

CW-WZ-0155

2.4G/5.8G External Antenna

Key Features

Frequency: 2400-2500/5150-5850MHz

SMA Male Connector

Dimensions: 30*8.1mm



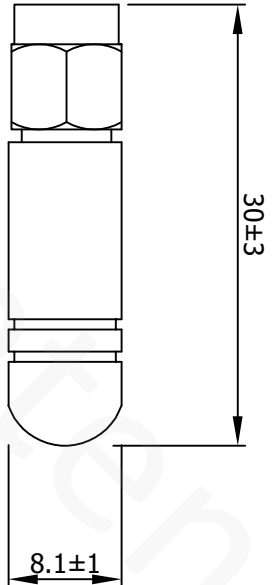
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2400-2500/5150-5850MHz
VSWR	≤2.0/3.0
Efficiency (%)	74.1%
Peak Gain (dBi)	5.53
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Male

2. Material and environmental characteristics

External structure	TPEE
Inner structure	Brass
Cable Type	N/A
Connector Type	SMA Male
Dimensions (mm)	30*8.1MM
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	2023/12/25	New issue



Specification (Free Test):
 Frequency Range: 2.4-2.5G/5.15-5.85G
 Impedance: 50Ω
 V.S.W.R: $\leq 2.0/3.0$
 100% Continuity, short and open circuit test
 Materials, parts and process must be environmentally (ROHS)

3	Radome	Black TPEE	1	
2	Spring	Brass	1	
1	Connector	SMA male	1	
NO	Name	Description	QTY	Remark
XX.	±5.0	Approved		
X.	±3.0	Customer		
.X	±1.0	Part NO.		
.XX	±0.2	Part name		External antenna
.XXX	±0.1	CW P/NO.		CW-WZ-0155
		REV	Unit	File
		X1	m/m	Sheet :
				1/1



4. Antenna test parameters

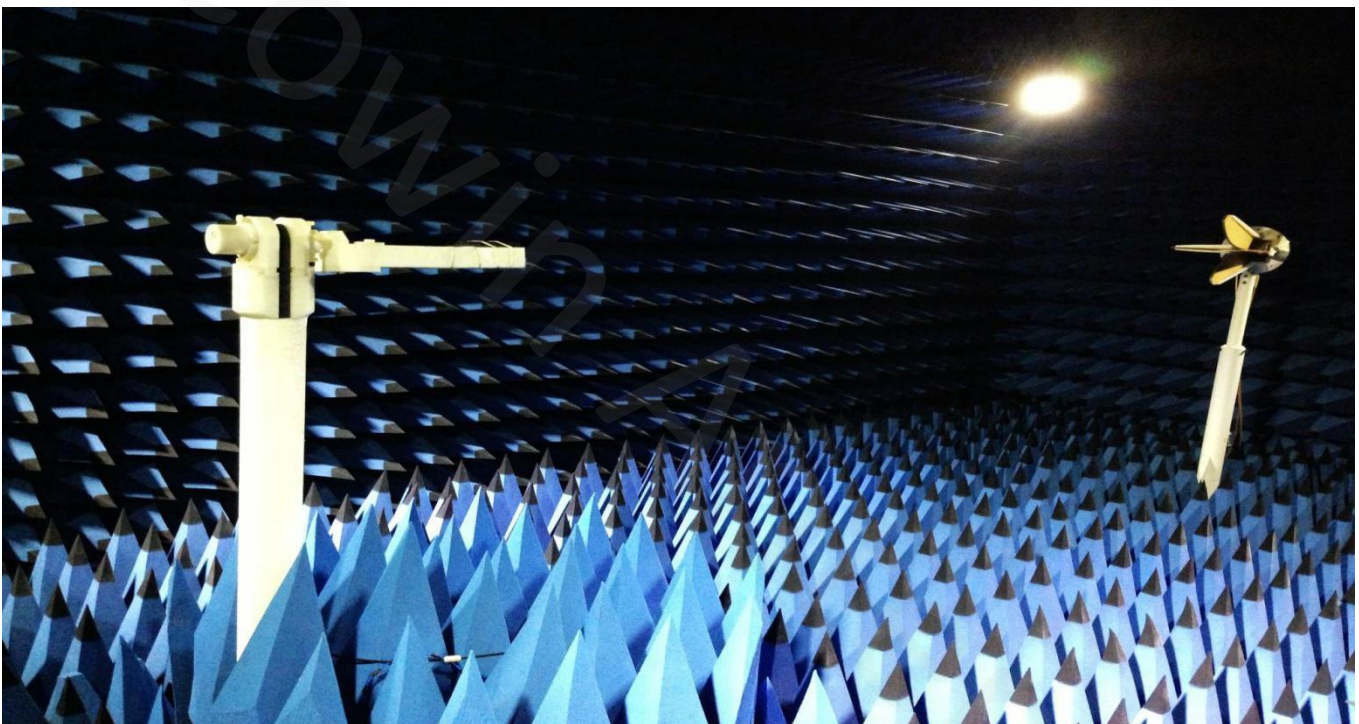
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

