

## **CW-WZ-0135**

### **4G Magnetic Antenna**

#### **Key Features**

Frequency: 700-960/1710-2700MHz

90° SMA Male Connector

External Magnetic Base

Dimensions 470\*62mm



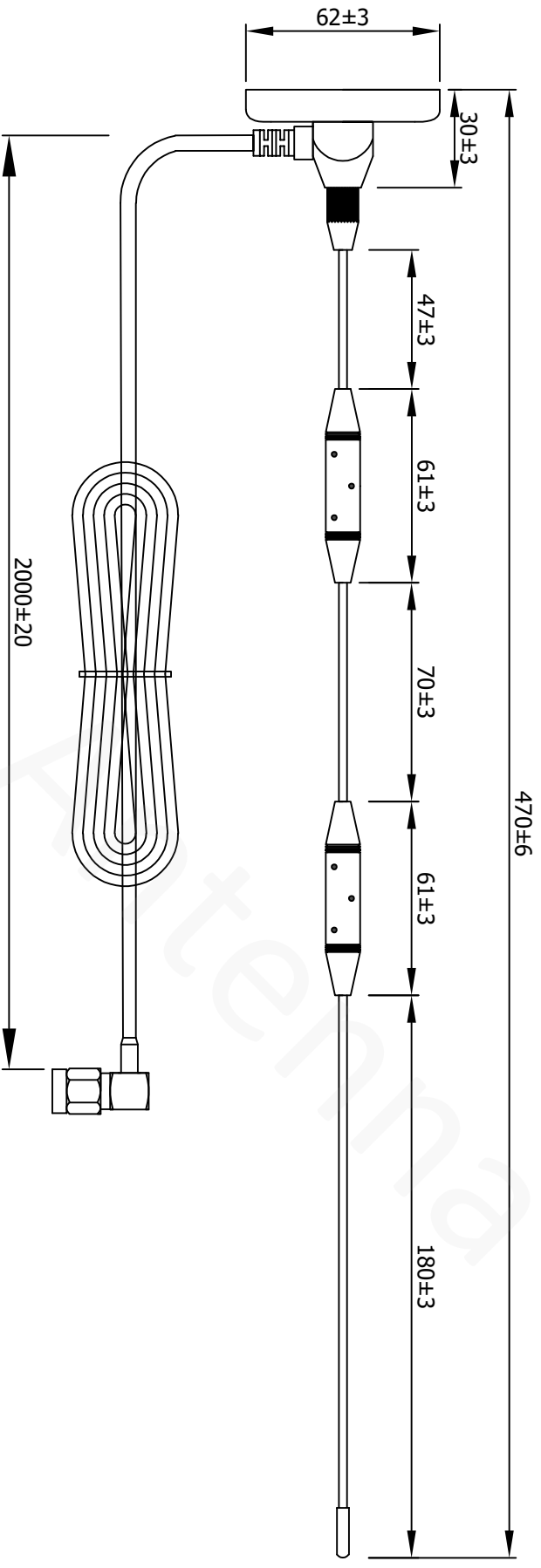
## 1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	700-960/1710-2700MHz
VSWR	4/2
Efficiency (%)	80.5%/91.57%
Peak Gain (dBi)	2.89/5.43
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	90° SMA Male

## 2. Material and environmental characteristics

Inner structure	N/A
Material of Plastic	N/A
Cable Type	LMR200
Connector Type	90° SMA Male
Dimensions (mm)	470*62MM
Antenna color	Black
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS

REV	Date	Description
X1	2023/10/24	New Issue



Specification(Free Test):  
 Frequency Range:700-960MHZ/1710-2700MHZ  
 Impedance: 50Ω  
 V.S.W.R:≤4/2  
 100% Continuity/short and open circuit test  
 Materials,parts and process must by environmentally (ROHS)

7	3M double-sided adhesive	60*1MM	2	
6	Magnet	Magnet	1	
5	Tube	φ7.0mm ordinary White	1	
4	Signal Pole	Black steel wire	1	
3	Bottom cover	Iron/Black Paint	1	
2	Cable	LMR 200 Black	1	
1	Connector	90° SMA Male	1	
NO	Name	Description	QTY	Remark
XX	±5.0	Approved		
X	±3.0	Customer		
.X	±1.0	Part NO.		
.XX	±0.2	Part name	External antenna	
.XXX	±0.1	CW P/NO.	CW-WZ-0135	
		REV	Unit	File
		X1	m/m	Sheet :
				1/1



