

CW-WZ-0049

4G External Antenna

Key Features

Frequency: 824-960MHz/1710-2700MHz

SMA Male Connector

External Rubber

Dimensions 89.5*9.8mm

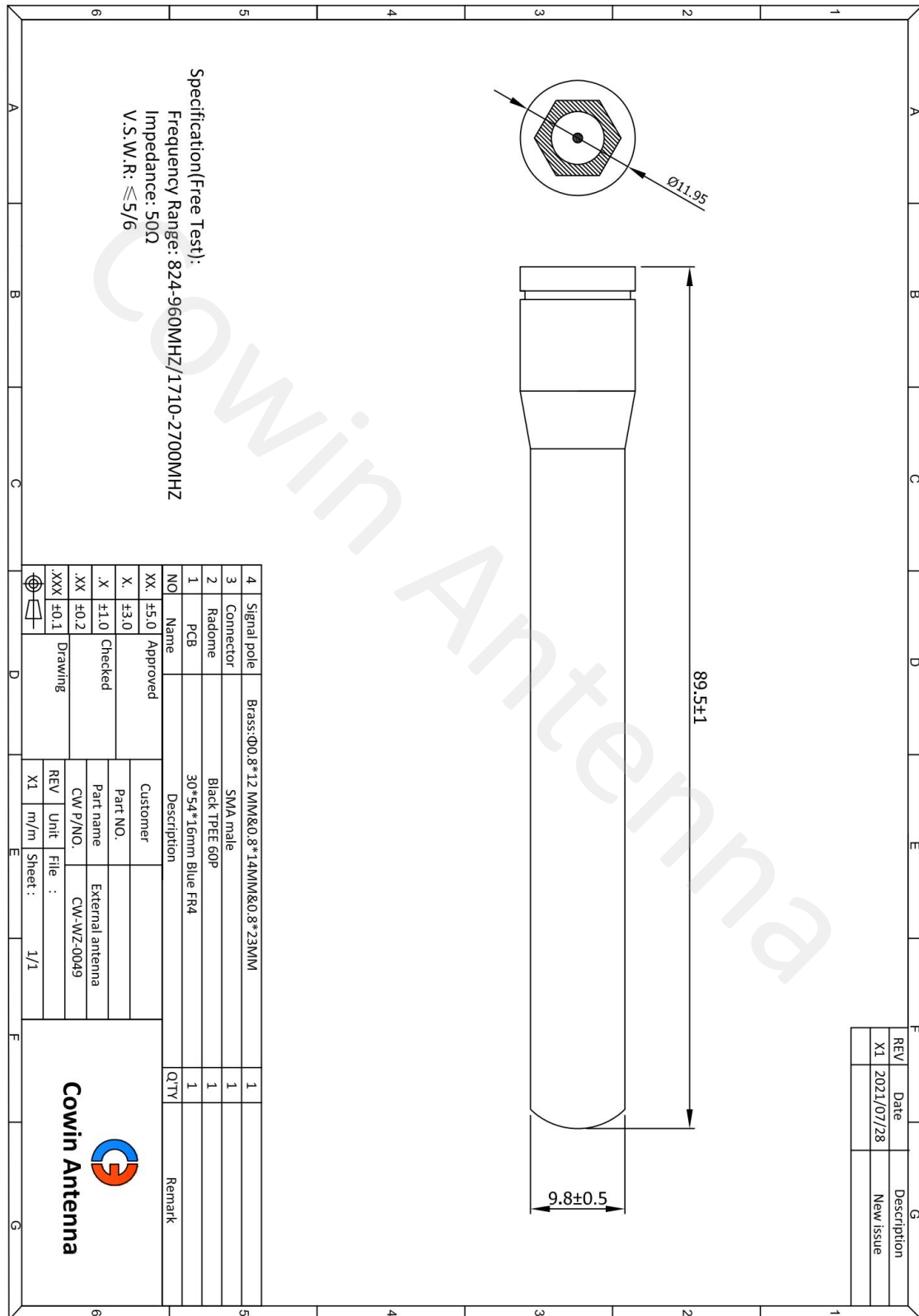


1. Antenna Electrical Characteristics

Band (MHz)		
Frequency (MHz)	824-960MHz	1710-2700MHz
VSWR	5:1	6:1
Efficiency (%)	68.16%	67.25%
Peak Gain (dBi)	2.46	3.88
Impedance (Ohm)	50	
Polarisation	Vertical	
Max. Input Power (W)	10	
Connector Type	SMA male	

2. Material and environmental characteristics

Material of PCB	N/A
Material of Plastic	TPEE
Cable Type	N/A
Connector Type	SMA male
Dimensions (mm)	89.5*9.8MM
Antenna color	Black
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

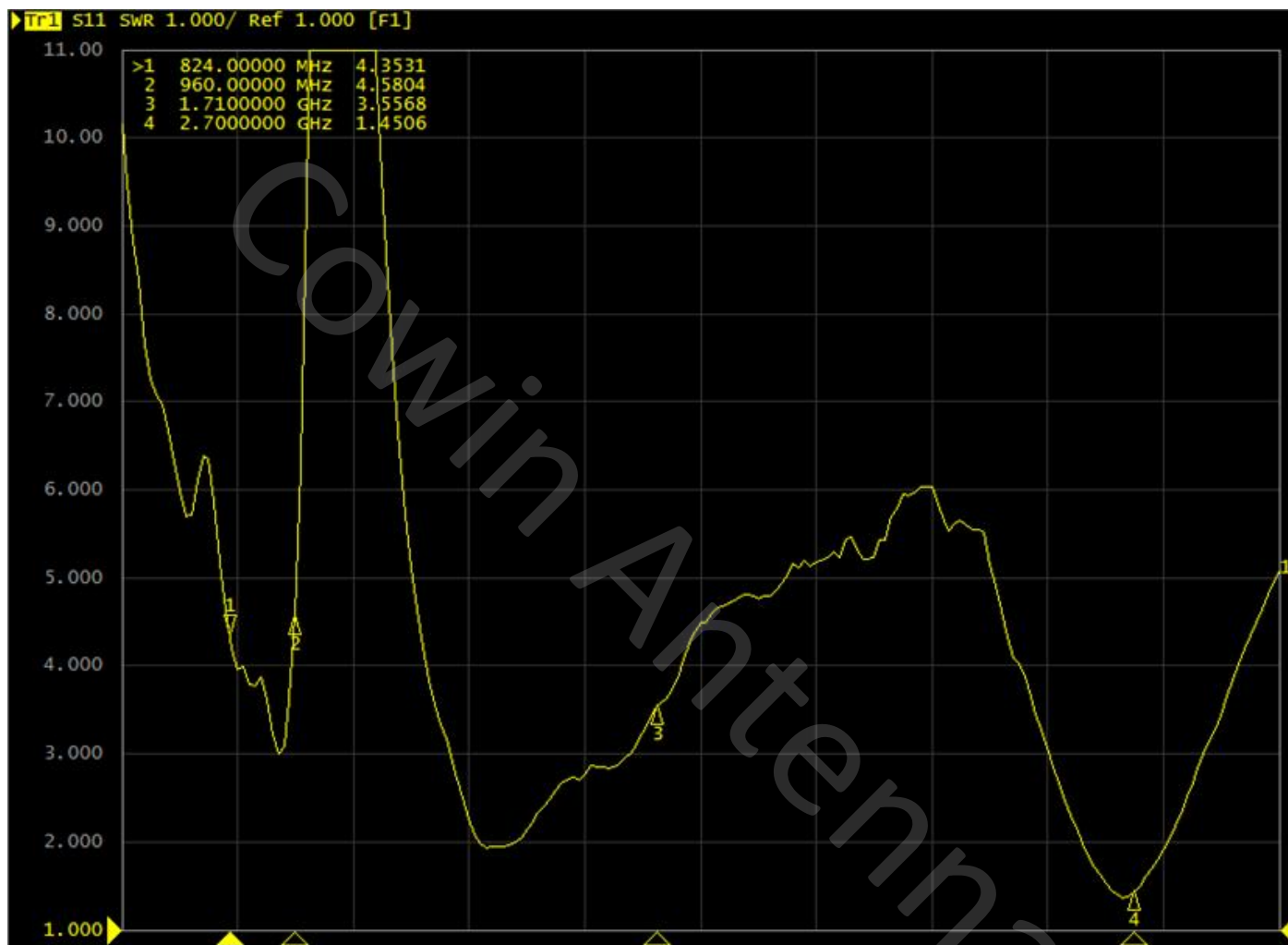
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

