承認	検認	作成
技術 19.2.20 高瀬	技術 19.2.19 武田	技術 19.2.19 内野

技適申請用資料
Application form to Technical standards conformity certification
T18-051-1120

2019/02/19

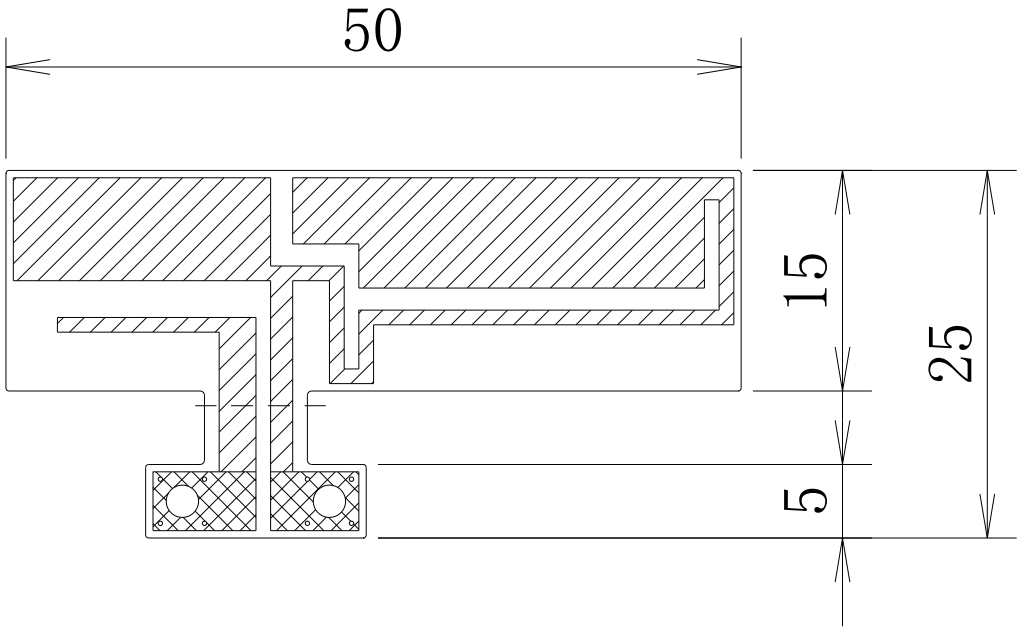
スタッフ株式会社

STAF Corporation

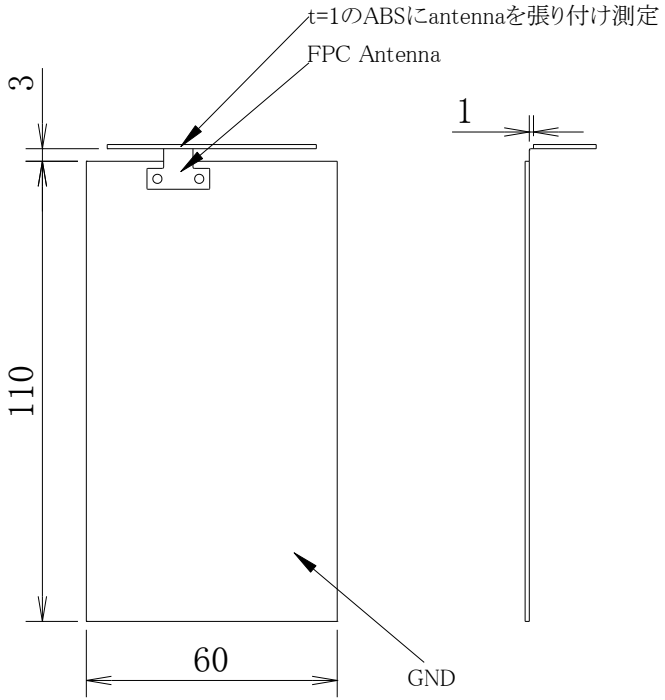
1.仕様 Specification

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	T18-051-1120
対応周波数 Frequency	814～960[MHz] /1710～2170[MHz]
アンテナ型式 Antenna type	λ/4モノポールアンテナ monopole antenna （λ/4）
最大絶対利得 Maximum absolute gain	3[dBi]以下 3[dBi] or less
インピーダンス Impedance	50Ω

