

CW-WZ-0123

2.4/5.8G External Patch Antenna

Key Features

Frequency: 2.4-2.5G/4.9-5.85G

SMA Male Connector

3M Adhesive

Dimensions 116*22 mm

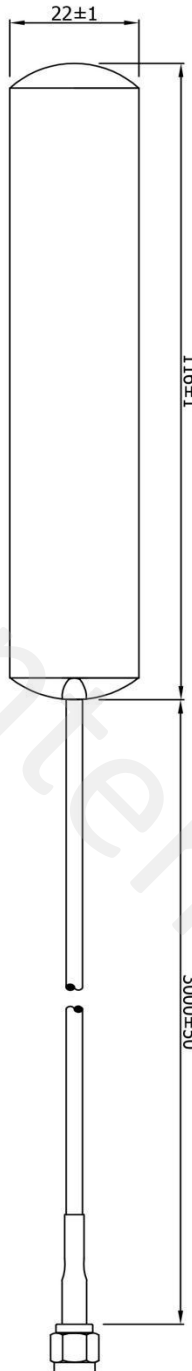


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4-2.5G/4.9-5.85G
VSWR	2.5/2
Efficiency (%)	74.86%/60.71%
Peak Gain (dBi)	3.49/5.02
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA Male

2. Material and environmental characteristics

Inner structure	PCB
Material of Plastic	ABS
Cable Type	RG174
Connector Type	SMA Male
Dimensions (mm)	116*22MM
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS

		A				B				C				D				E				F				G																																																										
		1				2				3				4				5				6				1				2				3				4				5				6																																						
																																																																																				
		Specification(Free Test): Frequency Range: 2.4-2.5G/4.9-5.85G Impedance: 50Ω V.S.W.R: ≤2.5/2 100% Continuity,short and open circuit test Materials,parts and process must by environmentally (ROHS)																																																																																		
		<table border="1"> <tr> <td>5</td> <td>Foam cotton</td> <td>116*22MM</td> <td>1</td> <td></td> </tr> <tr> <td>4</td> <td>PCB</td> <td>FR4</td> <td>1</td> <td></td> </tr> <tr> <td>3</td> <td>Radome</td> <td>Black ABS</td> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td>Cable</td> <td>RG174</td> <td>1</td> <td></td> </tr> <tr> <td>1</td> <td>Connector</td> <td>SMA Male</td> <td>1</td> <td></td> </tr> <tr> <td>NO</td> <td>Name</td> <td>Description</td> <td>QTY</td> <td>Remark</td> </tr> <tr> <td>XX</td> <td>±5.0</td> <td>Approved</td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>±3.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>.X</td> <td>±1.0</td> <td>Checked</td> <td></td> <td></td> </tr> <tr> <td>.XX</td> <td>±0.2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>XXX</td> <td>±0.1</td> <td>Drawing</td> <td></td> <td></td> </tr> </table>																								5	Foam cotton	116*22MM	1		4	PCB	FR4	1		3	Radome	Black ABS	1		2	Cable	RG174	1		1	Connector	SMA Male	1		NO	Name	Description	QTY	Remark	XX	±5.0	Approved			X	±3.0				.X	±1.0	Checked			.XX	±0.2				XXX	±0.1	Drawing						
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4. Antenna test parameters

Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

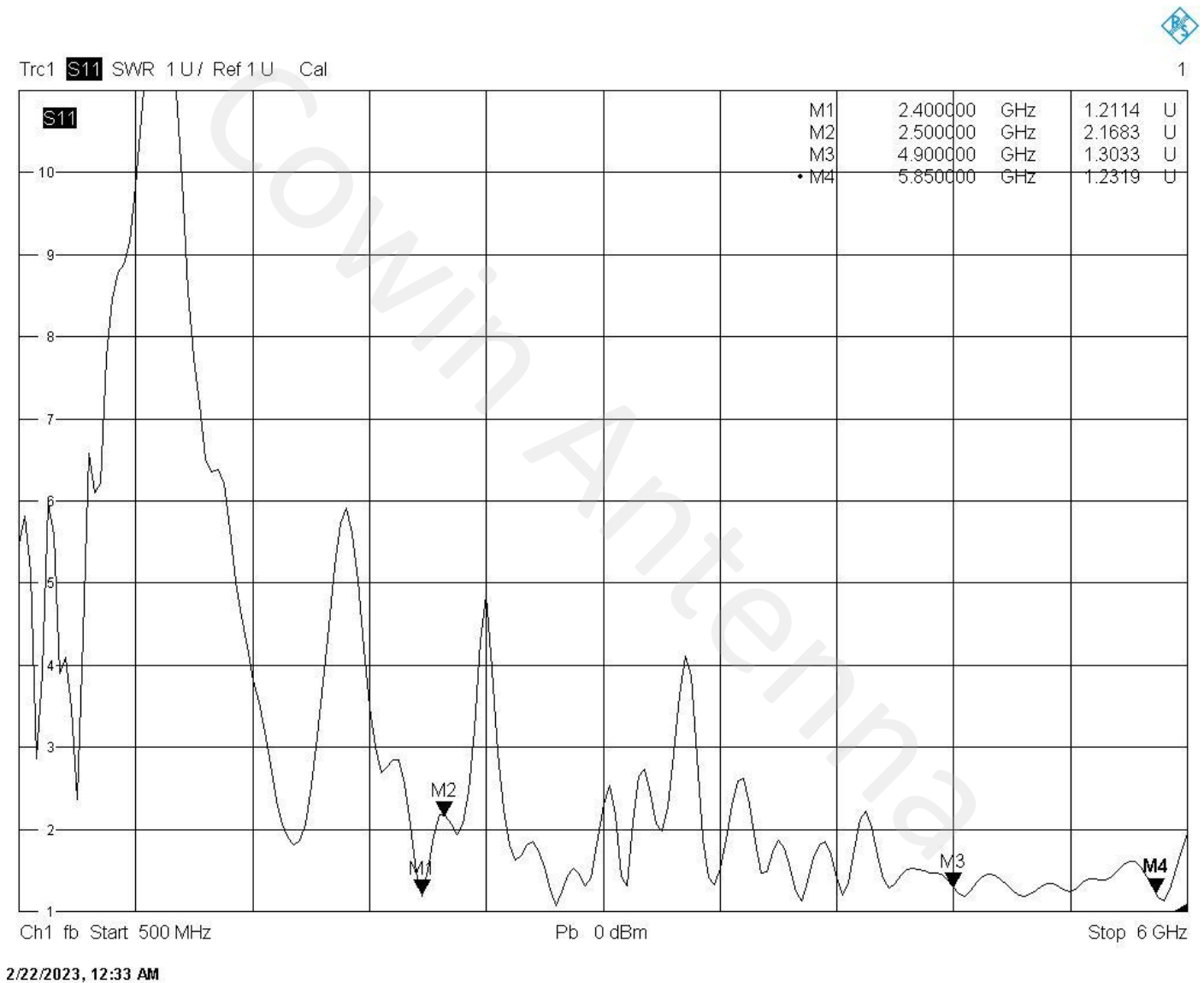
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

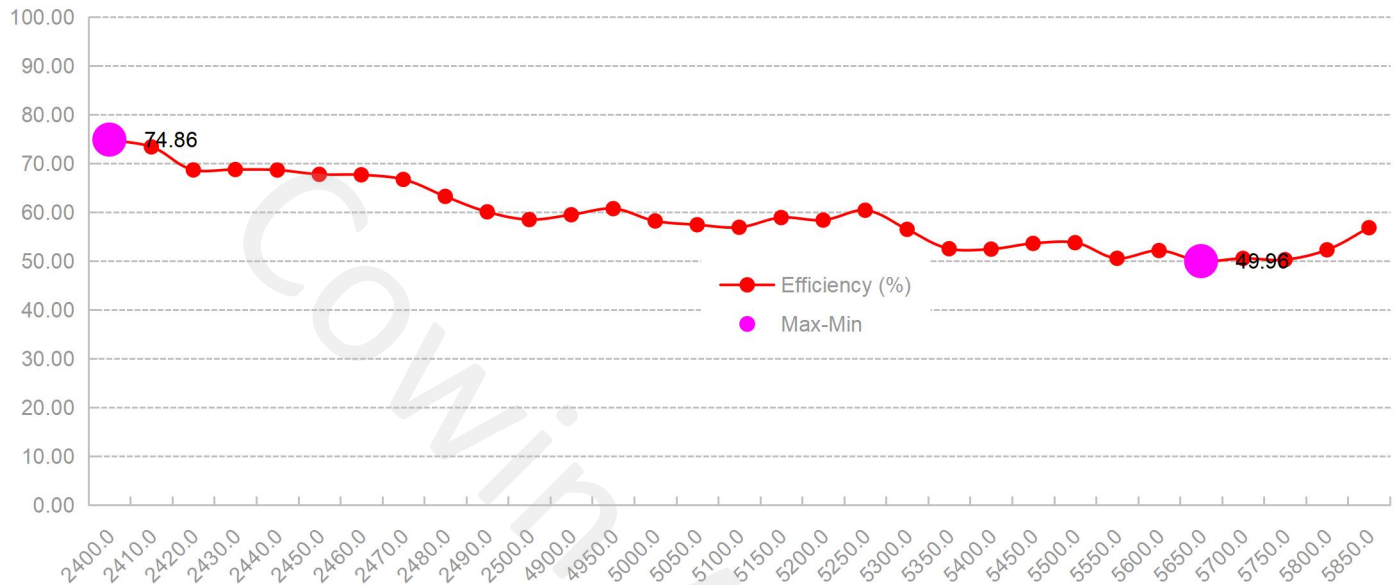
The comprehensive tester is Agilent cmv500



