CW-WZ-0156

2.4G/5.8G External Antenna

Key Features

Frequency: 2400-2500/5150-5850MHz

SMA Male Connector

Dimensions: 28*8.1mm

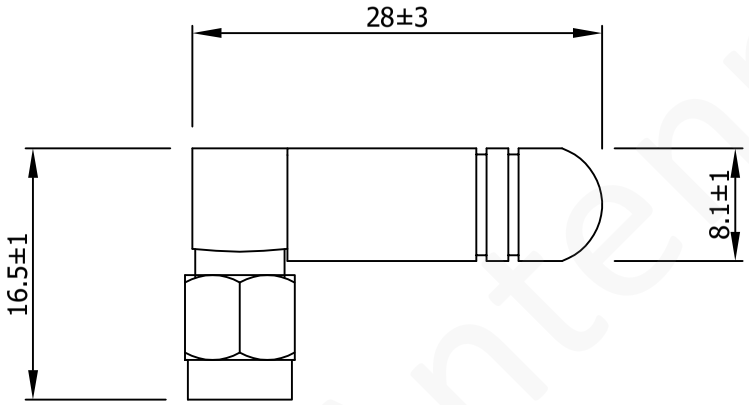
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2400-2500/5150-5850MHz
VSWR	≤2.0/5.0
Efficiency (%)	75.53%
Peak Gain (dBi)	3.69
Impendance (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
Dimensions (mm)	28*8.1 MM
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: ⩽2.0/5.0

100% Continutity,short and open circuit test

Materials,parts and process must by environmentally (ROHS)

NO	Name	Description	Q'TY	Remark
3	Radome	Black TPEE	1	
2	Spring	Brass	1	
1	Connector	SMA 90° male	1	

XX.	±5.0	Approved	Customer	
X.	±3.0		Part NO.	
.X	±1.0	Checked	Part name	External antenna
.XX	±0.2		CW P/NO.	CW-WZ-0156
.XXX	±0.1	Drawing	REV / Unit / File :	
			X1 / m/m / Sheet : 1/1	

Cowin Antenna

4. Antenna test parameters

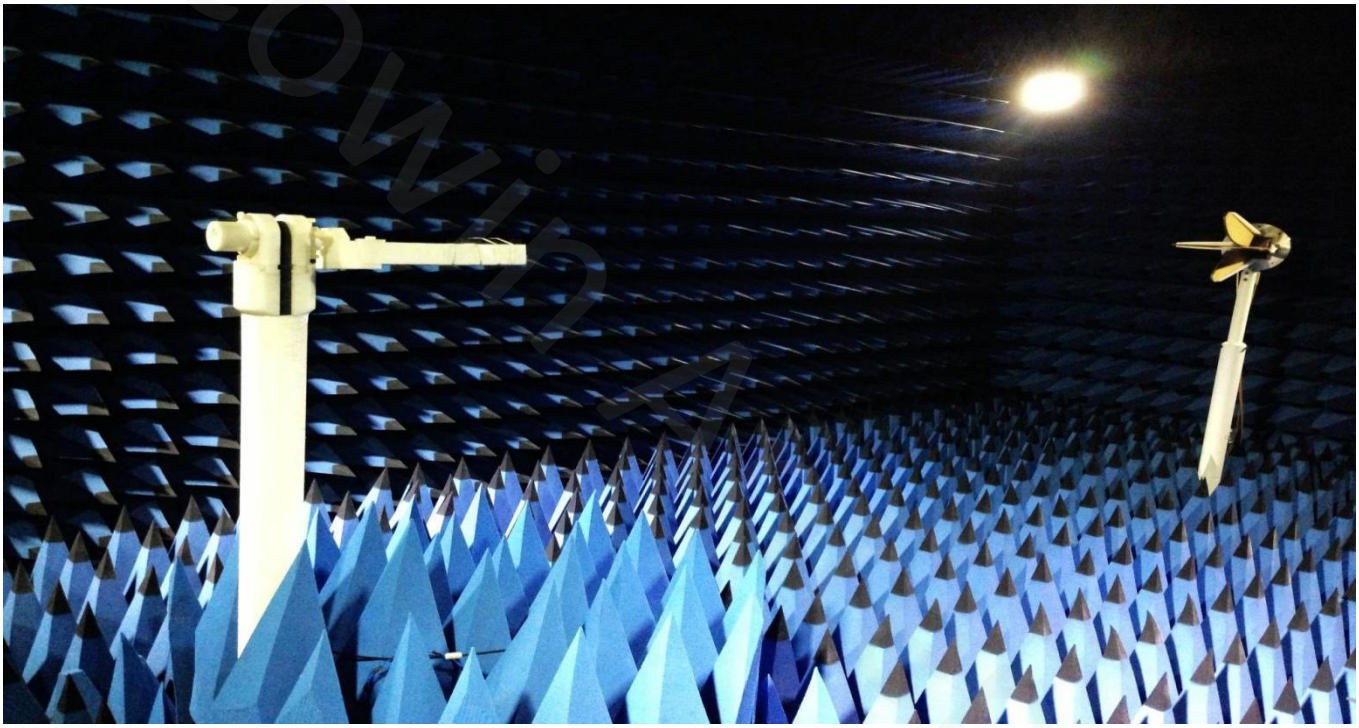
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

