

品名：RFMTA252009IMAB301

## History List

[illegible]

## 品名：RFMTA252009IMAB301

## 1. Explanation of part number：

| RF        | MTA           | 2520                                                                  | 09                                                  | I                                                                                                                                      | M                                                                              | A                                                                                                                                                                                                           | B                                            | 3                                                                                                                                  | 01                  |
|-----------|---------------|-----------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Type Code | Product Code  | Metal Dimension (Unit: mm)                                            | Cable Length (unit: cm)                             | Connector Brand                                                                                                                        | Type of Connector                                                              | Application                                                                                                                                                                                                 | Project status                               | Wire Diameter                                                                                                                      | Project             |
| RF Device | Metal Antenna | Per 2 digits of length, width<br>e.g.:2520<br>Length 25mm, Width 25mm | 2 digits for cable length<br>e.g.: 09<br>Length 9cm | A: N<br>C:MCX<br>D:IPEX III<br>E: IPEX IV<br>F: IPEX A13<br>H: Hirose<br>I: IPEX<br>M: MMCX<br>S: SMA<br>T: TNC<br>U:MURATA<br>N: None | A: Reverse Female<br><b>B: Reverse Male</b><br>F: Female<br>M: Male<br>N: None | <b>0: 0GHz</b><br><b>3: 3GHz</b><br><b>6: 6GHz</b><br>A: 2.4GHz ISM band<br>B: GSM 900/1800 dual band<br>G: GPS band<br>L: 2.4/5.2/5.8 GHz tri-band<br><b>N: NFC</b><br><b>T: LTE band</b><br>W: WCDMA band | B: MP<br><b>T:During Test</b><br>X: Pile Run | 0:None<br>1:∅ 0.81<br>2:∅ 1.32<br>3:∅ 1.13<br>4:Low Loss ∅ 1.13<br>5:∅ 0.5<br>6:RG316<br>7: ∅ 1.37<br>8:RG178<br>9:Low Loss ∅ 1.37 | 01~99 series number |

## 2. Electrical Specification：

| Item                    | Specification   |
|-------------------------|-----------------|
| Working Frequency Range | 2.4 ~2.5 GHz    |
| Return Loss             | -10dB(Max)      |
| VSWR                    | 2 max.          |
| Peak Gain               | 4.26 dBi        |
| Polarization            | Linear Vertical |
| Radiation Pattern       | Directional     |
| Impedance               | 50Ω             |
| Operation Temperature   | -55℃ ~ +100℃    |

UNLESS OTHER SPECIFIED TOLERANCES ON :  
 X = N/A      X.X = N/A      X.XX = N/A  
 ANGLES = N/A      HOLEDIA = N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 李欣樺

