

CW-WZ-0056

4G External Antenna

Key Features

Frequency: 698-960MHz/1710-2700MHz

SMA Male Connector

External Rubber

Dimensions 172*19 mm

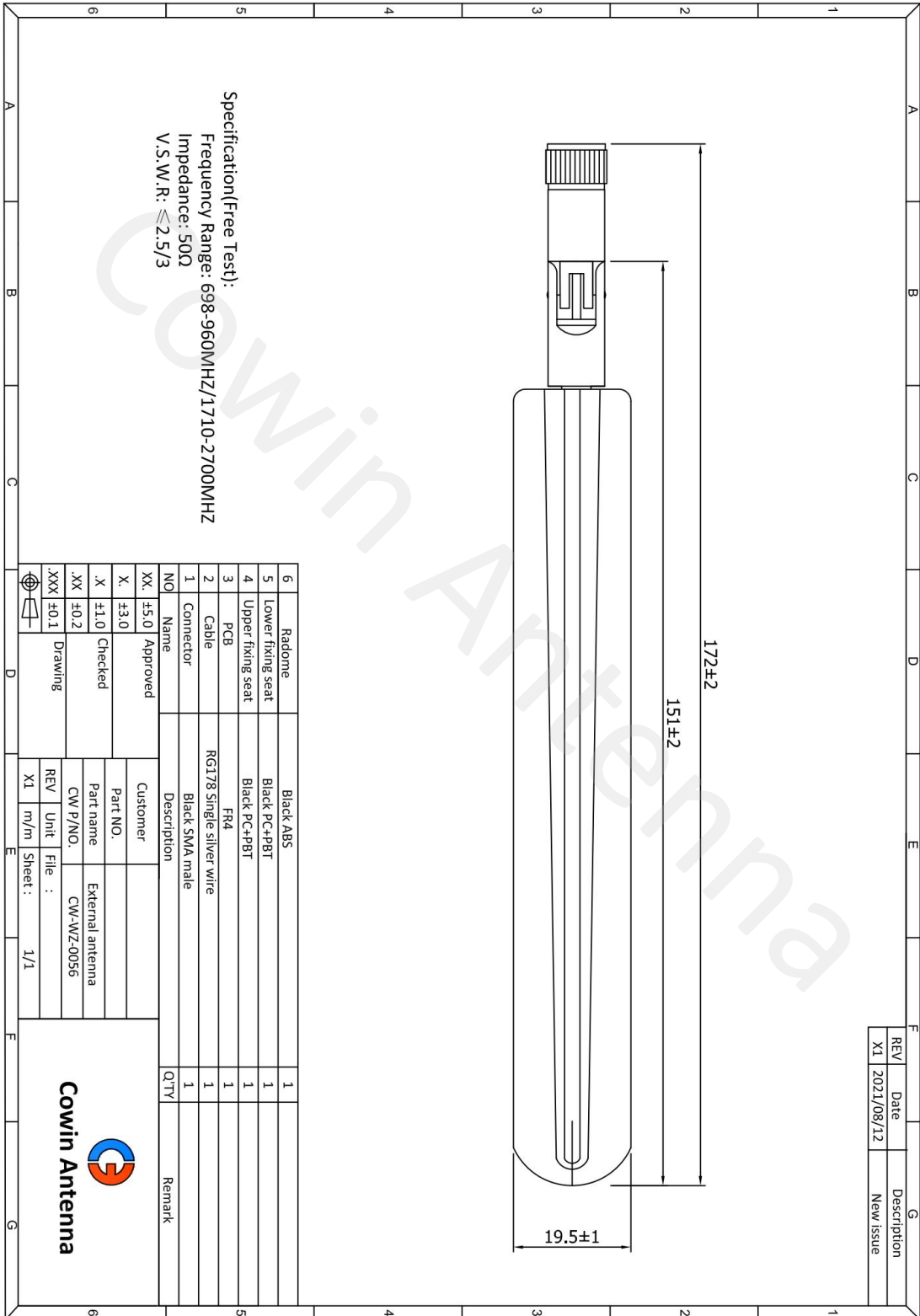


1. Antenna Electrical Characteristics

Band (MHz)		
Frequency (MHz)	698-960MHz	1710-2700MHz
VSWR	2:1	3:1
Efficiency (%)	65.17%	61.86%
Peak Gain (dBi)	3.25	3.02
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)	172*19MM
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



Specification(Free Test):
 Frequency Range: 698-960MHZ/1710-2700MHZ
 Impedance: 50Ω
 V.S.W.R: ≤2.5/3

6	Radome	Black ABS	1		
5	Lower fixing seat	Black PC+PBT	1		
4	Upper fixing seat	Black PC+PBT	1		
3	PCB	FR4	1		
2	Cable	RG178 Single silver wire	1		
1	Connector	Black SMA male	1		

NO	Name	Description	QTY	Remark
XX	±5.0	Approved		
X	±3.0	Customer		
X	±1.0	Part NO.		
.X	±1.0	Part name		External antenna
.XX	±0.2	CW P/NO.		CW-WZ-0056
XXX	±0.1	REV		File :
		Unit		Sheet :
		X1		1/1

