

CW-NZ-0117

2.4/5.8G FPC Antenna

Key Features

Frequency:2.4-2.5/5.15-5.85G

I-PEX Connector

1.13 Cable

Dimensions 42*12*0.1mm



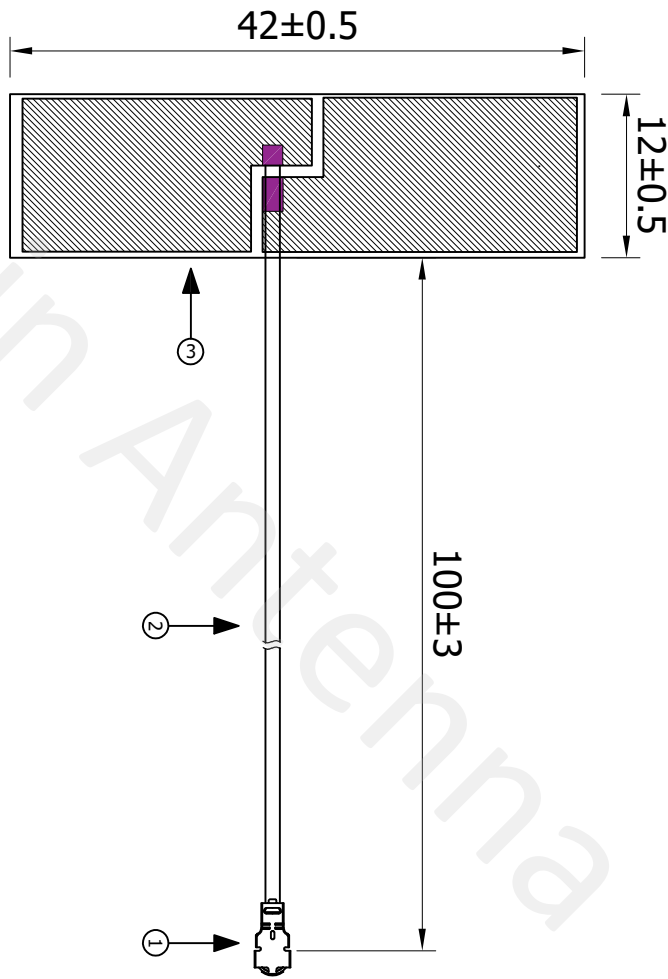
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5/5.15-5.85G
VSWR	≤2.0
Efficiency (%)	70.5%
Peak Gain (dBi)	5.23
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)	42*12*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: 2.4-2.5G/5.15-5.85G
 Impedance: 50Ω
 V.S.W.R: ≤2.0
 100% Continuity,short and open circuit test
 Materials,parts and process must by environmentally (ROHS)

NO	Name	Description	Q'ty	Remark
3	FPC	42*12*0.1MM Black	1	
2	Cable	Ø1.13MM black double tin wire	1	
1	Connector	Ø1.13 I-PEX (equivalents)	1	
XX: ±5.0	Approved			
X: ±3.0	Checked	Customer		
.X ±1.0	Checked	Part NO.		
.XX ±0.2	Checked	Part name		FPC Antenna
.XXX ±0.1	Drawing	CW P/NO.		CW-NZ-0117
⊙		REV	Unit	File
		X1	m/m	Sheet:
				1/1



