

# Testing Report

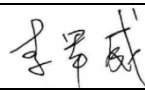
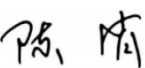
Customer Name: SHENZHEN SHIXINZHONGXIN TECHNOLOGY.CO.,LTD

Product Name: BT Antenna

Sample Model:H19

Reference Standard: *GB/T9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2023.02.02

|           |                                                                                     |                 |
|-----------|-------------------------------------------------------------------------------------|-----------------|
| Engineer: |  | Date:2023.02.02 |
| Auditor:  |  | Date:2023.02.02 |
| Approver: |  | Date:2023.02.02 |

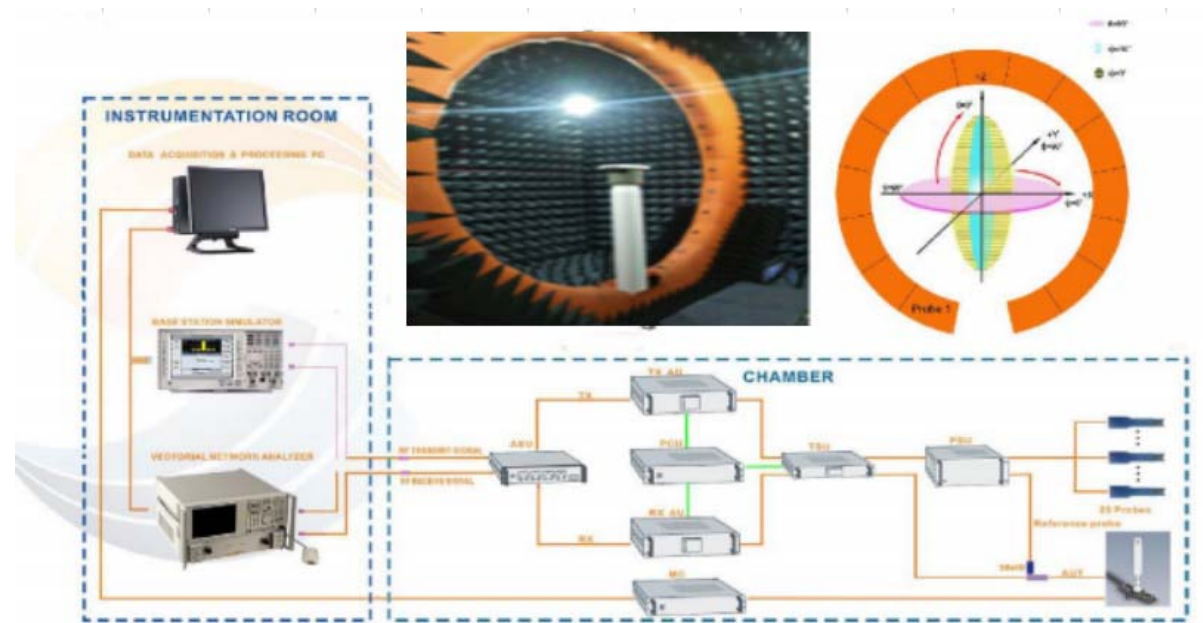
# 1. General Information

## 1.1 General Information of testing institutions

|           |                                                                                      |
|-----------|--------------------------------------------------------------------------------------|
| Name      | Shenzhen Hetuo Technology Co.,Ltd.                                                   |
| Address   | Room 1202B, Building C6, Hengfeng Industrial City, Xixiang, Baoan District, Shenzhen |
| Tel       | 18665849001                                                                          |
| E-mail    | 18665849001@163.com                                                                  |
| Equipment | Agilent 5071C                                                                        |

