

CW-WZ-0108

2.4G External Antenna

Key Features

Frequency: 2.4-2.5G

IPEX Connector

External Rubber

Dimensions 43.3*12 mm



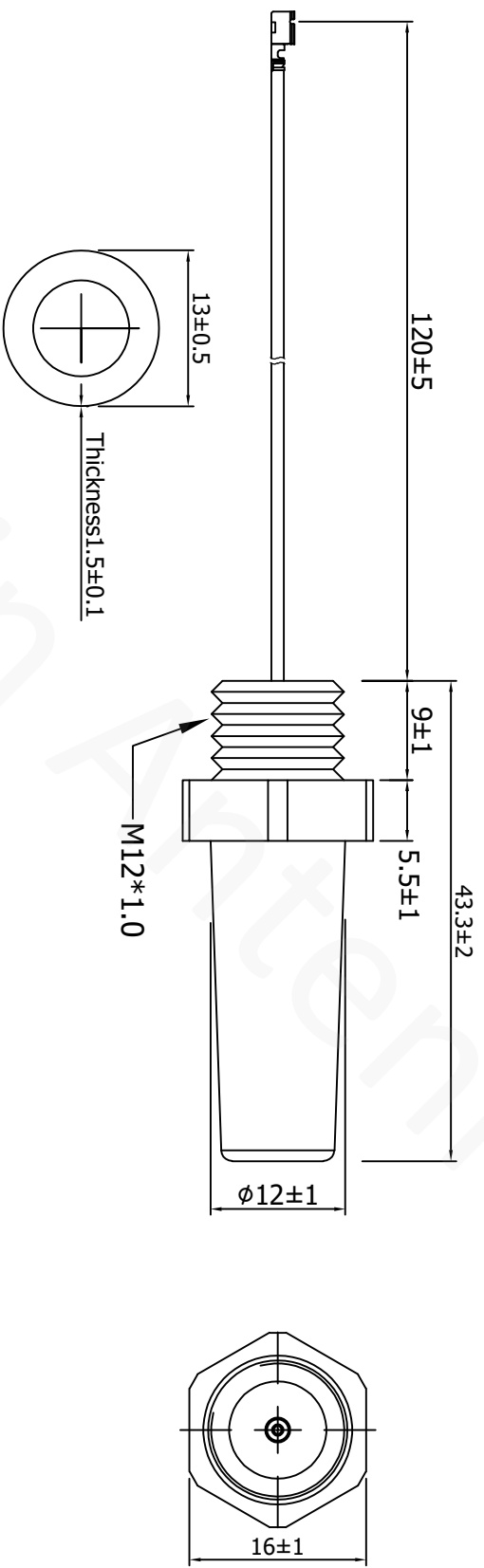
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5G
VSWR	≤2.5
Efficiency (%)	66.7%
Peak Gain (dBi)	4.01
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	IPEX

2. Material and environmental characteristics

Inner structure	Signal tube
Material of Plastic	ABS+PC
Cable Type	0.81
Connector Type	IPEX
Dimensions (mm)	43.3*12MM
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	2023/02/03	New issue
X2	2023/03/10	Modify stud size
X3	2023/03/28	Change IPEX model
X4	2023/04/28	Change IPEX model
X5	2023/05/18	Change wire length



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 be environmentally (ROHS)

5	Dust cap	Red silicone	1	
4	Radome	Black ABS+PC	1	
3	Fixing seat	Copper nickel plating	1	
2	Cable	φ0.81 Black double tin wire	1	
1	Connector	φ0.81 I-PEX III (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	External antenna	
		CW P/NO.	CW-WZ-0108	
REV	Unit	File		
X1	m/m	Sheet	1/1	



