

CW-NZ-0194

2.4-2.5G/5.15-5.85G PCB Antenna

Key Features

Frequency:2.4-2.5G/5.15-5.85G

I-PEX Connector

1.13 Cable

Dimensions: 40*8.1*0.8mm

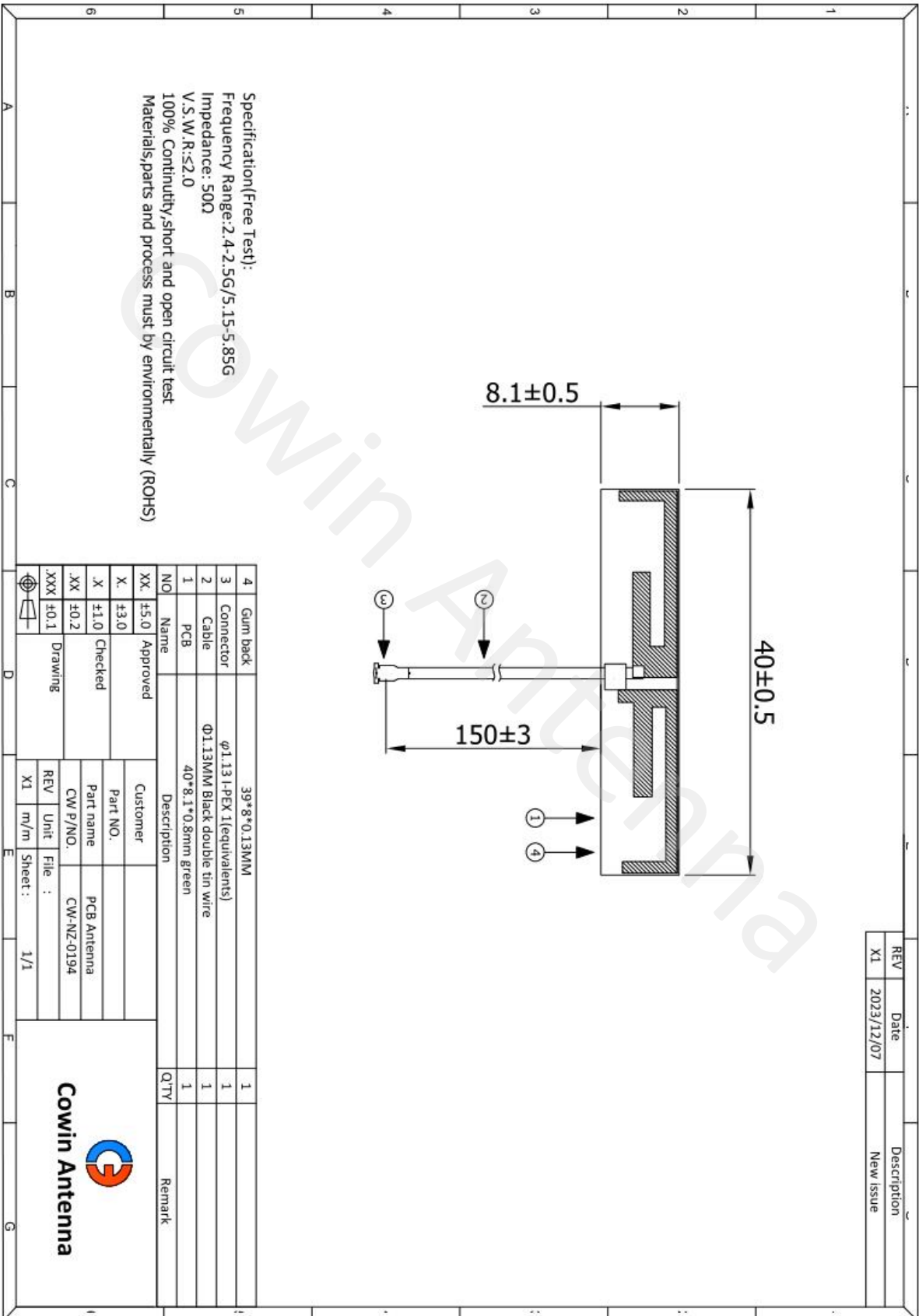


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5G/5.15-5.85G
VSWR	≤2
Efficiency (%)	77.54%
Peak Gain (dBi)	4.15
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/PCB
Cable Type	RF1.13
Connector Type	I-PEX
Dimensions (mm)	40*8.1*0.8MM
Antenna color	Green
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



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)

4	Gum back	39*8*0.13MM	1	
3	Connector	φ1.13 I-PEX I(equivalents)	1	
2	Cable	φ1.13MM Black double tin wire	1	
1	PCB	40*8.1*0.8mm green	1	
NOI	Name	Description	Q'TY	Remark
XX	±5.0	Approved		
X	±3.0	Customer		
X	±1.0	Part NO.		
.X	±1.0	Checked		
.XX	±0.2	Part name	PCB Antenna	
.XXX	±0.1	CW P/NO.	CW-NZ-0194	
		REV	File :	
		Unit	m/m	
		Sheet:	1/1	

