

CW-WZ-0064

2.4G/5.8G External Antenna

Key Features

Frequency: 2.4G-2.5G/4.9G-5.85G

SMA Male Connector

External Rubber

Dimensions 108*7.9 mm



1. Antenna Electrical Characteristics

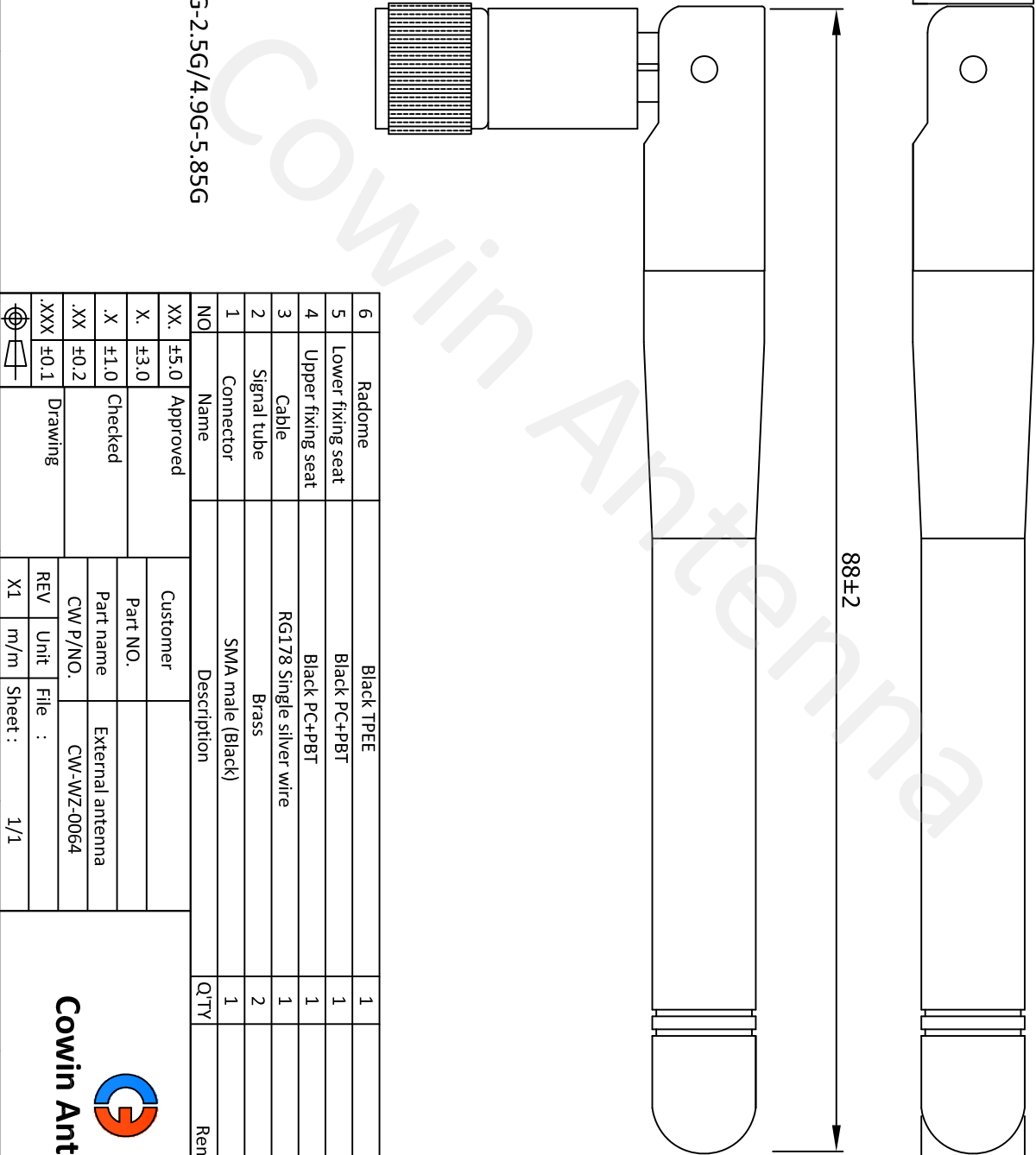
Band (MHz)		
Frequency (MHz)	2.4G-2.5G	4.9G-5.85G
VSWR	2:1	2:1
Efficiency (%)	62.99%	61.02%
Peak Gain (dBi)	3.28	3.73
Impedance (Ohm)	50	
Polarisation	Vertical	
Max. Input Power (W)	10	
Connector Type	SMA male	

2. Material and environmental characteristics

Material of PCB	N/A
Material of Plastic	PC+PBT/TPEE
Cable Type	RG178
Connector Type	SMA male
Dimensions (mm)	108*7.9MM
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	2021/09/06	New issue	

6	Radome	Black TPEE	1	
5	Lower fixing seat	Black PC+PBT	1	
4	Upper fixing seat	Black PC+PBT	1	
3	Cable	RG178 Single silver wire	1	
2	Signal tube	Brass	2	
1	Connector	SMA male (Black)	1	
NO	Name	Description	Q'TY	Remark
XX.	±5.0	Approved		
X.	±3.0	Checked	Customer	
X.	±1.0		Part NO.	
.XX	±0.2		Part name	External antenna
.XXX	±0.1		CW P/NO.	CW-WZ-0064
⌀		Drawing	REV	Unit
			X1	m/m
			File	Sheet :
				1/1



Specification(Free Test):
 Frequency Range: 2.4G-2.5G/4.9G-5.85G
 Impedance: 50Ω
 V.S.W.R: ≤2

