# CW-WZ-0081

## 2.4/5.8G External Antenna

Cowin Antenna

## Key Features

Frequency: 2.4-2.5G/5.15-5.85G

I-PEX Connector

Screw Mount

Dimensions 46*16 mm

## 1. Antenna Electrical Characteristics

| | |
|---|---|
| Band (MHz) | |
| Frequency (MHz) | 2.4-2.5G/5.15-5.85G |
| VSWR | 2:1 |
| Efficiency (%) | 65.45%/62% |
| Peak Gain (dBi) | 3.23/3.39 |
| Impendance (Ohm) | 50 |
| Polarisation | Vertical |
| Max. Input Power (W) | 10 |
| Connector Type | I-PEX |

## 2. Material and environmental characteristics

| | |
|---|---|
| Inner structure | PCB |
| Material of Plastic | ABS |
| Cable Type | RF1.13 |
| Connector Type | I-PEX |
| Dimensions (mm) | 46*16MM |
| Antenna color | Black |
| Operation Temperature | -40 to +80 |
| Storage Temperature | -40 to +80 |
| Antenna Storage life(year) | 10 |
| Substance Compliance | ROHS |

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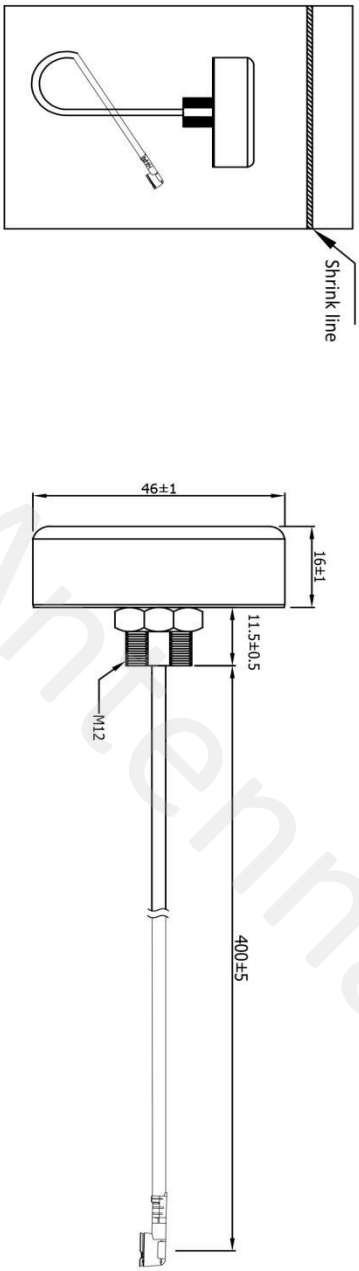


Packing:
Inner packaging(11*16cm Self sealing bag):1PCS.
Medium packaging(24*34cm Self sealing bag):30PCS.
Outer box(300x260x230mm):300PCS.
Nut Packing:Inner packaging(11*16cm Self sealing bag):100PCS.

Specification(Free Test):
Frequency Range: 2.4-2.5G/5.15-5.85G
Impedance: 50Ω
V.S.W.R: ≤2.0
100% Continuity,short and open circuit test
Materials,parts and process must by environmentally (ROHS)

| NO | Name | Description | Q'TY | Remark |
|---|---|---|---|---|
| 4 | Foam cotton | 45.5*1MM | 1 | |
| 4 | PCB | FR4 | 1 | |
| 3 | Radome | Black ABS | 1 | |
| 2 | Cable | φ1.13MM black double tin wire | 1 | |
| 1 | Connector | φ1.13 I-PEX I(equivalents) | 1 | |

| | | | |
|---|---|---|---|
| XX. | ±5.0 | Approved | |
| X. | ±3.0 | | |
| .X | ±1.0 | Checked | |
| .XX | ±0.2 | | |
| .XXX | ±0.1 | Drawing | |

| | |
|---|---|
| Customer | |
| Part NO. | |
| Part name | External antenna |
| CW P/NO. | CW-WZ-0081 |
| REV | X1 |
| Unit | m/m |
| File : | |
| Sheet : | 1/1 |

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| REV | Date | Description |
|---|---|---|
| X1 | 2022/08/19 | New issue |
| X2 | 2023/01/04 | Change wire |

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## 4. Antenna test parameters

