

## **CW-NZ-0093**

### **2.4GHz Internal Antenna**

#### **Key Features**

Frequency: 2.4-2.5GHz

IPEX Connector

RF1.13 Cable

Dimensions: 4.4\*24.5mm

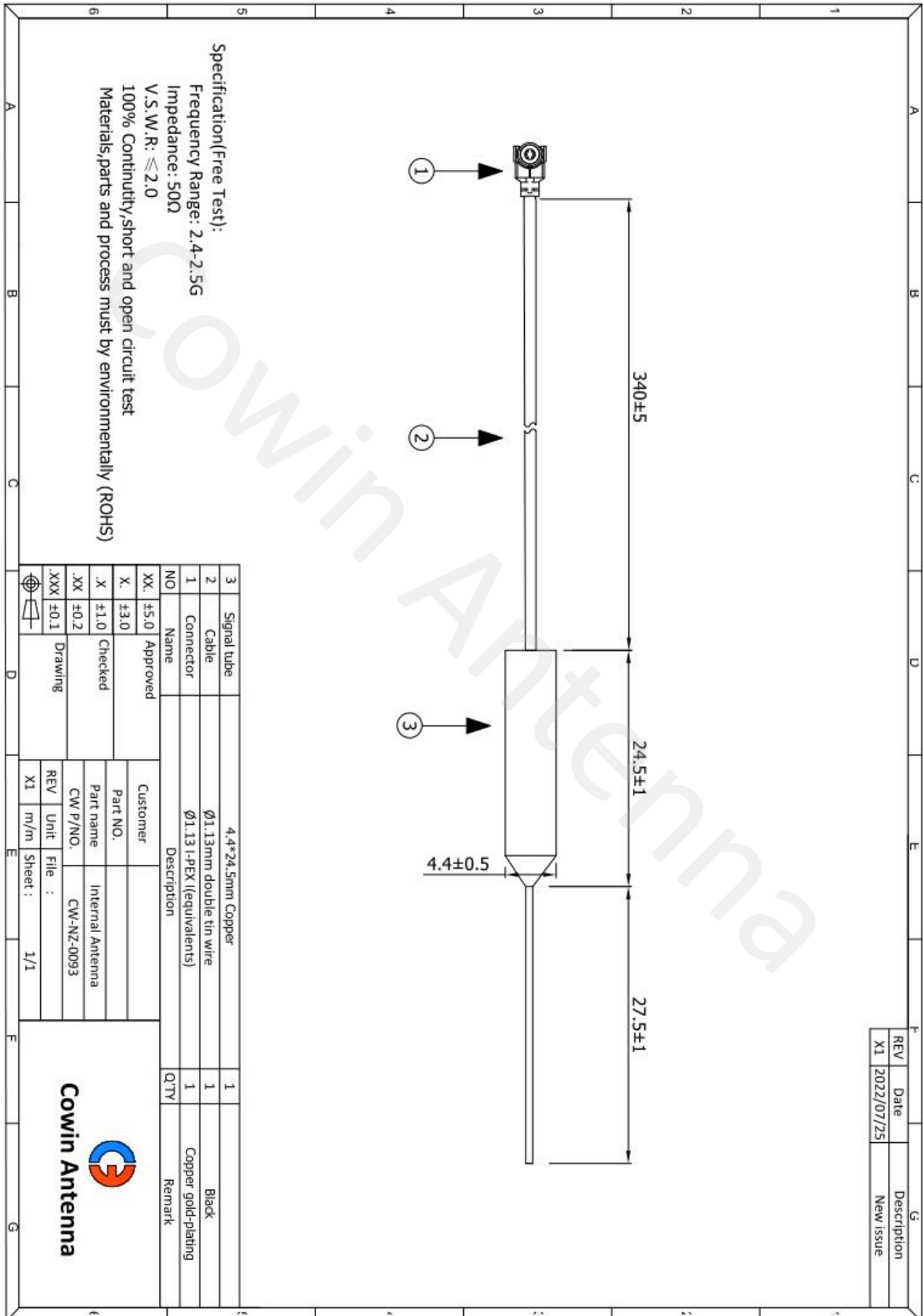


## 1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2400-2500
VSWR	≤2.0
Efficiency (%)	70.18%
Peak Gain (dBi)	2.61
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	IPEX

