

CW-WZ-0121

868/915MHZ External Antenna

Key Features

Frequency: 868/915MHZ

SMA Male Connector

External Rubber

Dimensions 50 mm

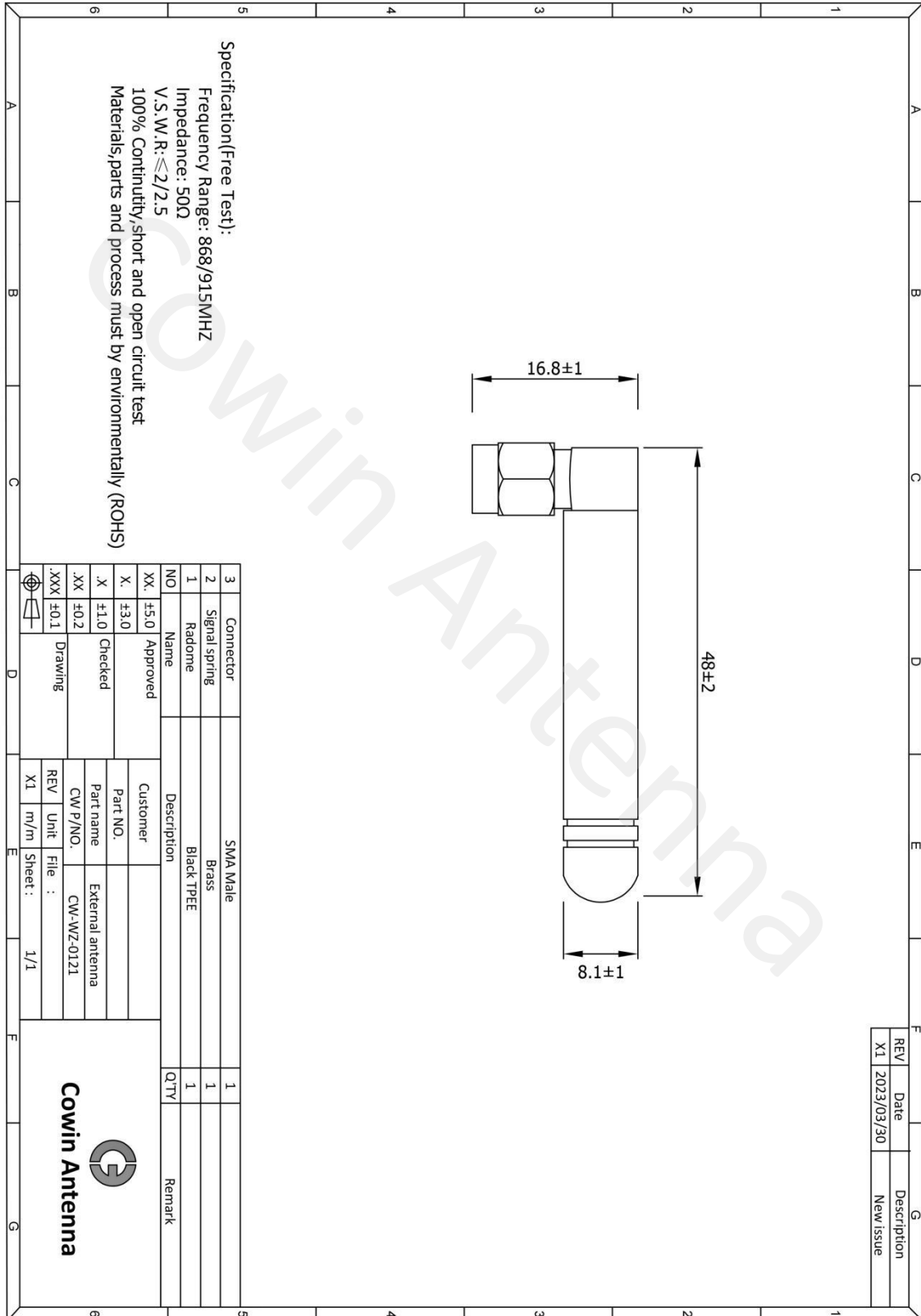


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	868/915MHZ
VSWR	2.5
Efficiency (%)	54.35%
Peak Gain (dBi)	2.3
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10