4. Antenna test parameters

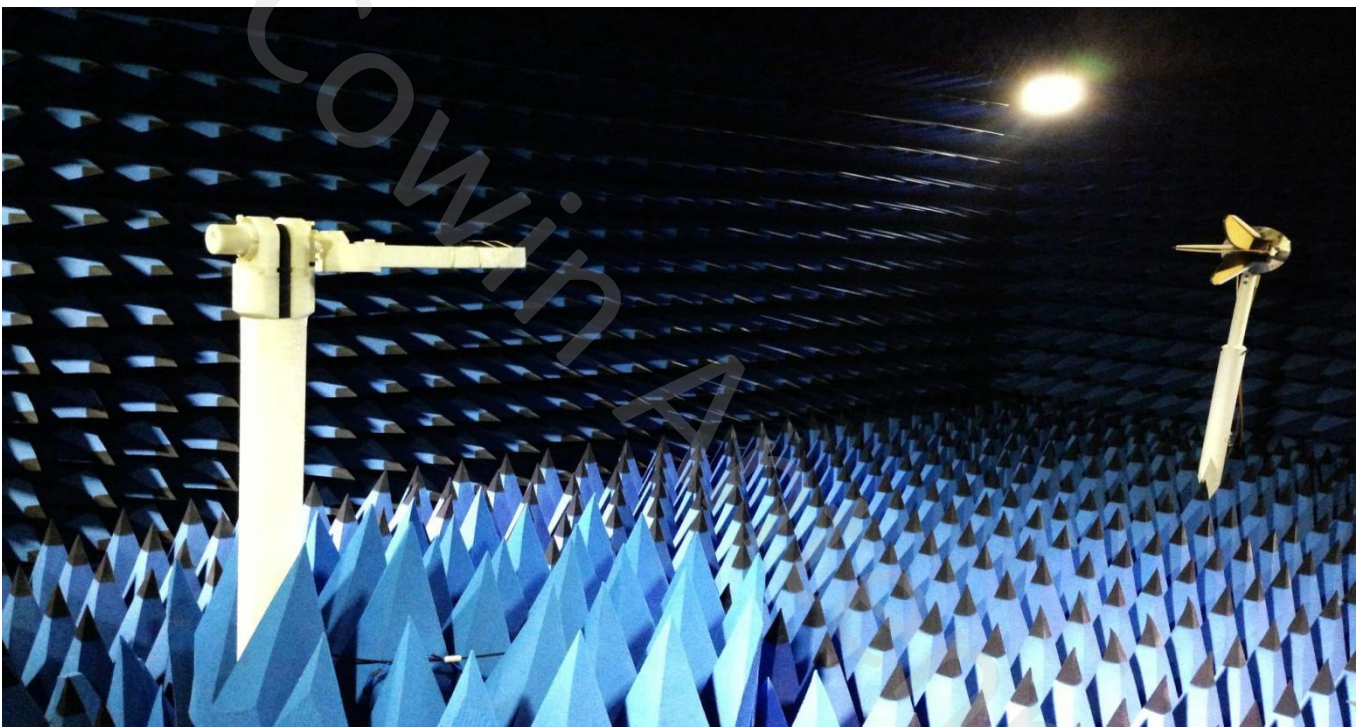
Antenna Measurement Conditions:

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

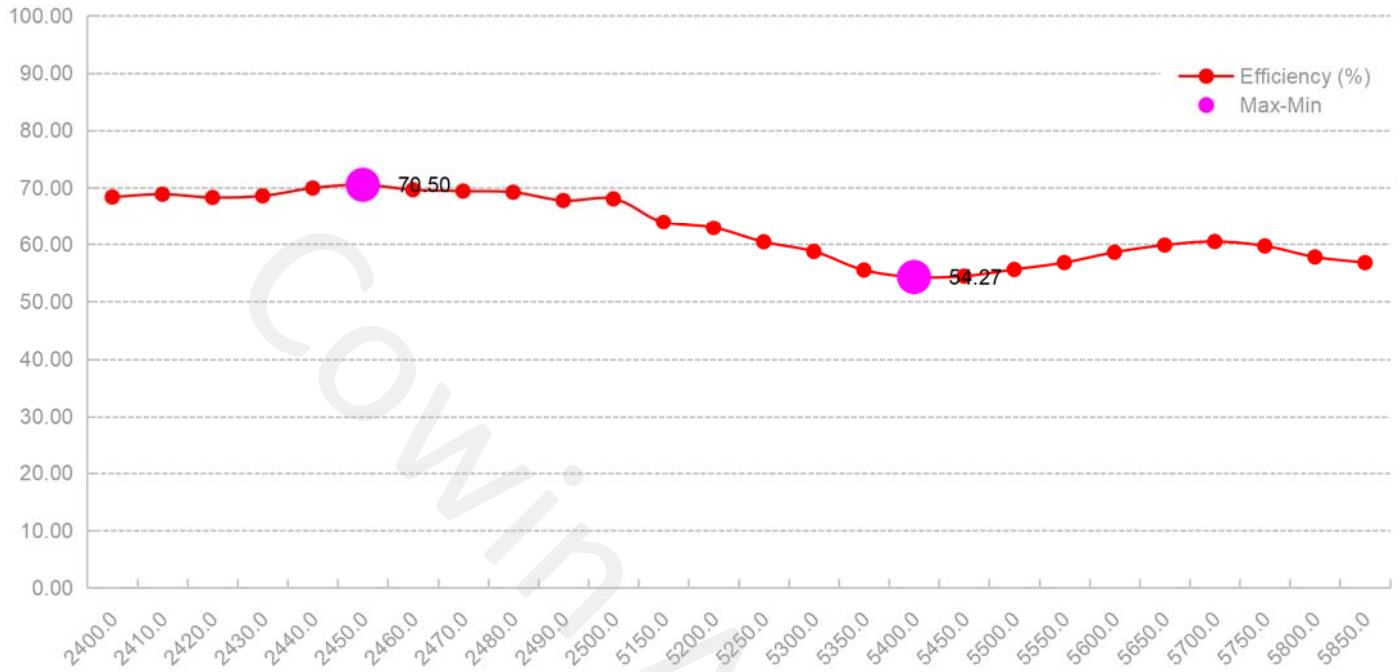


4.1 VSWR

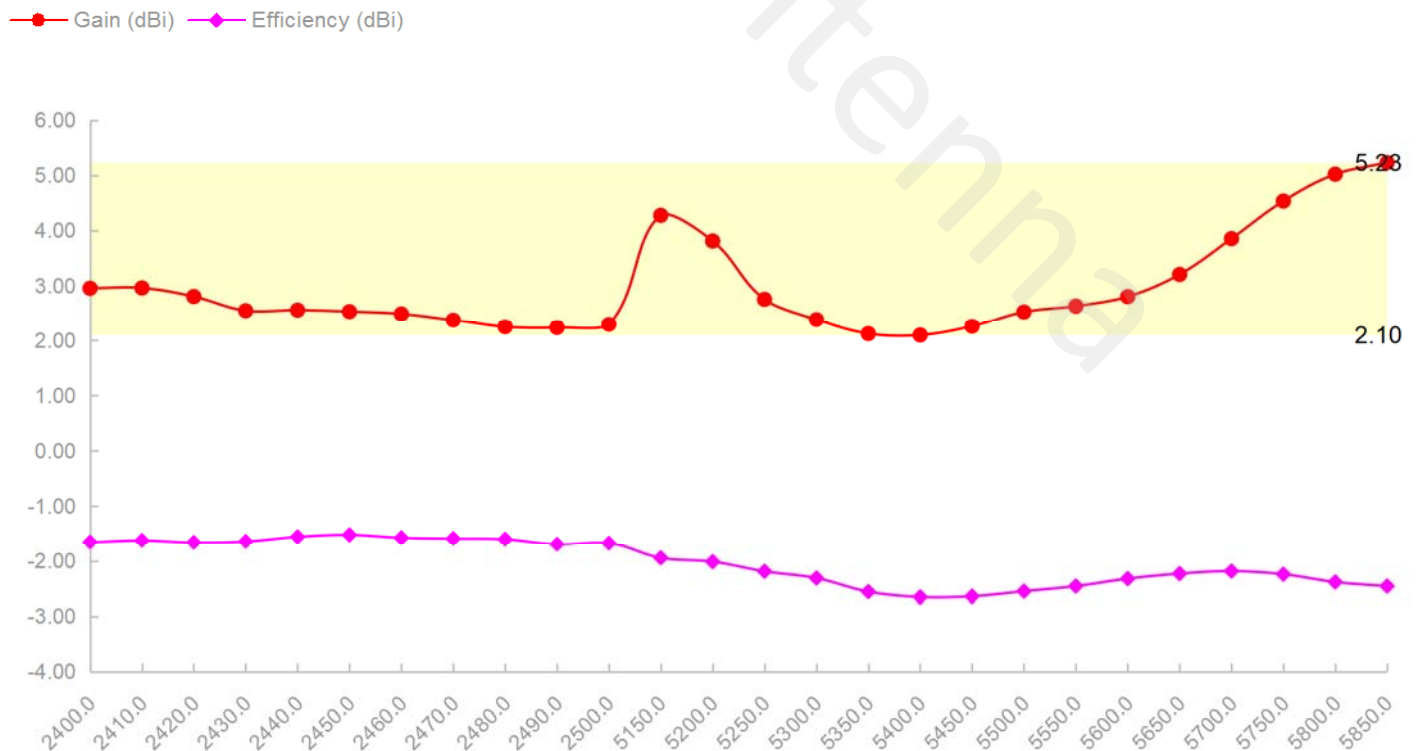


9/2/2022, 2:45 AM

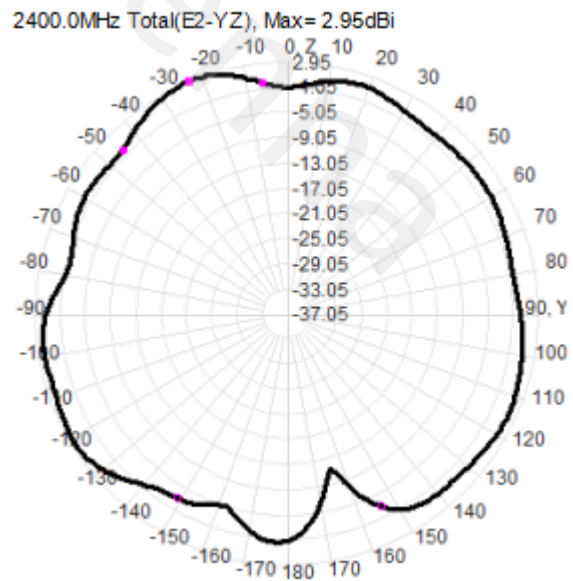
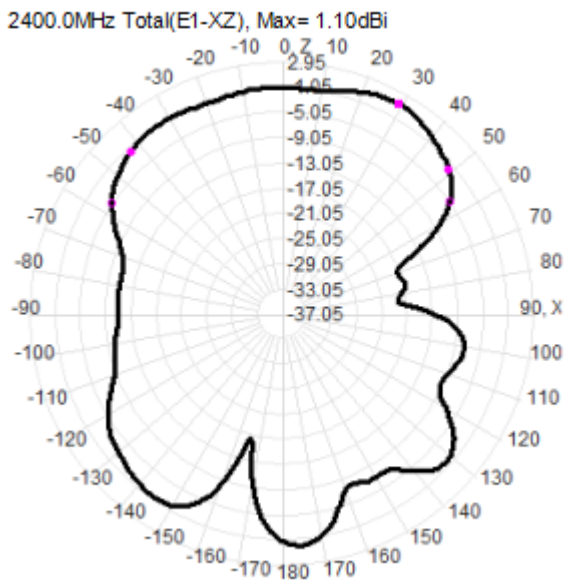
