承 認	検 認	検 認	担 当
技術 '24. 12.04 高瀬			技術 '24. 12.04 武田

技適基準適合証明用アンテナ特性資料

Antenna Characteristics Document for Technical Regulations Conformity Certification

T18-079-1128

04 DECEMBER,2024

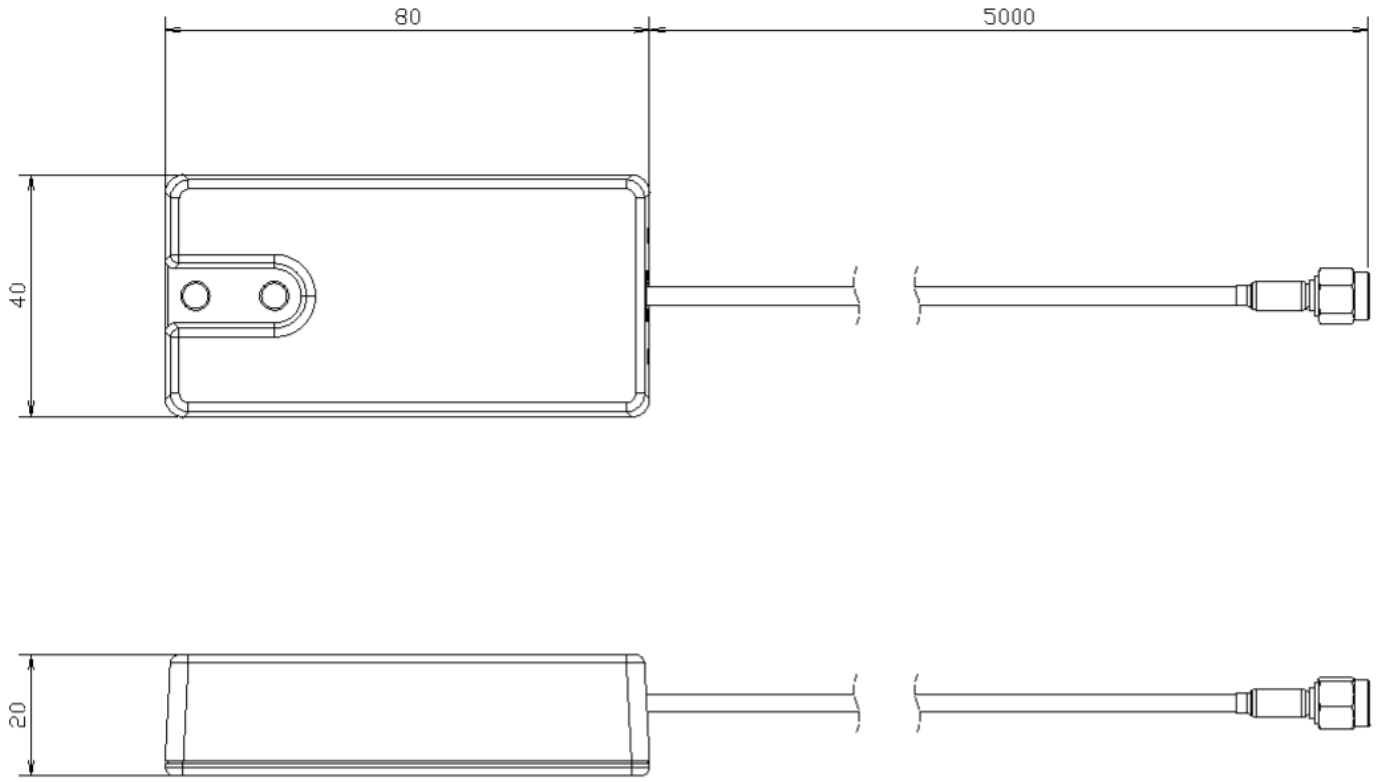
Staf Corporation
Electric Group

Address:Staf Bldg. 2-6-12 Shin-Yokohama, Kohoku-ku,
Yokohama-shi, Kanagawa-ken, Japan

1.仕様 Specification

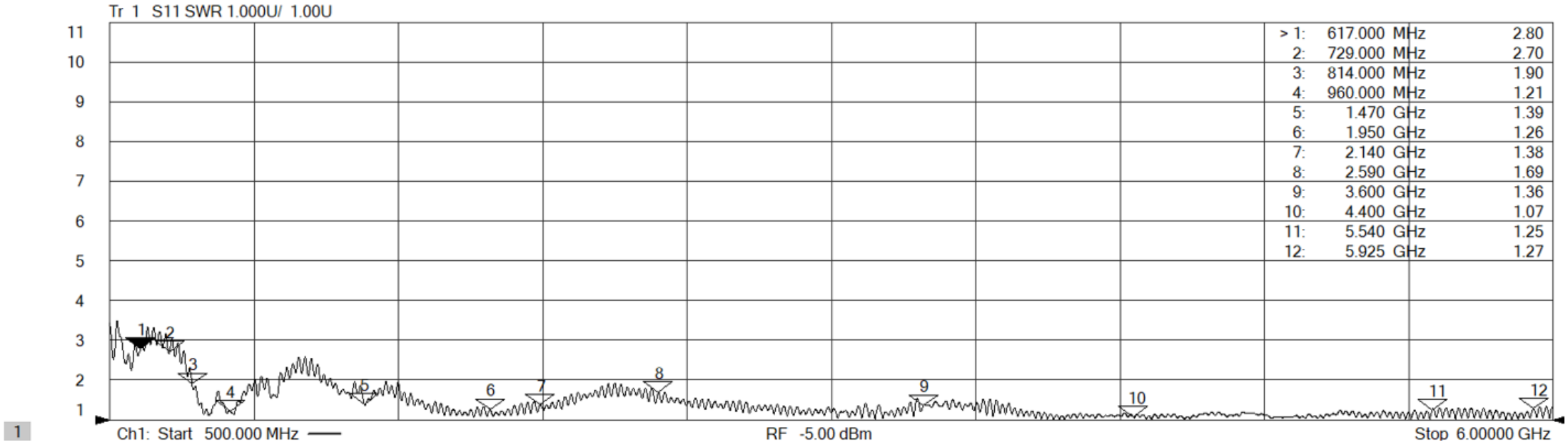
項目	記載内容
メーカー名 Manufacturer	スタッフ株式会社 Staf Corporation
品名（製品名称） Product Name	アンテナ Antenna
技適申請番号 Application Number	T18-079-1128
測定周波数 Frequency	617~5850[MHz]
アンテナ型式 Antenna Type	Dipole Antenna (λ/2)
最大絶対利得 Maximum Absolute Gain	617~5850[MHz]:3[dBi]以下 617~5850[MHz]:3[dBi] or less ※但し、B41(2496~2690[MHz])に限り、4[dBi]以下 詳細はグラフ参照のこと ※However, for B41 (2496~2690[MHz]), 4[dBi] or less See graph for details
インピーダンス Impedance	50Ω
コネクタ形状 Connector Type	SMA

2.外形図 Outside Dimension Drawing



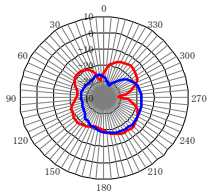
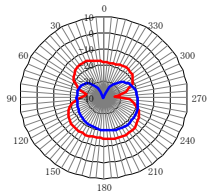
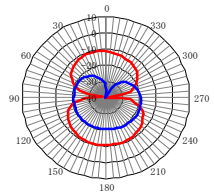
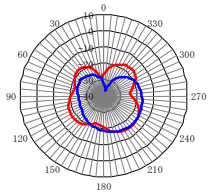
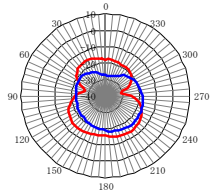
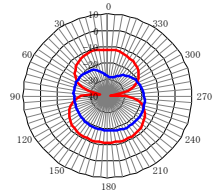
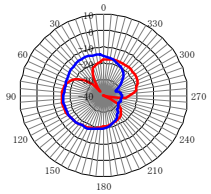
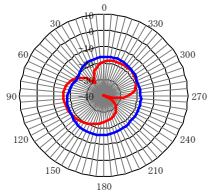
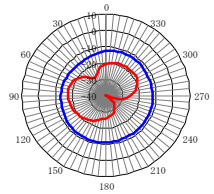
単位:mm
Unit:mm

3.VSWR

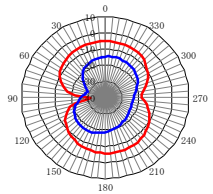
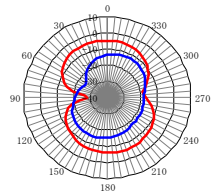
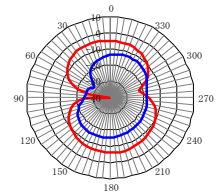
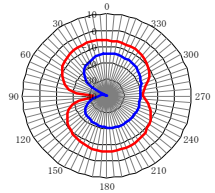
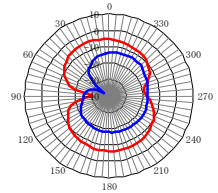
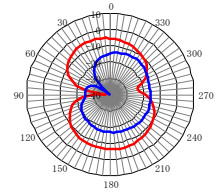
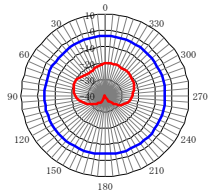
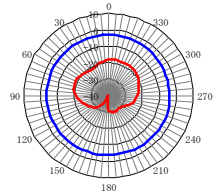
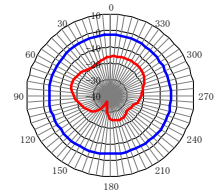

Tr 1 S11 SWR 1.000U/ 1.00U
11
10
9
8
7
6
5
4
3
2
1
> 1: 617.000 MHz 2.80
2: 729.000 MHz 2.70
3: 814.000 MHz 1.90
4: 960.000 MHz 1.21
5: 1.470 GHz 1.39
6: 1.950 GHz 1.26
7: 2.140 GHz 1.38
8: 2.590 GHz 1.69
9: 3.600 GHz 1.36
10: 4.400 GHz 1.07
11: 5.540 GHz 1.25
12: 5.925 GHz 1.27
1
Ch1: Start 500.000 MHz
RF -5.00 dBm
Stop 6.00000 GHz

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

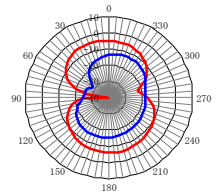
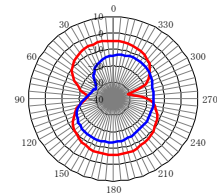
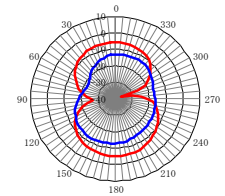
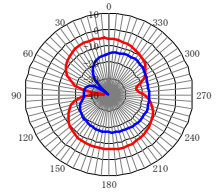
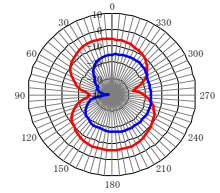
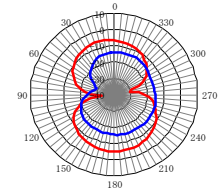
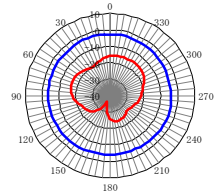
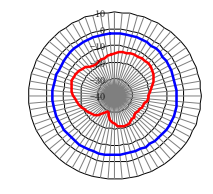
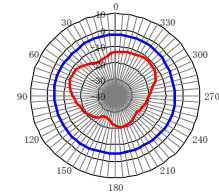
B28

703 [MHz]	725.5 [MHz]	748 [MHz]
Efficiency -17.02 [dB]	Efficiency -15.41 [dB]	Efficiency -12.38 [dB]
Z X面		
H MRG -14.80 [dBi]	H MRG -13.43 [dBi]	H MRG -10.70 [dBi]
(Red) PAG -18.70 [dBi]	(Red) PAG -16.77 [dBi]	(Red) PAG -13.38 [dBi]
V MRG -16.30 [dBi]	V MRG -18.08 [dBi]	V MRG -18.68 [dBi]
(Blue) PAG -20.83 [dBi]	(Blue) PAG -22.04 [dBi]	(Blue) PAG -21.33 [dBi]
		
Y Z面		
H MRG -14.89 [dBi]	H MRG -13.51 [dBi]	H MRG -11.25 [dBi]
(Red) PAG -18.74 [dBi]	(Red) PAG -16.95 [dBi]	(Red) PAG -13.76 [dBi]
V MRG -15.46 [dBi]	V MRG -16.50 [dBi]	V MRG -17.17 [dBi]
(Blue) PAG -20.05 [dBi]	(Blue) PAG -20.23 [dBi]	(Blue) PAG -19.82 [dBi]
		
X Y面		
H MRG -14.68 [dBi]	H MRG -16.05 [dBi]	H MRG -17.31 [dBi]
(Red) PAG -18.80 [dBi]	(Red) PAG -20.09 [dBi]	(Red) PAG -21.28 [dBi]
V MRG -13.86 [dBi]	V MRG -15.40 [dBi]	V MRG -11.04 [dBi]
(Blue) PAG -17.99 [dBi]	(Blue) PAG -17.16 [dBi]	(Blue) PAG -12.34 [dBi]
		

