

## **CW-WZ-0171**

### **2.4G/5.8G External Antenna**

#### **Key Features**

Frequency:2400-2500MHZ/5150-5850MHZ

SMA Connector

Dimensions:394\*13mm

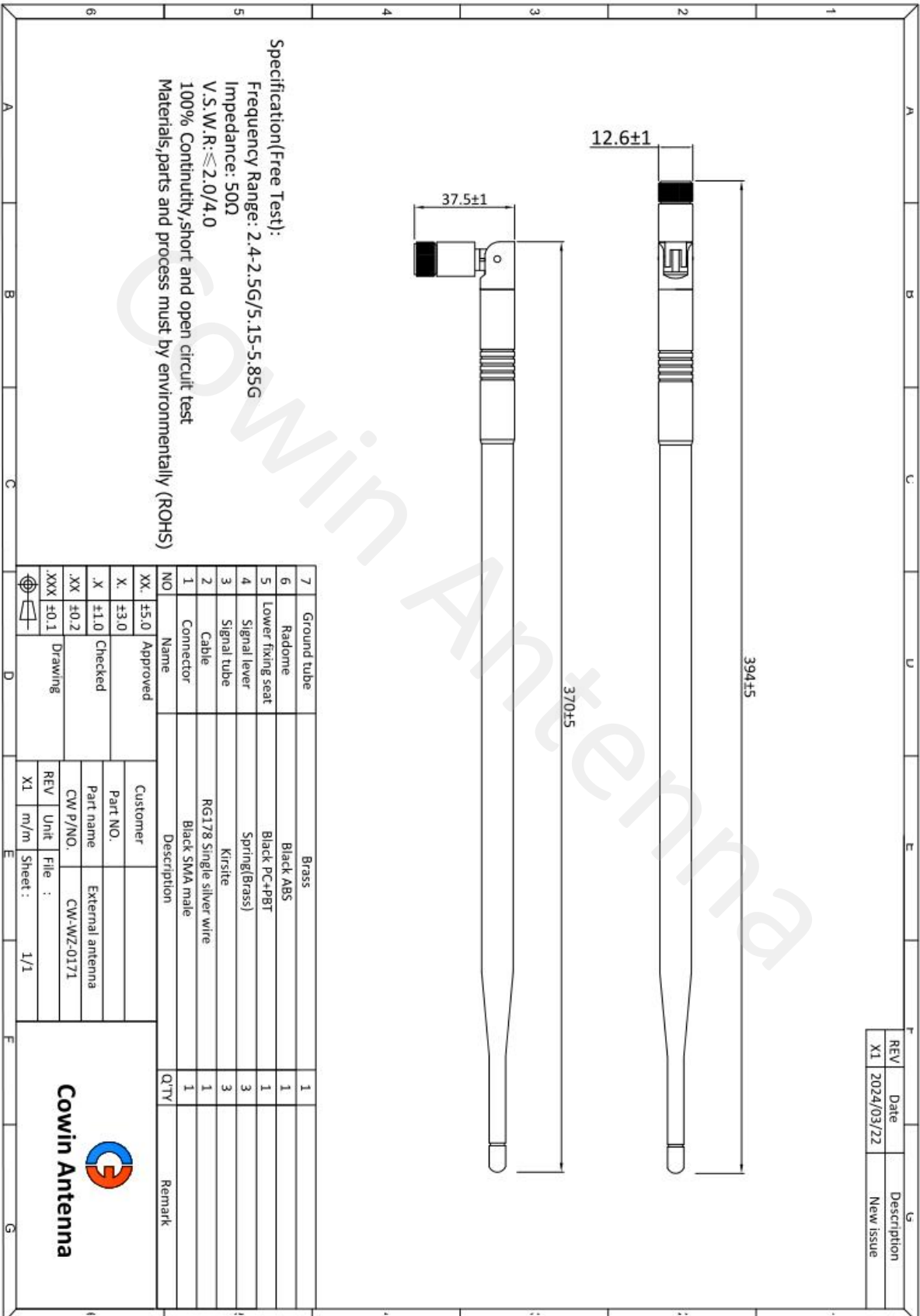


## 1. Antenna Electrical Characteristics

|                      |                           |
|----------------------|---------------------------|
| Band (MHz)           |                           |
| Frequency (MHz)      | 2400-2500MHZ/5150-5850MHZ |
| VSWR                 | ≤2.0/4.0                  |
| Efficiency (%)       | 95.90%/75.44%             |
| Peak Gain (dBi)      | 9.26/4.34                 |
| Impedance (Ohm)      | 50                        |
| Polarisation         | Vertical                  |
| Max. Input Power (W) | 10                        |
| Connector Type       | SMA                       |

## 2. Material and environmental characteristics

|                            |                           |
|----------------------------|---------------------------|
| External structure         | ABS+(PC+PBT)              |
| Inner structure            | Signal tube +Signal lever |
| Cable Type                 | RG178                     |
| Connector Type             | SMA                       |
| Dimensions (mm)            | 394*13 MM                 |
| Antenna color              | Black                     |
| Operation Temperature      | -40 to +80                |
| Storage Temperature        | -40 to +80                |
| Antenna Storage life(year) | 10                        |
| Substance Compliance       | ROHS                      |



