

CW-WZ-0054

4G External Antenna

Key Features

Frequency: 698-960MHz/1710-2700MHz

SMA Male Connector

External Rubber

Dimensions 221*27 mm

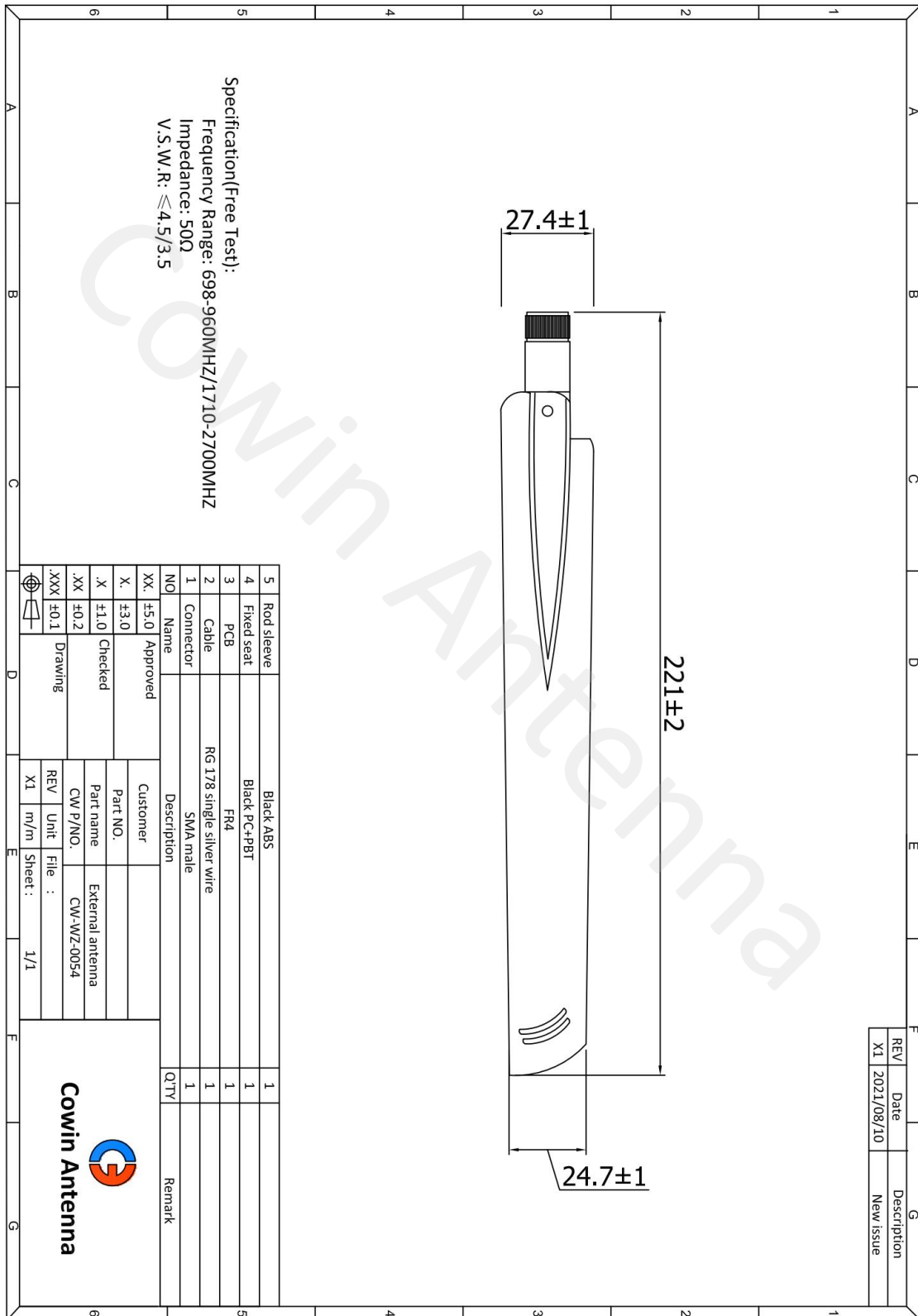


1. Antenna Electrical Characteristics

Band (MHz)		
Frequency (MHz)	698-960MHz	1710-2700MHz
VSWR	4.5:1	3.5:1
Efficiency (%)	69.9%	65.95%
Peak Gain (dBi)	1.84	3.57
Impedance (Ohm)	50	
Polarisation	Vertical	
Max. Input Power (W)	10	
Connector Type	SMA male	

2. Material and environmental characteristics

Material of PCB	FR4
Material of Plastic	PC+PBT/ABS
Cable Type	RG178
Connector Type	SMA male
Dimensions (mm)	221*27
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

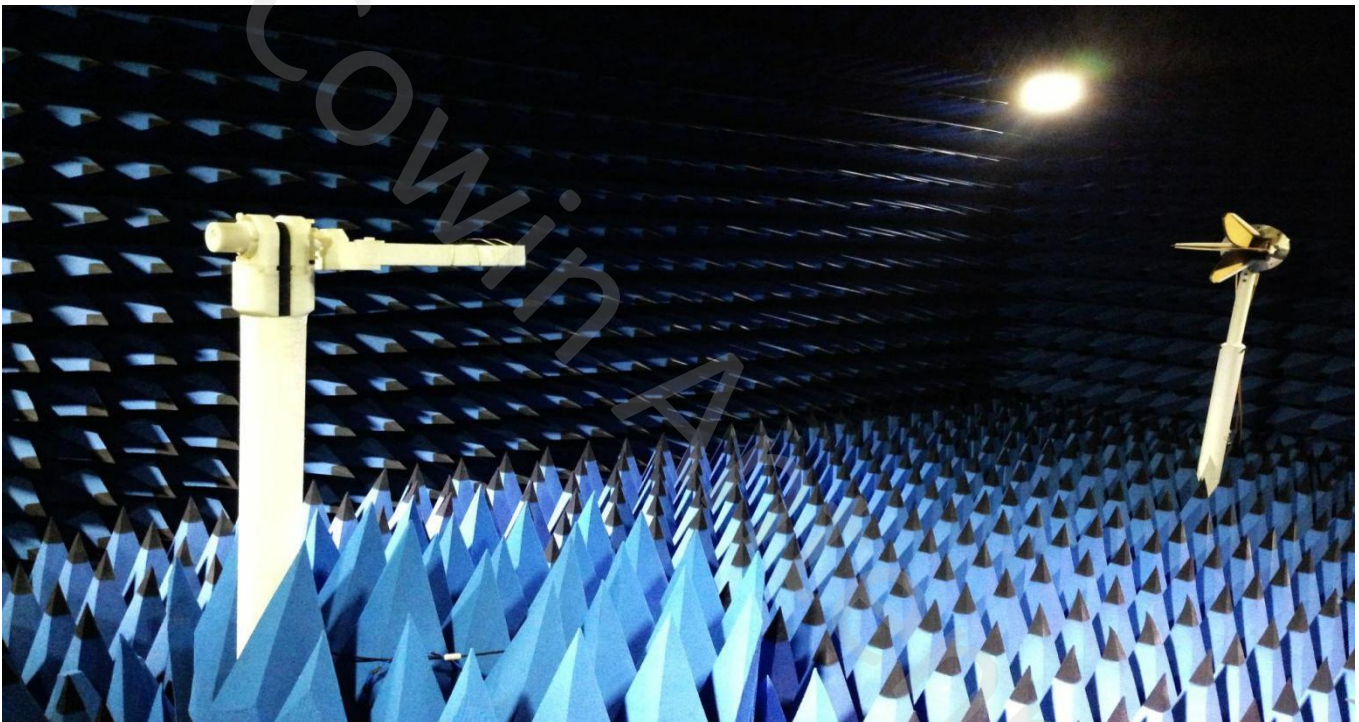
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

