

CW-WZ-0126

4G External Patch Antenna

Key Features

Frequency: 698-960/1710-2700MHz

SMA Male Connector

3M Adhesive

Dimensions 116*22 mm



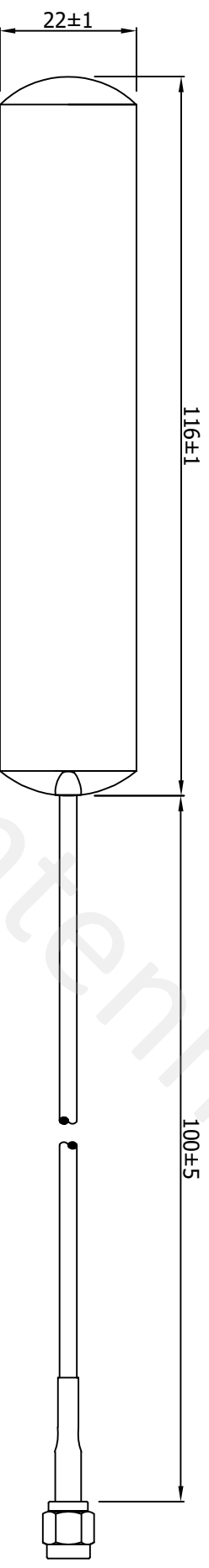
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	698-960/ 1710-2700MHz
VSWR	2/3
Efficiency (%)	58.18% /66.73%
Peak Gain (dBi)	3.58/2.76
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Male

2. Material and environmental characteristics

Inner structure	PCB
Material of Plastic	ABS
Cable Type	RG174
Connector Type	SMA Male
Dimensions (mm)	116*22MM
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS

REV	Date	Description
X1	2023/04/19	New issue



Specification(Free Test):
 Frequency Range: 698-960MHZ/1710-2700MHZ
 Impedance: 50Ω
 V.S.W.R: ≤2/3
 100% Continuity,short and open circuit test
 Materials,parts and process must by environmentally (ROHS)

5	Foam cotton	116*22MM	1						
4	PCB	FR4	1						
3	Radome	Black ABS	1						
2	Cable	RG174	1						
1	Connector	SMA Male	1						
NO	Name	Description	Q'TY	Remark					
XX	±5.0	Approved			Customer				
X	±3.0				Part NO.				
X	±1.0	Checked			Part name	External antenna			
.XX	±0.2				CW P/NO.	CW-WZ-0126			
.XXX	±0.1	Drawing			REV	Unit	File		
⊕					X1	m/m	Sheet :	1/1	



4. Antenna test parameters

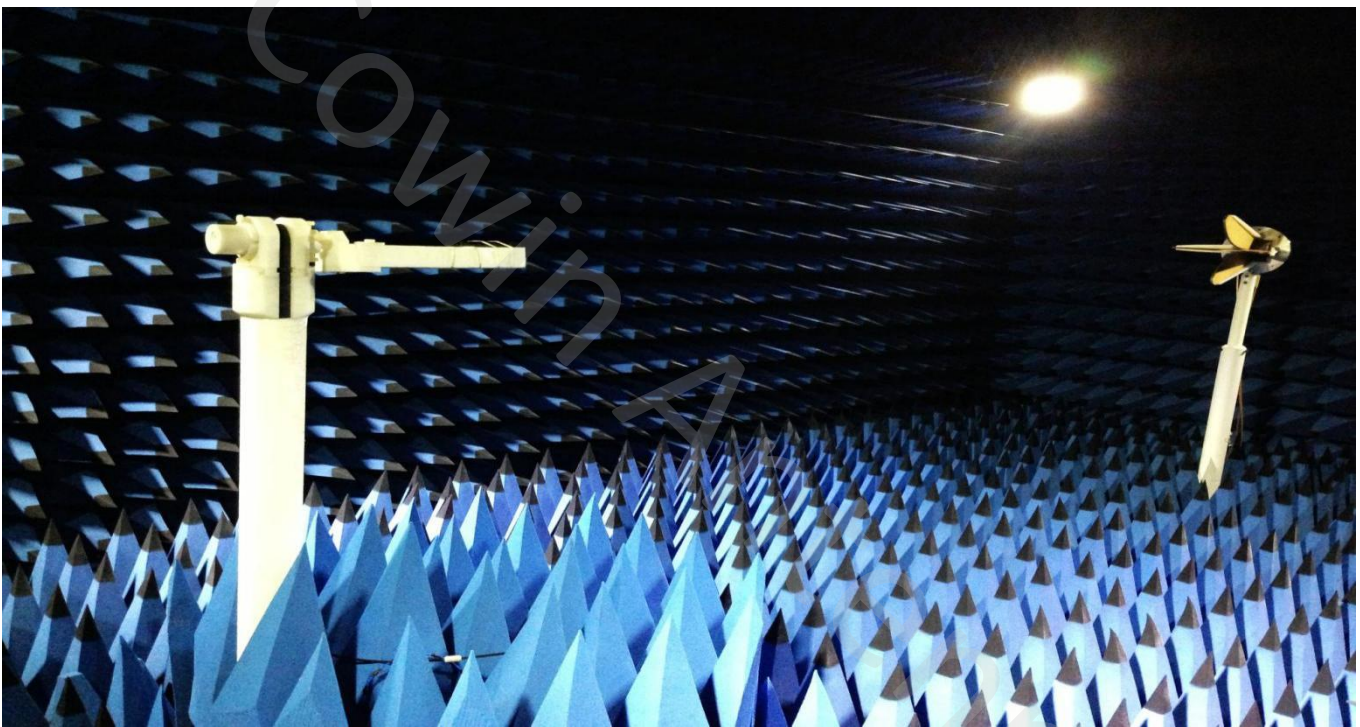
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