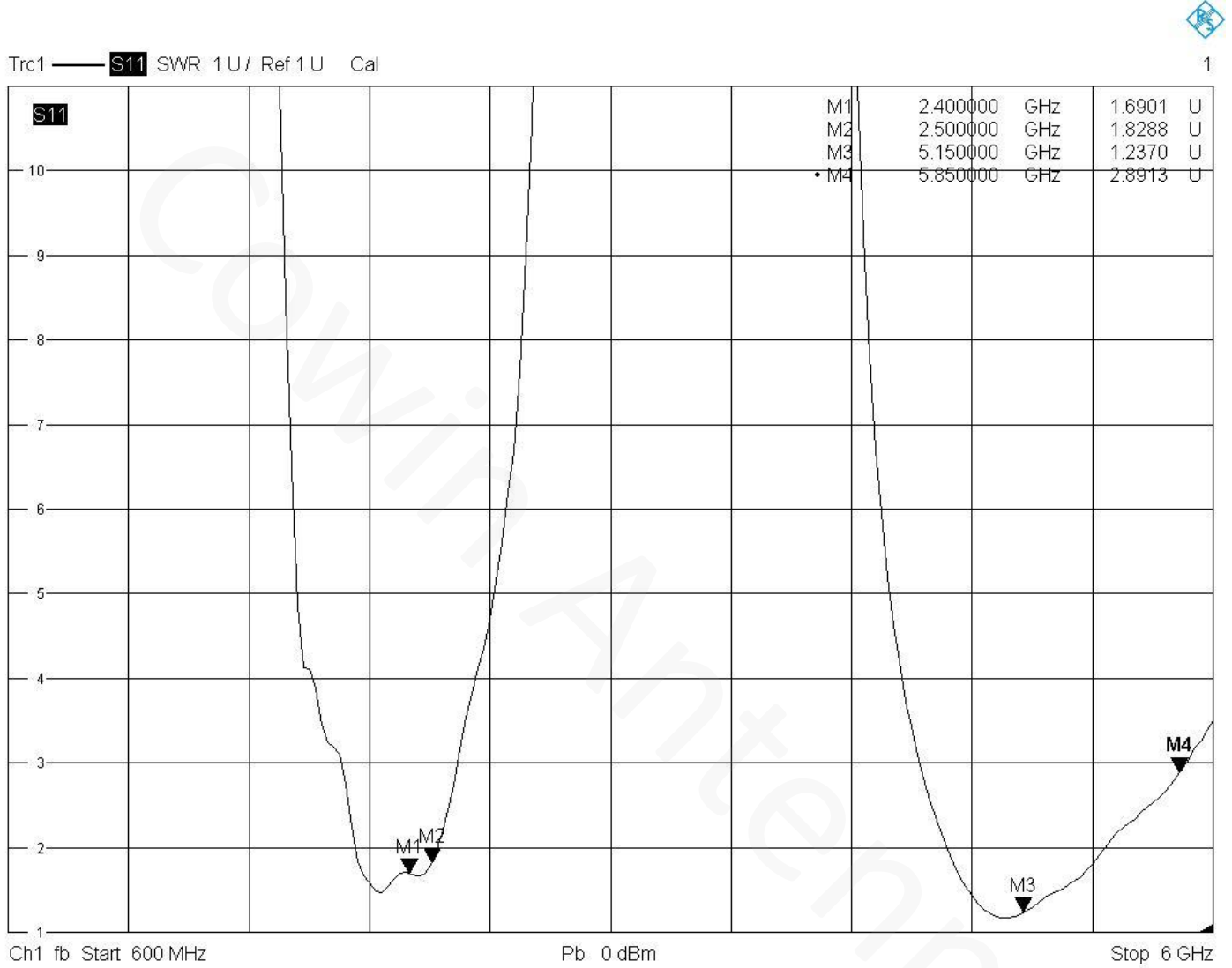
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

