

CW-NZ-0225

400-6000MHz Internal Antenna

Key Features

Frequency: 400-6000MHz

SMA Female Connector

Dimensions: 300*200*1.55mm

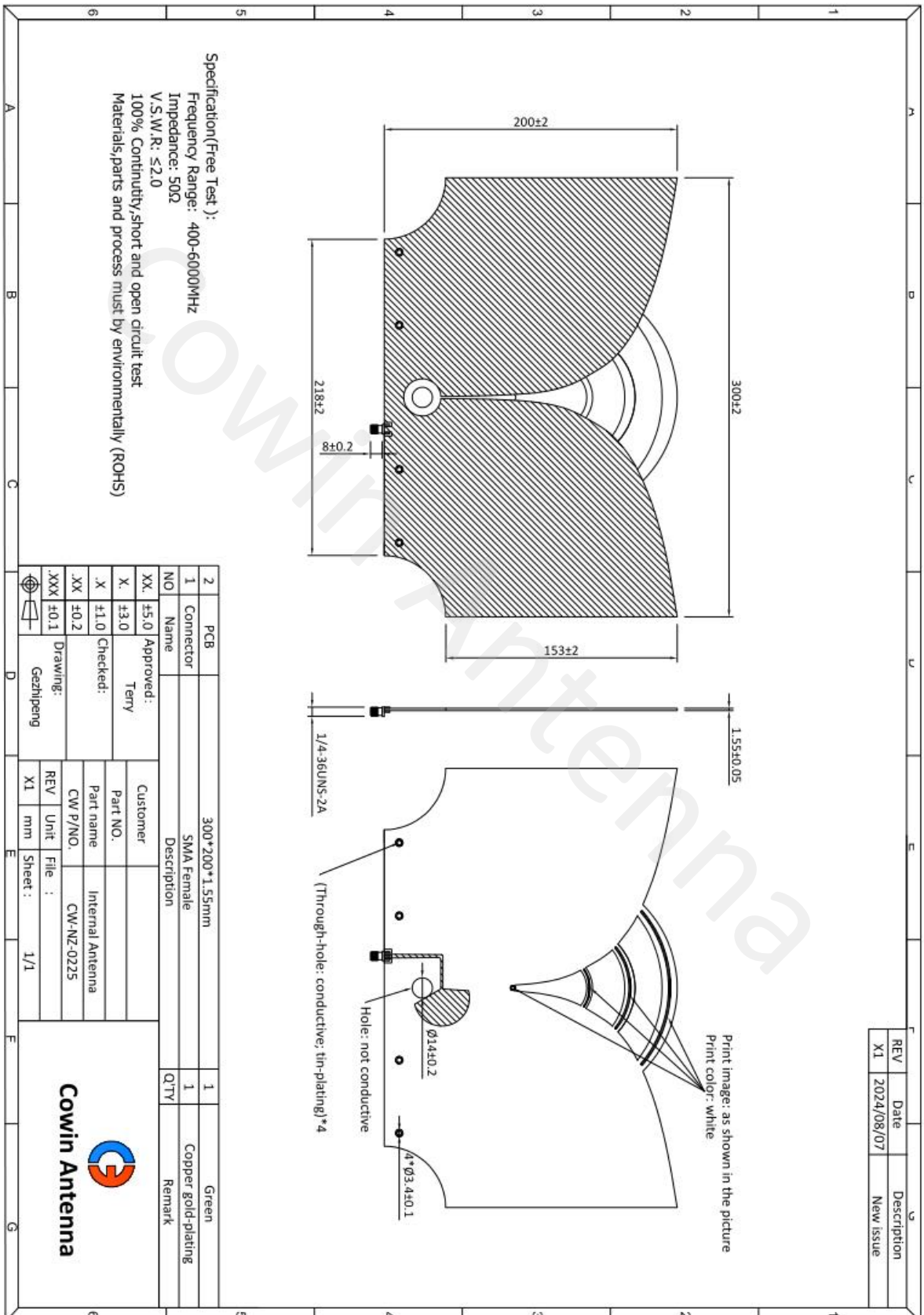


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	400-6000
VSWR	≤2.0
Efficiency (%)	99.83
Peak Gain (dBi)	8.74
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Female

2. Material and environmental characteristics

External Structure	N/A
Inner Structure	PCB
Cable Type	N/A
Connector Type	SMA Female
Dimensions (mm)	300*200*1.55
Antenna Colour	Green
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



4. Antenna test parameters

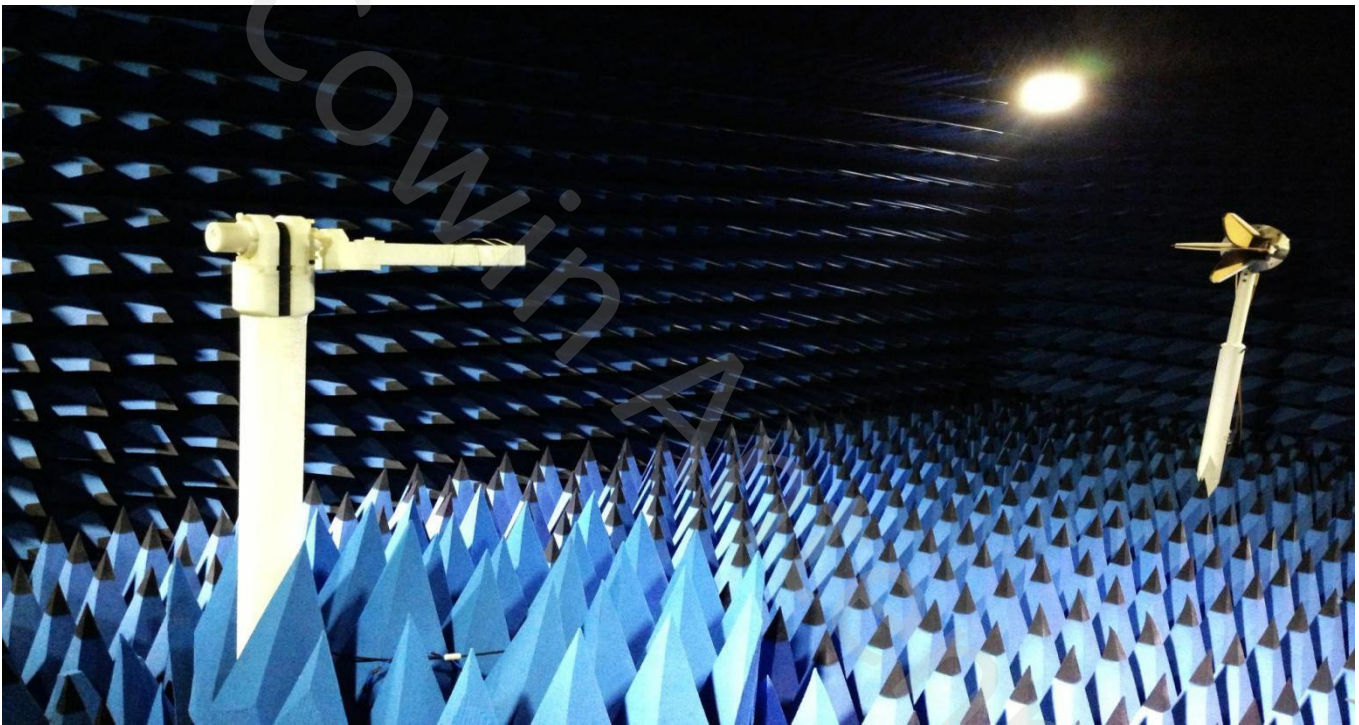
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