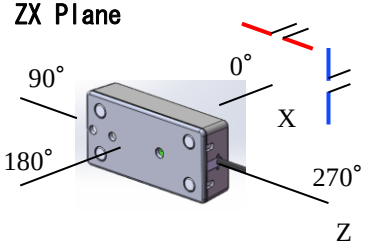
B18

815 [MHz]	822.5 [MHz]	830 [MHz]
Efficiency -7.11 [dB]	Efficiency -6.78 [dB]	Efficiency -6.89 [dB]
Z X面		
H MRG -5.01 [dBi]	H MRG -4.73 [dBi]	H MRG -4.49 [dBi]
(Red) PAG -7.95 [dBi]	(Red) PAG -7.83 [dBi]	(Red) PAG -8.08 [dBi]
V MRG -14.43 [dBi]	V MRG -12.36 [dBi]	V MRG -12.53 [dBi]
(Blue) PAG -18.48 [dBi]	(Blue) PAG -15.95 [dBi]	(Blue) PAG -16.29 [dBi]
		
Y Z面		
H MRG -5.72 [dBi]	H MRG -4.94 [dBi]	H MRG -4.68 [dBi]
(Red) PAG -8.54 [dBi]	(Red) PAG -8.38 [dBi]	(Red) PAG -8.58 [dBi]
V MRG -14.13 [dBi]	V MRG -13.05 [dBi]	V MRG -13.20 [dBi]
(Blue) PAG -18.84 [dBi]	(Blue) PAG -17.01 [dBi]	(Blue) PAG -16.78 [dBi]
		
X Y面		
H MRG -19.75 [dBi]	H MRG -17.65 [dBi]	H MRG -15.30 [dBi]
(Red) PAG -23.44 [dBi]	(Red) PAG -21.69 [dBi]	(Red) PAG -19.18 [dBi]
V MRG -3.40 [dBi]	V MRG -2.88 [dBi]	V MRG -2.51 [dBi]
(Blue) PAG -3.83 [dBi]	(Blue) PAG -3.54 [dBi]	(Blue) PAG -3.46 [dBi]
		

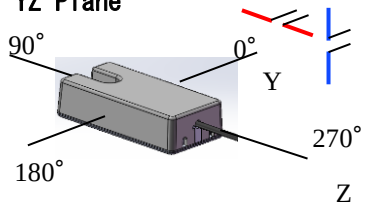
B19

830 [MHz]	837.5 [MHz]	845 [MHz]
Efficiency -6.89 [dB]	Efficiency -6.98 [dB]	Efficiency -6.94 [dB]
Z X面		
H MRG -4.49 [dBi]	H MRG -4.71 [dBi]	H MRG -4.80 [dBi]
(Red) PAG -8.08 [dBi]	(Red) PAG -8.47 [dBi]	(Red) PAG -8.68 [dBi]
V MRG -12.53 [dBi]	V MRG -12.41 [dBi]	V MRG -12.17 [dBi]
(Blue) PAG -16.29 [dBi]	(Blue) PAG -15.34 [dBi]	(Blue) PAG -14.62 [dBi]
		
Y Z面		
H MRG -4.68 [dBi]	H MRG -5.10 [dBi]	H MRG -4.79 [dBi]
(Red) PAG -8.58 [dBi]	(Red) PAG -8.71 [dBi]	(Red) PAG -8.82 [dBi]
V MRG -13.20 [dBi]	V MRG -14.36 [dBi]	V MRG -13.62 [dBi]
(Blue) PAG -16.78 [dBi]	(Blue) PAG -17.50 [dBi]	(Blue) PAG -15.94 [dBi]
		
X Y面		
H MRG -15.30 [dBi]	H MRG -12.77 [dBi]	H MRG -11.24 [dBi]
(Red) PAG -19.18 [dBi]	(Red) PAG -16.92 [dBi]	(Red) PAG -15.74 [dBi]
V MRG -2.51 [dBi]	V MRG -2.51 [dBi]	V MRG -2.93 [dBi]
(Blue) PAG -3.46 [dBi]	(Blue) PAG -3.72 [dBi]	(Blue) PAG -4.16 [dBi]
		

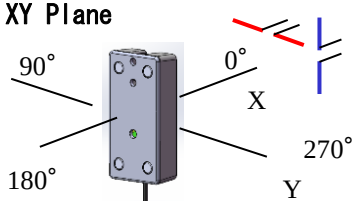
ZX Plane



YZ Plane



XY Plane



水平偏波 Horizontal Polarized Wave

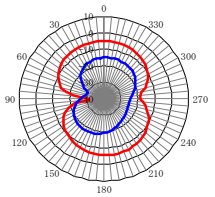
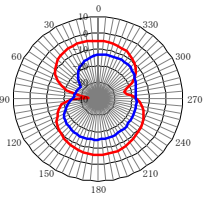
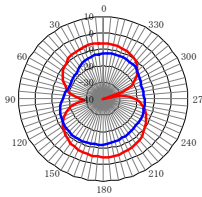
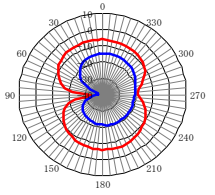
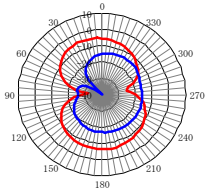
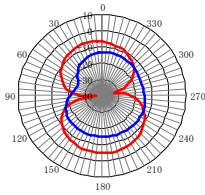
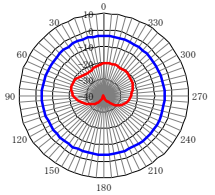
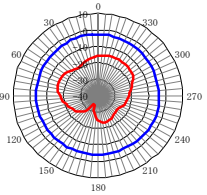
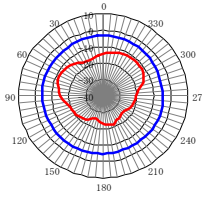
垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

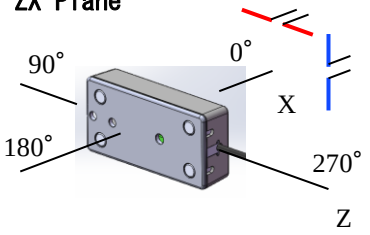
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

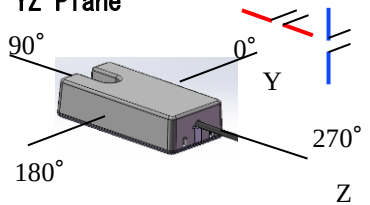
B26

814 [MHz]	831.5 [MHz]	849 [MHz]
Efficiency -7.17 [dBi]	Efficiency -7.03 [dBi]	Efficiency -6.80 [dBi]
Z X面	**Z X面**	**Z X面**
H MRG -5.01 [dBi]	H MRG -4.66 [dBi]	H MRG -4.53 [dBi]
(Red) PAG -7.99 [dBi]	(Red) PAG -8.32 [dBi]	(Red) PAG -8.70 [dBi]
V MRG -14.76 [dBi]	V MRG -12.61 [dBi]	V MRG -11.34 [dBi]
(Blue) PAG -19.05 [dBi]	(Blue) PAG -16.13 [dBi]	(Blue) PAG -13.82 [dBi]
		
Y Z面	**Y Z面**	**Y Z面**
H MRG -5.80 [dBi]	H MRG -4.77 [dBi]	H MRG -4.56 [dBi]
(Red) PAG -8.58 [dBi]	(Red) PAG -8.70 [dBi]	(Red) PAG -8.74 [dBi]
V MRG -14.34 [dBi]	V MRG -13.46 [dBi]	V MRG -13.20 [dBi]
(Blue) PAG -19.23 [dBi]	(Blue) PAG -17.01 [dBi]	(Blue) PAG -15.18 [dBi]
		
X Y面	**X Y面**	**X Y面**
H MRG -19.95 [dBi]	H MRG -14.86 [dBi]	H MRG -11.15 [dBi]
(Red) PAG -23.60 [dBi]	(Red) PAG -18.77 [dBi]	(Red) PAG -15.75 [dBi]
V MRG -3.47 [dBi]	V MRG -2.56 [dBi]	V MRG -3.19 [dBi]
(Blue) PAG -3.90 [dBi]	(Blue) PAG -3.57 [dBi]	(Blue) PAG -4.30 [dBi]
		

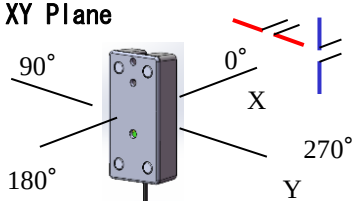
ZX Plane



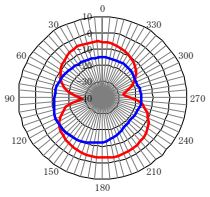
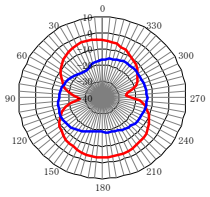
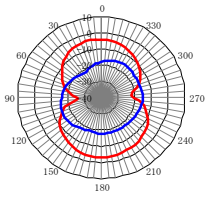
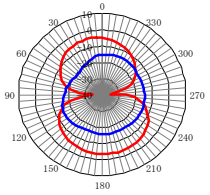
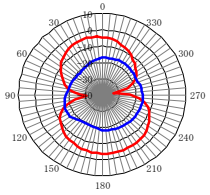
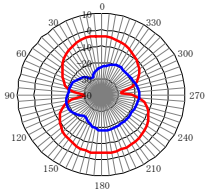
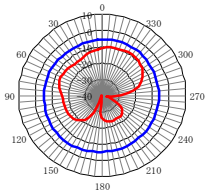
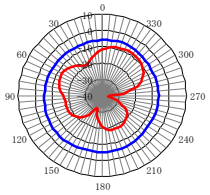
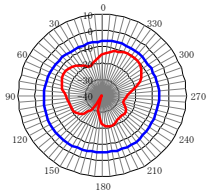
YZ Plane



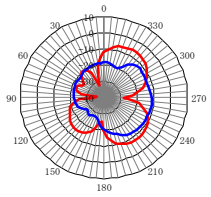
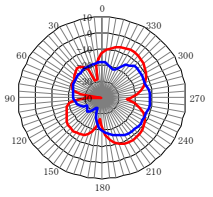
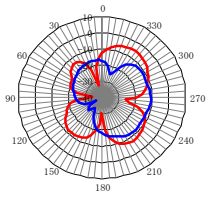
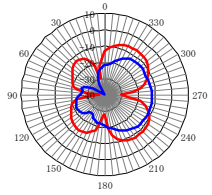
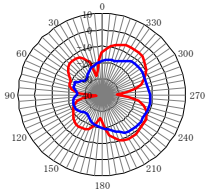
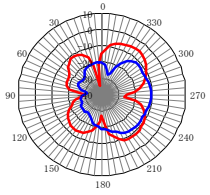
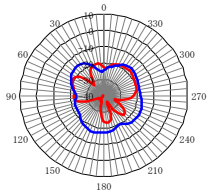
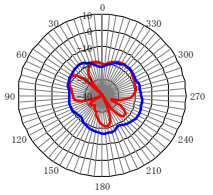
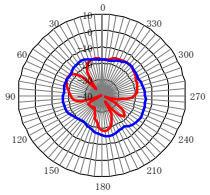
XY Plane



B8

880 [MHz]	897.5 [MHz]	915 [MHz]
Efficiency -5.76 [dBi]	Efficiency -5.76 [dBi]	Efficiency -5.96 [dBi]
Z X面	**Z X面**	**Z X面**
H MRG -3.02 [dBi]	H MRG -3.07 [dBi]	H MRG -3.21 [dBi]
(Red) PAG -7.28 [dBi]	(Red) PAG -6.90 [dBi]	(Red) PAG -7.05 [dBi]
V MRG -9.28 [dBi]	V MRG -12.80 [dBi]	V MRG -15.04 [dBi]
(Blue) PAG -13.39 [dBi]	(Blue) PAG -15.25 [dBi]	(Blue) PAG -16.96 [dBi]
		
Y Z面	**Y Z面**	**Y Z面**
H MRG -3.36 [dBi]	H MRG -3.55 [dBi]	H MRG -3.63 [dBi]
(Red) PAG -7.19 [dBi]	(Red) PAG -7.17 [dBi]	(Red) PAG -7.23 [dBi]
V MRG -14.30 [dBi]	V MRG -15.73 [dBi]	V MRG -17.36 [dBi]
(Blue) PAG -15.78 [dBi]	(Blue) PAG -17.66 [dBi]	(Blue) PAG -19.86 [dBi]
		
X Y面	**X Y面**	**X Y面**
H MRG -9.13 [dBi]	H MRG -8.42 [dBi]	H MRG -9.92 [dBi]
(Red) PAG -14.62 [dBi]	(Red) PAG -14.63 [dBi]	(Red) PAG -16.29 [dBi]
V MRG -4.18 [dBi]	V MRG -4.33 [dBi]	V MRG -4.21 [dBi]
(Blue) PAG -5.41 [dBi]	(Blue) PAG -5.70 [dBi]	(Blue) PAG -5.67 [dBi]
		

B11

1427.9 [MHz]	1437.9 [MHz]	1447.9 [MHz]
Efficiency -10.45 [dBi]	Efficiency -10.40 [dBi]	Efficiency -9.93 [dBi]
Z X面	**Z X面**	**Z X面**
H MRG -5.87 [dBi]	H MRG -6.03 [dBi]	H MRG -5.15 [dBi]
(Red) PAG -11.95 [dBi]	(Red) PAG -11.99 [dBi]	(Red) PAG -11.24 [dBi]
V MRG -11.00 [dBi]	V MRG -11.04 [dBi]	V MRG -10.72 [dBi]
(Blue) PAG -15.85 [dBi]	(Blue) PAG -15.86 [dBi]	(Blue) PAG -15.34 [dBi]
		