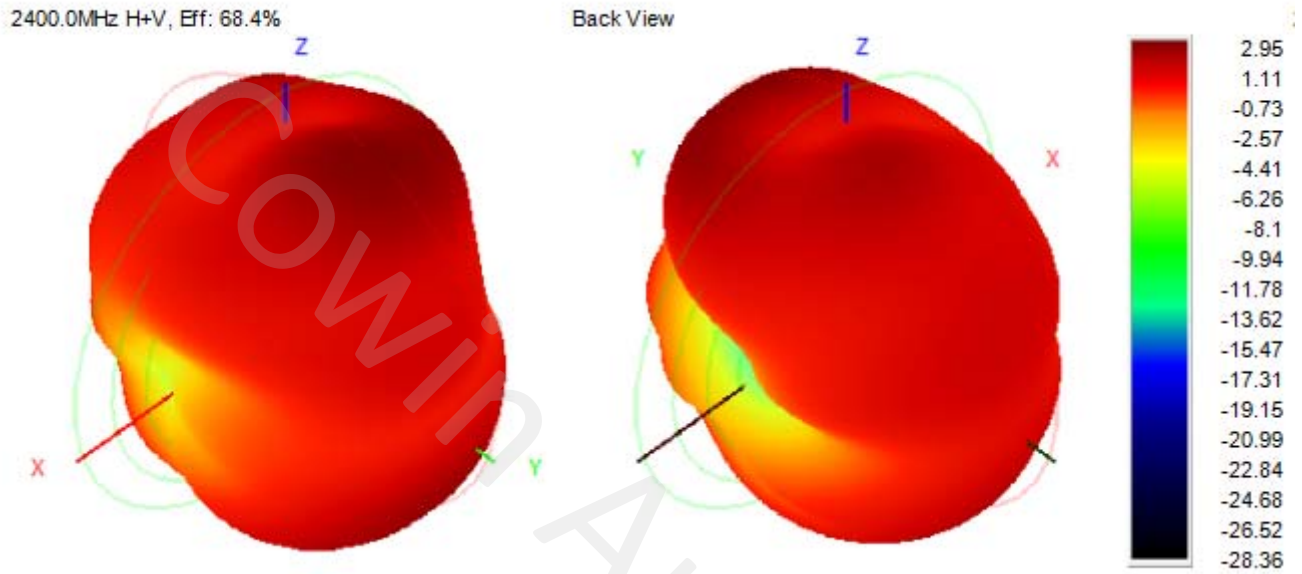
4.2 Efficiency



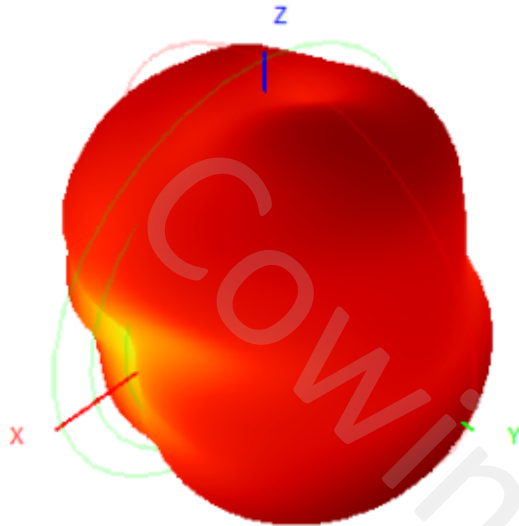
4.3 Peak gain



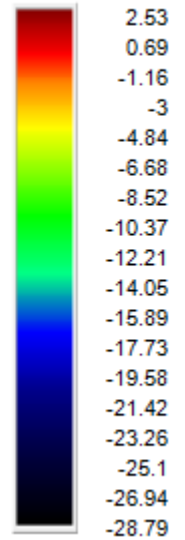
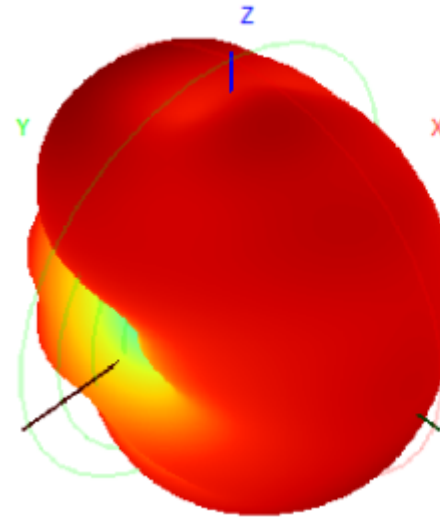
4.4 3D&2D Radiation Patterns



