

## **CW-WZ-0142**

### **2.4G External Antenna**

#### **Key Features**

Frequency: 2.4-2.5G

SMA Male Connector

External Rubber

Dimensions 48 mm



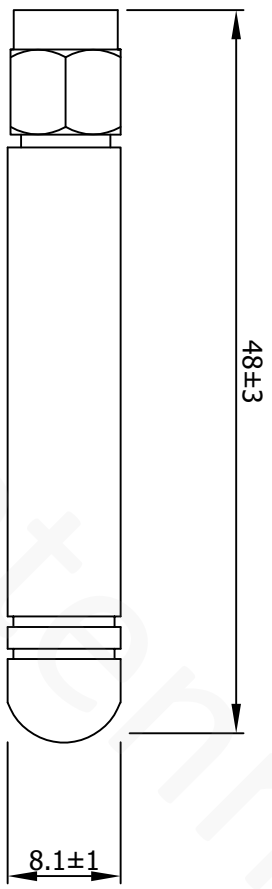
## 1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5G
VSWR	2.0
Efficiency (%)	51.36%
Peak Gain (dBi)	3.32
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Male

## 2. Material and environmental characteristics

Inner structure	Spring
Material of Plastic	TPEE
Cable Type	N/A
Connector Type	SMA Male
Dimensions (mm)	48MM
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	2023/11/09	New issue



Specification(Free Test):  
 Frequency Range: 2.4-2.5G  
 Impedance: 50Ω  
 V.S.W.R:  $\leq 2.0$   
 100% Continuity,short and open circuit test  
 Materials,parts and process must by environmentally (ROHS)

3	Radome	Black TPEE	1	
2	Spring	Brass	1	
1	Connector	SMA male	1	
NO	Name	Description	Q'TY	Remark
XX	±5.0	Approved		
X	±3.0	Customer		
X	±1.0	Part NO.		
.X	±0.2	Part name	External antenna	
.XX	±0.2	CW P/NO.	CW-WZ-0142	
.XXX	±0.1	REV	File :	
		X1	Unit	
			m/m	
			Sheet :	1/1



## 4. Antenna test parameters

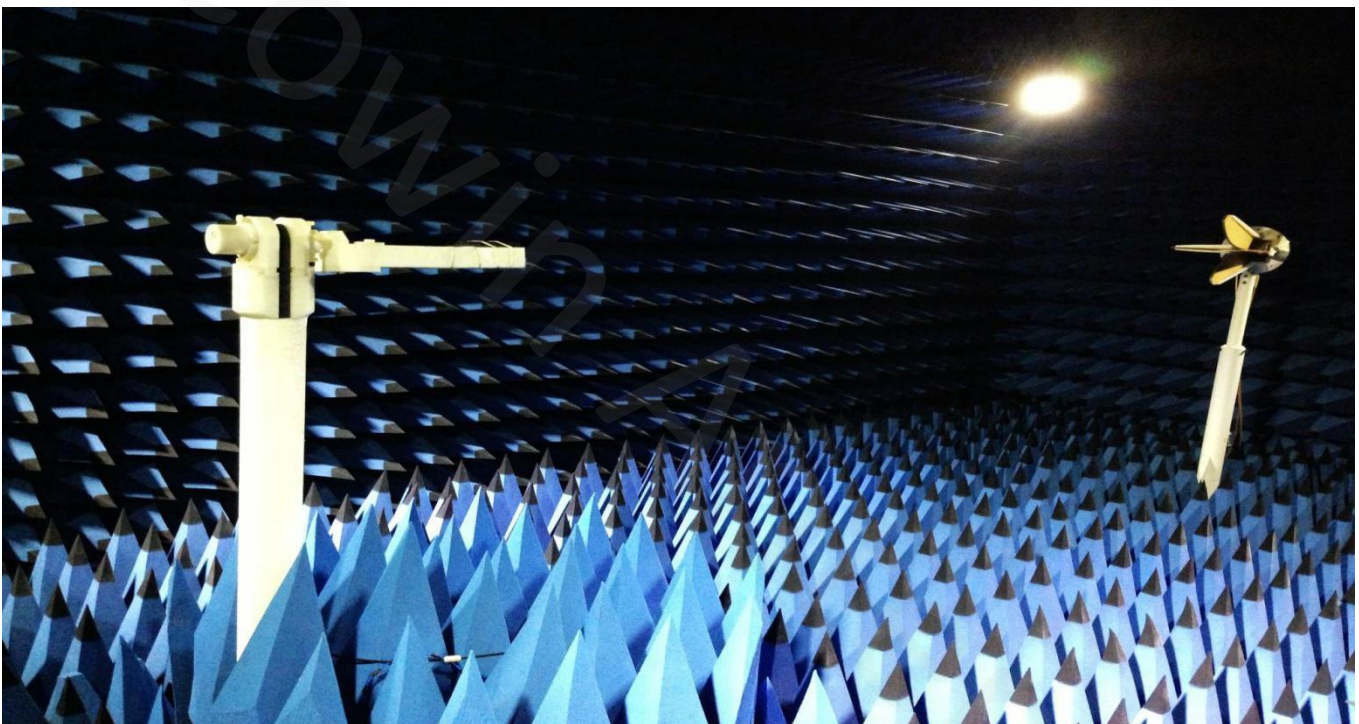
### Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