Y Z面	**Y Z面**	**Y Z面**
H MRG -6.67 [dBi]	H MRG -5.80 [dBi]	H MRG -5.36 [dBi]
(Red) PAG -12.08 [dBi]	(Red) PAG -12.02 [dBi]	(Red) PAG -11.64 [dBi]
V MRG -11.41 [dBi]	V MRG -10.66 [dBi]	V MRG -10.56 [dBi]
(Blue) PAG -16.21 [dBi]	(Blue) PAG -15.69 [dBi]	(Blue) PAG -15.67 [dBi]
		
X Y面	**X Y面**	**X Y面**
H MRG -18.26 [dBi]	H MRG -16.59 [dBi]	H MRG -14.84 [dBi]
(Red) PAG -22.61 [dBi]	(Red) PAG -21.37 [dBi]	(Red) PAG -19.61 [dBi]
V MRG -15.81 [dBi]	V MRG -15.28 [dBi]	V MRG -13.07 [dBi]
(Blue) PAG -18.38 [dBi]	(Blue) PAG -17.88 [dBi]	(Blue) PAG -15.96 [dBi]
		

水平偏波 Horizontal Polarized Wave

垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

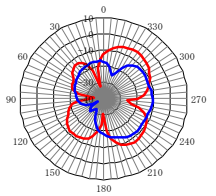
B21

1447.9 [MHz]

Efficiency -9.93 [dBi]

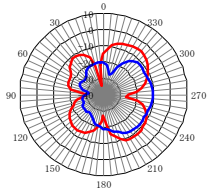
Z X面

H MRG -5.15 [dBi]
(Red) PAG -11.24 [dBi]
V MRG -10.72 [dBi]
(Blue) PAG -15.34 [dBi]



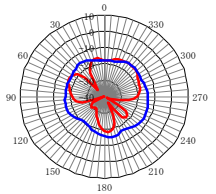
Y Z面

H MRG -5.36 [dBi]
(Red) PAG -11.64 [dBi]
V MRG -10.56 [dBi]
(Blue) PAG -15.67 [dBi]



X Y面

H MRG -14.84 [dBi]
(Red) PAG -19.61 [dBi]
V MRG -13.07 [dBi]
(Blue) PAG -15.96 [dBi]

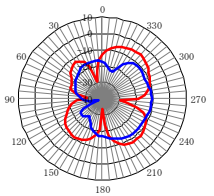


1455.4 [MHz]

Efficiency -9.69 [dBi]

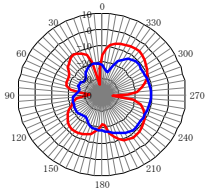
Z X面

H MRG -4.87 [dBi]
(Red) PAG -11.05 [dBi]
V MRG -10.56 [dBi]
(Blue) PAG -15.03 [dBi]



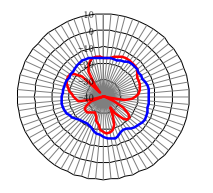
Y Z面

H MRG -5.33 [dBi]
(Red) PAG -11.37 [dBi]
V MRG -10.28 [dBi]
(Blue) PAG -15.13 [dBi]



X Y面

H MRG -13.28 [dBi]
(Red) PAG -18.98 [dBi]
V MRG -12.31 [dBi]
(Blue) PAG -15.38 [dBi]

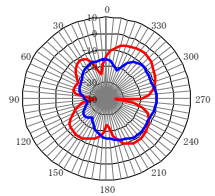


1462.9 [MHz]

Efficiency -9.36 [dBi]

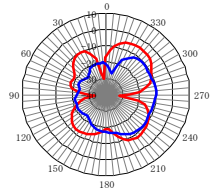
Z X面

H MRG -3.96 [dBi]
(Red) PAG -10.74 [dBi]
V MRG -10.02 [dBi]
(Blue) PAG -14.52 [dBi]



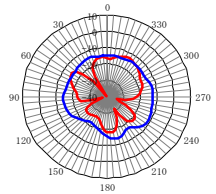
Y Z面

H MRG -4.69 [dBi]
(Red) PAG -11.11 [dBi]
V MRG -9.82 [dBi]
(Blue) PAG -14.55 [dBi]



X Y面

H MRG -13.09 [dBi]
(Red) PAG -18.73 [dBi]
V MRG -11.26 [dBi]
(Blue) PAG -14.62 [dBi]



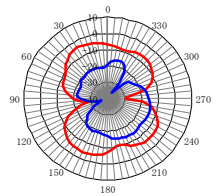
B3

1710 [MHz]

Efficiency -6.65 [dBi]

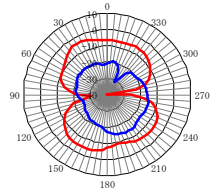
Z X面

H MRG -3.71 [dBi]
(Red) PAG -7.63 [dBi]
V MRG -13.83 [dBi]
(Blue) PAG -17.98 [dBi]



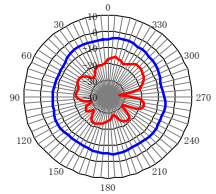
Y Z面

H MRG -3.71 [dBi]
(Red) PAG -7.39 [dBi]
V MRG -14.11 [dBi]
(Blue) PAG -18.39 [dBi]



X Y面

H MRG -13.94 [dBi]
(Red) PAG -20.11 [dBi]
V MRG -3.85 [dBi]
(Blue) PAG -5.85 [dBi]

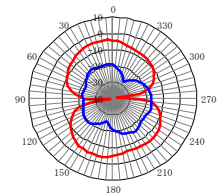


1747.5 [MHz]

Efficiency -6.16 [dBi]

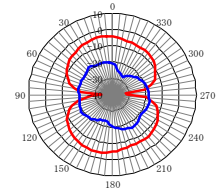
Z X面

H MRG -3.75 [dBi]
(Red) PAG -7.25 [dBi]
V MRG -16.01 [dBi]
(Blue) PAG -19.54 [dBi]



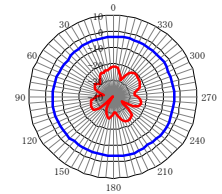
Y Z面

H MRG -3.80 [dBi]
(Red) PAG -7.03 [dBi]
V MRG -16.42 [dBi]
(Blue) PAG -19.68 [dBi]



X Y面

H MRG -20.65 [dBi]
(Red) PAG -25.24 [dBi]
V MRG -2.78 [dBi]
(Blue) PAG -3.78 [dBi]

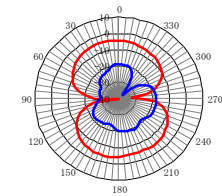


1785 [MHz]

Efficiency -5.88 [dBi]

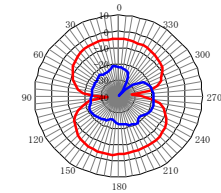
Z X面

H MRG -3.86 [dBi]
(Red) PAG -6.79 [dBi]
V MRG -17.63 [dBi]
(Blue) PAG -21.21 [dBi]



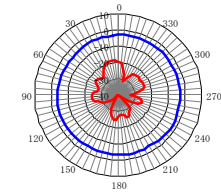
Y Z面

H MRG -3.76 [dBi]
(Red) PAG -6.63 [dBi]
V MRG -18.56 [dBi]
(Blue) PAG -22.08 [dBi]



X Y面

H MRG -18.36 [dBi]
(Red) PAG -24.84 [dBi]
V MRG -2.27 [dBi]
(Blue) PAG -3.23 [dBi]



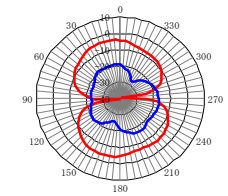
B9

1749.9 [MHz]

Efficiency -6.14 [dBi]

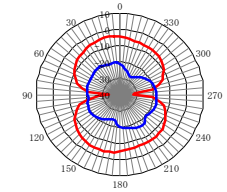
Z X面

H MRG -3.79 [dBi]
(Red) PAG -7.22 [dBi]
V MRG -16.26 [dBi]
(Blue) PAG -19.78 [dBi]



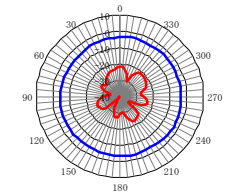
Y Z面

H MRG -3.86 [dBi]
(Red) PAG -7.01 [dBi]
V MRG -16.81 [dBi]
(Blue) PAG -19.98 [dBi]



X Y面

H MRG -21.04 [dBi]
(Red) PAG -25.43 [dBi]
V MRG -2.72 [dBi]
(Blue) PAG -3.73 [dBi]

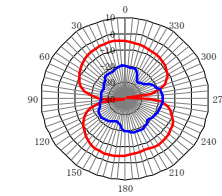


1767.4 [MHz]

Efficiency -6.09 [dBi]

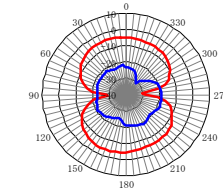
Z X面

H MRG -4.04 [dBi]
(Red) PAG -7.09 [dBi]
V MRG -17.50 [dBi]
(Blue) PAG -21.13 [dBi]



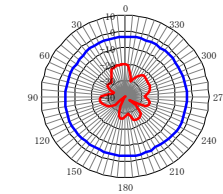
Y Z面

H MRG -3.92 [dBi]
(Red) PAG -6.90 [dBi]
V MRG -18.60 [dBi]
(Blue) PAG -21.63 [dBi]



X Y面

H MRG -20.18 [dBi]
(Red) PAG -25.49 [dBi]
V MRG -2.60 [dBi]
(Blue) PAG -3.58 [dBi]

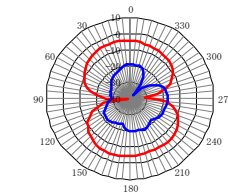


1784.9 [MHz]

Efficiency -5.88 [dBi]

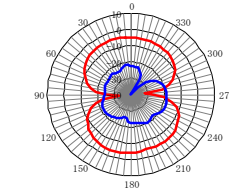
Z X面

H MRG -3.88 [dBi]
(Red) PAG -6.79 [dBi]
V MRG -17.65 [dBi]
(Blue) PAG -21.23 [dBi]



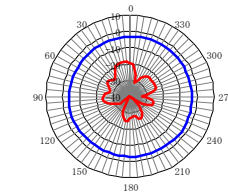
Y Z面

H MRG -3.77 [dBi]
(Red) PAG -6.63 [dBi]
V MRG -18.45 [dBi]
(Blue) PAG -22.08 [dBi]

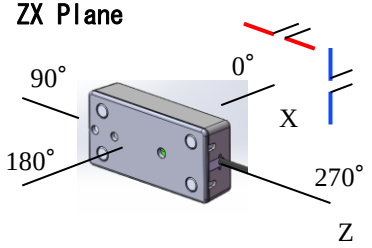


X Y面

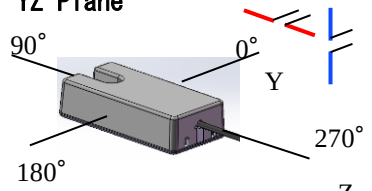
H MRG -18.47 [dBi]
(Red) PAG -24.85 [dBi]
V MRG -2.29 [dBi]
(Blue) PAG -3.24 [dBi]



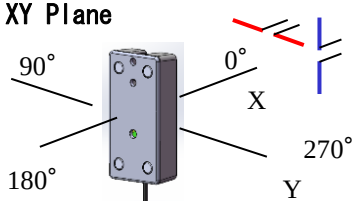
ZX Plane



YZ Plane



XY Plane

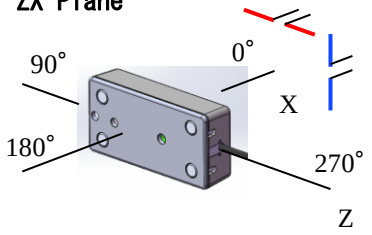


水平偏波 Horizontal Polarized Wave
垂直偏波 Vertical Polarized Wave

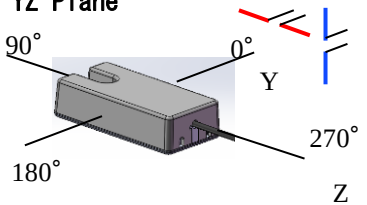
MRG = 最大利得 Maximum Absolute Gain
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

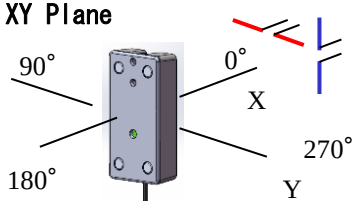
ZX Plane



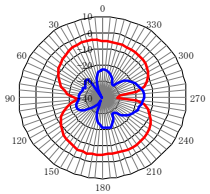
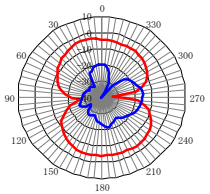
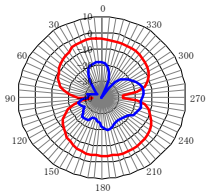
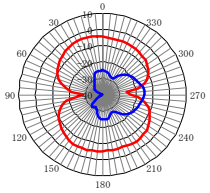
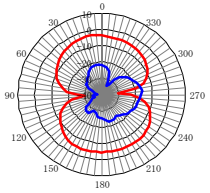
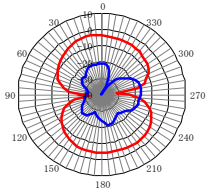
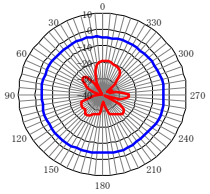
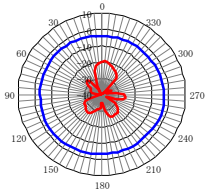
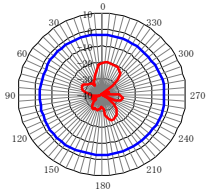
YZ Plane