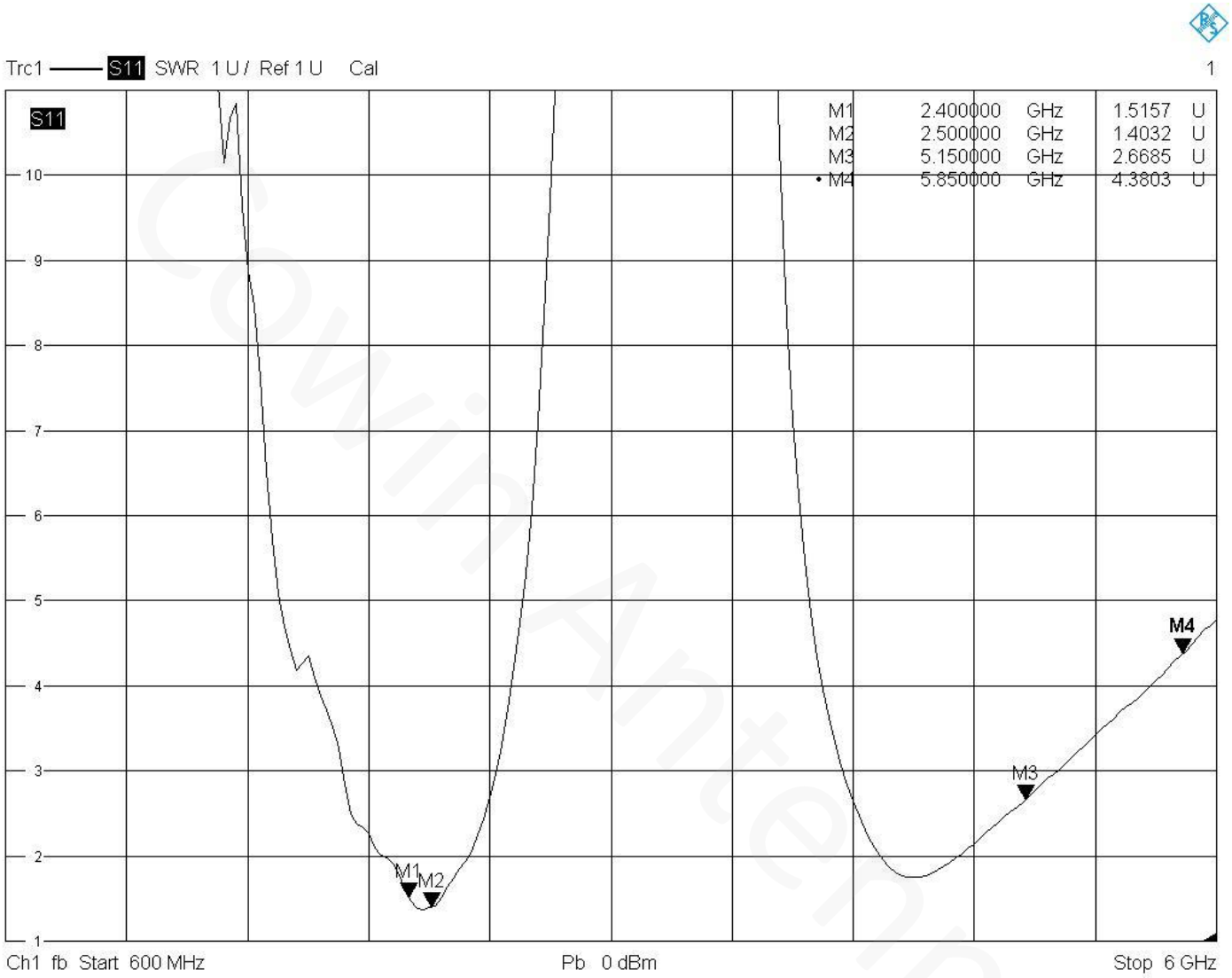
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

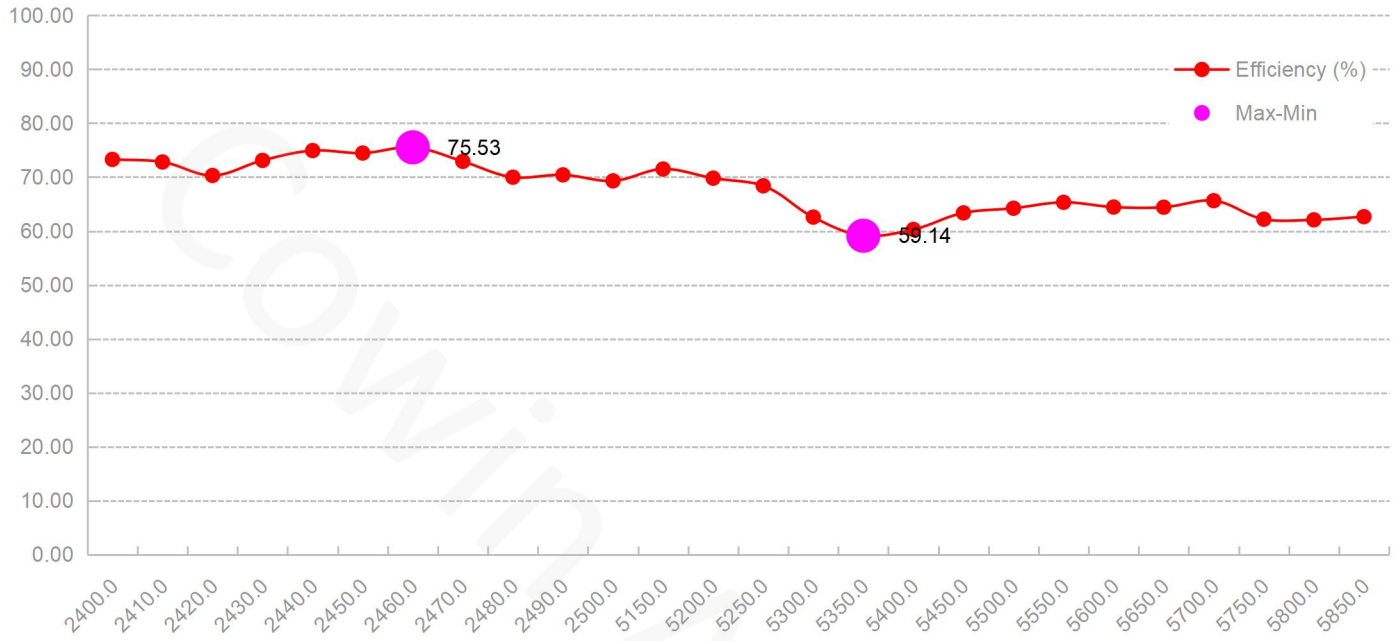
The comprehensive tester is Agilent cmv500