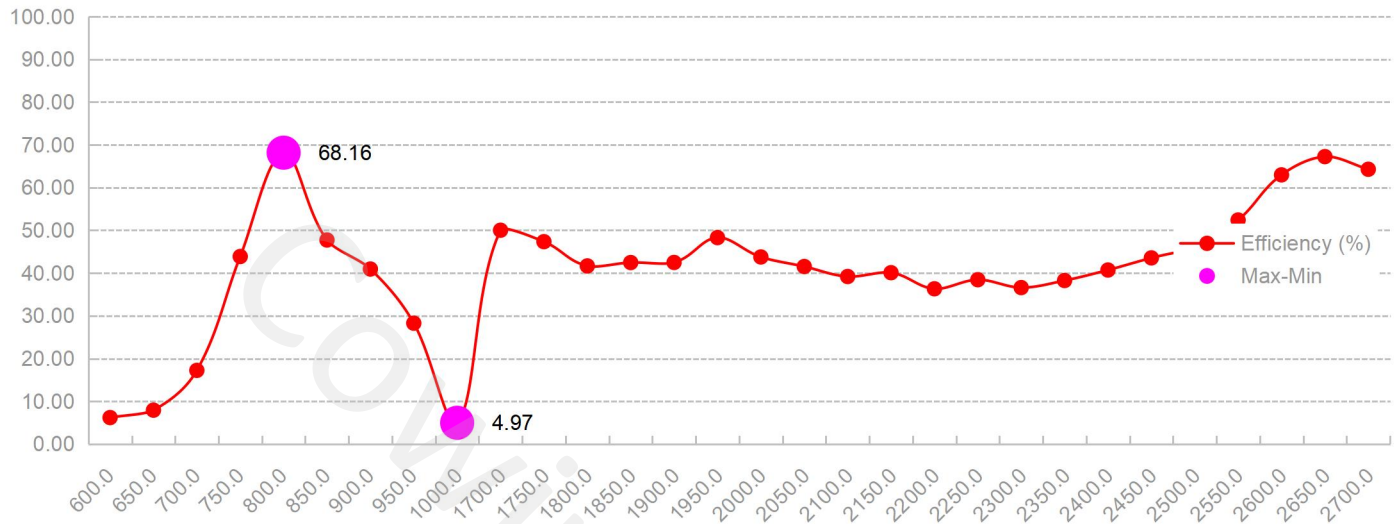
The comprehensive tester is Agilent cmv500