## 4. Antenna test parameters

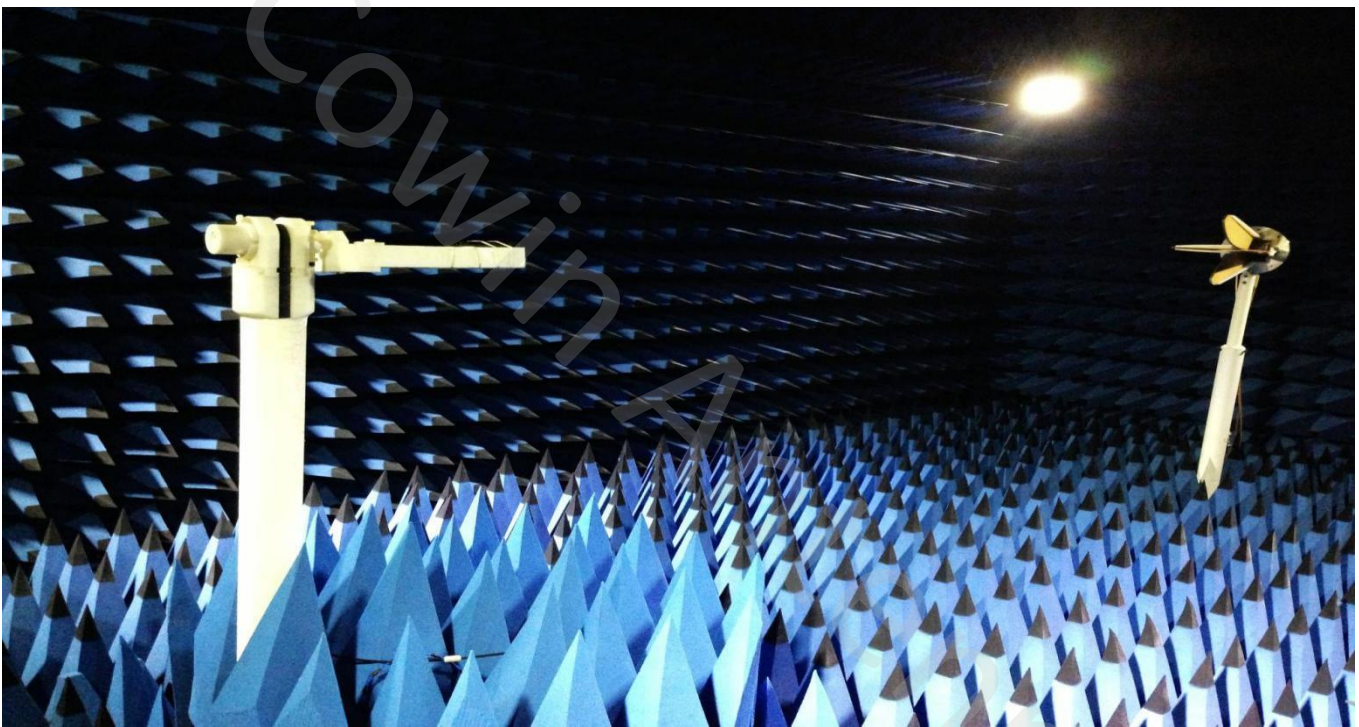
### Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

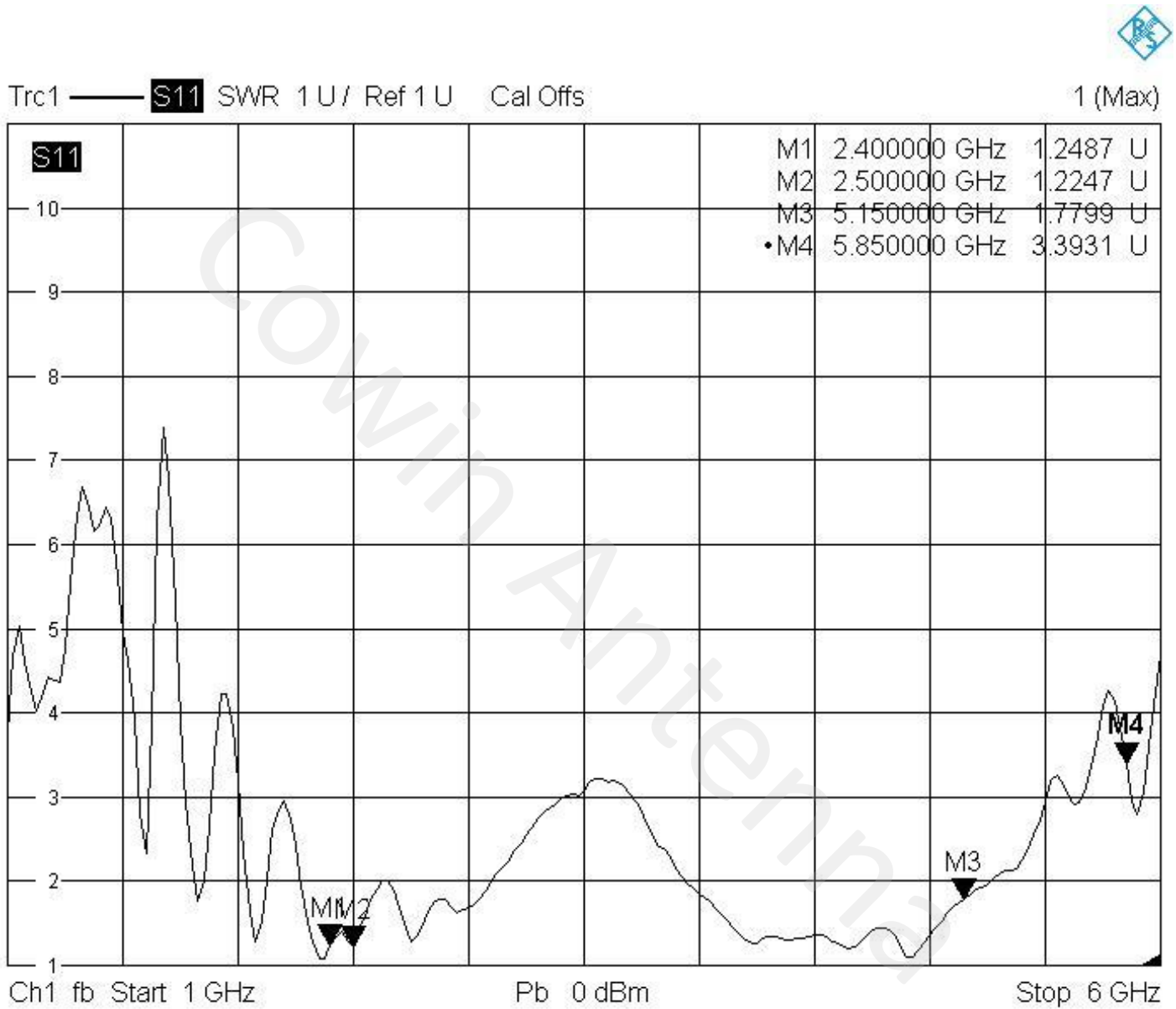
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