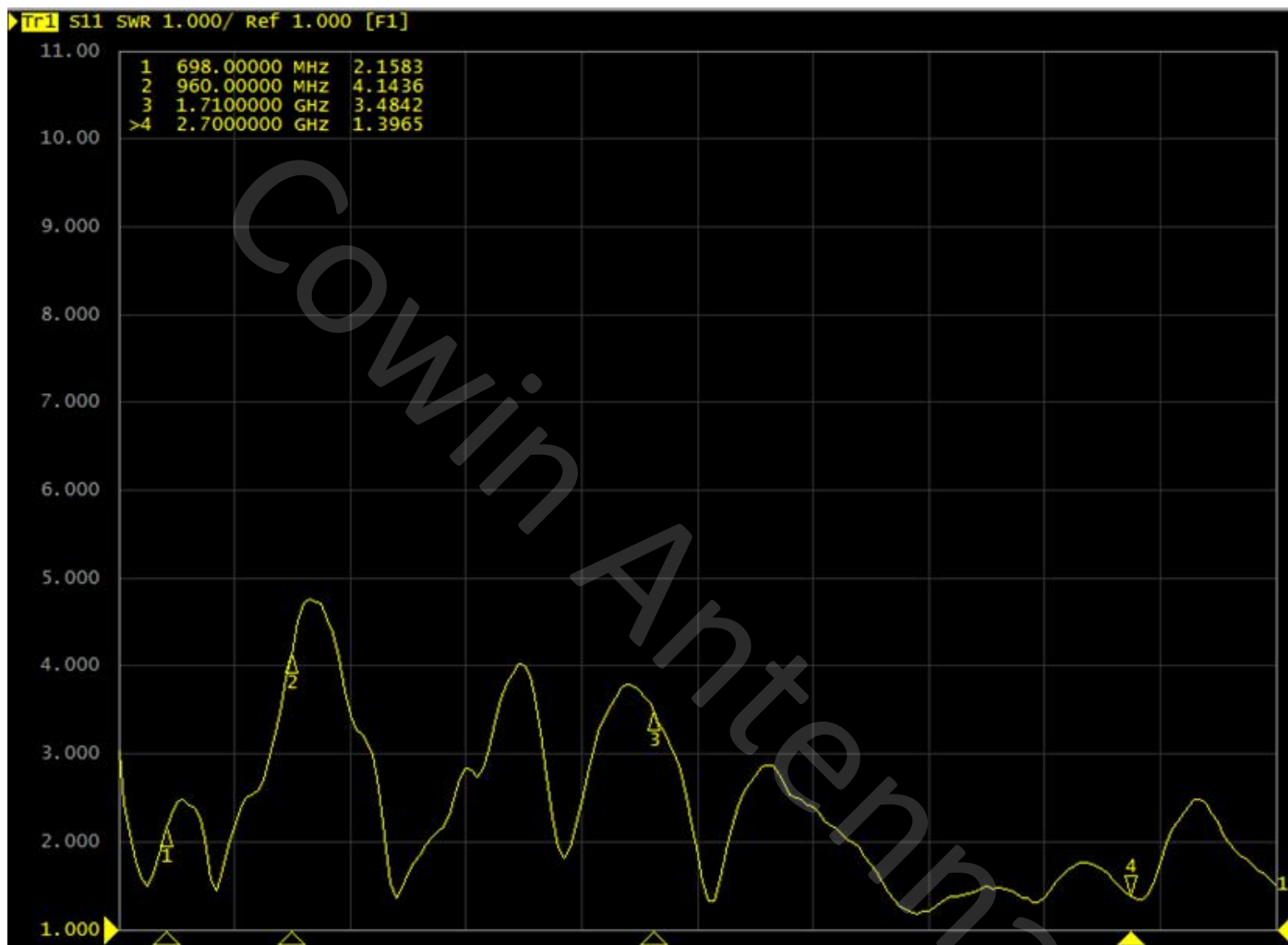
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

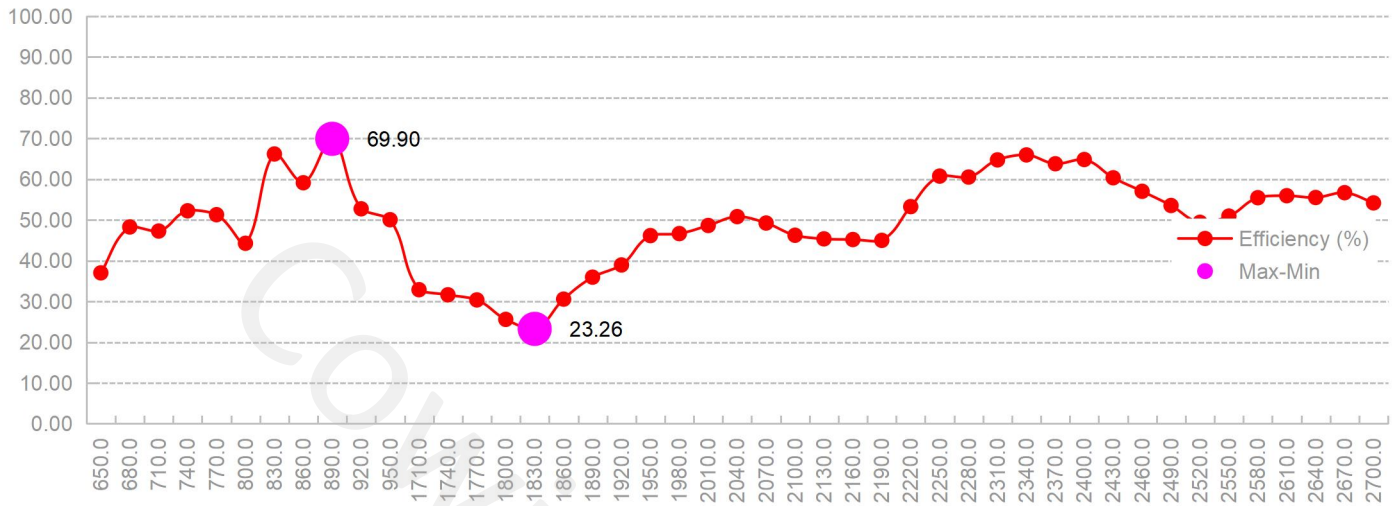
The comprehensive tester is Agilent cmv500



