

CW-WZ-0118

Lora External Antenna

Key Features

Frequency: 915MHz

N Male Connector

External Rubber

Dimensions 176*21 mm



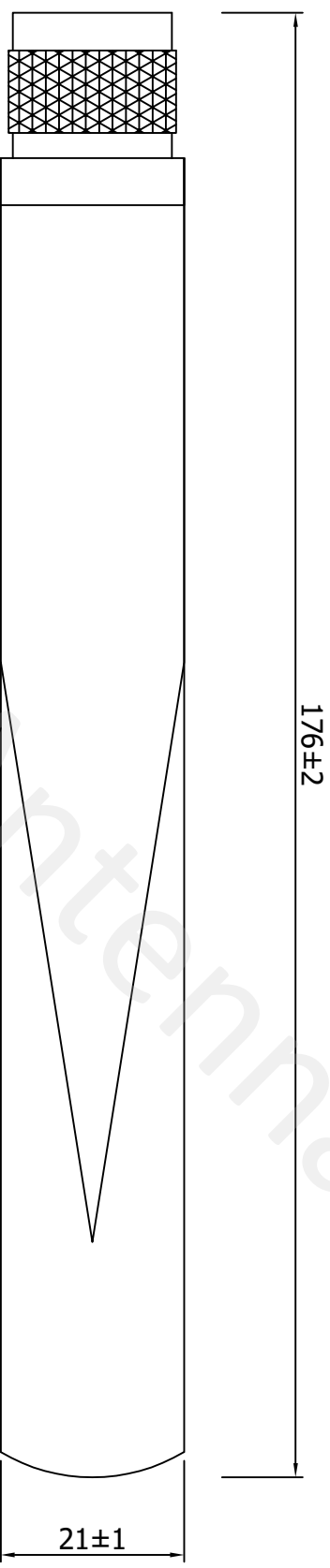
1. Antenna Electrical Characteristics

| | |
|----------------------|----------|
| Band (MHz) | |
| Frequency (MHz) | 915MHz |
| VSWR | 2.5 |
| Efficiency (%) | 63.61% |
| Peak Gain (dBi) | 2.99 |
| Impedance (Ohm) | 50 |
| Polarisation | Vertical |
| Max. Input Power (W) | 10 |
| Connector Type | N male |

2. Material and environmental characteristics

| | |
|----------------------------|------------|
| Inner structure | FR4 |
| Material of Plastic | TPE |
| Cable Type | RG178 |
| Connector Type | N Male |
| Dimensions (mm) | 176*21MM |
| Antenna color | White |
| Operation Temperature | -40 to +80 |
| Storage Temperature | -40 to +80 |
| Antenna Storage life(year) | 10 |
| Substance Compliance | ROHS |

| REV | Date | Description |
|-----|------------|-------------|
| X1 | 2023/03/08 | New issue |



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

| | | | | | | | | | |
|------|-----------------|--------------------------|------|--------|-----------|------------------|-------|-----|--|
| 4 | Antenna housing | White TPE | 1 | | | | | | |
| 3 | PCB | FR4 | 1 | | | | | | |
| 2 | Cable | RG178 single silver wire | 1 | | | | | | |
| 1 | Connector | N Male | 1 | | | | | | |
| NO | Name | Description | Q'TY | Remark | | | | | |
| XX. | ±5.0 | Approved | | | Customer | | | | |
| X. | ±3.0 | | | | Part NO. | | | | |
| .X | ±1.0 | Checked | | | Part name | External antenna | | | |
| .XX | ±0.2 | | | | CW P/NO. | CW-WZ-0118 | | | |
| .XXX | ±0.1 | Drawing | | | REV | Unit | File | | |
| | | | | | X1 | m/m | Sheet | 1/1 | |