REV	Date	Description
X1	2021/08/12	New issue



4. Antenna test parameters

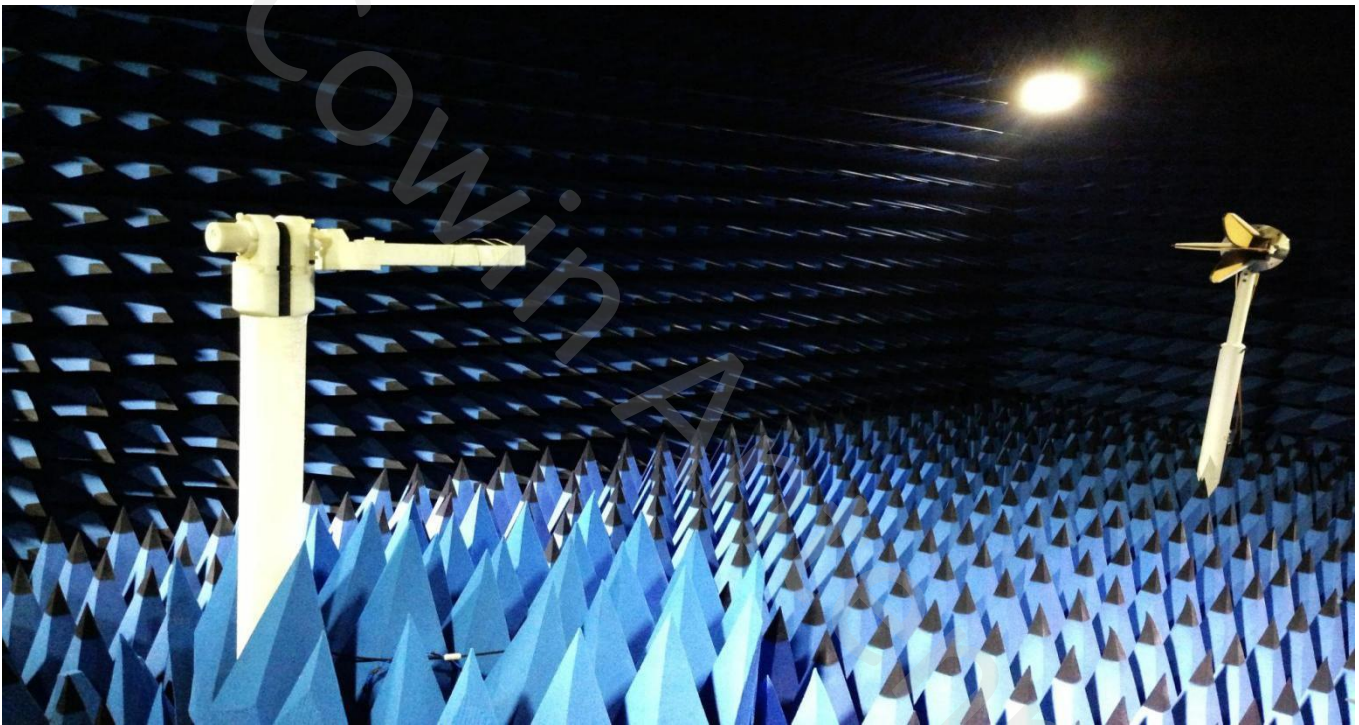
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

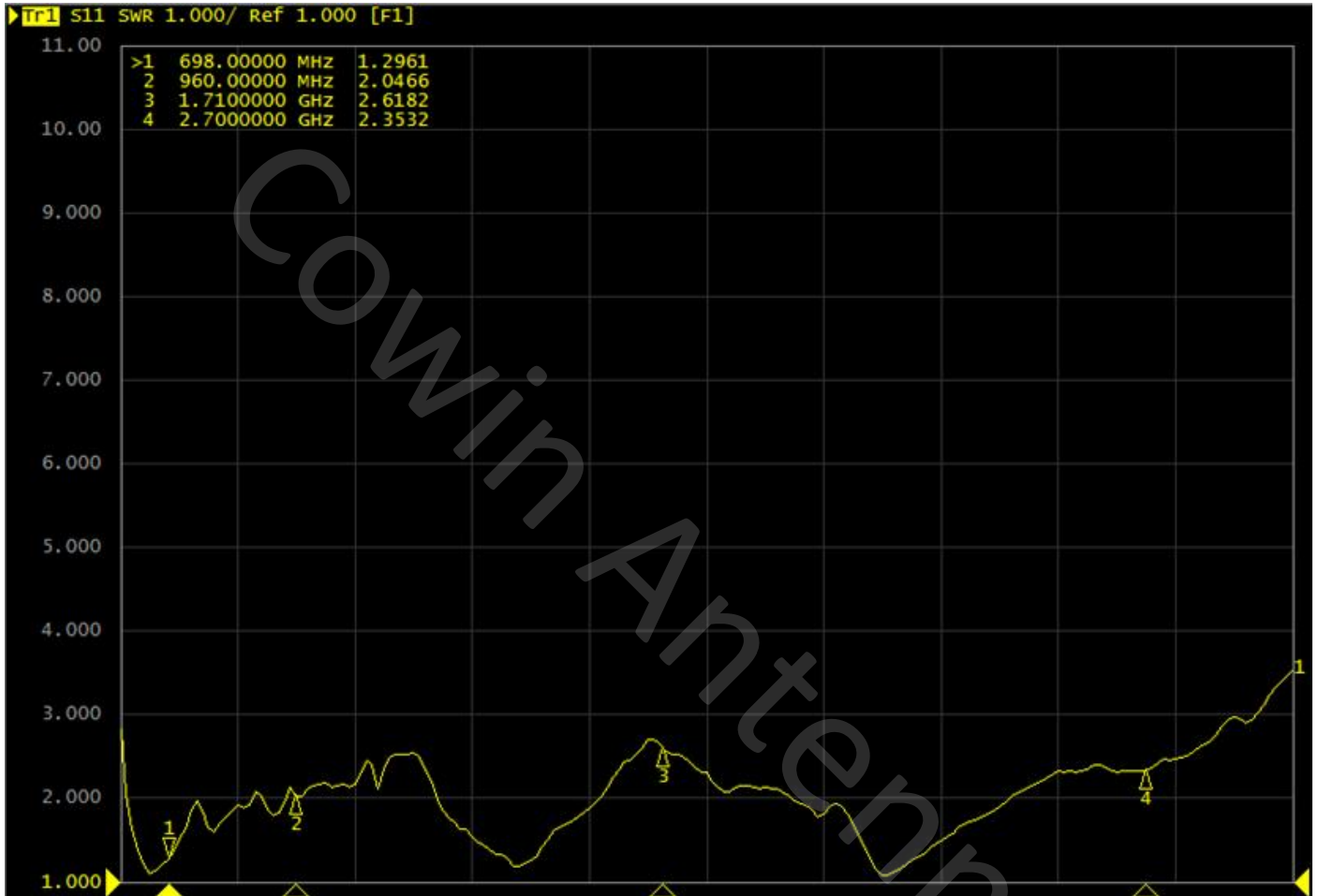
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