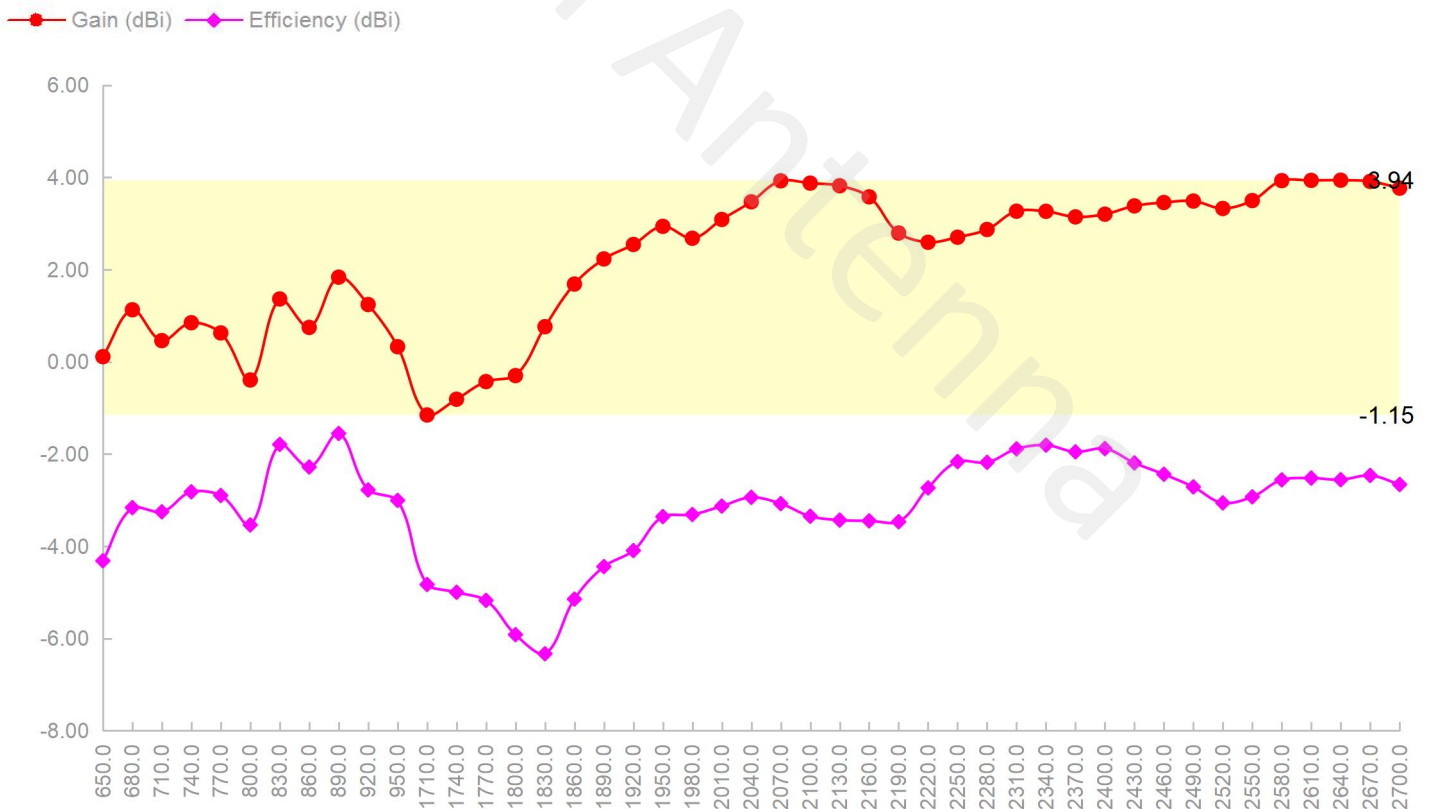
4.1 VSWR



4.2 Efficiency



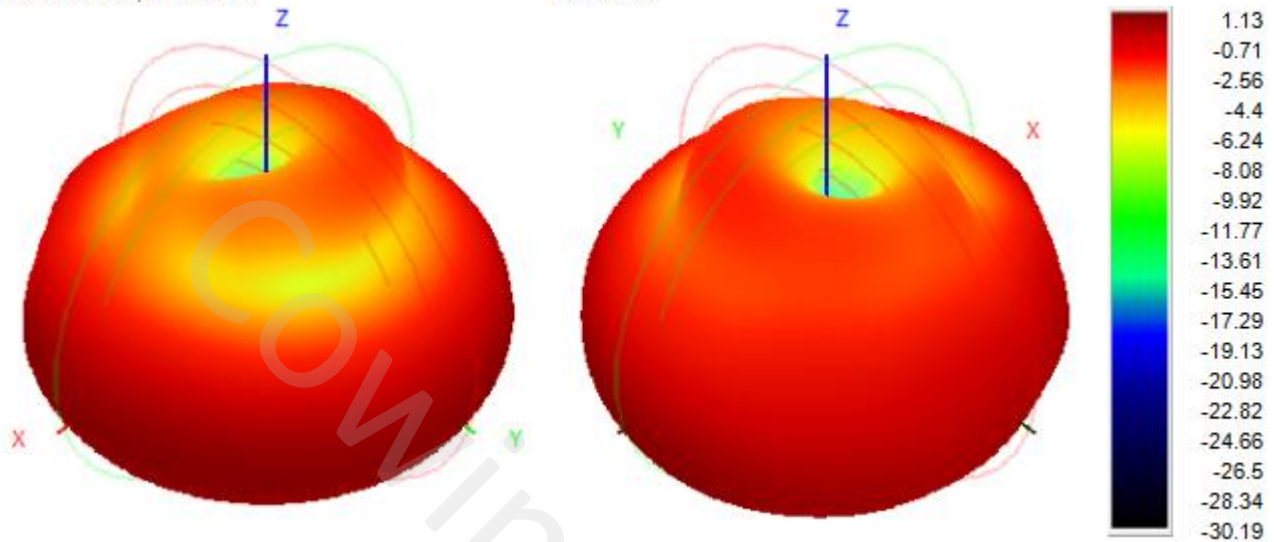
4.3 Peak gain



4.4 3D&2D Radiation Patterns

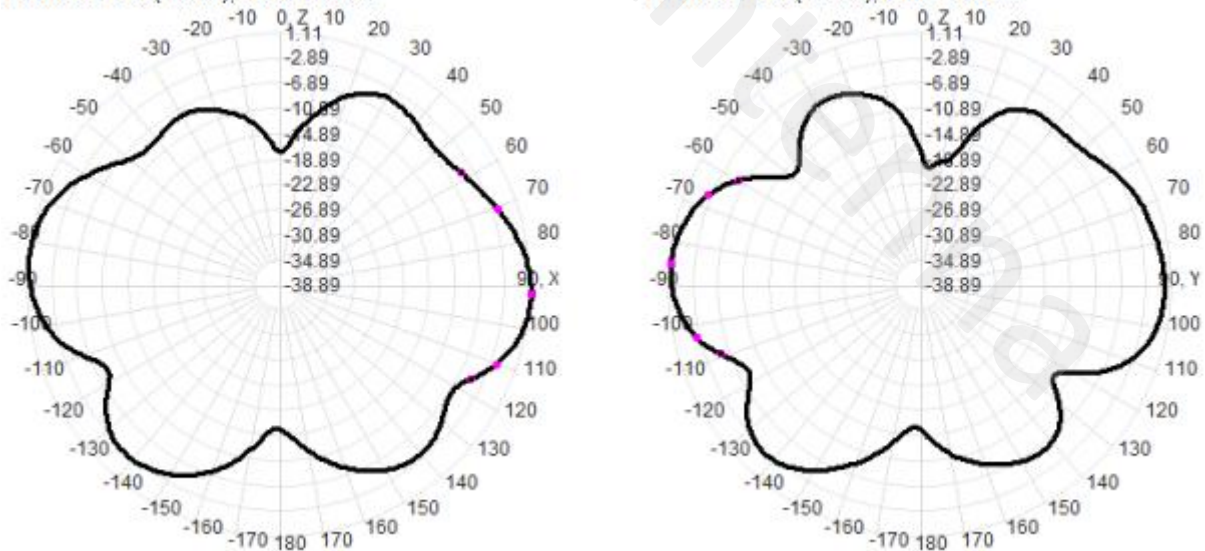
680.0MHz H+V, Eff: 48.3%

Back View



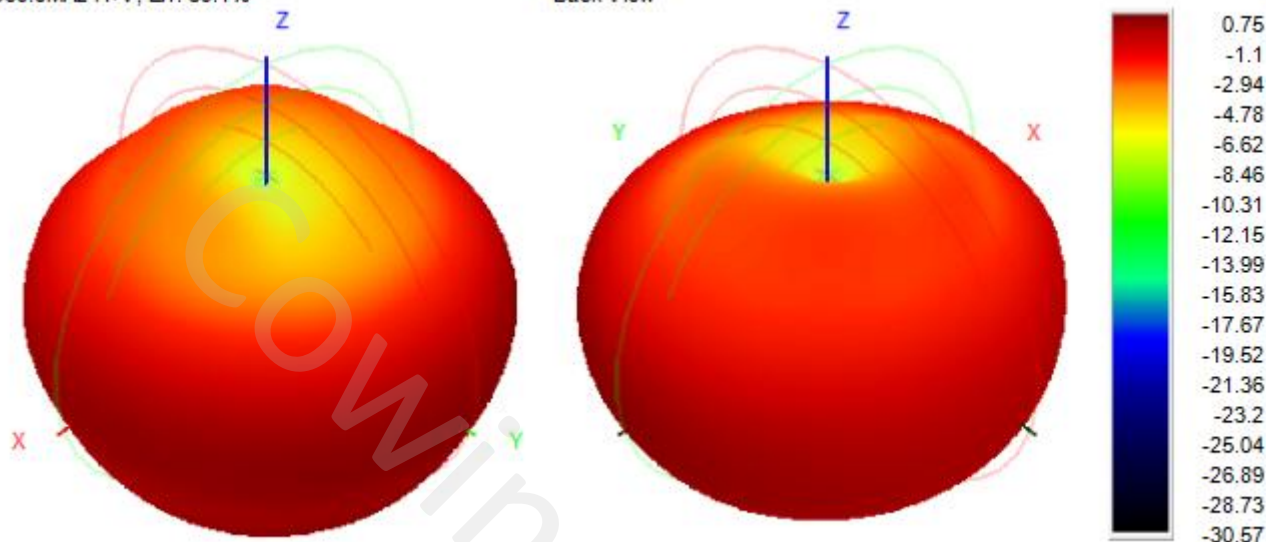
680.0MHz Total(E1-XZ), Max= 1.01dBi

