# 咏成国际科技有限公司(OTA)

M200

# 荣科威测试报告

## Antenna Test Report

日期 2023年8月18日

1. 匹配参数
2. 网分调试天线S参数
3. 微波暗室测试天线效率场型
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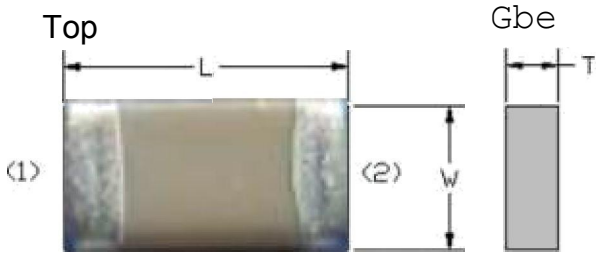
| Customer | 荣科威 | Project name | M200 |
| --- | --- | --- | --- |
| frequency band | 2400MHZ-2500MHZ | enginee: r | C K |
| Date | 2023/08/18 | : phone | 13530576606 |

## Electrical Specification,

| | |
|---|---|
| Working Frequency Range | 2400 -2500 MHz |
| Bandwidth | 120 MHz (Min.) |
| Peak Gain | 2.58 dBi (Typ.) |
| Impedance | 50 Ohm |
| Return loss | 10 dB ( Min) |
| Polarization | Linear |
| Azimuth Beamwidth | Omni-direclonal |
| Operation Temperatue{"C) | -40 -85”C: |
| Resistance to Soldering Heats | 10sec. (@ 280°C) |
| Termination | Ni / Au (Leadless) |

