

CW-NZ-0062

4G Flexible PCB Antenna

Key Features

Frequency: 698-960MHz/1710-2700MHz

IPEX Connector

3M Adhesive

Dimensions 98*14mm



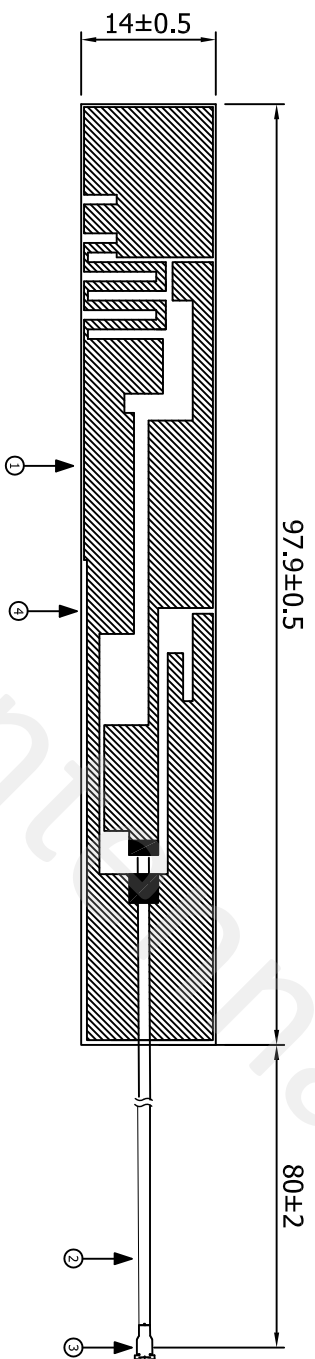
1. Antenna Electrical Characteristics

Band (MHz)		
Frequency (MHz)	698-960MHz	1710-2700MHz
VSWR	2.5:1	2:1
Efficiency (%)	68.43%	61.68%
Peak Gain (dBi)	3.82	3.77
Impedance (Ohm)	50	
Polarisation	Vertical	
Max. Input Power (W)	10	
Connector Type	IPEX	

2. Material and environmental characteristics

Material of PCB	FPC
Material of Plastic	N/A
Cable Type	RF1.13
Connector Type	IPEX
Dimensions (mm)	98*14MM
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	2021/06/30	New issue



Specification(Free test):
Frequency range: 698-960MHZ/1710-2700MHZ
Impedance: 50Ω
V.S.W.R: ≤5/4

Specification(Matching test):
Frequency range: 698-960MHZ/1710-2700MHZ
Impedance: 50Ω
V.S.W.R: ≤2

3	Connector	φ1.13 I-PEX 1(equivalents)	1	
2	Cable	Φ1.13MM Black double tin wire	1	
1	FPC	97.9*14*0.1mm Black	1	
NO	Name	Description	QTY	Remark
XX.	±5.0	Approved		
X.	±3.0	Customer		
X.	±1.0	Part NO.		
.XX	±1.0	Checked		
.XX	±0.2	Part name		FPC Antenna
.XXX	±0.1	CW P/NO.		CW-NZ-0062
①	Drawing	REV	Unit	File
		X1	m/m	Sheet :
				1/1



Cowin Antenna

4. Antenna test parameters

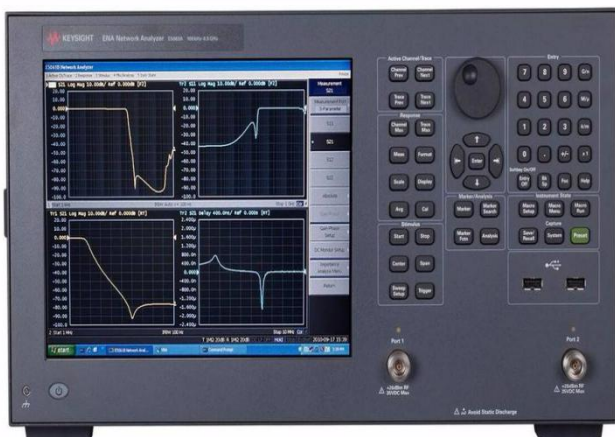
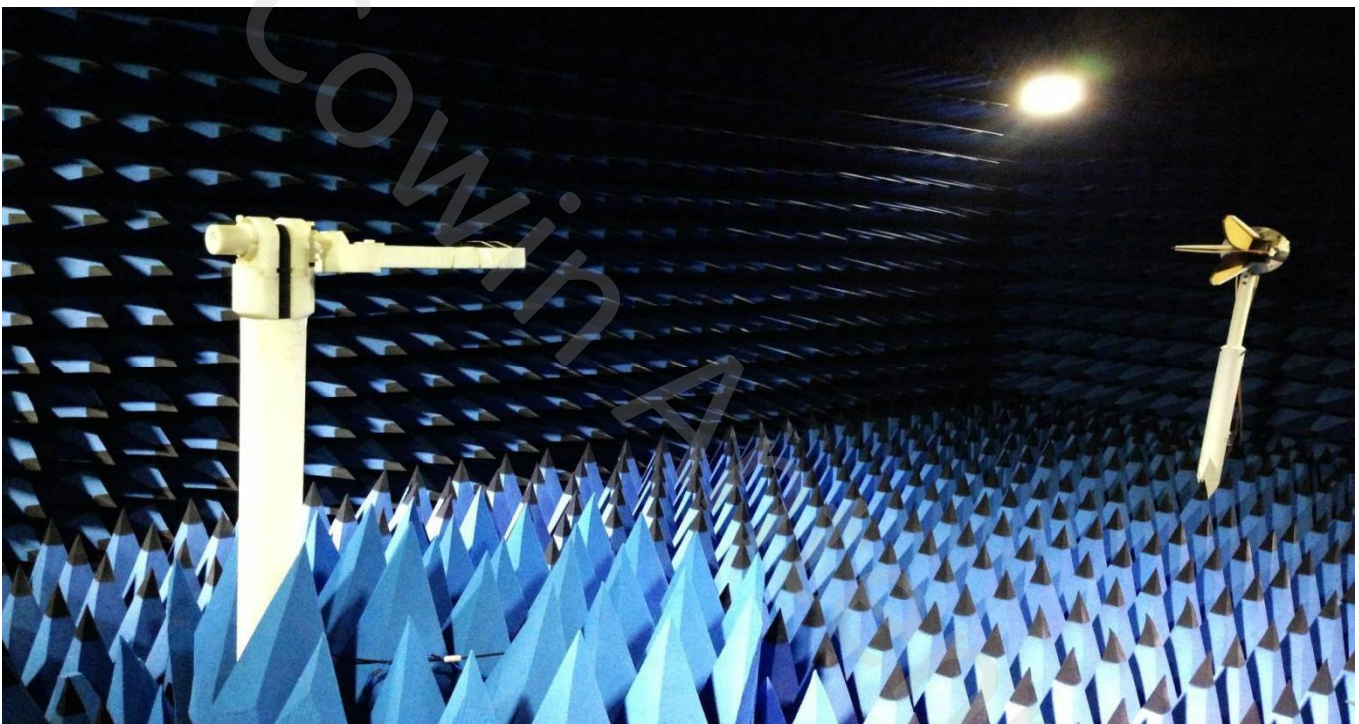
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