2.外形図 Outside dimension drawing

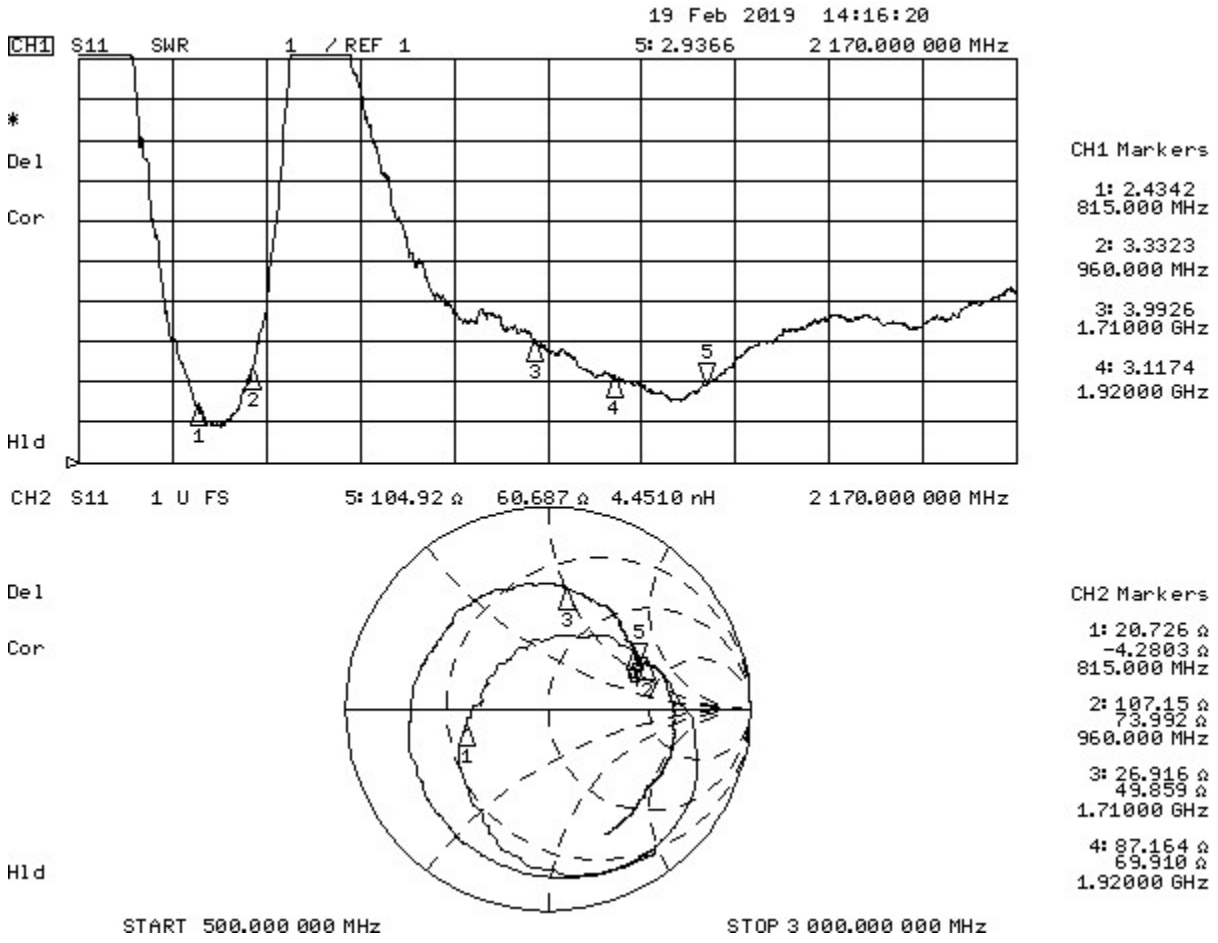


推奨基板
Recommended board



単位:mm
Unit:mm

3. VSWR/Impedance



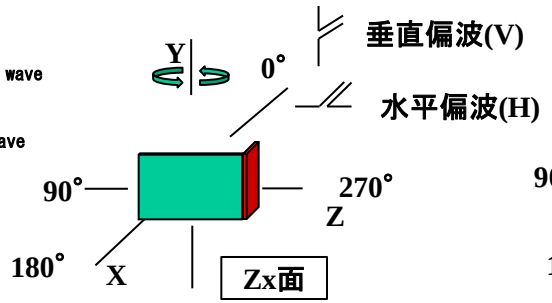
STAF

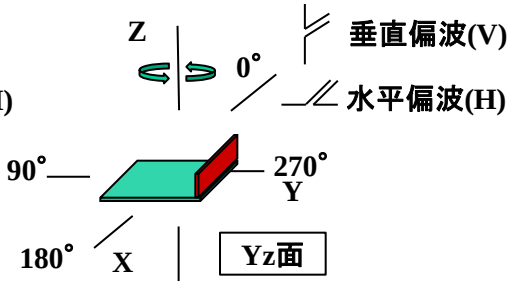
4.利得・指向性特性 Gain Radiation pattern(800MHz帯)

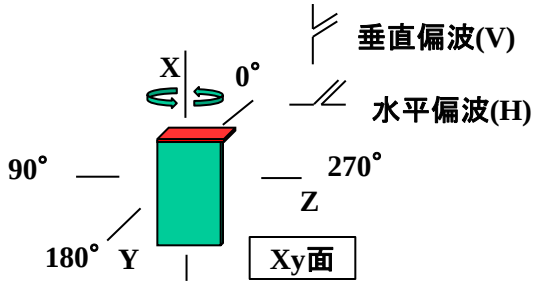
水平偏波
Horizontal polarized wave

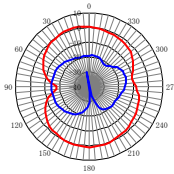
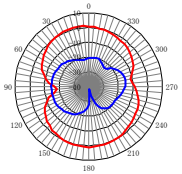
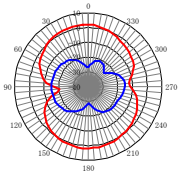
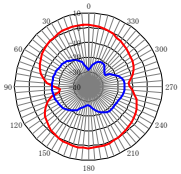
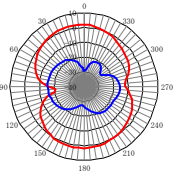
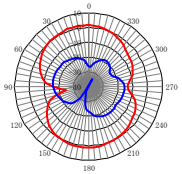
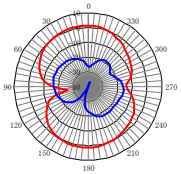
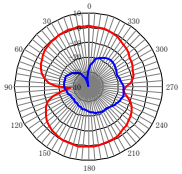