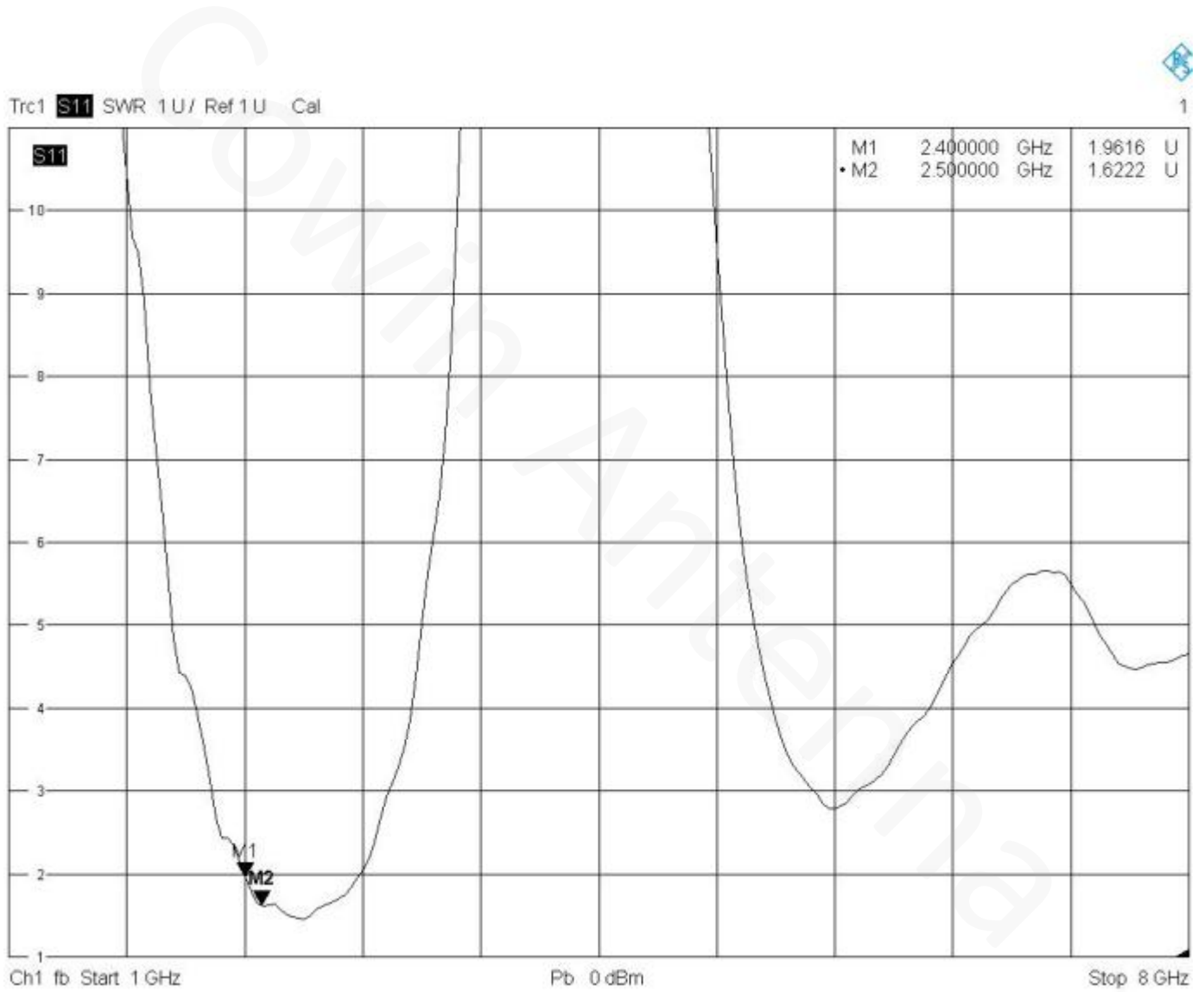
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

