

CW-LS-0066

617-5925MHz External Antenna

Key Features

Frequency: 617-960/1427-2690/3300-5000/5150-5925MHz

SMA Male Connector

Dimensions: 116*22 mm



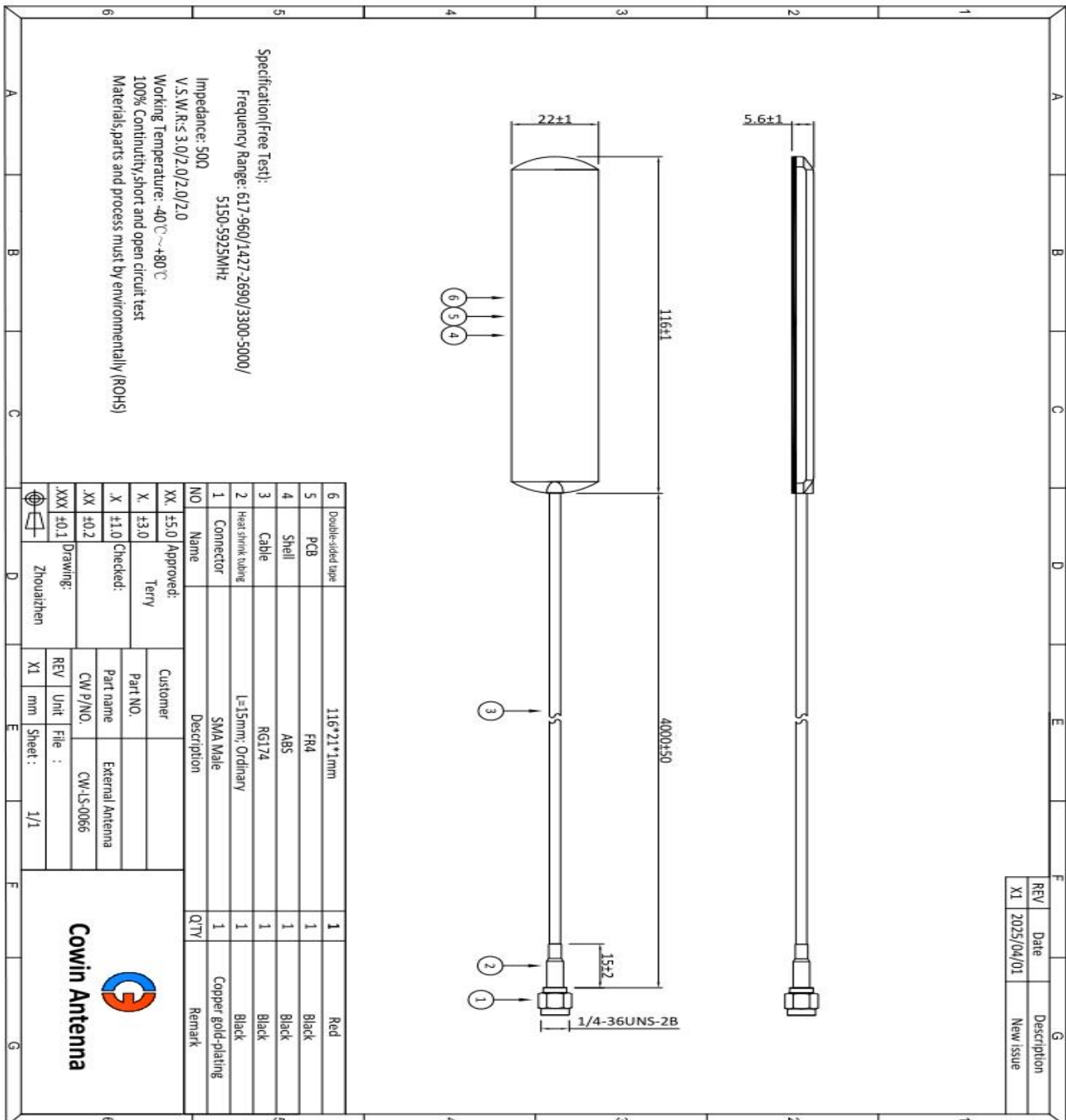
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	617-960/1427-2690/3300-5000/5150-5925
VSWR	≤3.0 / 2.0 / 2.0 / 2.0
Efficiency (%)	51.8/66.69/57/ 38.22
Peak Gain (dBi)	3.5/3.68/2.67/1.81
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10

2. Material and environmental characteristics

External Structure	PCB
Inner Structure	ABS
Cable Type	RG174
Connector Type	SMA Male
Dimensions (mm)	116*22
Antenna Color	Black
Operation Temperature	-40℃to+80℃
Storage Temperature	-40℃to+80℃
Antenna Storage life(year)	10
Substance Compliance	ROHS

3. Antenna drawing



4. Antenna test parameters

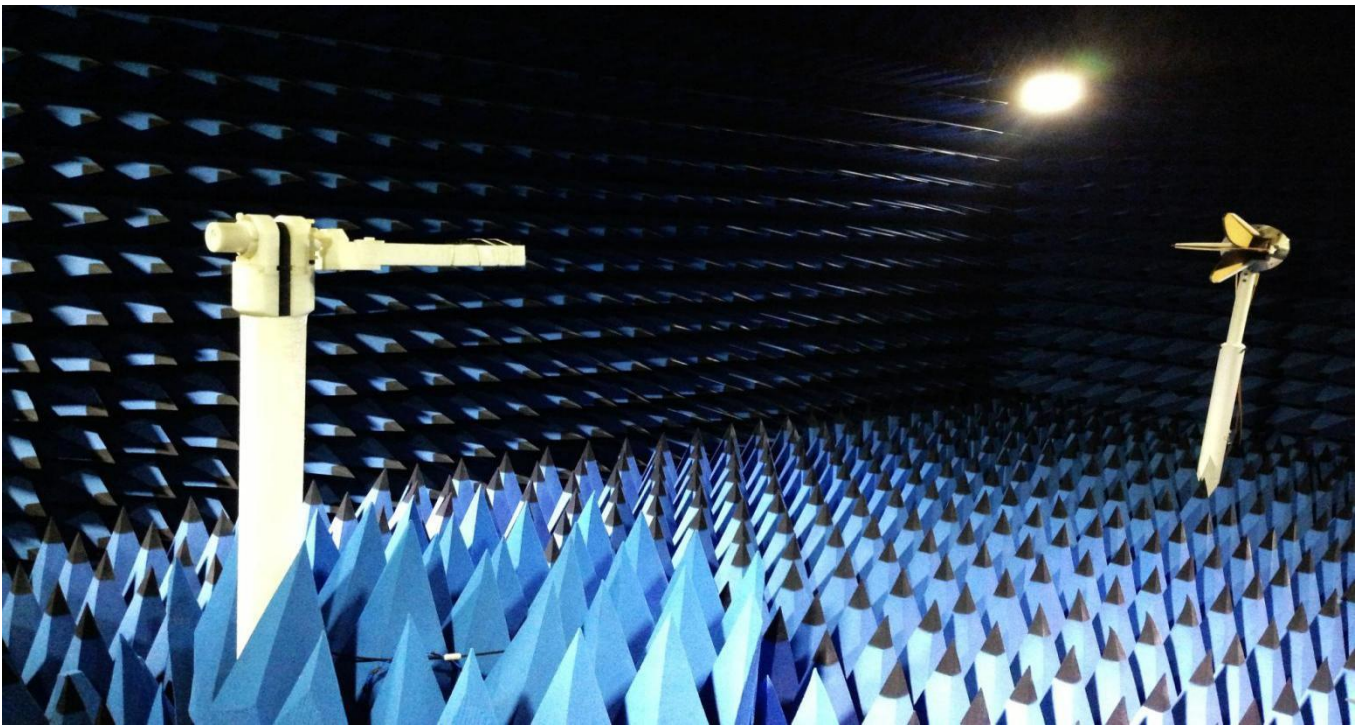
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