4. Antenna test parameters

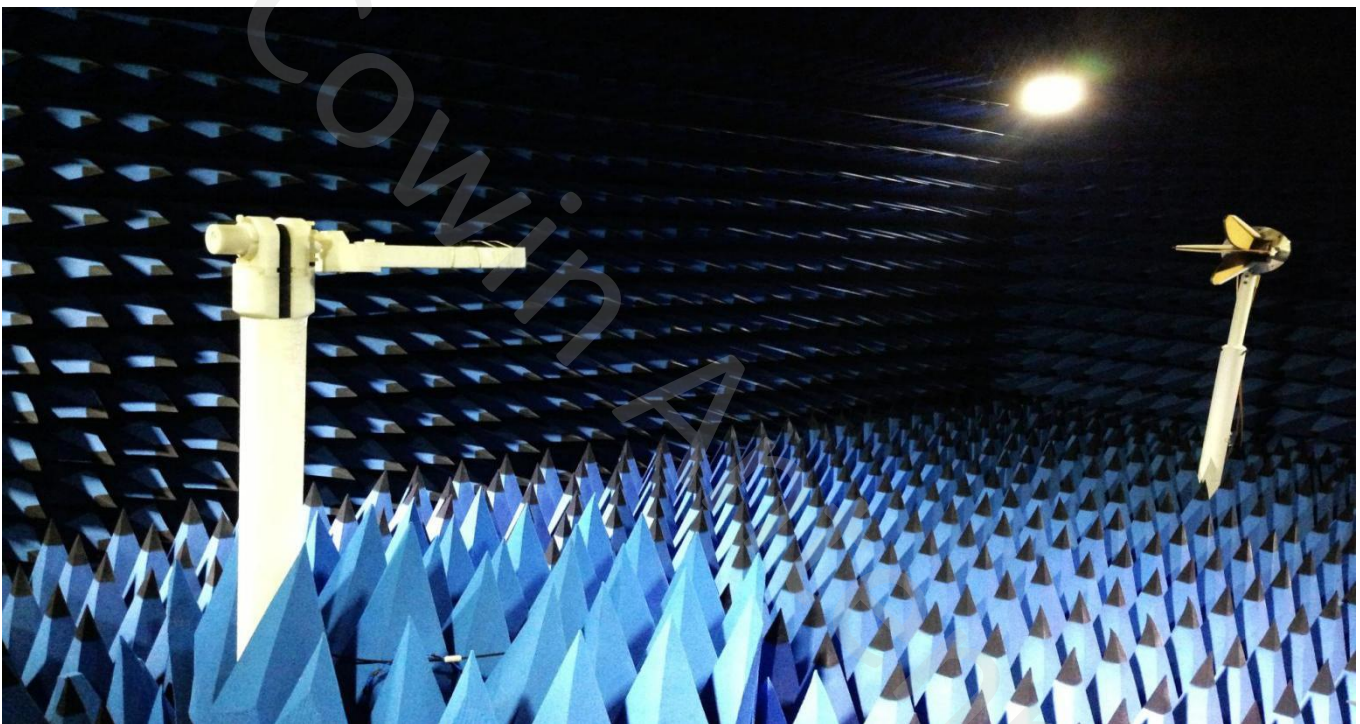
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

