449548	0.021162182
0.203	0.007894577	0.028703364	0.000341667	-0.005233794	0.011629501	0.022056451
0.204	0.008813394	0.030371322	0.000258038	-0.005638570	0.013081871	0.022953860
0.205	0.009922373	0.032250868	0.000148008	-0.006098861	0.014867353	0.023791932
0.206	0.011278599	0.034380192	0.000002170	-0.006626036	0.017041766	0.024465627
0.207	0.012962268	0.036805211	-0.000193335	-0.007234605	0.019630705	0.024813615
0.208	0.015087838	0.039579574	-0.000458835	-0.007942662	0.022581944	0.024614869
0.209	0.017822591	0.042762860	-0.000825267	-0.008772816	0.025695833	0.023627355
0.210	0.021416631	0.046412833	-0.001340810	-0.009752397	0.028572146	0.021702915
0.211	0.026251911	0.050562676	-0.002082421	-0.010911761	0.030664212	0.018972156
0.212	0.032921313	0.055160580	-0.003175918	-0.012276661	0.031516791	0.015971952
0.213	0.042344205	0.059914423	-0.004829427	-0.013843223	0.031077204	0.013527684
0.214	0.055879720	0.063906277	-0.007380530	-0.015505189	0.029805850	0.012423672
0.215	0.075167556	0.064715723	-0.011317257	-0.016862790	0.028510639	0.013162551
0.216	0.100625119	0.056969972	-0.017056436	-0.016830419	0.028148453	0.016006814
0.217	0.126497721	0.032700862	-0.023897933	-0.013405994	0.029851540	0.021339729
0.218	0.136564263	-0.008575182	-0.028516402	-0.005491699	0.036114213	0.030867188
0.219	0.120235651	-0.047922493	-0.027556875	0.003647268	0.061097309	0.047946314
0.220	0.090683163	-0.067986371	-0.022676106	0.009611155	0.140280046	-0.004965811
0.221	0.064082928	-0.071588855	-0.017393476	0.011988631	0.060835600	-0.069844518
0.222	0.045017988	-0.067606986	-0.013202964	0.012333870	0.029243205	-0.051078444
0.223	0.032225346	-0.061378495	-0.010171673	0.011828594	0.019734262	-0.039268555
0.224	0.023667110	-0.055069657	-0.008011348	0.011046220	0.015406863	-0.032212805
0.225	0.017829477	-0.049377103	-0.006451731	0.010223957	0.012893217	-0.027538794
0.226	0.013743613	-0.044440008	-0.005300994	0.009450187	0.011213252	-0.024184001
0.227	0.010808381	-0.040210560	-0.004431858	0.008752002	0.009990314	-0.021634643
0.228	0.008648188	-0.036591088	-0.003760630	0.008132303	0.009049227	-0.019615716
0.229	0.007023559	-0.033481622	-0.003231627	0.007585147	0.008296721	-0.017966957
0.230	0.005778049	-0.030794385	-0.002807091	0.007102002	0.007677972	-0.016588401
0.231	0.004806905	-0.028456488	-0.002460870	0.006674240	0.007158293	-0.015414191
0.232	0.004038312	-0.026408678	-0.002174466	0.006294023	0.006714443	-0.014398986
0.233	0.003421959	-0.024603138	-0.001934529	0.005954557	0.006330158	-0.013510413
0.234	0.002921886	-0.023001273	-0.001731246	0.005650073	0.005993652	-0.012724644
0.235	0.002511919	-0.021571816	-0.001557281	0.005375716	0.005696133	-0.012023696
0.236	0.002172699	-0.020289290	-0.001407052	0.005127410	0.005430889	-0.011393694
0.237	0.001889660	-0.019132830	-0.001276278	0.004901734	0.005192710	-0.010823741
0.238	0.001651728	-0.018085193	-0.001161598	0.004695804	0.004977456	-0.010305132
0.239	0.001450370	-0.017132070	-0.001060367	0.004507189	0.004781818	-0.009830827
0.240	0.001278918	-0.016261485	-0.000970468	0.004333822	0.004603100	-0.009395050

素子間隔 $d[\lambda]=0.2275$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.001061441	-0.004455160	-0.002223677	-0.000378051	-0.001842394	0.003276944
0.191	0.001003979	-0.004727750	-0.002327476	-0.000355103	-0.001753907	0.003579630
0.192	0.000931899	-0.005018929	-0.002439742	-0.000332777	-0.001638727	0.003903343
0.193	0.000842800	-0.005330209	-0.002562405	-0.000311413	-0.001492319	0.004249384
0.194	0.000733775	-0.005663252	-0.002697934	-0.000291305	-0.001309154	0.004619111
0.195	0.000601268	-0.006019874	-0.002849469	-0.000272634	-0.001082446	0.005013883
0.196	0.000440881	-0.006402015	-0.003021000	-0.000255356	-0.000803770	0.005434927
0.197	0.000247114	-0.006811669	-0.003217623	-0.000239070	-0.000462561	0.005883155
0.198	0.000013040	-0.007250751	-0.003445851	-0.000222761	-0.000045450	0.006358767
0.199	-0.000270113	-0.007720853	-0.003714029	-0.000204422	0.000464560	0.006860643
0.200	-0.000613591	-0.008222726	-0.004032820	-0.000180378	0.001089263	0.007385191
0.201	-0.001031631	-0.008755612	-0.004415860	-0.000144341	0.001856432	0.007924685
0.202	-0.001542288	-0.009315724	-0.004880344	-0.000085762	0.002801275	0.008464149
0.203	-0.002167952	-0.009894237	-0.005447577	0.000012799	0.003967624	0.008976708
0.204	-0.002935354	-0.010473634	-0.006142783	0.000179701	0.005407858	0.009415920
0.205	-0.003873897	-0.011022436	-0.006993248	0.000460279	0.007179576	0.009704439
0.206	-0.005010048	-0.011487970	-0.008022743	0.000924923	0.009334818	0.009718733
0.207	-0.006354541	-0.011789468	-0.009237237	0.001678118	0.011893430	0.009272832
0.208	-0.007877872	-0.011816584	-0.010601159	0.002861318	0.014795949	0.008114101
0.209	-0.009474785	-0.011448930	-0.011999807	0.004637375	0.017832155	0.005957583
0.210	-0.010936112	-0.010614205	-0.013209406	0.007137746	0.020586094	0.002595630
0.211	-0.011972971	-0.009382304	-0.013917874	0.010377201	0.022486811	-0.001926026
0.212	-0.012330510	-0.008033433	-0.013831578	0.014201118	0.023039217	-0.007196198
0.213	-0.011934236	-0.007010776	-0.012807909	0.018360317	0.022121504	-0.012583516
0.214	-0.010931620	-0.006787189	-0.010866119	0.022697372	0.020064885	-0.017619003
0.215	-0.009604083	-0.007829657	-0.008023665	0.027291825	0.017412401	-0.022346392
0.216	-0.008353598	-0.010824239	-0.004069582	0.032483240	0.014507150	-0.027528587
0.217	-0.008200044	-0.017178551	0.001662097	0.038984654	0.010794750	-0.034902691
0.218	-0.012809721	-0.029583670	0.011460745	0.048867501	0.002813133	-0.047525000
0.219	-0.038119539	-0.050558647	0.039447440	0.065788261	-0.025335516	-0.068213559
0.220	-0.119478076	-0.000607721	0.121142281	0.012416698	-0.109041234	-0.017684895
0.221	-0.042676208	0.062800855	0.043787861	-0.053082783	-0.034164842	0.046453405
0.222	-0.013407951	0.043567338	0.013935878	-0.035011453	-0.006473292	0.028014658
0.223	-0.005753074	0.031794421	0.005882676	-0.023917639	-0.000111708	0.017049345
0.224	-0.002876385	0.024997062	0.002780761	-0.017568736	0.001700329	0.011042295
0.225	-0.001507305	0.020665723	0.001306460	-0.013575474	0.002188964	0.007467531
0.226	-0.000745892	0.017674739	0.000514919	-0.010866797	0.002218655	0.005191276
0.227	-0.000274042	0.015482150	0.000057417	-0.008925385	0.002079345	0.003668445
0.228	0.000041841	0.013801115	-0.000219085	-0.007475622	0.001882303	0.002611992
0.229	0.000265456	0.012467205	-0.000390270	-0.006358294	0.001673485	0.001858924
0.230	0.000430325	0.011379861	-0.000496936	-0.005475379	0.001472262	0.001311003
0.231	0.000555538	0.010474244	-0.000562514	-0.004763364	0.001286372	0.000906095
0.232	0.000652723	0.009706703	-0.000601169	-0.004179420	0.001118289	0.000603404
0.233	0.000729345	0.009046750	-0.000621789	-0.003693654	0.000968056	0.000375256
0.234	0.000790430	0.008472431	-0.000630137	-0.003284618	0.000834637	0.000202385
0.235	0.000839488	0.007967510	-0.000630046	-0.002936552	0.000716570	0.000071075
0.236	0.000879060	0.007519707	-0.000624118	-0.002637637	0.000612268	-0.000028629
0.237	0.000911023	0.007119548	-0.000614158	-0.002378840	0.000520244	-0.000104050
0.238	0.000936809	0.006759595	-0.000601432	-0.002153164	0.000439063	-0.000160679
0.239	0.000957525	0.006433925	-0.000586836	-0.001955108	0.000367450	-0.000202668
0.240	0.000974041	0.006137749	-0.000571019	-0.001780289	0.000304268	-0.000233193

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003056331	0.017147567	0.000579873	-0.002509961	0.005063503	0.014479588
0.191	0.003233518	0.017674977	0.000580800	-0.002632619	0.005278182	0.014813031
0.192	0.003428710	0.018240992	0.000580336	-0.002764498	0.005511900	0.015175434
0.193	0.003644644	0.018849958	0.000578182	-0.002906666	0.005769069	0.015570497
0.194	0.003884603	0.019506886	0.000573968	-0.003060366	0.006055276	0.016002240
0.195	0.004152529	0.020217556	0.000567235	-0.003227046	0.006377532	0.016475006
0.196	0.004453307	0.020988727	0.000557384	-0.003408401	0.006744962	0.016993141
0.197	0.004792850	0.021828260	0.000543679	-0.003606434	0.007168929	0.017561085
0.198	0.005178524	0.022745390	0.000525165	-0.003823516	0.007664019	0.018182783
0.199	0.005619440	0.023751116	0.000500629	-0.004062510	0.008248738	0.018861180
0.200	0.006127431	0.024858185	0.000468420	-0.004326765	0.008946845	0.019596718
0.201	0.006717293	0.026082092	0.000426427	-0.004620430	0.009788141	0.020385992
0.202	0.007408317	0.027441332	0.000371796	-0.004948544	0.010810061	0.021218306
0.203	0.008225809	0.028958091	0.000300656	-0.005317283	0.012057906	0.022070832
0.204	0.009203537	0.030659169	0.000207669	-0.005734306	0.013583851	0.022901092
0.205	0.010387061	0.032576708	0.000085386	-0.006209123	0.015441213	0.023636278
0.206	0.011839340	0.034749375	-0.000076851	-0.006753672	0.017670298	0.024160644
0.207	0.013648761	0.037222773	-0.000294542	-0.007382920	0.020268480	0.024306420
0.208	0.015942095	0.040048928	-0.000590751	-0.008115554	0.023140579	0.023863927
0.209	0.018905159	0.043282607	-0.001000623	-0.008974509	0.026040361	0.022638610
0.210	0.022816158	0.046969499	-0.001579034	-0.009986591	0.028551749	0.020576741
0.211	0.028099717	0.051114688	-0.002413776	-0.011179304	0.030191172	0.017922172
0.212	0.035410365	0.055601510	-0.003647924	-0.012569206	0.030652049	0.015264869
0.213	0.045742660	0.059990504	-0.005515211	-0.014127059	0.030037924	0.013367779
0.214	0.060486308	0.063041115	-0.008381099	-0.015681991	0.028882001	0.012884131
0.215	0.081014451	0.061717554	-0.012719876	-0.016689716	0.027986501	0.014219275
0.216	0.106475047	0.049989566	-0.018730238	-0.015845915	0.028304332	0.017634130
0.217	0.128453992	0.021138473	-0.025084857	-0.011232443	0.031150504	0.023717522
0.218	0.130901174	-0.020128557	-0.028160329	-0.002826241	0.040562916	0.034703584
0.219	0.110100892	-0.053542096	-0.025923140	0.005398481	0.079978519	0.047948757
0.220	0.081610226	-0.068054423	-0.020913050	0.010180431	0.120622094	-0.045389216
0.221	0.057794744	-0.069205861	-0.016040860	0.011898929	0.047154435	-0.061875550
0.222	0.040993126	-0.064681966	-0.012270540	0.012002965	0.025993454	-0.045903166
0.223	0.029667785	-0.058628474	-0.009541288	0.011448504	0.018534968	-0.036232007
0.224	0.022010684	-0.052679039	-0.007579717	0.010687131	0.014823368	-0.030200819
0.225	0.016727686	-0.047346964	-0.006149282	0.009905962	0.012561033	-0.026078694
0.226	0.012990594	-0.042721085	-0.005083674	0.009175018	0.011006423	-0.023056420
0.227	0.010280683	-0.038747577	-0.004271911	0.008515445	0.009854977	-0.020725183
0.228	0.008270078	-0.035335529	-0.003640299	0.007928803	0.008958584	-0.018858725
0.229	0.006747328	-0.032394034	-0.003139303	0.007409405	0.008235885	-0.017321815
0.230	0.005572832	-0.029843541	-0.002734999	0.006949440	0.007637972	-0.016028435
0.231	0.004652226	-0.027617835	-0.002403685	0.006541051	0.007133368	-0.014921040
0.232	0.003920273	-0.025662893	-0.002128457	0.006177092	0.006700720	-0.013959513
0.233	0.003330927	-0.023934920	-0.001897033	0.005851348	0.006324934	-0.013114916
0.234	0.002851055	-0.022398413	-0.001700326	0.005558517	0.005994981	-0.012365770
0.235	0.002456397	-0.021024488	-0.001531503	0.005294118	0.005702583	-0.011695744
0.236	0.002128910	-0.019789522	-0.001385346	0.005054377	0.005441386	-0.011092164
0.237	0.001854971	-0.018674086	-0.001257819	0.004836110	0.005206425	-0.010545019
0.238	0.001624160	-0.017662082	-0.001145756	0.004636630	0.004993752	-0.010046277
0.239	0.001428423	-0.016740105	-0.001046648	0.004453657	0.004800192	-0.009589415
0.240	0.001261443	-0.015896906	-0.000958484	0.004285252	0.004623153	-0.009169062

素子間隔 $d[\lambda]=0.2300$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000992607	-0.004482901	-0.002240500	-0.000360216	-0.001728844	0.003320651
0.191	0.000929439	-0.004756154	-0.002347867	-0.000337204	-0.001630085	0.003621871
0.192	0.000850966	-0.005047991	-0.002464477	-0.000314562	-0.001503403	0.003943726
0.193	0.000754640	-0.005359888	-0.002592420	-0.000292527	-0.001343968	0.004287395
0.194	0.000637374	-0.005693452	-0.002734339	-0.000271240	-0.001145912	0.004654053
0.195	0.000495384	-0.006050436	-0.002893510	-0.000250700	-0.000902106	0.005044850
0.196	0.000323992	-0.006432569	-0.003074321	-0.000230532	-0.000603437	0.005460489
0.197	0.000117359	-0.006841640	-0.003282097	-0.000209954	-0.000238778	0.005901328
0.198	-0.000131855	-0.007279177	-0.003523722	-0.000187397	0.000206034	0.006366663
0.199	-0.000432886	-0.007746234	-0.003807945	-0.000160041	0.000748893	0.006854046
0.200	-0.000797510	-0.008242626	-0.004145836	-0.000123075	0.001412545	0.007357848
0.201	-0.001240435	-0.008766285	-0.004551364	-0.000068536	0.002225597	0.007867365
0.202	-0.001780047	-0.009311493	-0.005041961	0.000016522	0.003223944	0.008363339
0.203	-0.002438525	-0.009866539	-0.005638477	0.000152963	0.004450835	0.008812588
0.204	-0.003241254	-0.010409919	-0.006364494	0.000373878	0.005955814	0.009159941
0.205	-0.004213853	-0.010905022	-0.007243164	0.000730649	0.007788827	0.009316858
0.206	-0.005374914	-0.011293852	-0.008289542	0.001300492	0.009985664	0.009147518
0.207	-0.006720715	-0.011492555	-0.009494816	0.002192536	0.012537588	0.008458165
0.208	-0.008199842	-0.011396633	-0.010800084	0.003545130	0.015340878	0.007004682
0.209	-0.009682950	-0.010909852	-0.012064666	0.005500839	0.018136899	0.004545724
0.210	-0.010951545	-0.010008010	-0.013052544	0.008148739	0.020491000	0.000962353
0.211	-0.011745909	-0.008819684	-0.013475658	0.011454160	0.021890222	-0.003595715
0.212	-0.011881481	-0.007656422	-0.013101593	0.015246017	0.021979122	-0.008679098
0.213	-0.011355700	-0.006941869	-0.011842230	0.019320349	0.020774712	-0.013744557
0.214	-0.010346289	-0.007112219	-0.009711245	0.023602940	0.018645192	-0.018500697
0.215	-0.009143182	-0.008654943	-0.006648182	0.028245351	0.016041584	-0.023181243
0.216	-0.008249846	-0.012392900	-0.002312972	0.033644466	0.013072411	-0.028744738
0.217	-0.009171407	-0.019979062	0.004244952	0.040697285	0.008596232	-0.037152071
0.218	-0.017395367	-0.034214252	0.016910735	0.051954856	-0.002722394	-0.051520691
0.219	-0.057689747	-0.051143992	0.059098329	0.065028155	-0.045629131	-0.068150323
0.220	-0.100644722	0.039683347	0.102072243	-0.028744292	-0.090754452	0.023230242
0.221	-0.029686305	0.054998145	0.030554951	-0.045807931	-0.021586572	0.039231991
0.222	-0.010672923	0.038686710	0.011027983	-0.030479848	-0.004047998	0.023665792
0.223	-0.004925432	0.029089110	0.004944270	-0.021473586	0.000482887	0.014825717
0.224	-0.002561340	0.023313362	0.002396343	-0.016100466	0.001840075	0.009792763
0.225	-0.001370877	0.019516149	0.001125904	-0.012614096	0.002193699	0.006708535
0.226	-0.000683244	0.016835655	0.000423042	-0.010197176	0.002182658	0.004703532
0.227	-0.000245647	0.014839144	0.000008471	-0.008437310	0.002034238	0.003341830
0.228	0.000052983	0.013290108	-0.000245747	-0.007107355	0.001839139	0.002386422
0.229	0.000267418	0.012049610	-0.000404842	-0.006072760	0.001635844	0.001699426
0.230	0.000427249	0.011031045	-0.000504777	-0.005249055	0.001440865	0.001196146
0.231	0.000549695	0.010177723	-0.000566591	-0.004580678	0.001260875	0.000822225
0.232	0.000645412	0.009450997	-0.000603166	-0.004029673	0.001097981	0.000541507
0.233	0.000721342	0.008823601	-0.000622690	-0.003569278	0.000952157	0.000329225
0.234	0.000782210	0.008275728	-0.000630521	-0.003180124	0.000822416	0.000167982
0.235	0.000831348	0.007792624	-0.000630256	-0.002847871	0.000707384	0.000045306
0.236	0.000871185	0.007363060	-0.000624357	-0.002561698	0.000605589	-0.000047908
0.237	0.000903530	0.006978324	-0.000614536	-0.002313288	0.000515589	-0.000118420
0.238	0.000929770	0.006631544	-0.000602006	-0.002096165	0.000436054	-0.000171299
0.239	0.000950980	0.006317225	-0.000587635	-0.001905216	0.000365769	-0.000210405
0.240	0.000968011	0.006030906	-0.000572047	-0.001736351	0.000303656	-0.000238700

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003133024	0.017216498	0.000572865	-0.002529382	0.005100539	0.014531135
0.191	0.003317336	0.017750092	0.000573069	-0.002654138	0.005323885	0.014870620
0.192	0.003520606	0.018323023	0.000571750	-0.002788366	0.005568058	0.015239239
0.193	0.003745741	0.018939748	0.000568583	-0.002933178	0.005837794	0.015640559
0.194	0.003996241	0.019605401	0.000563162	-0.003089859	0.006139077	0.016078404
0.195	0.004276341	0.020325929	0.000554977	-0.003259914	0.006479461	0.016556774
0.196	0.004591211	0.021108247	0.000543386	-0.003445105	0.006868505	0.017079690
0.197	0.004947178	0.021960473	0.000527578	-0.003647536	0.007318292	0.017650947
0.198	0.005352221	0.022892025	0.000506493	-0.003869635	0.007844220	0.018273505
0.199	0.005816163	0.023914191	0.000478792	-0.004114384	0.008465663	0.018948933
0.200	0.006351676	0.025040143	0.000442667	-0.004385325	0.009207185	0.019675722
0.201	0.006974768	0.026285745	0.000395786	-0.004686771	0.010099281	0.020447648
0.202	0.007706457	0.027669938	0.000334962	-0.005023979	0.011179489	0.021249433
0.203	0.008574254	0.029215400	0.000255902	-0.005403403	0.012491811	0.022052378
0.204	0.009615024	0.030949419	0.000152649	-0.005833047	0.014084224	0.022806094
0.205	0.010878686	0.032904513	0.000016865	-0.006322828	0.016000516	0.023428503
0.206	0.012434450	0.035119378	-0.000163419	-0.006885160	0.018262652	0.023795911
0.207	0.014379816	0.037638805	-0.000405674	-0.007535512	0.020837799	0.023740882
0.208	0.016855074	0.040512120	-0.000735993	-0.008292997	0.023590832	0.023075428
0.209	0.020066246	0.043787092	-0.001194246	-0.009180550	0.026242274	0.021662658
0.210	0.024322115	0.047493214	-0.001842849	-0.010223777	0.028385147	0.019542063
0.211	0.030092446	0.051598637	-0.002781594	-0.011445672	0.029620503	0.017044622
0.212	0.038093445	0.055904003	-0.004172132	-0.012849899	0.029782947	0.014774803
0.213	0.049381540	0.059787288	-0.006273588	-0.014373603	0.029096300	0.013416303
0.214	0.065314256	0.061628394	-0.009470700	-0.015765160	0.028138243	0.013511356
0.215	0.086795935	0.057757036	-0.014183162	-0.016317622	0.027707071	0.015399181
0.216	0.111351178	0.041827914	-0.020295865	-0.014554095	0.028793266	0.019378322
0.217	0.128275993	0.009423445	-0.025859330	-0.008880034	0.033096323	0.026307533
0.218	0.123709811	-0.029919457	-0.027387036	-0.000406492	0.047331185	0.038502770
0.219	0.100289839	-0.057274149	-0.024234375	0.006760598	0.103136047	0.035799482
0.220	0.073543124	-0.067298354	-0.019296439	0.010530087	0.090634197	-0.060414293
0.221	0.052319829	-0.066692773	-0.014837968	0.011738465	0.038618073	-0.054811572
0.222	0.037478241	-0.061871815	-0.011442129	0.011667120	0.023593035	-0.041666783
0.223	0.027410848	-0.056041832	-0.008976494	0.011084653	0.017551607	-0.033622012
0.224	0.020531768	-0.050438748	-0.007188902	0.010348333	0.014316858	-0.028410196
0.225	0.015733206	-0.045440960	-0.005872627	0.009606788	0.012263239	-0.024749278
0.226	0.012304419	-0.041101415	-0.004883065	0.008915862	0.010817470	-0.022013783
0.227	0.009795908	-0.037363516	-0.004123083	0.008292124	0.009729946	-0.019874978
0.228	0.007920333	-0.034143056	-0.003527561	0.007736168	0.008874327	-0.018145309
0.229	0.006490342	-0.031357362	-0.003052287	0.007242602	0.008179215	-0.016710034
0.230	0.005380989	-0.028934248	-0.002666699	0.006804283	0.007600789	-0.015494829
0.231	0.004507046	-0.026813484	-0.002349260	0.006414050	0.007110403	-0.014449247
0.232	0.003809119	-0.024945739	-0.002084493	0.006065382	0.006688391	-0.013537703
0.233	0.003244975	-0.023290850	-0.001861075	0.005752585	0.006320718	-0.012734277
0.234	0.002784037	-0.021816117	-0.001670577	0.005470781	0.005997051	-0.012019573
0.235	0.002403785	-0.020494829	-0.001506627	0.005215833	0.005709583	-0.011378743
0.236	0.002087381	-0.019305059	-0.001364337	0.004984240	0.005452293	-0.010800193
0.237	0.001822060	-0.018228701	-0.001239906	0.004773040	0.005220453	-0.010274719
0.238	0.001598011	-0.017250710	-0.001130342	0.004579721	0.005010287	-0.009794902
0.239	0.001407623	-0.016358523	-0.001033268	0.004402151	0.004818752	-0.009354695
0.240	0.001244908	-0.015541564	-0.000946770	0.004238506	0.004643355	-0.008949098