## 2. Material and environmental characteristics

External structure	N/A
Inner structure	Connector/Cable/Signal tube
Cable Type	RF1.13
Connector Type	IPEX
Dimensions (mm)	4.4*24.5mm
Antenna color	N/A
Operation Temperature	-40 to +80
Storage Temperature	-40 to +80
Antenna Storage life(year)	10
Substance Compliance	ROHS



## 4. Antenna test parameters

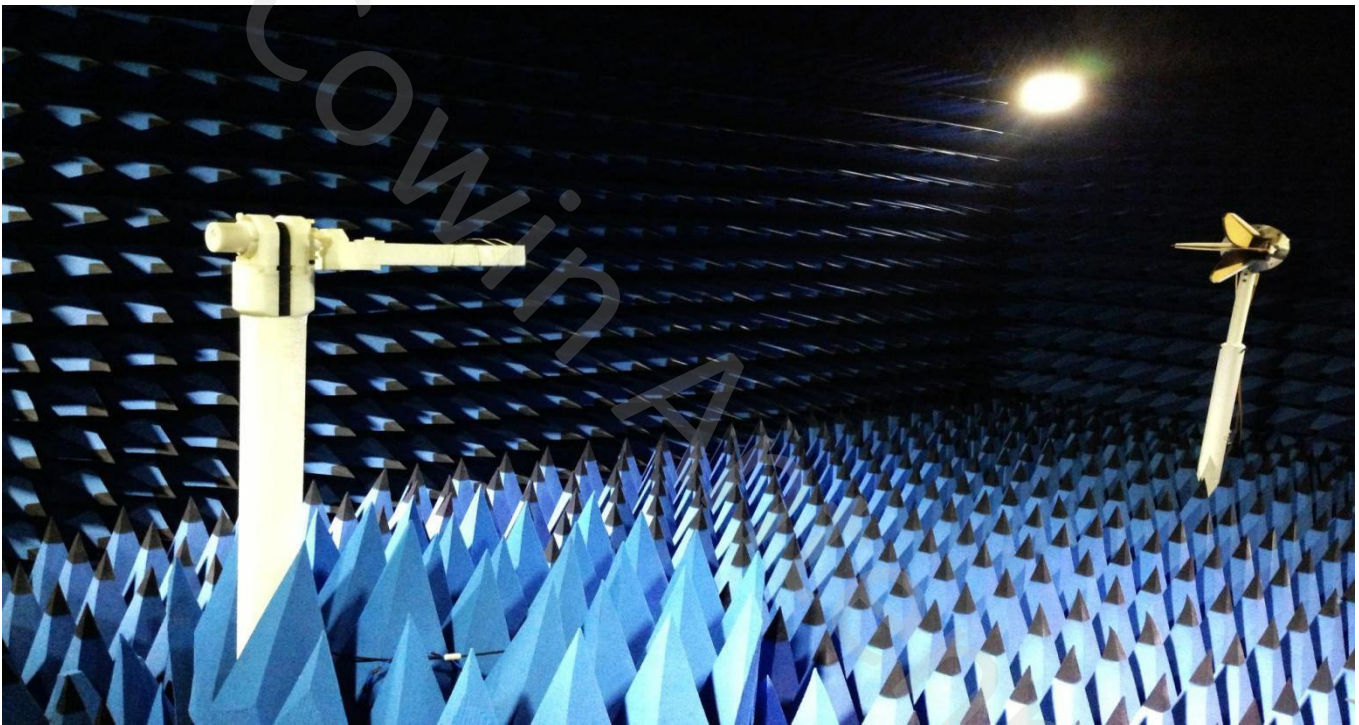
### Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