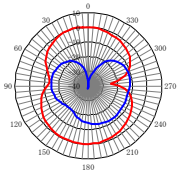
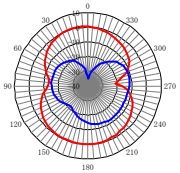
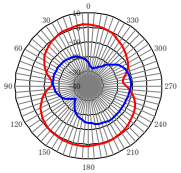
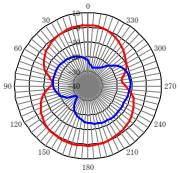
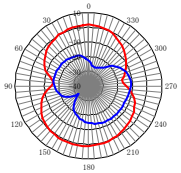
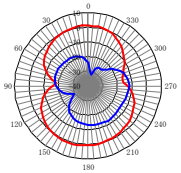
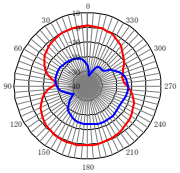
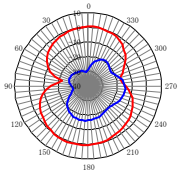
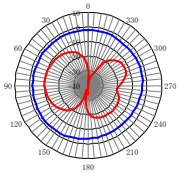
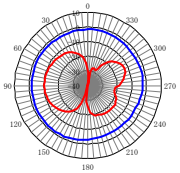
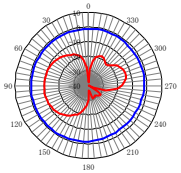
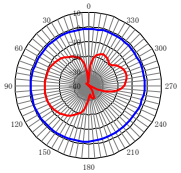
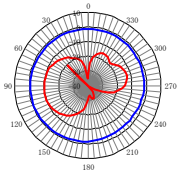
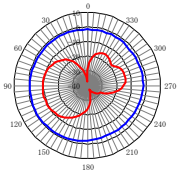
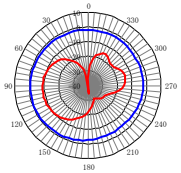
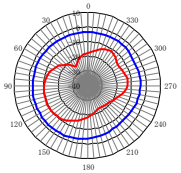
垂直偏波
Vertical polarized wave