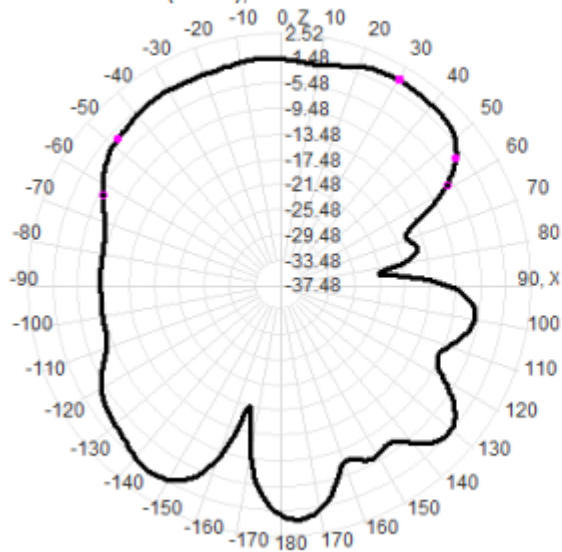
2450.0MHz H+V, Eff: 70.5%



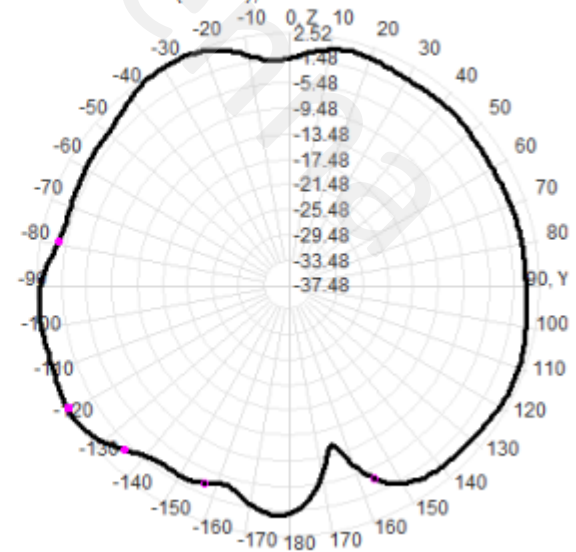
Back View



2450.0MHz Total(E1-XZ), Max= 0.15dBi

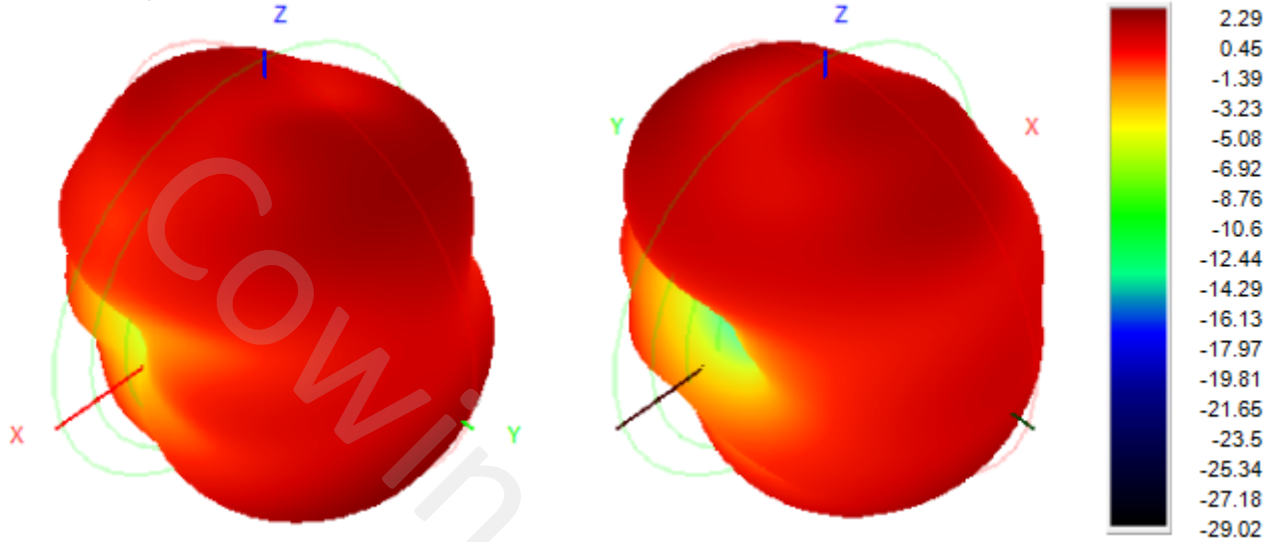


2450.0MHz Total(E2-YZ), Max= 2.52dBi



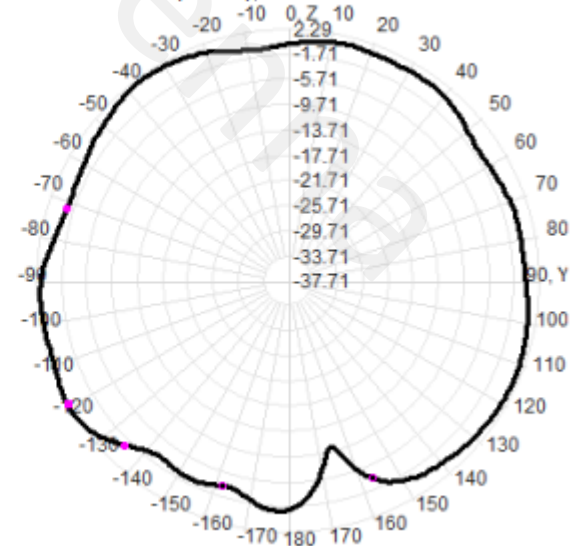