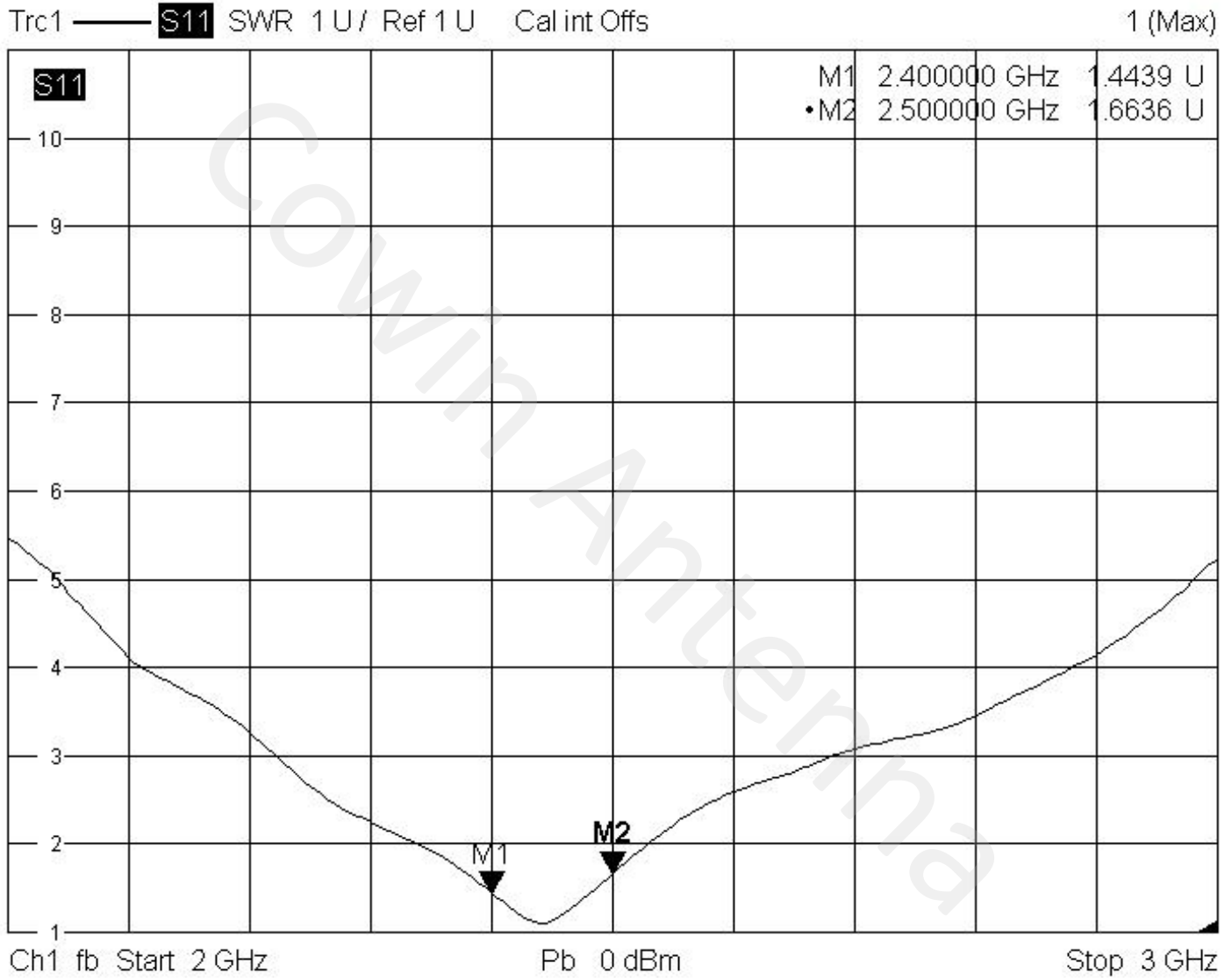
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