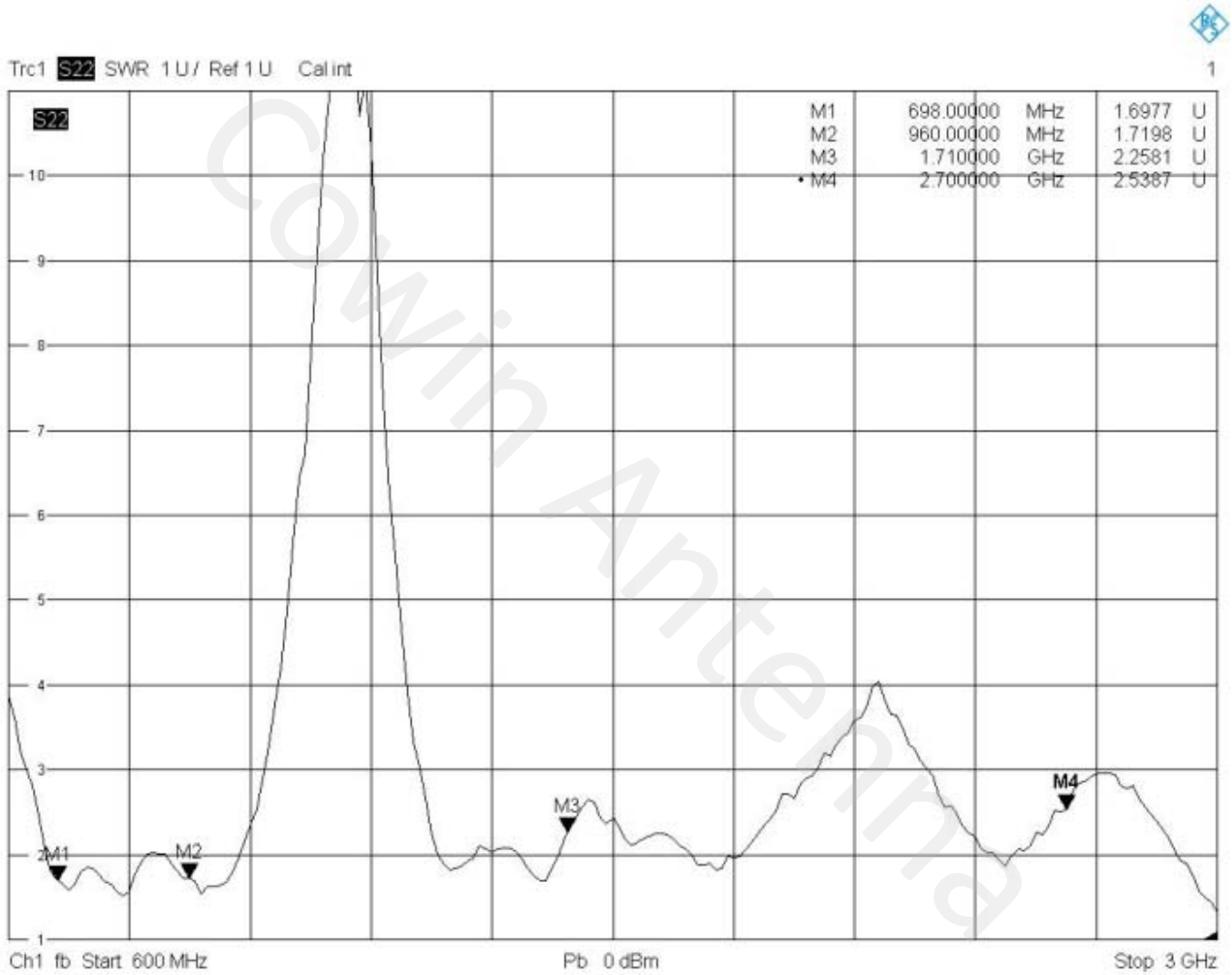
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

