

CW-WZ-0107

Lora External Antenna

Key Features

Frequency: 868MHz/915MHz

Right Angle SMA Male Connector

External Rubber

Dimensions 115mm



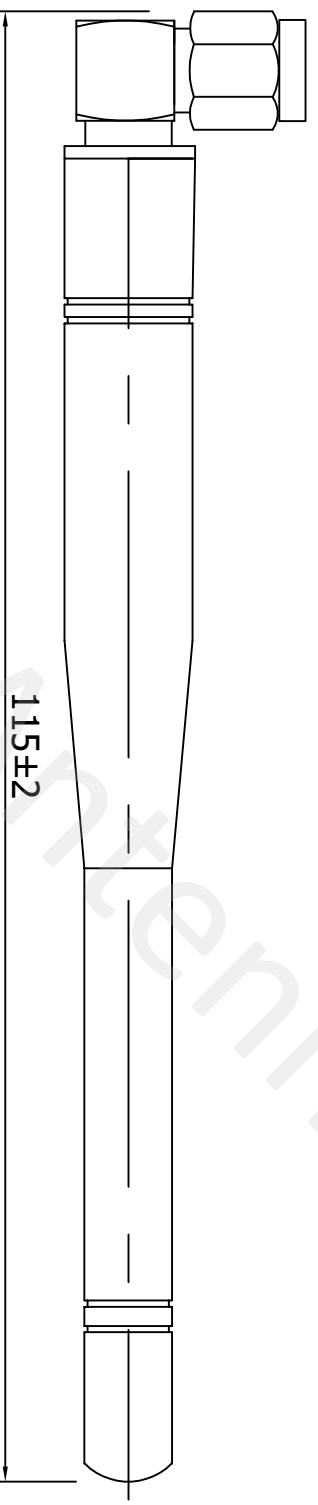
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	868MHz/915MHz
VSWR	2
Efficiency (%)	67.44%
Peak Gain (dBi)	2.69
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	90° SMA male

2. Material and environmental characteristics

Material of PCB	N/A
Material of Plastic	TPEE
Cable Type	2.8mm insulated wire
Connector Type	90° SMA male
Dimensions (mm)	115*10.3MM
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	2023/02/02	New issue



Specification(Free Test):
 Frequency Range: 868MHZ/915MHZ
 Impedance: 50Ω
 V.S.W.R: ≤2
 100% Continuity,short and open circuit test
 Materials,parts and process must by environmentally (ROHS)

4	Radome	Black TPEE	1		
3	Signal tube	Copper	2		
2	Cable	2.8mm insulated wire	1		
1	Connector	90° 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			
		Customer			
		Part NO.			
		Part name			External antenna
		CW P/NO.			CW-WZ-0107
		REV	Unit	File	
		X1	m/m	Sheet :	1/1