2. Material and environmental characteristics

Inner structure	Spring
Material of Plastic	TPEE
Cable Type	N/A
Connector Type	SMA Male
Dimensions (mm)	50MM
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



Specification(Free Test):
 Frequency Range: 868/915MHZ
 Impedance: 50Ω
 V.S.W.R: ≤2/2.5
 100% Continuity/short and open circuit test
 Materials,parts and process must by environmentally (ROHS)

3	Connector	SMA Male	1	
2	Signal spring	Brass	1	
1	Radome	Black TPEE	1	
NO	Name		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-0121
REV	File :
X1	Unit : m/m
	Sheet : 1/1

REV	Date	Description
X1	2023/03/30	New Issue



4. Antenna test parameters

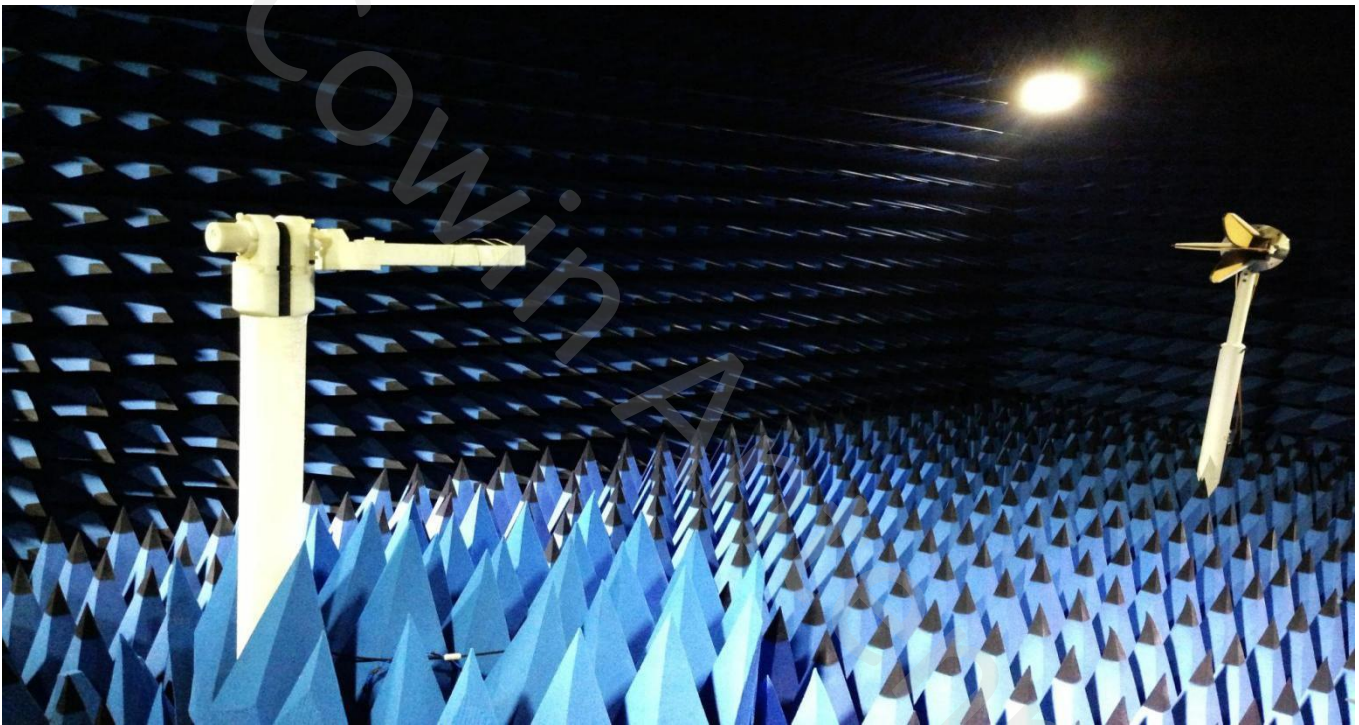
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

