

# 猎声电子智能手表天线增益报告

GPS L1/L5:

支持频段: 1176.45MHz (L5) 、 1575.42MHz (L1)

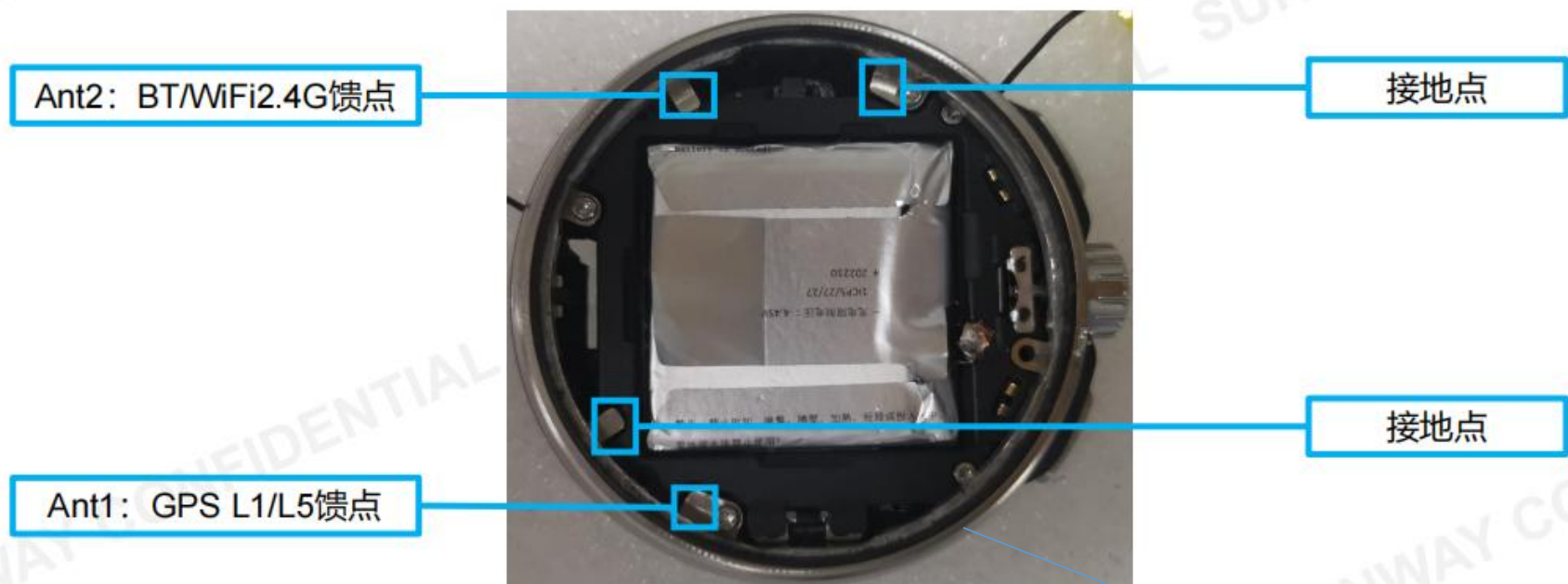
BT/WiFi 2.4G:

支持频段: 2400-2500MHz

● 天线数量及工作频段：

- Ant1: 1176.45MHz、1575.42MHz;
- Ant2: 2400-2500MHz;