**Cowin Antenna**

## 4. Antenna test parameters

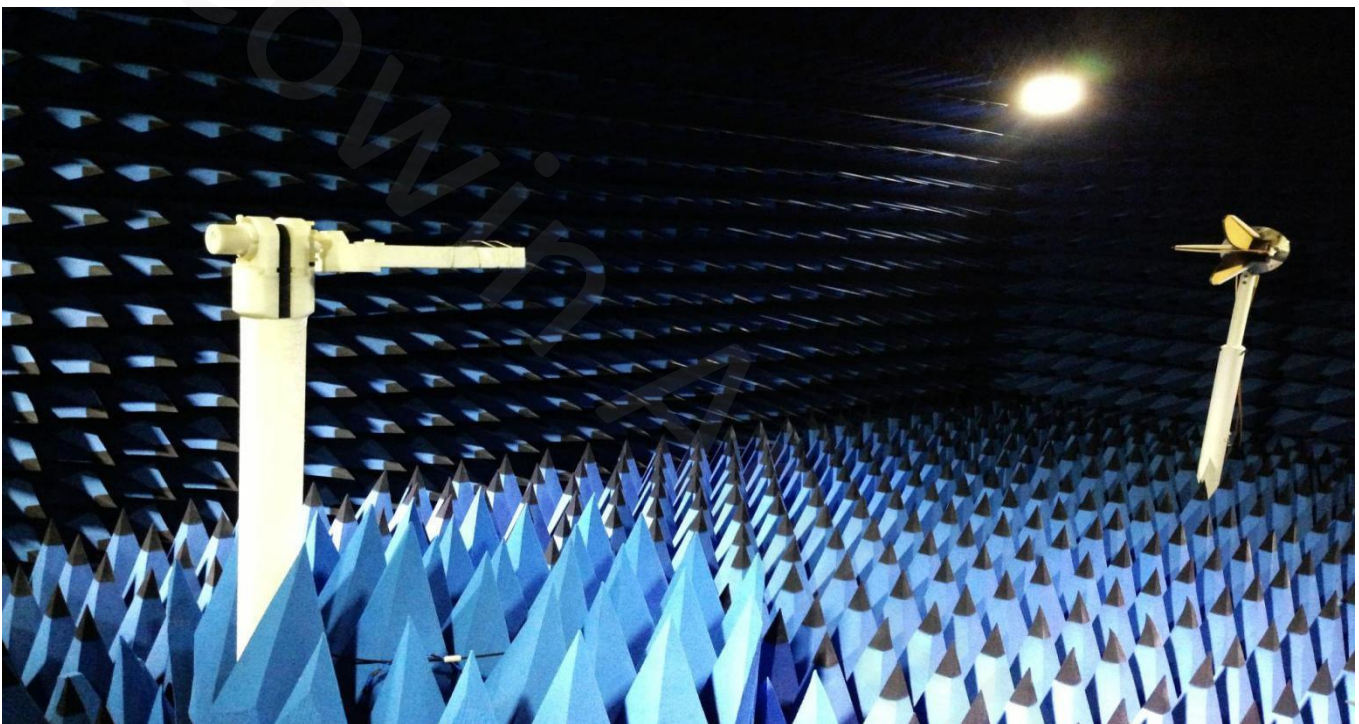
### Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

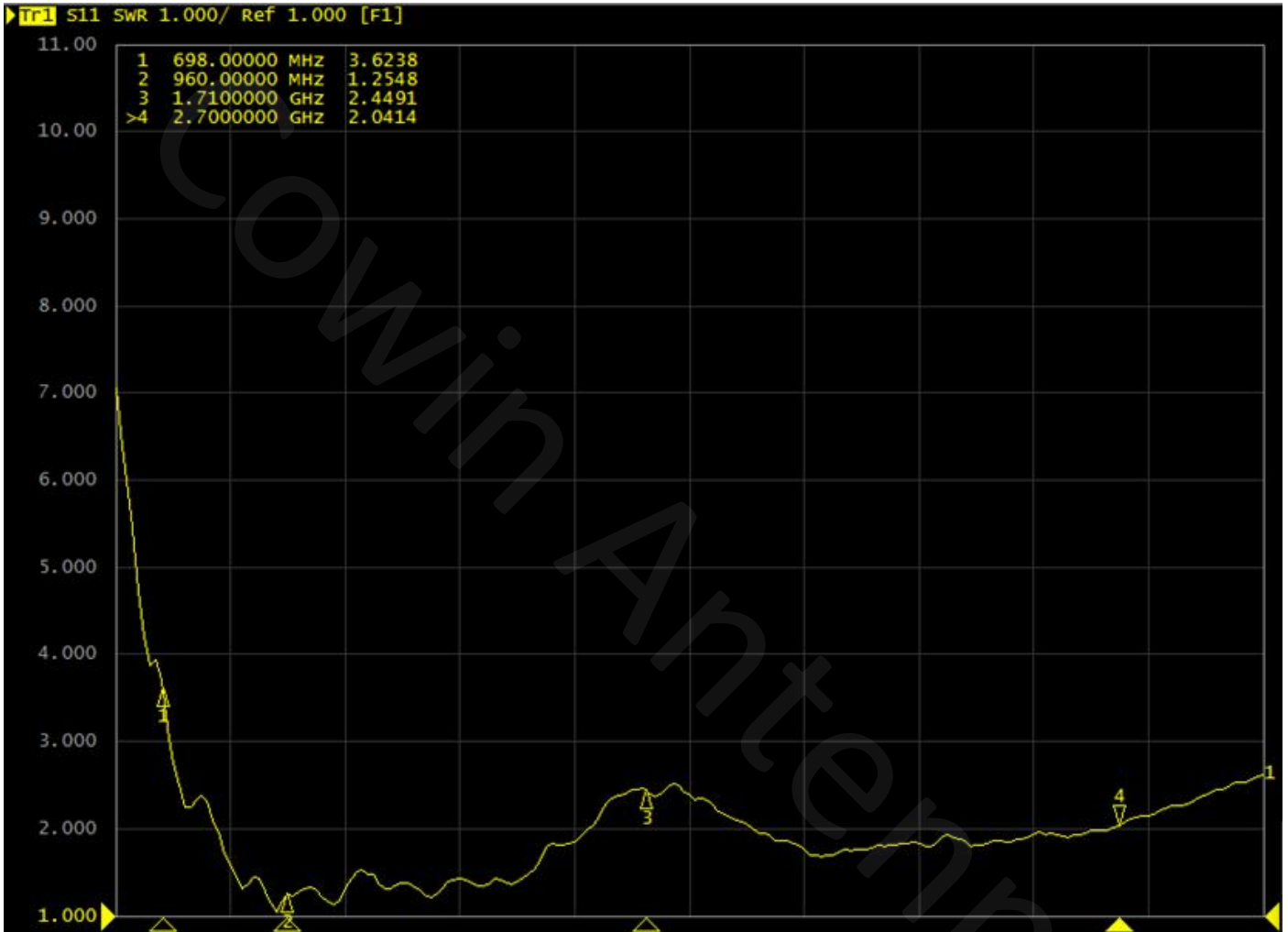
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