680.0MHz Total(E2-YZ), Max= 0.67dBi



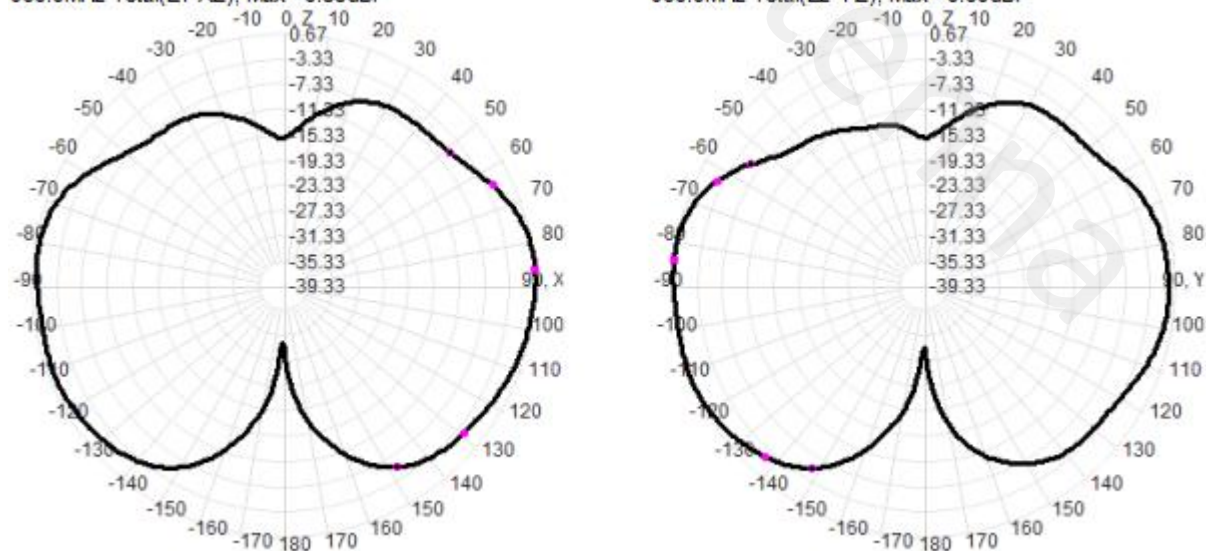
860.0MHz H+V, Eff: 59.1%

Back View

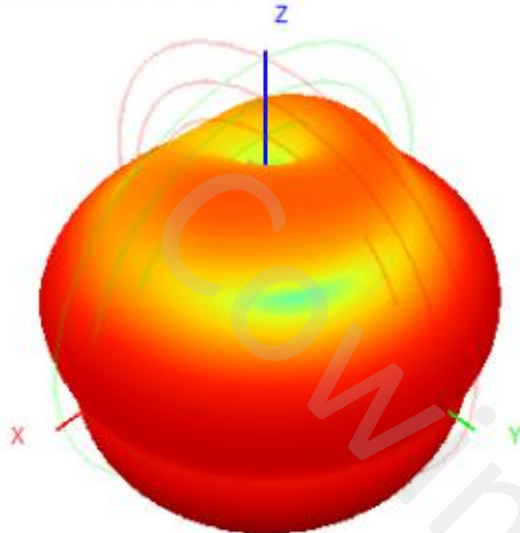


860.0MHz Total(E1-XZ), Max= 0.53dBi

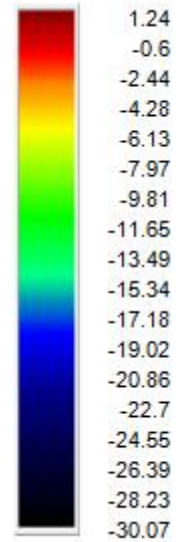
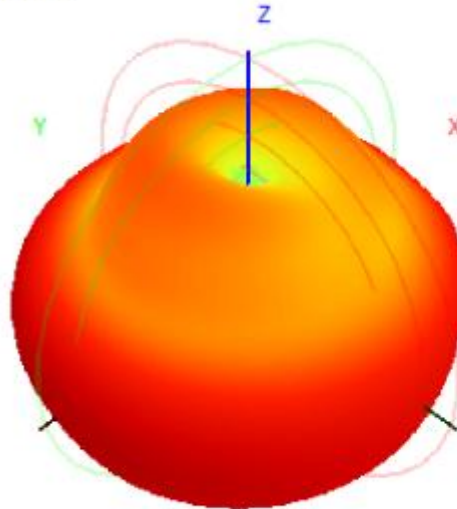
