

## **CW-WZ-0065**

### **GSM External Antenna**

#### **Key Features**

Frequency: 800-920MHz/1710-1900MHz

SMA Male Connector

External Rubber

Dimensions 48\*8 mm

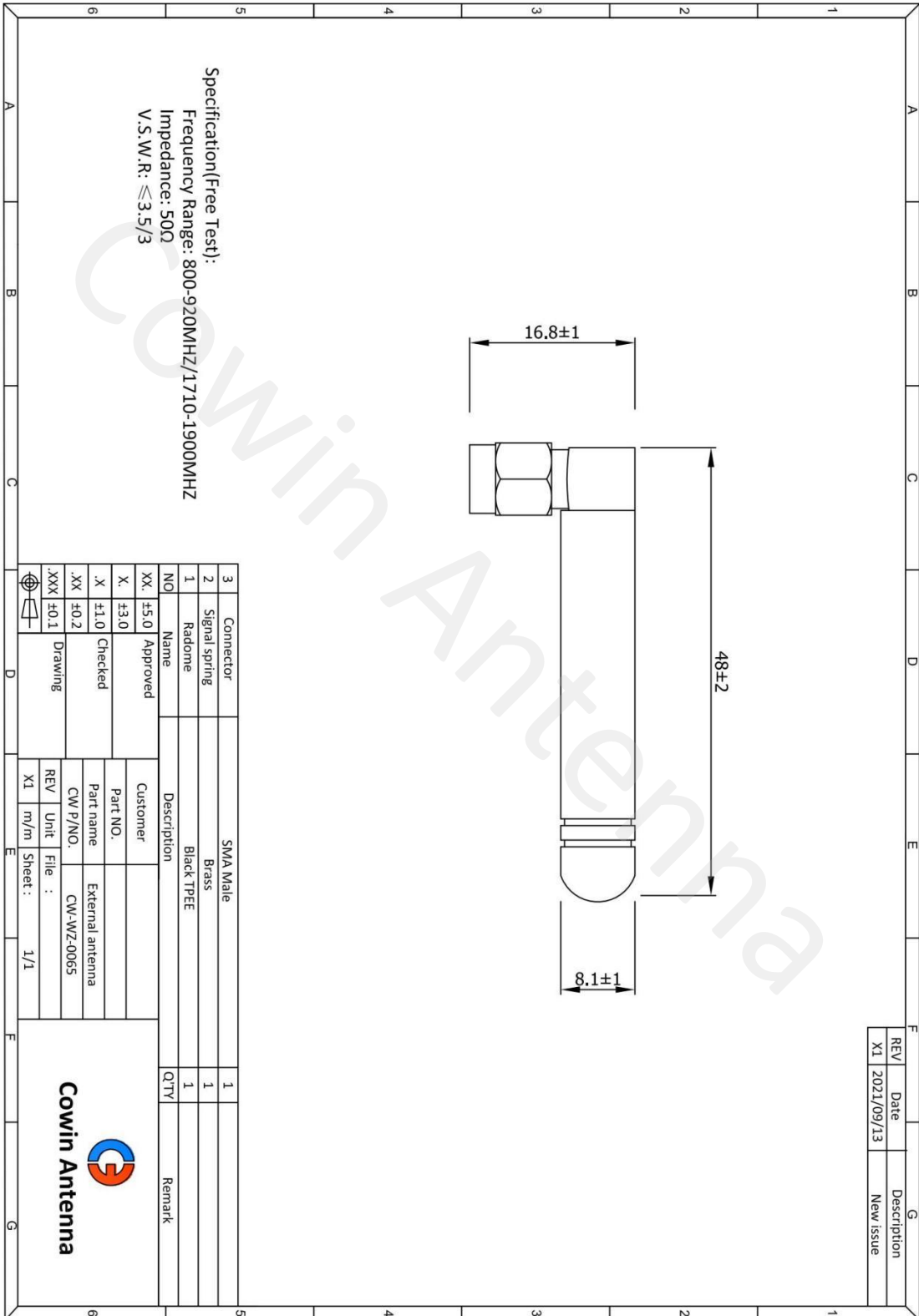


## 1. Antenna Electrical Characteristics

Band (MHz)		
Frequency (MHz)	800-920MHz	1710-1900MHz
VSWR	3.5:1	3:1
Efficiency (%)	68.66%	59.79
Peak Gain (dBi)	3.25	3.31
Impedance (Ohm)		50
Polarisation		Vertical
Max. Input Power (W)		10
Connector Type		SMA Male

## 2. Material and environmental characteristics

Material of PCB	N/A
Material of Plastic	TPEE
Cable Type	N/A
Connector Type	SMA Male
Dimensions (mm)	48*8MM
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