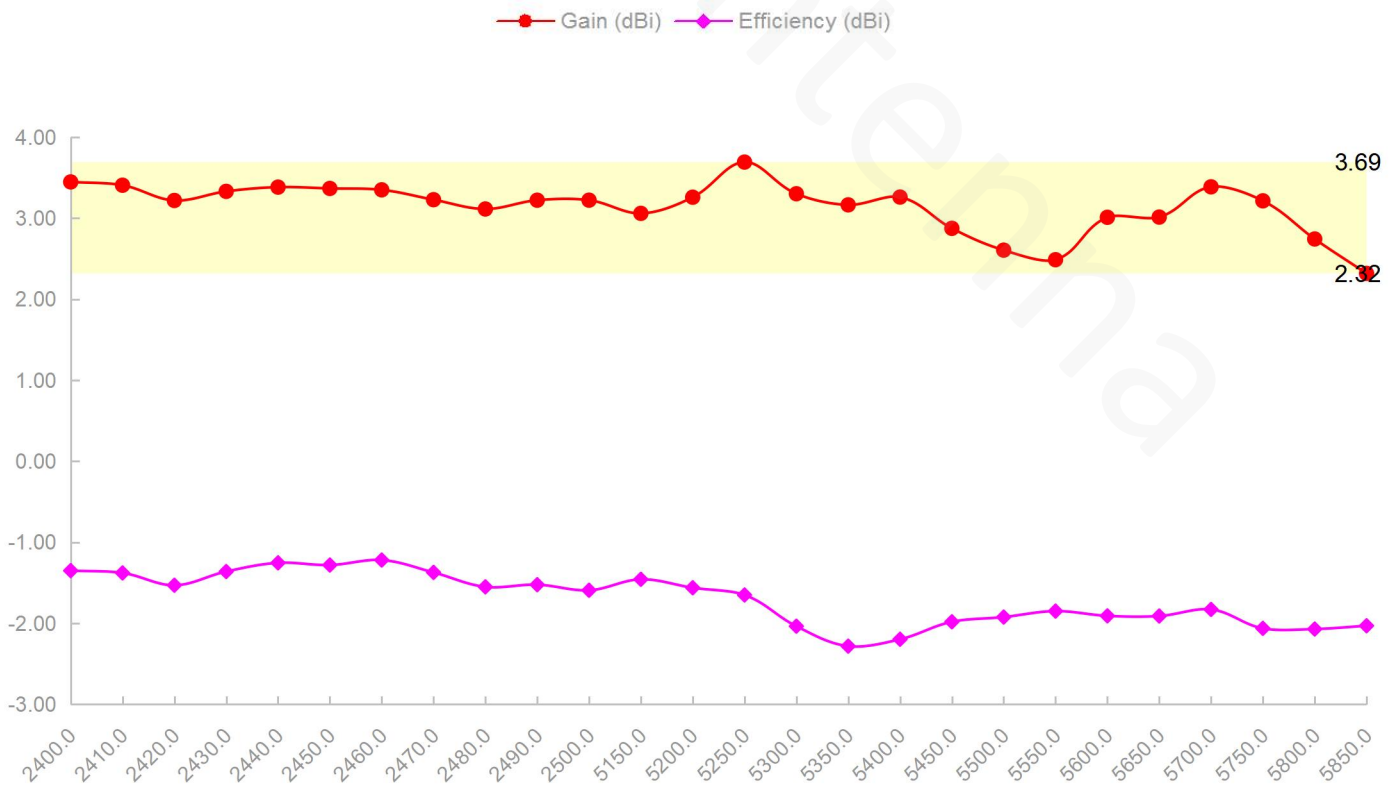
4.1 VSWR



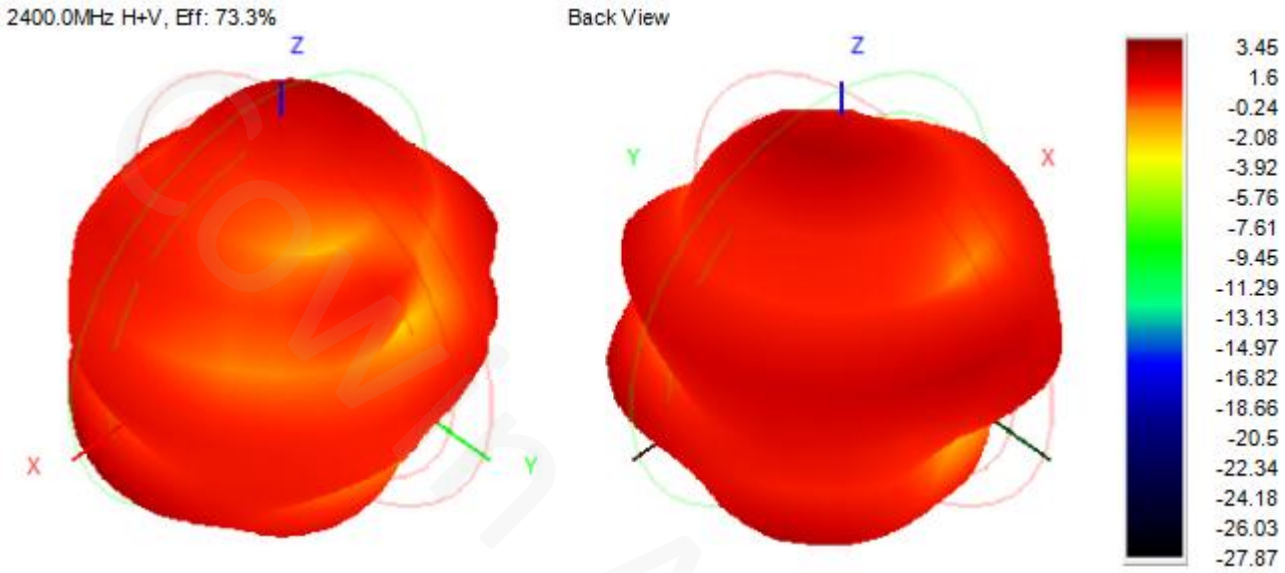
4.2 Efficiency

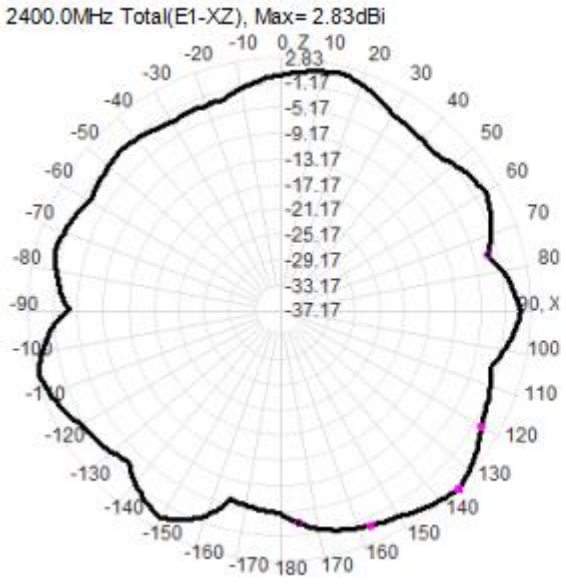


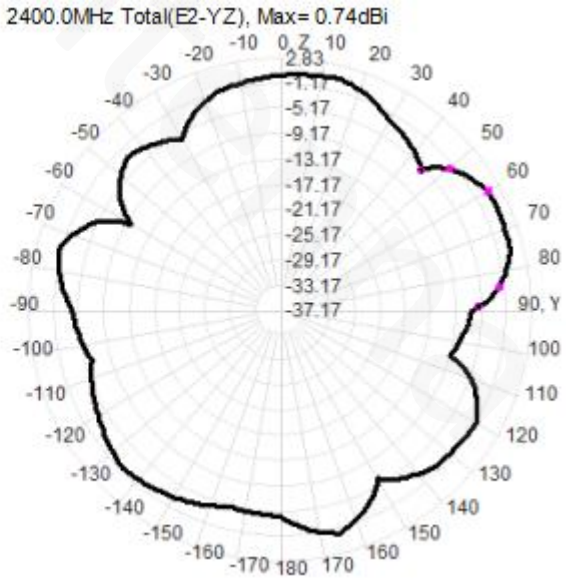
4.3 Peak gain

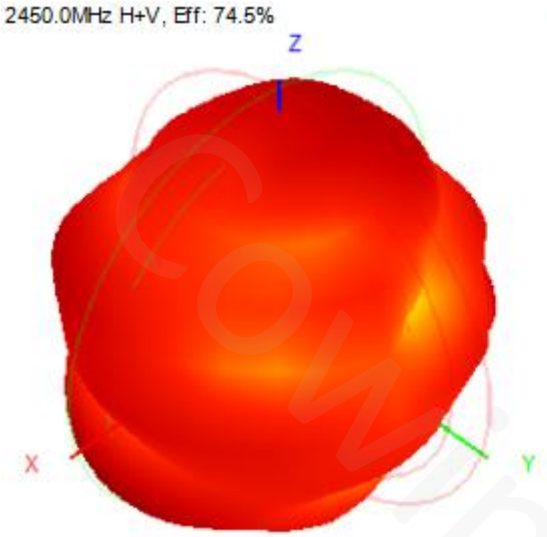