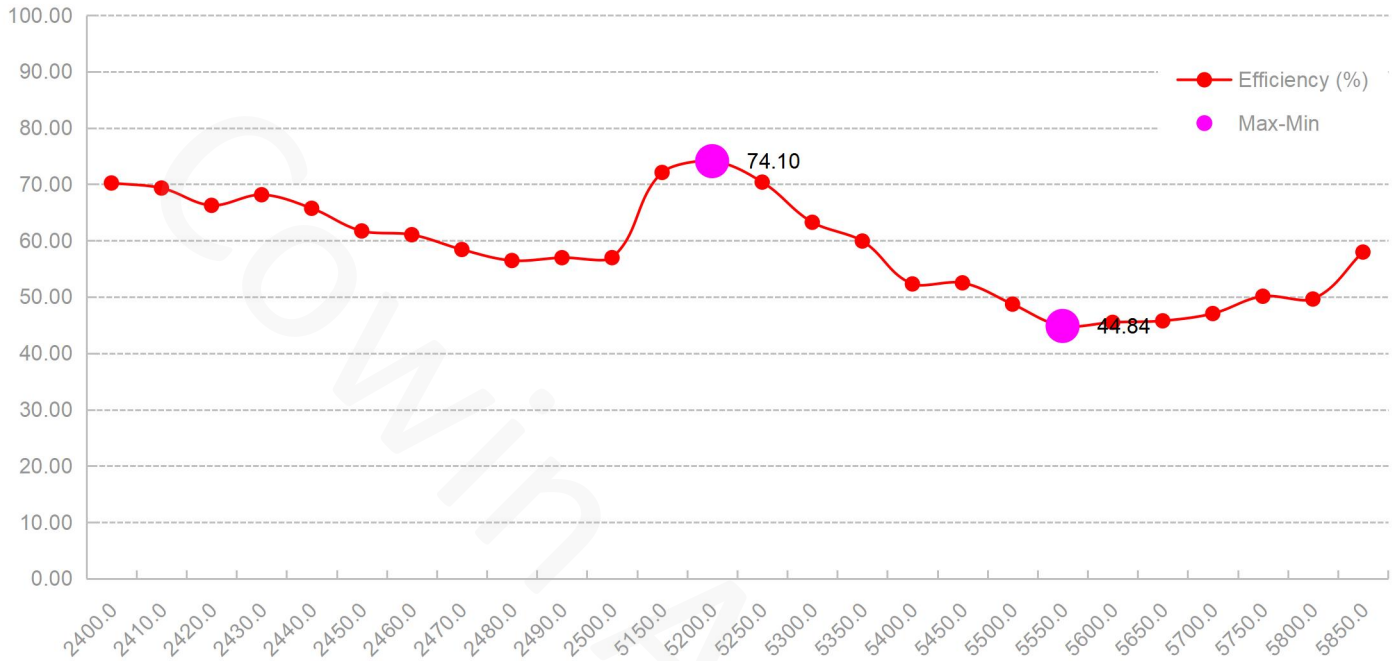


4.1 VSWR

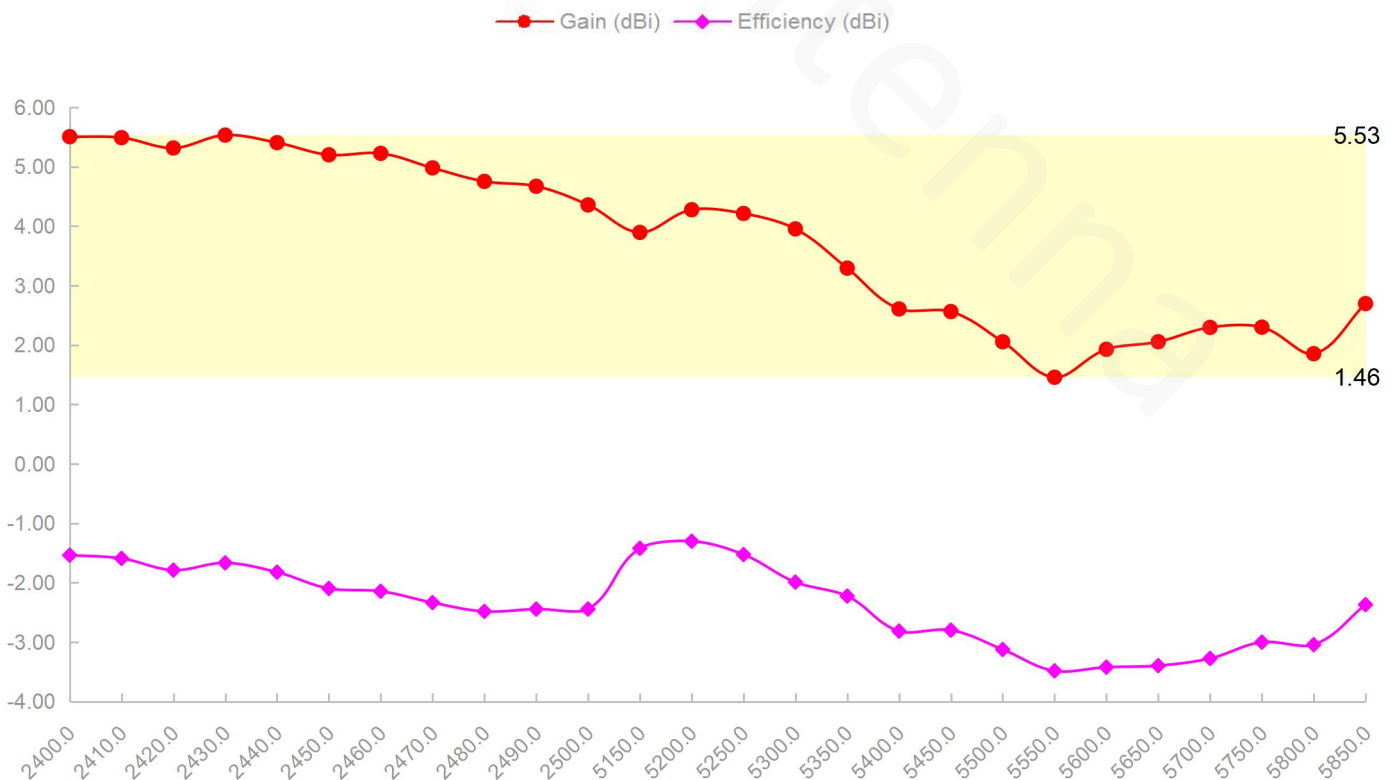


12/20/2023, 9:19 AM

4.2 Efficiency

