

CW-NZ-0213

2.4G Internal Antenna

Key Features

Frequency: 2400-2500MHz

IPEX Connector

Dimensions: 6*8mm

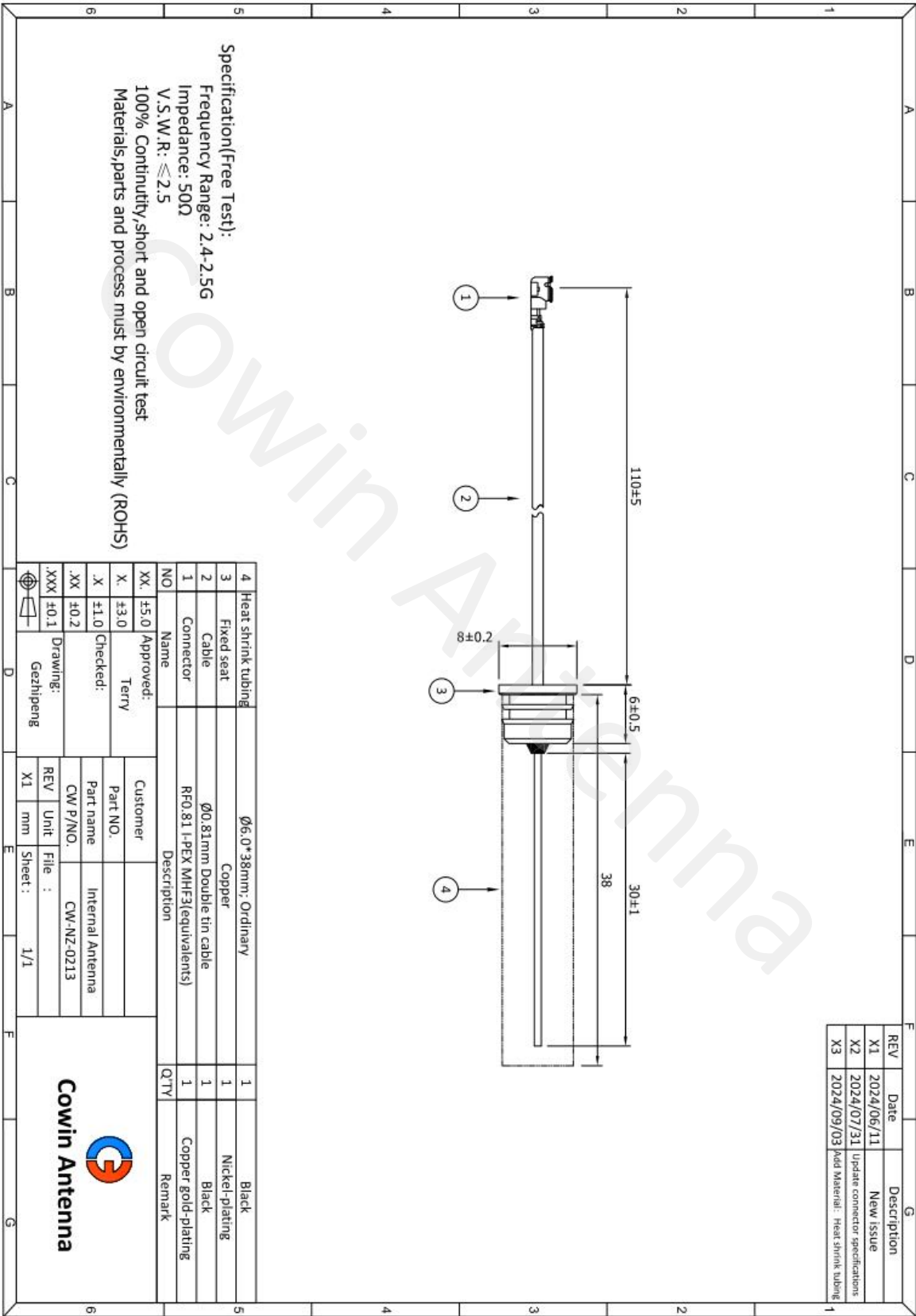


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2400-2500
VSWR	≤2.5
Efficiency (%)	73.4
Peak Gain (dBi)	4.26
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	IPEX