860.0MHz Total(E2-YZ), Max= 0.60dBi



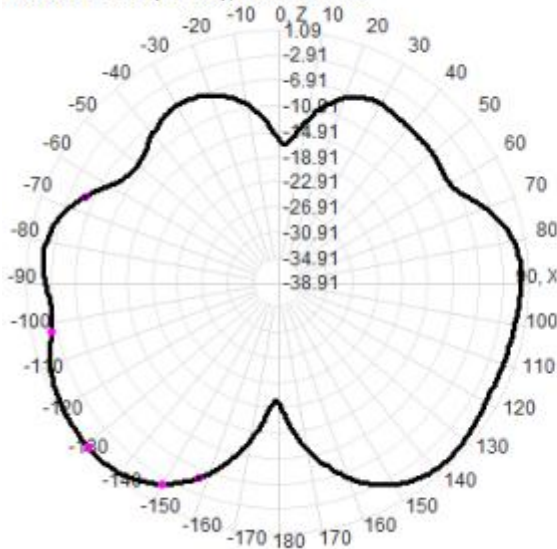
920.0MHz H+V, Eff: 52.7%



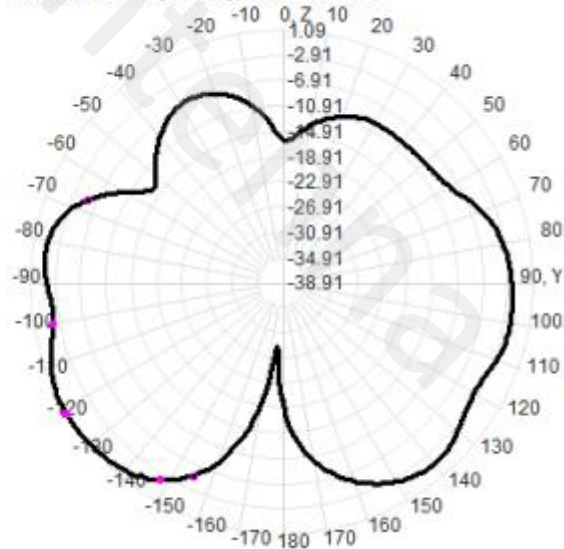
Back View



920.0MHz Total(E1-XZ), Max= 0.78dBi

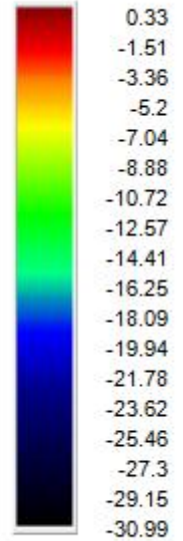
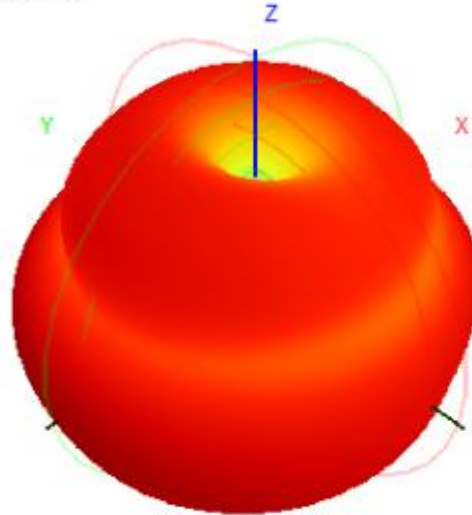
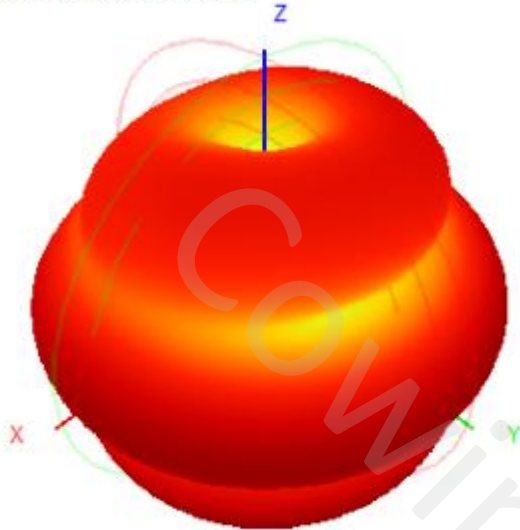