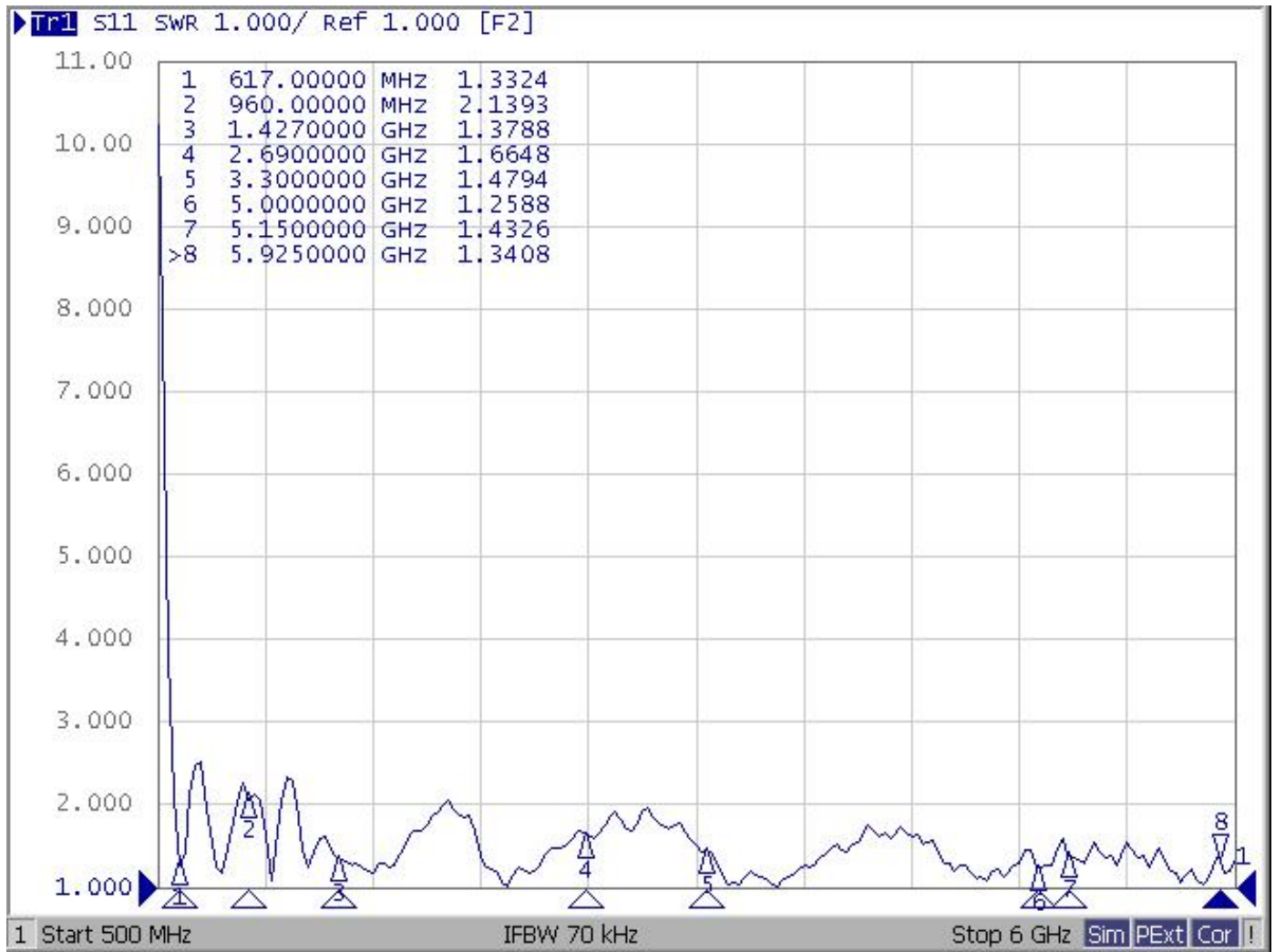
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

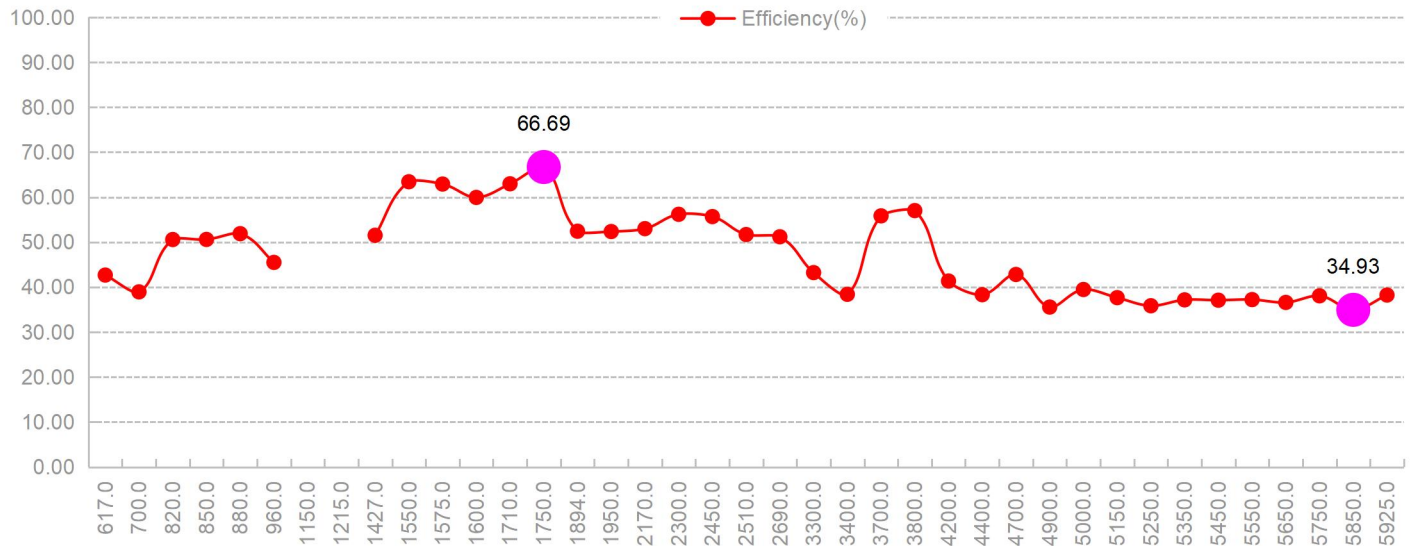
The comprehensive tester is Agilent cmv500



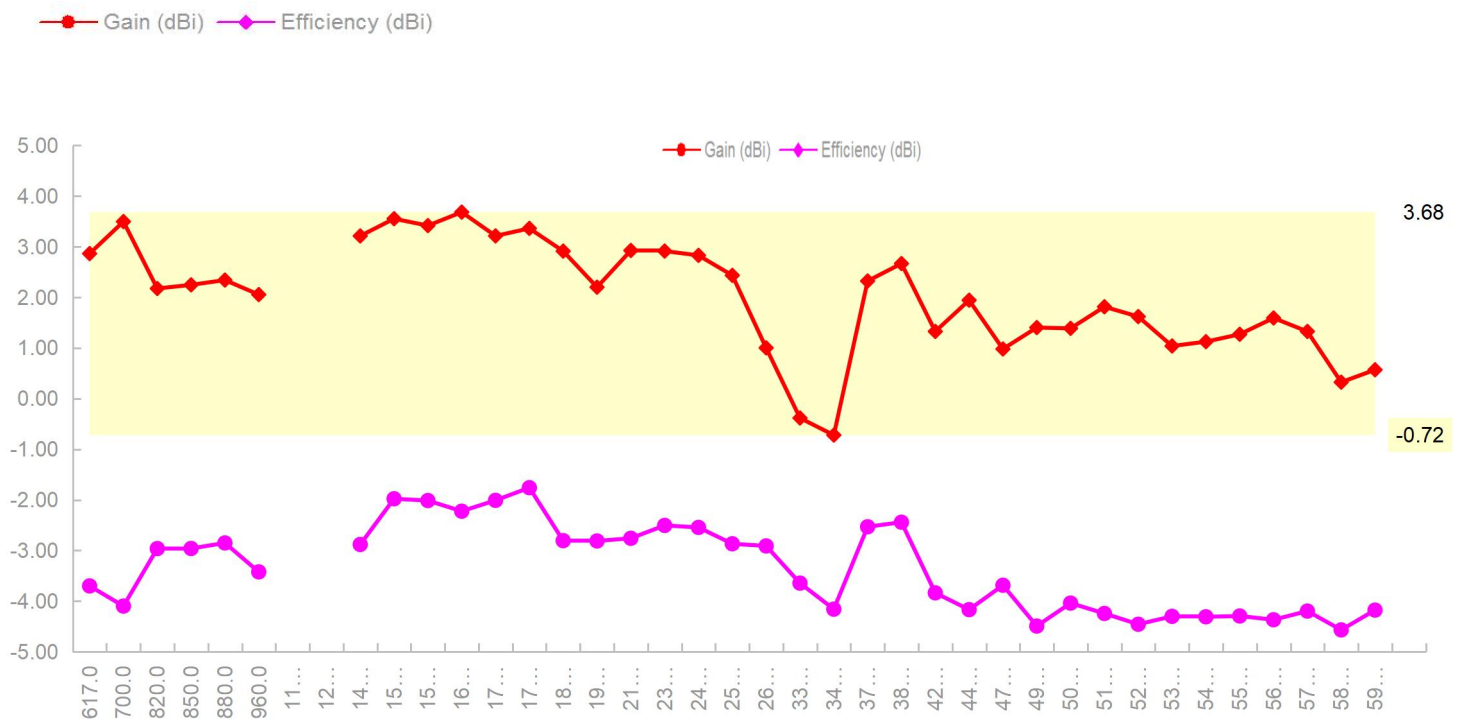
4.1 VSWR



4.2 Efficiency



4.3 Peak gain



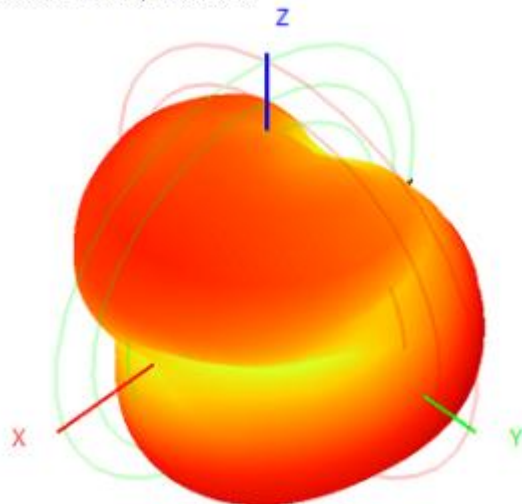
4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
617.0	2.86	42.66
700.0	3.50	38.93
820.0	2.17	50.56
850.0	2.25	50.59
880.0	2.34	51.87
960.0	2.05	45.48
1427.0	3.21	51.51
1550.0	3.55	63.41
1575.0	3.42	62.90
1600.0	3.68	59.93
1710.0	3.21	62.96
1750.0	3.36	66.69
1894.0	2.91	52.42
1950.0	2.20	52.34
2170.0	2.92	52.99
2300.0	2.91	56.17
2450.0	2.83	55.67
2510.0	2.43	51.68
2690.0	-0.72	38.39

