

## **CW-WZ-0143**

### **4G External Patch Antenna**

#### **Key Features**

Frequency:698-960MHZ/1710-2700MHZ

SMA Connector

3M Adhesive

Dimensions:109\*17.8mm

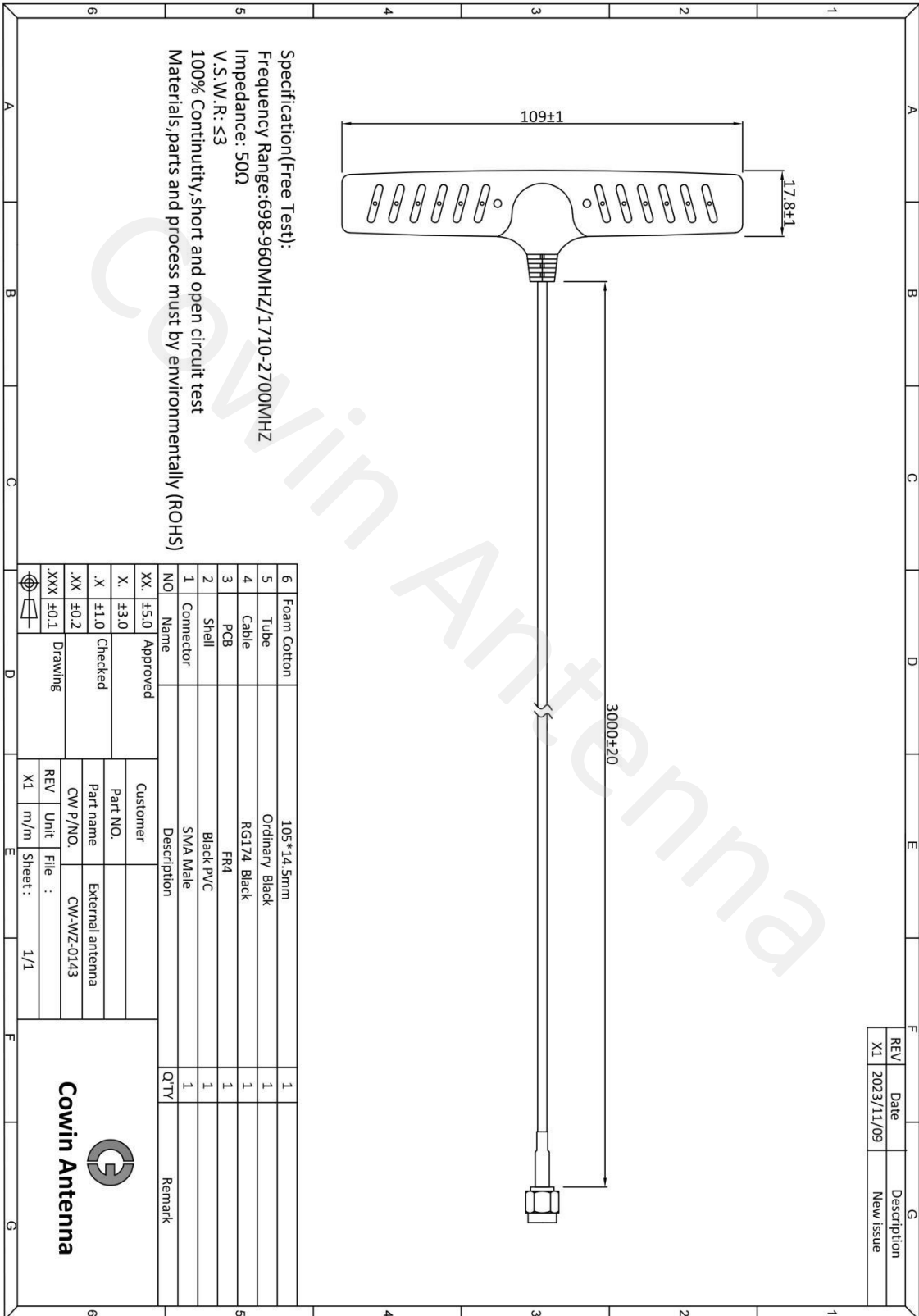


## 1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	698-960MHZ/1710-2700MHZ
VSWR	≤3
Efficiency (%)	73.45%/82.7%
Peak Gain (dBi)	3.41/4.8
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA

## 2. Material and environmental characteristics

External structure	PVC
Inner structure	PCB
Cable Type	RG174
Connector Type	SMA
Dimensions (mm)	109*17.8 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