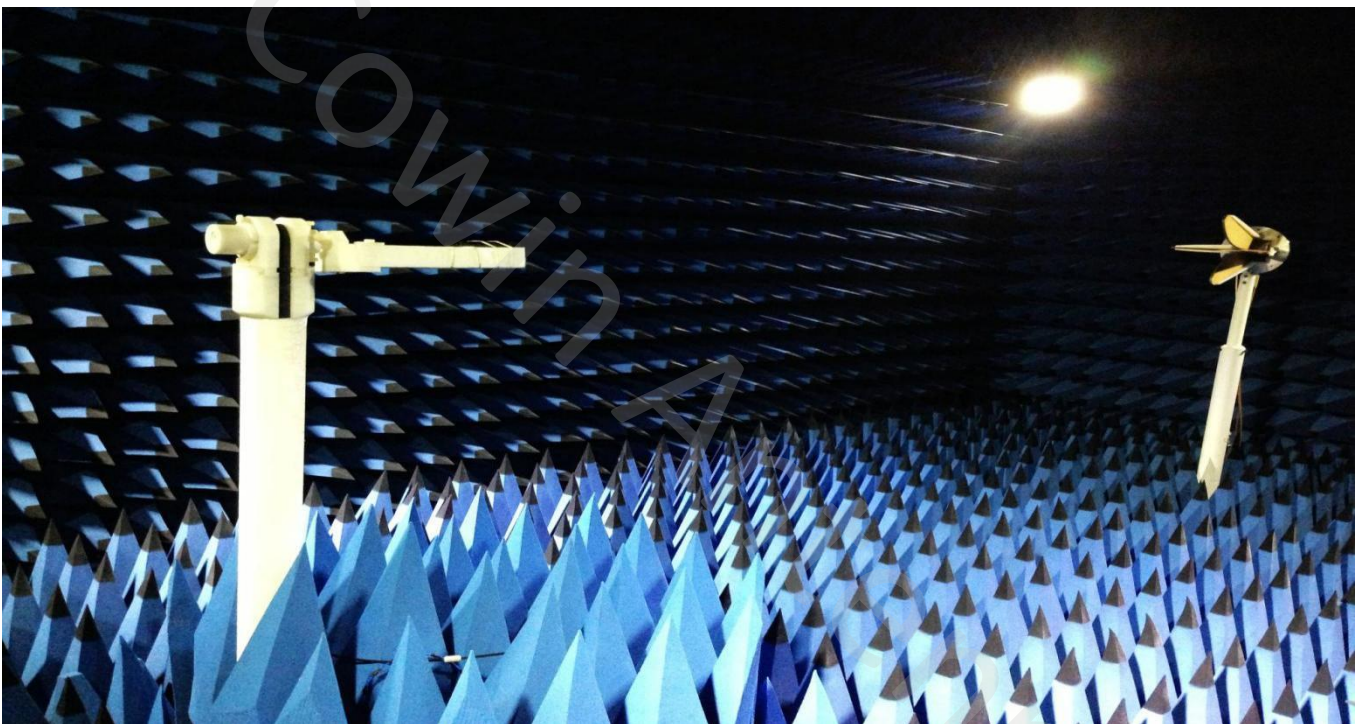
**Antenna Measurement Conditions:**

Mounted on Ground Plane of 280 x 80 mm

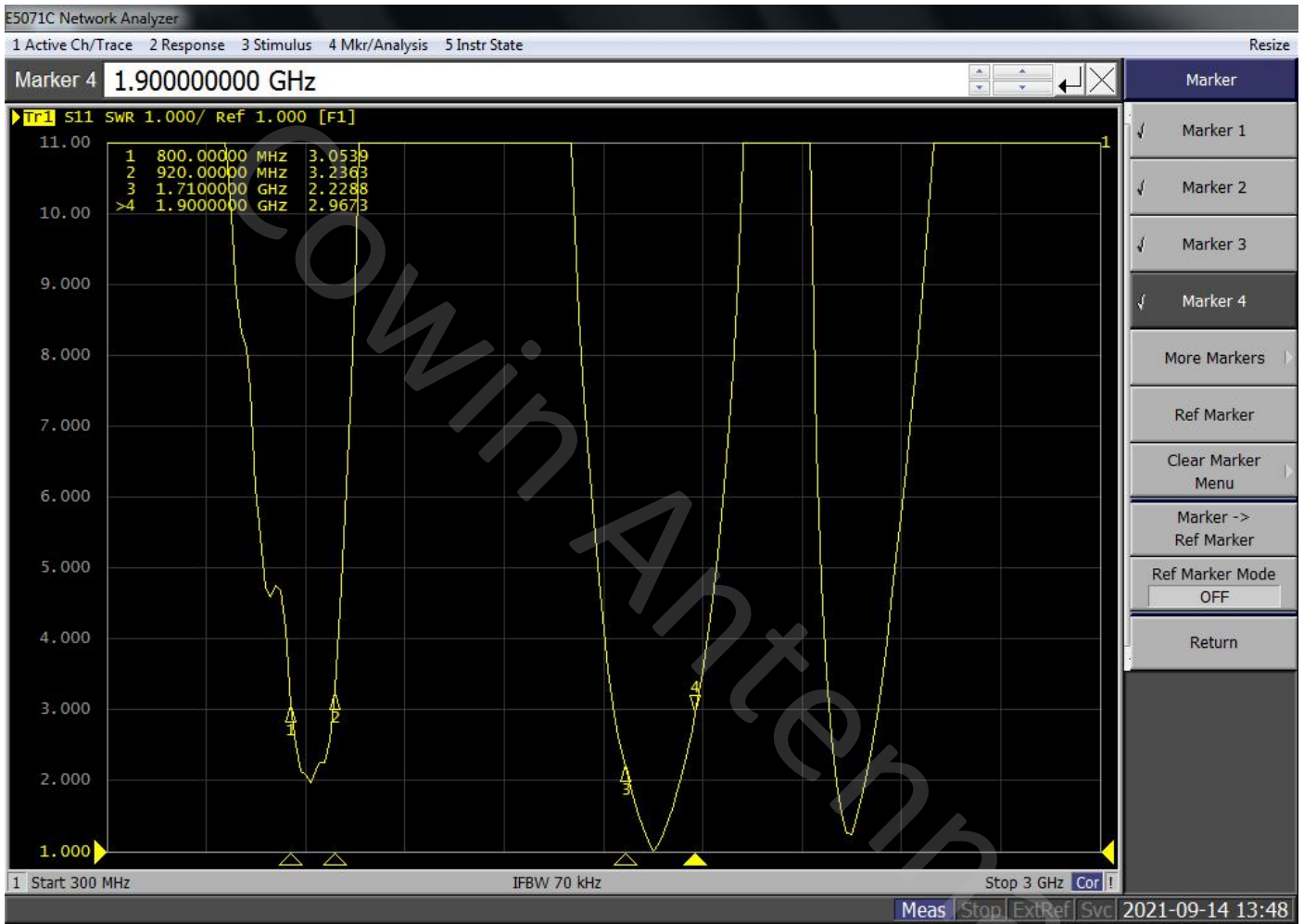
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