4. Antenna test parameters

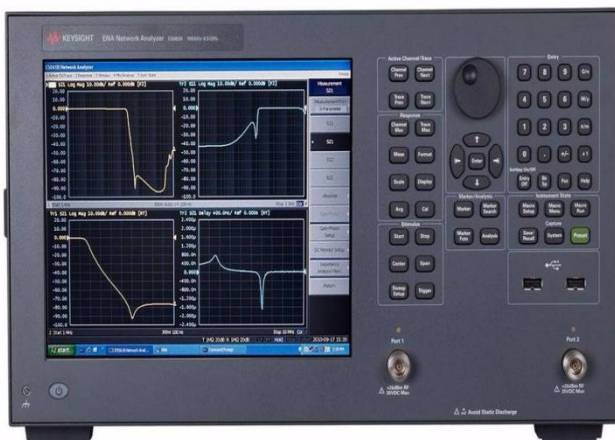
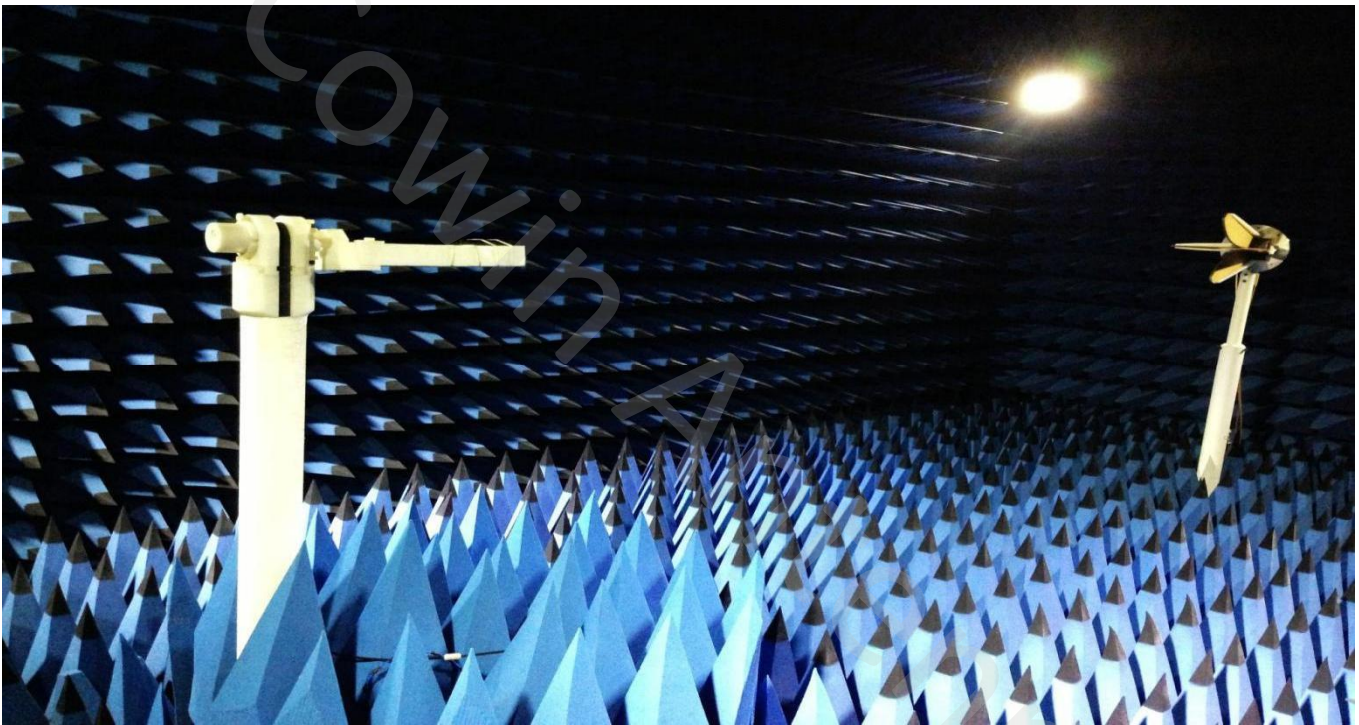
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