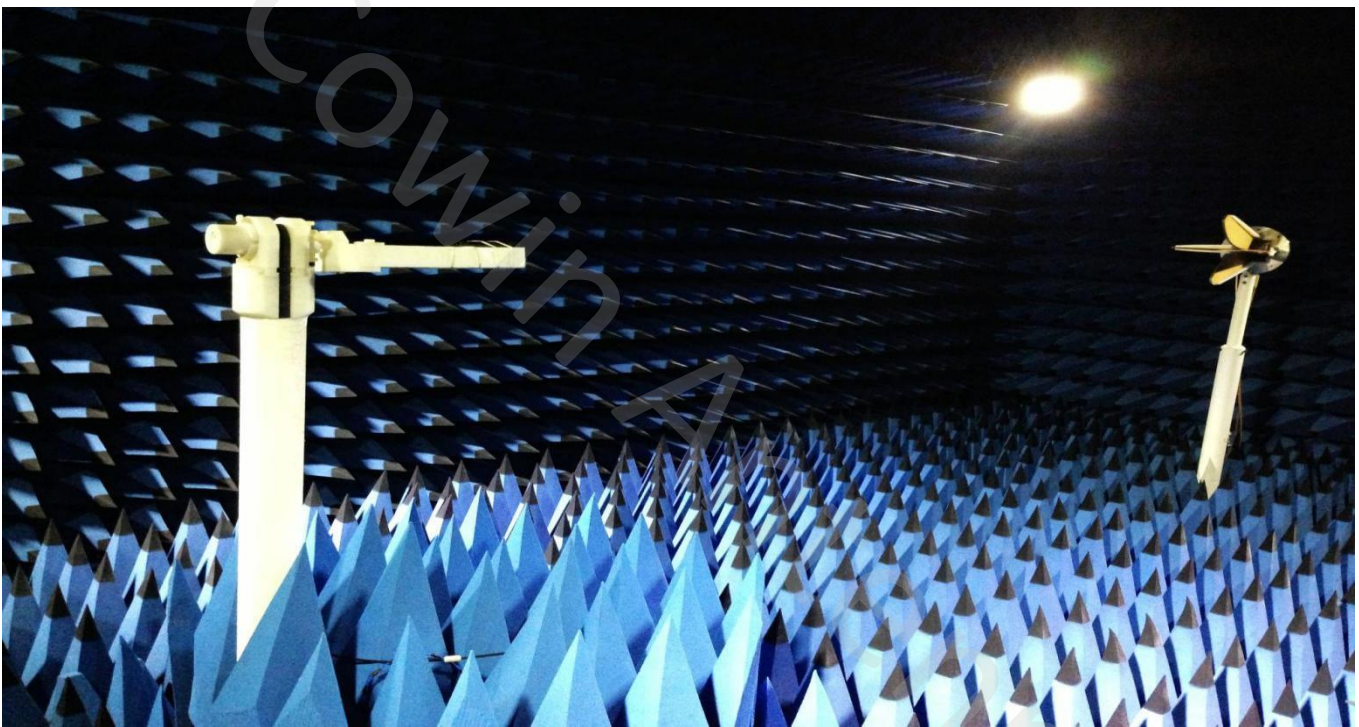
### Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

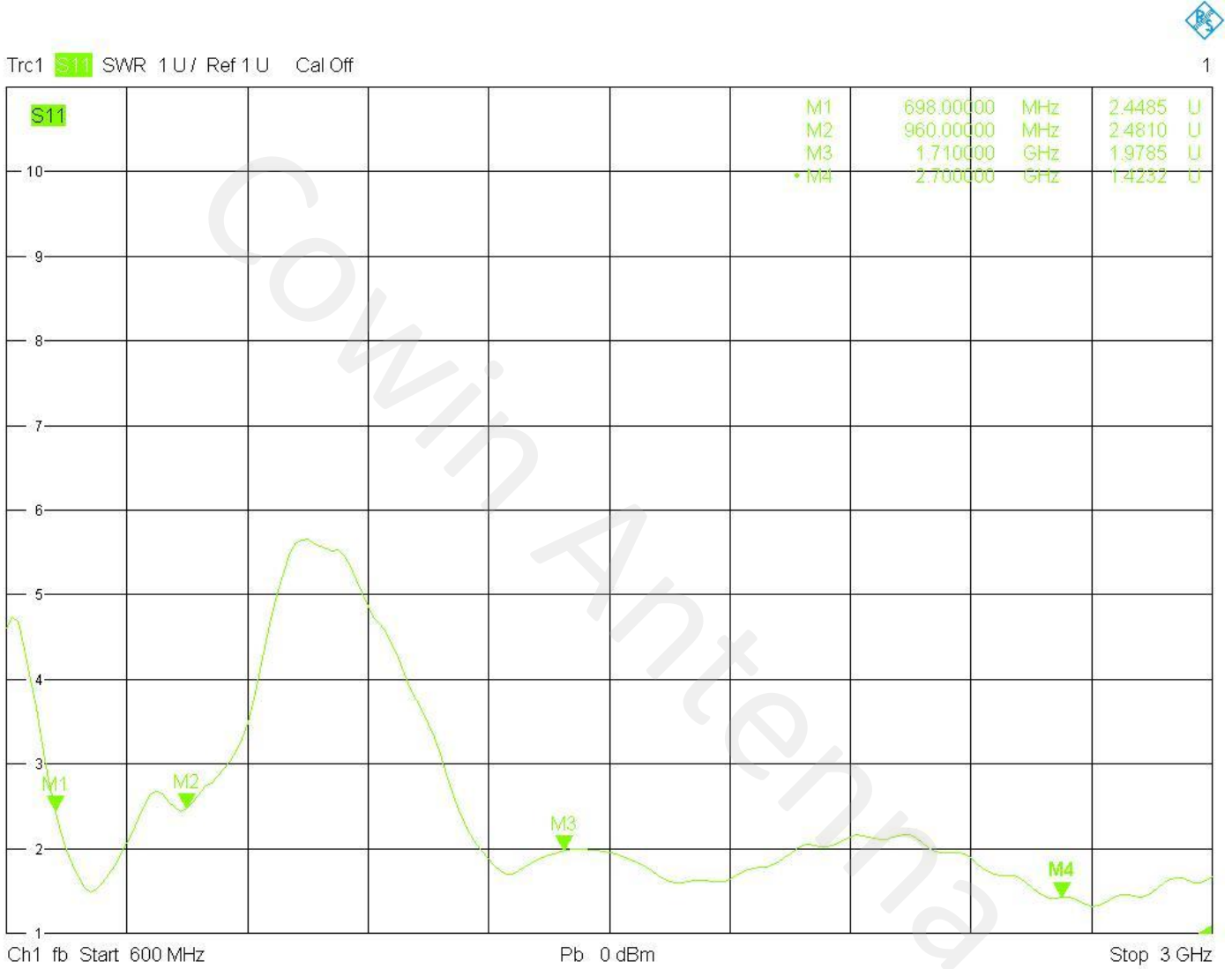
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500