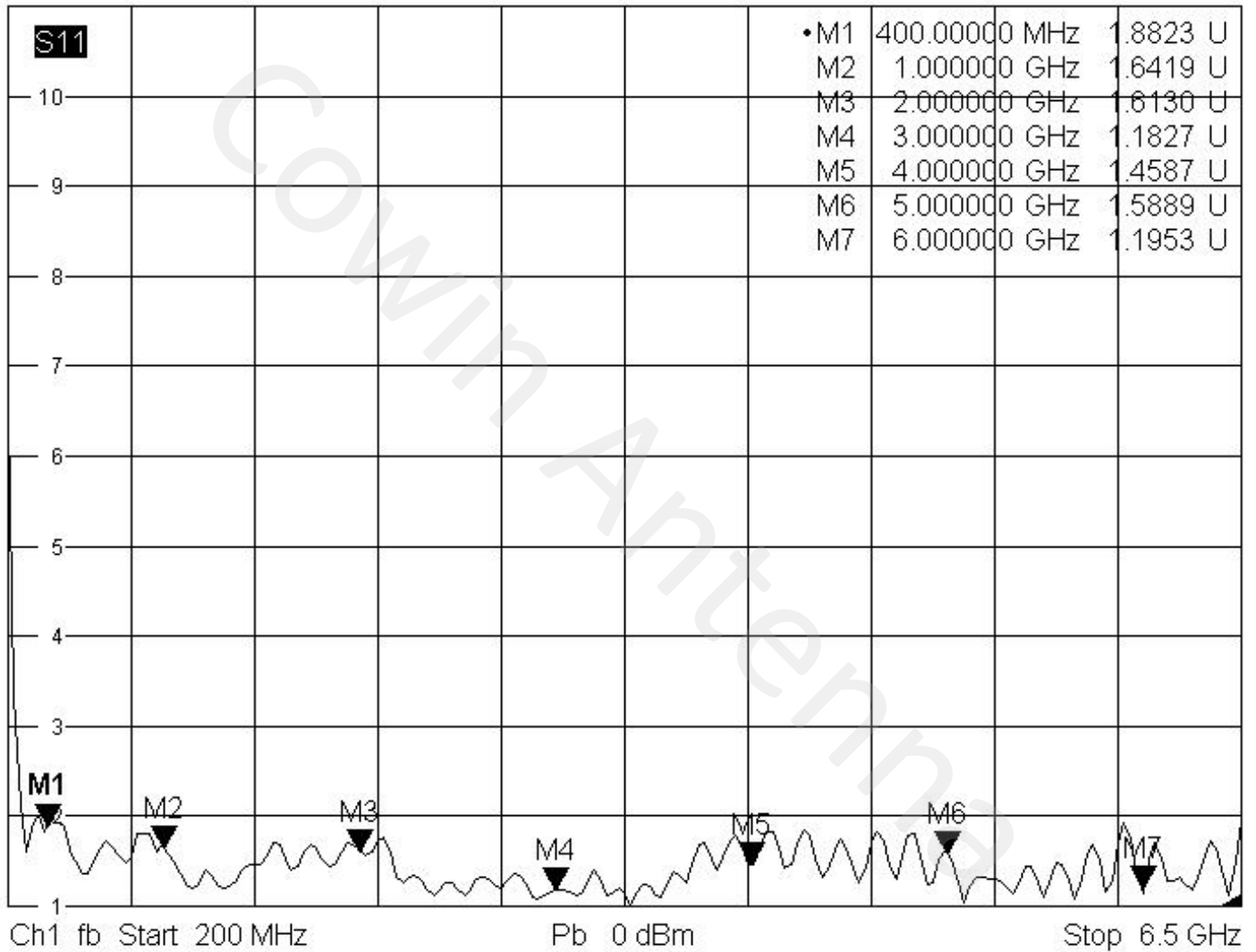
The comprehensive tester is Agilent cmv500