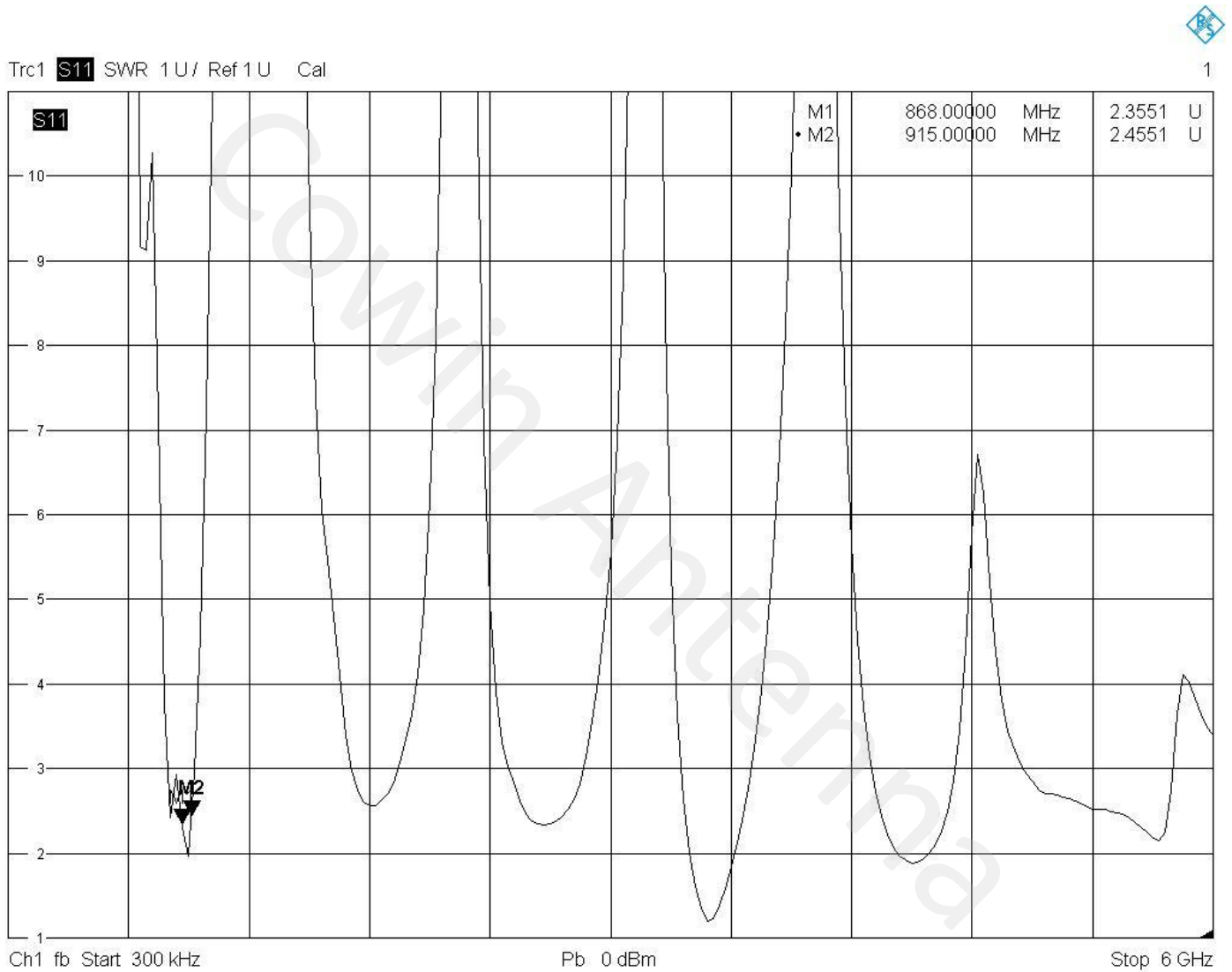
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