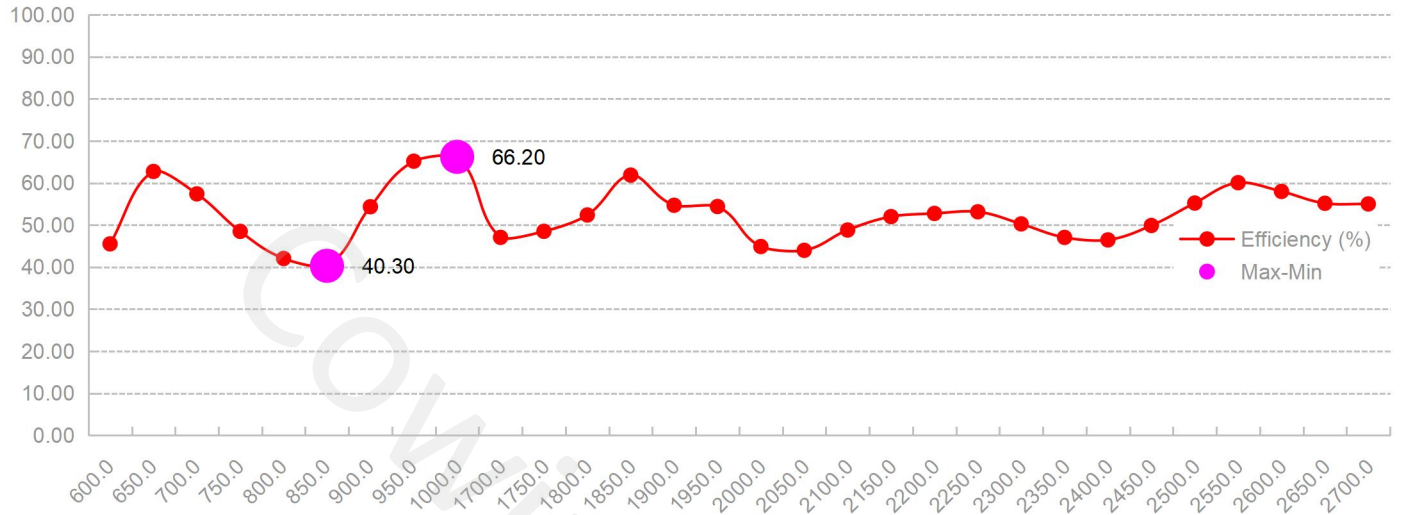
The comprehensive tester is Agilent cmv500