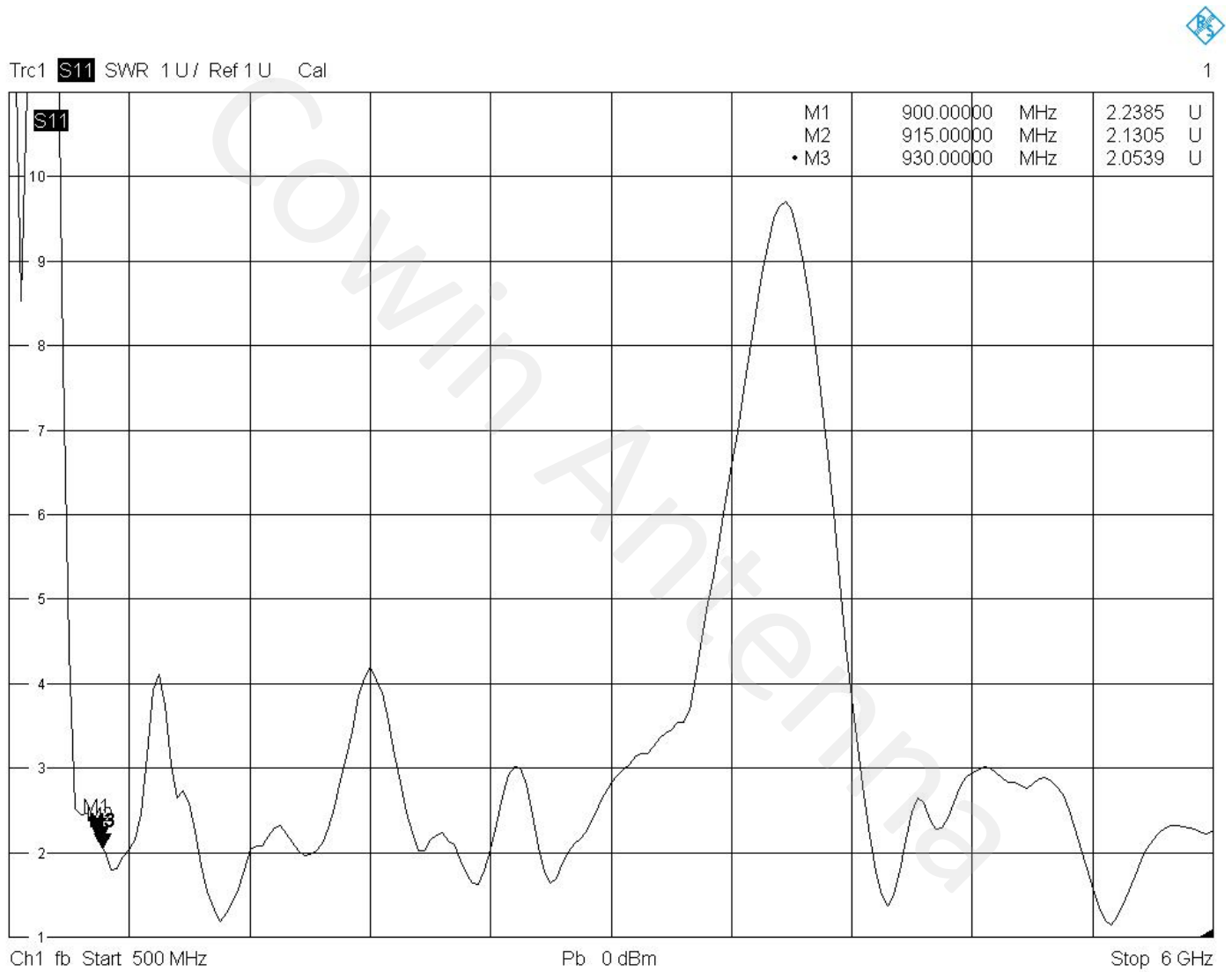
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500



