

CW-NZ-0024

GSM 3G FPC Antenna

Key Features

Frequency: 824-960/1710-2170MHz

I-PEX Connector

1.13 Cable

Dimensions 40*15*0.1mm



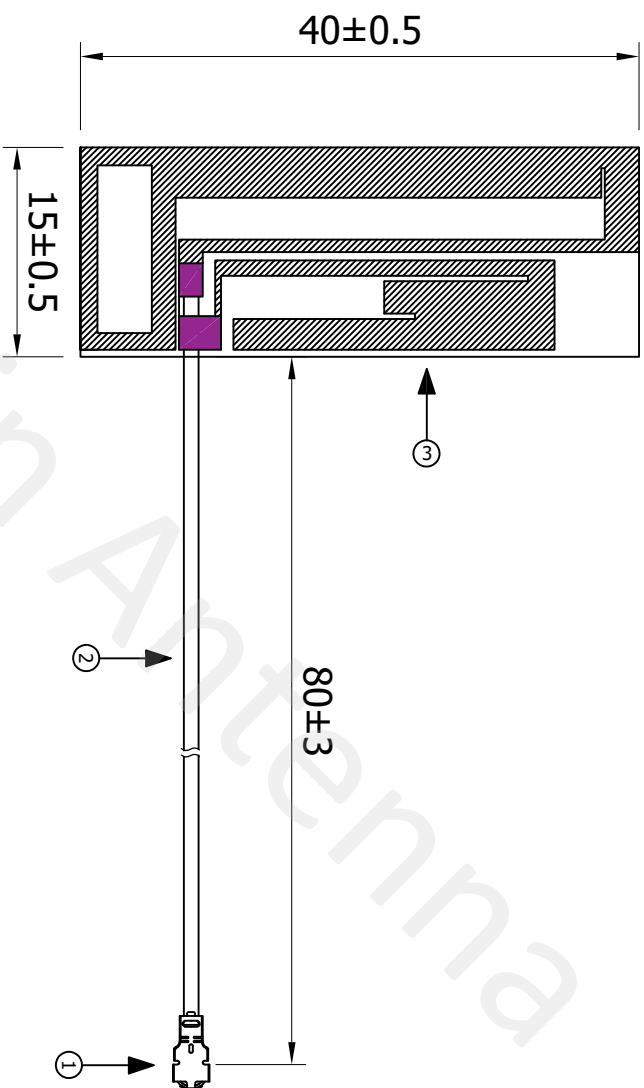
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	824-960/1710-2170MHz
VSWR	≤3.0/3.5
Efficiency (%)	50.94%
Peak Gain (dBi)	2.17
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)	45*15*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	2022/09/02	New issue



Specification(Free test):

Frequency Range: 824-960MHZ/1710-2170MHZ

Impedance: 50Ω

V.S.W.R: $\leq 3.0/3.5$

100% Continuity,short and open circuit test

Materials,parts and process must by environmentally (ROHS)

3	FPC	45*15*0.1MM Black	1	
2	Cable	$\phi 1.13$ MM black double tin wire	1	
1	Connector	$\phi 1.13$ I-PEX (equivalents)	1	
NO	Name	Description	Q'TY	Remark
XX	± 5.0	Approved		
X	± 3.0			
.X	± 1.0	Checked		
.XX	± 0.2			
.XXX	± 0.1			
		Drawing		
		REV	Unit	File
		X1	m/m	Sheet:
				1/1



Cowin Antenna

4. Antenna test parameters

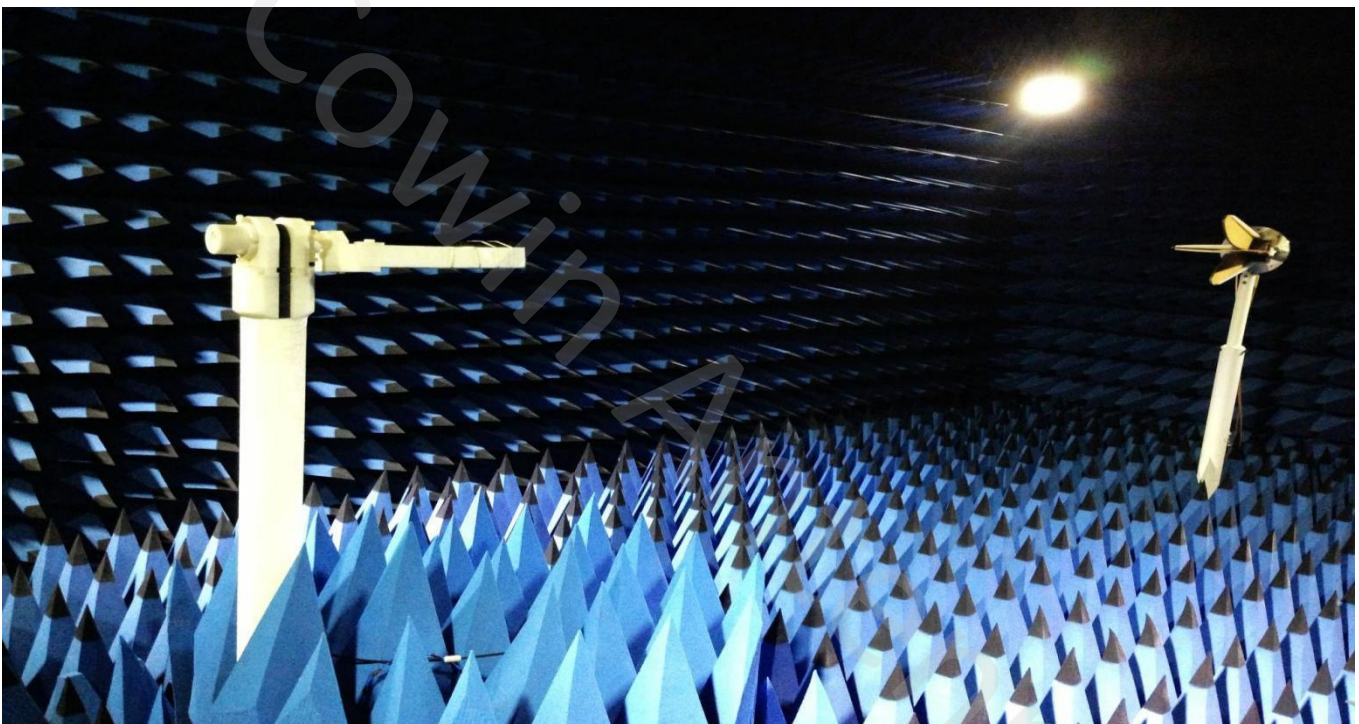
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