REV	Date	Description
X1	2023/12/07	New issue

4. Antenna test parameters

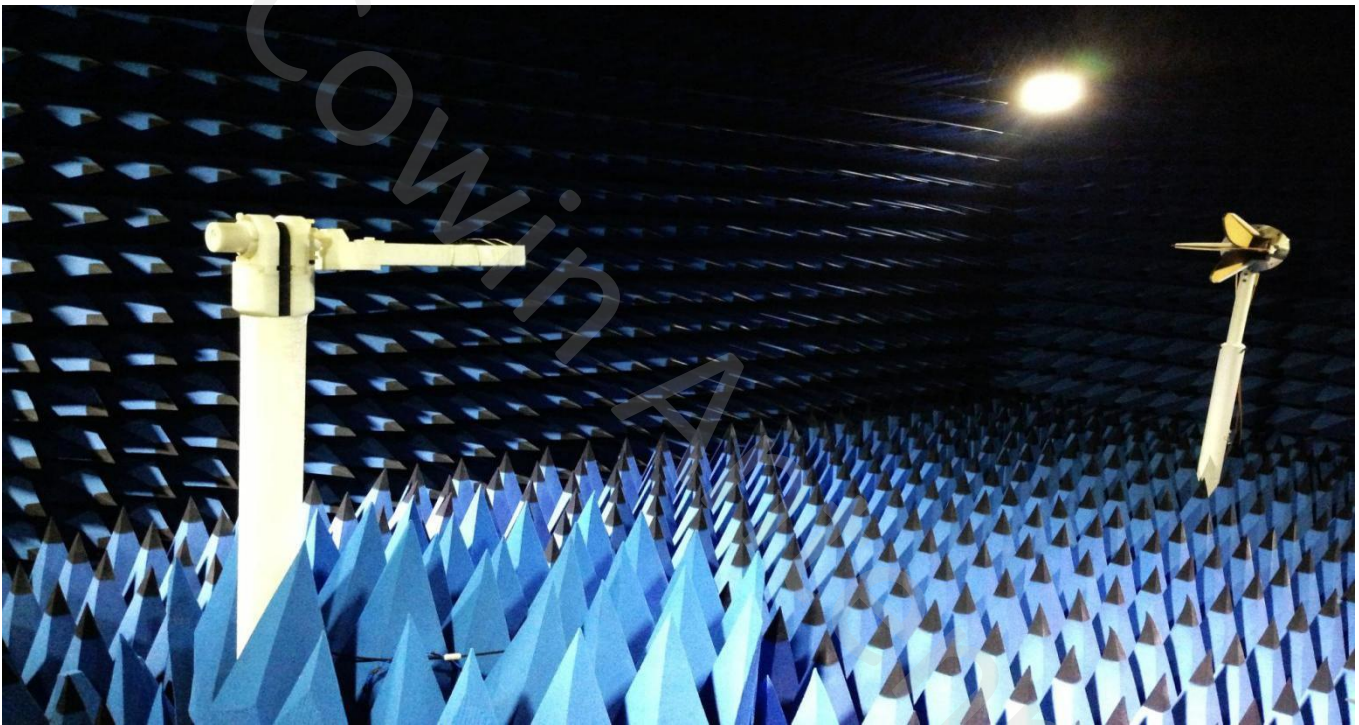
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

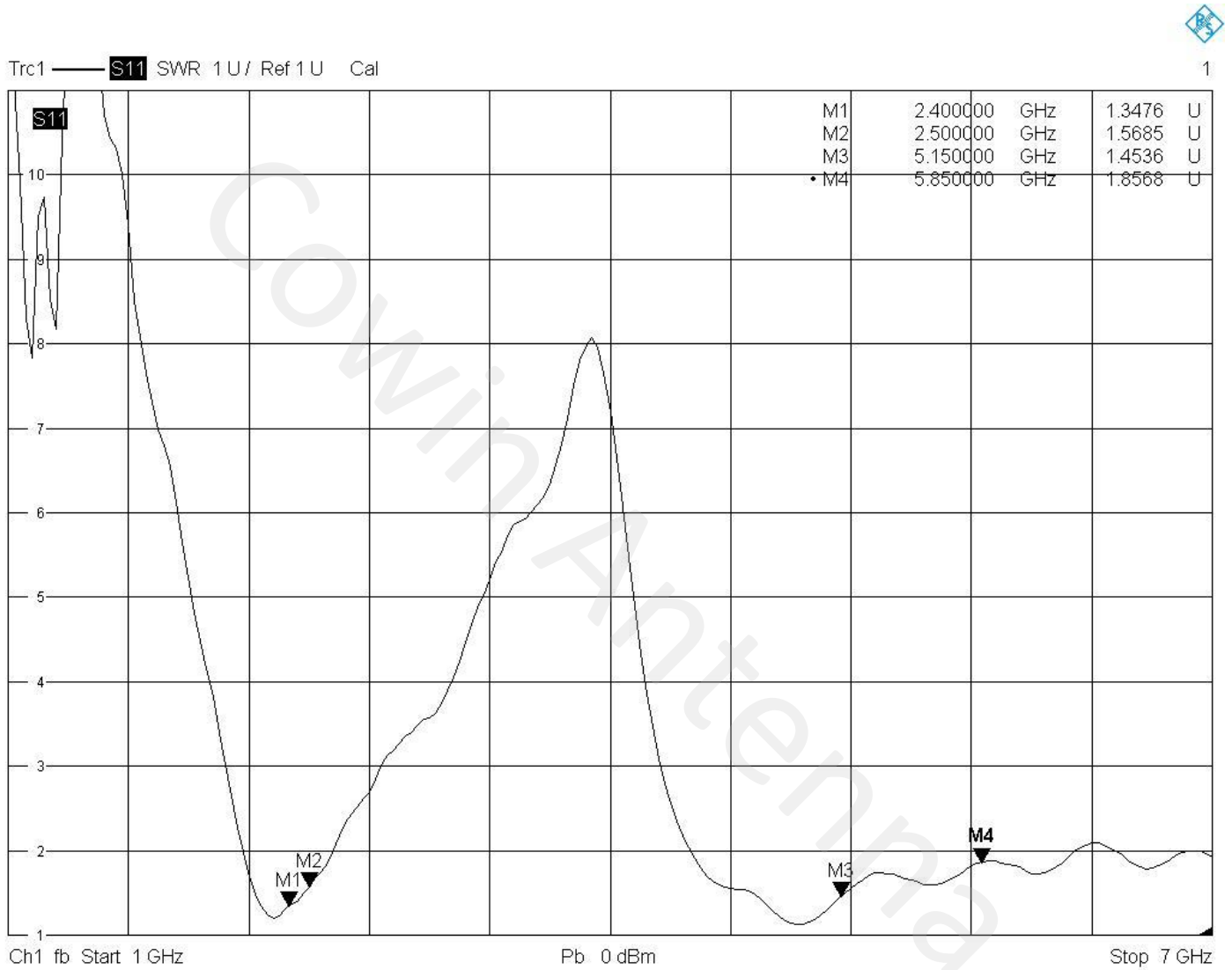
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