4.1 VSWR

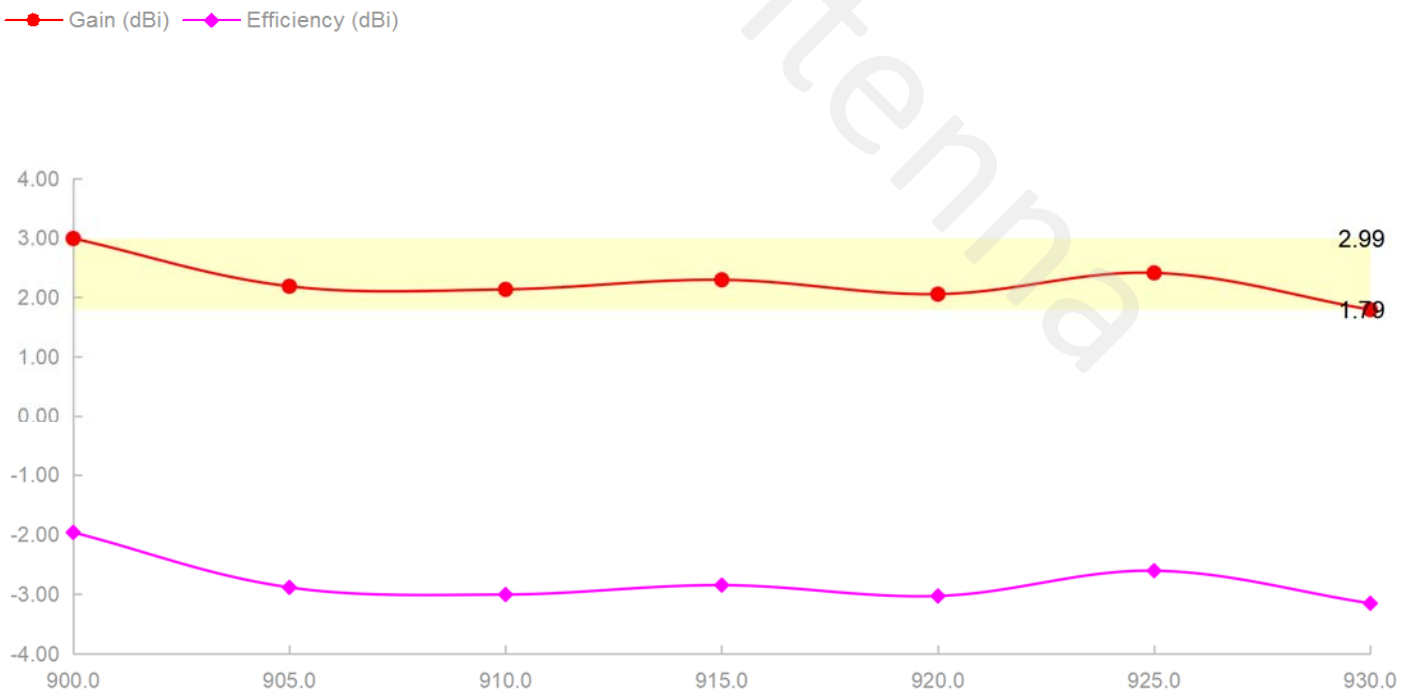


3/8/2023, 1:45 AM

4.2 Efficiency

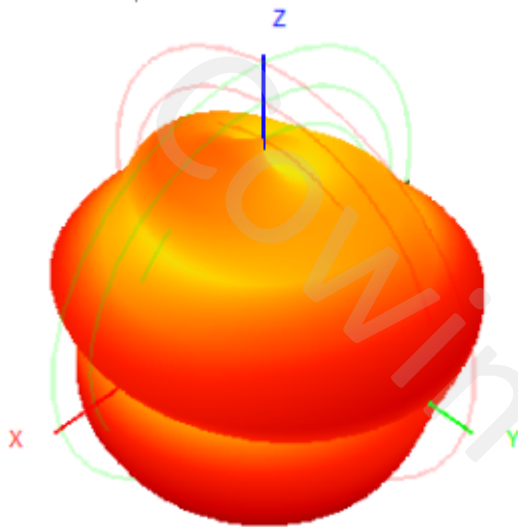


4.3 Peak gain

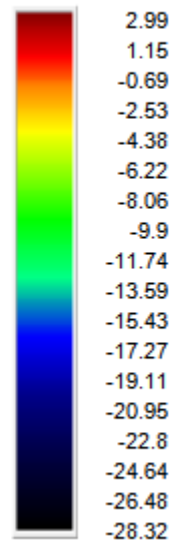
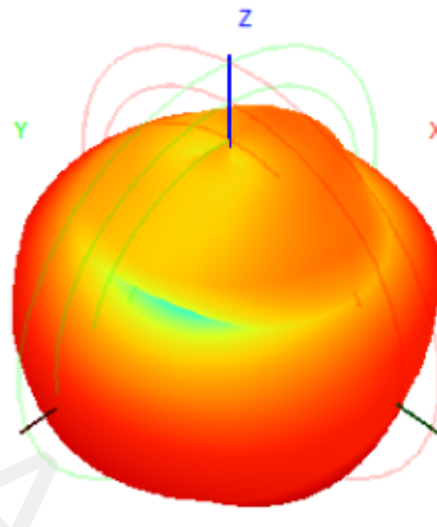


