

CW-BLG-0017

868MHz Fiberglass antenna

Key Features

Frequency: 868MHz

N Connector

Dimensions:300*20mm



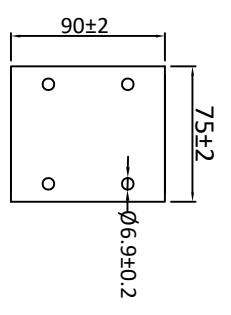
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	868MHZ
VSWR	≤2
Efficiency (%)	95.53%
Peak Gain (dBi)	3.38
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	N

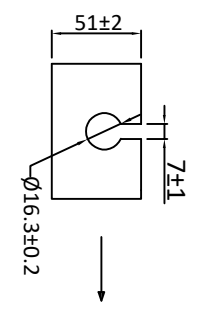
2. Material and environmental characteristics

inner structure	Copper Tube
Material of Plastic	Fiberglass
Cable Type	RG58
Connector Type	N
Dimensions (mm)	300*20MM
Antenna color	Gray
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS

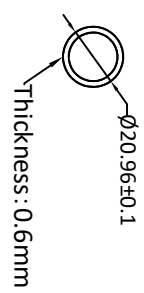
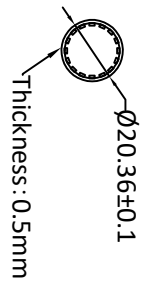
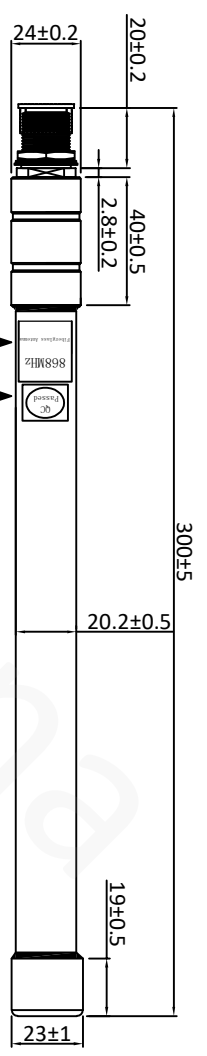
REV	Date	Description
X1	2024/01/08	New issue



Quantity is 4PCS



Thickness: 2mm



Attachment: The above parts will be assembled on the finished product

Label 1 content:
QC
Passed

Label 2 content:
868MHz
Fiberglass Antenna

Specification(Free Test):
Frequency Range: 868MHZ
Impedance: 50Ω
V.S.W.R: ≤2.0
100% Continuity,short and open circuit test
Materials,parts and process must by environmentally (ROHS)

14	Hat	White transparent PC	1	
13	Drivev Screw	Iron	4	
12	Nut	Nickel plated brass	1	
11	Rack	Aluminium	1	
10	Shim	Nickel plated brass	1	
9	Plum Blossom Gasket	Nickel plated brass	1	
8	Label 2	White ordinary waterproof	1	
7	Label 1	White coated waterproof	1	
6	Hat	Grey ABS	1	
5	Rod Sleeve	Grey fiberglass fiber	1	
4	Aluminium Sheath	Aluminium anode	1	
3	Signal Tube	Copper tube	1	
2	Cable	Black RG58	1	
1	Connector	N Female	1	
NO	Name	Description	QTY	Remark
XX.	±5.0	Approved		
X.	±3.0	Customer		
X.	±1.0	Part NO.		
.XX	±0.2	Part name		
.XXX	±0.1	CW P/NO.		
		REV		
		Unit		
		File		
		Sheet		
		1/1		