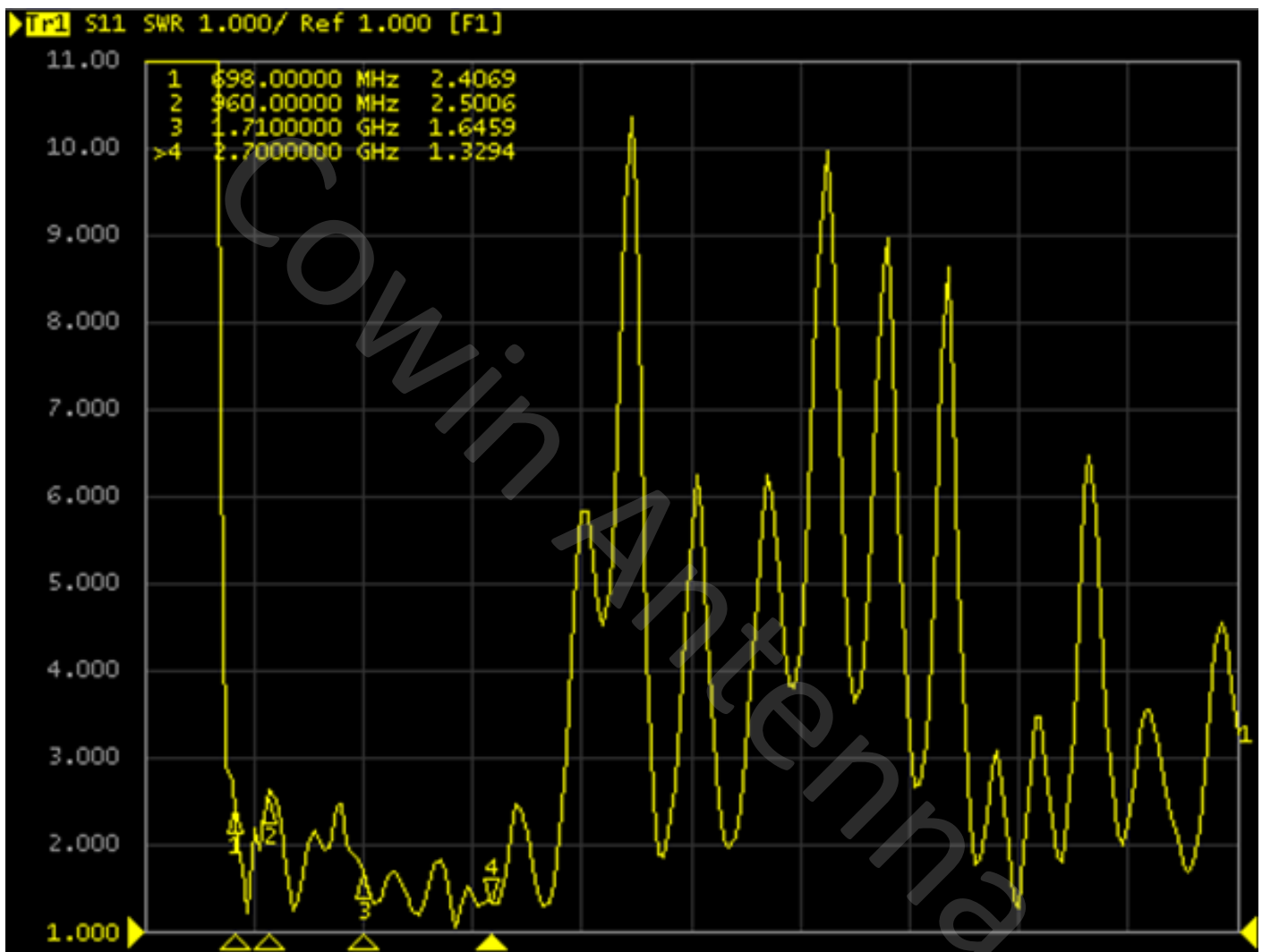
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

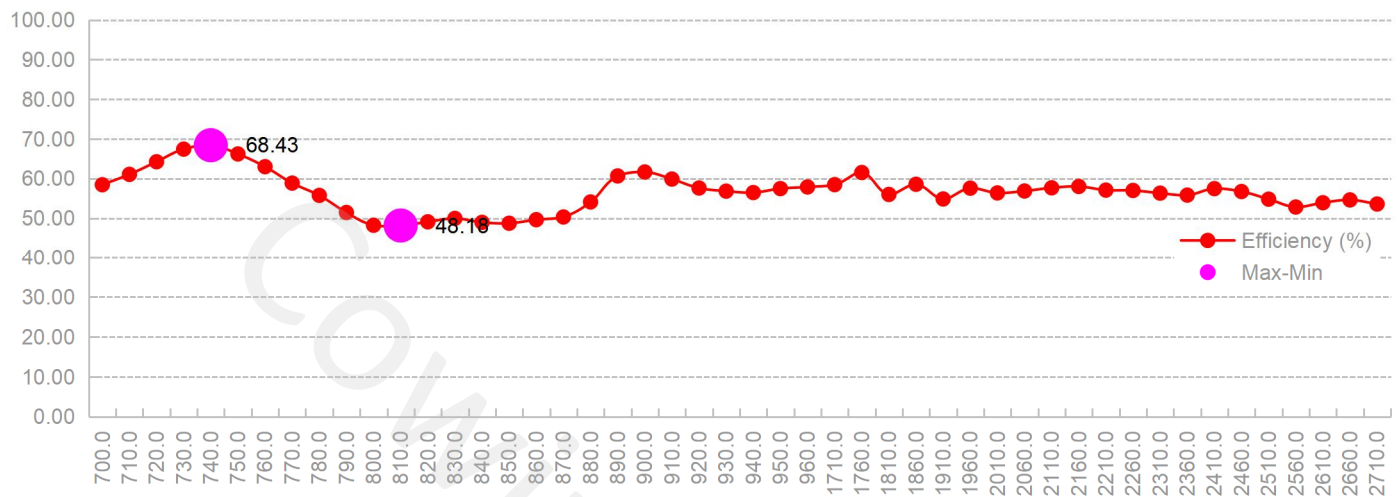
The comprehensive tester is Agilent cmv500