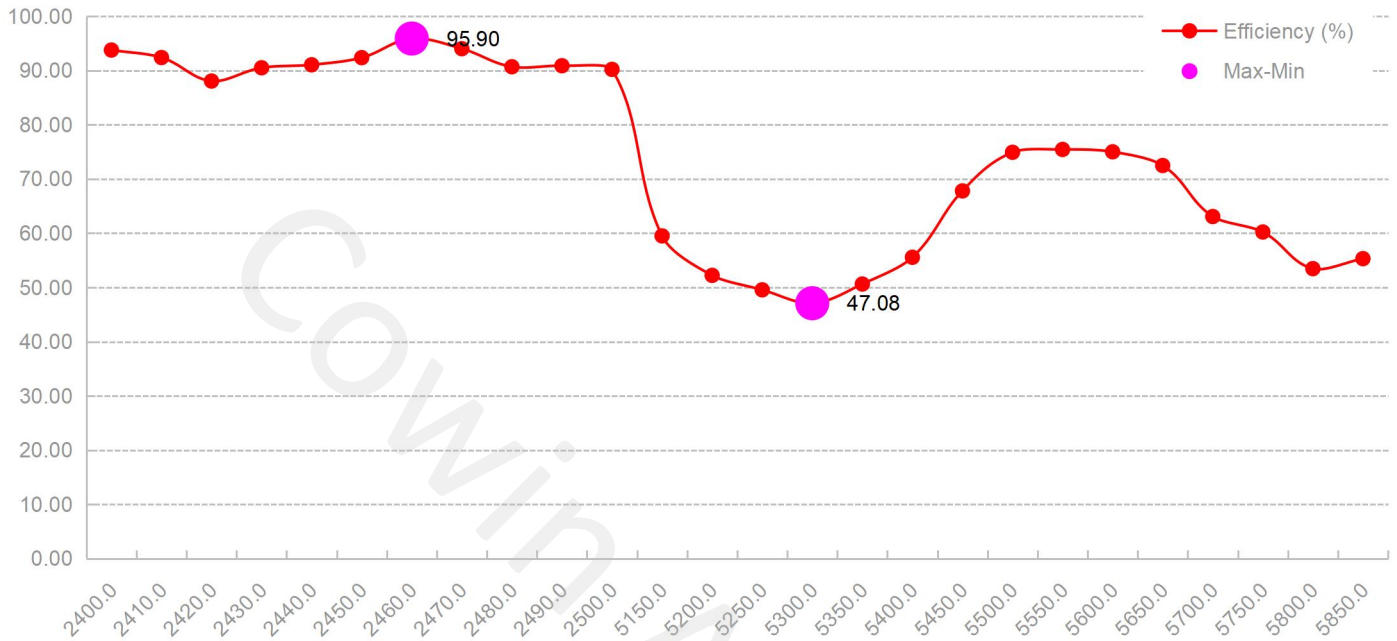
The comprehensive tester is Agilent cmv500