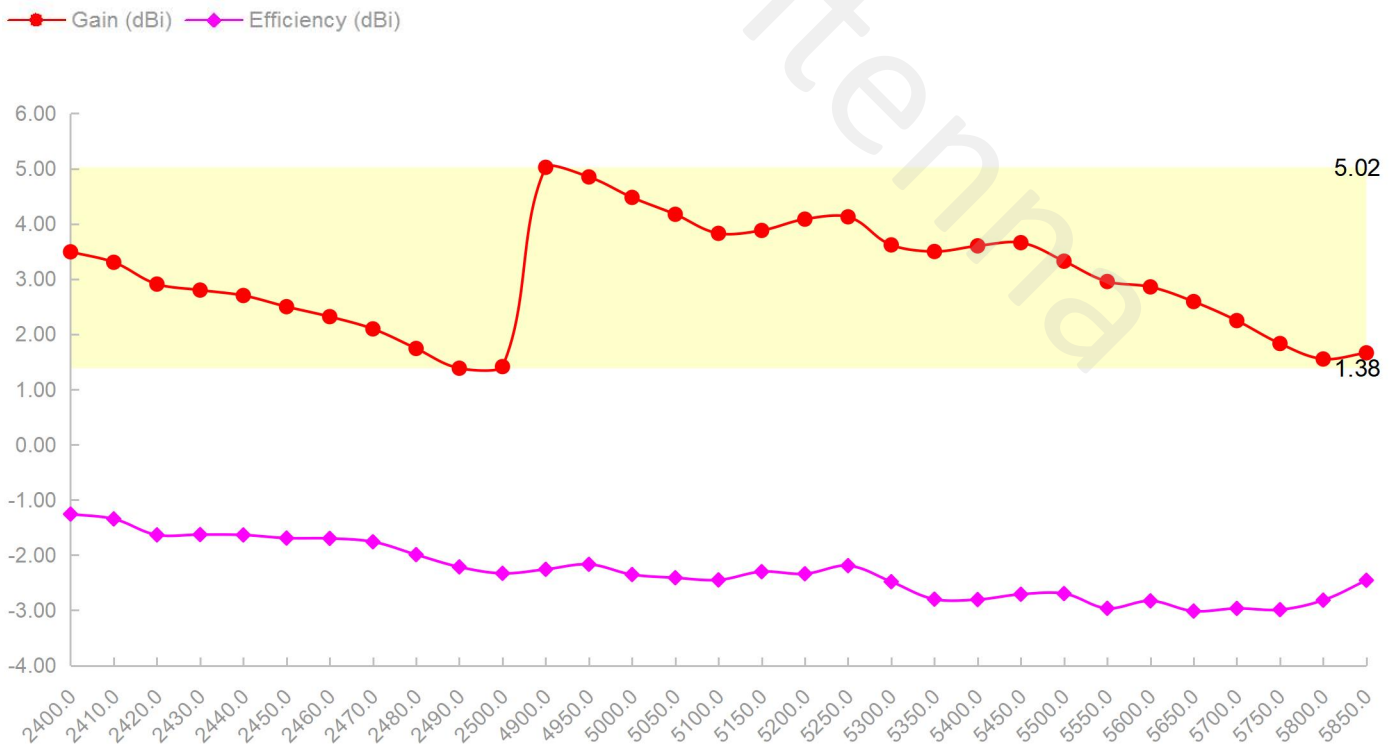
4.1 VSWR



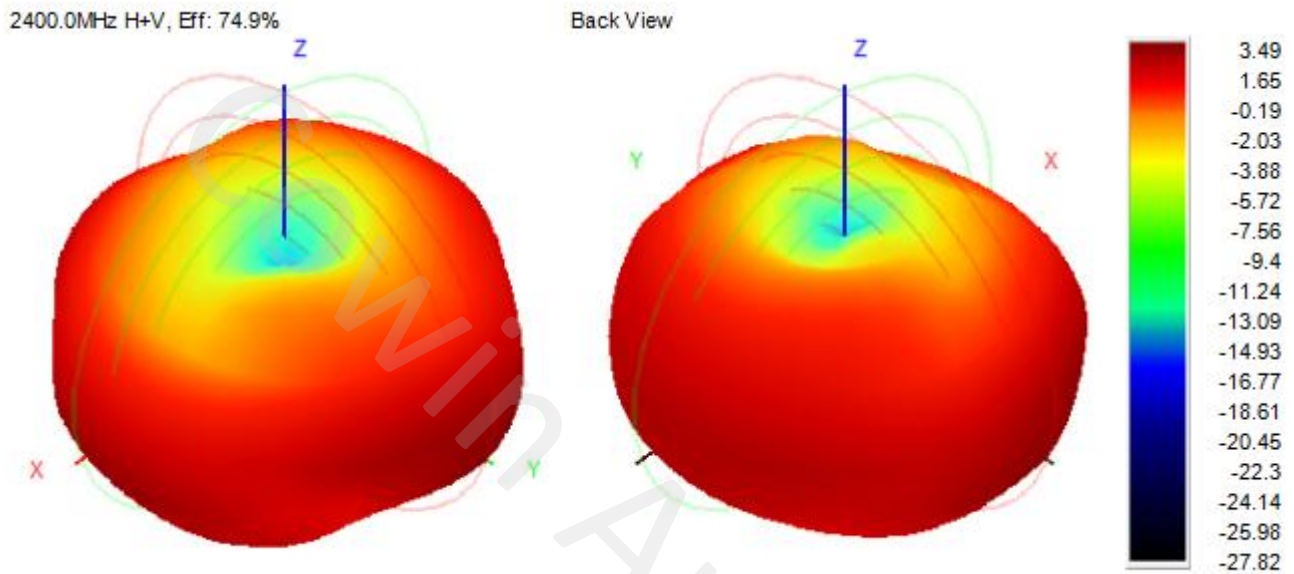
4.2 Efficiency



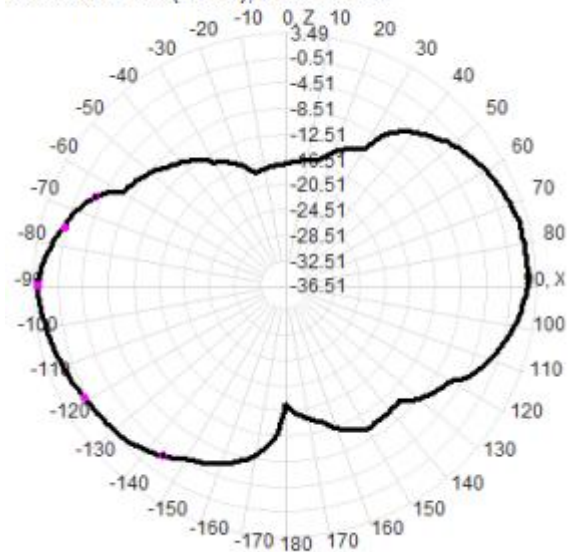
4.3 Peak gain



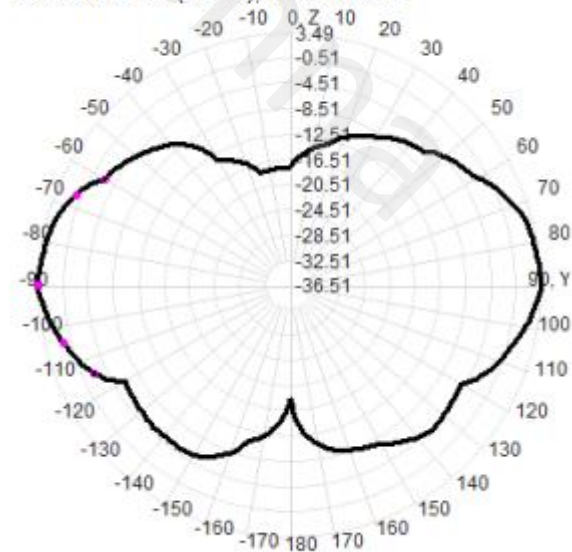