MRG = 最大利得
Maximum radiation gain
PAG = 平均利得
Pattern average gain







814 [MHz]	830 [MHz]	875 [MHz]	885 [MHz]	890 [MHz]	915 [MHz]	920 [MHz]	960 [MHz]
Efficiency -1.55 [dB]	Efficiency -1.39 [dB]	Efficiency -0.47 [dB]	Efficiency -0.80 [dB]	Efficiency -0.74 [dB]	Efficiency -1.10 [dB]	Efficiency -1.20 [dB]	Efficiency -1.53 [dB]
Z x面							
H (Red) MRG 1.07 [dBi] PAG -1.98 [dB]	H (Red) MRG 1.29 [dBi] PAG -1.89 [dB]	H (Red) MRG 2.28 [dBi] PAG -1.10 [dB]	H (Red) MRG 2.07 [dBi] PAG -1.31 [dB]	H (Red) MRG 2.17 [dBi] PAG -1.21 [dB]	H (Red) MRG 1.76 [dBi] PAG -1.63 [dB]	H (Red) MRG 1.64 [dBi] PAG -1.75 [dB]	H (Red) MRG 1.07 [dBi] PAG -2.16 [dB]
V (Blue) MRG -14.35 [dBi] PAG -17.42 [dB]	V (Blue) MRG -14.59 [dBi] PAG -17.81 [dB]	V (Blue) MRG -15.00 [dBi] PAG -18.30 [dB]	V (Blue) MRG -15.18 [dBi] PAG -18.54 [dB]	V (Blue) MRG -15.39 [dBi] PAG -18.67 [dB]	V (Blue) MRG -15.41 [dBi] PAG -18.62 [dB]	V (Blue) MRG -15.70 [dBi] PAG -18.98 [dB]	V (Blue) MRG -15.60 [dBi] PAG -20.64 [dB]
							
Y z面							
H (Red) MRG 0.39 [dBi] PAG -2.88 [dB]	H (Red) MRG 0.72 [dBi] PAG -2.70 [dB]	H (Red) MRG 1.81 [dBi] PAG -1.74 [dB]	H (Red) MRG 1.56 [dBi] PAG -1.96 [dB]	H (Red) MRG 1.65 [dBi] PAG -1.84 [dB]	H (Red) MRG 1.15 [dBi] PAG -2.21 [dB]	H (Red) MRG 1.03 [dBi] PAG -2.30 [dB]	H (Red) MRG 0.76 [dBi] PAG -2.66 [dB]
V (Blue) MRG -11.07 [dBi] PAG -14.97 [dB]	V (Blue) MRG -10.93 [dBi] PAG -15.13 [dB]	V (Blue) MRG -10.78 [dBi] PAG -15.32 [dB]	V (Blue) MRG -10.88 [dBi] PAG -15.49 [dB]	V (Blue) MRG -11.02 [dBi] PAG -15.59 [dB]	V (Blue) MRG -11.79 [dBi] PAG -15.91 [dB]	V (Blue) MRG -12.25 [dBi] PAG -16.38 [dB]	V (Blue) MRG -14.50 [dBi] PAG -19.44 [dB]
							