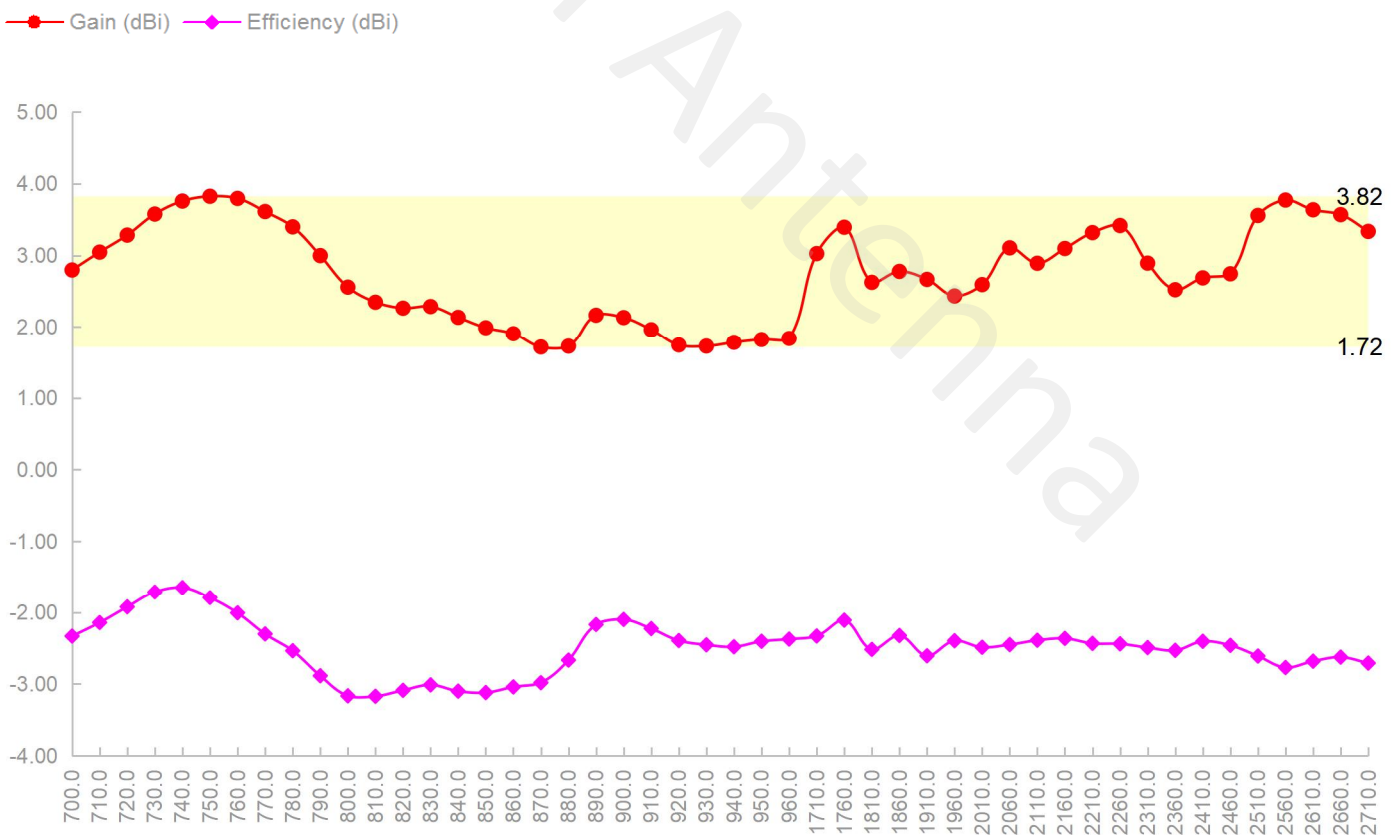
4.1 VSWR



4.2 Efficiency

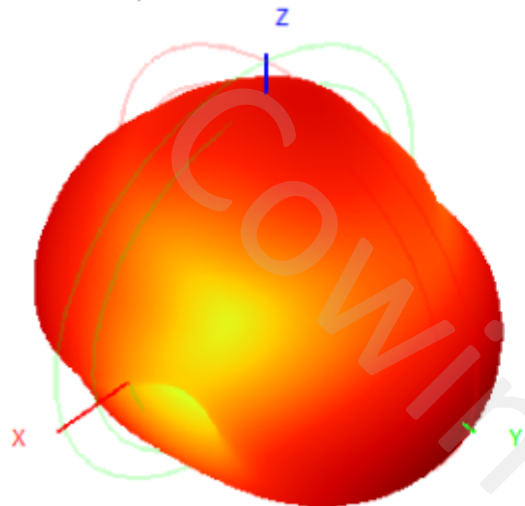


4.3 Peak gain

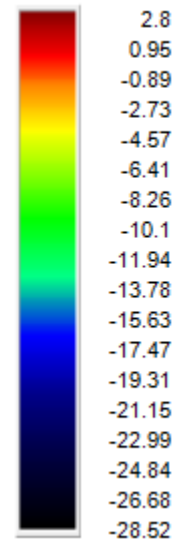
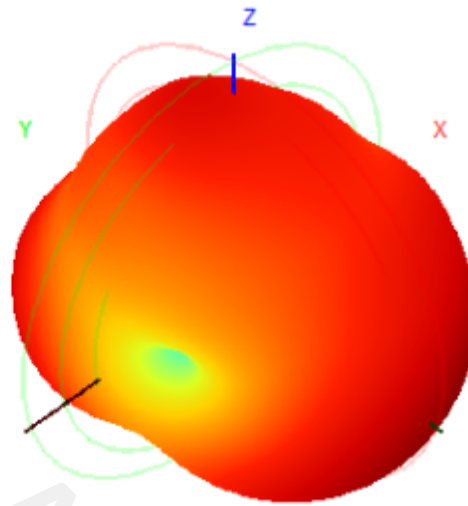


