

Testing Report


Customer Name: SHENZHEN SHIXINZHONGXIN TECHNOLOGY.CO.,LTD

Product Name: BT Antenna

Sample Model: T780

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

Issue Date: 2025.07.03

| | | |
|-----------|-------------------------------------------------------------------------------------|-----------------|
| Engineer: |  | Date:2025.07.03 |
| Auditor: |  | Date:2025.07.03 |
| Approver: |  | Date:2025.07.03 |

1. General Information

1.1 General Information of testing institutions

| | |
|------------------|--------------------------------------------------------------------------------------|
| Name | Shenzhen Hetuo Technology Co.,Ltd. |
| Addresses | 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

| | | |
|-------------------|-------------------|-------------------------|
| Gain & Efficiency | Gain & Efficiency | SATIMO Agilent 5071C |
|-------------------|-------------------|-------------------------|



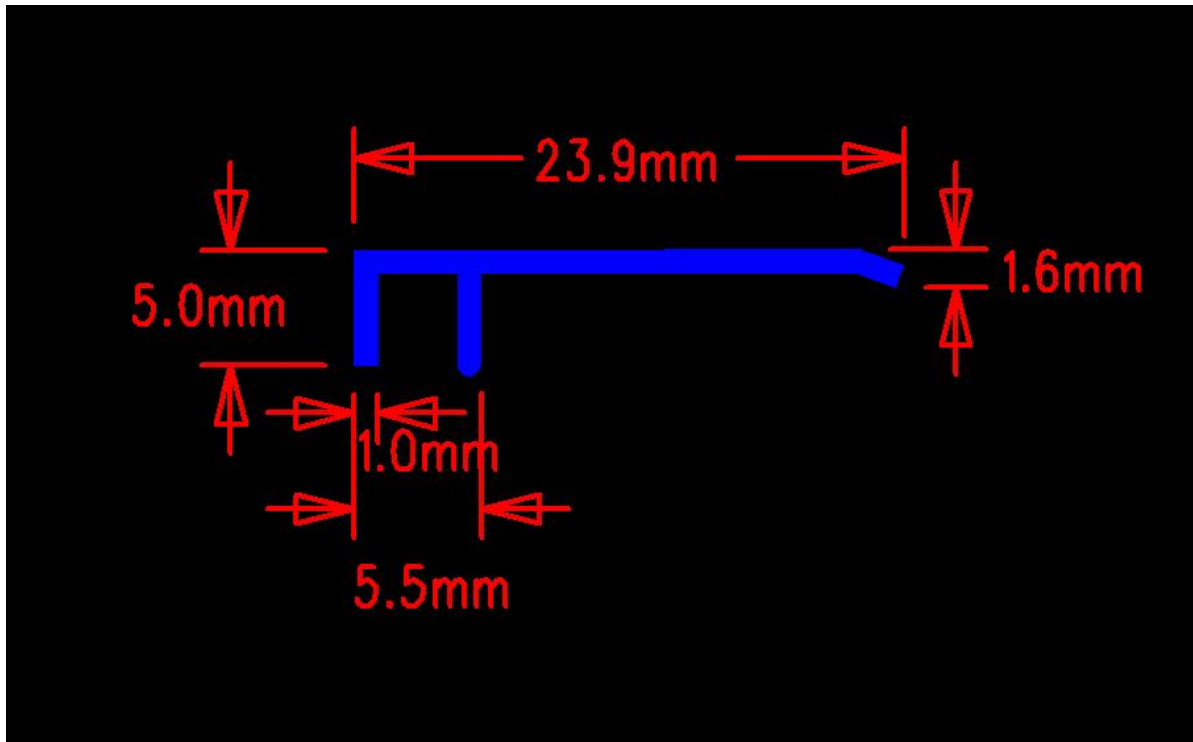
1.3 Test equipment

| Equipment | Model No. | Serial No. | Manufacturer | Calibration date | Next calibration date |
|----------------------------|-----------|------------|--------------|------------------|-----------------------|
| 24 probe microwave chamber | 4*3*3 | NA | FEITU | 2025.06.30 | 2025.09.30 |
| Network Analyzer | 5071C | NA | Agilent | 2025.06.30 | 2025.09.30 |

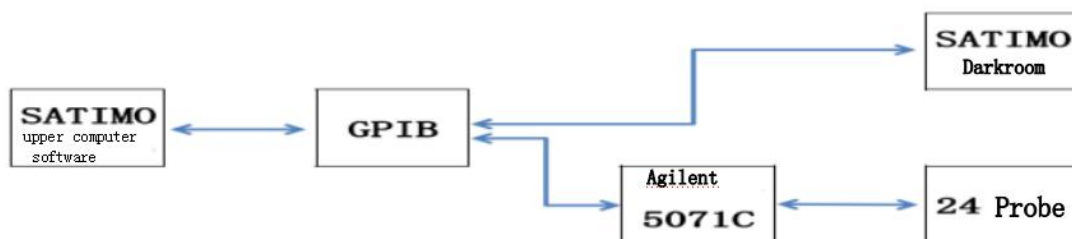
1.4 Test environment

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

1.5 Antenna Photo & Length(mm)



1.6 Brief summary of Procedure



1. SATIMO turn on the Upper Computer Software, Name: VeryView99.exe, Version No.: V1.10;
2. VeryView99 via GPIB (General Purpose Interface Bus) to control the shielding room (darkroom)'s SATIMO;
3. Meanwhile, GPIB control the Agilent 5071C to read the Antenna data by 24 Probe;
4. Agilent 5071C will analyse the data and generate the result;
5. Agilent 5071C will feedback to VeryView99 software to generate the test report.