Cowin Antenna

4. Antenna test parameters

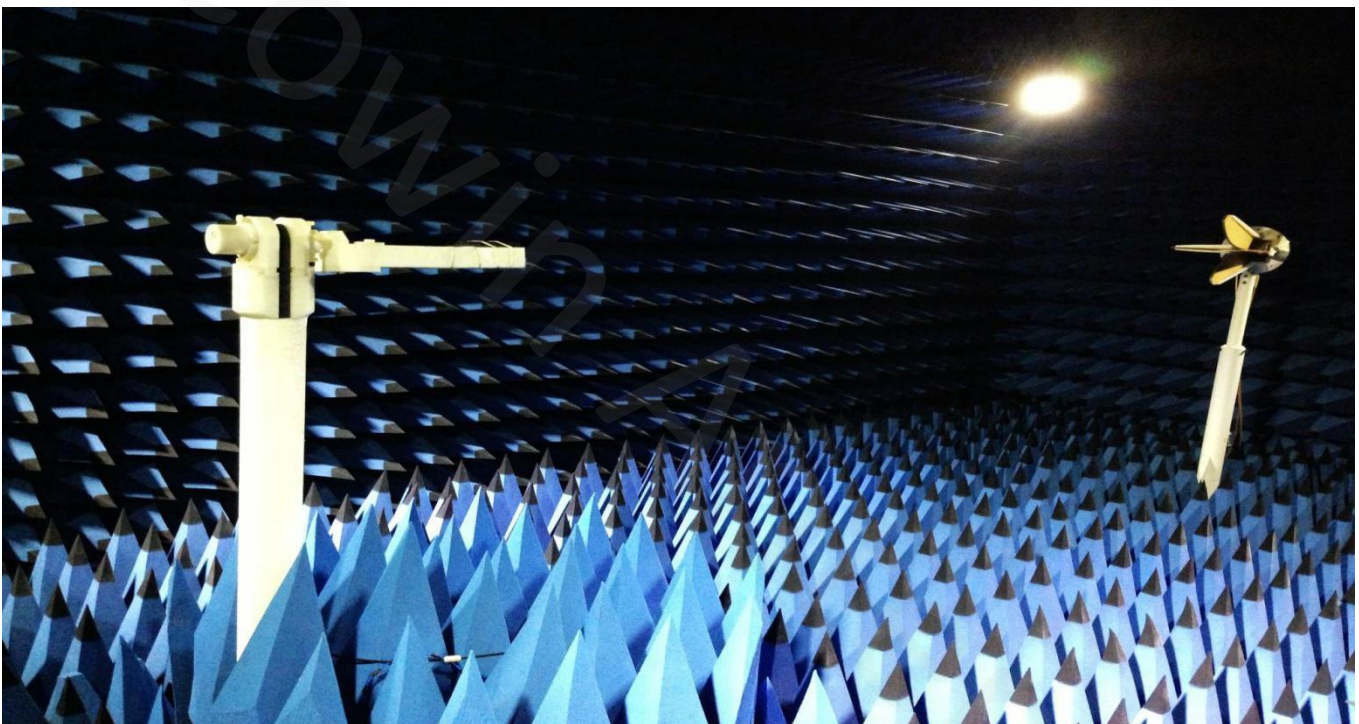
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