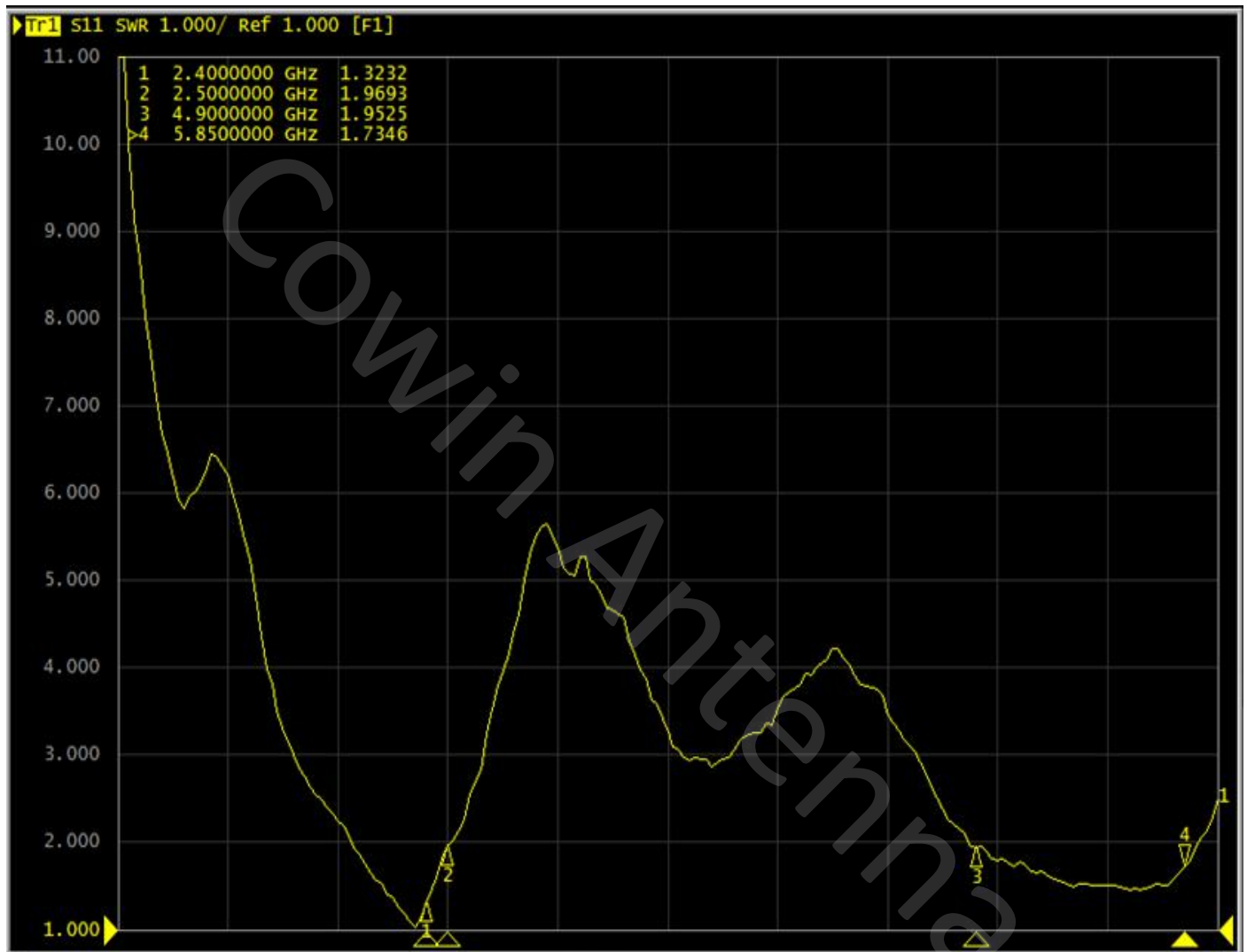
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

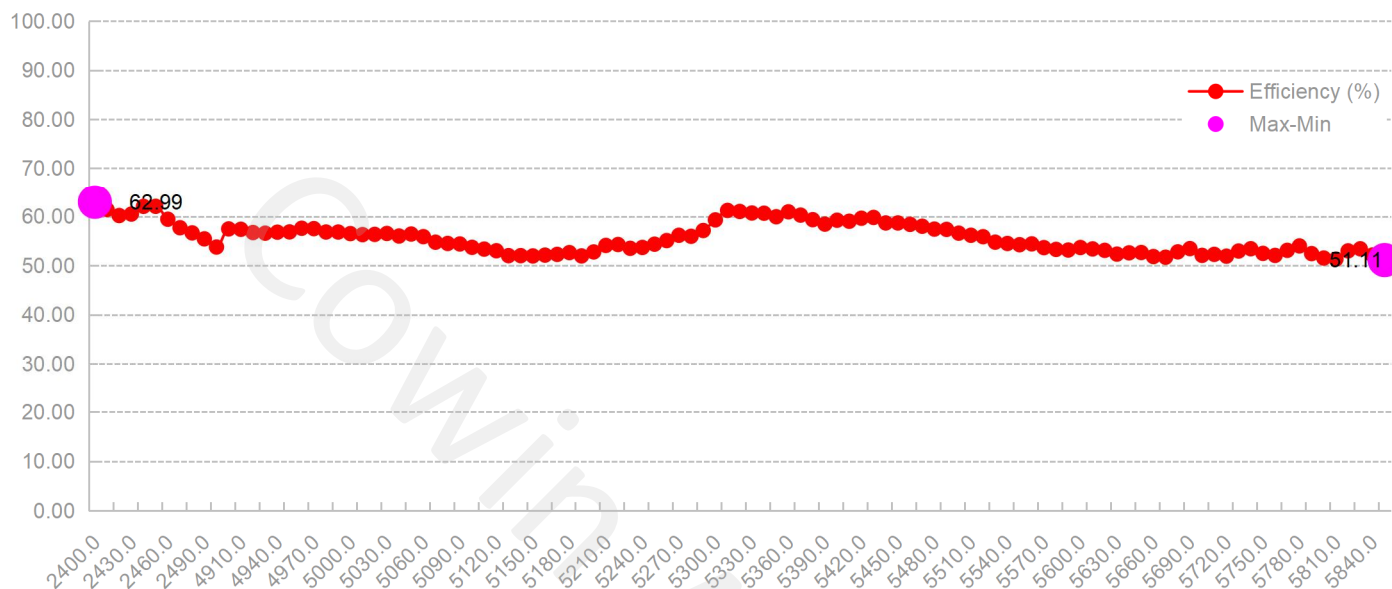
The comprehensive tester is Agilent cmv500