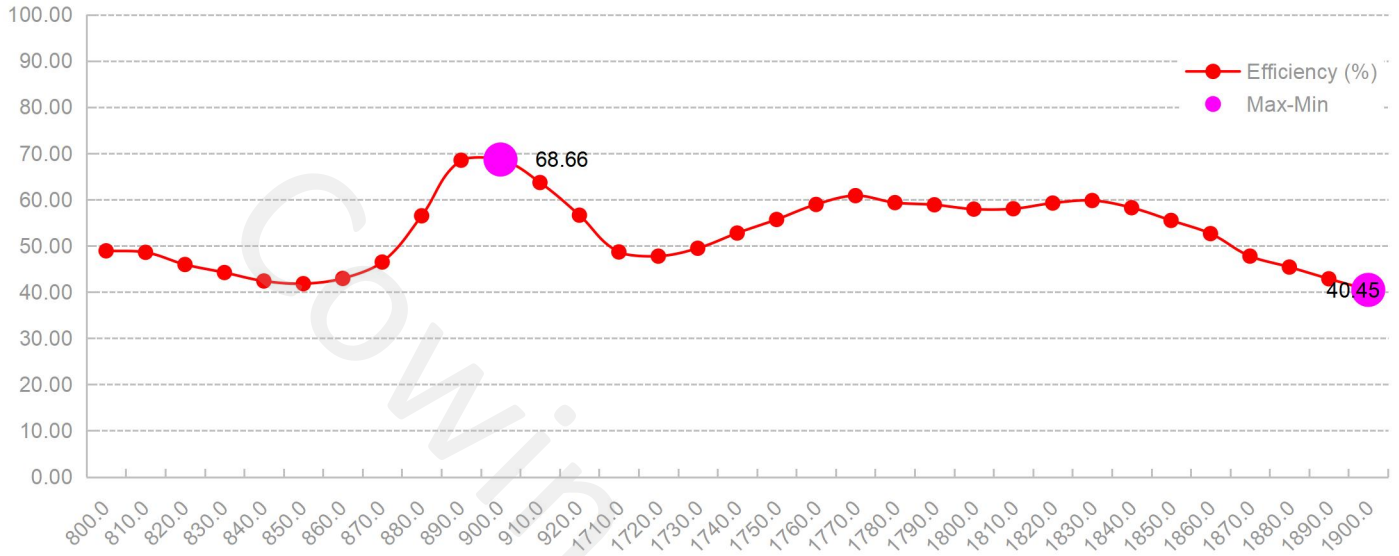
The comprehensive tester is Agilent cmv500