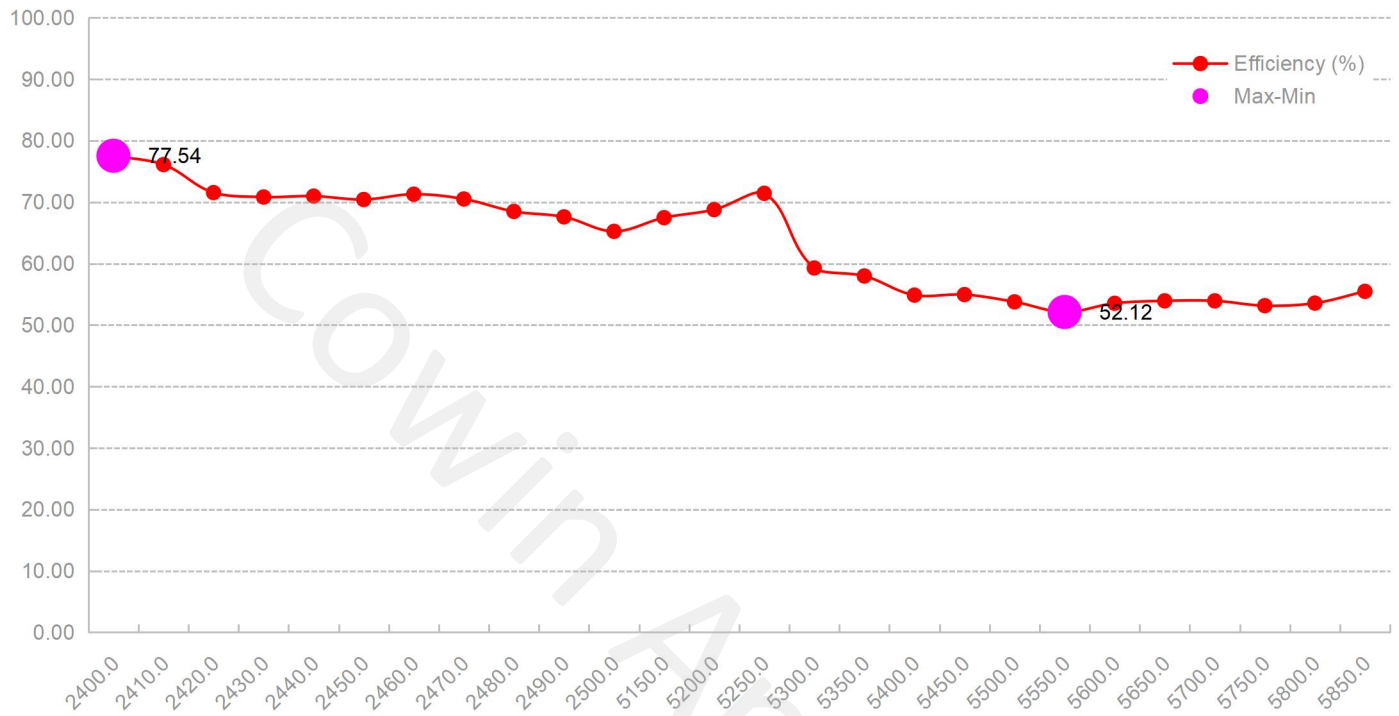


4.1 VSWR

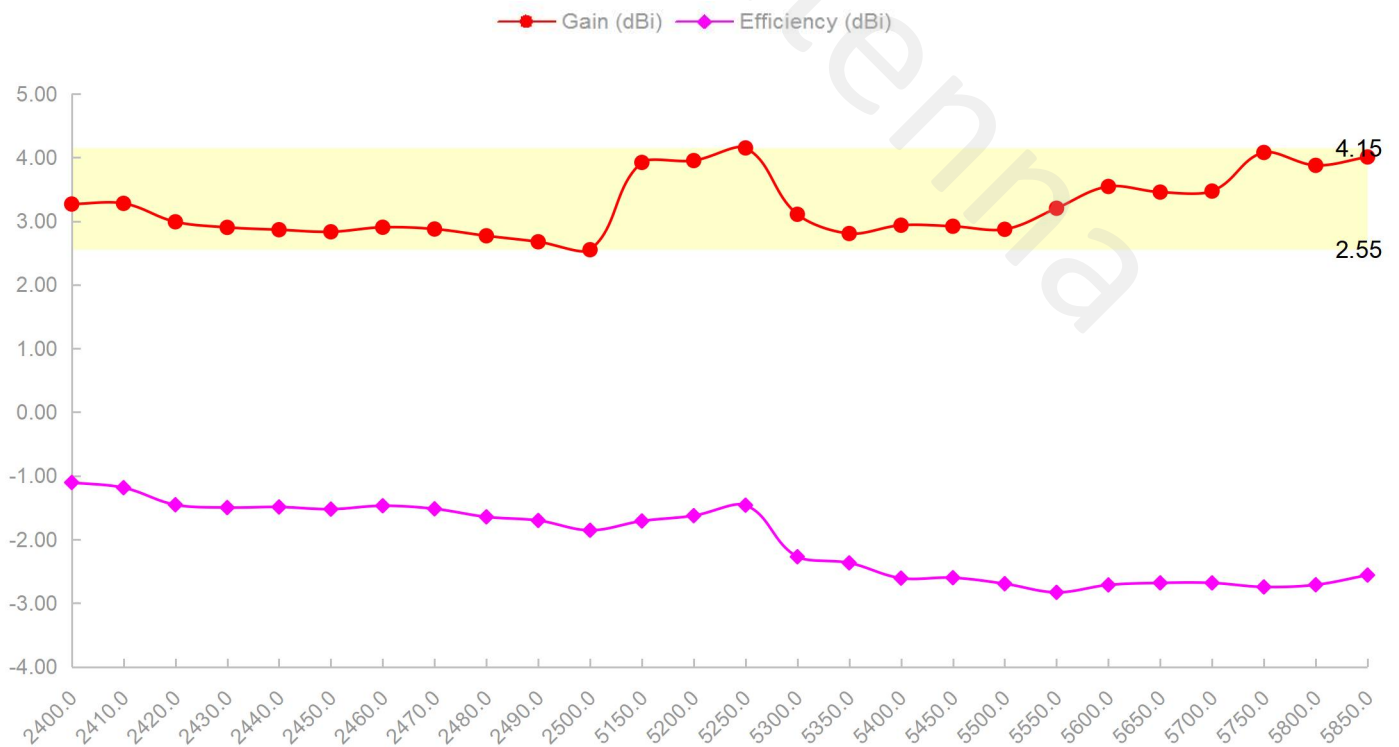


12/6/2023, 8:50 PM

4.2 Efficiency



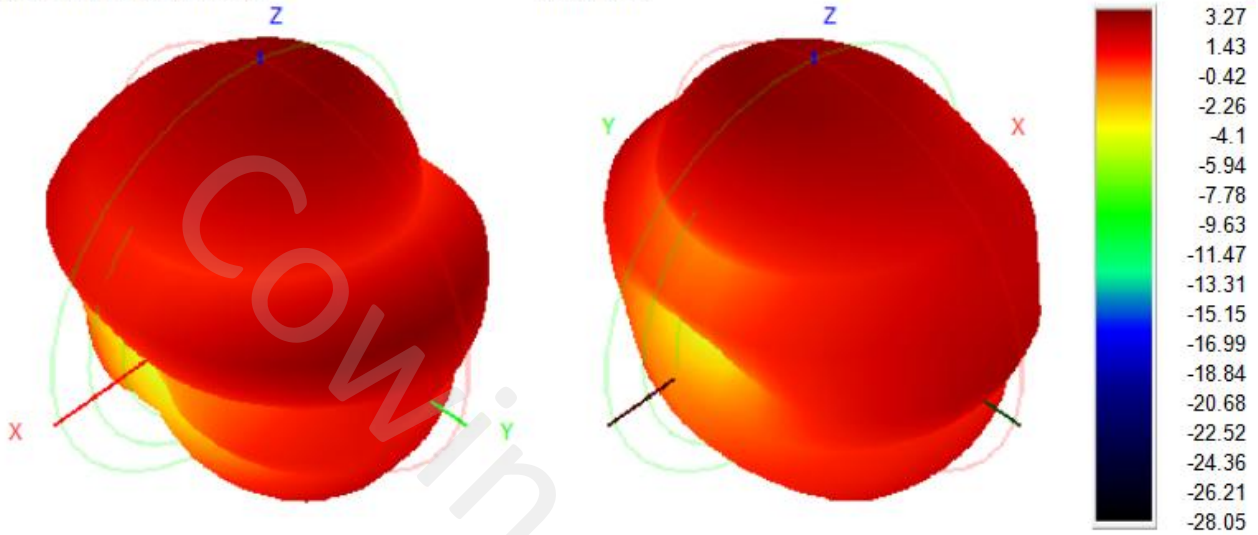
4.3 Peak gain



4.4 3D&2D Radiation Patterns

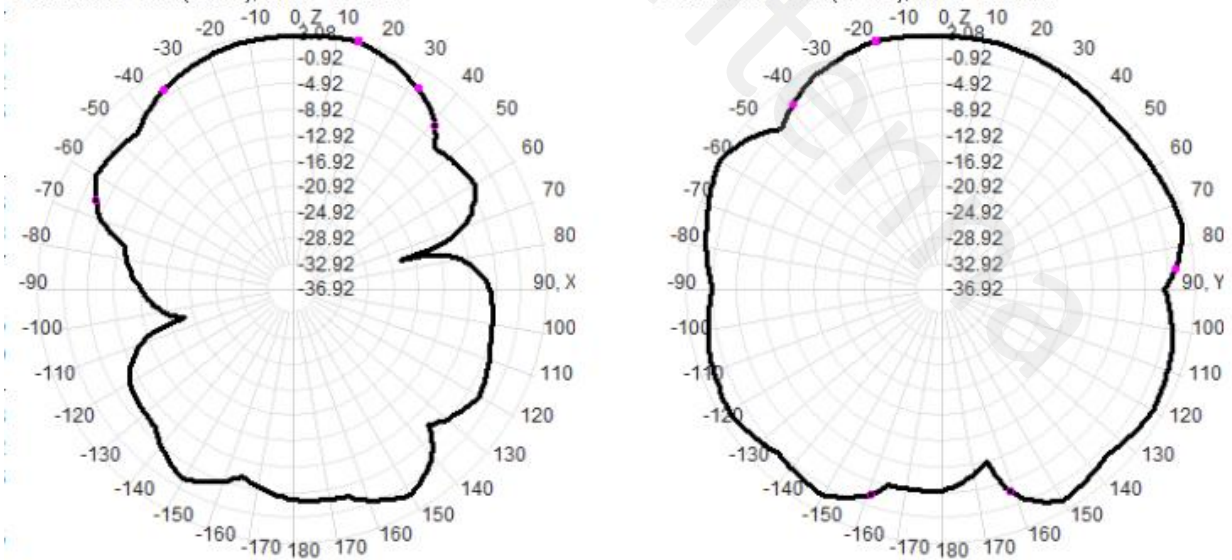