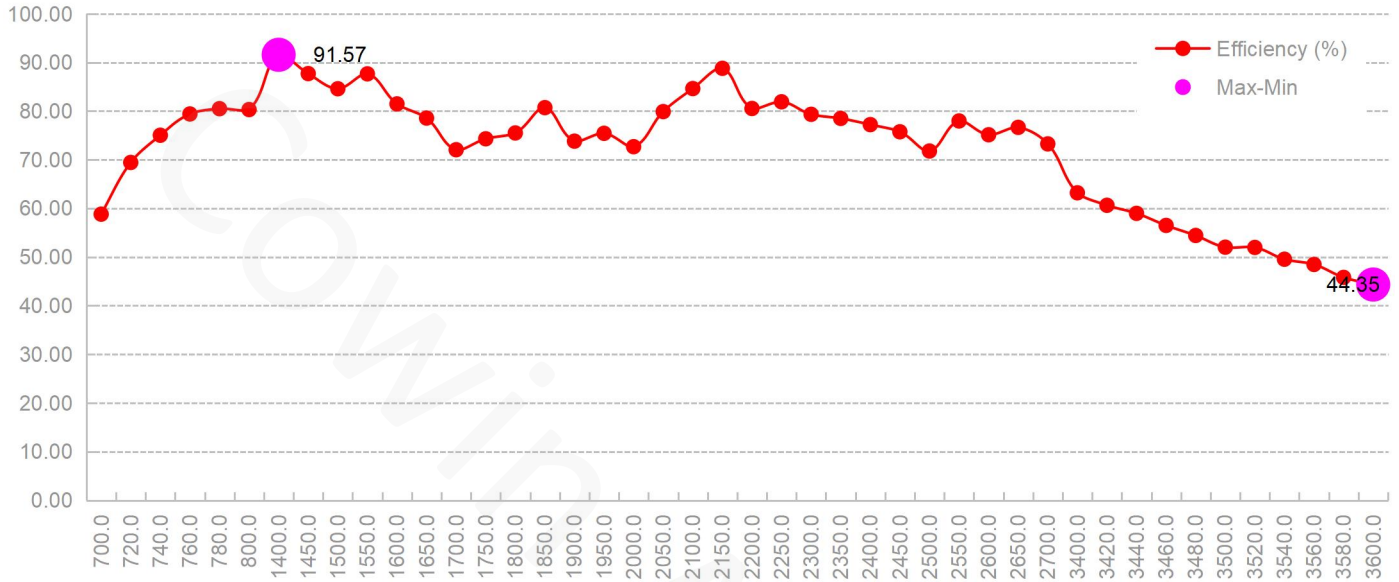
The comprehensive tester is Agilent cmv500