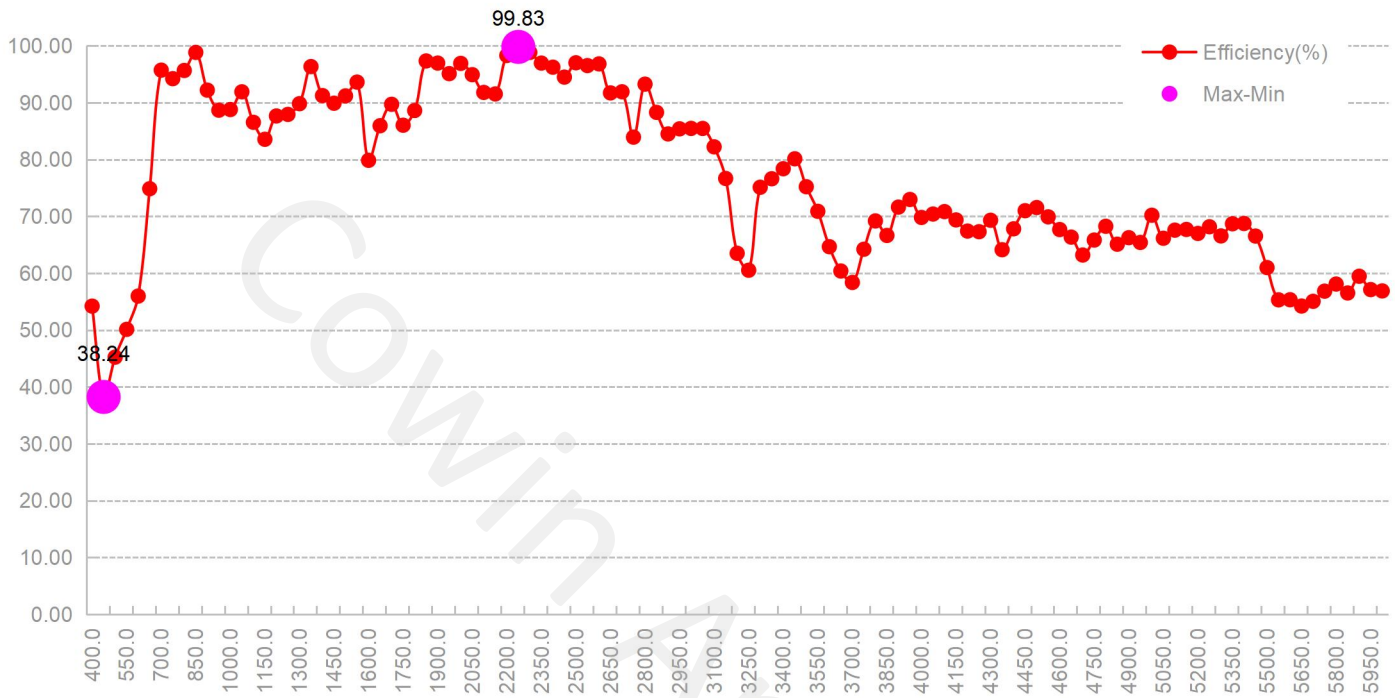
4.1 VSWR



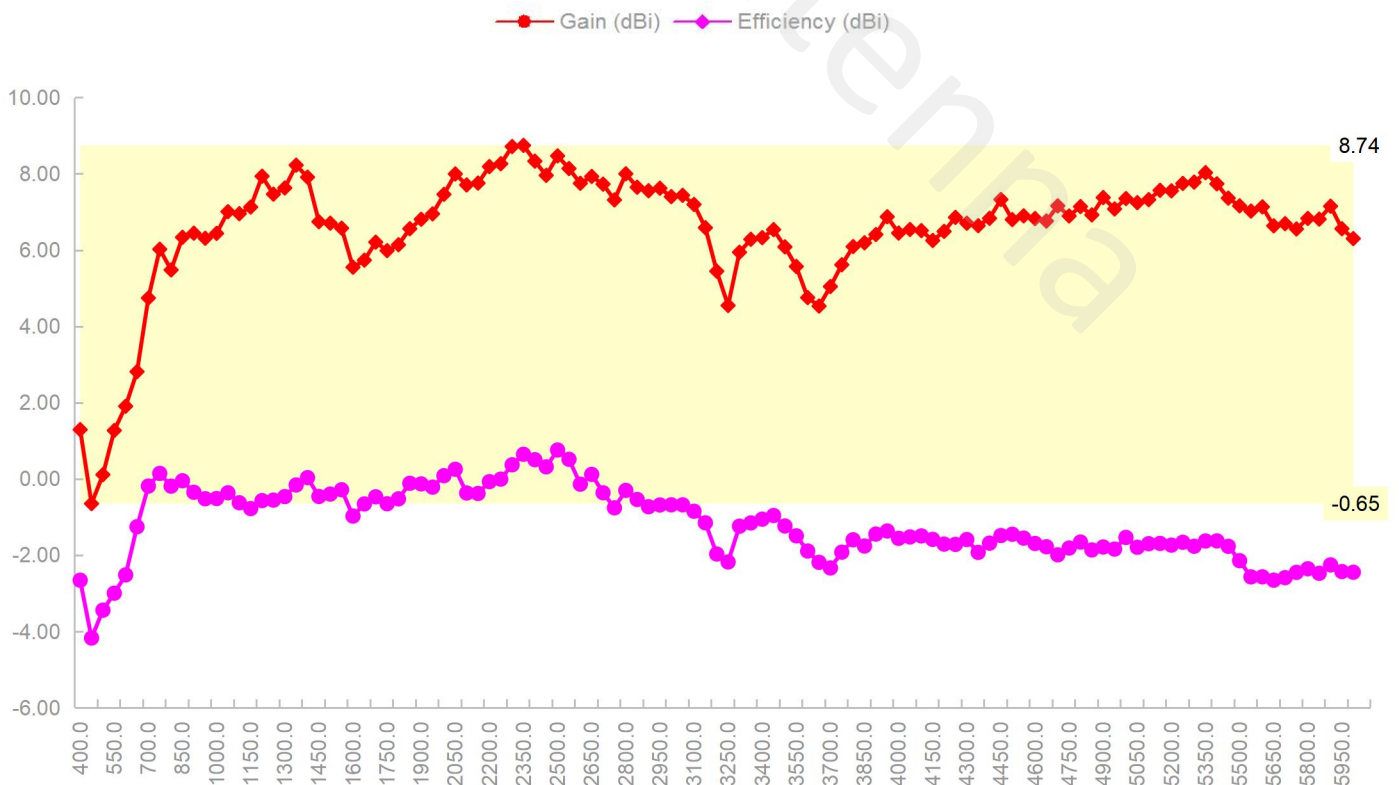
Trc1 — S11 SWR 1 U/ Ref 1 U Cal Off Offs 1 (Max)