素子間隔 $d[\lambda]=0.2325$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000922547	-0.004509349	-0.002258783	-0.000341332	-0.001613699	0.003360830
0.191	0.000853531	-0.004783143	-0.002369893	-0.000317954	-0.001504478	0.003660240
0.192	0.000768490	-0.005075475	-0.002491050	-0.000294641	-0.001366028	0.003979805
0.193	0.000664729	-0.005387775	-0.002624490	-0.000271498	-0.001193246	0.004320551
0.194	0.000538973	-0.005721578	-0.002773029	-0.000248492	-0.000979918	0.004683430
0.195	0.000387212	-0.006078484	-0.002940225	-0.000225359	-0.000718402	0.005069195
0.196	0.000204489	-0.006460094	-0.003130575	-0.000201451	-0.000399221	0.005478192
0.197	-0.000015361	-0.006867901	-0.003349775	-0.000175507	-0.000010531	0.005910025
0.198	-0.000280074	-0.007302956	-0.003605007	-0.000145333	0.000462522	0.006362913
0.199	-0.000599315	-0.007765643	-0.003905379	-0.000107217	0.001038639	0.006832879
0.200	-0.000985273	-0.008254848	-0.004262299	-0.000055052	0.001741368	0.007312087
0.201	-0.001453026	-0.008767083	-0.004689868	0.000020829	0.002599842	0.007786754
0.202	-0.002020924	-0.009294406	-0.005205466	0.000136146	0.003649978	0.008232598
0.203	-0.002710491	-0.009822166	-0.005828983	0.000315239	0.004933518	0.008610051
0.204	-0.003544958	-0.010324937	-0.006581512	0.000595915	0.006495539	0.008855289
0.205	-0.004545068	-0.010761513	-0.007480884	0.001035198	0.008376067	0.008869486
0.206	-0.005720060	-0.011069991	-0.008532155	0.001715648	0.010591968	0.008507462
0.207	-0.007050789	-0.011166815	-0.009710158	0.002748095	0.013103423	0.007573812
0.208	-0.008465340	-0.010958599	-0.010934036	0.004262705	0.015765371	0.005843190
0.209	-0.009816816	-0.010378482	-0.012043420	0.006376872	0.018283867	0.003127712
0.210	-0.010889716	-0.009450091	-0.012801577	0.009138446	0.020229692	-0.000604950
0.211	-0.011463985	-0.008348269	-0.012953861	0.012476725	0.021168318	-0.005128196
0.212	-0.011421370	-0.007398162	-0.012322769	0.016224103	0.020874136	-0.009995237
0.213	-0.010813683	-0.006999055	-0.010852168	0.020230642	0.019462090	-0.014771770
0.214	-0.009838827	-0.007568526	-0.008527109	0.024495909	0.017296123	-0.019332671
0.215	-0.008814293	-0.009643901	-0.005199223	0.029229225	0.014707827	-0.024085262
0.216	-0.008425200	-0.014208498	-0.000378266	0.034895244	0.011511537	-0.030178805
0.217	-0.010886143	-0.023124728	0.007349898	0.042634402	0.005777278	-0.039757170
0.218	-0.024465358	-0.038777255	0.024586014	0.055036934	-0.010649661	-0.055479033
0.219	-0.081583135	-0.039446056	0.082956567	0.052155647	-0.070178484	-0.055841436
0.220	-0.071433676	0.054664932	0.072622648	-0.044466992	-0.062041761	0.038797600
0.221	-0.021779193	0.048131544	0.022431411	-0.039400423	-0.014056939	0.032910758
0.222	-0.008739061	0.034746135	0.008944075	-0.026853223	-0.002399691	0.020224749
0.223	-0.004280708	0.026800272	0.004203602	-0.019426136	0.000911699	0.012990260
0.224	-0.002301237	0.021837984	0.002075779	-0.014827357	0.001937050	0.008726955
0.225	-0.001254019	0.018484385	0.000970204	-0.011760555	0.002187526	0.006046061
0.226	-0.000628332	0.016069826	0.000342078	-0.009592569	0.002145096	0.004270625
0.227	-0.000220477	0.014245102	-0.000035282	-0.007991063	0.001990301	0.003048215
0.228	0.000062781	0.012813706	-0.000269797	-0.006767366	0.001797754	0.002181577
0.229	0.000268872	0.011657568	-0.000418044	-0.005807102	0.001599898	0.001553365
0.230	0.000424054	0.010701774	-0.000511882	-0.005037151	0.001410888	0.001090216
0.231	0.000543910	0.009896582	-0.000570255	-0.004408721	0.001236492	0.000744379
0.232	0.000638238	0.009207682	-0.000604922	-0.003888080	0.001078513	0.000483719
0.233	0.000713505	0.008610632	-0.000623440	-0.003451211	0.000936872	0.000286007
0.234	0.000774161	0.008087528	-0.000630802	-0.003080588	0.000810627	0.000135502
0.235	0.000823372	0.007624943	-0.000630385	-0.002763139	0.000698487	0.000020836
0.236	0.000863461	0.007212593	-0.000624520	-0.002488938	0.000599065	-0.000066342
0.237	0.000896175	0.006842459	-0.000614841	-0.002250323	0.000511007	-0.000132260
0.238	0.000922854	0.006508185	-0.000602510	-0.002041290	0.000433050	-0.000181618
0.239	0.000944544	0.006204668	-0.000588361	-0.001857081	0.000364046	-0.000218005
0.240	0.000962078	0.005927749	-0.000573003	-0.001693876	0.000302966	-0.000244188

素子間隔 $d[\lambda]=0.2350$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003211995	0.017286219	0.000565245	-0.002549413	0.005141529	0.014582667
0.191	0.003403740	0.017826073	0.000564662	-0.002676322	0.005374026	0.014927790
0.192	0.003615447	0.018406003	0.000562414	-0.002812965	0.005629175	0.015302116
0.193	0.003850209	0.019030576	0.000558147	-0.002960493	0.005912048	0.015709051
0.194	0.004111752	0.019705058	0.000551414	-0.003120240	0.006229020	0.016152186
0.195	0.004404563	0.020435578	0.000541666	-0.003293788	0.006588094	0.016635211
0.196	0.004734243	0.021229165	0.000528185	-0.003482927	0.006999432	0.0171161594
0.197	0.005107578	0.022094145	0.000510082	-0.003689844	0.007475758	0.017734405
0.198	0.005533057	0.023040254	0.000486203	-0.003917112	0.008033131	0.018355618
0.199	0.006021299	0.024079037	0.000455064	-0.004167815	0.008691691	0.019025236
0.200	0.006585972	0.025223998	0.000414674	-0.004445648	0.009476644	0.019739525
0.201	0.007244462	0.026491392	0.000362436	-0.004755110	0.010418841	0.020488889
0.202	0.008019477	0.027900555	0.000294843	-0.005101687	0.011555140	0.021253872
0.203	0.008941002	0.029474607	0.000207106	-0.005492119	0.012927209	0.021999625
0.204	0.010049293	0.031241198	0.000092582	-0.005934745	0.014577246	0.022668280
0.205	0.011399039	0.033233011	-0.000058063	-0.006439883	0.016537360	0.023170099
0.206	0.013066208	0.035488417	-0.000258246	-0.007020397	0.018809295	0.023377632
0.207	0.015158453	0.038050644	-0.000527688	-0.007692171	0.021329597	0.023129982
0.208	0.017830715	0.040964952	-0.000895858	-0.008474554	0.023929164	0.022270479
0.209	0.021311099	0.044269560	-0.001407949	-0.009390080	0.026310912	0.020725943
0.210	0.025941066	0.047972477	-0.002134757	-0.010462220	0.028098913	0.018620200
0.211	0.032237157	0.051994457	-0.003189209	-0.011707394	0.028989929	0.016343589
0.212	0.040974024	0.056032406	-0.004752419	-0.013111758	0.028943929	0.014485746
0.213	0.053246398	0.059243025	-0.007106828	-0.014569090	0.028273667	0.013646957
0.214	0.070289361	0.059577029	-0.010641164	-0.015730283	0.027584409	0.014279694
0.215	0.092298625	0.052776561	-0.015668103	-0.015718688	0.027683938	0.016686658
0.216	0.114925643	0.032704197	-0.021671340	-0.012975064	0.029662739	0.021242062
0.217	0.126028213	-0.001866067	-0.026193545	-0.006468290	0.035936420	0.029089300
0.218	0.115585083	-0.037803096	-0.026303805	0.001699235	0.057444566	0.041165944
0.219	0.091081048	-0.059471649	-0.022567055	0.007784694	0.117804617	0.007024482
0.220	0.066418105	-0.065973583	-0.017829046	0.010713101	0.067856267	-0.060598917
0.221	0.047544766	-0.064135824	-0.013767770	0.011530366	0.032960256	-0.048940619
0.222	0.034396542	-0.059189069	-0.010703663	0.011332910	0.021751520	-0.038138422
0.223	0.025411065	-0.053609963	-0.008468559	0.010737654	0.016729420	-0.031351940
0.224	0.019206611	-0.048336947	-0.006833826	0.010028770	0.013872435	-0.026805040
0.225	0.014832922	-0.043648780	-0.005618820	0.009325133	0.011994520	-0.023533296
0.226	0.011677657	-0.039572946	-0.004697422	0.008671573	0.010644067	-0.021046734
0.227	0.009349716	-0.036052286	-0.003984313	0.008081121	0.009614026	-0.019078456
0.228	0.007596340	-0.033009091	-0.003421782	0.007553634	0.008795834	-0.017471855
0.229	0.006250985	-0.030368132	-0.002970180	0.007084147	0.008126330	-0.016129153
0.230	0.005201496	-0.028063842	-0.002601934	0.006666070	0.007566177	-0.014985826
0.231	0.004370704	-0.026041362	-0.002297428	0.006292875	0.007089230	-0.013997510
0.232	0.003704410	-0.024255581	-0.002042462	0.005958605	0.006677335	-0.013132560
0.233	0.003163810	-0.022669620	-0.001826579	0.005658036	0.006317420	-0.012367713
0.234	0.002720633	-0.021253327	-0.001641949	0.005386678	0.005999791	-0.011685426
0.235	0.002353944	-0.019981972	-0.001482621	0.005140707	0.005717078	-0.011072178
0.236	0.002048011	-0.018835189	-0.001344009	0.004916874	0.005463573	-0.010517351
0.237	0.001790853	-0.017796076	-0.001222531	0.004712417	0.005234761	-0.010012477
0.238	0.001573225	-0.016850573	-0.001115357	0.004524991	0.005027037	-0.009550696
0.239	0.001387930	-0.015986893	-0.001020231	0.004352596	0.004837480	-0.009126397
0.240	0.001229283	-0.015195087	-0.000935331	0.004193518	0.004663690	-0.008734924

素子間隔 $d[\lambda]=0.2350$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000851248	-0.004534417	-0.002278580	-0.000321311	-0.001496873	0.003397430
0.191	0.000776237	-0.004808604	-0.002393618	-0.000297256	-0.001376966	0.003694650
0.192	0.000684455	-0.005101240	-0.002519517	-0.000272889	-0.001226484	0.004011444
0.193	0.000573052	-0.005413696	-0.002658658	-0.000248170	-0.001040040	0.004348655
0.194	0.000438567	-0.005747412	-0.002814030	-0.000222870	-0.000811071	0.004706966
0.195	0.000276770	-0.006103867	-0.002989402	-0.000196450	-0.000531508	0.005086759
0.196	0.000082422	-0.006484388	-0.003189493	-0.000167913	-0.000191381	0.005487786
0.197	-0.000150960	-0.006890129	-0.003420266	-0.000135494	0.000221744	0.005908833
0.198	-0.000431452	-0.007321693	-0.003689207	-0.000096275	0.000723387	0.006346974
0.199	-0.000769091	-0.007778696	-0.004005695	-0.000045561	0.001332912	0.006796503
0.200	-0.001176383	-0.008258931	-0.004381341	0.000024150	0.002074422	0.007247121
0.201	-0.001668525	-0.008757259	-0.004830322	0.000124586	0.002977344	0.007681344
0.202	-0.002263590	-0.009263649	-0.005369345	0.000273999	0.004076664	0.008070293
0.203	-0.002981856	-0.009760415	-0.006016867	0.000500436	0.005411607	0.008367644
0.204	-0.003843588	-0.010218424	-0.006790652	0.000846249	0.007021154	0.008501297
0.205	-0.004863564	-0.010592688	-0.007702048	0.001373374	0.008933189	0.008363661
0.206	-0.006040758	-0.010819504	-0.008744910	0.002167703	0.011143513	0.007804272
0.207	-0.007340237	-0.010818790	-0.009877535	0.003338872	0.013580926	0.006632047
0.208	-0.008672542	-0.010513154	-0.010999685	0.005004185	0.016064652	0.004649811
0.209	-0.009880932	-0.009868326	-0.011938459	0.007253208	0.018280488	0.001728629
0.210	-0.010763692	-0.008951689	-0.012466490	0.010097323	0.019825904	-0.002086787
0.211	-0.011145748	-0.007971340	-0.012366378	0.013444228	0.020354398	-0.006522140
0.212	-0.010967202	-0.007253297	-0.011504597	0.017144896	0.019751387	-0.011164939
0.213	-0.010319774	-0.007174799	-0.009836046	0.021105635	0.018191917	-0.015698513
0.214	-0.009419881	-0.008154430	-0.007300383	0.025388723	0.016003640	-0.020151239
0.215	-0.008645974	-0.010806485	-0.003649470	0.030252945	0.013366944	-0.025093416
0.216	-0.008969188	-0.016281844	0.001800192	0.036250981	0.009716917	-0.031854247
0.217	-0.013624836	-0.026552926	0.011240057	0.044779993	0.002041689	-0.042659728
0.218	-0.035016239	-0.042132625	0.035524054	0.057014921	-0.021977065	-0.058259881
0.219	-0.097001188	-0.011000297	0.098265594	0.022694533	-0.086193716	-0.026820069
0.220	-0.049379606	0.054875766	0.050339456	-0.045312083	-0.040443820	0.039558805
0.221	-0.016693918	0.042479347	0.017154976	-0.034151633	-0.009318902	0.027771189
0.222	-0.007321539	0.031511724	0.007396423	-0.023903721	-0.001246167	0.017460506
0.223	-0.003768028	0.024841044	0.003607736	-0.017691286	0.001223848	0.011458583
0.224	-0.002083620	0.020535705	0.001805407	-0.013715761	0.002002533	0.007811747
0.225	-0.001152932	0.017554052	0.000834889	-0.010999512	0.002173457	0.005465495
0.226	-0.000579777	0.015368728	0.000270277	-0.009045249	0.002106824	0.003885517
0.227	-0.000197942	0.013695179	-0.000074643	-0.007582463	0.001947776	0.002784007
0.228	0.000071448	0.012368918	-0.000291527	-0.006453120	0.001758073	0.001995473
0.229	0.000269922	0.011289143	-0.000430016	-0.005559779	0.001565550	0.001419654
0.230	0.000420794	0.010390733	-0.000518314	-0.004838697	0.001382242	0.000992615
0.231	0.000538217	0.009629893	-0.000573539	-0.004246872	0.001213157	0.000672245
0.232	0.000631225	0.008976081	-0.000606455	-0.003754240	0.001059840	0.000429894
0.233	0.000705855	0.008407335	-0.000624051	-0.003339196	0.000922171	0.000245558
0.234	0.000766301	0.007907444	-0.000630987	-0.002985845	0.000799255	0.000104961
0.235	0.000815577	0.007464165	-0.000630441	-0.002682254	0.000689874	-0.000002283
0.236	0.000855902	0.007068063	-0.000624615	-0.002419292	0.000592714	-0.000083867
0.237	0.000888969	0.006711757	-0.000615083	-0.002189909	0.000506518	-0.000145494
0.238	0.000916073	0.006389358	-0.000602951	-0.001988524	0.000430080	-0.000191550
0.239	0.000938229	0.006096121	-0.000589025	-0.001810703	0.000362311	-0.000225379
0.240	0.000956251	0.005828167	-0.000573893	-0.001652874	0.000302230	-0.000249568

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003293337	0.017356680	0.000556984	-0.002570057	0.005186455	0.014633895
0.191	0.003492838	0.017902862	0.000555545	-0.002699176	0.005428558	0.014984217
0.192	0.003713359	0.018489867	0.000552290	-0.002838299	0.005695179	0.015363696
0.193	0.003958158	0.019122403	0.000546833	-0.002988637	0.005991695	0.015775577
0.194	0.004231273	0.019805805	0.000538679	-0.003151536	0.006324922	0.016223126
0.195	0.004537500	0.020546350	0.000527221	-0.003328634	0.006703324	0.016709636
0.196	0.004882753	0.021351312	0.000511690	-0.003521835	0.007137542	0.017238063
0.197	0.005274343	0.022229190	0.000491100	-0.003733391	0.007640919	0.017810635
0.198	0.005721390	0.023189965	0.000464184	-0.003965981	0.008230142	0.018428148
0.199	0.006235332	0.024245463	0.000429306	-0.004222815	0.008925934	0.019088918
0.200	0.006830914	0.025409505	0.000384270	-0.004507746	0.009753883	0.019786804
0.201	0.007526957	0.026698699	0.000326204	-0.004825463	0.010744686	0.020508839
0.202	0.008348105	0.028132750	0.000251215	-0.005181686	0.011933914	0.021230991
0.203	0.009327046	0.029735157	0.000153971	-0.005583446	0.013359788	0.021912565
0.204	0.010507581	0.031533668	0.000027089	-0.006039387	0.015057029	0.022489046
0.205	0.011949768	0.033560998	-0.000139904	-0.006560238	0.017044359	0.022865256
0.206	0.013737084	0.035854603	-0.000362077	-0.007159239	0.019301698	0.022913479
0.207	0.015987925	0.038455361	-0.000661594	-0.007852600	0.021737378	0.022487876
0.208	0.018873388	0.041402776	-0.001071752	-0.008659650	0.024156271	0.021469707
0.209	0.022645290	0.044722291	-0.001643666	-0.009601985	0.026259879	0.019850662
0.210	0.027679627	0.048394117	-0.002457387	-0.010699750	0.027720374	0.017825114
0.211	0.034539933	0.052279069	-0.003639976	-0.011960188	0.028332412	0.015816411
0.212	0.044051225	0.055946529	-0.005392106	-0.013346395	0.028162405	0.014379441
0.213	0.057310072	0.058291364	-0.008014910	-0.014697657	0.027586344	0.014035994
0.214	0.075308881	0.056803274	-0.011878487	-0.015552167	0.027231562	0.015169724
0.215	0.097277181	0.046776419	-0.017125449	-0.014874237	0.027937501	0.018071855
0.216	0.116946027	0.022948245	-0.022782396	-0.011156301	0.030995076	0.023227830
0.217	0.121966114	-0.012232773	-0.026103864	-0.004113485	0.040051167	0.031932214
0.218	0.107056299	-0.043832806	-0.025018588	0.003466652	0.071564337	0.040136303
0.219	0.082619204	-0.060472057	-0.020970790	0.008527877	0.111162192	-0.025039715
0.220	0.060146905	-0.064272392	-0.016505235	0.010772273	0.052957347	-0.056085101
0.221	0.043369309	-0.061593530	-0.012814256	0.011291284	0.028998288	-0.044100325
0.222	0.031683508	-0.056638997	-0.010043110	0.011004533	0.020294184	-0.035150270
0.223	0.023631894	-0.051323625	-0.008010126	0.010407366	0.016030847	-0.029355076
0.224	0.018014943	-0.046362687	-0.006510206	0.009727139	0.013479185	-0.025355487
0.225	0.014015416	-0.041961090	-0.005385371	0.009059580	0.011750984	-0.022415422
0.226	0.011103693	-0.038128389	-0.004525278	0.008440913	0.010484626	-0.020146492
0.227	0.008938169	-0.034808342	-0.003854723	0.007881424	0.009506531	-0.018330152
0.228	0.007295685	-0.031929391	-0.003322330	0.007380544	0.008722585	-0.016834843
0.229	0.006027731	-0.029423097	-0.002892561	0.006933529	0.008076915	-0.015576720
0.230	0.005033362	-0.027229809	-0.002540415	0.006534405	0.007533932	-0.014499642
0.231	0.004242538	-0.025299492	-0.002247984	0.006177218	0.007069708	-0.013564486
0.232	0.003605697	-0.023590846	-0.002002215	0.005856518	0.006667451	-0.012743044
0.233	0.003087119	-0.022069960	-0.001793434	0.005567510	0.006314965	-0.012014401
0.234	0.002660623	-0.020709002	-0.001614355	0.005306057	0.006003141	-0.011362662
0.235	0.002306717	-0.019485054	-0.001459414	0.005068618	0.005725019	-0.010775501
0.236	0.002010684	-0.018379164	-0.001324326	0.004852149	0.005475205	-0.010243175
0.237	0.001761266	-0.017375581	-0.001205665	0.004654132	0.005249336	-0.009757900
0.238	0.001549742	-0.016461129	-0.001100778	0.004472345	0.005043991	-0.009313322
0.239	0.001369297	-0.015624746	-0.001007519	0.004304911	0.004856367	-0.008904229
0.240	0.001214533	-0.014857066	-0.000924153	0.004150219	0.004684151	-0.008526284

素子間隔 $d[\lambda]=0.2375$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000778714	-0.004558033	-0.002299846	-0.000299992	-0.001378399	0.003430313
0.191	0.000697566	-0.004832445	-0.002418977	-0.000274924	-0.001247601	0.003724919
0.192	0.000598873	-0.005125172	-0.002549792	-0.000249095	-0.001084839	0.004038411
0.193	0.000479638	-0.005437533	-0.002694820	-0.000222294	-0.000884439	0.004371426
0.194	0.000336204	-0.005770800	-0.002857206	-0.000194086	-0.000639506	0.004724304
0.195	0.000164117	-0.006126279	-0.003040911	-0.000163633	-0.000341560	0.005096976
0.196	-0.000042108	-0.006505085	-0.003250889	-0.000129516	0.000019859	0.005488579
0.197	-0.000289252	-0.006907963	-0.003493333	-0.000089415	0.000457713	0.005896964
0.198	-0.000585700	-0.007334949	-0.003775966	-0.000039635	0.000988086	0.006317883
0.199	-0.000941779	-0.007784838	-0.004108358	0.000025603	0.001630849	0.006743750
0.200	-0.001370174	-0.008254242	-0.004502174	0.000115306	0.002410378	0.007161596
0.201	-0.001885992	-0.008736357	-0.004971331	0.000243274	0.003355814	0.007550217
0.202	-0.002506632	-0.009218890	-0.005531636	0.000430547	0.004500666	0.007875685
0.203	-0.003250601	-0.009681262	-0.006199455	0.000708771	0.005880437	0.008085167
0.204	-0.004134333	-0.010091054	-0.006988339	0.001124424	0.007526303	0.008099121
0.205	-0.005165774	-0.010400631	-0.007902143	0.001743404	0.009452147	0.007803224
0.206	-0.006332667	-0.010546288	-0.008922871	0.002653295	0.011631347	0.007045106
0.207	-0.007585680	-0.010455673	-0.009992750	0.003958369	0.013962943	0.005646341
0.208	-0.008821586	-0.010070833	-0.010995964	0.005760027	0.016238335	0.003444181
0.209	-0.009881792	-0.009390903	-0.011754515	0.008119726	0.018138720	0.000369263
0.210	-0.010586712	-0.008520623	-0.012057779	0.011019654	0.019304329	-0.003471317
0.211	-0.010807200	-0.007689248	-0.011724699	0.014359515	0.019477010	-0.007783429
0.212	-0.010532690	-0.007216039	-0.010652374	0.018018944	0.018629988	-0.012211283
0.213	-0.009884108	-0.007464039	-0.008788283	0.021958196	0.016964908	-0.016556408
0.214	-0.009104480	-0.008872870	-0.006012957	0.026291850	0.014745807	-0.020989391
0.215	-0.008680619	-0.012153988	-0.001963324	0.031325148	0.011961467	-0.026235648
0.216	-0.010005979	-0.018610048	0.004320671	0.037722653	0.007548558	-0.033776836
0.217	-0.017781865	-0.030085319	0.016309117	0.047005536	-0.003018122	-0.045683661
0.218	-0.049673216	-0.041699316	0.050396110	0.055330741	-0.037339689	-0.057281076
0.219	-0.091097519	0.020841450	0.092210228	-0.010021146	-0.080835194	0.005564259
0.220	-0.035150181	0.050441491	0.035896413	-0.041424454	-0.026632911	0.035642206
0.221	-0.013253255	0.037871831	0.013546265	-0.029901412	-0.006198501	0.023645844
0.222	-0.006250611	0.028813545	0.006212581	-0.021465490	-0.000419912	0.015205155
0.223	-0.003353217	0.023144681	0.003120694	-0.016203970	0.001451969	0.010165662
0.224	-0.001899728	0.019377298	0.001575428	-0.012737167	0.002044209	0.007019332
0.225	-0.001065080	0.016710590	0.000716864	-0.010316736	0.002153260	0.004953438
0.226	-0.000536867	0.014724295	0.000206638	-0.008547310	0.002067995	0.003541082
0.227	-0.000177934	0.013184530	-0.000109851	-0.007206745	0.001906350	0.002545128
0.228	0.000079160	0.011952738	-0.000311291	-0.006162014	0.001720127	0.001825881
0.229	0.000270654	0.010942314	-0.000440972	-0.005329127	0.001532803	0.001296925
0.230	0.000417519	0.010096502	-0.000524222	-0.004652592	0.001354936	0.000902471
0.231	0.000532653	0.009376625	-0.000576561	-0.004094386	0.001190891	0.000605255
0.232	0.000624404	0.008755422	-0.000607864	-0.003627641	0.001041998	0.000379657
0.233	0.000698419	0.008213121	-0.000624610	-0.003232877	0.000908102	0.000207626
0.234	0.000758659	0.007735013	-0.000631157	-0.002895650	0.000788351	0.000076184
0.235	0.000807993	0.007309920	-0.000630500	-0.002605047	0.000681600	-0.000024169
0.236	0.000848503	0.006929168	-0.000624649	-0.002352586	0.000586528	-0.000100536
0.237	0.000881911	0.006585969	-0.000615267	-0.002131913	0.000502118	-0.000158151
0.238	0.000909424	0.006274854	-0.000603335	-0.001937762	0.000427141	-0.000201110
0.239	0.000932033	0.005991407	-0.000589630	-0.001765999	0.000360563	-0.000232532
0.240	0.000950531	0.005732009	-0.000574724	-0.001613280	0.000301448	-0.000254840