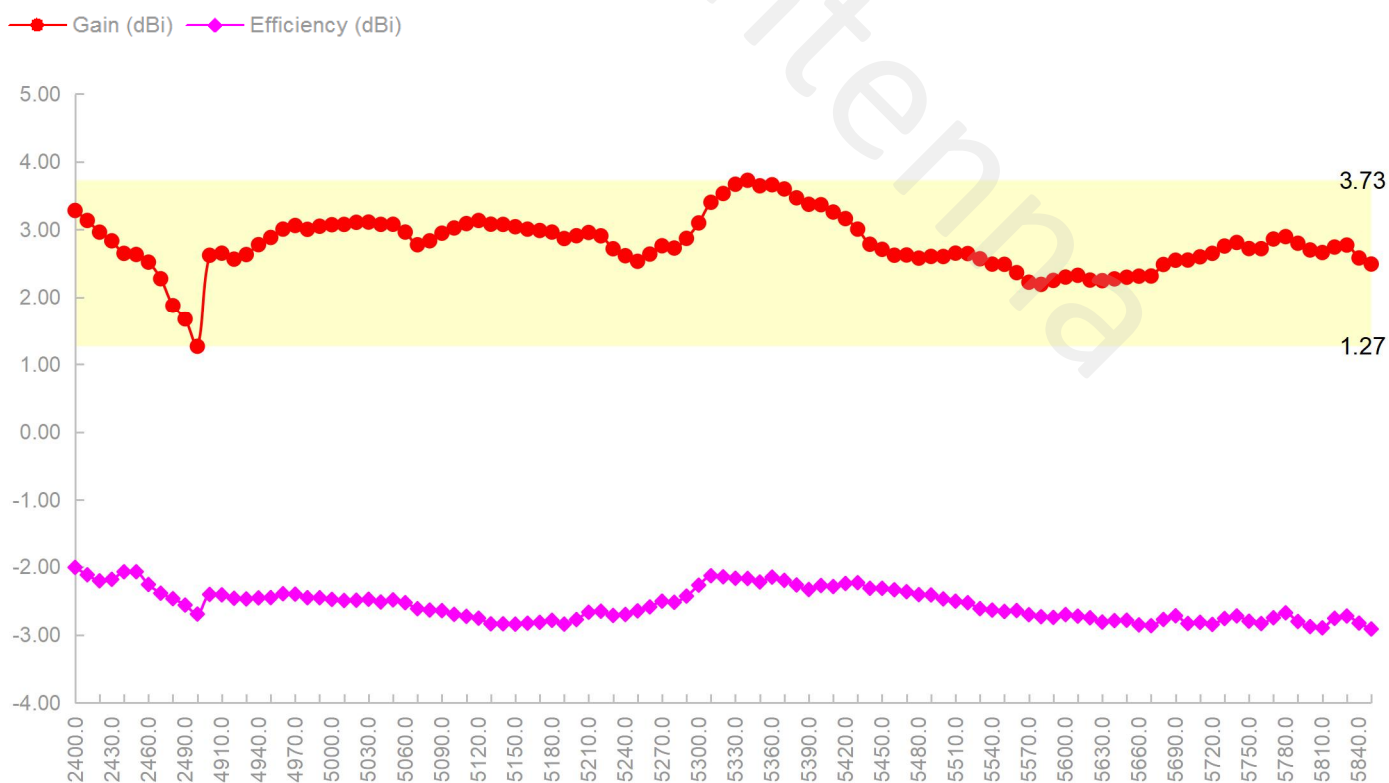
4.1 VSWR



4.2 Efficiency



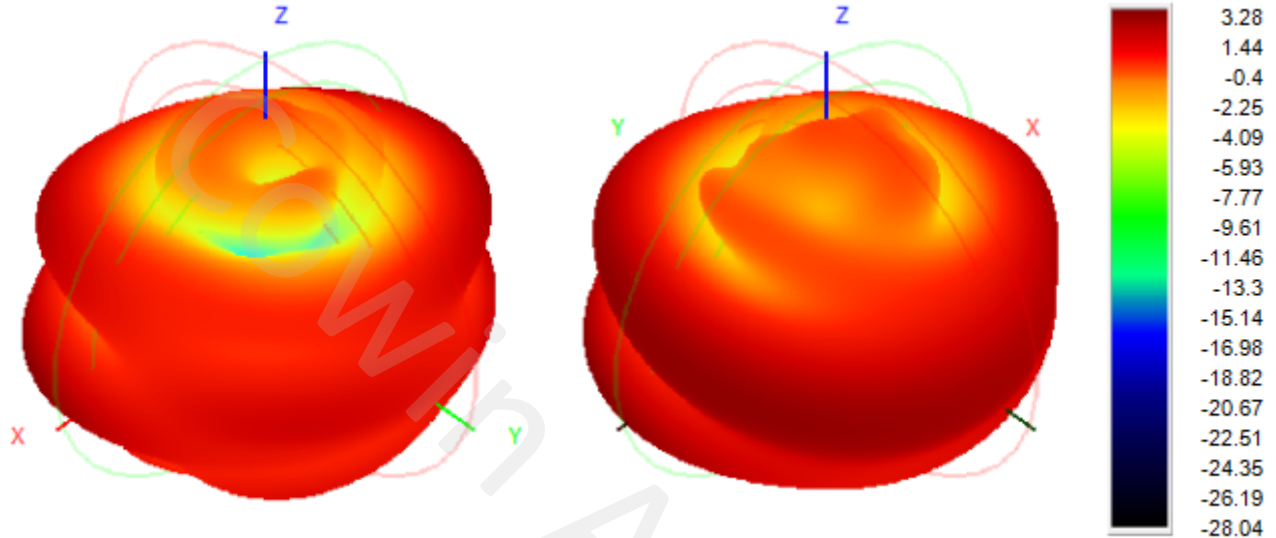
4.3 Peak gain



4.4 3D&2D Radiation Patterns

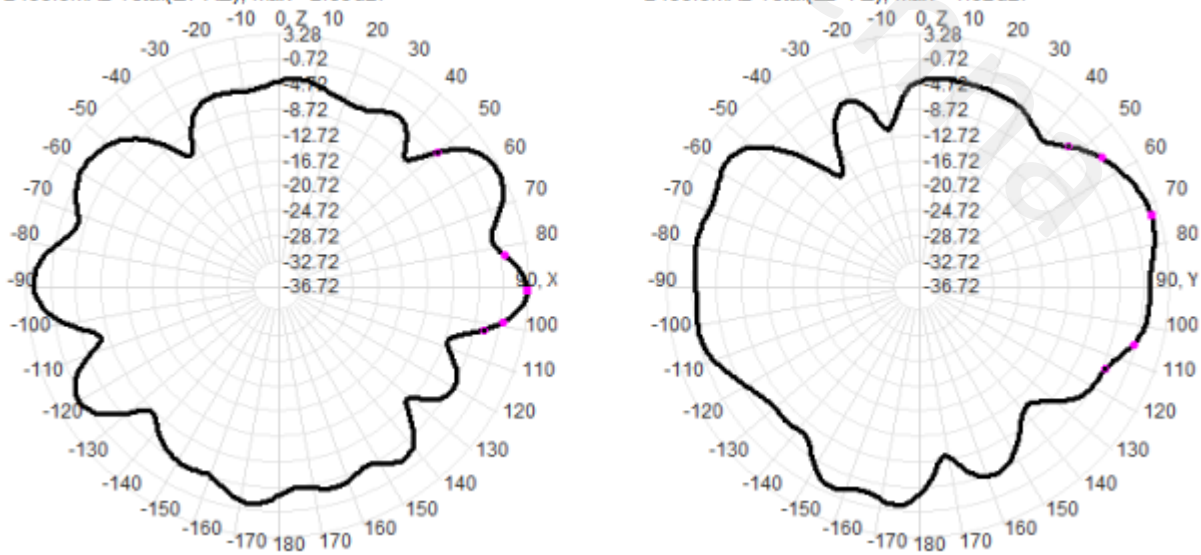