4.2 Efficiency



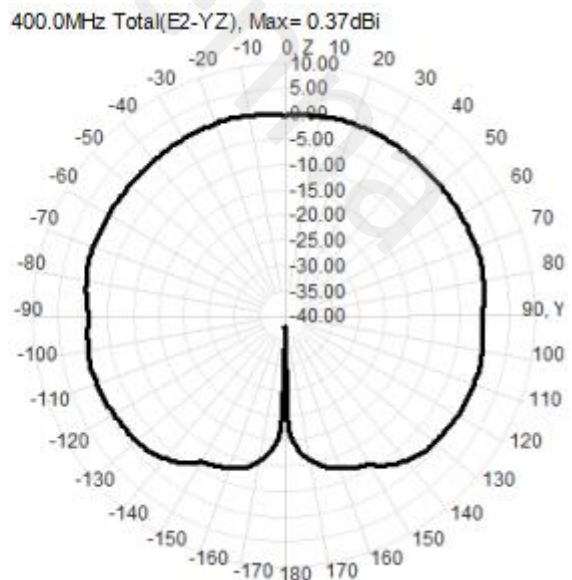
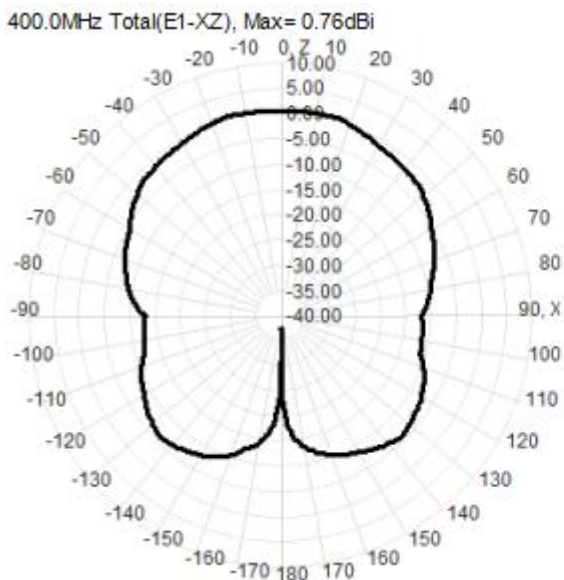
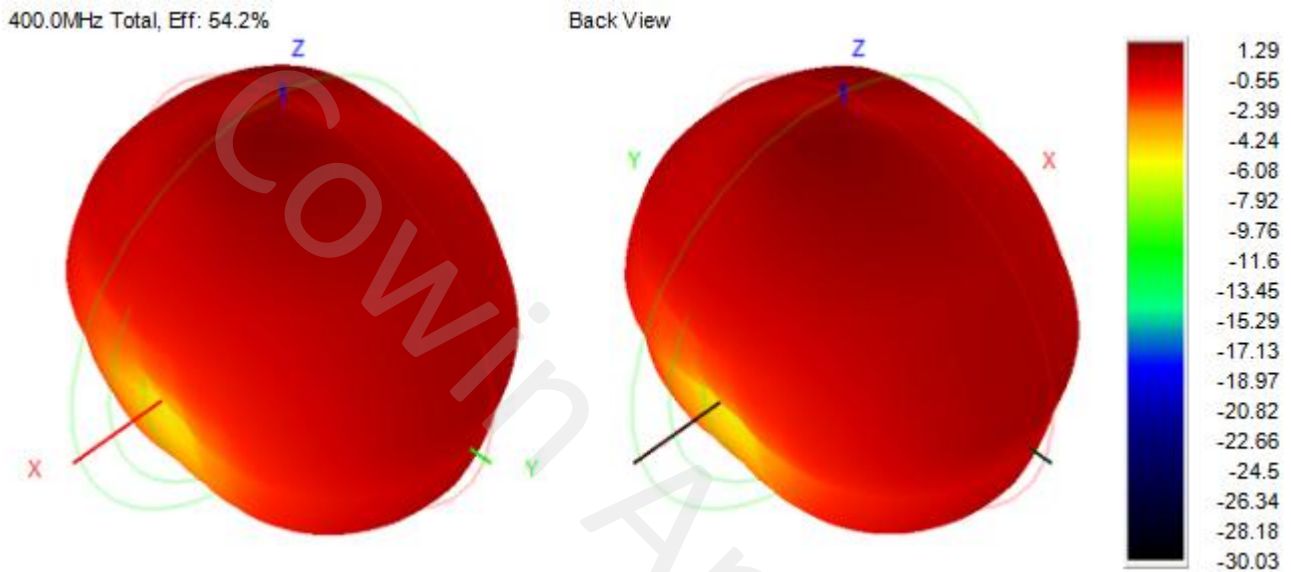
4.3 Peak gain



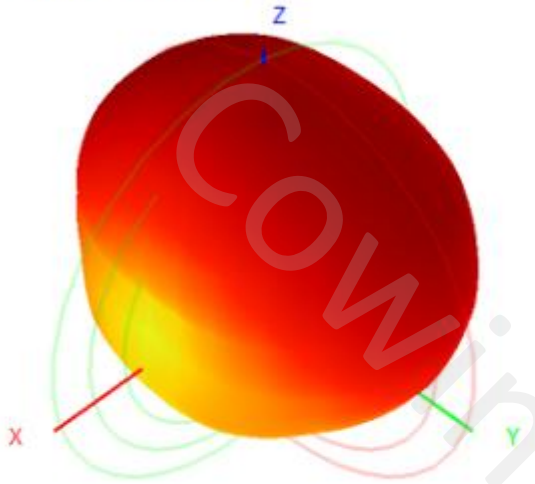
4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
400.0	1.29	54.22
500.0	0.11	45.25
1000.0	6.44	88.80
1500.0	6.70	91.20
2000.0	7.46	96.92
2500.0	8.47	97.03
3000.0	7.40	85.48
3500.0	6.08	75.22
4000.0	6.44	69.82
4500.0	6.80	71.56
5000.0	7.35	70.21
5500.0	7.16	61.00
6000.0	6.30	56.89