2400.0MHz H+V, Eff. 77.5%

Back View

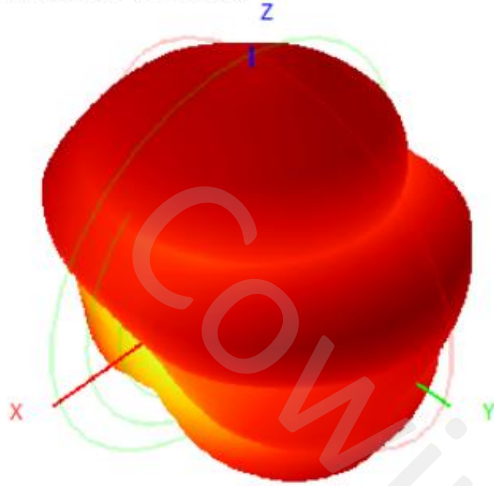


2400.0MHz Total(E1-XZ), Max= 3.03dBi

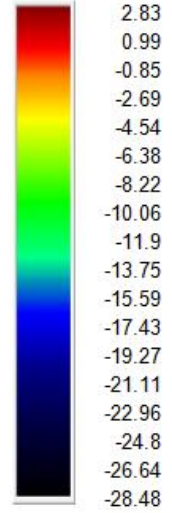
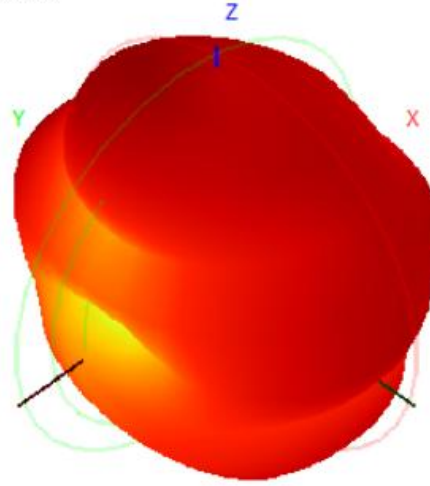
2400.0MHz Total(E2-YZ), Max= 3.08dBi



