

CW-WZ-0045

2.4G-2.5G External Antenna

Key Features

Frequency: 2.4G-2.5G

SMA Male Connector

External Rubber

Dimensions 50*8 mm



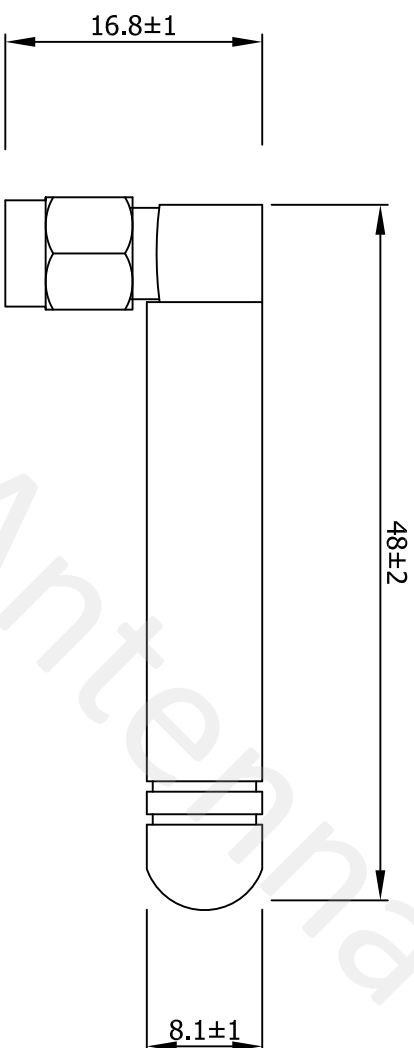
1. Antenna Electrical Characteristics

Band (MHz)	
Frequency (MHz)	2.4G-2.5G
VSWR	2:1
Efficiency (%)	60.98%
Peak Gain (dBi)	4.02
Impedance (Ohm)	50
Polarisation	Vertical
Max. Input Power (W)	10
Connector Type	SMA male

2. Material and environmental characteristics

Material of PCB	FR4
Material of Plastic	TPEE
Cable Type	N/A
Connector Type	SMA male
Dimensions (mm)	50*8MM
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	2021/09/13		New issue



Specification(Free Test):
Frequency Range: 2.4G-2.5G
Impedance: 50Ω
V.S.W.R: ≤2

4	Connector	SMA Male	1	
3	PCB	FR4	1	
2	Signal spring	Brass	1	
1	Radome	Black TPEE	1	
NO	Name	Description	QTY	Remark
XX.	±5.0	Approved		
X.	±3.0			
X	±1.0	Checked		
XX	±0.2			
.XXX	±0.1	Drawing		
		REV	Unit	File
		X1	m/m	Sheet :
				1/1