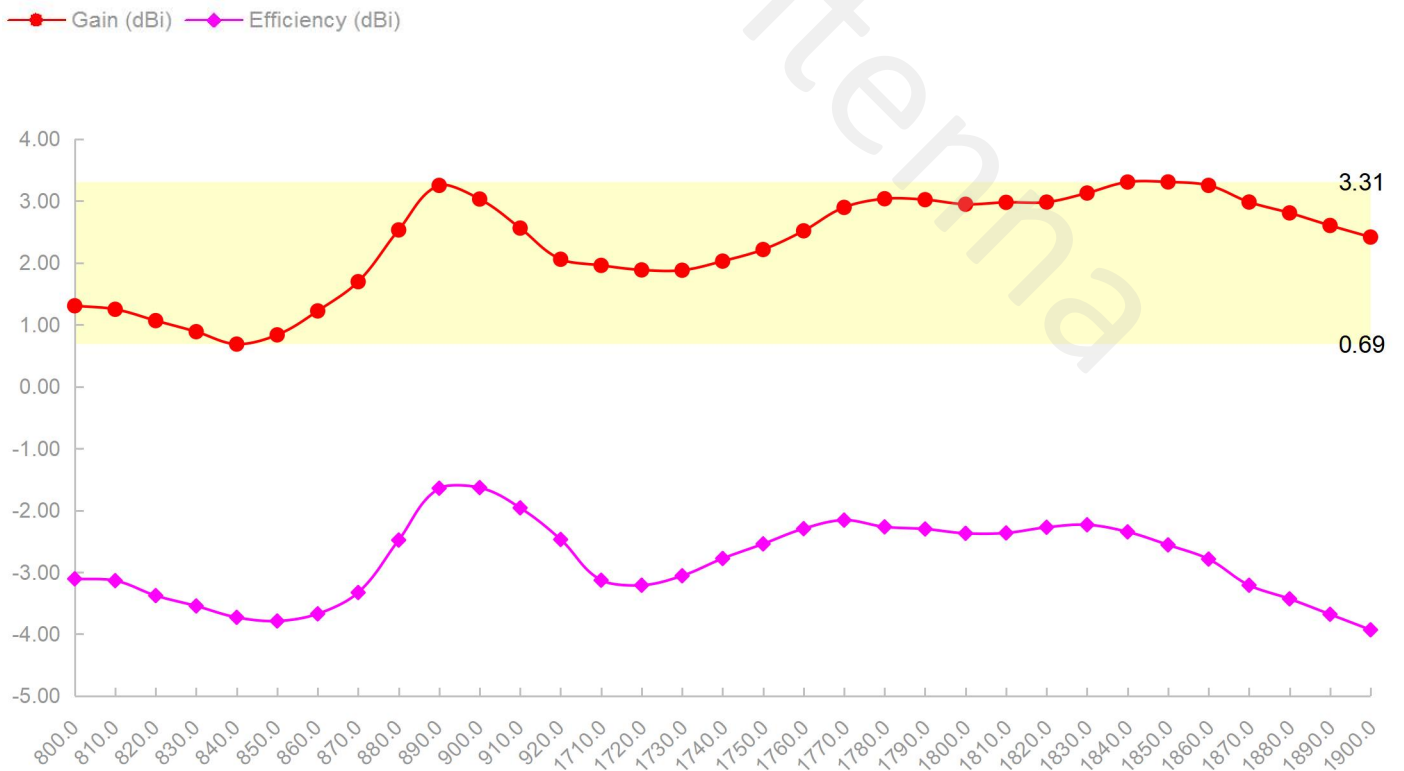
## 4.1 VSWR



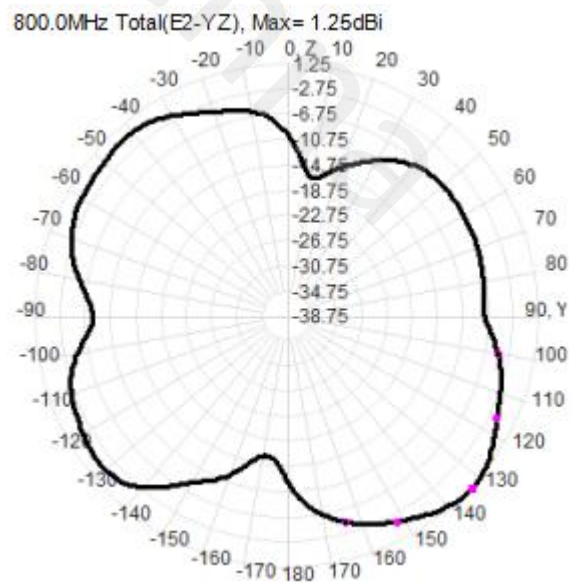
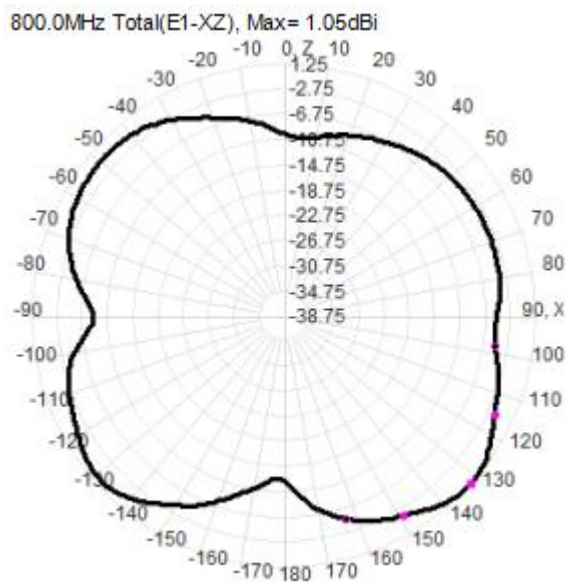
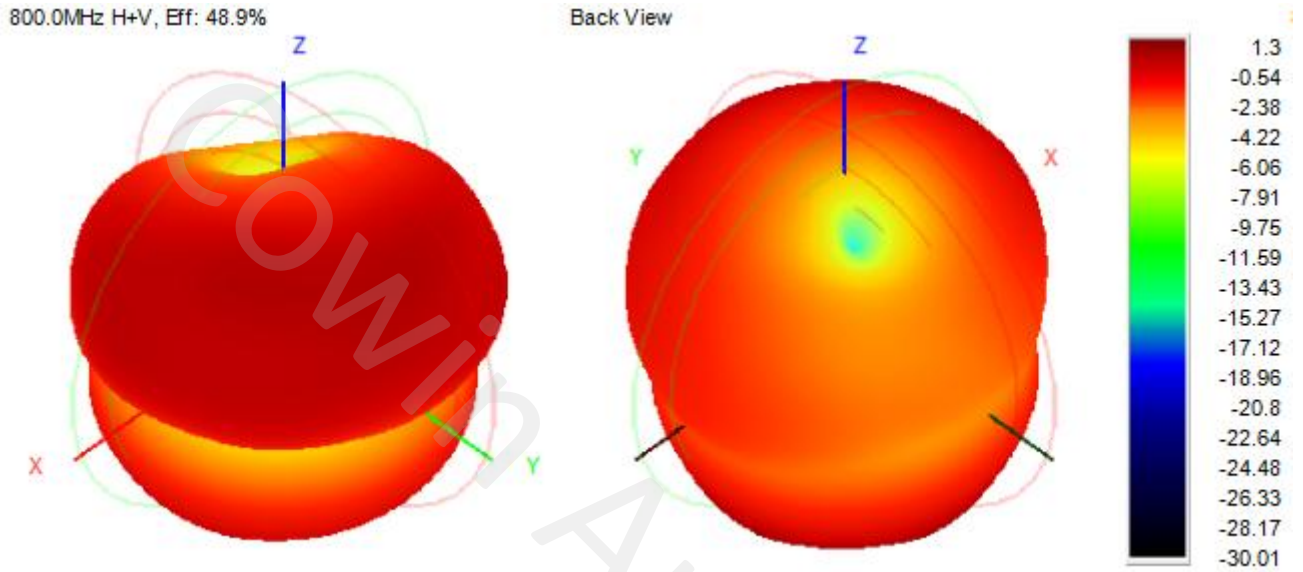
## 4.2 Efficiency



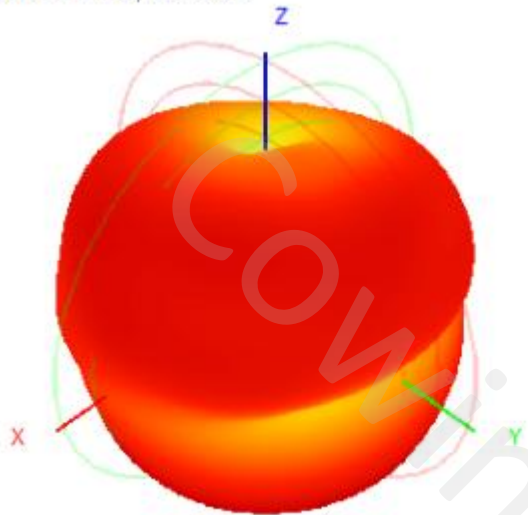
## 4.3 Peak gain



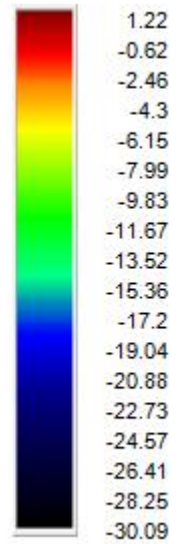
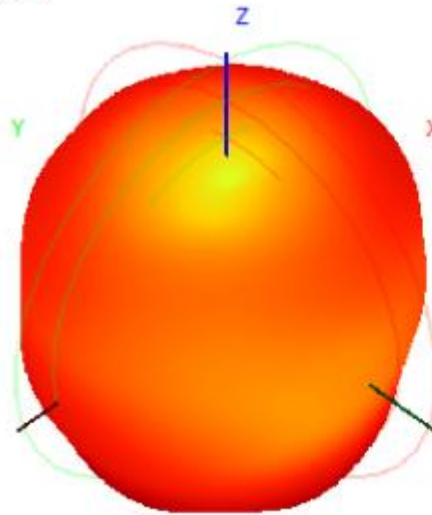
## 4.4 3D&2D Radiation Patterns