4.4 3D&2D Radiation Patterns



2400.0MHz Total(E1-XZ), Max= 2.79dBi

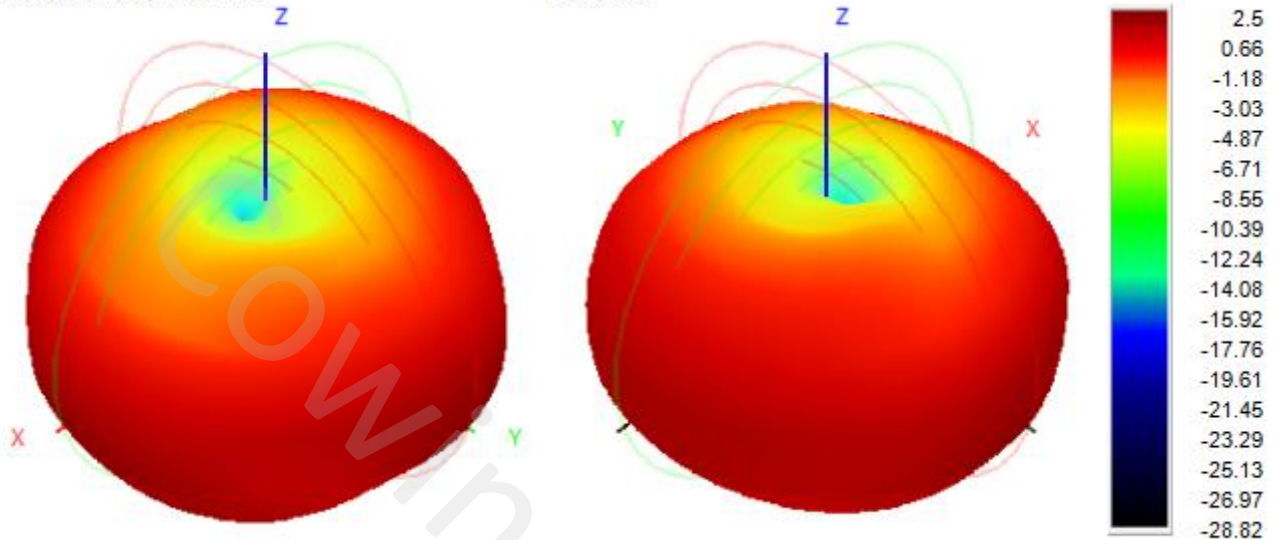


2400.0MHz Total(E2-YZ), Max= 3.49dBi



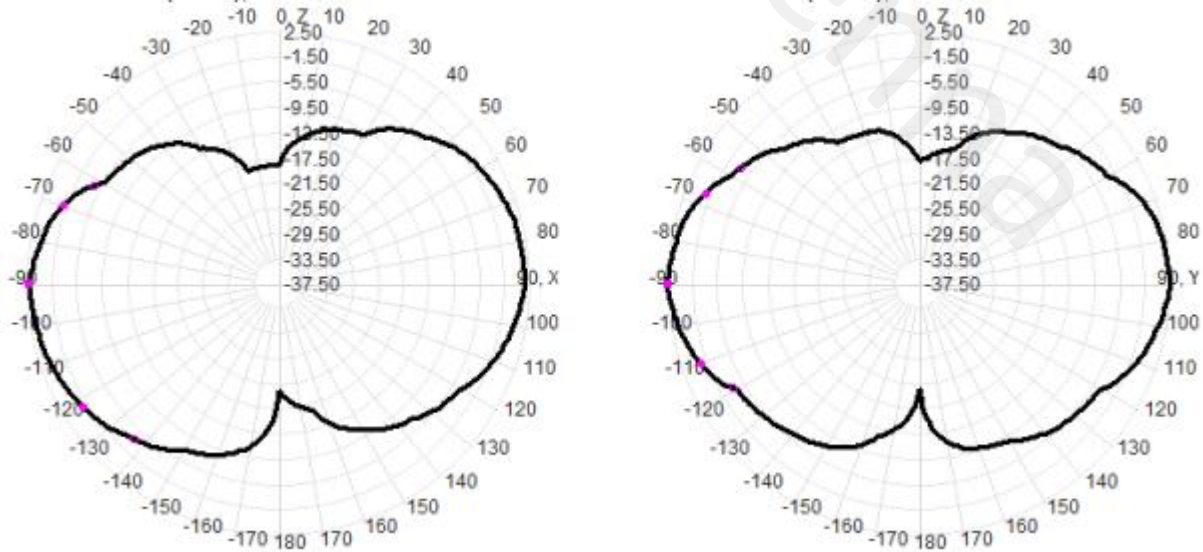