2400.0MHz H+V, Eff: 63.0%

Back View



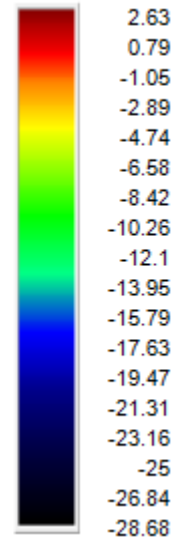
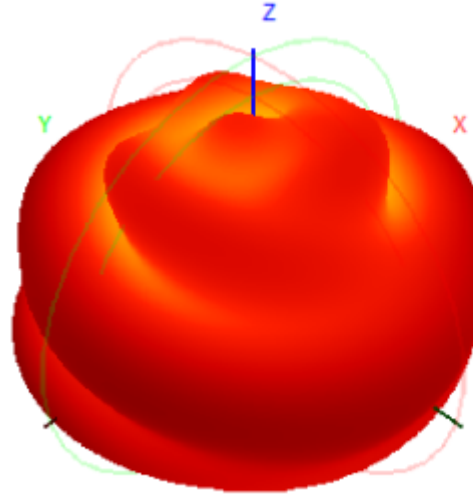
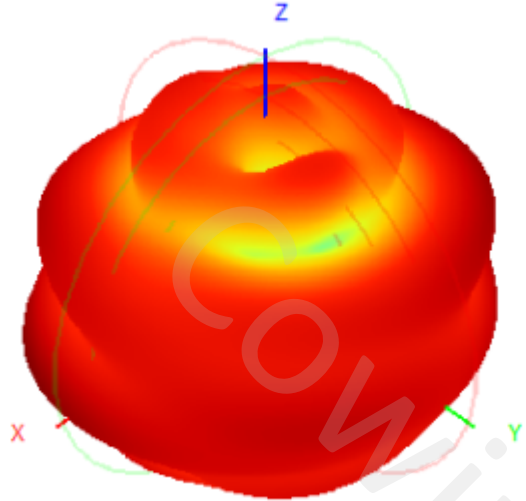
2400.0MHz Total(E1-XZ), Max= 2.69dBi