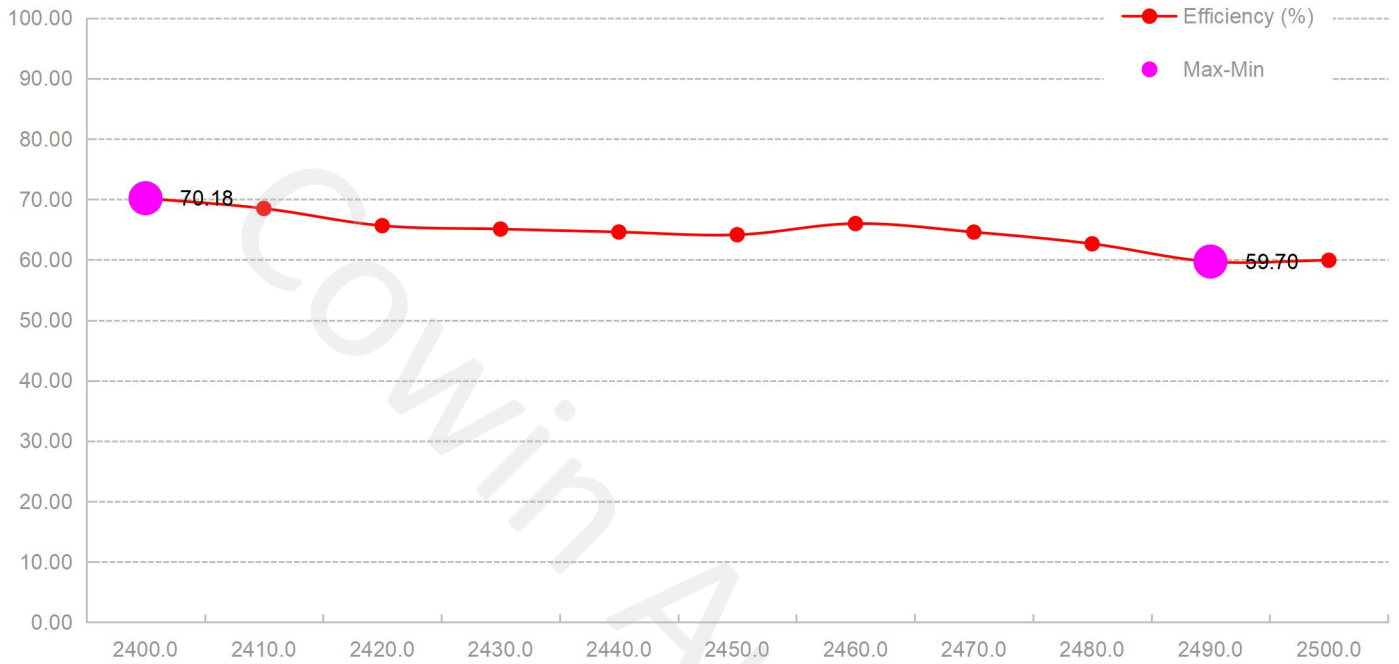
The comprehensive tester is Agilent cmv500