2. Sample Information

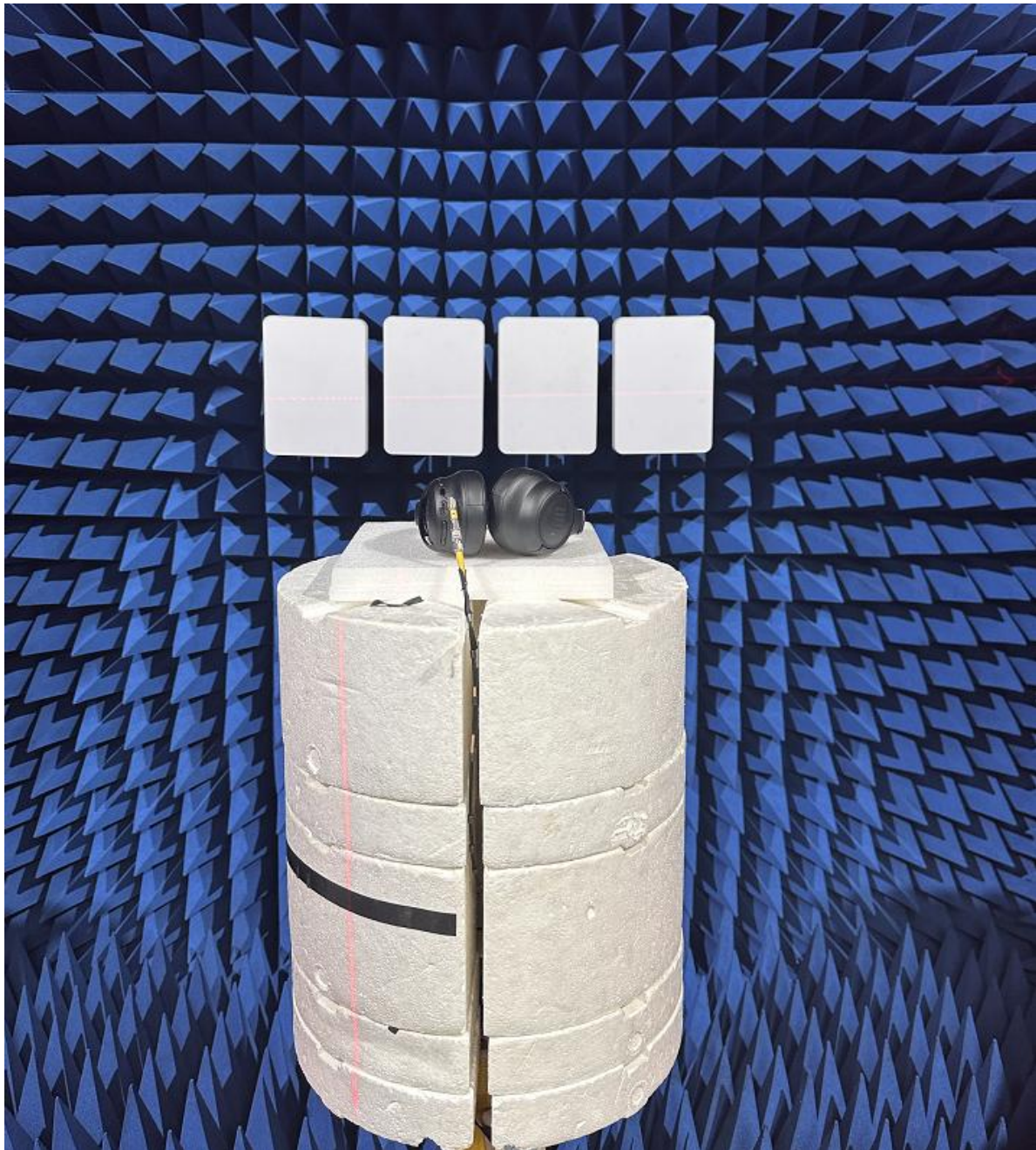
2.1 Client information

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

2.2 Description of EUT(S)

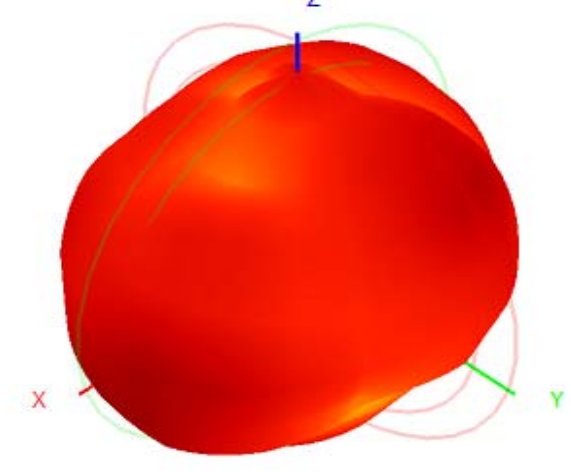
| | |
|------------------------|------------------------------------------------|
| Product Name | BT Antenna |
| Sample Model | T780 |
| Antenna Size | 5*23.9mm |
| Antenna Type | PCB antenna |
| Serial No. | / |
| Test Item | Antenna Gain,Radiation pattern,photo,peak Gain |
| Frequency Range | 2400-2500MHz |
| Peak Gain | 2.24dBi |
| Received Date | 2025.06.27 |
| Test Date | 2025.07.03 |
| Remark | The length of the RF cable is 50mm |

3.Photo

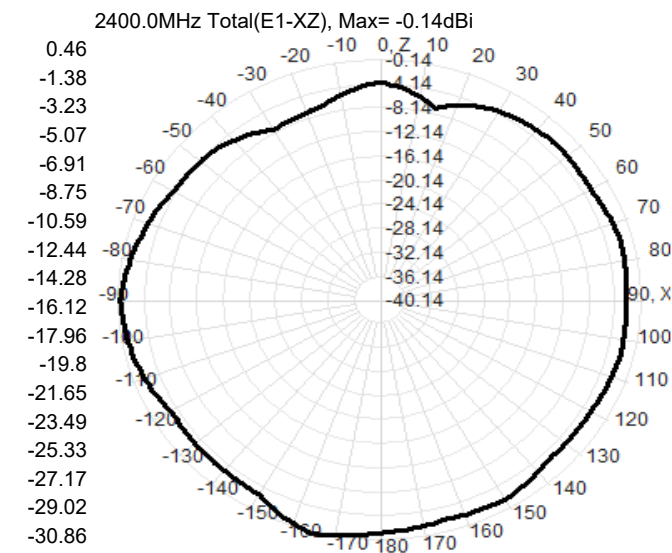
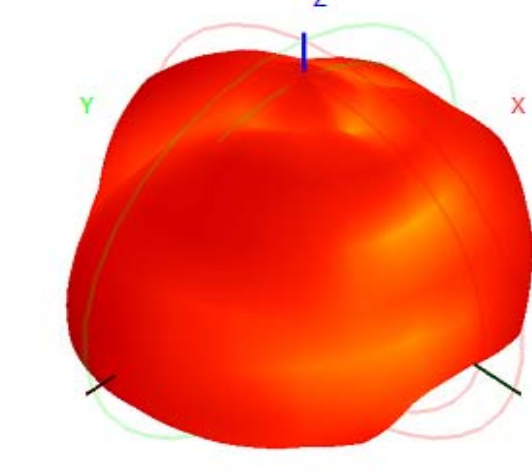


| | | | | | | | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Efficiency (dBi) | -4.51 | -4.40 | -4.47 | -4.37 | -4.28 | -4.24 | -4.15 | -4.18 | -4.31 | -4.09 | -3.86 |
| Gain (dBi) | 0.46 | 0.98 | 1.23 | 1.57 | 1.75 | 1.79 | 1.74 | 1.71 | 1.68 | 2.24 | 2.66 |
| Efficiency (%) | 35.43 | 36.31 | 35.74 | 36.55 | 37.29 | 37.66 | 38.44 | 38.19 | 37.08 | 38.98 | 41.15 |