X y面							
H (Red) MRG -10.19 [dBi] PAG -14.75 [dB]	H (Red) MRG -10.35 [dBi] PAG -15.06 [dB]	H (Red) MRG -9.85 [dBi] PAG -14.97 [dB]	H (Red) MRG -10.03 [dBi] PAG -15.08 [dB]	H (Red) MRG -10.03 [dBi] PAG -14.99 [dB]	H (Red) MRG -9.31 [dBi] PAG -14.62 [dB]	H (Red) MRG -8.86 [dBi] PAG -14.25 [dB]	H (Red) MRG -9.89 [dBi] PAG -13.94 [dB]
V (Blue) MRG -1.89 [dBi] PAG -2.66 [dB]	V (Blue) MRG -1.42 [dBi] PAG -2.21 [dB]	V (Blue) MRG -0.81 [dBi] PAG -1.52 [dB]	V (Blue) MRG -0.60 [dBi] PAG -1.42 [dB]	V (Blue) MRG -0.56 [dBi] PAG -1.44 [dB]	V (Blue) MRG -0.43 [dBi] PAG -1.65 [dB]	V (Blue) MRG -0.66 [dBi] PAG -1.92 [dB]	V (Blue) MRG -2.17 [dBi] PAG -3.42 [dB]
							

Staf corporation

CONFIDENTIAL

STAF

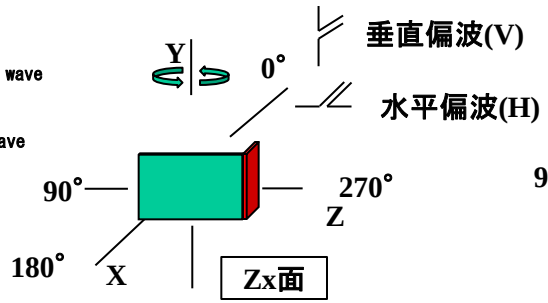
4.利得・指向性特性 Gain Radiation pattern(2GHz帯)

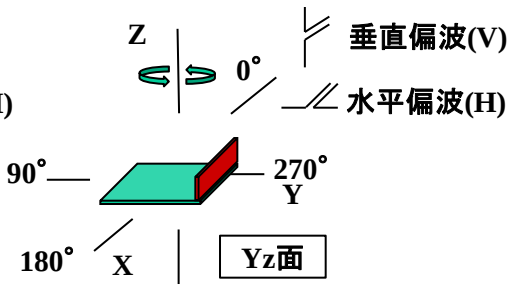
水平偏波
Horizontal polarized wave

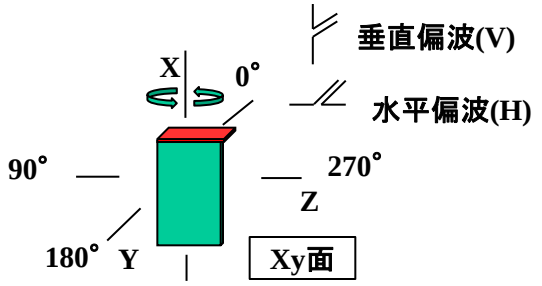
垂直偏波
Vertical polarized wave

MRG = 最大利得
Maximum radiation gain

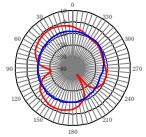
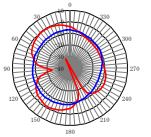
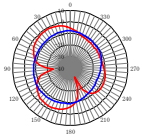
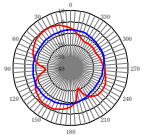
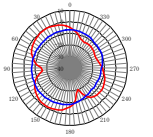
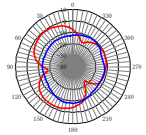
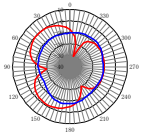
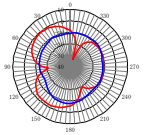
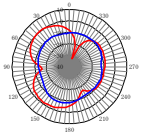
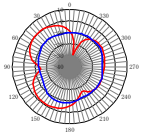
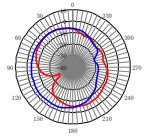
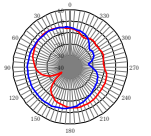
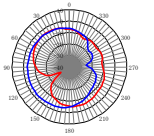
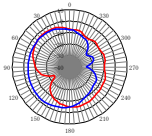
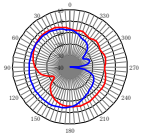
PAG = 平均利得
Pattern average gain