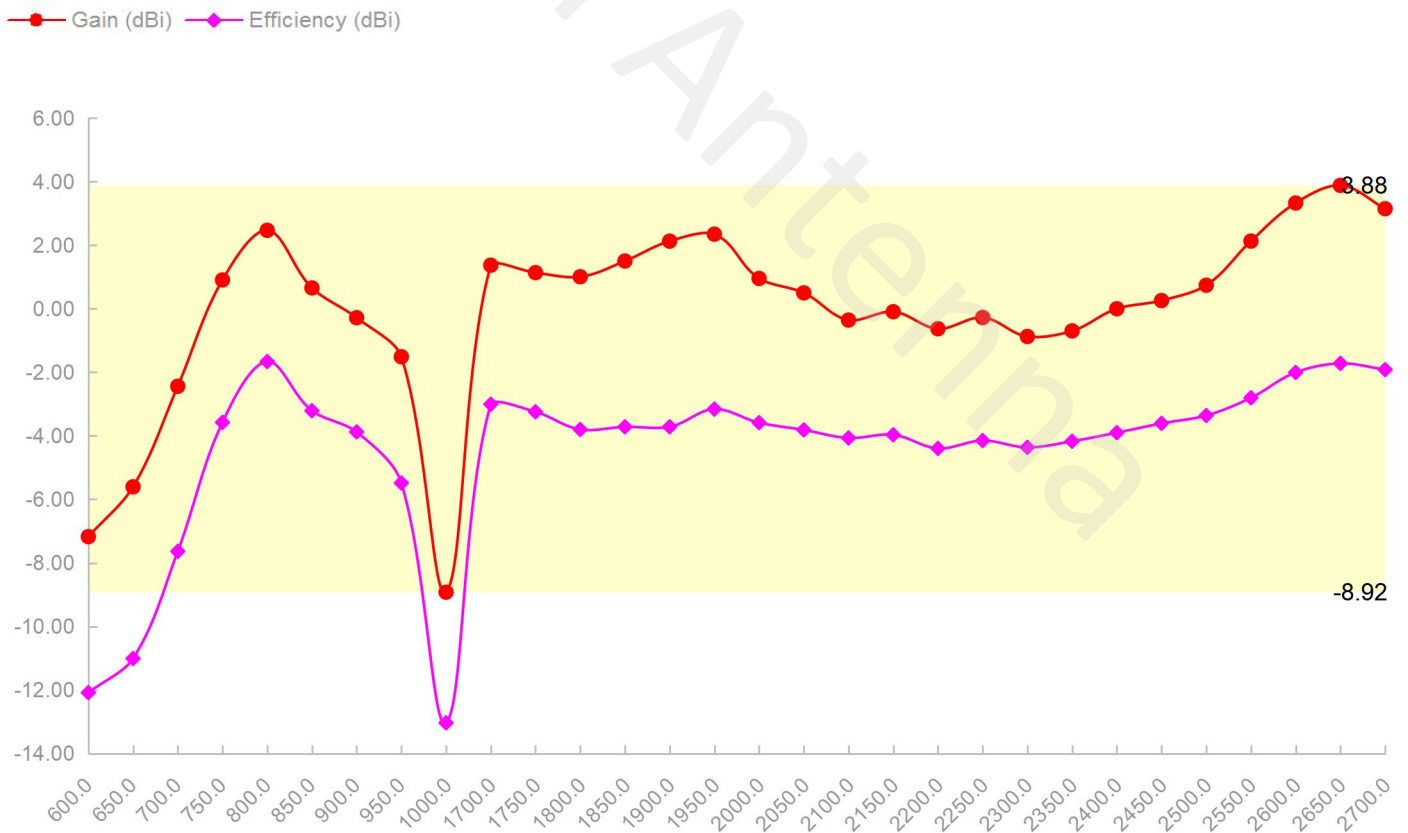
4.1 VSWR



4.2 Efficiency



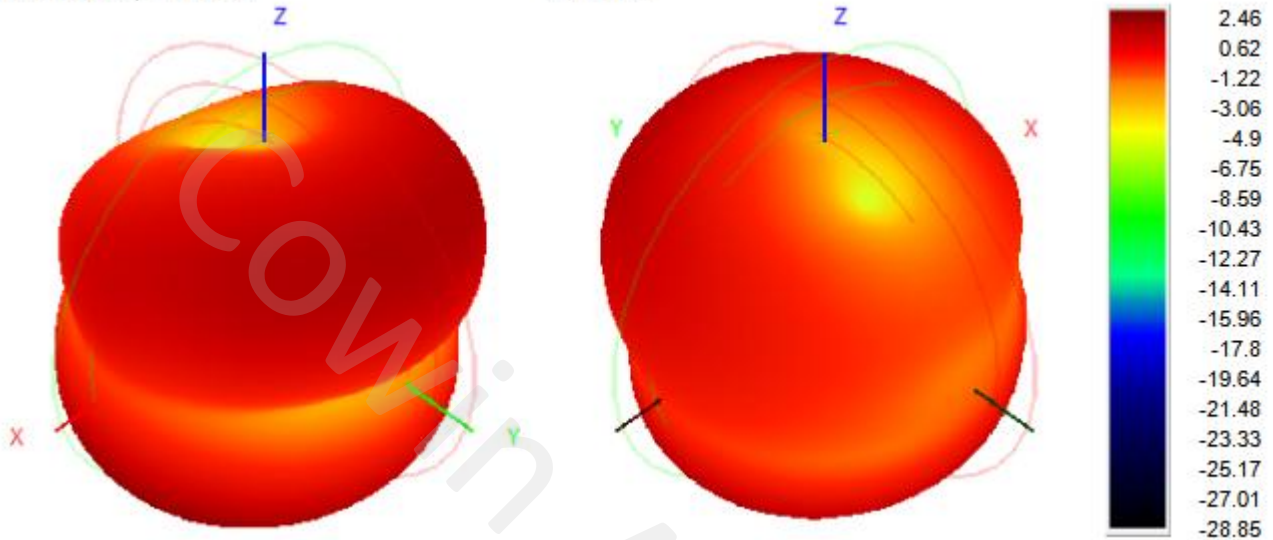
4.3 Peak gain



4.4 3D&2D Radiation Patterns

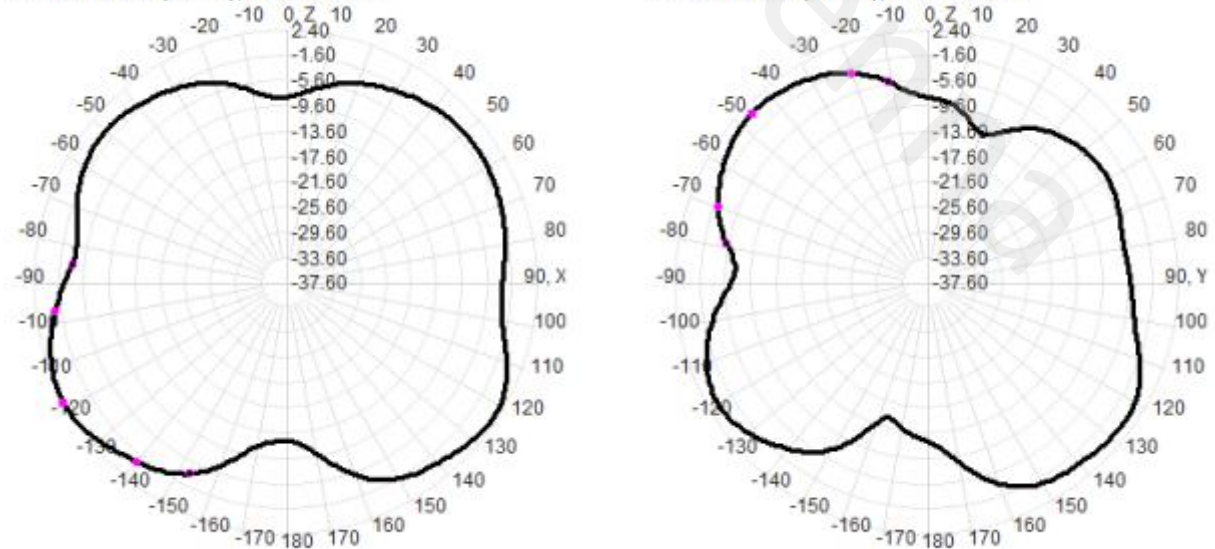
800.0MHz H+V, Eff: 68.2%

Back View

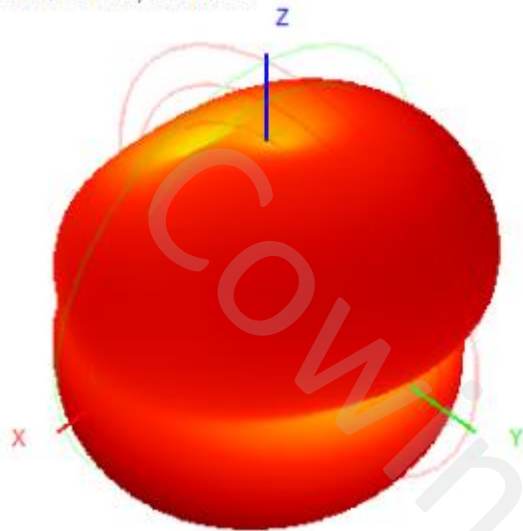


800.0MHz Total(E1-XZ), Max= 2.40dBi

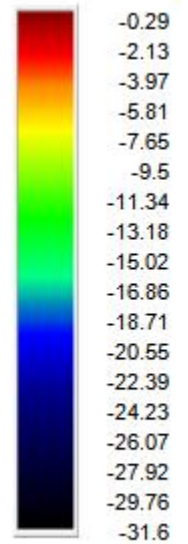
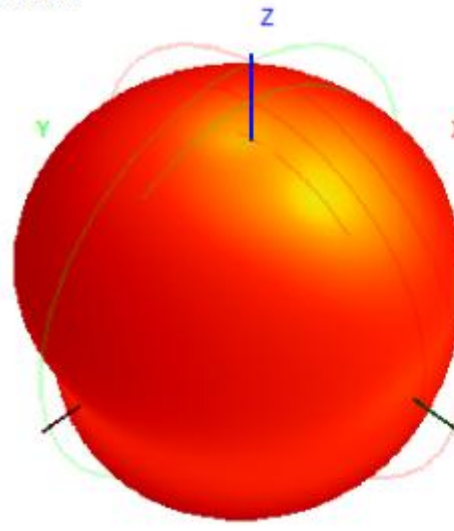