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003376963	0.017428357	0.000548105	-0.002591494	0.005235181	0.014684901
0.191	0.003584554	0.017980968	0.000545741	-0.002722888	0.005487331	0.015039970
0.192	0.003814283	0.018575160	0.000541395	-0.002864565	0.005765894	0.015424037
0.193	0.004069654	0.019215721	0.000534640	-0.003017759	0.006076602	0.015840098
0.194	0.004354898	0.019908175	0.000524946	-0.003183905	0.006426607	0.016291156
0.195	0.004675172	0.020658924	0.000511646	-0.003364685	0.006824837	0.016780028
0.196	0.005036804	0.021475416	0.000493893	-0.003562077	0.007282431	0.017309032
0.197	0.005447632	0.022366359	0.000470607	-0.003778420	0.007813263	0.017879484
0.198	0.005917454	0.023341968	0.000440394	-0.004016503	0.008434541	0.018490886
0.199	0.006458594	0.024414343	0.000401454	-0.004279669	0.009167390	0.019139724
0.200	0.007086963	0.025597601	0.000351362	-0.004571928	0.010037466	0.019817302
0.201	0.007822936	0.026908672	0.000286941	-0.004898167	0.011074818	0.020507172
0.202	0.008693266	0.028367570	0.000203875	-0.005264340	0.012312950	0.021180765
0.203	0.009733533	0.029998037	0.000096232	-0.005677759	0.013785468	0.021791944
0.204	0.010991572	0.031827869	-0.000044224	-0.006147395	0.015518286	0.022270813
0.205	0.012533110	0.033889339	-0.000229201	-0.006684327	0.017515289	0.022519250
0.206	0.014449833	0.036218527	-0.000475614	-0.007302128	0.019734737	0.022414507
0.207	0.016872017	0.038852842	-0.000808404	-0.008017178	0.022060027	0.021831263
0.208	0.019988171	0.041824047	-0.001265120	-0.008848473	0.024279889	0.020693869
0.209	0.024075516	0.045140939	-0.001903460	-0.009815986	0.026109331	0.019055396
0.210	0.029545919	0.048748367	-0.002813605	-0.010935045	0.027279847	0.017164528
0.211	0.037008310	0.052432498	-0.004137534	-0.012200509	0.027679442	0.015455472
0.212	0.047324857	0.055607624	-0.006094768	-0.013545624	0.027460147	0.014438615
0.213	0.061540126	0.056868971	-0.008996712	-0.014743391	0.027047283	0.014564881
0.214	0.080254743	0.053243120	-0.013164008	-0.015208055	0.027091749	0.016168921
0.215	0.101493587	0.039826507	-0.018502054	-0.013779757	0.028499237	0.019553818
0.216	0.117296554	0.012948675	-0.023577580	-0.009166565	0.032922381	0.025332860
0.217	0.116479463	-0.021347722	-0.025644621	-0.001907488	0.045974151	0.034471050
0.218	0.098532370	-0.048211541	-0.023625110	0.004909096	0.087966367	0.031201082
0.219	0.074941216	-0.060582229	-0.019471786	0.009048142	0.091308678	-0.043770410
0.220	0.054621215	-0.062341675	-0.015312433	0.010742801	0.043215640	-0.050808236
0.221	0.039696520	-0.059105356	-0.011960668	0.011034592	0.026082205	-0.040076121
0.222	0.029277458	-0.054221179	-0.009448350	0.010685415	0.019105319	-0.032580343
0.223	0.022036910	-0.049171898	-0.007593451	0.010093709	0.015425469	-0.027579649
0.224	0.016935165	-0.044504188	-0.006213161	0.009442360	0.013126023	-0.024036643
0.225	0.013267460	-0.040367767	-0.005169125	0.008808915	0.011527431	-0.021382052
0.226	0.010574085	-0.036759583	-0.004364512	0.008222786	0.010336210	-0.019304819
0.227	0.008555598	-0.033625188	-0.003732819	0.007692111	0.009405543	-0.017624607
0.228	0.007014415	-0.030898812	-0.003228213	0.007215981	0.008653446	-0.016230331
0.229	0.005817724	-0.028518115	-0.002818702	0.006789978	0.008030150	-0.015049820
0.230	0.004874455	-0.026428773	-0.002481589	0.006408636	0.007503434	-0.014034040
0.231	0.004120909	-0.024585088	-0.002200498	0.006066519	0.007051351	-0.013148403
0.232	0.003511694	-0.022949201	-0.001963410	0.005758636	0.006658346	-0.012367724
0.233	0.003013866	-0.021489895	-0.001761360	0.005480582	0.006313028	-0.011673153
0.234	0.002603155	-0.020181452	-0.001587565	0.005228539	0.006006833	-0.011050280
0.235	0.002261393	-0.019002613	-0.001436814	0.004999228	0.005733178	-0.010487854
0.236	0.001974798	-0.017935738	-0.001305056	0.004789844	0.005486910	-0.009976945
0.237	0.001732782	-0.016966115	-0.001189104	0.004597988	0.005263929	-0.009510359
0.238	0.001527112	-0.016081403	-0.001086420	0.004421606	0.005060928	-0.009082223
0.239	0.001351333	-0.015271211	-0.000994965	0.004258937	0.004875213	-0.008687695
0.240	0.001200312	-0.014526717	-0.000913084	0.004108464	0.004704558	-0.008322731

素子間隔 $d[\lambda]=0.2400$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000704974	-0.004580376	-0.002322575	-0.000277173	-0.001258228	0.003459414
0.191	0.000617548	-0.004854838	-0.002445956	-0.000250736	-0.001116339	0.003750948
0.192	0.000511783	-0.005147430	-0.002581848	-0.000223011	-0.000941064	0.004060563
0.193	0.000384520	-0.005459353	-0.002732912	-0.000193611	-0.000726454	0.004388625
0.194	0.000231933	-0.005791793	-0.002902467	-0.000161841	-0.000465269	0.004735138
0.195	0.000049349	-0.006145824	-0.003094649	-0.000126538	-0.000148645	0.005099505
0.196	-0.000168961	-0.006522262	-0.003314608	-0.000085832	0.000234319	0.005480137
0.197	-0.000430037	-0.006921421	-0.003568738	-0.000036785	0.000697056	0.005873855
0.198	-0.000742521	-0.007342708	-0.003864935	0.000025149	0.001256094	0.006274958
0.199	-0.001116932	-0.007784027	-0.004212858	0.000106914	0.001931615	0.006673817
0.200	-0.001565980	-0.008240733	-0.004624049	0.000219122	0.002747946	0.007054623
0.201	-0.002104428	-0.008704305	-0.005111892	0.000377723	0.003733419	0.007392311
0.202	-0.002748604	-0.009160207	-0.005690872	0.000606563	0.004919261	0.007647901
0.203	-0.003514651	-0.009585175	-0.006374637	0.000940710	0.006336052	0.007762424
0.204	-0.004414498	-0.009944151	-0.007171733	0.001430277	0.008005701	0.007649996
0.205	-0.005448495	-0.010188108	-0.008077782	0.002143855	0.009926676	0.007192078
0.206	-0.006593280	-0.010255989	-0.009062615	0.003168289	0.012049669	0.006239382
0.207	-0.007786582	-0.010085996	-0.010054015	0.004599941	0.014247332	0.004631365
0.208	-0.008916327	-0.009642331	-0.010924933	0.006521957	0.016292589	0.002244480
0.209	-0.009829392	-0.008956074	-0.011498960	0.008969731	0.017876308	-0.000935132
0.210	-0.010373794	-0.008161826	-0.011586454	0.011904773	0.018691470	-0.004755256
0.211	-0.010464020	-0.007500285	-0.011038030	0.015230251	0.018561350	-0.008925818
0.212	-0.010128859	-0.007282236	-0.009767502	0.018859854	0.017522172	-0.013161087
0.213	-0.009516097	-0.007866137	-0.007699548	0.022803075	0.015775332	-0.017378190
0.214	-0.008911775	-0.009732196	-0.004642901	0.027218295	0.013493634	-0.021881096
0.215	-0.008975357	-0.013700611	-0.000094161	0.032459981	0.010419156	-0.027541347
0.216	-0.011703147	-0.021172837	0.007330148	0.039314250	0.004824039	-0.035933136
0.217	-0.023886089	-0.033313434	0.023102918	0.048947337	-0.009943250	-0.048422110
0.218	-0.066676632	-0.033257339	0.067487426	0.045770730	-0.054987229	-0.048321841
0.219	-0.071956855	0.039437638	0.072897261	-0.029370854	-0.062194518	0.024672055
0.220	-0.026026006	0.045283029	0.026576641	-0.036742038	-0.017894550	0.030971157
0.221	-0.010813408	0.034088103	0.010958802	-0.026437872	-0.004055415	0.020316332
0.222	-0.005415728	0.026527691	0.005279330	-0.019418996	0.000187139	0.013337068
0.223	-0.003009459	0.021659278	0.002713848	-0.014914589	0.001621084	0.009061591
0.224	-0.001740903	0.018338352	0.001376060	-0.011868579	0.002069424	0.006327034
0.225	-0.000986919	0.015941039	0.000611894	-0.009700273	0.002129504	0.004498422
0.226	-0.000497820	0.014128927	0.000148946	-0.008091947	0.002029653	0.003231006
0.227	-0.000159366	0.012708270	-0.000142295	-0.006859695	0.001866558	0.002327788
0.228	0.000086387	0.011561733	-0.000329637	-0.005890832	0.001683773	0.001670162
0.229	0.000271374	0.010614604	-0.000451243	-0.005112843	0.001501443	0.001183382
0.230	0.000414440	0.009817219	-0.000529810	-0.004477113	0.001328735	0.000818512
0.231	0.000527369	0.009135327	-0.000579444	-0.003949924	0.001169455	0.000542471
0.232	0.000617888	0.008544551	-0.000609217	-0.003507218	0.001024743	0.000332299
0.233	0.000691285	0.008027040	-0.000625152	-0.003131375	0.000894426	0.000171654
0.234	0.000751302	0.007569440	-0.000631324	-0.002809262	0.000777689	0.000048728
0.235	0.000800670	0.007161533	-0.000630556	-0.002530879	0.000673450	-0.000045188
0.236	0.000841433	0.006795359	-0.000624838	-0.002288503	0.000580550	-0.000116602
0.237	0.000875153	0.006464619	-0.000615591	-0.002076077	0.000497848	-0.000170439
0.238	0.000903051	0.006164255	-0.000603843	-0.001888794	0.000424273	-0.000210470
0.239	0.000926089	0.005890158	-0.000590345	-0.001722795	0.000358839	-0.000239608
0.240	0.000945042	0.005638945	-0.000575652	-0.001574950	0.000300656	-0.000260123

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003463387	0.017500109	0.000538452	-0.002613366	0.005287867	0.014734641
0.191	0.003679428	0.018059162	0.000535083	-0.002747087	0.005550461	0.015093915
0.192	0.003918787	0.018660554	0.000529552	-0.002891376	0.005841384	0.015481897
0.193	0.004185192	0.019309181	0.000521394	-0.003047512	0.006166690	0.015901331
0.194	0.004483155	0.020010697	0.000510029	-0.003216983	0.006533898	0.016354858
0.195	0.004818182	0.020771650	0.000494727	-0.003401533	0.006952352	0.016844791
0.196	0.005197044	0.021599662	0.000474562	-0.003603215	0.007433640	0.017372734
0.197	0.005628144	0.022503637	0.000448348	-0.003824463	0.007992087	0.017939001
0.198	0.006122011	0.023494016	0.000414552	-0.004068172	0.008645283	0.018541690
0.199	0.006691918	0.024583150	0.000371191	-0.004337822	0.009414532	0.019175342
0.200	0.007355036	0.025785423	0.000315592	-0.004637584	0.010325206	0.019828604
0.201	0.008133423	0.027118033	0.000244240	-0.004972540	0.011406151	0.020481536
0.202	0.009056110	0.028601220	0.000152347	-0.005348877	0.012687991	0.021101233
0.203	0.010161824	0.030258831	0.000033321	-0.005774181	0.014198627	0.021636833
0.204	0.011502739	0.032118441	-0.000122017	-0.006257723	0.015953976	0.022014559
0.205	0.013150793	0.034211516	-0.000326761	-0.006810891	0.017942348	0.022136542
0.206	0.015206526	0.036571988	-0.000599872	-0.007447491	0.020101537	0.021889586
0.207	0.017813042	0.039232468	-0.000969376	-0.008183862	0.022295199	0.021174090
0.208	0.021177462	0.042214504	-0.001477533	-0.009038248	0.024306439	0.019959326
0.209	0.025603623	0.045505549	-0.002189253	-0.010028096	0.025876457	0.018352690
0.210	0.031539358	0.049006135	-0.003205569	-0.011162046	0.026801756	0.016640171
0.211	0.039633929	0.052411072	-0.004683599	-0.012418675	0.027054851	0.015249575
0.212	0.050763663	0.054951907	-0.006858995	-0.013693872	0.026856745	0.014642323
0.213	0.065848553	0.054894477	-0.010040492	-0.014682741	0.026671120	0.015210068
0.214	0.084925756	0.048852848	-0.014459884	-0.014673626	0.027183054	0.017254827
0.215	0.104656647	0.032097780	-0.019725843	-0.012448276	0.029417624	0.021110331
0.216	0.115944302	0.003175755	-0.024015921	-0.007098435	0.035634333	0.027472228
0.217	0.109993446	-0.028963865	-0.024883207	0.000070178	0.054230785	0.035755202
0.218	0.090321532	-0.051133117	-0.022197261	0.006043497	0.099627637	0.011958402
0.219	0.068064664	-0.060013401	-0.018087243	0.009385038	0.071914851	-0.049389685
0.220	0.049774943	-0.060269263	-0.014243556	0.010645204	0.036656395	-0.045918931
0.221	0.036474375	-0.056690566	-0.011198562	0.010766608	0.023872554	-0.036697565
0.222	0.027150255	-0.051932323	-0.008914288	0.010376191	0.018125317	-0.030348964
0.223	0.020613329	-0.047147101	-0.007216147	0.009795700	0.014901125	-0.025992752
0.224	0.015962468	-0.042754818	-0.005941863	0.009173311	0.012811360	-0.022833669
0.225	0.012588193	-0.038864042	-0.004970071	0.008572221	0.011324767	-0.020425891
0.226	0.010089773	-0.035463389	-0.004215503	0.008016543	0.010200277	-0.018517897
0.227	0.008203739	-0.032500925	-0.003619158	0.007512755	0.009312564	-0.016959811
0.228	0.006754502	-0.029916300	-0.003140010	0.007059743	0.008589714	-0.015657278
0.229	0.005622928	-0.027652713	-0.002749176	0.006653411	0.007987182	-0.014547933
0.230	0.004726624	-0.025660643	-0.002426002	0.006288766	0.007475684	-0.013588803
0.231	0.004007513	-0.023898311	-0.002155477	0.005960840	0.007035034	-0.012749224
0.232	0.003423916	-0.022330963	-0.001926510	0.005665063	0.006650789	-0.012006652
0.233	0.002945413	-0.020929844	-0.001730784	0.005397382	0.006312287	-0.011344090
0.234	0.002549449	-0.019671154	-0.001561967	0.005154273	0.006011465	-0.010748441
0.235	0.002219065	-0.018535158	-0.001415175	0.004932698	0.005742089	-0.010209424
0.236	0.001941333	-0.017505421	-0.001286595	0.004730046	0.005499258	-0.009718834
0.237	0.001706282	-0.016568191	-0.001173213	0.004544078	0.005279056	-0.009270034
0.238	0.001506133	-0.015711902	-0.001072623	0.004372872	0.005078314	-0.008857585
0.239	0.001334756	-0.014926781	-0.000982884	0.004214774	0.004894443	-0.008476980
0.240	0.001187273	-0.014204519	-0.000902417	0.004068354	0.004725297	-0.008124449

素子間隔 $d[\lambda]=0.2425$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000629991	-0.004600844	-0.002346580	-0.000252765	-0.001136640	0.003484393
0.191	0.000536160	-0.004875136	-0.002474330	-0.000224579	-0.000983499	0.003772340
0.192	0.000423176	-0.005167316	-0.002615413	-0.000194499	-0.000795531	0.004077435
0.193	0.000287734	-0.005478476	-0.002772624	-0.000161932	-0.000566514	0.004399746
0.194	0.000125829	-0.005809637	-0.002949431	-0.000125912	-0.000288892	0.004738866
0.195	-0.000067411	-0.006161641	-0.003150133	-0.000084910	0.000046560	0.005093618
0.196	-0.000297933	-0.006534969	-0.003380045	-0.000036562	0.000451131	0.005461603
0.197	-0.000572996	-0.006929452	-0.003645715	0.000022743	0.000938634	0.005838512
0.198	-0.000901430	-0.007343817	-0.003955132	0.000098464	0.001525898	0.006217066
0.199	-0.001293834	-0.007775014	-0.004317913	0.000198790	0.002233179	0.006585459
0.200	-0.001762759	-0.008217094	-0.004745285	0.000335998	0.003084380	0.006924922
0.201	-0.002322343	-0.008659813	-0.005249792	0.000528225	0.004106446	0.007206482
0.202	-0.002987435	-0.009086498	-0.005844146	0.000802053	0.005327471	0.007386273
0.203	-0.003771253	-0.009471562	-0.006538661	0.001195668	0.006771949	0.007399841
0.204	-0.004680607	-0.009778068	-0.007336252	0.001762091	0.008451340	0.007156432
0.205	-0.005707871	-0.009957229	-0.008223713	0.002571154	0.010347718	0.006536301
0.206	-0.006819129	-0.009952963	-0.009159155	0.003706740	0.012390196	0.005397718
0.207	-0.007941716	-0.009716725	-0.010058161	0.005254869	0.014429924	0.003602969
0.208	-0.008959884	-0.009235956	-0.010787158	0.007279728	0.016231399	0.001069150
0.209	-0.009732226	-0.008570520	-0.011176754	0.009794432	0.017507030	-0.002169775
0.210	-0.010137133	-0.007877145	-0.011059548	0.012748583	0.018006714	-0.005934508
0.211	-0.010128535	-0.007400993	-0.010310644	0.016057589	0.017623330	-0.009958088
0.212	-0.009767987	-0.007445518	-0.008847066	0.019670950	0.016432549	-0.014032244
0.213	-0.009230989	-0.008377004	-0.006557208	0.023641040	0.014610165	-0.018184094
0.214	-0.008874196	-0.010731404	-0.003164764	0.028163183	0.012207540	-0.022842948
0.215	-0.009613580	-0.015432719	0.002017030	0.033644996	0.008646295	-0.029006675
0.216	-0.014283827	-0.023855011	0.011028170	0.040944717	0.001310562	-0.038211856
0.217	-0.032449967	-0.035245301	0.032154615	0.049655154	-0.019253694	-0.049883514
0.218	-0.078973897	-0.014400449	0.079780119	0.025930767	-0.067872070	-0.028973655
0.219	-0.053239346	0.044998412	0.054000744	-0.035579456	-0.043934964	0.030716284
0.220	-0.020033217	0.040543443	0.020407307	-0.032418129	-0.012256644	0.026691442
0.221	-0.009037725	0.030955436	0.009054113	-0.023592947	-0.002553823	0.017612328
0.222	-0.004759223	0.024574631	0.004537442	-0.017686566	0.000632416	0.011778738
0.223	-0.002725537	0.020352839	0.002375045	-0.013791879	0.001742546	0.008116037
0.224	-0.001605879	0.017405002	0.001205614	-0.011096417	0.002079688	0.005722229
0.225	-0.000919309	0.015238965	0.000520653	-0.009143822	0.002101705	0.004094985
0.226	-0.000463858	0.013579518	0.000098352	-0.007676139	0.001991022	0.002952944
0.227	-0.000143421	0.012264962	-0.000170791	-0.006539938	0.001827676	0.002131157
0.228	0.000092196	0.011195319	-0.000345660	-0.005639162	0.001648612	0.001528253
0.229	0.000271297	0.010305860	-0.000460066	-0.004910924	0.001471213	0.001079279
0.230	0.000410903	0.009552962	-0.000534446	-0.004312472	0.001303487	0.000741131
0.231	0.000521815	0.008906202	-0.000581664	-0.003813810	0.001148781	0.000484340
0.232	0.000611212	0.008343716	-0.000610091	-0.003393321	0.001008083	0.000288249
0.233	0.000684054	0.007849379	-0.000625323	-0.003035066	0.000881194	0.000138064
0.234	0.000743884	0.007411029	-0.000631187	-0.002727058	0.000767345	0.000022992
0.235	0.000793308	0.007019310	-0.000630354	-0.002460125	0.000665517	-0.000064966
0.236	0.000834286	0.006666896	-0.000624713	-0.002227140	0.000574617	-0.000131817
0.237	0.000868328	0.006347962	-0.000615626	-0.002022489	0.000493567	-0.000182134
0.238	0.000896615	0.006057813	-0.000604080	-0.001841701	0.000421347	-0.000219424
0.239	0.000920084	0.005792615	-0.000590805	-0.001681163	0.000357024	-0.000246422
0.240	0.000939493	0.005549208	-0.000576338	-0.001537944	0.000299747	-0.000265254

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003552446	0.017572412	0.000528080	-0.002635853	0.005344274	0.014783246
0.191	0.003777303	0.018137956	0.000523625	-0.002771960	0.005617679	0.015146184
0.192	0.004026754	0.018746595	0.000516804	-0.002918925	0.005921387	0.015537337
0.193	0.004304708	0.019403338	0.000507129	-0.003078079	0.006261673	0.015959295
0.194	0.004616010	0.020113971	0.000493943	-0.003250970	0.006646433	0.016414268
0.195	0.004966528	0.020885174	0.000476475	-0.003439390	0.007085418	0.016903940
0.196	0.005363512	0.021724742	0.000453697	-0.003645479	0.007590590	0.017429166
0.197	0.005815973	0.022641768	0.000424308	-0.003871762	0.008176630	0.017989171
0.198	0.006335224	0.023646906	0.000386626	-0.004121249	0.008861355	0.018580558
0.199	0.006935565	0.024752734	0.000338461	-0.004397555	0.009665996	0.019195834
0.200	0.007635523	0.025973867	0.000276872	-0.004705014	0.010615253	0.019820949
0.201	0.008458983	0.027327718	0.000197966	-0.005048906	0.011736189	0.020432570
0.202	0.009437479	0.028834681	0.000096431	-0.005435653	0.013055796	0.020993807
0.203	0.010612991	0.030518419	-0.000035033	-0.005873072	0.014595196	0.021449955
0.204	0.012042592	0.032406160	-0.000206684	-0.006370741	0.016359533	0.021725381
0.205	0.013804872	0.034528000	-0.000433141	-0.006940284	0.018321532	0.021725572
0.206	0.016009953	0.036914859	-0.000735642	-0.007595612	0.020400826	0.021351204
0.207	0.018814723	0.039592966	-0.001145634	-0.008352769	0.022447578	0.020532008
0.208	0.022446050	0.042570709	-0.001710567	-0.009228708	0.024249392	0.019281207
0.209	0.027235240	0.045808669	-0.002503190	-0.010237253	0.025583150	0.017751204
0.210	0.033664936	0.049152685	-0.003635956	-0.011378070	0.026311283	0.016249716
0.211	0.042415947	0.052187646	-0.005280715	-0.012608864	0.026480242	0.015186330
0.212	0.054346219	0.053934689	-0.007684521	-0.013779891	0.026366585	0.014974282
0.213	0.070158868	0.052315977	-0.011135194	-0.014498479	0.026469407	0.015957037
0.214	0.089150958	0.043646569	-0.015730536	-0.013937786	0.027526402	0.018418065
0.215	0.106595312	0.023830057	-0.020744269	-0.010914636	0.030763722	0.022730301
0.216	0.113062951	-0.005991962	-0.024104648	-0.005039727	0.039396275	0.029489776
0.217	0.102944051	-0.035073927	-0.023905546	0.001788315	0.064932002	0.034079417
0.218	0.082604450	-0.052886444	-0.020789590	0.006915326	0.098844521	-0.011574133
0.219	0.061932069	-0.058975671	-0.016818898	0.009583674	0.057394425	-0.048588718
0.220	0.045508174	-0.058137210	-0.013283829	0.010501681	0.032031005	-0.041662360
0.221	0.033628354	-0.054367524	-0.010514336	0.010495303	0.022137745	-0.033820337
0.222	0.025254962	-0.049768669	-0.008431478	0.010078807	0.017299228	-0.028387363
0.223	0.019332446	-0.045239938	-0.006872050	0.009513131	0.014439892	-0.024561769
0.224	0.015079317	-0.041104750	-0.005692313	0.008919007	0.012526759	-0.021729111
0.225	0.011966375	-0.037441457	-0.004785520	0.008348427	0.011138425	-0.019536605
0.226	0.009643272	-0.034232915	-0.004076384	0.007821206	0.010074013	-0.017779067
0.227	0.007877388	-0.031429984	-0.003512389	0.007342514	0.009225672	-0.016331153
0.228	0.006512202	-0.028977341	-0.003056710	0.006911115	0.008529988	-0.015112337
0.229	0.005440559	-0.026823202	-0.002683205	0.006523225	0.007946940	-0.014068524
0.230	0.004587735	-0.024922385	-0.002373040	0.006174284	0.007449841	-0.013161947
0.231	0.003900623	-0.023236642	-0.002112413	0.005859755	0.007020101	-0.012365381
0.232	0.003340989	-0.021734012	-0.001891098	0.005575428	0.006644232	-0.011658558
0.233	0.002880629	-0.020387989	-0.001701351	0.005317587	0.006312279	-0.011026149
0.234	0.002498563	-0.019176540	-0.001537257	0.005082976	0.006016639	-0.010456242
0.235	0.002178934	-0.018081322	-0.001394233	0.004868774	0.005751405	-0.009939431
0.236	0.001909605	-0.017087011	-0.001268684	0.004672554	0.005511910	-0.009468172
0.237	0.001681174	-0.016180744	-0.001157760	0.004492223	0.005294415	-0.009036336
0.238	0.001486280	-0.015351669	-0.001059175	0.004325981	0.005095879	-0.008638877
0.239	0.001319107	-0.014590599	-0.000971084	0.004172272	0.004913814	-0.008271609
0.240	0.001175006	-0.013889695	-0.000891977	0.004029753	0.004746151	-0.007931010