920.0MHz Total(E2-YZ), Max= 1.09dBi

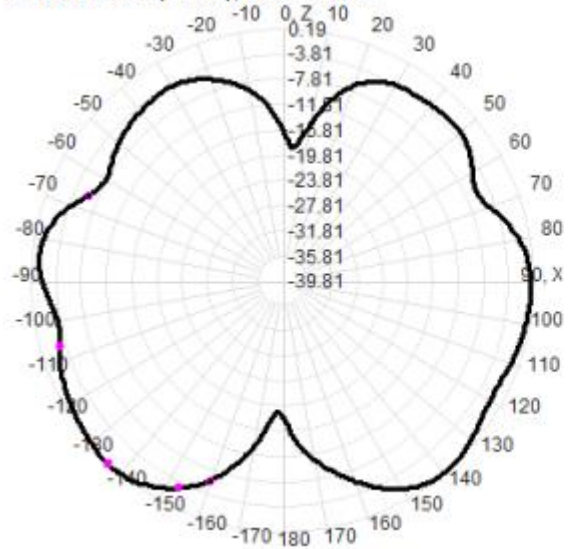


950.0MHz H+V, Eff: 50.0%

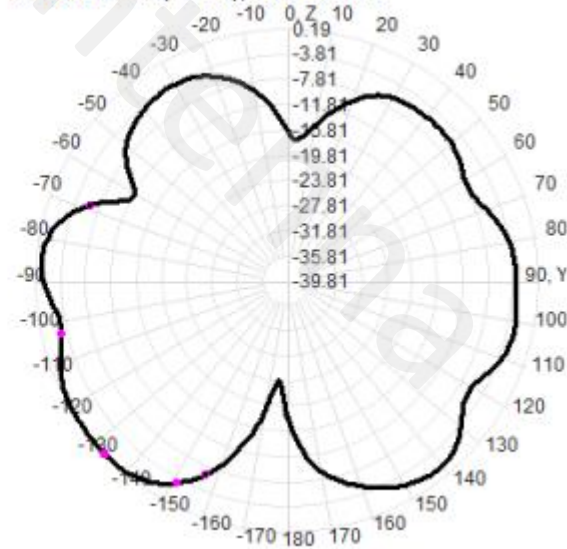
Back View



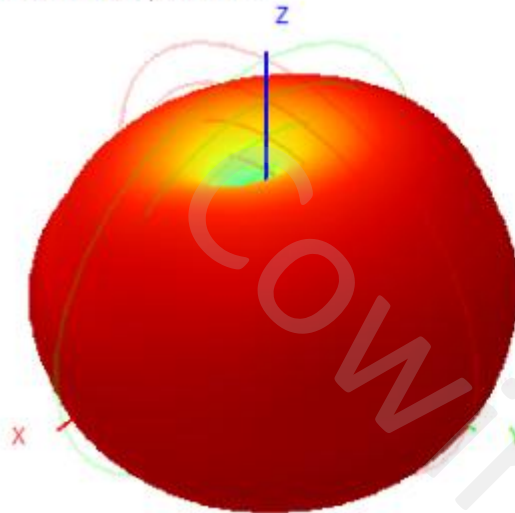
950.0MHz Total(E1-XZ), Max= 0.19dBi



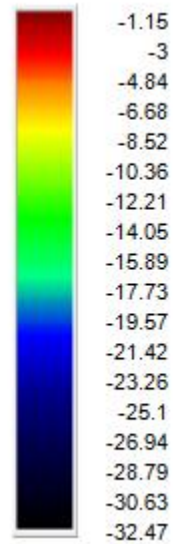
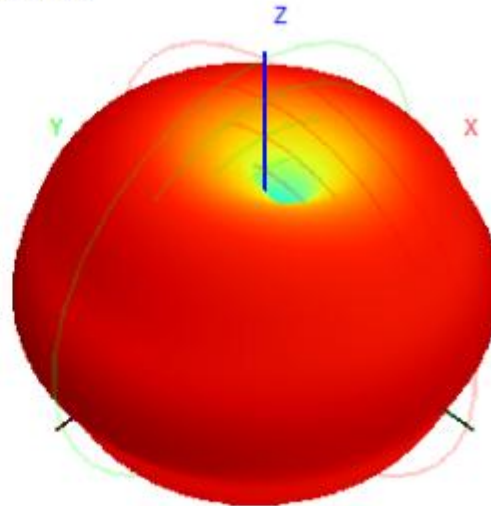
950.0MHz Total(E2-YZ), Max= 0.01dBi



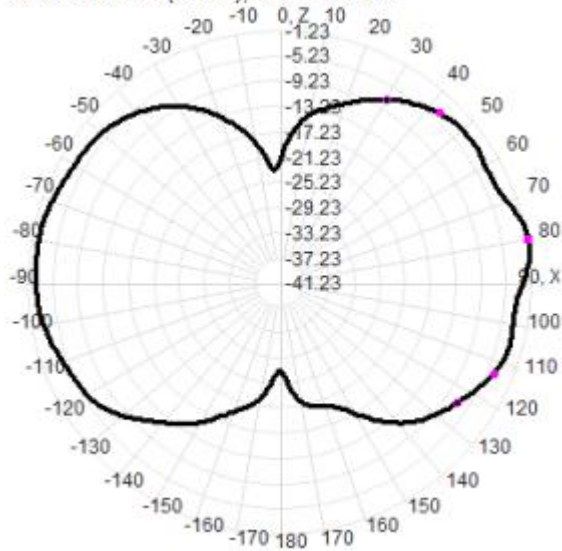
1710.0MHz H+V, Eff: 32.9%



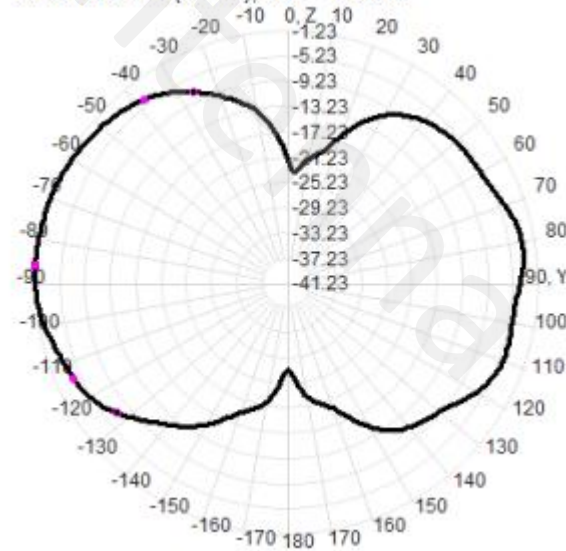
Back View



1710.0MHz Total(E1-XZ), Max= -1.34dBi

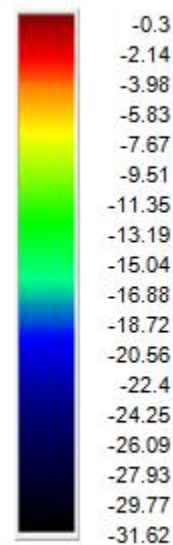
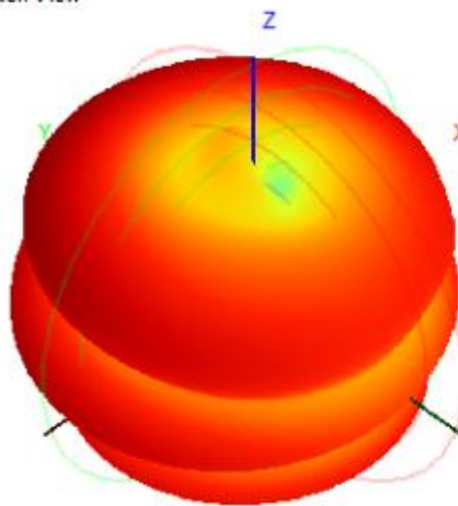
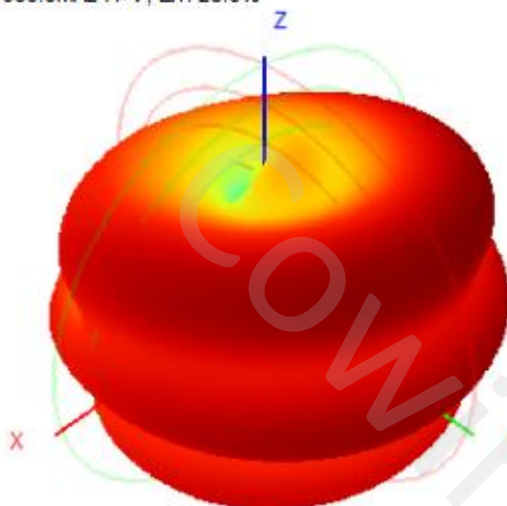