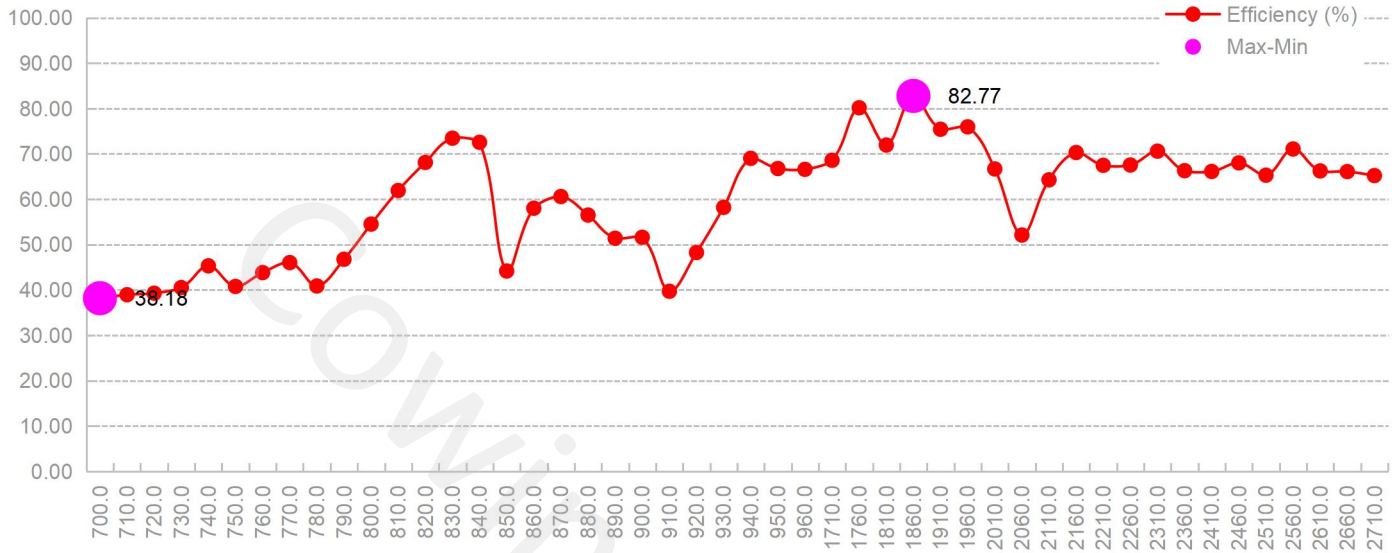


## 4.1 VSWR

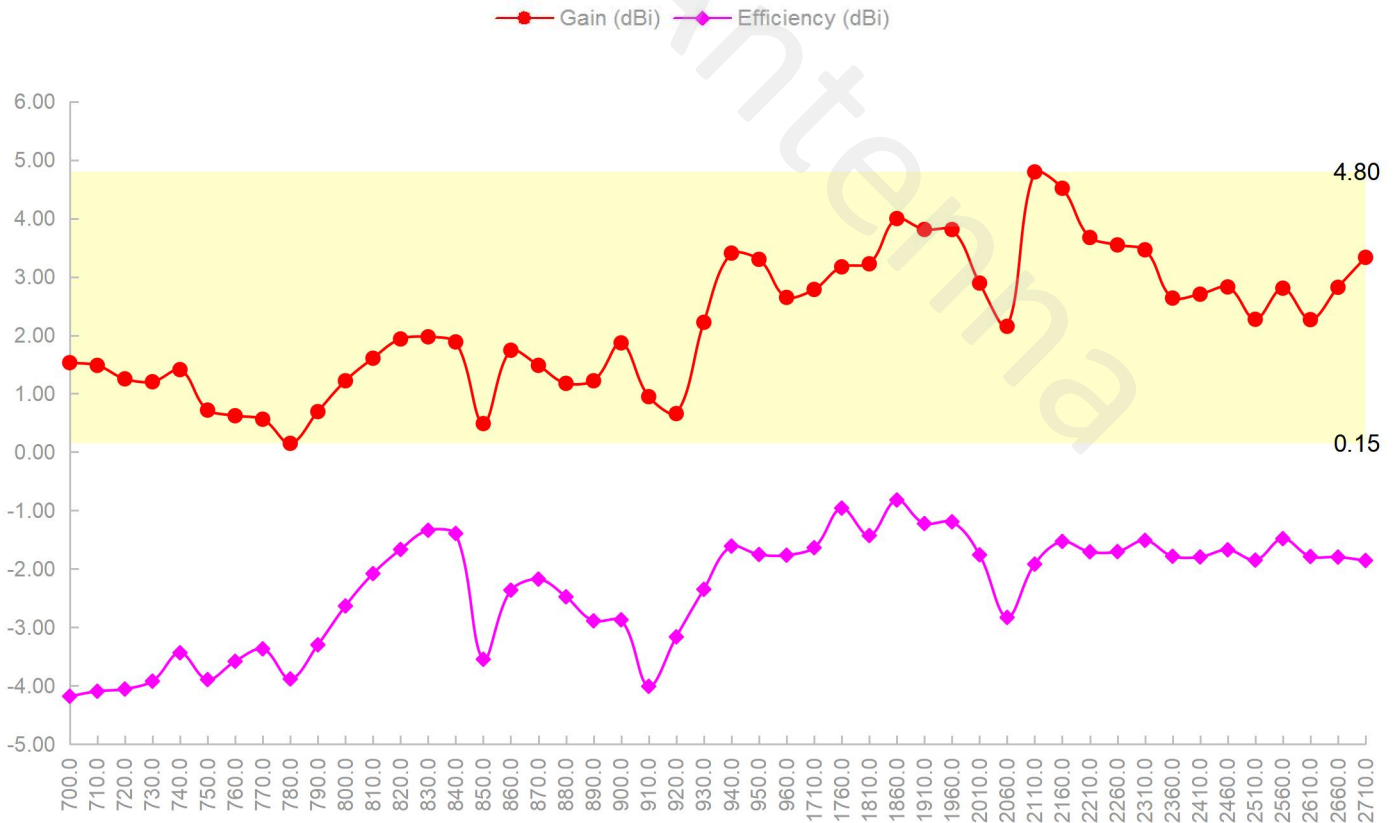


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## 4.2 Efficiency