素子間隔 $d[\lambda]=0.2450$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000553823	-0.004619644	-0.002371842	-0.000226621	-0.001013617	0.003505297
0.191	0.000453466	-0.004893542	-0.002504062	-0.000196290	-0.000849088	0.003789113
0.192	0.000333148	-0.005184996	-0.002650493	-0.000163322	-0.000648214	0.004088905
0.193	0.000189387	-0.005495027	-0.002813935	-0.000126999	-0.000404635	0.004404608
0.194	0.000018026	-0.005824451	-0.002997973	-0.000086002	-0.000110517	0.004735232
0.195	-0.000185984	-0.006173836	-0.003207188	-0.000038413	0.000243824	0.005078994
0.196	-0.000428781	-0.006543295	-0.003446957	0.000018674	0.000669934	0.005432590
0.197	-0.000717798	-0.006932135	-0.003723921	0.000089593	0.001181903	0.005790479
0.198	-0.001061968	-0.007338356	-0.004046071	0.000180779	0.001796692	0.006143699
0.199	-0.001471843	-0.007757911	-0.004422845	0.000301720	0.002534364	0.006478162
0.200	-0.001959621	-0.008183525	-0.004864934	0.000466404	0.003417990	0.006772067
0.201	-0.002538521	-0.008603284	-0.005383707	0.000695137	0.004472503	0.006992594
0.202	-0.003221524	-0.008998554	-0.005989693	0.001017107	0.005722087	0.007091293
0.203	-0.004018373	-0.009341877	-0.006689320	0.001473156	0.007184091	0.006999132
0.204	-0.004930364	-0.009595469	-0.007479275	0.002118373	0.008858512	0.006622293
0.205	-0.005941857	-0.009712360	-0.008337436	0.003022312	0.010710989	0.005842880
0.206	-0.007009498	-0.009643664	-0.009211085	0.004263873	0.012651129	0.004530844
0.207	-0.008053291	-0.009356000	-0.010006341	0.005917094	0.014514496	0.002574627
0.208	-0.008958805	-0.008859788	-0.010587531	0.008027907	0.016066719	-0.000069432
0.209	-0.009601006	-0.008239470	-0.010795938	0.010592057	0.017050232	-0.003329573
0.210	-0.009889139	-0.007667062	-0.010484995	0.013555254	0.017270881	-0.007016167
0.211	-0.009811839	-0.007388280	-0.009545754	0.016851057	0.016676763	-0.010899187
0.212	-0.009459348	-0.007703650	-0.007886036	0.020463834	0.015361250	-0.014850494
0.213	-0.009043095	-0.008999363	-0.005345902	0.024482338	0.013451324	-0.019001700
0.214	-0.009028866	-0.011877121	-0.001546540	0.029134209	0.010839354	-0.023898740
0.215	-0.010697001	-0.017336514	0.004454288	0.034878494	0.006528216	-0.030627317
0.216	-0.018027071	-0.026465745	0.015691885	0.042461684	-0.003282717	-0.040426045
0.217	-0.043557784	-0.034151747	0.043584669	0.047424138	-0.031043261	-0.048339188
0.218	-0.078836382	0.008842964	0.079578149	0.001828017	-0.068273137	-0.005264638
0.219	-0.039354275	0.044197739	0.039940082	-0.035339381	-0.030471474	0.030371993
0.220	-0.015927763	0.036457887	0.016144051	-0.028699485	-0.008479367	0.023039629
0.221	-0.007700080	0.028325306	0.007603793	-0.021223932	-0.001470776	0.015386760
0.222	-0.004230419	0.022884245	0.003934382	-0.016200946	0.000964184	0.010461400
0.223	-0.002486568	0.019192581	0.002088221	-0.012804593	0.001829373	0.007297426
0.224	-0.001488253	0.016560184	0.001056768	-0.010404643	0.002080272	0.005189202
0.225	-0.000859115	0.014594557	0.000439407	-0.008638313	0.002072135	0.003734520
0.226	-0.000433202	0.013069925	0.000052680	-0.007294317	0.001953214	0.002701795
0.227	-0.000128941	0.011850469	-0.000196775	-0.006243811	0.001790340	0.001951995
0.228	0.000097407	0.010850567	-0.000360376	-0.005404480	0.001615037	0.001398002
0.229	0.000271045	0.010013911	-0.000468209	-0.004721557	0.001442381	0.000983126
0.230	0.000407390	0.009302066	-0.000538724	-0.004157316	0.001279387	0.000669253
0.231	0.000516340	0.008687957	-0.000583618	-0.003685022	0.001128906	0.000430058
0.232	0.000604666	0.008151891	-0.000610799	-0.003285176	0.000992023	0.000246926
0.233	0.000676974	0.007679290	-0.000625385	-0.002943333	0.000868402	0.000106405
0.234	0.000736622	0.007259069	-0.000630973	-0.002648541	0.000757312	-0.000001380
0.235	0.000786098	0.006882646	-0.000630088	-0.002392373	0.000657792	-0.000083786
0.236	0.000827284	0.006543272	-0.000624533	-0.002168245	0.000568810	-0.000146374
0.237	0.000861636	0.006235555	-0.000615608	-0.001970948	0.000489347	-0.000193388
0.238	0.000890301	0.005955130	-0.000604267	-0.001796311	0.000418435	-0.000228108
0.239	0.000914191	0.005698425	-0.000591213	-0.001640962	0.000355185	-0.000253085
0.240	0.000934045	0.005462481	-0.000576969	-0.001502147	0.000298785	-0.000270322

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003644304	0.017645217	0.000516916	-0.002658967	0.005404365	0.014830381
0.191	0.003878366	0.018217284	0.000511284	-0.002797519	0.005688923	0.015196391
0.192	0.004138308	0.018833208	0.000503087	-0.002947235	0.006005665	0.015590135
0.193	0.004428350	0.019498104	0.000491772	-0.003109484	0.006361249	0.016013740
0.194	0.004753621	0.020217872	0.000476647	-0.003285866	0.006763866	0.016469001
0.195	0.005120400	0.020999348	0.000456837	-0.003478256	0.007223574	0.016957050
0.196	0.005536442	0.021850480	0.000431233	-0.003688865	0.007752669	0.017477863
0.197	0.006011456	0.022780533	0.000398394	-0.003920309	0.008366067	0.018029359
0.198	0.006557506	0.023800363	0.000356497	-0.004175722	0.009081625	0.018606842
0.199	0.007190040	0.024922746	0.000303120	-0.004458850	0.009920233	0.019200608
0.200	0.007929073	0.026162500	0.000234995	-0.004774205	0.010905492	0.019794026
0.201	0.008800403	0.027537133	0.000147865	-0.005127233	0.012062140	0.020360371
0.202	0.009838273	0.029067074	0.000035819	-0.005524593	0.013412724	0.020859445
0.203	0.011088327	0.030775715	-0.000109252	-0.005974342	0.014970902	0.021233886
0.204	0.012612774	0.032689462	-0.000298773	-0.006486293	0.016730511	0.021408245
0.205	0.014497443	0.034836494	-0.000549065	-0.007072237	0.018649502	0.021294574
0.206	0.016862766	0.037243673	-0.000883885	-0.007746025	0.020632643	0.020811023
0.207	0.019880329	0.039928941	-0.001338456	-0.008523076	0.022523402	0.019918516
0.208	0.023797667	0.042884038	-0.001965900	-0.009418387	0.024122901	0.018670873
0.209	0.028973738	0.046036192	-0.002847369	-0.010440793	0.025249865	0.017255142
0.210	0.035922904	0.049164754	-0.004107017	-0.011578248	0.025830128	0.015987574
0.211	0.045343557	0.051724913	-0.005930015	-0.012762322	0.025973568	0.015252392
0.212	0.058030744	0.052503232	-0.008567306	-0.013789148	0.026003175	0.015418210
0.213	0.074360619	0.049089243	-0.012261889	-0.014172326	0.026456478	0.016790387
0.214	0.092734374	0.037687668	-0.016931103	-0.012997747	0.028152720	0.019644316
0.215	0.107195160	0.015323321	-0.021511375	-0.009230522	0.032641137	0.024373742
0.216	0.108908837	-0.014245809	-0.023872498	-0.003070812	0.044519809	0.031015050
0.217	0.095693870	-0.039757501	-0.022789088	0.003237532	0.076637766	0.027083164
0.218	0.075477400	-0.053715122	-0.019437121	0.007566179	0.087229230	-0.029190803
0.219	0.056480705	-0.057615004	-0.015663614	0.009676514	0.047219894	-0.045527185
0.220	0.041743916	-0.055995216	-0.012421230	0.010326446	0.028635034	-0.038016657
0.221	0.031105599	-0.052143205	-0.009898161	0.010224977	0.020739083	-0.031340581
0.222	0.023560150	-0.047723785	-0.007993535	0.009793679	0.016591881	-0.026646831
0.223	0.018176215	-0.043441535	-0.006557262	0.009245195	0.014030210	-0.023263150
0.224	0.014274955	-0.039546402	-0.005462111	0.008678540	0.012268431	-0.020710523
0.225	0.011395580	-0.036093922	-0.004613990	0.008136696	0.010966872	-0.018706950
0.226	0.009230621	-0.033063401	-0.003946211	0.007636076	0.009956720	-0.017083797
0.227	0.007574026	-0.030408689	-0.003411896	0.007180826	0.009144535	-0.015735622
0.228	0.006285863	-0.028079091	-0.002977901	0.006769654	0.008474107	-0.014593405
0.229	0.005269499	-0.026027362	-0.002620507	0.006399069	0.007909346	-0.013610064
0.230	0.004457016	-0.024212214	-0.002322500	0.006064901	0.007425854	-0.012752316
0.231	0.003799835	-0.022598597	-0.002071191	0.005762998	0.007006446	-0.011995900
0.232	0.003262636	-0.021157139	-0.001857091	0.005489516	0.006638602	-0.011322659
0.233	0.002819329	-0.019863343	-0.001673004	0.005241018	0.006312951	-0.010718695
0.234	0.002450370	-0.018696789	-0.001513395	0.005014495	0.006022317	-0.010173158
0.235	0.002140916	-0.017640417	-0.001373959	0.004807330	0.005761097	-0.009677434
0.236	0.001879556	-0.016679930	-0.001251304	0.004617262	0.005524849	-0.009224587
0.237	0.001657395	-0.015803282	-0.001142725	0.004442337	0.005309997	-0.008808954
0.238	0.001467511	-0.015000286	-0.001046063	0.004280859	0.005113617	-0.008425838
0.239	0.001304353	-0.014262298	-0.000959553	0.004131371	0.004933322	-0.008071352
0.240	0.001163489	-0.013581926	-0.000881754	0.003992607	0.004767115	-0.007742210

素子間隔 $d[\lambda]=0.2475$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000476524	-0.004636642	-0.002398251	-0.000198479	-0.000889274	0.003521718
0.191	0.000369535	-0.004909898	-0.002535030	-0.000165583	-0.000713232	0.003800817
0.192	0.000241740	-0.005200376	-0.002686755	-0.000129322	-0.000499463	0.004094784
0.193	0.000089548	-0.005508895	-0.002856458	-0.000088633	-0.000241243	0.004402977
0.194	-0.000091361	-0.005836083	-0.003047860	-0.000041924	0.000069543	0.004724010
0.195	-0.000306205	-0.006182230	-0.003265510	0.000013163	0.000442715	0.005055358
0.196	-0.000561272	-0.006547036	-0.003514943	0.000080110	0.000890131	0.005392768
0.197	-0.000864059	-0.006929194	-0.003802876	0.000164133	0.001426072	0.005729186
0.198	-0.001223597	-0.007326037	-0.004137099	0.000272478	0.002067361	0.006054253
0.199	-0.001650213	-0.007732453	-0.004526760	0.000416077	0.002833615	0.006351347
0.200	-0.002155547	-0.008139886	-0.004981671	0.000610625	0.003746510	0.006595665
0.201	-0.002751595	-0.008534777	-0.005511946	0.000878550	0.004828642	0.006750652
0.202	-0.003449070	-0.008968669	-0.006125336	0.001251380	0.006099265	0.006763823
0.203	-0.004253891	-0.009197433	-0.006823939	0.001772131	0.007567801	0.006562625
0.204	-0.005161547	-0.009398879	-0.007597891	0.002496930	0.009222237	0.006052224
0.205	-0.006148763	-0.009457695	-0.008416352	0.003493576	0.011012392	0.005119608
0.206	-0.007164357	-0.009334062	-0.009217147	0.004834309	0.012831420	0.003649815
0.207	-0.008124349	-0.009010834	-0.009899874	0.006580421	0.014505703	0.001559003
0.208	-0.008920059	-0.008520003	-0.010330519	0.008761466	0.015810328	-0.001161081
0.209	-0.009445877	-0.007965966	-0.010362853	0.011361207	0.016522686	-0.004412001
0.210	-0.009640816	-0.007530585	-0.009867696	0.014328168	0.016499682	-0.008008256
0.211	-0.009524000	-0.007458916	-0.008742988	0.017617378	0.015729272	-0.011766001
0.212	-0.009213916	-0.008054732	-0.006876024	0.021245303	0.014302529	-0.015637072
0.213	-0.008973065	-0.009734844	-0.004046550	0.025330775	0.012273510	-0.019851902
0.214	-0.009427737	-0.013167507	0.000252357	0.030129652	0.009327548	-0.025059287
0.215	-0.012359172	-0.019360361	0.007331754	0.036127024	0.003920911	-0.032358235
0.216	-0.023247820	-0.028599011	0.021642155	0.043496991	-0.009279929	-0.042172033
0.217	-0.055742534	-0.027657675	0.055960343	0.039893572	-0.043852181	-0.041413913
0.218	-0.067858802	0.026256009	0.068499022	-0.016333509	-0.057790395	0.012589995
0.219	-0.029772569	0.041182941	0.030191527	-0.032812458	-0.021278693	0.027788621
0.220	-0.013009079	0.032998284	0.013085040	-0.025566407	-0.005864722	0.019989775
0.221	-0.006665700	0.026091780	0.006470921	-0.019228975	-0.000673241	0.013535666
0.222	-0.003796969	0.021407596	0.003436177	-0.014915198	0.001213624	0.009337856
0.223	-0.002282841	0.018155400	0.001842615	-0.011930708	0.001890504	0.006584154
0.224	-0.001385524	0.015791964	0.000926597	-0.009781907	0.002072841	0.004717006
0.225	-0.000805663	0.014001083	0.000367289	-0.008177407	0.002040834	0.003411089
0.226	-0.000405741	0.012596087	0.000011754	-0.006942726	0.001915841	0.002474159
0.227	-0.000116008	0.011462191	-0.000220165	-0.005968967	0.001754076	0.001788252
0.228	0.000101882	0.010525726	-0.000373614	-0.005185254	0.001582598	0.001278124
0.229	0.000270474	0.009737532	-0.000475475	-0.004543708	0.001414547	0.000894088
0.230	0.000403789	0.009063642	-0.000542477	-0.004010937	0.001256108	0.000602342
0.231	0.000510982	0.008479864	-0.000585408	-0.003563009	0.001109886	0.000379290
0.232	0.000598280	0.007968506	-0.000611429	-0.003182365	0.000976626	0.000208095
0.233	0.000670070	0.007516324	-0.000625414	-0.002855856	0.000856112	0.000076515
0.234	0.000729537	0.007113194	-0.000630746	-0.002573463	0.000747650	-0.000024498
0.235	0.000779057	0.006751241	-0.000629820	-0.002327428	0.000650333	-0.000101727
0.236	0.000820437	0.006424239	-0.000624345	-0.002111662	0.000563182	-0.000160327
0.237	0.000855073	0.006127202	-0.000615541	-0.001921341	0.000485181	-0.000204241
0.238	0.000884106	0.005856046	-0.000604404	-0.001752544	0.000415530	-0.000236535
0.239	0.000908406	0.005607452	-0.000591569	-0.001602132	0.000353316	-0.000259603
0.240	0.000928695	0.005378648	-0.000577546	-0.001467514	0.000297766	-0.000275327

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003739038	0.017718439	0.000504939	-0.002682703	0.005467984	0.014875801
0.191	0.003982711	0.018297057	0.000498038	-0.002823760	0.005763984	0.015244272
0.192	0.004253652	0.018920291	0.000488345	-0.002976290	0.006094083	0.015639778
0.193	0.004556352	0.019593358	0.000475258	-0.003141711	0.006465212	0.016064090
0.194	0.004896281	0.020322279	0.000458020	-0.003321680	0.006885849	0.016518512
0.195	0.005280144	0.021114025	0.000435677	-0.003518139	0.007366335	0.017003511
0.196	0.005716240	0.021976694	0.000407013	-0.003733381	0.007919201	0.017518156
0.197	0.006214926	0.022919720	0.000370464	-0.003970124	0.008559473	0.018059294
0.198	0.006789266	0.023954122	0.000323999	-0.004231607	0.009304864	0.018620340
0.199	0.007455856	0.025092853	0.000264962	-0.004521723	0.010175613	0.019189646
0.200	0.008236256	0.026350827	0.000189783	-0.004845128	0.011193837	0.019747897
0.201	0.009158475	0.027745678	0.000093695	-0.005207491	0.012381354	0.020265651
0.202	0.010259486	0.029297581	-0.000029801	-0.005615643	0.013755544	0.020699928
0.203	0.011589131	0.031029451	-0.000189758	-0.006077862	0.015321884	0.020991814
0.204	0.013214929	0.032966536	-0.000398837	-0.006604169	0.017063370	0.021068765
0.205	0.015230627	0.035134354	-0.000675299	-0.007206406	0.018924550	0.020852245
0.206	0.017767599	0.037554425	-0.001045613	-0.007898143	0.020799266	0.020280284
0.207	0.021012976	0.040234168	-0.001549171	-0.008693767	0.022531139	0.019345232
0.208	0.025235552	0.043144566	-0.002245238	-0.009605487	0.023942162	0.018136391
0.209	0.030821165	0.046172034	-0.003223803	-0.010635503	0.024896021	0.016865158
0.210	0.038310208	0.049016359	-0.004620560	-0.011756825	0.025377332	0.015845984
0.211	0.048398254	0.050983116	-0.006631248	-0.012869081	0.025550245	0.015434262
0.212	0.061759856	0.050607941	-0.009499816	-0.013706400	0.025779398	0.015958800
0.213	0.078322888	0.045194542	-0.013395415	-0.013689312	0.026649672	0.017695124
0.214	0.095492218	0.031099776	-0.018014383	-0.011863930	0.029105306	0.020914267
0.215	0.106440970	0.006901212	-0.021999377	-0.007459962	0.035190312	0.025952846
0.216	0.103797595	-0.021389394	-0.023368240	-0.001253943	0.051241976	0.031336627
0.217	0.088523048	-0.043166279	-0.021599938	0.004428464	0.085397727	0.013640806
0.218	0.068975543	-0.053832601	-0.018160880	0.008035769	0.072616956	-0.037745881
0.219	0.051642004	-0.056041967	-0.014614917	0.009689484	0.040071809	-0.041964020
0.220	0.038414746	-0.053877756	-0.011644709	0.010130208	0.026053361	-0.034893296
0.221	0.028861473	-0.050020526	-0.009341584	0.009958708	0.019586949	-0.029179442
0.222	0.022039288	-0.045791092	-0.007595017	0.009520955	0.015978632	-0.025089663
0.223	0.017129227	-0.041743864	-0.006268442	0.008991132	0.013663608	-0.022077930
0.224	0.013540475	-0.038072531	-0.005249220	0.008450946	0.012032612	-0.019767388
0.225	0.010870514	-0.034815594	-0.004454219	0.007936147	0.010808263	-0.017930591
0.226	0.008848604	-0.031950294	-0.003824190	0.007460416	0.009847405	-0.016427986
0.227	0.007291656	-0.029433505	-0.003317169	0.007027097	0.009068569	-0.015170414
0.228	0.006074219	-0.027218796	-0.002903247	0.006634881	0.008421706	-0.014098473
0.229	0.005108933	-0.025263024	-0.002560857	0.006280558	0.007874160	-0.013171062
0.230	0.004333927	-0.023528434	-0.002274231	0.005960318	0.007403576	-0.012358777
0.231	0.003704645	-0.021982868	-0.002031674	0.005670361	0.006994046	-0.011639972
0.232	0.003188484	-0.020599280	-0.001824388	0.005407156	0.006633888	-0.010998312
0.233	0.002761231	-0.019355030	-0.001645664	0.005167537	0.006314299	-0.010421203
0.234	0.002404653	-0.018231172	-0.001490320	0.004948720	0.006028499	-0.009898755
0.235	0.002104838	-0.017211827	-0.001354305	0.004748272	0.005771169	-0.009423072
0.236	0.001851051	-0.016283641	-0.001234415	0.004564086	0.005538073	-0.008987762
0.237	0.001634910	-0.015435336	-0.001128094	0.004394334	0.005325790	-0.008587587
0.238	0.001449804	-0.014657345	-0.001033276	0.004237432	0.005131521	-0.008218202
0.239	0.001290480	-0.013941526	-0.000948286	0.004092005	0.004952962	-0.007875978
0.240	0.001152713	-0.013280900	-0.000871744	0.003956859	0.004788187	-0.007557845

素子間隔 $d[\lambda]=0.2500$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000398135	-0.004651778	-0.002425699	-0.000168236	-0.000763753	0.003533610
0.191	0.000284424	-0.004924128	-0.002567085	-0.000132332	-0.000576131	0.003807361
0.192	0.000149078	-0.005213272	-0.002724193	-0.000092193	-0.000349351	0.004094619
0.193	-0.000011621	-0.005519862	-0.002900153	-0.000046487	-0.000076472	0.004394326
0.194	-0.000202131	-0.005844299	-0.003098780	0.000006728	0.000250852	0.004704533
0.195	-0.000427802	-0.006186554	-0.003324705	0.000070276	0.000642654	0.005021951
0.196	-0.000695032	-0.006545894	-0.003583496	0.000148253	0.001110946	0.005341294
0.197	-0.001011412	-0.006920472	-0.003881770	0.000246571	0.001669985	0.005654322
0.198	-0.001385803	-0.007306733	-0.004227203	0.000373750	0.002336399	0.005948462
0.199	-0.001828234	-0.007698597	-0.004628375	0.000541981	0.003128950	0.006204899
0.200	-0.002349563	-0.008086202	-0.005094225	0.000768663	0.004067761	0.006395842
0.201	-0.002960309	-0.008454642	-0.005632833	0.001078195	0.005171979	0.006481347
0.202	-0.003668527	-0.008782326	-0.006249005	0.001504104	0.006455437	0.006405571
0.203	-0.004475872	-0.009039868	-0.006940125	0.002091207	0.007918909	0.006093317
0.204	-0.005372364	-0.009191169	-0.007689693	0.002895218	0.009538502	0.005451560
0.205	-0.006327710	-0.009197677	-0.008458572	0.003980952	0.011249347	0.004374734
0.206	-0.007284797	-0.009029951	-0.009177049	0.005412859	0.012932103	0.002765257
0.207	-0.008159048	-0.008687356	-0.009740966	0.007239551	0.014410187	0.000566861
0.208	-0.008851173	-0.008221234	-0.010020771	0.009476932	0.015474672	-0.002198920
0.209	-0.009276575	-0.007751465	-0.009882798	0.012102074	0.015939493	-0.005418090
0.210	-0.009402131	-0.007465969	-0.009210393	0.015071417	0.015705040	-0.008920924
0.211	-0.009274622	-0.007610104	-0.007899347	0.018362607	0.014783774	-0.012575332
0.212	-0.009044471	-0.008497792	-0.005805921	0.022020280	0.013245472	-0.016411286
0.213	-0.009048011	-0.010584058	-0.002636001	0.026187238	0.011043886	-0.020751245
0.214	-0.010138026	-0.014589873	0.002284400	0.031140201	0.007595812	-0.026321961
0.215	-0.014764667	-0.021396537	0.010799280	0.037307745	0.000650469	-0.034096731
0.216	-0.030175420	-0.029511887	0.029124118	0.043340754	-0.016918443	-0.042708497
0.217	-0.065028302	-0.014632320	0.065337629	0.025937390	-0.053710816	-0.027976558
0.218	-0.053864413	0.034680583	0.054382642	-0.025409474	-0.044251750	0.021433468
0.219	-0.023175209	0.037702602	0.023439023	-0.029759365	-0.015040943	0.024716437
0.220	-0.010865881	0.030071245	0.010817557	-0.022932144	-0.004003781	0.017450205
0.221	-0.005848464	0.024174436	0.005567571	-0.017530872	-0.000076747	0.011980214
0.222	-0.003436708	0.020106854	0.003019366	-0.013793084	0.001401752	0.008371689
0.223	-0.002107525	0.017222734	0.001630588	-0.011152537	0.001931973	0.005958878
0.224	-0.001294966	0.015090406	0.000811816	-0.009218862	0.002059672	0.004296840
0.225	-0.000757776	0.013452781	0.000302761	-0.007755777	0.002008694	0.003119905
0.226	-0.000380917	0.012154416	-0.000025231	-0.006618122	0.001879296	0.002267280
0.227	-0.000104323	0.011097764	-0.000241433	-0.005713334	0.001719091	0.001638276
0.228	0.000105800	0.010219167	-0.000385679	-0.004980104	0.001551431	0.001167592
0.229	0.000269698	0.009475555	-0.000482080	-0.004376425	0.001387819	0.000811514
0.230	0.000400160	0.008836824	-0.000545842	-0.003872651	0.001233720	0.000539955
0.231	0.000505646	0.008281328	-0.000586879	-0.003447323	0.001091448	0.000331712
0.232	0.000591970	0.007793105	-0.000611839	-0.003084564	0.000961653	0.000171530
0.233	0.000663267	0.007360119	-0.000625279	-0.002772401	0.000844114	0.000048237
0.234	0.000722564	0.006973119	-0.000630389	-0.002501649	0.000738173	-0.000046474
0.235	0.000772130	0.006624864	-0.000629438	-0.002265160	0.000642973	-0.000118869
0.236	0.000813706	0.006309604	-0.000624065	-0.002057295	0.000557594	-0.000173725
0.237	0.000848650	0.006022707	-0.000615466	-0.001873554	0.000481121	-0.000214724
0.238	0.000878039	0.005760394	-0.000604528	-0.001710304	0.000412681	-0.000244731
0.239	0.000902738	0.005519551	-0.000591908	-0.001564587	0.000351466	-0.000265993
0.240	0.000923452	0.005297583	-0.000578103	-0.001433971	0.000296735	-0.000280282