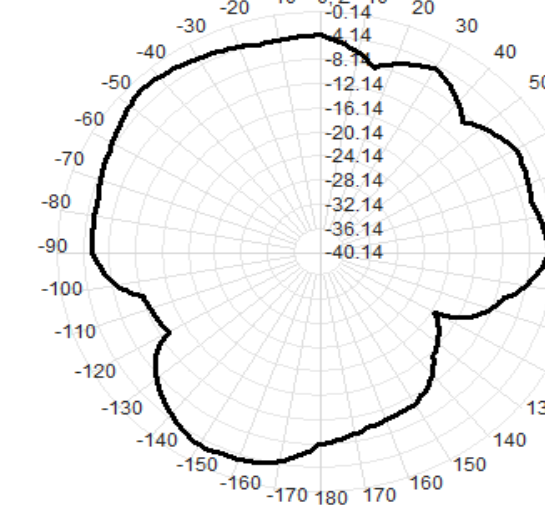
2400.0MHz Total, Eff: 35.4%



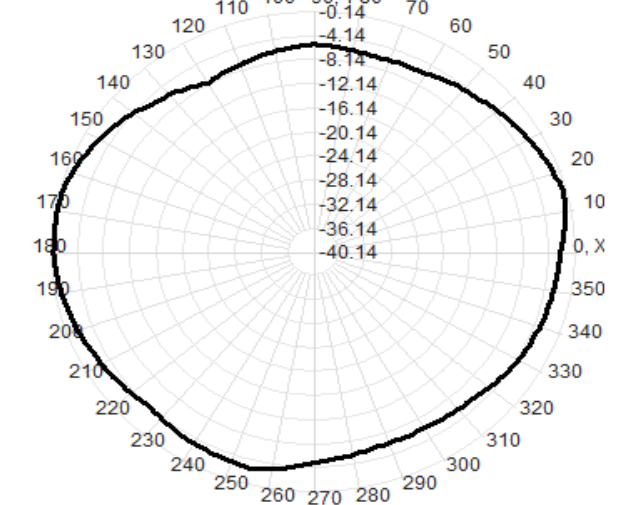
Back View



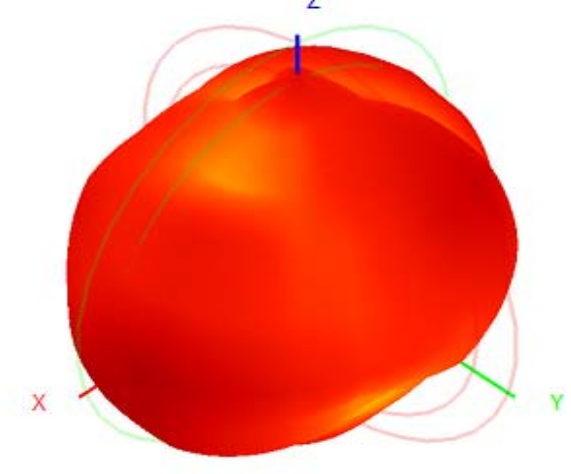
2400.0MHz Total(E2-YZ), Max=-1.89dBi



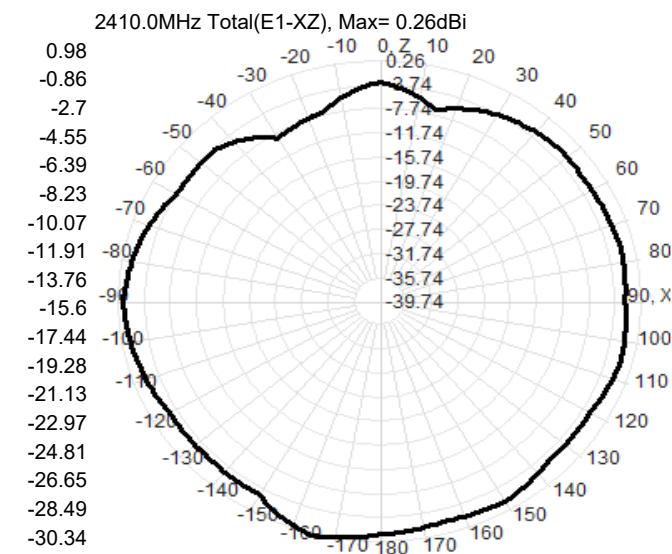
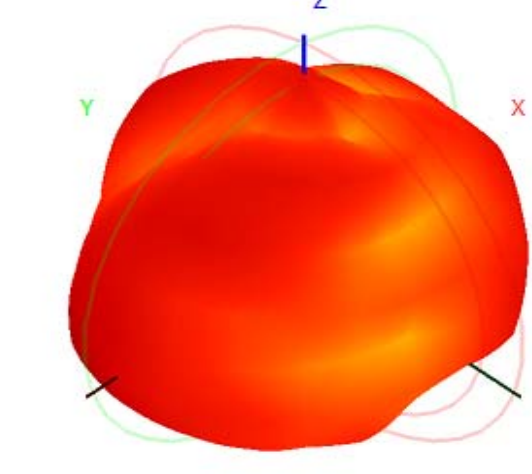
Total(H-XY), Max=-0.58dBi, CirD=7.23



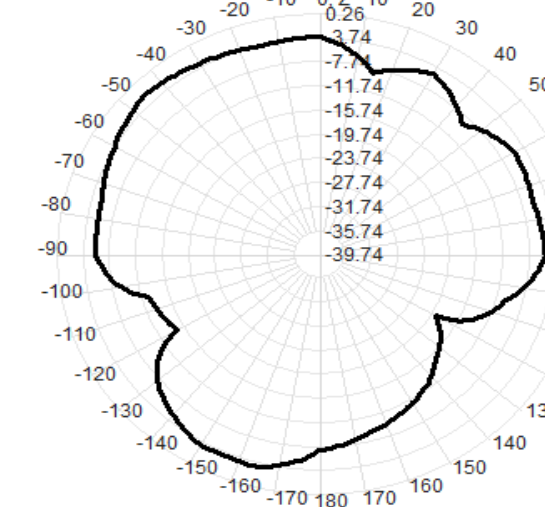
2410.0MHz Total, Eff: 36.3%



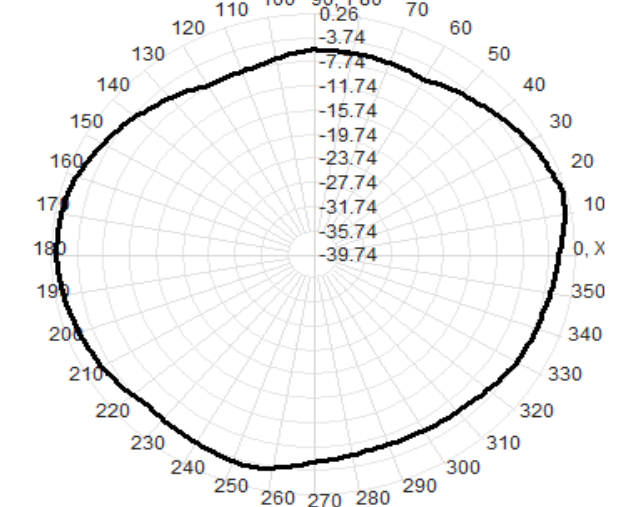
Back View



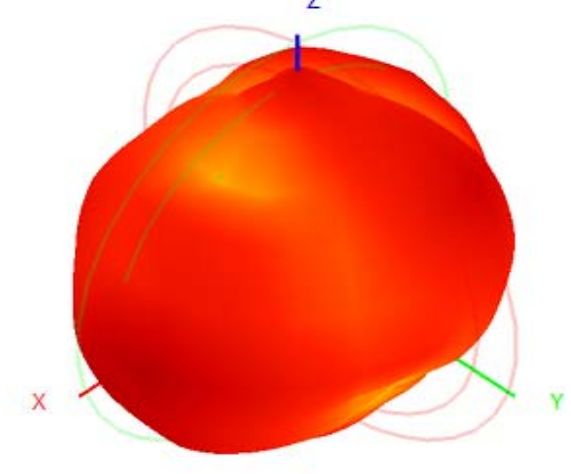
2410.0MHz Total(E2-YZ), Max=-2.23dBi



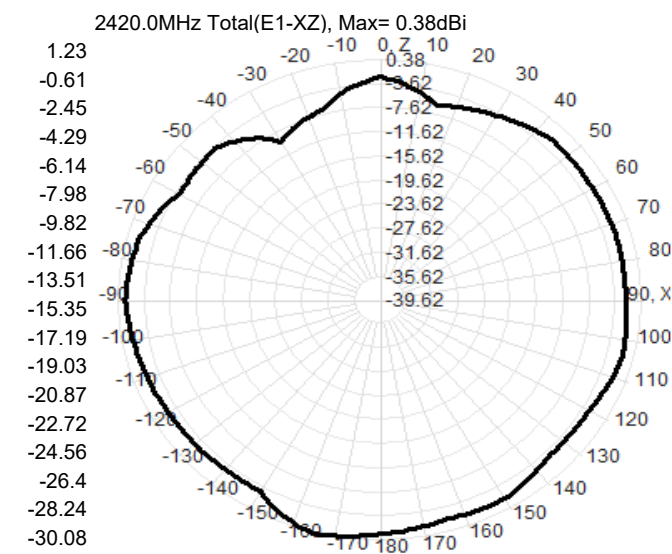
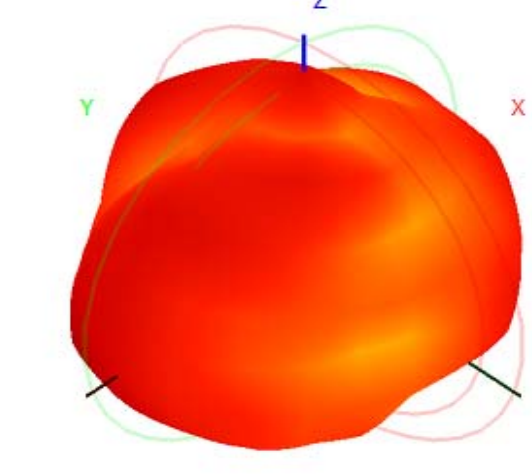
Total(H-XY), Max=-0.51dBi, CirD=7.00



