

CW-NZ-0103

868MHz U.FL Antenna

Key Features

Frequency:868MHz

I-PEX Connector

1.13 Cable

Dimensions 92mm

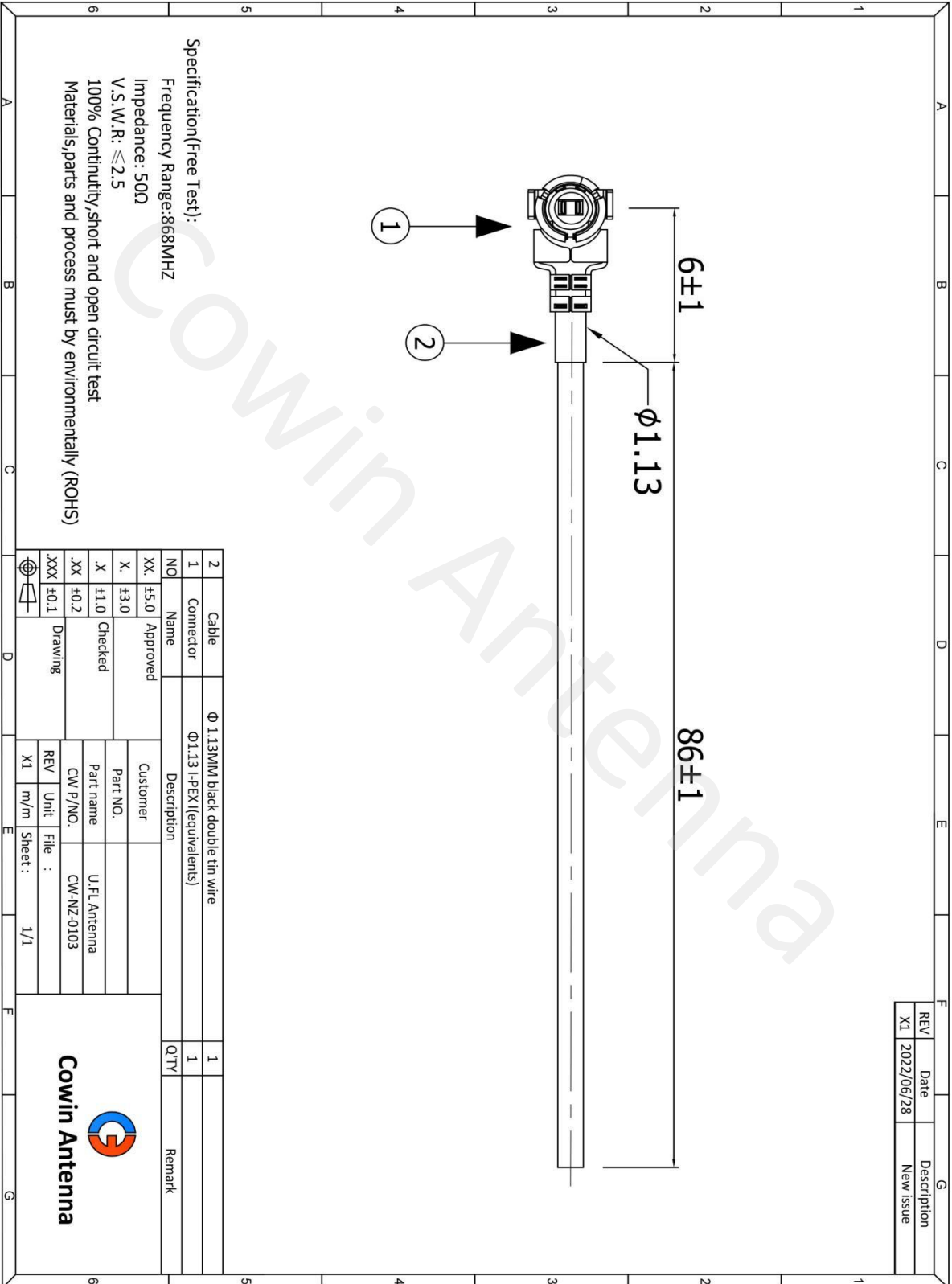


1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	868MHZ
VSWR	2.5
Efficiency (%)	40.88%
Peak Gain (dBi)	1.21
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	I-PEX