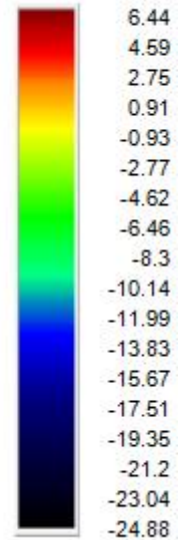
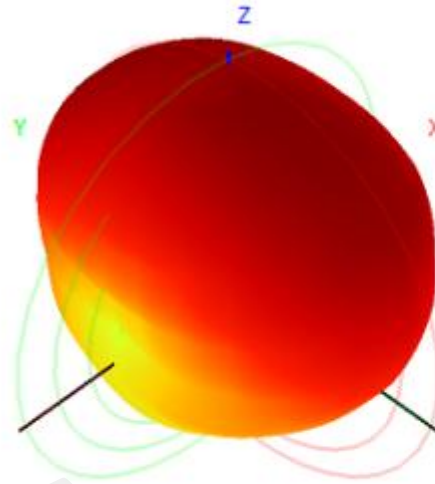
4.5 3D&2D Radiation Patterns



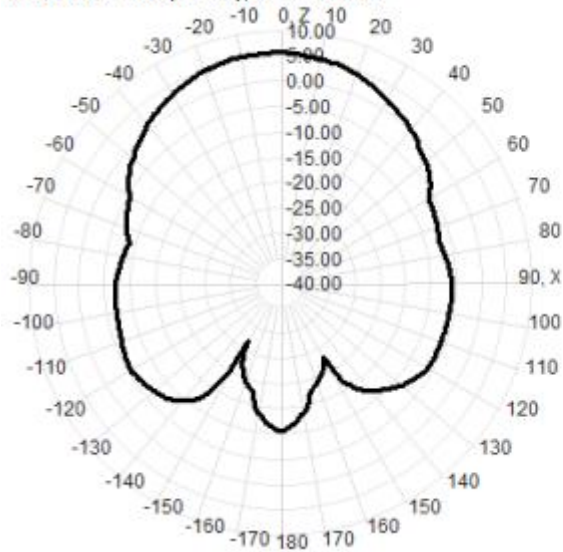
1000.0MHz Total, Eff: 88.8%



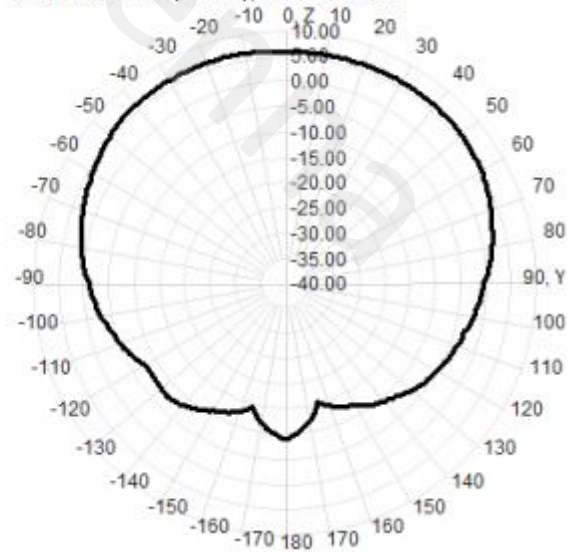
Back View



1000.0MHz Total(E1-XZ), Max= 5.77dBi

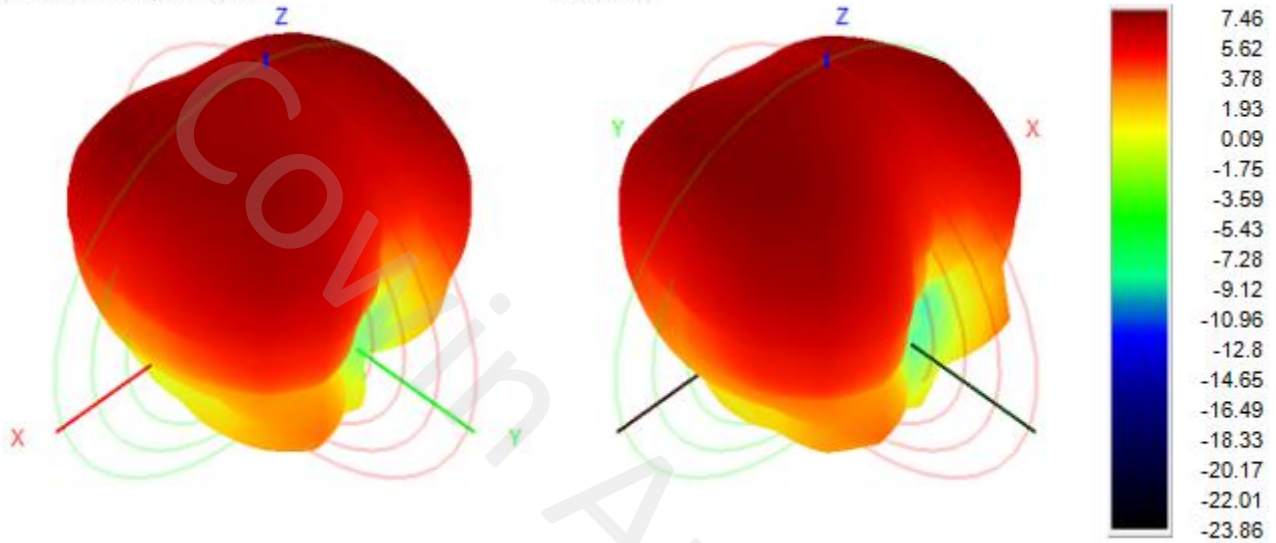


1000.0MHz Total(E2-YZ), Max= 6.31dBi



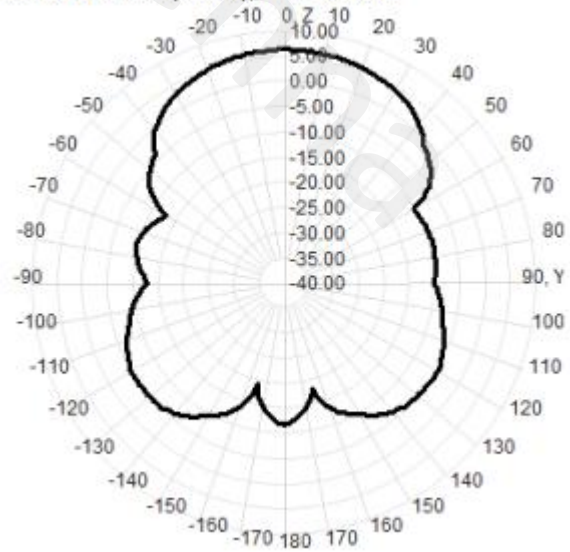
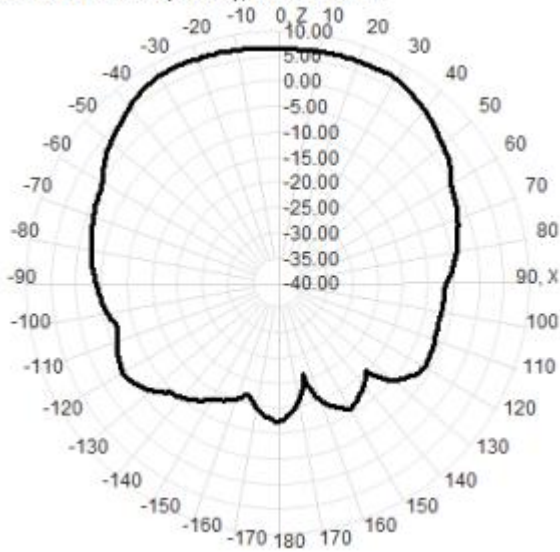
2000.0MHz Total, Eff: 96.9%

Back View

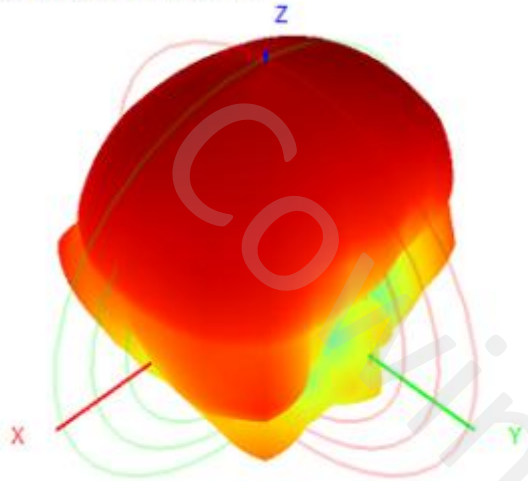


2000.0MHz Total(E1-XZ), Max= 7.39dBi

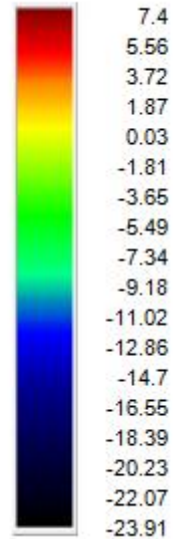
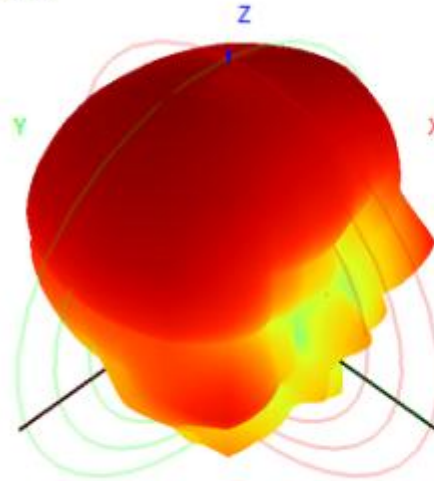
2000.0MHz Total(E2-YZ), Max= 6.37dBi