## Dimension and Terminal Configuration



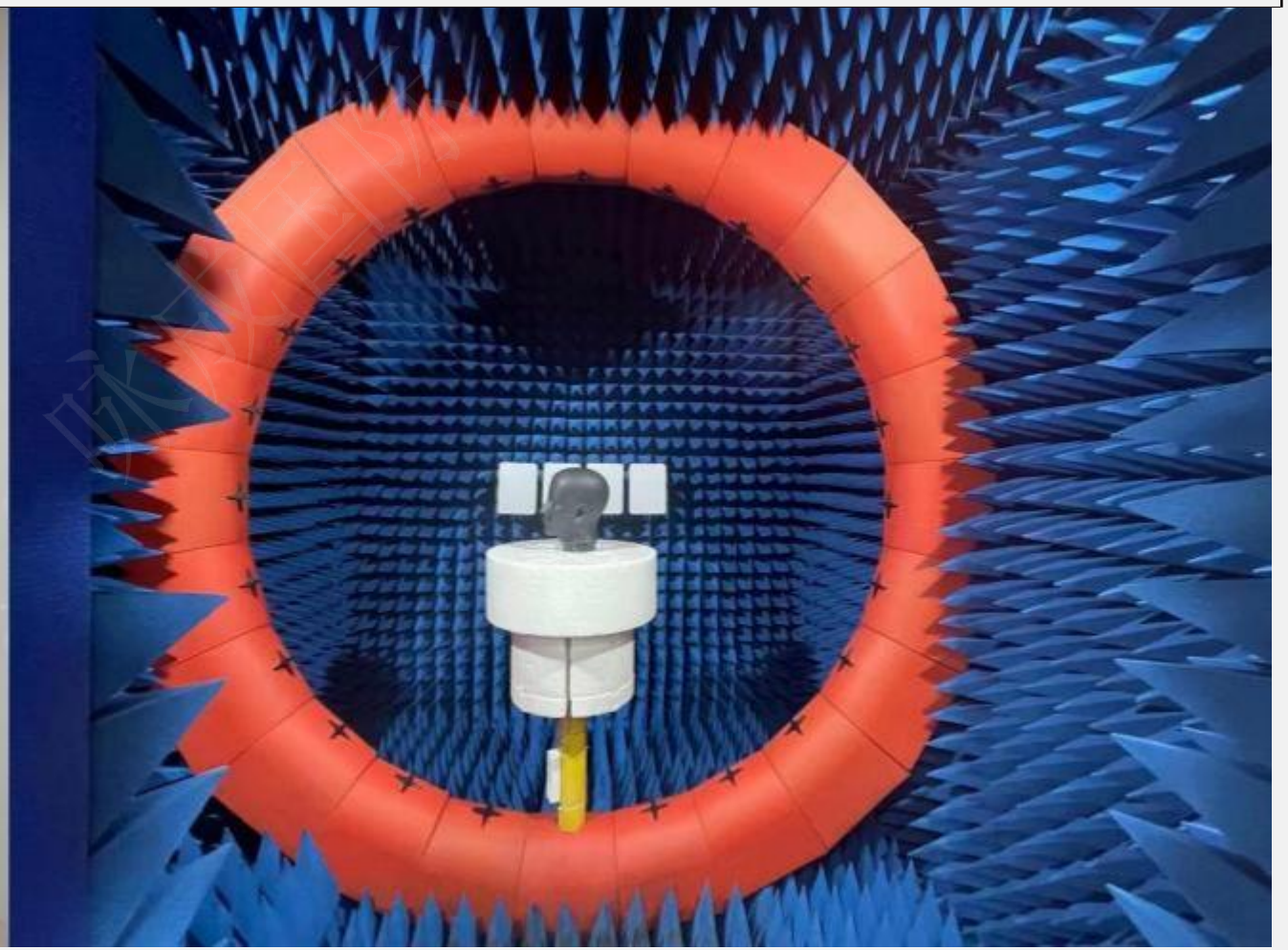
Bottom

| Dimension (mm) | |
|---|---|
| * | 1.60 + 0.1o |
| >/ | 0.80 1 0.10 |
| T | 0.80 1 0.10 |

| No. | Terminal Name |
|---|---|
| 1 | Feeding/GNG |
| 2 | GND/Feeding |

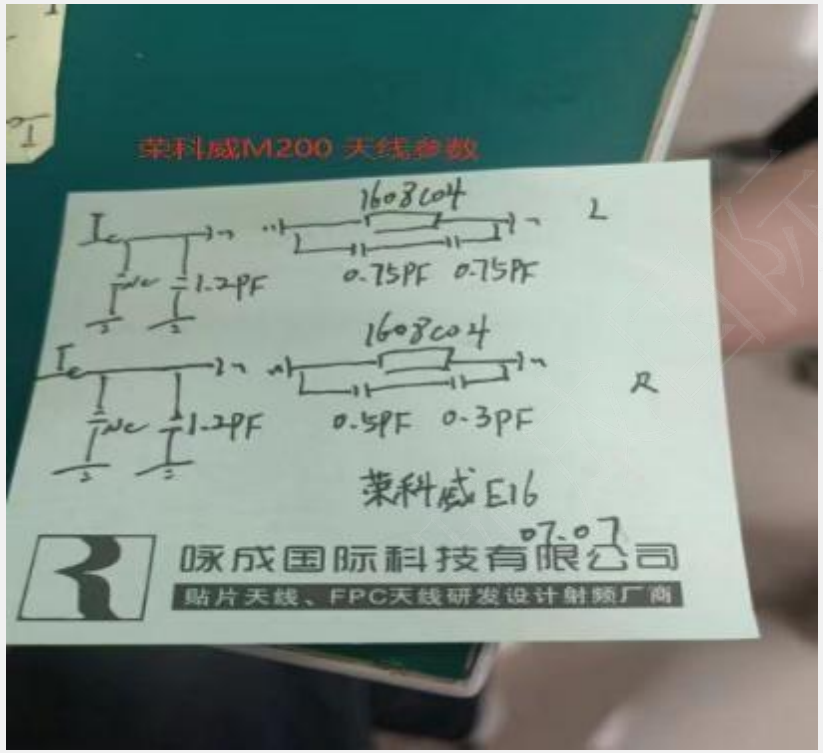
# 1.测试工具

| | |
|---|---|
| 仪 | Agelent Techmologies E5071B & R&S CMW500 |
| 暗室 | Atenlab M3 |
| | CK |
| 温度 | 25℃ |
| 湿度 | 65%（RH） |