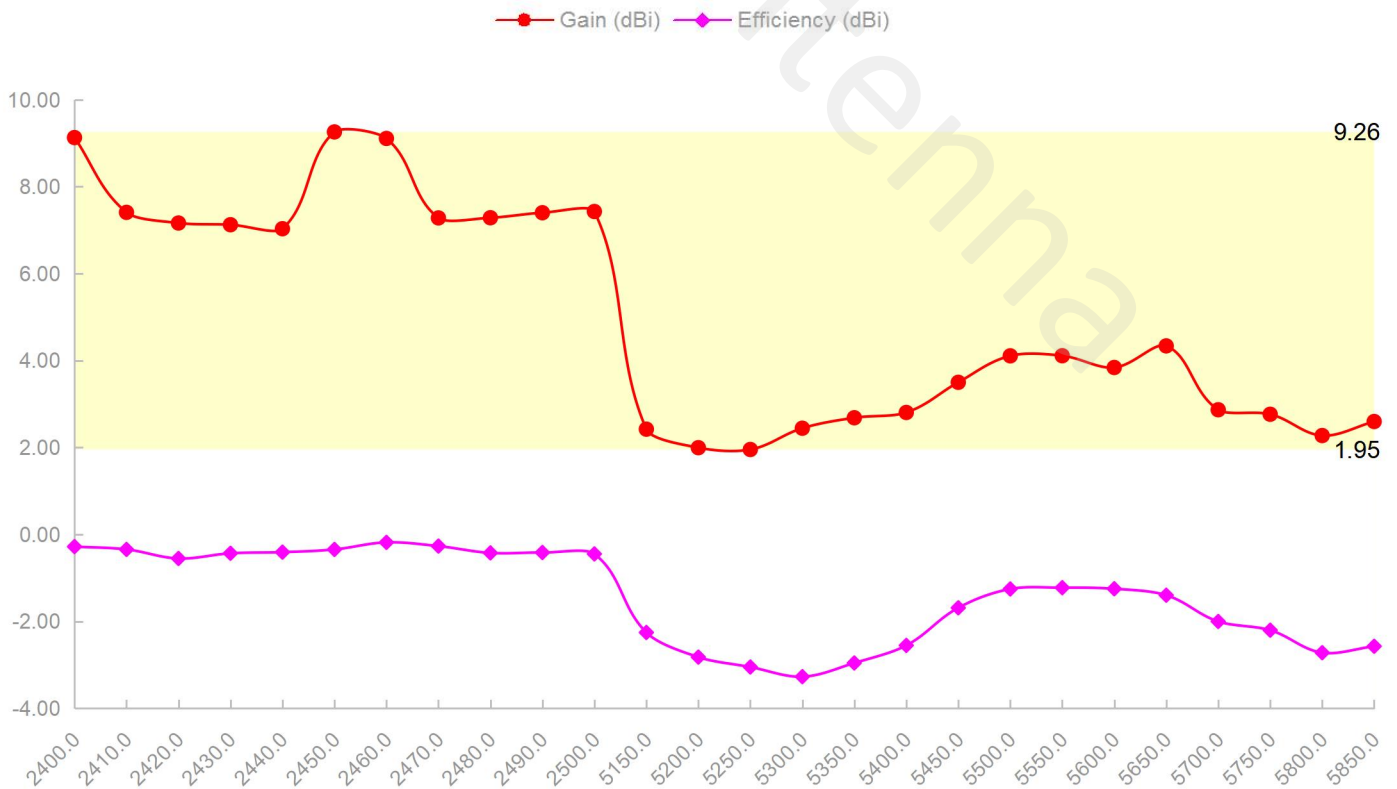
## 4.1 VSWR



## 4.2 Efficiency



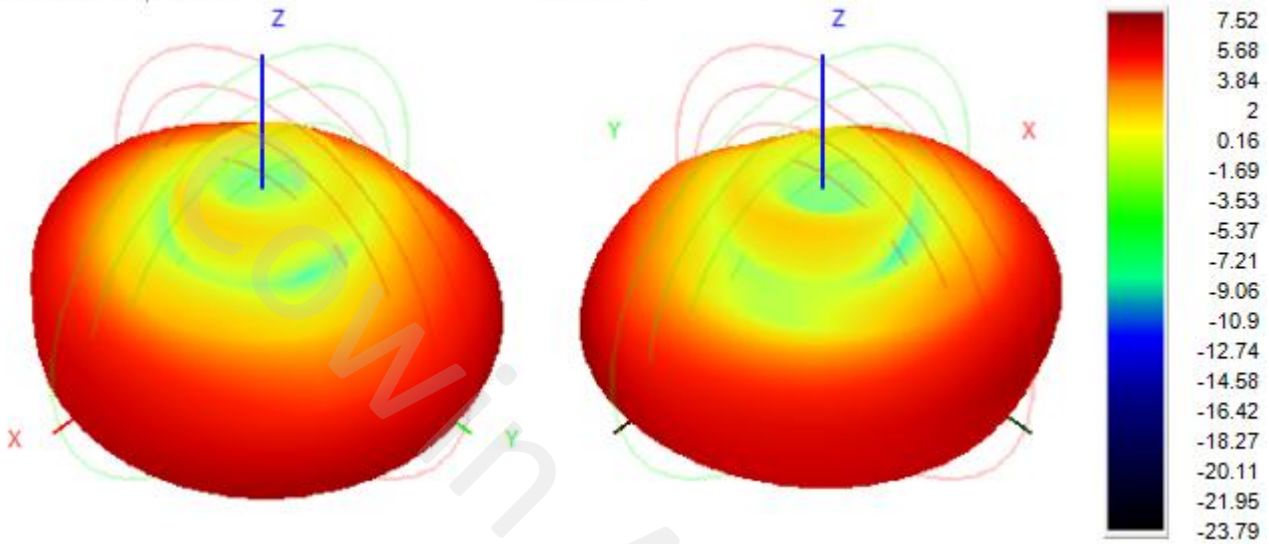
## 4.3 Peak gain



## 4.4 3D&2D Radiation Patterns

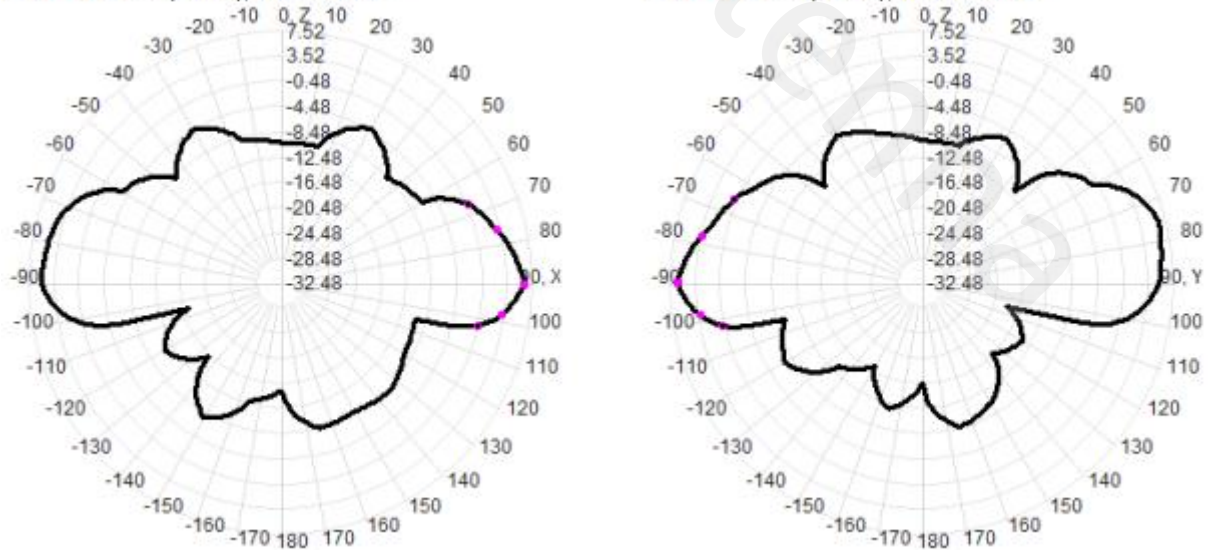
2400.0MHz H+V, Eff: 93.8%