Cowin Antenna

4. Antenna test parameters

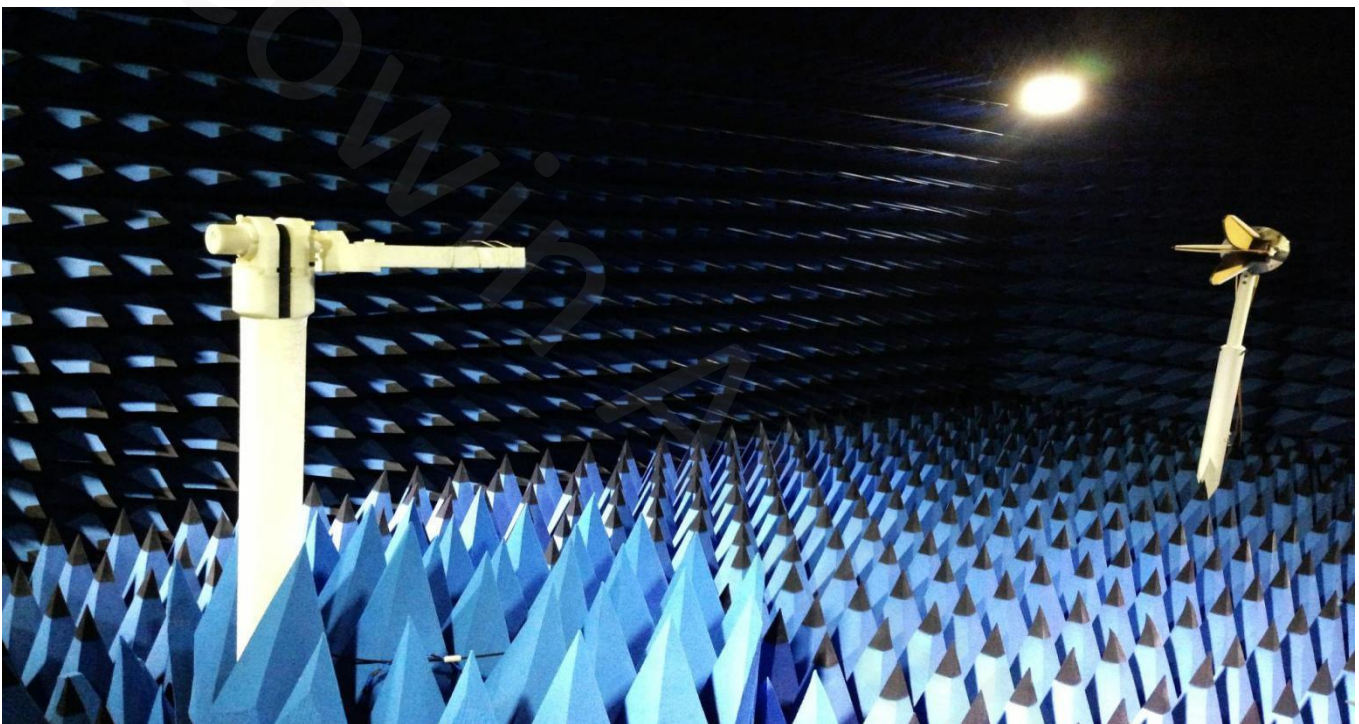
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