4.4 3D&2D Radiation Patterns

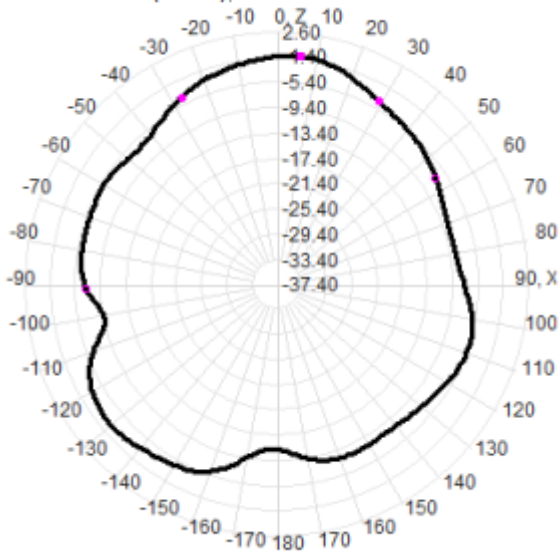
700.0MHz H+V, Eff: 58.5%



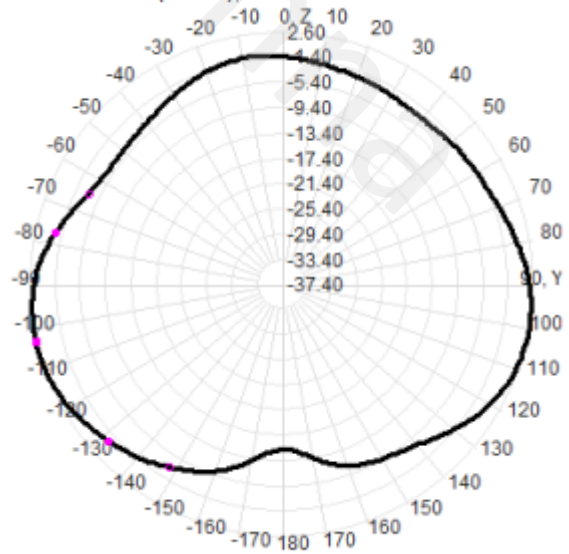
Back View



700.0MHz Total(E1-XZ), Max= -1.11dBi

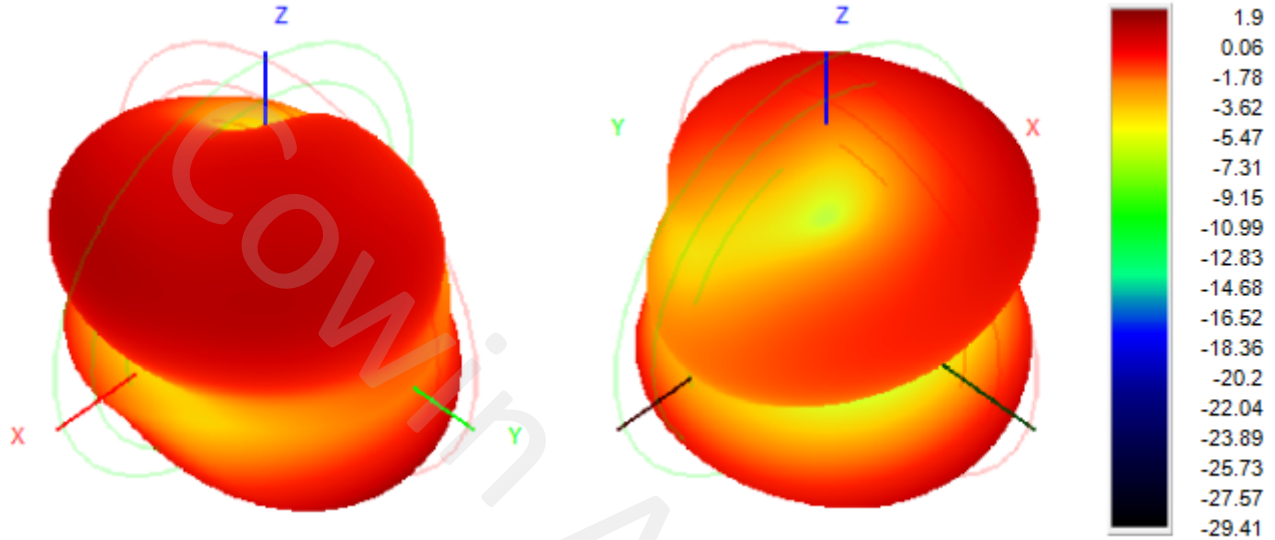


700.0MHz Total(E2-YZ), Max= 2.60dBi

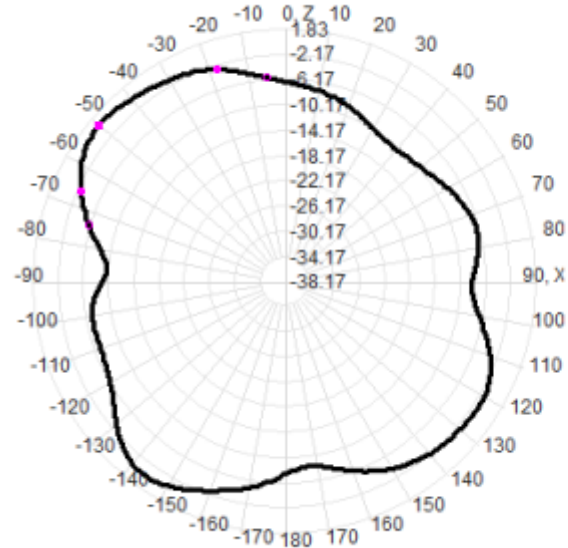


860.0MHz H+V, Eff: 49.6%

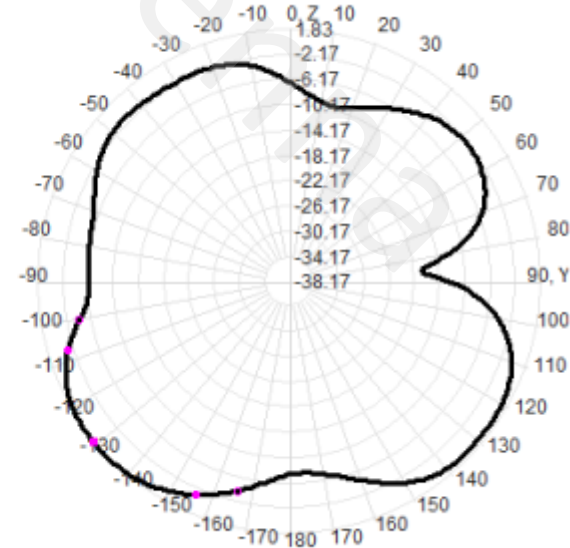
Back View



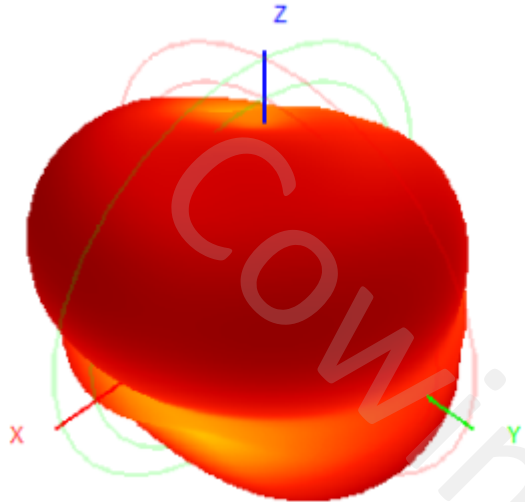
860.0MHz Total(E1-XZ), Max= 0.24dBi



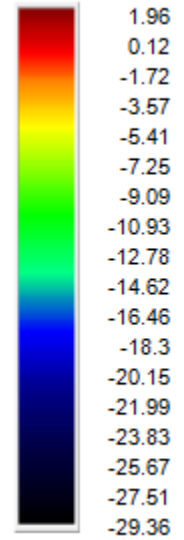
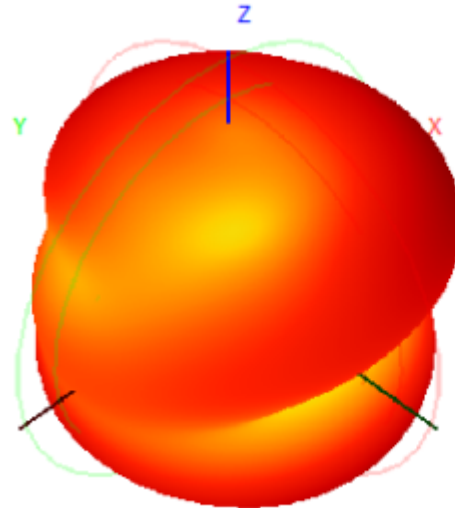
860.0MHz Total(E2-YZ), Max= 1.83dBi