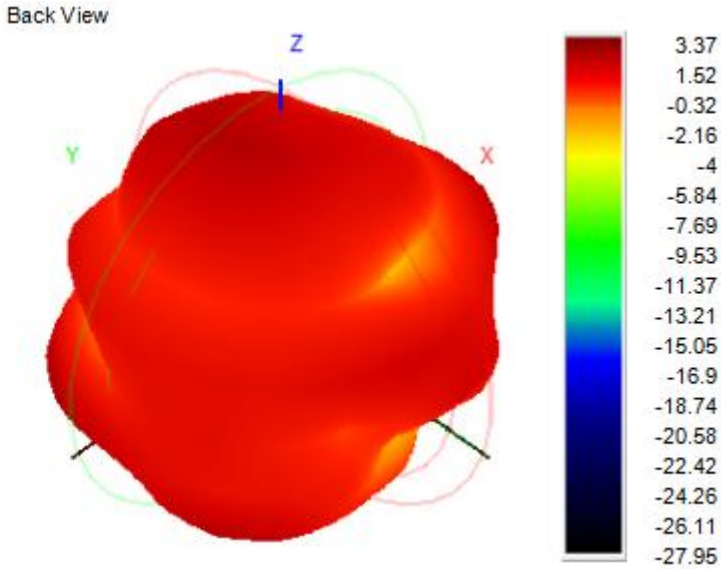
4.4 3D&2D Radiation Patterns

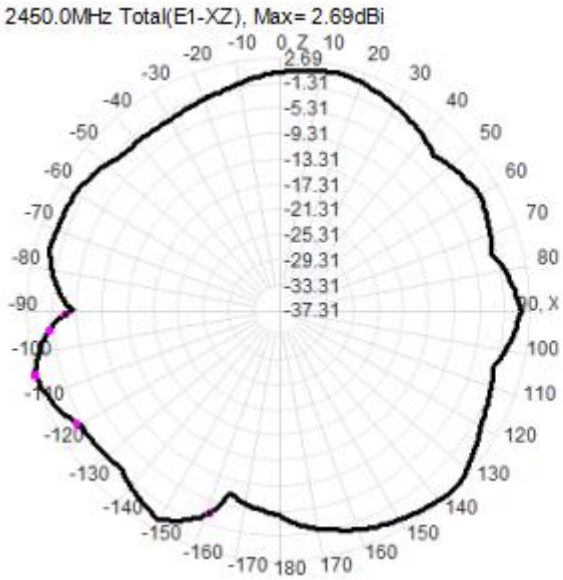


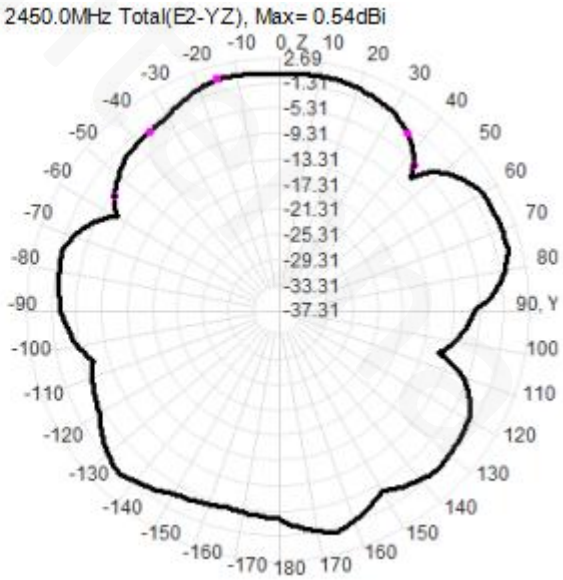


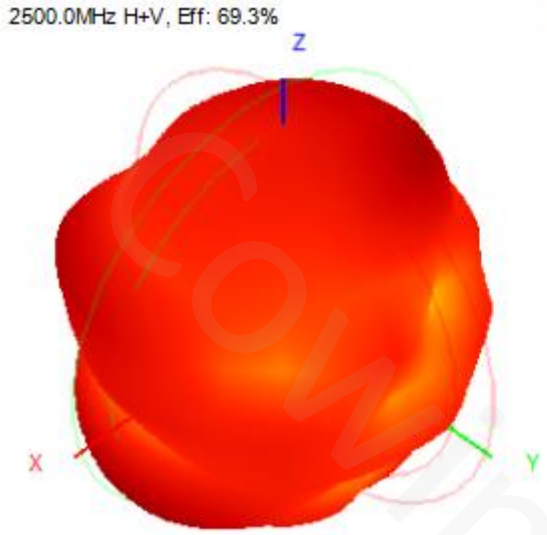