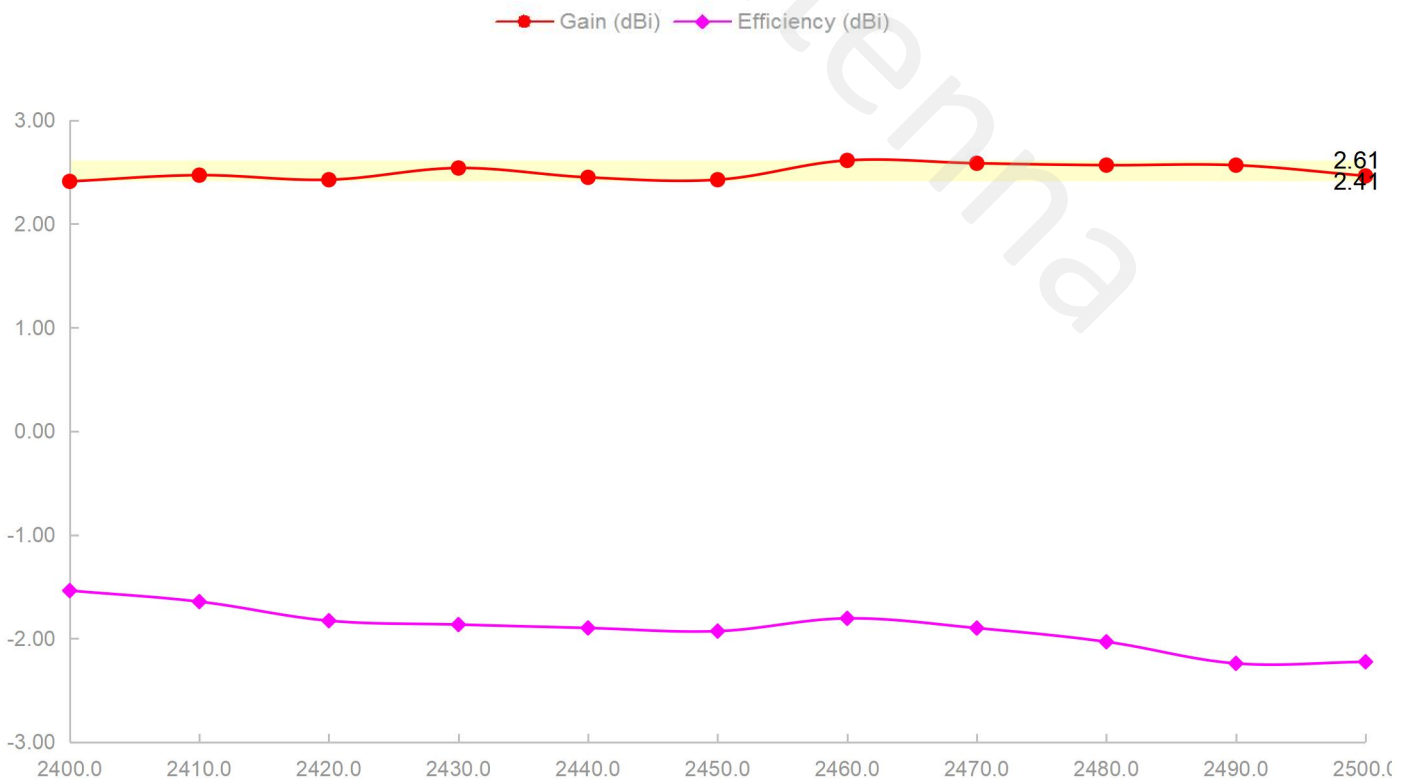
## 4.1 VSWR



## 4.2 Efficiency



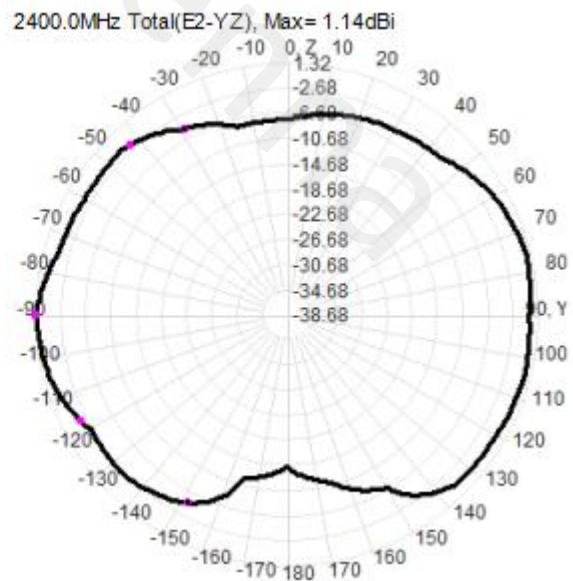