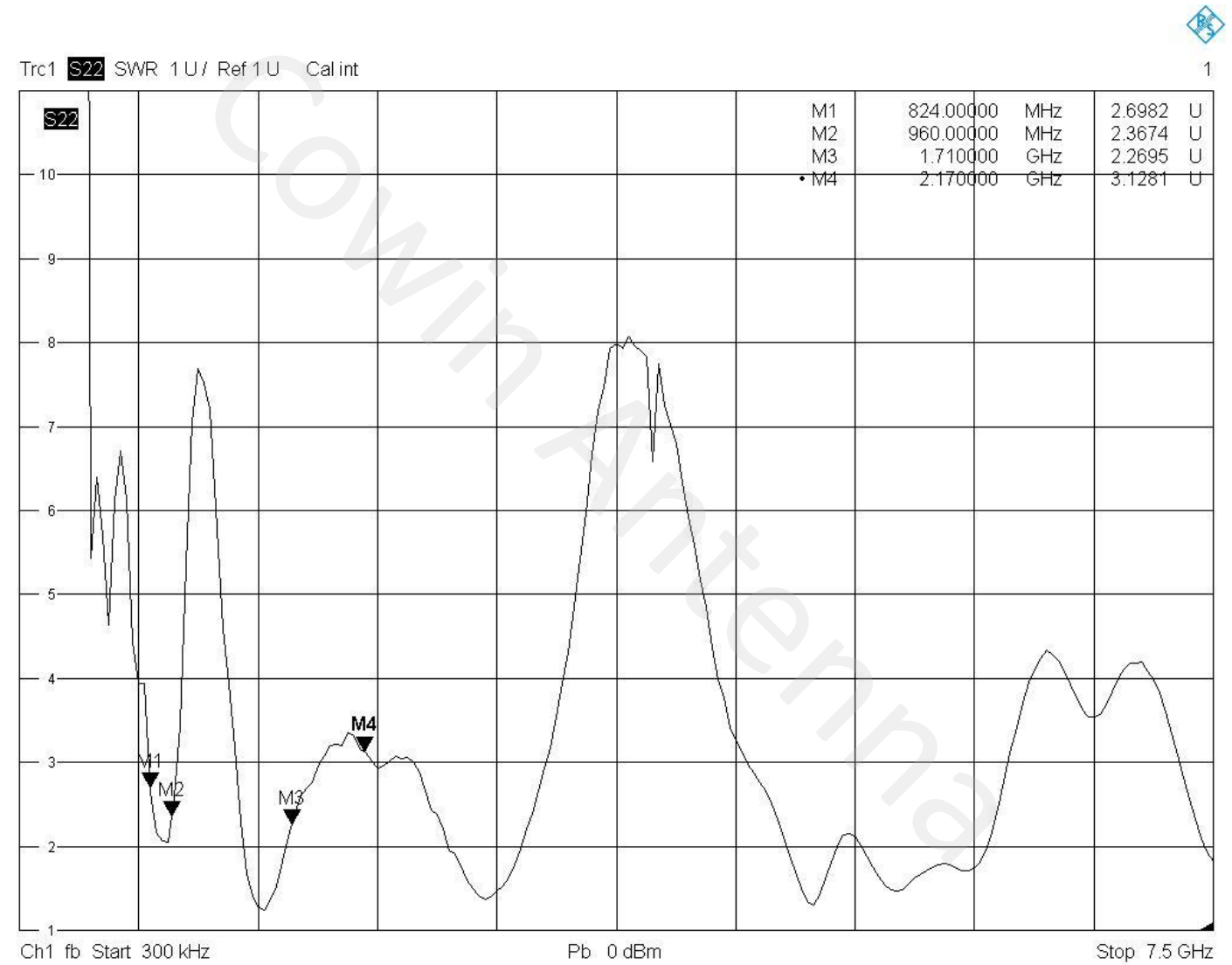
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