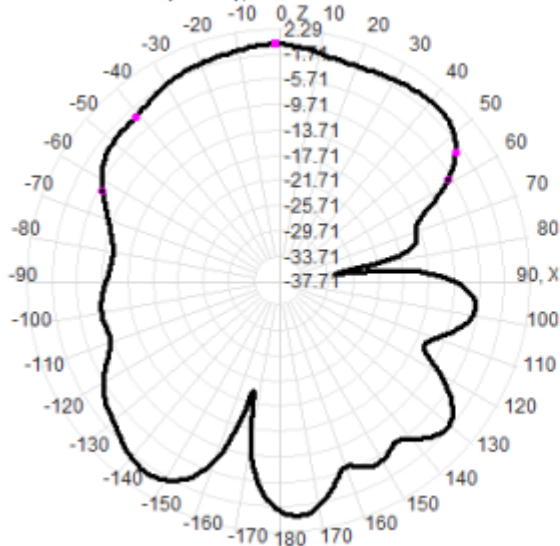
2500.0MHz H+V, Eff: 68.0%

Back View

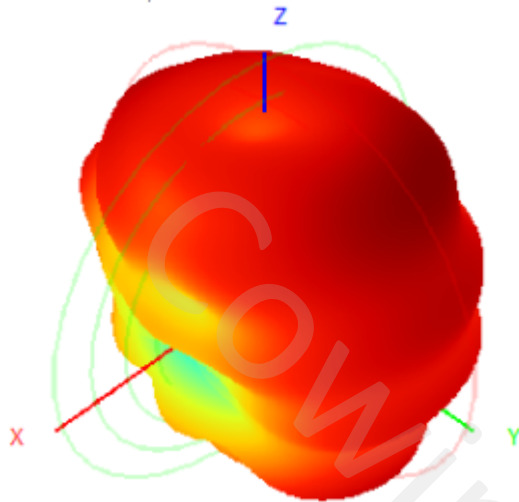


2500.0MHz Total(E1-XZ), Max= -0.13dBi

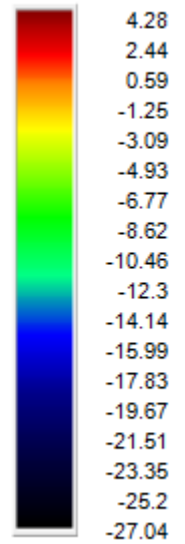
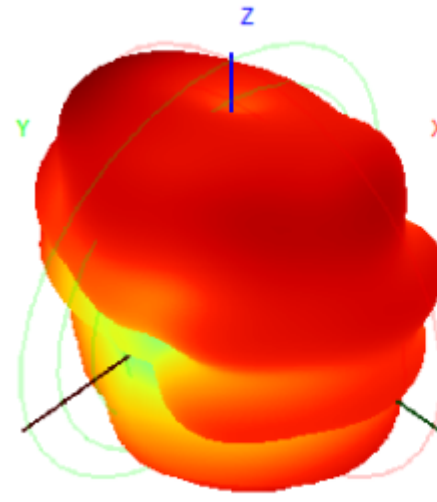
2500.0MHz Total(E2-YZ), Max= 2.29dBi