2400.0MHz Total(E2-YZ), Max= 1.82dBi

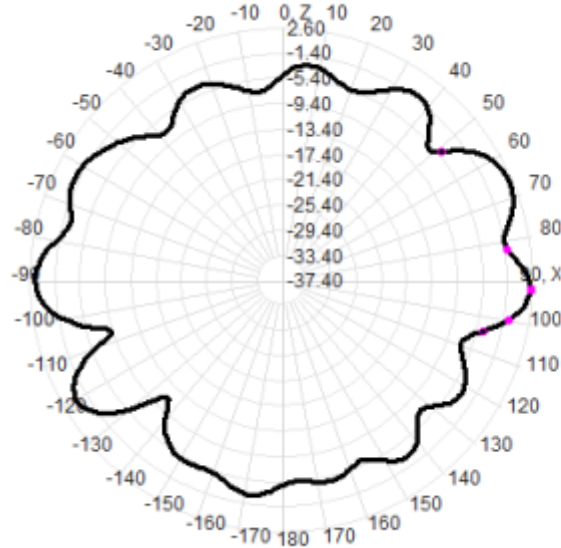


2450.0MHz H+V, Eff: 62.1%

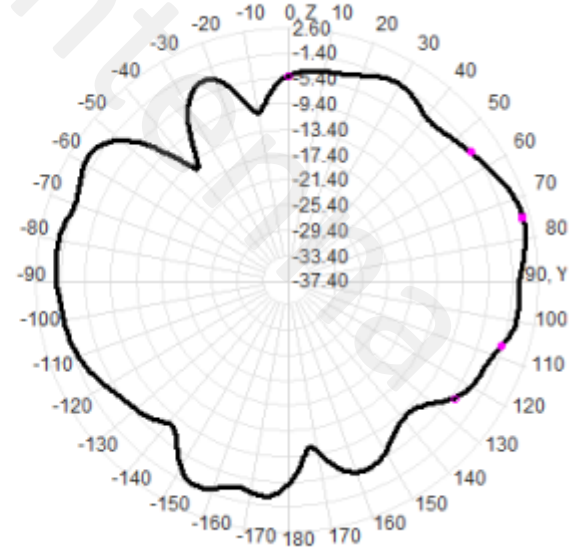
Back View



2450.0MHz Total(E1-XZ), Max= 1.94dBi

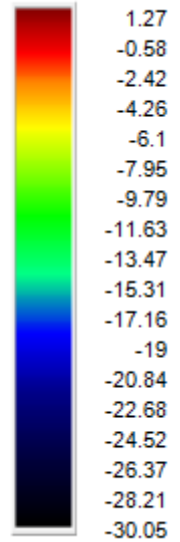
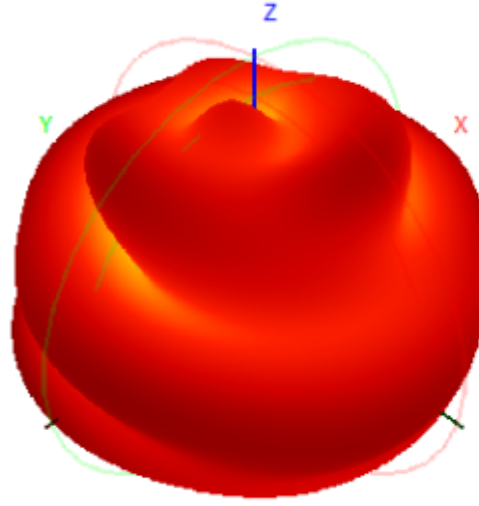
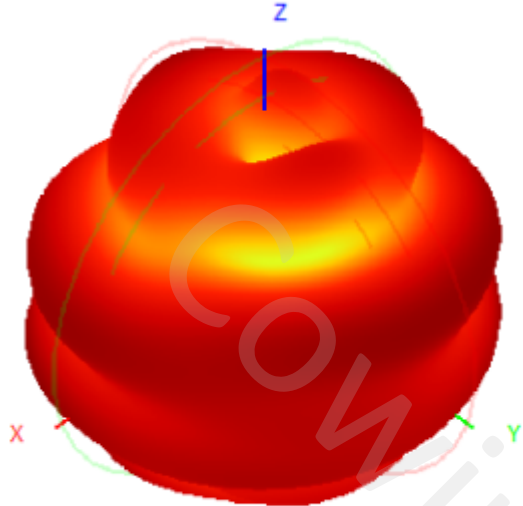