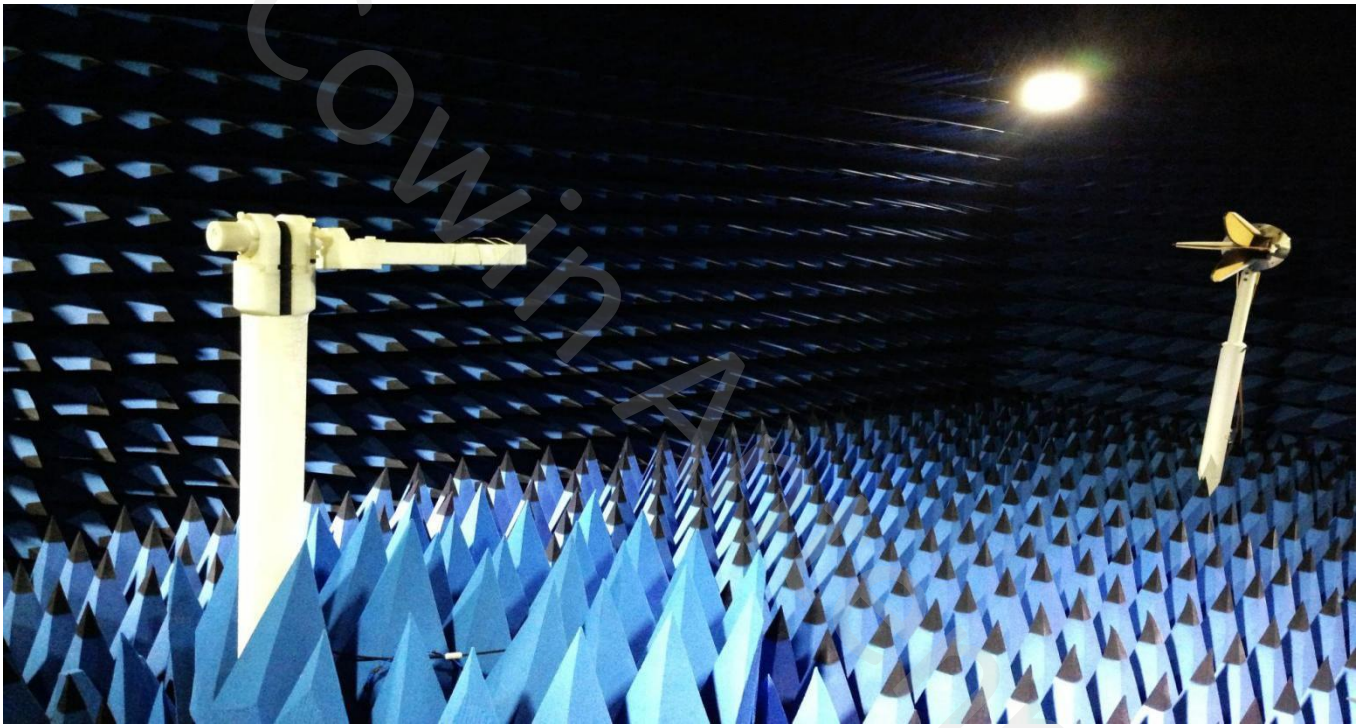
**Antenna Measurement Conditions:**

Mounted on Ground Plane of 280 x 80 mm

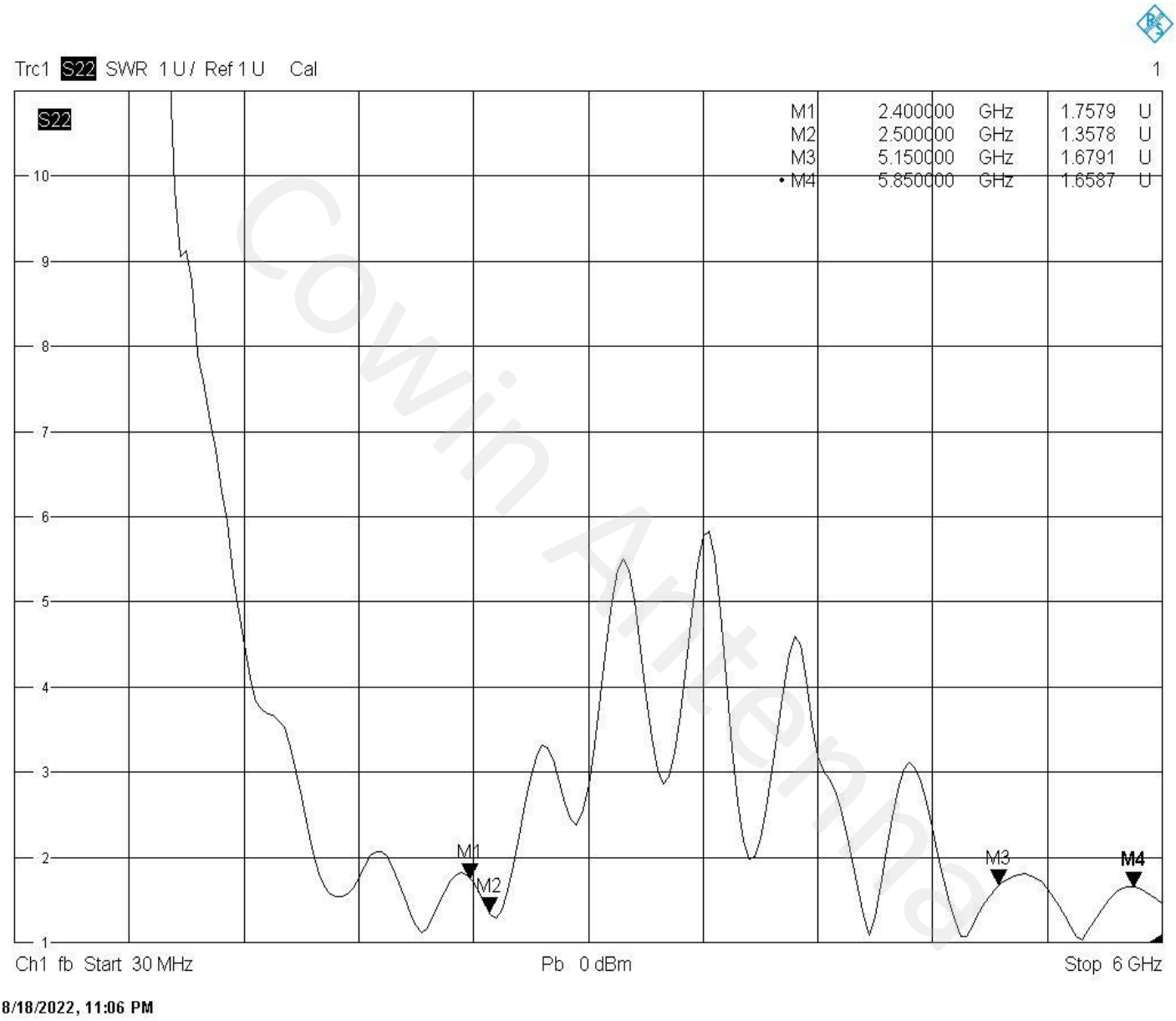
Measured in Certified 3D Anechoic Chamber