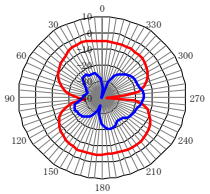
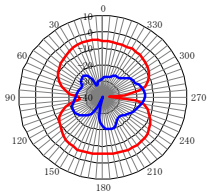
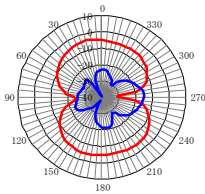
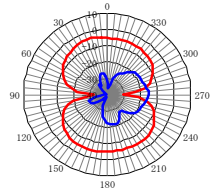
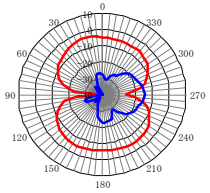
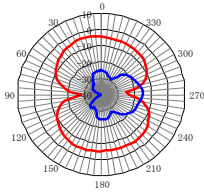
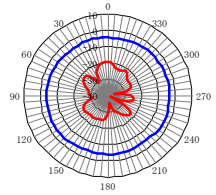
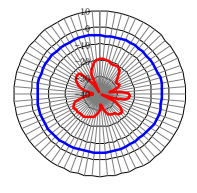
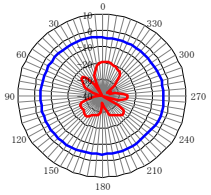
XY Plane



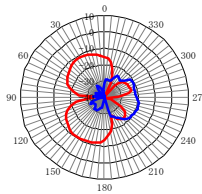
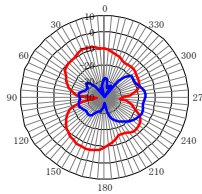
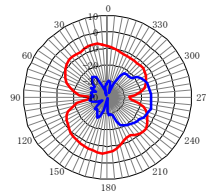
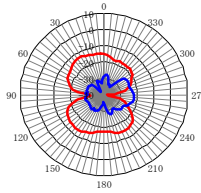
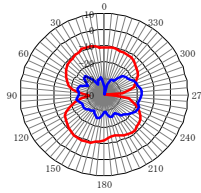
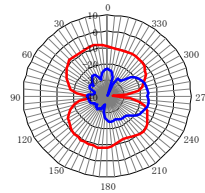
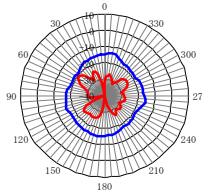
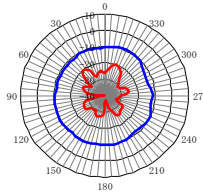
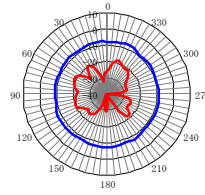
B1

1920 [MHz]	1950 [MHz]	1980 [MHz]
Efficiency -5.79 [dB]	Efficiency -5.39 [dB]	Efficiency -5.62 [dB]
Z X面		
H MRG -3.78 [dBi]	H MRG -3.16 [dBi]	H MRG -3.22 [dBi]
(Red) PAG -6.90 [dBi]	(Red) PAG -6.44 [dBi]	(Red) PAG -6.38 [dBi]
V MRG -15.13 [dBi]	V MRG -15.40 [dBi]	V MRG -14.91 [dBi]
(Blue) PAG -22.17 [dBi]	(Blue) PAG -21.91 [dBi]	(Blue) PAG -21.04 [dBi]
		
Y Z面		
H MRG -3.30 [dBi]	H MRG -2.88 [dBi]	H MRG -3.03 [dBi]
(Red) PAG -6.75 [dBi]	(Red) PAG -6.35 [dBi]	(Red) PAG -6.35 [dBi]
V MRG -15.07 [dBi]	V MRG -16.05 [dBi]	V MRG -15.95 [dBi]
(Blue) PAG -22.64 [dBi]	(Blue) PAG -22.64 [dBi]	(Blue) PAG -22.20 [dBi]
		
X Y面		
H MRG -18.88 [dBi]	H MRG -19.42 [dBi]	H MRG -19.84 [dBi]
(Red) PAG -25.40 [dBi]	(Red) PAG -26.80 [dBi]	(Red) PAG -26.54 [dBi]
V MRG -3.10 [dBi]	V MRG -2.58 [dBi]	V MRG -2.13 [dBi]
(Blue) PAG -3.87 [dBi]	(Blue) PAG -3.22 [dBi]	(Blue) PAG -2.87 [dBi]
		

B39

1880 [MHz]	1900 [MHz]	1920 [MHz]
Efficiency -5.87 [dB]	Efficiency -5.95 [dB]	Efficiency -5.79 [dB]
Z X面		
H MRG -4.01 [dBi]	H MRG -4.12 [dBi]	H MRG -3.78 [dBi]
(Red) PAG -6.85 [dBi]	(Red) PAG -7.02 [dBi]	(Red) PAG -6.90 [dBi]
V MRG -15.02 [dBi]	V MRG -14.95 [dBi]	V MRG -15.13 [dBi]
(Blue) PAG -21.45 [dBi]	(Blue) PAG -21.62 [dBi]	(Blue) PAG -22.17 [dBi]
		
Y Z面		
H MRG -3.81 [dBi]	H MRG -3.65 [dBi]	H MRG -3.30 [dBi]
(Red) PAG -6.70 [dBi]	(Red) PAG -6.81 [dBi]	(Red) PAG -6.75 [dBi]
V MRG -15.29 [dBi]	V MRG -14.62 [dBi]	V MRG -15.07 [dBi]
(Blue) PAG -22.46 [dBi]	(Blue) PAG -22.39 [dBi]	(Blue) PAG -22.64 [dBi]
		
X Y面		
H MRG -19.06 [dBi]	H MRG -18.93 [dBi]	H MRG -18.88 [dBi]
(Red) PAG -24.43 [dBi]	(Red) PAG -24.30 [dBi]	(Red) PAG -25.40 [dBi]
V MRG -2.91 [dBi]	V MRG -3.09 [dBi]	V MRG -3.10 [dBi]
(Blue) PAG -3.88 [dBi]	(Blue) PAG -4.01 [dBi]	(Blue) PAG -3.87 [dBi]
		

B41

2496 [MHz]	2593 [MHz]	2690 [MHz]
Efficiency -15.09 [dB]	Efficiency -11.08 [dB]	Efficiency -9.75 [dB]
Z X面		
H MRG -10.78 [dBi]	H MRG -6.88 [dBi]	H MRG -5.59 [dBi]
(Red) PAG -15.97 [dBi]	(Red) PAG -12.08 [dBi]	(Red) PAG -10.30 [dBi]
V MRG -19.16 [dBi]	V MRG -15.73 [dBi]	V MRG -13.38 [dBi]
(Blue) PAG -25.49 [dBi]	(Blue) PAG -22.03 [dBi]	(Blue) PAG -20.41 [dBi]
		
Y Z面		
H MRG -12.59 [dBi]	H MRG -8.99 [dBi]	H MRG -7.54 [dBi]
(Red) PAG -16.58 [dBi]	(Red) PAG -12.66 [dBi]	(Red) PAG -11.05 [dBi]
V MRG -21.76 [dBi]	V MRG -17.20 [dBi]	V MRG -14.68 [dBi]
(Blue) PAG -27.50 [dBi]	(Blue) PAG -23.43 [dBi]	(Blue) PAG -21.81 [dBi]
		
X Y面		
H MRG -20.71 [dBi]	H MRG -19.71 [dBi]	H MRG -17.90 [dBi]
(Red) PAG -27.04 [dBi]	(Red) PAG -26.10 [dBi]	(Red) PAG -23.21 [dBi]
V MRG -13.88 [dBi]	V MRG -8.90 [dBi]	V MRG -6.87 [dBi]
(Blue) PAG -16.70 [dBi]	(Blue) PAG -10.50 [dBi]	(Blue) PAG -8.22 [dBi]
		

水平偏波 Horizontal Polarized Wave

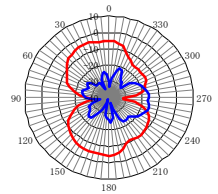
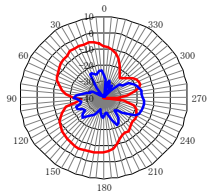
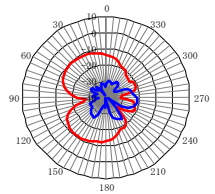
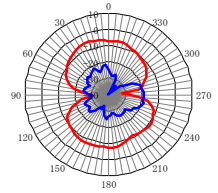
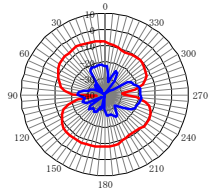
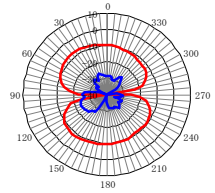
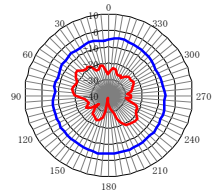
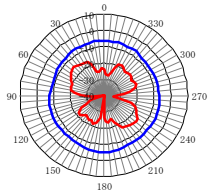
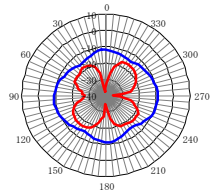
垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

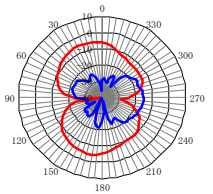
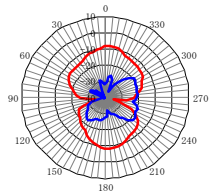
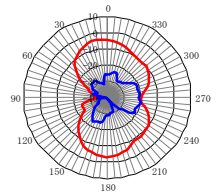
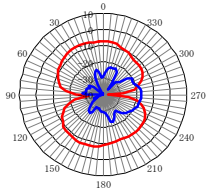
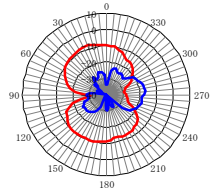
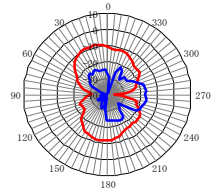
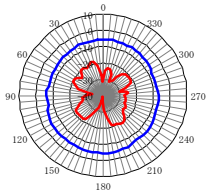
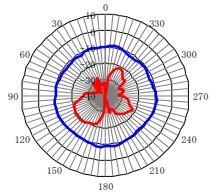
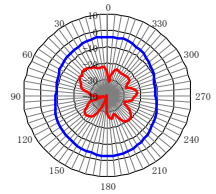
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

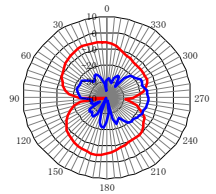
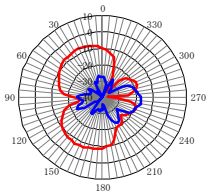
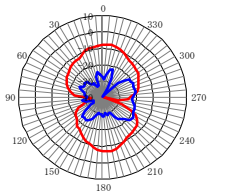
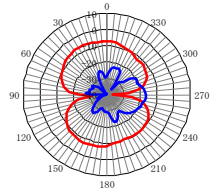
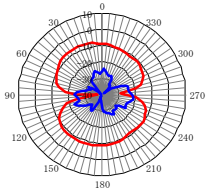
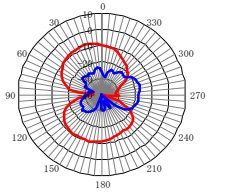
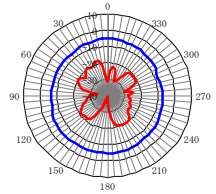
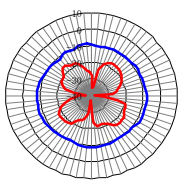
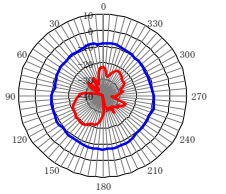
B42

3400 [MHz]	3500 [MHz]	3600 [MHz]
Efficiency -7.96 [dBi]	Efficiency -8.62 [dBi]	Efficiency -11.47 [dBi]
Z X面		
H MRG -4.09 [dBi]	H MRG -5.00 [dBi]	H MRG -10.16 [dBi]
(Red) PAG -8.66 [dBi]	(Red) PAG -9.65 [dBi]	(Red) PAG -14.55 [dBi]
V MRG -15.28 [dBi]	V MRG -15.48 [dBi]	V MRG -20.83 [dBi]
(Blue) PAG -22.61 [dBi]	(Blue) PAG -22.76 [dBi]	(Blue) PAG -27.99 [dBi]
		
Y Z面		
H MRG -5.42 [dBi]	H MRG -5.87 [dBi]	H MRG -7.44 [dBi]
(Red) PAG -9.54 [dBi]	(Red) PAG -9.39 [dBi]	(Red) PAG -10.51 [dBi]
V MRG -18.59 [dBi]	V MRG -18.00 [dBi]	V MRG -22.99 [dBi]
(Blue) PAG -24.34 [dBi]	(Blue) PAG -24.38 [dBi]	(Blue) PAG -29.07 [dBi]
		