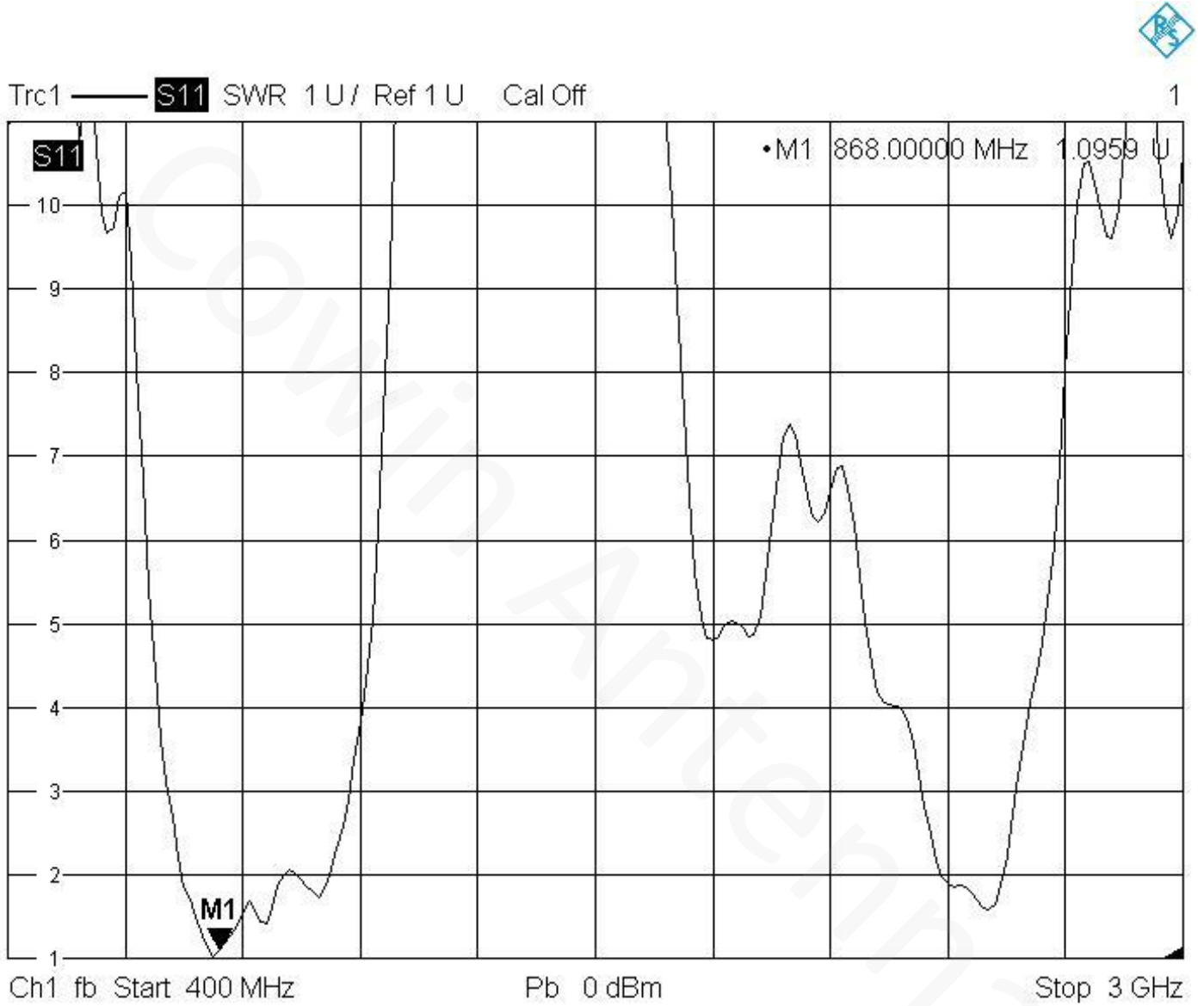
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