2. Material and environmental characteristics

External Structure	N/A
Inner Structure	Signal lever
Cable Type	RF0.81 Double tin cable
Connector Type	IPEX
Dimensions (mm)	6*8
Antenna Color	N/A
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



REV	Date	Description
X1	2024/06/11	New Issue
X2	2024/07/31	Update connector specifications
X3	2024/09/03	Add Material: Heat shrink tubing

Specification(Free Test):
 Frequency Range: 2.4-2.5G
 Impedance: 50Ω
 V.S.W.R: ≤2.5
 100% Continuity,short and open circuit test
 Materials,parts and process must by environmentally (ROHS)

4	Heat shrink tubing	φ6.0*38mm: Ordinary	1	Black
3	Fixed seat	Copper	1	Nickel-plating
2	Cable	φ0.81mm Double tin cable	1	Black
1	Connector	RFO.81 I-PEX MHF3(equivalents)	1	Copper gold-plating
NO	Name	Description	QTY	Remark
XX	±5.0	Approved:		
X	±3.0	Terry		
X	±1.0	Checked:		
XX	±0.2			
XXX	±0.1	Drawing:		
		Gezhipeng		
		Customer		
		Part NO.		
		Part name		Internal Antenna
		CW P/NO.		CW-NZ-0213
		REV		File :
		X1		mm
				Sheet: 1/1



4. Antenna test parameters

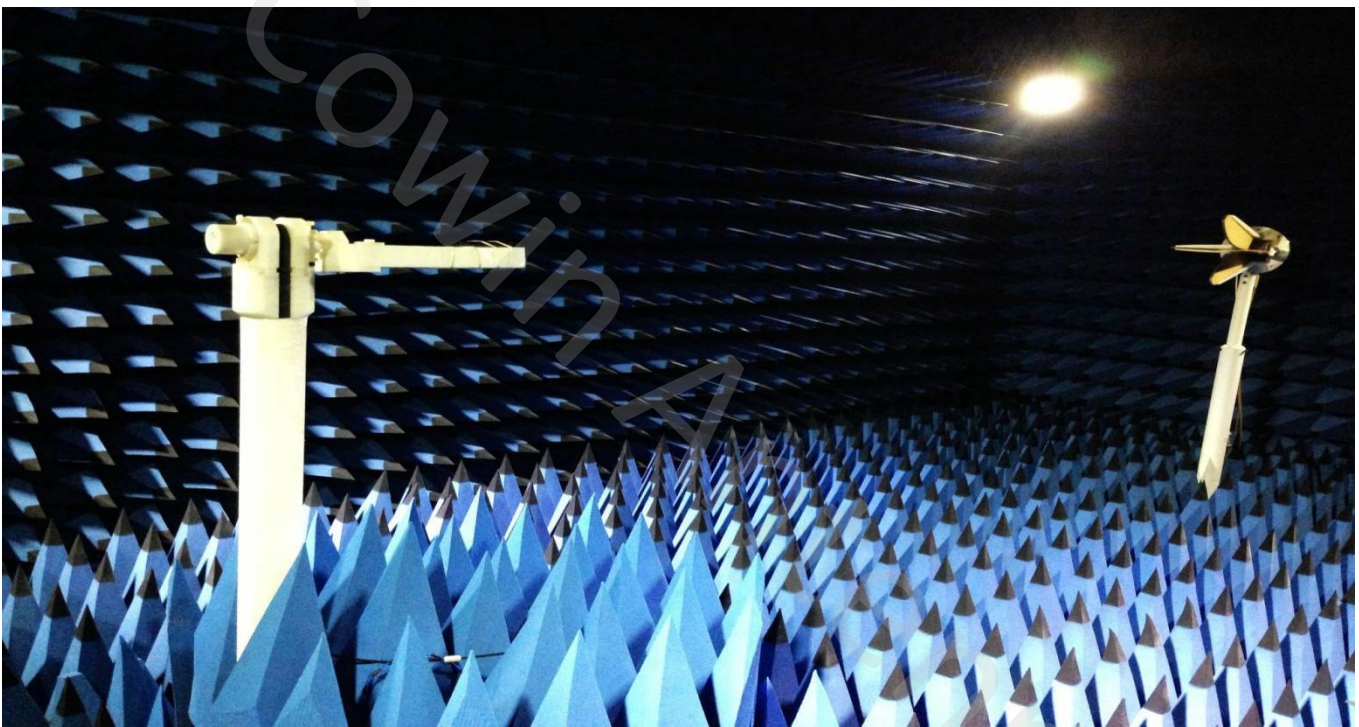
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