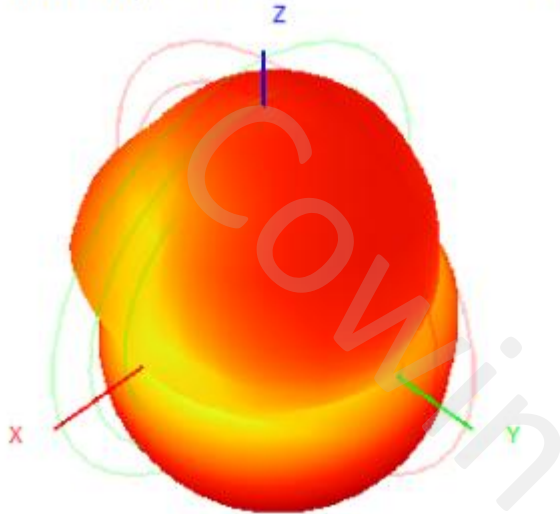


## 4.3 Peak gain

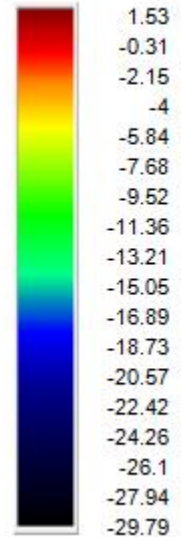
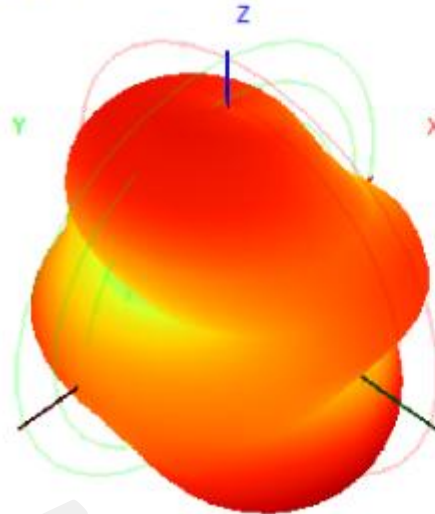