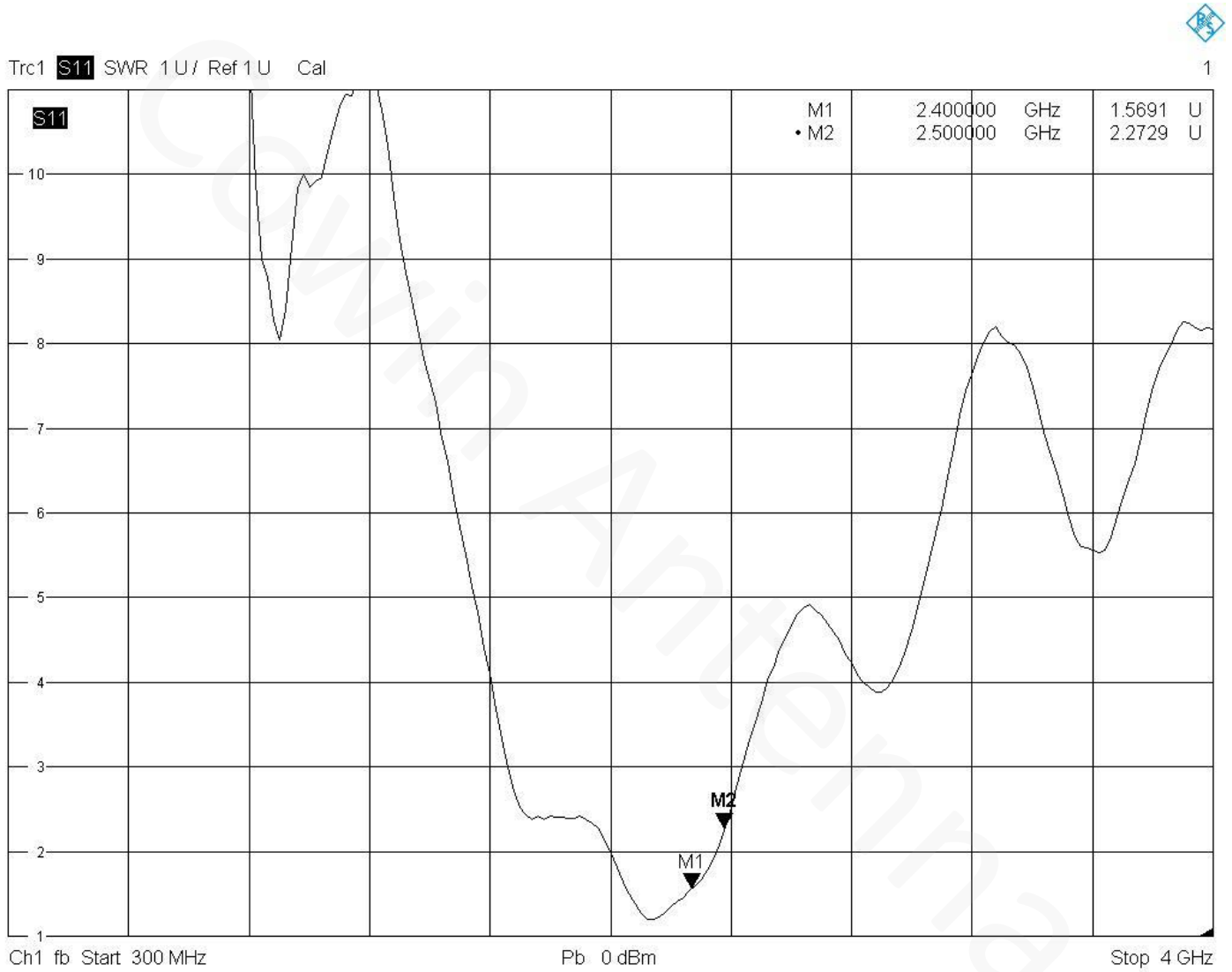
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