Antenna Placement　　ANT：陶瓷天线1608F245C04(咏成国际)　　L/R

Matching Circuit：左右参数



S11 、SWR 、smith chart：

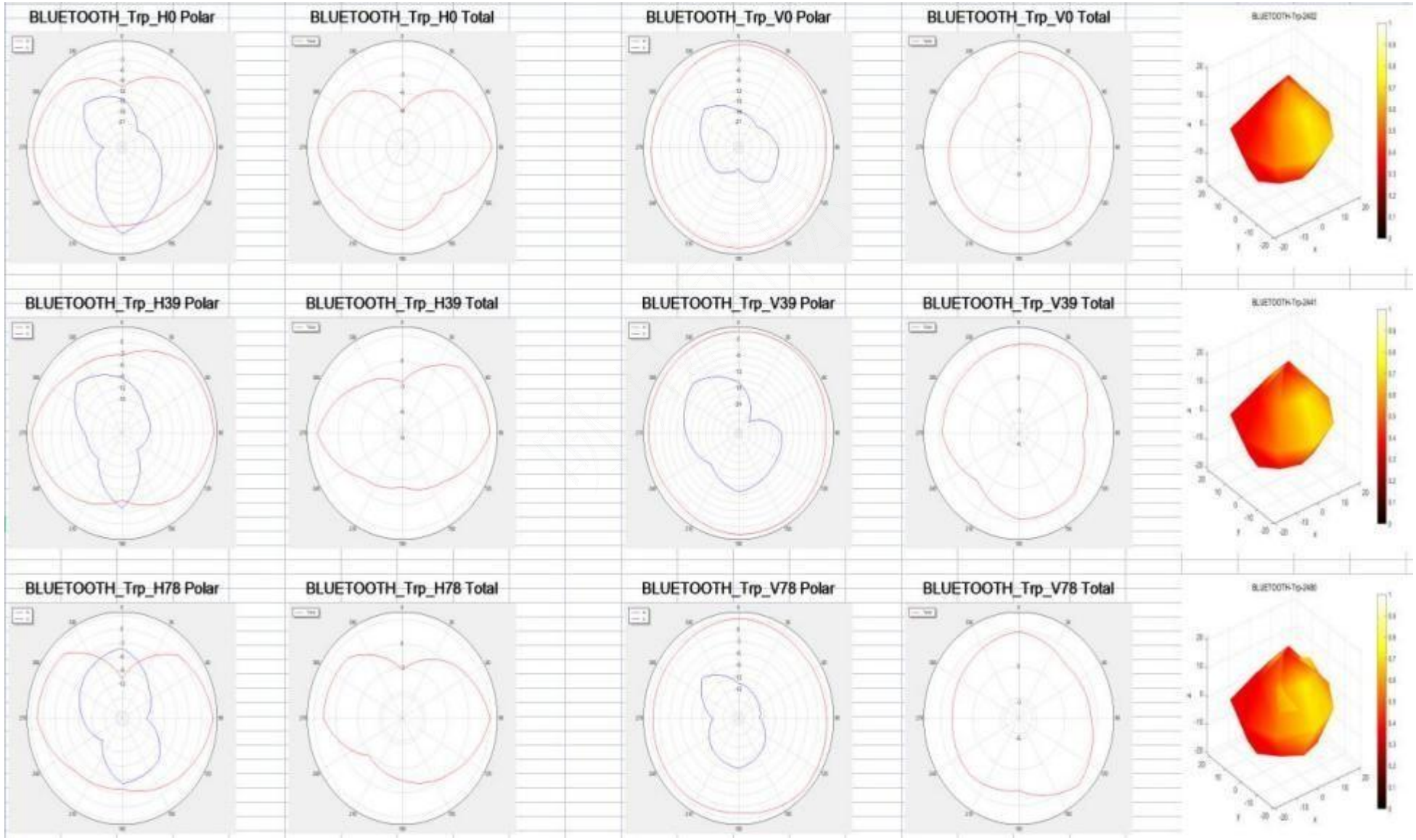
# Antenna active test data

# 有源测试数据

| ANT EIRP&EIS parameter Summary | | | | | | |
|---|---|---|---|---|---|---|
| 频段frequency band | BT 2.4G (L) | | | BT 2.4G (R) | | |
| 信道route | 0 | 39 | 78 | 0 | 39 | 78 |
| 1# TRP (dBm) | 4.45 | 4.23 | 4.33 | 4.46 | 4.45 | 4.67 |
| 1# TIS (dBm) | -88.12 | -88.34 | -88.56 | -88.12 | -88.34 | -88.13 |