800.0MHz Total(E2-YZ), Max= 0.92dBi



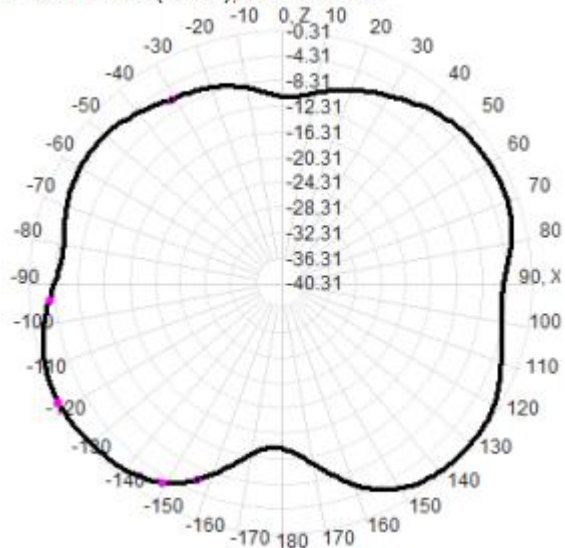
900.0MHz H+V, Eff: 40.9%



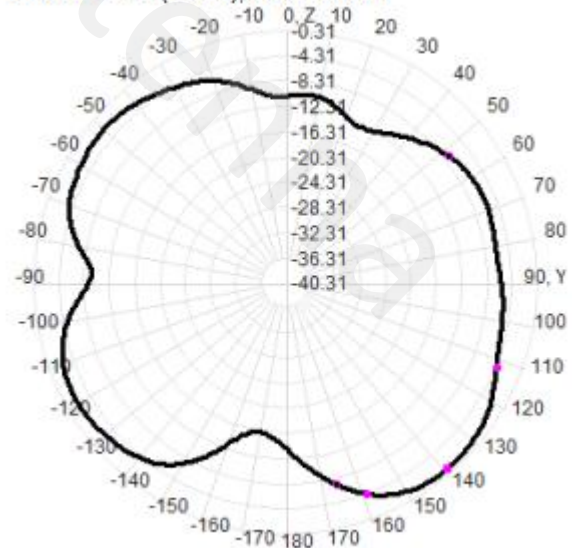
Back View



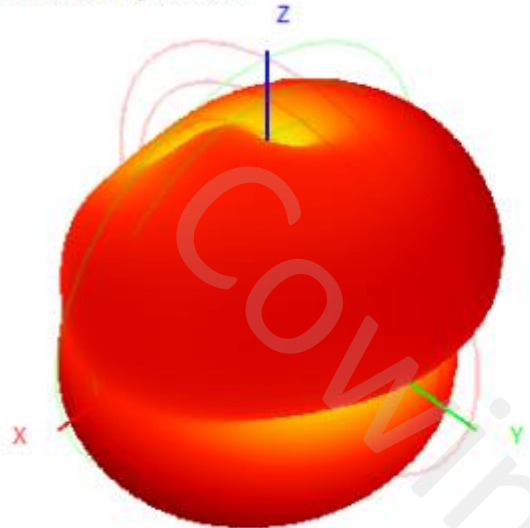
900.0MHz Total(E1-XZ), Max= -0.31dBi



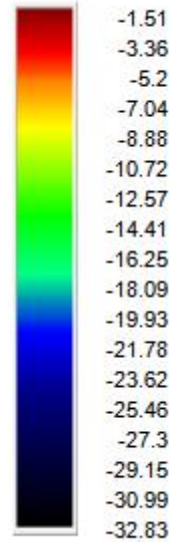
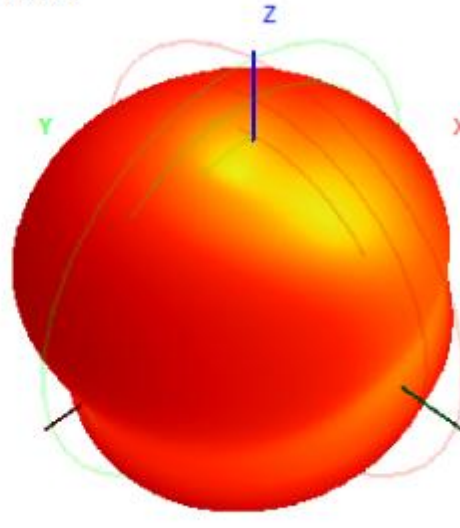
900.0MHz Total(E2-YZ), Max= -1.42dBi