2450.0MHz H+V, Eff: 67.7%

Back View



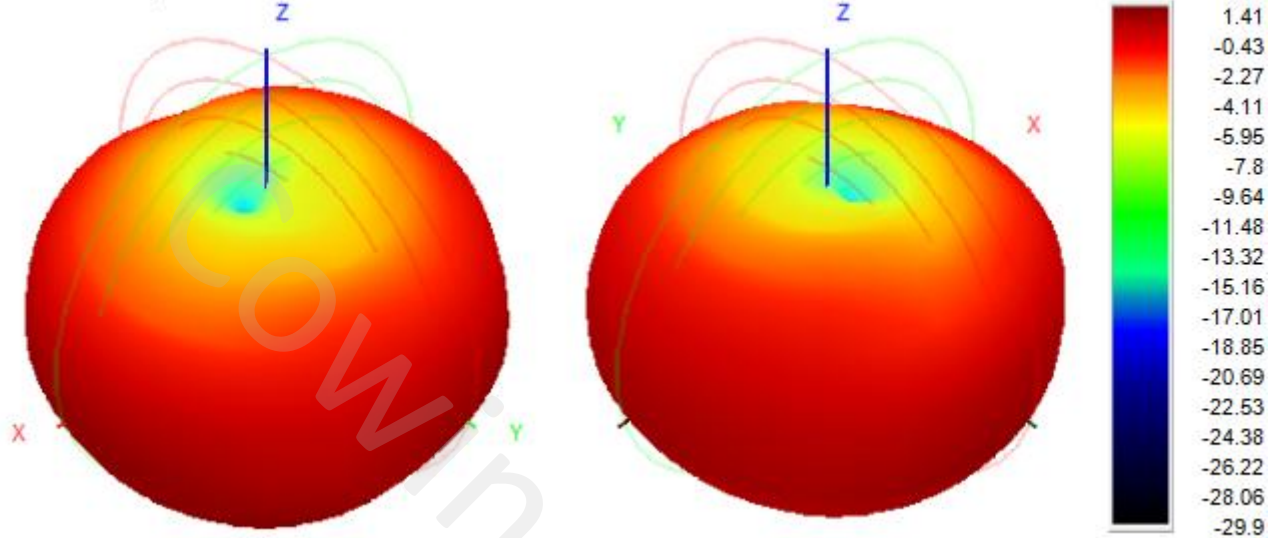
2450.0MHz Total(E1-XZ), Max= 2.10dBi

2450.0MHz Total(E2-YZ), Max= 2.50dBi



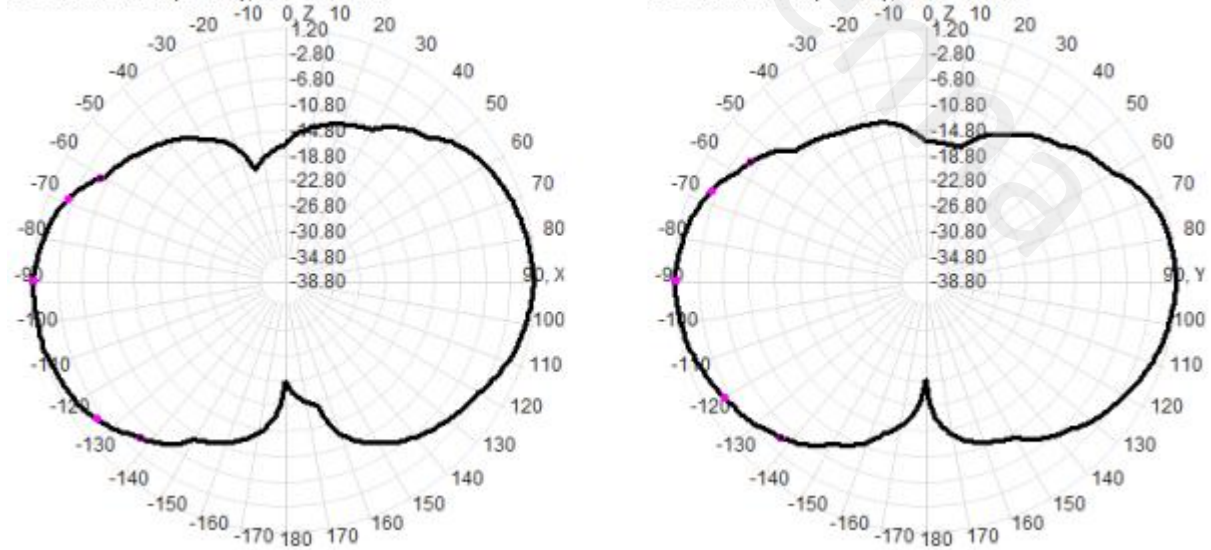
2500.0MHz H+V, Eff: 58.5%