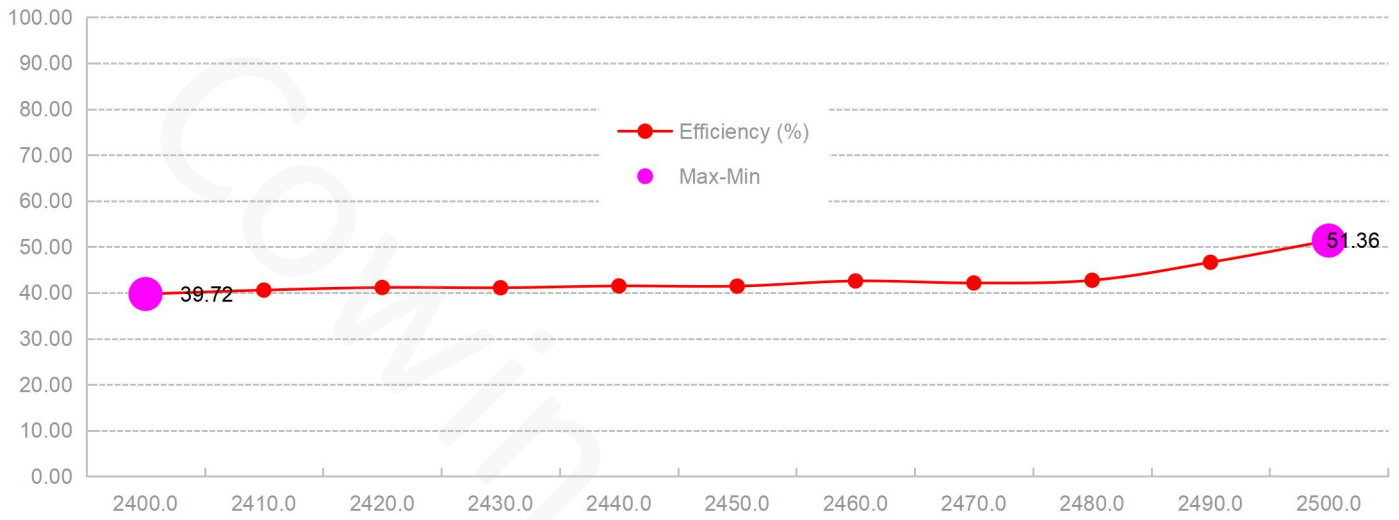
The comprehensive tester is Agilent cmv500