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003836761	0.017791998	0.000492112	-0.002707059	0.005534988	0.014919244
0.191	0.004090469	0.018377182	0.000483841	-0.002850680	0.005842678	0.015289533
0.192	0.004372907	0.019007735	0.000472534	-0.003006091	0.006186355	0.015686016
0.193	0.004688861	0.019688975	0.000457533	-0.003174761	0.006573196	0.016110073
0.194	0.005044158	0.020427037	0.000438015	-0.003358403	0.007011930	0.016562478
0.195	0.005445963	0.021229019	0.000412935	-0.003559029	0.007513115	0.017042986
0.196	0.005903155	0.022103158	0.000380963	-0.003779015	0.008089419	0.017549713
0.197	0.006426840	0.023059035	0.000340384	-0.004021176	0.008755834	0.018078243
0.198	0.007031059	0.024107818	0.000288966	-0.004288869	0.009529701	0.018620371
0.199	0.007733670	0.025262564	0.000223791	-0.004586120	0.010430317	0.019162377
0.200	0.008557943	0.026538269	0.000140921	-0.004917748	0.011477864	0.019682591
0.201	0.009534170	0.027952497	0.000035089	-0.005289599	0.012690726	0.020149101
0.202	0.010702420	0.029525103	-0.000100899	-0.005708692	0.014080693	0.020517077
0.203	0.012116724	0.031278274	-0.000277063	-0.006183508	0.015645232	0.020728079
0.204	0.013850727	0.033235424	-0.000507535	-0.006724147	0.017356151	0.020713629
0.205	0.016006381	0.035418632	-0.000812587	-0.007342383	0.019147021	0.020407311
0.206	0.018726815	0.037842645	-0.001221808	-0.008051270	0.020905420	0.019769175
0.207	0.022215305	0.040501700	-0.001779065	-0.008863639	0.022481356	0.018821322
0.208	0.026762129	0.043340978	-0.002550216	-0.009787837	0.023722460	0.017682612
0.209	0.032777646	0.046198096	-0.003634254	-0.010817563	0.024539324	0.016578980
0.210	0.040819380	0.048679094	-0.005177653	-0.011907138	0.024969234	0.015815741
0.211	0.051552195	0.049921478	-0.007382313	-0.012918115	0.025223940	0.015718598
0.212	0.065459517	0.048207076	-0.010470392	-0.013516576	0.025708499	0.016581340
0.213	0.081900678	0.040645480	-0.014504941	-0.013040119	0.027070951	0.018655227
0.214	0.097275649	0.024063078	-0.018935754	-0.010561032	0.030443636	0.022196544
0.215	0.104417769	-0.001128916	-0.022201932	-0.005671360	0.038581863	0.027290303
0.216	0.098055539	-0.027339727	-0.022651040	0.000370510	0.059399721	0.029313439
0.217	0.081628302	-0.045485436	-0.020389975	0.005384185	0.086780254	-0.003289679
0.218	0.063093200	-0.053416674	-0.016971494	0.008359488	0.059887043	-0.040040033
0.219	0.047347709	-0.054338573	-0.013664601	0.009642909	0.034923979	-0.038534004
0.220	0.035462222	-0.051807863	-0.010944280	0.009920919	0.024031645	-0.032200870
0.221	0.026858277	-0.047999364	-0.008837317	0.009698595	0.018620636	-0.027277074
0.222	0.020669950	-0.043963829	-0.007231259	0.009260533	0.015441268	-0.023686402
0.223	0.016178347	-0.040139458	-0.006002704	0.008750181	0.013333412	-0.020990708
0.224	0.012868100	-0.036676688	-0.005051861	0.008235366	0.011816452	-0.018890921
0.225	0.010386475	-0.033601298	-0.004305088	0.007746012	0.010661218	-0.017202117
0.226	0.008494309	-0.030889543	-0.003709603	0.007293590	0.009745334	-0.015808087
0.227	0.007028431	-0.028501280	-0.003227737	0.006880810	0.008997356	-0.014633074
0.228	0.005876069	-0.026393986	-0.002832434	0.006506383	0.008372533	-0.013625774
0.229	0.004958062	-0.024528241	-0.002504038	0.006167362	0.007841224	-0.012750197
0.230	0.004217930	-0.022869480	-0.002228082	0.005860263	0.007382897	-0.011980311
0.231	0.003614728	-0.021388172	-0.001993767	0.005581610	0.006982801	-0.011296766
0.232	0.003118317	-0.020059388	-0.001792922	0.005328157	0.006630019	-0.010684846
0.233	0.002706189	-0.018862182	-0.001619285	0.005096985	0.006316272	-0.010133125
0.234	0.002361313	-0.017778965	-0.001467998	0.004885515	0.006035147	-0.009632576
0.235	0.002070637	-0.016794944	-0.001335245	0.004691488	0.005781593	-0.009175956
0.236	0.001824045	-0.015897639	-0.001218000	0.004512936	0.005551567	-0.008757376
0.237	0.001613614	-0.015076480	-0.001113836	0.004348152	0.005341795	-0.008371986
0.238	0.001433071	-0.014322476	-0.001020789	0.004195647	0.005149590	-0.008015753
0.239	0.001277416	-0.013627957	-0.000937259	0.004054129	0.004972733	-0.007685296
0.240	0.001142617	-0.012986332	-0.000861927	0.003922470	0.004809366	-0.007377745

素子間隔 $d[\lambda]=0.2525$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000318711	-0.004664966	-0.002454059	-0.000135740	-0.000637209	0.003540805
0.191	0.000198206	-0.004936131	-0.002600074	-0.000096372	-0.000437978	0.003808546
0.192	0.000055245	-0.005223594	-0.002762555	-0.000051804	-0.000198192	0.004088280
0.193	-0.000114004	-0.005527824	-0.002944713	-0.000000418	0.000089281	0.004378496
0.194	-0.000314117	-0.005848973	-0.003150433	0.000060106	0.000432971	0.004676633
0.195	-0.000550545	-0.006186672	-0.003384384	0.000133086	0.000843054	0.004978584
0.196	-0.000829748	-0.006539727	-0.003652116	0.000223265	0.001331594	0.005277969
0.197	-0.001159290	-0.006905679	-0.003960106	0.000337398	0.001912705	0.005565108
0.198	-0.001547835	-0.007280181	-0.004315682	0.000485085	0.002602491	0.005825558
0.199	-0.002004918	-0.007656139	-0.004726769	0.000679877	0.003418637	0.006038146
0.200	-0.002540403	-0.008022542	-0.005201023	0.000940795	0.004379050	0.006172286
0.201	-0.003163045	-0.008363286	-0.005744420	0.001294025	0.005499131	0.006185018
0.202	-0.003878027	-0.008655910	-0.006358417	0.001774734	0.006786675	0.006017916
0.203	-0.004682947	-0.008871313	-0.007035466	0.002428397	0.008233646	0.005595322
0.204	-0.005561916	-0.008975665	-0.007752491	0.003310114	0.009804239	0.004826690
0.205	-0.006478893	-0.008936727	-0.008463150	0.004480258	0.011421232	0.003616746
0.206	-0.007373190	-0.008736568	-0.009091586	0.005994642	0.012956493	0.001886994
0.207	-0.008162687	-0.008390454	-0.009532633	0.007890140	0.014236394	-0.000393197
0.208	-0.008759740	-0.007966637	-0.009662818	0.010172306	0.015072089	-0.003179252
0.209	-0.009102093	-0.007596183	-0.009359891	0.012816051	0.015313596	-0.006351725
0.210	-0.009182071	-0.007471105	-0.008513868	0.015789315	0.014895200	-0.009765591
0.211	-0.009073529	-0.007839576	-0.007009417	0.019091735	0.013838790	-0.013343293
0.212	-0.008966680	-0.009032179	-0.004661879	0.022791511	0.012173900	-0.017189992
0.213	-0.009303101	-0.011544281	-0.001085968	0.027048752	0.009721043	-0.021710106
0.214	-0.011244155	-0.016112567	0.004617612	0.032142403	0.005551257	-0.027663087
0.215	-0.018099924	-0.023242374	0.015035861	0.038247094	-0.003477852	-0.035643943
0.216	-0.038631431	-0.028038850	0.037981801	0.040852886	-0.026026839	-0.040870952
0.217	-0.066961529	0.001964612	0.067290418	0.008512973	-0.056171071	-0.010986288
0.218	-0.041725082	0.036905286	0.042112460	-0.028201898	-0.032533124	0.024055676
0.219	-0.018537668	0.034383081	0.018659352	-0.026816501	-0.010736620	0.021783360
0.220	-0.009247483	0.027581648	0.009089377	-0.020706912	-0.002647931	0.015327364
0.221	-0.005190755	0.022512316	0.004834532	-0.016071280	0.000374868	0.010660894
0.222	-0.003133592	0.018952570	0.002666799	-0.012806489	0.001543587	0.007534728
0.223	-0.001955385	0.016379592	0.001446217	-0.010455846	0.001958295	0.005407715
0.224	-0.001214669	0.014447237	0.000710100	-0.008707726	0.002042176	0.003921382
0.225	-0.000714700	0.012944740	0.000244821	-0.007368874	0.001976120	0.002856868
0.226	-0.000358414	0.011741809	-0.000058739	-0.006317696	0.001843647	0.002078741
0.227	-0.000093752	0.010755124	-0.000260806	-0.005475092	0.001685344	0.001500584
0.228	0.000109215	0.009929454	-0.000396687	-0.004787809	0.001521469	0.001065469
0.229	0.000268737	0.009226942	-0.000488085	-0.004218862	0.001362130	0.000734790
0.230	0.000396514	0.008620841	-0.000548860	-0.003741857	0.001212178	0.000481691
0.231	0.000500380	0.008091738	-0.000588146	-0.003337509	0.001073673	0.000287065
0.232	0.000585774	0.007625206	-0.000612123	-0.002991433	0.000947182	0.000137059
0.233	0.000656598	0.007210294	-0.000625062	-0.002692705	0.000832483	0.000021456
0.234	0.000715729	0.006838531	-0.000629972	-0.002432896	0.000728953	-0.000067387
0.235	0.000765340	0.006503256	-0.000629009	-0.002205409	0.000635783	-0.000135263
0.236	0.000807104	0.006199155	-0.000623737	-0.002005016	0.000552102	-0.000186611
0.237	0.000842332	0.005921926	-0.000615305	-0.001827526	0.000477042	-0.000224867
0.238	0.000872070	0.005668051	-0.000604568	-0.001669544	0.000409774	-0.000252716
0.239	0.000897161	0.005434618	-0.000592164	-0.001528298	0.000349528	-0.000272268
0.240	0.000918293	0.005219196	-0.000578577	-0.001401496	0.000295594	-0.000285195

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.003937587	0.017865809	0.000478393	-0.002732032	0.005605210	0.014960450
0.191	0.004201771	0.018457559	0.000468647	-0.002878275	0.005924786	0.015331891
0.192	0.004496232	0.019095424	0.000455597	-0.003036637	0.006282205	0.015728545
0.193	0.004826061	0.019784817	0.000438533	-0.003208630	0.006684845	0.016151359
0.194	0.005197474	0.020531982	0.000416554	-0.003396029	0.007141639	0.016600549
0.195	0.005618121	0.021344134	0.000388519	-0.003600919	0.007663296	0.017075117
0.196	0.006097509	0.022229639	0.000352971	-0.003825756	0.008262512	0.017572199
0.197	0.006647537	0.023198193	0.000308033	-0.004073454	0.008954090	0.018086081
0.198	0.007283285	0.024261071	0.000251255	-0.004347486	0.009754779	0.018606940
0.199	0.008023994	0.025431416	0.000179424	-0.004652013	0.010682609	0.019119143
0.200	0.008894753	0.026724196	0.000088202	-0.004992007	0.011755445	0.019598888
0.201	0.009928308	0.028156785	-0.000028225	-0.005373480	0.012987793	0.020012349
0.202	0.011168064	0.029748513	-0.000177821	-0.005803619	0.014385498	0.020313846
0.203	0.012672645	0.031520418	-0.000371697	-0.006291034	0.015937809	0.020446678
0.204	0.014522058	0.033493603	-0.000625547	-0.006845851	0.017606825	0.020348992
0.205	0.016827114	0.035685672	-0.000961921	-0.007479595	0.019317662	0.019968358
0.206	0.019743206	0.038102820	-0.001413733	-0.008204463	0.020956126	0.019287085
0.207	0.023490147	0.040722996	-0.002029698	-0.009031098	0.022384108	0.018354368
0.208	0.028378912	0.043460702	-0.002882528	-0.009962904	0.023479850	0.017311589
0.209	0.034841092	0.046094536	-0.004080329	-0.010982557	0.024197025	0.016391957
0.210	0.043437909	0.048122899	-0.005778620	-0.012021674	0.024621465	0.015886376
0.211	0.054766693	0.048501073	-0.008178661	-0.012897851	0.025007319	0.016091407
0.212	0.069039736	0.045273430	-0.011462804	-0.013206278	0.025804920	0.017270062
0.213	0.084945375	0.035496217	-0.015555469	-0.012223486	0.027748186	0.019651510
0.214	0.097991650	0.016800777	-0.019658461	-0.009127015	0.032245205	0.023436099
0.215	0.101294365	-0.008511002	-0.022133471	-0.003929260	0.042977681	0.028060961
0.216	0.091981878	-0.032109425	-0.021781623	0.001783188	0.067877142	0.023641180
0.217	0.075133694	-0.046905305	-0.019197025	0.006133829	0.080498464	-0.017979262
0.218	0.057800018	-0.052610551	-0.015872446	0.008567542	0.050103408	-0.039230322
0.219	0.043533510	-0.052564835	-0.012803855	0.009552560	0.031103813	-0.035428664
0.220	0.032836036	-0.049800338	-0.010311046	0.009704452	0.022408169	-0.029860872
0.221	0.025064111	-0.046077583	-0.008379079	0.009446024	0.017797715	-0.025587548
0.222	0.019433120	-0.042235317	-0.006898254	0.009012144	0.014966062	-0.022413667
0.223	0.015312333	-0.038621434	-0.005757559	0.008521590	0.013034306	-0.019988816
0.224	0.012251101	-0.035353002	-0.004868478	0.008031007	0.011617574	-0.018073695
0.225	0.009939354	-0.032446336	-0.004165614	0.007565587	0.010524554	-0.016516853
0.226	0.008165166	-0.029877462	-0.003601815	0.007135011	0.009649864	-0.015220975
0.227	0.006782703	-0.027609130	-0.003143181	0.006741491	0.008930521	-0.014121415
0.228	0.005690335	-0.025602397	-0.002765178	0.006383779	0.008326357	-0.013173709
0.229	0.004816164	-0.023821216	-0.002449857	0.006059172	0.007810392	-0.012346266
0.230	0.004108532	-0.022233914	-0.002183918	0.005764489	0.007363723	-0.011615985
0.231	0.003529744	-0.020813344	-0.001957371	0.005496543	0.006972648	-0.010965544
0.232	0.003051894	-0.019536507	-0.001762621	0.005252352	0.006626952	-0.010381664
0.233	0.002654031	-0.018384008	-0.001593815	0.005029224	0.006318840	-0.009853967
0.234	0.002320226	-0.017339505	-0.001446391	0.004824766	0.006042241	-0.009374209
0.235	0.002038220	-0.016389205	-0.001316752	0.004636879	0.005792353	-0.008935739
0.236	0.001798473	-0.015521439	-0.001202036	0.004463728	0.005565318	-0.008533126
0.237	0.001593484	-0.014726294	-0.001099940	0.004303713	0.005357999	-0.008161881
0.238	0.001417299	-0.013995315	-0.001008593	0.004155437	0.005167815	-0.007818255
0.239	0.001265154	-0.013321273	-0.000926467	0.004017684	0.004992630	-0.007499097
0.240	0.001133199	-0.012697939	-0.000852299	0.003889389	0.004830649	-0.007201725

素子間隔 $d[\lambda]=0.2550$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000238324	-0.004676128	-0.002483185	-0.000100838	-0.000509856	0.003543132
0.191	0.000110974	-0.004945812	-0.002633816	-0.000057532	-0.000299036	0.003804170
0.192	-0.000039641	-0.005231225	-0.002801628	-0.000007976	-0.000046278	0.004075537
0.193	-0.000217446	-0.005532648	-0.002989871	0.000049772	0.000255635	0.004355220
0.194	-0.000427112	-0.005849960	-0.003202478	0.000118424	0.000615398	0.004640010
0.195	-0.000674156	-0.006182431	-0.003444117	0.000201820	0.001043257	0.004924931
0.196	-0.000965047	-0.006528391	-0.003720240	0.000305375	0.001551193	0.005202469
0.197	-0.001307240	-0.006884752	-0.004037117	0.000436708	0.002153036	0.005461463
0.198	-0.001709089	-0.007246376	-0.004401602	0.000606509	0.002864145	0.005685599
0.199	-0.002179477	-0.007605238	-0.004820733	0.000829649	0.003700708	0.005851436
0.200	-0.002727072	-0.007949292	-0.005300690	0.001126667	0.004678055	0.005925822
0.201	-0.003358640	-0.008261521	-0.005845058	0.001525293	0.005807332	0.005863287
0.202	-0.004076303	-0.008519105	-0.006451683	0.002061891	0.007089864	0.005603753
0.203	-0.004873418	-0.008693922	-0.007107985	0.002782078	0.008508636	0.005072206
0.204	-0.005729030	-0.008755652	-0.007784674	0.003738991	0.010017017	0.004183209
0.205	-0.006602543	-0.008679393	-0.008429128	0.004987819	0.011527644	0.002853336
0.206	-0.007431878	-0.008459002	-0.008961436	0.006575677	0.012907982	0.001023282
0.207	-0.008140104	-0.008124549	-0.009277372	0.008529135	0.013992076	-0.001314979
0.208	-0.008653991	-0.007757942	-0.009260336	0.010846566	0.014614214	-0.004100856
0.209	-0.008931620	-0.007499172	-0.008796369	0.013505044	0.014655421	-0.007218645
0.210	-0.008990090	-0.007543333	-0.007776277	0.016485658	0.014074610	-0.010553999
0.211	-0.008931541	-0.008144746	-0.006065625	0.019808177	0.012888721	-0.014084753
0.212	-0.009000151	-0.009655617	-0.003427229	0.023558778	0.011066093	-0.017986519
0.213	-0.009782572	-0.012606218	0.000637973	0.027906837	0.008254275	-0.022729917
0.214	-0.012847314	-0.017673046	0.007337429	0.033087485	0.003084829	-0.029026420
0.215	-0.022533423	-0.024545403	0.020210892	0.038622738	-0.008639963	-0.036650246
0.216	-0.047480622	-0.022859141	0.047105568	0.034729649	-0.035476084	-0.035339236
0.217	-0.061237905	0.016398041	0.061536644	-0.006651353	-0.050933397	0.003822465
0.218	-0.032500575	0.036076198	0.032755980	-0.027869141	-0.023697820	0.023603943
0.219	-0.015189708	0.031409153	0.015182529	-0.024176895	-0.007698048	0.019175608
0.220	-0.007995565	0.025448160	0.007740660	-0.018813695	-0.001640687	0.013541350
0.221	-0.004652870	0.021058730	0.004230712	-0.014805651	0.000720003	0.009532335
0.222	-0.002875787	0.017921473	0.002365696	-0.011933256	0.001650050	0.006804872
0.223	-0.001822364	0.015613720	0.001284857	-0.009829036	0.001972885	0.004919428
0.224	-0.001143090	0.013855512	0.000619554	-0.008241996	0.002021444	0.003584556
0.225	-0.000675806	0.012472747	0.000192625	-0.007012816	0.001943421	0.002618505
0.226	-0.000337966	0.011355557	-0.000089168	-0.006039007	0.001808937	0.001906466
0.227	-0.000084182	0.010432440	-0.000278481	-0.005252642	0.001652794	0.001373885
0.228	0.000112173	0.009655298	-0.000406739	-0.004607280	0.001492649	0.000970925
0.229	0.000267608	0.008990757	-0.000493543	-0.004070256	0.001337422	0.000663376
0.230	0.000392855	0.008414989	-0.000551560	-0.003618008	0.001191433	0.000427188
0.231	0.000495182	0.007910554	-0.000589225	-0.003233166	0.001056520	0.000245103
0.232	0.000579687	0.007464386	-0.000612292	-0.002902671	0.000933182	0.000104511
0.233	0.000650057	0.007066507	-0.000624769	-0.002616541	0.000821197	-0.000003948
0.234	0.000709029	0.006709154	-0.000629501	-0.002367028	0.000719974	-0.000087317
0.235	0.000758683	0.006386190	-0.000628536	-0.002148036	0.000628751	-0.000150964
0.236	0.000800628	0.006092699	-0.000623369	-0.001954714	0.000546701	-0.000199019
0.237	0.000836133	0.005824685	-0.000615105	-0.001783154	0.000473002	-0.000234693
0.238	0.000866213	0.005578868	-0.000604568	-0.001630182	0.000406866	-0.000260503
0.239	0.000891687	0.005352526	-0.000592378	-0.001493193	0.000347556	-0.000278435
0.240	0.000913229	0.005143377	-0.000579006	-0.001370032	0.000294395	-0.000290067

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004041638	0.017939782	0.000463733	-0.002757623	0.005678485	0.014999194
0.191	0.004316760	0.018538088	0.000452396	-0.002906548	0.006010094	0.015371101
0.192	0.004623790	0.019183240	0.000437474	-0.003067921	0.006381326	0.015767084
0.193	0.004968147	0.019880745	0.000418188	-0.003243310	0.006799756	0.016187652
0.194	0.005356453	0.020636939	0.000393559	-0.003434550	0.007274455	0.016632416
0.195	0.005796893	0.021459159	0.000362334	-0.003643794	0.007816202	0.017099611
0.196	0.006299619	0.022355860	0.000322927	-0.003873584	0.008437613	0.017585339
0.197	0.006877400	0.023336849	0.000273277	-0.004126932	0.009153123	0.018082629
0.198	0.007546430	0.024413467	0.000210697	-0.004407424	0.009978663	0.018580095
0.199	0.008327418	0.025598864	0.000131653	-0.004719353	0.010930704	0.019060328
0.200	0.009247456	0.026907924	0.000031361	-0.005067841	0.012024463	0.019497759
0.201	0.010341787	0.028357577	-0.000096572	-0.005459027	0.013270144	0.019857273
0.202	0.011657529	0.029966479	-0.000260985	-0.005900257	0.014667603	0.020093398
0.203	0.013258167	0.031754071	-0.000474165	-0.006400202	0.016198194	0.020152715
0.204	0.015230482	0.033738459	-0.000753529	-0.006968896	0.017815766	0.019981755
0.205	0.017694623	0.035931593	-0.001124111	-0.007617406	0.019439956	0.019543358
0.206	0.020818695	0.038329080	-0.001622424	-0.008356670	0.020959192	0.018841581
0.207	0.024839111	0.040889042	-0.002302347	-0.009194383	0.022251678	0.017949157
0.208	0.030086167	0.043488894	-0.003243681	-0.010127494	0.023227489	0.017023824
0.209	0.037006364	0.045838663	-0.004563086	-0.011125122	0.023882503	0.016299173
0.210	0.046146600	0.047315325	-0.006422395	-0.012091757	0.024345867	0.016048783
0.211	0.057991466	0.046684637	-0.009013234	-0.012795853	0.024912630	0.016541370
0.212	0.072396356	0.041796468	-0.012456481	-0.012764130	0.026085636	0.018011342
0.213	0.087319567	0.029843593	-0.016510911	-0.011247670	0.028719059	0.020655547
0.214	0.097617154	0.009555350	-0.020158564	-0.007609133	0.034605556	0.024530958
0.215	0.097294115	-0.015064489	-0.021825281	-0.002286915	0.048426989	0.027723912
0.216	0.085824992	-0.035780843	-0.020815668	0.002982636	0.074310986	0.013857531
0.217	0.069106528	-0.047604813	-0.018046920	0.006708197	0.070414404	-0.027168574
0.218	0.053052367	-0.051527729	-0.014862691	0.008685158	0.042838744	-0.037168151
0.219	0.040140831	-0.050764222	-0.012023981	0.009430583	0.028184813	-0.032677114
0.220	0.030493115	-0.047864305	-0.009737215	0.009485112	0.021076330	-0.027809818
0.221	0.023451941	-0.044251918	-0.007961498	0.009201862	0.017087643	-0.024075246
0.222	0.018312595	-0.040599183	-0.006592585	0.008775406	0.014542391	-0.021252755
0.223	0.014521524	-0.037183448	-0.005530843	0.008304635	0.012761987	-0.019061747
0.224	0.011683636	-0.034096130	-0.004697709	0.007837129	0.011433982	-0.017309377
0.225	0.009525544	-0.031346435	-0.004034925	0.007394226	0.010397246	-0.015870728
0.226	0.007858897	-0.028910692	-0.003500257	0.006984146	0.009560426	-0.014663887
0.227	0.006553002	-0.026754420	-0.003063121	0.006608706	0.008867729	-0.013633474
0.228	0.005516045	-0.024841949	-0.002701223	0.006266717	0.008282973	-0.012740834
0.229	0.004682587	-0.023140293	-0.002398136	0.005955705	0.007781530	-0.011958169
0.230	0.004005285	-0.021620402	-0.002141611	0.005672763	0.007345964	-0.011264943
0.231	0.003449380	-0.020257299	-0.001922398	0.005414971	0.006963526	-0.010645621
0.232	0.002988993	-0.019029746	-0.001733422	0.005179588	0.006624645	-0.010088209
0.233	0.002604598	-0.017919768	-0.001569205	0.004964124	0.006321973	-0.009583272
0.234	0.002281277	-0.016912169	-0.001425461	0.004766365	0.006049760	-0.009123270
0.235	0.002007503	-0.015994083	-0.001298798	0.004584356	0.005803435	-0.008702094
0.236	0.001774269	-0.015154590	-0.001186503	0.004416384	0.005579315	-0.008314733
0.237	0.001574472	-0.014384387	-0.001086390	0.004260950	0.005374394	-0.007957027
0.238	0.001402451	-0.013675522	-0.000996675	0.004116744	0.005186192	-0.007625494
0.239	0.001253667	-0.013021174	-0.000915900	0.003982620	0.005012650	-0.007317194
0.240	0.001124435	-0.012415469	-0.000842854	0.003857575	0.004852032	-0.007029624