## 1.2 Testing principle

### Multi-probe OTA Measurement System



1.3 Test equipment

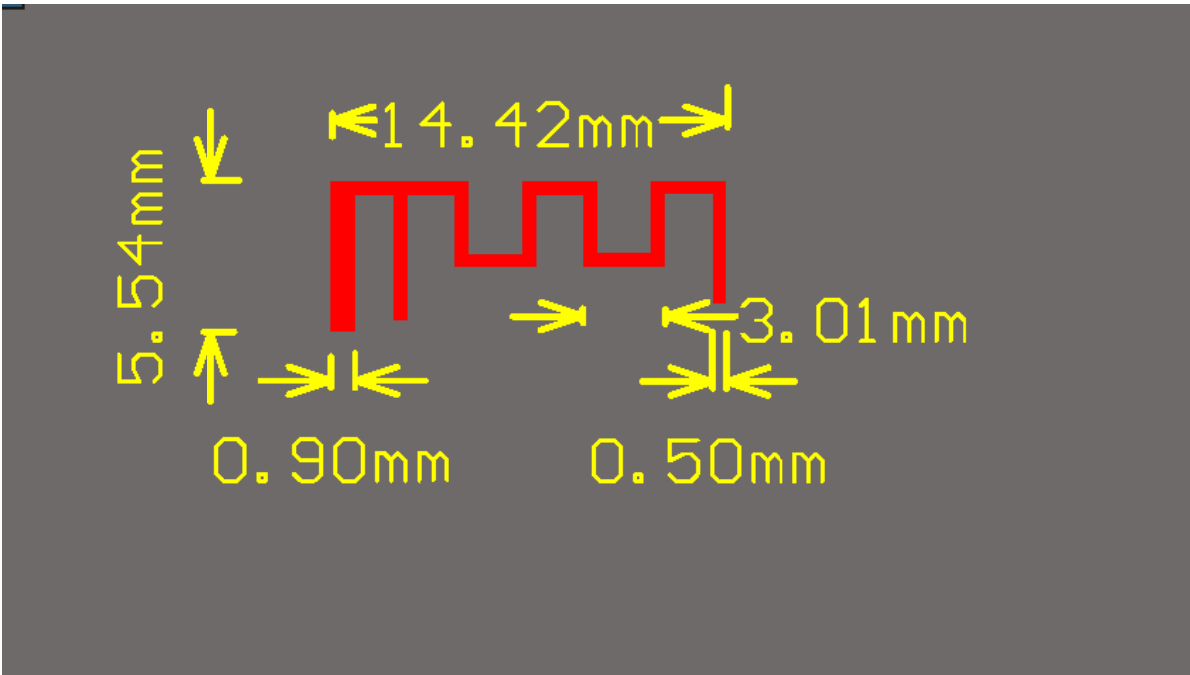
| Equipment                  | Model No. | Serial No. | Manufacturer | Calibration date | Next calibration date |
|----------------------------|-----------|------------|--------------|------------------|-----------------------|
| 24 probe microwave chamber | 4*3*3     | NA         | FEITU        | 2022.12.29       | 2023.03.31            |
| Network Analyzer           | 5071C     | NA         | Agilent      | 2022.12.29       | 2023.03.31            |

1.4 Test environment

|             |          |
|-------------|----------|
| Temperature | 24℃±1.5℃ |
| Humidity    | 45%RH    |
| Pressure    | 101kPa   |

