

CW-NZ-0130

4G LTE FPC Antenna

Key Features

Frequency: 698-960MHz/1710-2700MHz

I-PEX Connector

1.13 Cable

Dimensions 34*33*0.1mm



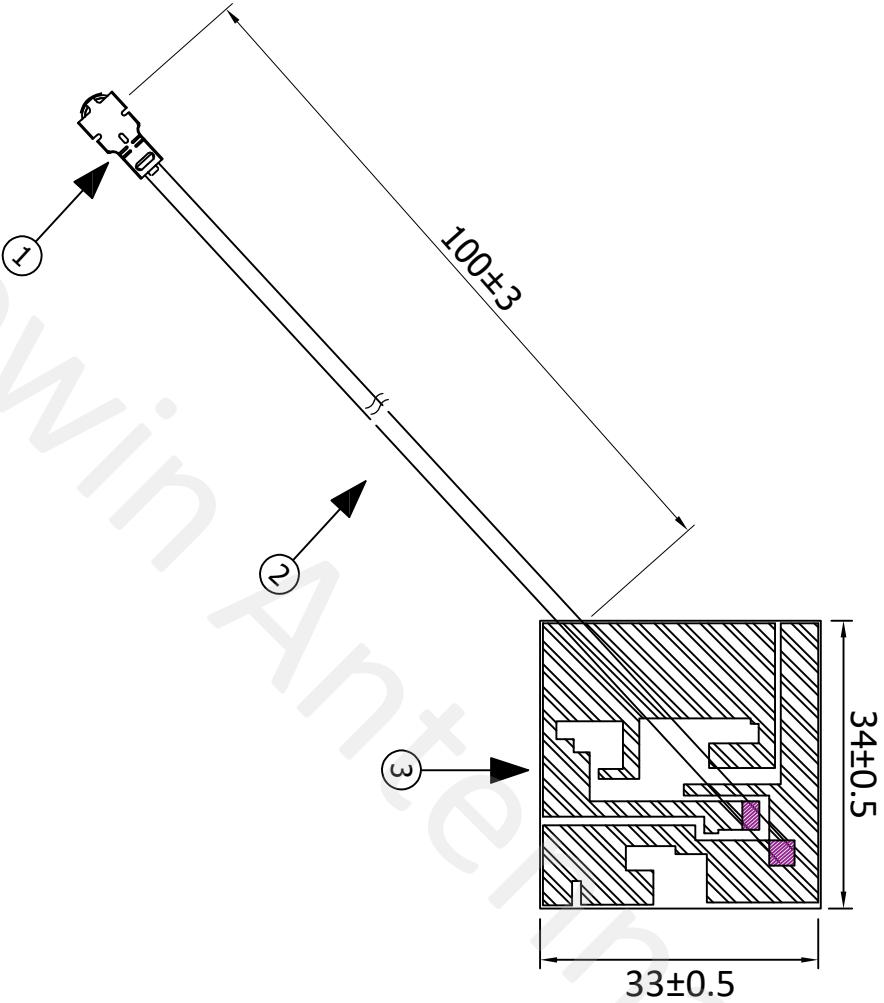
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	698-960MHz/1710-2700MHz
VSWR	≤3.0
Efficiency (%)	59.73%/63.12%
Peak Gain (dBi)	2.92/3
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	I-PEX

2. Material and environmental characteristics

External structure	N/A
Inner structure	Connector/Cable/FPC
Cable Type	RF1.13
Connector Type	I-PEX
Dimensions (mm)	34*33*0.1MM
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		2022/11/03	New issue



Specification(Free Test):
Frequency Range: 698-960MHZ/1710-2700MHZ
Impedance: 50Ω
V.S.W.R: ≤ 3.0
100% Continuity,short and open circuit test
Materials,parts and process must by environmentally (ROHS)

3	FPC	34*33*0.1MM Black	1	
2	Cable	Ø1.13MM black double tin wire	1	
1	Connector	Ø1.13 I-PEX (equivalents)	1	
NO	Name	Description	QTY	Remark
XX.	±5.0	Approved		
X.	±3.0			
.X	±1.0	Checked		
.XX	±0.2			
.XXX	±0.1	Drawing		
⊙				
⊙				

Customer		
Part NO.		
Part name		FPC Antenna
CW P/NO.		CW-NZ-0130
REV	Unit	File
X1	m/m	Sheet
		1/1