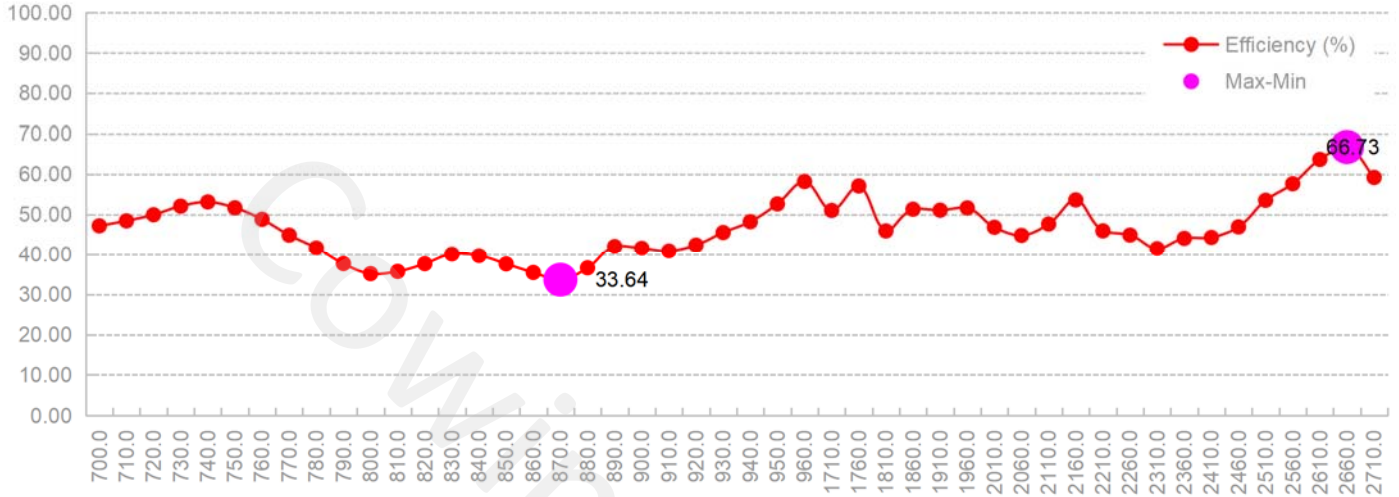
The comprehensive tester is Agilent cmv500