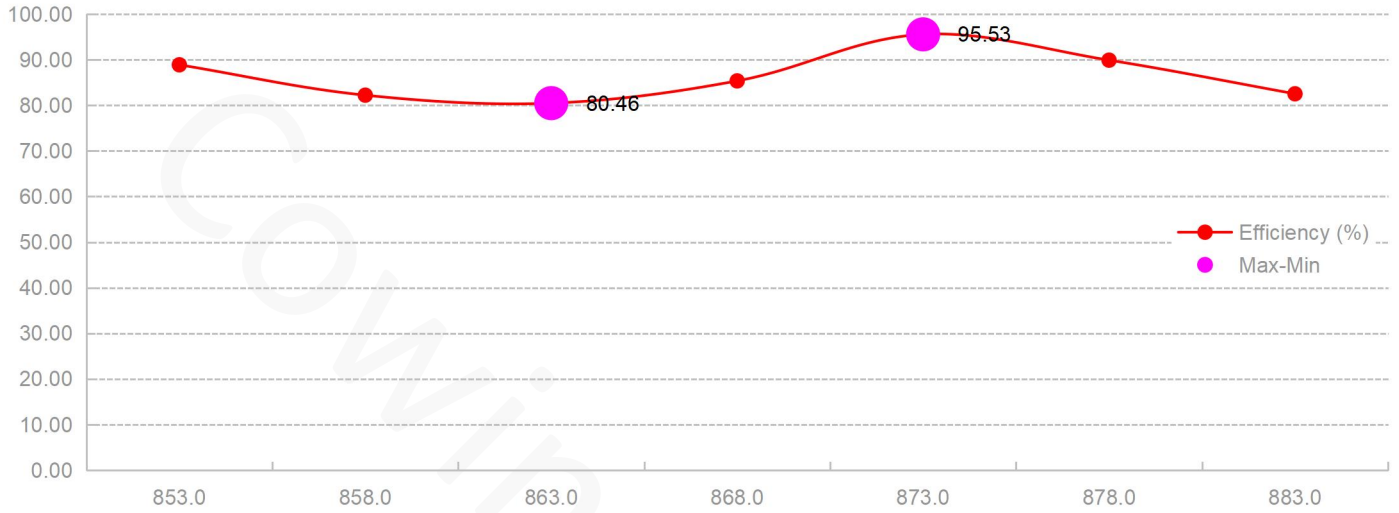


4.1 VSWR

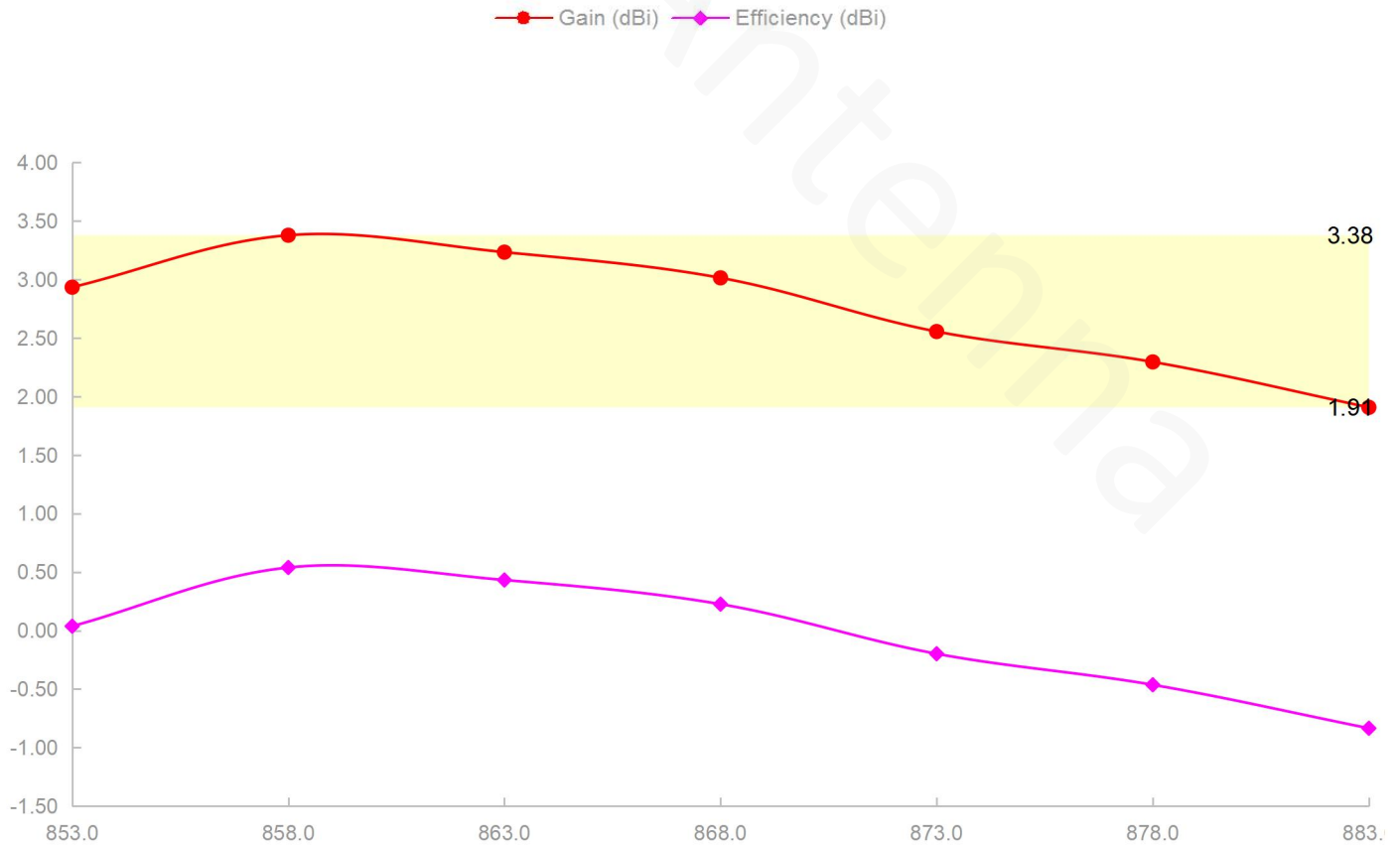


1/8/2024, 3:05 PM

4.2 Efficiency



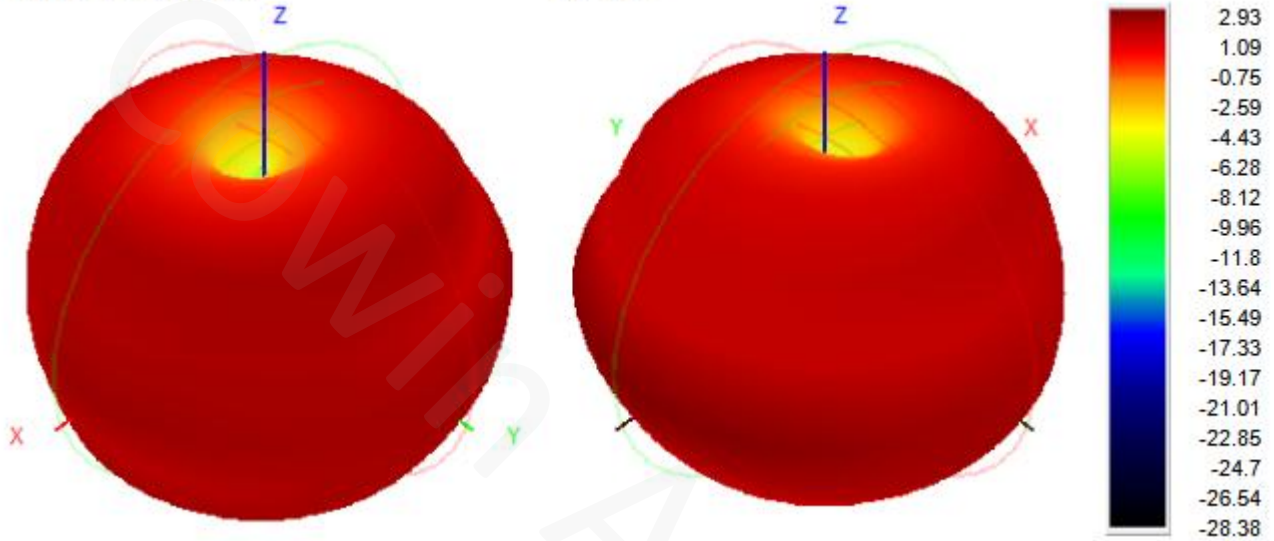