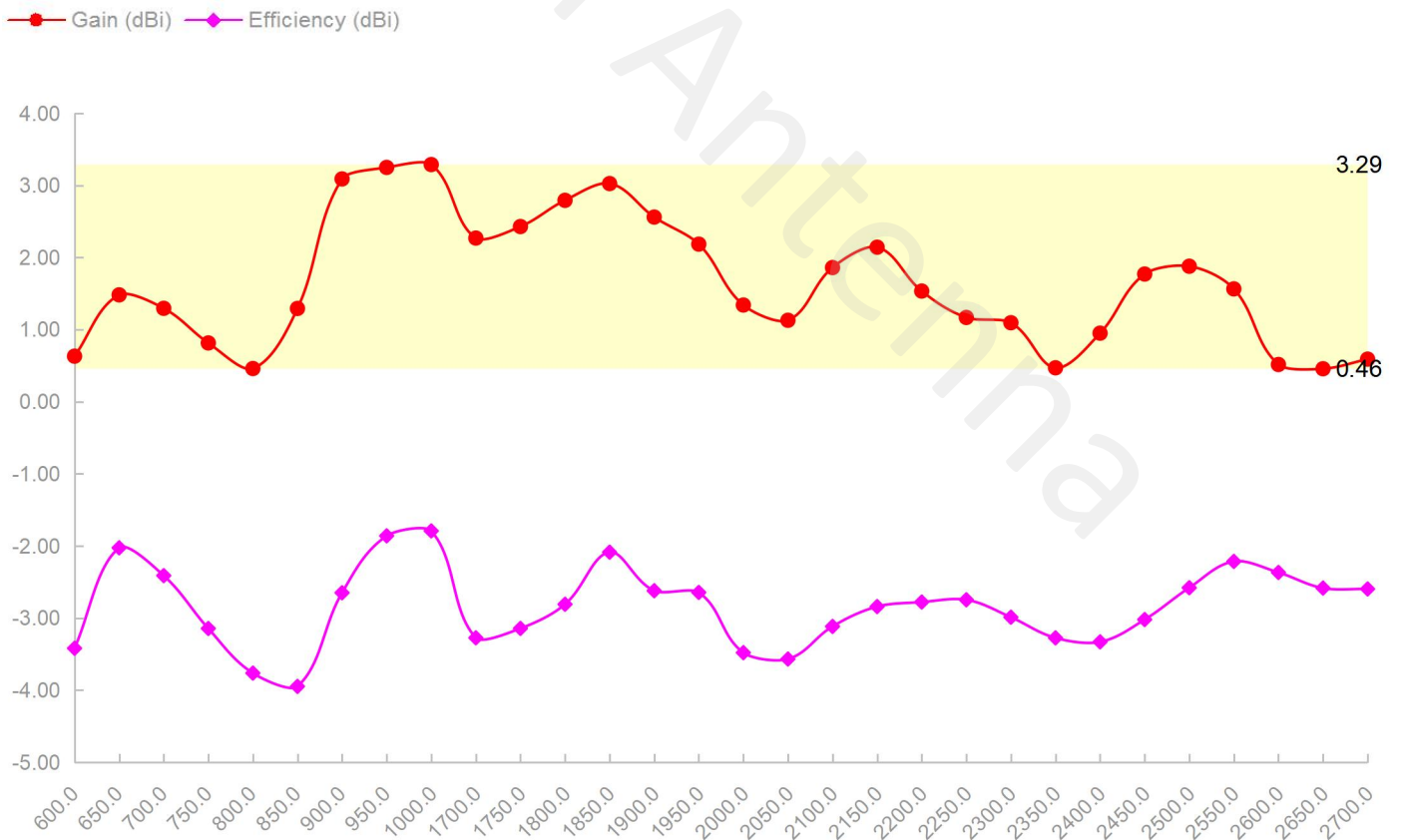
4.1 VSWR



4.2 Efficiency

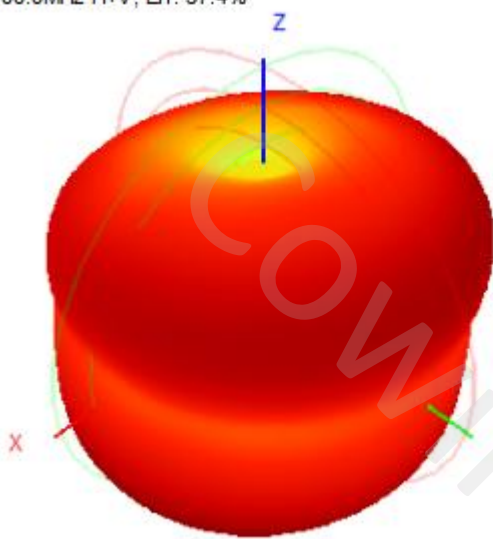


4.3 Peak gain

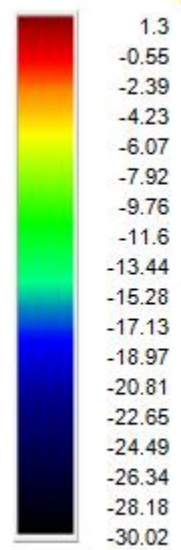
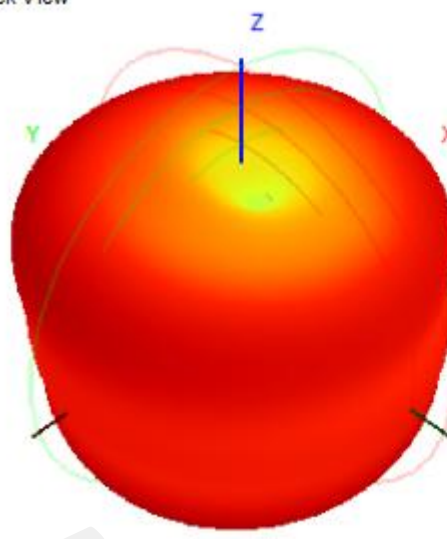


4.4 3D&2D Radiation Patterns

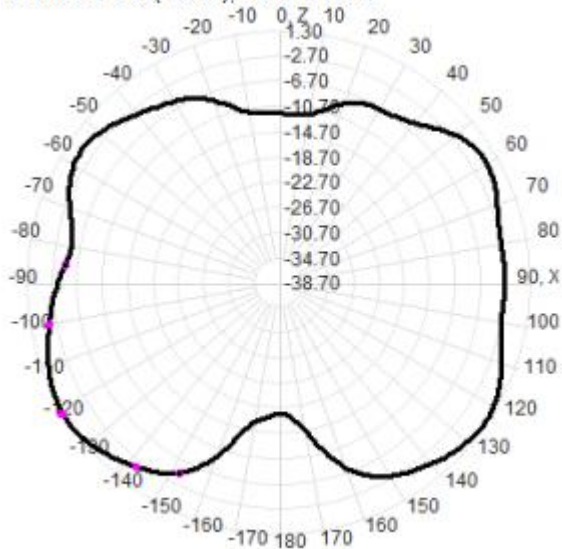
700.0MHz H+V, Eff: 57.4%



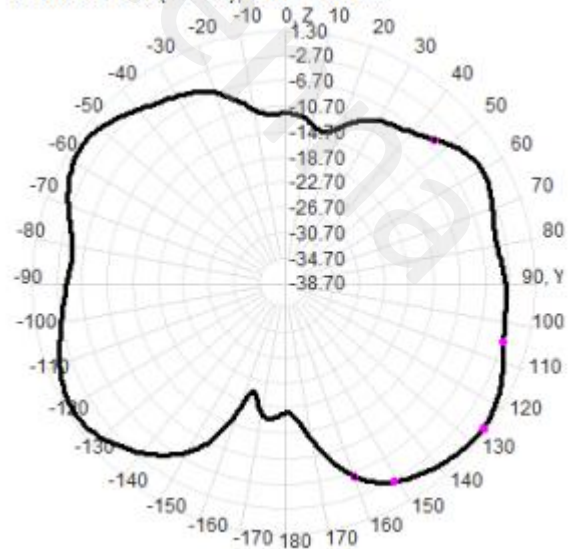
Back View



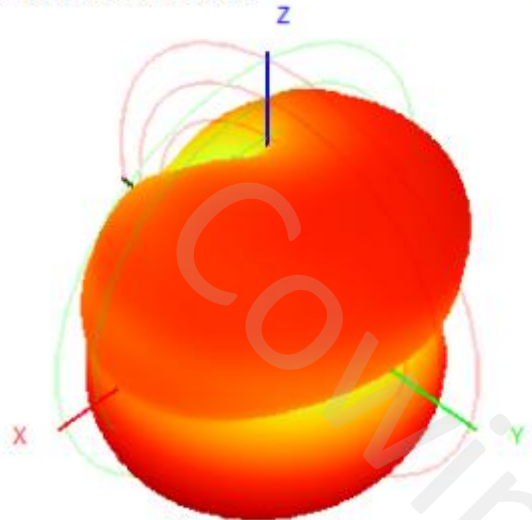
700.0MHz Total(E1-XZ), Max= 1.30dBi



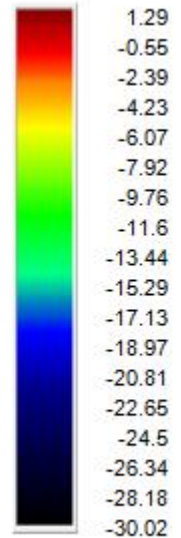
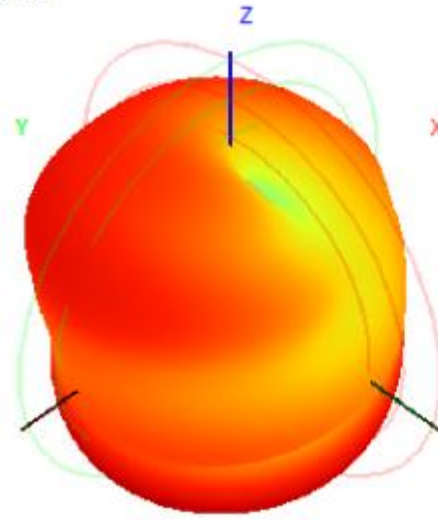
700.0MHz Total(E2-YZ), Max= 0.27dBi