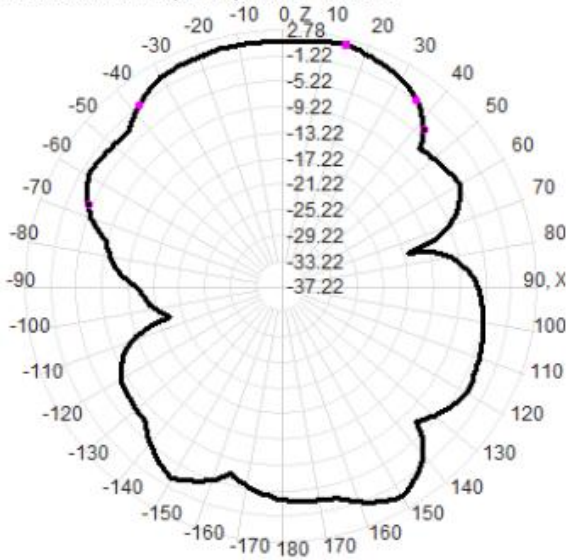
2450.0MHz H+V, Eff. 70.4%



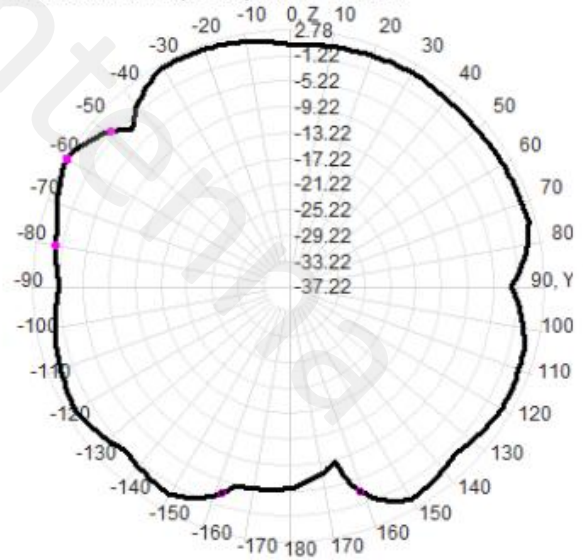
Back View



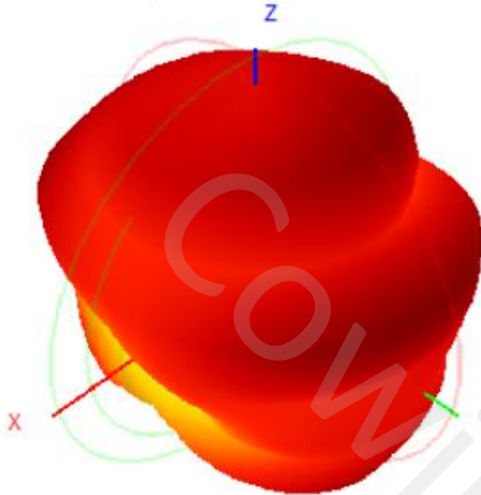
2450.0MHz Total(E1-XZ), Max= 1.78dBi



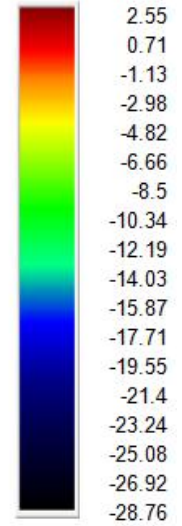
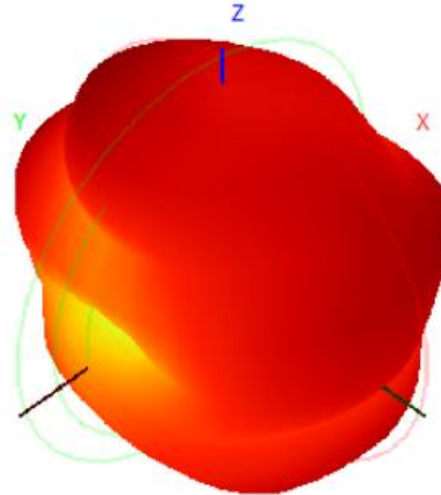
2450.0MHz Total(E2-YZ), Max= 2.78dBi