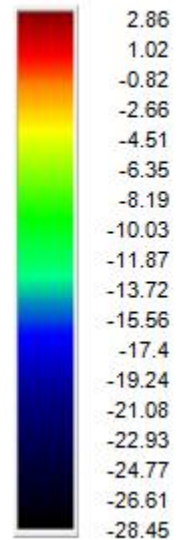
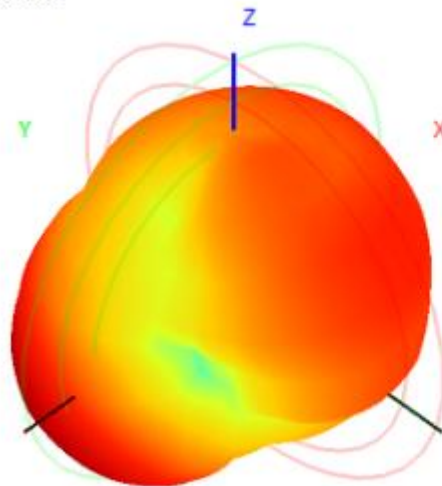
Frequency (MHz)	Gain (dBi)	Efficiency (%)
3300.0	-0.38	43.21
3400.0	-0.72	38.39
3700.0	2.32	55.83
3800.0	2.67	57.00
4200.0	1.33	41.34
4400.0	1.94	38.30
4700.0	0.98	42.80
4900.0	1.40	35.55
5000.0	1.39	39.46
5150.0	1.81	37.64
5250.0	1.62	35.84
5350.0	1.04	37.15
5450.0	1.12	37.08
5550.0	1.27	37.21
5650.0	1.59	36.58
5750.0	1.33	38.05
5850.0	0.32	34.93
5925.0	0.57	38.22