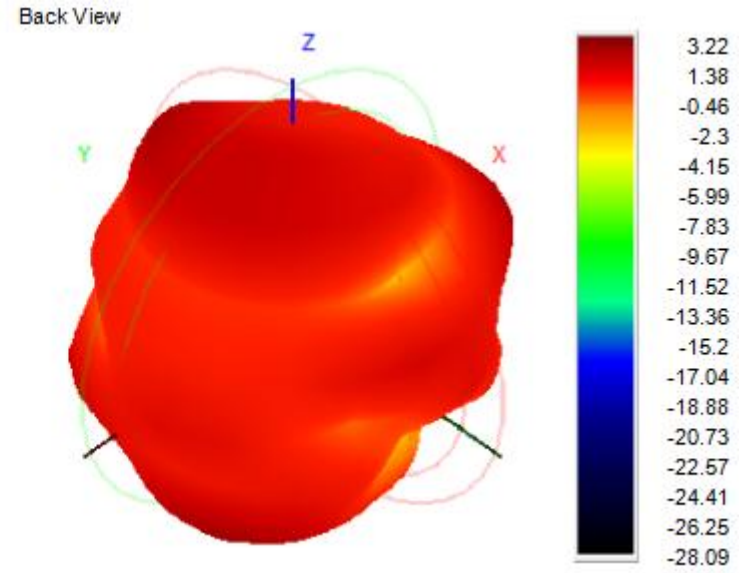

2450.0MHz H+V, Eff: 74.5%
Z
X
Y

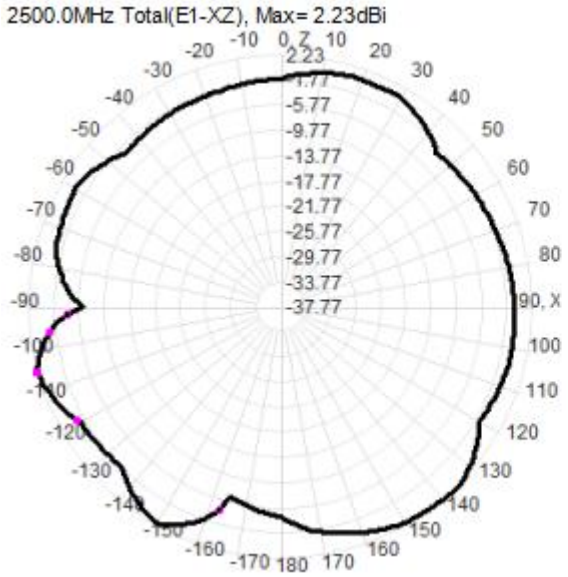

Back View
Z
Y
X
3.37
1.52
-0.32
-2.16
-4
-5.84
-7.69
-9.53
-11.37
-13.21
-15.05
-16.9
-18.74
-20.58
-22.42
-24.26
-26.11
-27.95