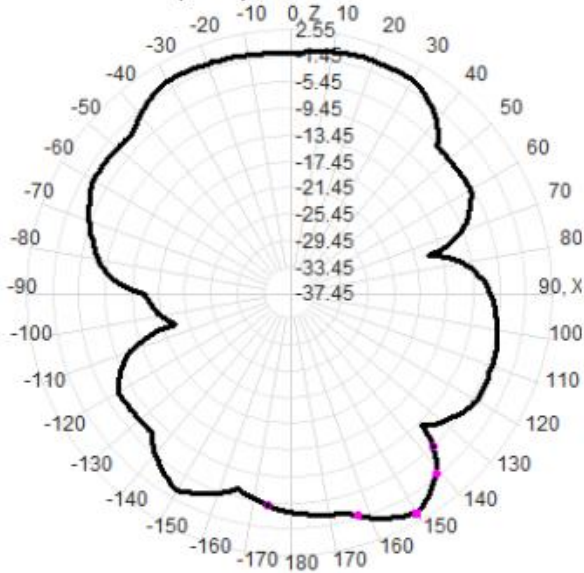
2500.0MHz H+V, Eff. 65.2%



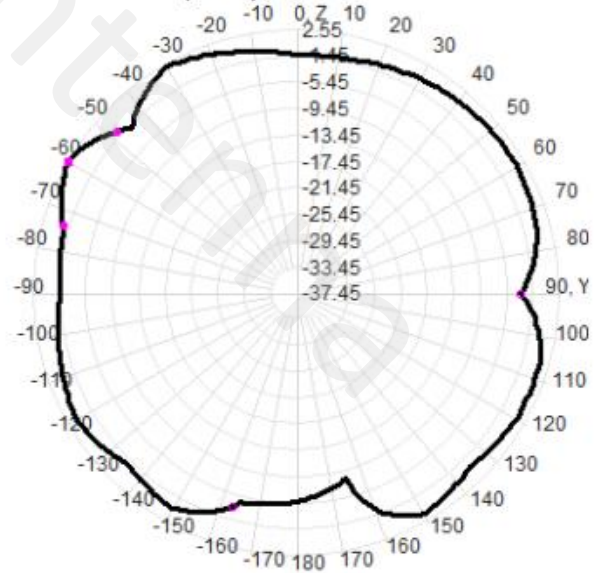
Back View



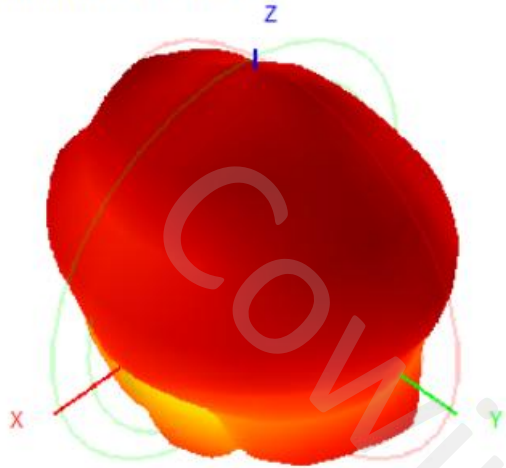
2500.0MHz Total(E1-XZ), Max= 1.00dBi



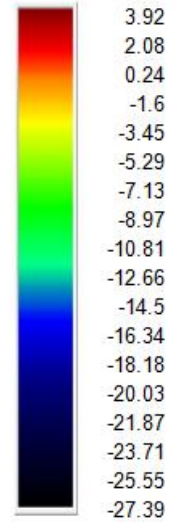
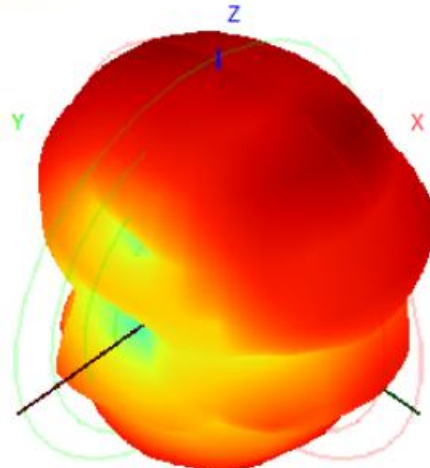
2500.0MHz Total(E2-YZ), Max= 2.55dBi