4.5 3D&2D Radiation Patterns

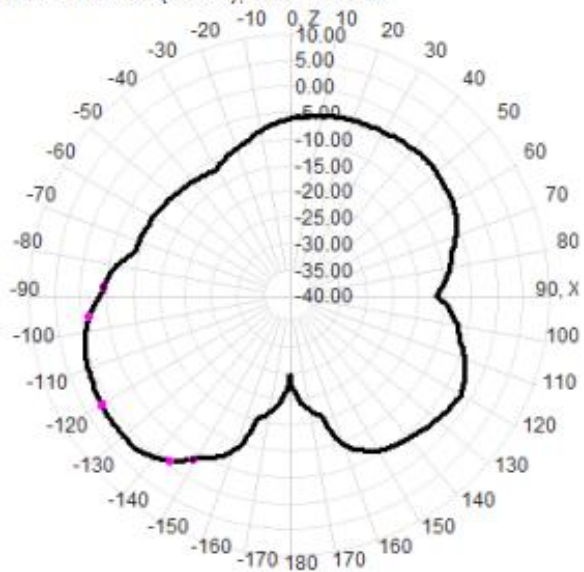
617.0MHz Total, Eff: 42.7%



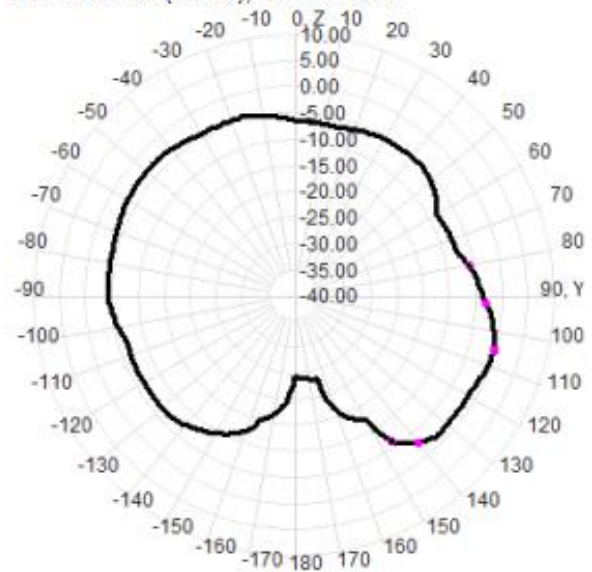
Back View



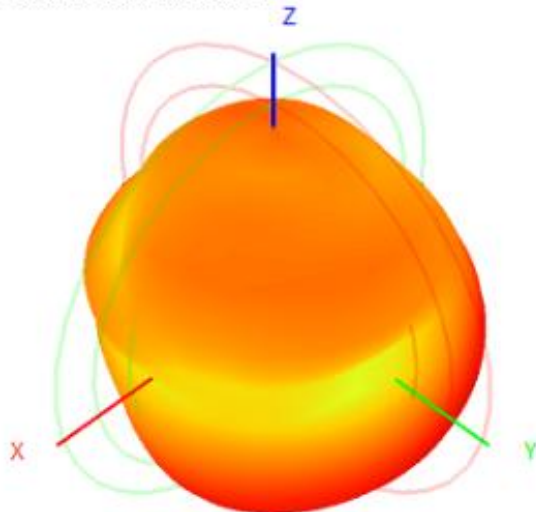
617.0MHz Total(E1-XZ), Max= 1.63dBi



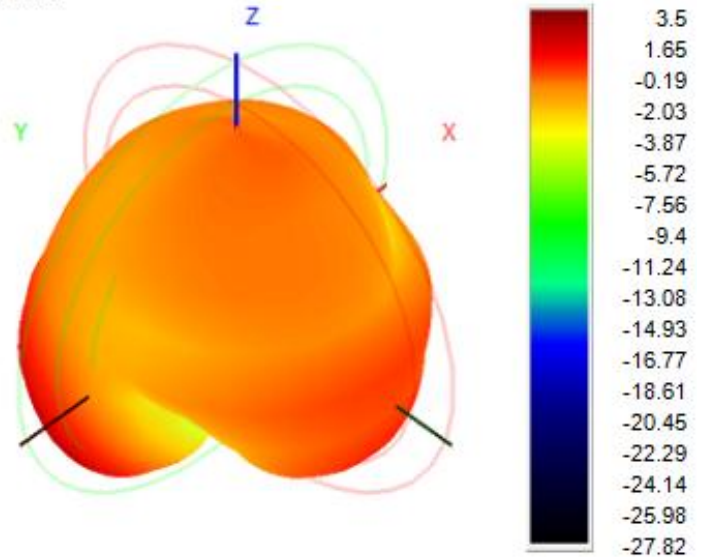
617.0MHz Total(E2-YZ), Max= -0.40dBi



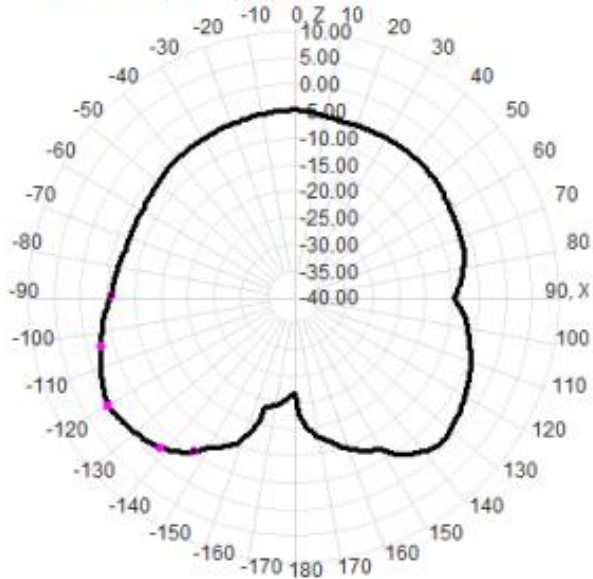
700.0MHz Total, Eff: 38.9%



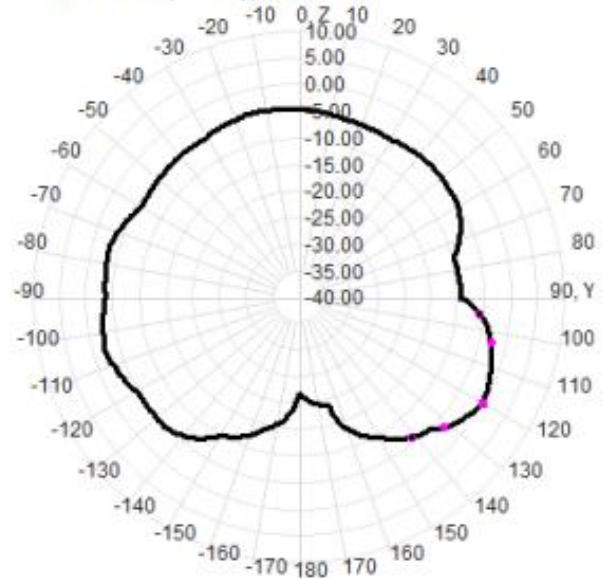
Back View



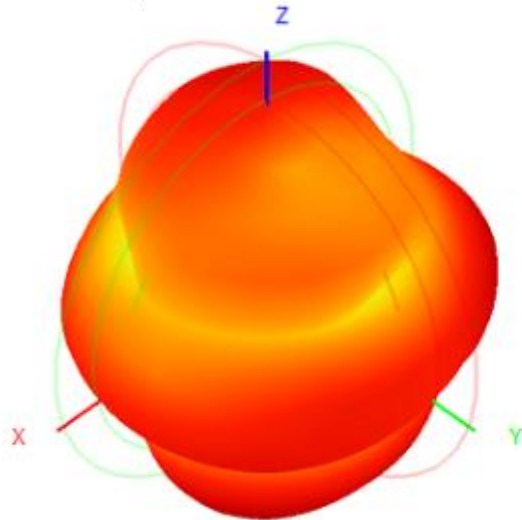
700.0MHz Total(E1-XZ), Max= 0.34dBi



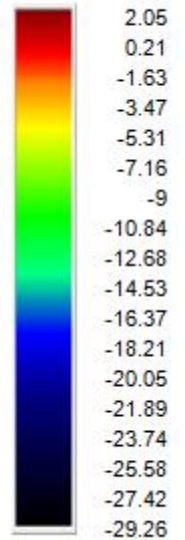
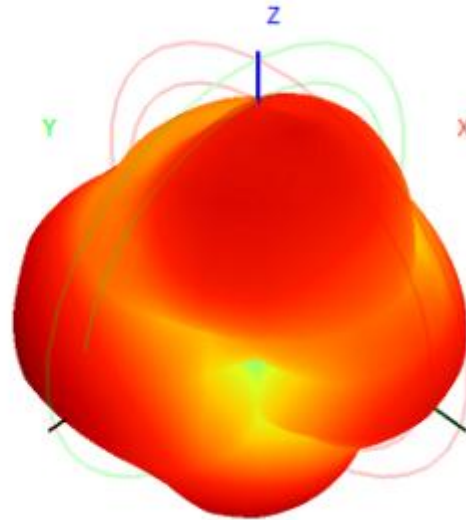
700.0MHz Total(E2-YZ), Max= -0.26dBi



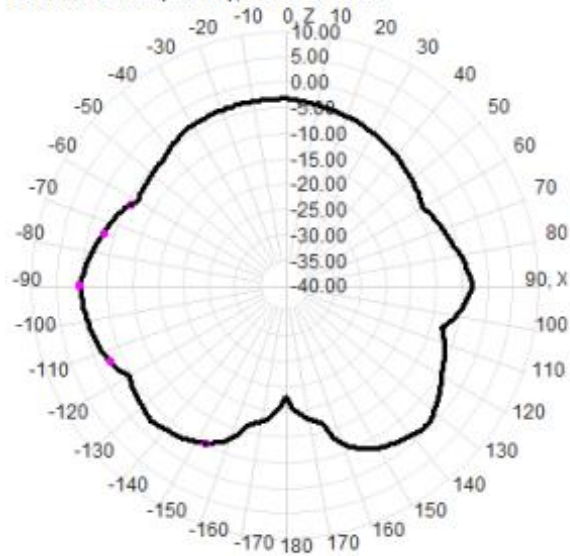
960.0MHz Total, Eff: 45.5%



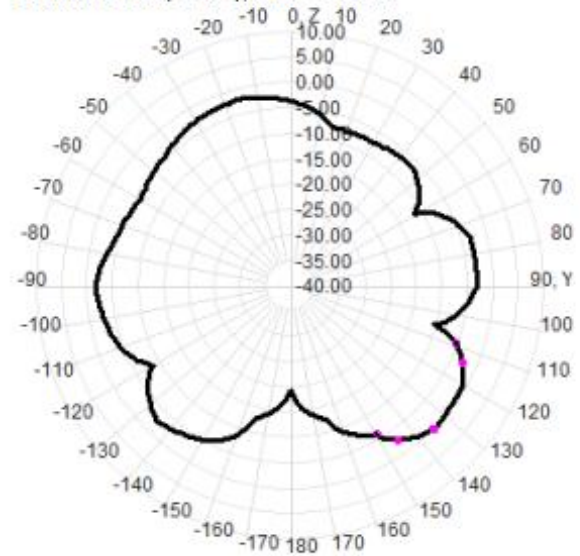
Back View



960.0MHz Total(E1-XZ), Max= 0.33dBi

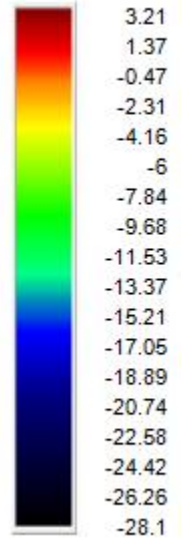
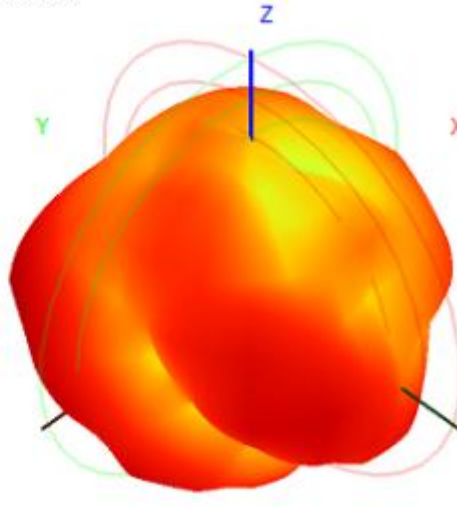
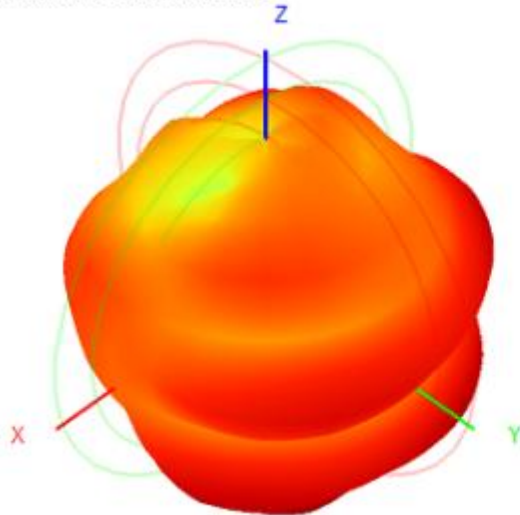