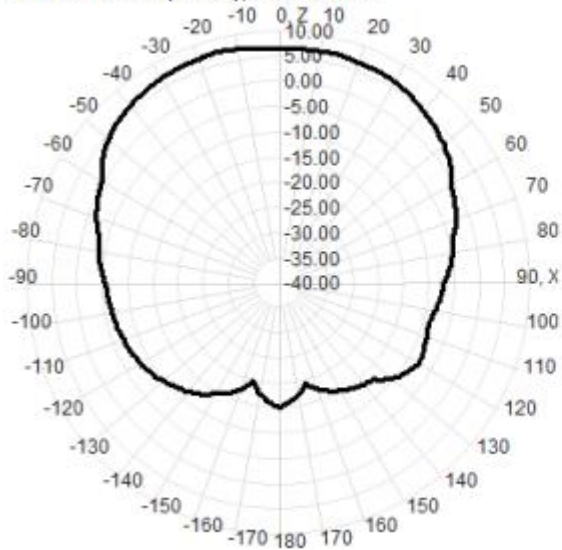
3000.0MHz Total, Eff: 85.5%



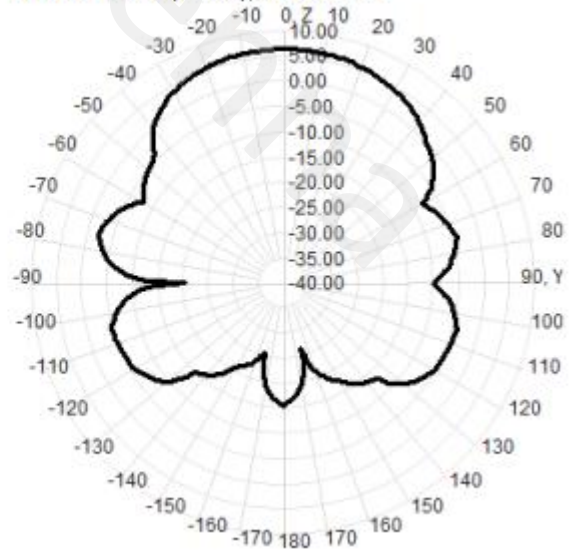
Back View



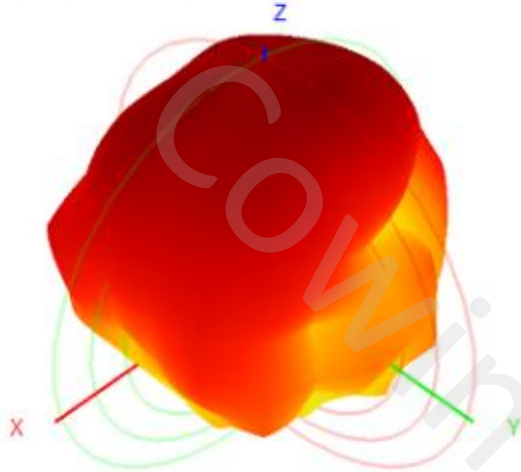
3000.0MHz Total(E1-XZ), Max= 7.37dBi



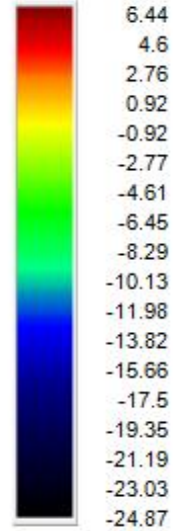
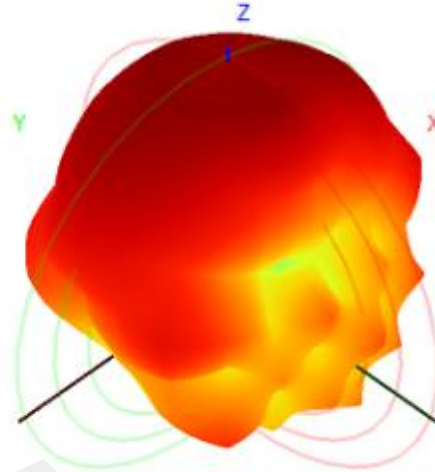
3000.0MHz Total(E2-YZ), Max= 6.44dBi