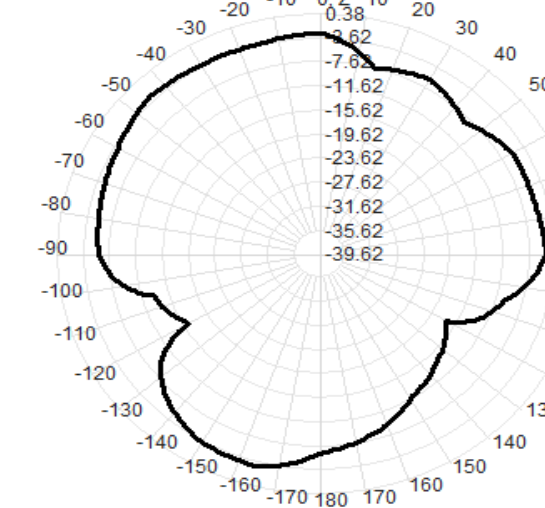
2420.0MHz Total, Eff: 35.7%



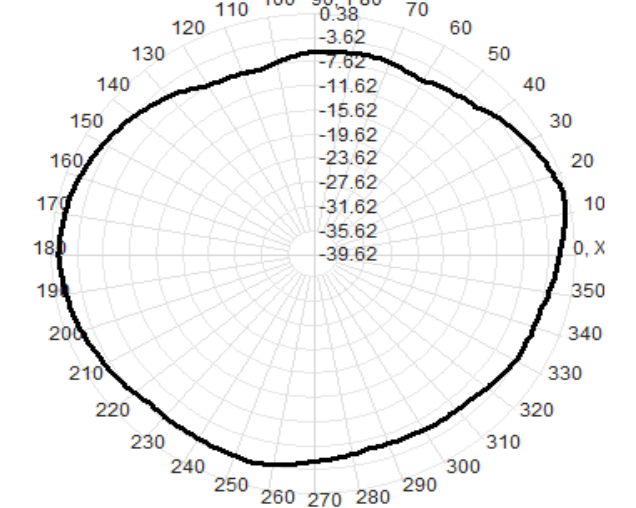
Back View



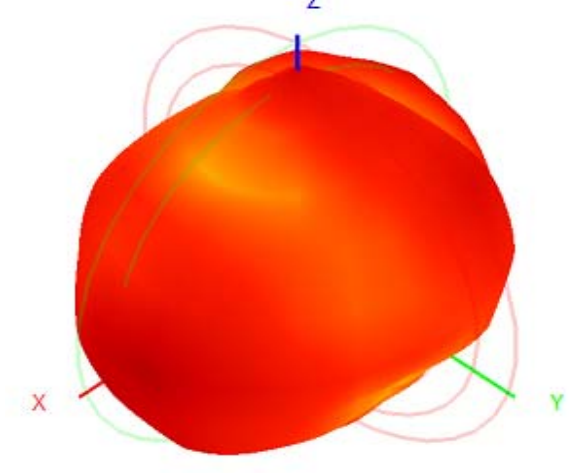
2420.0MHz Total(E2-YZ), Max=-2.88dBi



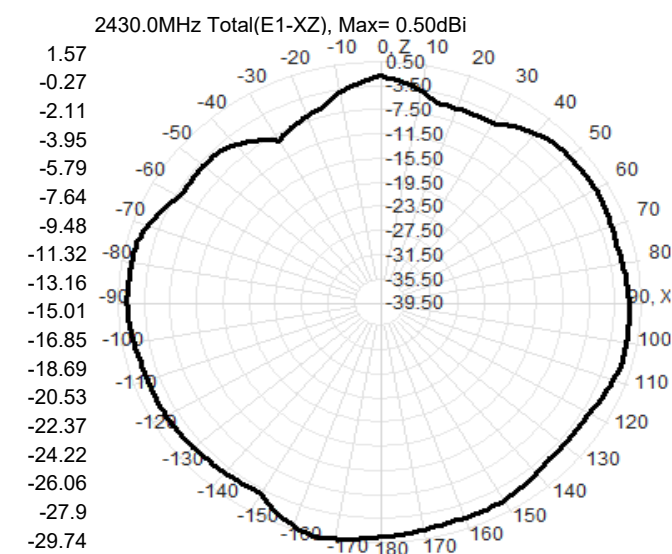
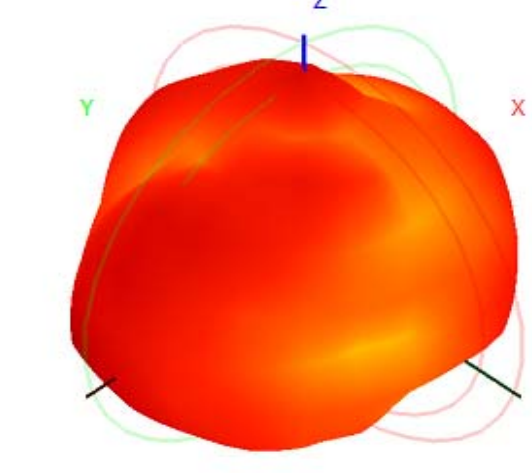
Total(H-XY), Max=-0.33dBi, CirD=7.63



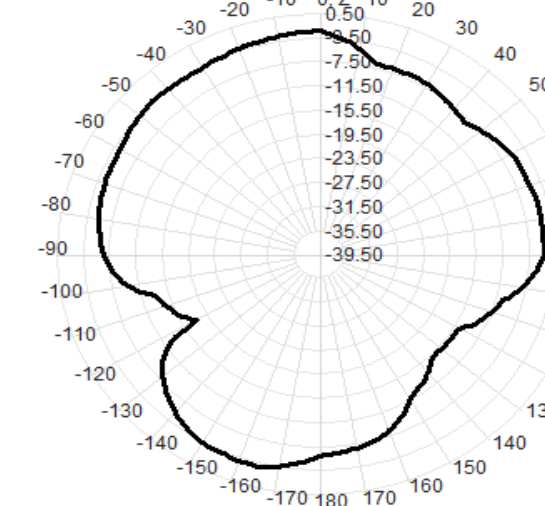
2430.0MHz Total, Eff: 36.6%



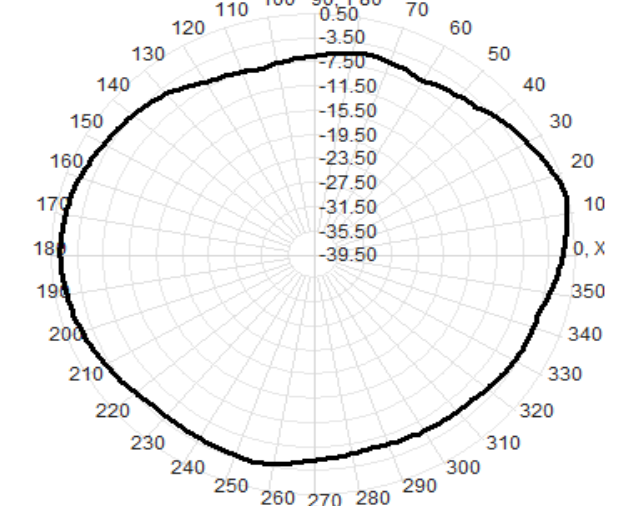
Back View



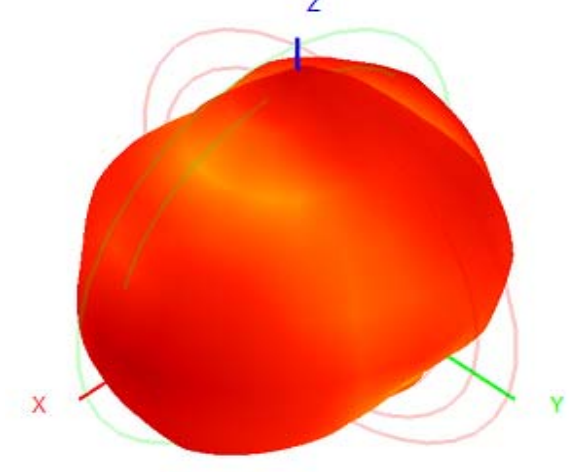
2430.0MHz Total(E2-YZ), Max=-2.38dBi



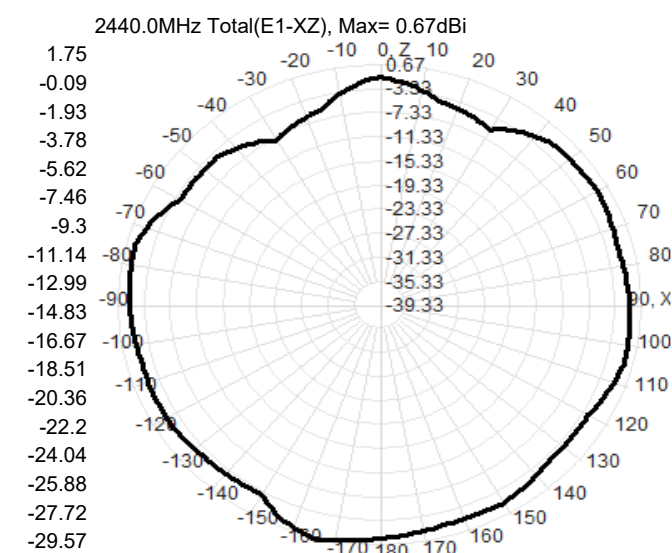
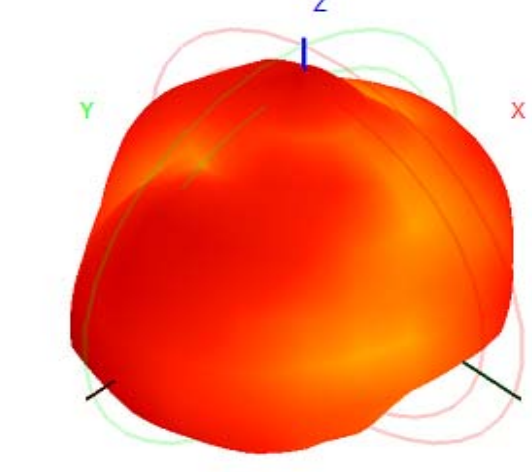
Total(H-XY), Max=0.07dBi, CirD=7.78