960.0MHz Total(E2-YZ), Max= -0.14dBi

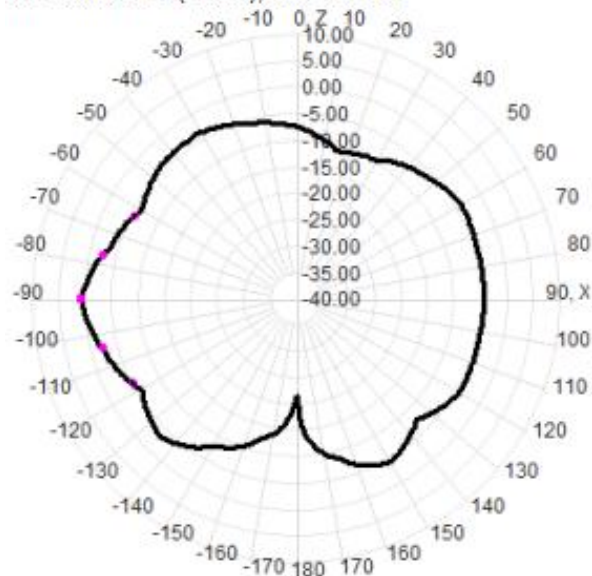


1427.0MHz Total, Eff: 51.5%

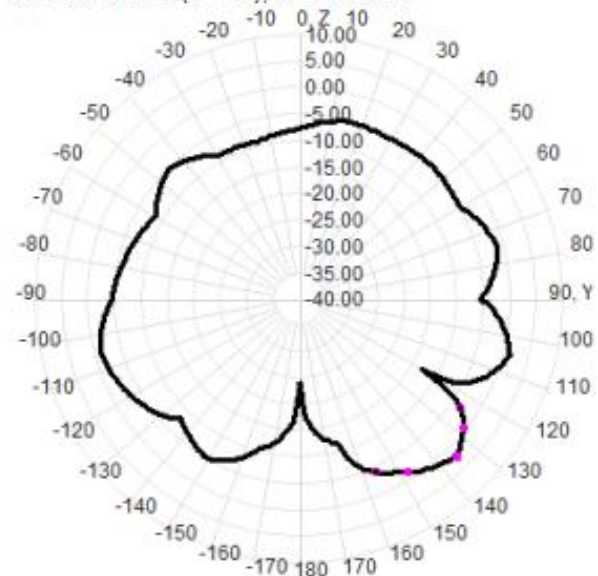
Back View



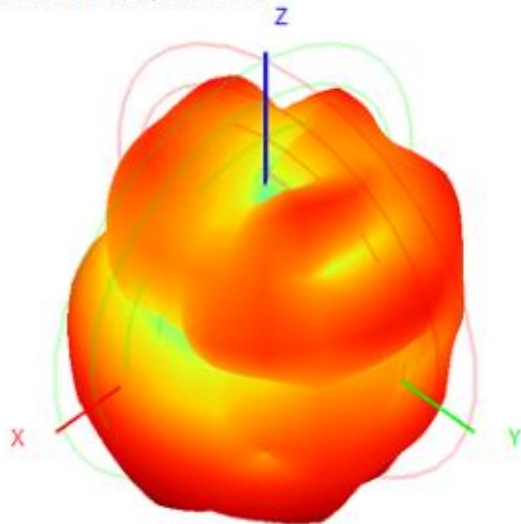
1427.0MHz Total(E1-XZ), Max= 0.69dBi



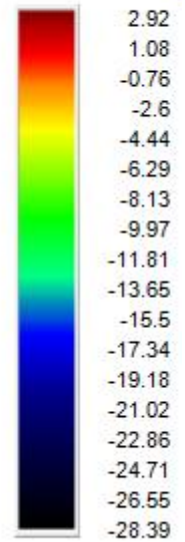
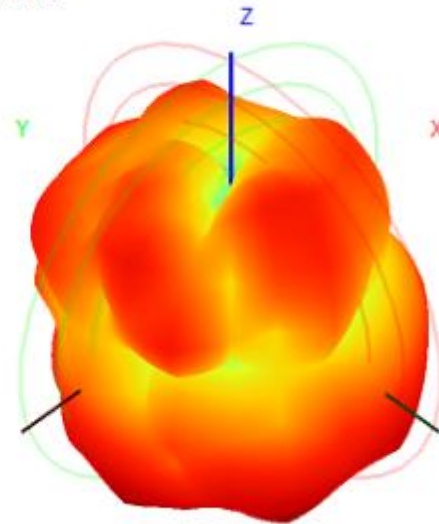
1427.0MHz Total(E2-YZ), Max= 1.81dBi



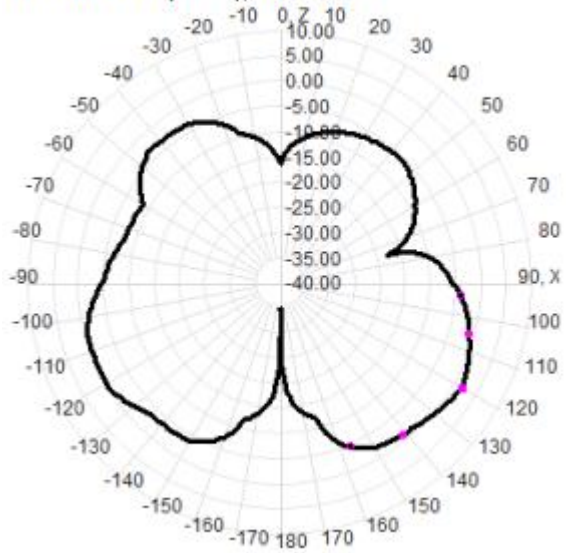
2170.0MHz Total, Eff: 53.0%



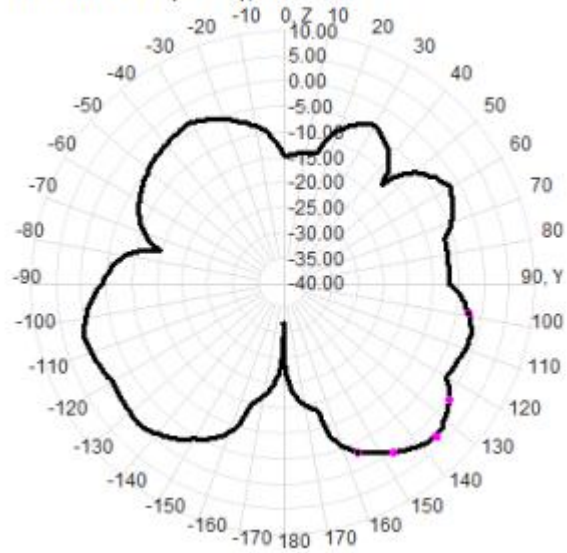
Back View



2170.0MHz Total(E1-XZ), Max= 1.52dBi

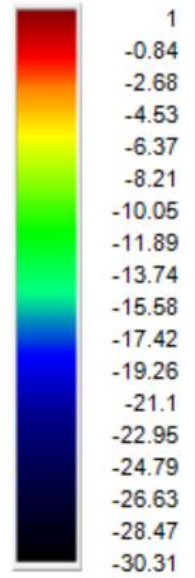
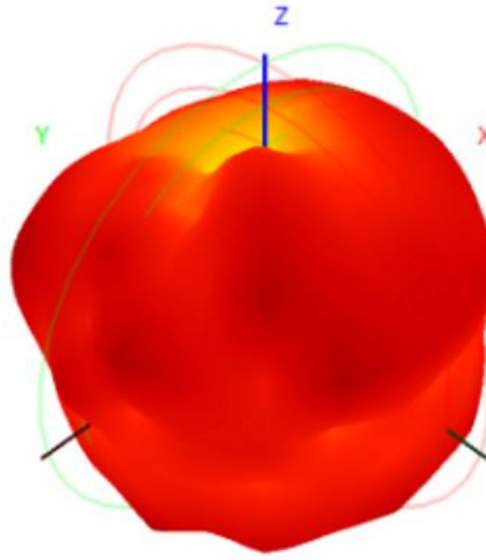
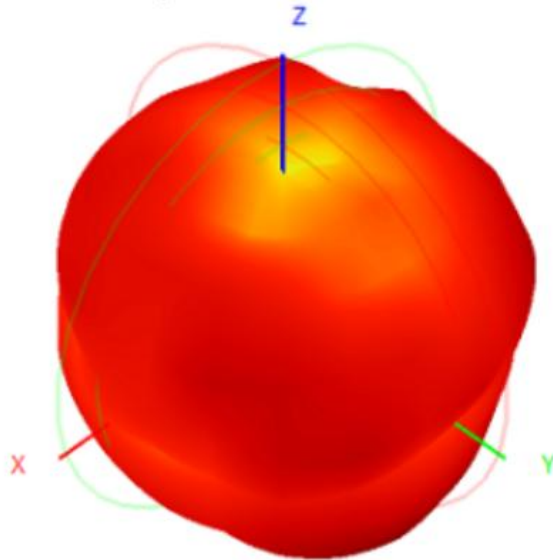