1710.0MHz Total(E2-YZ), Max= -1.23dBi

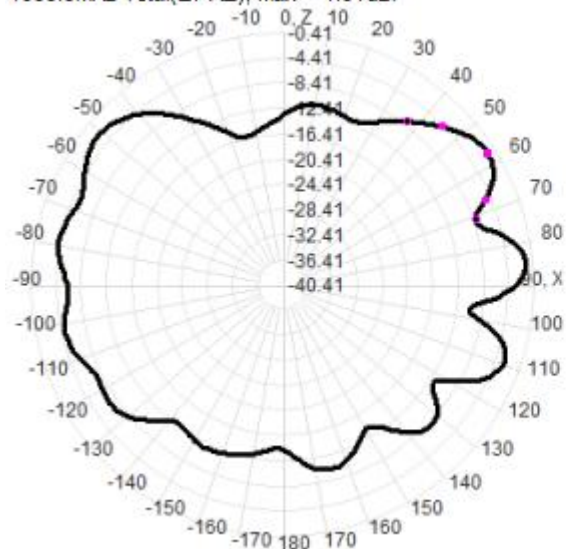


1800.0MHz H+V, Eff: 25.6%

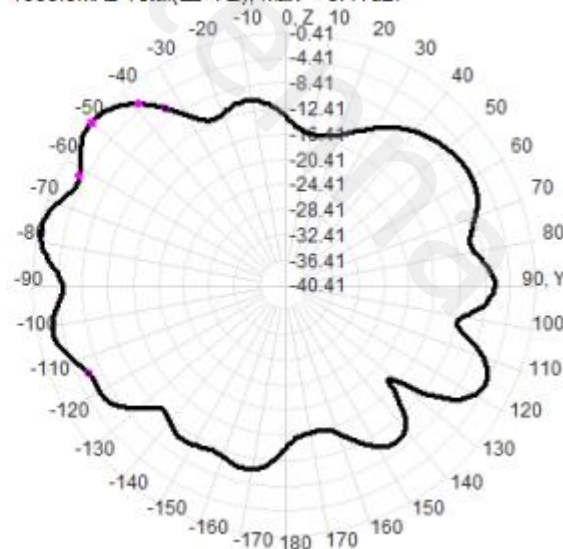
Back View



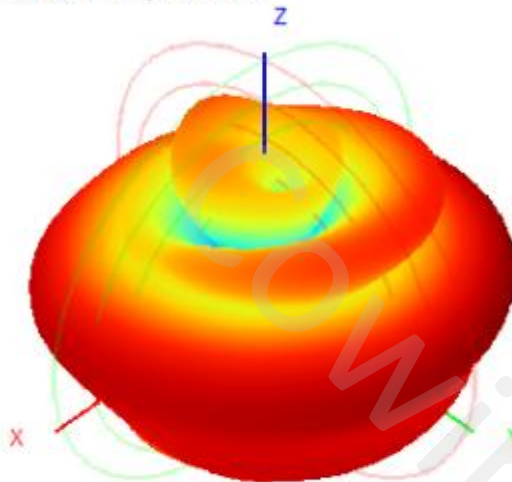
1800.0MHz Total(E1-XZ), Max=-1.81dBi



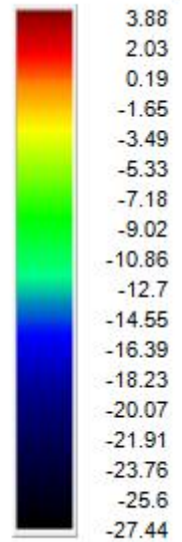
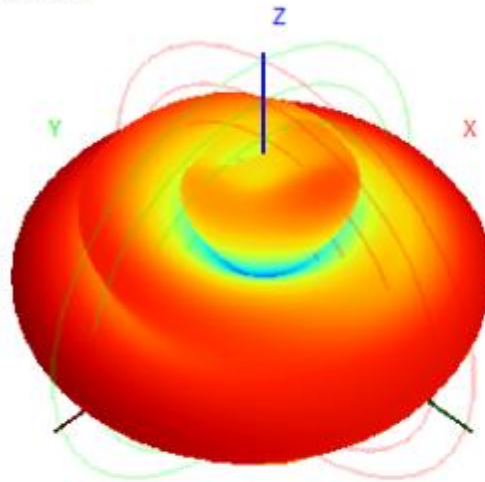
1800.0MHz Total(E2-YZ), Max=-0.41dBi