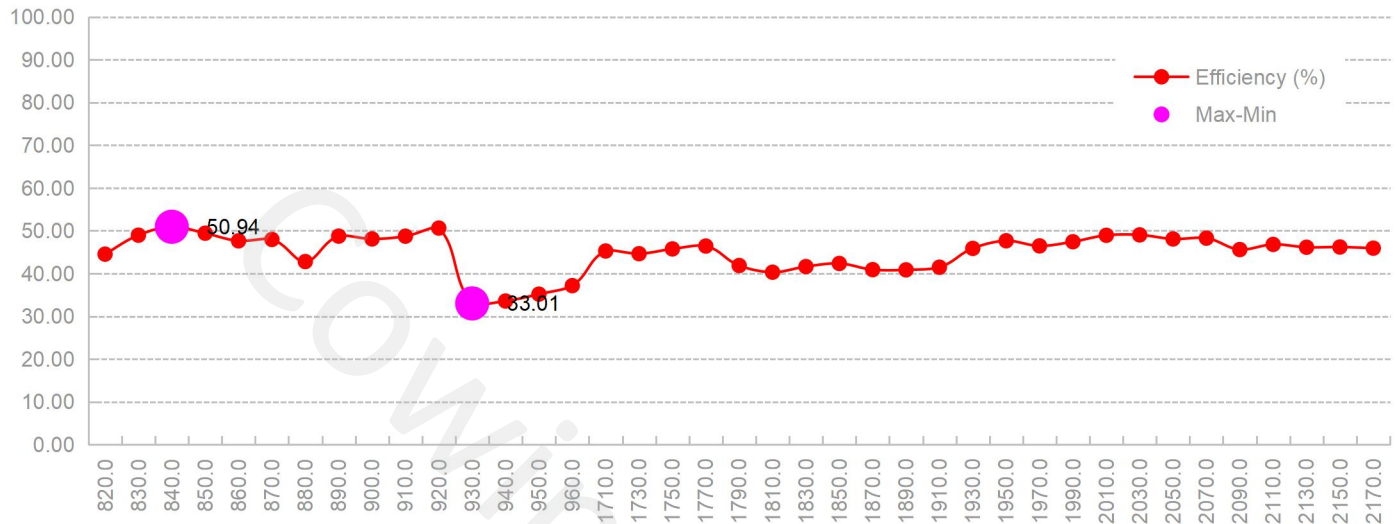


4.1 VSWR

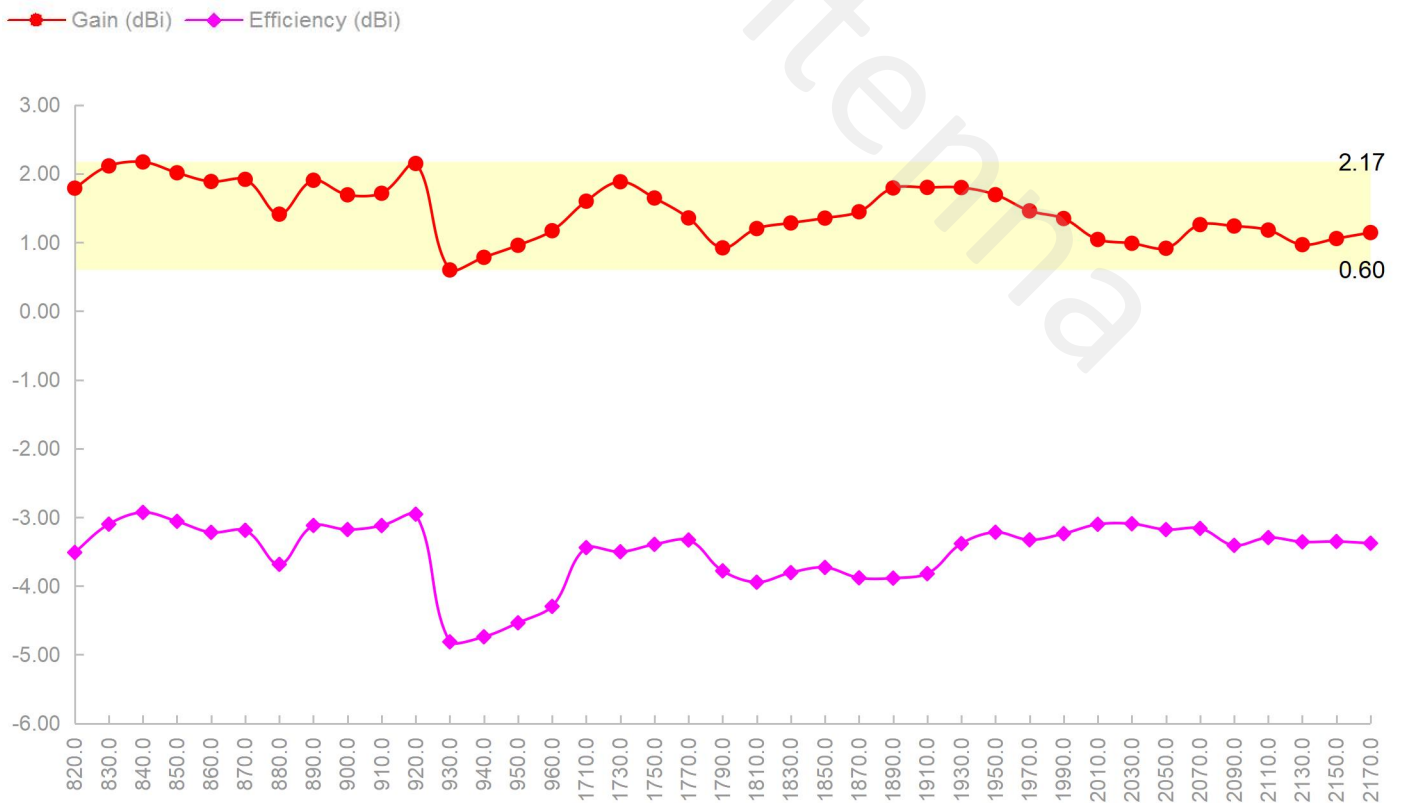


9/2/2022, 3:13 AM