素子間隔 $d[\lambda]=0.2575$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000157041	-0.004685169	-0.002512942	-0.000063404	-0.000381824	0.003540438
0.191	0.000022817	-0.004953068	-0.002668144	-0.000015673	-0.000159486	0.003794054
0.192	-0.000135450	-0.005236067	-0.002841167	0.000039469	0.000106031	0.004056168
0.193	-0.000321773	-0.005534226	-0.003035321	0.000104274	0.000422132	0.004324251
0.194	-0.000540881	-0.005847143	-0.003254538	0.000181882	0.000797548	0.004594398
0.195	-0.000798326	-0.006173716	-0.003503417	0.000276678	0.001242494	0.004860727
0.196	-0.001100522	-0.006511779	-0.003787288	0.000394770	0.001768802	0.005114551
0.197	-0.001454731	-0.006857629	-0.004112062	0.000544653	0.002389759	0.005343222
0.198	-0.001868880	-0.007205369	-0.004483996	0.000738086	0.003119747	0.005528597
0.199	-0.002351047	-0.007546114	-0.004909077	0.000991206	0.003973162	0.005645102
0.200	-0.002908540	-0.007866966	-0.005391783	0.001325932	0.004962359	0.005657314
0.201	-0.003545908	-0.008150316	-0.005933072	0.001771208	0.006093798	0.005517906
0.202	-0.004262182	-0.008373521	-0.006527043	0.002364152	0.007362189	0.005166081
0.203	-0.005046633	-0.008510255	-0.007156098	0.003149803	0.008741698	0.004528952
0.204	-0.005873948	-0.008534619	-0.007785272	0.004178522	0.010176169	0.003527833
0.205	-0.006700440	-0.008429780	-0.008356835	0.005499752	0.011570777	0.002092263
0.206	-0.007464813	-0.008201277	-0.008788515	0.007152262	0.012792497	0.000181361
0.207	-0.008097555	-0.007892519	-0.008978392	0.009154182	0.013686612	-0.002194242
0.208	-0.008540474	-0.007596676	-0.008816240	0.011499979	0.014110611	-0.004964953
0.209	-0.008772293	-0.007460124	-0.008193226	0.014171633	0.013972240	-0.008025975
0.210	-0.008833995	-0.007681680	-0.006994479	0.017164057	0.013244200	-0.011297830
0.211	-0.008860840	-0.008525303	-0.005057878	0.020514111	0.011923555	-0.014812933
0.212	-0.009169443	-0.010366555	-0.002081707	0.024319650	0.009894216	-0.018810538
0.213	-0.010542298	-0.013747115	0.002579775	0.028742164	0.006581517	-0.023797159
0.214	-0.015062646	-0.019155744	0.010546557	0.033878755	0.000074294	-0.030301816
0.215	-0.028112081	-0.024739310	0.026380237	0.037896149	-0.014889361	-0.036551845
0.216	-0.054339508	-0.013501955	0.054137698	0.024509221	-0.042888168	-0.025643183
0.217	-0.051706454	0.025400193	0.051942859	-0.016296756	-0.041851250	0.013182395
0.218	-0.025761805	0.034035039	0.025889309	-0.026263651	-0.017320098	0.021920962
0.219	-0.012707501	0.028804587	0.012584401	-0.021871041	-0.005503691	0.016918301
0.220	-0.007006614	0.023605188	0.006666494	-0.017190363	-0.000880177	0.012027893
0.221	-0.004206657	0.019777569	0.003726786	-0.013699609	0.000985641	0.008559645
0.222	-0.002654321	0.016995042	0.002106312	-0.011155792	0.001729276	0.006164684
0.223	-0.001705271	0.014915015	0.001142812	-0.009262581	0.001978357	0.004484843
0.224	-0.001078976	0.013309353	0.000538616	-0.007816189	0.001998319	0.003281286
0.225	-0.000640569	0.012033159	0.000145463	-0.006684266	0.001910834	0.002401860
0.226	-0.000319343	0.010993280	-0.000116862	-0.005779926	0.001775189	0.001748659
0.227	-0.000075511	0.010128085	-0.000294631	-0.005044568	0.001621395	0.001257049
0.228	0.000114718	0.009395543	-0.000415925	-0.004437546	0.001464910	0.000883232
0.229	0.000266328	0.008766147	-0.000498503	-0.003929921	0.001313639	0.000596786
0.230	0.000389186	0.008218627	-0.000553971	-0.003500608	0.001171436	0.000376119
0.231	0.000490051	0.007737277	-0.000590132	-0.003133927	0.001039953	0.000205602
0.232	0.000573706	0.007310252	-0.000612355	-0.002818003	0.000919625	0.000073733
0.233	0.000643639	0.006928444	-0.000624408	-0.002543698	0.000810235	-0.000028080
0.234	0.000702458	0.006584730	-0.000628981	-0.002303882	0.000711223	-0.000106340
0.235	0.000752154	0.006273453	-0.000628023	-0.002092916	0.000621867	-0.000166026
0.236	0.000794276	0.005990058	-0.000622964	-0.001906289	0.000541385	-0.000210987
0.237	0.000830051	0.005730832	-0.000614868	-0.001740359	0.000468998	-0.000244227
0.238	0.000860464	0.005492716	-0.000604530	-0.001592151	0.000403953	-0.000268109
0.239	0.000886314	0.005273162	-0.000592552	-0.001459220	0.000345549	-0.000284505
0.240	0.000908260	0.005070031	-0.000579393	-0.001339537	0.000293138	-0.000294905

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004149027	0.018013807	0.000448091	-0.002783823	0.005754597	0.015035239
0.191	0.004435570	0.018618638	0.000435044	-0.002935486	0.006098326	0.015406906
0.192	0.004755741	0.019271032	0.000418105	-0.003099937	0.006483395	0.015801379
0.193	0.005115308	0.019976580	0.000396424	-0.003278796	0.006917519	0.016218690
0.194	0.005521339	0.020741720	0.000368931	-0.003473958	0.007409856	0.016657841
0.195	0.005982553	0.021573855	0.000334270	-0.003687647	0.007971167	0.017116241
0.196	0.006509829	0.022481543	0.000290695	-0.003922488	0.008613855	0.017588998
0.197	0.007116847	0.023474652	0.000235955	-0.004181590	0.009351830	0.018067889
0.198	0.007820993	0.024564546	0.000167098	-0.004468651	0.010199974	0.018540067
0.199	0.008644553	0.025764309	0.000080242	-0.004788088	0.011172921	0.018986572
0.200	0.009616705	0.027088583	-0.000029874	-0.005145152	0.012282912	0.019380468
0.201	0.010775520	0.028553790	-0.000170311	-0.005546113	0.013535730	0.019686098
0.202	0.012171933	0.030177503	-0.000350825	-0.005998405	0.014925181	0.019859290
0.203	0.013874652	0.031977124	-0.000585024	-0.006510697	0.016425531	0.019851288
0.204	0.015977616	0.033966949	-0.000892193	-0.007092790	0.017984119	0.019618440
0.205	0.018610724	0.036151906	-0.001300059	-0.007755028	0.019518211	0.019139446
0.206	0.021955048	0.038514663	-0.001848999	-0.008506603	0.020922828	0.018438726
0.207	0.026263151	0.040989487	-0.002598303	-0.009351350	0.022095773	0.017608483
0.208	0.031881971	0.043409971	-0.003634848	-0.010278090	0.022979553	0.016816947
0.209	0.039264130	0.045407311	-0.005082821	-0.011239446	0.023609611	0.016293113
0.210	0.048918475	0.046225579	-0.007106218	-0.012108388	0.024155082	0.016291532
0.211	0.061163701	0.044444842	-0.009875380	-0.012600777	0.024952816	0.017054125
0.212	0.075417088	0.037794343	-0.013426624	-0.012184164	0.026570835	0.018785870
0.213	0.088908767	0.023823801	-0.017336307	-0.010131034	0.030028942	0.021630495
0.214	0.096197693	0.002563717	-0.020426233	-0.006059204	0.037621664	0.025317121
0.215	0.092659274	-0.020687644	-0.021318262	-0.000783417	0.054666173	0.025555277
0.216	0.079773528	-0.038474041	-0.019799531	0.003978971	0.076200547	0.001590553
0.217	0.063570968	-0.047738148	-0.016955041	0.007136257	0.060220909	-0.031376882
0.218	0.048800959	-0.050253116	-0.013938023	0.008732346	0.037423861	-0.034737418
0.219	0.037116876	-0.048967644	-0.011316533	0.009286444	0.025896555	-0.030251624
0.220	0.028396223	-0.046004609	-0.009215777	0.009266148	0.019964978	-0.025996806
0.221	0.021998487	-0.042518171	-0.007579780	0.008966689	0.016468810	-0.022712027
0.222	0.017294299	-0.039049179	-0.006311155	0.008549939	0.014162511	-0.020188486
0.223	0.013797357	-0.035819842	-0.005320668	0.008098675	0.012513121	-0.018200929
0.224	0.011160592	-0.032901262	-0.004538381	0.007653054	0.011263957	-0.016592556
0.225	0.009141847	-0.030297751	-0.003912270	0.007231339	0.010278383	-0.015260196
0.226	0.007573457	-0.027986207	-0.003404442	0.006840504	0.009476500	-0.014134381
0.227	0.006337989	-0.025934767	-0.002987237	0.006482057	0.008808667	-0.013167496
0.228	0.005352304	-0.024110758	-0.002640352	0.006154877	0.008242182	-0.012325843
0.229	0.004556716	-0.022483967	-0.002348728	0.005856701	0.007754509	-0.011584906
0.230	0.003907779	-0.021027709	-0.002101048	0.005584874	0.007329539	-0.010926394
0.231	0.003373348	-0.019719028	-0.001888764	0.005336721	0.006955380	-0.010336365
0.232	0.002929411	-0.018538270	-0.001705261	0.005109718	0.006623060	-0.009803965
0.233	0.002557743	-0.017468766	-0.001545410	0.004901566	0.006325646	-0.009320608
0.234	0.002244358	-0.016496373	-0.001405176	0.004710209	0.006057685	-0.008879397
0.235	0.001978406	-0.015609081	-0.001281356	0.004533831	0.005814827	-0.008474713
0.236	0.001751376	-0.014796664	-0.001171381	0.004370829	0.005593551	-0.008101931
0.237	0.001556534	-0.014050392	-0.001073170	0.004219801	0.005390976	-0.007757196
0.238	0.001388495	-0.013362774	-0.000985024	0.004079515	0.005204717	-0.007437268
0.239	0.001242930	-0.012727379	-0.000905547	0.003948891	0.005032790	-0.007139407
0.240	0.001116314	-0.012138650	-0.000833581	0.003826982	0.004873517	-0.006861272

素子間隔 $d[\lambda]=0.2600$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	0.000074960	-0.004692017	-0.002543157	-0.000023301	-0.000253378	0.003532570
0.191	-0.000066142	-0.004957811	-0.002702844	0.000029354	-0.000019656	0.003778021
0.192	-0.000232034	-0.005238007	-0.002880944	0.000090666	0.000258438	0.004029989
0.193	-0.000426793	-0.005532436	-0.003080777	0.000163231	0.000588378	0.004285388
0.194	-0.000655187	-0.005840406	-0.003306235	0.000250631	0.000978891	0.004539588
0.195	-0.000922744	-0.006160417	-0.003561839	0.000357807	0.001440112	0.004785773
0.196	-0.001235763	-0.006489819	-0.003852662	0.000491573	0.001983505	0.005014070
0.197	-0.001601232	-0.006824304	-0.004184190	0.000661294	0.002621694	0.005210359
0.198	-0.002026535	-0.007157268	-0.004561936	0.000879771	0.003367812	0.005354746
0.199	-0.002518801	-0.007479075	-0.004990666	0.001164313	0.004234160	0.005419716
0.200	-0.003083806	-0.007776188	-0.005472956	0.001538020	0.005229759	0.005367981
0.201	-0.003723823	-0.008030787	-0.006006965	0.002030774	0.006356150	0.005150972
0.202	-0.004434759	-0.008220986	-0.006582925	0.002679898	0.007601260	0.004708282
0.203	-0.005202168	-0.008322939	-0.007178510	0.003529209	0.008931209	0.003970421
0.204	-0.005997240	-0.008315956	-0.007753693	0.004625650	0.010281782	0.002866768
0.205	-0.006774732	-0.008191671	-0.008246827	0.006012700	0.011553449	0.001340240
0.206	-0.007476116	-0.007966805	-0.008574679	0.007721539	0.012616086	-0.000633257
0.207	-0.008040992	-0.007696421	-0.008638336	0.009763907	0.013328498	-0.003028880
0.208	-0.008426754	-0.007482700	-0.008332652	0.012133149	0.013570137	-0.005774424
0.209	-0.008632300	-0.007477163	-0.007549922	0.014818075	0.013269296	-0.008781657
0.210	-0.008723466	-0.007883548	-0.006163213	0.017826754	0.012401782	-0.012008211
0.211	-0.008876513	-0.008978150	-0.003974151	0.021209093	0.010929236	-0.015538680
0.212	-0.009505261	-0.011156206	-0.000601355	0.025066187	0.008623905	-0.019664689
0.213	-0.011647131	-0.014930492	0.004790835	0.029523986	0.004631927	-0.024881396
0.214	-0.018001585	-0.020378187	0.014348250	0.034355218	-0.003598028	-0.031309756
0.215	-0.034563712	-0.023078457	0.033285825	0.035344219	-0.021959369	-0.034603834
0.216	-0.056688932	-0.001592404	0.056581912	0.011819070	-0.045748330	-0.013407268
0.217	-0.042050978	0.029481375	0.042205043	-0.020943833	-0.032611572	0.017605111
0.218	-0.020839386	0.031657780	0.020845513	-0.024270964	-0.012732822	0.019884316
0.219	-0.010823466	0.026537267	0.010596697	-0.019872414	-0.003888091	0.014980395
0.220	-0.006212359	0.022000111	0.005797319	-0.015787211	-0.000299697	0.010735439
0.221	-0.003832695	0.018640288	0.003302315	-0.012726136	0.001190049	0.007715267
0.222	-0.002462980	0.016158242	0.001881767	-0.010459928	0.001786629	0.005600007
0.223	-0.001601797	0.014275277	0.001017478	-0.008748771	0.001976330	0.004096563
0.224	-0.001021259	0.012803782	0.000465987	-0.007425669	0.001973482	0.003007336
0.225	-0.000608519	0.011622838	0.000102733	-0.006380346	0.001878549	0.002204433
0.226	-0.000302331	0.010652895	-0.000142111	-0.005538584	0.001742419	0.001603785
0.227	-0.000067638	0.009840616	-0.000309396	-0.004849612	0.001591104	0.001149108
0.228	0.000116898	0.009149153	-0.000424312	-0.004277731	0.001438197	0.000801759
0.229	0.000264917	0.008552349	-0.000502992	-0.003797230	0.001290723	0.000534606
0.230	0.000385510	0.008031165	-0.000556115	-0.003389204	0.001152146	0.000328192
0.231	0.000484983	0.007571451	-0.000590881	-0.003039456	0.001023937	0.000168361
0.232	0.000567826	0.007162440	-0.000612322	-0.002737173	0.000906486	0.000044585
0.233	0.000637341	0.006795811	-0.000623984	-0.002473982	0.000799579	-0.000051039
0.234	0.000696013	0.006465019	-0.000628415	-0.002243307	0.000702685	-0.000124524
0.235	0.000745749	0.006164844	-0.000627472	-0.002039927	0.000615121	-0.000180495
0.236	0.000788044	0.005891064	-0.000622525	-0.001859647	0.000536148	-0.000222546
0.237	0.000824083	0.005640227	-0.000614597	-0.001699064	0.000465024	-0.000253489
0.238	0.000854823	0.005409474	-0.000604456	-0.001555391	0.000401033	-0.000275548
0.239	0.000881042	0.005196421	-0.000592688	-0.001426328	0.000343504	-0.000290486
0.240	0.000903383	0.004999061	-0.000579740	-0.001309964	0.000291820	-0.000299714

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004259881	0.018087784	0.000431417	-0.002810627	0.005833326	0.015068382
0.191	0.004558347	0.018699089	0.000416532	-0.002965084	0.006189205	0.015439093
0.192	0.004892260	0.019358660	0.000397421	-0.003132677	0.006588048	0.015831211
0.193	0.005267750	0.020072155	0.000373164	-0.003315074	0.007037669	0.016244260
0.194	0.005692351	0.020846089	0.000342594	-0.003514233	0.007547248	0.016676603
0.195	0.006175380	0.021687947	0.000304226	-0.003732450	0.008127431	0.017124854
0.196	0.006728469	0.022606343	0.000256158	-0.003972431	0.008790289	0.017583116
0.197	0.007366275	0.023611174	0.000195920	-0.004237381	0.009549033	0.018041978
0.198	0.008107463	0.024713765	0.000120280	-0.004531104	0.010417283	0.018487272
0.199	0.008975995	0.025927052	0.000024968	-0.004858133	0.011407594	0.01898756
0.200	0.010003299	0.027265313	-0.000095802	-0.005223836	0.012529022	0.019248620
0.201	0.011230431	0.028744212	-0.000249809	-0.005634575	0.013782827	0.019501404
0.202	0.012712400	0.030379914	-0.000447821	-0.006097825	0.015157081	0.019615300
0.203	0.014523441	0.032187211	-0.000704877	-0.006622153	0.016619911	0.019547488
0.204	0.016764995	0.034175648	-0.001042297	-0.007216953	0.018114171	0.019265112
0.205	0.019577022	0.036341560	-0.001490710	-0.007891532	0.019557811	0.018762663
0.206	0.023153527	0.038651983	-0.002094581	-0.008652747	0.020855828	0.018082879
0.207	0.027762153	0.041012848	-0.002918771	-0.009499508	0.021927874	0.017333221
0.208	0.033762275	0.043206722	-0.004056940	-0.010410592	0.022748543	0.016687309
0.209	0.041600587	0.044776013	-0.005639029	-0.011318980	0.023390325	0.016365861
0.210	0.051718279	0.044824416	-0.007825461	-0.012062082	0.024060529	0.016603412
0.211	0.064209593	0.041765268	-0.010751233	-0.012302498	0.025141551	0.017615140
0.212	0.077988857	0.033313860	-0.014345780	-0.011466205	0.027284845	0.019570735
0.213	0.089640530	0.017605491	-0.018002775	-0.008902089	0.031732392	0.022512043
0.214	0.093845529	-0.003967662	-0.020467808	-0.004528137	0.041354294	0.025522319
0.215	0.087628433	-0.025354644	-0.020658543	0.000557800	0.060852468	0.020850083
0.216	0.073961944	-0.040329474	-0.018770367	0.004790468	0.072954416	-0.009979318
0.217	0.058524966	-0.047438551	-0.015930292	0.007444526	0.051554085	-0.032417294
0.218	0.044995745	-0.048853953	-0.013093083	0.008725620	0.033321420	-0.032311177
0.219	0.034416117	-0.047195851	-0.010673919	0.009126943	0.024057630	-0.028111492
0.220	0.026514433	-0.044222694	-0.008740829	0.009049579	0.019021337	-0.024381501
0.221	0.020684699	-0.040871452	-0.007229997	0.008740544	0.015923077	-0.021475075
0.222	0.016366842	-0.037579253	-0.006051479	0.008335113	0.013819016	-0.019207938
0.223	0.013133082	-0.034524879	-0.005125393	0.007902939	0.012284370	-0.017398453
0.224	0.010677397	-0.031763879	-0.004389358	0.007478180	0.011106236	-0.015918651
0.225	0.008785368	-0.029296658	-0.003796889	0.007076405	0.010167315	-0.014682224
0.226	0.007306967	-0.027101126	-0.003313845	0.006703656	0.009397730	-0.013630351
0.227	0.006136416	-0.025147883	-0.002915157	0.006361194	0.008753128	-0.012721960
0.228	0.005198263	-0.023406990	-0.002582296	0.006047975	0.008203859	-0.011927601
0.229	0.004438053	-0.021850762	-0.002301449	0.005761916	0.007729233	-0.011225545
0.230	0.003815621	-0.020454703	-0.002062137	0.005500625	0.007314369	-0.010599614
0.231	0.003301367	-0.019197606	-0.001856406	0.005261630	0.006948155	-0.010037190
0.232	0.002872941	-0.018061317	-0.001678098	0.005042608	0.006622159	-0.009528452
0.233	0.002513311	-0.017030364	-0.001522400	0.004841436	0.006329830	-0.009065578
0.234	0.002209353	-0.016091579	-0.001385516	0.004656207	0.006065997	-0.008642252
0.235	0.001950839	-0.015233741	-0.001264415	0.004485226	0.005826514	-0.008253309
0.236	0.001729739	-0.014447260	-0.001156650	0.004326997	0.005608016	-0.007894470
0.237	0.001539629	-0.013723957	-0.001060265	0.004180208	0.005407737	-0.007562168
0.238	0.001375400	-0.013056768	-0.000973627	0.004043698	0.005223385	-0.007253387
0.239	0.001232916	-0.012439629	-0.000895401	0.003916455	0.005053045	-0.006965573
0.240	0.001108812	-0.011867255	-0.000824475	0.003797573	0.004895101	-0.006696522

素子間隔 $d[\lambda]=0.2625$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000007823	-0.004696602	-0.002573643	0.000019597	-0.000124774	0.003519387
0.191	-0.000155779	-0.004959966	-0.002737695	0.000077680	0.000120147	0.003755917
0.192	-0.000329233	-0.005236970	-0.002920667	0.000145762	0.000410506	0.003996828
0.193	-0.000532299	-0.005527206	-0.003125882	0.000226793	0.000753827	0.004238455
0.194	-0.000769751	-0.005829672	-0.003357160	0.000324809	0.001158774	0.004475416
0.195	-0.001047050	-0.006142485	-0.003618843	0.000445324	0.001635239	0.004699948
0.196	-0.001370318	-0.006462511	-0.003915702	0.000595858	0.002194231	0.004900992
0.197	-0.001746178	-0.006784864	-0.004252690	0.000786629	0.002847504	0.005063000
0.198	-0.002181361	-0.007102305	-0.004634435	0.001031425	0.003606709	0.005164445
0.199	-0.002681927	-0.007404590	-0.005064326	0.001348610	0.004481769	0.005176122
0.200	-0.003252008	-0.007677791	-0.005542869	0.001762260	0.005478110	0.005059314
0.201	-0.003891540	-0.007904260	-0.006065309	0.002302834	0.006592189	0.004764939
0.202	-0.004593450	-0.008063413	-0.006618060	0.003007371	0.007805386	0.004233960
0.203	-0.005340047	-0.008134574	-0.007174346	0.003917894	0.009076499	0.003401475
0.204	-0.006100021	-0.008102811	-0.007689832	0.005077488	0.010335053	0.002205782
0.205	-0.006828090	-0.007968308	-0.008100064	0.006523763	0.011479459	0.000602925
0.206	-0.007470202	-0.007758169	-0.008321885	0.008281350	0.012385200	-0.001416691
0.207	-0.007976312	-0.007537423	-0.008259398	0.010357658	0.012925627	-0.003818591
0.208	-0.008319632	-0.007415487	-0.007810560	0.012747136	0.012999588	-0.006533509
0.209	-0.008519250	-0.007548529	-0.006864424	0.015446354	0.012549026	-0.009493899
0.210	-0.008668590	-0.008146651	-0.005275566	0.018474795	0.011541871	-0.012695184
0.211	-0.008996410	-0.009499323	-0.002800095	0.021890155	0.009887324	-0.016269666
0.212	-0.010044673	-0.012009452	0.001042331	0.025784320	0.007213984	-0.020542712
0.213	-0.013170167	-0.016087237	0.007331508	0.030194270	0.002326695	-0.025919863
0.214	-0.021732465	-0.021047543	0.018809261	0.034248104	-0.008006383	-0.031760975
0.215	-0.041032338	-0.018841843	0.040090242	0.030263455	-0.028999289	-0.030086750
0.216	-0.053921445	0.009687152	0.053851221	-0.000160175	-0.043453476	-0.001814108
0.217	-0.033901555	0.030445644	0.033962841	-0.022406215	-0.024847910	0.018895148
0.218	-0.017196811	0.029310592	0.017089941	-0.022264973	-0.009402115	0.017860972
0.219	-0.009358817	0.024563400	0.009039424	-0.018141742	-0.002673848	0.013319582
0.220	-0.005562417	0.020591593	0.005081302	-0.014565242	0.000150220	0.009624049
0.221	-0.003514581	0.017624048	0.002939764	-0.011863612	0.001349055	0.006977621
0.222	-0.002295521	0.015398506	0.001685029	-0.009833783	0.001828006	0.005099358
0.223	-0.001509376	0.013687032	0.000905633	-0.008280630	0.001969251	0.003748019
0.224	-0.000969318	0.012334582	0.000400836	-0.007066595	0.001947125	0.002759118
0.225	-0.000579456	0.011239096	0.000064108	-0.006098676	0.001846440	0.002024076
0.226	-0.000286893	0.010332608	-0.000165024	-0.005313452	0.001710410	0.001470514
0.227	-0.000060590	0.009568789	-0.000322795	-0.004666763	0.001561696	0.001049211
0.228	0.000118664	0.008915234	-0.000431879	-0.004127151	0.001412302	0.000725954
0.229	0.000263373	0.008348637	-0.000507083	-0.003671638	0.001268637	0.000476415
0.230	0.000381835	0.007852068	-0.000558000	-0.003283381	0.001133518	0.000283155
0.231	0.000479983	0.007412657	-0.000591468	-0.002949440	0.001008436	0.000133210
0.232	0.000562047	0.007020618	-0.000612182	-0.002659944	0.000893734	0.000016951
0.233	0.000631159	0.006668338	-0.000623484	-0.002407204	0.000789203	-0.000072903
0.234	0.000689689	0.006349800	-0.000627790	-0.002185154	0.000694338	-0.000141921
0.235	0.000739466	0.006060180	-0.000626870	-0.001988951	0.000608496	-0.000194406
0.236	0.000781930	0.005795561	-0.000622055	-0.001814698	0.000530982	-0.000233727
0.237	0.000818228	0.005552734	-0.000614294	-0.001659197	0.000461076	-0.000262502
0.238	0.000849288	0.005329026	-0.000604350	-0.001519842	0.000398103	-0.000282834
0.239	0.000875870	0.005122208	-0.000592790	-0.001394473	0.000341424	-0.000296387
0.240	0.000898598	0.004930383	-0.000580048	-0.001281275	0.000290440	-0.000304498