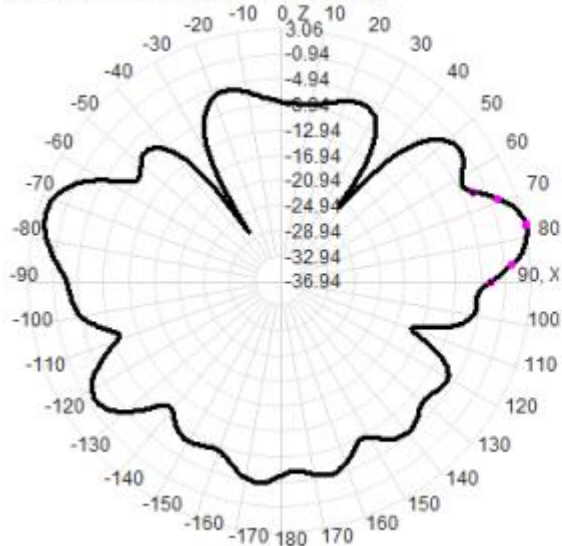
2100.0MHz H+V, Eff: 46.2%



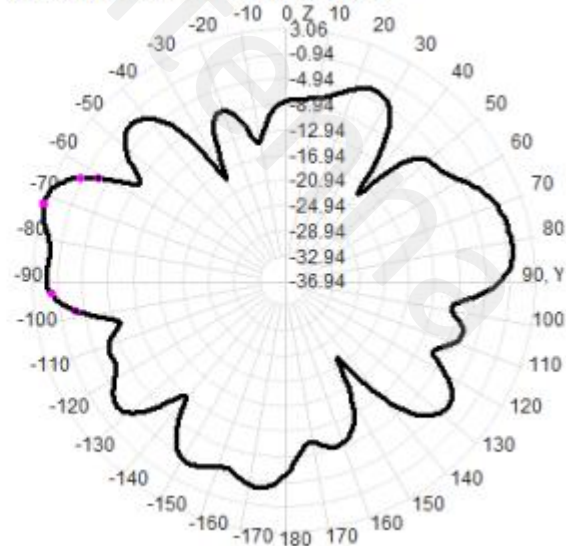
Back View



2100.0MHz Total(E1-XZ), Max= 3.00dBi

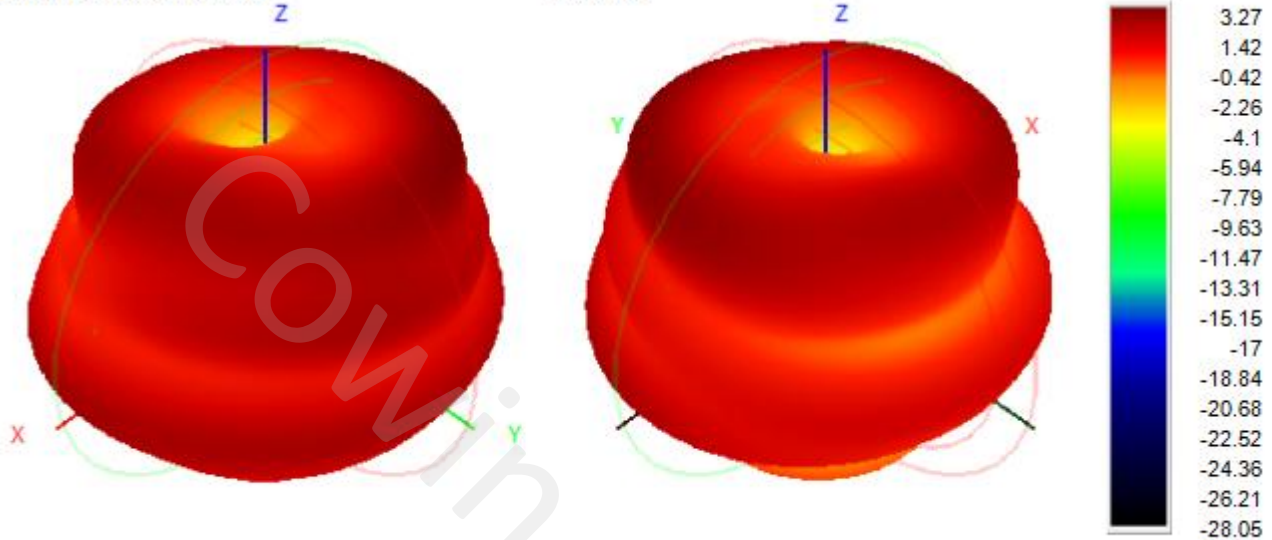


2100.0MHz Total(E2-YZ), Max= 3.06dBi



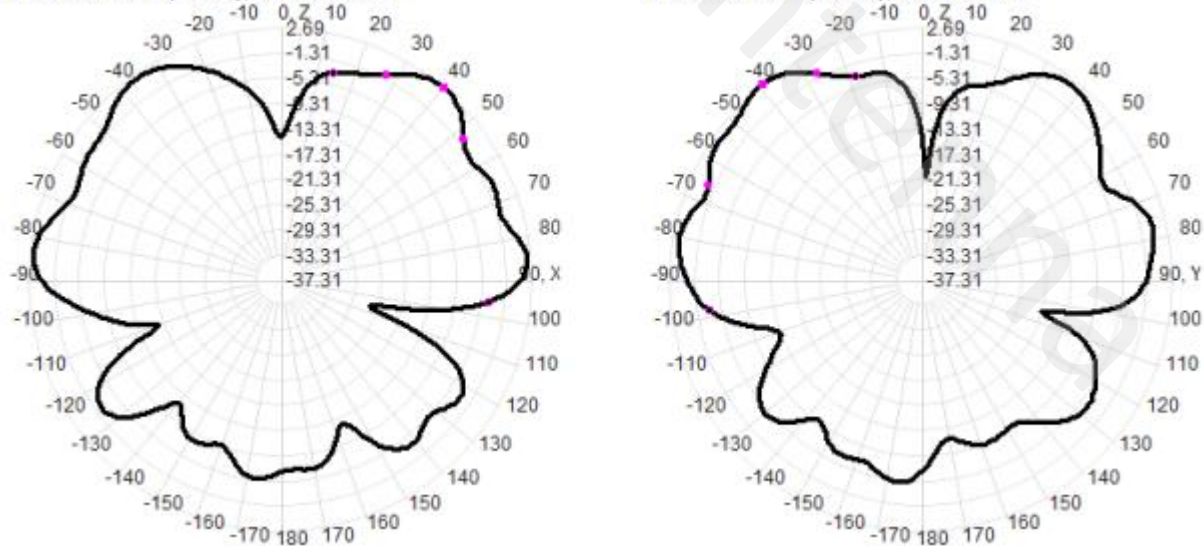
2310.0MHz H+V, Eff: 64.7%

Back View



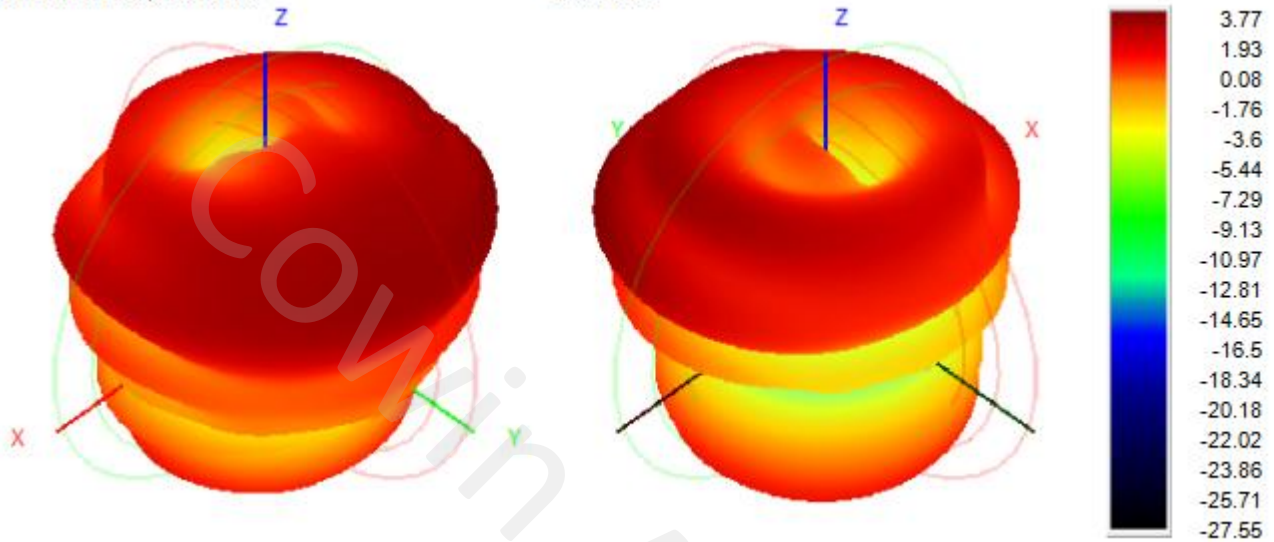
2310.0MHz Total(E1-XZ), Max= 2.69dBi

2310.0MHz Total(E2-YZ), Max= 2.68dBi



2700.0MHz H+V, Eff: 54.2%

Back View



2700.0MHz Total(E1-XZ), Max= 2.70dBi

2700.0MHz Total(E2-YZ), Max= 3.09dBi