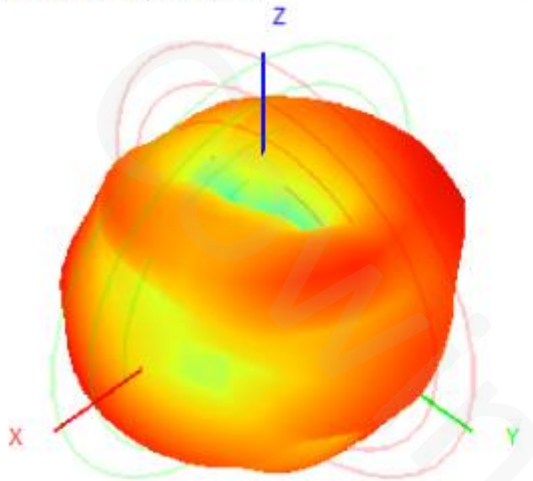


4.3 Peak gain

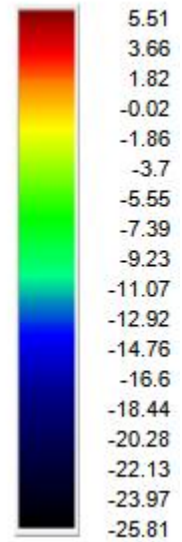
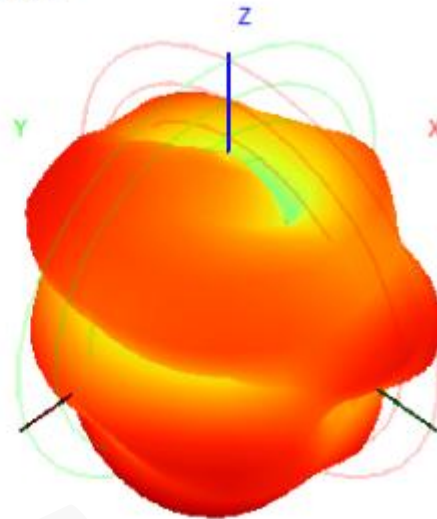