Back View



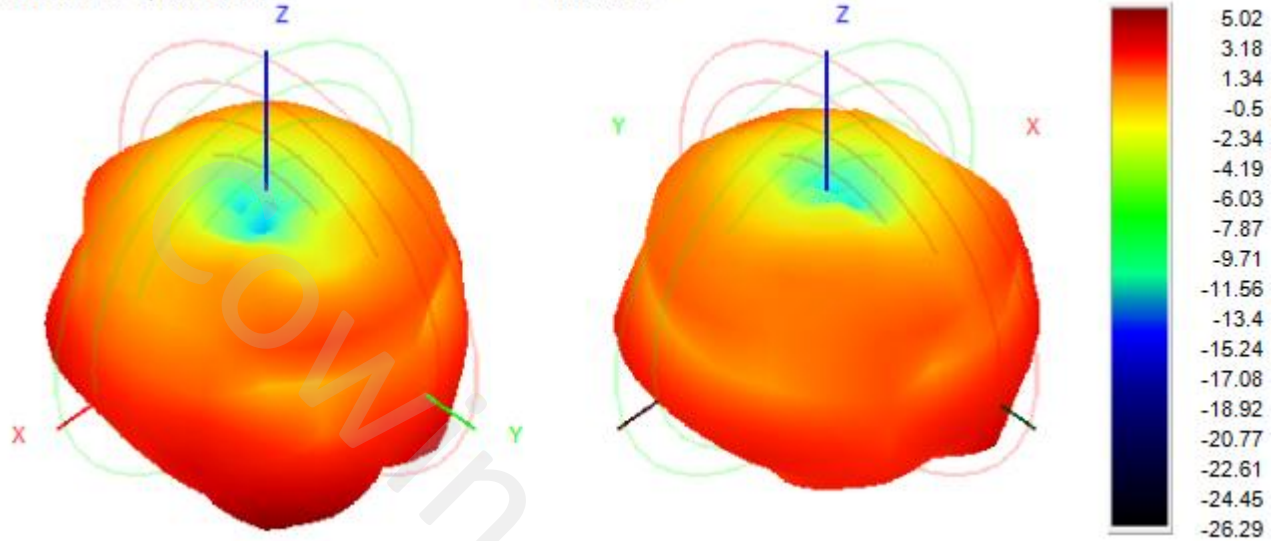
2500.0MHz Total(E1-XZ), Max= 1.13dBi

2500.0MHz Total(E2-YZ), Max= 1.01dBi



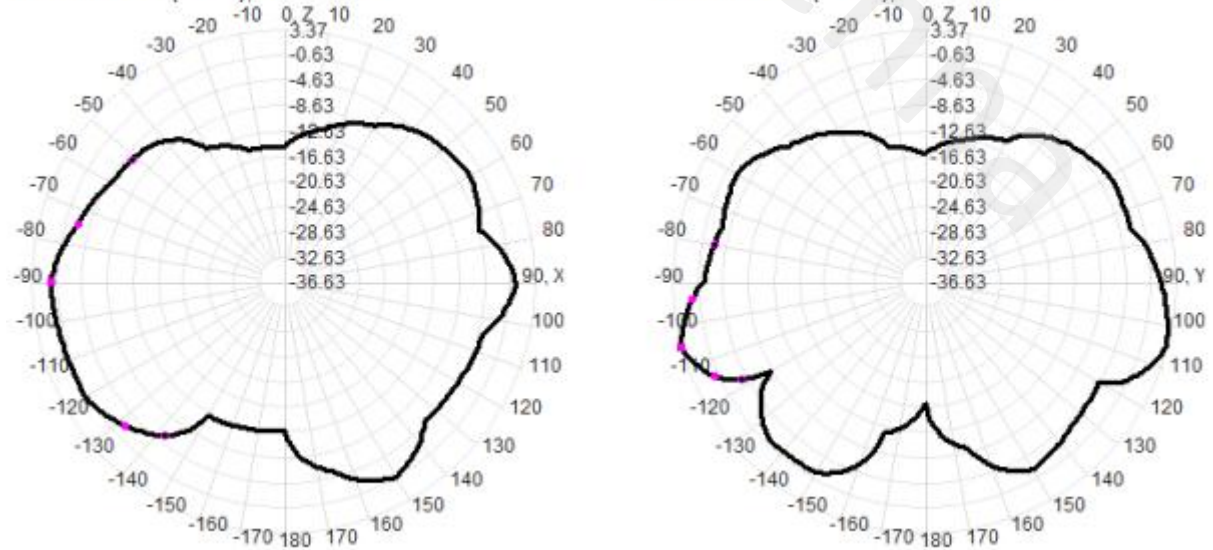
4900.0MHz H+V, Eff: 59.5%