4.3 Peak gain



4.4 3D&2D Radiation Patterns

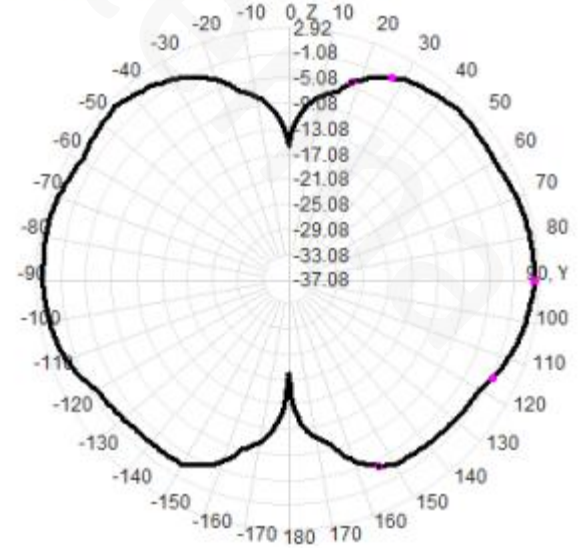
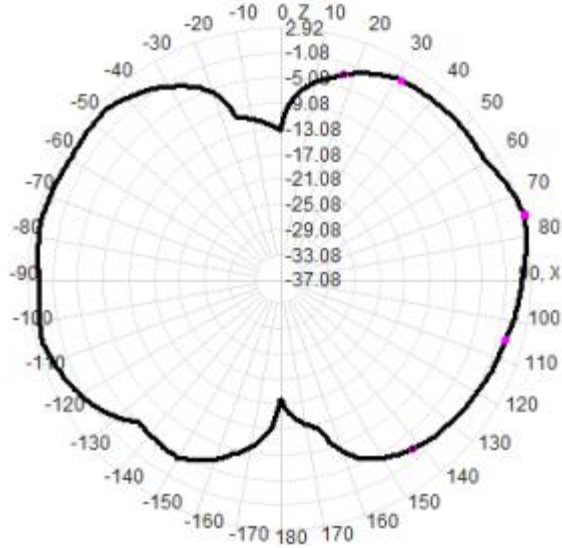
853.0MHz H+V, Eff: 88.9%