2450.0MHz Total(E2-YZ), Max= 1.17dBi

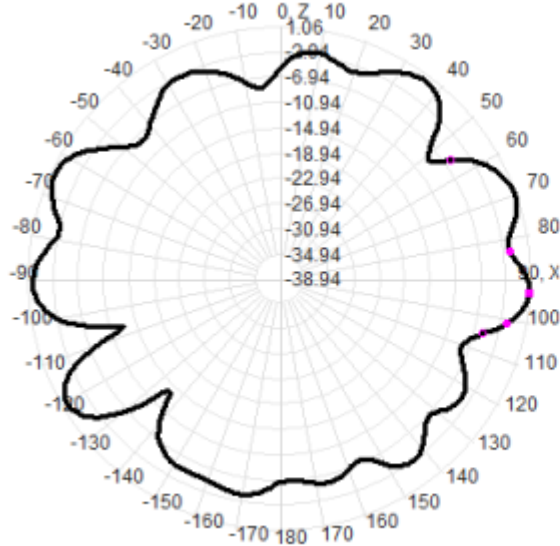


2500.0MHz H+V, Eff: 53.8%

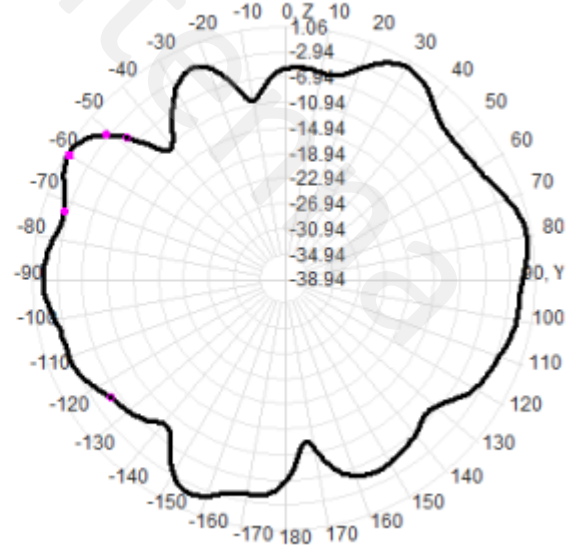
Back View



2500.0MHz Total(E1-XZ), Max= 0.63dBi

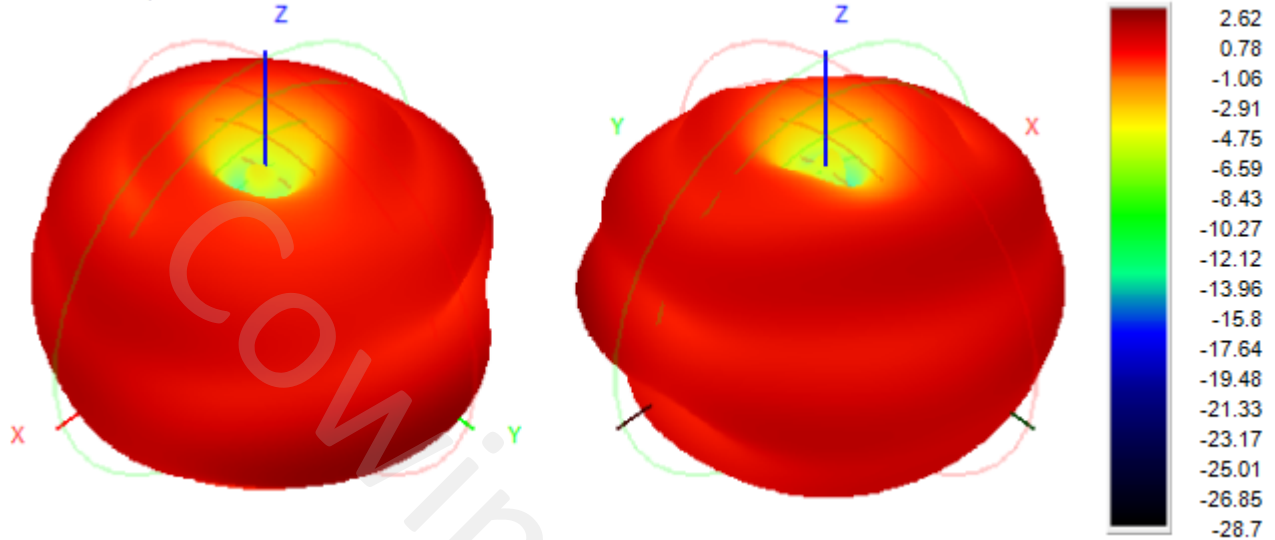


2500.0MHz Total(E2-YZ), Max= 0.59dBi



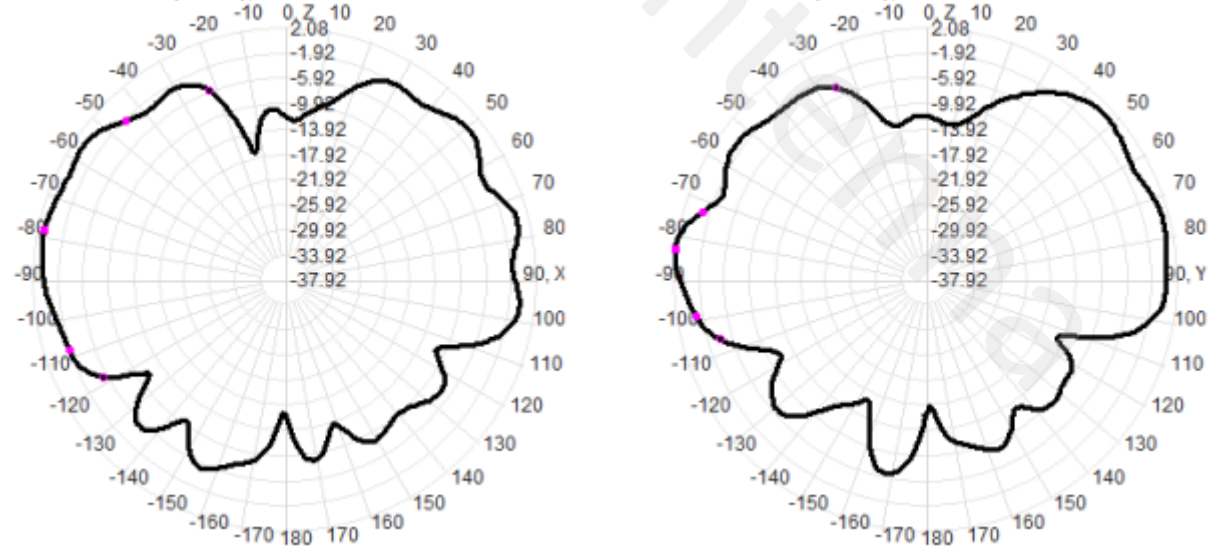
4900.0MHz H+V, Eff: 57.5%

Back View

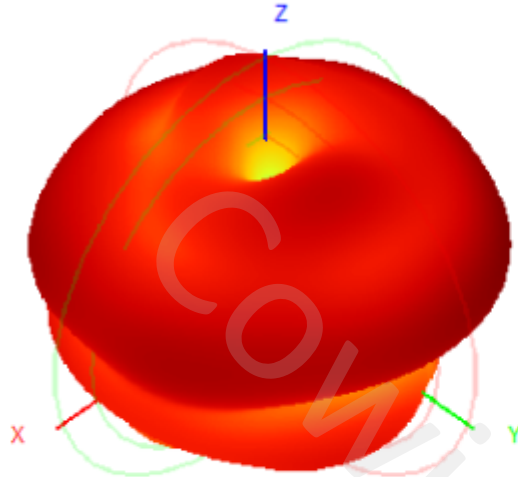


4900.0MHz Total(E1-XZ), Max= 1.06dBi

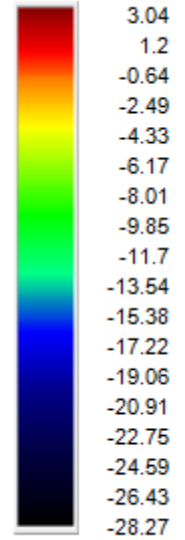
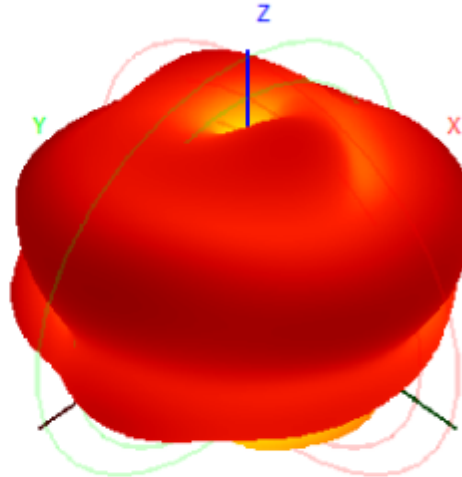
4900.0MHz Total(E2-YZ), Max= 2.08dBi