## 4.4 3D&2D Radiation Patterns

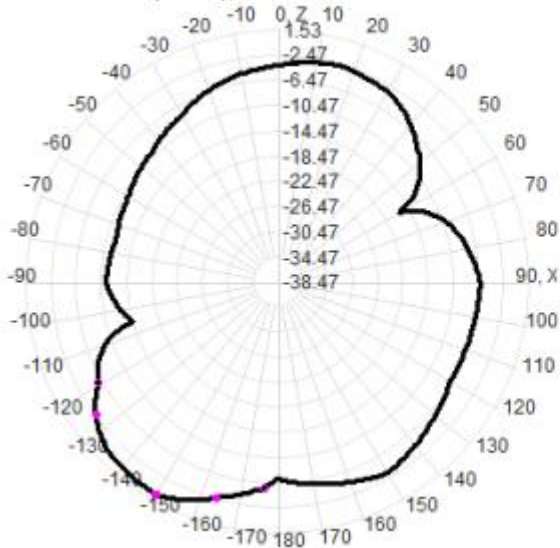
700.0MHz H+V, Eff: 38.2%



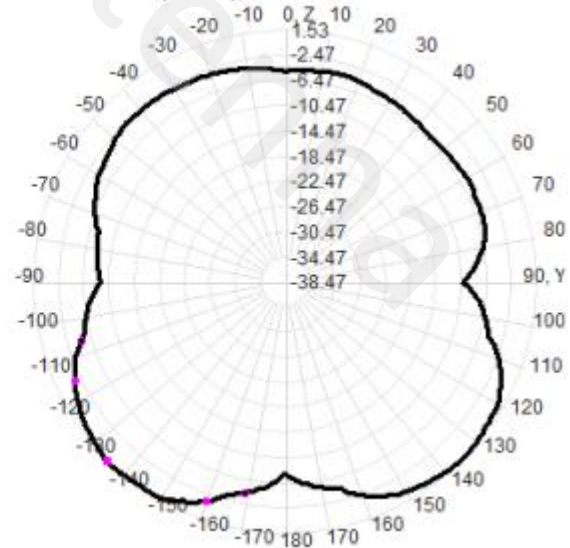
Back View



700.0MHz Total(E1-XZ), Max= 0.28dBi

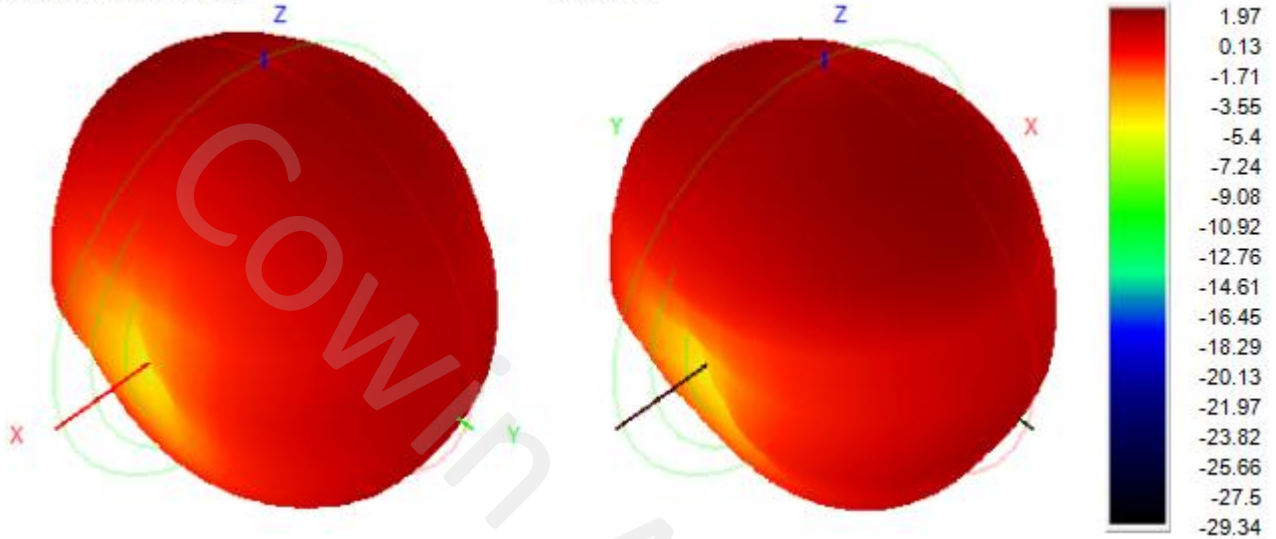


700.0MHz Total(E2-YZ), Max= 1.53dBi