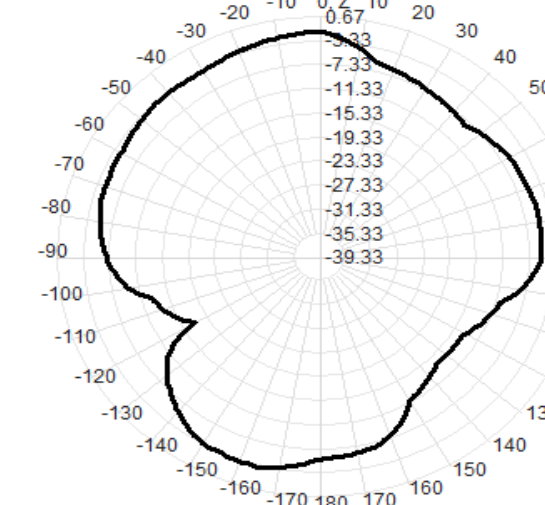
2440.0MHz Total, Eff: 37.3%



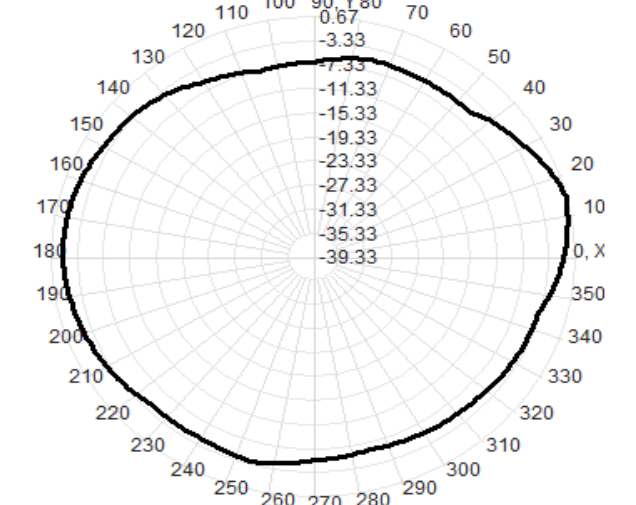
Back View



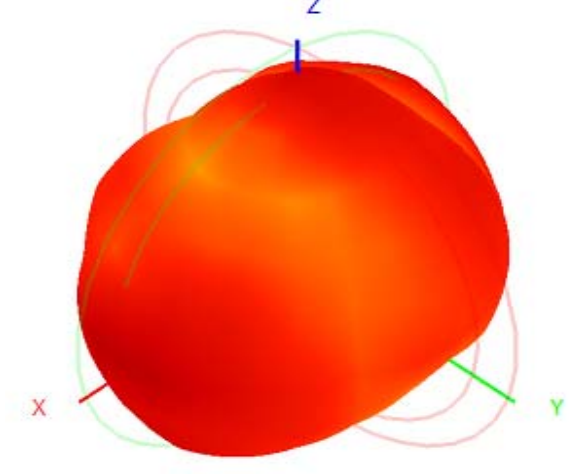
2440.0MHz Total(E2-YZ), Max=-1.81dBi



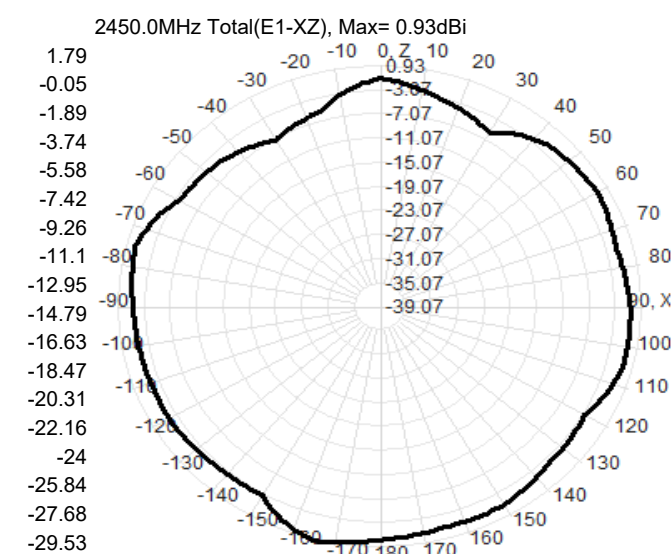
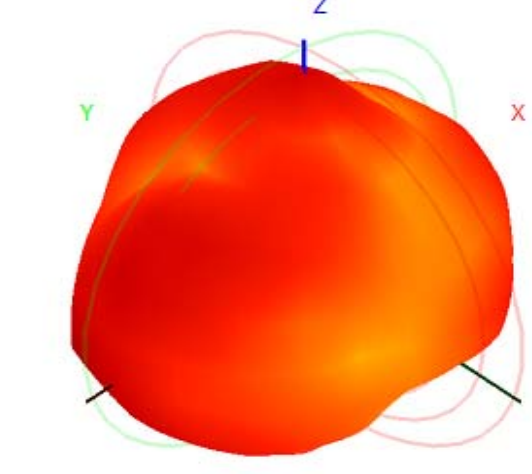
Total(H-XY), Max=0.32dBi, CirD=7.66