素子間隔 $d[\lambda]=0.2650$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004374372	0.018161616	0.000413645	-0.002838030	0.005914437	0.015098498
0.191	0.004685297	0.018779338	0.000396780	-0.002995339	0.006282428	0.015467556
0.192	0.005033576	0.019445988	0.000375336	-0.003166132	0.006694911	0.015856474
0.193	0.005425742	0.020167305	0.000348307	-0.003352135	0.007159737	0.016264285
0.194	0.005869750	0.020949844	0.000314441	-0.003555364	0.007686008	0.016688609
0.195	0.006375680	0.021801179	0.000272082	-0.003778186	0.008284223	0.017125432
0.196	0.006955902	0.022729933	0.000219169	-0.004023388	0.008965967	0.017567801
0.197	0.007626125	0.023745993	0.000152999	-0.004294268	0.009743579	0.018005223
0.198	0.008406352	0.024860552	0.000070035	-0.004594720	0.010629256	0.018422332
0.199	0.009322412	0.026086369	-0.000034429	-0.004929405	0.011633252	0.018798018
0.200	0.010407969	0.027437084	-0.000166723	-0.005303753	0.012761245	0.019104060
0.201	0.011707404	0.028927453	-0.000335439	-0.005724209	0.014010132	0.019305993
0.202	0.013279985	0.030571793	-0.000552439	-0.006198212	0.015362719	0.019365367
0.203	0.015205760	0.032381632	-0.000834314	-0.006734110	0.016782206	0.019246309
0.204	0.017593963	0.034360690	-0.001204582	-0.007340679	0.018209089	0.018927315
0.205	0.020594753	0.036494878	-0.001696967	-0.008025803	0.019564846	0.018417996
0.206	0.024414731	0.038732612	-0.002360219	-0.008793316	0.020767218	0.017776928
0.207	0.029334613	0.040946539	-0.003264754	-0.009635964	0.021758987	0.017122741
0.208	0.035720206	0.042860795	-0.004510344	-0.010520359	0.022545999	0.016630179
0.209	0.043996520	0.043920213	-0.006230029	-0.011356617	0.023235741	0.016508954
0.210	0.054501883	0.043086941	-0.008573180	-0.011943430	0.024073572	0.016972729
0.211	0.067046585	0.038645395	-0.011623624	-0.011893406	0.025494082	0.018208057
0.212	0.080007581	0.028432782	-0.015185710	-0.010617234	0.028256325	0.020334853
0.213	0.089490574	0.011372448	-0.018490025	-0.007596424	0.033885675	0.023201538
0.214	0.090717182	-0.009881426	-0.020302524	-0.003060369	0.045750144	0.024761499
0.215	0.082410984	-0.029098458	-0.019890836	0.001727422	0.065545490	0.013486532
0.216	0.068475114	-0.041487470	-0.017755372	0.005439022	0.066341755	-0.018452439
0.217	0.053947943	-0.046814221	-0.014976107	0.007655932	0.044666510	-0.031792932
0.218	0.041588599	-0.047379959	-0.012321673	0.008677981	0.030147297	-0.030036045
0.219	0.031997983	-0.045464075	-0.010089168	0.008957661	0.022551105	-0.026214970
0.220	0.024820474	-0.042518920	-0.008307094	0.008837148	0.018210303	-0.022932180
0.221	0.019493520	-0.039307304	-0.006908601	0.008523572	0.015438326	-0.020346557
0.222	0.015519730	-0.036184143	-0.005811274	0.008130496	0.013507106	-0.018300942
0.223	0.012522177	-0.033293884	-0.004943577	0.007716865	0.012073560	-0.016648239
0.224	0.010230463	-0.030679897	-0.004249799	0.007311848	0.010959285	-0.015283289
0.225	0.008453903	-0.028339904	-0.003688253	0.006928861	0.010063150	-0.014133798
0.226	0.007058063	-0.026252885	-0.003228135	0.006573132	0.009323566	-0.013149630
0.227	0.005947435	-0.024391744	-0.002846674	0.006245733	0.008700758	-0.012295254
0.228	0.005053398	-0.022729042	-0.002526927	0.005945694	0.008167769	-0.011544870
0.229	0.004326009	-0.021239390	-0.002256169	0.005671134	0.007705596	-0.010879299
0.230	0.003728437	-0.019900265	-0.002024736	0.005419835	0.007300398	-0.010283967
0.231	0.003233168	-0.018692108	-0.001825212	0.005189549	0.006941814	-0.009747584
0.232	0.002819386	-0.017598111	-0.001651836	0.004978139	0.006621913	-0.009261249
0.233	0.002471158	-0.016603908	-0.001500097	0.004783636	0.006334506	-0.008817830
0.234	0.002176152	-0.015697227	-0.001366412	0.004604272	0.006074680	-0.008411541
0.235	0.001924766	-0.014867595	-0.001247927	0.004438462	0.005838487	-0.008037603
0.236	0.001709291	-0.014106005	-0.001142304	0.004284824	0.005622701	-0.007692116
0.237	0.001523704	-0.013404760	-0.001047672	0.004142115	0.005424671	-0.007371739
0.238	0.001363123	-0.012757218	-0.000962484	0.004009247	0.005242192	-0.007073668
0.239	0.001223596	-0.012157654	-0.000885461	0.003885265	0.005073416	-0.006795520
0.240	0.001101904	-0.011601062	-0.000815535	0.003769315	0.004916781	-0.006535232

素子間隔 $d[\lambda]=0.2650$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000091212	-0.004698881	-0.002604122	0.000065383	0.000003606	0.003500804
0.191	-0.000245972	-0.004959497	-0.002772343	0.000129408	0.000259426	0.003727647
0.192	-0.000426887	-0.005232922	-0.002959943	0.000204854	0.000561673	0.003956599
0.193	-0.000638090	-0.005518512	-0.003170167	0.000295047	0.000917798	0.004183385
0.194	-0.000884290	-0.005814914	-0.003406815	0.000404547	0.001336454	0.004401761
0.195	-0.001170888	-0.006119931	-0.003673835	0.000539330	0.001826970	0.004603193
0.196	-0.001503740	-0.006429923	-0.003975701	0.000707666	0.002399875	0.004775374
0.197	-0.001889019	-0.006739486	-0.004316704	0.000920600	0.003065840	0.004901403
0.198	-0.002332711	-0.007040804	-0.004700529	0.001192807	0.003834895	0.004958285
0.199	-0.002839704	-0.007323242	-0.005128938	0.001543629	0.004714227	0.004915379
0.200	-0.003412378	-0.007572719	-0.005600293	0.001997807	0.005705505	0.004733098
0.201	-0.004048409	-0.007772172	-0.006106868	0.002586073	0.006800126	0.004362514
0.202	-0.004737965	-0.007902838	-0.006631379	0.003344704	0.007973289	0.003746920
0.203	-0.005460709	-0.007947765	-0.007143005	0.004313466	0.009177489	0.002826925
0.204	-0.006183880	-0.007898133	-0.007593865	0.005531356	0.010337823	0.001550169
0.205	-0.006863590	-0.007762483	-0.007917645	0.007030474	0.011353007	-0.000115010
0.206	-0.007451697	-0.007577324	-0.008031859	0.008830135	0.012106056	-0.002166446
0.207	-0.007909348	-0.007416092	-0.007843052	0.010935265	0.012484728	-0.004564405
0.208	-0.008225793	-0.007394156	-0.007249753	0.013343030	0.012403688	-0.007247159
0.209	-0.008441073	-0.007672350	-0.006133188	0.016057744	0.011811129	-0.010170579
0.210	-0.008681016	-0.008468236	-0.004322847	0.019107511	0.010655562	-0.013367039
0.211	-0.009242122	-0.010082040	-0.001518848	0.022550821	0.008774683	-0.017009020
0.212	-0.010830658	-0.012899709	0.002882323	0.026450433	0.005617235	-0.021425577
0.213	-0.015183717	-0.017109061	0.010263430	0.030659075	-0.000411787	-0.026809053
0.214	-0.026203042	-0.020758426	0.023881588	0.033174765	-0.013103755	-0.031252572
0.215	-0.046062530	-0.011897336	0.045357729	0.022532839	-0.034558257	-0.022869325
0.216	-0.047793403	0.017932370	0.047718540	-0.009029096	-0.037763661	0.006732096
0.217	-0.027507195	0.029787768	0.027471745	-0.022187791	-0.018812142	0.018547962
0.218	-0.014451424	0.027134505	0.014240682	-0.020393317	-0.006947485	0.015992897
0.219	-0.008199262	0.022838500	0.007797502	-0.016638202	-0.001748475	0.011892189
0.220	-0.005024000	0.019346927	0.004484753	-0.013493649	0.000500996	0.008661816
0.221	-0.003241911	0.016710864	0.002628094	-0.011095064	0.001472023	0.006329464
0.222	-0.002148336	0.014705876	0.001512093	-0.009267994	0.001856252	0.004653520
0.223	-0.001426653	0.013144535	0.000805746	-0.007852784	0.001957871	0.003434131
0.224	-0.000922042	0.011897807	0.000341707	-0.006735280	0.001920310	0.002533417
0.225	-0.000552755	0.010879305	0.000028708	-0.005836827	0.001815153	0.001858791
0.226	-0.000272644	0.010030589	-0.000186190	-0.005102860	0.001679616	0.001347561
0.227	-0.000054111	0.009311277	-0.000335252	-0.004494827	0.001533528	0.000956505
0.228	0.000120199	0.008692794	-0.000438953	-0.003984927	0.001387528	0.000655232
0.229	0.000261685	0.008154437	-0.000510721	-0.003552707	0.001247229	0.000421963
0.230	0.000378128	0.007680880	-0.000559614	-0.003182846	0.001115435	0.000240814
0.231	0.000475019	0.007260539	-0.000591882	-0.002863675	0.000993353	0.000100022
0.232	0.000556341	0.006884503	-0.000611919	-0.002586171	0.000881275	-0.000009266
0.233	0.000625070	0.006545799	-0.000622896	-0.002343268	0.000779026	-0.000093736
0.234	0.000683467	0.006238887	-0.000627096	-0.002129359	0.000686114	-0.000158573
0.235	0.000733301	0.005959279	-0.000626256	-0.001939903	0.000602001	-0.000207819
0.236	0.000775931	0.005703403	-0.000621540	-0.001771354	0.000525876	-0.000244549
0.237	0.000812481	0.005468230	-0.000613946	-0.001620686	0.000457143	-0.000271276
0.238	0.000843855	0.005251267	-0.000604196	-0.001485445	0.000395153	-0.000289971
0.239	0.000870792	0.005050424	-0.000592840	-0.001363597	0.000339293	-0.000302208
0.240	0.000893903	0.004863918	-0.000580304	-0.001253430	0.000288991	-0.000309254

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004492531	0.018235119	0.000394754	-0.002866011	0.005997674	0.015125282
0.191	0.004816449	0.018859156	0.000375769	-0.003026220	0.006377682	0.015491948
0.192	0.005179739	0.019532764	0.000351820	-0.003200271	0.006803583	0.015876825
0.193	0.005589348	0.020261733	0.000321814	-0.003389941	0.007283219	0.016278422
0.194	0.006053830	0.021052684	0.000284364	-0.003597307	0.007825607	0.016693810
0.195	0.006583799	0.021913186	0.000237707	-0.003824804	0.008440885	0.017118021
0.196	0.007192552	0.022851876	0.000179571	-0.004075299	0.009140074	0.017543286
0.197	0.007896899	0.023878563	0.000107001	-0.004352174	0.009934507	0.017958110
0.198	0.008718309	0.025004289	0.000016116	-0.004659425	0.010834733	0.018346258
0.199	0.009684361	0.026241392	-0.000098202	-0.005001785	0.011848494	0.018685772
0.200	0.010831490	0.027602811	-0.000242970	-0.005384752	0.012978335	0.018948943
0.201	0.012207364	0.029102029	-0.000427615	-0.005814791	0.014216824	0.019102941
0.202	0.013875772	0.030751072	-0.000665194	-0.006299228	0.015542214	0.019113542
0.203	0.015922819	0.032557447	-0.000973976	-0.006846049	0.016914152	0.018952575
0.204	0.018465732	0.034517805	-0.001379829	-0.007463155	0.018272907	0.018609989
0.205	0.021664820	0.036605600	-0.001919750	-0.008156556	0.019546035	0.018109379
0.206	0.025738404	0.038747272	-0.002646875	-0.008926257	0.020666100	0.017522444
0.207	0.030977323	0.040776956	-0.003636994	-0.009757435	0.021599643	0.016975189
0.208	0.037745585	0.042353072	-0.004994833	-0.010602253	0.022382685	0.016639965
0.209	0.046426818	0.042816406	-0.006852808	-0.011344895	0.023156489	0.016713401
0.210	0.057216716	0.040995213	-0.009340022	-0.011743683	0.024206059	0.017386908
0.211	0.069587664	0.035104152	-0.012472702	-0.011369542	0.026028025	0.018813311
0.212	0.081388786	0.023257068	-0.015919725	-0.009651761	0.029518635	0.021034250
0.213	0.088486209	0.005306643	-0.018788442	-0.006253584	0.036531102	0.023549609
0.214	0.086993061	-0.015077049	-0.019958966	-0.001690734	0.050524593	0.022581242
0.215	0.077177845	-0.031992492	-0.019055162	0.002727171	0.067303661	0.004441512
0.216	0.063359702	-0.042078705	-0.016773386	0.005947336	0.058702299	-0.023414128
0.217	0.049809283	-0.045951937	-0.014092434	0.007789799	0.039300638	-0.030406186
0.218	0.038534801	-0.045868093	-0.011617430	0.008599648	0.027638404	-0.027957100
0.219	0.029827427	-0.043781983	-0.009556034	0.008782675	0.021295156	-0.024525156
0.220	0.023291222	-0.040891911	-0.007910003	0.008629954	0.017505217	-0.021623293
0.221	0.018410551	-0.037820996	-0.006612551	0.008315664	0.015004560	-0.019311724
0.222	0.014744111	-0.034858736	-0.005588558	0.007935593	0.013222509	-0.017458804
0.223	0.011959164	-0.032122347	-0.004773939	0.007539879	0.011878648	-0.015944876
0.224	0.009816167	-0.029645675	-0.004118834	0.007153570	0.010822192	-0.014683084
0.225	0.008145089	-0.027424565	-0.003585776	0.006788287	0.009965399	-0.013612612
0.226	0.006825164	-0.025439151	-0.003146909	0.006448588	0.009253732	-0.012690581
0.227	0.005769962	-0.023664487	-0.002781504	0.006135391	0.008651394	-0.011886172
0.228	0.004916945	-0.022075416	-0.002474040	0.005847808	0.008133812	-0.011176738
0.229	0.004220302	-0.020648640	-0.002212790	0.005584124	0.007683480	-0.010545271
0.230	0.003646045	-0.019363436	-0.001988799	0.005342317	0.007287539	-0.009978736
0.231	0.003168644	-0.018201748	-0.001795157	0.005120323	0.006936296	-0.009466959
0.232	0.002768692	-0.017148010	-0.001626475	0.004916172	0.006622285	-0.009001864
0.233	0.002431263	-0.016188865	-0.001478509	0.004728047	0.006339649	-0.008576948
0.234	0.002144757	-0.015312873	-0.001347879	0.004554304	0.006083720	-0.008186907
0.235	0.001900068	-0.014510226	-0.001231874	0.004393473	0.005850730	-0.007827361
0.236	0.001689978	-0.013772503	-0.001128296	0.004244247	0.005637595	-0.007494658
0.237	0.001508716	-0.013092457	-0.001035350	0.004105469	0.005441770	-0.007185725
0.238	0.001351631	-0.012463822	-0.000951556	0.003976116	0.005261131	-0.006897949
0.239	0.001214944	-0.011881192	-0.000875691	0.003855285	0.005093896	-0.006629109
0.240	0.001095569	-0.011339825	-0.000806731	0.003742170	0.004938555	-0.006377271

素子間隔 $d[\lambda]=0.2675$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000175071	-0.004698747	-0.002634582	0.000114184	0.000131731	0.003476653
0.191	-0.000336549	-0.004956274	-0.002806788	0.000184666	0.000398159	0.003693031
0.192	-0.000524785	-0.005225729	-0.002998714	0.000268080	0.000711823	0.003909102
0.193	-0.000743896	-0.005506217	-0.003213527	0.000368132	0.001080087	0.004119974
0.194	-0.000998554	-0.005796115	-0.003454773	0.000489791	0.001511258	0.004318732
0.195	-0.001293946	-0.006092780	-0.003726287	0.000639719	0.002014471	0.004495713
0.196	-0.001635645	-0.006392174	-0.004031981	0.000826816	0.002599373	0.004637581
0.197	-0.002029298	-0.006688412	-0.004375425	0.001062898	0.003275435	0.004726180
0.198	-0.002480050	-0.006973278	-0.004759113	0.001363486	0.004050703	0.004737227
0.199	-0.002991453	-0.007235760	-0.005183372	0.001748752	0.004929789	0.004638827
0.200	-0.003564313	-0.007462079	-0.005644048	0.002243719	0.005910231	0.004391343
0.201	-0.004194036	-0.007636105	-0.006130522	0.002879102	0.006978525	0.003946593
0.202	-0.004868379	-0.007741362	-0.006622020	0.003690025	0.008104260	0.003250995
0.203	-0.005565038	-0.007765046	-0.007084139	0.004713656	0.009234787	0.002251327
0.204	-0.006250867	-0.007704597	-0.007466171	0.005984880	0.010292556	0.000904561
0.205	-0.006884668	-0.007576512	-0.007700667	0.007530857	0.011178567	-0.000809982
0.206	-0.007425357	-0.007425649	-0.007705983	0.009366844	0.011784467	-0.002881290
0.207	-0.007845895	-0.007332491	-0.007389981	0.011496877	0.012011302	-0.005268404
0.208	-0.008151935	-0.007417522	-0.006648851	0.013921760	0.011785203	-0.007920737
0.209	-0.008406346	-0.007846505	-0.005351216	0.016652617	0.011052730	-0.010818970
0.210	-0.008774435	-0.008844454	-0.003294553	0.019722204	0.009730579	-0.014029838
0.211	-0.009639532	-0.010714799	-0.000110692	0.023179991	0.007563391	-0.017753734
0.212	-0.011911534	-0.013783694	0.004956126	0.027026663	0.003781257	-0.022276129
0.213	-0.017742310	-0.017833233	0.013633849	0.030772753	-0.003642932	-0.027389990
0.214	-0.031124255	-0.019039284	0.029285338	0.030683573	-0.018605768	-0.029314811
0.215	-0.048197709	-0.003216540	0.047650783	0.013129705	-0.037183721	-0.013923637
0.216	-0.040634823	0.022722382	0.040526894	-0.014373386	-0.031012146	0.011810820
0.217	-0.022608557	0.028402753	0.022476754	-0.021191761	-0.014247428	0.017459337
0.218	-0.012341947	0.025170084	0.012036564	-0.018702072	-0.005109535	0.014321628
0.219	-0.007265394	0.021323650	0.006790525	-0.015325925	-0.001033947	0.010660305
0.220	-0.004572451	0.018239939	0.003982050	-0.012547875	0.000776277	0.007823530
0.221	-0.003006137	0.015886006	0.002358064	-0.010406653	0.001566772	0.005756950
0.222	-0.002018167	0.014071914	0.001359273	-0.008754651	0.001874067	0.004254764
0.223	-0.001352282	0.012642712	0.000716207	-0.007460514	0.001943124	0.003150443
0.224	-0.000879051	0.011490384	0.000288156	-0.006428921	0.001892973	0.002327642
0.225	-0.000528309	0.010541452	-0.000003584	-0.005593006	0.001784439	0.001706981
0.226	-0.000259588	0.009745465	-0.000205581	-0.004905623	0.001649742	0.001233906
0.227	-0.000048246	0.009067112	-0.000346677	-0.004333002	0.001506311	0.000870323
0.228	0.000121441	0.008481128	-0.000445419	-0.003850501	0.001363609	0.000589148
0.229	0.000259938	0.007969036	-0.000514104	-0.003439813	0.001226679	0.000370786
0.230	0.000374460	0.007517040	-0.000561105	-0.003087105	0.001098054	0.000200832
0.231	0.000470146	0.007114646	-0.000592248	-0.002781764	0.000978832	0.000068536
0.232	0.000550758	0.006753725	-0.000611665	-0.002515533	0.000869283	-0.000034225
0.233	0.000619117	0.006427884	-0.000622335	-0.002281904	0.000769212	-0.000113663
0.234	0.000677384	0.006132020	-0.000626437	-0.002075693	0.000678168	-0.000174578
0.235	0.000727246	0.005862006	-0.000625586	-0.001892722	0.000595573	-0.000220713
0.236	0.000770040	0.005614468	-0.000620991	-0.001729593	0.000520795	-0.000255011
0.237	0.000806840	0.005386613	-0.000613564	-0.001583520	0.000453196	-0.000279803
0.238	0.000838524	0.005176109	-0.000604008	-0.001452199	0.000392158	-0.000296948
0.239	0.000865811	0.004980997	-0.000592857	-0.001333712	0.000337095	-0.000307935
0.240	0.000889297	0.004799599	-0.000580524	-0.001226439	0.000287454	-0.000313969

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004614518	0.018308193	0.000374679	-0.002894565	0.006082755	0.015148666
0.191	0.004952000	0.018938435	0.000353419	-0.003057725	0.006474617	0.015512240
0.192	0.005330975	0.019618850	0.000326782	-0.003235088	0.006913635	0.015892264
0.193	0.005758835	0.020355270	0.000293578	-0.003428482	0.007407591	0.016286731
0.194	0.006244691	0.021154344	0.000252299	-0.003640044	0.007965308	0.016692076
0.195	0.006799869	0.022023639	0.000201023	-0.003872277	0.008596523	0.017102589
0.196	0.007438575	0.022971748	0.000137267	-0.004128121	0.009311553	0.017509669
0.197	0.008178816	0.024008325	0.000057798	-0.004411034	0.010120588	0.017900969
0.198	0.009043561	0.025144182	-0.000041620	-0.004725099	0.011032413	0.018259599
0.199	0.010062562	0.026391114	-0.000166643	-0.005075111	0.012052425	0.018563525
0.200	0.011274692	0.027761145	-0.000324902	-0.005466608	0.013179636	0.018785517
0.201	0.012731275	0.029266119	-0.000526781	-0.005906003	0.014402864	0.018895286
0.202	0.014500846	0.030915245	-0.000786632	-0.006400415	0.015696650	0.018863602
0.203	0.016675763	0.032711143	-0.001124526	-0.006957289	0.017018559	0.018670446
0.204	0.019381064	0.034642116	-0.001568763	-0.007583382	0.018310202	0.018316897
0.205	0.022787321	0.036666669	-0.002159860	-0.008282247	0.019508198	0.017839146
0.206	0.027122954	0.038685735	-0.002955305	-0.009049161	0.020561090	0.017319207
0.207	0.032684628	0.040489538	-0.004035791	-0.009860176	0.021459304	0.016887066
0.208	0.039823851	0.041664199	-0.005509236	-0.010650647	0.022268083	0.016709786
0.209	0.048859246	0.041443697	-0.007502544	-0.011276225	0.023162096	0.016968997
0.210	0.059801887	0.038541538	-0.010113877	-0.011455492	0.024469404	0.017831332
0.211	0.071746107	0.031183098	-0.013276595	-0.010731722	0.026761551	0.019405698
0.212	0.082075924	0.017915735	-0.016524880	-0.008591563	0.031103432	0.021605289
0.213	0.086701508	-0.000429112	-0.018899603	-0.004913091	0.039665503	0.023344877
0.214	0.082856425	-0.019509997	-0.019470791	-0.000442911	0.055060309	0.018627078
0.215	0.072058390	-0.034133254	-0.018184947	0.003566614	0.065656587	-0.004478397
0.216	0.058633821	-0.042218844	-0.015836457	0.006337216	0.051536071	-0.025665330
0.217	0.046073286	-0.044920072	-0.013276934	0.007862179	0.035111950	-0.028731956
0.218	0.035793532	-0.044345450	-0.010974091	0.008498665	0.025615009	-0.026076334
0.219	0.027873932	-0.042155503	-0.009068908	0.008605071	0.020232084	-0.023010416
0.220	0.021906718	-0.039339322	-0.007545525	0.008428736	0.016886107	-0.020434006
0.221	0.017423315	-0.036407820	-0.006339161	0.008116617	0.014613901	-0.018358288
0.222	0.014032250	-0.033598233	-0.005381586	0.007749894	0.012961719	-0.016674068
0.223	0.011439208	-0.031006092	-0.004615341	0.007371427	0.011697913	-0.015283610
0.224	0.009431440	-0.028657783	-0.003995715	0.007002838	0.010694043	-0.014114850
0.225	0.007856942	-0.026547876	-0.003488960	0.006654248	0.009873549	-0.013116431
0.226	0.006606963	-0.024657714	-0.003069825	0.006329660	0.009187923	-0.012251579
0.227	0.005603119	-0.022964339	-0.002719410	0.006029870	0.008604849	-0.011493496
0.228	0.004788312	-0.021444715	-0.002423477	0.005754076	0.008101854	-0.010822289
0.229	0.004120430	-0.020077378	-0.002171183	0.005500706	0.007662814	-0.010222803
0.230	0.003568072	-0.018843284	-0.001954228	0.005267920	0.007275746	-0.009683394
0.231	0.003107516	-0.017725755	-0.001766165	0.005053826	0.006931570	-0.009194884
0.232	0.002720642	-0.016710361	-0.001601948	0.004856610	0.006623249	-0.008749944
0.233	0.002393454	-0.015784682	-0.001457580	0.004674589	0.006345240	-0.008342638
0.234	0.002115031	-0.014938042	-0.001329873	0.004506236	0.006093102	-0.007968101
0.235	0.001876766	-0.014161268	-0.001216256	0.004350182	0.005863239	-0.007622298
0.236	0.001671816	-0.013446455	-0.001114639	0.004205204	0.005652699	-0.007301852
0.237	0.001494692	-0.012786785	-0.001023311	0.004070216	0.005459037	-0.007003910
0.238	0.001340950	-0.012176363	-0.000940859	0.003944259	0.005280206	-0.006726047
0.239	0.001206989	-0.011610047	-0.000866109	0.003826473	0.005114491	-0.006466171
0.240	0.001089839	-0.011083379	-0.000798079	0.003716104	0.004960426	-0.006222489