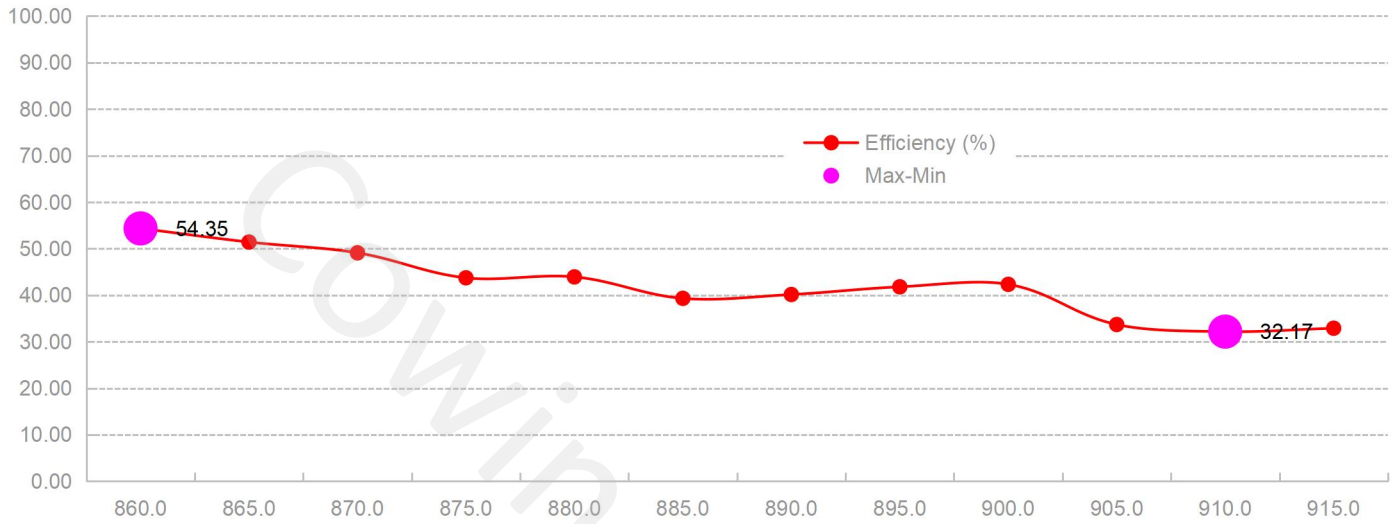


4.1 VSWR

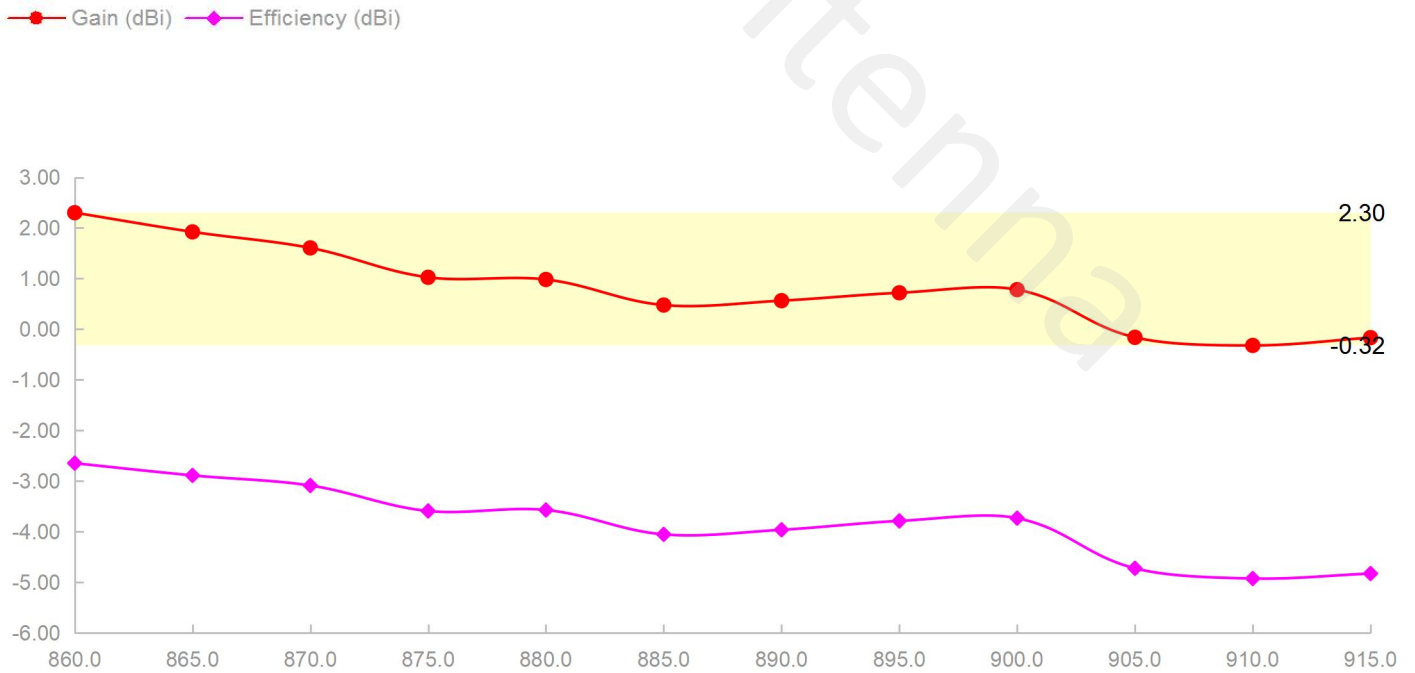


4/11/2023, 12:35 AM

4.2 Efficiency