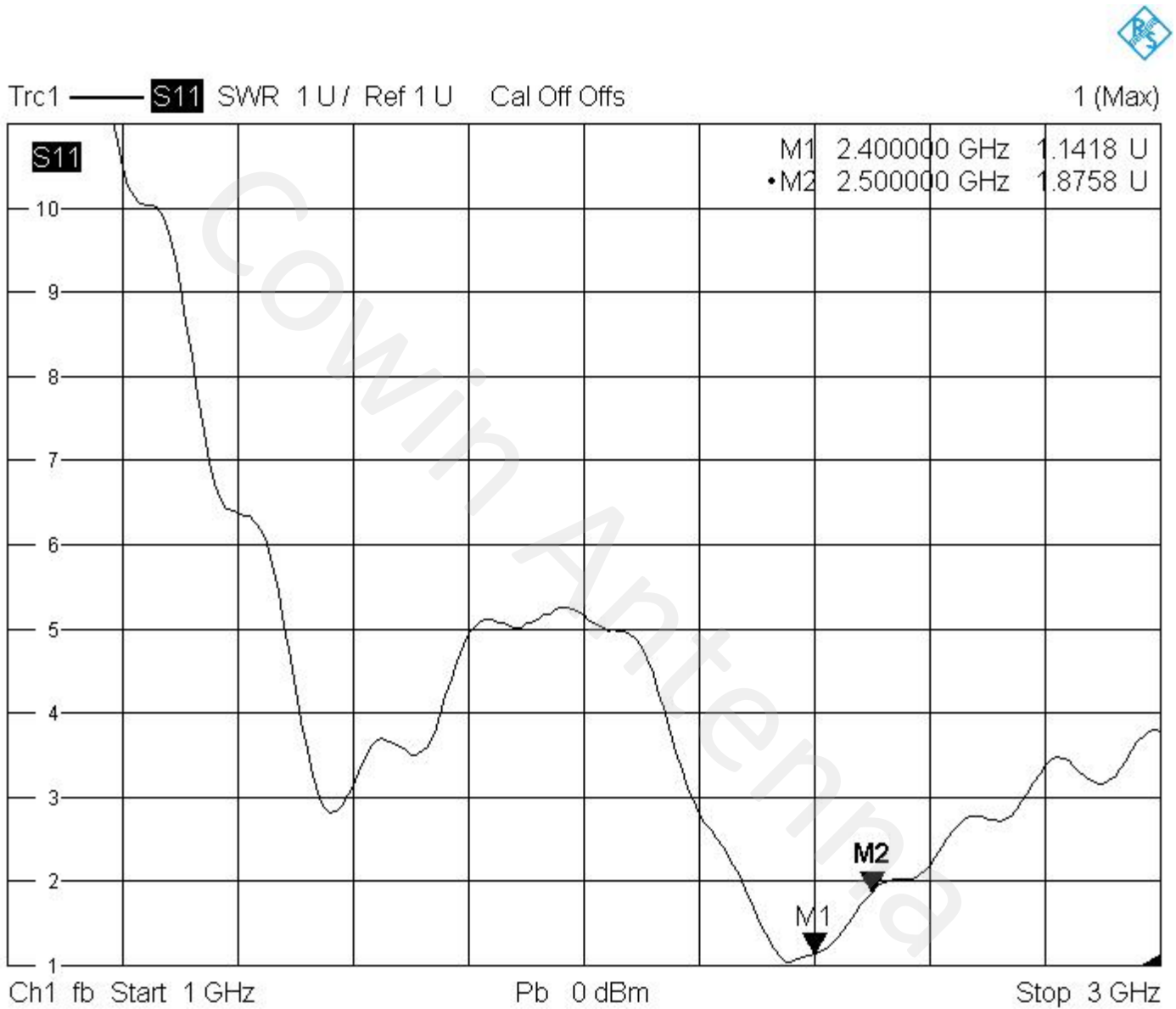
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