2. Material and environmental characteristics

External structure	N/A
Inner structure	Connector/Cable
Cable Type	RF1.13
Connector Type	I-PEX
Dimensions (mm)	92MM
Antenna color	N/A
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



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

2	Cable	$\phi 1.13$ MM black double tin wire	1	
1	Connector	$\phi 1.13$ I-PEX (equivalents)	1	
NO	Name	Description	QTY	Remark
XX	± 5.0	Approved		
X	± 3.0	Checked		
X	± 1.0	Checked		
.XX	± 0.2	Checked		
XXX	± 0.1	Drawing		
	REV	Unit	File	
	XI	m/m	Sheet	1/1

REV	Date	Description
X1	2022/06/28	New Issue



4. Antenna test parameters

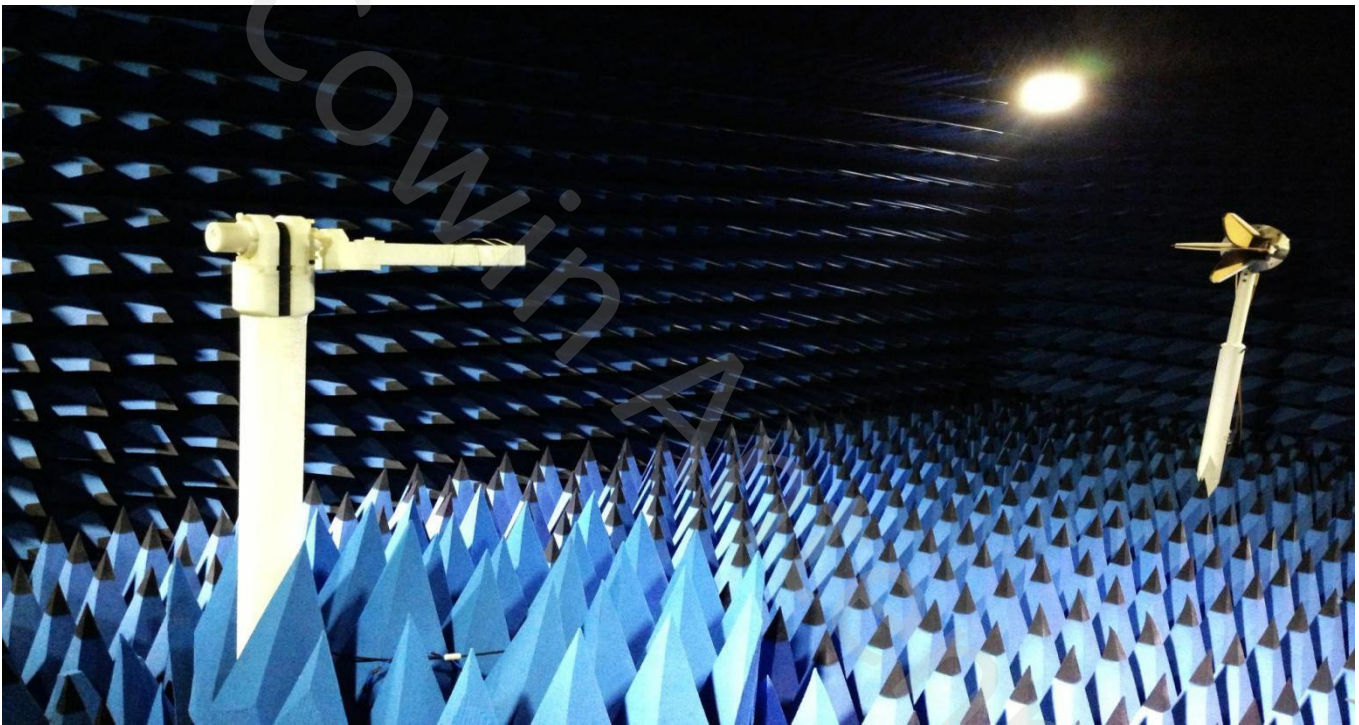
Antenna Measurement Conditions:

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

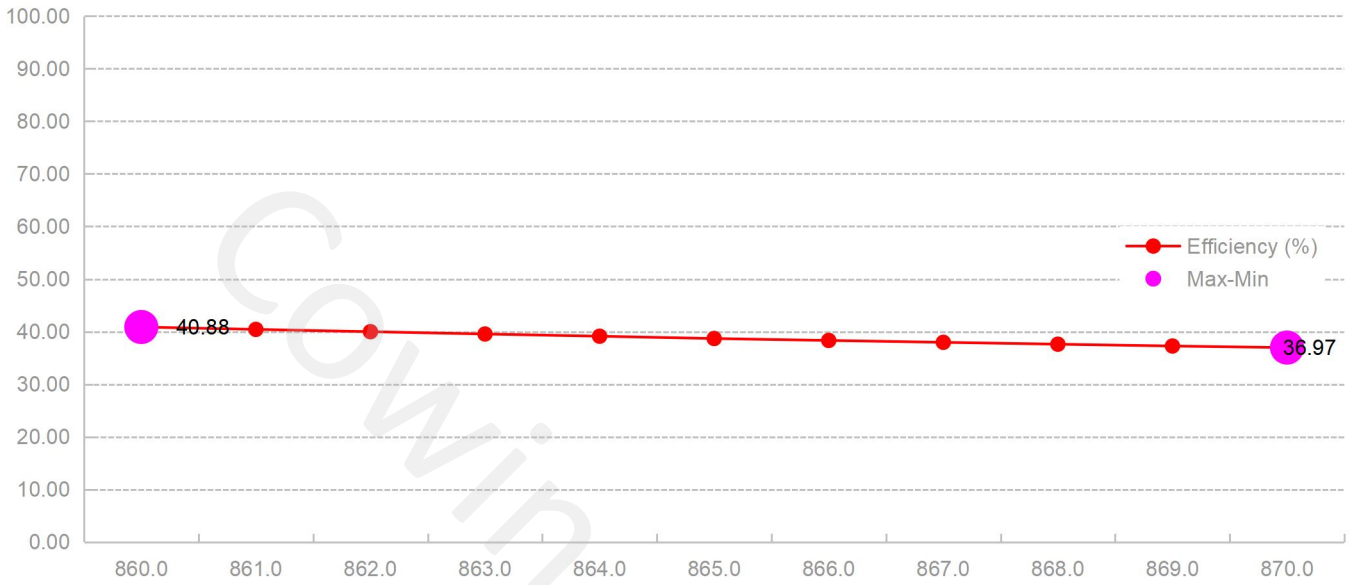


4.1 VSWR

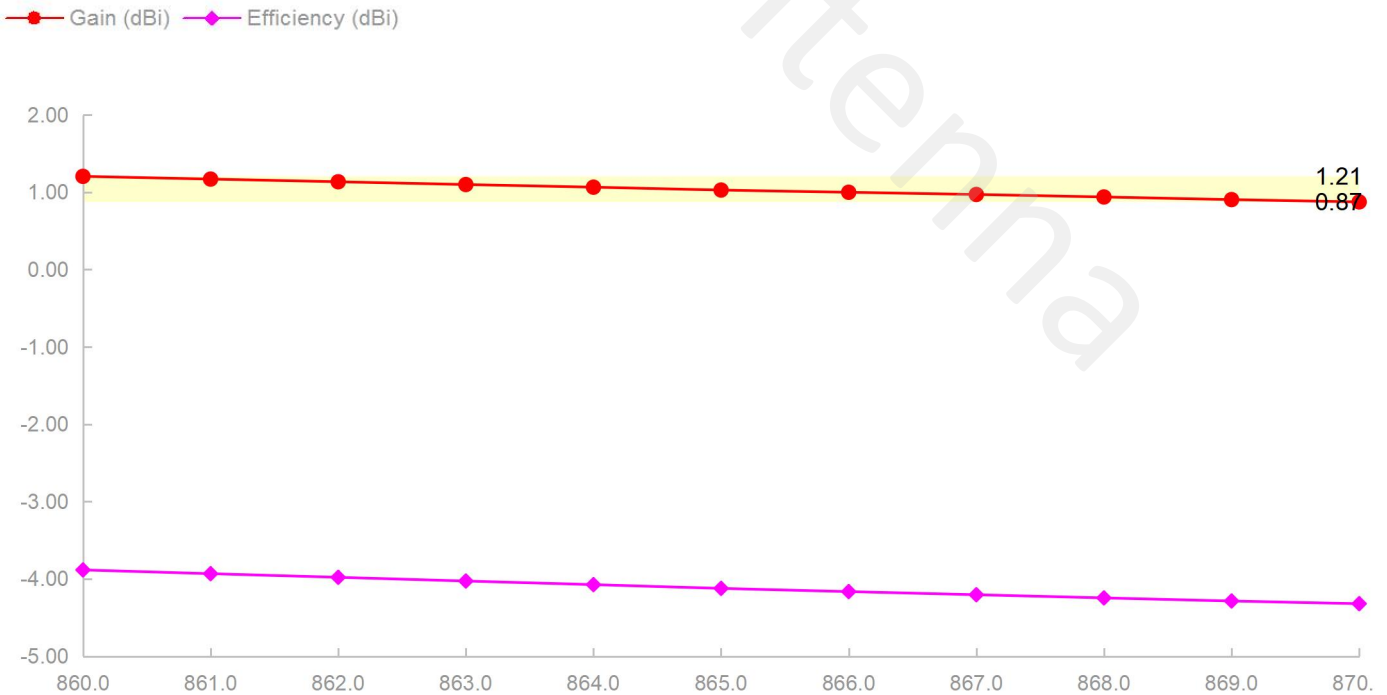


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4.2 Efficiency