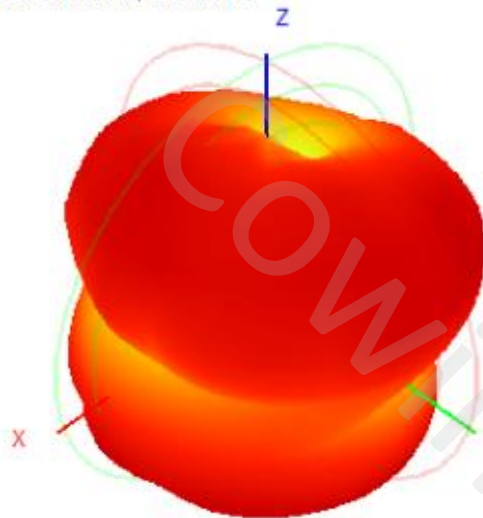


4.3 Peak gain

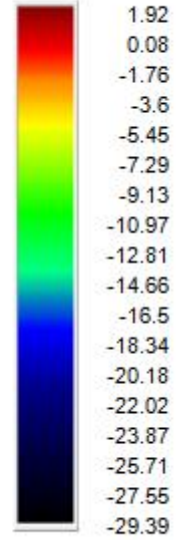
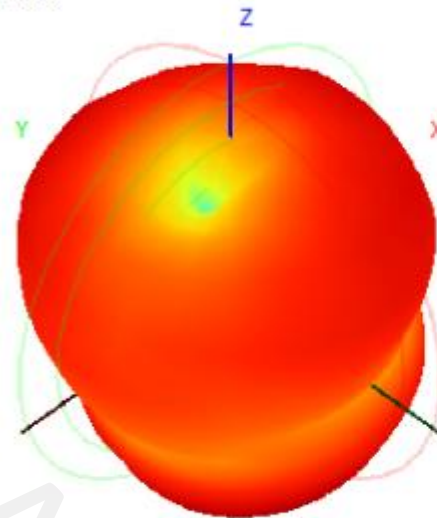