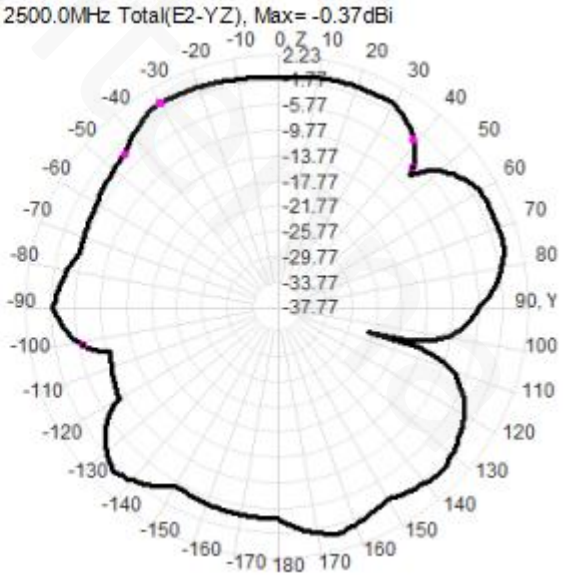

2450.0MHz Total(E1-XZ), Max= 2.69dBi
2.69
-1.31
-5.31
-9.31
-13.31
-17.31
-21.31
-25.31
-29.31
-33.31
-37.31
0, Z
90, X
180

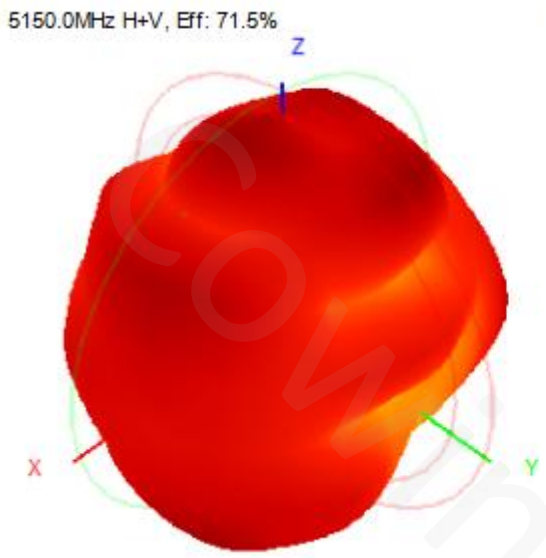

2450.0MHz Total(E2-YZ), Max= 0.54dBi
2.69
-1.31
-5.31
-9.31
-13.31
-17.31
-21.31
-25.31
-29.31
-33.31
-37.31
0, Z
90, Y
180