4. Antenna test parameters

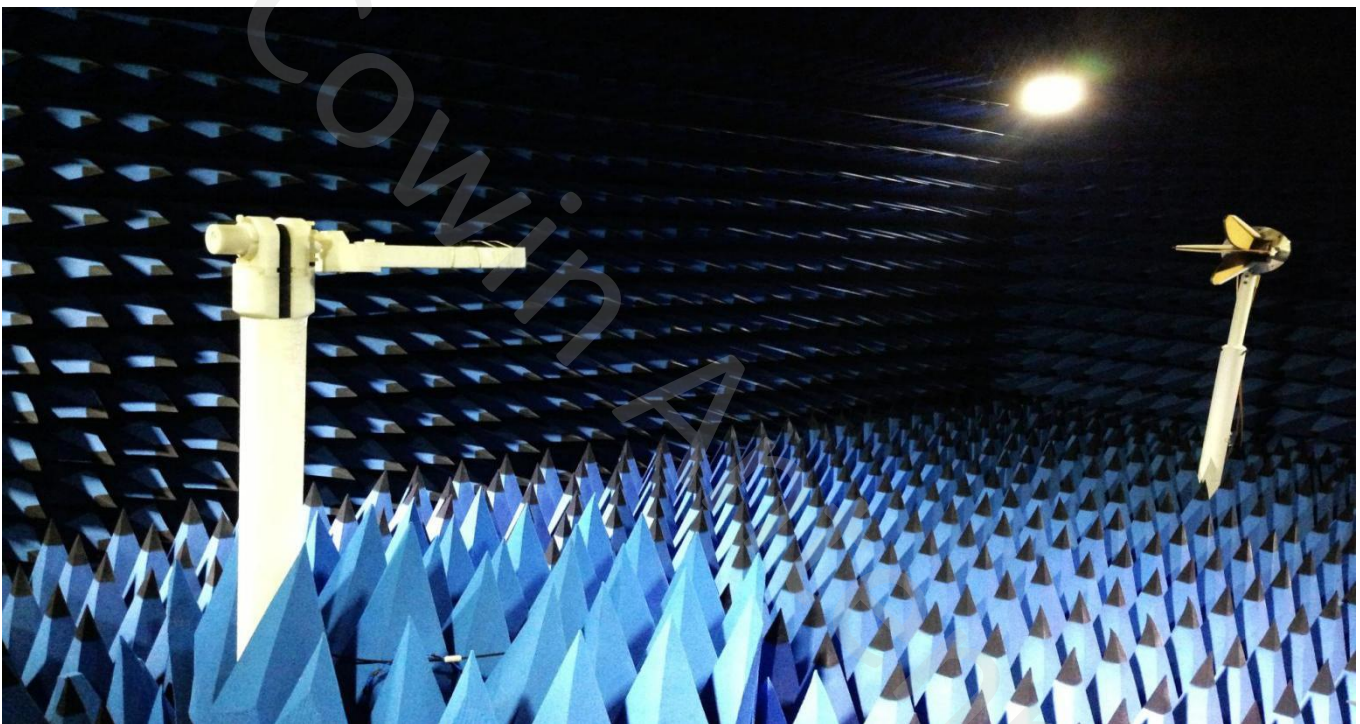
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

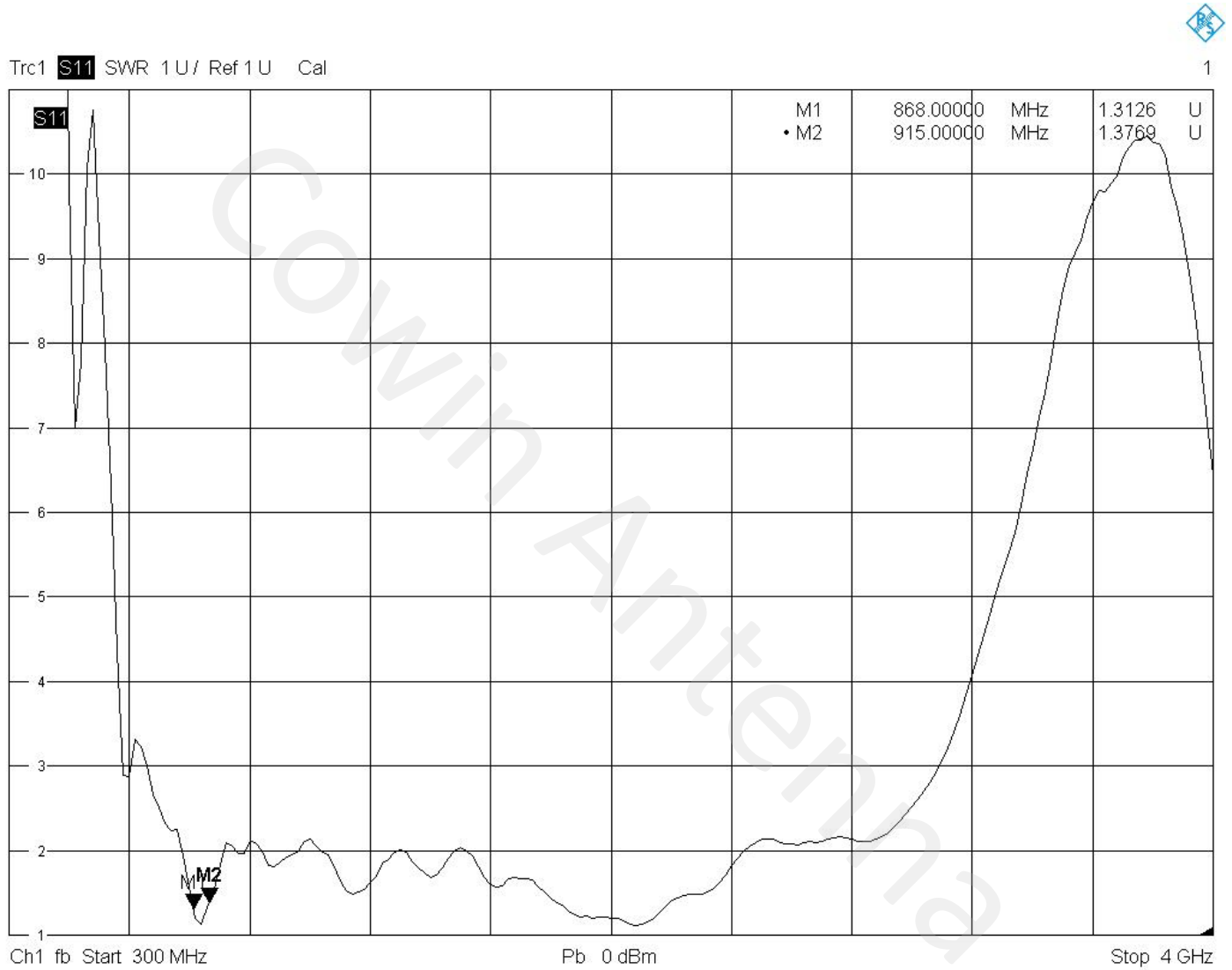
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500