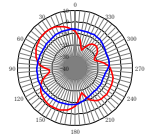
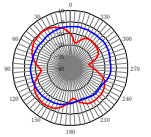
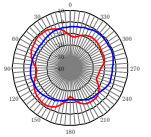
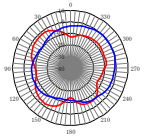
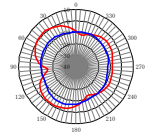
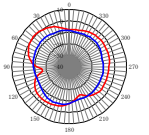
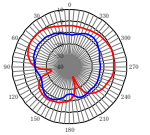
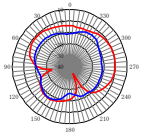
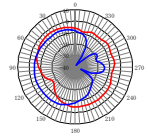
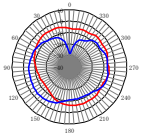
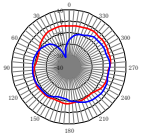
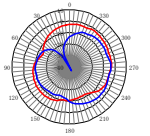




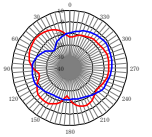
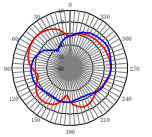
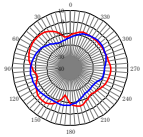
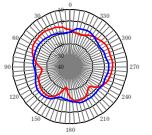
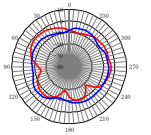
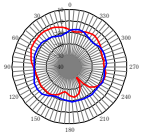
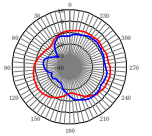
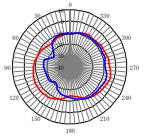
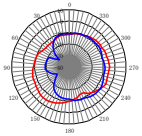


参考

1428 [MHz]	1496 [MHz]	1510 [MHz]	1575 [MHz]	1602 [MHz]
Efficiency -4.37 [dB]	Efficiency -3.64 [dB]	Efficiency -4.38 [dB]	Efficiency -3.81 [dB]	Efficiency -3.59 [dB]
Z x 面				
H MRG -1.16 [dBi] (Red) PAG -5.86 [dBi]	H MRG -0.33 [dBi] (Red) PAG -5.20 [dBi]	H MRG -1.15 [dBi] (Red) PAG -6.03 [dBi]	H MRG -0.46 [dBi] (Red) PAG -5.43 [dBi]	H MRG -0.19 [dBi] (Red) PAG -5.23 [dBi]
V MRG -7.77 [dBi] (Blue) PAG -9.88 [dBi]	V MRG -6.75 [dBi] (Blue) PAG -8.56 [dBi]	V MRG -7.35 [dBi] (Blue) PAG -9.25 [dBi]	V MRG -6.66 [dBi] (Blue) PAG -8.40 [dBi]	V MRG -6.45 [dBi] (Blue) PAG -8.32 [dBi]
				
Y z 面				
H MRG -0.86 [dBi] (Red) PAG -5.86 [dBi]	H MRG -0.10 [dBi] (Red) PAG -5.26 [dBi]	H MRG -0.86 [dBi] (Red) PAG -6.04 [dBi]	H MRG 0.11 [dBi] (Red) PAG -5.11 [dBi]	H MRG 0.35 [dBi] (Red) PAG -4.93 [dBi]
V MRG -7.92 [dBi] (Blue) PAG -11.47 [dBi]	V MRG -7.36 [dBi] (Blue) PAG -10.01 [dBi]	V MRG -7.85 [dBi] (Blue) PAG -10.67 [dBi]	V MRG -7.79 [dBi] (Blue) PAG -10.40 [dBi]	V MRG -7.76 [dBi] (Blue) PAG -10.19 [dBi]
				
X z 面				
H MRG -4.28 [dBi] (Red) PAG -7.76 [dBi]	H MRG -3.38 [dBi] (Red) PAG -6.83 [dBi]	H MRG -4.19 [dBi] (Red) PAG -7.67 [dBi]	H MRG -3.22 [dBi] (Red) PAG -7.00 [dBi]	H MRG -3.19 [dBi] (Red) PAG -6.80 [dBi]
V MRG -2.72 [dBi] (Blue) PAG -5.92 [dBi]	V MRG -2.16 [dBi] (Blue) PAG -5.34 [dBi]	V MRG -2.89 [dBi] (Blue) PAG -6.09 [dBi]	V MRG -2.46 [dBi] (Blue) PAG -6.09 [dBi]	V MRG -2.86 [dBi] (Blue) PAG -6.56 [dBi]
				