2170.0MHz Total(E2-YZ), Max= 2.92dBi

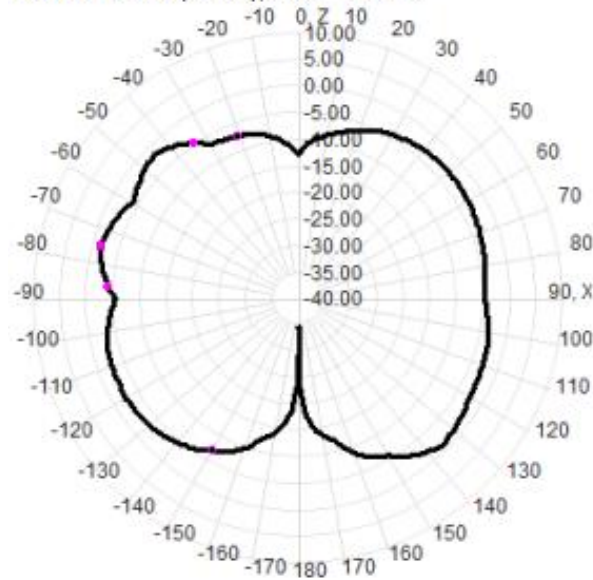


2690.0MHz Total, Eff: 51.2%

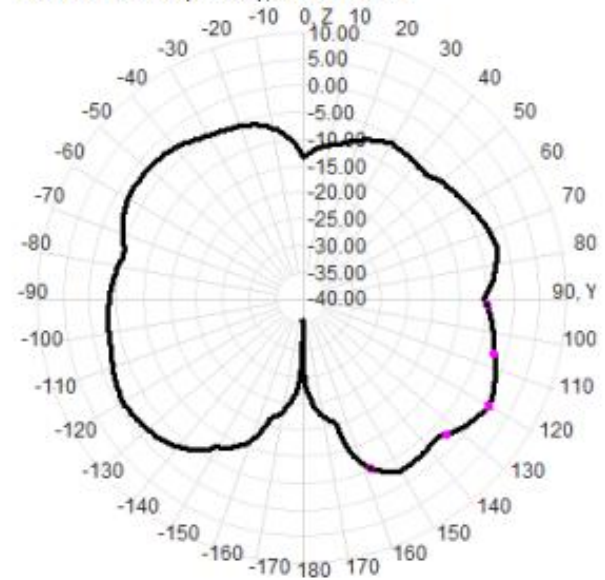
Back View



2690.0MHz Total(E1-XZ), Max= -1.34dBi

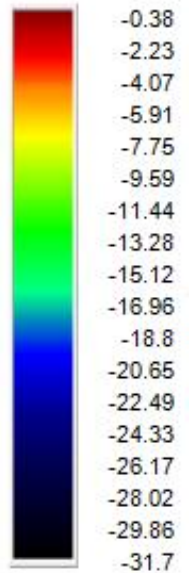
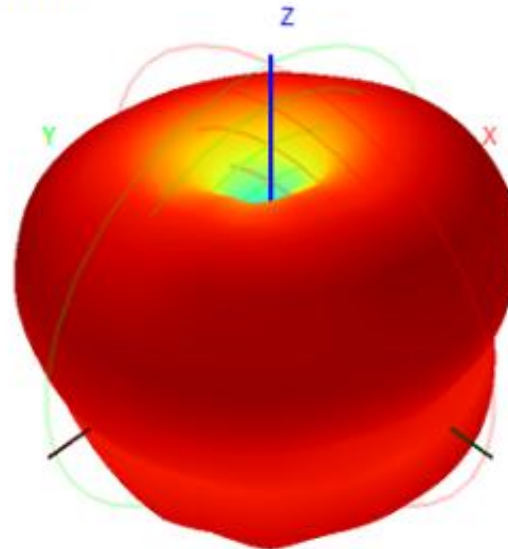
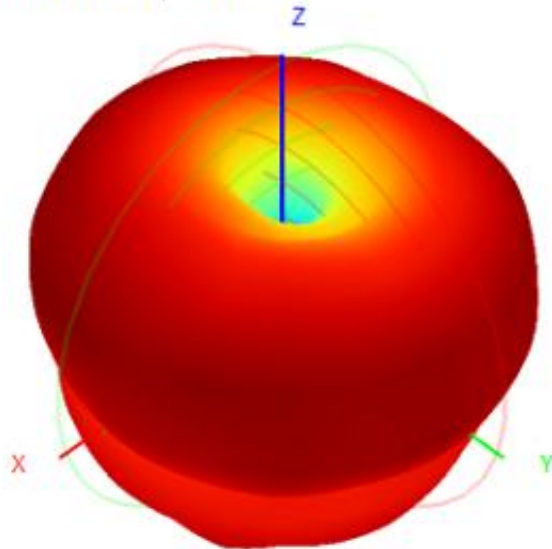