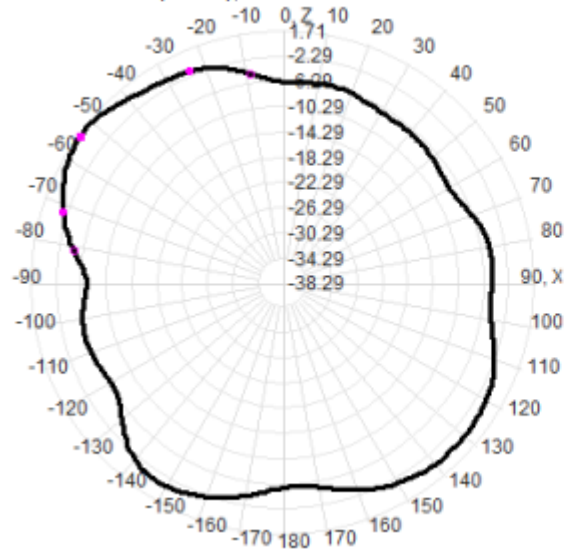
910.0MHz H+V, Eff: 59.9%



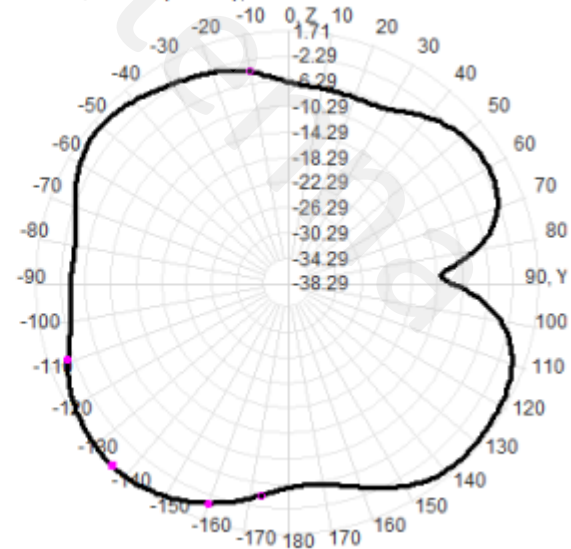
Back View



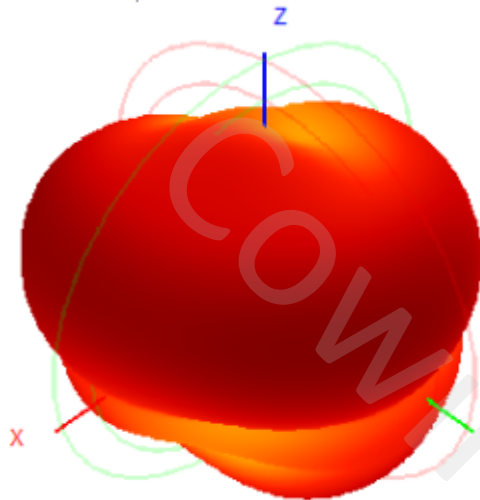
910.0MHz Total(E1-XZ), Max= 1.38dBi



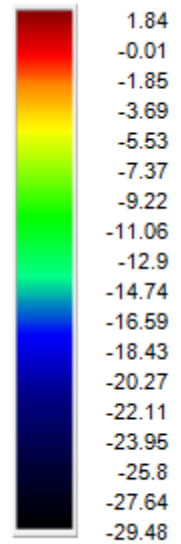
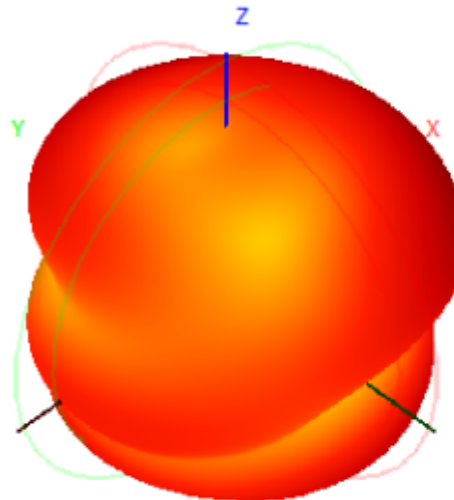
910.0MHz Total(E2-YZ), Max= 1.71dBi