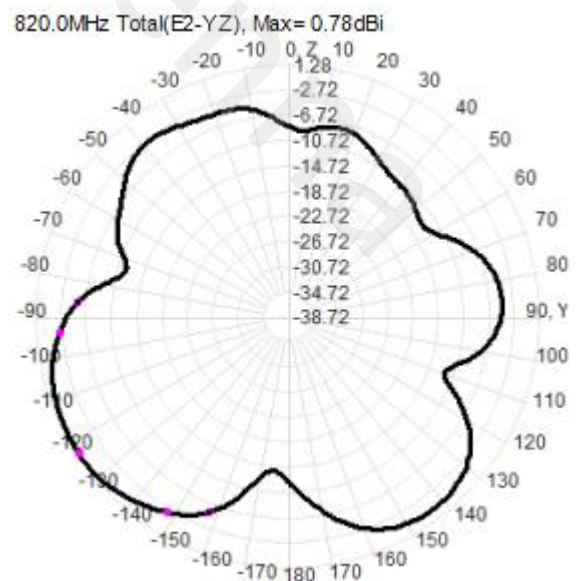
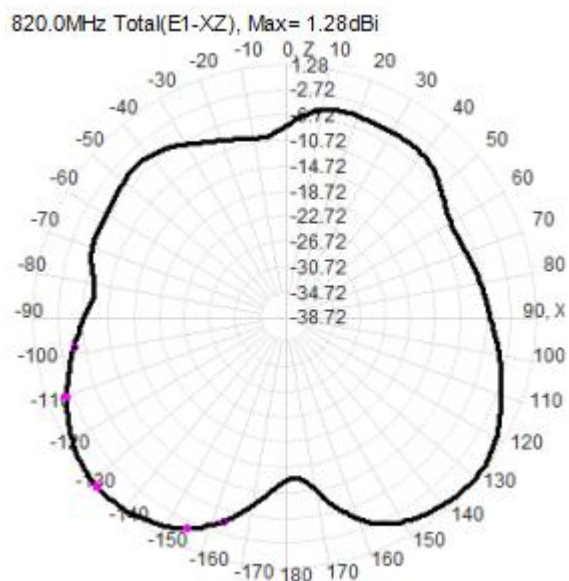
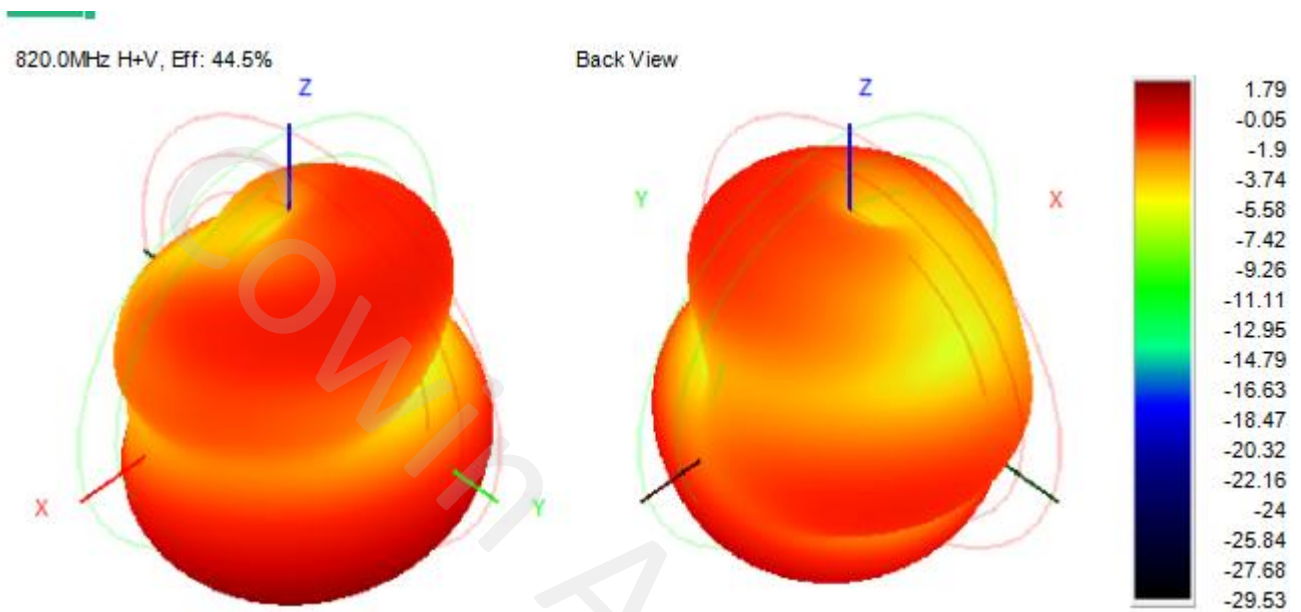
4.2 Efficiency