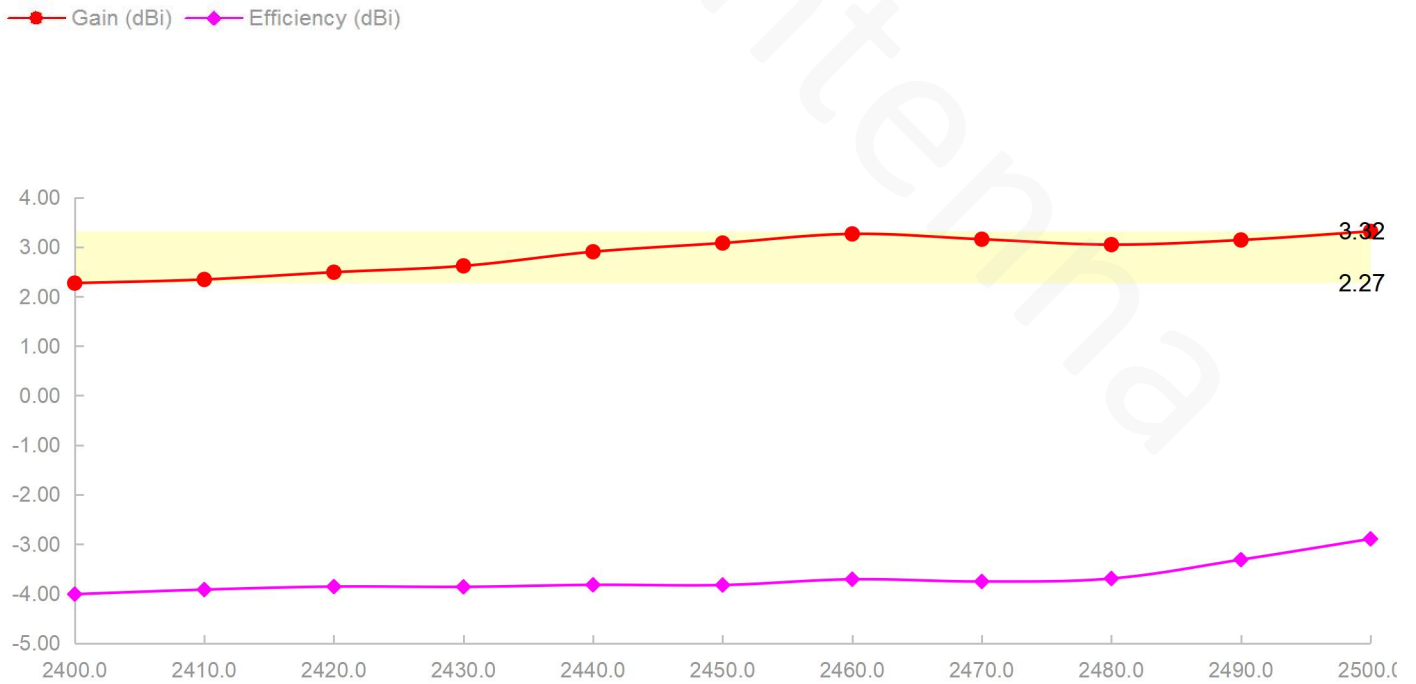
## 4.1 VSWR



## 4.2 Efficiency

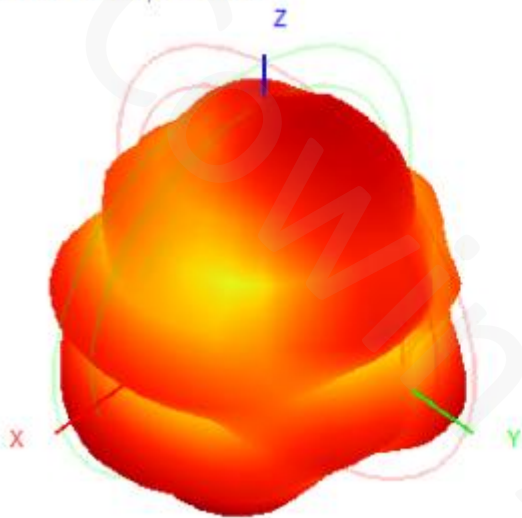


## 4.3 Peak gain

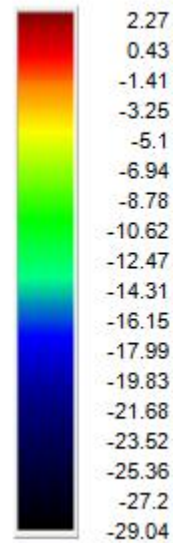
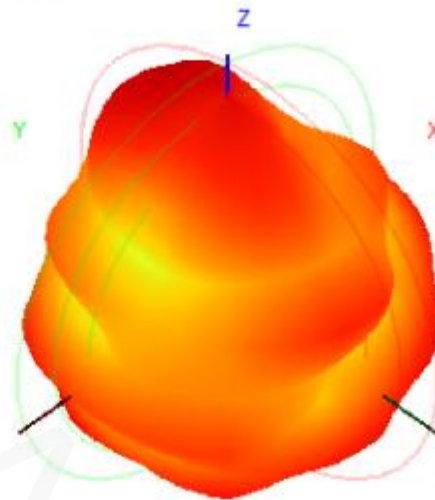