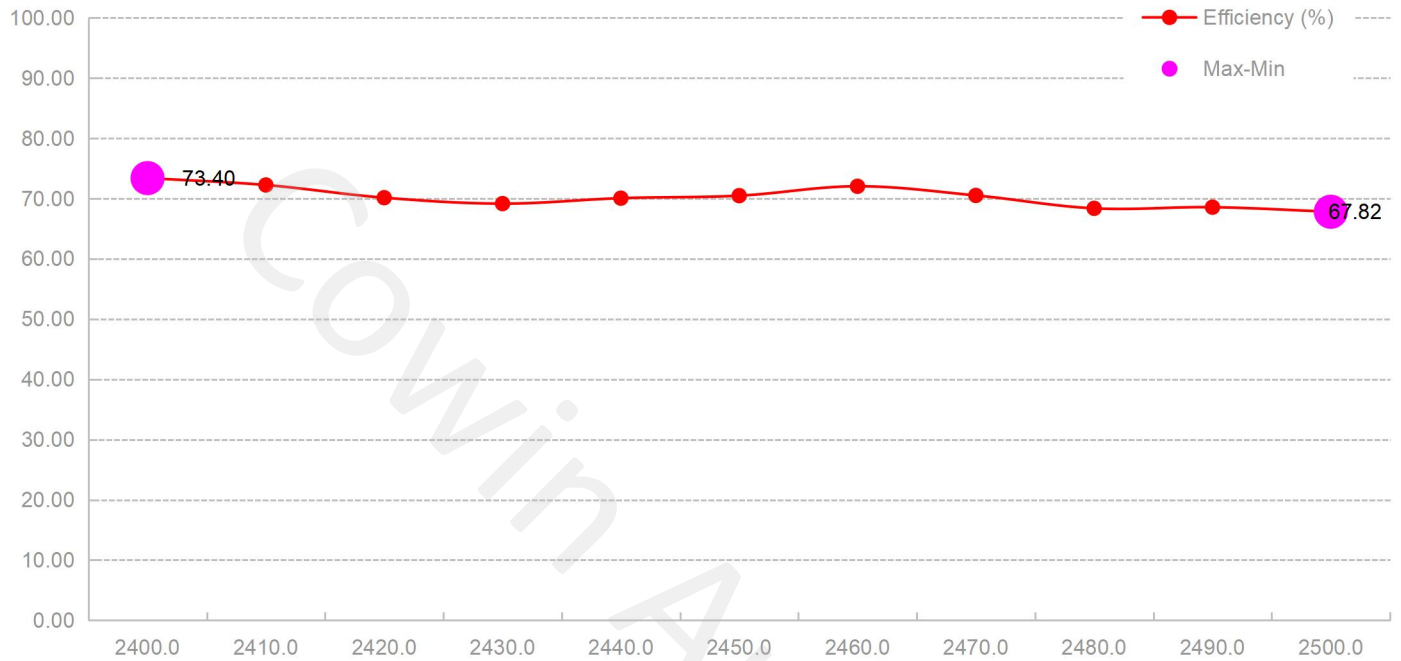
The comprehensive tester is Agilent cmv500