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

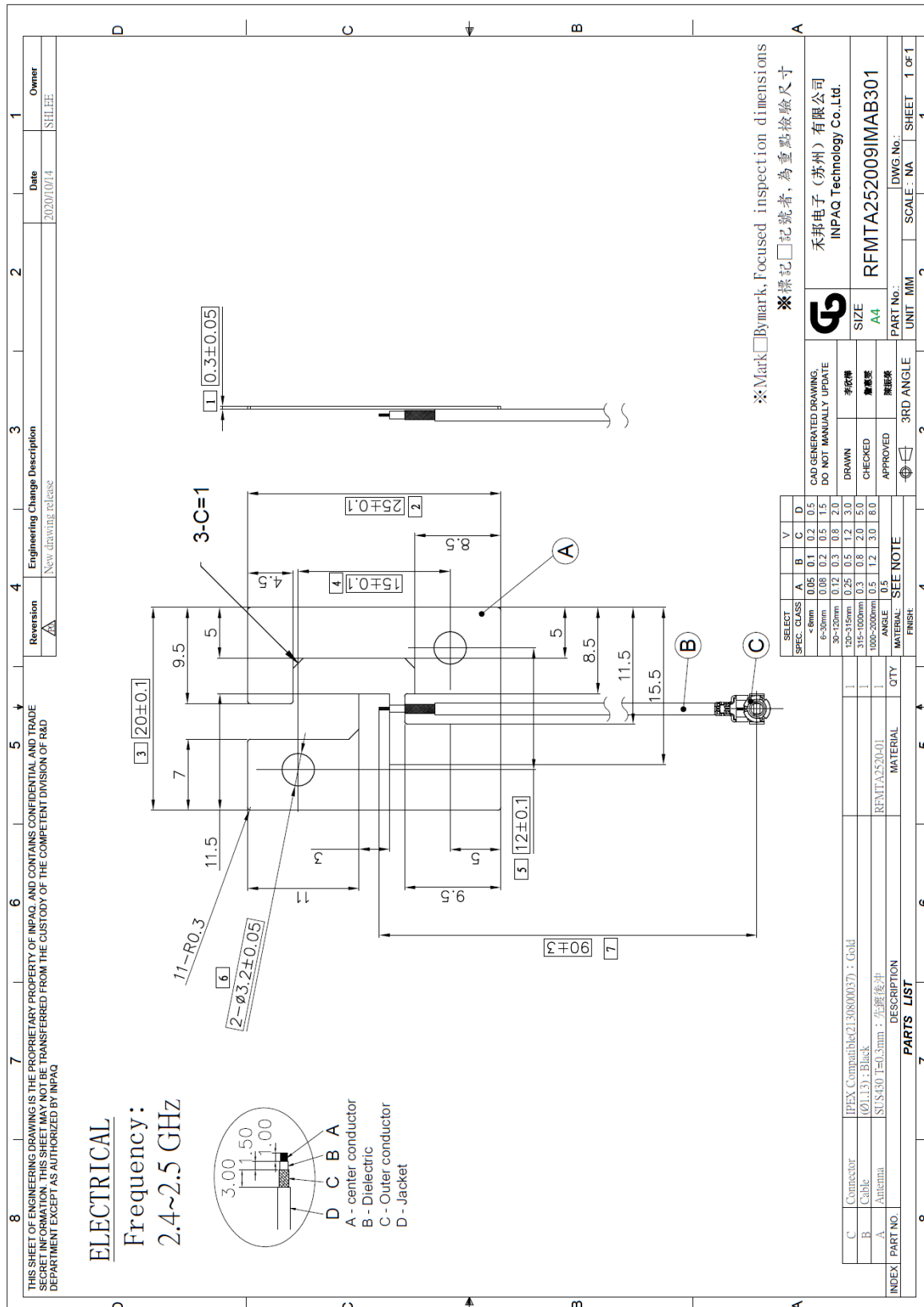
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### 3. Antenna Drawing :



UNLESS OTHER SPECIFIED TOLERANCES ON :  
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ANGLES=N/A                      HOLEDIA=N/A



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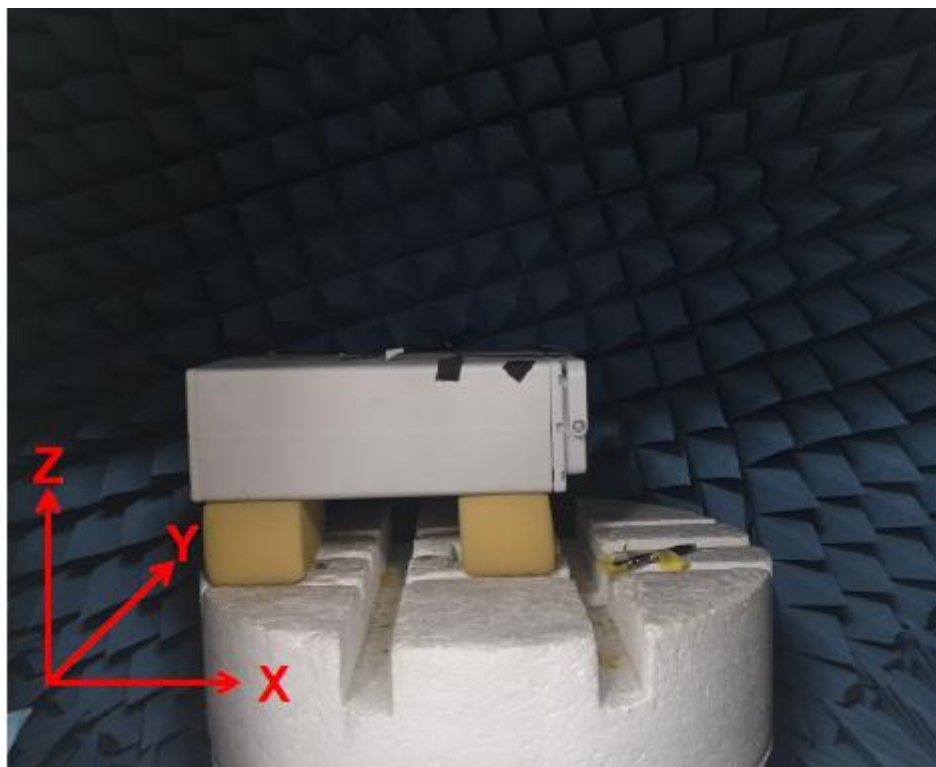
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## 4. Performance Report :

|             |
|-------------|
| Test Report |
|-------------|

## ■ Experimental Setup



UNLESS OTHER SPECIFIED TOLERANCES ON :  
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# ELECTRICAL CHARACTERISTICS