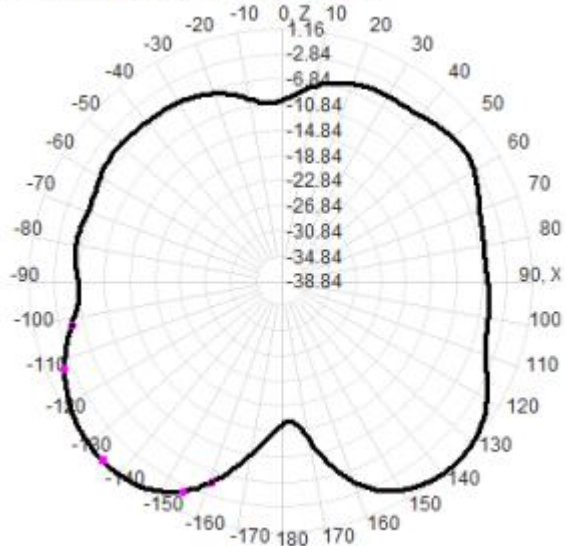
850.0MHz H+V, Eff: 40.3%



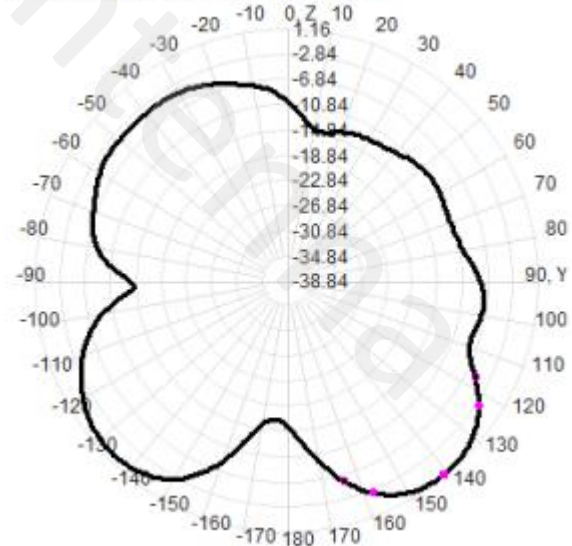
Back View



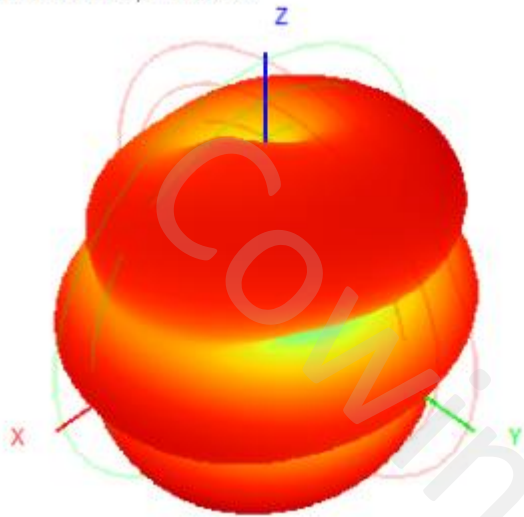
850.0MHz Total(E1-XZ), Max= 1.16dBi



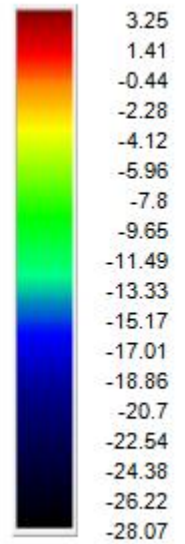
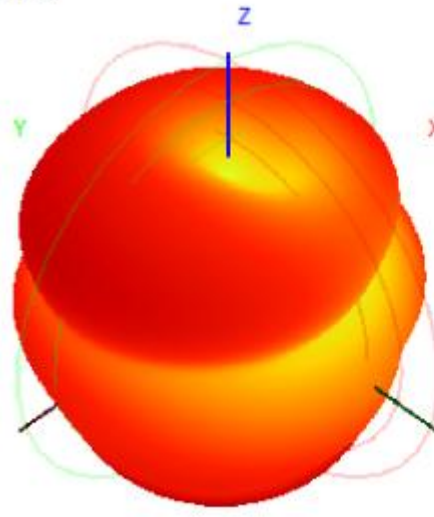
850.0MHz Total(E2-YZ), Max= 0.62dBi