The network analyzer is Agilent 5071c

The comprehensive tester is Agilent cmv500



### 4.1 VSWR

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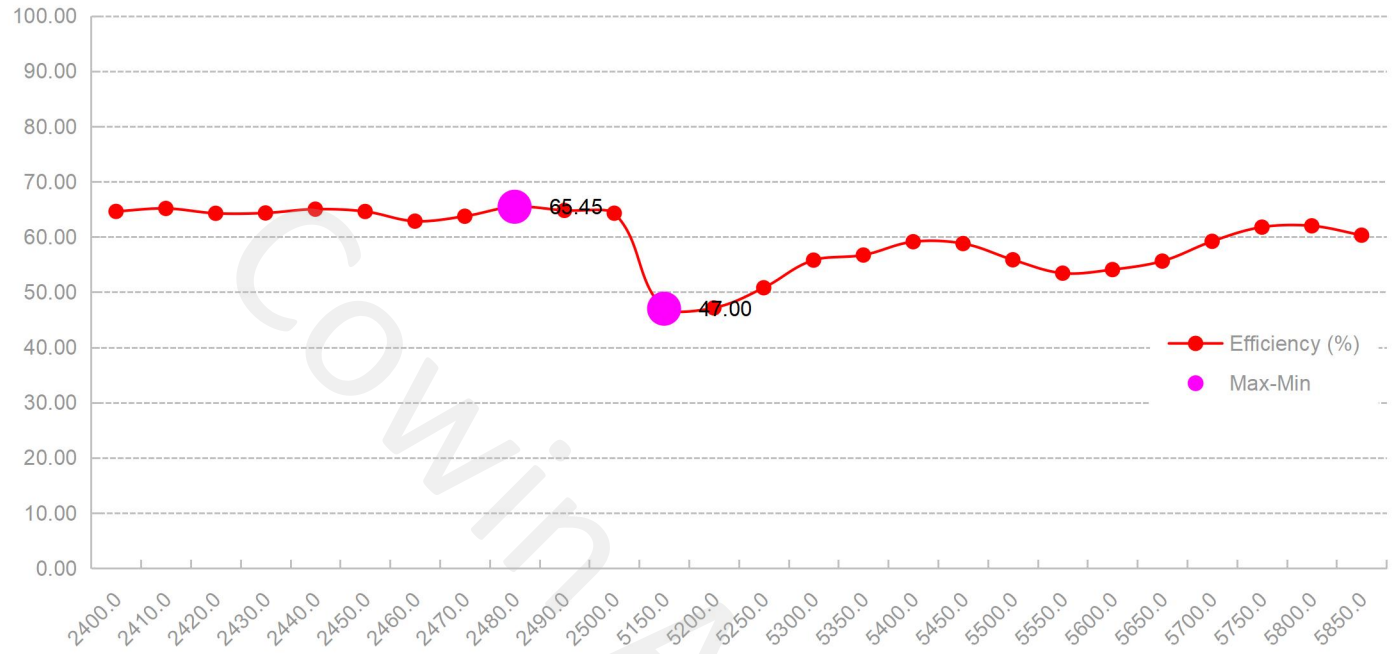
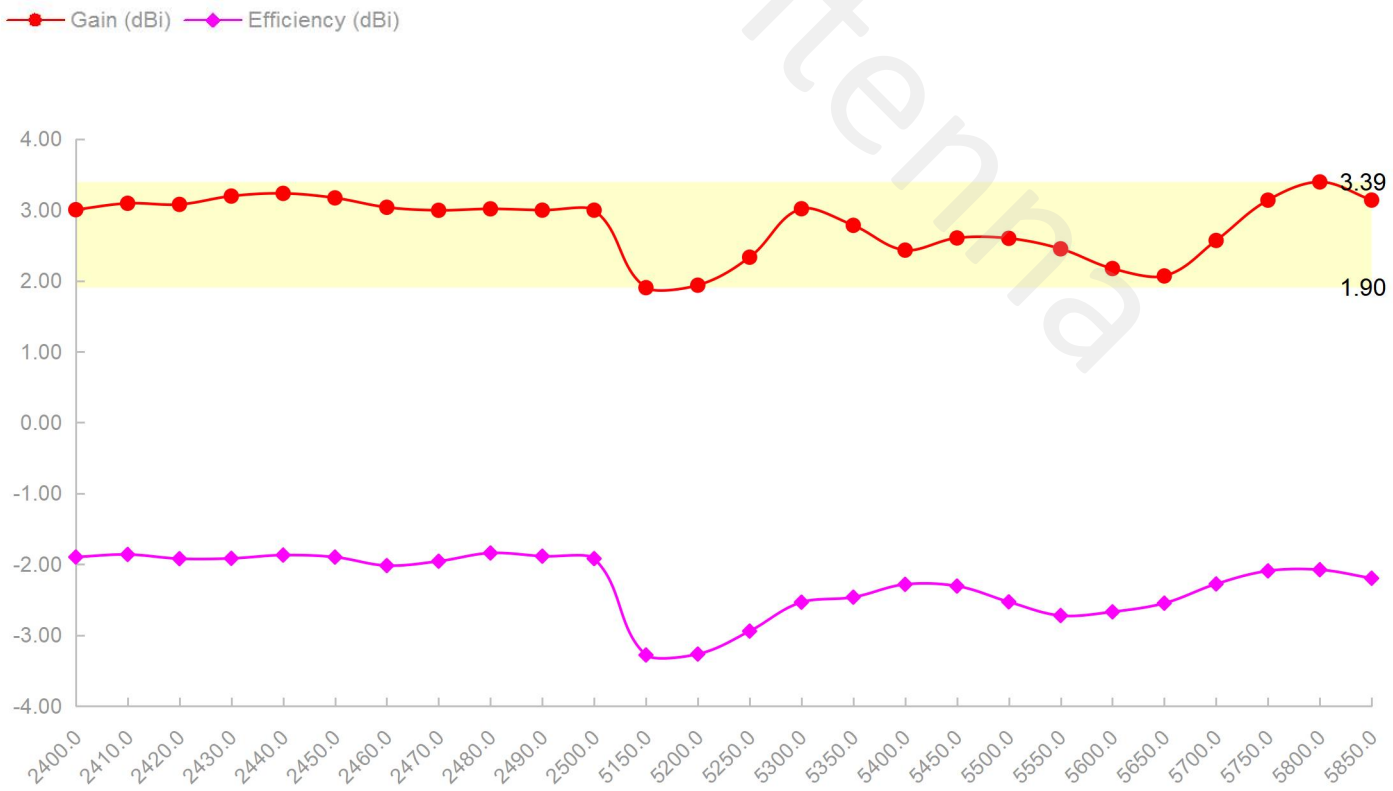
## 4.2 Efficiency