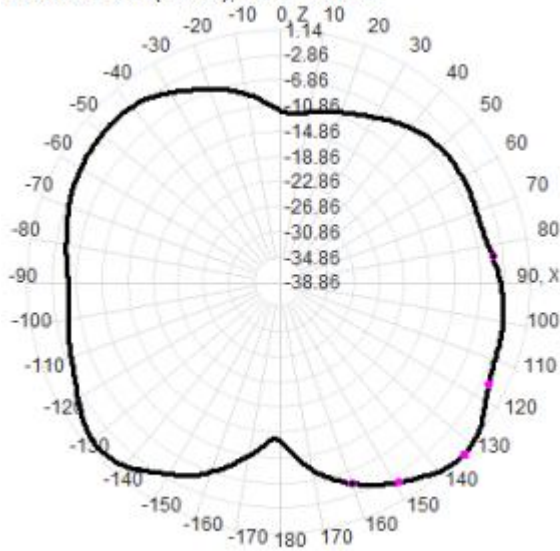
860.0MHz H+V, Eff: 42.9%



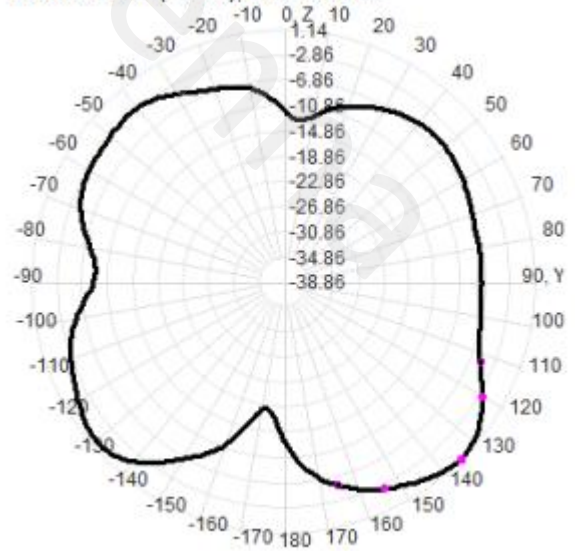
Back View



860.0MHz Total(E1-XZ), Max= 1.14dBi

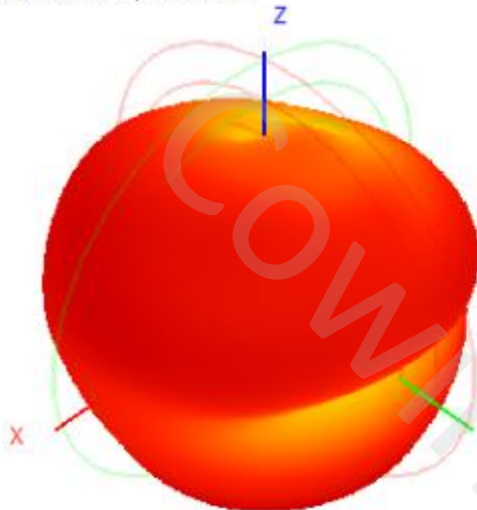


860.0MHz Total(E2-YZ), Max= 0.66dBi

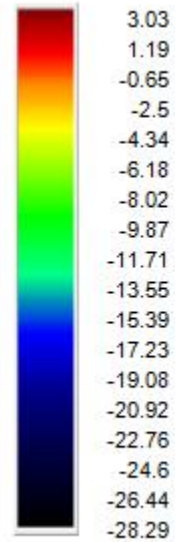
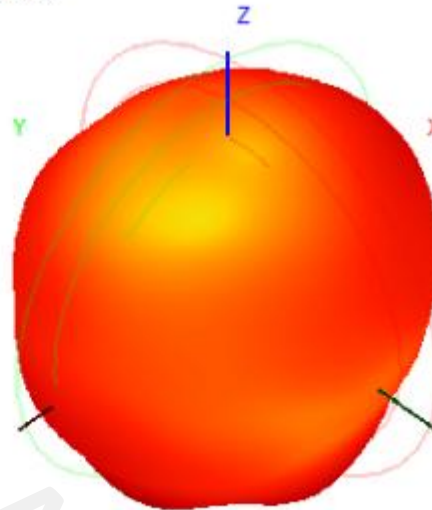




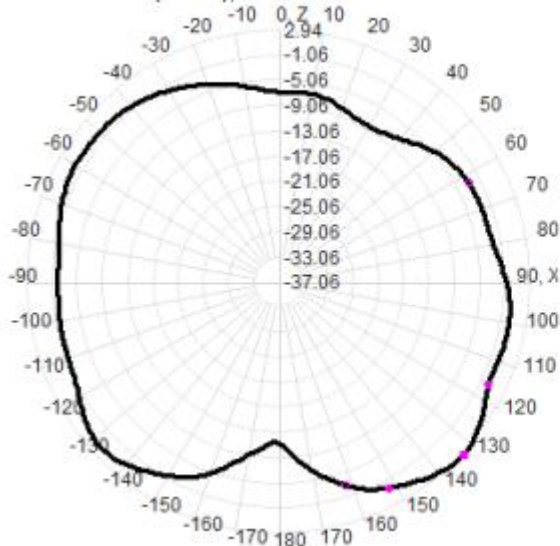
900.0MHz H+V, Eff: 68.7%



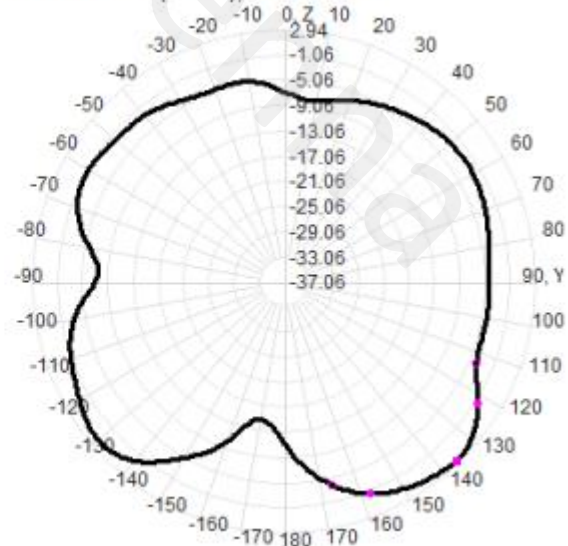
Back View



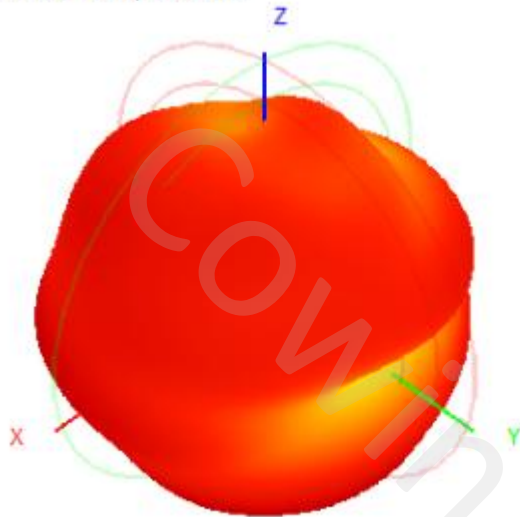
900.0MHz Total(E1-XZ), Max= 2.94dBi



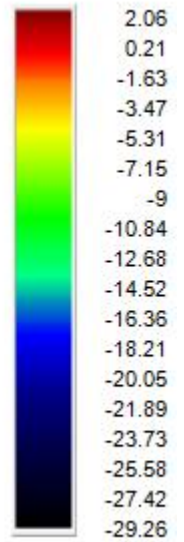
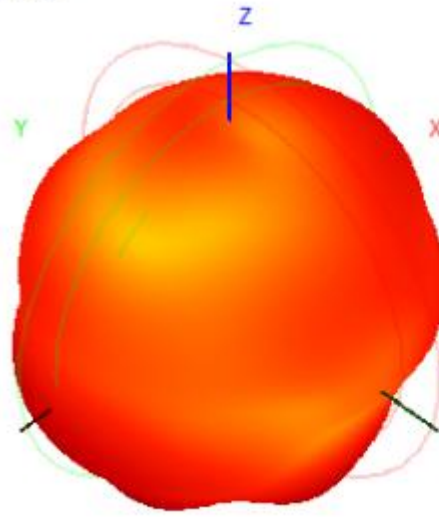
900.0MHz Total(E2-YZ), Max= 2.17dBi