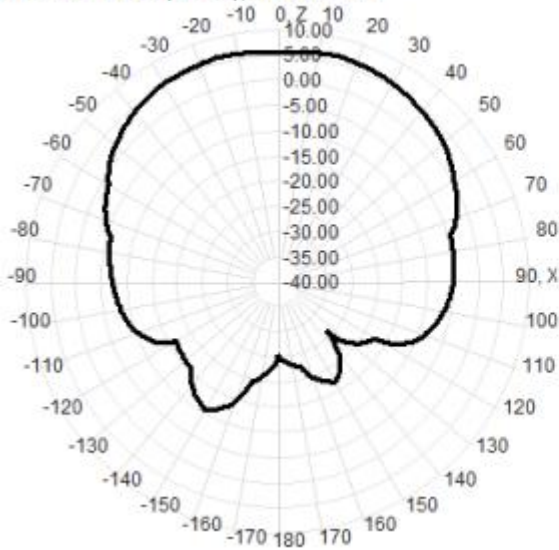
4000.0MHz Total, Eff: 69.8%



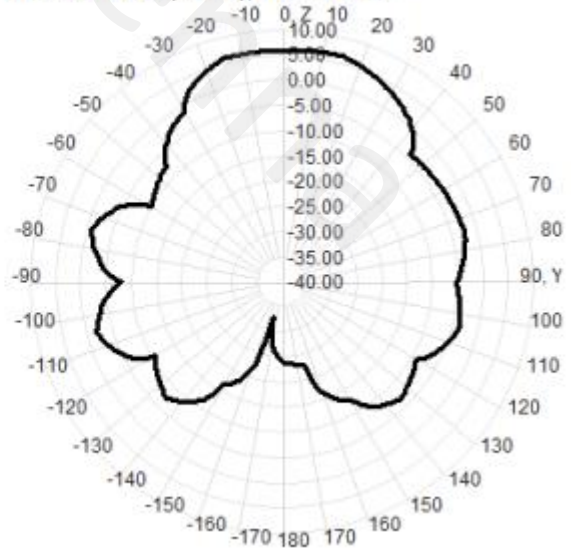
Back View



4000.0MHz Total(E1-XZ), Max= 6.35dBi

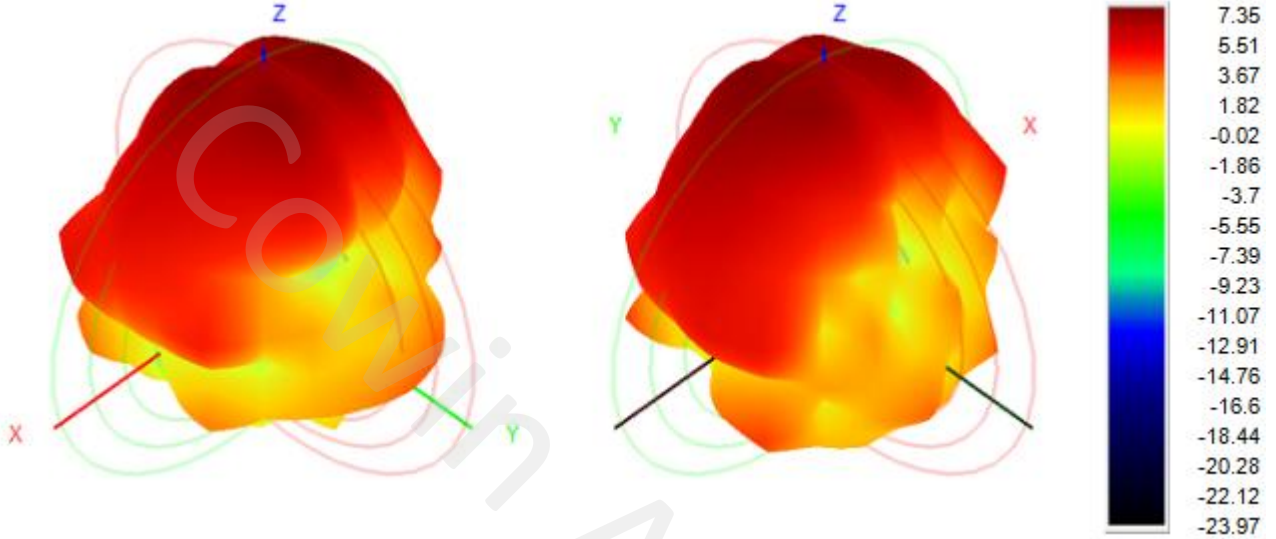


4000.0MHz Total(E2-YZ), Max= 6.31dBi

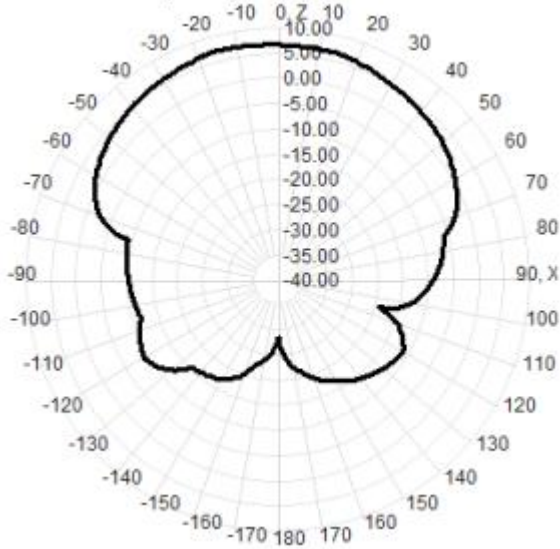


5000.0MHz Total, Eff: 70.2%