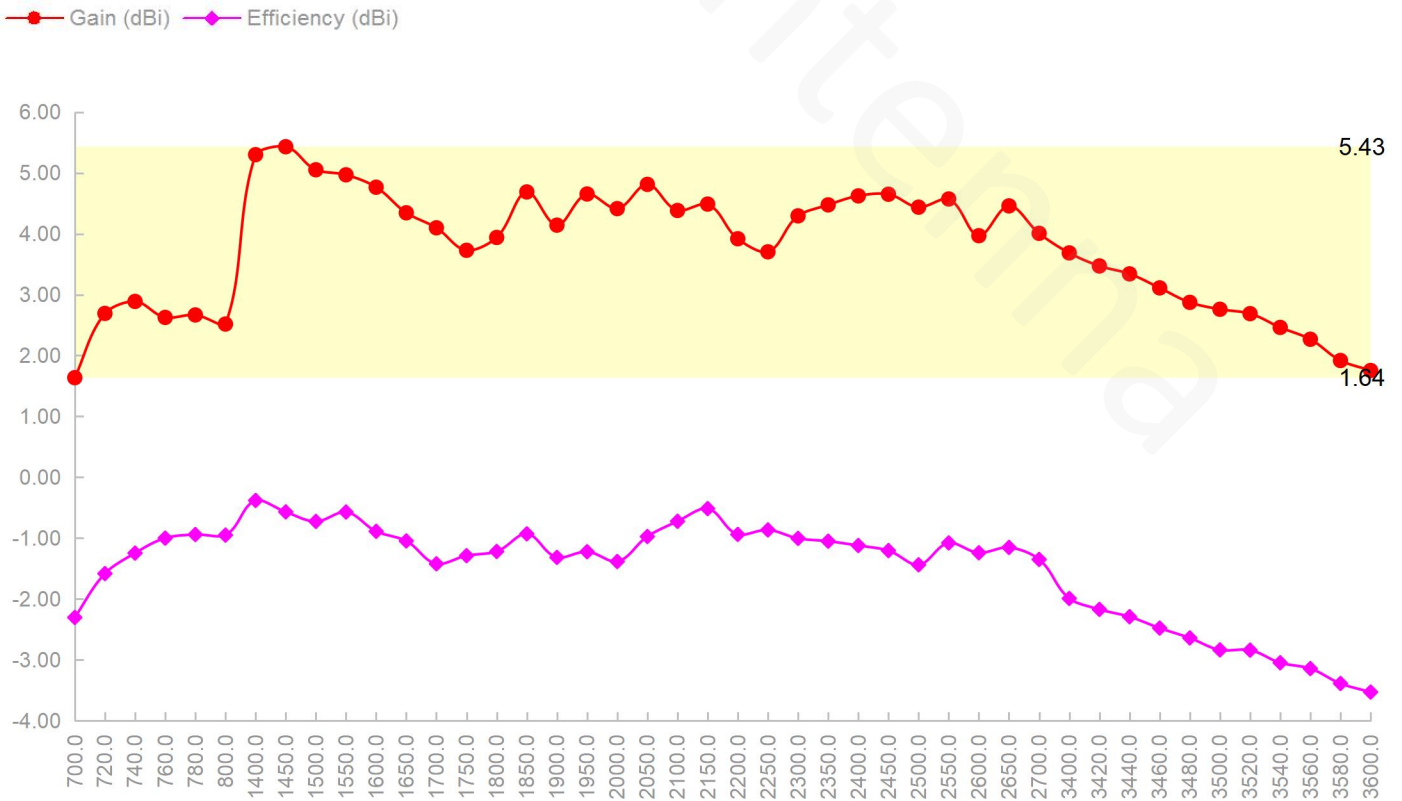
## 4.1 VSWR



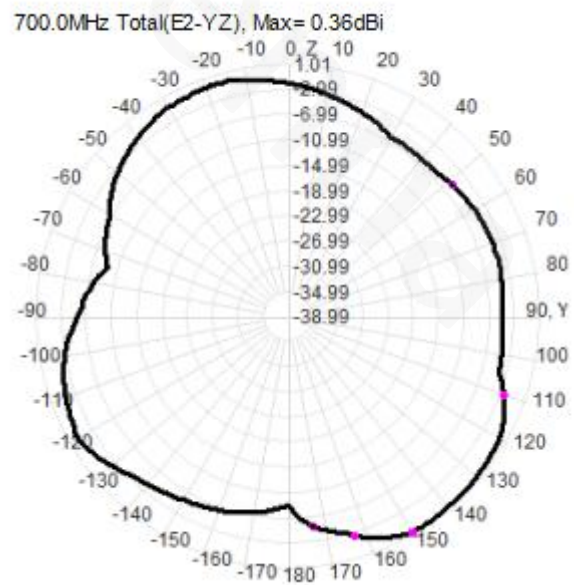
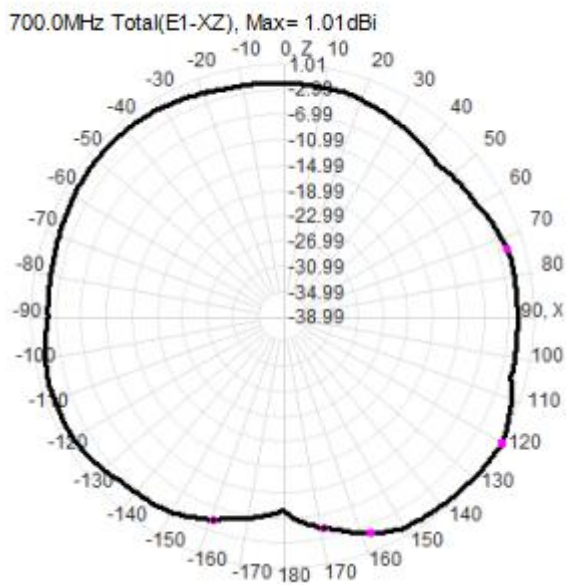
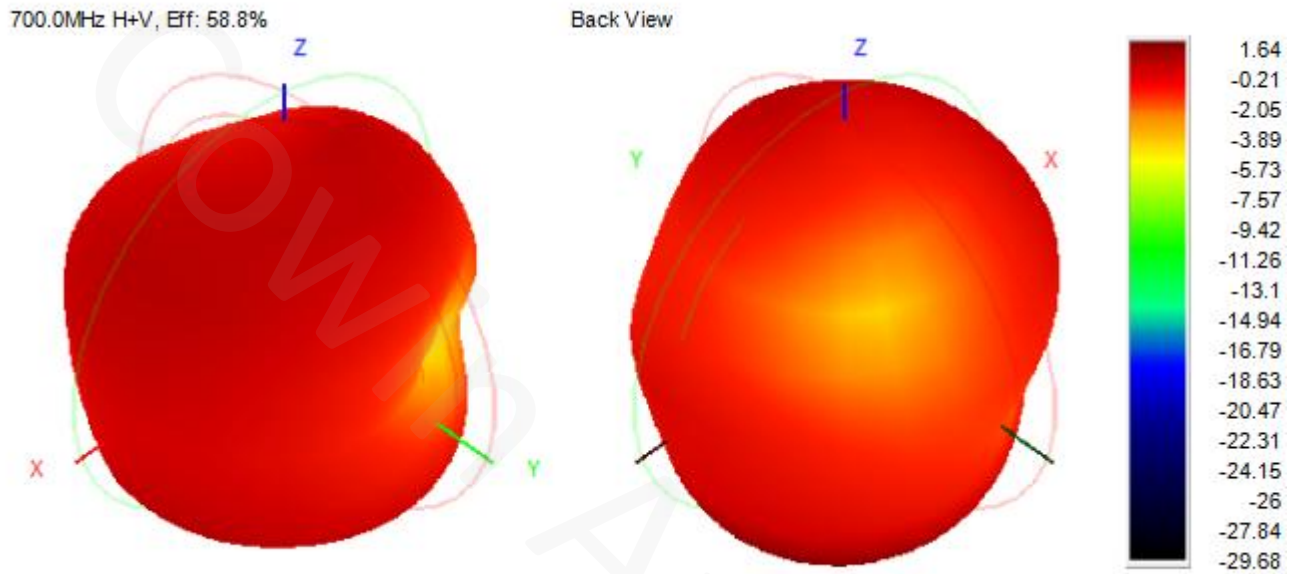