4.3 Peak gain

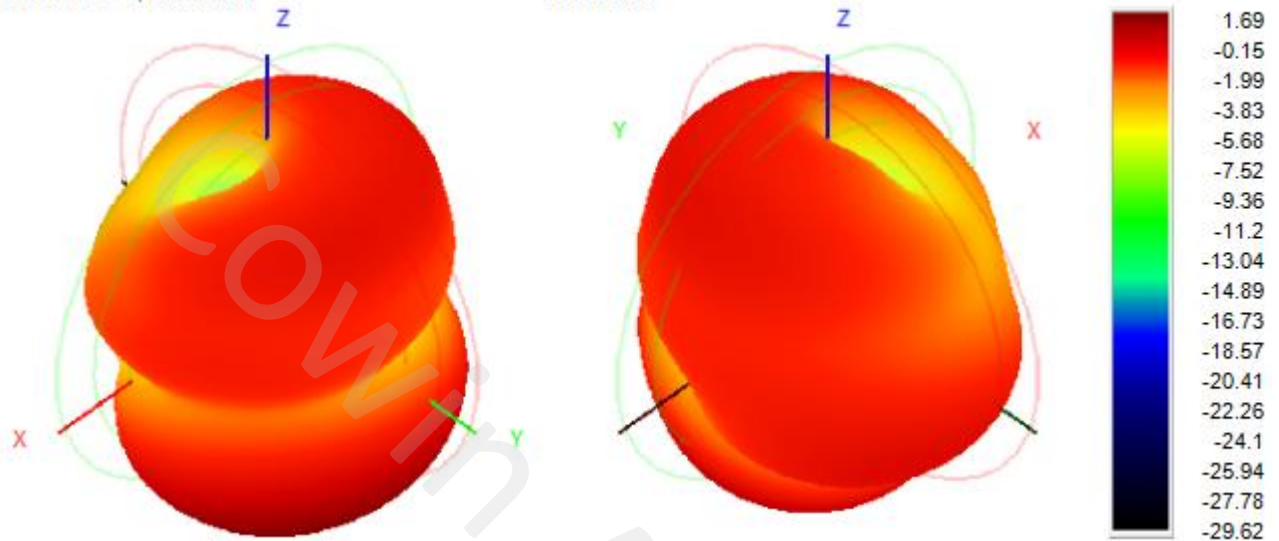


4.4 3D&2D Radiation Patterns



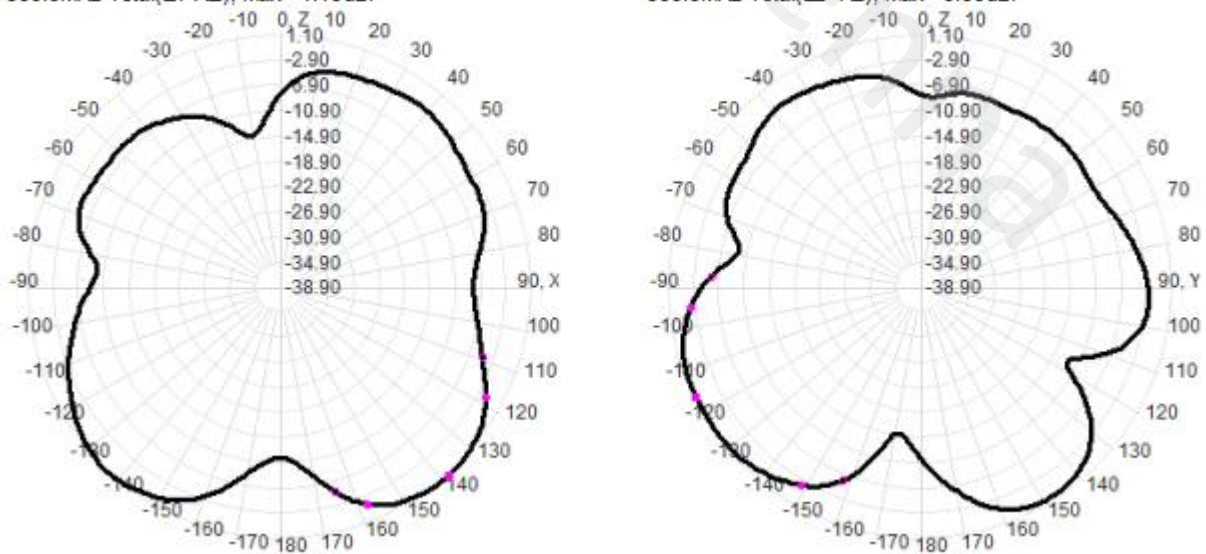
900.0MHz H+V, Eff: 48.1%

Back View

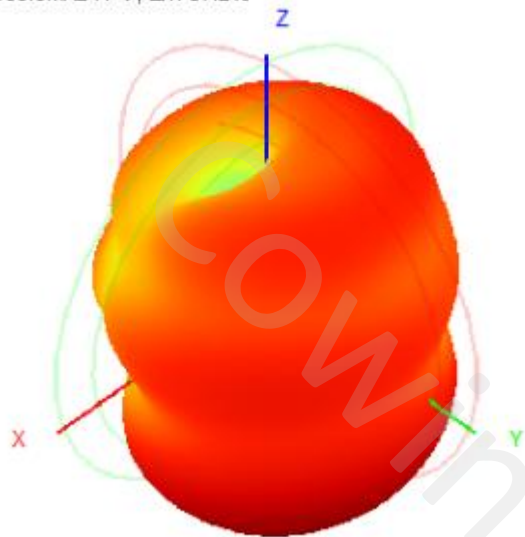


900.0MHz Total(E1-XZ), Max= 1.10dBi

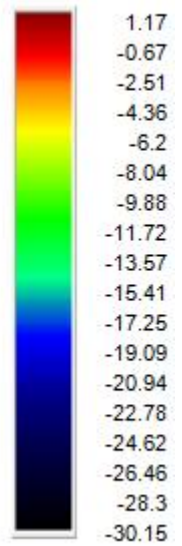
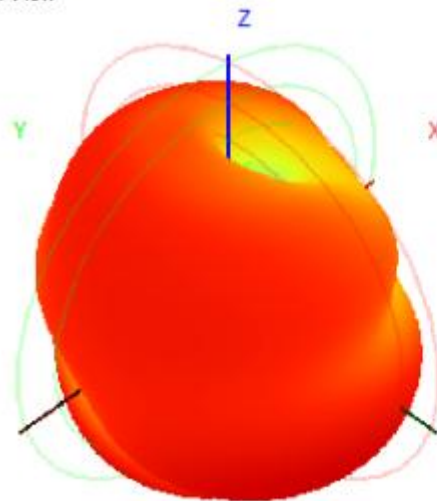
900.0MHz Total(E2-YZ), Max= 0.66dBi