4.4 3D&2D Radiation Patterns

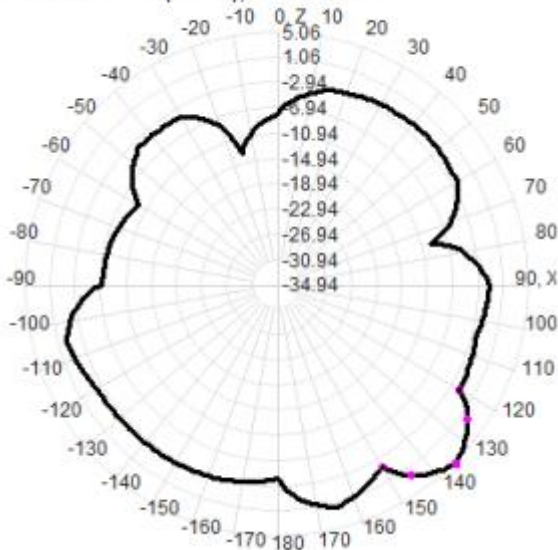
2400.0MHz H+V, Eff: 70.2%



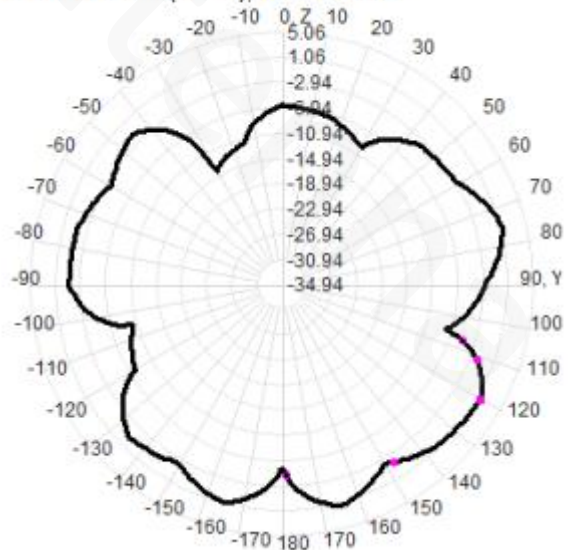
Back View



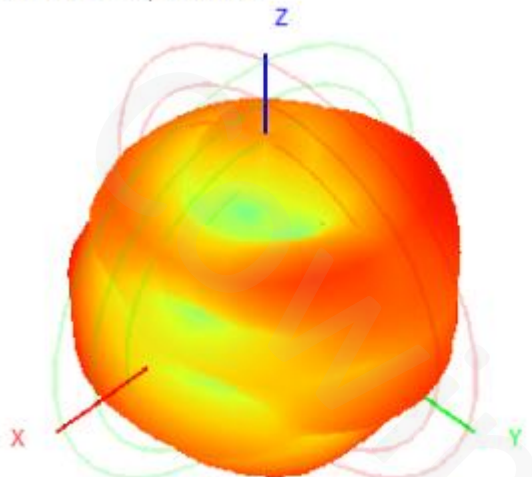
2400.0MHz Total(E1-XZ), Max= 5.06dBi



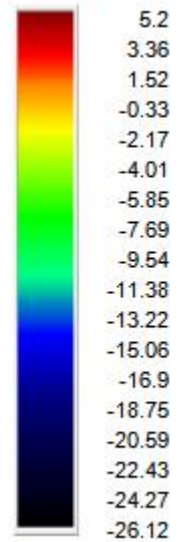
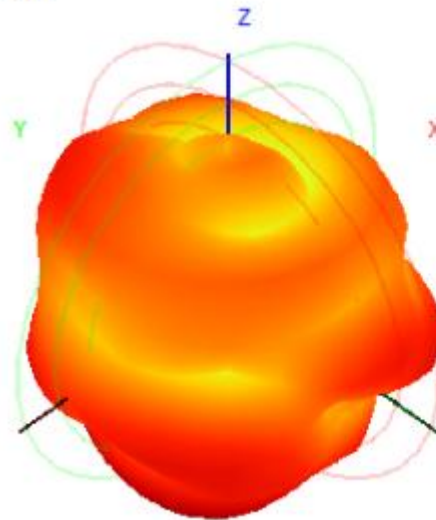
2400.0MHz Total(E2-YZ), Max= 1.32dBi