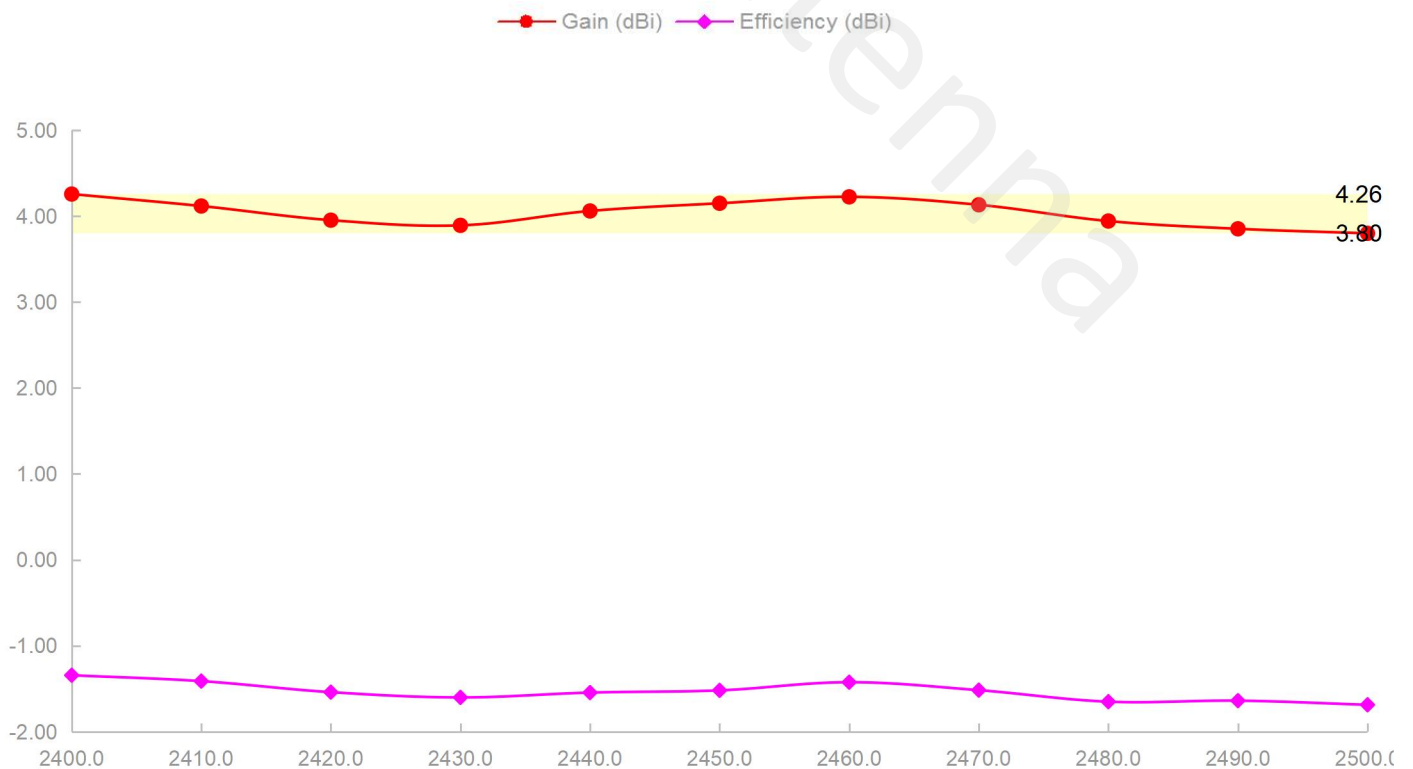
4.1 VSWR



4.2 Efficiency



4.3 Peak gain

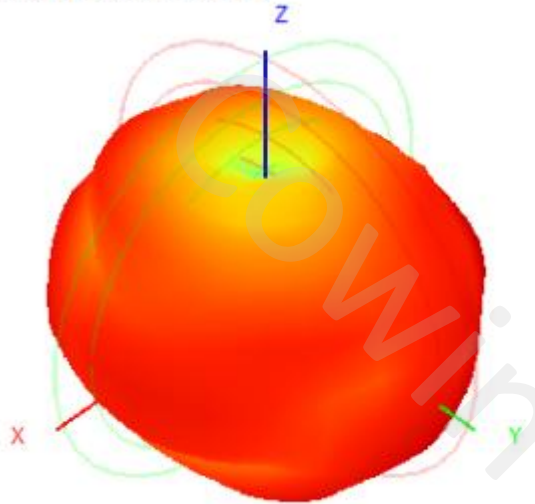


4.4 Data summary

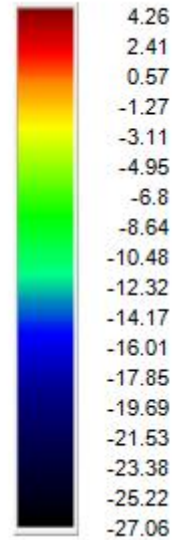
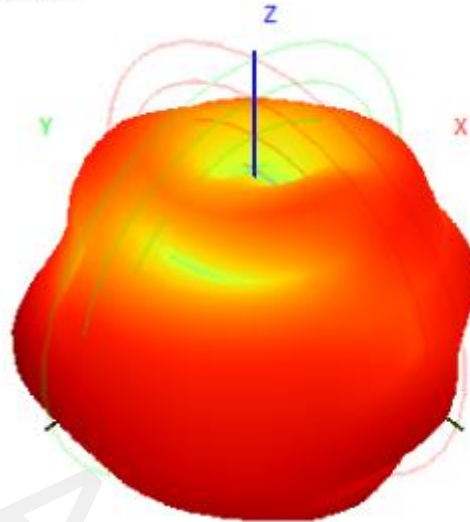
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	4.26	73.40
2410.0	4.12	72.26
2420.0	3.95	70.15
2430.0	3.89	69.17
2440.0	4.06	70.07
2450.0	4.15	70.49
2460.0	4.22	72.05
2470.0	4.13	70.53
2480.0	3.94	68.39
2490.0	3.85	68.57
2500.0	3.80	67.82