## Return Loss



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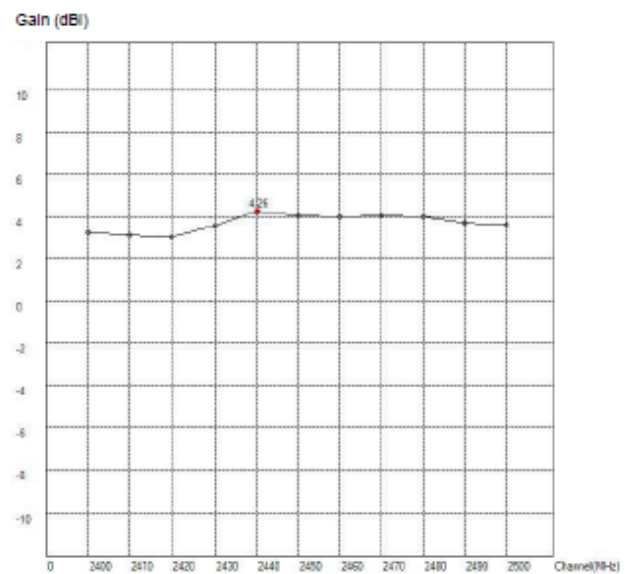
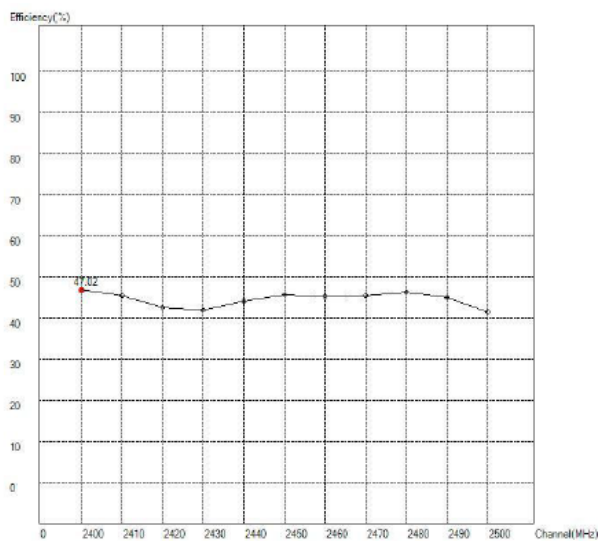
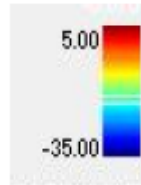
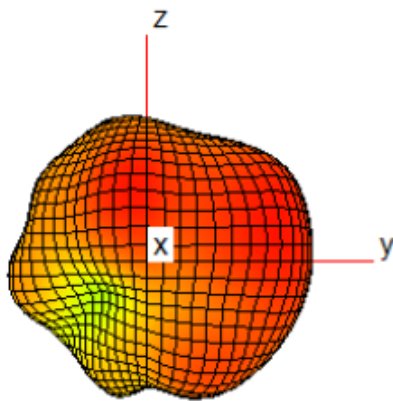
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# Antenna Efficiency and Peak Gain