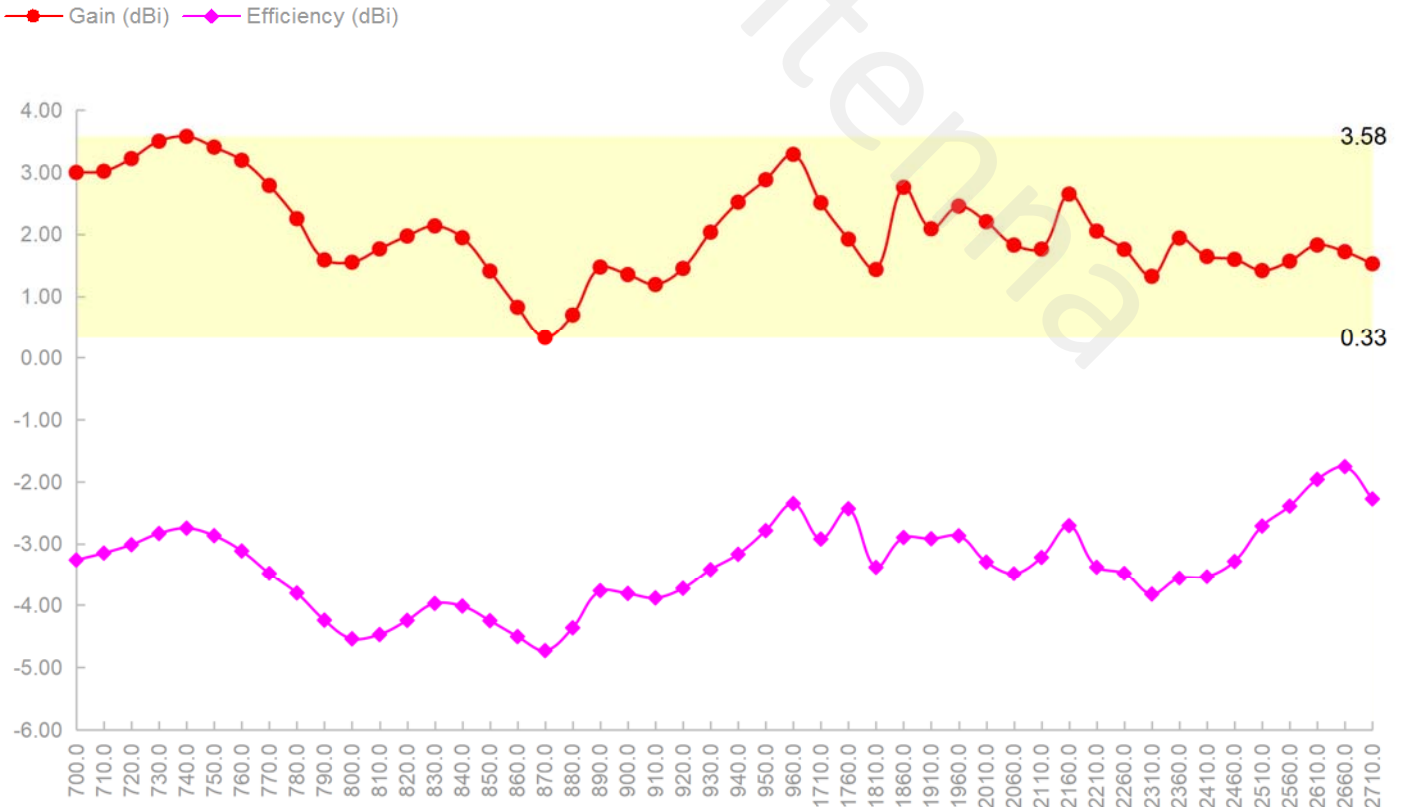
4.1 VSWR



4.2 Efficiency



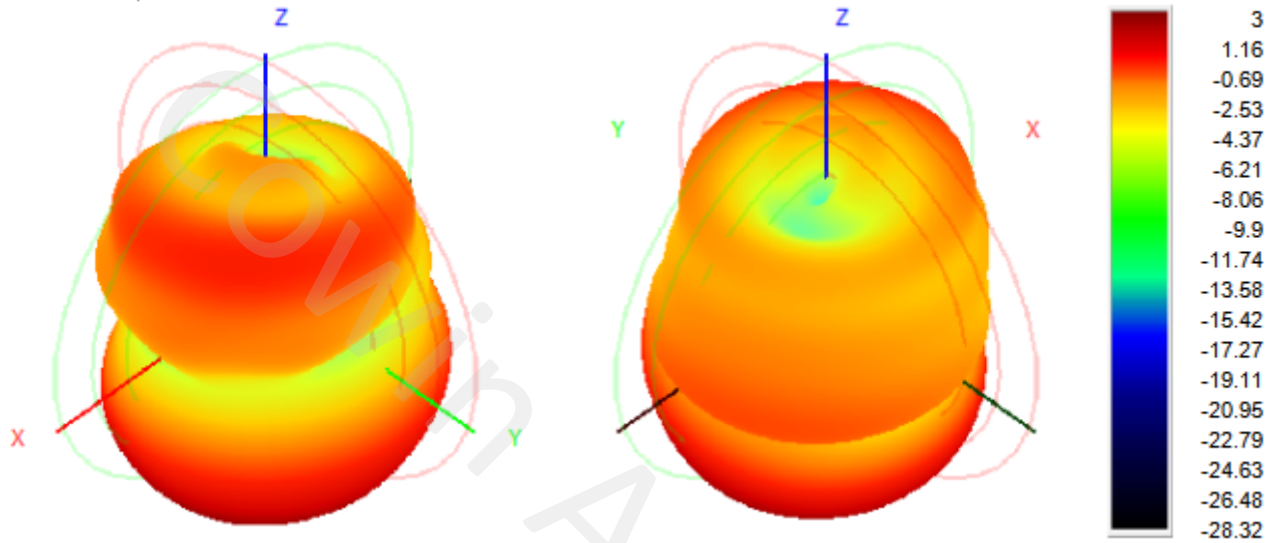
4.3 Peak gain



4.4 3D&2D Radiation Patterns

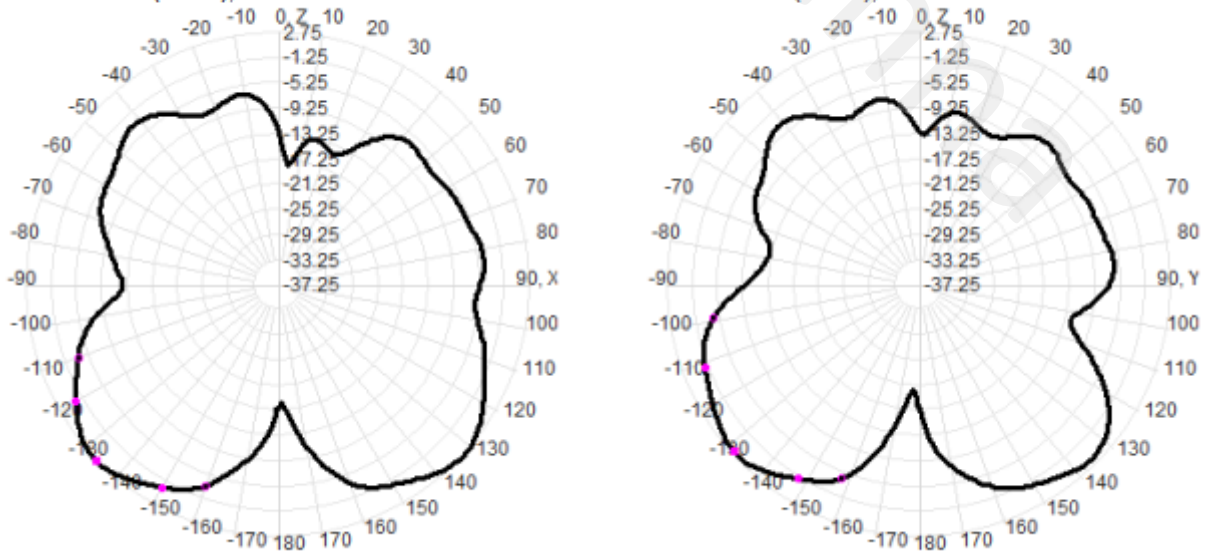
700.0MHz H+V, Eff: 47.2%