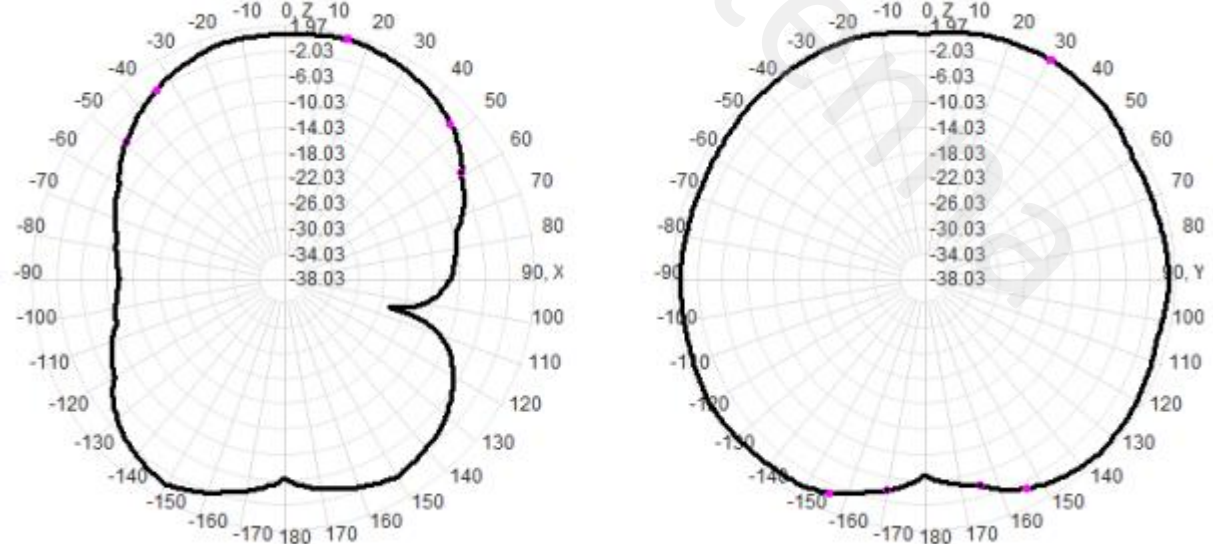
830.0MHz H+V, Eff: 73.5%

Back View



830.0MHz Total(E1-XZ), Max= 1.12dBi

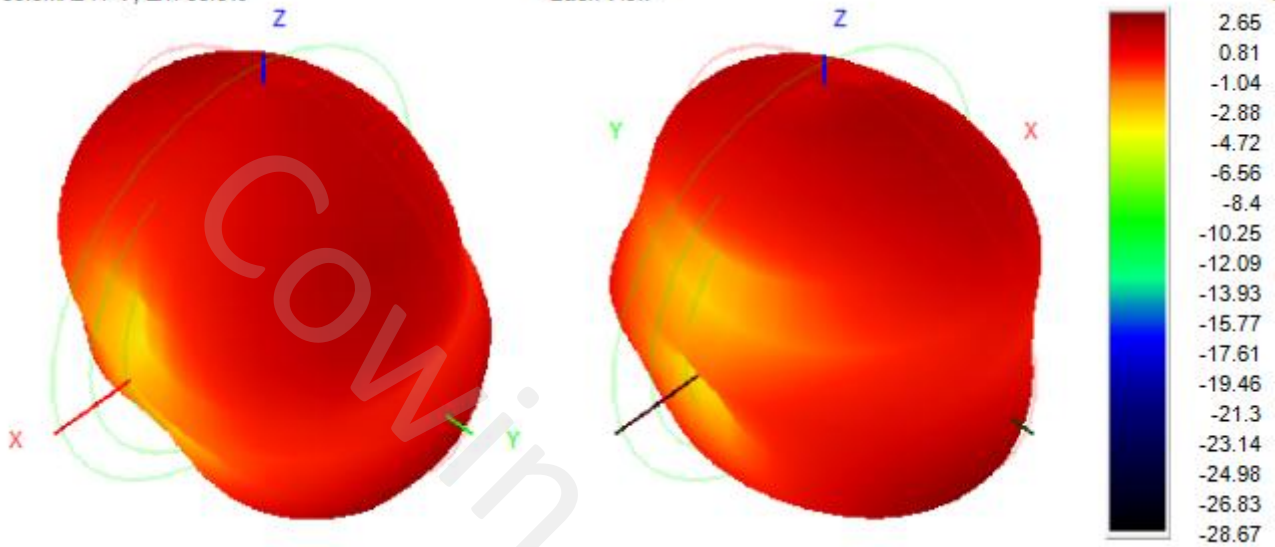
830.0MHz Total(E2-YZ), Max= 1.97dBi





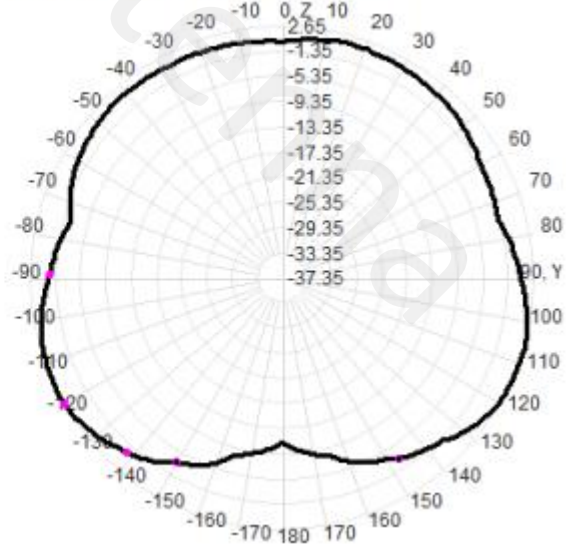
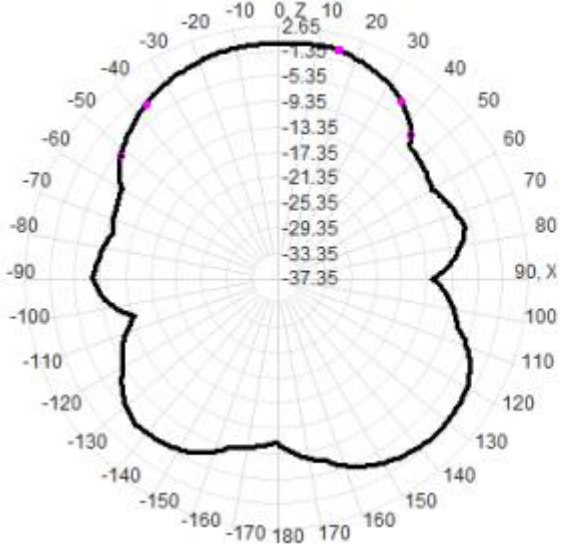
960.0MHz H+V, Eff: 66.6%