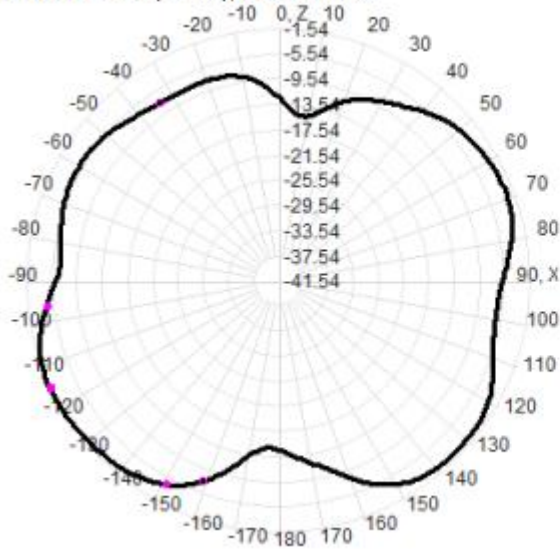
950.0MHz H+V, Eff: 28.3%



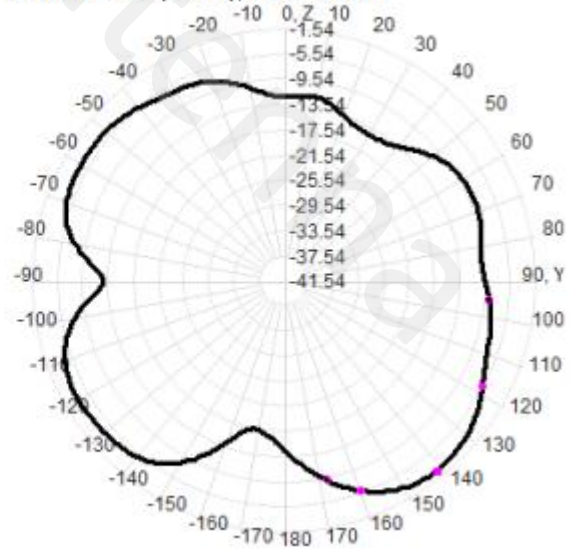
Back View



950.0MHz Total(E1-XZ), Max=-1.54dBi

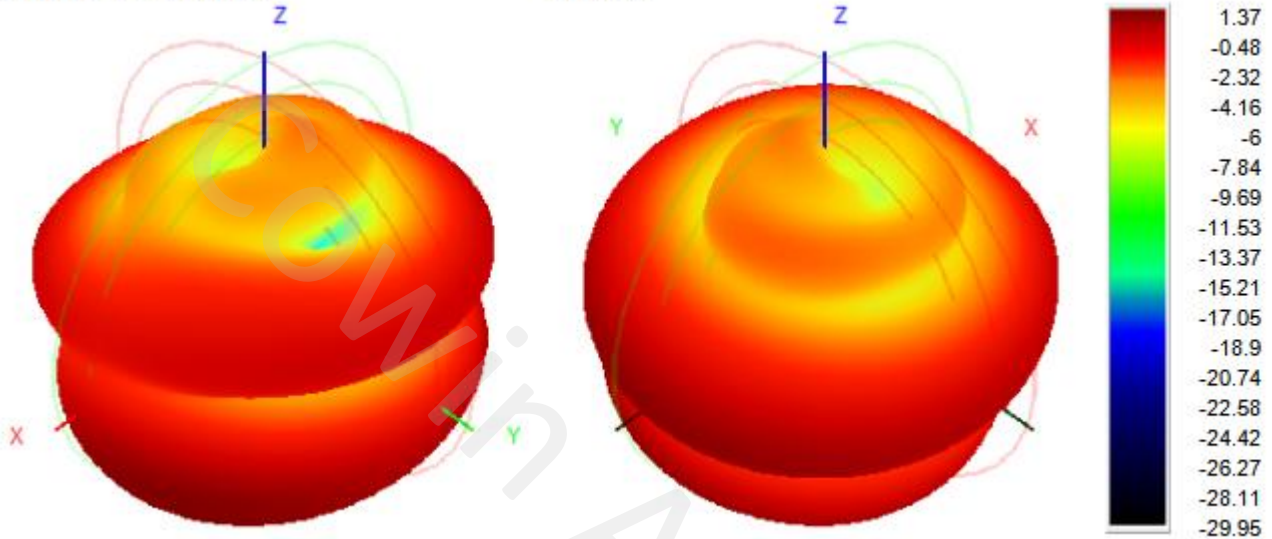


950.0MHz Total(E2-YZ), Max=-2.99dBi



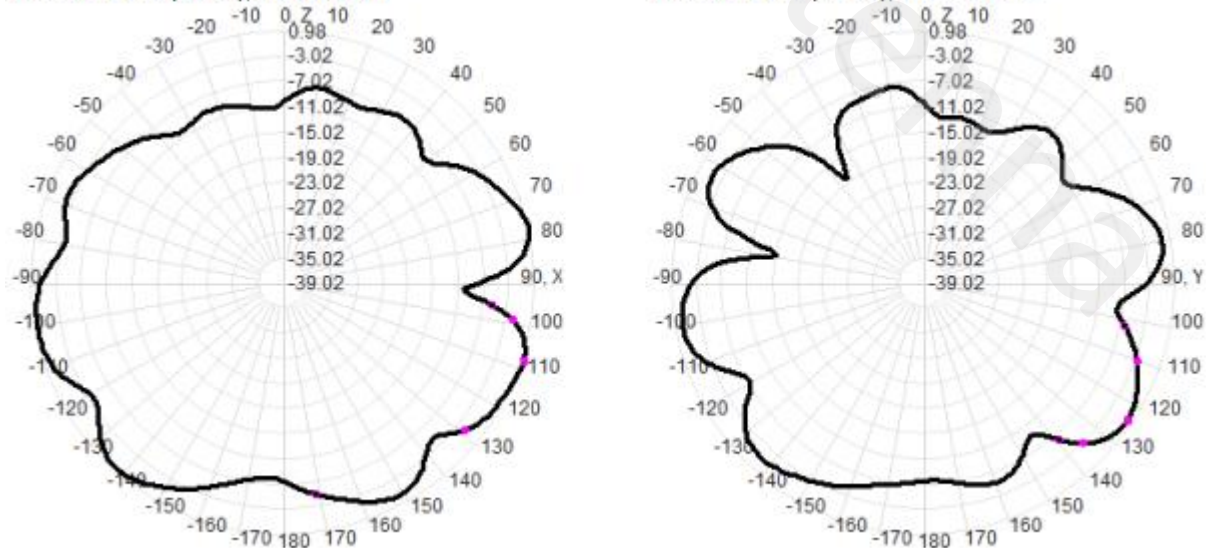
1700.0MHz H+V, Eff: 50.0%

Back View

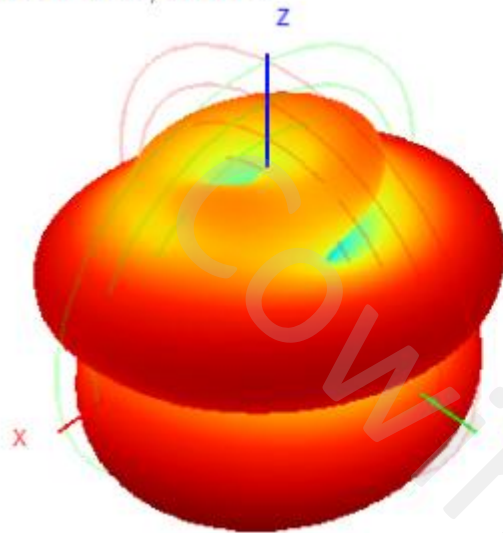


1700.0MHz Total(E1-XZ), Max= 0.98dBi

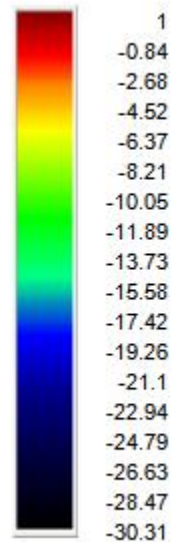
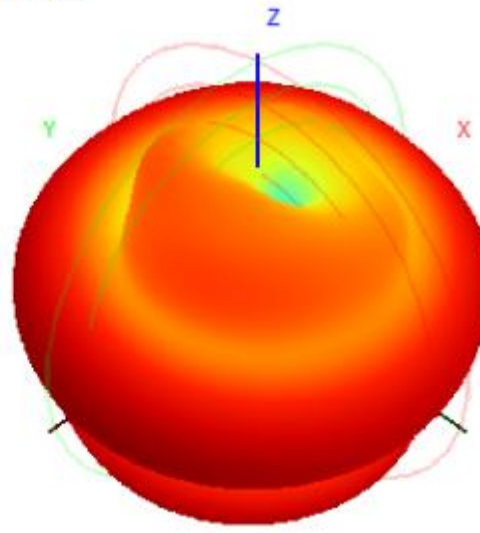
1700.0MHz Total(E2-YZ), Max= -0.07dBi