Back View

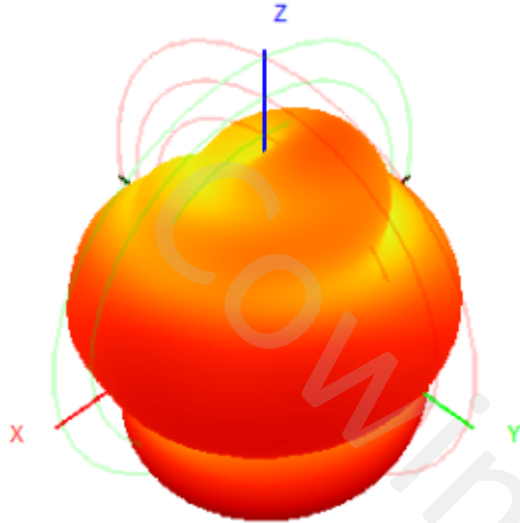


700.0MHz Total(E1-XZ), Max= 2.75dBi

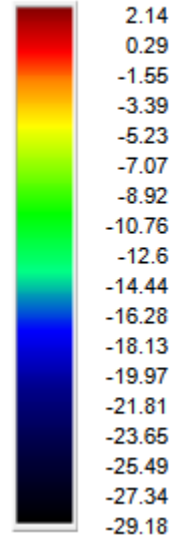
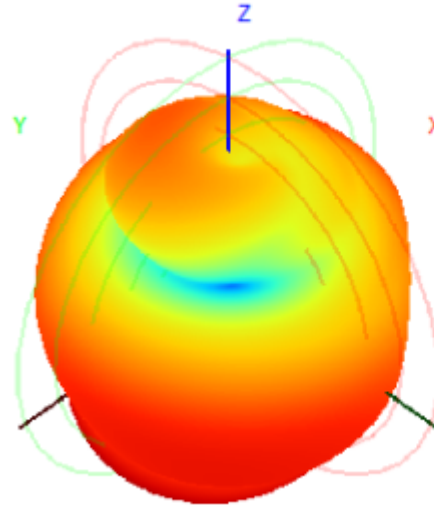
700.0MHz Total(E2-YZ), Max= 2.13dBi