Back View

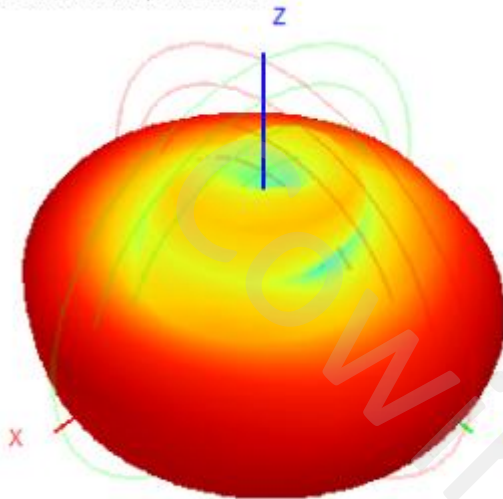


2400.0MHz Total(E1-XZ), Max= 6.03dBi

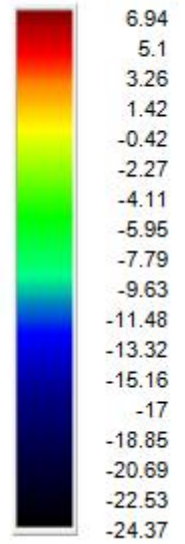
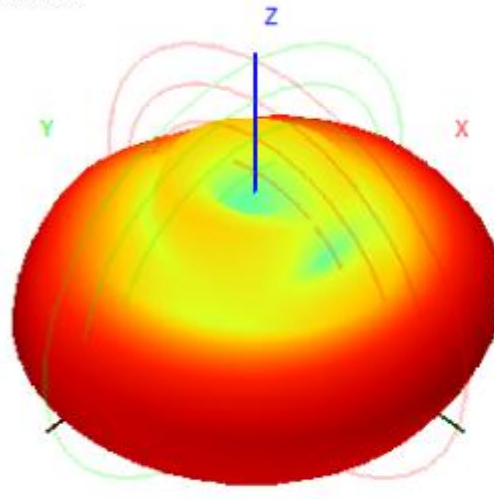
2400.0MHz Total(E2-YZ), Max= 6.29dBi