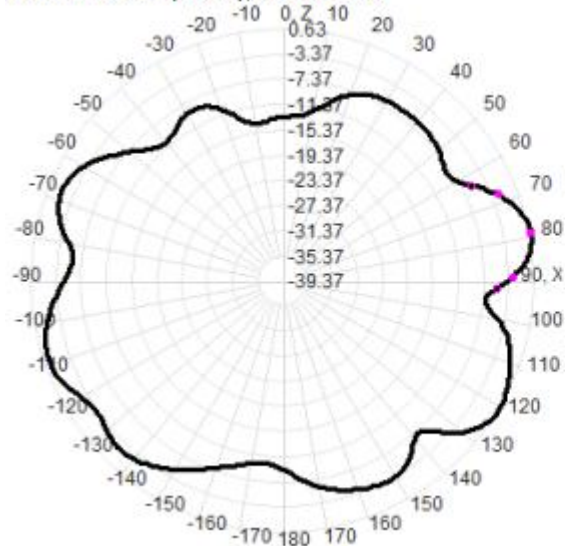
1800.0MHz H+V, Eff: 41.7%



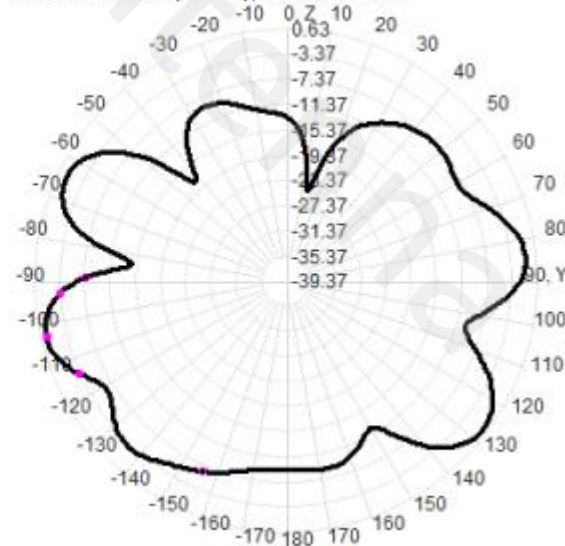
Back View



1800.0MHz Total(E1-XZ), Max= 0.63dBi

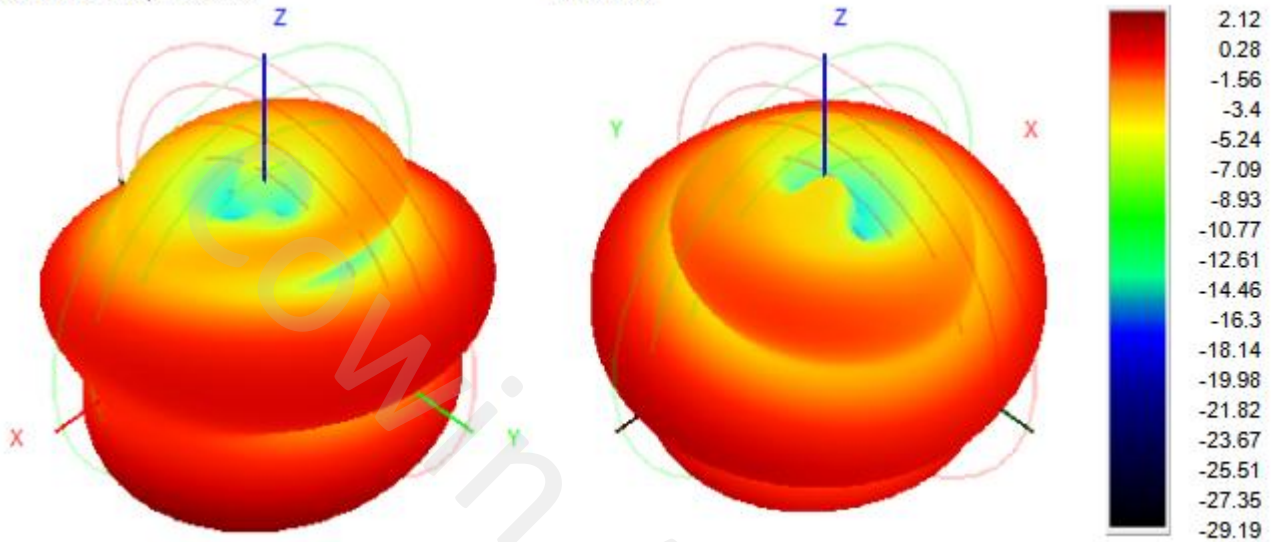


1800.0MHz Total(E2-YZ), Max= -0.33dBi



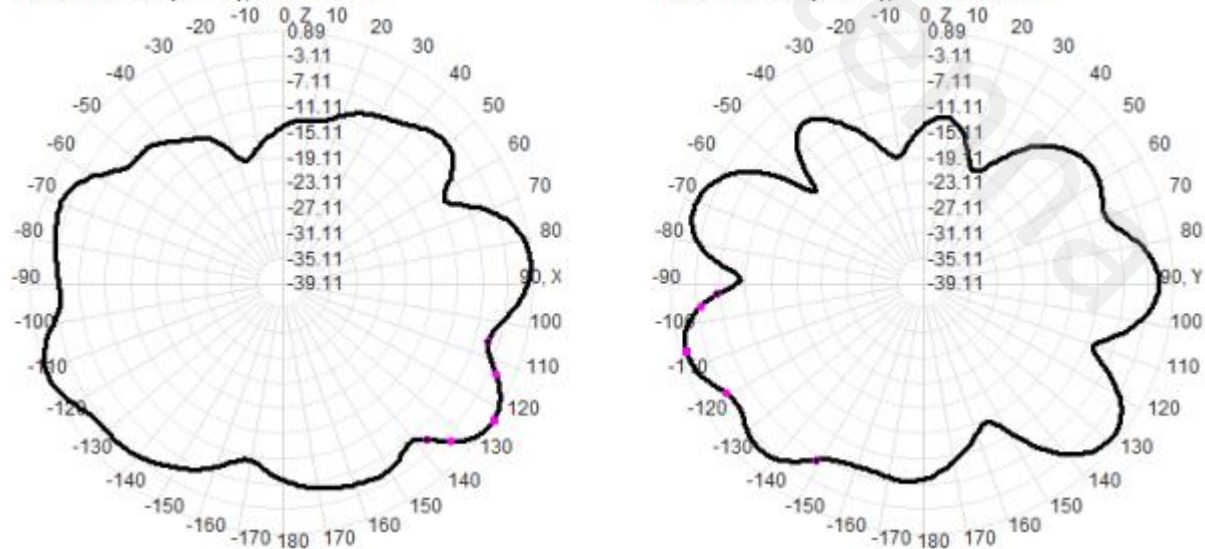
1900.0MHz H+V, Eff: 42.5%

Back View