1.5

1.6 Antenna Photo &Lenght(mm)



## 2. Sample Information

### 2.1 Client information

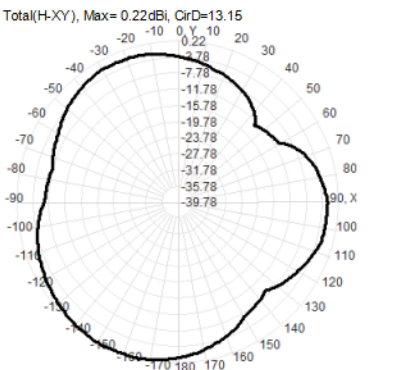
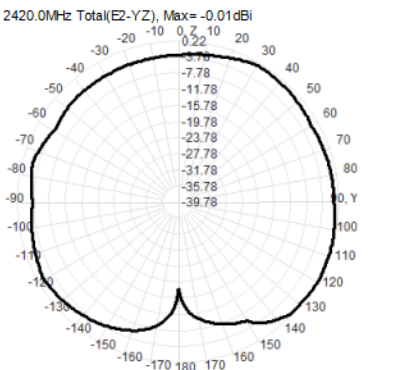
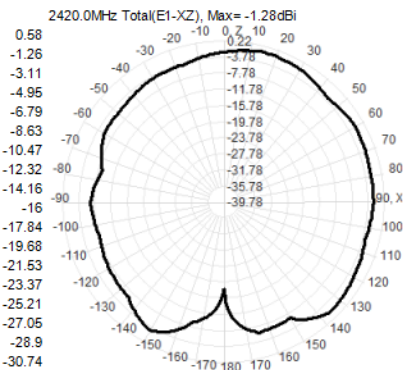
|          |                                                                 |
|----------|-----------------------------------------------------------------|
| Name     | SHENZHEN SHI XIN ZHONG XIN TECHNOLOGY CO., LTD                  |
| Address  | A1, ShajingDonghuan Industrial Zone, Bao 'an District, Shenzhen |
| Contacts | Ma Chao                                                         |
| Tel      | 18218809918                                                     |
| E-mail   | machao@c-chip.com.cn                                            |

### 2.2 Description of EUT(S)

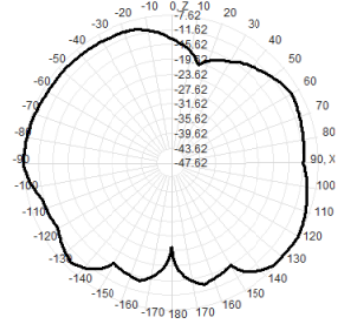
|                 |                                    |
|-----------------|------------------------------------|
| Product Name    | BT Antenna                         |
| Sample Model    | F-6991A                            |
| Antenna Size    | 4.6*10.4mm                         |
| Antenna Type    | PCB antenna                        |
| Serial No.      | /                                  |
| Test Item       | Antenna Gain,Radiation pattern     |
| Frequency Range | 2400-2500MHz                       |
| Received Date   | 2023.02.02                         |
| Test Date       | 2023.02.02                         |
| Remark          | The length of the RF cable is 50mm |

Test data

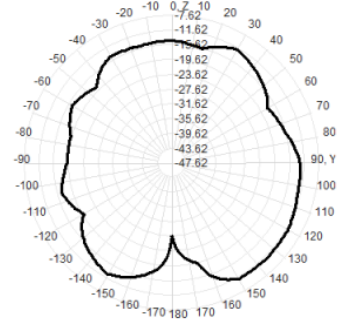
|                 |        |        |        |        |        |        |        |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Gain (dBi)      | -7.62  | -7.64  | -8.16  | -8.59  | -8.27  | -9.21  | -8.94  | -9.21  | -8.77  | -8.87  | -8.86  |