Cowin Antenna

4. Antenna test parameters

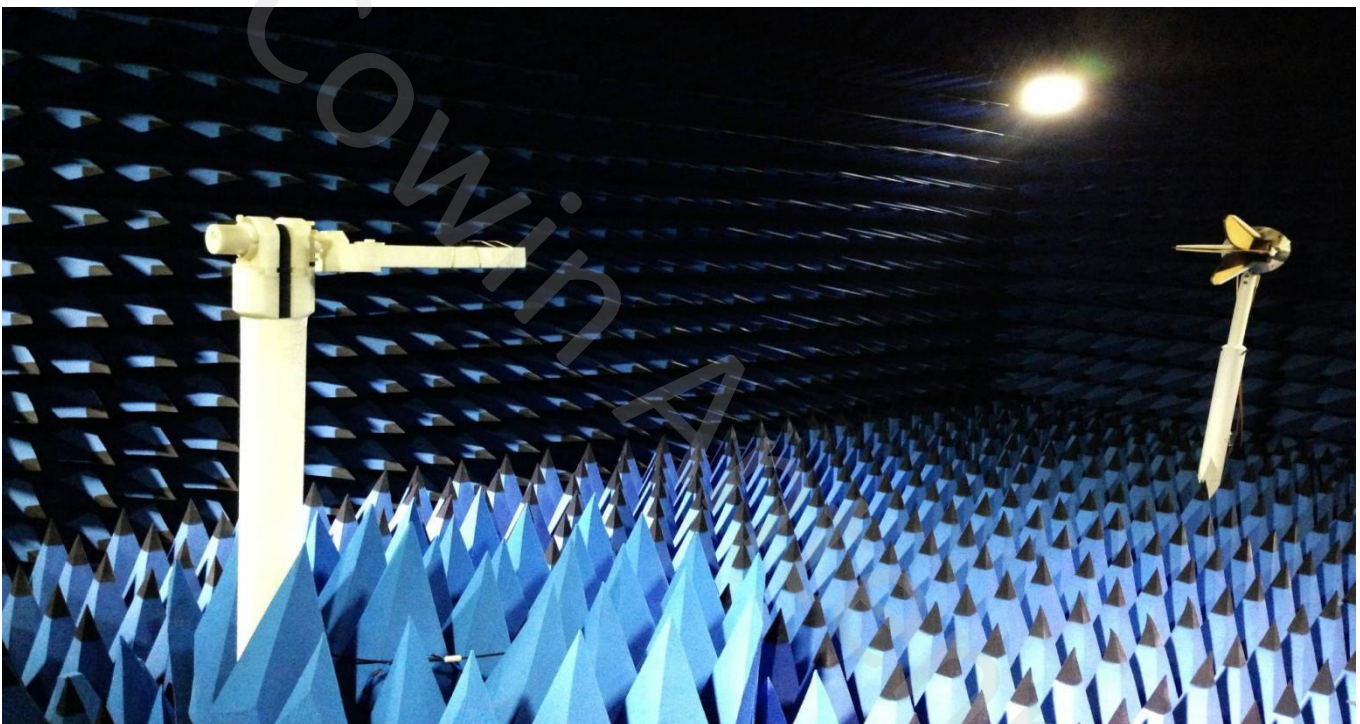
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

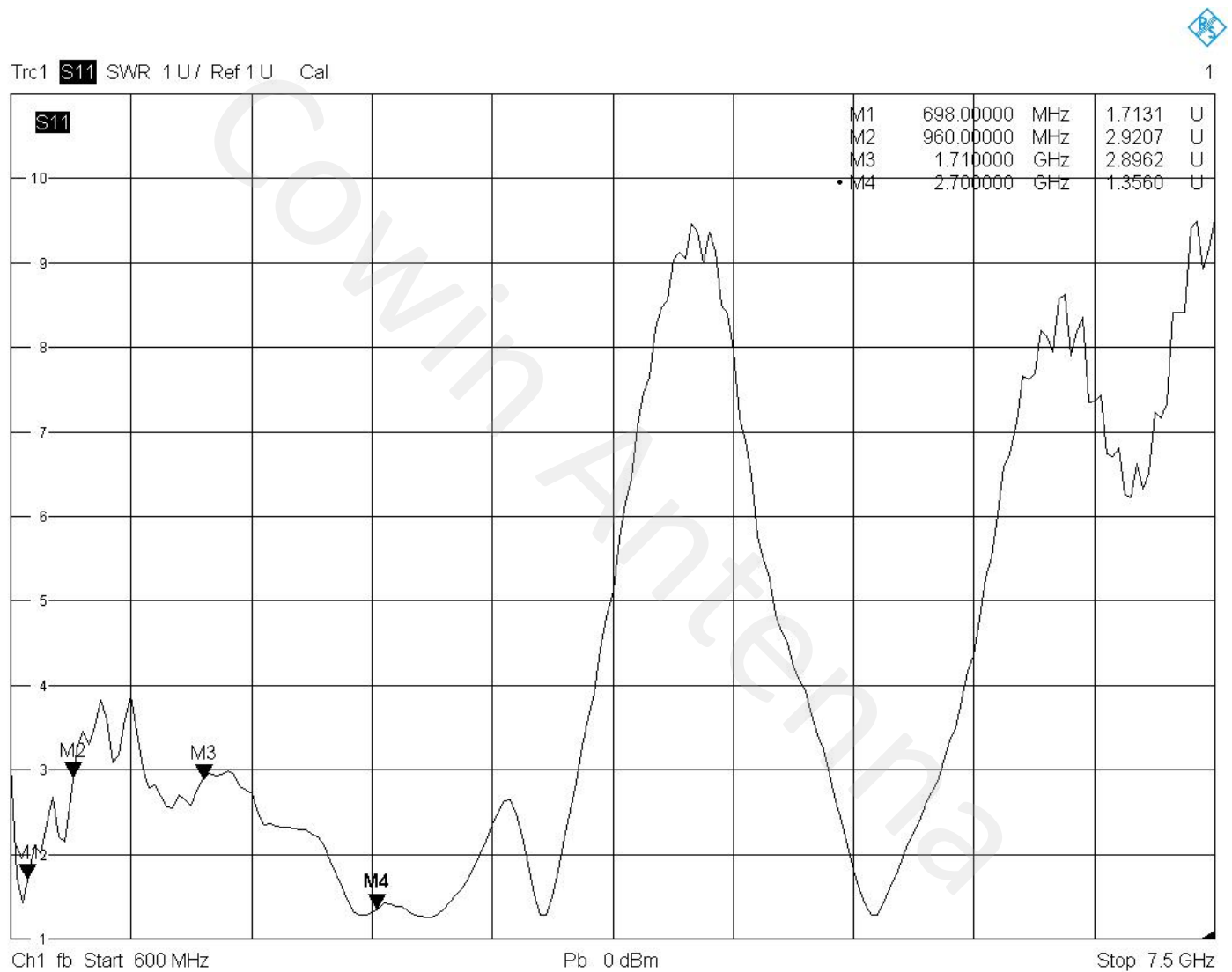
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