4.4 3D&2D Radiation Patterns

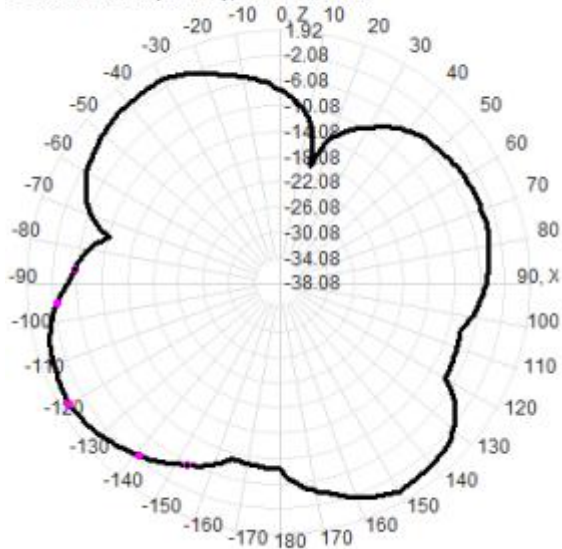
865.0MHz H+V, Eff: 51.4%



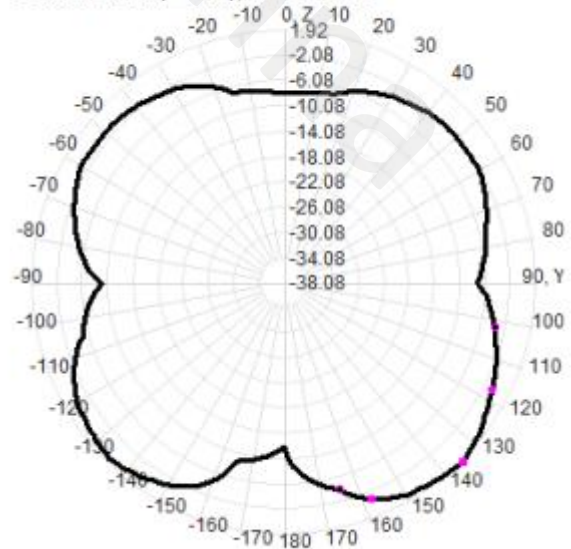
Back View



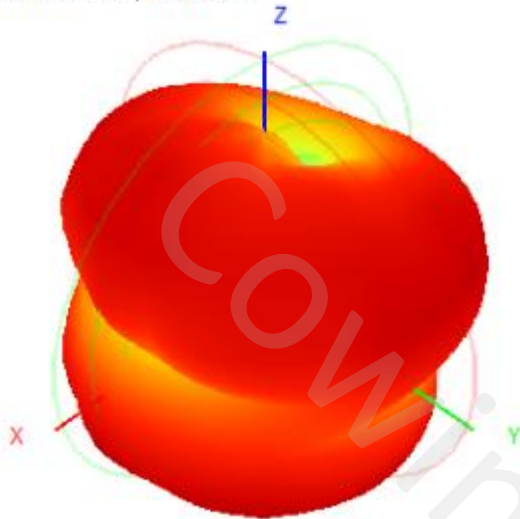
865.0MHz Total(E1-XZ), Max= 0.30dBi



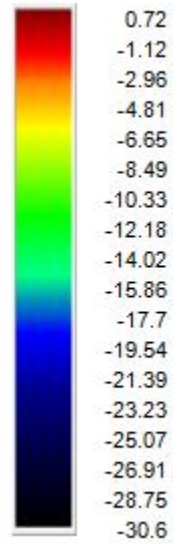
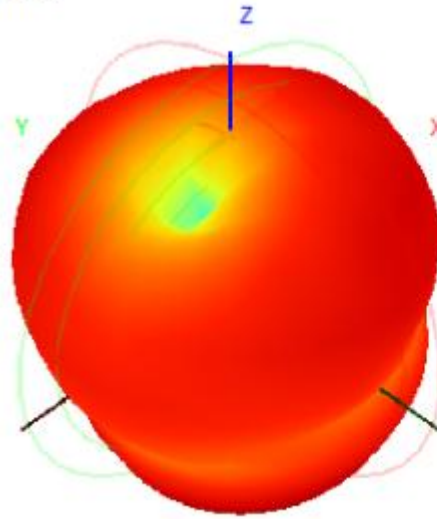
865.0MHz Total(E2-YZ), Max= 1.92dBi