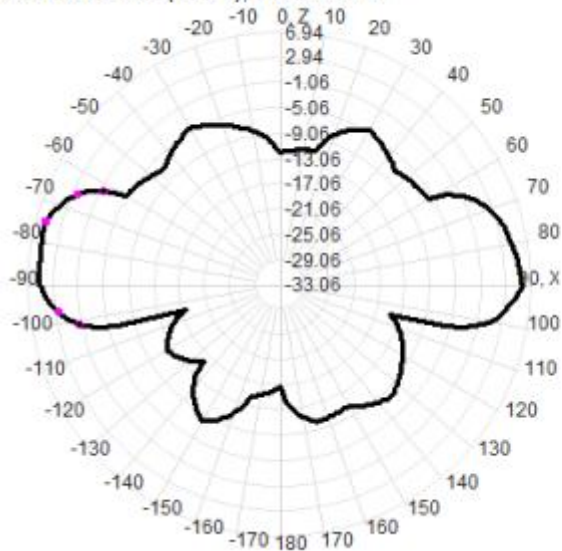
2450.0MHz H+V, Eff: 92.4%



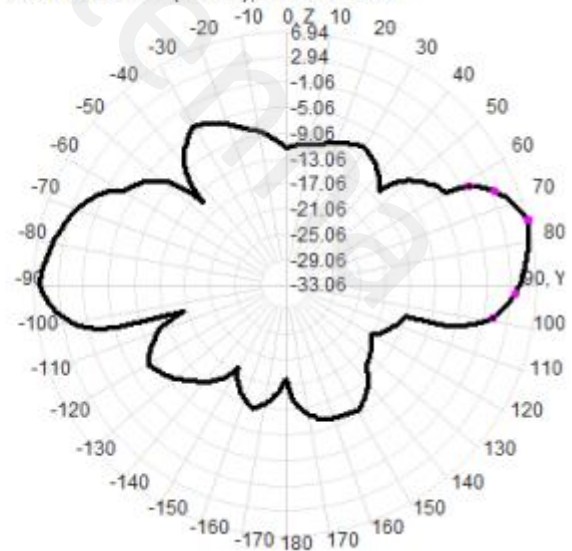
Back View



2450.0MHz Total(E1-XZ), Max= 5.45dBi

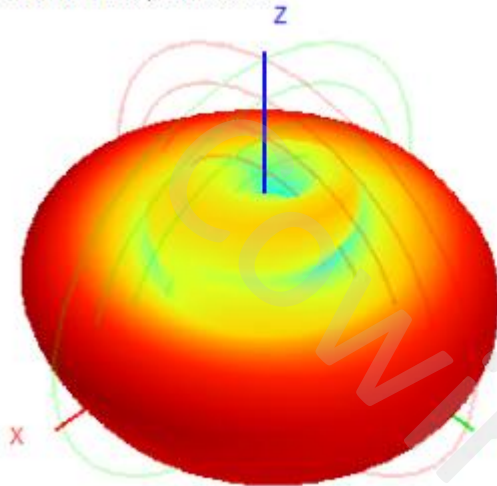


2450.0MHz Total(E2-YZ), Max= 6.68dBi

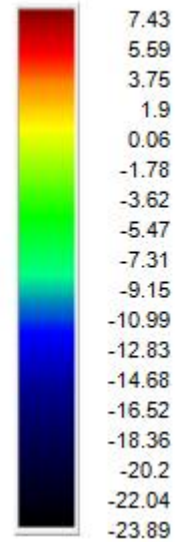
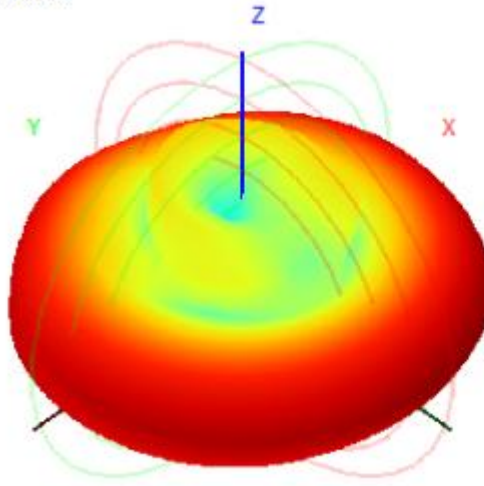