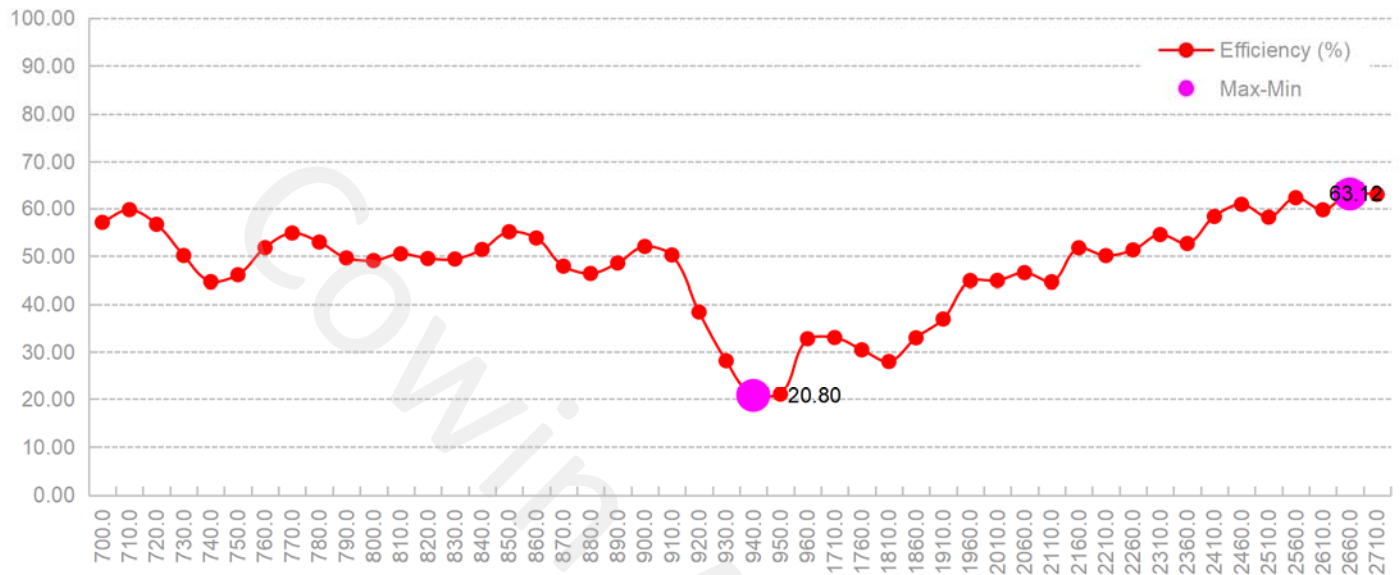


4.1 VSWR

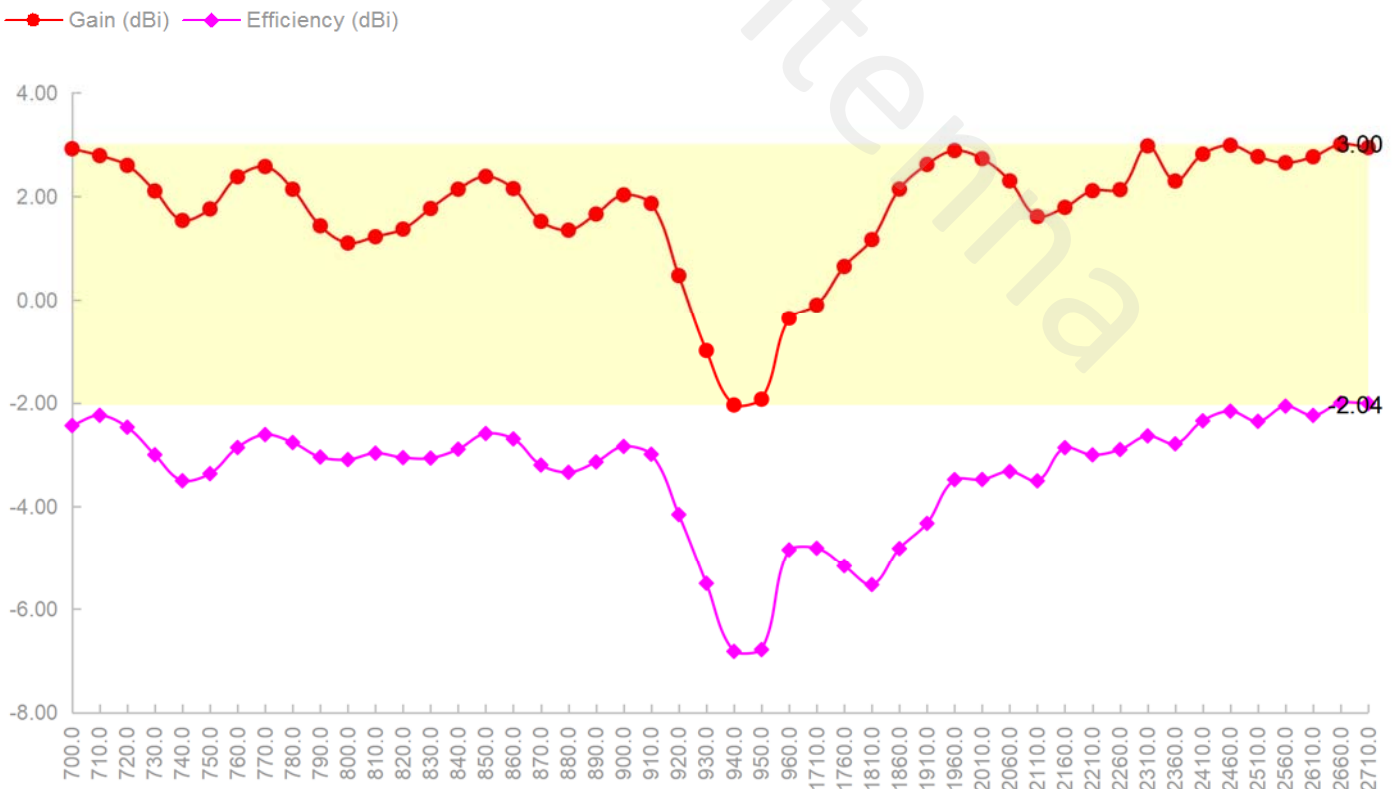


11/2/2022, 9:20 PM

4.2 Efficiency



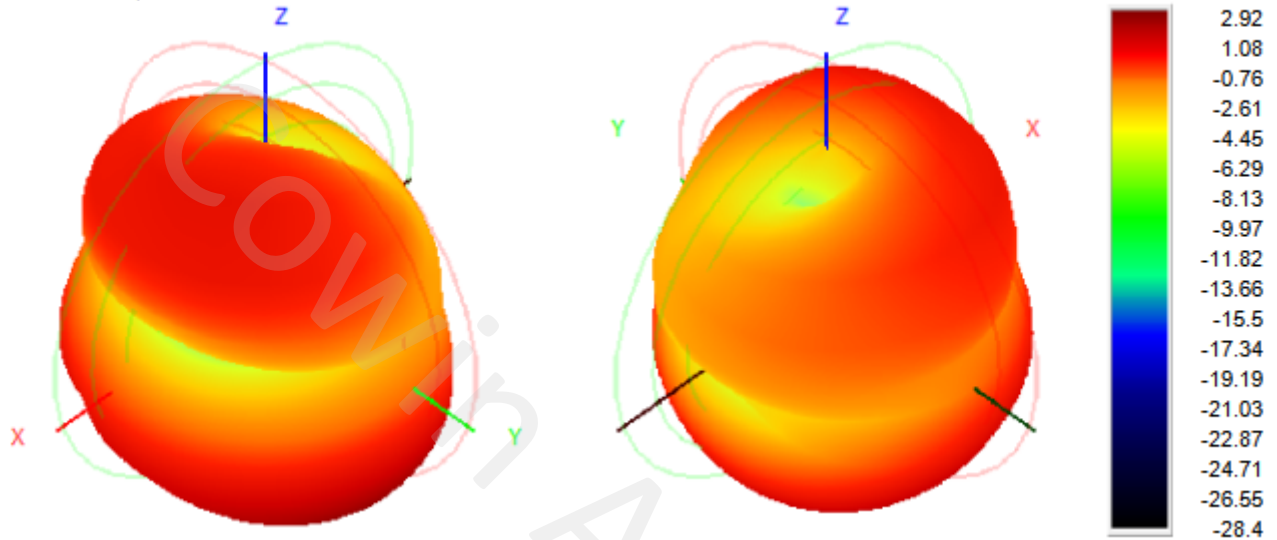