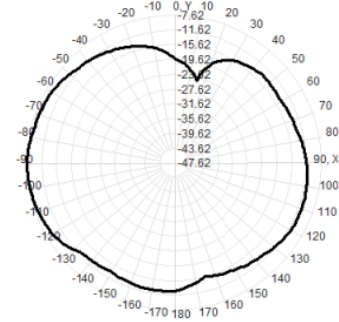
2400.0MHz Total(E1-XZ), Max=-7.62dBi



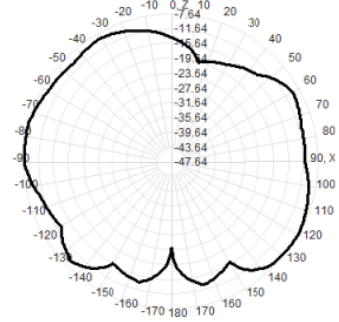
2400.0MHz Total(E2-YZ), Max=-11.29dBi



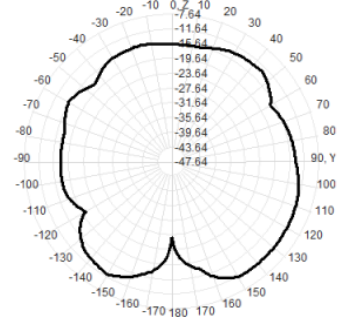
Total(H-XY), Max=-7.62dBi, CirD=17.06



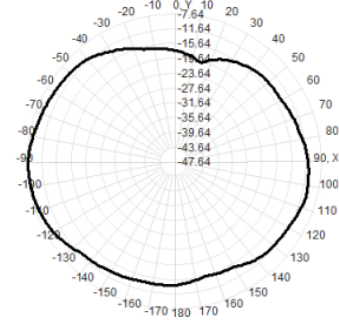
2410.0MHz Total(E1-XZ), Max=-7.64dBi



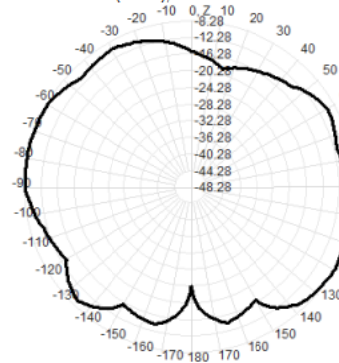
2410.0MHz Total(E2-YZ), Max=-11.62dBi



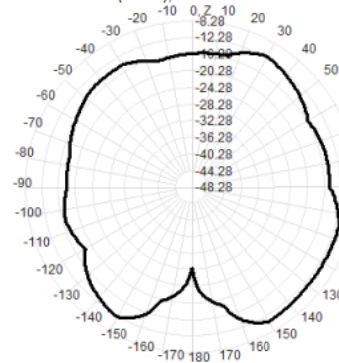
Total(H-XY), Max=-7.92dBi, CirD=12.13



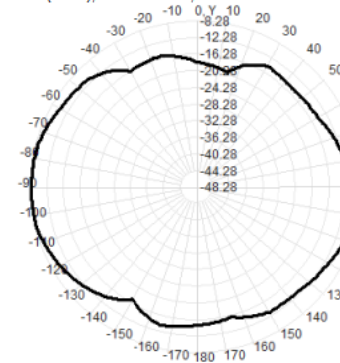
2420.0MHz Total(E1-XZ), Max=-8.28dBi



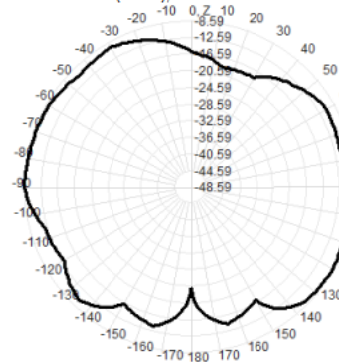
2420.0MHz Total(E2-YZ), Max=-11.03dBi