## 4.4 3D&2D Radiation Patterns

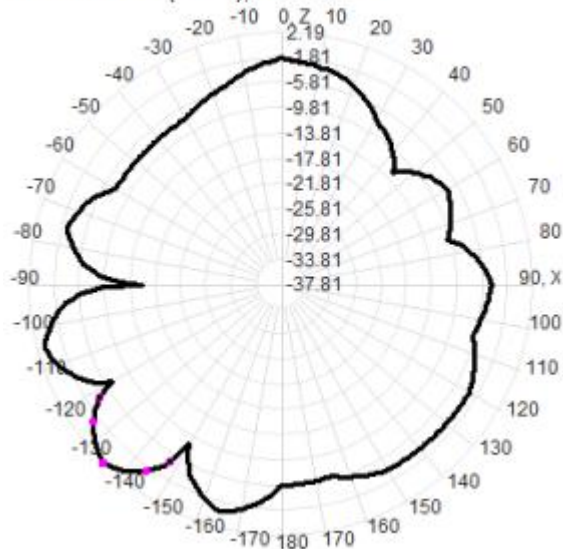
2400.0MHz H+V, Eff: 39.7%



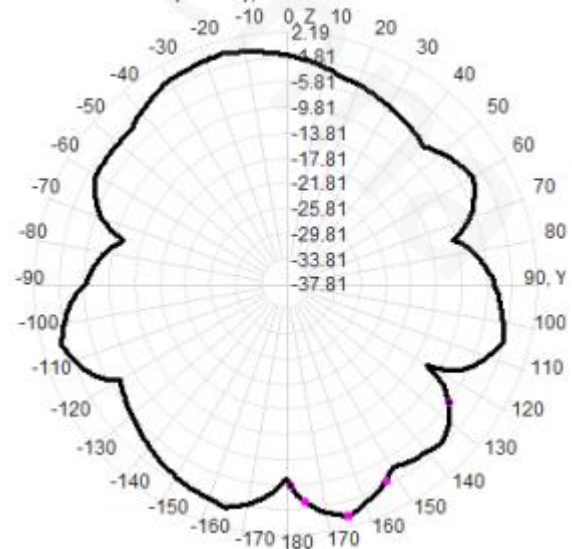
Back View



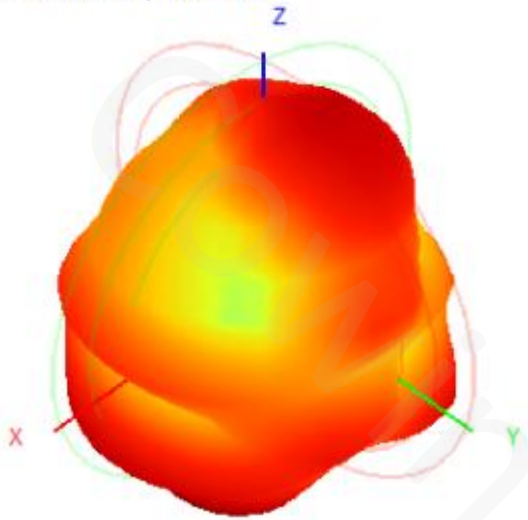
2400.0MHz Total(E1-XZ), Max= 2.19dBi



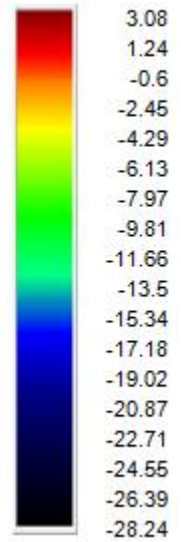
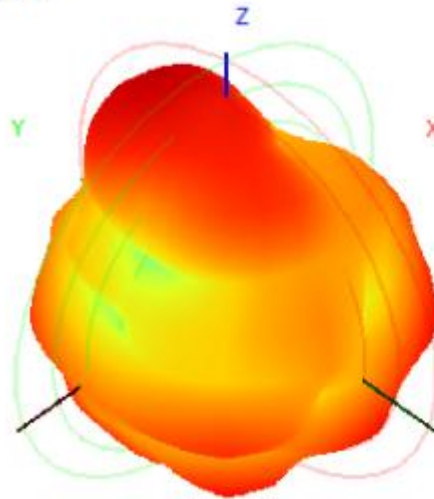
2400.0MHz Total(E2-YZ), Max= 0.13dBi