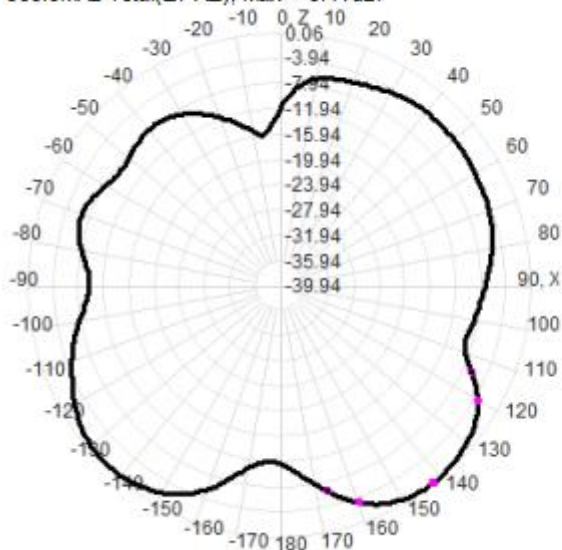
960.0MHz H+V, Eff: 37.2%



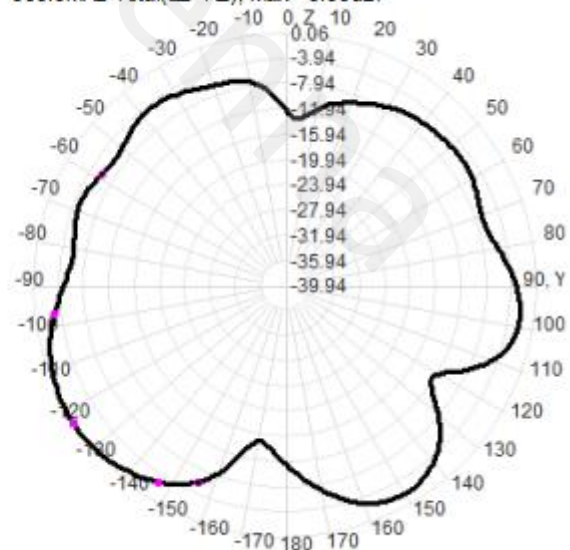
Back View



960.0MHz Total(E1-XZ), Max= -0.41dBi

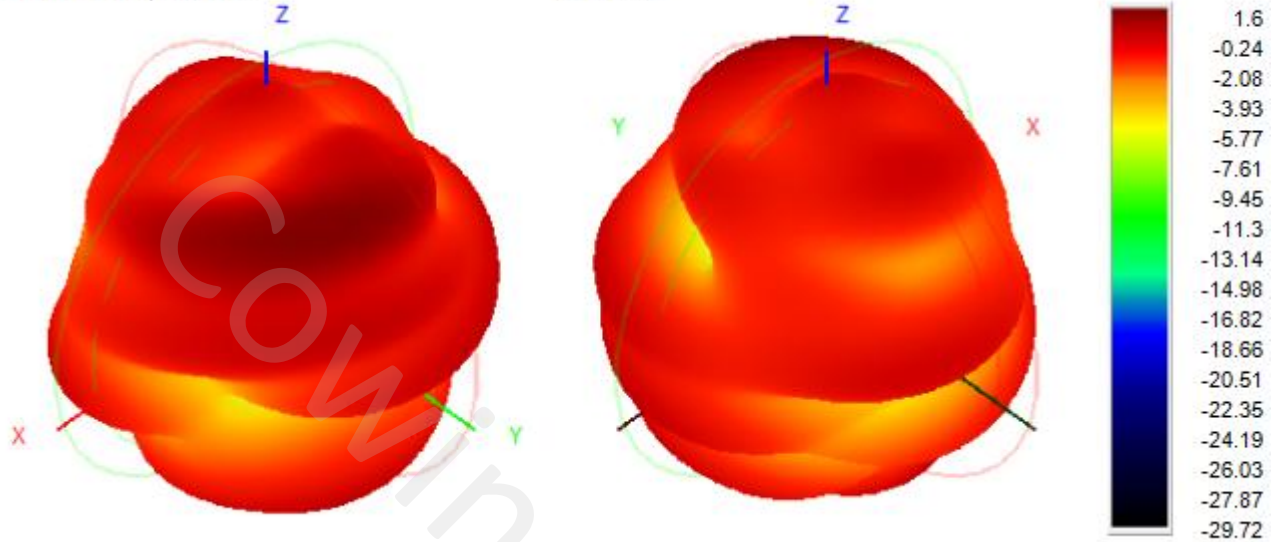


960.0MHz Total(E2-YZ), Max= 0.06dBi



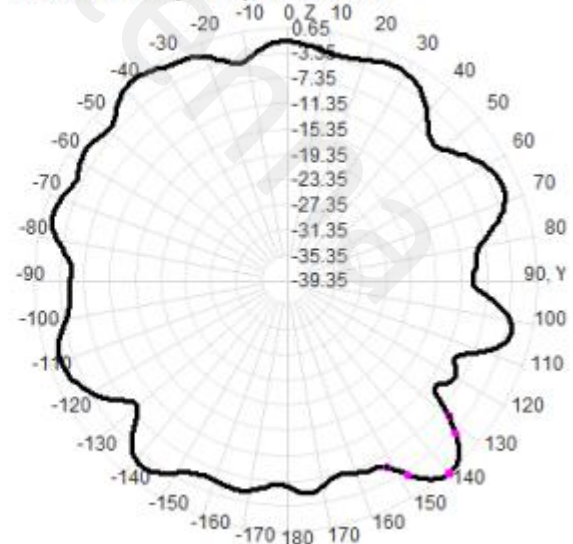