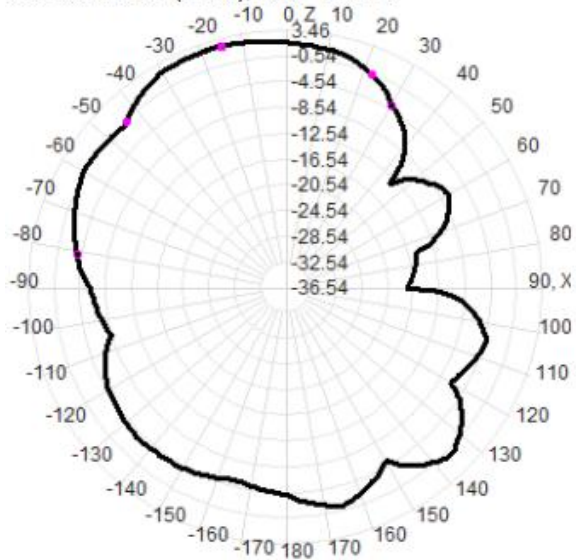
5150.0MHz H+V, Eff. 67.5%



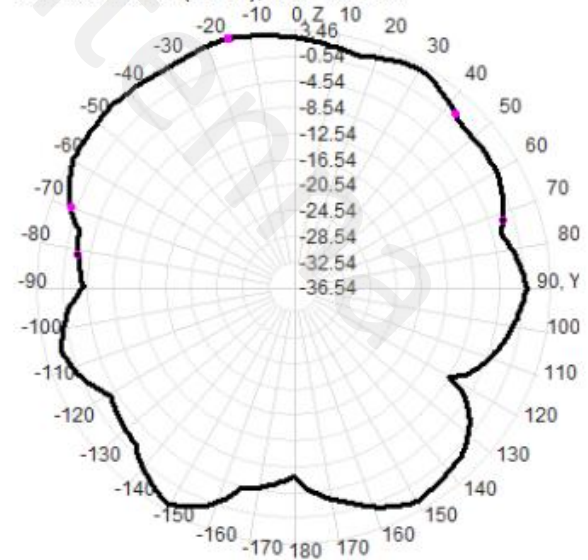
Back View



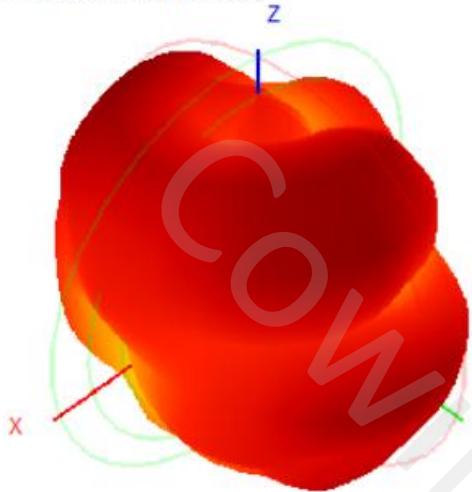
5150.0MHz Total(E1-XZ), Max= 2.31dBi



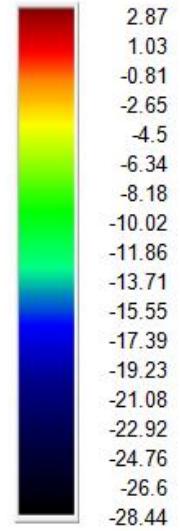
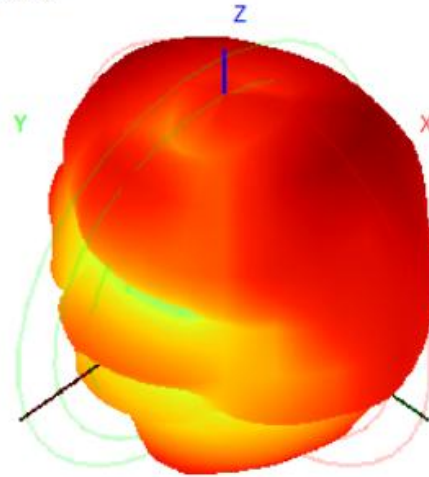
5150.0MHz Total(E2-YZ), Max= 3.46dBi