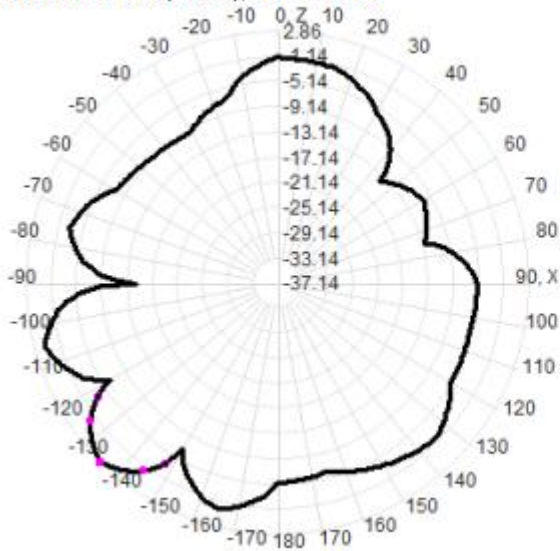
2450.0MHz H+V, Eff: 41.4%



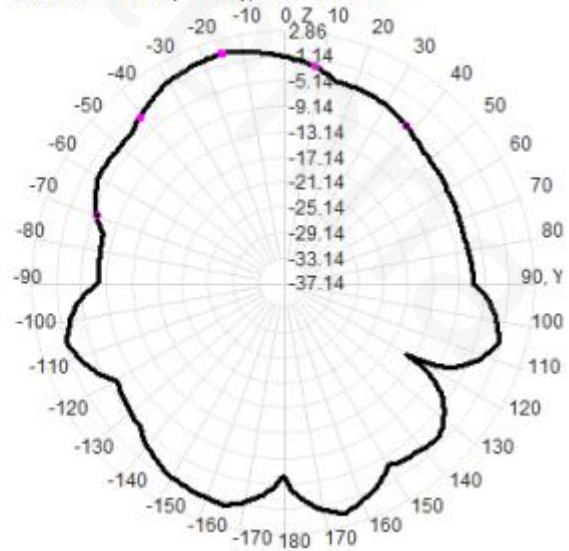
Back View



2450.0MHz Total(E1-XZ), Max= 2.86dBi

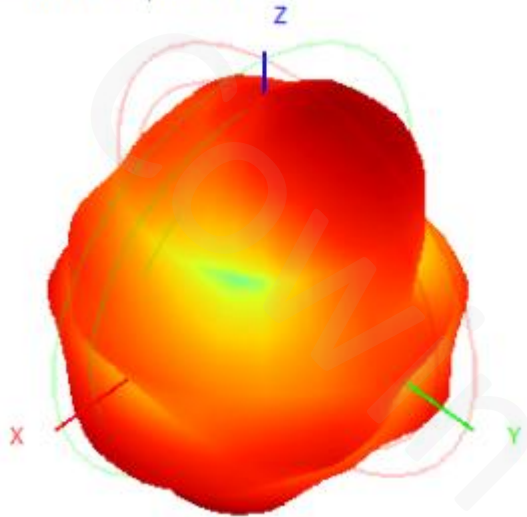


2450.0MHz Total(E2-YZ), Max= 0.61dBi

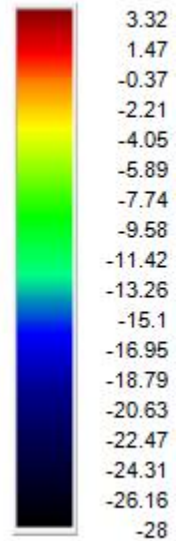
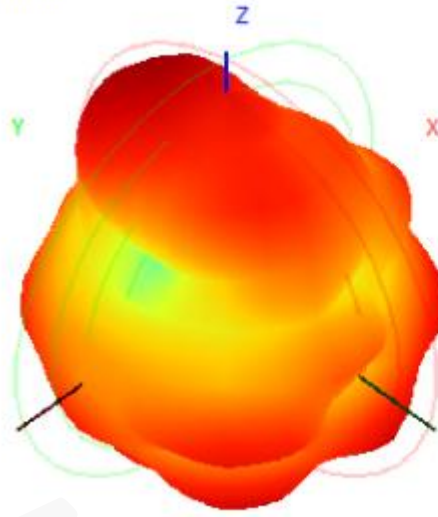




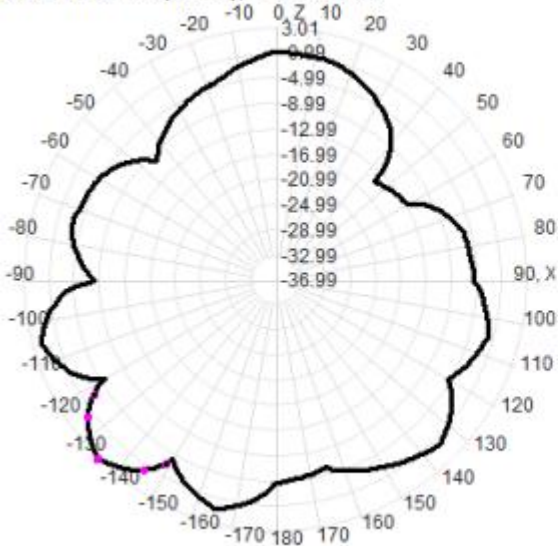
2500.0MHz H+V, Eff: 51.4%



Back View



2500.0MHz Total(E1-XZ), Max= 3.01 dBi



2500.0MHz Total(E2-YZ), Max= 1.87dBi