4.3 Peak gain



4.4 3D&2D Radiation Patterns

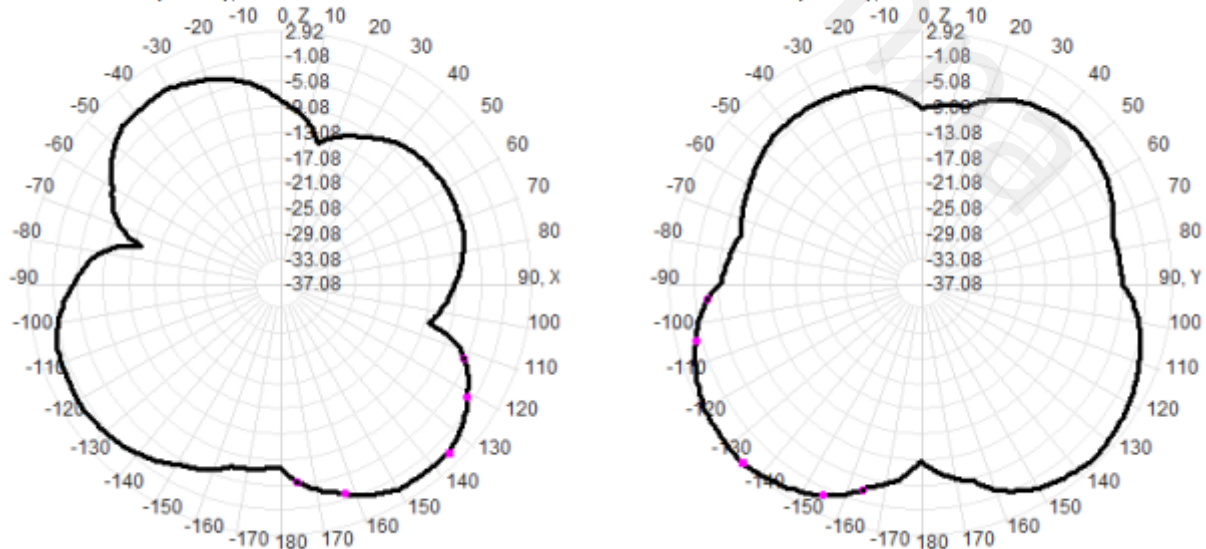
700.0MHz H+V, Eff: 57.1%

Back View



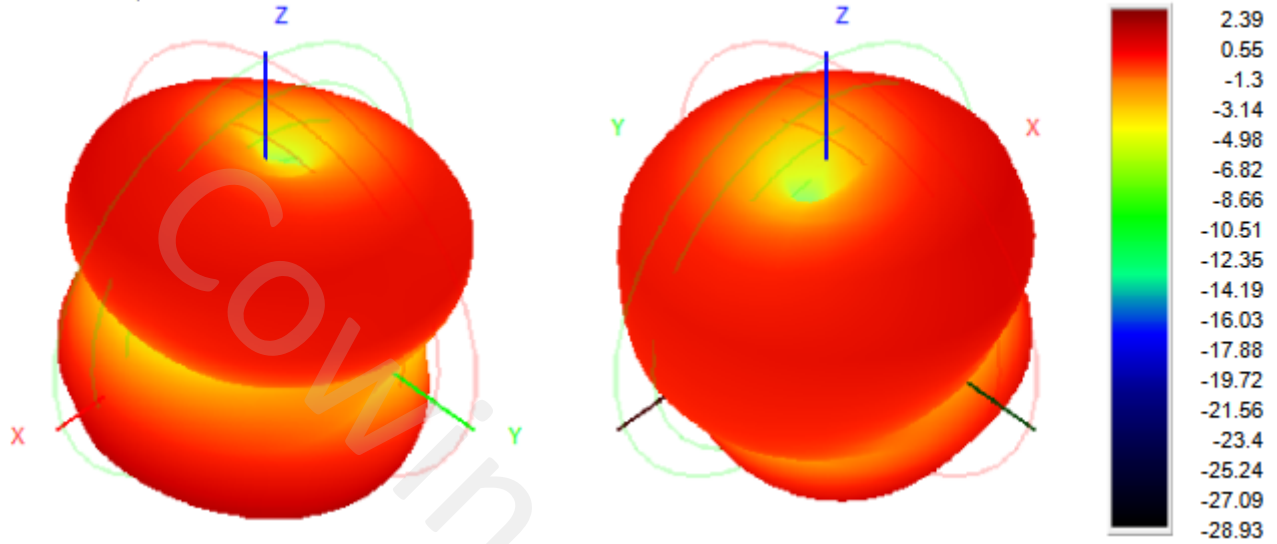