4.1 VSWR

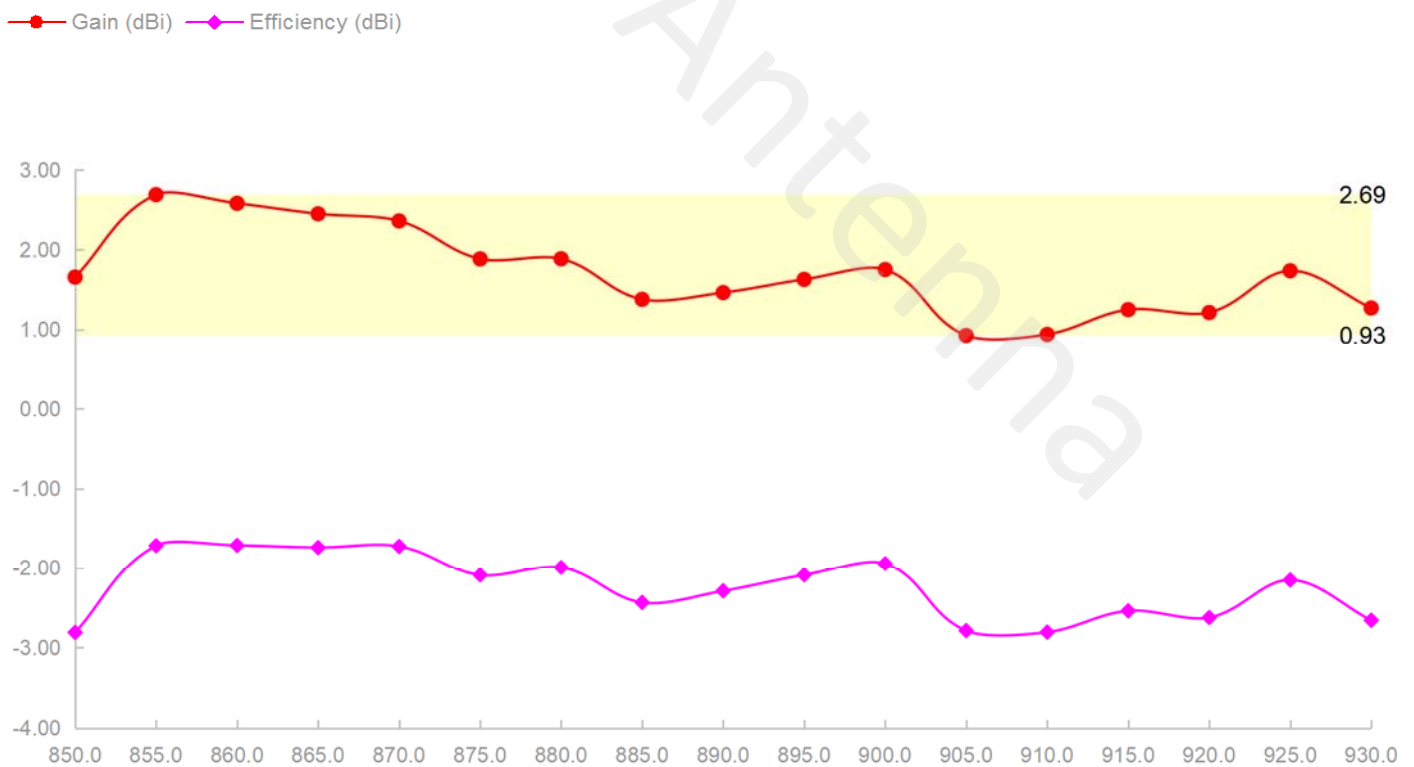


2/1/2023, 9:42 PM

4.2 Efficiency



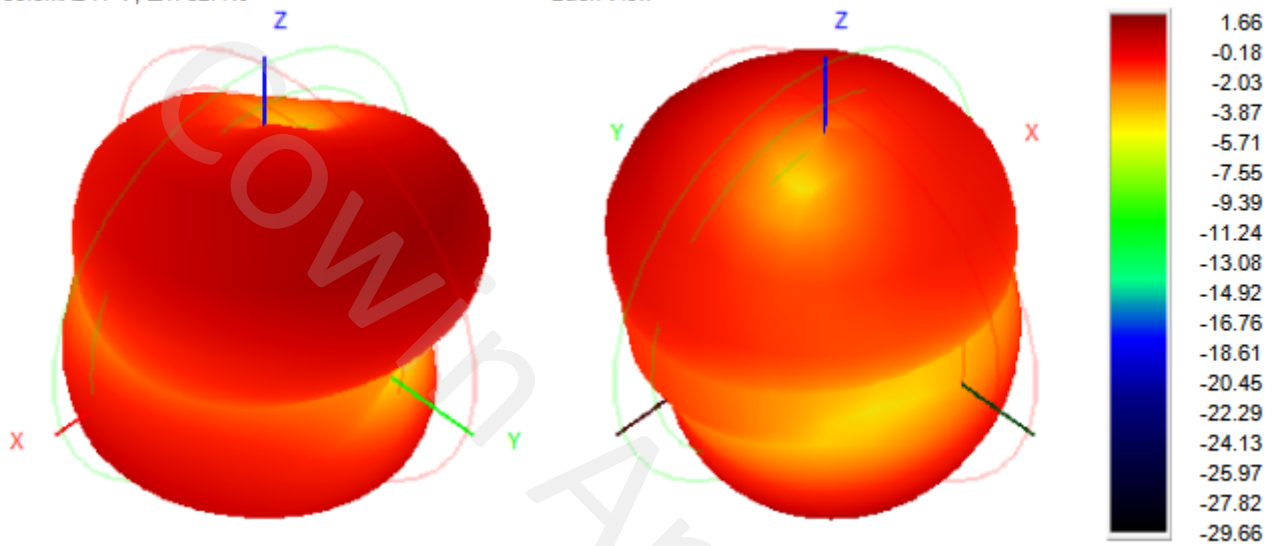
4.3 Peak gain