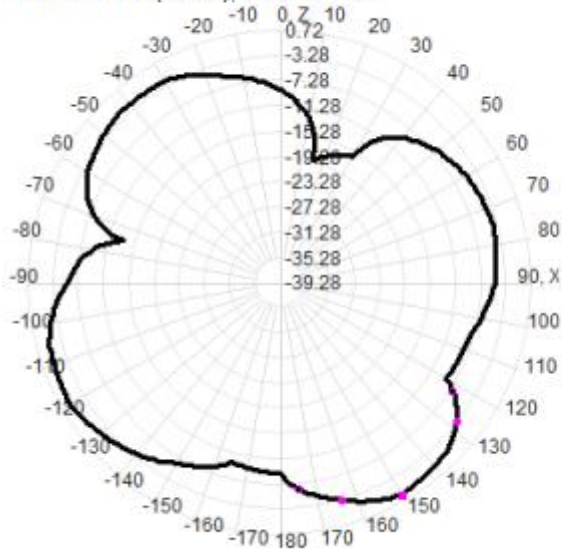
895.0MHz H+V, Eff: 41.8%



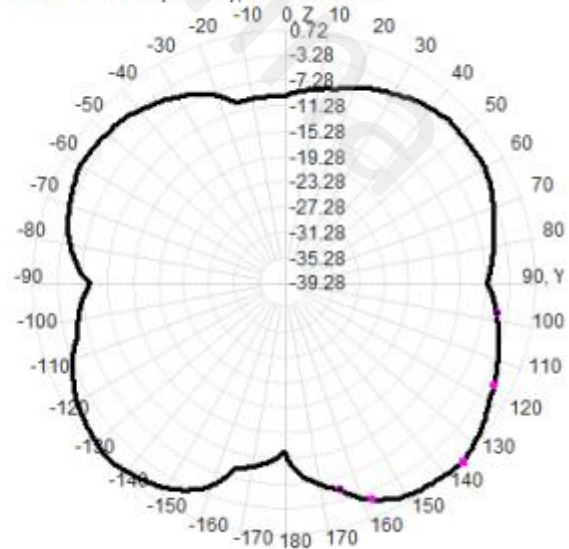
Back View



895.0MHz Total(E1-XZ), Max=-0.62dBi

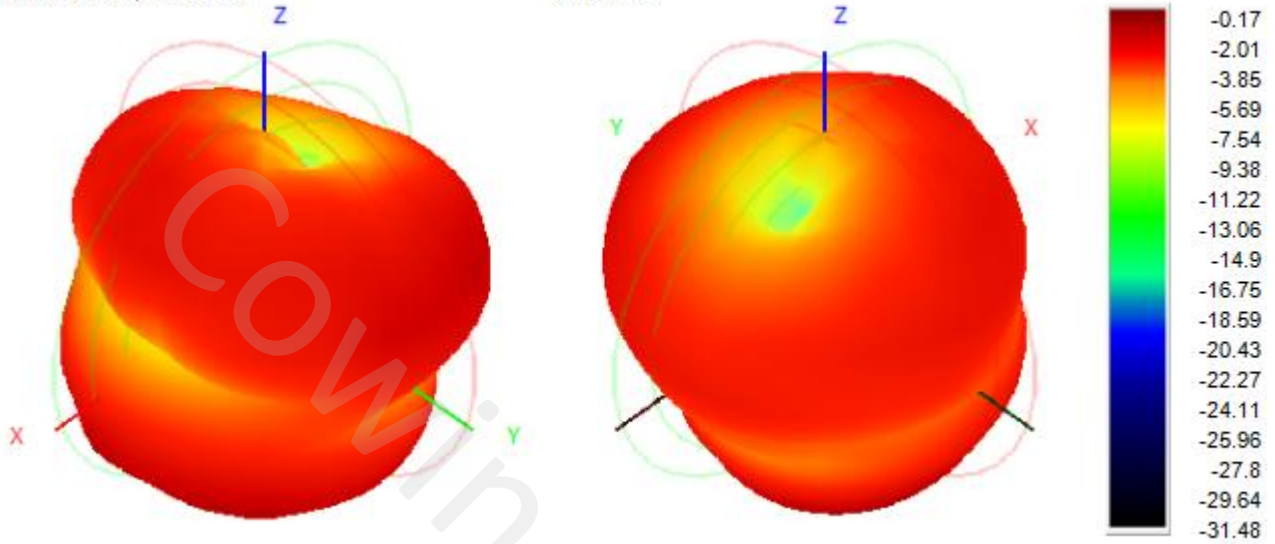


895.0MHz Total(E2-YZ), Max=0.72dBi



915.0MHz H+V, Eff: 32.9%

Back View



915.0MHz Total(E1-XZ), Max=-1.43dBi

915.0MHz Total(E2-YZ), Max=-0.17dBi