## 4.2 Efficiency



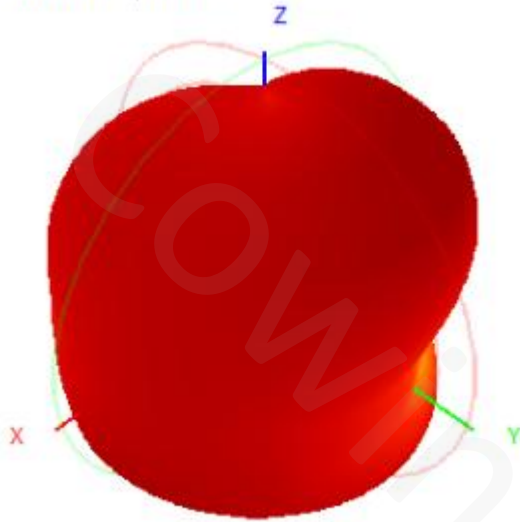
## 4.3 Peak gain



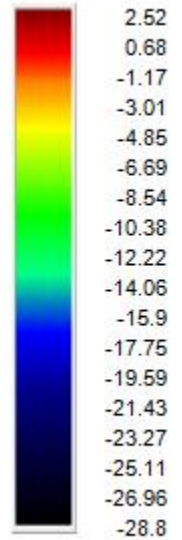
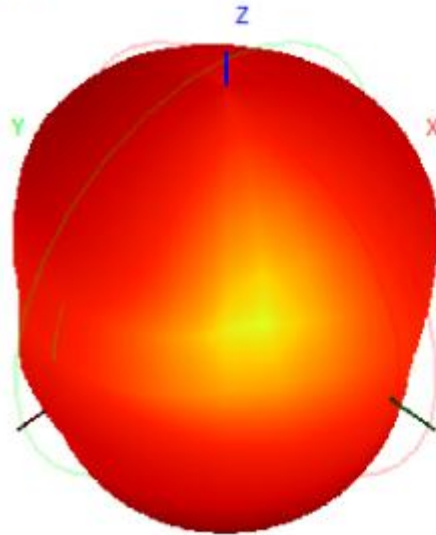
## 4.4 3D&2D Radiation Patterns