## 4.3 Peak gain

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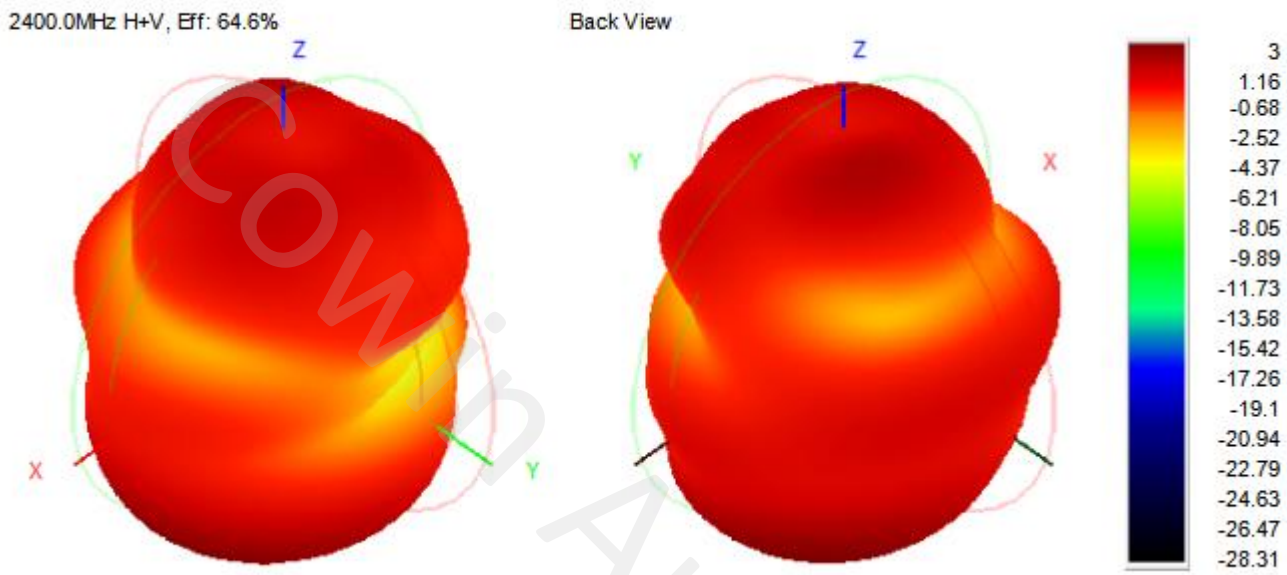
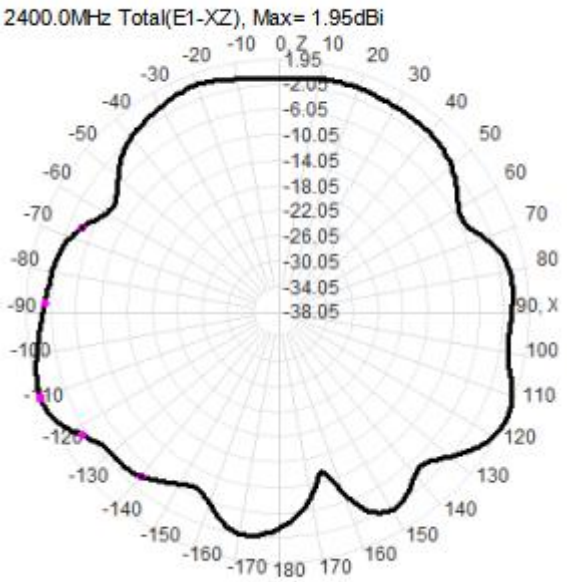
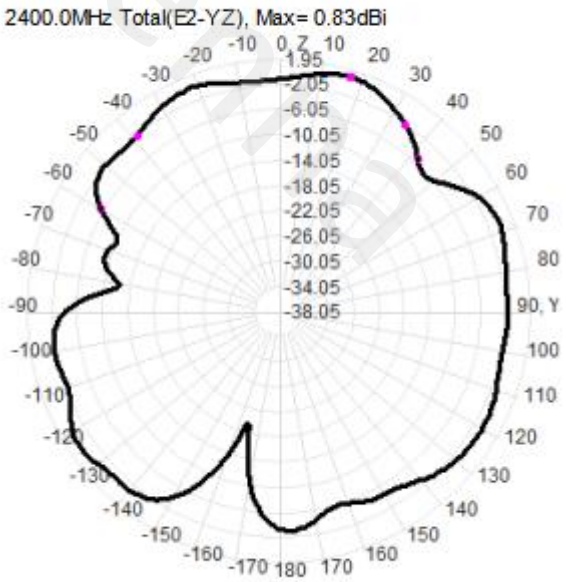
### 4.4 3D&2D Radiation Patterns