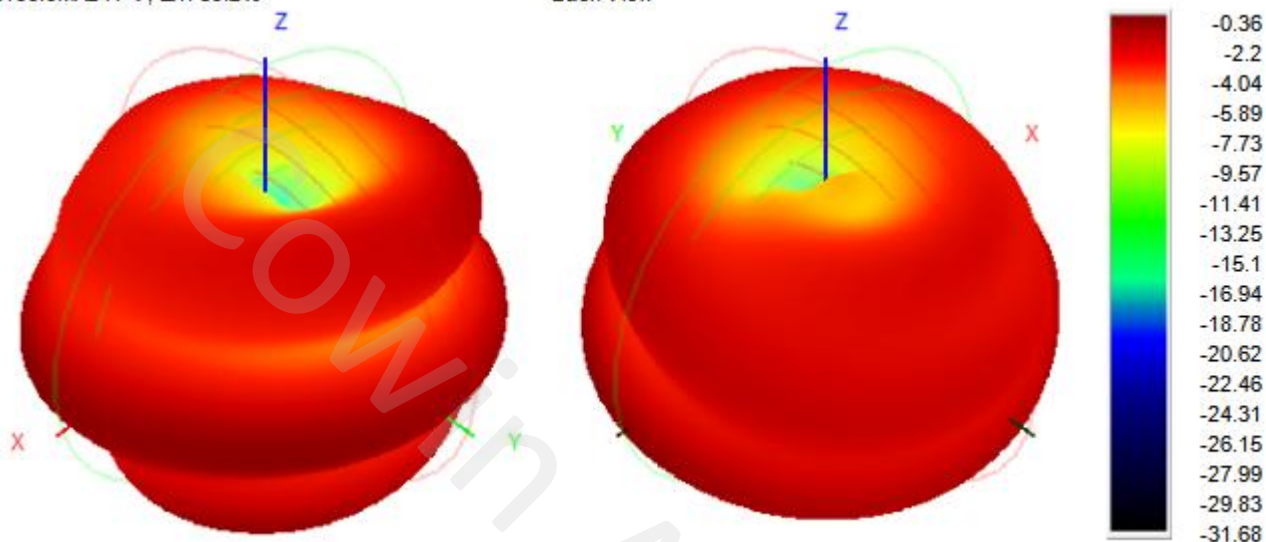
1900.0MHz Total(E1-XZ), Max= 0.89dBi

1900.0MHz Total(E2-YZ), Max= -0.15dBi



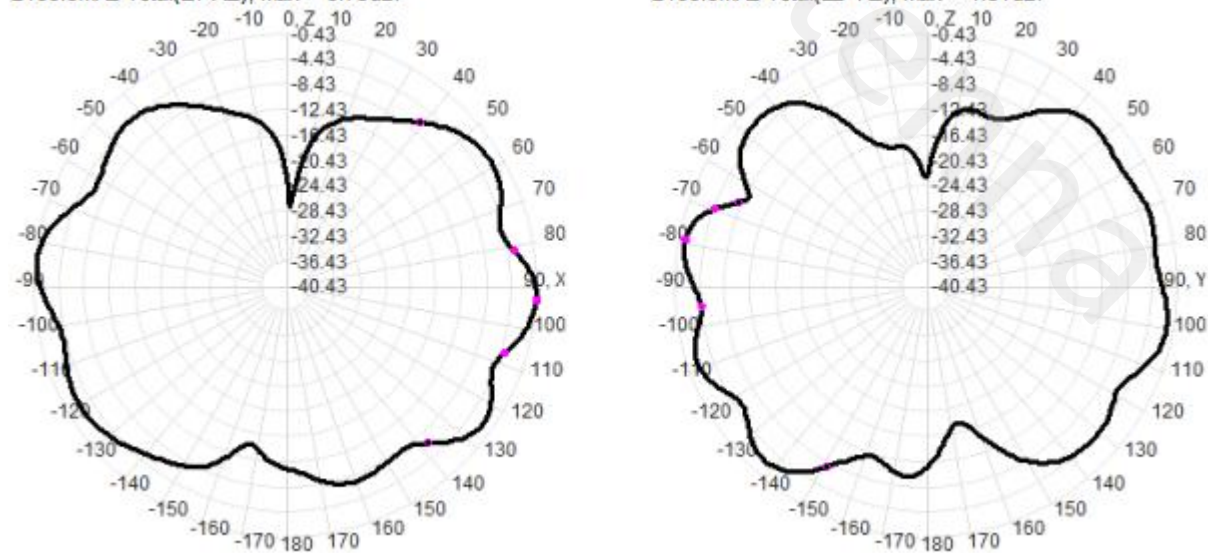
2100.0MHz H+V, Eff: 39.2%

Back View



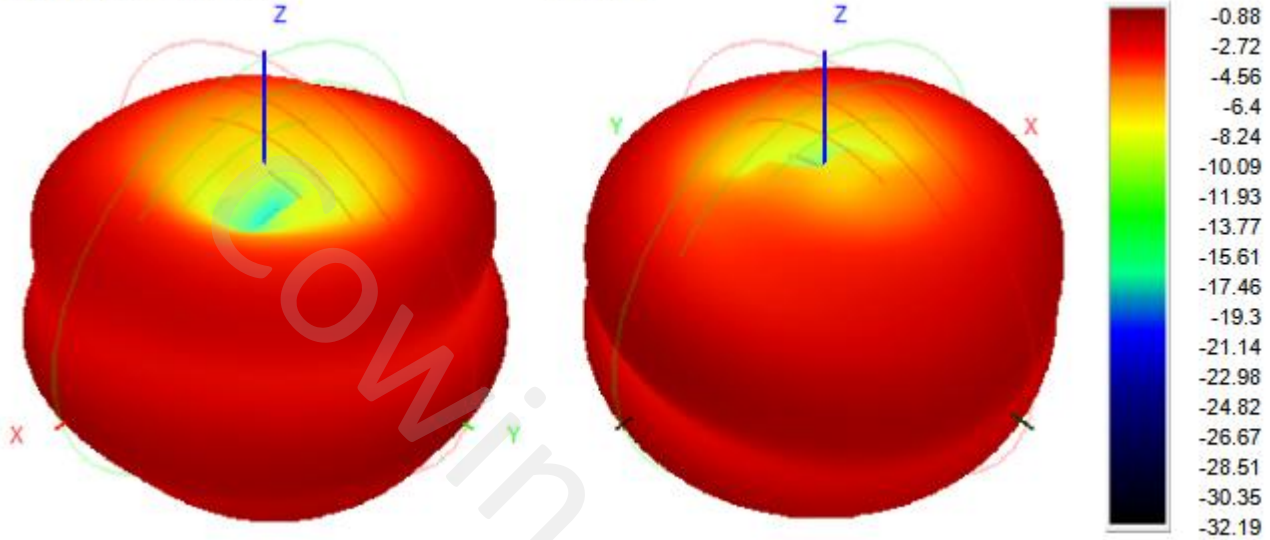
2100.0MHz Total(E1-XZ), Max= -0.75dBi

2100.0MHz Total(E2-YZ), Max= -1.51dBi



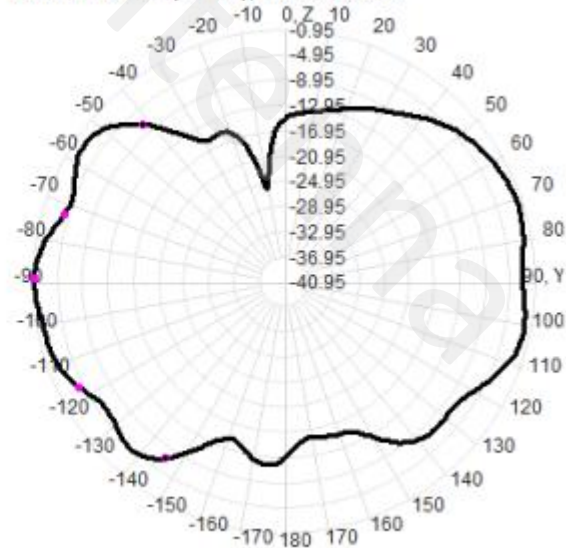