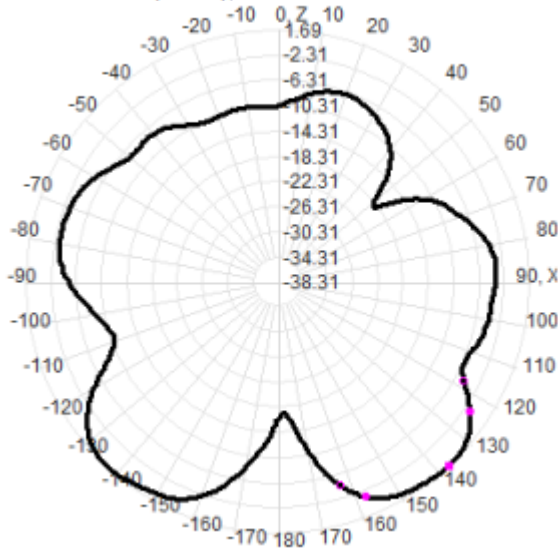
830.0MHz H+V, Eff: 40.1%



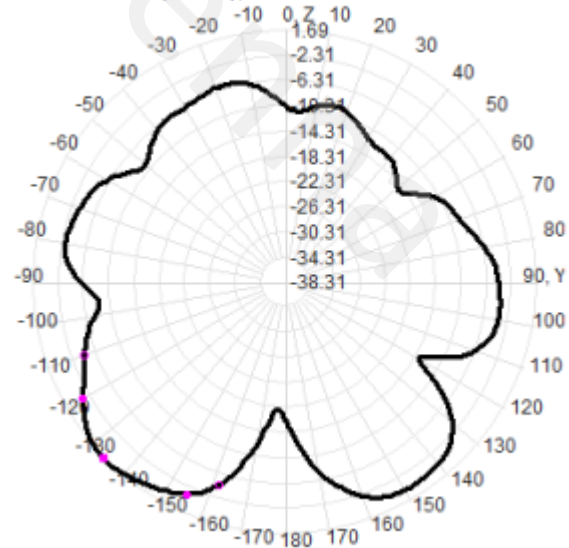
Back View



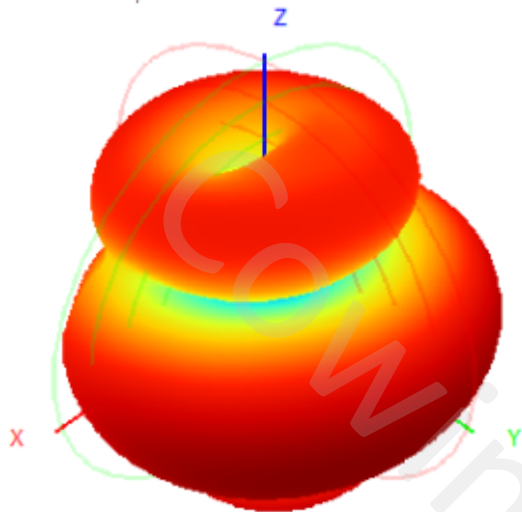
830.0MHz Total(E1-XZ), Max= 1.44dBi



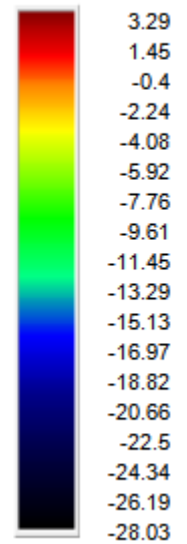
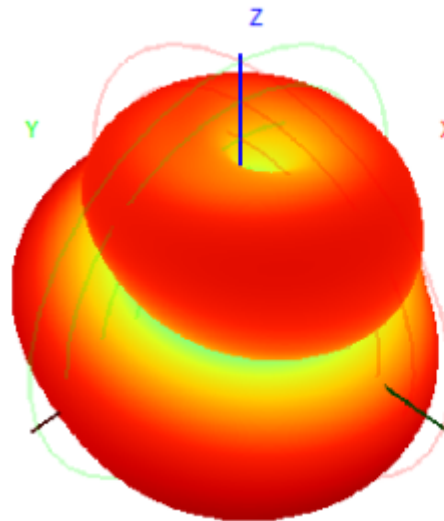
830.0MHz Total(E2-YZ), Max= 1.69dBi



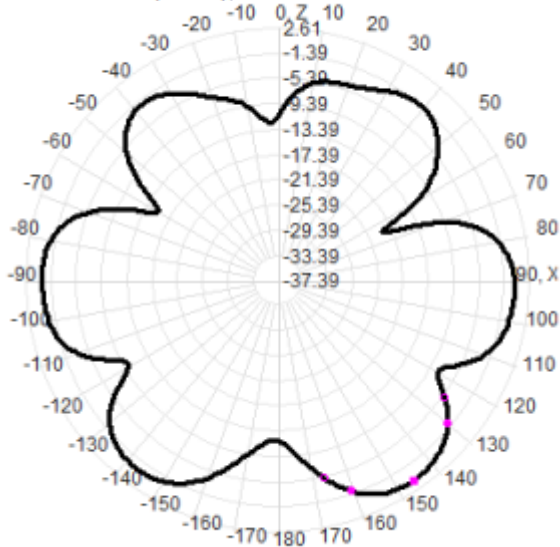
960.0MHz H+V, Eff: 58.2%



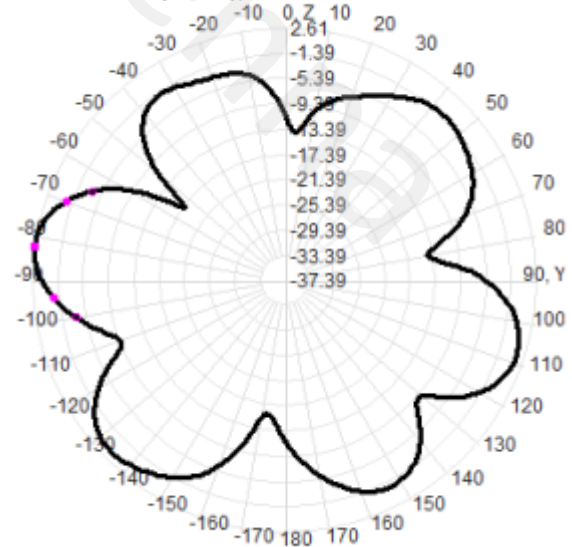
Back View



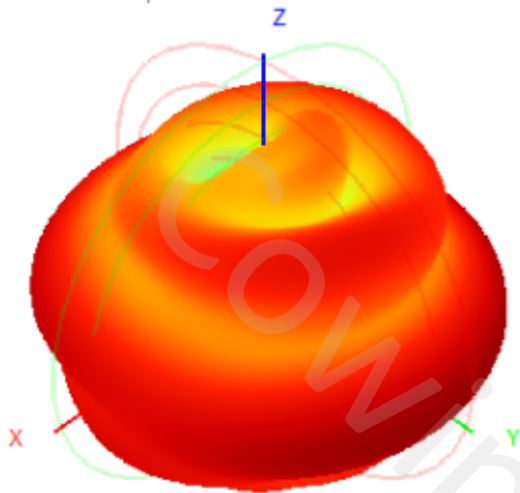
960.0MHz Total(E1-XZ), Max= 0.77dBi



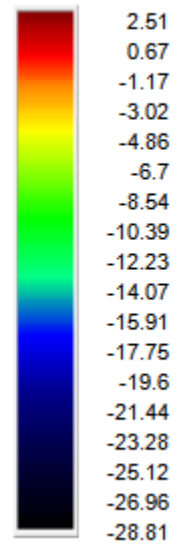
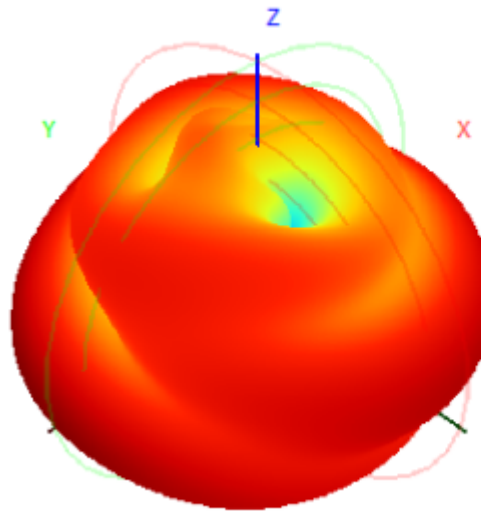
960.0MHz Total(E2-YZ), Max= 2.61dBi