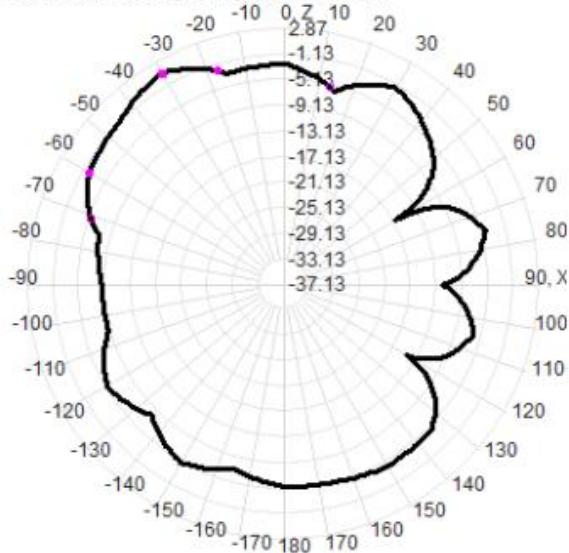
5500.0MHz H+V, Eff 53.8%



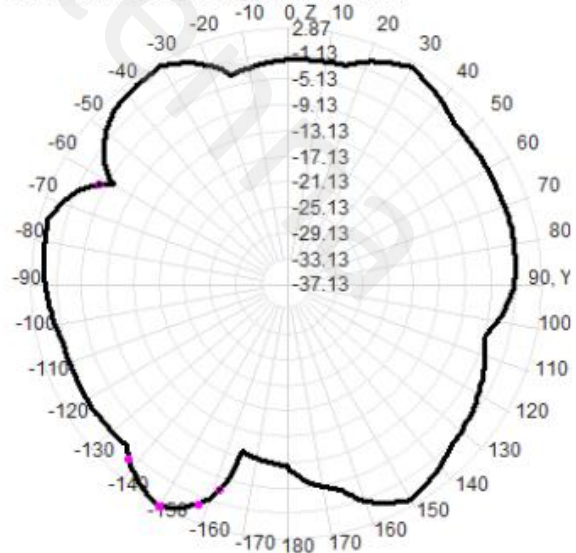
Back View



5500.0MHz Total(E1-XZ), Max= 0.86dBi

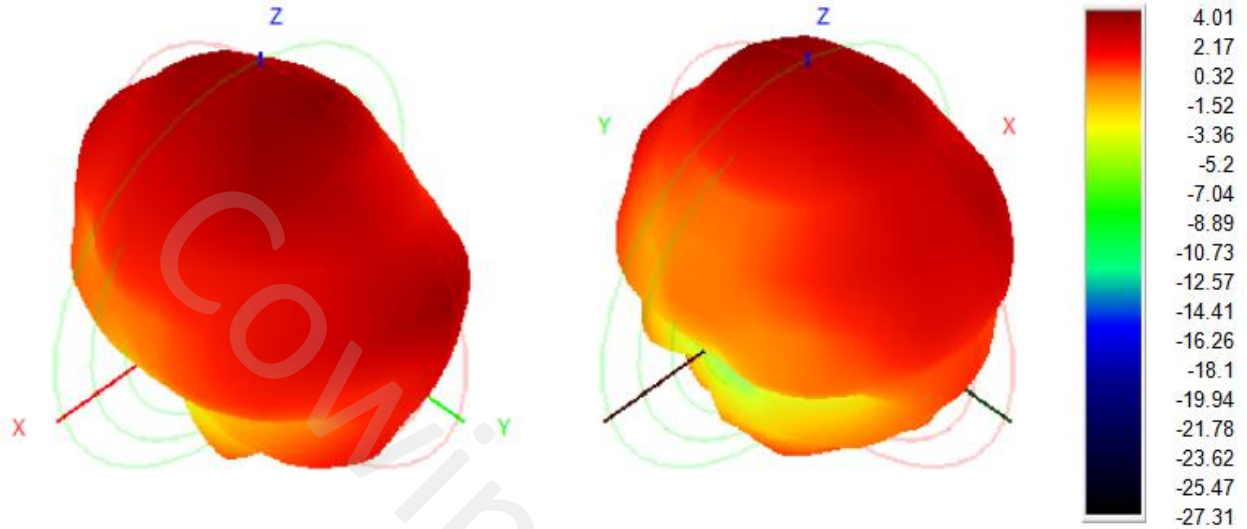


5500.0MHz Total(E2-YZ), Max= 2.87dBi



5850.0MHz H+V, Eff. 55.5%

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5850.0MHz Total(E1-XZ), Max= 3.12dBi

5850.0MHz Total(E2-YZ), Max= 4.01dBi