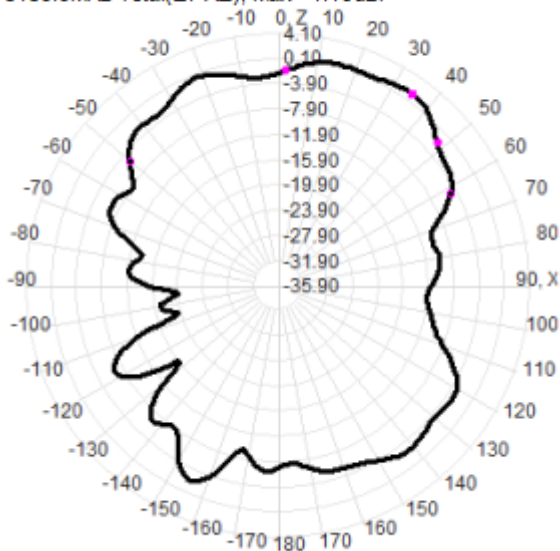
5150.0MHz H+V, Eff: 63.9%



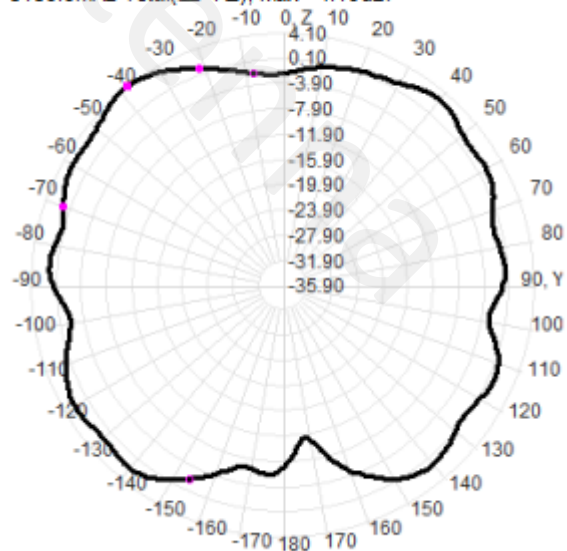
Back View



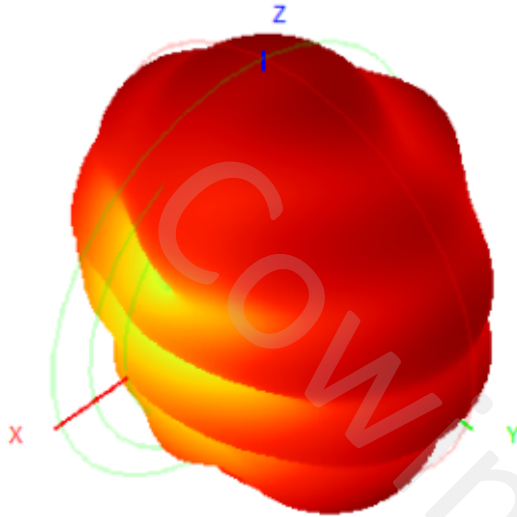
5150.0MHz Total(E1-XZ), Max= 1.16dBi



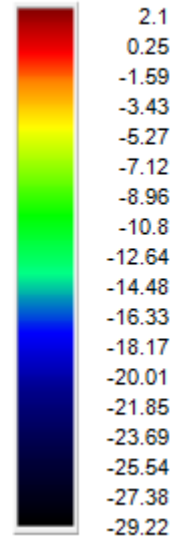
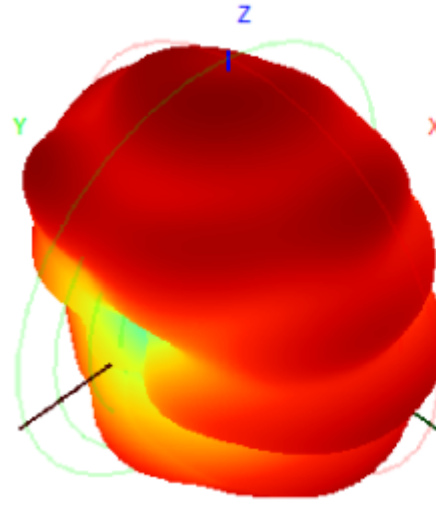
5150.0MHz Total(E2-YZ), Max= 4.10dBi