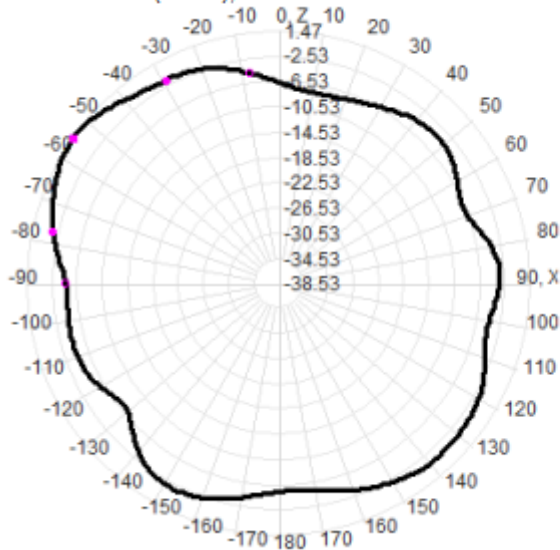
960.0MHz H+V, Eff: 57.9%



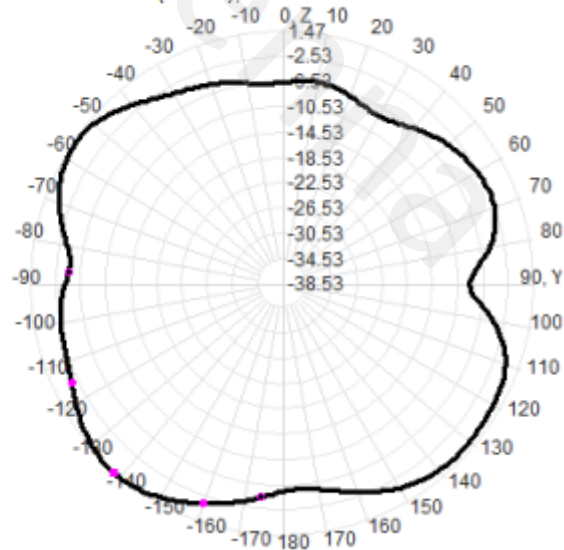
Back View



960.0MHz Total(E1-XZ), Max= 1.32dBi

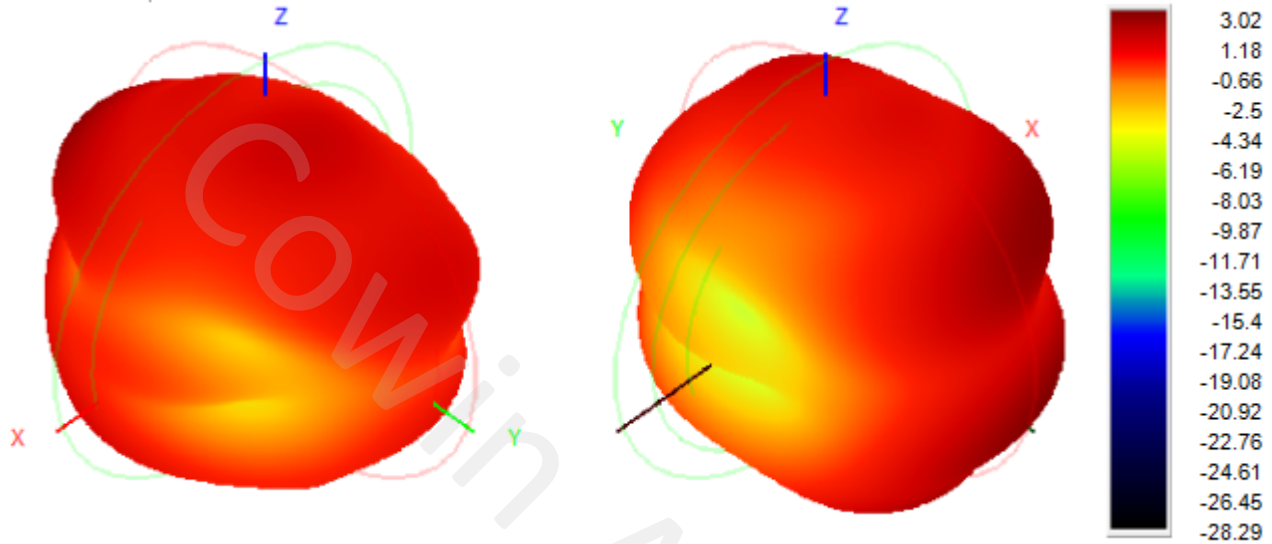


960.0MHz Total(E2-YZ), Max= 1.47dBi



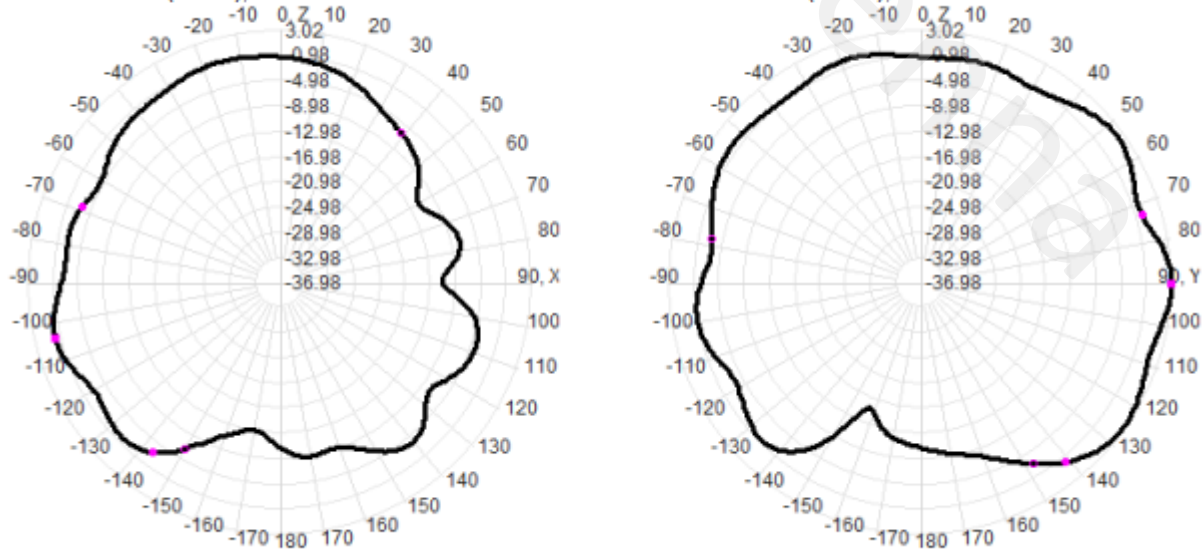
1710.0MHz H+V, Eff: 58.5%

Back View



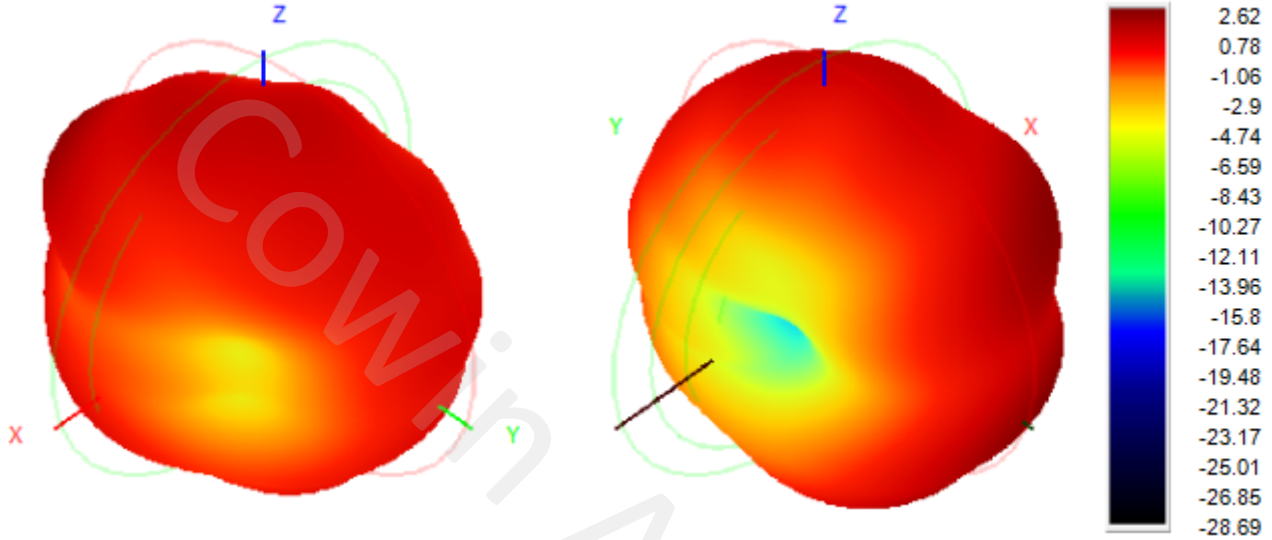
1710.0MHz Total(E1-XZ), Max= -0.35dBi

1710.0MHz Total(E2-YZ), Max= 2.83dBi



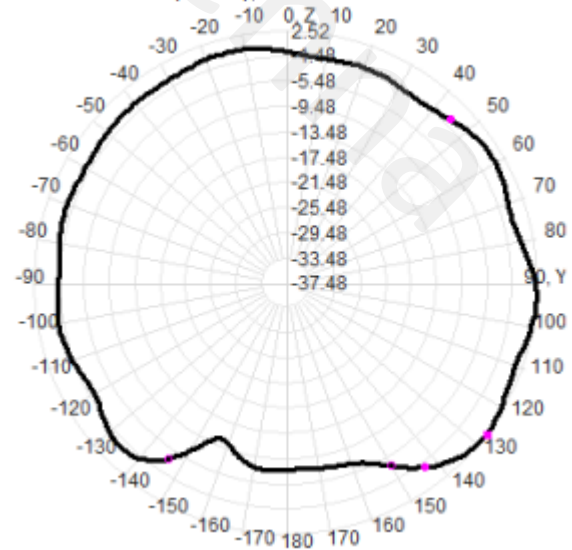
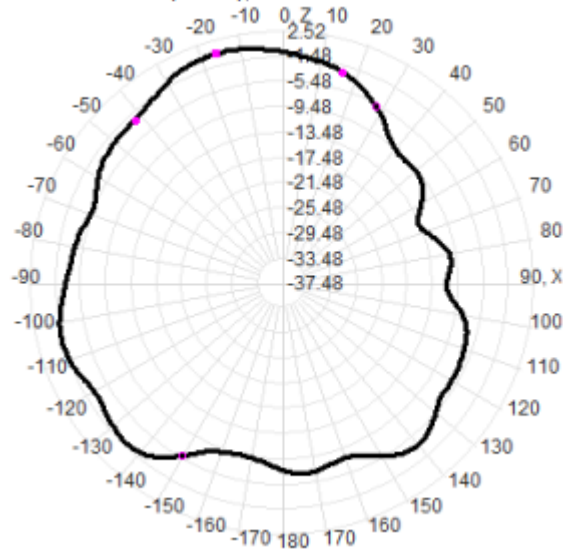
1810.0MHz H+V, Eff: 56.0%