Back View



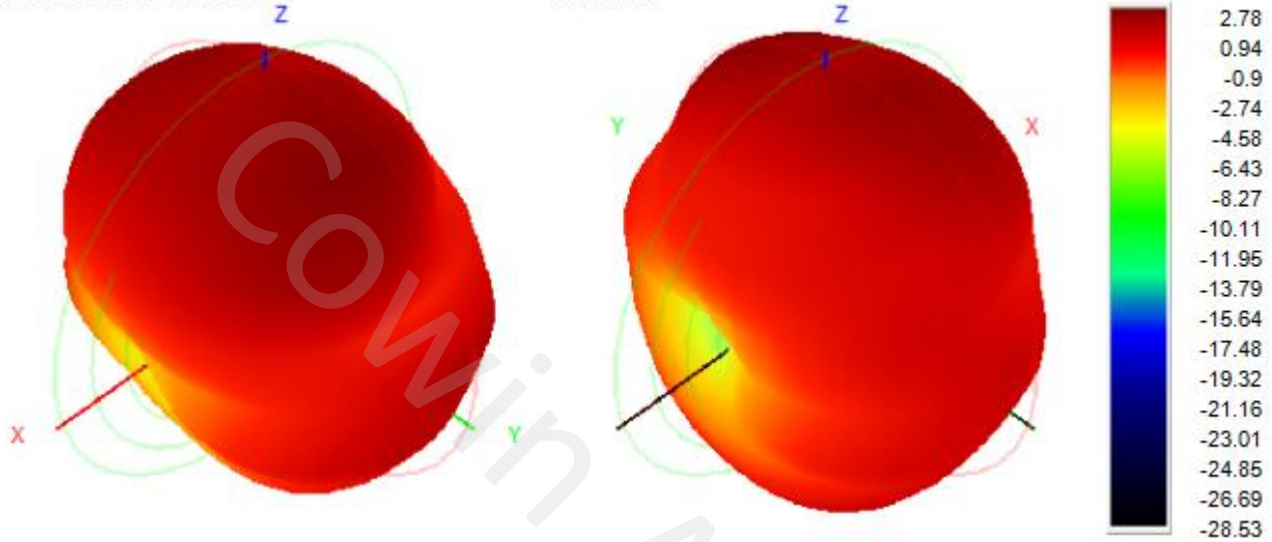
960.0MHz Total(E1-XZ), Max= 0.16dBi

960.0MHz Total(E2-YZ), Max= 2.65dBi



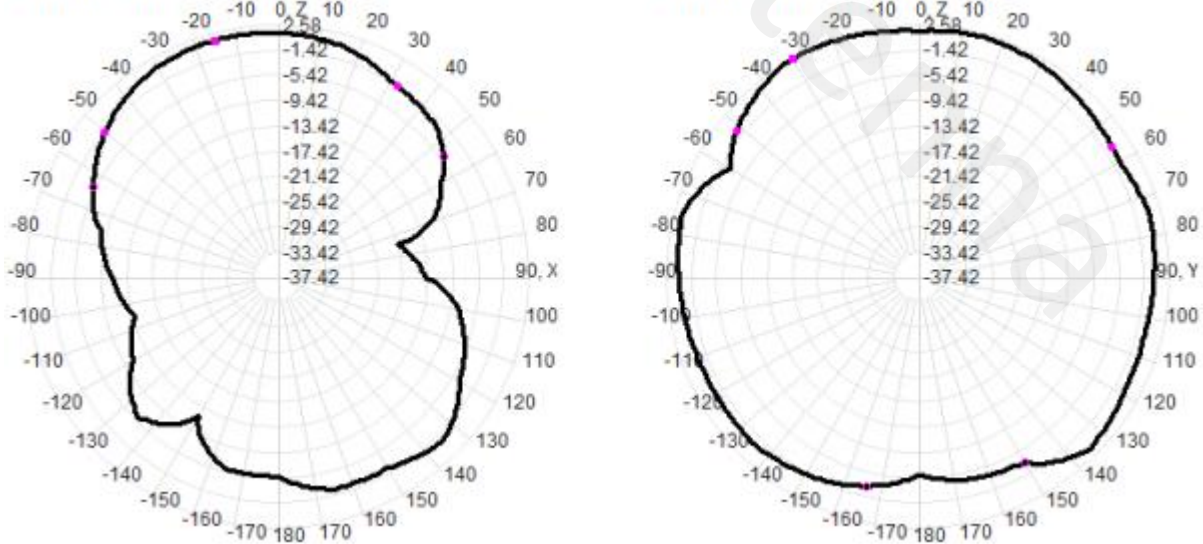
1710.0MHz H+V, Eff: 68.6%

Back View



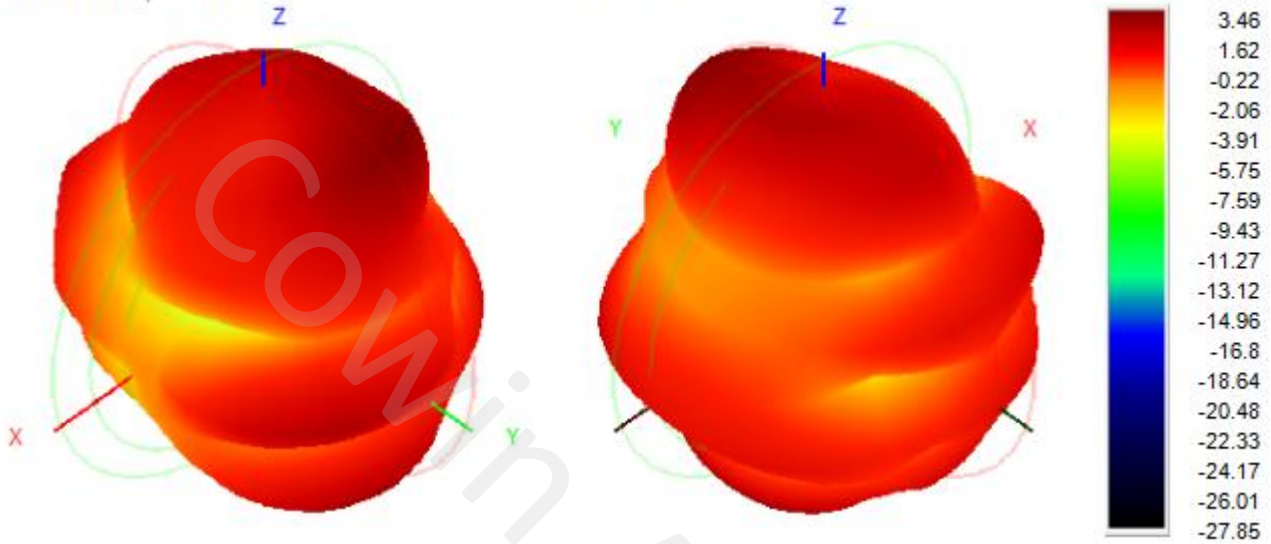
1710.0MHz Total(E1-XZ), Max= 1.38dBi

1710.0MHz Total(E2-YZ), Max= 2.58dBi