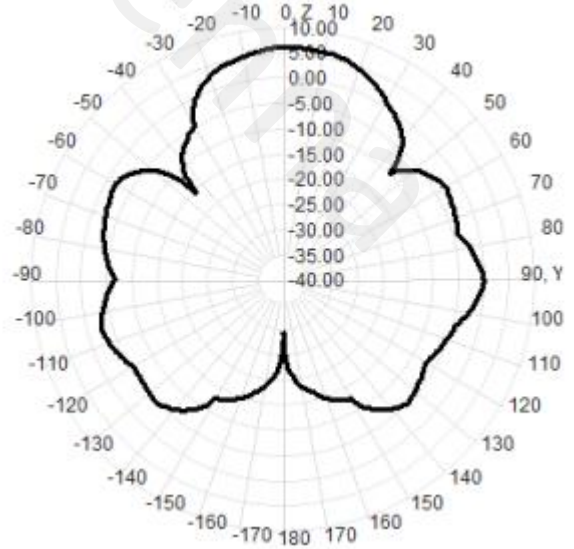
Back View



5000.0MHz Total(E1-XZ), Max= 6.96dBi

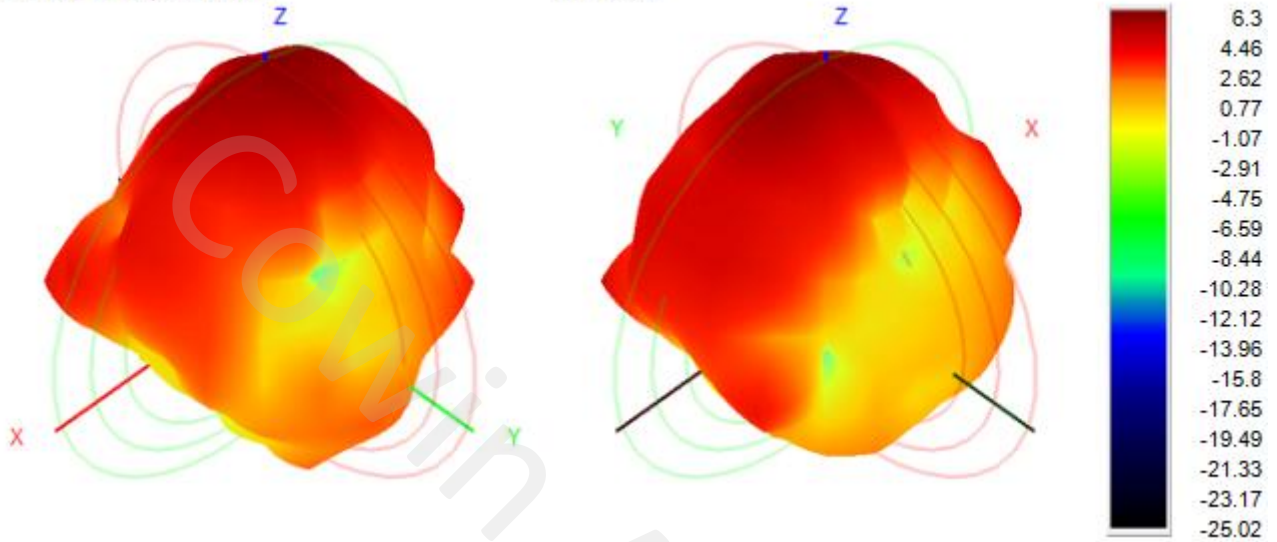


5000.0MHz Total(E2-YZ), Max= 6.25dBi

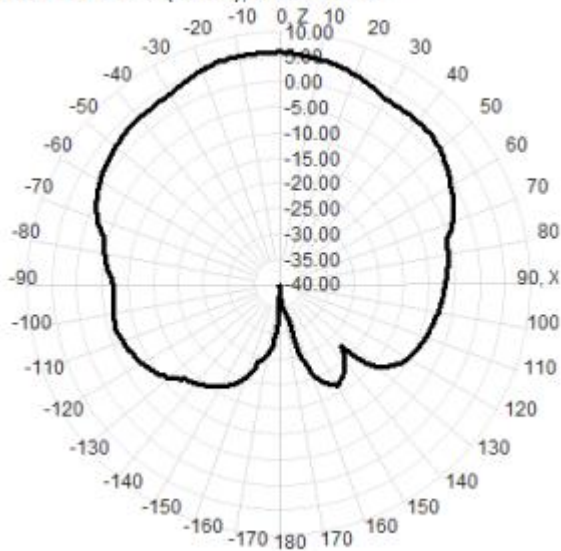


6000.0MHz Total, Eff: 56.9%

Back View



6000.0MHz Total(E1-XZ), Max= 5.98dBi



6000.0MHz Total(E2-YZ), Max= 6.27dBi