X Y面		
H MRG -15.80 [dBi]	H MRG -14.64 [dBi]	H MRG -16.36 [dBi]
(Red) PAG -21.97 [dBi]	(Red) PAG -20.24 [dBi]	(Red) PAG -20.14 [dBi]
V MRG -3.84 [dBi]	V MRG -5.19 [dBi]	V MRG -8.73 [dBi]
(Blue) PAG -5.61 [dBi]	(Blue) PAG -6.75 [dBi]	(Blue) PAG -11.79 [dBi]
		

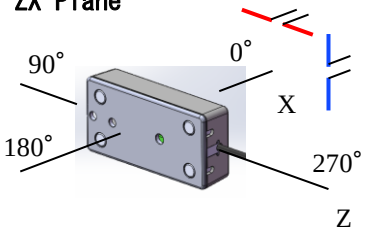
n77

3300 [MHz]	3750 [MHz]	4200 [MHz]
Efficiency -8.46 [dBi]	Efficiency -11.62 [dBi]	Efficiency -9.48 [dBi]
Z X面		
H MRG -4.32 [dBi]	H MRG -8.15 [dBi]	H MRG -3.32 [dBi]
(Red) PAG -8.88 [dBi]	(Red) PAG -13.19 [dBi]	(Red) PAG -8.69 [dBi]
V MRG -14.96 [dBi]	V MRG -17.60 [dBi]	V MRG -19.82 [dBi]
(Blue) PAG -21.31 [dBi]	(Blue) PAG -24.42 [dBi]	(Blue) PAG -25.53 [dBi]
		
Y Z面		
H MRG -6.60 [dBi]	H MRG -7.68 [dBi]	H MRG -8.54 [dBi]
(Red) PAG -9.94 [dBi]	(Red) PAG -12.54 [dBi]	(Red) PAG -14.24 [dBi]
V MRG -16.91 [dBi]	V MRG -16.70 [dBi]	V MRG -16.36 [dBi]
(Blue) PAG -23.80 [dBi]	(Blue) PAG -23.99 [dBi]	(Blue) PAG -23.52 [dBi]
		
X Y面		
H MRG -18.17 [dBi]	H MRG -18.66 [dBi]	H MRG -19.01 [dBi]
(Red) PAG -23.08 [dBi]	(Red) PAG -24.54 [dBi]	(Red) PAG -23.83 [dBi]
V MRG -4.31 [dBi]	V MRG -8.33 [dBi]	V MRG -2.84 [dBi]
(Blue) PAG -5.94 [dBi]	(Blue) PAG -10.09 [dBi]	(Blue) PAG -5.77 [dBi]
		

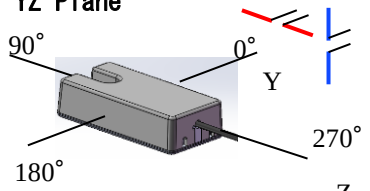
n78

3300 [MHz]	3550 [MHz]	3800 [MHz]
Efficiency -8.46 [dBi]	Efficiency -10.01 [dBi]	Efficiency -11.17 [dBi]
Z X面		
H MRG -4.32 [dBi]	H MRG -6.74 [dBi]	H MRG -6.81 [dBi]
(Red) PAG -8.88 [dBi]	(Red) PAG -11.72 [dBi]	(Red) PAG -12.22 [dBi]
V MRG -14.96 [dBi]	V MRG -16.80 [dBi]	V MRG -17.78 [dBi]
(Blue) PAG -21.31 [dBi]	(Blue) PAG -24.85 [dBi]	(Blue) PAG -24.15 [dBi]
		
Y Z面		
H MRG -6.60 [dBi]	H MRG -6.82 [dBi]	H MRG -7.64 [dBi]
(Red) PAG -9.94 [dBi]	(Red) PAG -10.09 [dBi]	(Red) PAG -12.72 [dBi]
V MRG -16.91 [dBi]	V MRG -21.36 [dBi]	V MRG -16.76 [dBi]
(Blue) PAG -23.80 [dBi]	(Blue) PAG -26.87 [dBi]	(Blue) PAG -23.49 [dBi]
		
X Y面		
H MRG -18.17 [dBi]	H MRG -15.80 [dBi]	H MRG -19.04 [dBi]
(Red) PAG -23.08 [dBi]	(Red) PAG -20.47 [dBi]	(Red) PAG -24.88 [dBi]
V MRG -4.31 [dBi]	V MRG -7.59 [dBi]	V MRG -7.11 [dBi]
(Blue) PAG -5.94 [dBi]	(Blue) PAG -9.11 [dBi]	(Blue) PAG -8.99 [dBi]
		

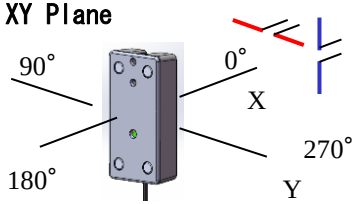
ZX Plane



YZ Plane



XY Plane



水平偏波 Horizontal Polarized Wave

垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

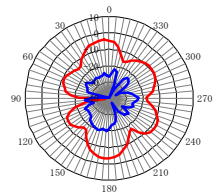
n79

4400 [MHz]

Efficiency -9.92 [dBi]

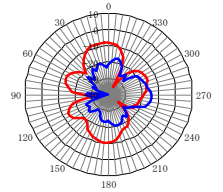
Z X面

H MRG -3.02 [dBi]
(Red) PAG -9.10 [dBi]
V MRG -19.40 [dBi]
(Blue) PAG -24.87 [dBi]



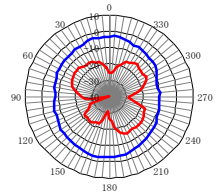
Y Z面

H MRG -7.83 [dBi]
(Red) PAG -14.00 [dBi]
V MRG -14.05 [dBi]
(Blue) PAG -21.16 [dBi]



X Y面

H MRG -14.22 [dBi]
(Red) PAG -18.29 [dBi]
V MRG -2.66 [dBi]
(Blue) PAG -5.40 [dBi]

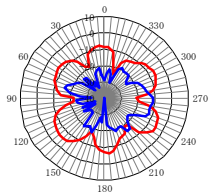


4700 [MHz]

Efficiency -10.21 [dBi]

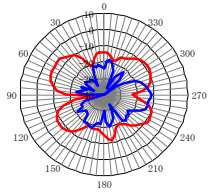
Z X面

H MRG -4.41 [dBi]
(Red) PAG -9.20 [dBi]
V MRG -10.79 [dBi]
(Blue) PAG -18.86 [dBi]



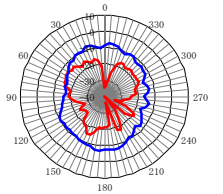
Y Z面

H MRG -5.58 [dBi]
(Red) PAG -11.11 [dBi]
V MRG -11.37 [dBi]
(Blue) PAG -19.81 [dBi]



X Y面

H MRG -13.70 [dBi]
(Red) PAG -19.06 [dBi]
V MRG -6.71 [dBi]
(Blue) PAG -10.72 [dBi]

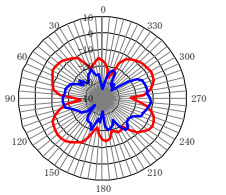


5000 [MHz]

Efficiency -10.62 [dBi]

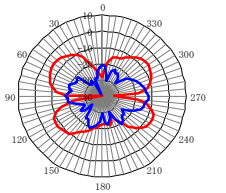
Z X面

H MRG -5.65 [dBi]
(Red) PAG -10.08 [dBi]
V MRG -11.25 [dBi]
(Blue) PAG -18.51 [dBi]



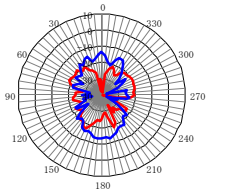
Y Z面

H MRG -5.28 [dBi]
(Red) PAG -10.64 [dBi]
V MRG -12.25 [dBi]
(Blue) PAG -20.04 [dBi]



X Y面

H MRG -17.28 [dBi]
(Red) PAG -22.45 [dBi]
V MRG -12.79 [dBi]
(Blue) PAG -18.62 [dBi]



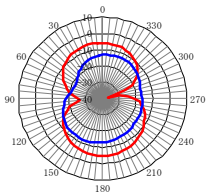
Sub-GHz Band

845 [MHz]

Efficiency -6.94 [dBi]

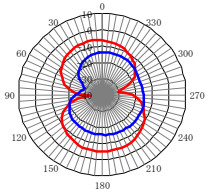
Z X面

H MRG -4.80 [dBi]
(Red) PAG -8.68 [dBi]
V MRG -12.17 [dBi]
(Blue) PAG -14.62 [dBi]



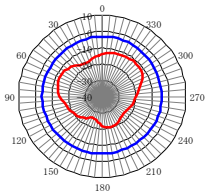
Y Z面

H MRG -4.79 [dBi]
(Red) PAG -8.82 [dBi]
V MRG -13.62 [dBi]
(Blue) PAG -15.94 [dBi]



X Y面

H MRG -11.24 [dBi]
(Red) PAG -15.74 [dBi]
V MRG -2.93 [dBi]
(Blue) PAG -4.16 [dBi]

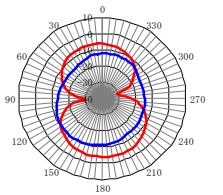


860 [MHz]

Efficiency -6.19 [dBi]

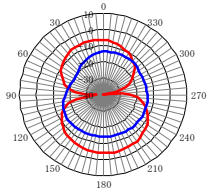
Z X面

H MRG -3.93 [dBi]
(Red) PAG -8.16 [dBi]
V MRG -10.07 [dBi]
(Blue) PAG -12.70 [dBi]



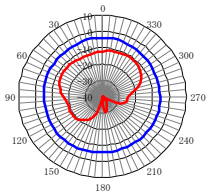
Y Z面

H MRG -3.92 [dBi]
(Red) PAG -8.08 [dBi]
V MRG -13.10 [dBi]
(Blue) PAG -14.47 [dBi]



X Y面

H MRG -10.69 [dBi]
(Red) PAG -15.42 [dBi]
V MRG -3.72 [dBi]
(Blue) PAG -4.97 [dBi]

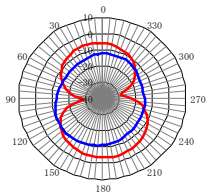


865 [MHz]

Efficiency -5.83 [dBi]

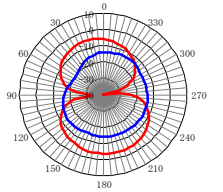
Z X面

H MRG -3.57 [dBi]
(Red) PAG -7.76 [dBi]
V MRG -9.73 [dBi]
(Blue) PAG -12.53 [dBi]



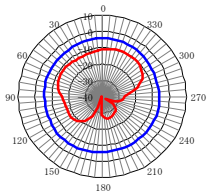
Y Z面

H MRG -3.57 [dBi]
(Red) PAG -7.62 [dBi]
V MRG -13.12 [dBi]
(Blue) PAG -14.51 [dBi]



X Y面

H MRG -9.67 [dBi]
(Red) PAG -14.61 [dBi]
V MRG -4.03 [dBi]
(Blue) PAG -5.32 [dBi]

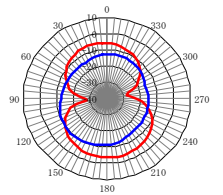


868 [MHz]

Efficiency -5.85 [dBi]

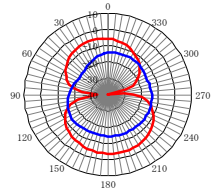
Z X面

H MRG -3.55 [dBi]
(Red) PAG -7.73 [dBi]
V MRG -9.76 [dBi]
(Blue) PAG -12.70 [dBi]



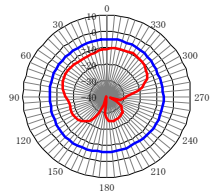
Y Z面

H MRG -3.59 [dBi]
(Red) PAG -7.58 [dBi]
V MRG -13.40 [dBi]
(Blue) PAG -14.79 [dBi]



X Y面

H MRG -9.30 [dBi]
(Red) PAG -14.39 [dBi]
V MRG -4.39 [dBi]
(Blue) PAG -5.62 [dBi]

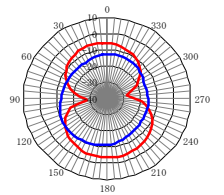


869 [MHz]

Efficiency -5.87 [dBi]

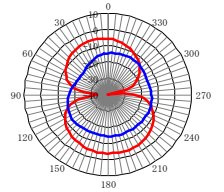
Z X面

H MRG -3.54 [dBi]
(Red) PAG -7.73 [dBi]
V MRG -9.75 [dBi]
(Blue) PAG -12.77 [dBi]



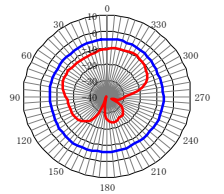
Y Z面

H MRG -3.60 [dBi]
(Red) PAG -7.58 [dBi]
V MRG -13.49 [dBi]
(Blue) PAG -14.90 [dBi]



X Y面

H MRG -9.22 [dBi]
(Red) PAG -14.34 [dBi]
V MRG -4.51 [dBi]
(Blue) PAG -5.71 [dBi]

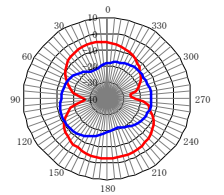


890 [MHz]