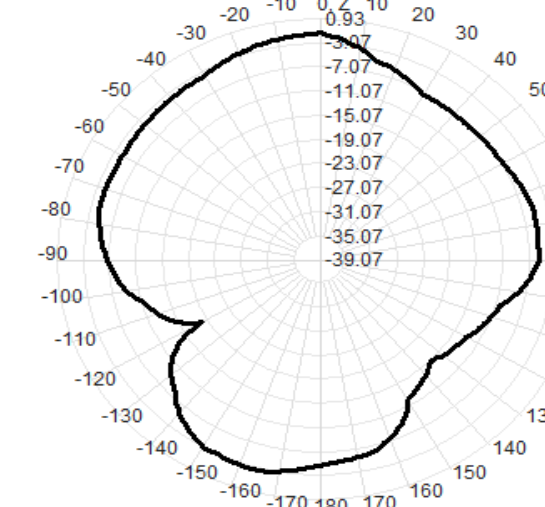
2450.0MHz Total, Eff: 37.7%



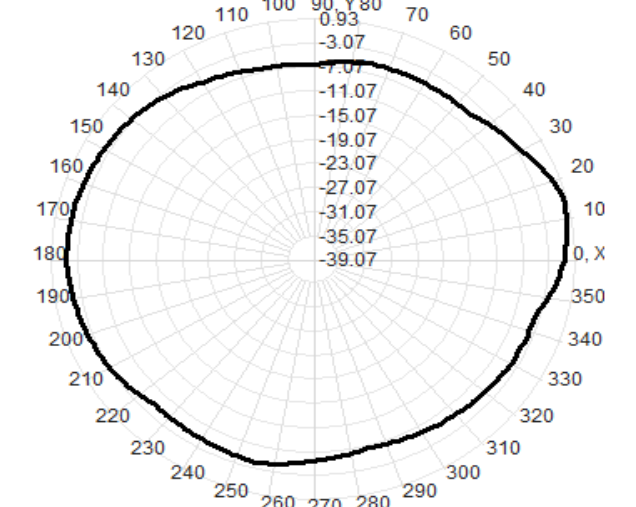
Back View



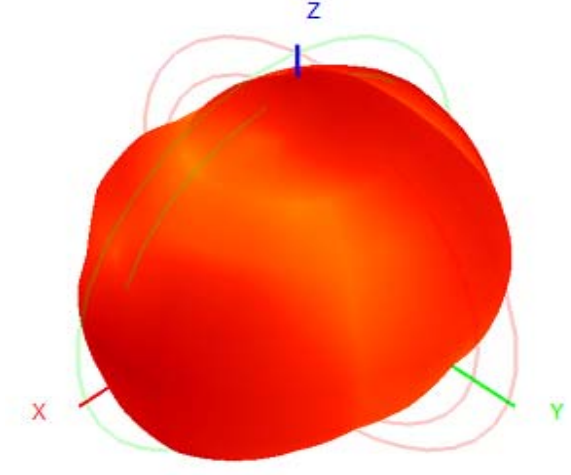
2450.0MHz Total(E2-YZ), Max=-1.52dBi



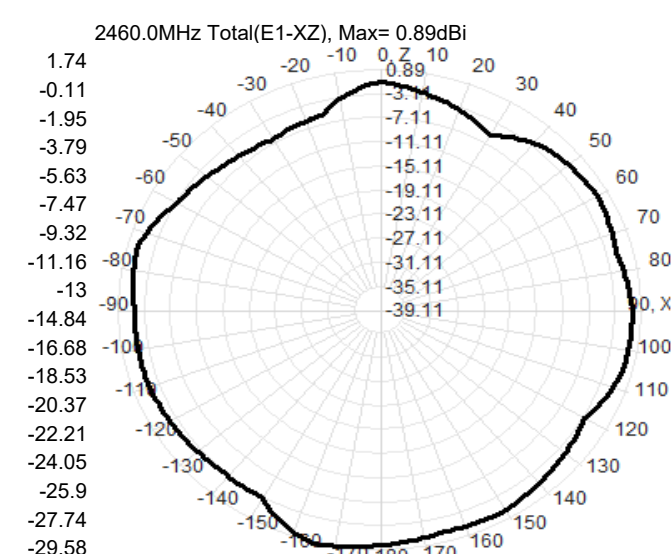
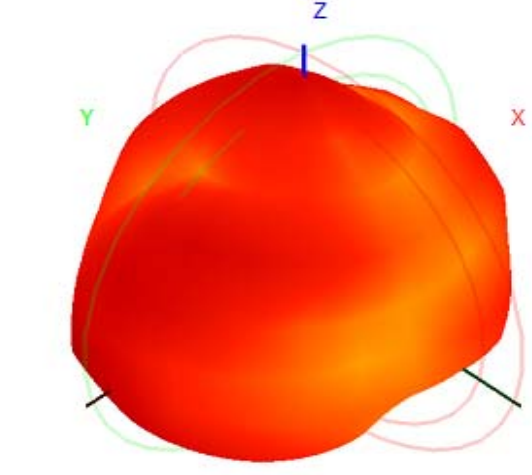
Total(H-XY), Max=0.28dBi, CirD=7.11



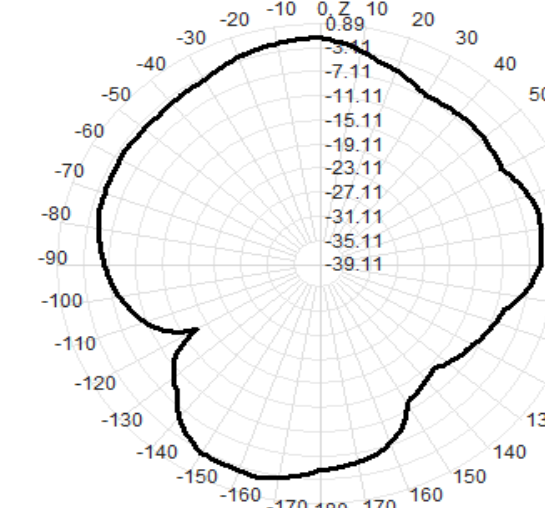
2460.0MHz Total, Eff: 38.4%



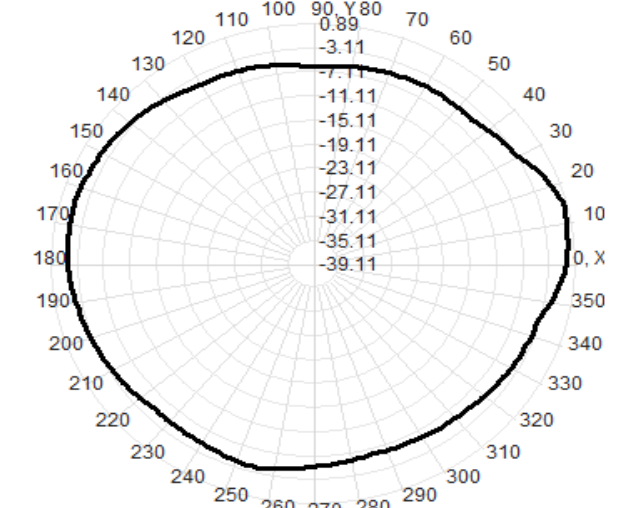
Back View



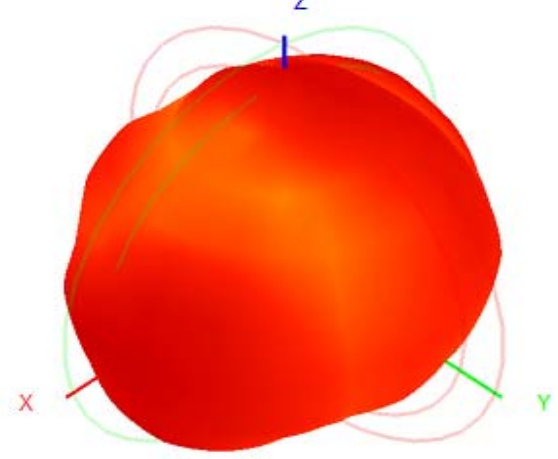
2460.0MHz Total(E2-YZ), Max=-1.45dBi



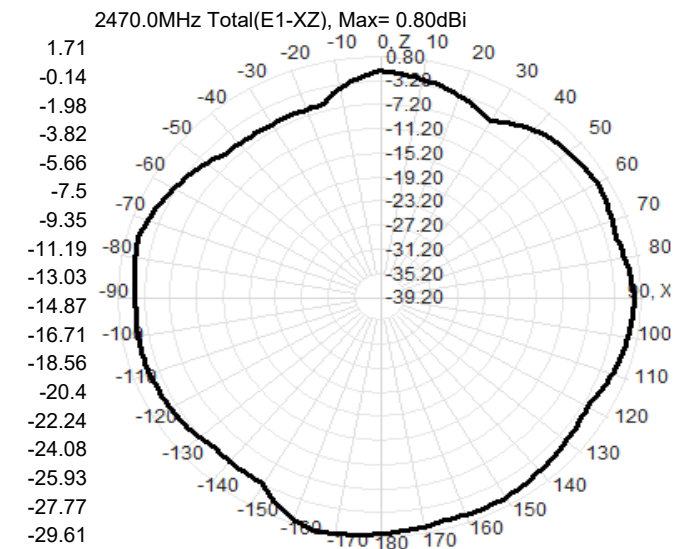
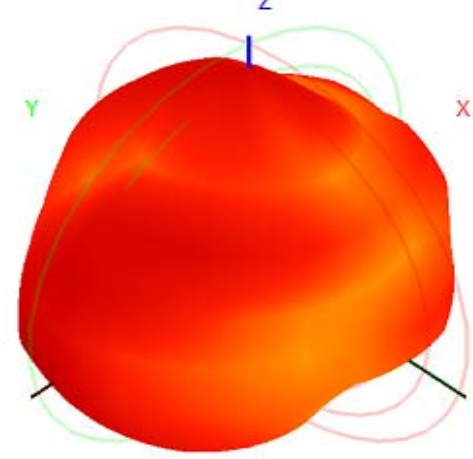
Total(H-XY), Max=0.16dBi, CirD=6.58