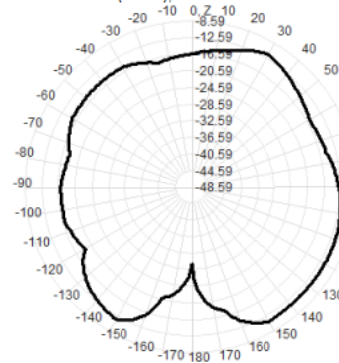
Total(H-XY), Max=-8.56dBi, CirD=11.19



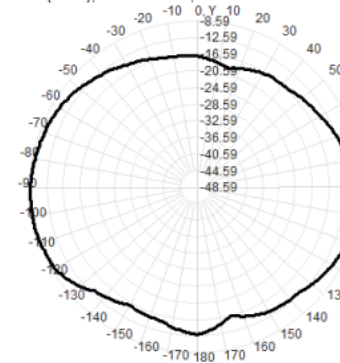
2430.0MHz Total(E1-XZ), Max=-8.69dBi



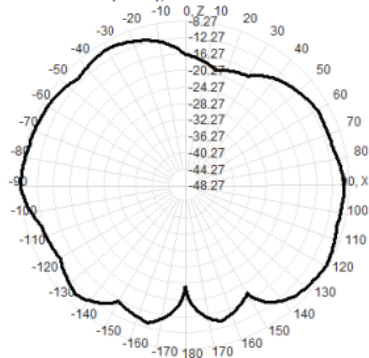
2430.0MHz Total(E2-YZ), Max=-11.40dBi



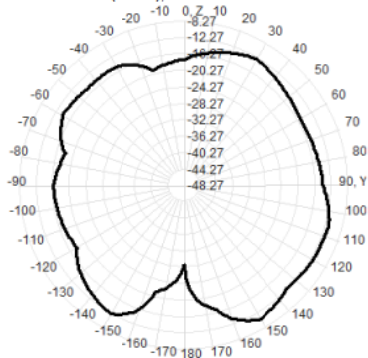
Total(H-XY), Max=-8.59dBi, CirD=10.47



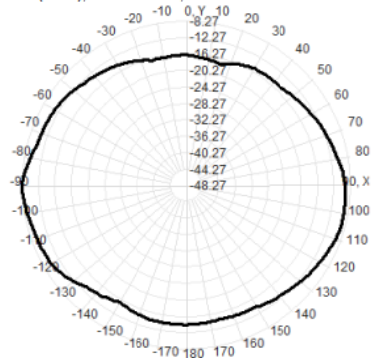
2440.0MHz Total(E1-XZ), Max=-8.27dBi



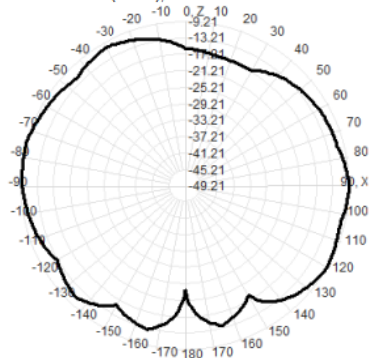
2440.0MHz Total(E2-YZ), Max=-10.88dBi



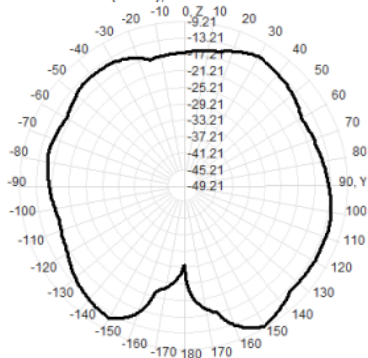
Total(H-XY), Max=-8.27dBi, CirD=9.34



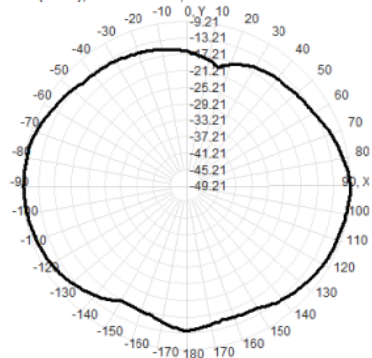
2450.0MHz Total(E1-XZ), Max=-9.21dBi