4.4 3D&2D Radiation Patterns

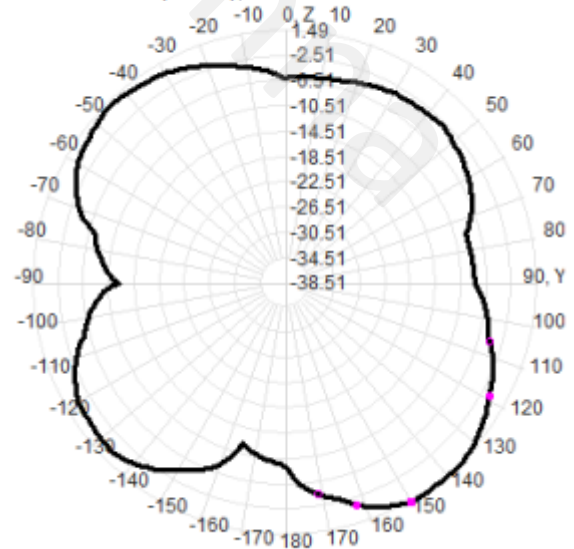
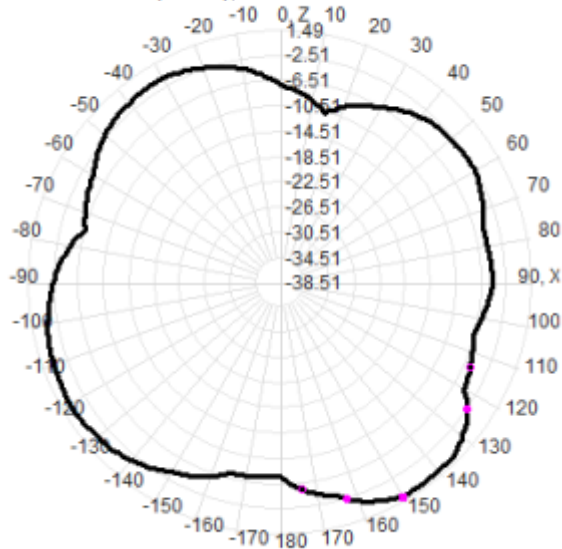
850.0MHz H+V, Eff: 52.4%