Cowin Antenna

4. Antenna test parameters

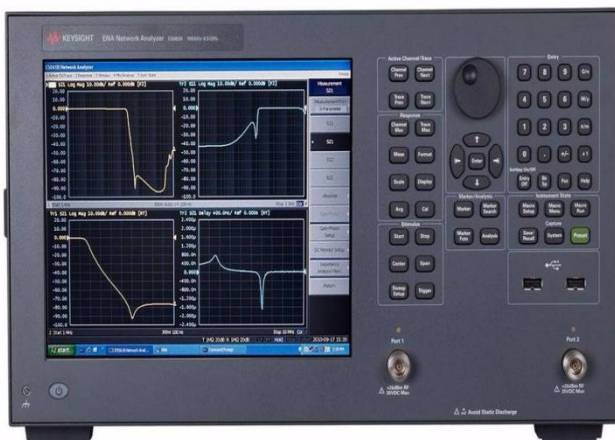
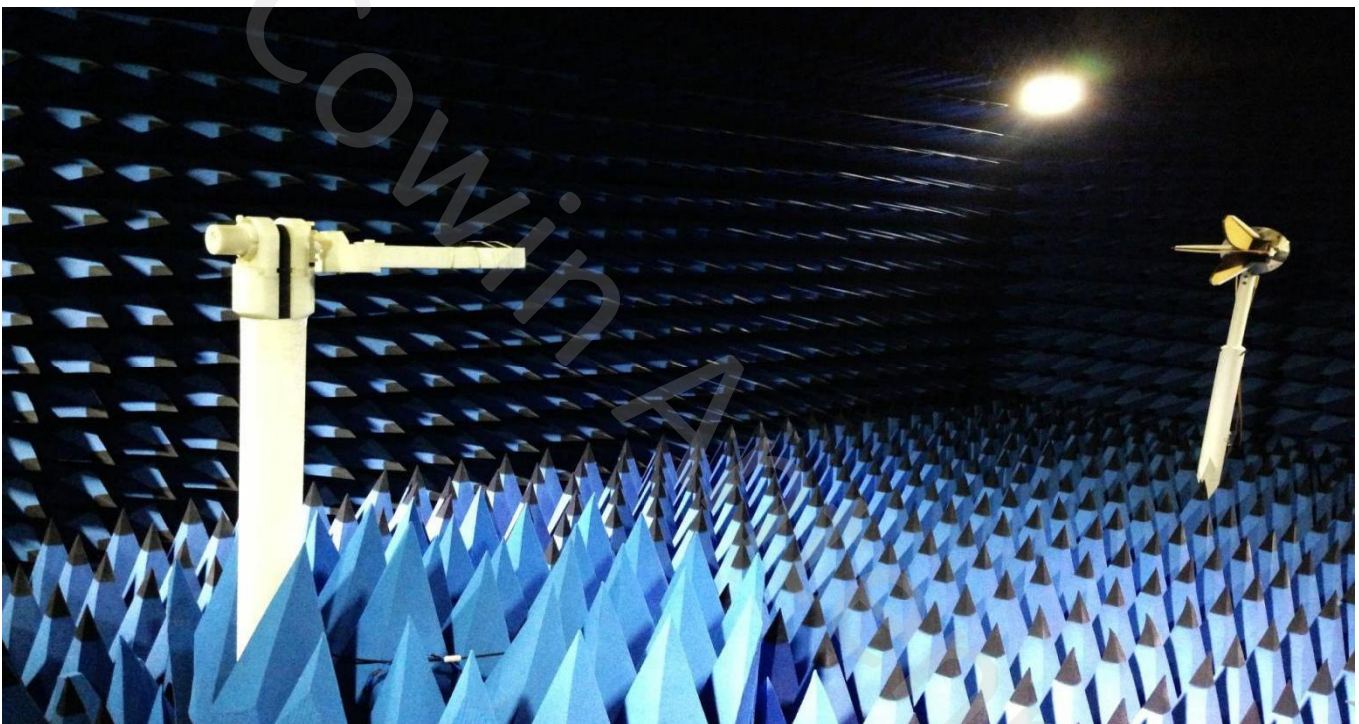
Antenna Measurement Conditions:

Mounted on Ground Plane of 280 x 80 mm

Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

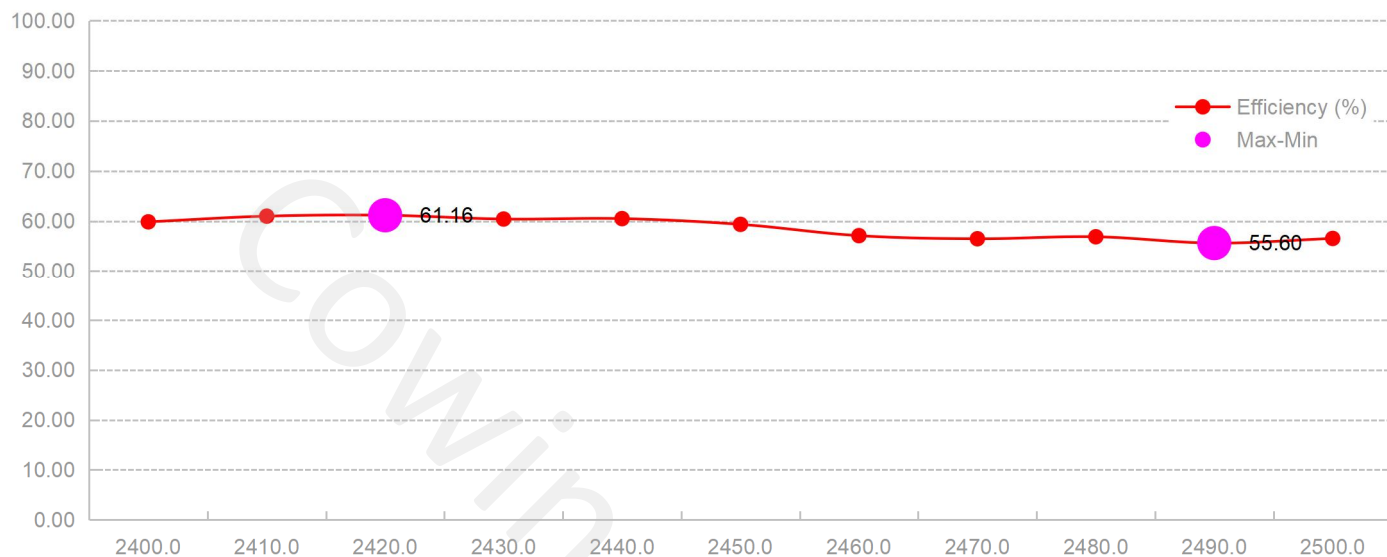
The comprehensive tester is Agilent cmv500