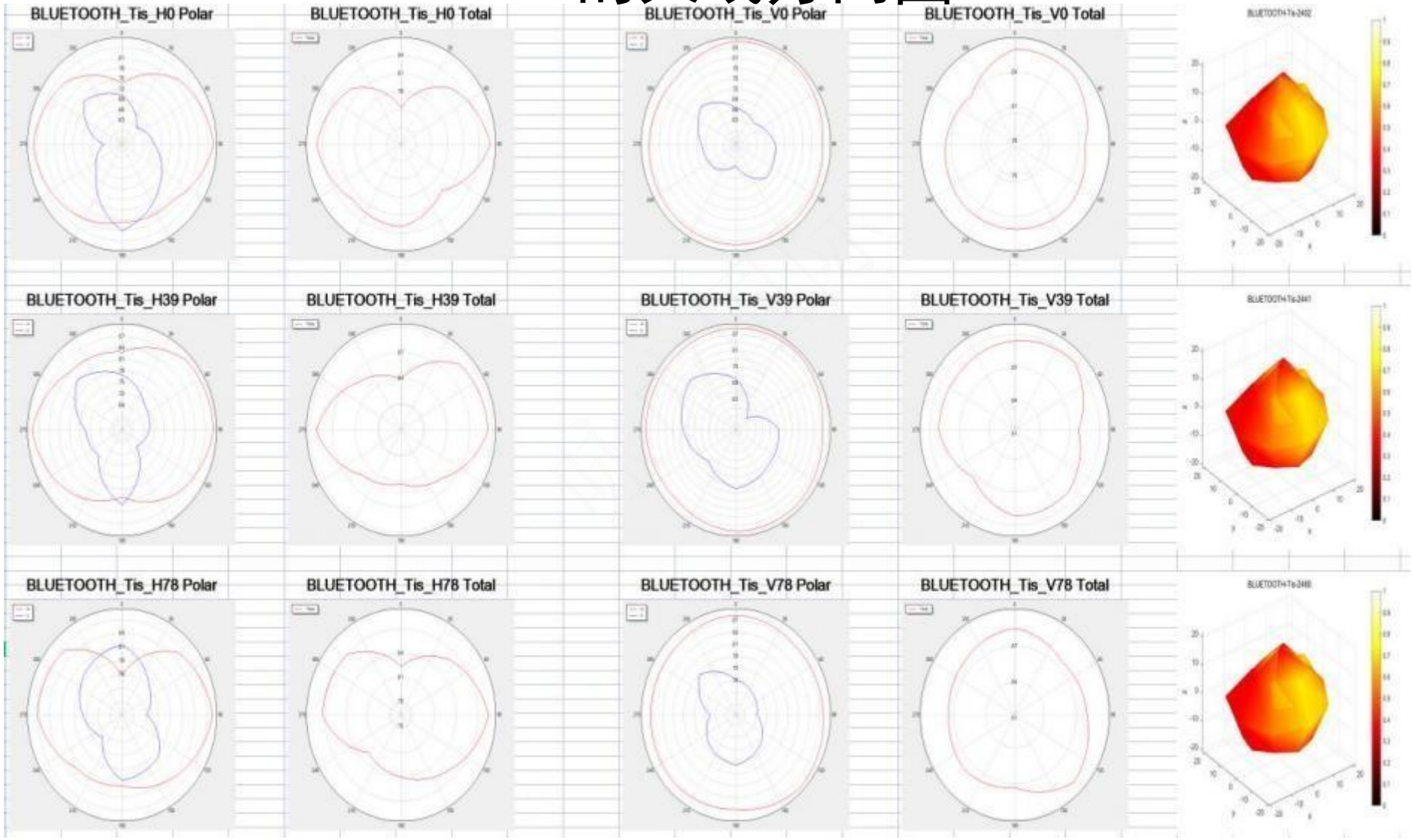
#-L

# #-L-TRP的天线方向图



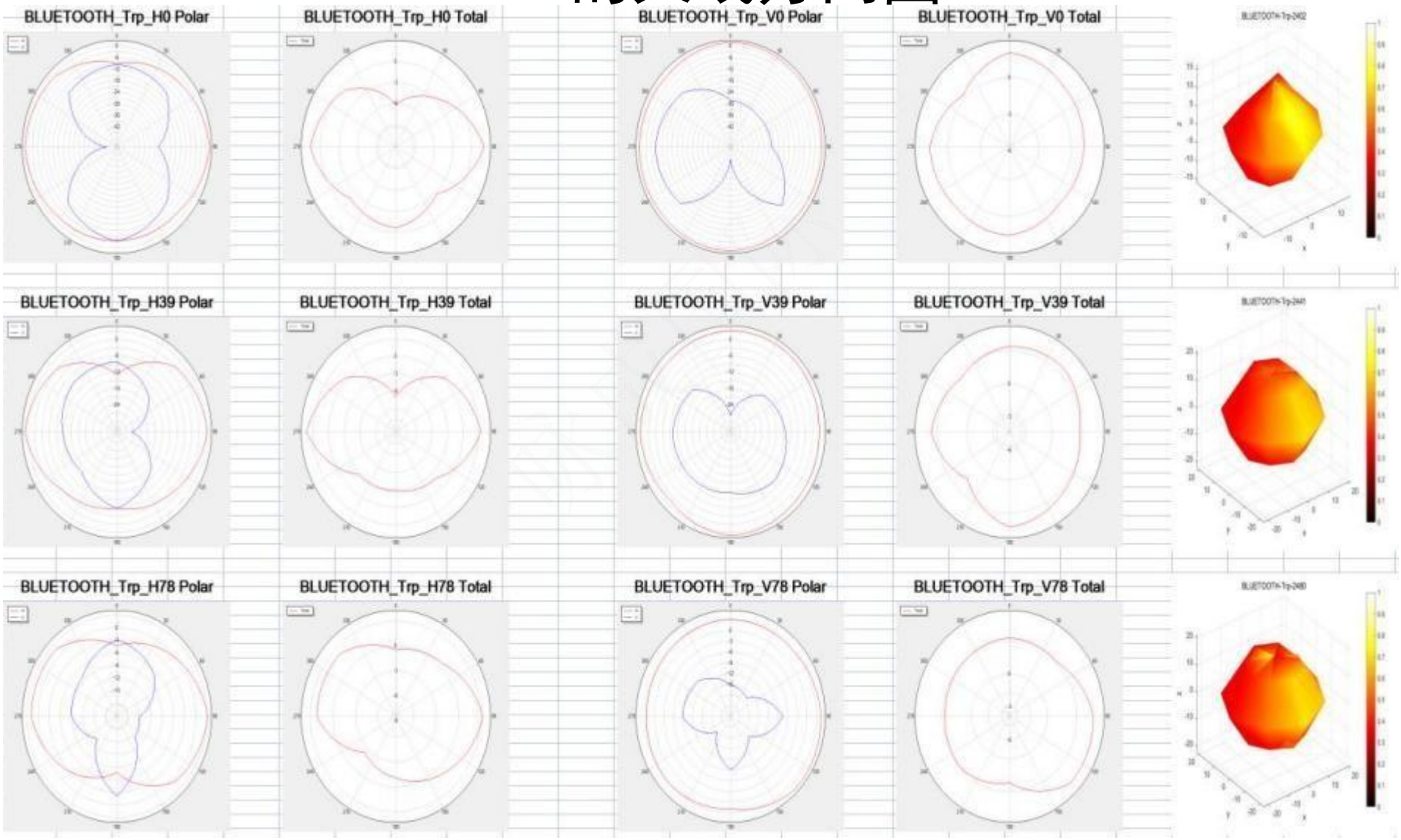
#-L

# #-L-TIS的天线方向图



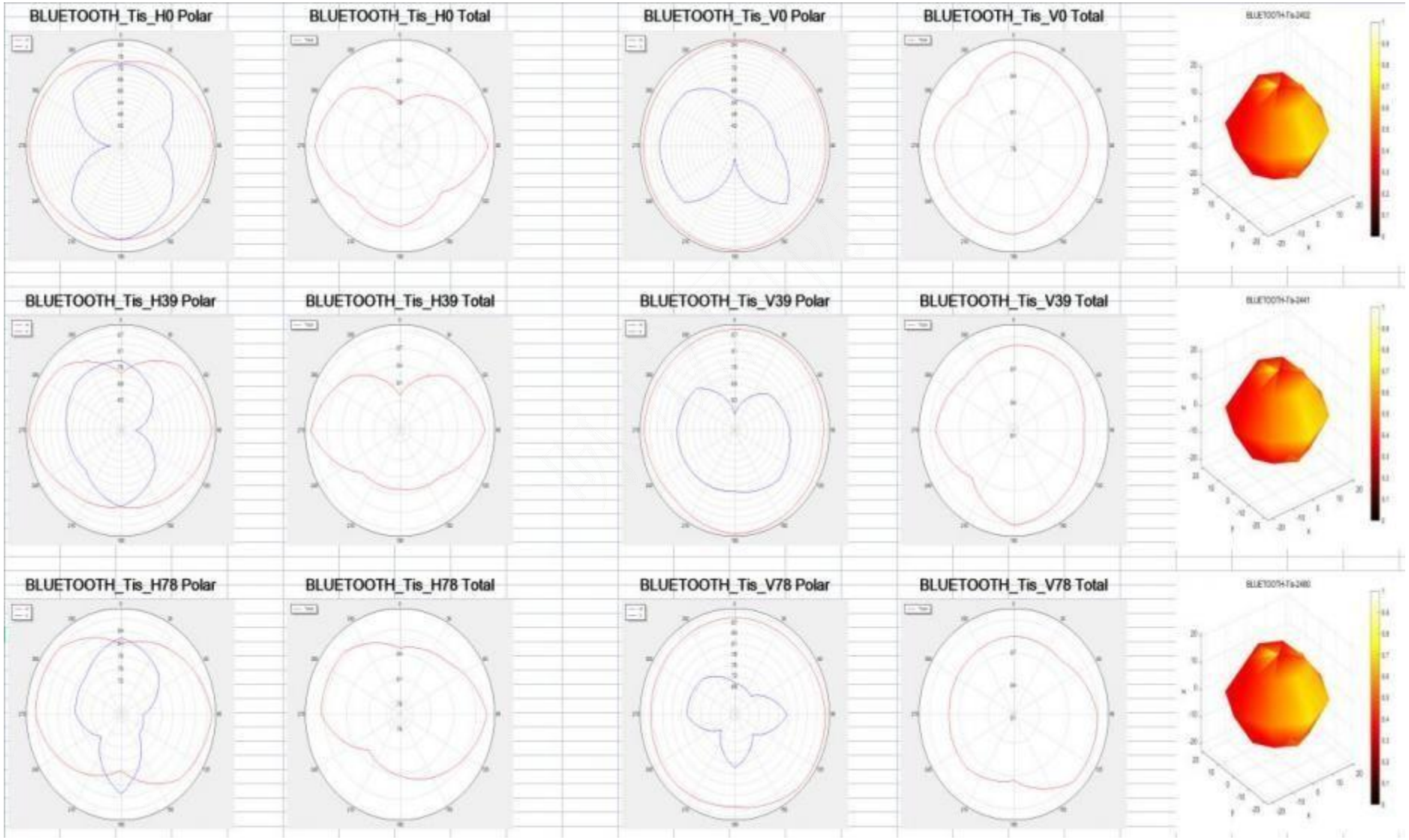
#-R

# #-R-TRP的天线方向图



#-R

# #-R-TIS的天线方向图



# Antenna efficiency gain

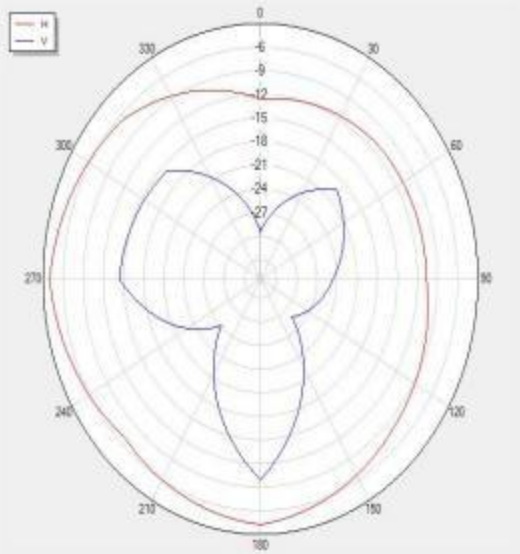