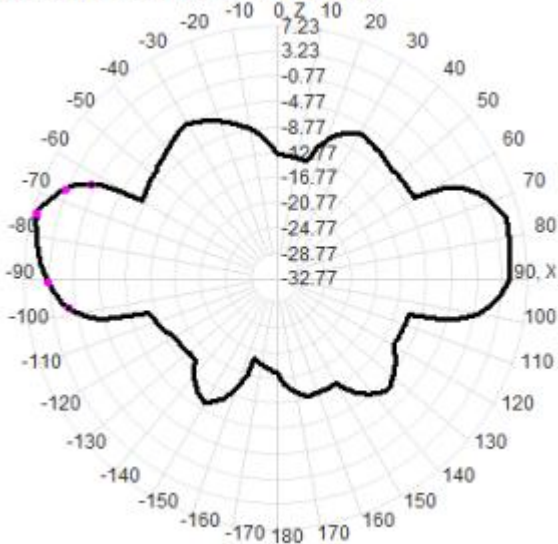
2500.0MHz H+V, Eff: 90.2%



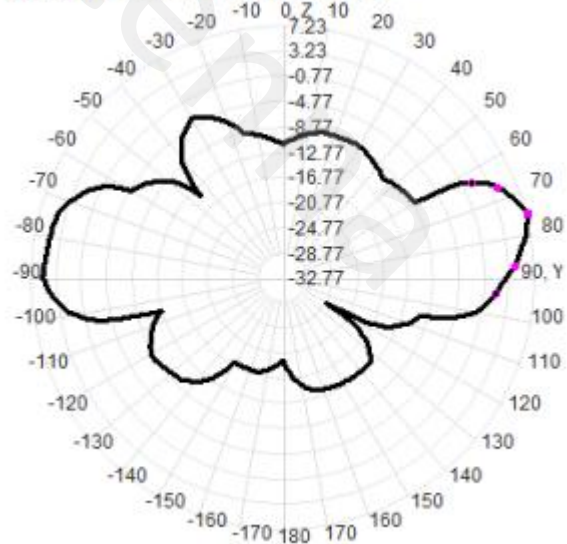
Back View



2500.0MHz Total(E1-XZ), Max= 6.57dBi

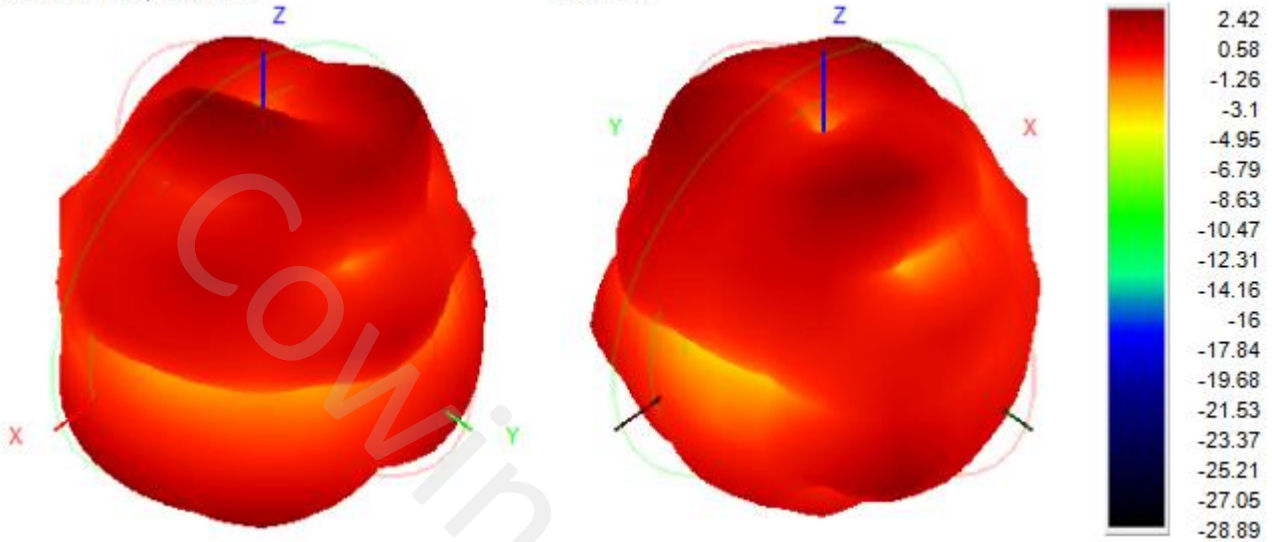


2500.0MHz Total(E2-YZ), Max= 7.23dBi



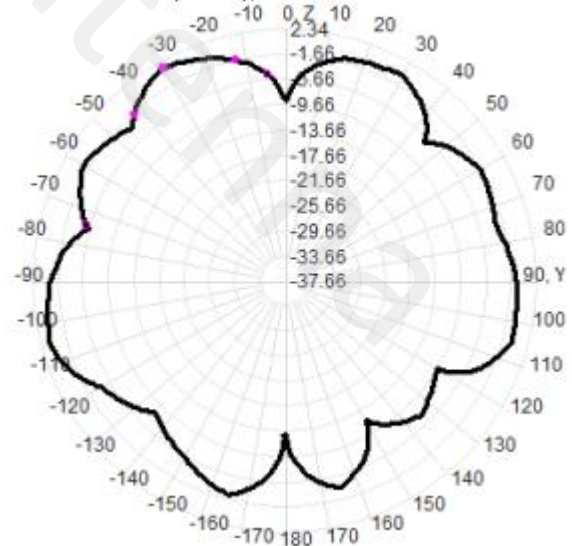
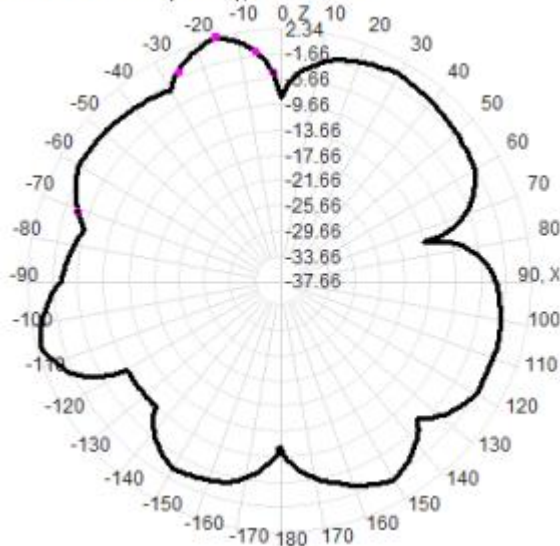
5150.0MHz H+V, Eff: 59.5%

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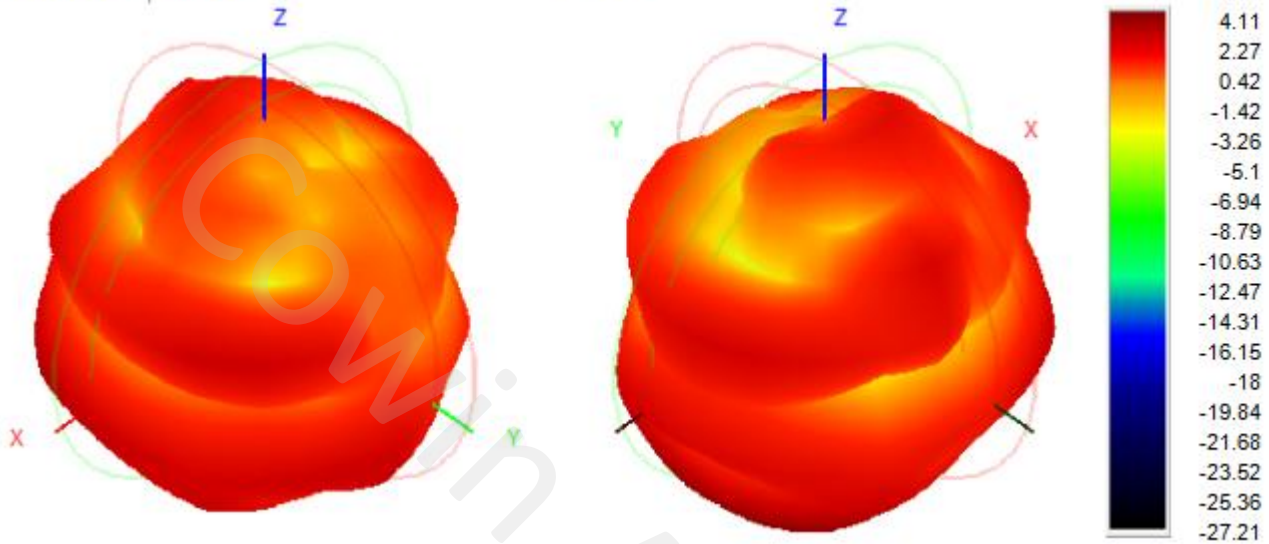
5150.0MHz Total(E1-XZ), Max= 2.34dBi