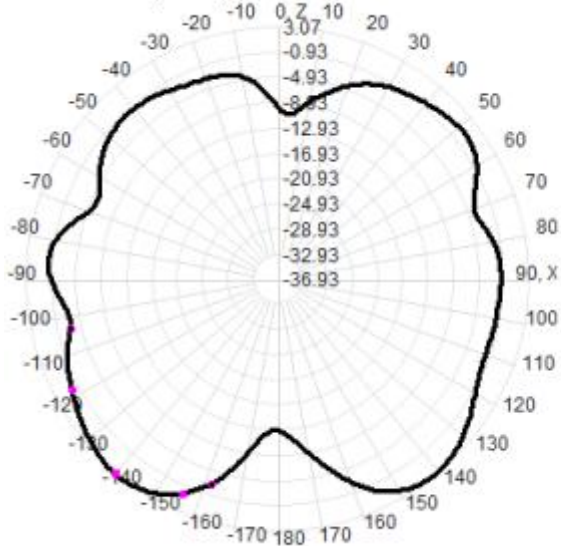
950.0MHz H+V, Eff: 65.2%



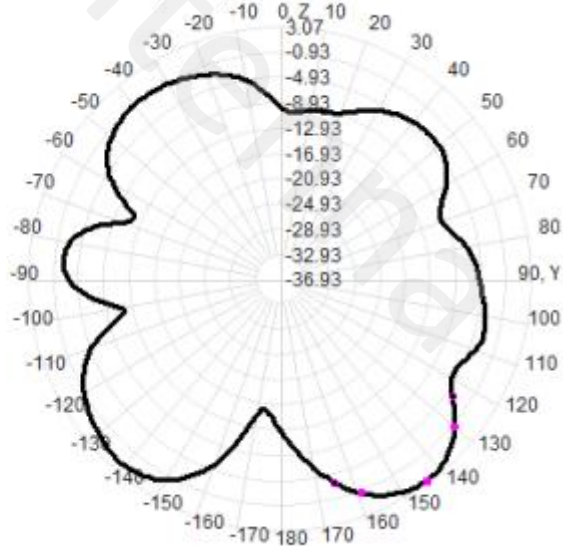
Back View



950.0MHz Total(E1-XZ), Max= 3.07dBi

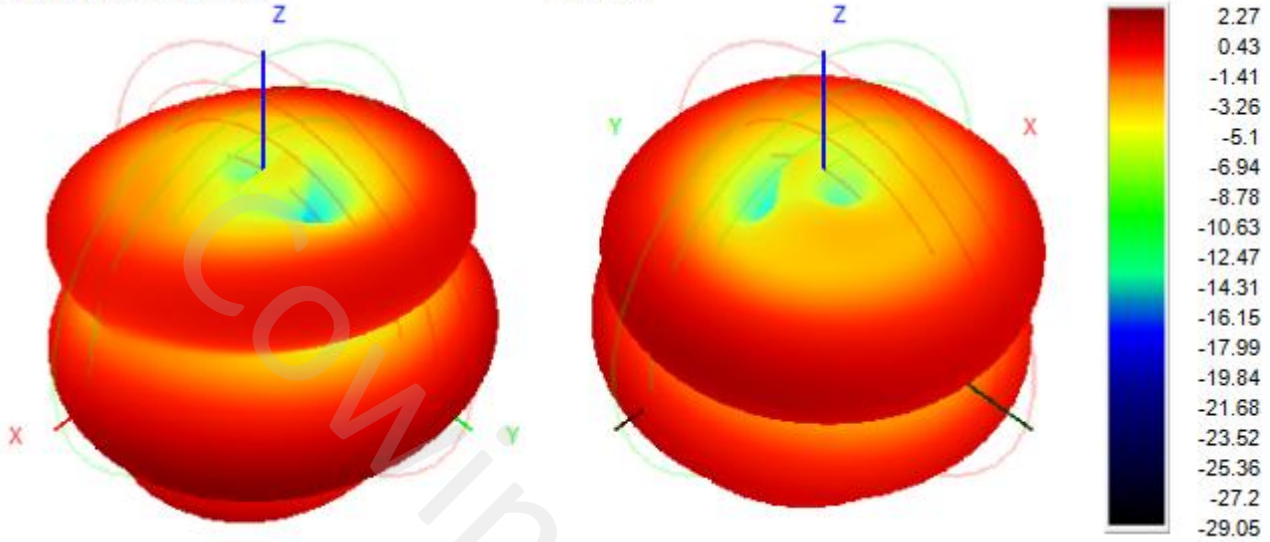


950.0MHz Total(E2-YZ), Max= 2.38dBi



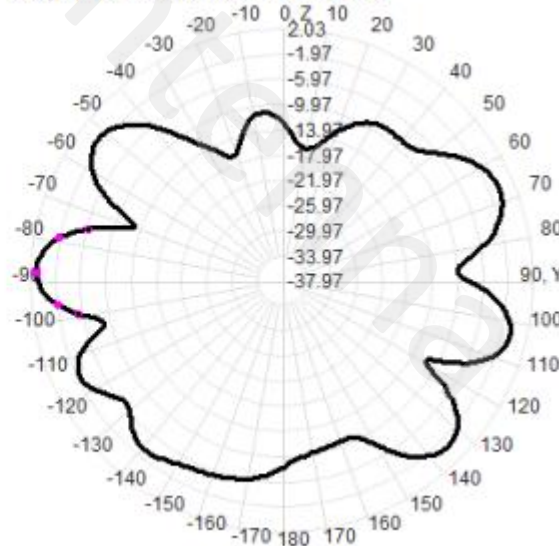
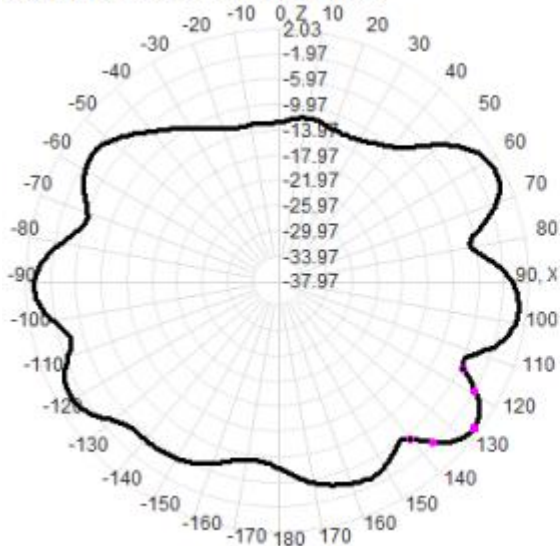
1700.0MHz H+V, Eff: 47.1%

Back View

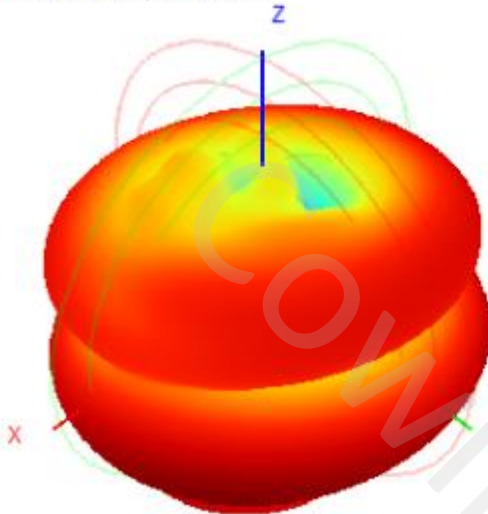


1700.0MHz Total(E1-XZ), Max= 0.79dBi

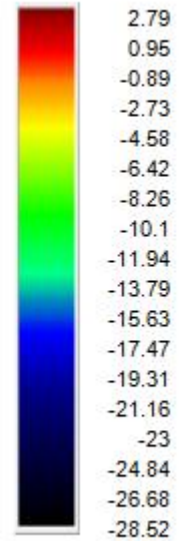
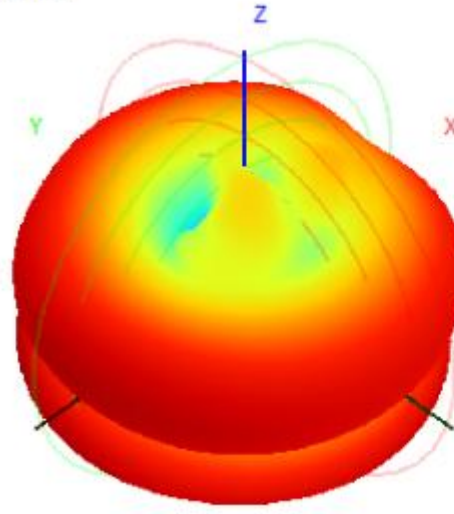
1700.0MHz Total(E2-YZ), Max= 1.04dBi