Back View

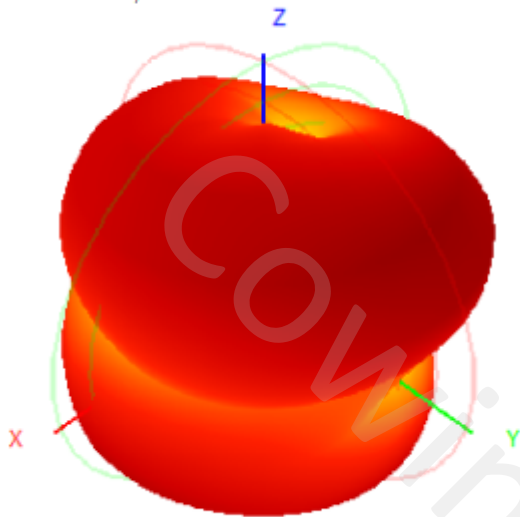


850.0MHz Total(E1-XZ), Max= 0.47dBi

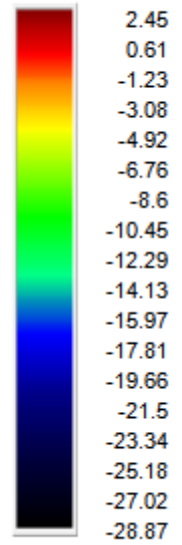
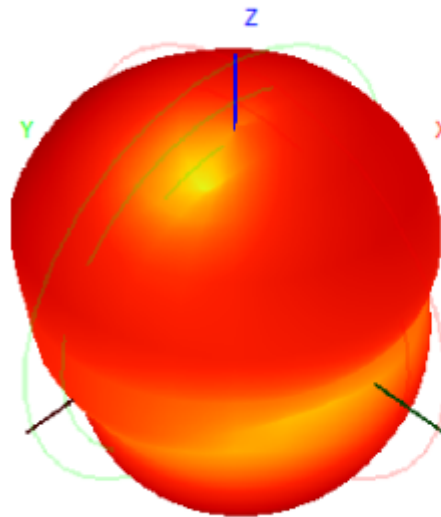
850.0MHz Total(E2-YZ), Max= 1.49dBi