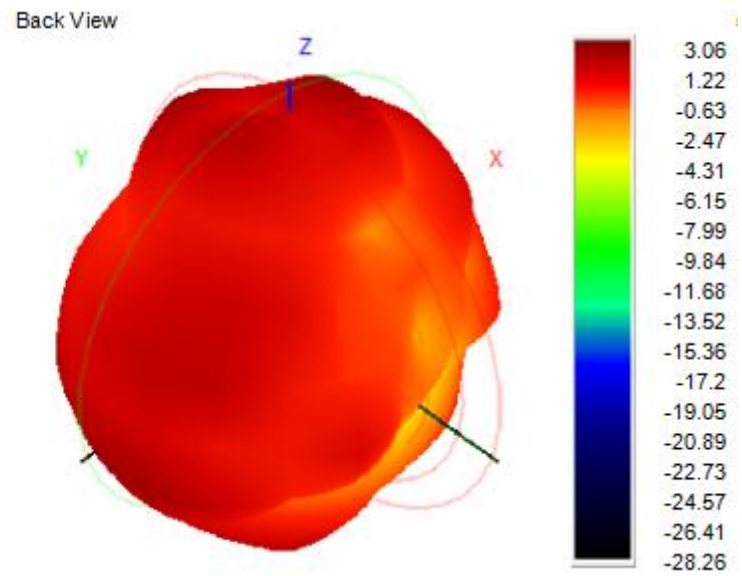


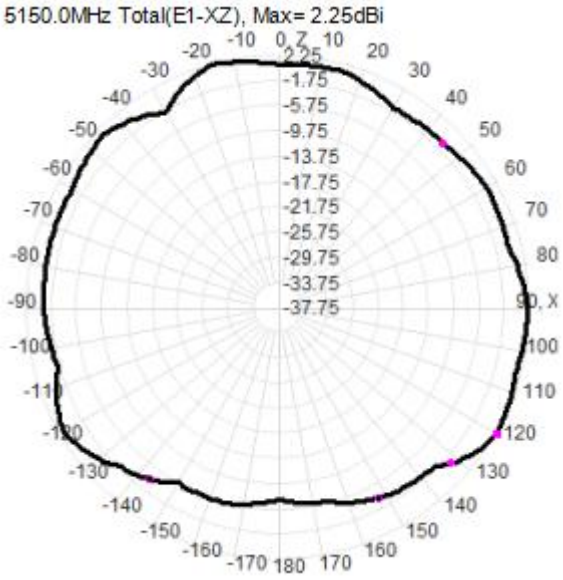


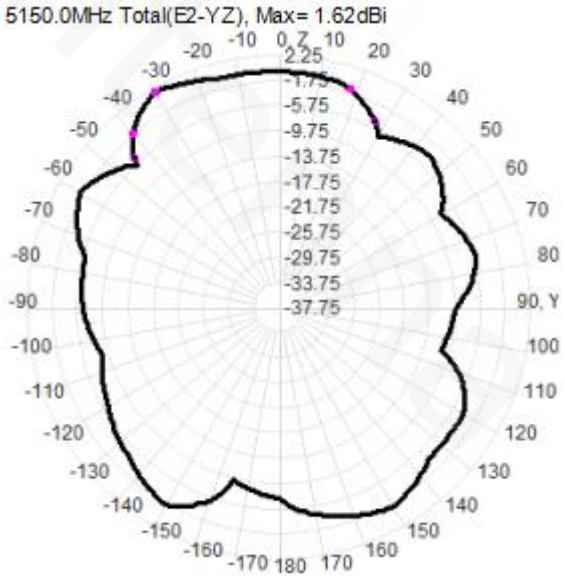


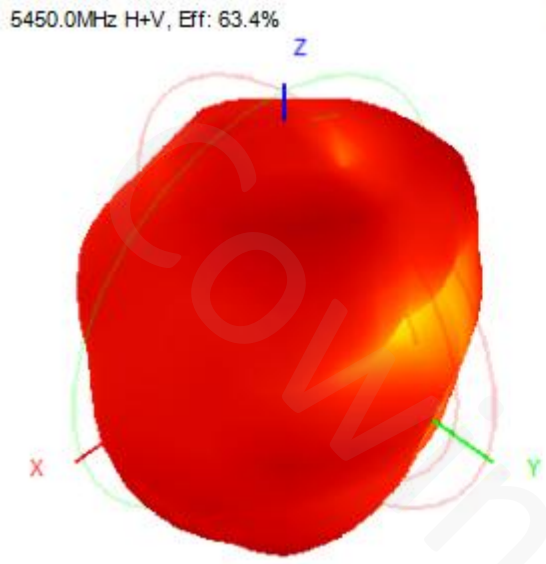


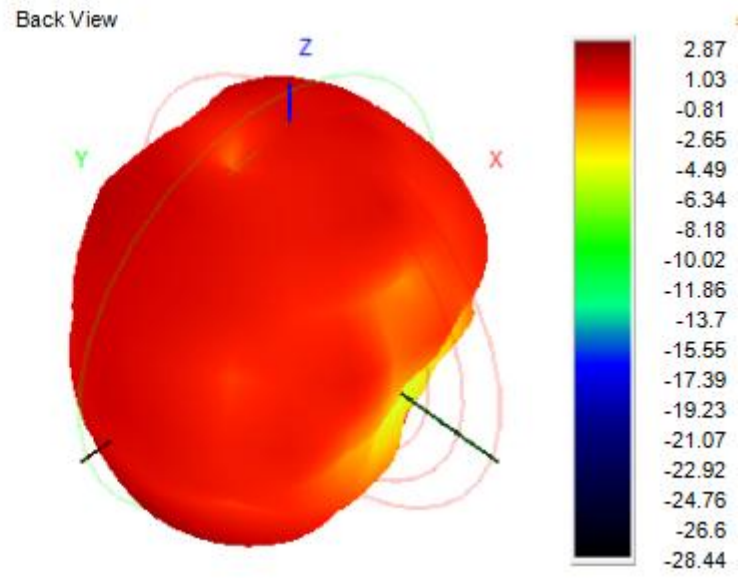

5150.0MHz H+V, Eff: 71.5%
Z
X
Y

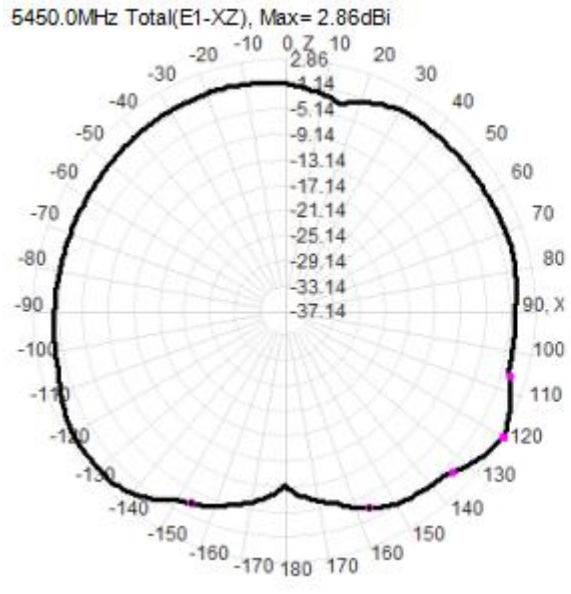

Back View
Z
Y
X
3.06
1.22
-0.63
-2.47
-4.31
-6.15
-7.99
-9.84
-11.68
-13.52
-15.36
-17.2
-19.05
-20.89
-22.73
-24.57
-26.41
-28.26

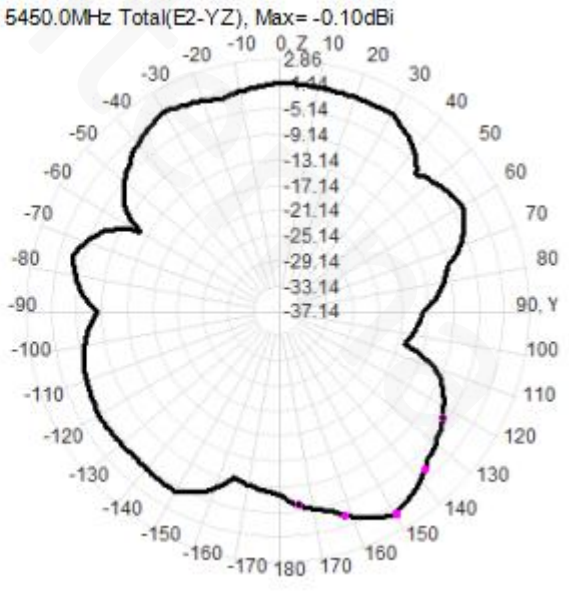

5150.0MHz Total(E1-XZ), Max= 2.25dBi
2.25
-1.75
-5.75
-9.75
-13.75
-17.75
-21.75
-25.75
-29.75
-33.75
-37.75
90, X