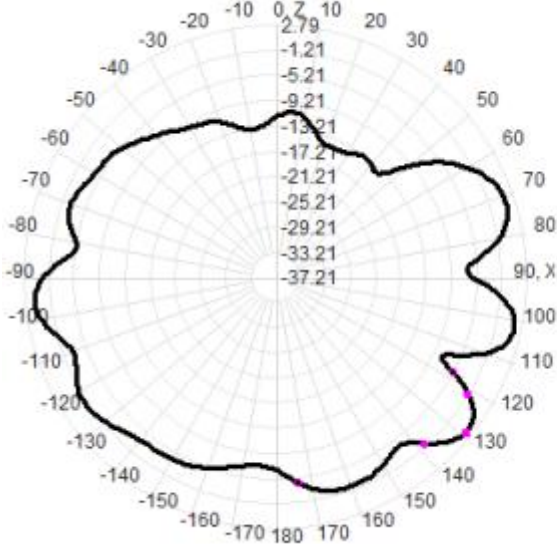
1800.0MHz H+V, Eff: 52.4%



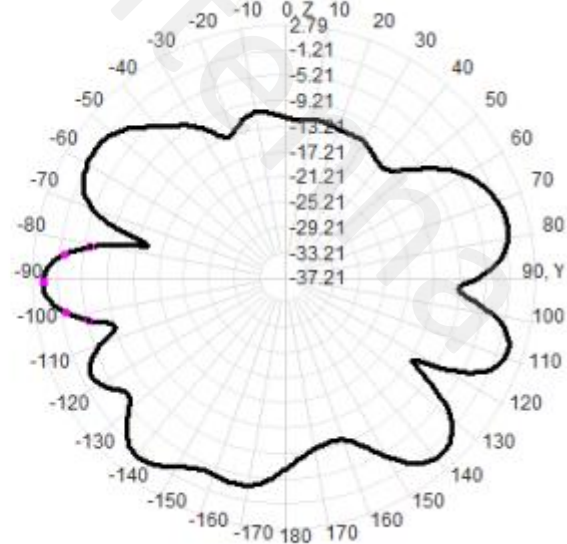
Back View



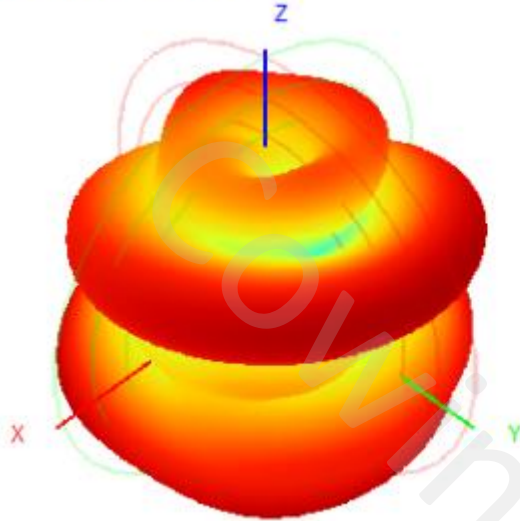
1800.0MHz Total(E1-XZ), Max= 1.55dBi



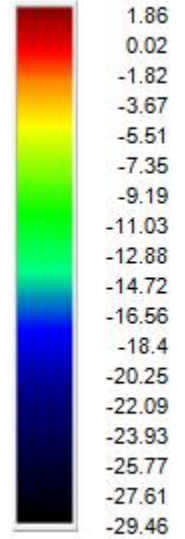
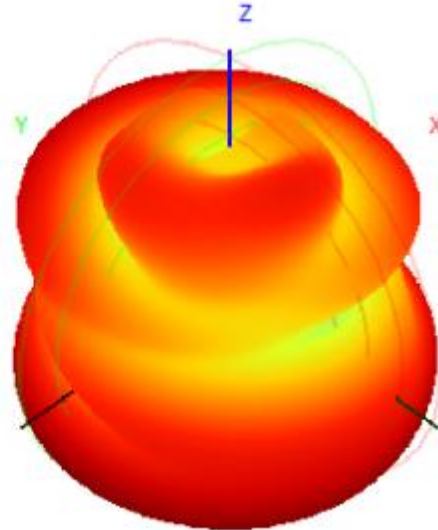
1800.0MHz Total(E2-YZ), Max= 1.02dBi