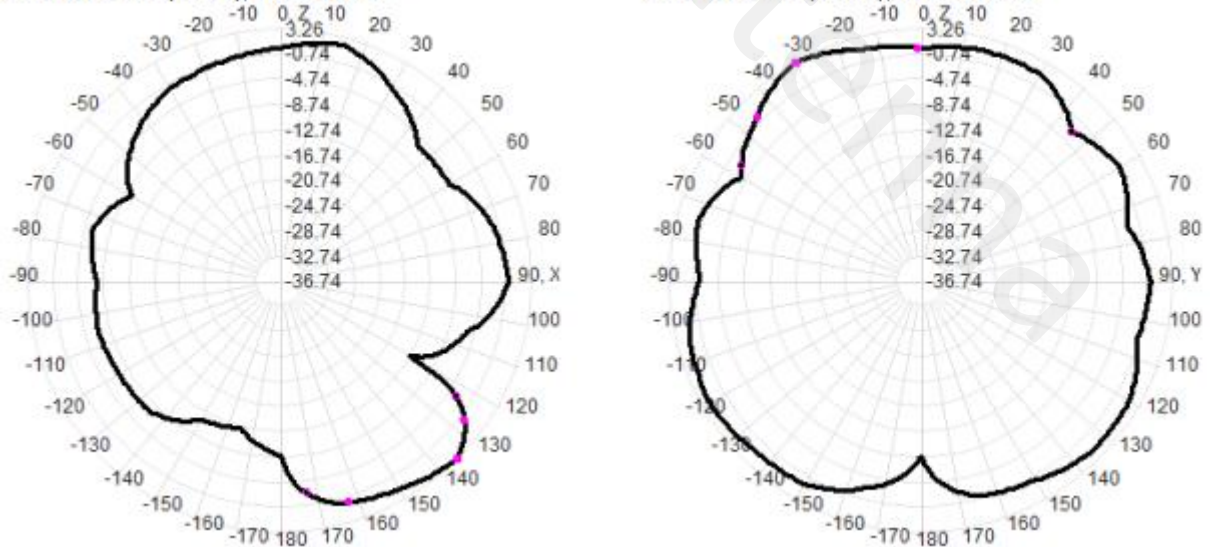
2310.0MHz H+V, Eff: 70.6%

Back View



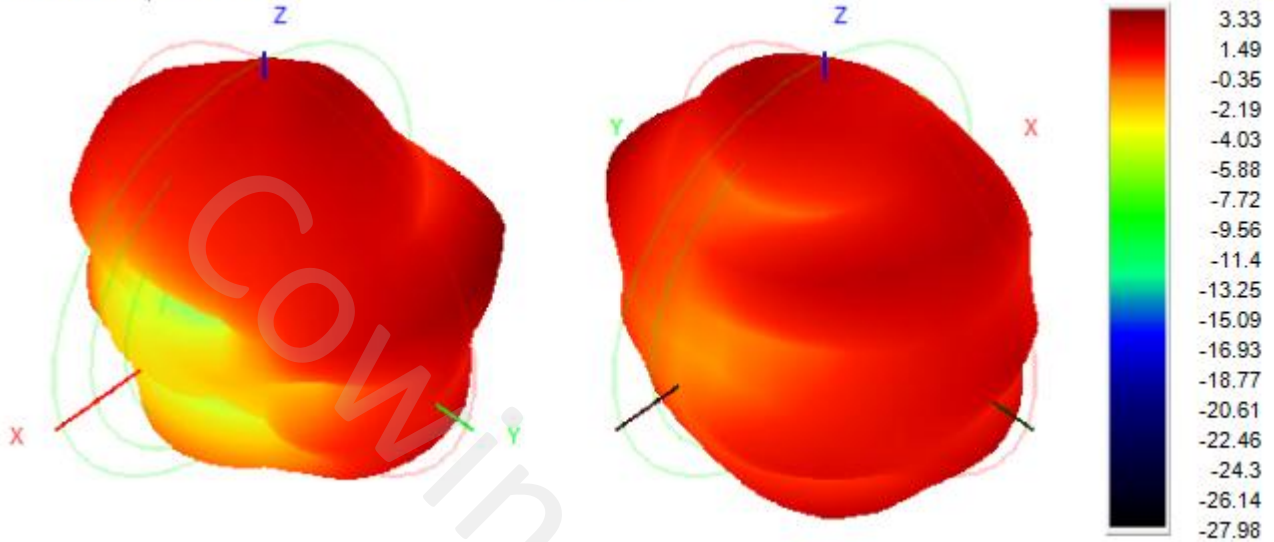
2310.0MHz Total(E1-XZ), Max= 2.96dBi

2310.0MHz Total(E2-YZ), Max= 3.26dBi



2710.0MHz H+V, Eff: 65.2%

Back View



2710.0MHz Total(E1-XZ), Max= 1.85dBi

2710.0MHz Total(E2-YZ), Max= 2.14dBi