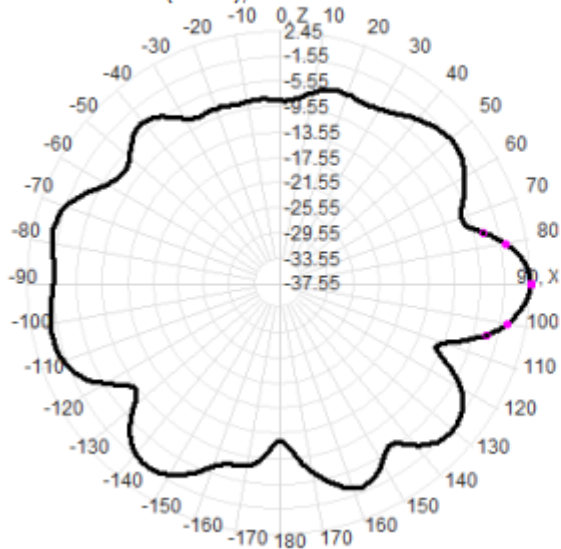
1710.0MHz H+V, Eff: 51.0%



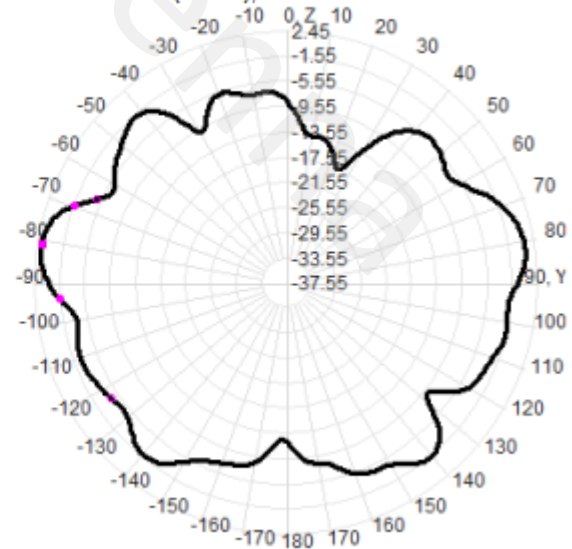
Back View



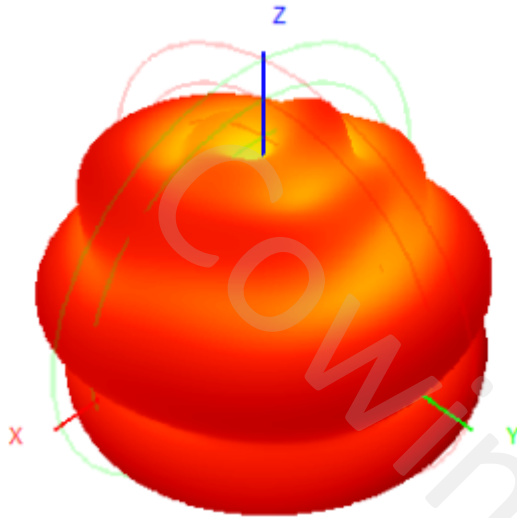
1710.0MHz Total(E1-XZ), Max= 2.29dBi



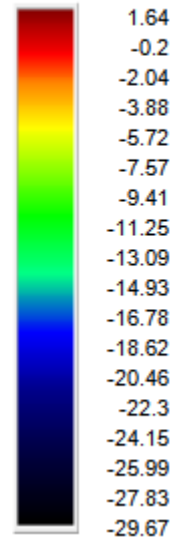
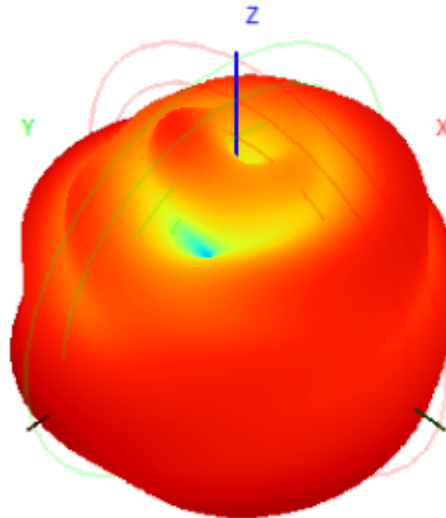
1710.0MHz Total(E2-YZ), Max= 1.72dBi