5150.0MHz Total(E2-YZ), Max= 1.31dBi



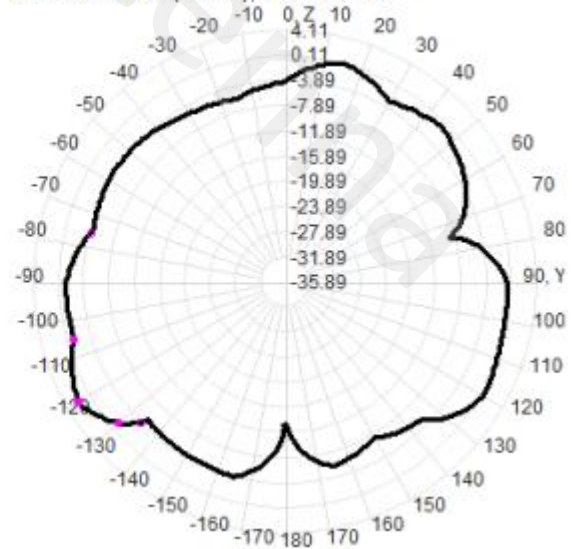
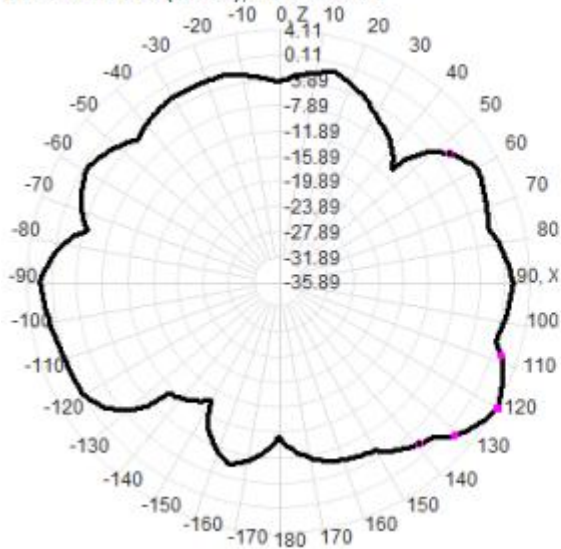
5500.0MHz H+V, Eff: 74.9%

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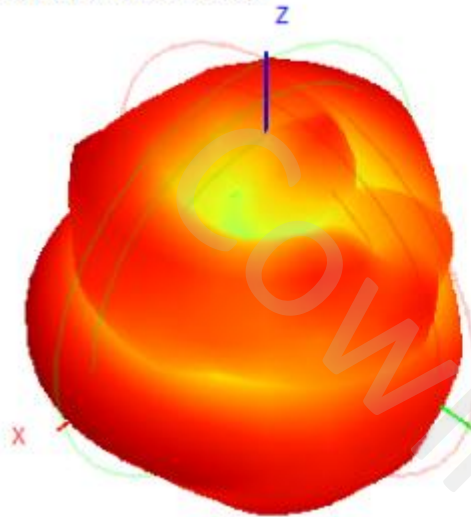


5500.0MHz Total(E1-XZ), Max= 4.11dBi

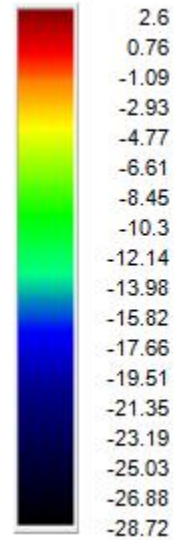
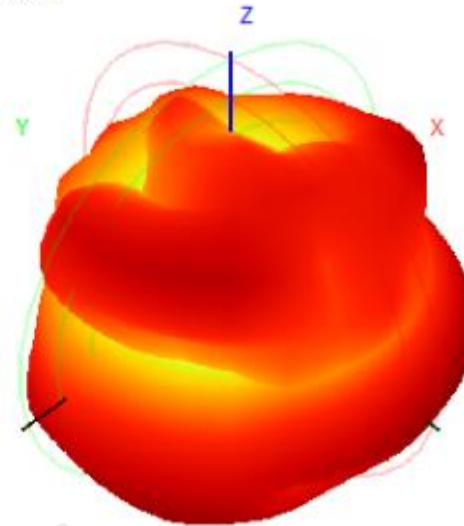
5500.0MHz Total(E2-YZ), Max= 2.04dBi



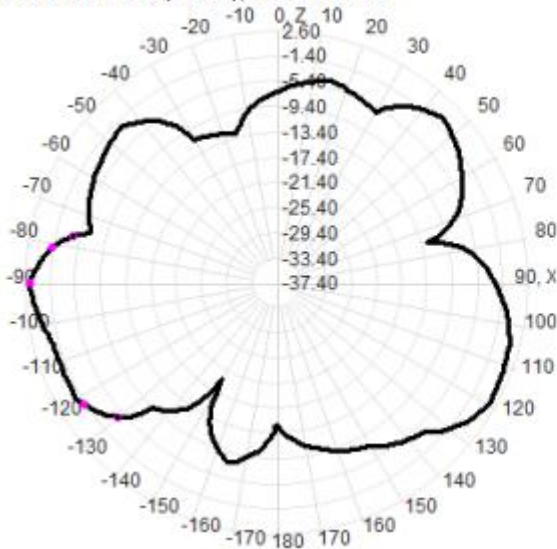
5850.0MHz H+V, Eff: 55.3%



Back View



5850.0MHz Total(E1-XZ), Max= 1.82dBi



5850.0MHz Total(E2-YZ), Max= 1.83dBi