Back View

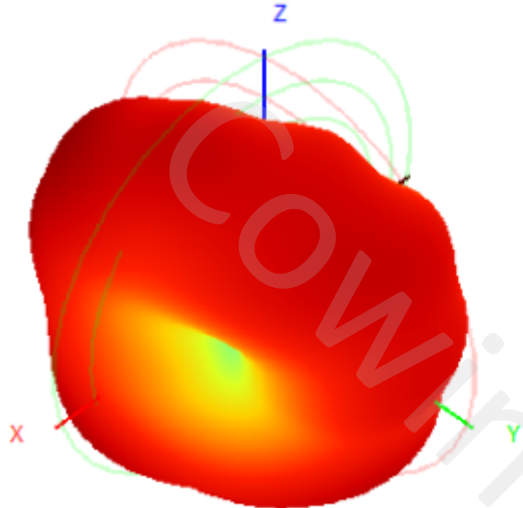


1810.0MHz Total(E1-XZ), Max= 0.34dBi

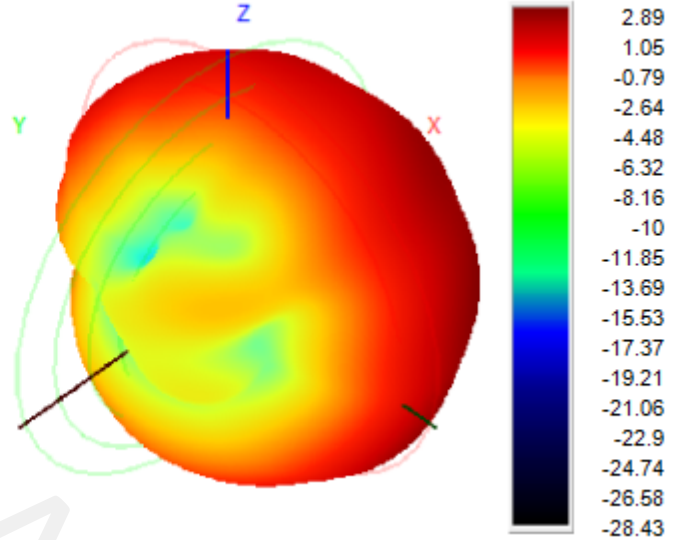
1810.0MHz Total(E2-YZ), Max= 2.25dBi



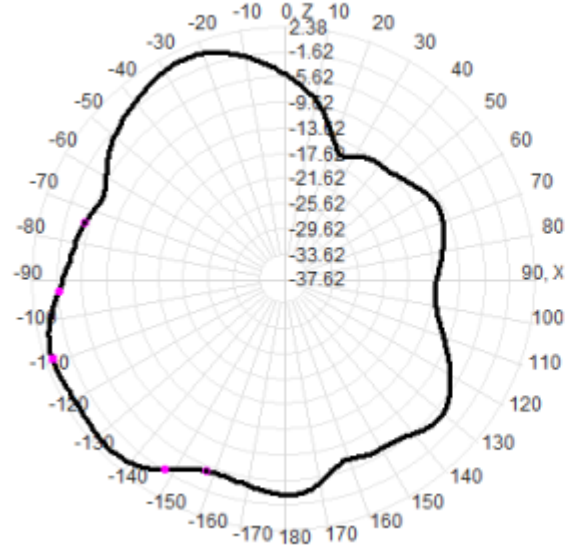
2110.0MHz H+V, Eff: 57.7%



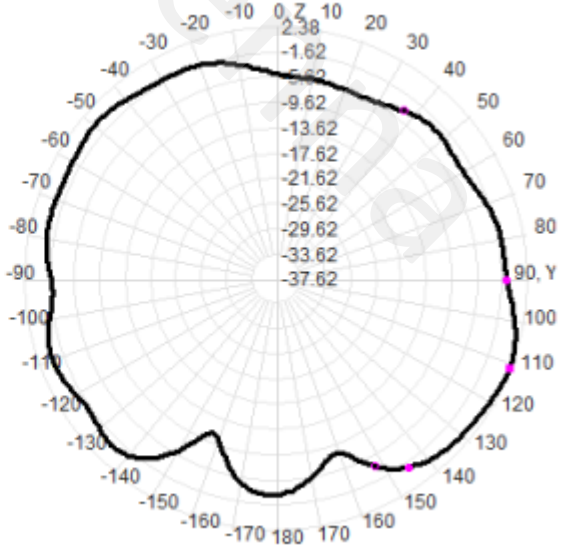
Back View



2110.0MHz Total(E1-XZ), Max= 1.17dBi

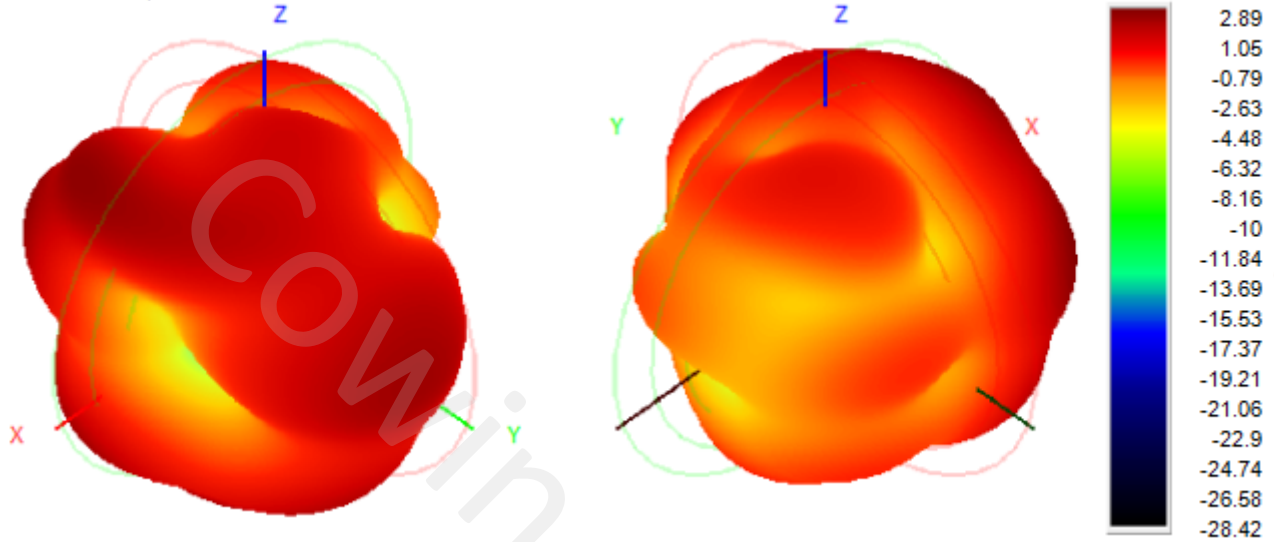