Efficiency -5.86 [dBi]

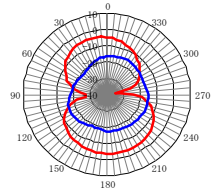
Z X面

H MRG -3.01 [dBi]
(Red) PAG -7.11 [dBi]
V MRG -10.93 [dBi]
(Blue) PAG -14.75 [dBi]



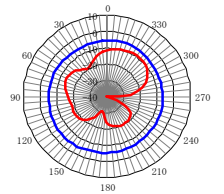
Y Z面

H MRG -3.50 [dBi]
(Red) PAG -7.22 [dBi]
V MRG -15.27 [dBi]
(Blue) PAG -16.96 [dBi]

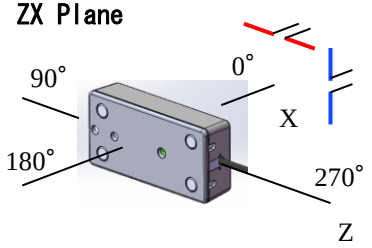


X Y面

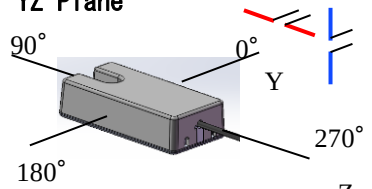
H MRG -9.06 [dBi]
(Red) PAG -15.10 [dBi]
V MRG -4.26 [dBi]
(Blue) PAG -5.62 [dBi]



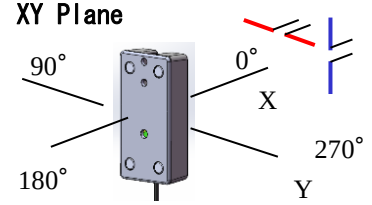
ZX Plane



YZ Plane



XY Plane



水平偏波 Horizontal Polarized Wave
垂直偏波 Vertical Polarized Wave

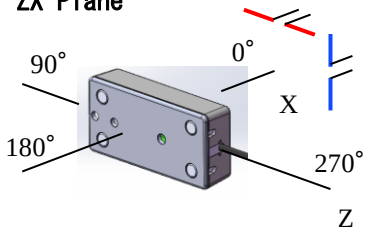
MRG = 最大利得 Maximum Absolute Gain
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

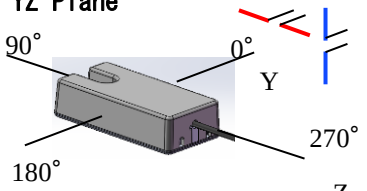
Sub-GHz Band

	902 [MHz]	915 [MHz]	922 [MHz]	928 [MHz]	930 [MHz]	940 [MHz]
Efficiency	-5.63 [dB]	-5.96 [dB]	-6.27 [dB]	-6.39 [dB]	-6.61 [dB]	-7.34 [dB]
Z X面						
H MRG	-3.00 [dBi]	-3.21 [dBi]	-3.44 [dBi]	-3.48 [dBi]	-3.68 [dBi]	-4.21 [dBi]
(Red) PAG	-6.74 [dBi]	-7.05 [dBi]	-7.32 [dBi]	-7.42 [dBi]	-7.63 [dBi]	-8.36 [dBi]
V MRG	-13.39 [dBi]	-15.04 [dBi]	-16.02 [dBi]	-16.42 [dBi]	-16.67 [dBi]	-16.59 [dBi]
(Blue) PAG	-15.46 [dBi]	-16.96 [dBi]	-18.10 [dBi]	-18.97 [dBi]	-19.42 [dBi]	-20.52 [dBi]
Y Z面						
H MRG	-3.55 [dBi]	-3.63 [dBi]	-3.83 [dBi]	-3.85 [dBi]	-4.03 [dBi]	-4.87 [dBi]
(Red) PAG	-7.03 [dBi]	-7.23 [dBi]	-7.53 [dBi]	-7.66 [dBi]	-7.90 [dBi]	-8.78 [dBi]
V MRG	-15.92 [dBi]	-17.36 [dBi]	-18.07 [dBi]	-18.03 [dBi]	-18.08 [dBi]	-16.95 [dBi]
(Blue) PAG	-17.95 [dBi]	-19.86 [dBi]	-21.20 [dBi]	-21.84 [dBi]	-22.09 [dBi]	-21.09 [dBi]
X Y面						
H MRG	-8.66 [dBi]	-9.92 [dBi]	-10.17 [dBi]	-10.45 [dBi]	-10.79 [dBi]	-11.77 [dBi]
(Red) PAG	-14.86 [dBi]	-16.29 [dBi]	-16.62 [dBi]	-17.05 [dBi]	-17.46 [dBi]	-17.65 [dBi]
V MRG	-4.16 [dBi]	-4.21 [dBi]	-4.53 [dBi]	-4.78 [dBi]	-5.04 [dBi]	-5.73 [dBi]
(Blue) PAG	-5.53 [dBi]	-5.67 [dBi]	-6.06 [dBi]	-6.39 [dBi]	-6.70 [dBi]	-7.58 [dBi]

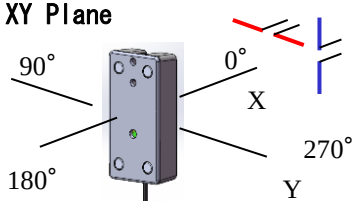
ZX Plane

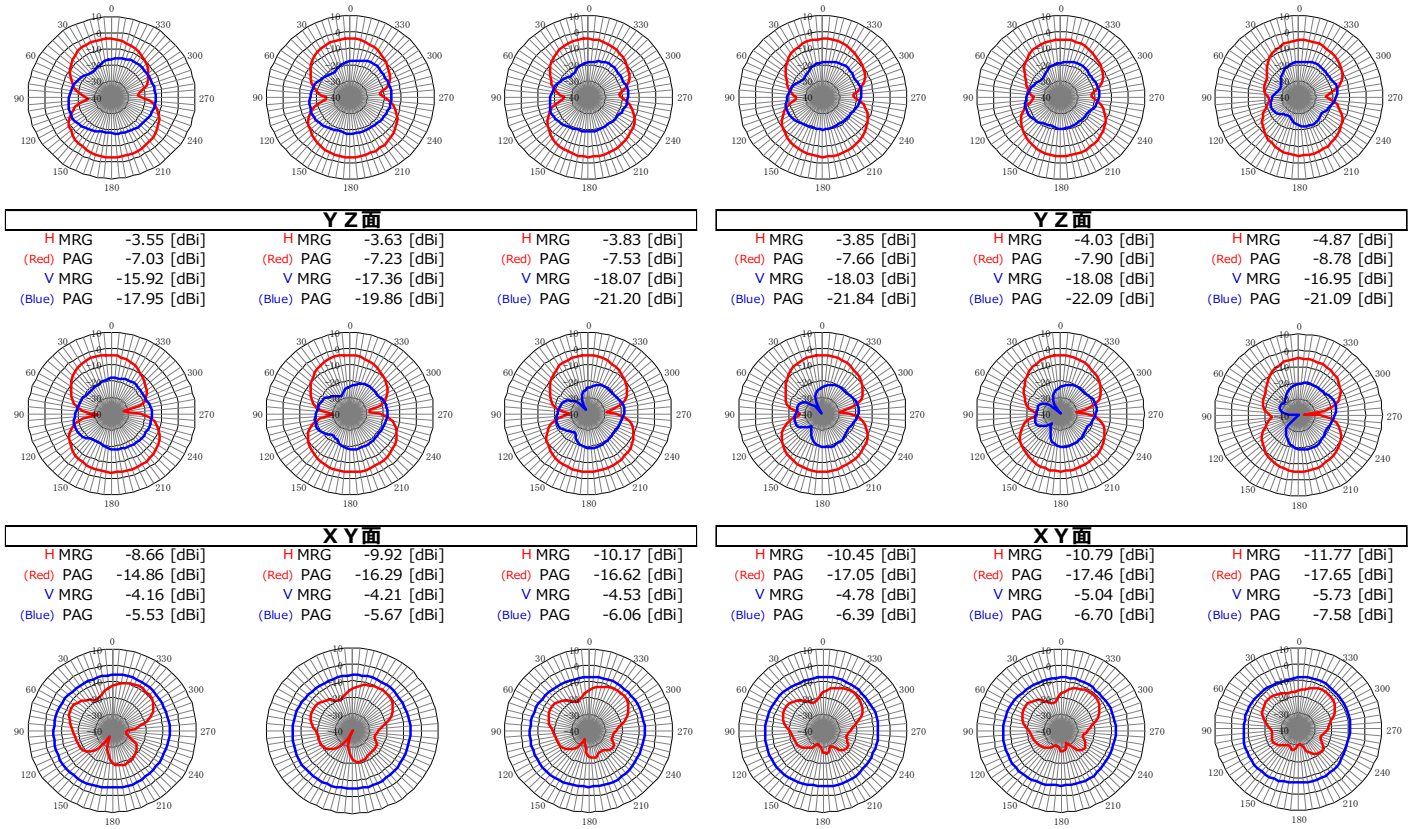


YZ Plane



XY Plane





水平偏波 Horizontal Polarized Wave

垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

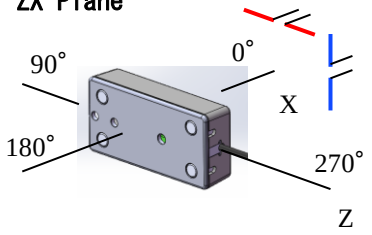
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

2.4GHz Band (Wi-Fi , etc.)

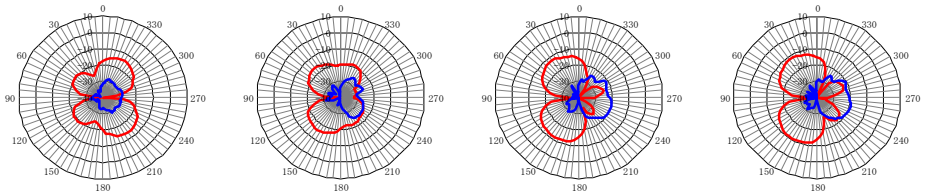
2400 [MHz]	2442 [MHz]	2483.5 [MHz]	2500 [MHz]
Efficiency -15.96 [dB]	Efficiency -17.68 [dB]	Efficiency -15.69 [dB]	Efficiency -14.98 [dB]

ZX Plane

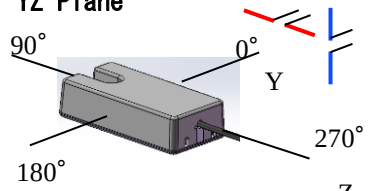


Z X面

2400 [MHz]	2442 [MHz]	2483.5 [MHz]	2500 [MHz]
H MRG -13.87 [dBi]	H MRG -15.74 [dBi]	H MRG -11.34 [dBi]	H MRG -10.72 [dBi]
(Red) PAG -18.43 [dBi]	(Red) PAG -20.02 [dBi]	(Red) PAG -16.60 [dBi]	(Red) PAG -15.86 [dBi]
V MRG -27.45 [dBi]	V MRG -24.60 [dBi]	V MRG -19.55 [dBi]	V MRG -19.19 [dBi]
(Blue) PAG -31.51 [dBi]	(Blue) PAG -29.48 [dBi]	(Blue) PAG -25.92 [dBi]	(Blue) PAG -25.52 [dBi]

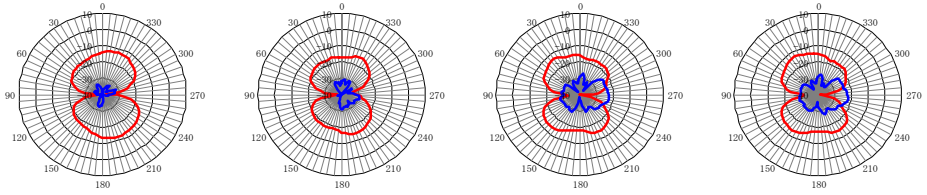


YZ Plane

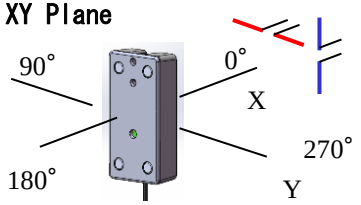


Y Z面

2400 [MHz]	2442 [MHz]	2483.5 [MHz]	2500 [MHz]
H MRG -12.37 [dBi]	H MRG -14.51 [dBi]	H MRG -13.27 [dBi]	H MRG -12.54 [dBi]
(Red) PAG -16.07 [dBi]	(Red) PAG -18.23 [dBi]	(Red) PAG -16.99 [dBi]	(Red) PAG -16.52 [dBi]
V MRG -31.33 [dBi]	V MRG -28.37 [dBi]	V MRG -22.50 [dBi]	V MRG -21.63 [dBi]
(Blue) PAG -36.00 [dBi]	(Blue) PAG -33.72 [dBi]	(Blue) PAG -27.84 [dBi]	(Blue) PAG -27.52 [dBi]