# 天线效率与增益图

L/R

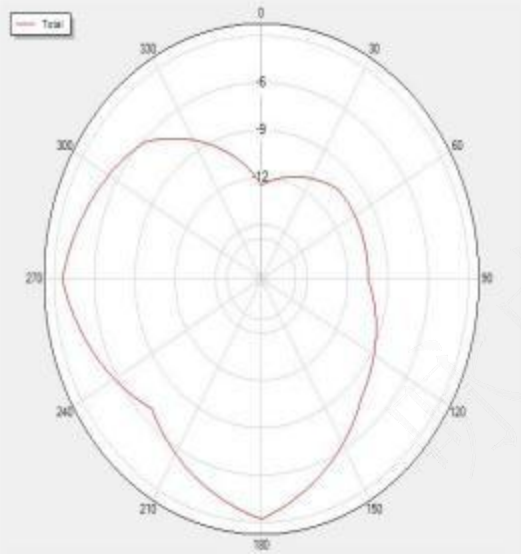
| Frequency | Efficiency | percentage | Gain |
|---|---|---|---|
| 2400 | -4.04 | 40.19% | 1.57 |
| 2410 | -3.88 | 42.41% | 2.15 |
| 2420 | -3.76 | 42.22% | 2.18 |
| 2430 | -3.56 | 44.56% | 2.56 |
| 2440 | -3.56 | 44.54% | 2.58 |
| 2450 | -3.89 | 45.55% | 2.56 |
| 2460 | -3.65 | 45.23% | 2.56 |
| 2470 | -3.56 | 44.82% | 2.01 |
| 2480 | -3.23 | 44.54% | 1.1 |
| 2490 | -3.56 | 40.56% | 1.19 |
| 2500 | -3.96 | 41.42% | 1.11 |