Back View

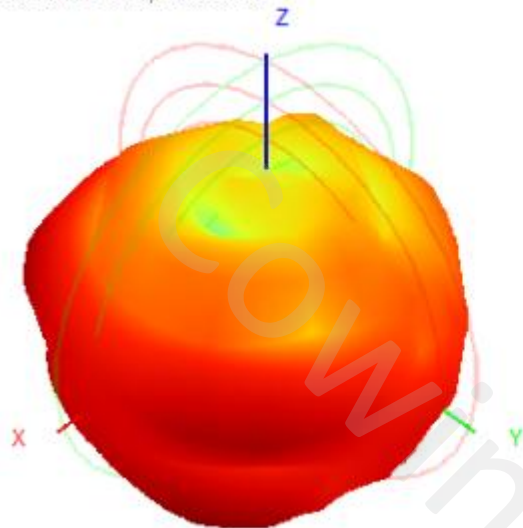


4900.0MHz Total(E1-XZ), Max= 0.33dBi

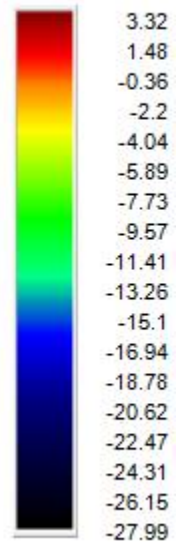
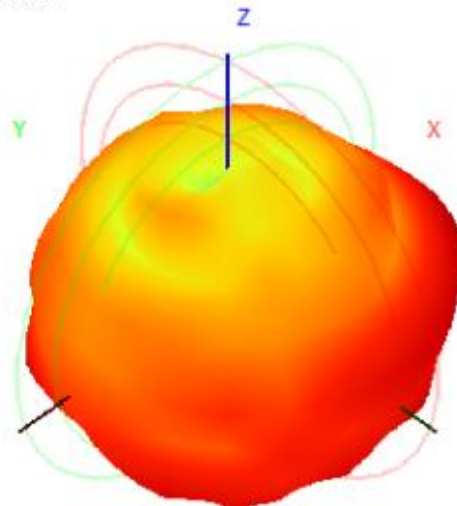
4900.0MHz Total(E2-YZ), Max= 3.37dBi