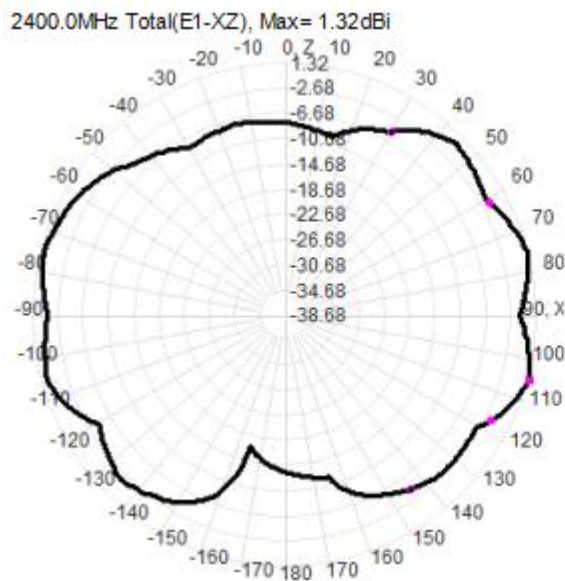
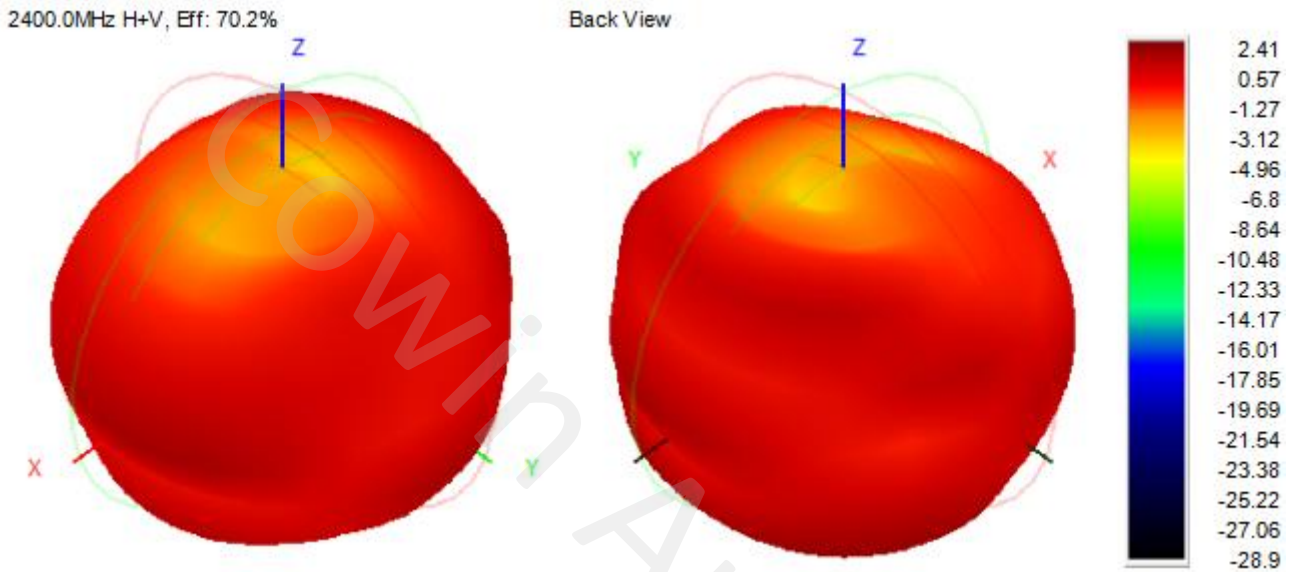
## 4.3 Peak gain