## Antenna radiation pattern 2400.00MHz

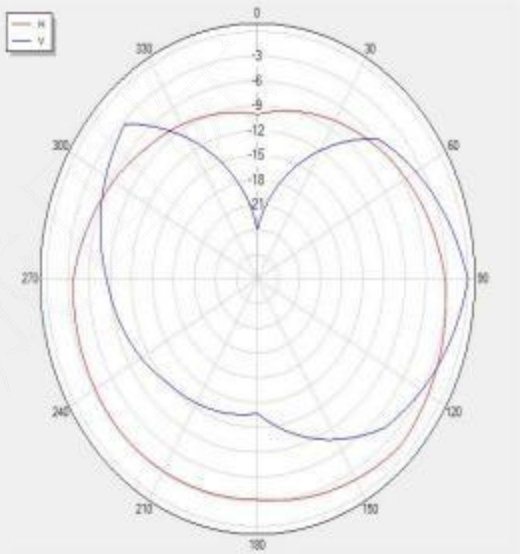
2400 Polar



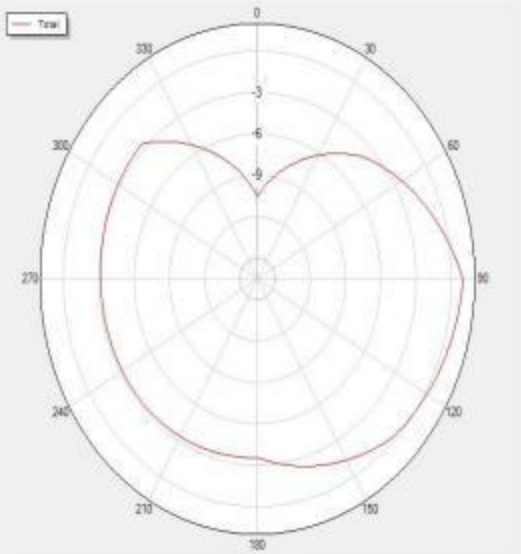

2400 Total




2400 Polar

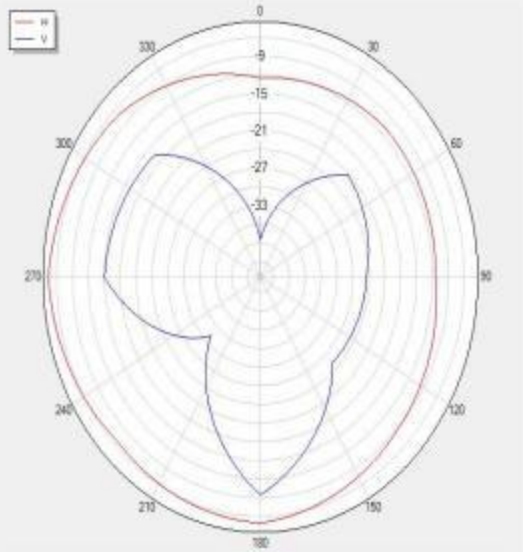



2400 Total

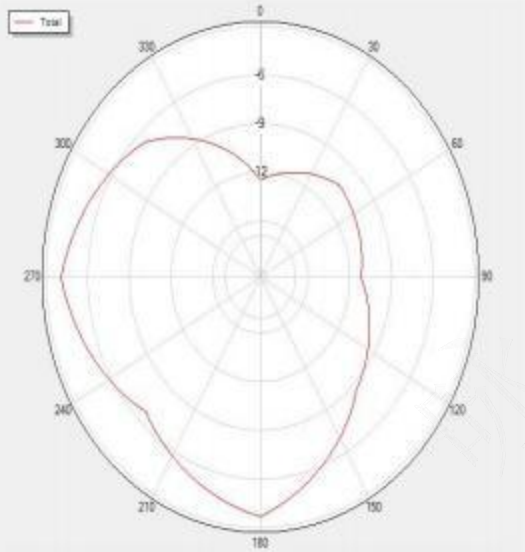


## Antenna radiation pattern 2450.00MHz

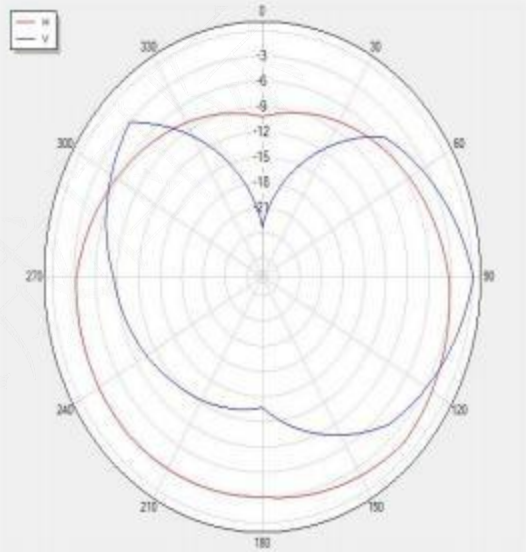
2450 Polar



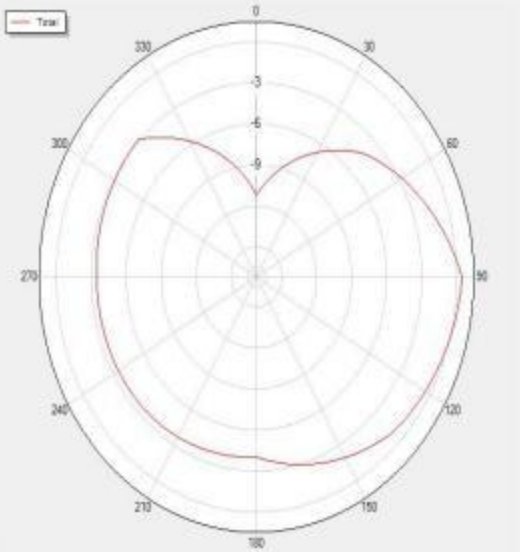

2450 Total




2450 Polar

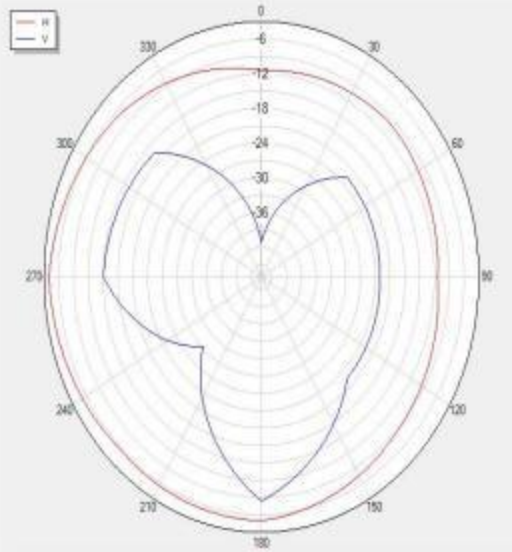



2450 Total