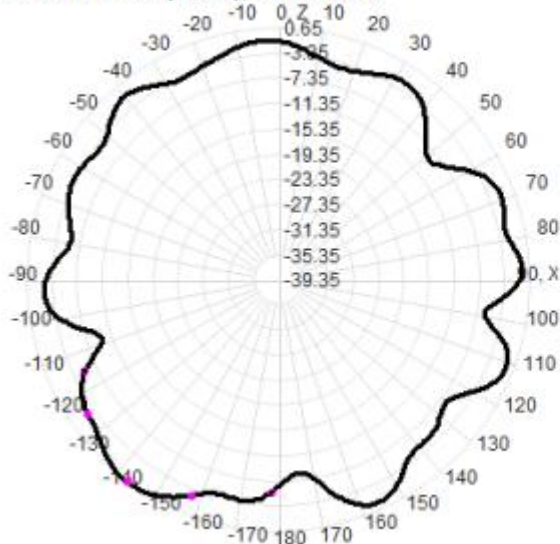
1710.0MHz H+V, Eff: 45.3%

Back View

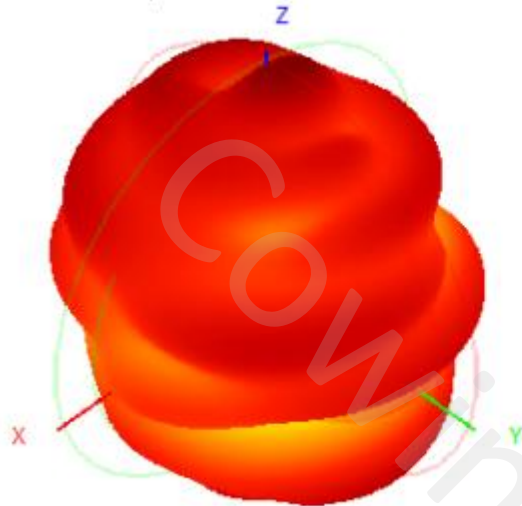


1710.0MHz Total(E1-XZ), Max= 0.60dBi

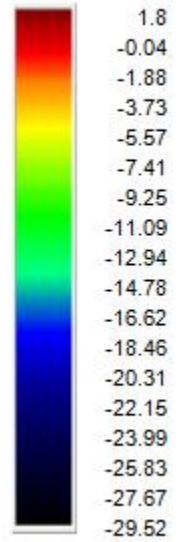
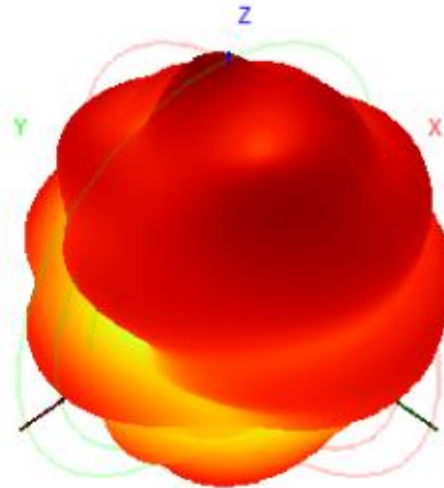
1710.0MHz Total(E2-YZ), Max= 0.65dBi