4.5 3D&2D Radiation Patterns

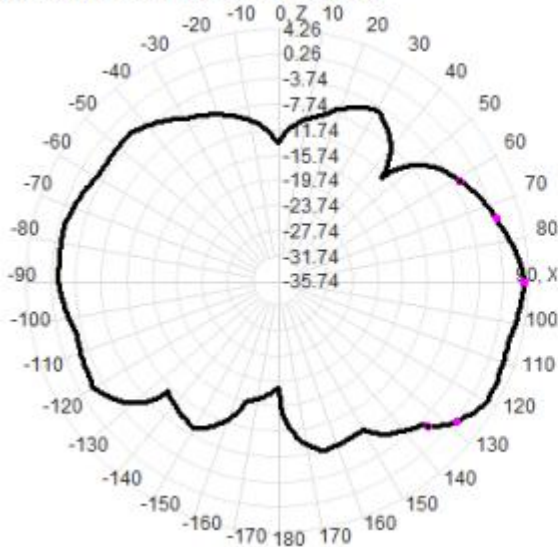
2400.0MHz H+V, Eff: 73.4%



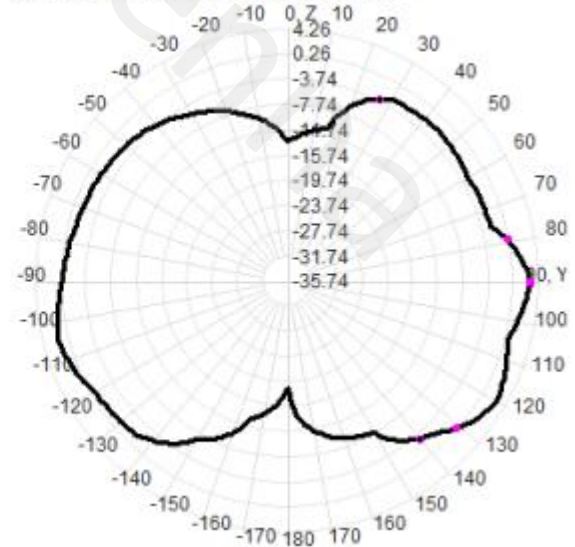
Back View



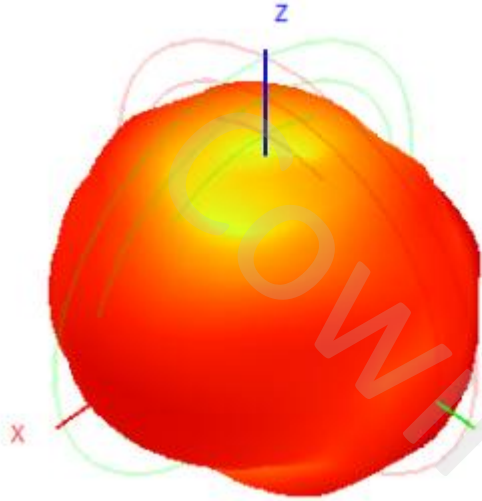
2400.0MHz Total(E1-XZ), Max= 3.31dBi



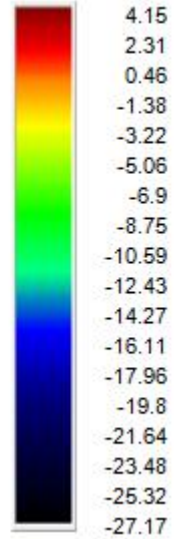
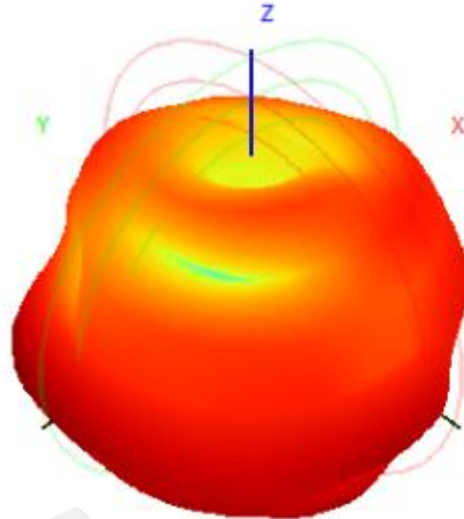
2400.0MHz Total(E2-YZ), Max= 2.74dBi