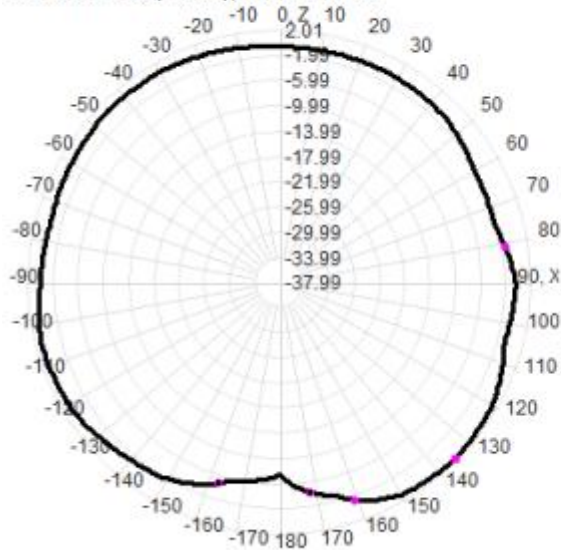
800.0MHz H+V, Eff: 80.3%



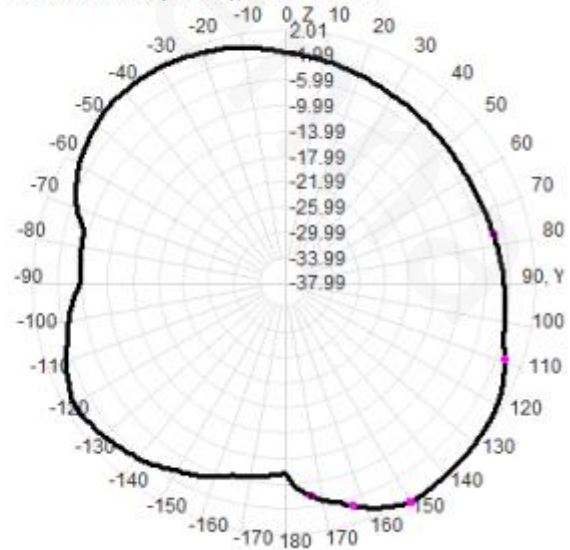
Back View



800.0MHz Total(E1-XZ), Max= 1.32dBi

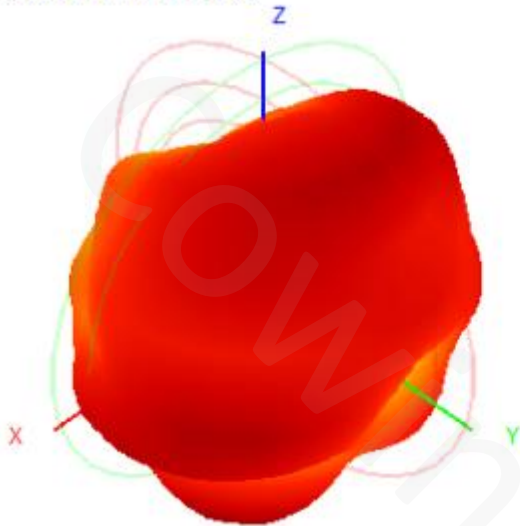


800.0MHz Total(E2-YZ), Max= 2.01dBi

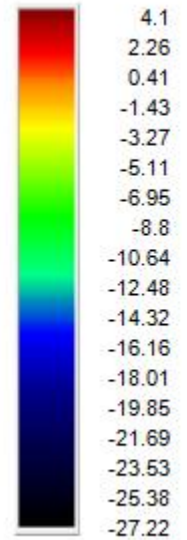
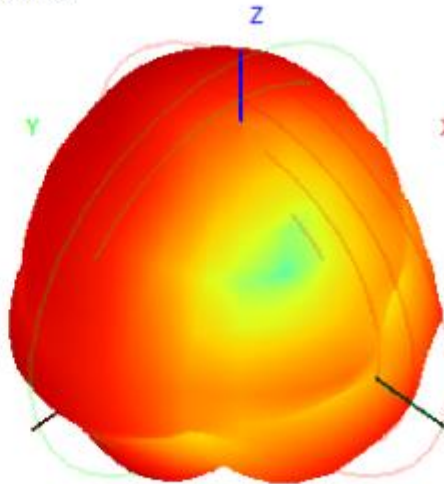