700.0MHz Total(E1-XZ), Max= 0.66dBi

700.0MHz Total(E2-YZ), Max= 2.92dBi



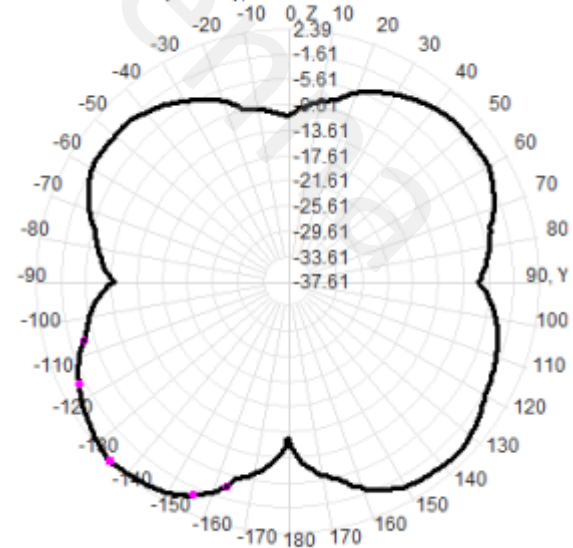
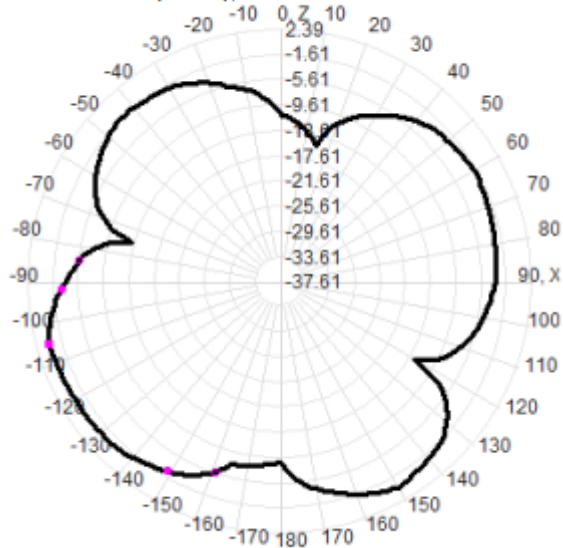
850.0MHz H+V, Eff: 55.1%