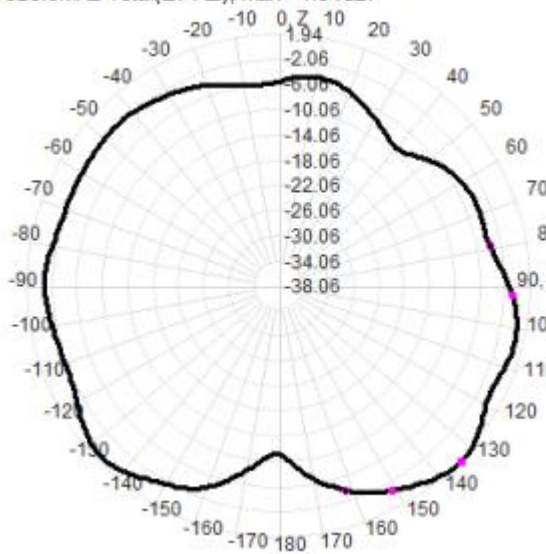
920.0MHz H+V, Eff: 56.6%



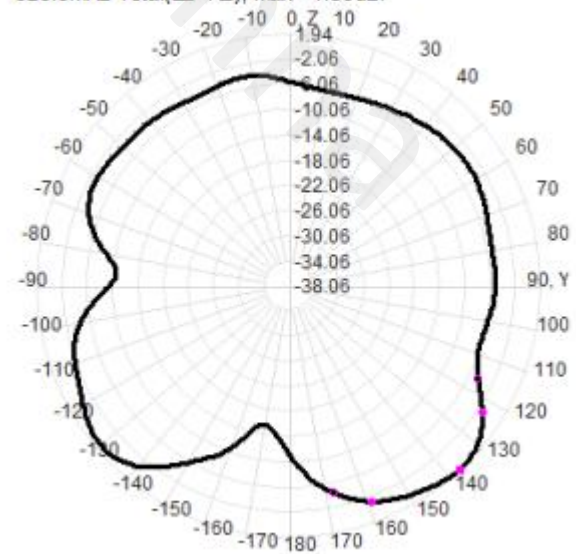
Back View



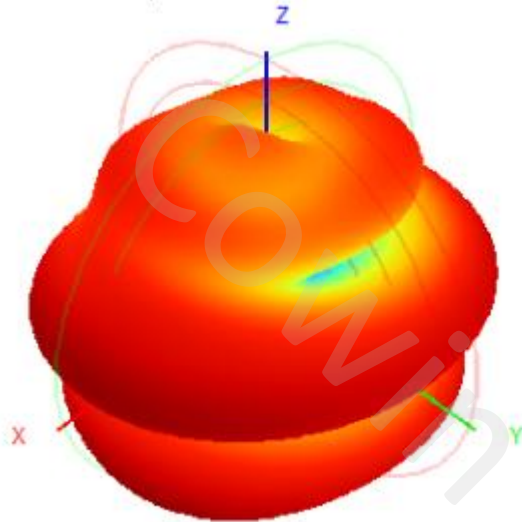
920.0MHz Total(E1-XZ), Max= 1.94dBi



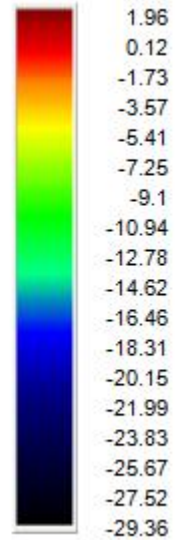
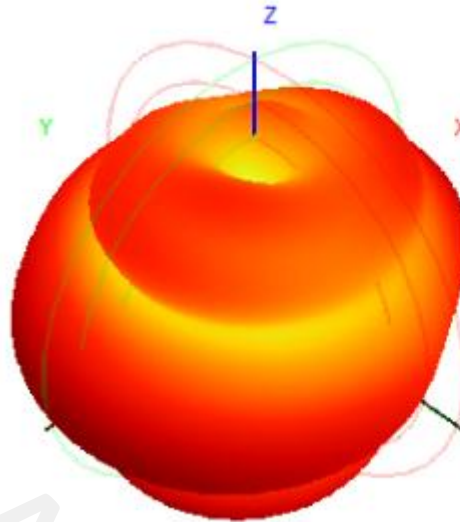
920.0MHz Total(E2-YZ), Max= 1.56dBi