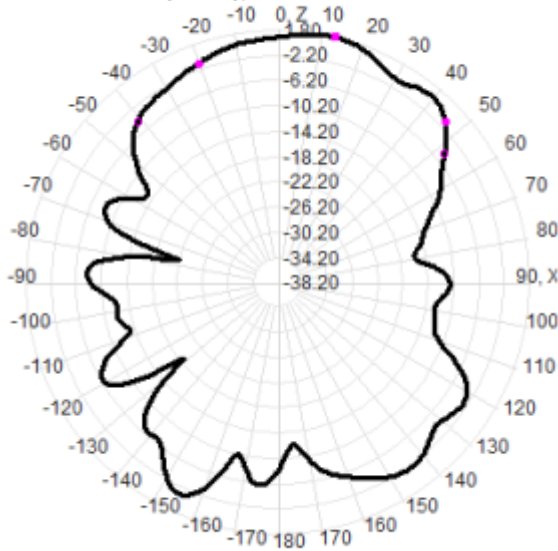
5400.0MHz H+V, Eff: 54.3%



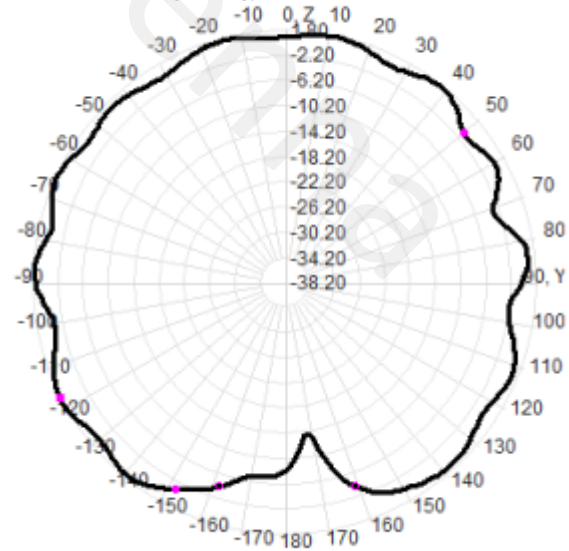
Back View



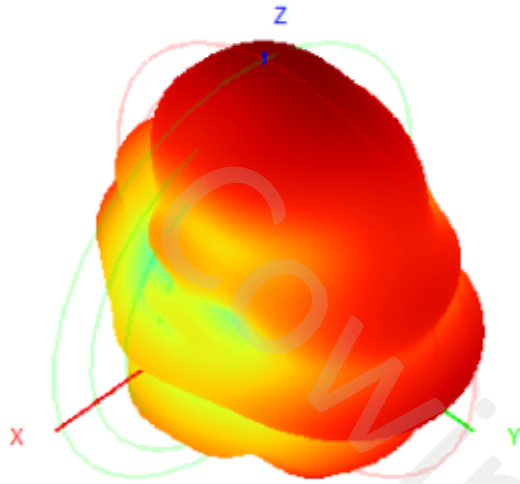
5400.0MHz Total(E1-XZ), Max= 1.71dBi



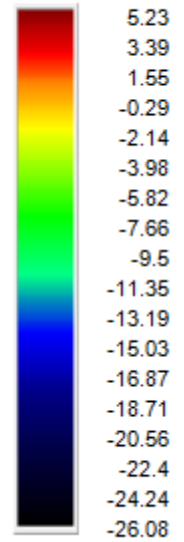
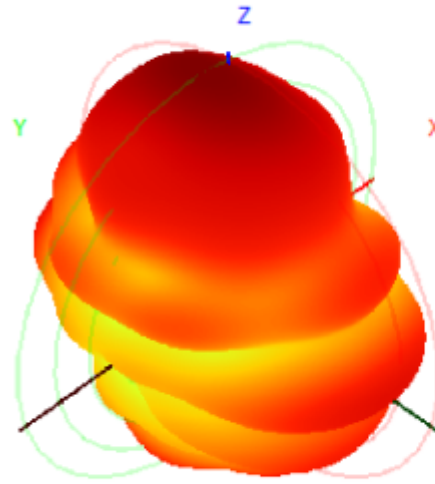
5400.0MHz Total(E2-YZ), Max= 1.80dBi



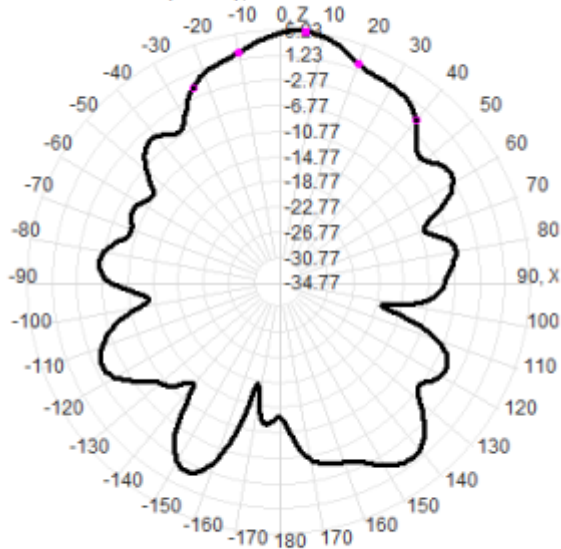
5850.0MHz H+V, Eff: 56.8%



Back View



5850.0MHz Total(E1-XZ), Max= 5.23dBi



5850.0MHz Total(E2-YZ), Max= 4.68dBi