Back View

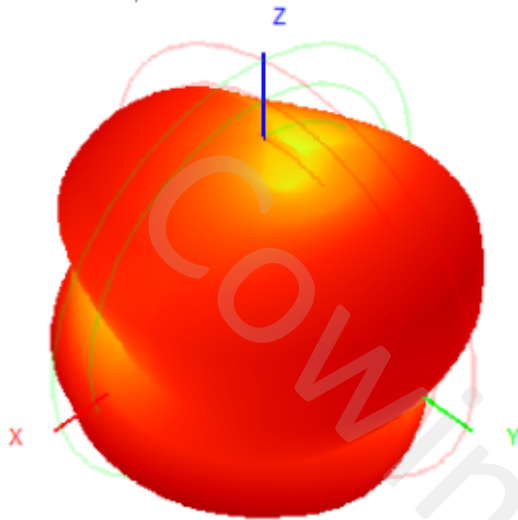


850.0MHz Total(E1-XZ), Max= 0.34dBi

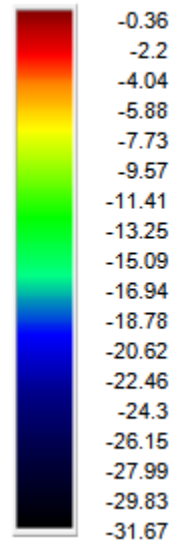
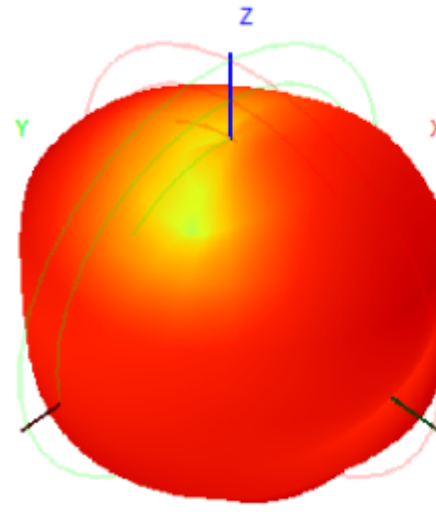
850.0MHz Total(E2-YZ), Max= 2.39dBi