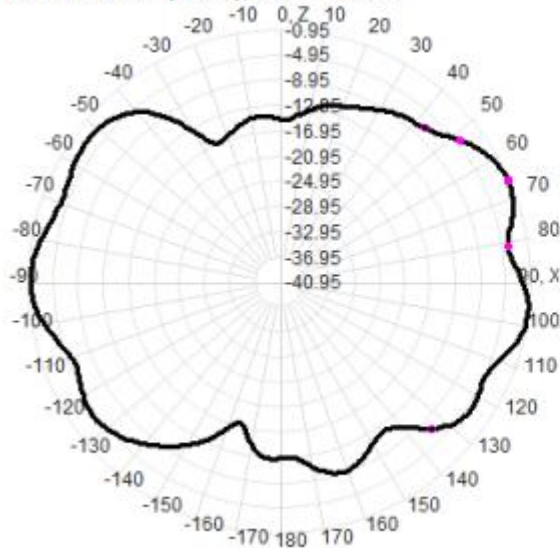
2300.0MHz H+V, Eff: 36.6%

Back View



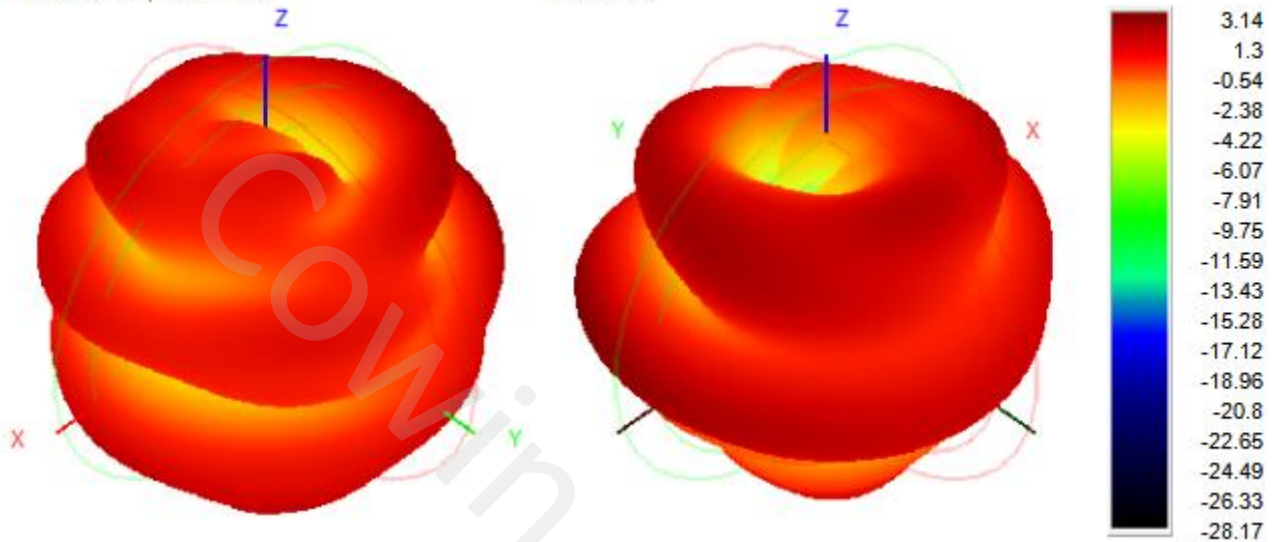
2300.0MHz Total(E1-XZ), Max= -1.36dBi

2300.0MHz Total(E2-YZ), Max= -1.28dBi



2700.0MHz H+V, Eff: 64.3%

Back View



2700.0MHz Total(E1-XZ), Max= 2.56dBi

2700.0MHz Total(E2-YZ), Max= 1.60dBi