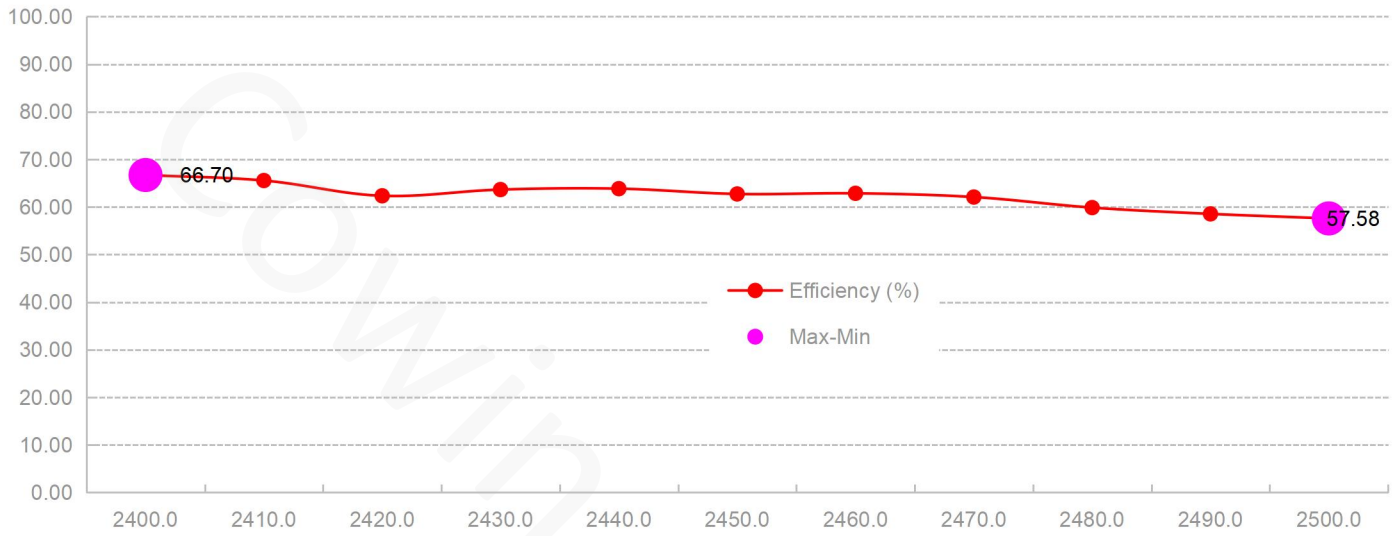


4.1 VSWR

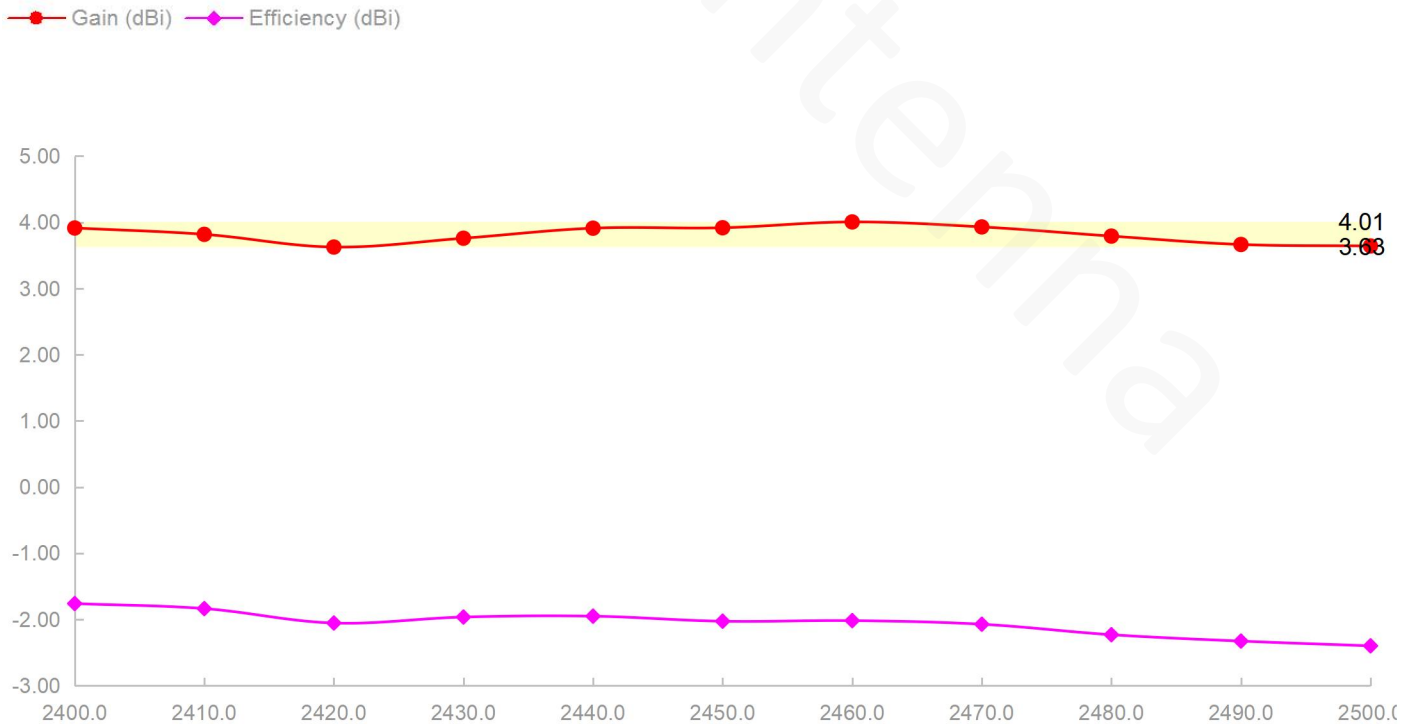


2/3/2023, 12:09 AM

4.2 Efficiency