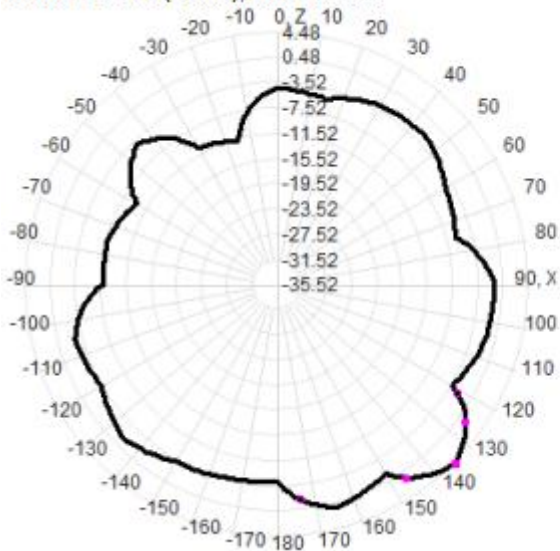
2450.0MHz H+V, Eff: 61.7%



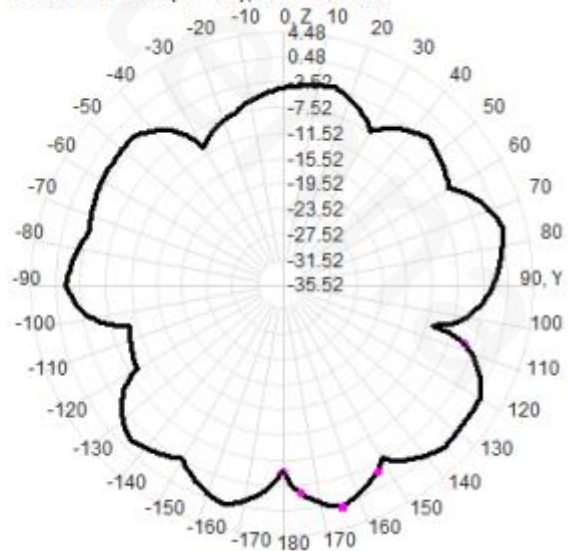
Back View



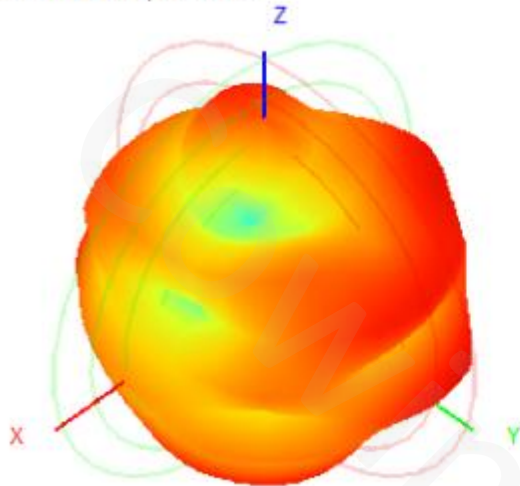
2450.0MHz Total(E1-XZ), Max= 4.48dBi



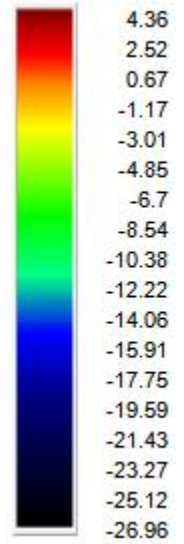
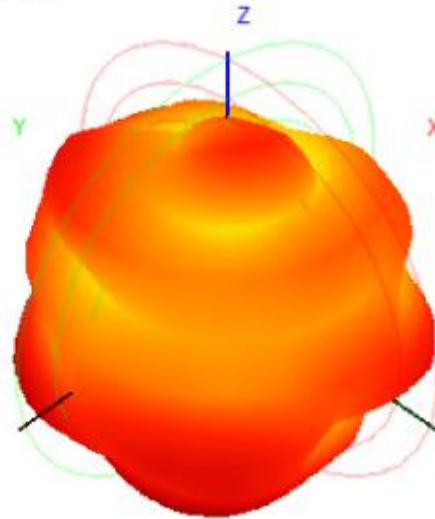
2450.0MHz Total(E2-YZ), Max= 0.77dBi



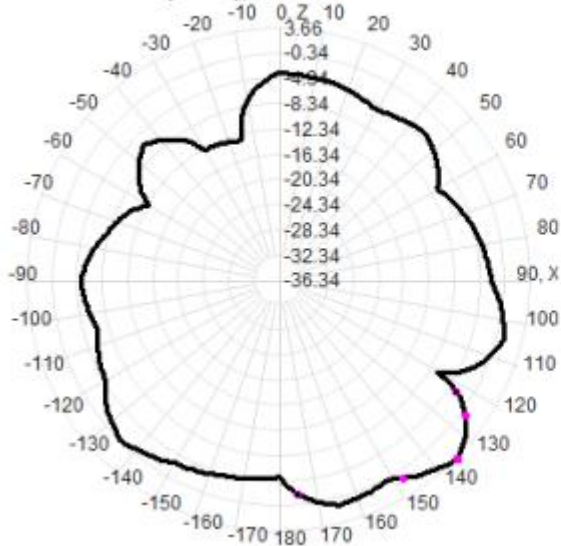
2500.0MHz H+V, Eff: 57.0%



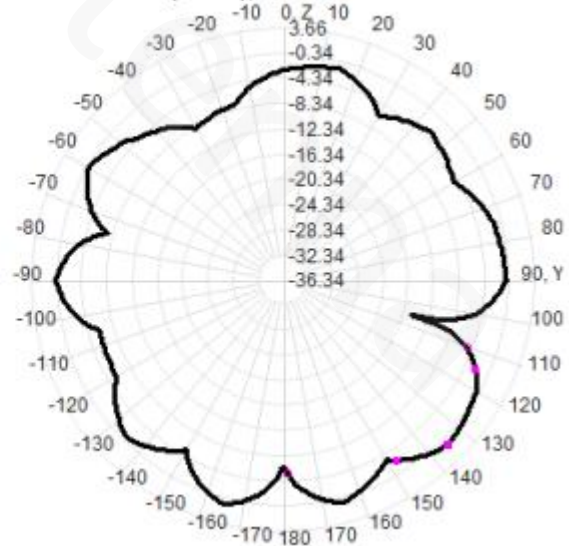
Back View



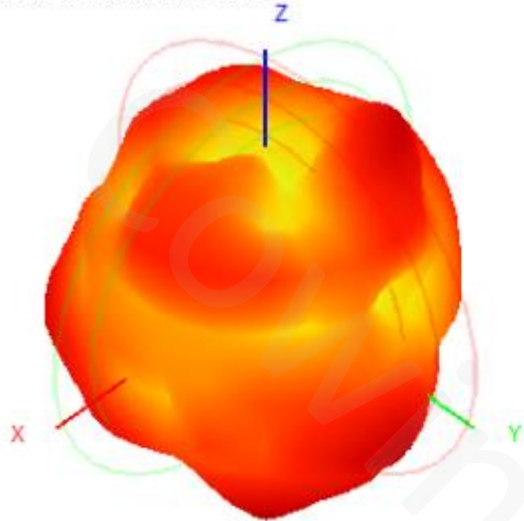
2500.0MHz Total(E1-XZ), Max= 3.66dBi



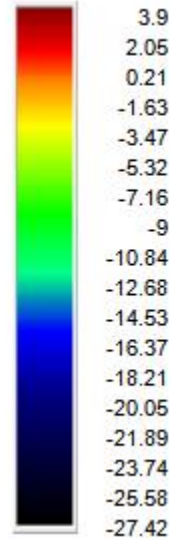
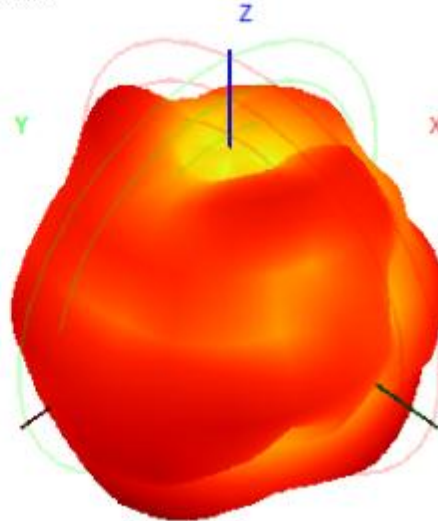
2500.0MHz Total(E2-YZ), Max= 0.50dBi