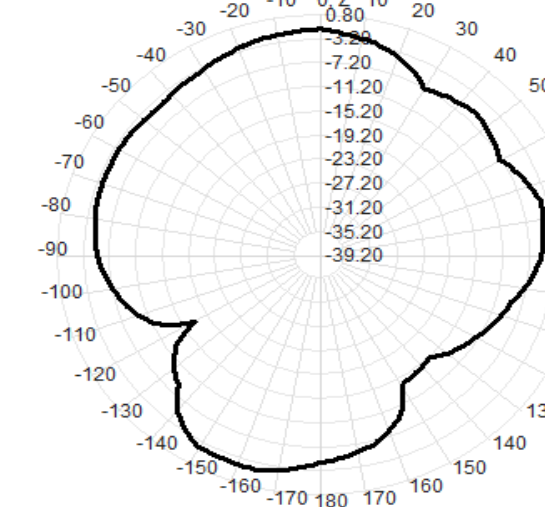
2470.0MHz Total, Eff: 38.2%



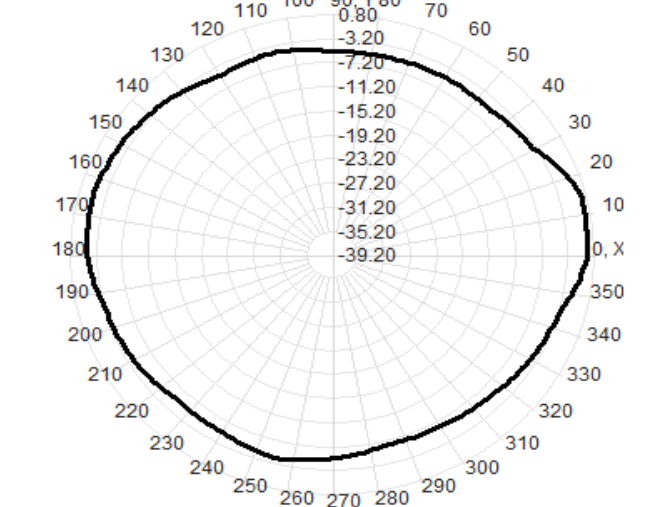
Back View



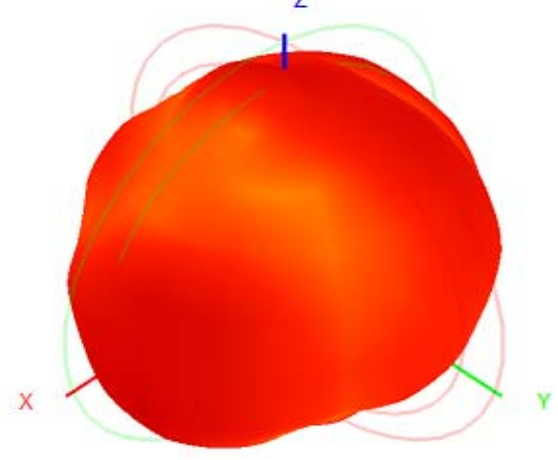
2470.0MHz Total(E2-YZ), Max=-1.66dBi



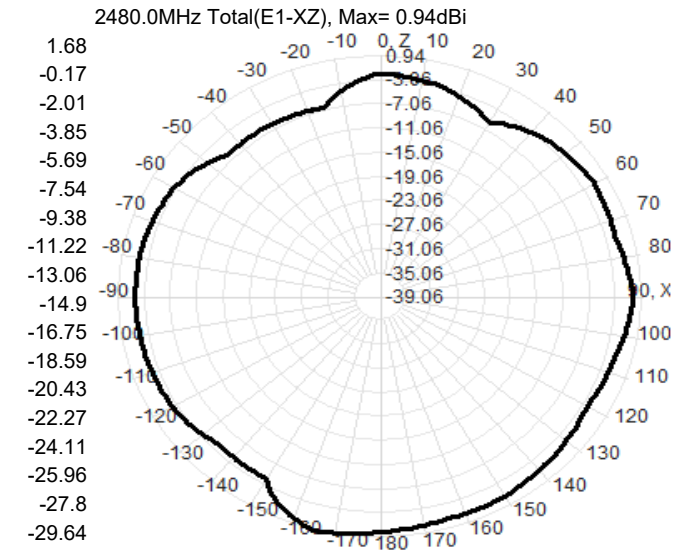
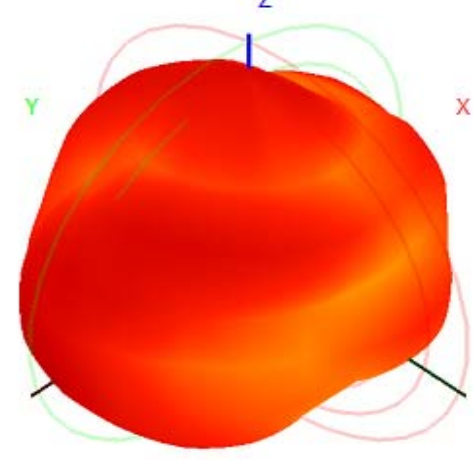
Total(H-XY), Max=-0.23dBi, CirD=6.53