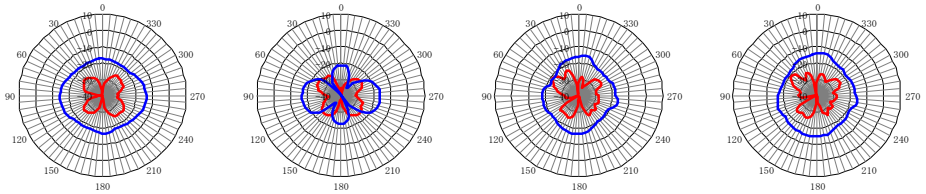


XY Plane



X Y面

2400 [MHz]	2442 [MHz]	2483.5 [MHz]	2500 [MHz]
H MRG -24.54 [dBi]	H MRG -24.16 [dBi]	H MRG -21.34 [dBi]	H MRG -20.59 [dBi]
(Red) PAG -28.09 [dBi]	(Red) PAG -27.63 [dBi]	(Red) PAG -27.14 [dBi]	(Red) PAG -27.07 [dBi]
V MRG -13.86 [dBi]	V MRG -16.30 [dBi]	V MRG -14.97 [dBi]	V MRG -13.65 [dBi]
(Blue) PAG -16.52 [dBi]	(Blue) PAG -20.91 [dBi]	(Blue) PAG -18.33 [dBi]	(Blue) PAG -16.39 [dBi]

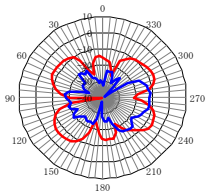
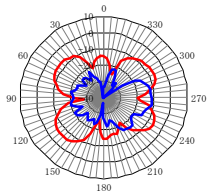
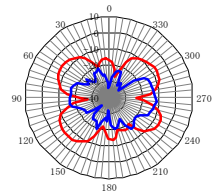
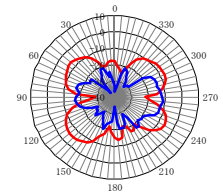
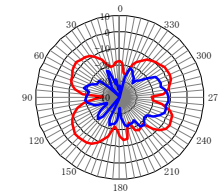
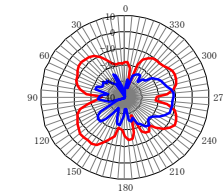
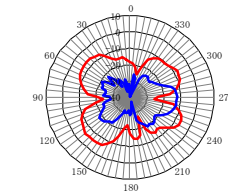
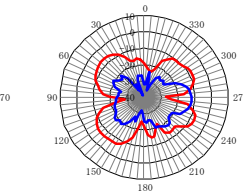
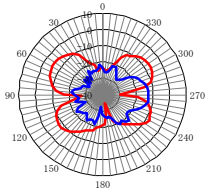
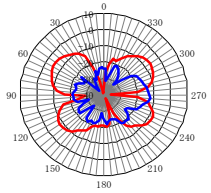
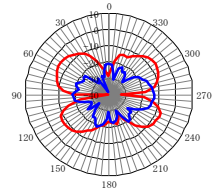
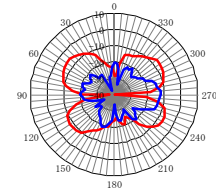
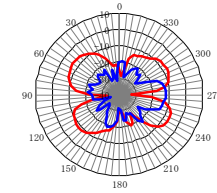
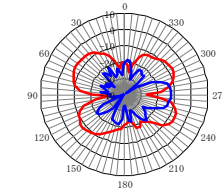
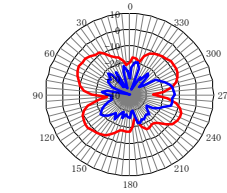
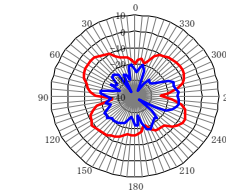
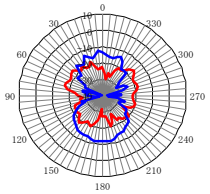
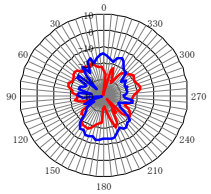
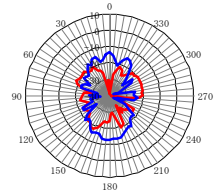
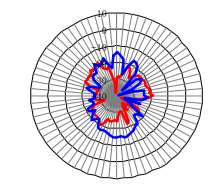
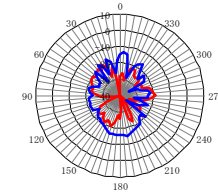
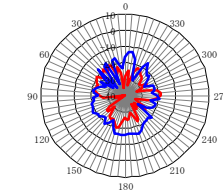
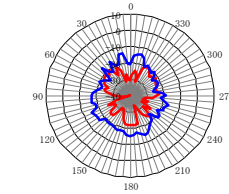
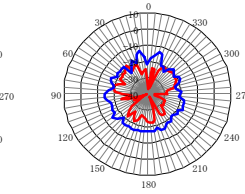


水平偏波 Horizontal Polarized Wave
垂直偏波 Vertical Polarized Wave

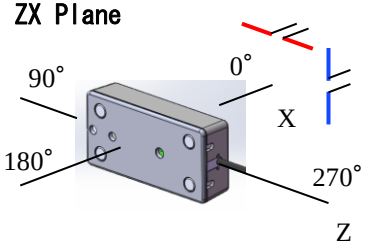
MRG = 最大利得 Maximum Absolute Gain
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

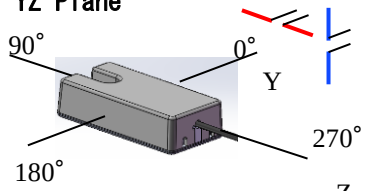
5GHz Band (Wi-Fi , etc.)

4900 [MHz]	4950 [MHz]	5000 [MHz]	5030 [MHz]	5060.5 [MHz]	5091 [MHz]	5150 [MHz]	5200 [MHz]
Efficiency -10.83 [dB]	Efficiency -10.73 [dB]	Efficiency -10.62 [dB]	Efficiency -10.74 [dB]	Efficiency -10.95 [dB]	Efficiency -10.74 [dB]	Efficiency -10.58 [dB]	Efficiency -10.68 [dB]
Z X面							
H MRG -5.85 [dBi]	H MRG -5.67 [dBi]	H MRG -5.65 [dBi]	H MRG -5.46 [dBi]	H MRG -5.31 [dBi]	H MRG -5.32 [dBi]	H MRG -5.76 [dBi]	H MRG -6.23 [dBi]
(Red) PAG -10.27 [dBi]	(Red) PAG -10.20 [dBi]	(Red) PAG -10.08 [dBi]	(Red) PAG -10.36 [dBi]	(Red) PAG -10.45 [dBi]	(Red) PAG -10.29 [dBi]	(Red) PAG -10.30 [dBi]	(Red) PAG -10.63 [dBi]
V MRG -11.56 [dBi]	V MRG -10.66 [dBi]	V MRG -11.25 [dBi]	V MRG -11.17 [dBi]	V MRG -11.13 [dBi]	V MRG -11.04 [dBi]	V MRG -11.92 [dBi]	V MRG -11.69 [dBi]
(Blue) PAG -18.53 [dBi]	(Blue) PAG -18.76 [dBi]	(Blue) PAG -18.51 [dBi]	(Blue) PAG -18.51 [dBi]	(Blue) PAG -18.79 [dBi]	(Blue) PAG -19.09 [dBi]	(Blue) PAG -19.88 [dBi]	(Blue) PAG -19.47 [dBi]
							
Y Z面							
H MRG -5.17 [dBi]	H MRG -5.39 [dBi]	H MRG -5.28 [dBi]	H MRG -5.84 [dBi]	H MRG -6.29 [dBi]	H MRG -6.29 [dBi]	H MRG -5.40 [dBi]	H MRG -5.82 [dBi]
(Red) PAG -10.96 [dBi]	(Red) PAG -10.86 [dBi]	(Red) PAG -10.64 [dBi]	(Red) PAG -10.93 [dBi]	(Red) PAG -11.12 [dBi]	(Red) PAG -10.92 [dBi]	(Red) PAG -10.74 [dBi]	(Red) PAG -10.84 [dBi]
V MRG -12.16 [dBi]	V MRG -12.06 [dBi]	V MRG -12.25 [dBi]	V MRG -12.22 [dBi]	V MRG -11.90 [dBi]	V MRG -11.65 [dBi]	V MRG -12.79 [dBi]	V MRG -13.00 [dBi]
(Blue) PAG -19.96 [dBi]	(Blue) PAG -20.15 [dBi]	(Blue) PAG -20.04 [dBi]	(Blue) PAG -20.04 [dBi]	(Blue) PAG -19.93 [dBi]	(Blue) PAG -20.32 [dBi]	(Blue) PAG -21.14 [dBi]	(Blue) PAG -20.30 [dBi]
							
X Y面							
H MRG -16.01 [dBi]	H MRG -17.52 [dBi]	H MRG -17.28 [dBi]	H MRG -17.35 [dBi]	H MRG -17.75 [dBi]	H MRG -17.97 [dBi]	H MRG -19.28 [dBi]	H MRG -17.73 [dBi]
(Red) PAG -20.67 [dBi]	(Red) PAG -21.28 [dBi]	(Red) PAG -22.45 [dBi]	(Red) PAG -23.29 [dBi]	(Red) PAG -23.97 [dBi]	(Red) PAG -23.96 [dBi]	(Red) PAG -24.44 [dBi]	(Red) PAG -23.61 [dBi]
V MRG -11.70 [dBi]	V MRG -11.80 [dBi]	V MRG -12.79 [dBi]	V MRG -13.79 [dBi]	V MRG -13.43 [dBi]	V MRG -12.74 [dBi]	V MRG -13.45 [dBi]	V MRG -12.56 [dBi]
(Blue) PAG -16.92 [dBi]	(Blue) PAG -18.22 [dBi]	(Blue) PAG -18.62 [dBi]	(Blue) PAG -19.73 [dBi]	(Blue) PAG -19.88 [dBi]	(Blue) PAG -19.40 [dBi]	(Blue) PAG -18.06 [dBi]	(Blue) PAG -17.56 [dBi]
							

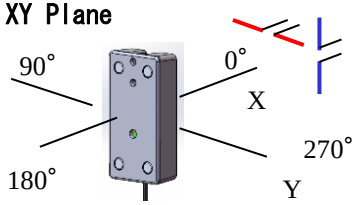
ZX Plane



YZ Plane



XY Plane



水平偏波 Horizontal Polarized Wave

垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

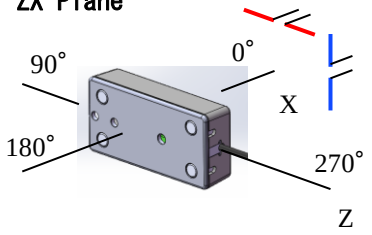
PAG = 平均利得 Pattern Average Gain

4.利得･指向性特性 Gain and Radiation Pattern Characteristics

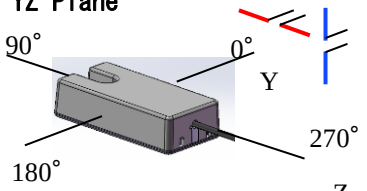
5GHz Band (Wi-Fi , etc.)

	5350 [MHz]	5500 [MHz]	5650 [MHz]	5750 [MHz]	5850 [MHz]
Efficiency	-10.93 [dB]	-11.45 [dB]	-12.10 [dB]	-12.51 [dB]	-12.10 [dB]
Z X面					
H MRG	-6.07 [dBi]	-6.99 [dBi]	-7.87 [dBi]	-8.93 [dBi]	-7.12 [dBi]
(Red) PAG	-10.89 [dBi]	-11.71 [dBi]	-12.74 [dBi]	-13.30 [dBi]	-12.86 [dBi]
V MRG	-12.52 [dBi]	-13.22 [dBi]	-14.87 [dBi]	-17.54 [dBi]	-17.88 [dBi]
(Blue) PAG	-20.93 [dBi]	-22.03 [dBi]	-22.93 [dBi]	-23.22 [dBi]	-23.66 [dBi]
Y Z面					
H MRG	-5.94 [dBi]	-7.25 [dBi]	-8.80 [dBi]	-8.10 [dBi]	-7.16 [dBi]
(Red) PAG	-10.89 [dBi]	-11.41 [dBi]	-12.31 [dBi]	-12.67 [dBi]	-12.02 [dBi]
V MRG	-13.83 [dBi]	-15.05 [dBi]	-17.56 [dBi]	-19.95 [dBi]	-19.80 [dBi]
(Blue) PAG	-22.15 [dBi]	-23.61 [dBi]	-24.72 [dBi]	-27.10 [dBi]	-25.82 [dBi]
X Y面					
H MRG	-20.67 [dBi]	-20.07 [dBi]	-19.29 [dBi]	-22.11 [dBi]	-19.29 [dBi]
(Red) PAG	-25.54 [dBi]	-25.12 [dBi]	-25.62 [dBi]	-26.20 [dBi]	-25.64 [dBi]
V MRG	-11.75 [dBi]	-11.48 [dBi]	-9.03 [dBi]	-9.78 [dBi]	-10.07 [dBi]
(Blue) PAG	-15.39 [dBi]	-14.22 [dBi]	-11.98 [dBi]	-12.68 [dBi]	-13.87 [dBi]