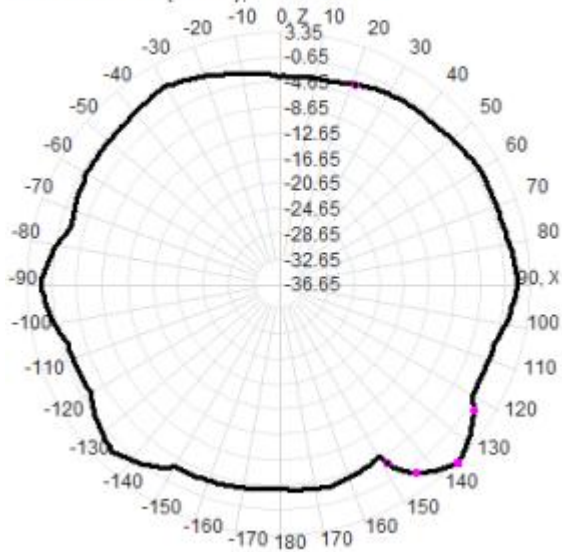
1700.0MHz H+V, Eff: 72.1%



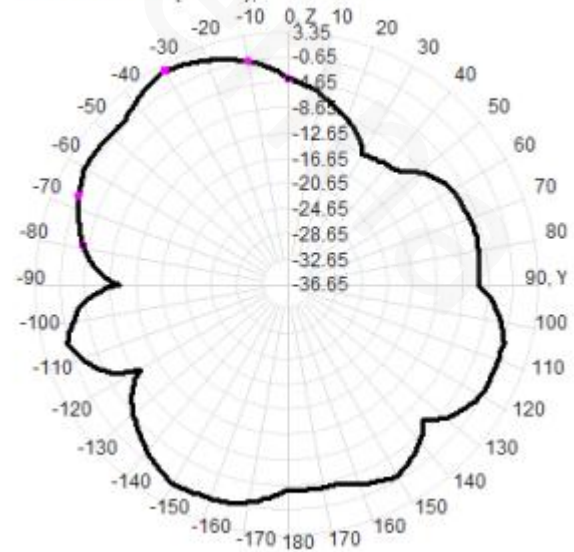
Back View



1700.0MHz Total(E1-XZ), Max= 3.35dBi

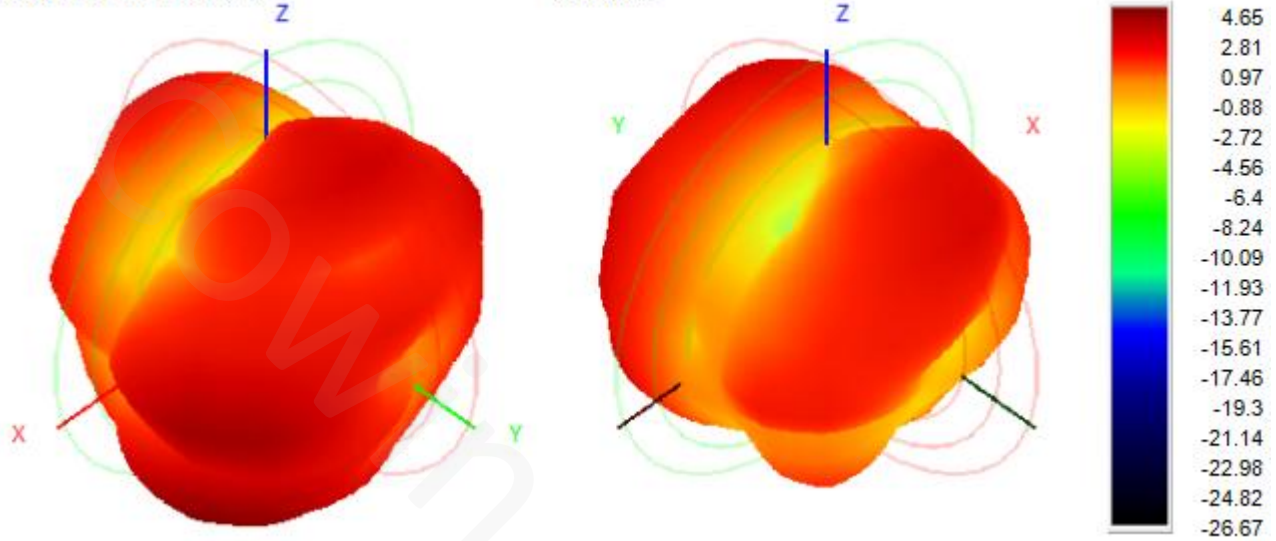


1700.0MHz Total(E2-YZ), Max= 2.30dBi

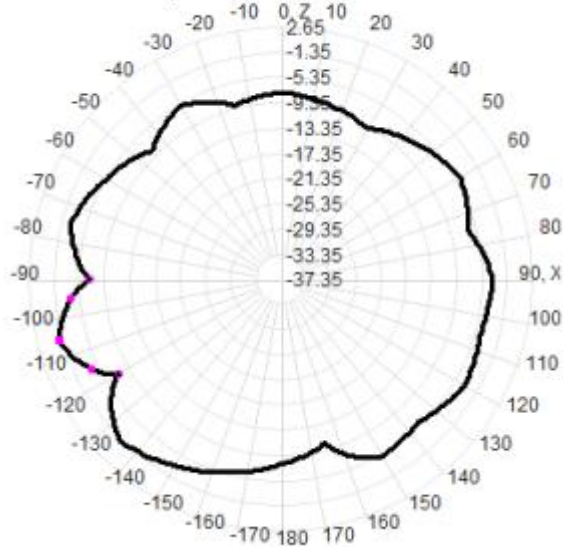


2450.0MHz H+V, Eff: 75.7%

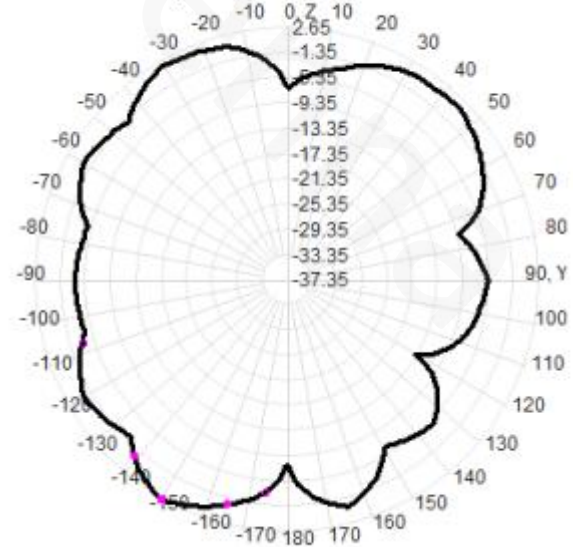
Back View