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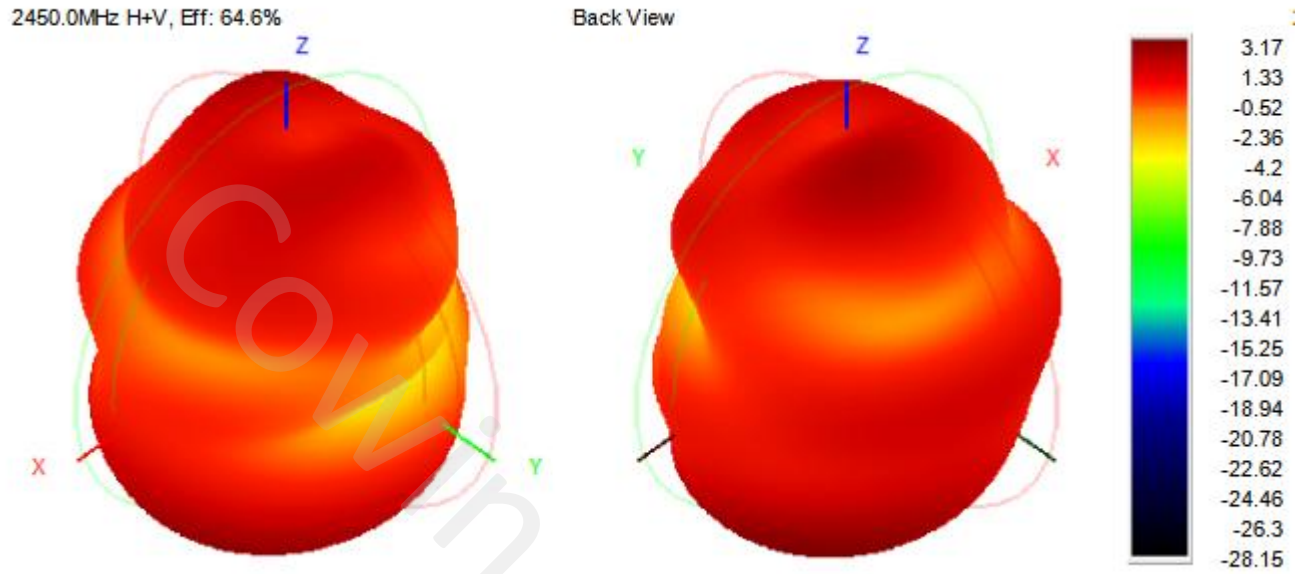


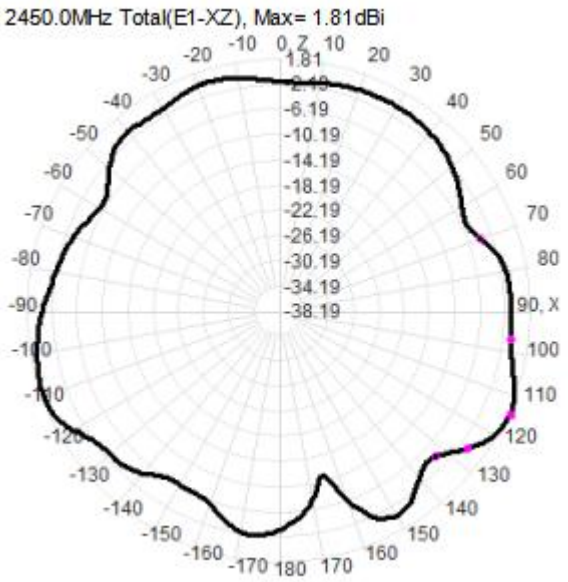


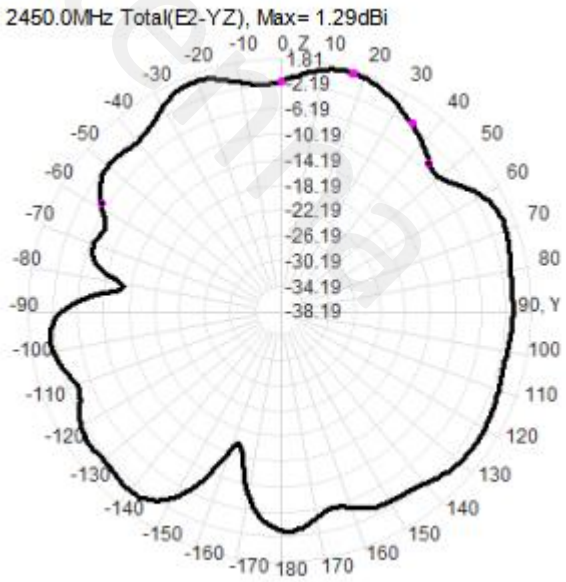


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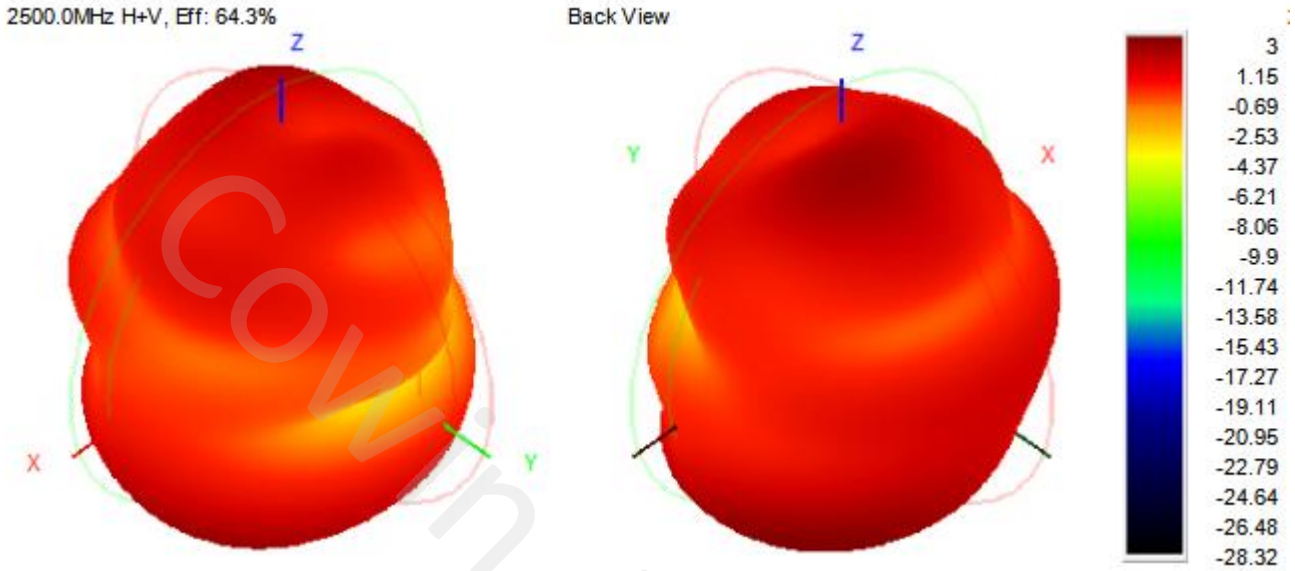