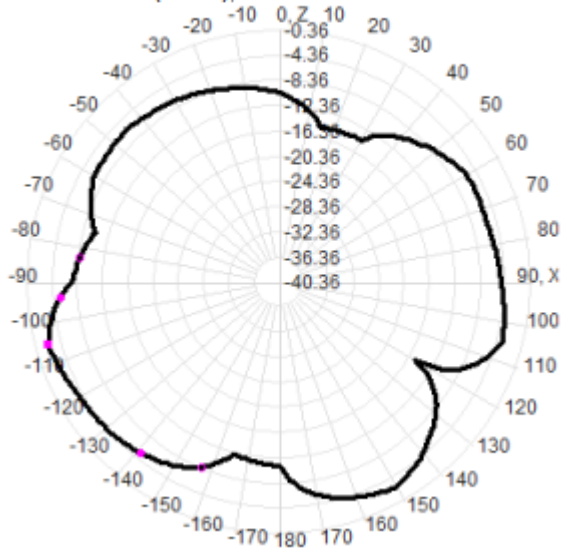
960.0MHz H+V, Eff: 32.8%



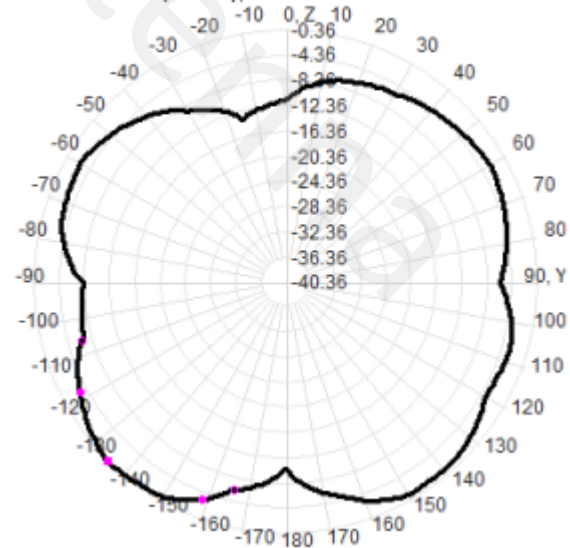
Back View



960.0MHz Total(E1-XZ), Max= -2.52dBi

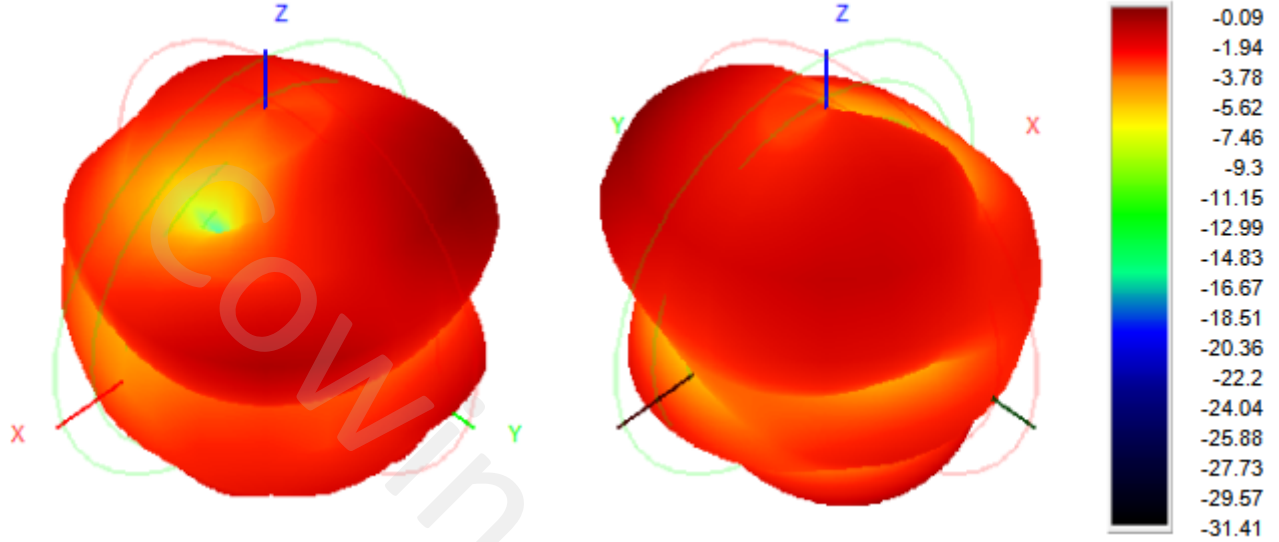


960.0MHz Total(E2-YZ), Max= -0.36dBi

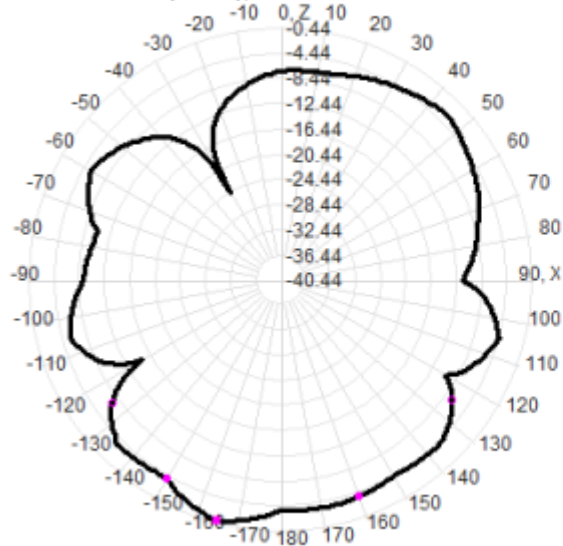


1710.0MHz H+V, Eff: 33.0%

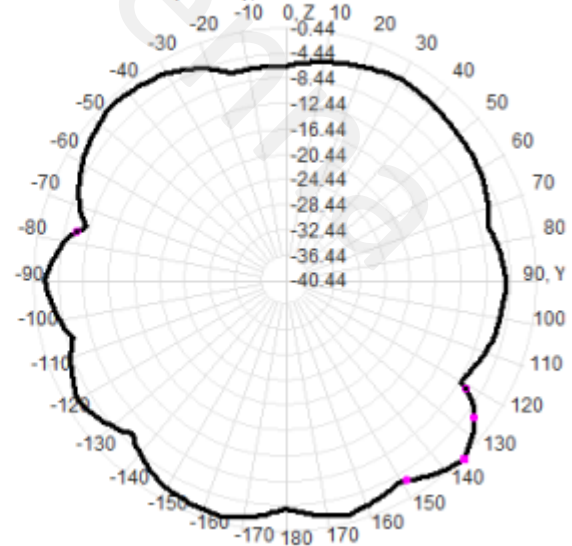
Back View



1710.0MHz Total(E1-XZ), Max= -1.07dBi