2690.0MHz Total(E2-YZ), Max= 0.53dBi

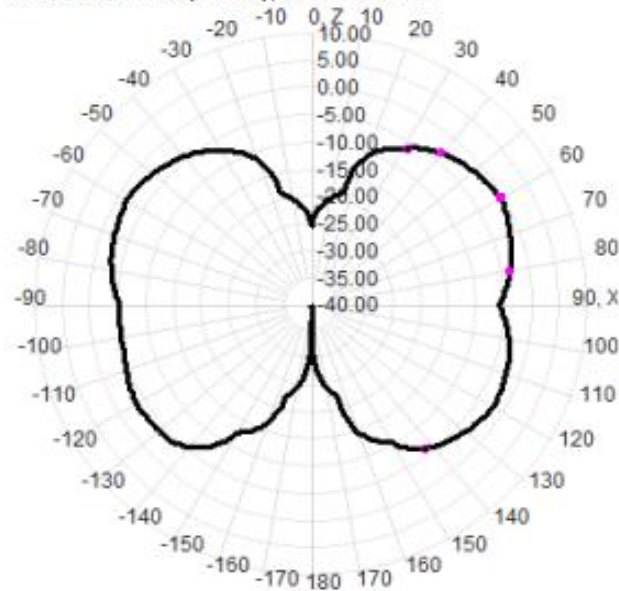


3300.0MHz Total, Eff: 43.2%

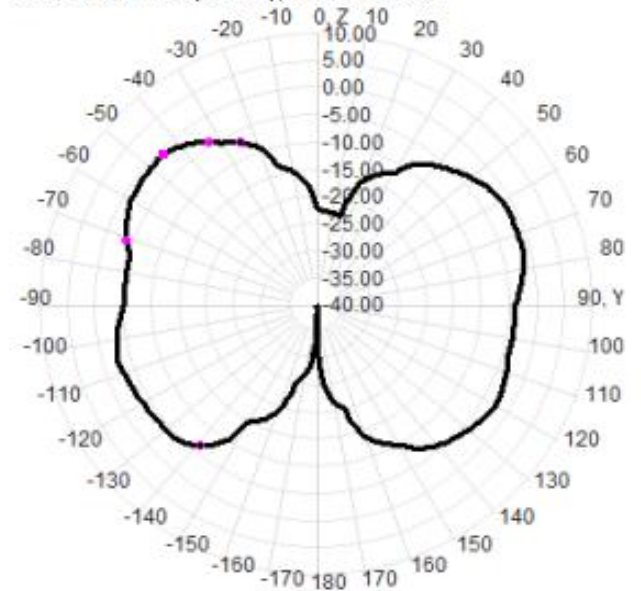
Back View



3300.0MHz Total(E1-XZ), Max=-0.55dBi

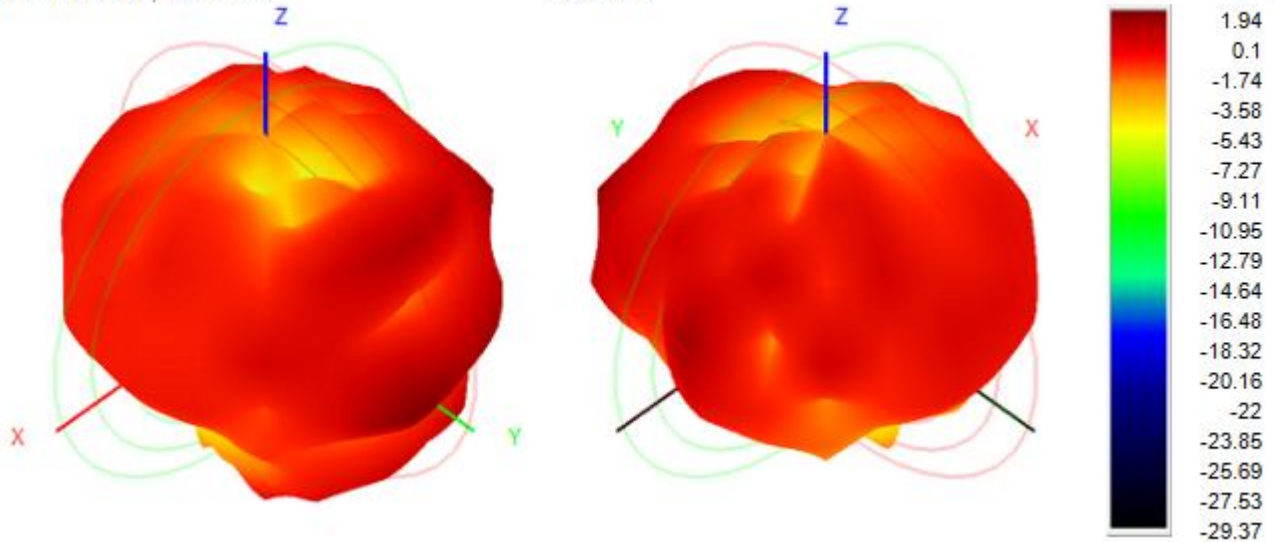


3300.0MHz Total(E2-YZ), Max=-0.86dBi

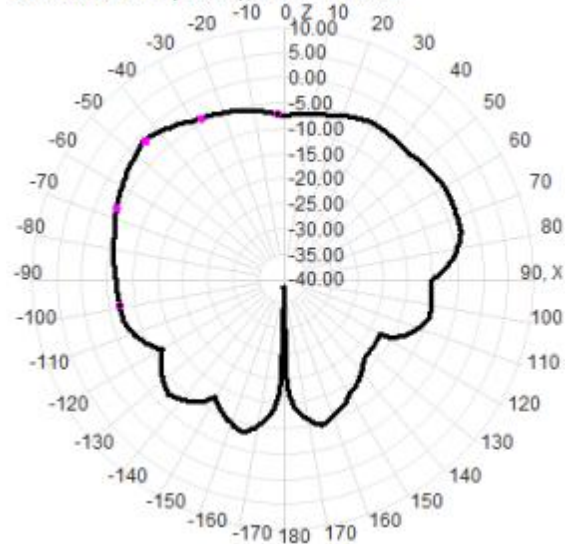


4400.0MHz Total, Eff: 38.3%

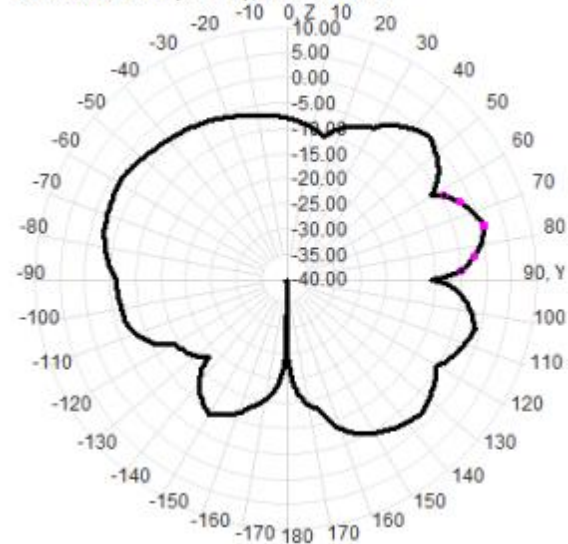
Back View



4400.0MHz Total(E1-XZ), Max= -1.08dBi

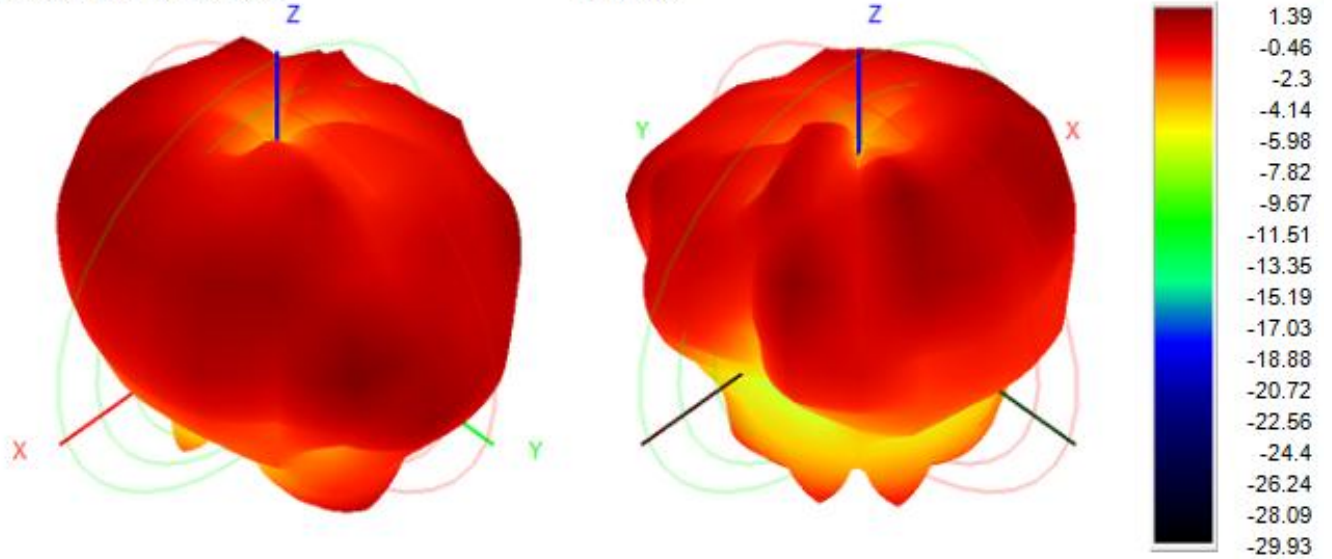


4400.0MHz Total(E2-YZ), Max= 0.68dBi

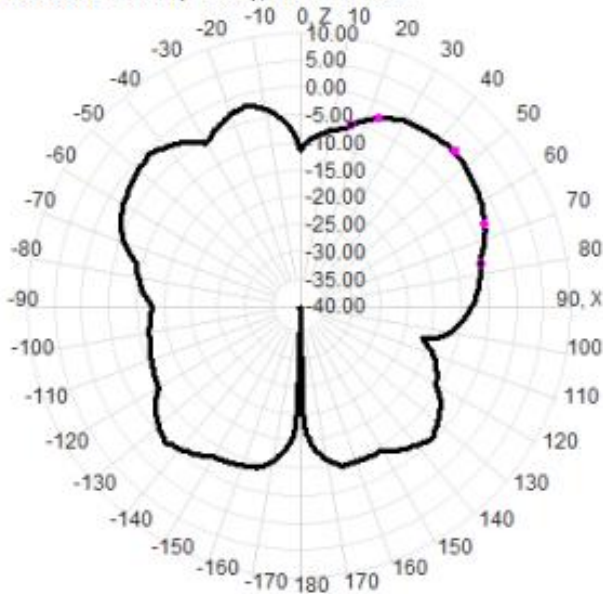


5000.0MHz Total, Eff: 39.5%

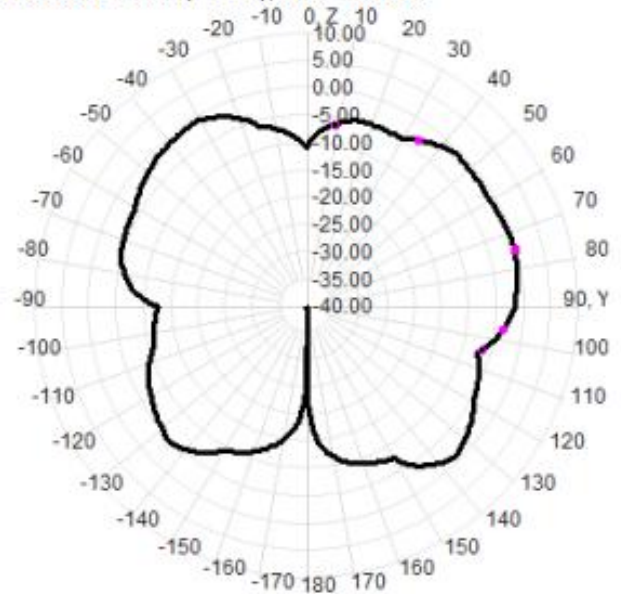
Back View



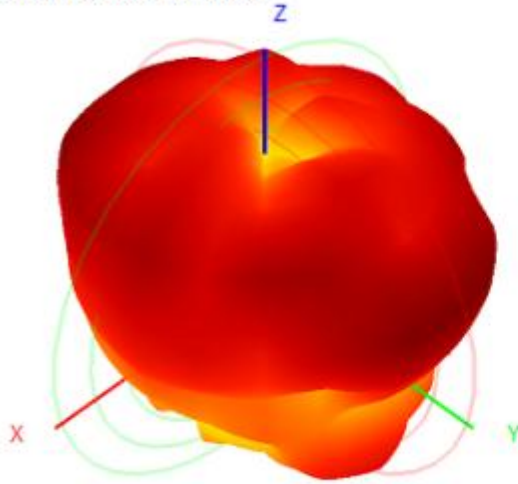
5000.0MHz Total(E1-XZ), Max= 0.13dBi



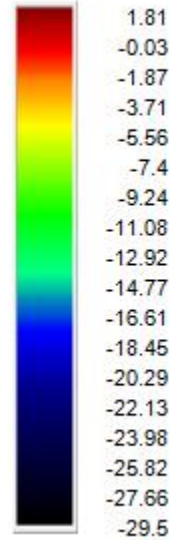
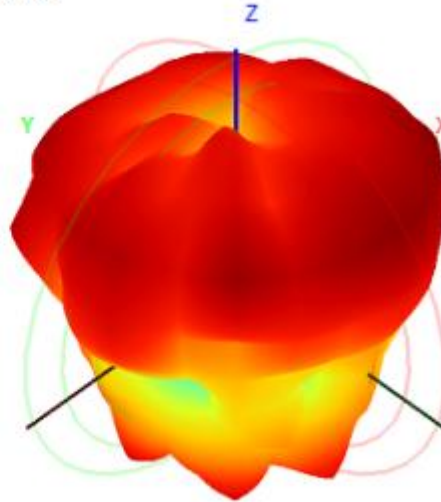
5000.0MHz Total(E2-YZ), Max= -0.48dBi