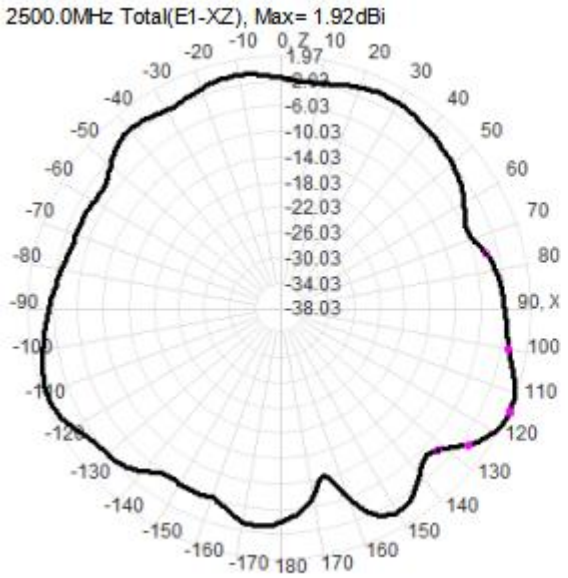


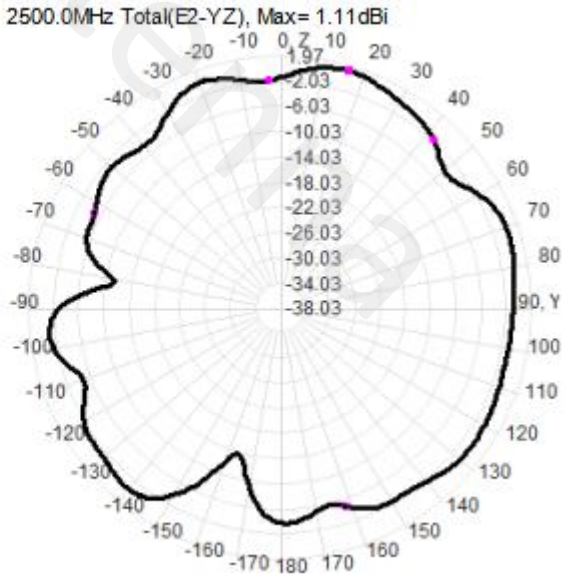


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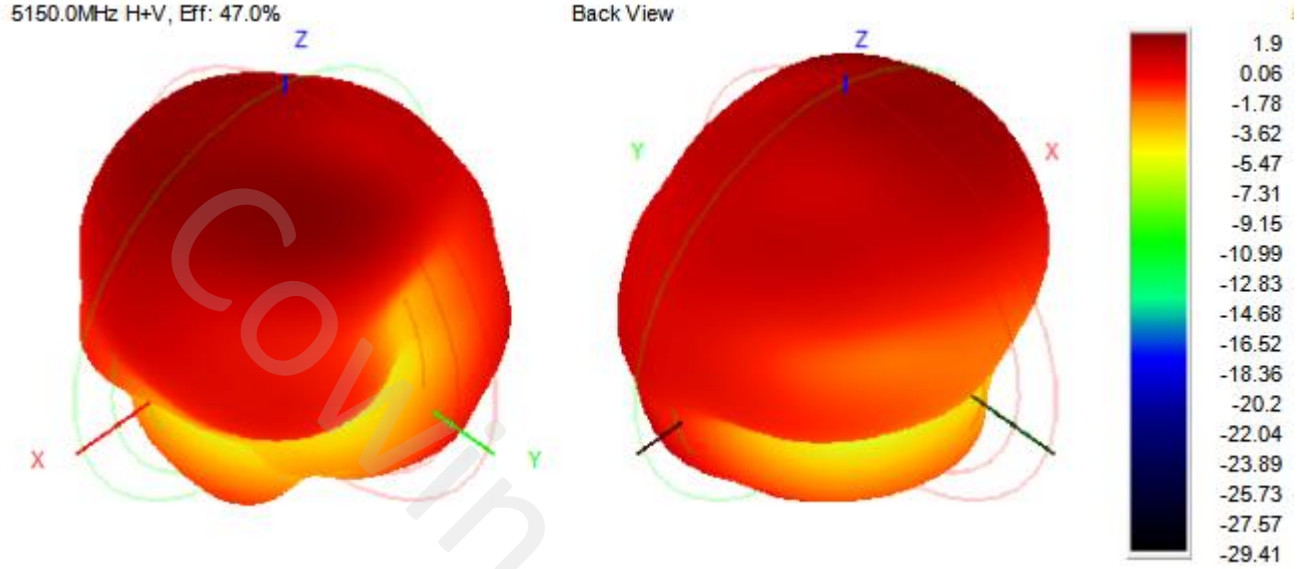