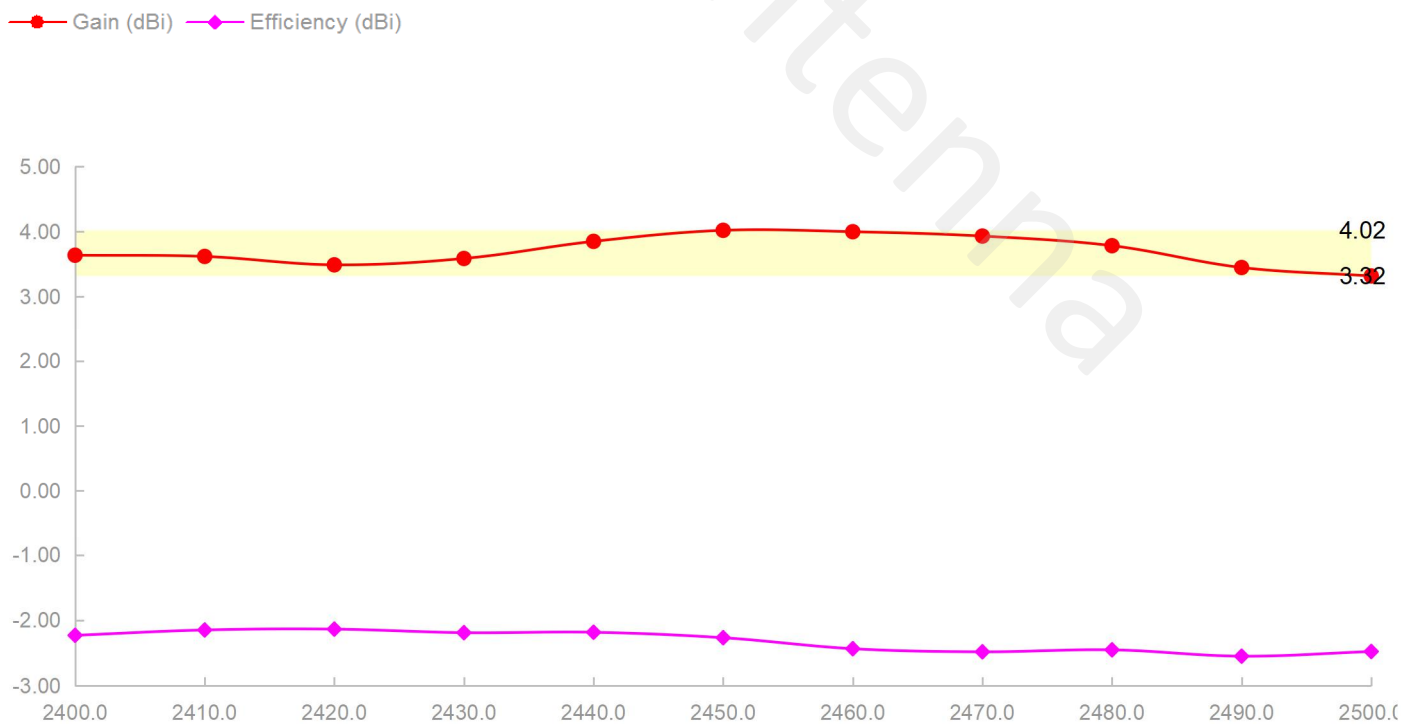
4.1 VSWR



4.2 Efficiency

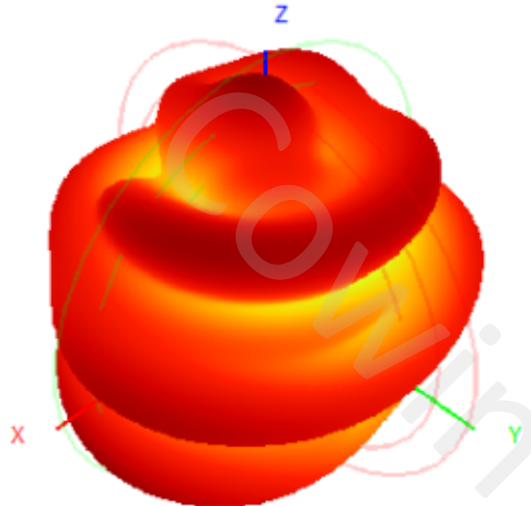


4.3 Peak gain

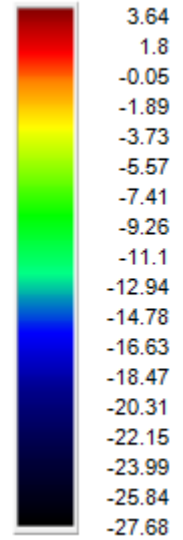
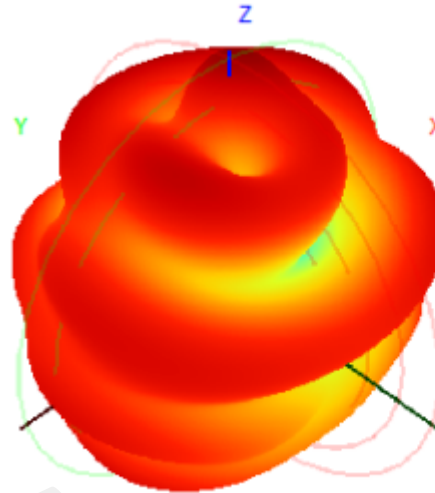