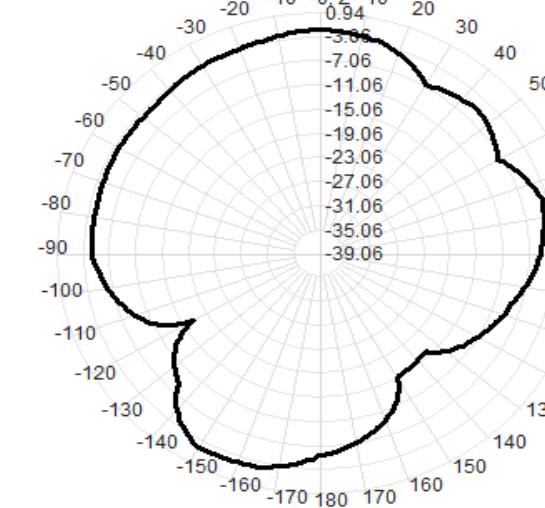
2480.0MHz Total, Eff: 37.1%



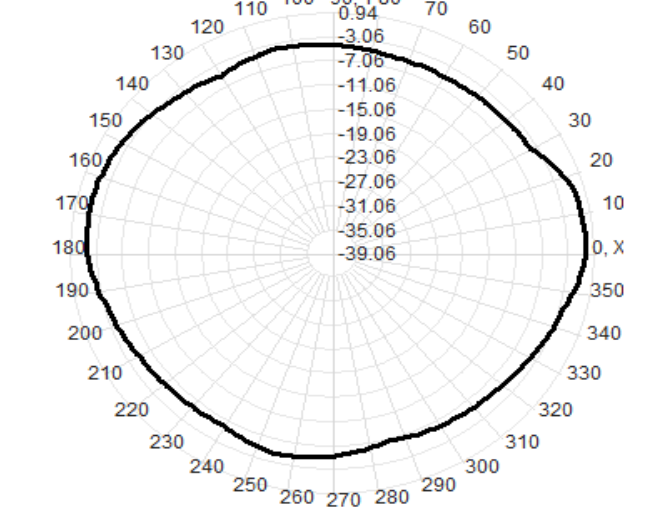
Back View



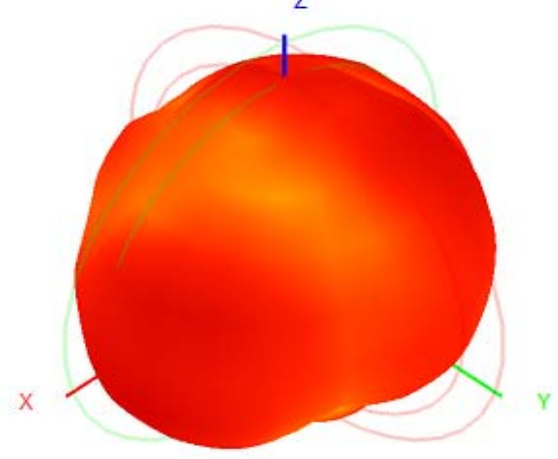
2480.0MHz Total(E2-YZ), Max=-1.81dBi



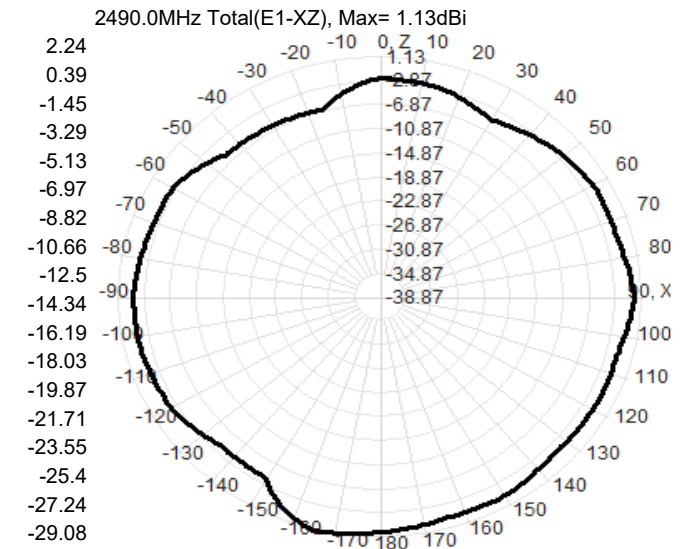
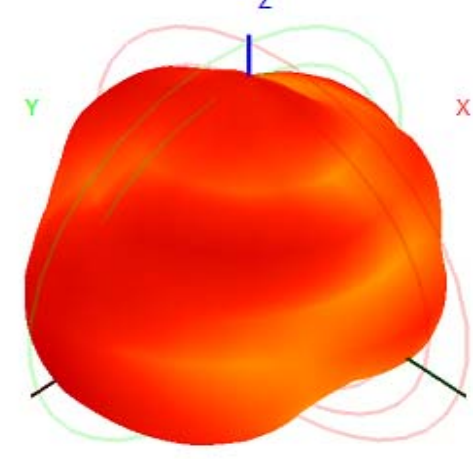
Total(H-XY), Max=-0.53dBi, CirD=6.42



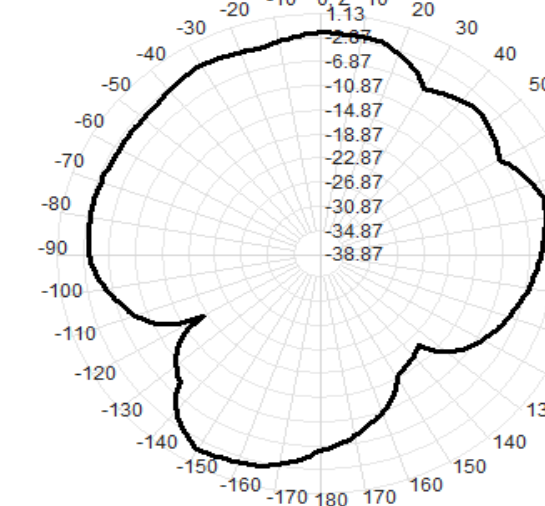
2490.0MHz Total, Eff: 39.0%



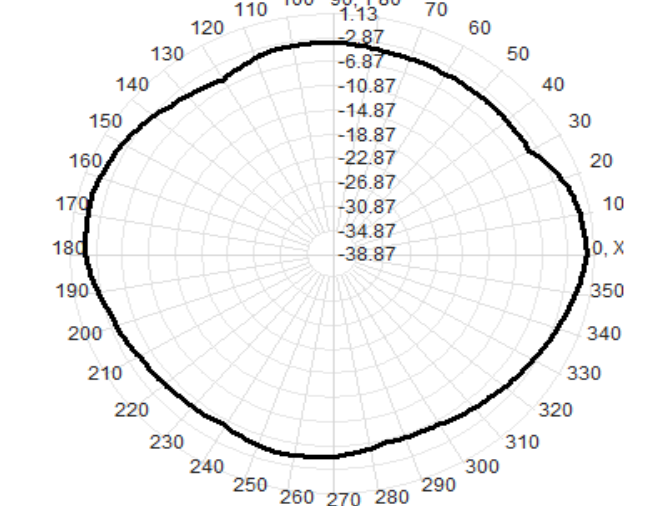
Back View



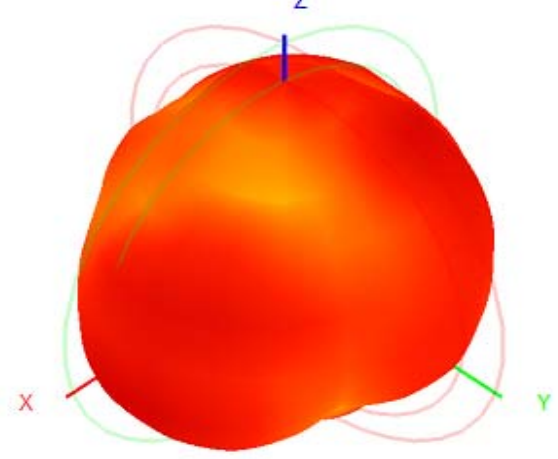
2490.0MHz Total(E2-YZ), Max=-1.59dBi



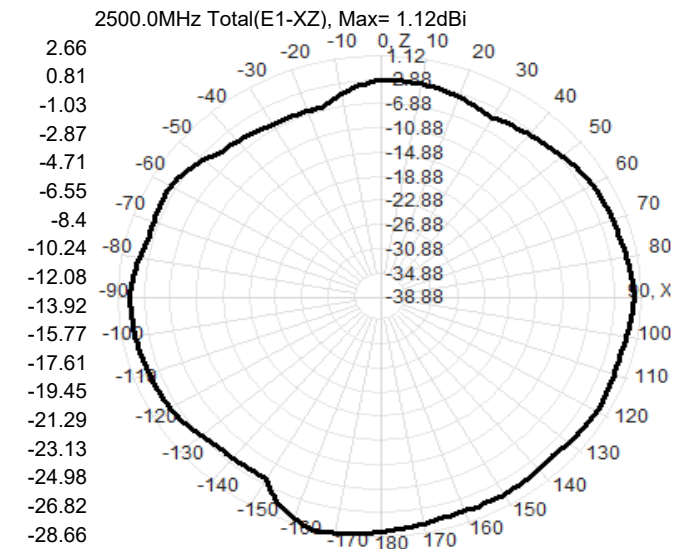
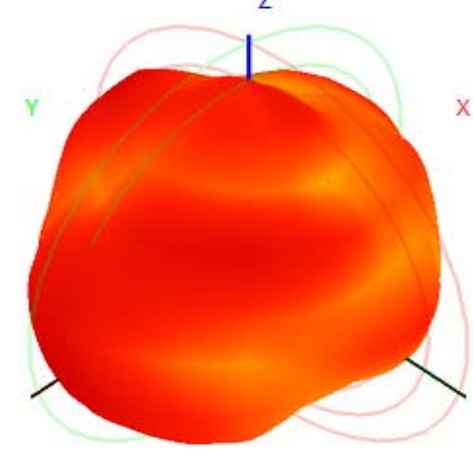
Total(H-XY), Max=-0.23dBi, CirD=6.37



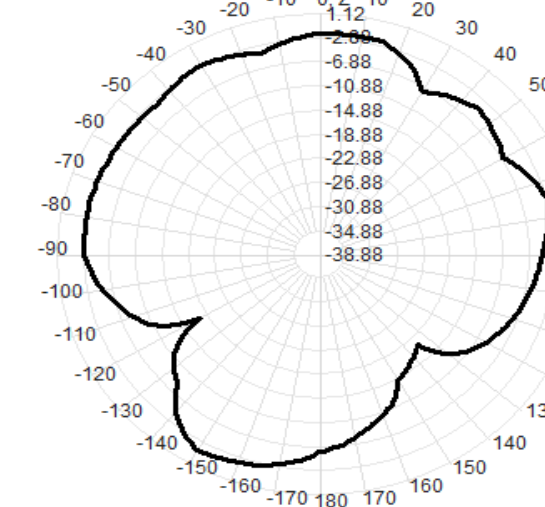
2500.0MHz Total, Eff: 41.1%



Back View



2500.0MHz Total(E2-YZ), Max=-1.56dBi



Total(H-XY), Max=-0.25dBi, CirD=5.90