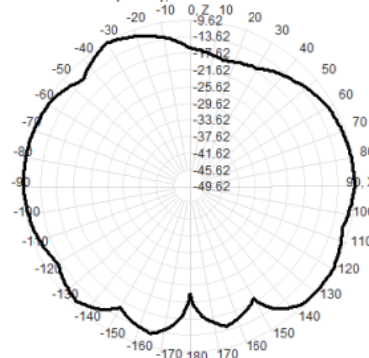
2450.0MHz Total(E2-YZ), Max=-9.88dBi



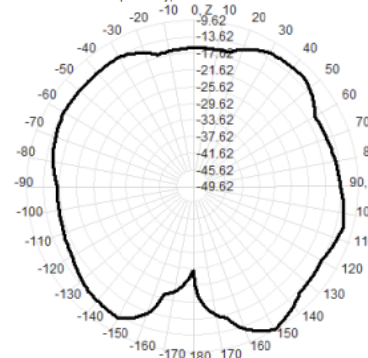
Total(H-XY), Max=-9.42dBi, CirD=9.90



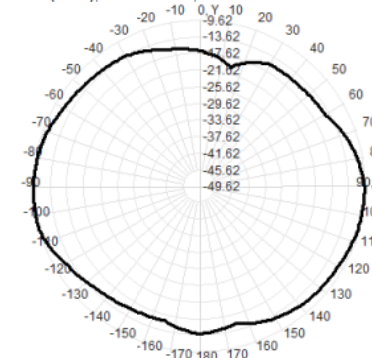
2460.0MHz Total(E1-XZ), Max=-9.62dBi



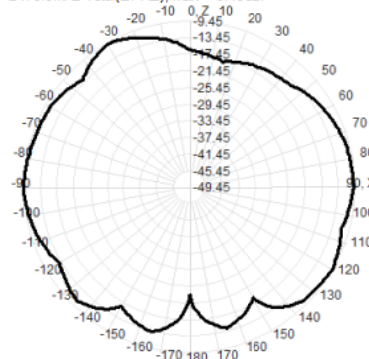
2460.0MHz Total(E2-YZ), Max=-10.06dBi



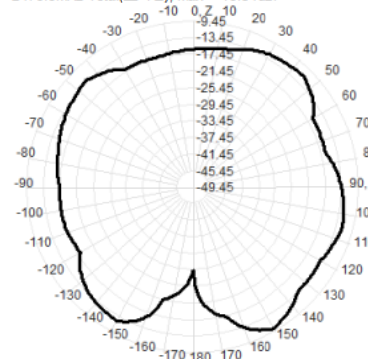
Total(H-XY), Max=-9.62dBi, CirD=10.35



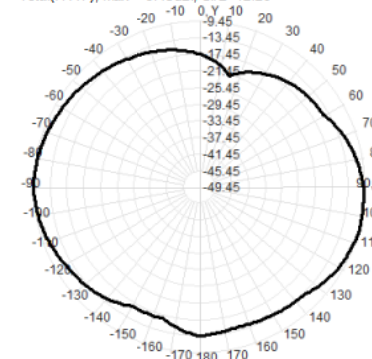
2470.0MHz Total(E1-XZ), Max=-9.45dBi



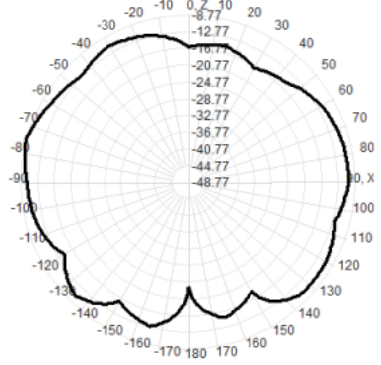
2470.0MHz Total(E2-YZ), Max=-10.34dBi



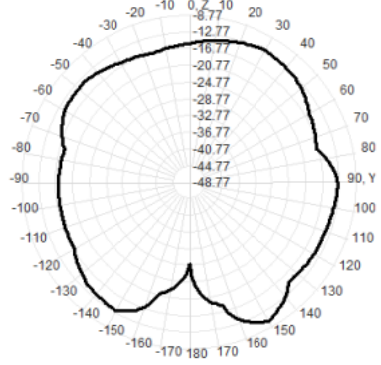
Total(H-XY), Max=-9.45dBi, CirD=12.28