Back View



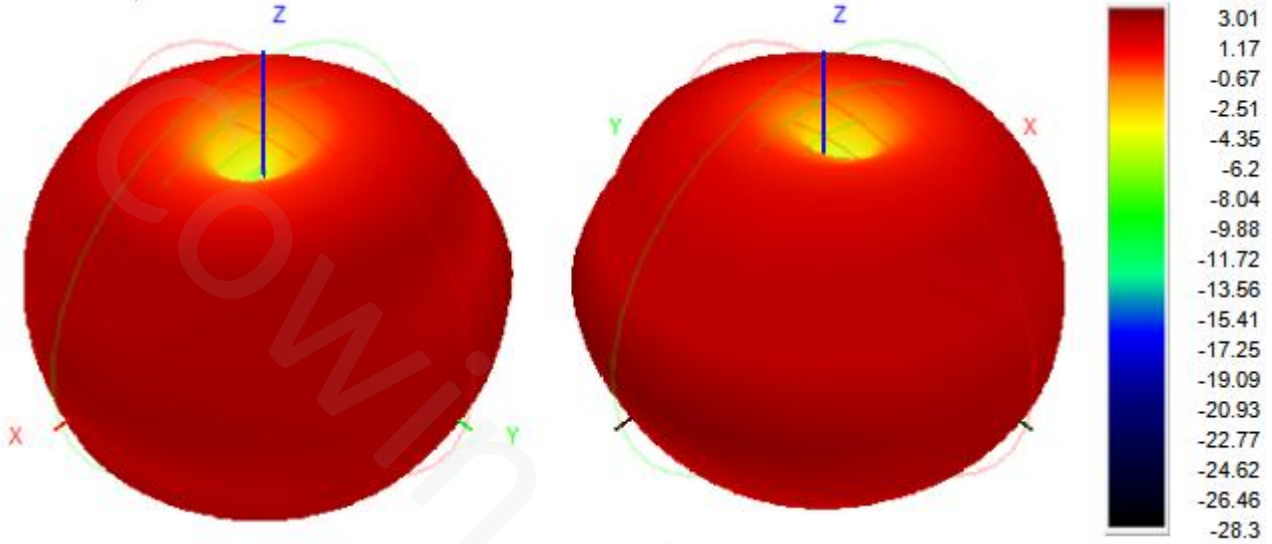
853.0MHz Total(E1-XZ), Max= 2.92dBi

853.0MHz Total(E2-YZ), Max= 1.93dBi



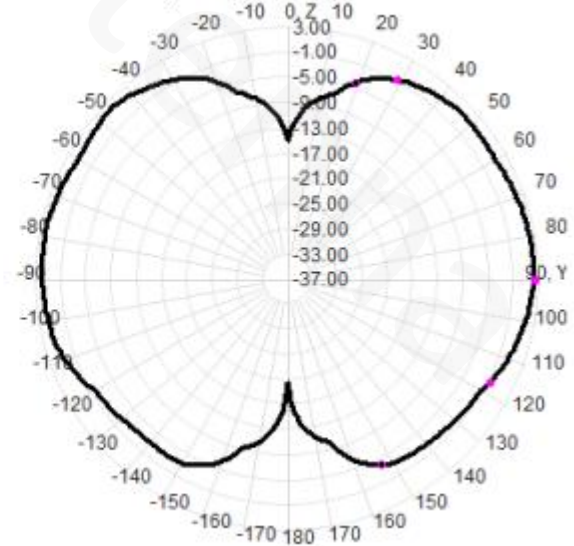
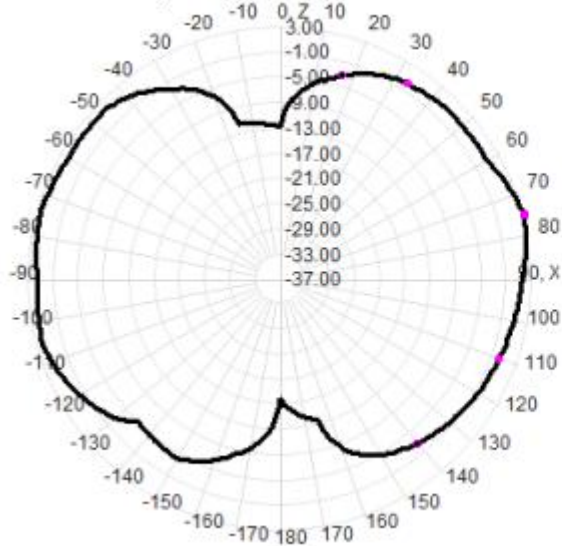
868.0MHz H+V, Eff: 85.3%