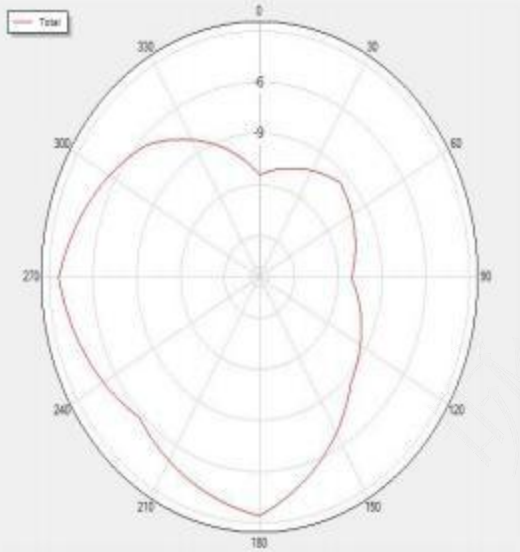


## Antenna radiation pattern 2500.00MHz

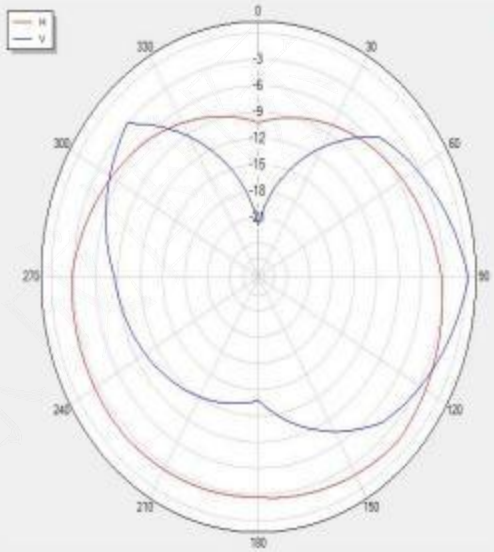
2500 Polar



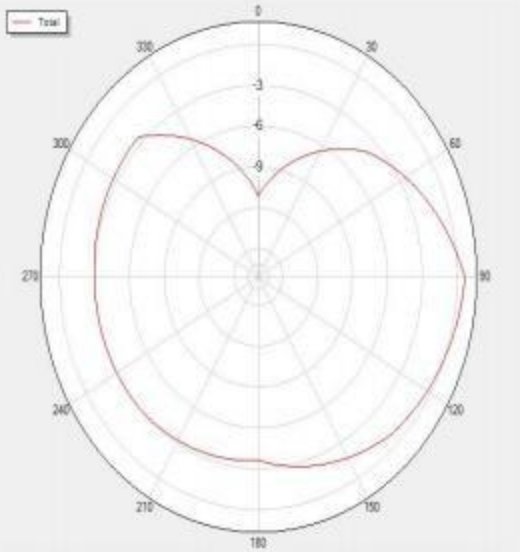

2500 Total




2500 Polar




2500 Total



# 拉距测试

a. 环境/手机

| 测试项目 | 测试吾耳 | 口袋测试要求(请叙述以下项目测试距离) | | 备注 |
|---|---|---|---|---|
| M200 | 双手吾耳OK | 右前 | OK | iPhone6 公园草地测试15M+ |
| | | 左前 | OK | |
| | | 右后 | OK | |
| | | 左后 | OK | |

b. 总结

# 组装方式

欧克国际

# Thank you for watching !

Wish you enjoy your  life