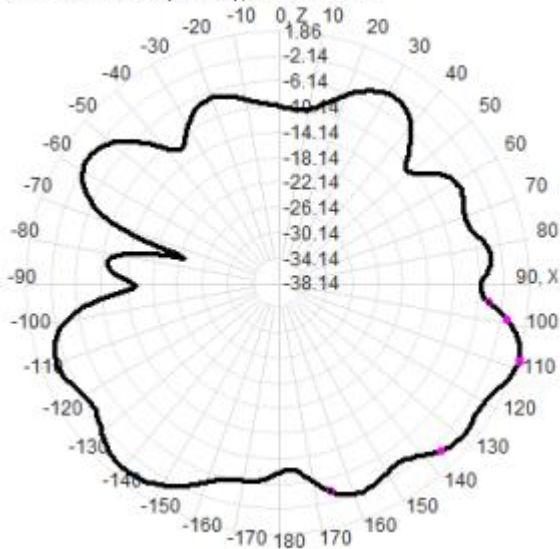
2100.0MHz H+V, Eff: 48.8%



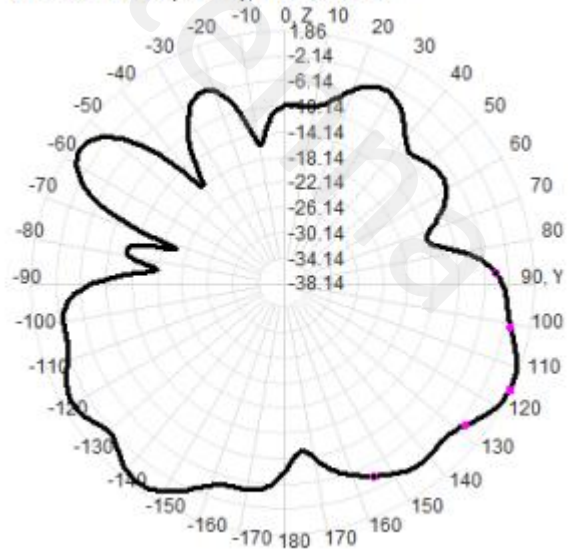
Back View



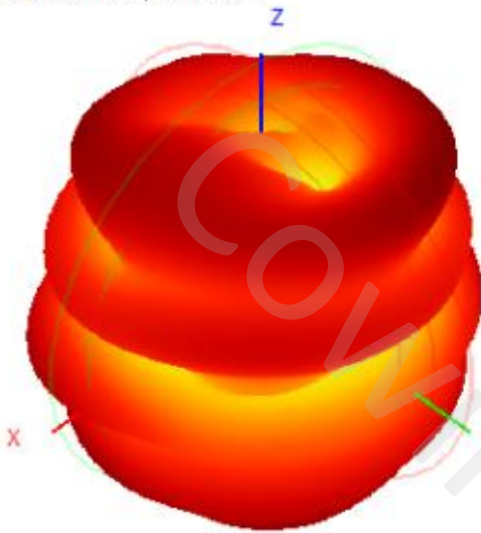
2100.0MHz Total(E1-XZ), Max= 1.86dBi



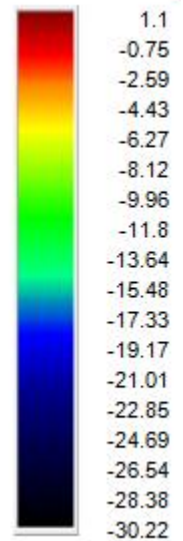
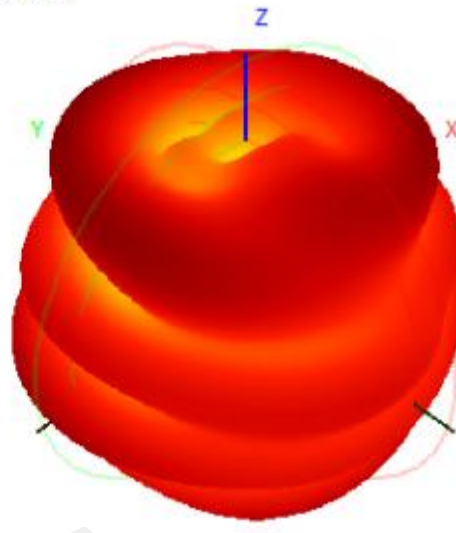
2100.0MHz Total(E2-YZ), Max= 1.54dBi



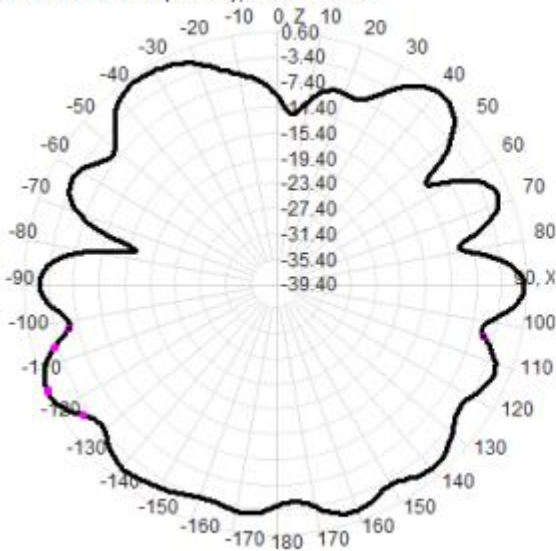
2300.0MHz H+V, Eff: 50.3%



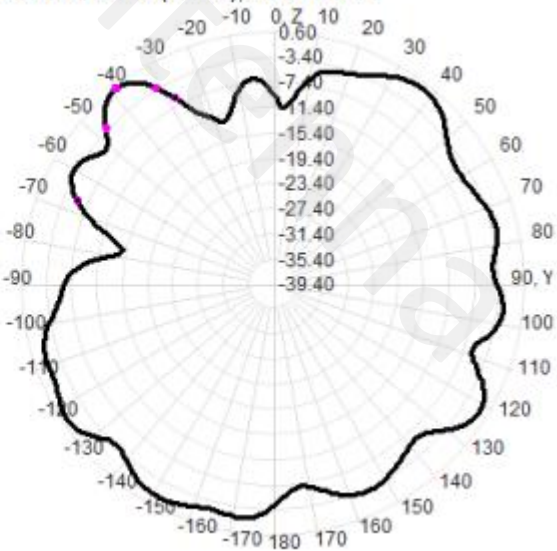
Back View



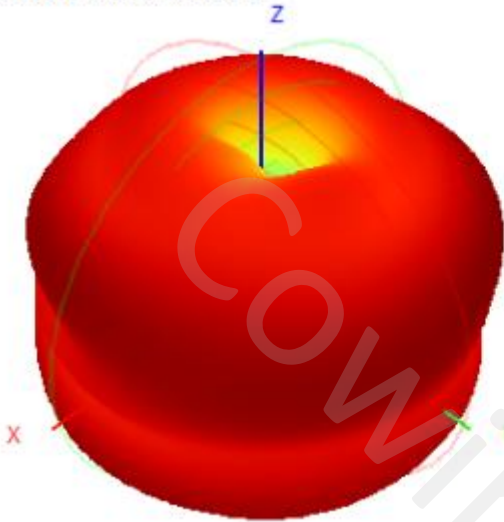
2300.0MHz Total(E1-XZ), Max= 0.60dBi



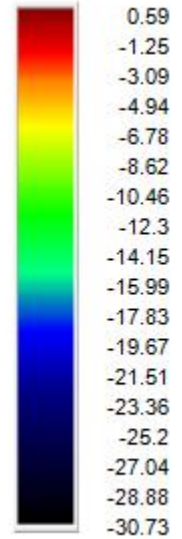
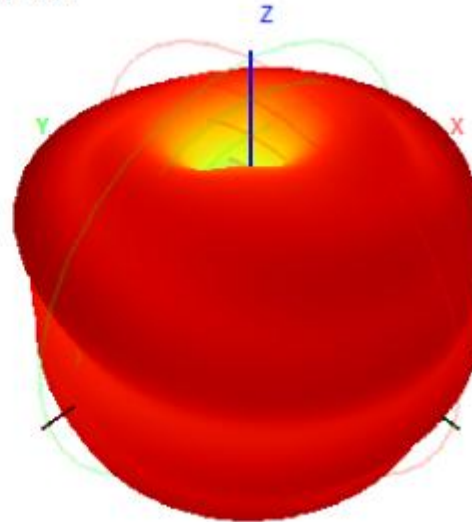
2300.0MHz Total(E2-YZ), Max= 0.41dBi



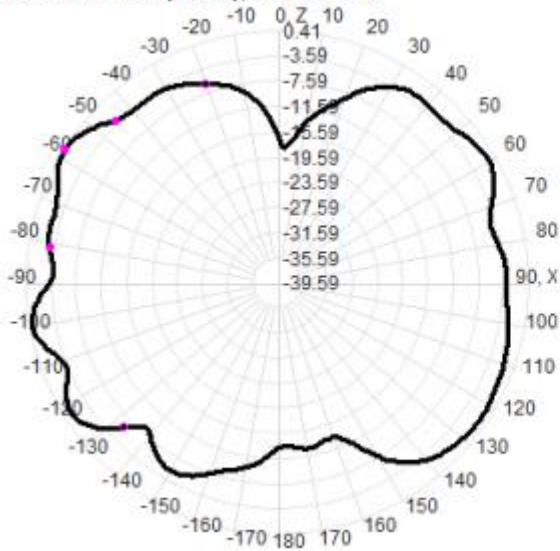
2700.0MHz H+V, Eff: 55.0%



Back View



2700.0MHz Total(E1-XZ), Max= 0.21dBi



2700.0MHz Total(E2-YZ), Max= 0.41dBi