2110.0MHz Total(E2-YZ), Max= 1.88dBi



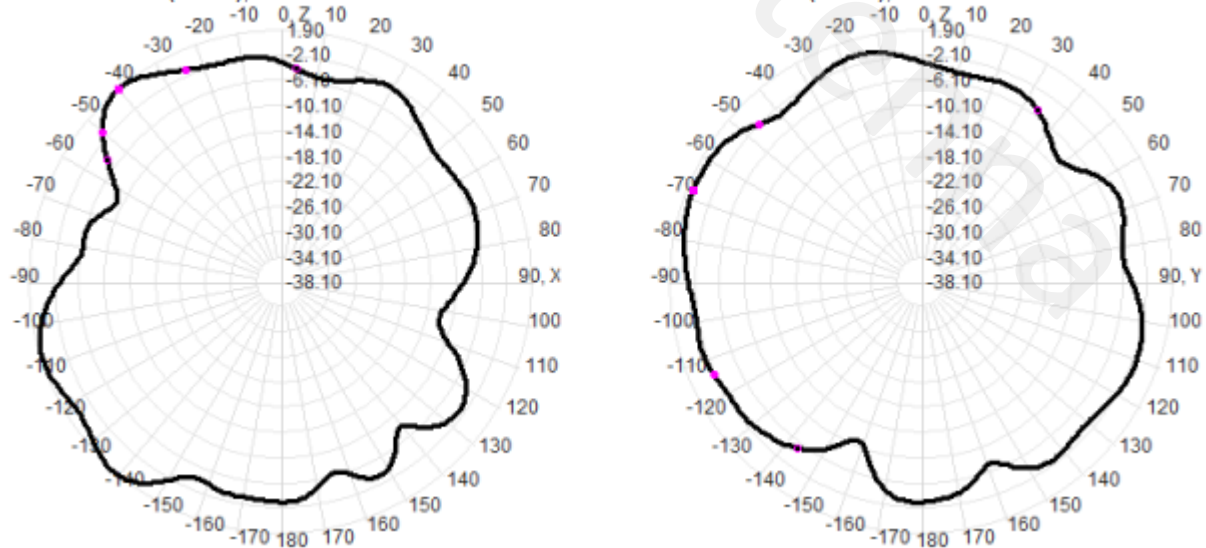
2310.0MHz H+V, Eff: 56.3%

Back View



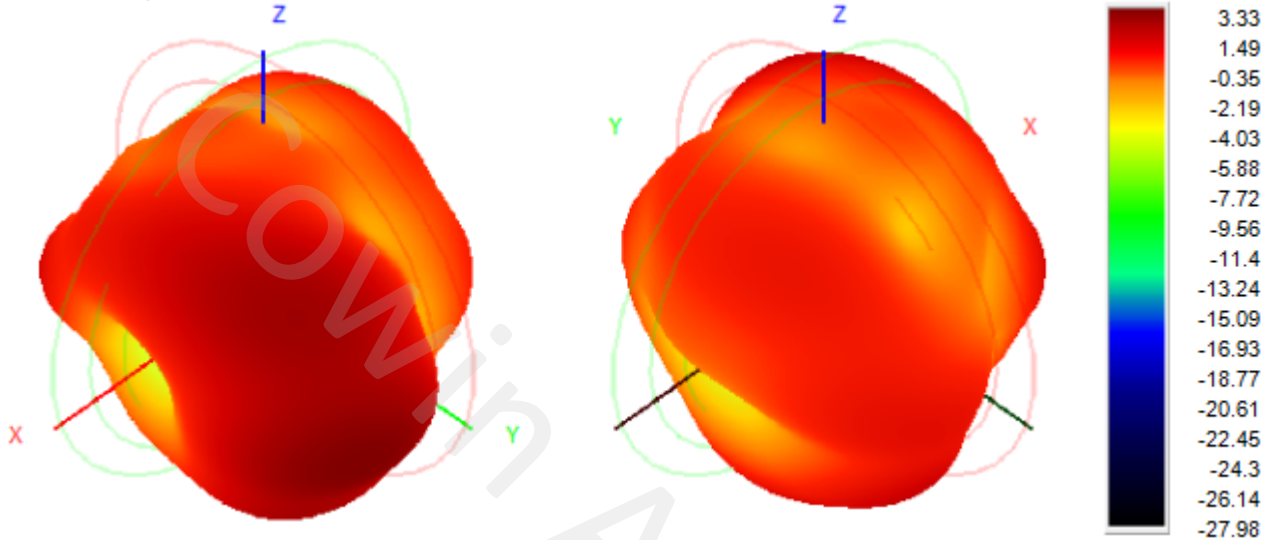
2310.0MHz Total(E1-XZ), Max= 1.90dBi

2310.0MHz Total(E2-YZ), Max= 0.87dBi



2710.0MHz H+V, Eff: 53.6%

Back View



2710.0MHz Total(E1-XZ), Max=-0.77dBi

2710.0MHz Total(E2-YZ), Max=-1.25dBi