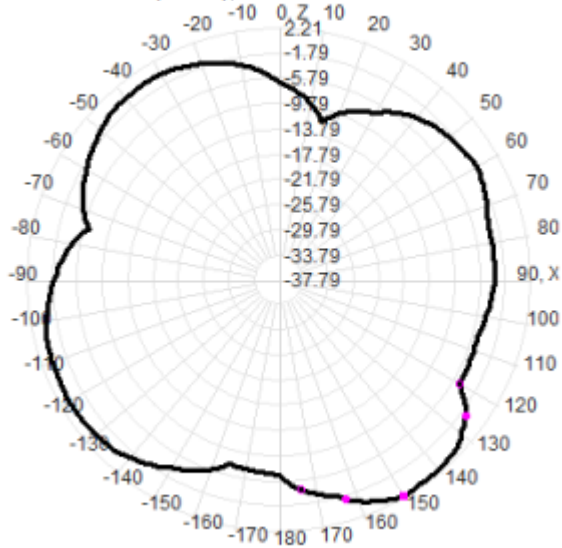
865.0MHz H+V, Eff: 67.0%



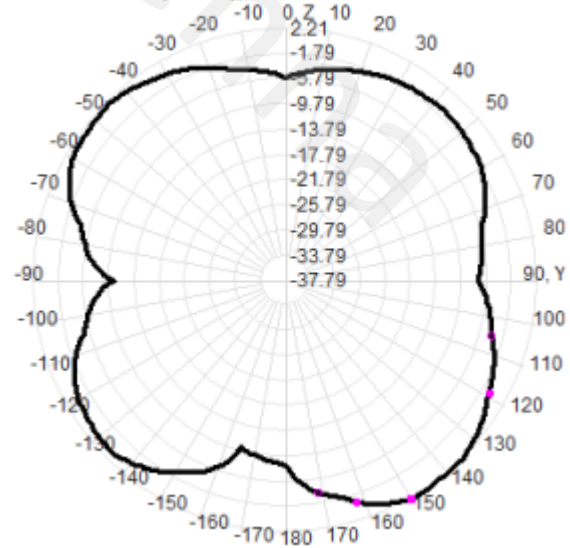
Back View



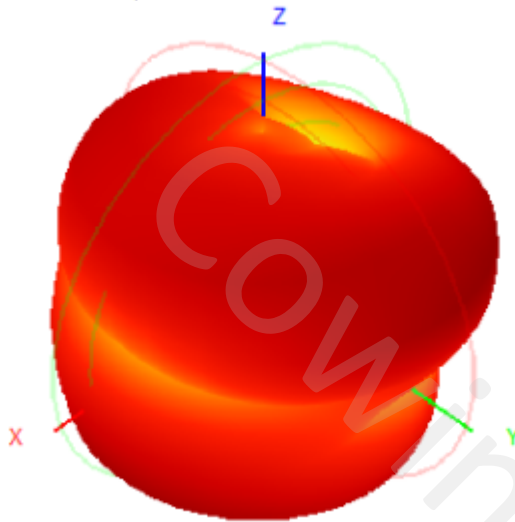
865.0MHz Total(E1-XZ), Max= 1.65dBi



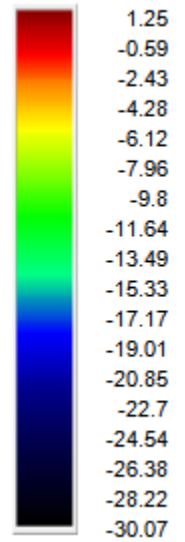
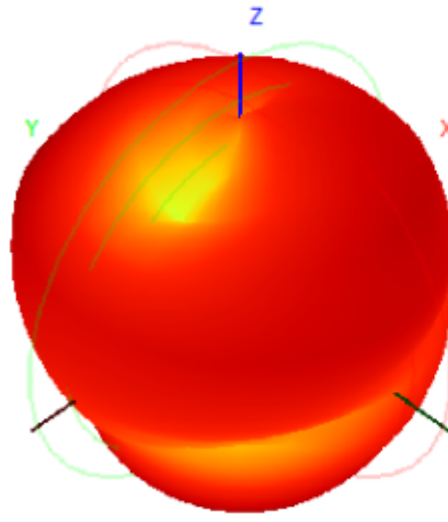
865.0MHz Total(E2-YZ), Max= 2.21dBi