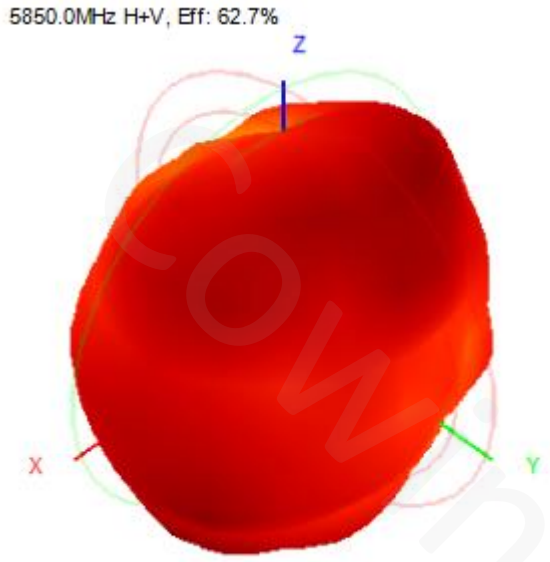

5150.0MHz Total(E2-YZ), Max= 1.62dBi
2.25
-5.75
-9.75
-13.75
-17.75
-21.75
-25.75
-29.75
-33.75
-37.75
90, Y

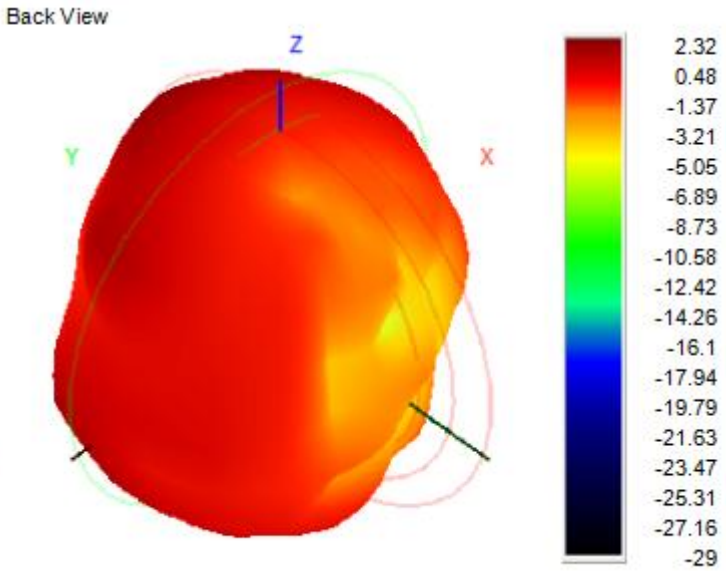

5450.0MHz H+V, Eff: 63.4%
Z
X
Y

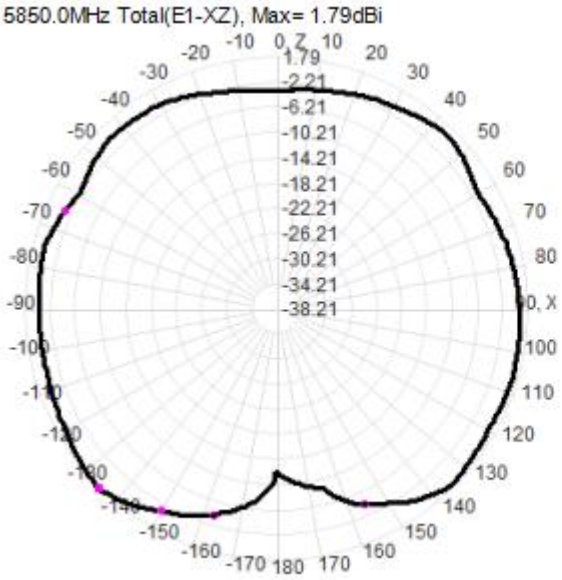

Back View
Z
Y
X
2.87
1.03
-0.81
-2.65
-4.49
-6.34
-8.18
-10.02
-11.86
-13.7
-15.55
-17.39
-19.23
-21.07
-22.92
-24.76
-26.6
-28.44

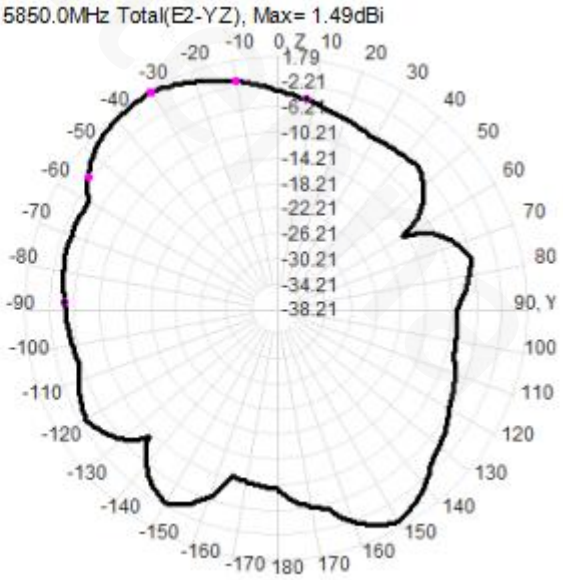

5450.0MHz Total(E1-XZ), Max= 2.86dBi
2.86
-5.14
-9.14
-13.14
-17.14
-21.14
-25.14
-29.14
-33.14
-37.14
90, X


5450.0MHz Total(E2-YZ), Max= -0.10dBi
2.86
-5.14
-9.14
-13.14
-17.14
-21.14
-25.14
-29.14
-33.14
-37.14
90, Y


5850.0MHz H+V, Eff: 62.7%
Z
X
Y


Back View
Z
Y
X
2.32
0.48
-1.37
-3.21
-5.05
-6.89
-8.73
-10.58
-12.42
-14.26
-16.1
-17.94
-19.79
-21.63
-23.47
-25.31
-27.16
-29


5850.0MHz Total(E1-XZ), Max= 1.79dBi
1.79
-2.21
-6.21
-10.21
-14.21
-18.21
-22.21
-26.21
-30.21
-34.21
-38.21
0, X


5850.0MHz Total(E2-YZ), Max= 1.49dBi
1.79
-2.21
-10.21
-14.21
-18.21
-22.21
-26.21
-30.21
-34.21
-38.21
90, Y