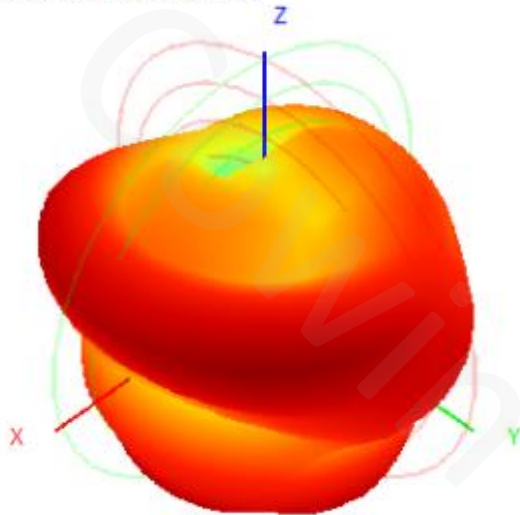


4.3 Peak gain

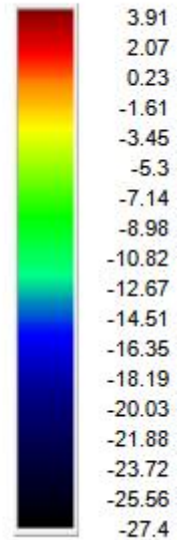
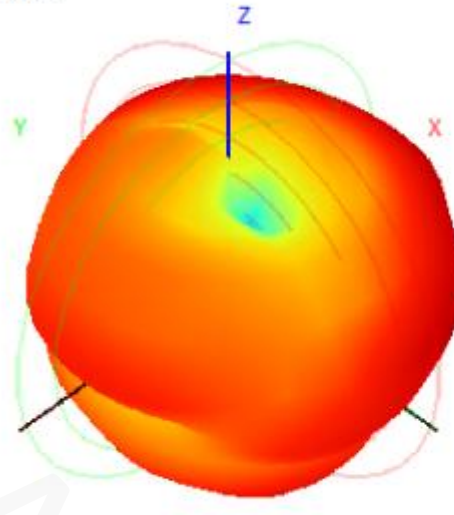