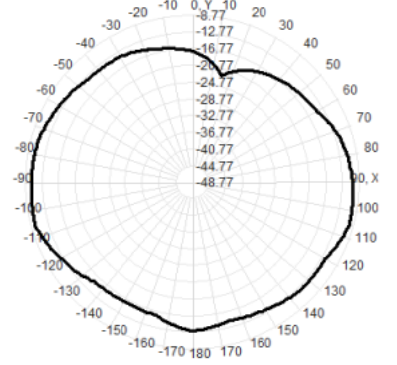
2480.0MHz Total(E1-XZ), Max=-8.77dBi



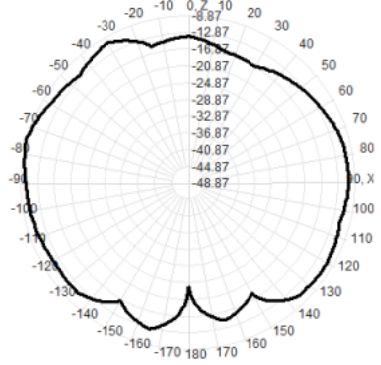
2480.0MHz Total(E2-YZ), Max=-10.63dBi



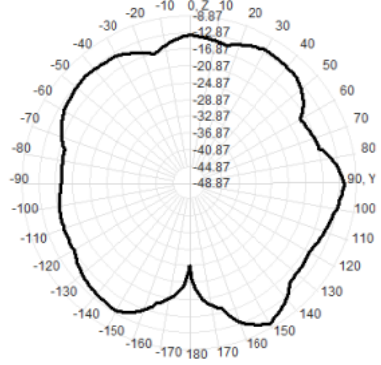
Total(H-XY), Max=-9.82dBi, CirD=12.69



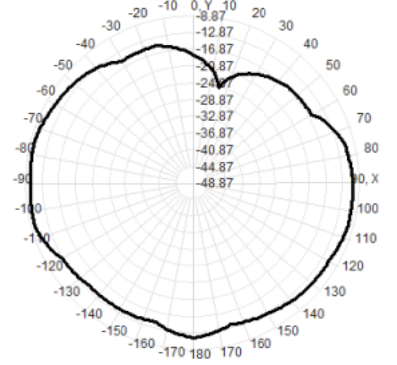
2490.0MHz Total(E1-XZ), Max=-8.87dBi



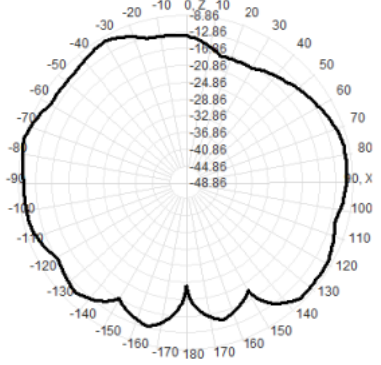
2490.0MHz Total(E2-YZ), Max=-10.21dBi



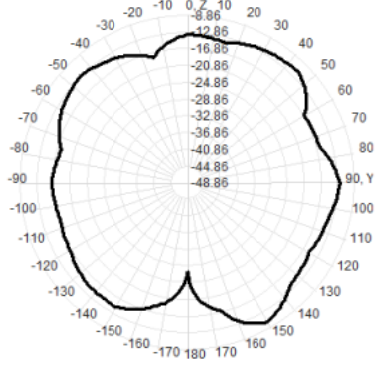
Total(H-XY), Max=-9.80dBi, CirD=15.48



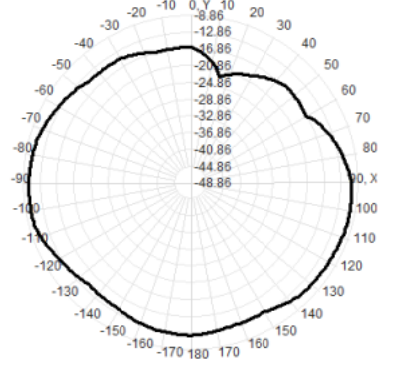
2500.0MHz Total(E1-XZ), Max=-8.86dBi



2500.0MHz Total(E2-YZ), Max=-10.62dBi



Total(H-XY), Max=-10.19dBi, CirD=12.49



## The test photos