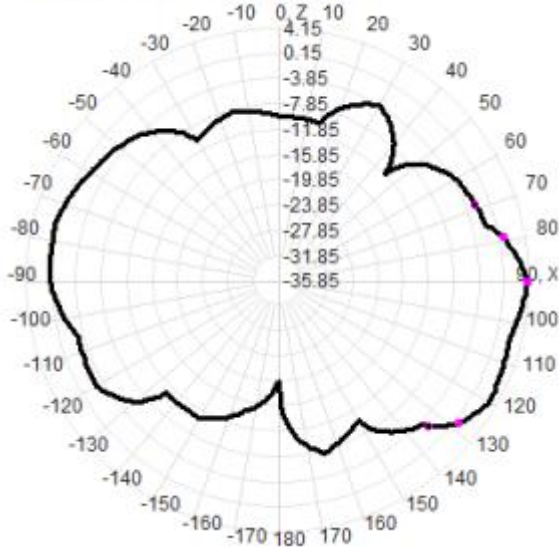
2450.0MHz H+V, Eff: 70.5%



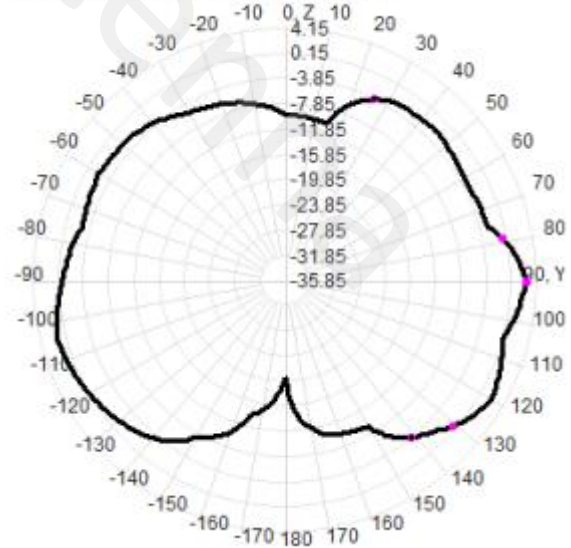
Back View



2450.0MHz Total(E1-XZ), Max= 3.56dBi

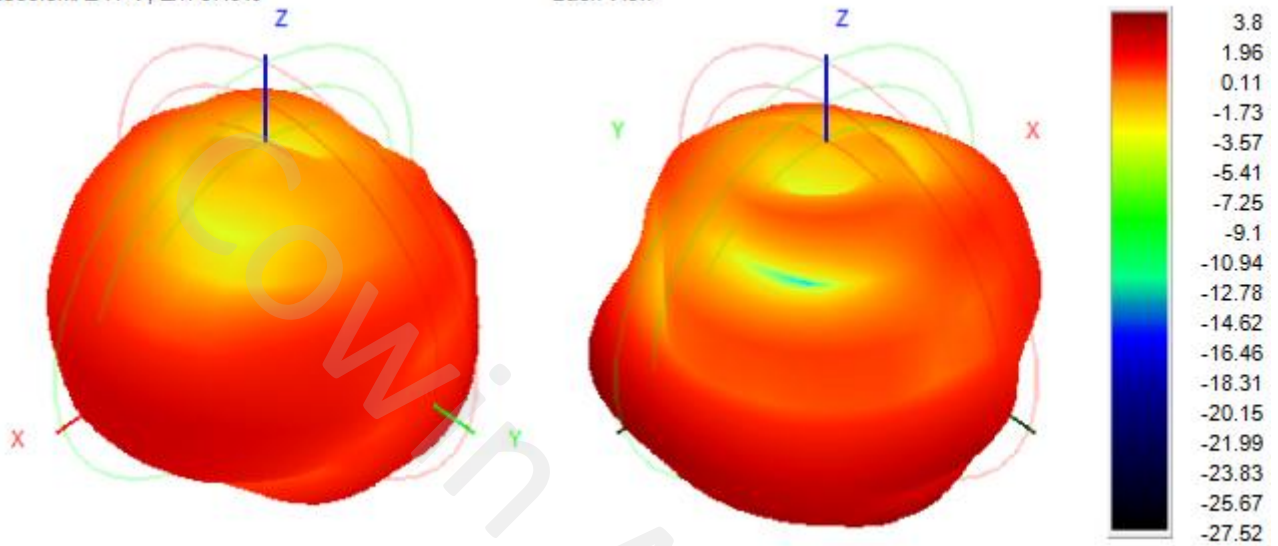


2450.0MHz Total(E2-YZ), Max= 2.27dBi



2500.0MHz H+V, Eff: 67.8%

Back View



2500.0MHz Total(E1-XZ), Max= 3.48dBi

2500.0MHz Total(E2-YZ), Max= 1.50dBi