4.4 3D&2D Radiation Patterns

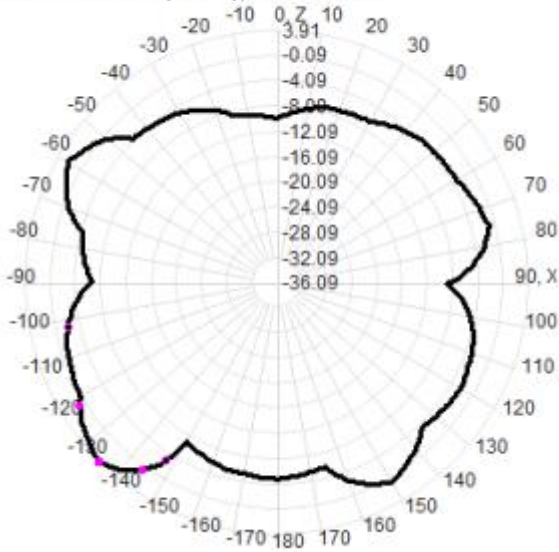
2400.0MHz H+V, Eff: 66.7%



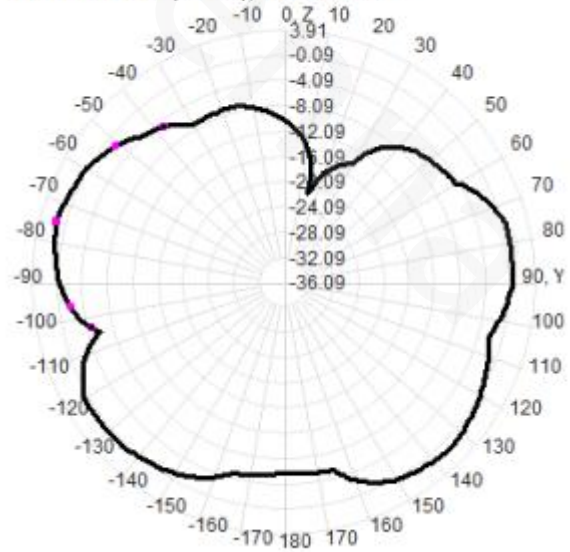
Back View



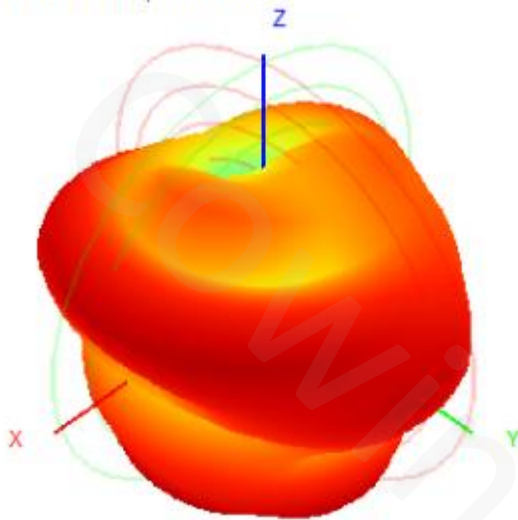
2400.0MHz Total(E1-XZ), Max= 3.91dBi



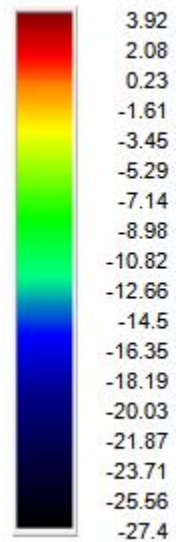
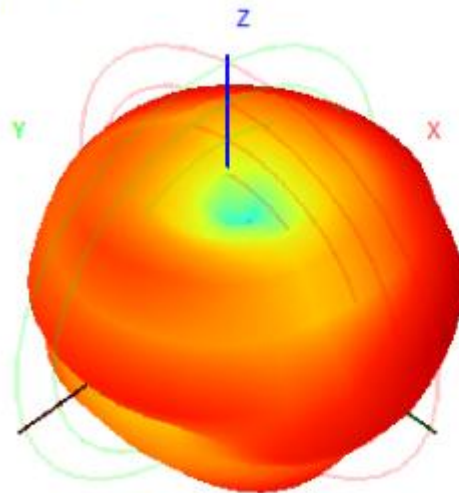
2400.0MHz Total(E2-YZ), Max= 1.26dBi