4.4 3D&2D Radiation Patterns

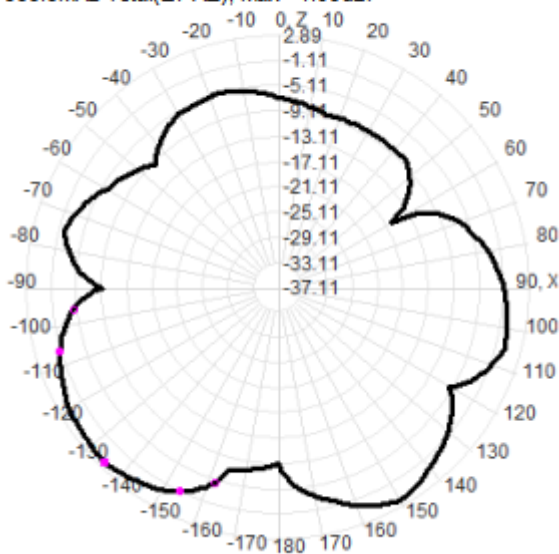
900.0MHz H+V, Eff: 63.6%



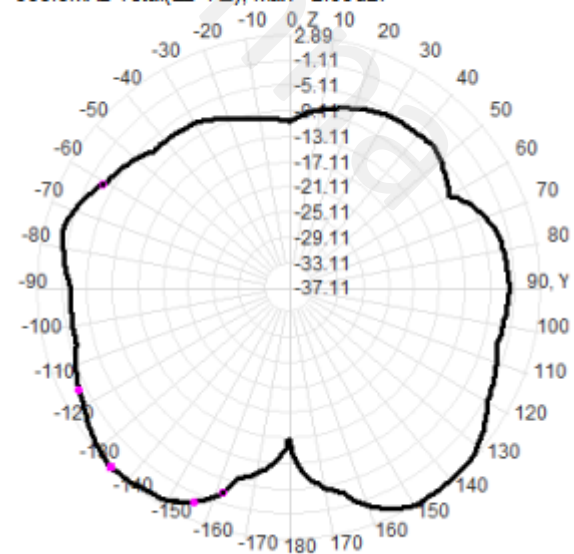
Back View



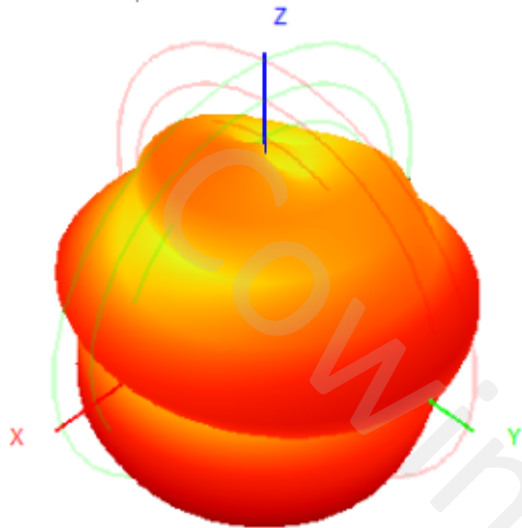
900.0MHz Total(E1-XZ), Max= 1.80dBi



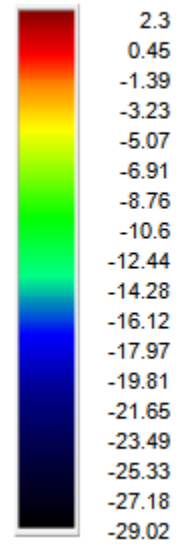
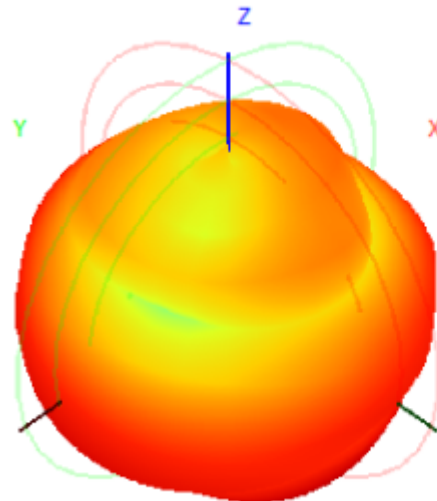
900.0MHz Total(E2-YZ), Max= 2.89dBi