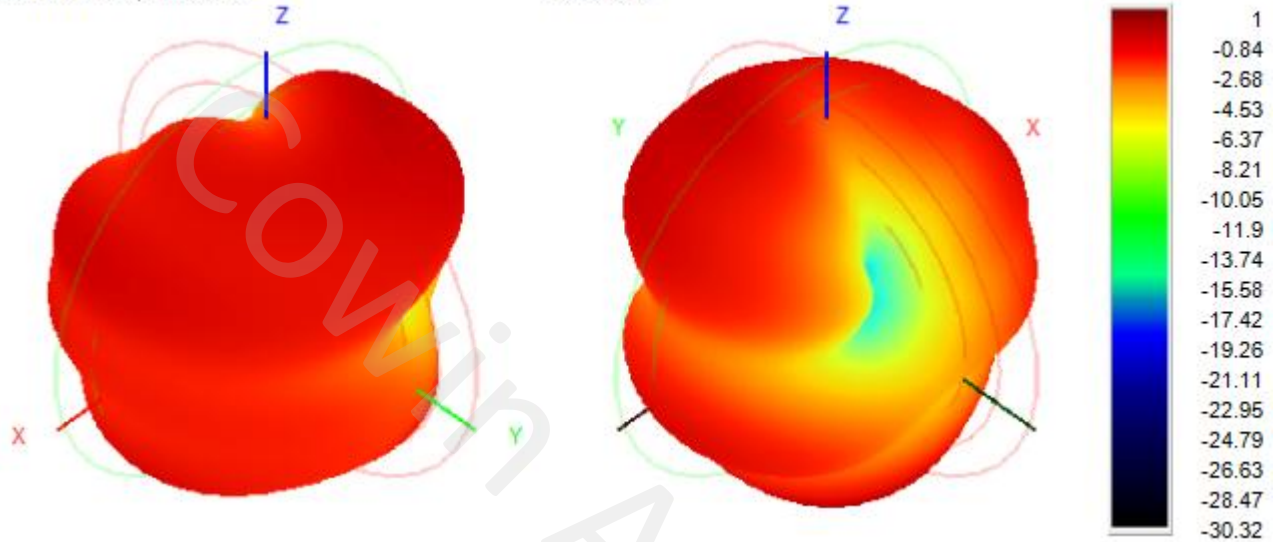
4.3 Peak gain



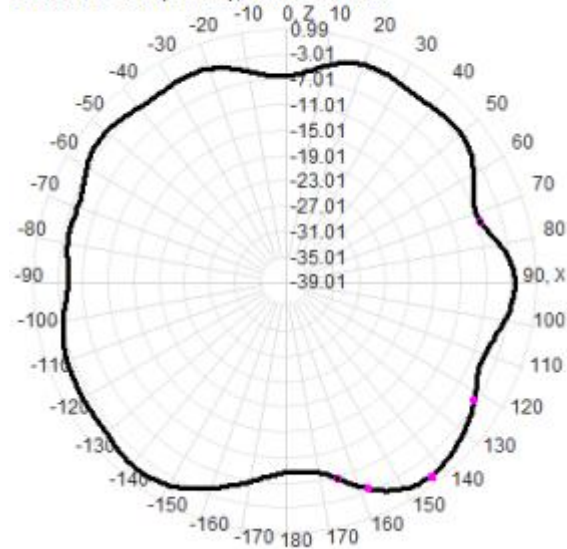
4.4 3D&2D Radiation Patterns

866.0MHz H+V, Eff: 38.3%

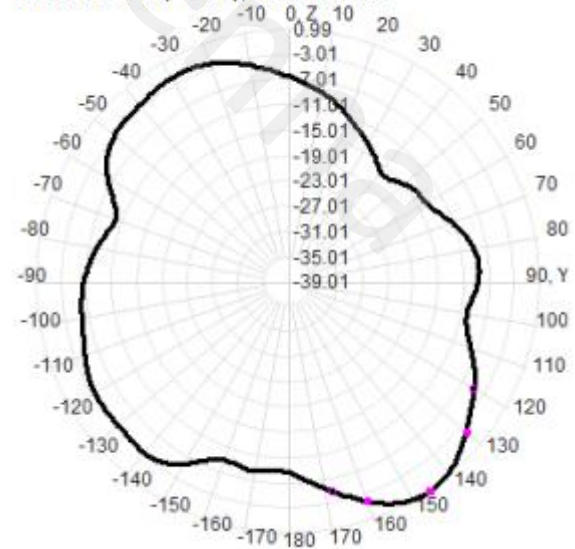