4.4 3D&2D Radiation Patterns

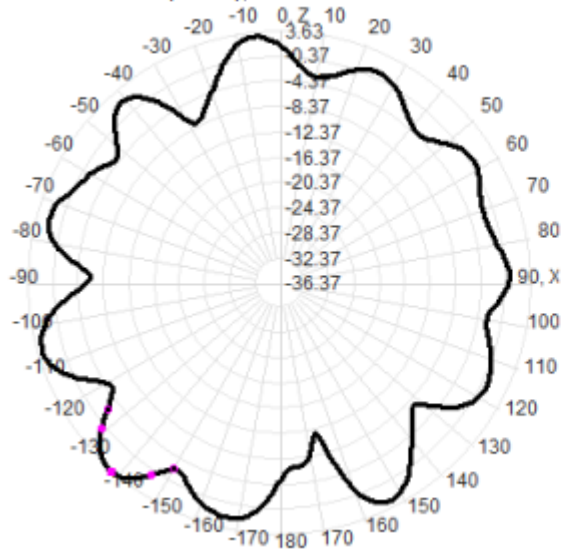
2400.0MHz H+V, Eff: 59.8%



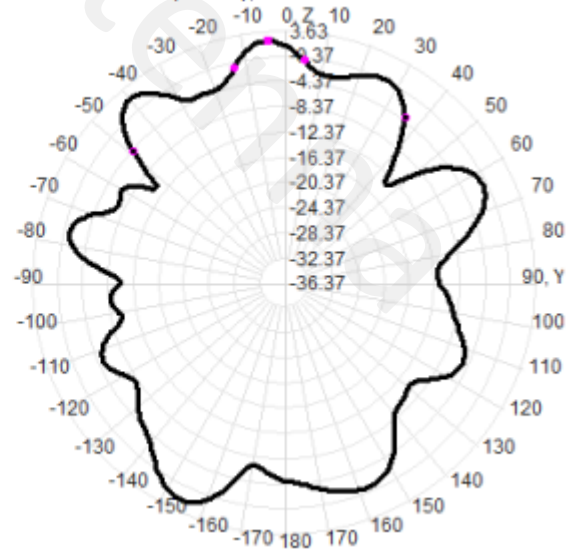
Back View



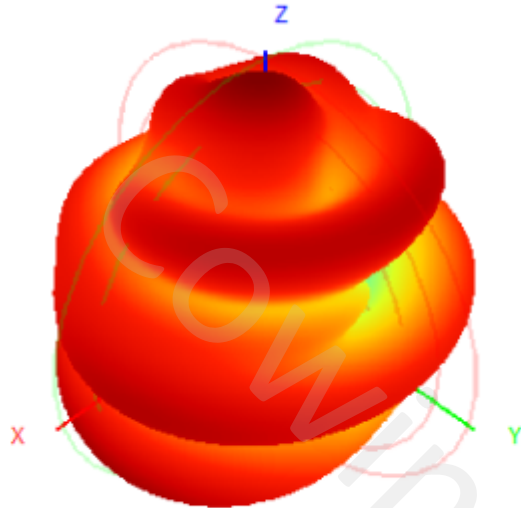
2400.0MHz Total(E1-XZ), Max= 3.63dBi



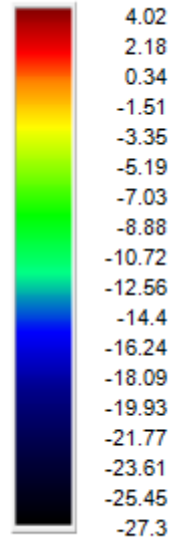
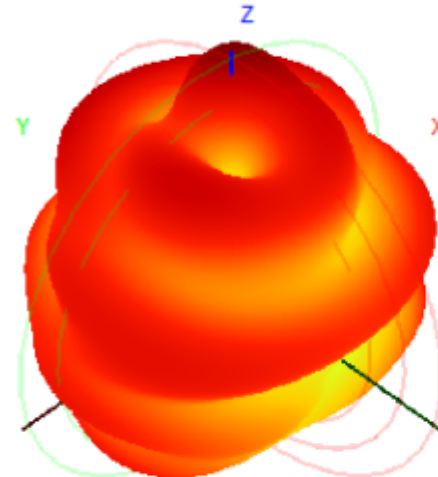
2400.0MHz Total(E2-YZ), Max= 2.06dBi