2450.0MHz Total(E1-XZ), Max= -0.91dBi

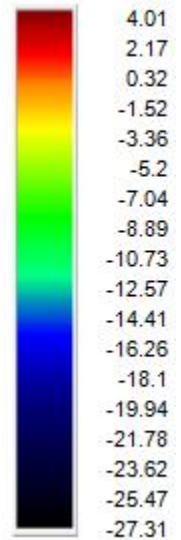
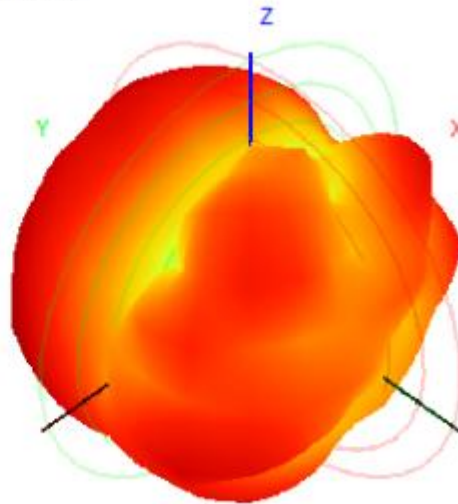
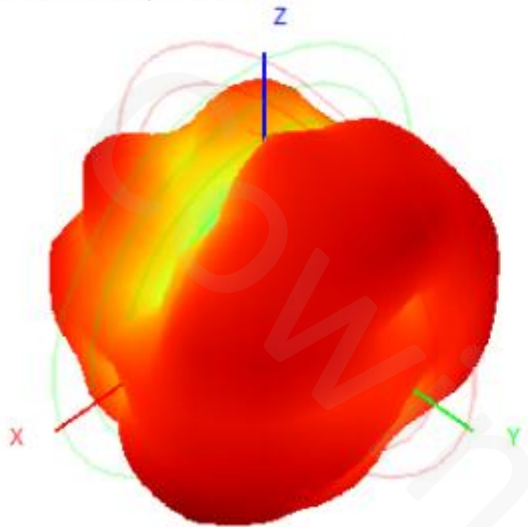


2450.0MHz Total(E2-YZ), Max= 2.65dBi

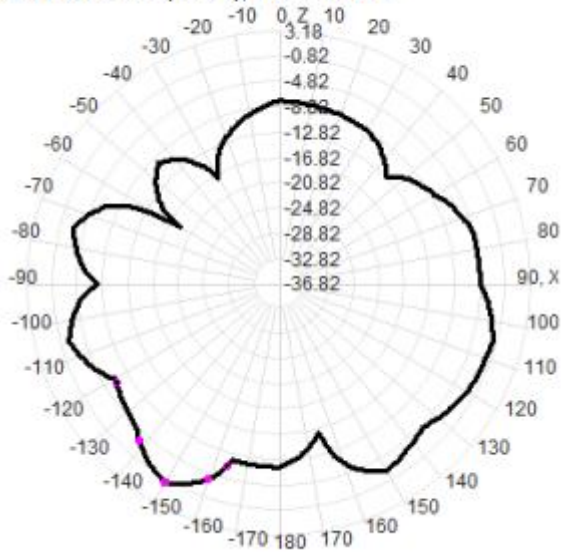


2700.0MHz H+V, Eff: 73.3%

Back View



2700.0MHz Total(E1-XZ), Max= -0.60dBi



2700.0MHz Total(E2-YZ), Max= 2.10dBi