## 2450 MHz



Maximum Efficiency at 2400MHz :47.02 %

Maximum Peak Gain at 2440 MHz : 4.26 dBi

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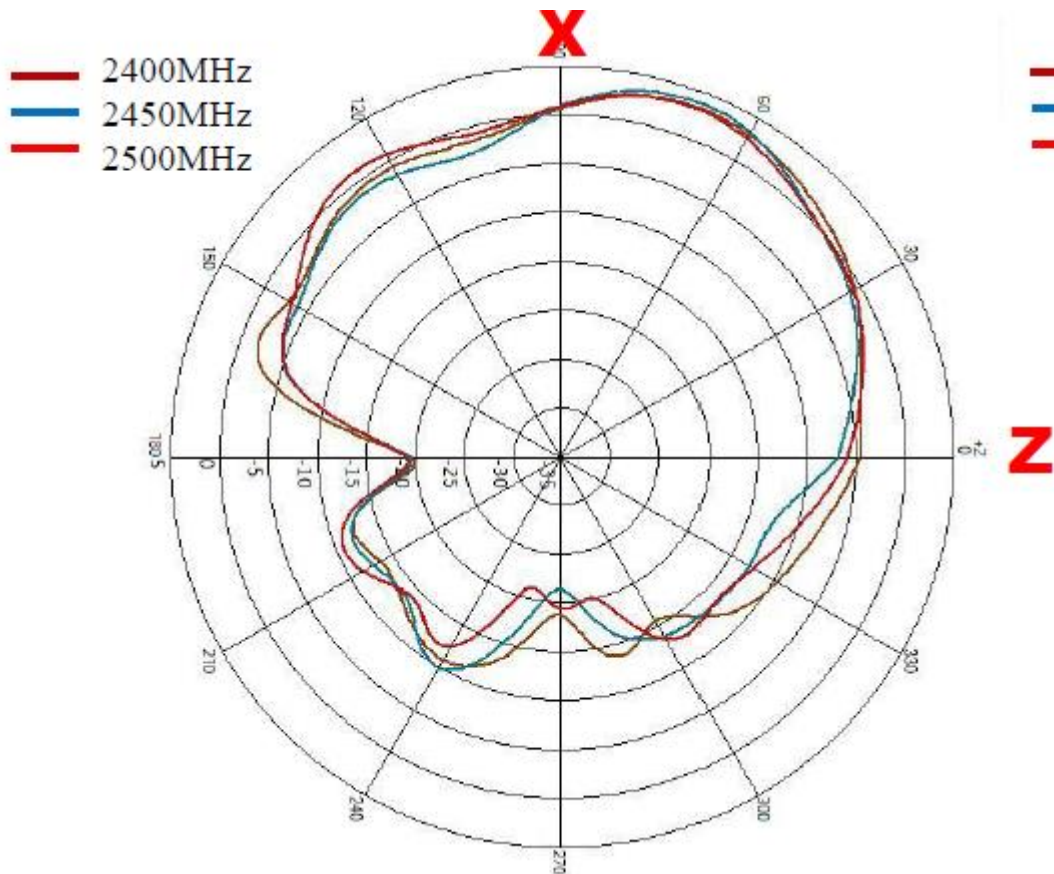
# RADIATION PATTERN

2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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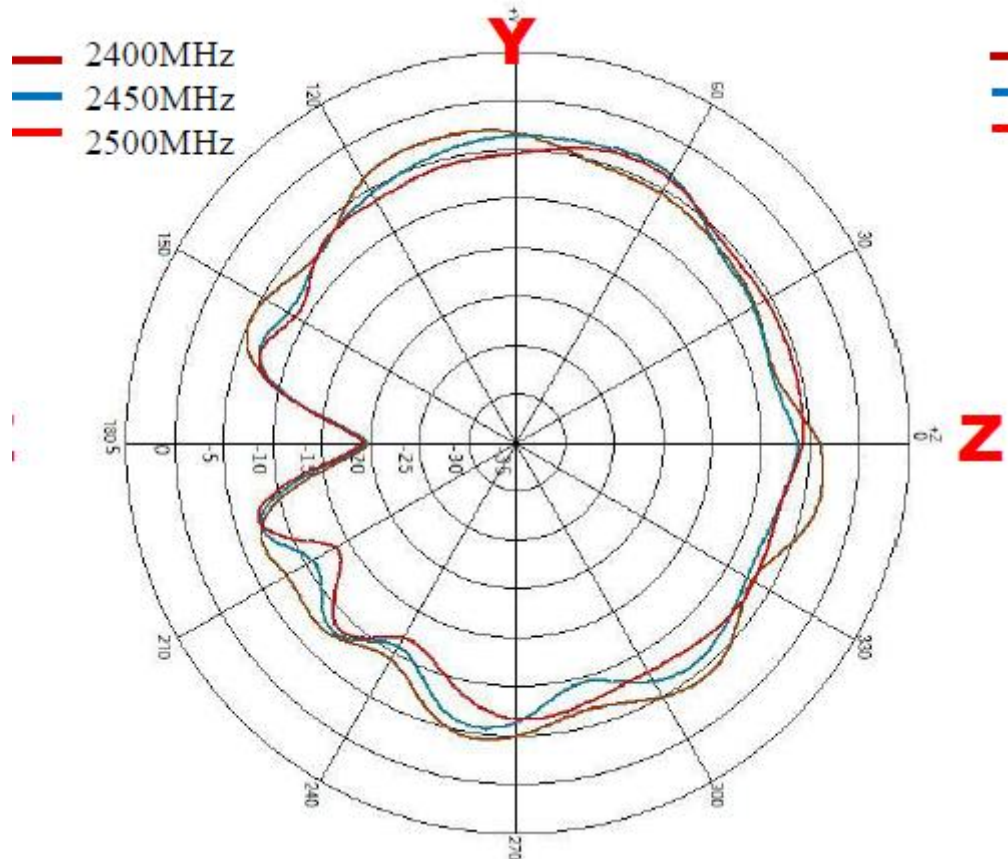
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## Y-Z Plane