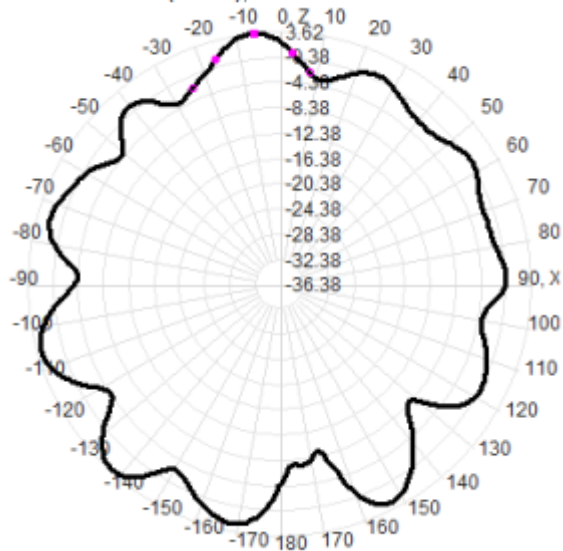
2450.0MHz H+V, Eff: 59.3%



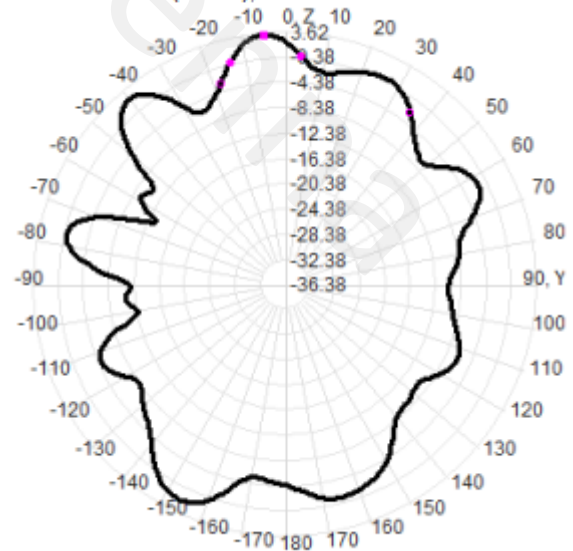
Back View



2450.0MHz Total(E1-XZ), Max= 3.62dBi

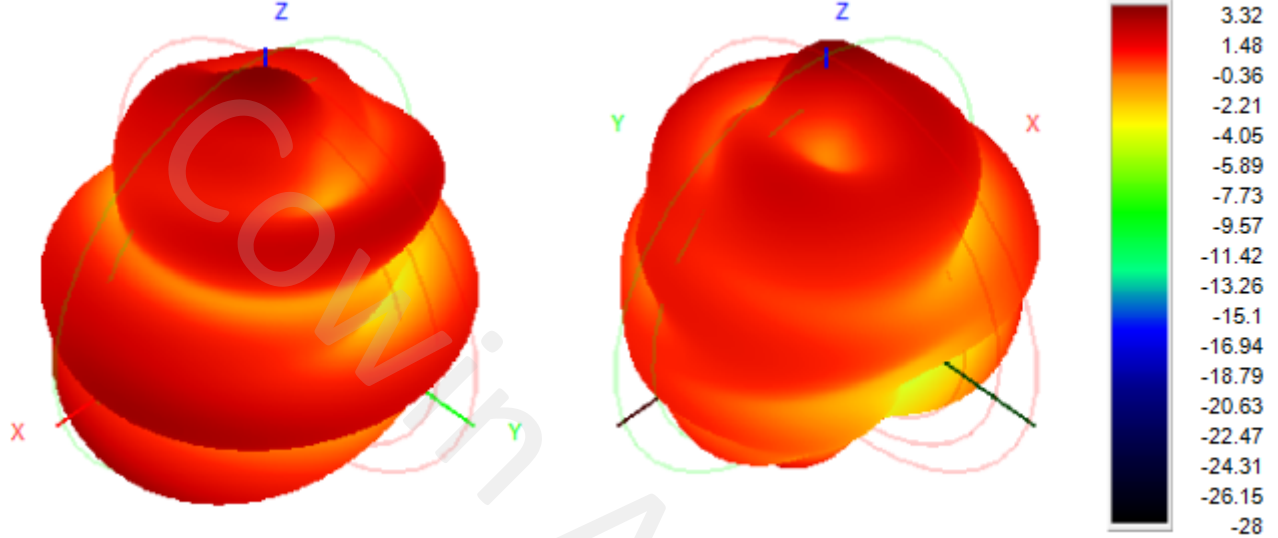


2450.0MHz Total(E2-YZ), Max= 3.22dBi



2500.0MHz H+V, Eff: 56.5%

Back View



2500.0MHz Total(E1-XZ), Max= 3.02dBi

2500.0MHz Total(E2-YZ), Max= 2.62dBi