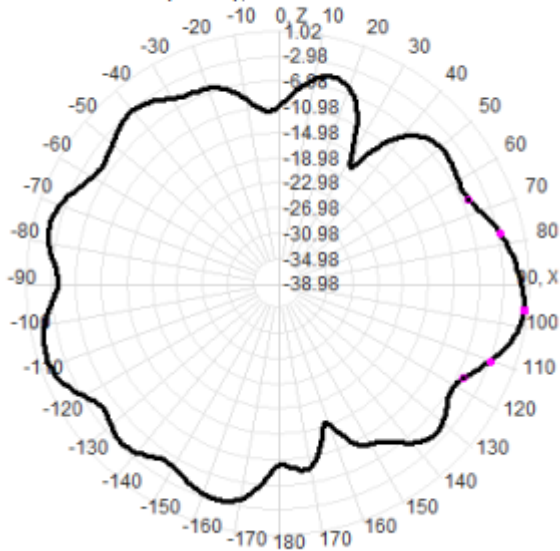
2410.0MHz H+V, Eff: 44.3%



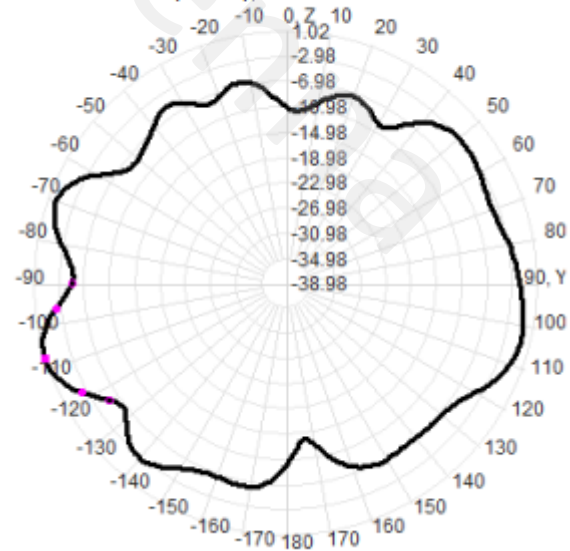
Back View



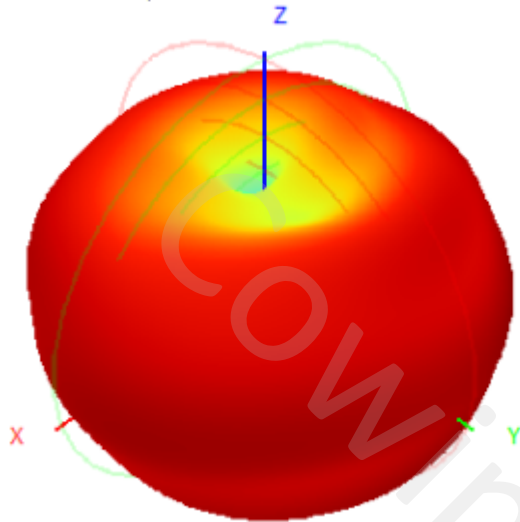
2410.0MHz Total(E1-XZ), Max= 0.08dBi



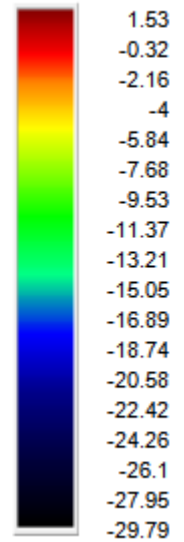
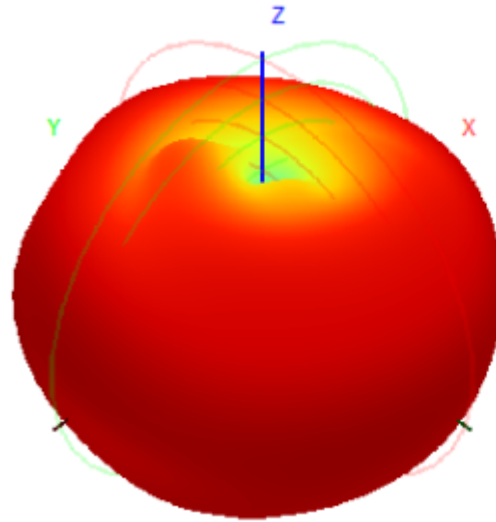
2410.0MHz Total(E2-YZ), Max= 1.02dBi



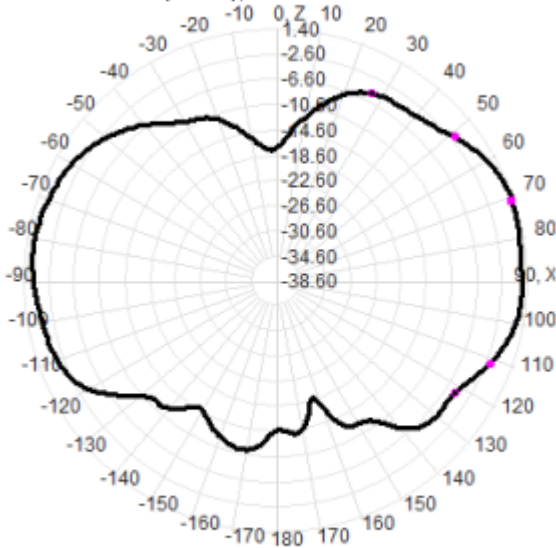
2710.0MHz H+V, Eff: 59.2%



Back View



2710.0MHz Total(E1-XZ), Max= 0.83dBi



2710.0MHz Total(E2-YZ), Max= 0.90dBi