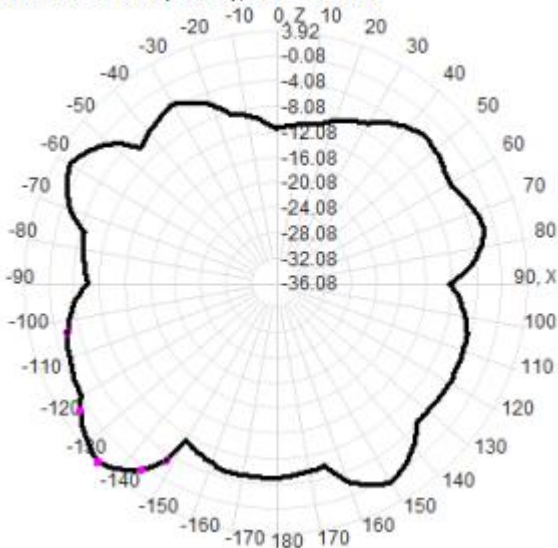
2450.0MHz H+V, Eff: 62.7%



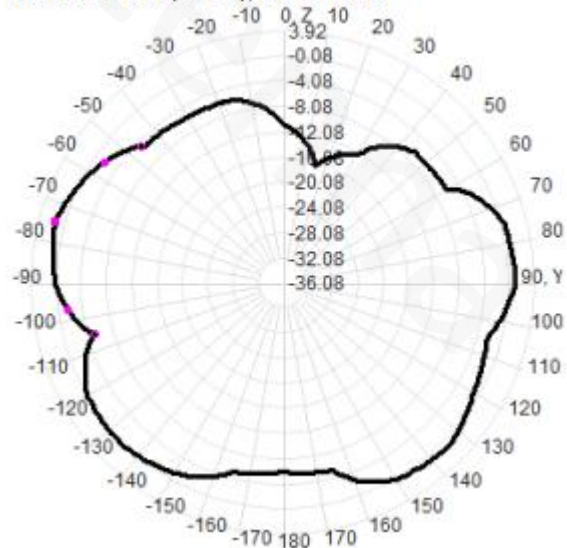
Back View



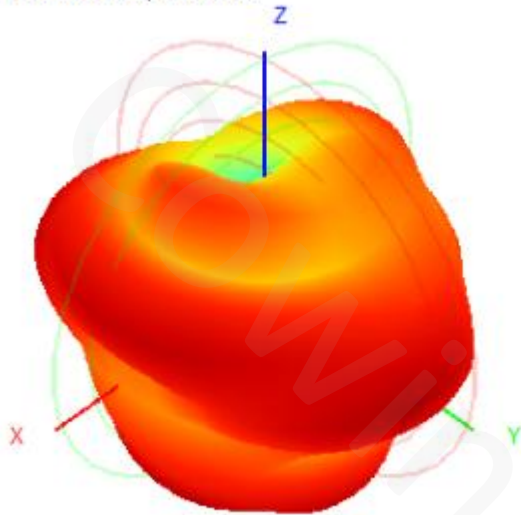
2450.0MHz Total(E1-XZ), Max= 3.92dBi



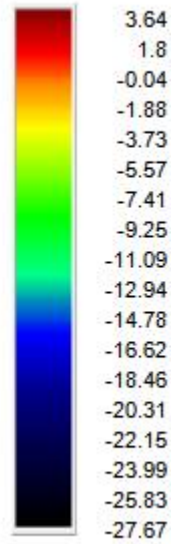
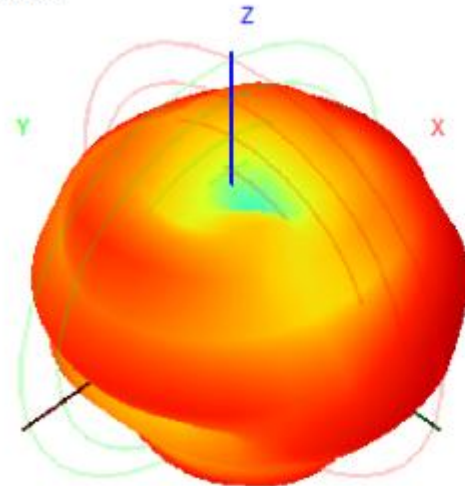
2450.0MHz Total(E2-YZ), Max= 1.31dBi



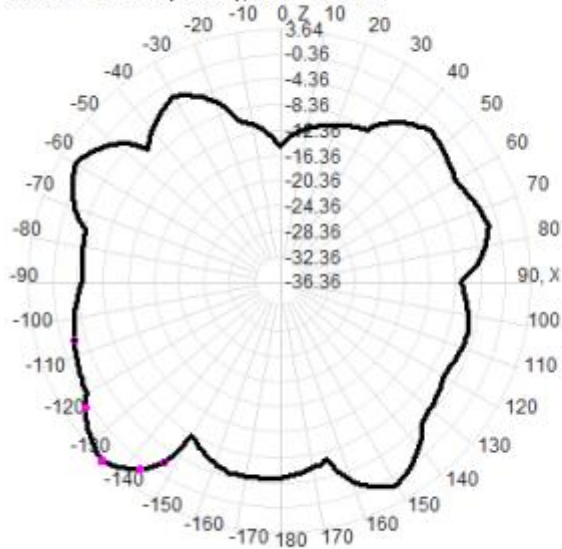
2500.0MHz H+V, Eff: 57.6%



Back View



2500.0MHz Total(E1-XZ), Max= 3.64dBi



2500.0MHz Total(E2-YZ), Max= 1.14dBi