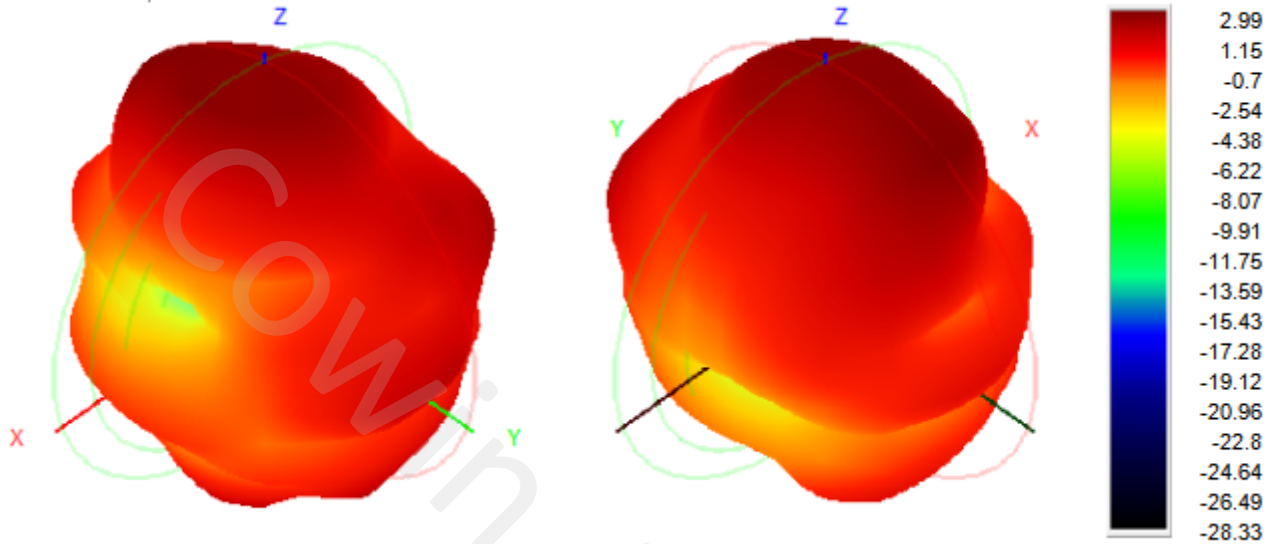


1710.0MHz Total(E2-YZ), Max= -0.44dBi



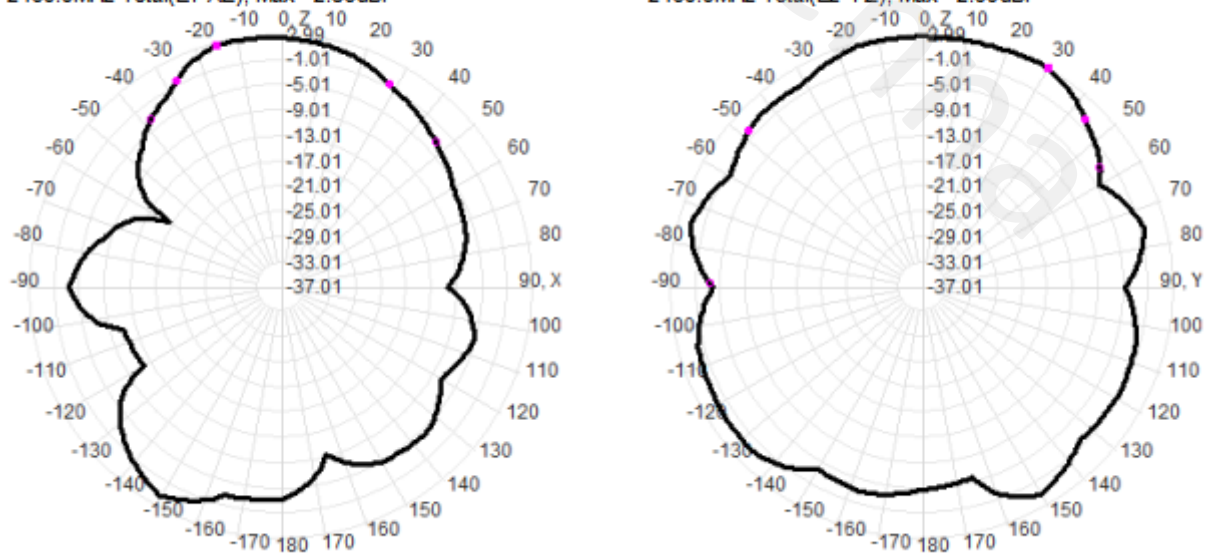
2460.0MHz H+V, Eff: 60.9%

Back View



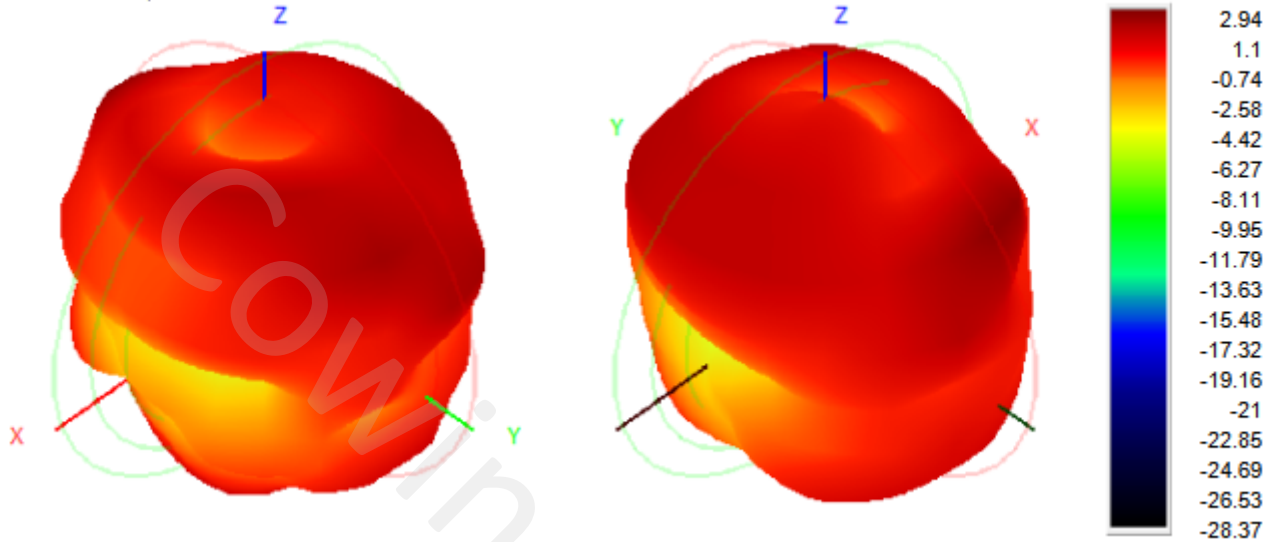
2460.0MHz Total(E1-XZ), Max= 2.56dBi

2460.0MHz Total(E2-YZ), Max= 2.99dBi

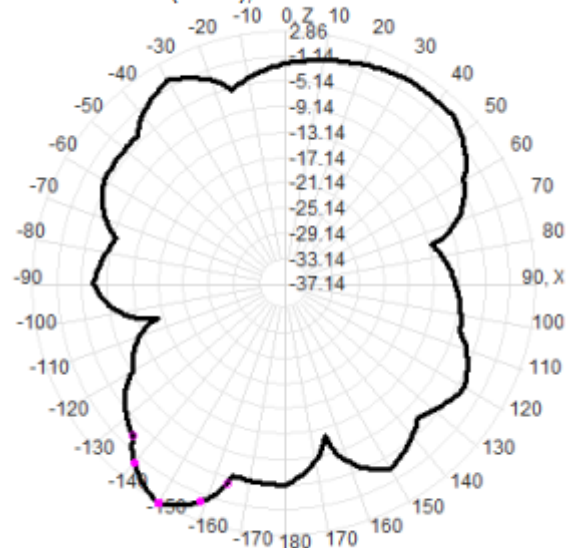


2710.0MHz H+V, Eff: 62.9%

Back View



2710.0MHz Total(E1-XZ), Max= 2.86dBi



2710.0MHz Total(E2-YZ), Max= 2.42dBi