Back View



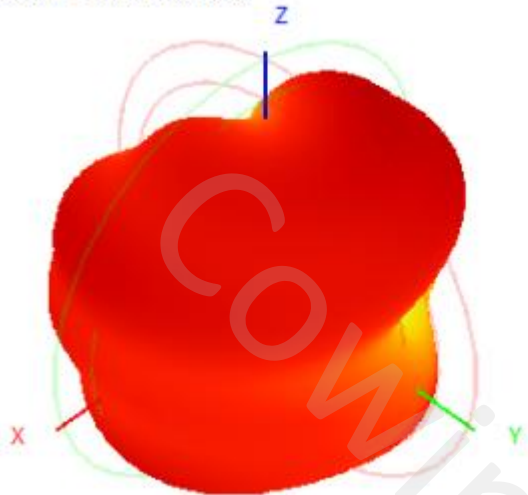
866.0MHz Total(E1-XZ), Max= -0.57dBi



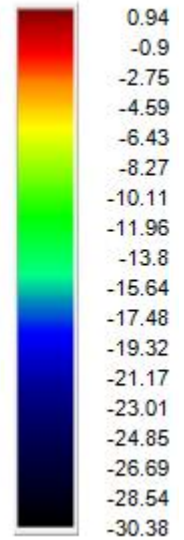
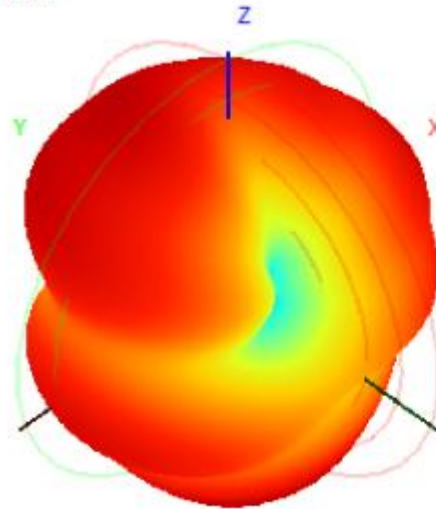
866.0MHz Total(E2-YZ), Max= 0.99dBi