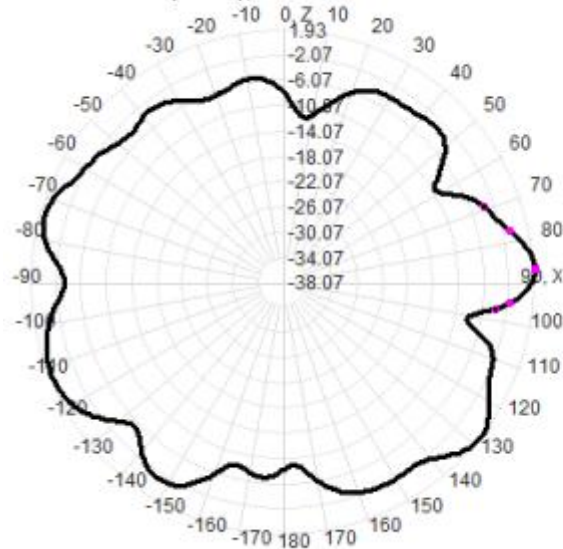
1710.0MHz H+V, Eff: 48.7%



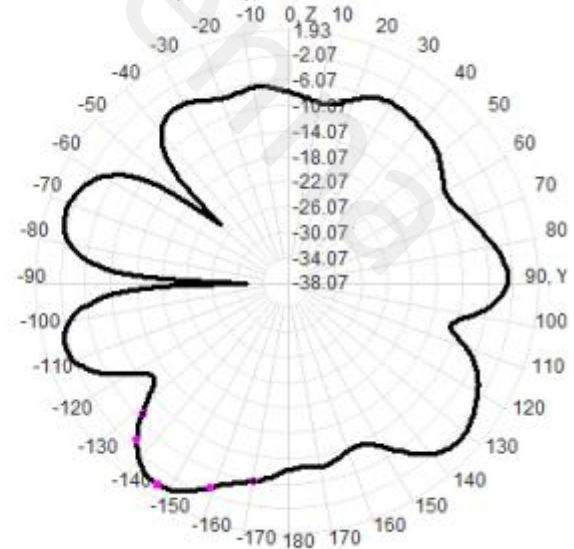
Back View



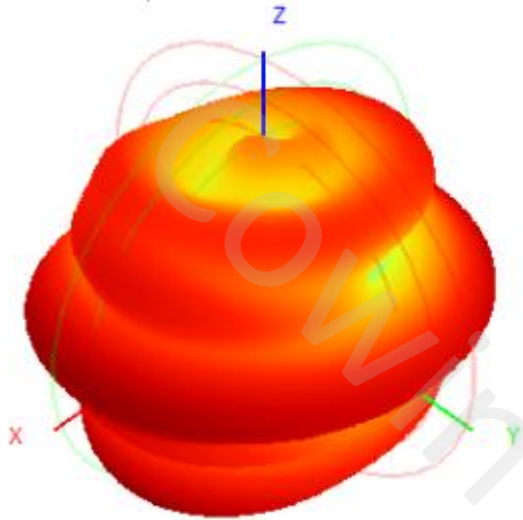
1710.0MHz Total(E1-XZ), Max= 1.93dBi



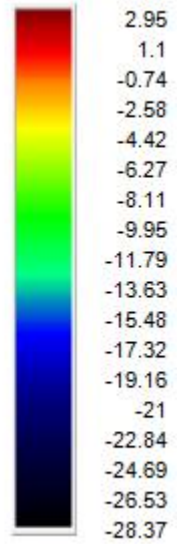
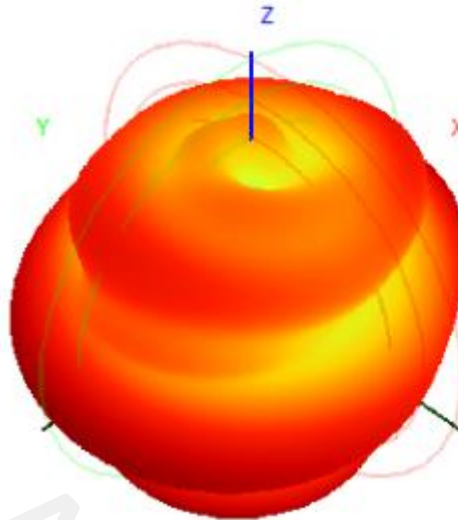
1710.0MHz Total(E2-YZ), Max= -0.15dBi



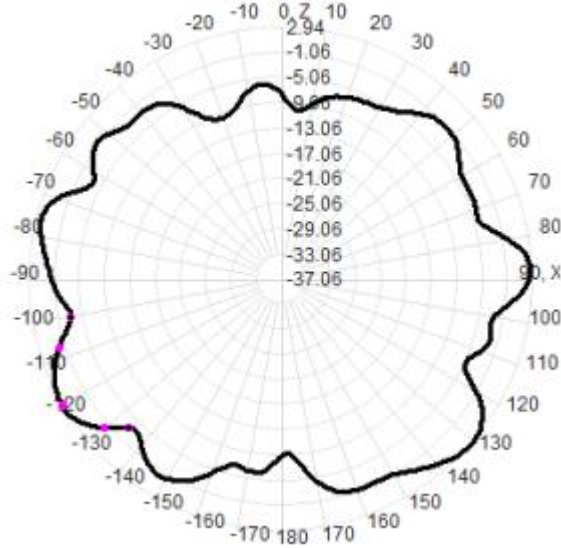
1800.0MHz H+V, Eff: 57.9%



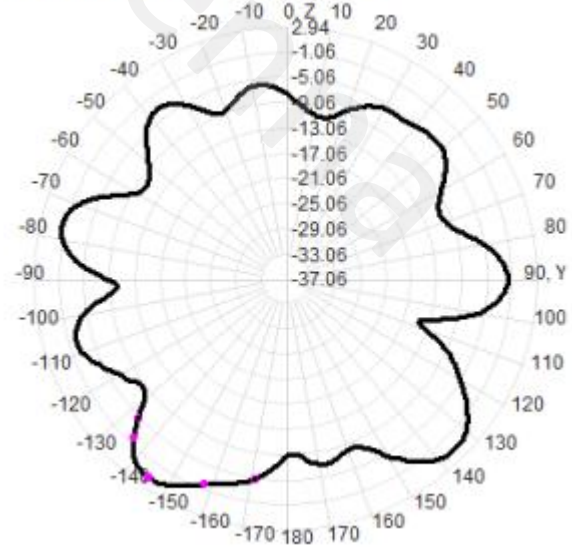
Back View



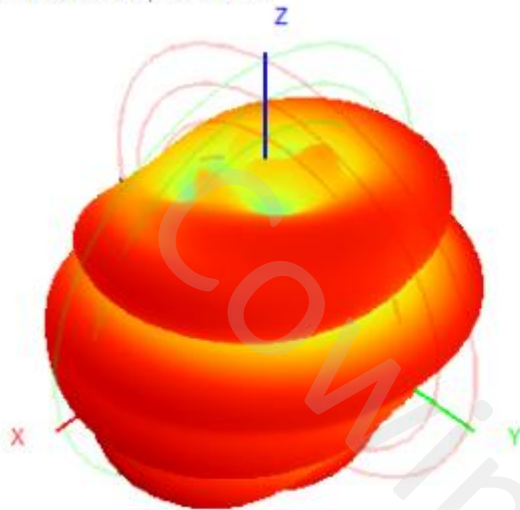
1800.0MHz Total(E1-XZ), Max= 2.94dBi



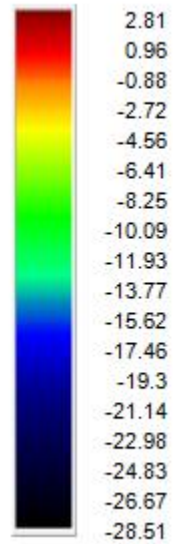
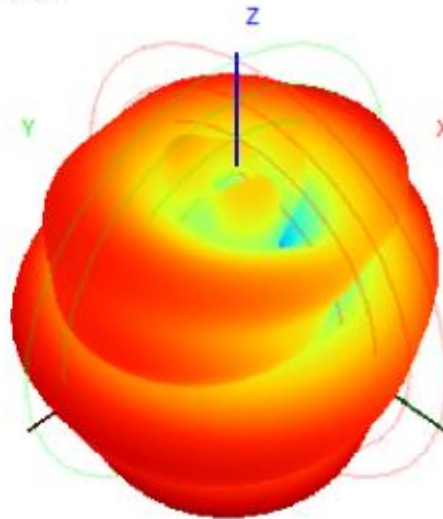
1800.0MHz Total(E2-YZ), Max= 1.17dBi