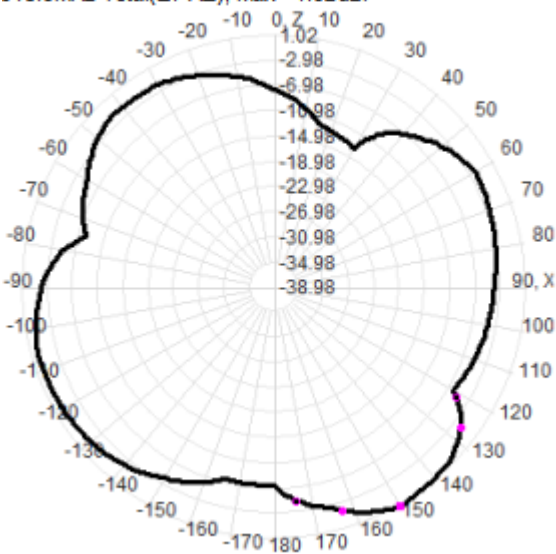
915.0MHz H+V, Eff: 55.7%



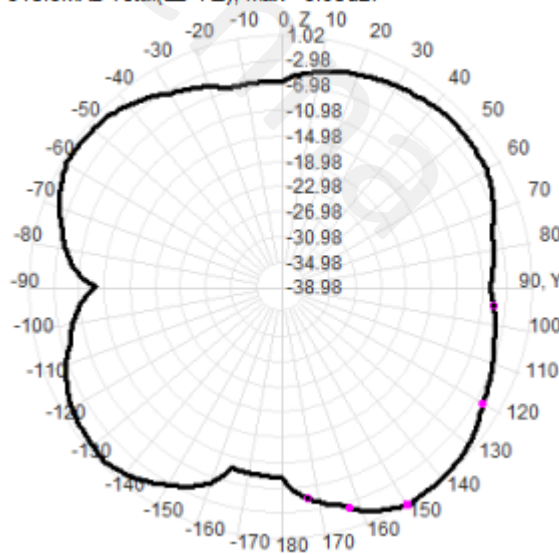
Back View



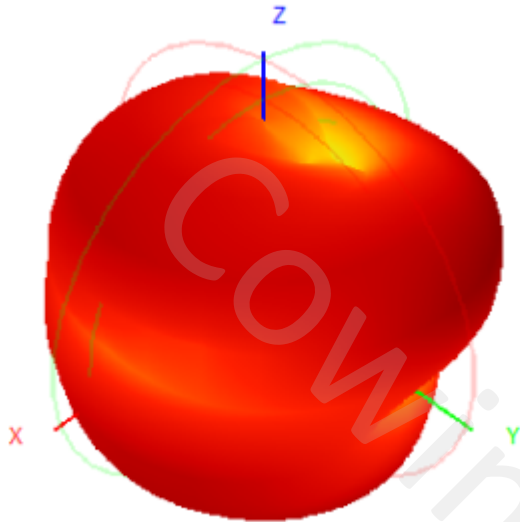
915.0MHz Total(E1-XZ), Max= 1.02dBi



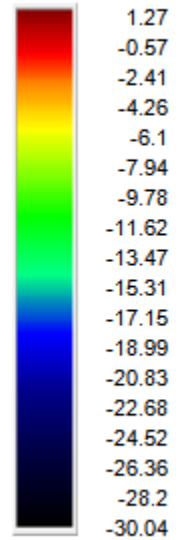
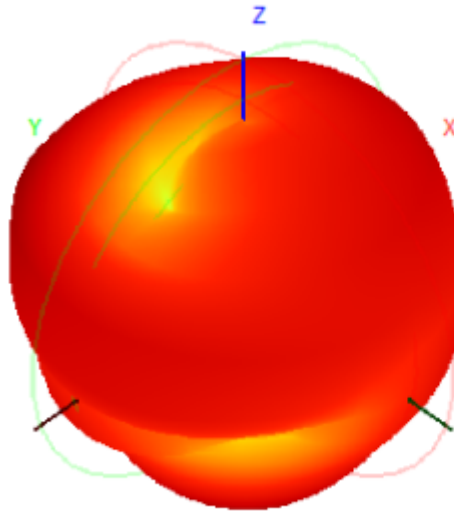
915.0MHz Total(E2-YZ), Max= 0.85dBi



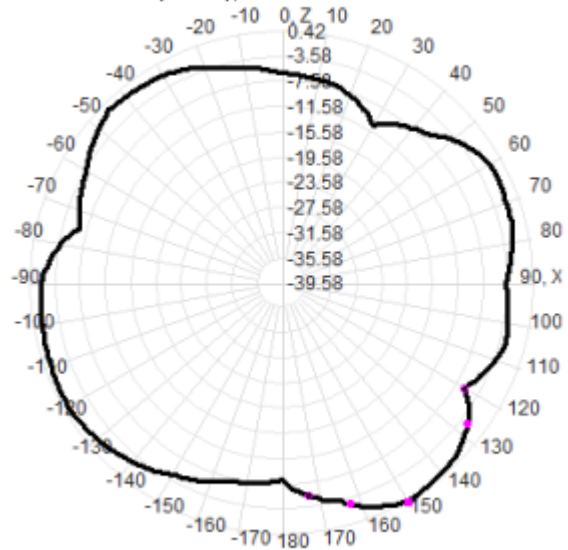
930.0MHz H+V, Eff: 54.2%



Back View



930.0MHz Total(E1-XZ), Max= 0.32dBi



930.0MHz Total(E2-YZ), Max= 0.42dBi