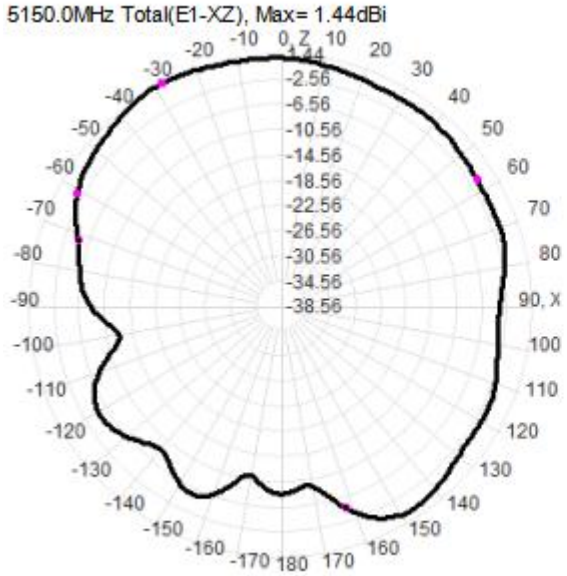


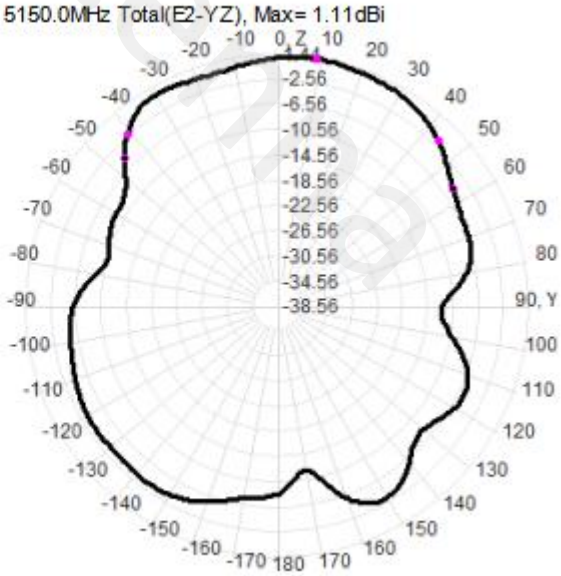


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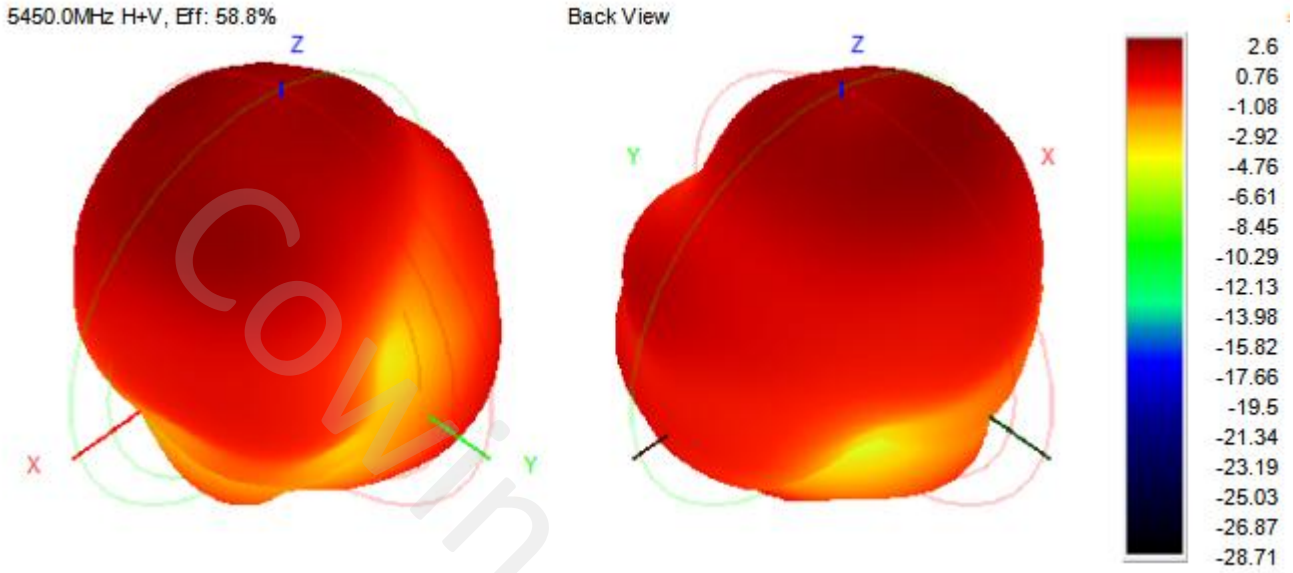