Back View



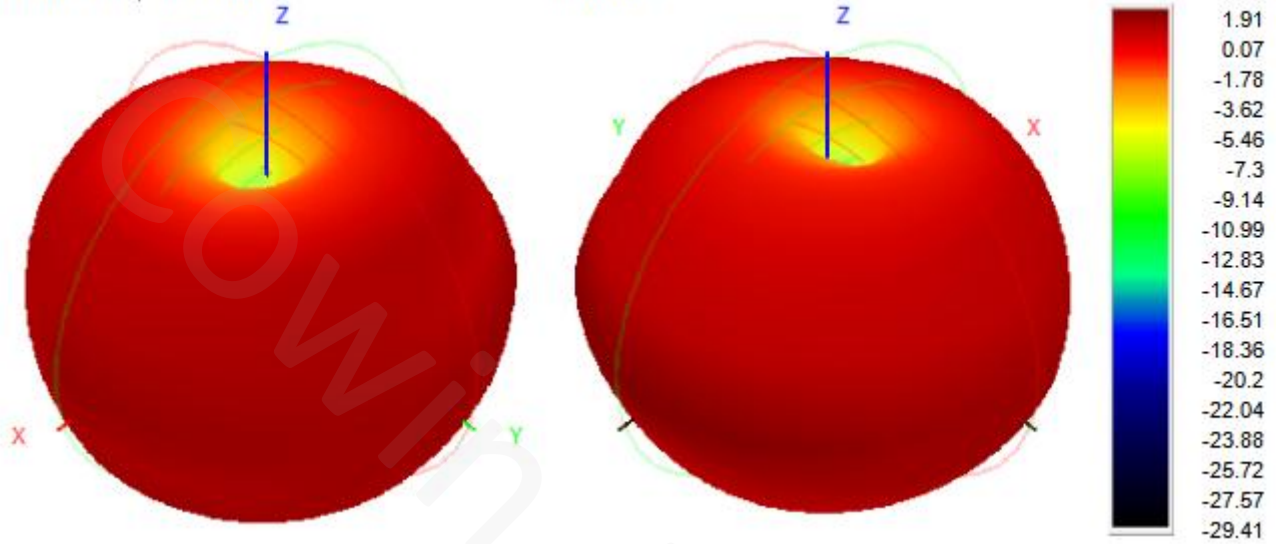
868.0MHz Total(E1-XZ), Max= 3.00dBi

868.0MHz Total(E2-YZ), Max= 2.07dBi



883.0MHz H+V, Eff: 82.5%

Back View



883.0MHz Total(E1-XZ), Max= 1.89dBi

883.0MHz Total(E2-YZ), Max= 1.18dBi