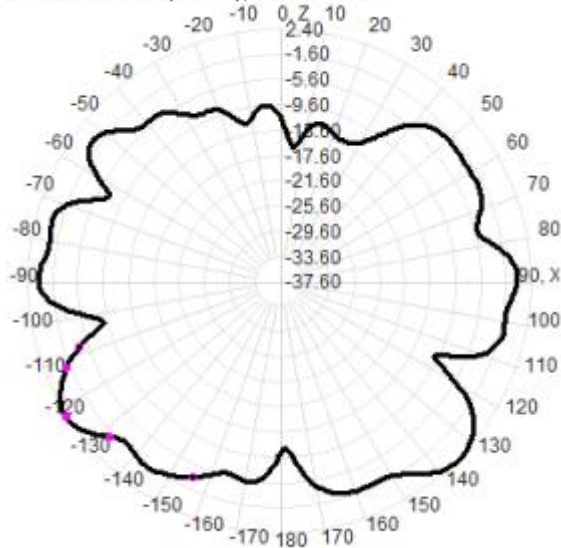
1880.0MHz H+V, Eff: 45.4%



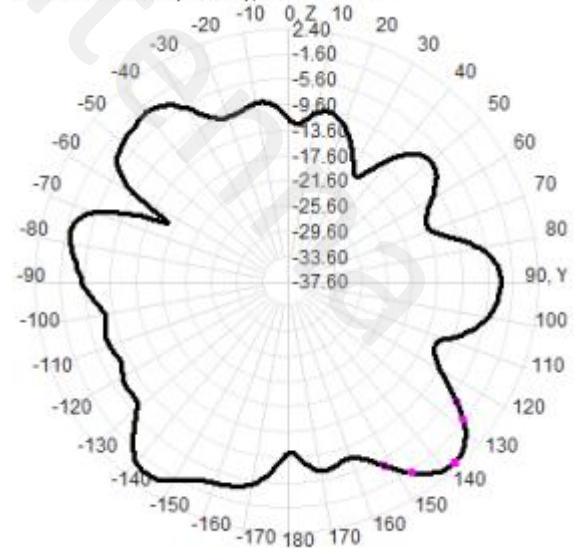
Back View



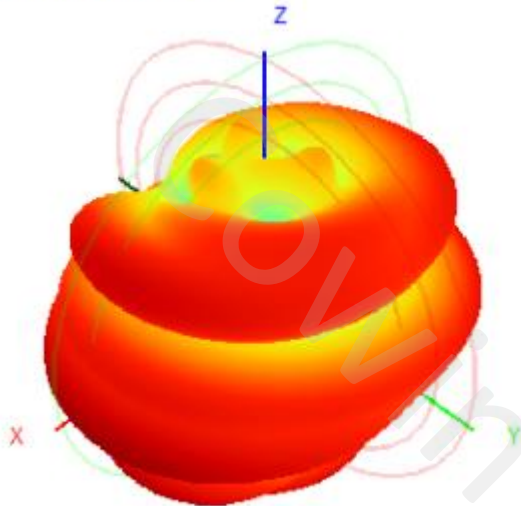
1880.0MHz Total(E1-XZ), Max= 2.40dBi



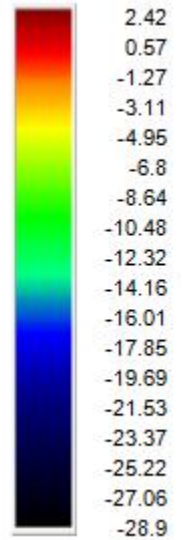
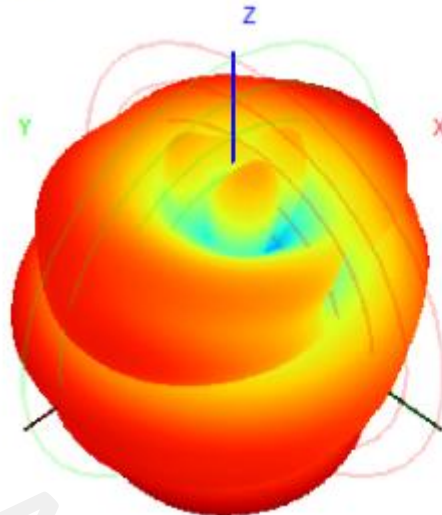
1880.0MHz Total(E2-YZ), Max= 1.36dBi



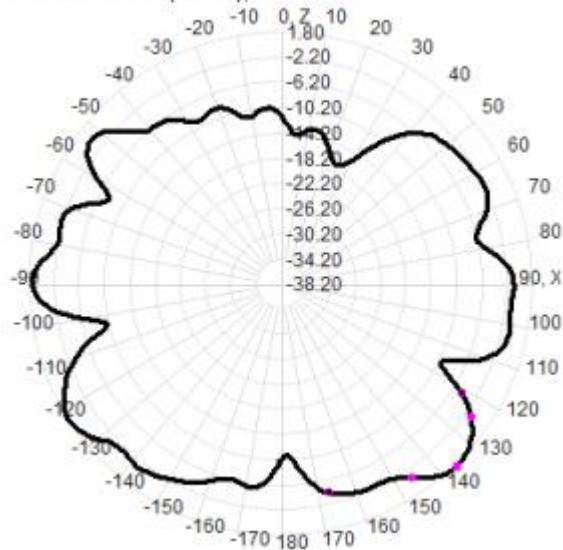
1900.0MHz H+V, Eff: 40.5%



Back View



1900.0MHz Total(E1-XZ), Max= 1.80dBi



1900.0MHz Total(E2-YZ), Max= 0.99dBi