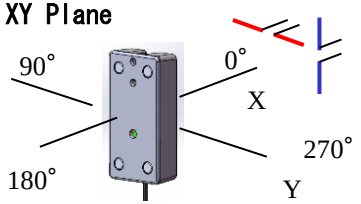
ZX Plane

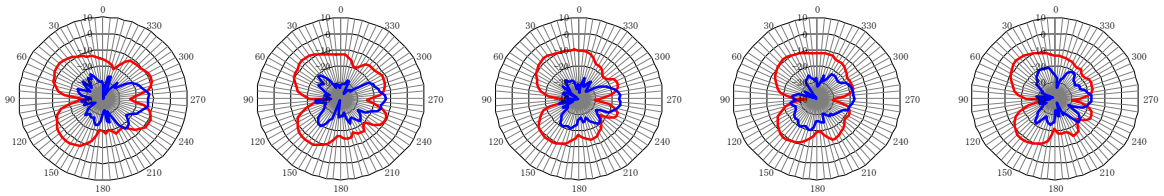


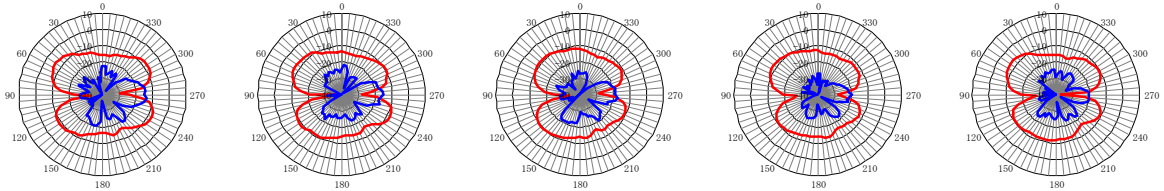
YZ Plane

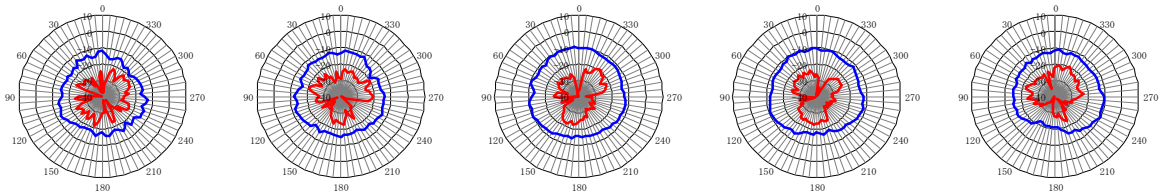


XY Plane









水平偏波 Horizontal Polarized Wave

垂直偏波 Vertical Polarized Wave

MRG = 最大利得 Maximum Absolute Gain

PAG = 平均利得 Pattern Average Gain

5.最大利得･放射効率 Maximum Absolute Gain and Efficiency

Frequency(MHz)	600	617	630	634.5	652	660	663	680.5	698	699	703	704	707.5	710	716
Maximum Absolute Gain(dBi)	-11.24	-10.06	-8.95	-9.02	-9.17	-9.06	-9.91	-10.06	-13.21	-13.36	-13.86	-14.03	-14.66	-14.57	-14.14
Efficiency(dB)	-12.98	-12.69	-11.69	-12.13	-12.35	-12.03	-13.21	-14.07	-17.13	-17.21	-17.02	-16.89	-16.61	-16.59	-16.41

Frequency(MHz)	725.5	729	734	737.5	740	746	748	751	756	758	763	768	777	780.5	782
Maximum Absolute Gain(dBi)	-13.43	-13.13	-12.86	-12.37	-12.02	-11.08	-10.70	-10.21	-9.81	-9.59	-8.87	-8.17	-6.99	-6.74	-6.59
Efficiency(dB)	-15.41	-14.97	-14.51	-13.98	-13.56	-12.74	-12.38	-11.94	-11.61	-11.46	-10.92	-10.30	-9.26	-9.07	-8.98

Frequency(MHz)	787	788	791	793	798	803	806	814	815	821	822.5	824	830	831.5	832
Maximum Absolute Gain(dBi)	-6.02	-5.89	-5.45	-5.20	-4.98	-4.53	-4.32	-3.47	-3.40	-2.95	-2.88	-2.80	-2.51	-2.56	-2.59
Efficiency(dB)	-8.62	-8.53	-8.16	-7.93	-7.91	-7.80	-7.78	-7.17	-7.11	-6.81	-6.78	-6.76	-6.89	-7.03	-7.07

Frequency(MHz)	836.5	837.5	845	847	849	859	860	862	865	867.5	868	869	875	876.5	880
Maximum Absolute Gain(dBi)	-2.53	-2.51	-2.93	-3.06	-3.19	-3.67	-3.72	-3.74	-3.57	-3.55	-3.55	-3.54	-3.15	-3.04	-3.02
Efficiency(dB)	-7.04	-6.98	-6.94	-6.88	-6.80	-6.26	-6.19	-6.02	-5.83	-5.84	-5.85	-5.87	-5.66	-5.60	-5.76

Frequency(MHz)	881.5	882.5	890	894	897.5	900	902	915	922	925	928	930	940	942.5	960
Maximum Absolute Gain(dBi)	-2.99	-2.99	-3.01	-3.05	-3.07	-2.62	-3.00	-3.21	-3.44	-3.44	-3.48	-3.68	-4.21	-4.24	-3.79
Efficiency(dB)	-5.76	-5.77	-5.86	-5.82	-5.76	-5.36	-5.63	-5.96	-6.27	-6.31	-6.39	-6.61	-7.34	-7.47	-6.76

Frequency(MHz)	1176.5	1227.6	1246.0	1278.8	1427.9	1437.9	1440.0	1447.9	1455.4	1462.9	1475.9	1485.9	1495.9	1503.4	1510.9
Maximum Absolute Gain(dBi)	-8.84	-14.83	-17.17	-11.32	-5.87	-5.80	-5.58	-5.15	-4.87	-3.96	-3.92	-5.13	-6.76	-6.98	-7.25
Efficiency(dB)	-12.46	-18.81	-20.50	-13.78	-10.45	-10.40	-10.48	-9.93	-9.69	-9.36	-8.85	-9.22	-10.09	-10.46	-10.61

Frequency(MHz)	1575.42	1602	1710	1732.5	1740	1745	1747.5	1749.9	1755	1767.4	1780	1784.9	1785	1805	1842.5
Maximum Absolute Gain(dBi)	-7.43	-7.49	-3.71	-3.08	-2.88	-2.88	-2.78	-2.72	-2.60	-2.60	-2.40	-2.29	-2.27	-2.36	-2.78
Efficiency(dB)	-10.06	-10.00	-6.65	-6.28	-6.02	-6.22	-6.16	-6.14	-6.06	-6.09	-5.96	-5.88	-5.88	-5.79	-5.80

5.最大利得･放射効率 Maximum Absolute Gain and Efficiency

Frequency(MHz)	1844.9	1850	1862.4	1879.9	1880	1882.5	1900	1910	1915	1920	1930	1950	1960	1962.5	1980
Maximum Absolute Gain(dBi)	-2.75	-2.71	-2.68	-2.91	-2.91	-2.94	-3.09	-2.99	-3.09	-3.10	-3.00	-2.58	-2.43	-2.41	-2.13
Efficiency(dB)	-5.82	-5.81	-5.82	-5.87	-5.87	-5.86	-5.95	-5.79	-5.83	-5.79	-5.60	-5.39	-5.53	-5.57	-5.62

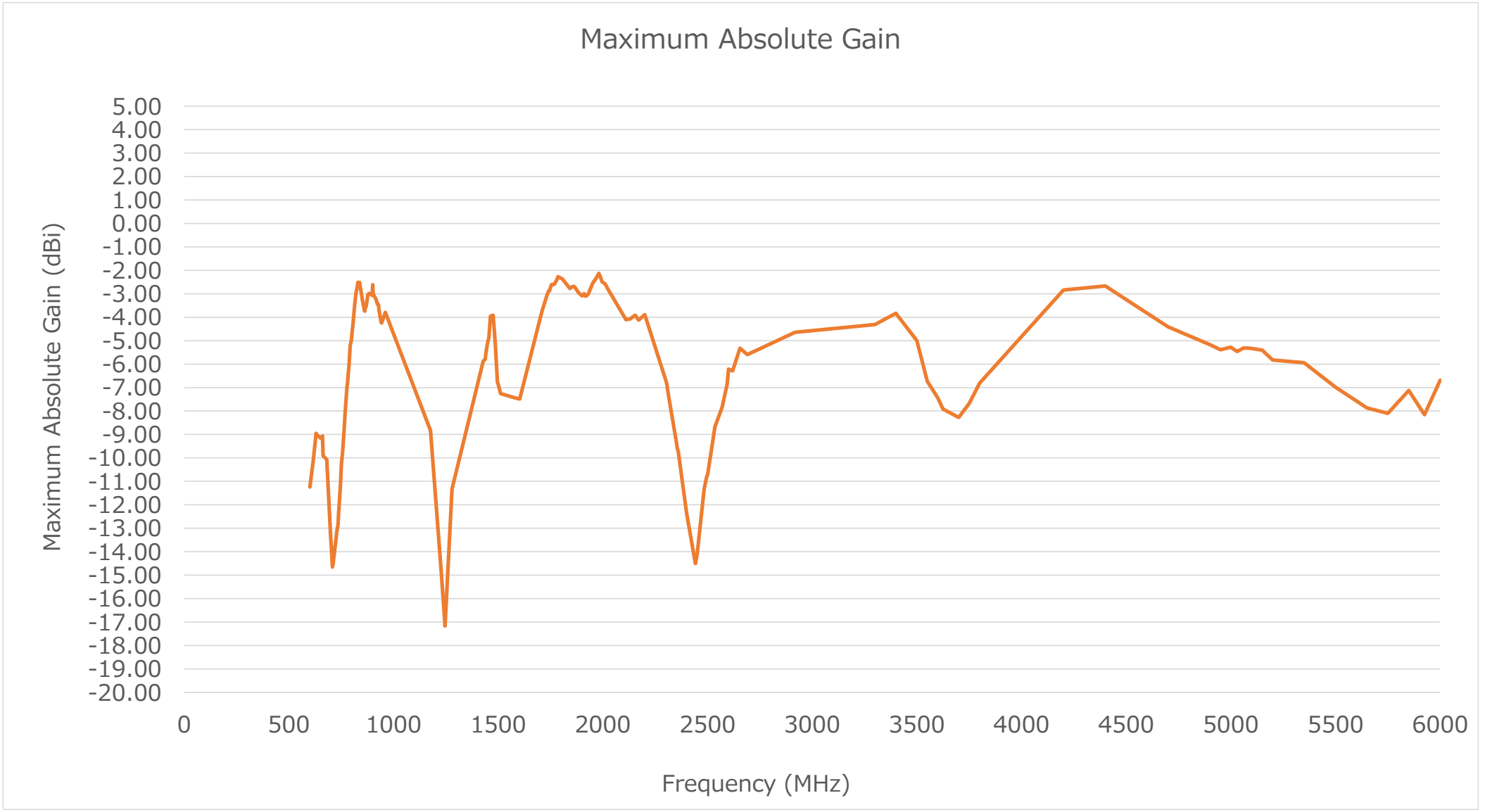
Frequency(MHz)	1990	1995	2010	2025	2110	2132.5	2140	2155	2170	2200	2300	2305	2310	2315	2350
Maximum Absolute Gain(dBi)	-2.32	-2.48	-2.58	-2.81	-4.10	-4.06	-4.00	-3.91	-4.12	-3.89	-6.67	-6.83	-7.16	-7.42	-9.28
Efficiency(dB)	-5.80	-5.93	-6.02	-6.24	-6.37	-6.71	-6.76	-6.78	-6.98	-7.12	-9.91	-10.04	-10.34	-10.54	-12.52

Frequency(MHz)	2355	2360	2400	2442	2450	2483.5	2496	2500	2535	2570	2593	2595	2600	2620	2655
Maximum Absolute Gain(dBi)	-9.56	-9.75	-12.37	-14.51	-14.12	-11.34	-10.78	-10.72	-8.67	-7.84	-6.88	-6.77	-6.21	-6.29	-5.32
Efficiency(dB)	-12.77	-12.93	-15.96	-17.68	-17.43	-15.69	-15.09	-14.98	-13.07	-11.89	-11.08	-11.00	-10.55	-10.84	-9.65

Frequency(MHz)	2690	2917.5	3300	3400	3500	3550	3600	3625	3700	3750	3800	4200	4400	4700	4900
Maximum Absolute Gain(dBi)	-5.59	-4.64	-4.31	-3.84	-5.00	-6.74	-7.44	-7.92	-8.27	-7.68	-6.81	-2.84	-2.66	-4.41	-5.17
Efficiency(dB)	-9.75	-8.33	-8.46	-7.96	-8.62	-10.01	-11.47	-12.23	-12.49	-11.62	-11.17	-9.48	-9.92	-10.21	-10.83

Frequency(MHz)	4950	5000	5030	5060.5	5091	5150	5200	5350	5500	5650	5750	5850	5925	6000
Maximum Absolute Gain(dBi)	-5.39	-5.28	-5.46	-5.31	-5.32	-5.40	-5.82	-5.94	-6.99	-7.87	-8.10	-7.12	-8.15	-6.69
Efficiency(dB)	-10.73	-10.62	-10.74	-10.95	-10.74	-10.58	-10.68	-10.93	-11.45	-12.10	-12.51	-12.10	-11.75	-10.54

6.最大利得 Maximum Absolute Gain



7.放射効率 Efficiency

8.来歴 Revision History

日付 Date	変更前 Before Change	変更後 After Change	氏名 Name
2023/11/02	922MHz指向性、利得追加 （Add 922MHz Gain and Radiation Pattern ）		Takeda
2024/12/04	測定周波数変更 (Frequency Change)		Takeda