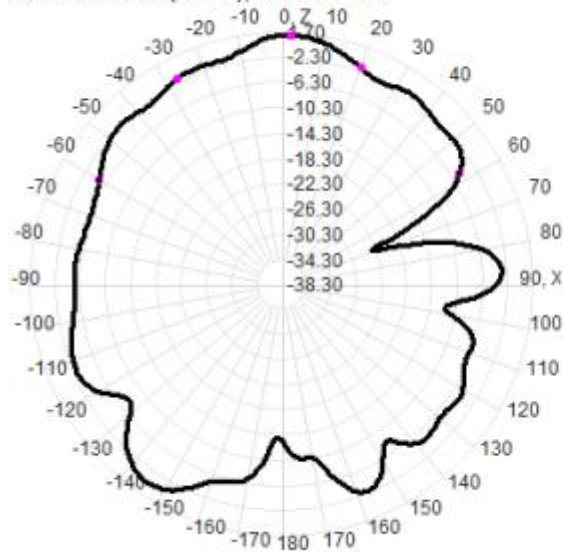
1910.0MHz H+V, Eff: 41.5%



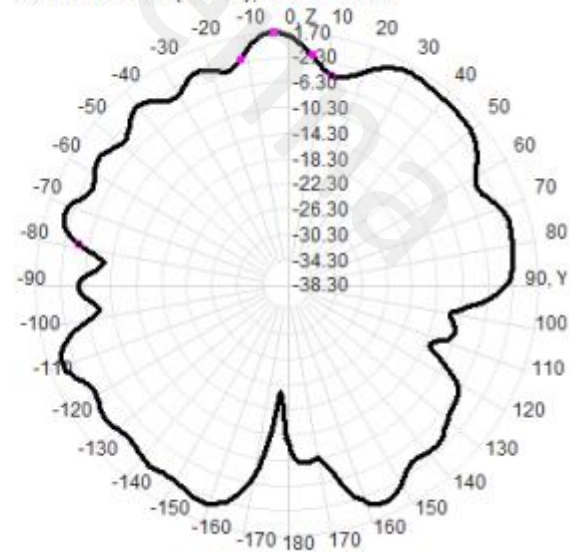
Back View



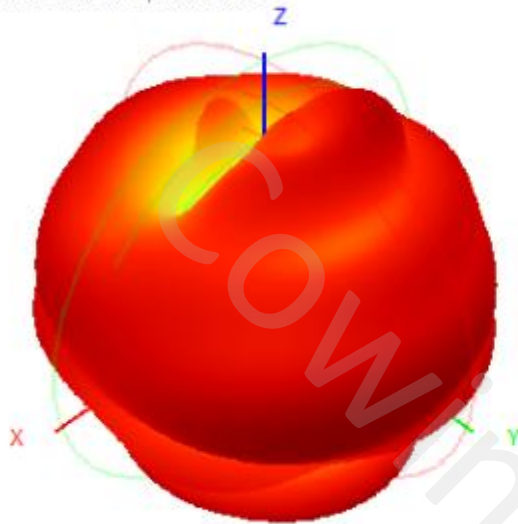
1910.0MHz Total(E1-XZ), Max= 1.25dBi



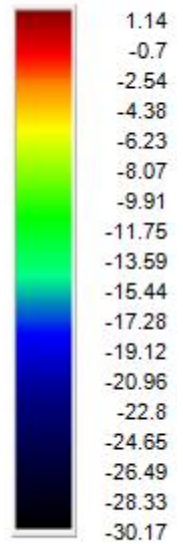
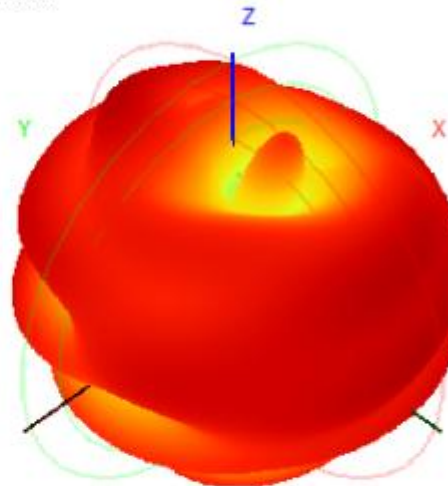
1910.0MHz Total(E2-YZ), Max= 1.70dBi



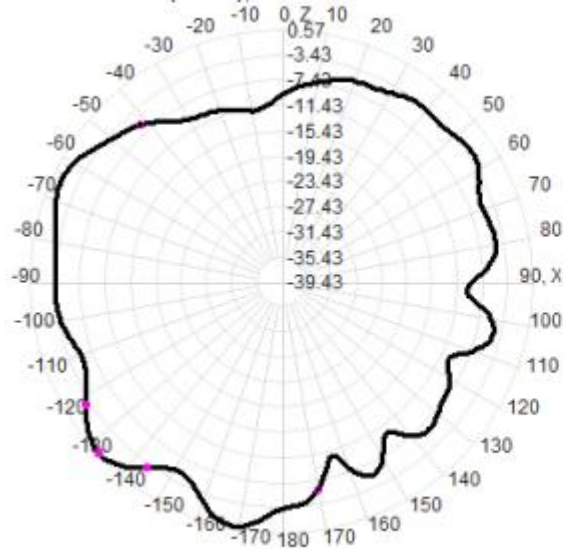
2170.0MHz H+V, Eff: 45.9%



Back View



2170.0MHz Total(E1-XZ), Max= 0.19dBi



2170.0MHz Total(E2-YZ), Max= 0.57dBi