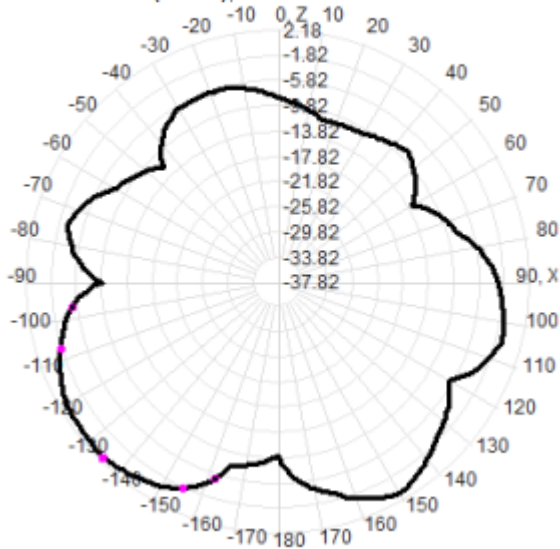
915.0MHz H+V, Eff: 51.9%



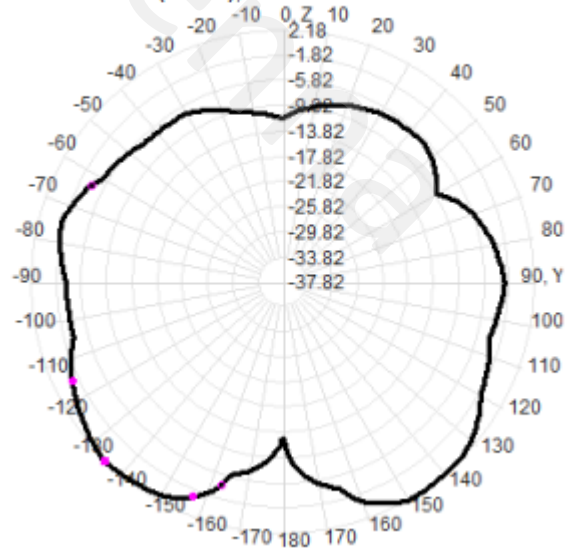
Back View



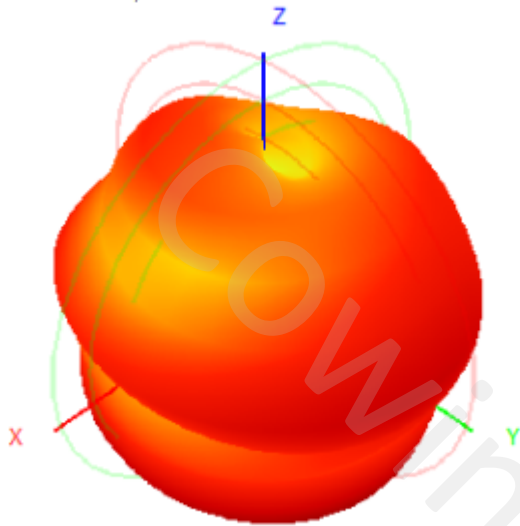
915.0MHz Total(E1-XZ), Max= 1.33dBi



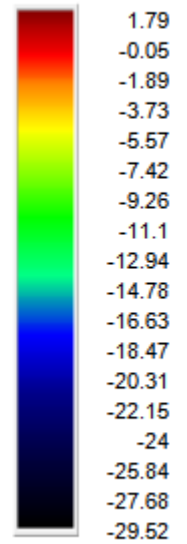
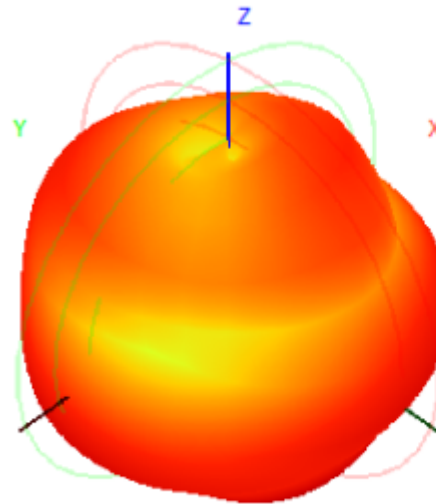
915.0MHz Total(E2-YZ), Max= 2.18dBi



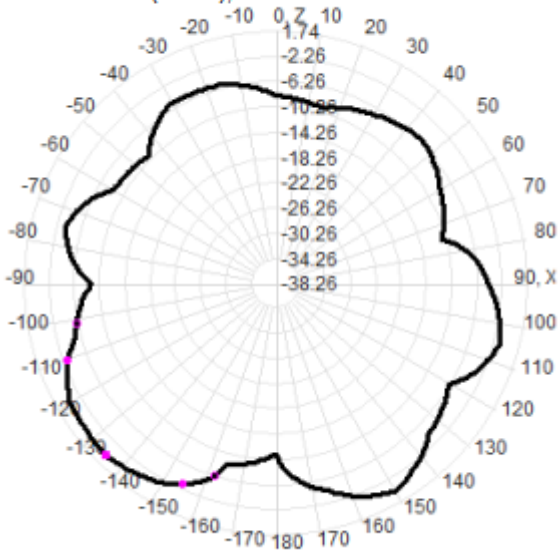
930.0MHz H+V, Eff: 48.4%



Back View



930.0MHz Total(E1-XZ), Max= -0.04dBi



930.0MHz Total(E2-YZ), Max= 1.74dBi