1710 [MHz]	1920 [MHz]	2110 [MHz]	2170 [MHz]
Efficiency -3.27 [dB]	Efficiency -2.83 [dB]	Efficiency -3.12 [dB]	Efficiency -3.22 [dB]
Z x 面			
H MRG 0.16 [dBi] (Red) PAG -4.92 [dBi]	H MRG -0.40 [dBi] (Red) PAG -5.46 [dBi]	H MRG -1.15 [dBi] (Red) PAG -5.80 [dBi]	H MRG -2.07 [dBi] (Red) PAG -6.30 [dBi]
V MRG -6.17 [dBi] (Blue) PAG -8.13 [dBi]	V MRG -3.15 [dBi] (Blue) PAG -5.66 [dBi]	V MRG -1.01 [dBi] (Blue) PAG -4.78 [dBi]	V MRG 0.17 [dBi] (Blue) PAG -4.12 [dBi]
			
Y z 面			
H MRG 0.99 [dBi] (Red) PAG -4.27 [dBi]	H MRG 0.51 [dBi] (Red) PAG -4.40 [dBi]	H MRG 0.30 [dBi] (Red) PAG -3.70 [dBi]	H MRG 0.19 [dBi] (Red) PAG -3.96 [dBi]
V MRG -5.83 [dBi] (Blue) PAG -8.97 [dBi]	V MRG -6.16 [dBi] (Blue) PAG -8.52 [dBi]	V MRG -6.84 [dBi] (Blue) PAG -9.86 [dBi]	V MRG -6.27 [dBi] (Blue) PAG -9.63 [dBi]
			
X z 面			
H MRG -2.97 [dBi] (Red) PAG -6.01 [dBi]	H MRG -4.17 [dBi] (Red) PAG -6.44 [dBi]	H MRG -2.28 [dBi] (Red) PAG -5.75 [dBi]	H MRG -1.77 [dBi] (Red) PAG -5.69 [dBi]
V MRG -4.02 [dBi] (Blue) PAG -7.77 [dBi]	V MRG -3.99 [dBi] (Blue) PAG -7.48 [dBi]	V MRG -3.51 [dBi] (Blue) PAG -7.56 [dBi]	V MRG -3.16 [dBi] (Blue) PAG -7.51 [dBi]
			

参考

2400 [MHz]	2500 [MHz]	2700 [MHz]
Efficiency -4.08 [dB]	Efficiency -4.00 [dB]	Efficiency -5.00 [dB]
Z x 面		
H MRG -1.02 [dBi] (Red) PAG -5.78 [dBi]	H MRG -0.13 [dBi] (Red) PAG -4.96 [dBi]	H MRG -0.75 [dBi] (Red) PAG -5.62 [dBi]
V MRG -1.87 [dBi] (Blue) PAG -6.93 [dBi]	V MRG -2.63 [dBi] (Blue) PAG -7.51 [dBi]	V MRG -5.47 [dBi] (Blue) PAG -8.65 [dBi]
		
Y z 面		
H MRG -2.30 [dBi] (Red) PAG -6.22 [dBi]	H MRG -1.53 [dBi] (Red) PAG -6.33 [dBi]	H MRG -2.24 [dBi] (Red) PAG -7.30 [dBi]
V MRG -4.94 [dBi] (Blue) PAG -7.41 [dBi]	V MRG -4.34 [dBi] (Blue) PAG -6.76 [dBi]	V MRG -5.66 [dBi] (Blue) PAG -8.60 [dBi]
		
X y 面		
H MRG -3.59 [dBi] (Red) PAG -7.90 [dBi]	H MRG -3.46 [dBi] (Red) PAG -7.98 [dBi]	H MRG -4.58 [dBi] (Red) PAG -7.90 [dBi]
V MRG -6.85 [dBi] (Blue) PAG -11.09 [dBi]	V MRG -6.66 [dBi] (Blue) PAG -10.91 [dBi]	V MRG -6.68 [dBi] (Blue) PAG -10.91 [dBi]
		

来歴 REVISON HISTORY

日付 Date	変更前 Before Change	変更後 After Change	氏名 Name