Phi=90.00deg

Gain . dB



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 ANGLES = N/A      HOLEDIA = N/A



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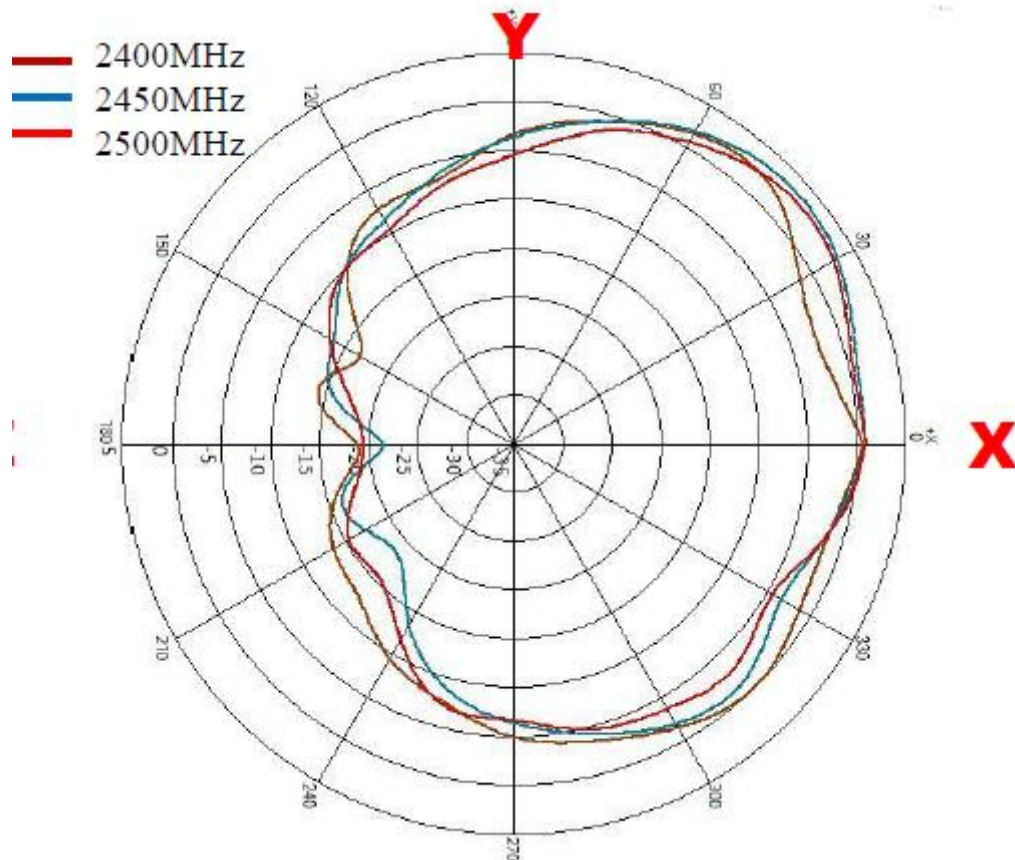
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## X-Y Plane

Theta=90.00deg

Gain . dB



|                 | ZX plane        |               | ZY plane        |               | XY plane        |               |
|-----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| Frequency [MHz] | Max Value [dBi] | Average [dBi] | Max Value [dBi] | Average [dBi] | Max Value [dBi] | Average [dBi] |
| 2400            | 3.27            | -2.68         | -2.71           | -5.45         | 2.34            | -2.96         |
| 2450            | 3.76            | -3.09         | -3.18           | -6.39         | 3.75            | -2.34         |
| 2500            | 3.22            | -2.76         | -3.59           | -6.61         | 2.93            | -3.03         |

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 ANGLES = N/A      HOLEDIA = N/A



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