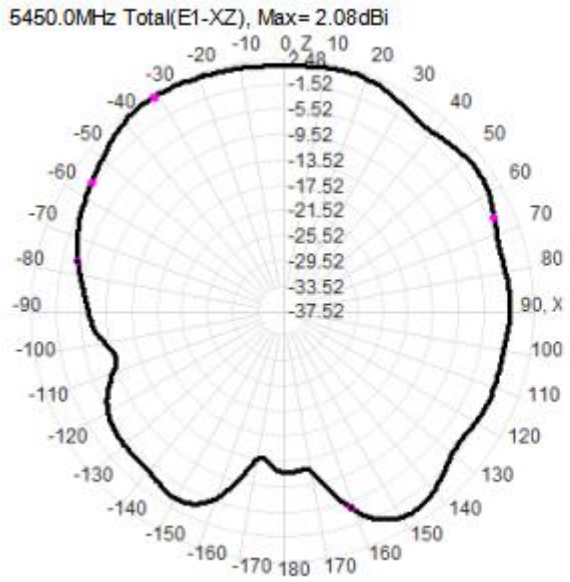


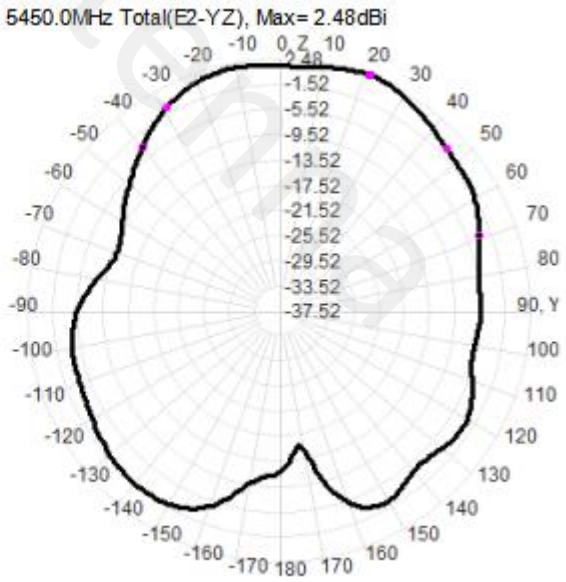


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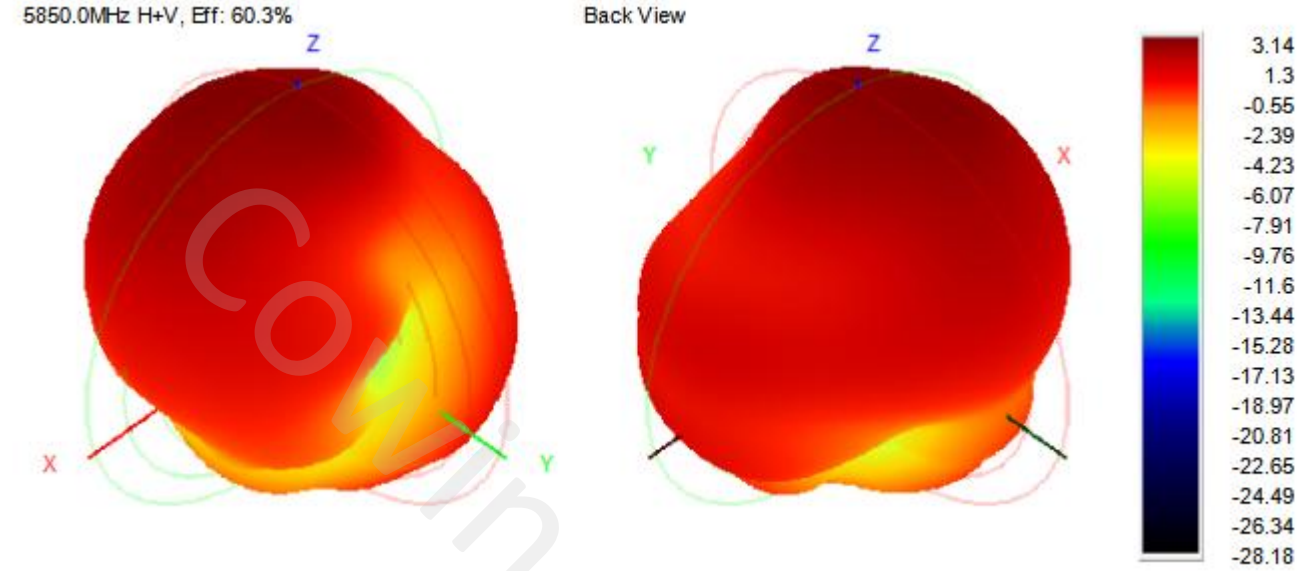


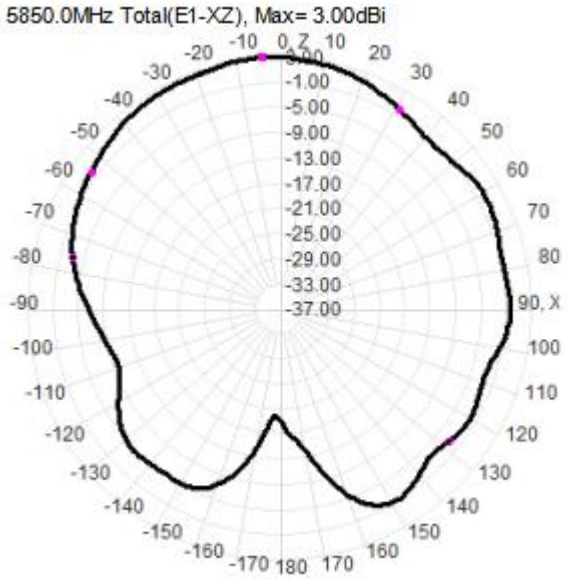


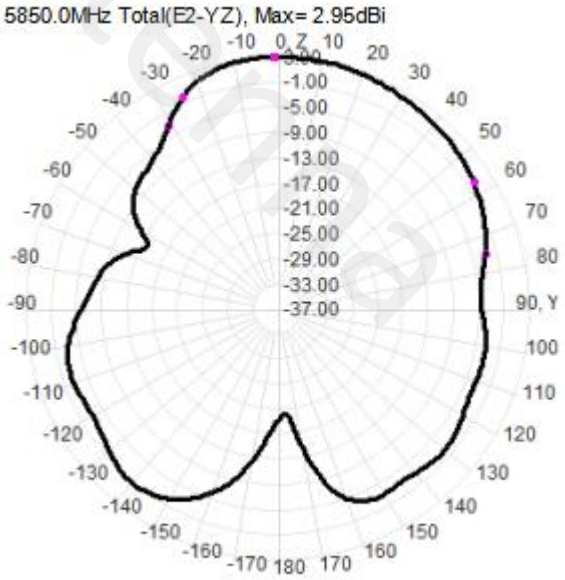


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