## 4.4 Data summary

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.41	70.18
2410.0	2.47	68.48
2420.0	2.43	65.64
2430.0	2.54	65.08
2440.0	2.45	64.59
2450.0	2.43	64.14
2460.0	2.61	65.98
2470.0	2.59	64.58
2480.0	2.57	62.64
2490.0	2.57	59.70
2500.0	2.46	59.91

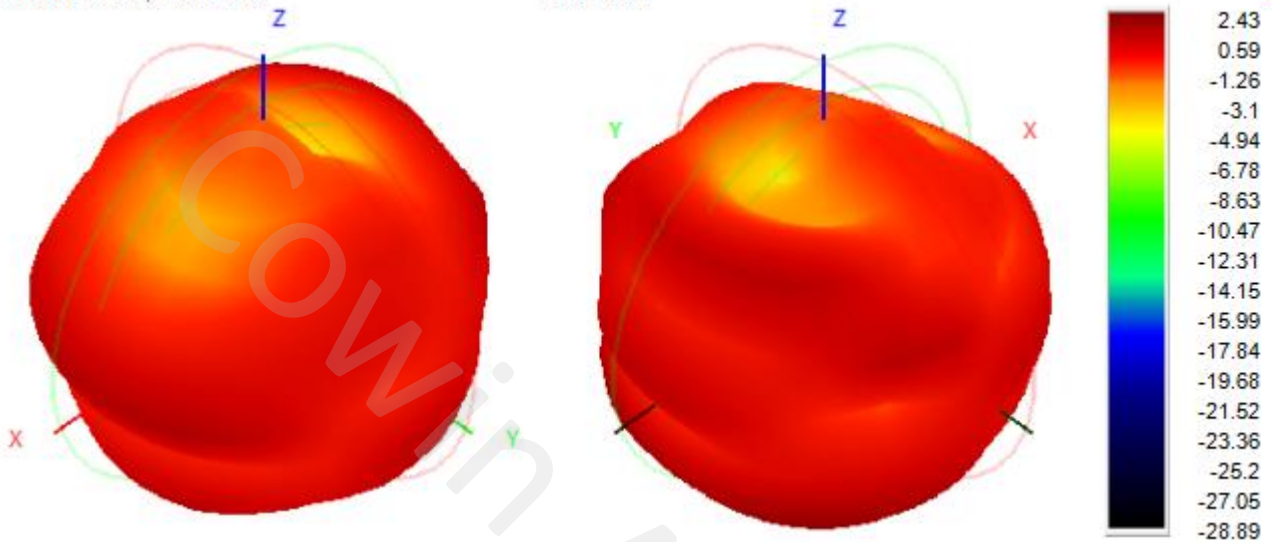
## 4.5 3D&2D Radiation Patterns





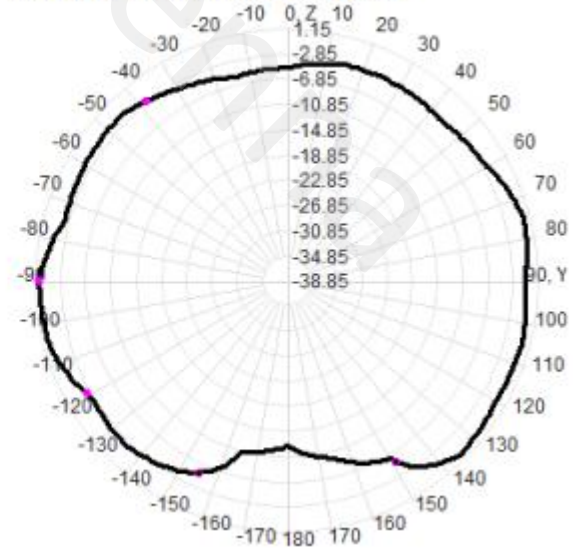
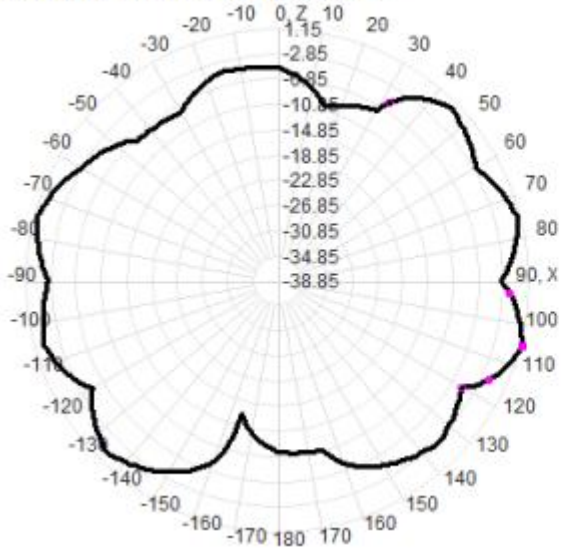
2450.0MHz H+V, Eff: 64.1%

Back View



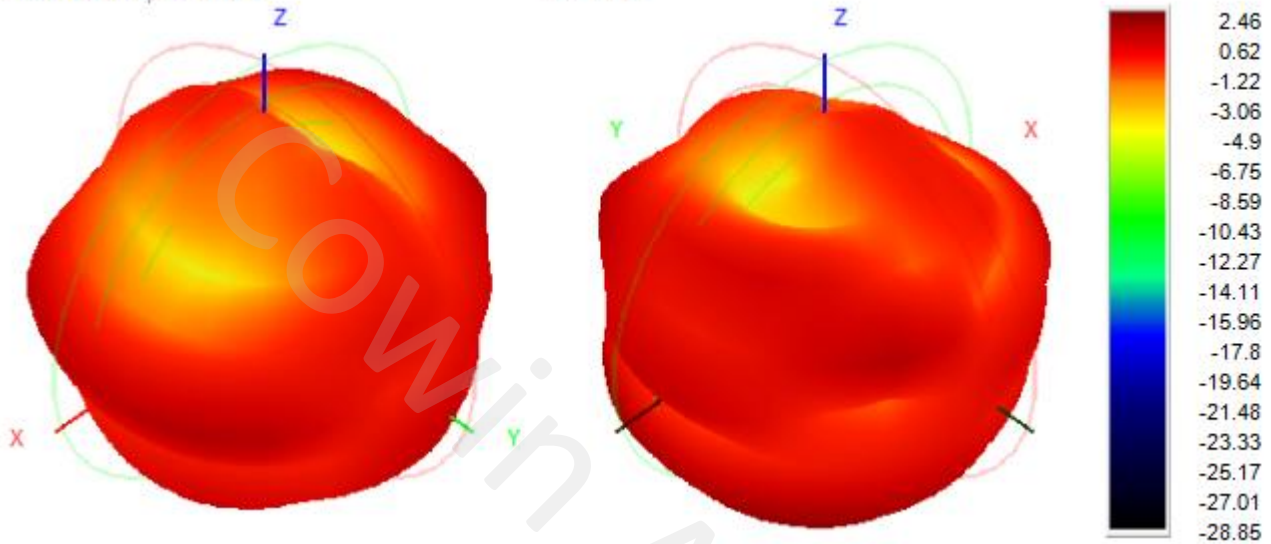
2450.0MHz Total(E1-XZ), Max= 1.15dBi

2450.0MHz Total(E2-YZ), Max= 0.52dBi



2500.0MHz H+V, Eff: 59.9%

Back View



2500.0MHz Total(E1-XZ), Max= 1.22dBi

2500.0MHz Total(E2-YZ), Max= 0.38dBi