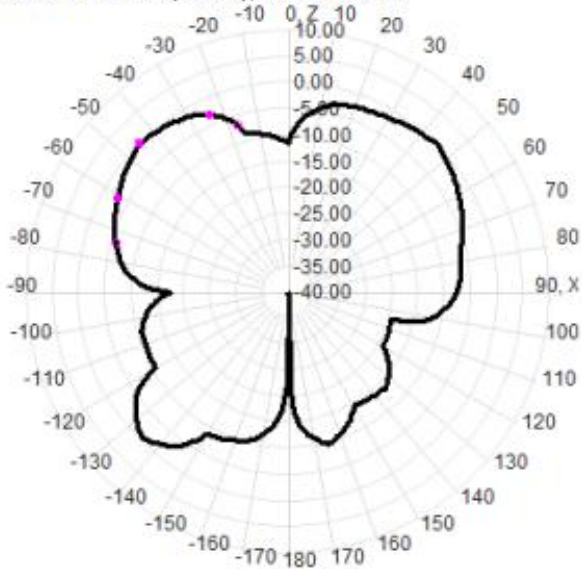
5150.0MHz Total, Eff: 37.6%



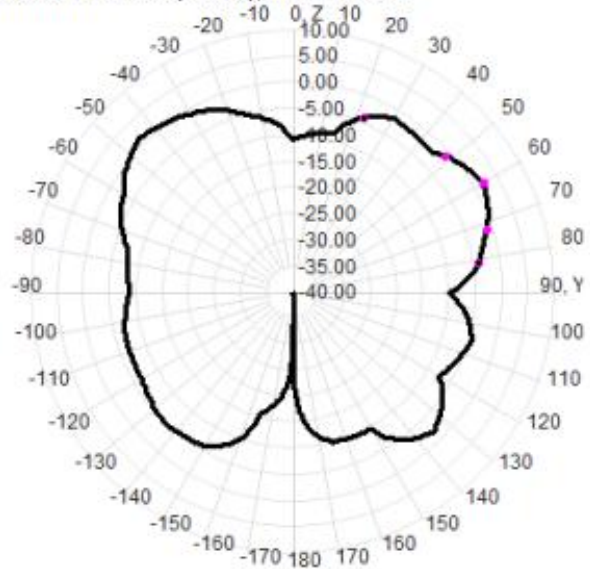
Back View



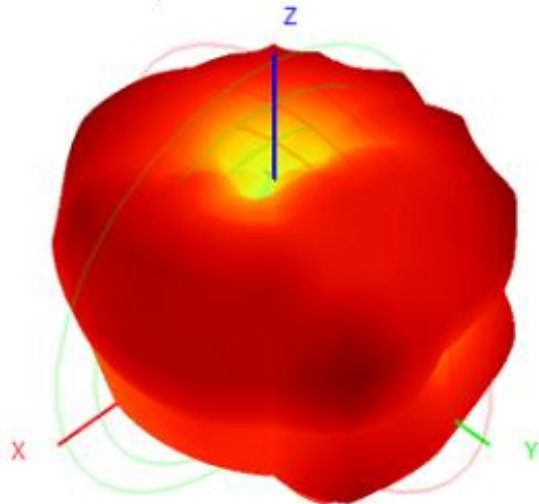
5150.0MHz Total(E1-XZ), Max= -0.02dBi



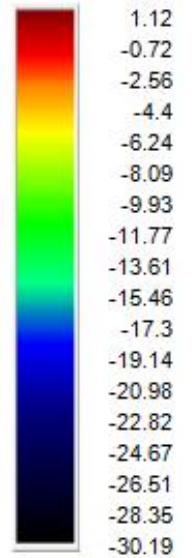
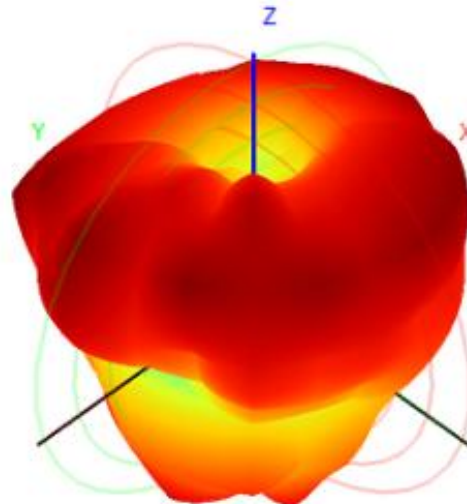
5150.0MHz Total(E2-YZ), Max= 1.81dBi



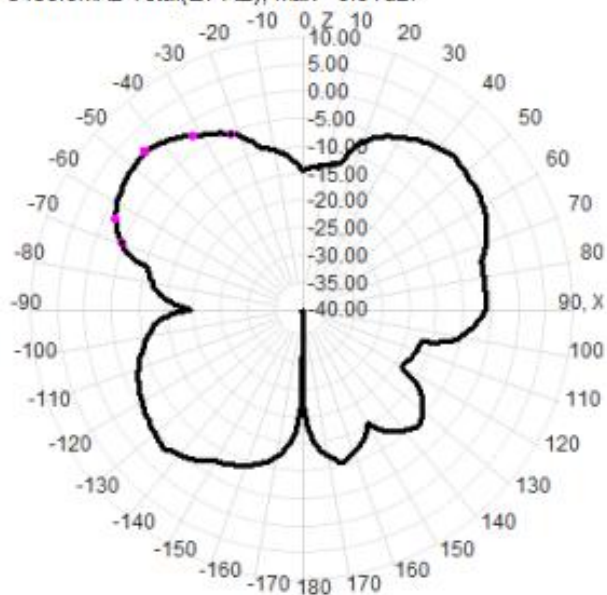
5450.0MHz Total, Eff: 37.1%



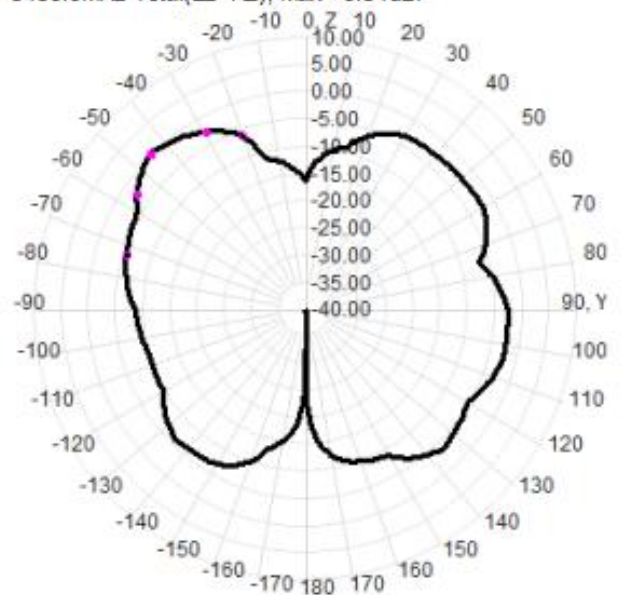
Back View



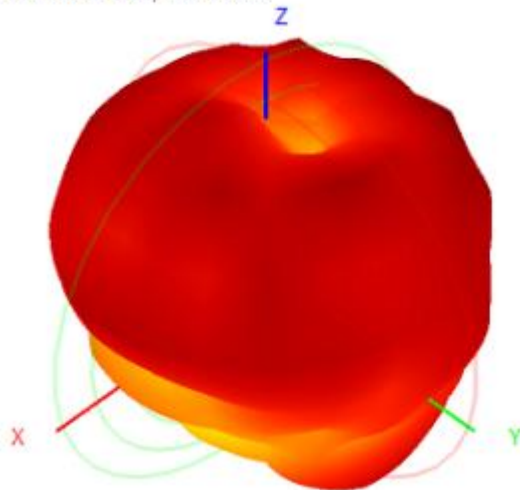
5450.0MHz Total(E1-XZ), Max= 0.91dBi



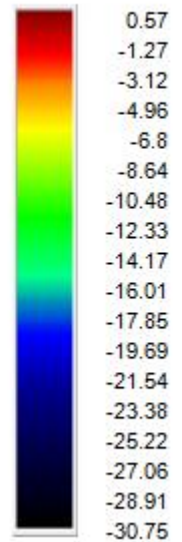
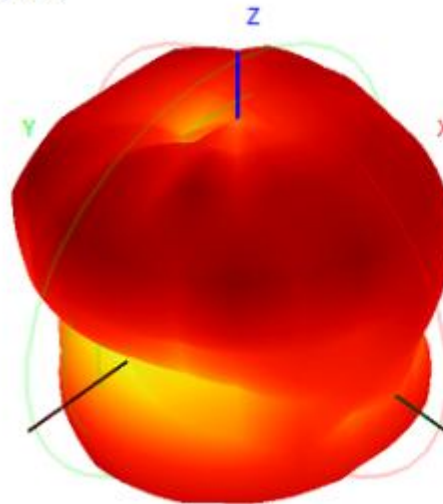
5450.0MHz Total(E2-YZ), Max= 0.34dBi



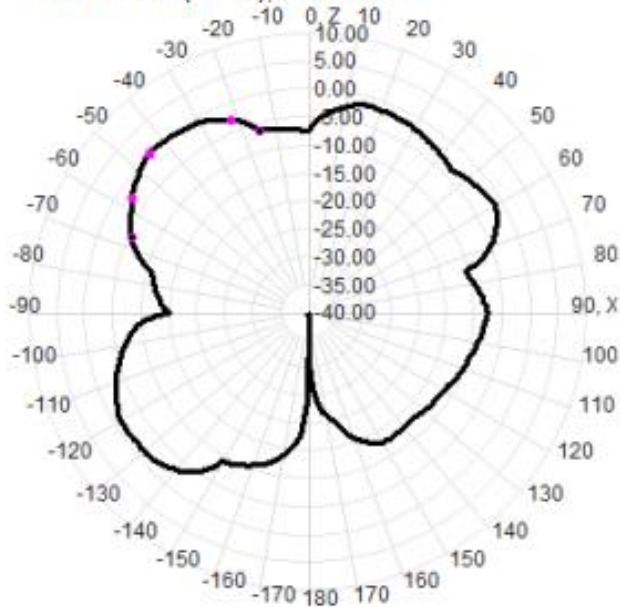
5925.0MHz Total, Eff: 38.2%



Back View



5925.0MHz Total(E1-XZ), Max= 0.30dBi



5925.0MHz Total(E2-YZ), Max= -0.88dBi