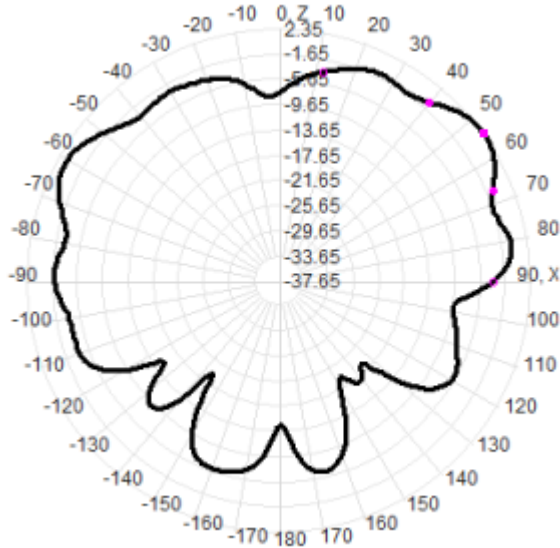
5150.0MHz H+V, Eff: 52.0%



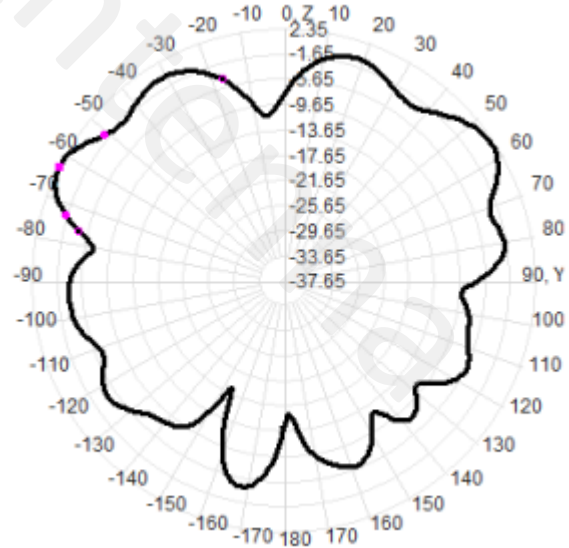
Back View



5150.0MHz Total(E1-XZ), Max= 2.35dBi

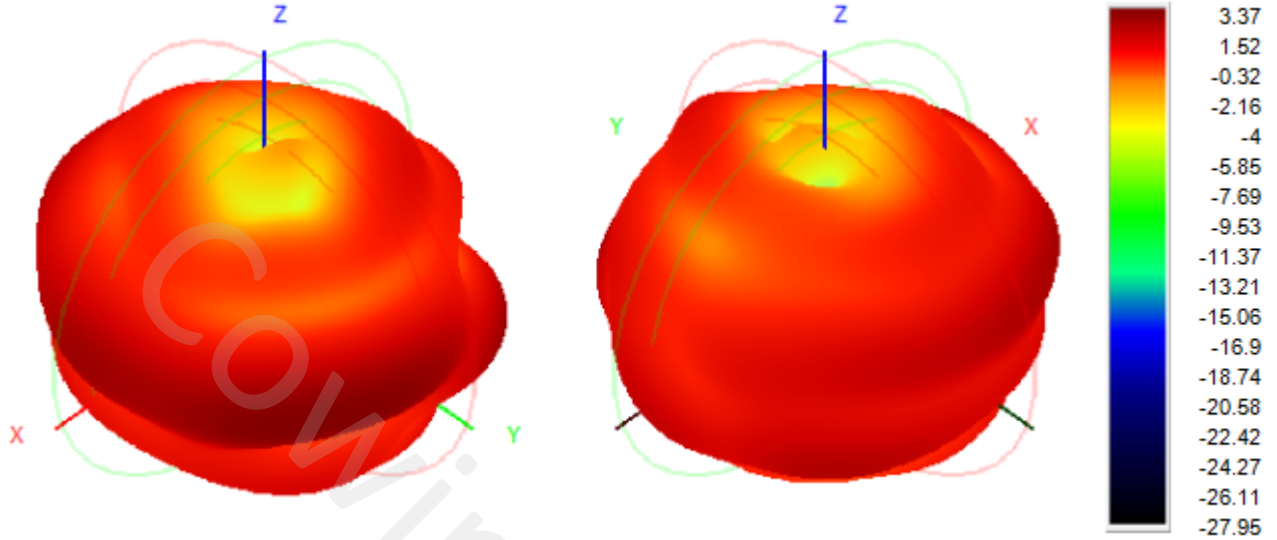


5150.0MHz Total(E2-YZ), Max= 2.28dBi



5400.0MHz H+V, Eff: 59.2%

Back View



5400.0MHz Total(E1-XZ), Max= 2.15dBi

5400.0MHz Total(E2-YZ), Max= 1.55dBi