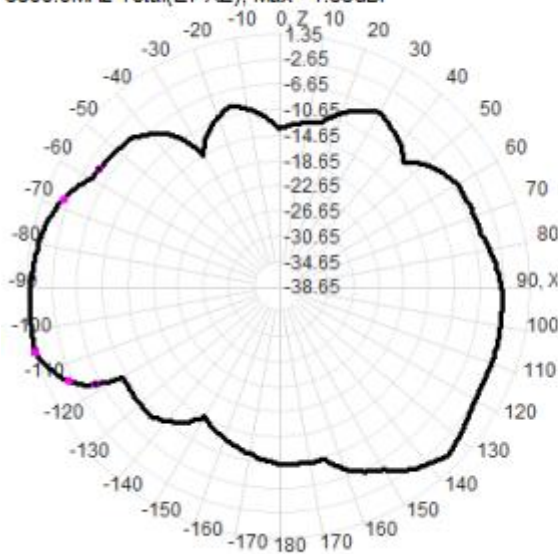
5500.0MHz H+V, Eff: 53.7%



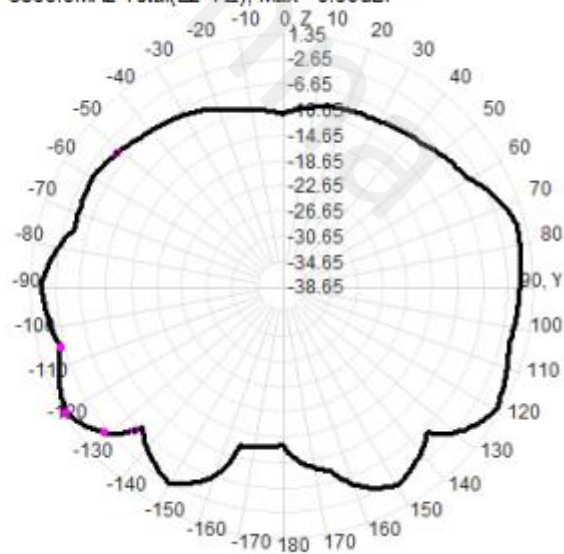
Back View



5500.0MHz Total(E1-XZ), Max= 1.35dBi

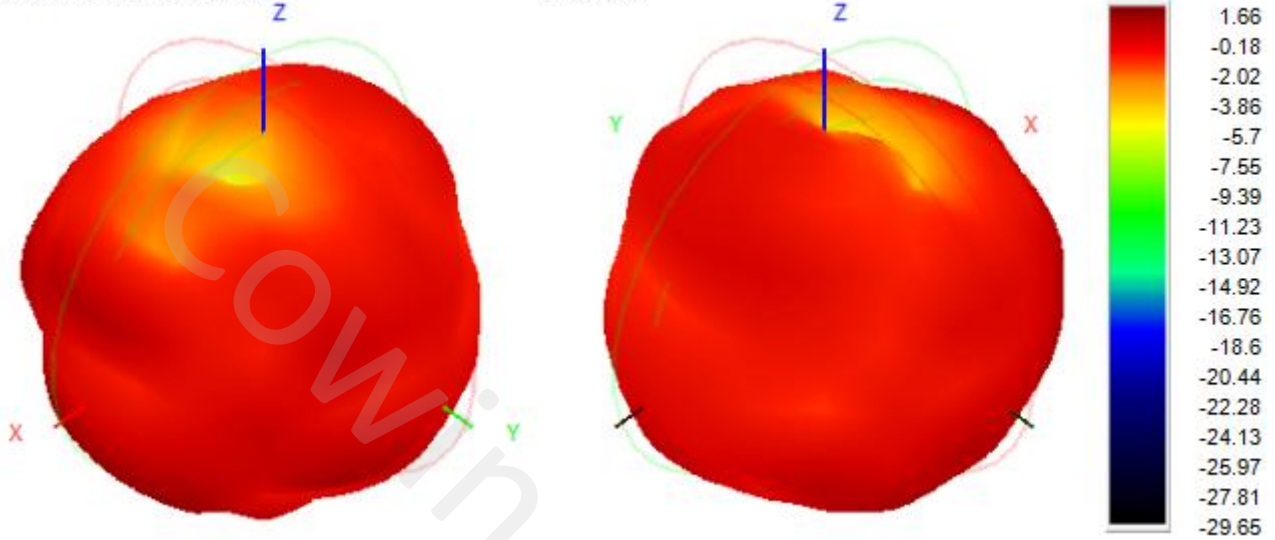


5500.0MHz Total(E2-YZ), Max= 0.98dBi



5850.0MHz H+V, Eff: 56.8%

Back View



5850.0MHz Total(E1-XZ), Max= 1.10dBi

5850.0MHz Total(E2-YZ), Max= 0.49dBi