素子間隔 $d[\lambda]=0.2700$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000259276	-0.004696184	-0.002664712	0.000166076	0.000259165	0.003446879
0.191	-0.000427361	-0.004950297	-0.002840640	0.000243527	0.000535787	0.003652023
0.192	-0.000622738	-0.005215404	-0.003036531	0.000335499	0.000860303	0.003854321
0.193	-0.000849487	-0.005490363	-0.003255433	0.000446083	0.001239918	0.004048254
0.194	-0.001112172	-0.005773246	-0.003500681	0.000580720	0.001682631	0.004226138
0.195	-0.001415771	-0.006061052	-0.003775762	0.000746636	0.002197036	0.004377393
0.196	-0.001765487	-0.006349346	-0.004084036	0.000953380	0.002791888	0.004487631
0.197	-0.002166378	-0.006631839	-0.004428231	0.001213487	0.003475262	0.004537562
0.198	-0.002622673	-0.006900026	-0.004809624	0.001543190	0.004253146	0.004501862
0.199	-0.003136739	-0.007142892	-0.005226698	0.001963122	0.005127121	0.004348127
0.200	-0.003707504	-0.007346998	-0.005673160	0.002498757	0.006091018	0.004036444
0.201	-0.004328421	-0.007497595	-0.006135427	0.003180261	0.007126553	0.003520370
0.202	-0.004985259	-0.007580913	-0.006589458	0.004041263	0.008198342	0.002750124
0.203	-0.005654476	-0.007588586	-0.006997745	0.005116128	0.009249808	0.001679028
0.204	-0.006303276	-0.007524290	-0.007307481	0.006435939	0.010202355	0.000272758
0.205	-0.006894796	-0.007411917	-0.007450384	0.008023295	0.010960828	-0.001479568
0.206	-0.007395708	-0.007303643	-0.007345465	0.009890752	0.011425815	-0.003561238
0.207	-0.007791327	-0.007285895	-0.006900357	0.012042638	0.011509692	-0.005933534
0.208	-0.008104490	-0.007483750	-0.006005727	0.014483631	0.011145132	-0.008559617
0.209	-0.008423962	-0.008067964	-0.004512695	0.017229814	0.010268727	-0.011445116
0.210	-0.008964015	-0.009269031	-0.002179271	0.020313175	0.008751827	-0.014686256
0.211	-0.010217059	-0.011378454	0.001445349	0.023759789	0.006222293	-0.018492028
0.212	-0.013333711	-0.014594448	0.007299713	0.027454480	0.001655381	-0.023032554
0.213	-0.020850224	-0.018032917	0.017444060	0.030326947	-0.007375430	-0.027438891
0.214	-0.035870294	-0.015521106	0.034407372	0.026421455	-0.023890749	-0.025580116
0.215	-0.046953755	0.005395136	0.046502587	0.003860919	-0.036395092	-0.005055419
0.216	-0.033938697	0.024851312	0.033779182	-0.016994377	-0.024694760	0.014216540
0.217	-0.018860570	0.026759068	0.018635577	-0.019893772	-0.010810890	0.016098451
0.218	-0.010690629	0.023415632	0.010299540	-0.017194116	-0.003712163	0.012846309
0.219	-0.006501755	0.019985623	0.005962050	-0.014174190	-0.000476031	0.009591570
0.220	-0.004189597	0.017249335	0.003554149	-0.011707955	0.000993342	0.007088724
0.221	-0.002800678	0.015137243	0.002122477	-0.009786886	0.001639230	0.005248598
0.222	-0.001902405	0.013489432	0.001223551	-0.008287020	0.001883595	0.003896596
0.223	-0.001285158	0.012177136	0.000635648	-0.007099701	0.001925785	0.002893137
0.224	-0.000839855	0.011109454	0.000239522	-0.006144889	0.001865369	0.002139466
0.225	-0.000505899	0.010223603	-0.000033097	-0.005365465	0.001754351	0.001567175
0.226	-0.000247627	0.009475878	-0.000223368	-0.004720542	0.001620770	0.001128593
0.227	-0.000042957	0.008835308	-0.000357163	-0.004180439	0.001480005	0.000790027
0.228	0.000122421	0.008279530	-0.000451341	-0.003723303	0.001340518	0.000527313
0.229	0.000258096	0.007791955	-0.000517166	-0.003332615	0.001206822	0.000322678
0.230	0.000370794	0.007360184	-0.000562406	-0.002995914	0.001081233	0.000163078
0.231	0.000465332	0.006974691	-0.000592501	-0.002703531	0.000964747	0.000038674
0.232	0.000545262	0.006628056	-0.000611333	-0.002447899	0.000857607	-0.000058017
0.233	0.000613267	0.006314410	-0.000621722	-0.002223019	0.000759625	-0.000132746
0.234	0.000671411	0.006029049	-0.000625740	-0.002024089	0.000670375	-0.000189980
0.235	0.000721315	0.005768151	-0.000624929	-0.001847221	0.000589306	-0.000233216
0.236	0.000764269	0.005528578	-0.000620453	-0.001689248	0.000515822	-0.000265216
0.237	0.000801314	0.005307726	-0.000613193	-0.001547554	0.000449316	-0.000288174
0.238	0.000833303	0.005103419	-0.000603827	-0.001419977	0.000389197	-0.000303844
0.239	0.000860933	0.004913806	-0.000592875	-0.001304698	0.000334900	-0.000313640
0.240	0.000884792	0.004737321	-0.000580743	-0.001200198	0.000285902	-0.000318701

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 $L[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004740494	0.018380675	0.000353351	-0.002923670	0.006169410	0.015168523
0.191	0.005092130	0.019016977	0.000329652	-0.003089827	0.006572898	0.015528318
0.192	0.005487494	0.019704012	0.000300131	-0.003270550	0.007024657	0.015902710
0.193	0.005934446	0.020447635	0.000263495	-0.003467720	0.007532350	0.016289181
0.194	0.006442690	0.021254498	0.000218104	-0.003683530	0.008104532	0.016683558
0.195	0.007024304	0.022132139	0.000161862	-0.003920548	0.008750453	0.017079437
0.196	0.007694458	0.023089051	0.000092062	-0.004181783	0.009479613	0.017467484
0.197	0.008472390	0.024134713	0.000005178	-0.004470769	0.010300936	0.017834695
0.198	0.009382778	0.025279539	-0.000103445	-0.004791651	0.011221403	0.018163745
0.199	0.010457360	0.026534594	-0.000239969	-0.005149252	0.012243830	0.018432786
0.200	0.011737954	0.027910802	-0.000412782	-0.005549121	0.013364180	0.018615894
0.201	0.013279568	0.029417970	-0.000633266	-0.005997548	0.014567876	0.018685850
0.202	0.015155641	0.031061876	-0.000917163	-0.006501324	0.015826704	0.018618963
0.203	0.017464913	0.032839275	-0.001286464	-0.007067153	0.017097641	0.018403539
0.204	0.020340655	0.034728294	-0.001772167	-0.007700230	0.018326463	0.018051245
0.205	0.023962132	0.036670395	-0.002418151	-0.008401132	0.019458999	0.017608907
0.206	0.028566001	0.038536954	-0.003286202	-0.009159315	0.020461424	0.017166197
0.207	0.034449031	0.040068829	-0.004461151	-0.009940003	0.021347967	0.016854117
0.208	0.041936817	0.040774872	-0.006051613	-0.010659501	0.022212444	0.016832008
0.209	0.051255777	0.039785506	-0.008172805	-0.011143338	0.023262792	0.017265046
0.210	0.062191967	0.035730797	-0.010880532	-0.011073687	0.024876732	0.018289418
0.211	0.073444029	0.026945611	-0.014013328	-0.009986070	0.027715607	0.019952514
0.212	0.082048387	0.012548423	-0.016984765	-0.007463663	0.033037344	0.021957540
0.213	0.084246778	-0.005702909	-0.018835076	-0.003611197	0.043184786	0.022324077
0.214	0.078477876	-0.023182257	-0.018872801	0.000669837	0.058460698	0.012936450
0.215	0.067144563	-0.035625436	-0.017306715	0.004259787	0.061406745	-0.011692953
0.216	0.054296950	-0.042006456	-0.014951677	0.006628371	0.045419753	-0.026198096
0.217	0.042703671	-0.043771924	-0.012526127	0.007886140	0.031806465	-0.027005762
0.218	0.033328840	-0.042831799	-0.010385907	0.008381280	0.023953774	-0.024380695
0.219	0.026111510	-0.040588125	-0.008622948	0.008427145	0.019320508	-0.021645409
0.220	0.020650097	-0.037858472	-0.007210244	0.008233965	0.016337759	-0.019348015
0.221	0.016521256	-0.035063445	-0.006086168	0.007926183	0.014260007	-0.017476489
0.222	0.013377575	-0.032398373	-0.005188887	0.007572922	0.012721769	-0.015940722
0.223	0.010958183	-0.029941451	-0.004466828	0.007211009	0.011529824	-0.014660559
0.224	0.009073649	-0.027713221	-0.003879816	0.006859202	0.010573979	-0.013575960
0.225	0.007587745	-0.025707452	-0.003397384	0.006526368	0.009787074	-0.012643413
0.226	0.006402322	-0.023906674	-0.002996603	0.006216038	0.009125802	-0.011831279
0.227	0.005446138	-0.022289784	-0.002660200	0.005928917	0.008560896	-0.011116211
0.228	0.004666950	-0.020835618	-0.002375081	0.005664274	0.008071783	-0.010480667
0.229	0.004026011	-0.019524525	-0.002131235	0.005420694	0.007643525	-0.009911214
0.230	0.003494246	-0.018338922	-0.001920939	0.005196493	0.007264971	-0.009397390
0.231	0.003049590	-0.017263386	-0.001738176	0.004989932	0.006927605	-0.008930906
0.232	0.002675096	-0.016284544	-0.001578210	0.004799344	0.006624789	-0.008505110
0.233	0.002357630	-0.015390833	-0.001437279	0.004623169	0.006351268	-0.008114579
0.234	0.002086899	-0.014572287	-0.001312368	0.004459990	0.006102821	-0.007754847
0.235	0.001854762	-0.013820318	-0.001201039	0.004308529	0.005876011	-0.007422199
0.236	0.001654723	-0.013127507	-0.001101305	0.004167642	0.005668010	-0.007113509
0.237	0.001481559	-0.012487437	-0.001011533	0.004036310	0.005476469	-0.006826130
0.238	0.001331028	-0.011894547	-0.000930372	0.003913631	0.005299418	-0.006557803
0.239	0.001199681	-0.011343975	-0.000856697	0.003798793	0.005135200	-0.006306576
0.240	0.001084670	-0.010831499	-0.000789562	0.003691084	0.004982397	-0.006070769

素子間隔 $d[\lambda]=0.2725$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000343706	-0.004691146	-0.002694273	0.000221131	0.000385567	0.003411412
0.191	-0.000518254	-0.004941525	-0.002873616	0.000306056	0.000671907	0.003604568
0.192	-0.000720558	-0.005201923	-0.003073056	0.000407162	0.001006619	0.003792225
0.193	-0.000954628	-0.005470948	-0.003295479	0.000528928	0.001396688	0.003968240
0.194	-0.001224886	-0.005746384	-0.003543962	0.000677262	0.001849717	0.004124175
0.195	-0.001536051	-0.006024897	-0.003821580	0.000859931	0.002373652	0.004248575
0.196	-0.001892905	-0.006301705	-0.004131067	0.001087103	0.002976230	0.004326083
0.197	-0.002299847	-0.006570222	-0.004474234	0.001371950	0.003664001	0.004336442
0.198	-0.002760177	-0.006821757	-0.004851024	0.001731317	0.004440748	0.004253492
0.199	-0.003274918	-0.007045449	-0.005258132	0.002186193	0.005305039	0.004044549
0.200	-0.003841409	-0.007228601	-0.005686933	0.002762069	0.006246922	0.003670262
0.201	-0.004451305	-0.007358148	-0.006121067	0.003488356	0.007243755	0.003086358
0.202	-0.005088859	-0.007423342	-0.006533526	0.004396929	0.008255966	0.002247361
0.203	-0.005730040	-0.007420406	-0.006884167	0.005519275	0.009224266	0.001113216
0.204	-0.006343967	-0.007359044	-0.007118371	0.006882629	0.010070482	-0.000341960
0.205	-0.006898068	-0.007269902	-0.007167541	0.008506421	0.010704159	-0.002122001
0.206	-0.007367918	-0.007211468	-0.006950603	0.010401244	0.011034518	-0.004206860
0.207	-0.007751828	-0.007275248	-0.006372991	0.012572420	0.010982570	-0.006562869
0.208	-0.008091195	-0.007590554	-0.005316502	0.015028047	0.010482154	-0.009168560
0.209	-0.008504567	-0.008333079	-0.003610092	0.017786751	0.009451237	-0.012053511
0.210	-0.009268045	-0.009732794	-0.000963416	0.020871522	0.007700619	-0.015334833
0.211	-0.011006824	-0.012043776	0.003172906	0.024263652	0.004716642	-0.019200849
0.212	-0.015136584	-0.015234635	0.009943527	0.027647679	-0.000803546	-0.023601777
0.213	-0.024406158	-0.017428857	0.021594284	0.029060820	-0.011512235	-0.026678971
0.214	-0.039533901	-0.010230700	0.038355056	0.020426877	-0.028055354	-0.020076360
0.215	-0.043121459	0.012355847	0.042718978	-0.003693204	-0.032986476	0.002153367
0.216	-0.028276924	0.025304561	0.028054791	-0.017884621	-0.019386063	0.014935110
0.217	-0.015969539	0.025086856	0.015656341	-0.018530143	-0.008210899	0.014696198
0.218	-0.009376112	0.021855209	0.008907877	-0.015857325	-0.002635582	0.011551885
0.219	-0.005868976	0.018797909	0.005271900	-0.013158599	-0.000036531	0.008660371
0.220	-0.003861802	0.016358540	0.003186734	-0.010958485	0.001164956	0.006441676
0.221	-0.002620323	0.014454951	0.001915657	-0.009226831	0.001693967	0.004795569
0.222	-0.001798868	0.012952707	0.001102450	-0.007859834	0.001886550	0.003573995
0.223	-0.001224291	0.011744256	0.000562901	-0.006767130	0.001906502	0.002659284
0.224	-0.000803970	0.010752711	0.000195216	-0.005881148	0.001837731	0.001967127
0.225	-0.000485267	0.009924207	-0.000060156	-0.005152880	0.001724964	0.001438289
0.226	-0.000236615	0.009220742	-0.000239739	-0.004546727	0.001592711	0.001030946
0.227	-0.000038153	0.008615080	-0.000366825	-0.004036528	0.001454601	0.000715190
0.228	0.000123147	0.008087328	-0.000456758	-0.003602772	0.001318200	0.000469319
0.229	0.000256158	0.007622677	-0.000519927	-0.003230694	0.001187613	0.000277348
0.230	0.000367124	0.007209903	-0.000563527	-0.002908953	0.001064931	0.000127345
0.231	0.000460566	0.006840347	-0.000592641	-0.002628729	0.000951066	0.000010284
0.232	0.000539844	0.006507229	-0.000610930	-0.002383075	0.000846235	-0.000080738
0.233	0.000607510	0.006205158	-0.000621060	-0.002166455	0.000750256	-0.000151055
0.234	0.000665539	0.005929791	-0.000625005	-0.001974419	0.000662728	-0.000204829
0.235	0.000715488	0.005677586	-0.000624242	-0.001803348	0.000583130	-0.000245333
0.236	0.000758601	0.005445626	-0.000619887	-0.001650276	0.000510893	-0.000275160
0.237	0.000795888	0.005231481	-0.000612792	-0.001512754	0.000445440	-0.000296379
0.238	0.000828176	0.005033112	-0.000603615	-0.001388746	0.000386208	-0.000310648
0.239	0.000856146	0.004848785	-0.000592859	-0.001276538	0.000332654	-0.000319306
0.240	0.000880372	0.004677026	-0.000580925	-0.001174691	0.000284278	-0.000323438

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y00		Y01		Y11	
	real	imag	real	imag	real	imag
0.190	0.004870577	0.018452411	0.000330713	-0.002953310	0.006257341	0.015184775
0.191	0.005236980	0.019094602	0.000304402	-0.003122506	0.006672163	0.015540126
0.192	0.005649462	0.019788032	0.000271791	-0.003306634	0.007136210	0.015908151
0.193	0.006116380	0.020538562	0.000231475	-0.003507623	0.007656971	0.016285830
0.194	0.006648061	0.021352822	0.000181671	-0.003727723	0.008242660	0.016668418
0.195	0.007257383	0.022238277	0.000120095	-0.003969562	0.008901955	0.017048882
0.196	0.007960537	0.023203274	0.000043798	-0.004236212	0.009643448	0.017417273
0.197	0.008778080	0.024257004	-0.000051070	-0.004531266	0.010474714	0.017760104
0.198	0.009736409	0.025409381	-0.000169596	-0.004858915	0.011400855	0.018059924
0.199	0.010869505	0.026670612	-0.000318520	-0.005223994	0.012422247	0.018295478
0.200	0.012222141	0.028050161	-0.000507024	-0.005631996	0.013532003	0.018442632
0.201	0.013853193	0.029555383	-0.000747571	-0.006089010	0.014712764	0.018477771
0.202	0.015841142	0.031187931	-0.001057389	-0.006601354	0.015934594	0.018383103
0.203	0.018291120	0.032937595	-0.001460496	-0.007174747	0.017155348	0.018155177
0.204	0.021344085	0.034770710	-0.001990615	-0.007812438	0.018326170	0.017815303
0.205	0.025187315	0.036608788	-0.002695104	-0.008511283	0.019404315	0.017419199
0.206	0.030062451	0.038289795	-0.003639683	-0.009253790	0.020373887	0.017061611
0.207	0.036258928	0.039500602	-0.004912099	-0.009992688	0.021272659	0.016871940
0.208	0.044060380	0.039669393	-0.006618441	-0.010623074	0.022222823	0.016999427
0.209	0.053572083	0.037831173	-0.008855197	-0.010939592	0.023468910	0.017588587
0.210	0.064319134	0.032582198	-0.011623872	-0.010595866	0.025442274	0.018739688
0.211	0.074617878	0.022474544	-0.014662088	-0.009144052	0.028910955	0.020407770
0.212	0.081321557	0.007294182	-0.017290390	-0.006298100	0.035324757	0.021964364
0.213	0.081253148	-0.010423974	-0.018614080	-0.002377408	0.046828738	0.020216187
0.214	0.074003703	-0.026133324	-0.018197856	0.001643874	0.059895983	0.006135696
0.215	0.062494759	-0.036573598	-0.016440206	0.004823318	0.055912345	-0.016605676
0.216	0.050334785	-0.041524003	-0.014122186	0.006838350	0.040402850	-0.025762809
0.217	0.039664073	-0.042548489	-0.011835635	0.007872355	0.029158292	-0.025335224
0.218	0.031108285	-0.041341094	-0.009847395	0.008252396	0.022567483	-0.022850174
0.219	0.024517271	-0.039081213	-0.008213750	0.008250609	0.018529789	-0.020408192
0.220	0.019506513	-0.036446117	-0.006901071	0.008045901	0.015848362	-0.018351282
0.221	0.015695007	-0.033783522	-0.005851507	0.007744054	0.013937787	-0.016657699
0.222	0.012774189	-0.031255017	-0.005009099	0.007404203	0.012500236	-0.015253292
0.223	0.010512336	-0.028924885	-0.004327497	0.007058143	0.011373126	-0.014072096
0.224	0.008740373	-0.026809088	-0.003770531	0.006722231	0.010461309	-0.013063909
0.225	0.007335918	-0.024900931	-0.003310639	0.006404275	0.009705583	-0.012191748
0.226	0.006210188	-0.023184129	-0.002926959	0.006107410	0.009067137	-0.011428335
0.227	0.005298305	-0.021639284	-0.002603676	0.005832274	0.008519394	-0.010753292
0.228	0.004552388	-0.020246979	-0.002328732	0.005578207	0.008043467	-0.010151140
0.229	0.003936715	-0.018989148	-0.002092861	0.005343929	0.007625518	-0.009609922
0.230	0.003424335	-0.017849582	-0.001888874	0.005127901	0.007255142	-0.009120250
0.231	0.002994689	-0.016814018	-0.001711146	0.004928533	0.006924342	-0.008674639
0.232	0.002631923	-0.015870039	-0.001555231	0.004744284	0.006626854	-0.008267038
0.233	0.002323692	-0.015006878	-0.001417581	0.004573713	0.006357696	-0.007892495
0.234	0.002060285	-0.014215233	-0.001295346	0.004415503	0.006112844	-0.007546912
0.235	0.001833995	-0.013487057	-0.001186212	0.004268460	0.005889017	-0.007226862
0.236	0.001638654	-0.012815384	-0.001088286	0.004131516	0.005683505	-0.006929453
0.237	0.001469280	-0.012194184	-0.001000011	0.004003716	0.005494048	-0.006652235
0.238	0.001321834	-0.011618171	-0.000920092	0.003884202	0.005318753	-0.006393085
0.239	0.001192999	-0.011082788	-0.000847452	0.003772218	0.005156012	-0.006150198
0.240	0.001080045	-0.010584019	-0.000781181	0.003667087	0.005004458	-0.005921997

素子間隔 $d[\lambda]=0.2750$ アンテナ半径 $[\lambda]=0.0125$

アンテナ長 L $[\lambda]$	Y21		Y31		Y41	
	real	imag	real	imag	real	imag
0.190	-0.000428220	-0.004683614	-0.002723028	0.000279404	0.000510598	0.003370224
0.191	-0.000609057	-0.004929952	-0.002905436	0.000372297	0.000806106	0.003550656
0.192	-0.000818034	-0.005185296	-0.003107950	0.000483094	0.001150270	0.003722844
0.193	-0.001059066	-0.005448018	-0.003333262	0.000616660	0.001549790	0.003880024
0.194	-0.001336394	-0.005715625	-0.003584137	0.000779357	0.002011791	0.004013033
0.195	-0.001654437	-0.005984488	-0.003863177	0.000979473	0.002543466	0.004109596
0.196	-0.002017506	-0.006249539	-0.004172420	0.001227738	0.003151417	0.004153490
0.197	-0.002429300	-0.006503978	-0.004512674	0.001537887	0.003840545	0.004123657
0.198	-0.002892146	-0.006739097	-0.004882494	0.001927227	0.004612345	0.003993398
0.199	-0.003405797	-0.006944401	-0.005276737	0.002416959	0.005462381	0.003730075
0.200	-0.003966091	-0.007108191	-0.005684493	0.003032317	0.006377083	0.003295406
0.201	-0.004563194	-0.007219381	-0.006086774	0.003801722	0.007329902	0.002647761
0.202	-0.005180354	-0.007270470	-0.006453911	0.004755121	0.008277904	0.001746264
0.203	-0.005793807	-0.007262320	-0.006743523	0.005921150	0.009160192	0.000557346
0.204	-0.006375167	-0.007210361	-0.006899622	0.007323749	0.009900118	-0.000937652
0.205	-0.006897498	-0.007151311	-0.006853048	0.008979594	0.010412479	-0.002736976
0.206	-0.007345748	-0.007149118	-0.006521750	0.010898290	0.010614096	-0.004819961
0.207	-0.007731974	-0.007299686	-0.005806884	0.013086489	0.010431526	-0.007160261
0.208	-0.008118277	-0.007736042	-0.004577707	0.015554398	0.009793764	-0.009752325
0.209	-0.008660208	-0.008635946	-0.002634783	0.018318196	0.008589972	-0.012645990
0.210	-0.009707394	-0.010220682	0.000368114	0.021382801	0.006555251	-0.015967559
0.211	-0.012041267	-0.012665633	0.005095427	0.024651121	0.003011347	-0.019840611
0.212	-0.017334702	-0.015568051	0.012895509	0.027483412	-0.003613598	-0.023851402
0.213	-0.028148177	-0.015735498	0.025827911	0.026705596	-0.015794993	-0.024826941
0.214	-0.041273651	-0.003787955	0.040301952	0.013327007	-0.030261451	-0.013424301
0.215	-0.038049488	0.017065421	0.037660993	-0.008936148	-0.028309324	0.007102472
0.216	-0.023695961	0.024826103	0.023405498	-0.017794929	-0.015134744	0.014710890
0.217	-0.013710425	0.023489129	0.013314914	-0.017209169	-0.006224142	0.013356227
0.218	-0.008313151	0.020466417	0.007775698	-0.014672458	-0.001795852	0.010416687
0.219	-0.005338272	0.017737611	0.004690442	-0.012257984	0.000312363	0.007844549
0.220	-0.003578682	0.015553304	0.002868740	-0.010286161	0.001300782	0.005868834
0.221	-0.002461005	0.013830623	0.001733067	-0.008718532	0.001734520	0.004389990
0.222	-0.001705851	0.012456521	0.000993956	-0.007468223	0.001884251	0.003282309
0.223	-0.001168929	0.011340731	0.000497016	-0.006459706	0.001885743	0.002446038
0.224	-0.000771055	0.010417927	0.000154769	-0.005635657	0.001810193	0.001808828
0.225	-0.000466263	0.009641711	-0.000084990	-0.004953853	0.001696278	0.001319154
0.226	-0.000226490	0.008978942	-0.000254808	-0.004383196	0.001565521	0.000940179
0.227	-0.000033816	0.008405602	-0.000375718	-0.003900559	0.001430043	0.000645272
0.228	0.000123667	0.007903981	-0.000461732	-0.003488519	0.001296642	0.000414924
0.229	0.000254156	0.007460788	-0.000522429	-0.003133771	0.001169040	0.000234645
0.230	0.000363474	0.007065873	-0.000564498	-0.002826023	0.001049144	0.000093538
0.231	0.000455870	0.006711360	-0.000592700	-0.002557214	0.000937787	-0.000016689
0.232	0.000534524	0.006391041	-0.000610482	-0.002320957	0.000835167	-0.000102417
0.233	0.000601864	0.006099960	-0.000620375	-0.002112142	0.000741111	-0.000168602
0.234	0.000659783	0.005834106	-0.000624258	-0.001926634	0.000655237	-0.000219126
0.235	0.000709777	0.005590196	-0.000623546	-0.001761062	0.000577053	-0.000257056
0.236	0.000753048	0.005365514	-0.000619313	-0.001612651	0.000506018	-0.000284831
0.237	0.000790573	0.005157796	-0.000612383	-0.001479107	0.000441583	-0.000304401
0.238	0.000823155	0.004965121	-0.000603389	-0.001358502	0.000383205	-0.000317338
0.239	0.000851460	0.004785872	-0.000592828	-0.001249227	0.000330371	-0.000324913
0.240	0.000876048	0.004618659	-0.000581087	-0.001149918	0.000282597	-0.000328157