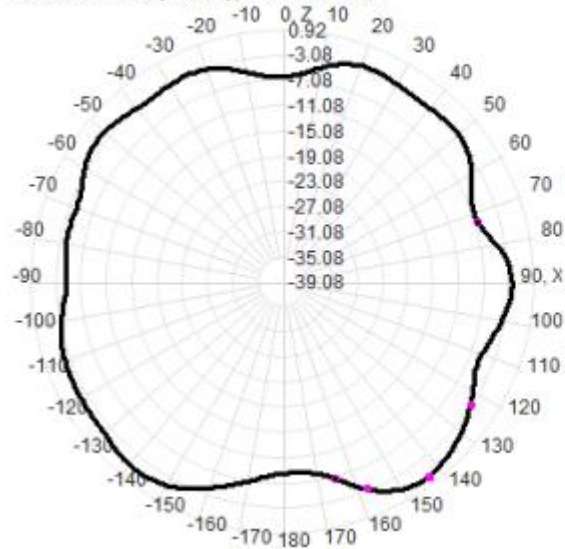
868.0MHz H+V, Eff: 37.6%



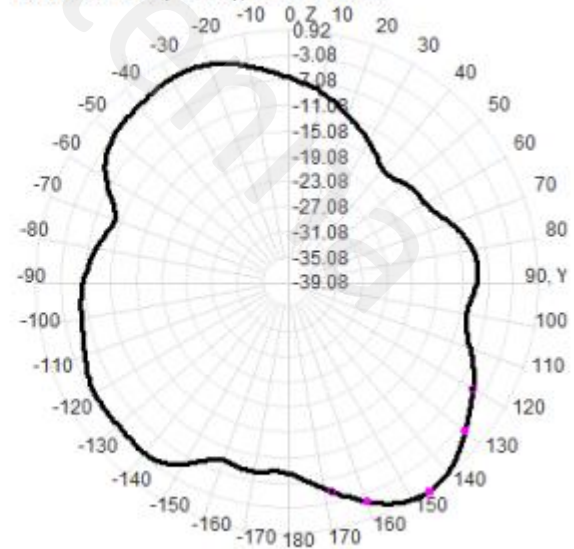
Back View



868.0MHz Total(E1-XZ), Max= -0.60dBi

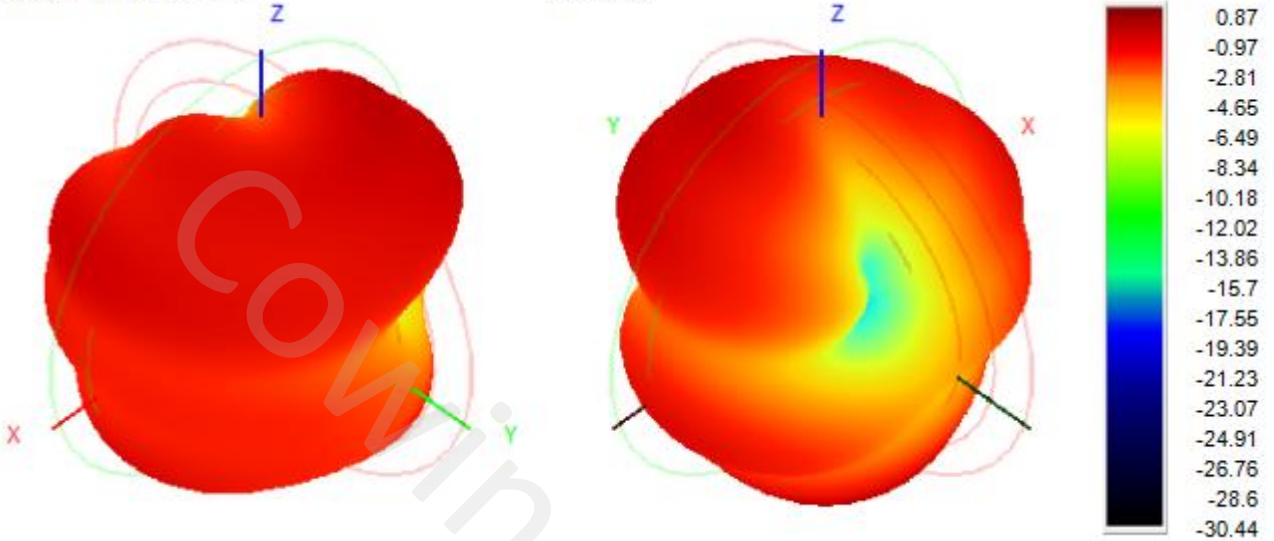


868.0MHz Total(E2-YZ), Max= 0.92dBi



870.0MHz H+V, Eff: 37.0%

Back View



870.0MHz Total(E1-XZ), Max=-0.64dBi

870.0MHz Total(E2-YZ), Max=0.86dBi