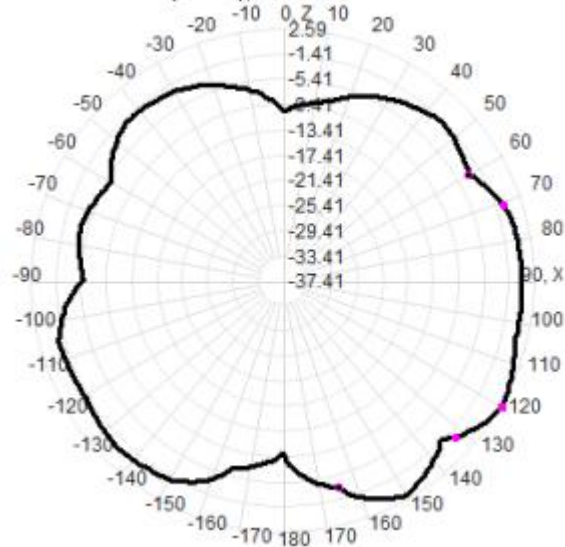
5150.0MHz H+V, Eff: 72.1%



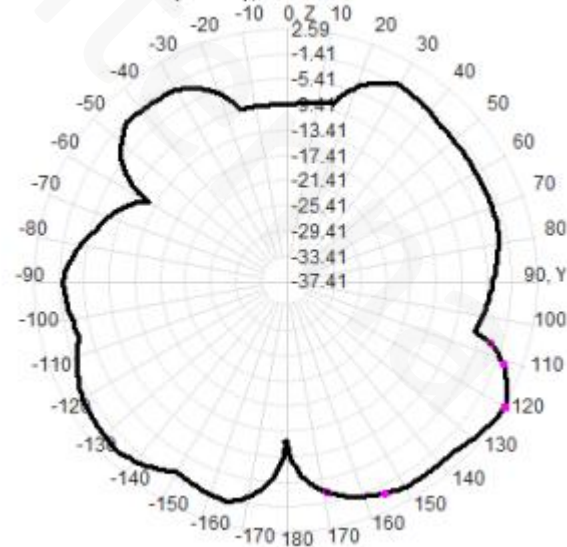
Back View



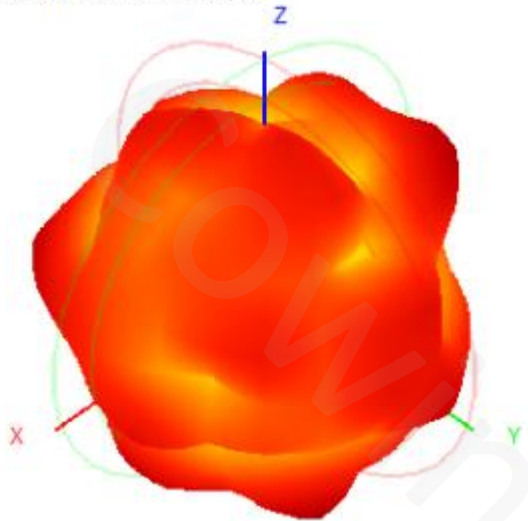
5150.0MHz Total(E1-XZ), Max= 2.59dBi



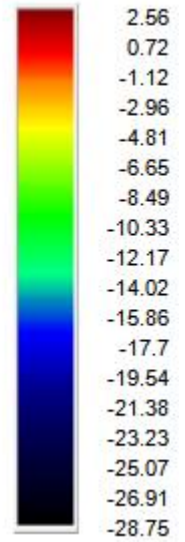
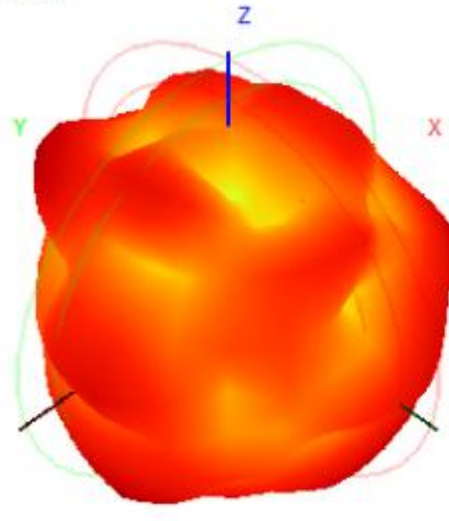
5150.0MHz Total(E2-YZ), Max= 2.59dBi



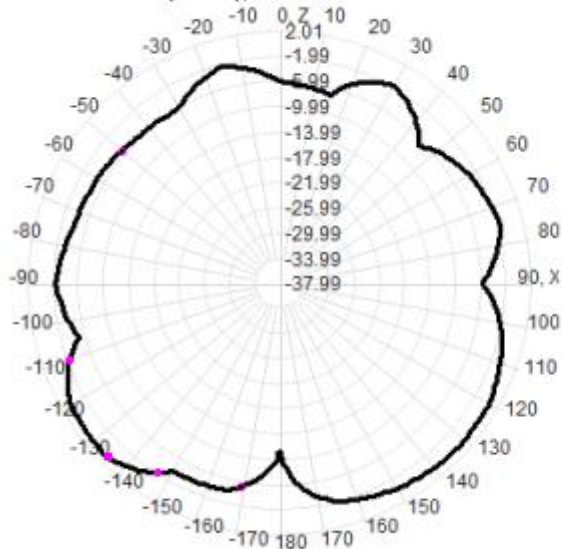
5450.0MHz H+V, Eff: 52.5%



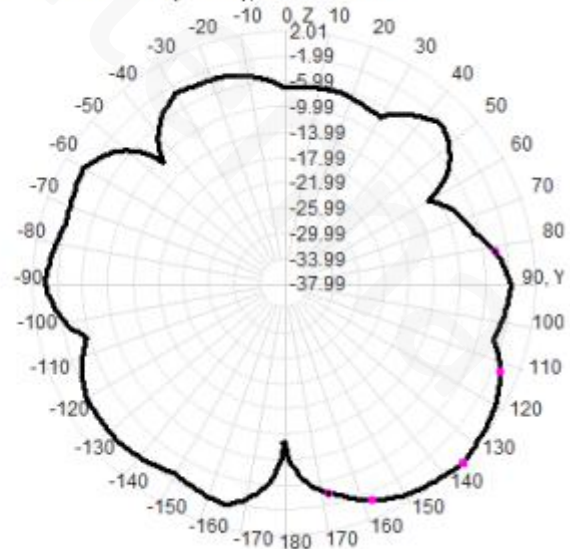
Back View



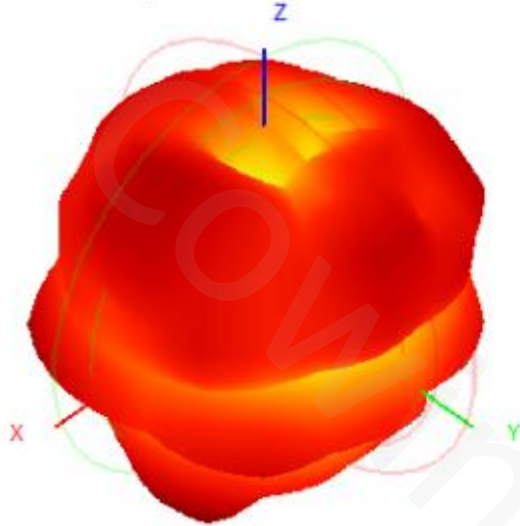
5450.0MHz Total(E1-XZ), Max= 0.73dBi



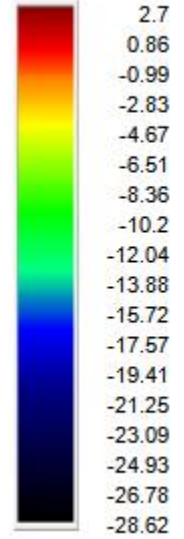
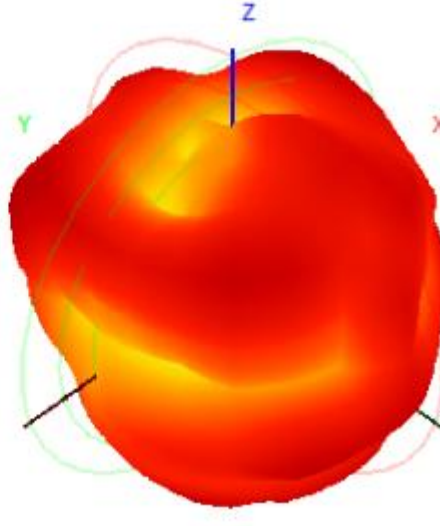
5450.0MHz Total(E2-YZ), Max= 2.01dBi



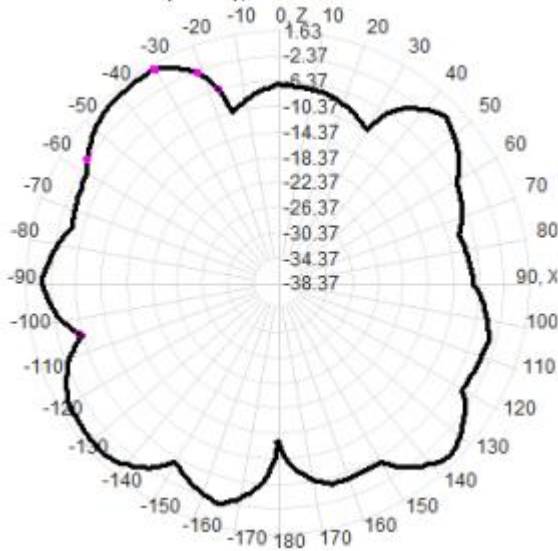
5850.0MHz H+V, Eff: 58.0%



Back View



5850.0MHz Total(E1-XZ), Max= 0.80dBi



5850.0MHz Total(E2-YZ), Max= 0.44dBi