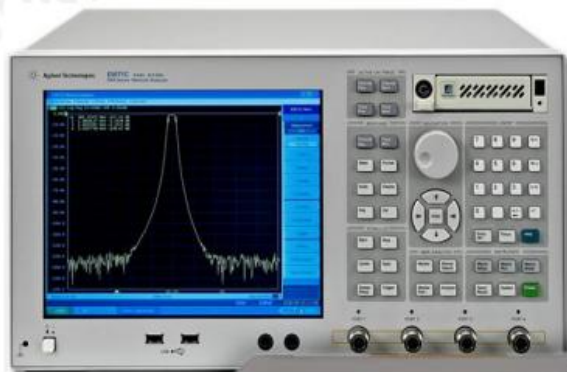
● 各天线分布如图所示：



天线类型：金属边框天线

边框天线

调测设备：网络分析仪5071C+SATIMO暗室；

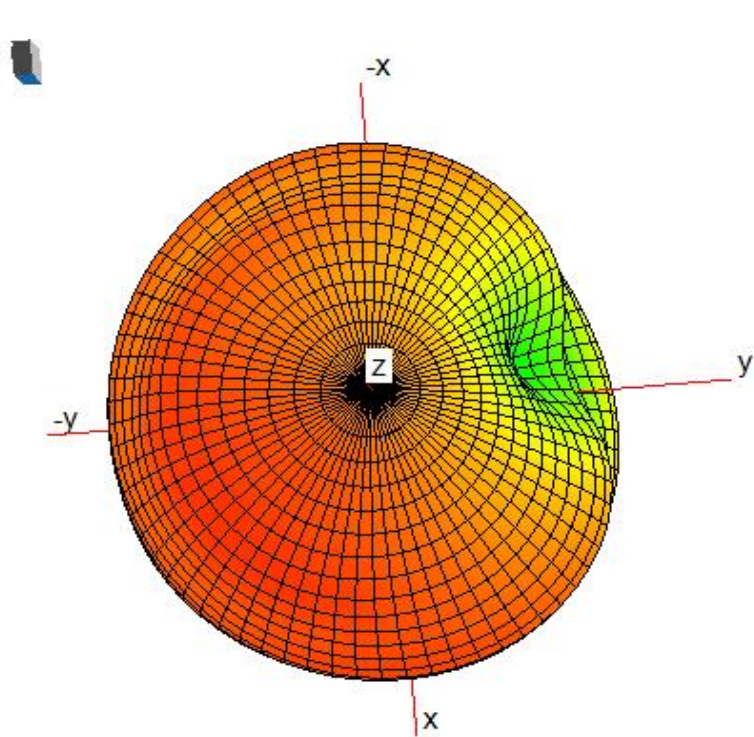


Agilent 网络分析仪E5071C



SATIMO

GPS增益图

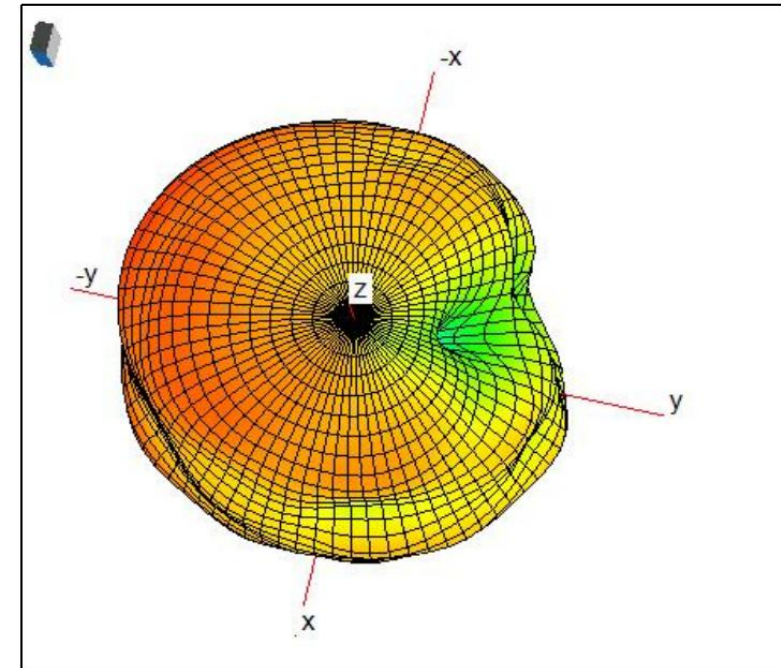
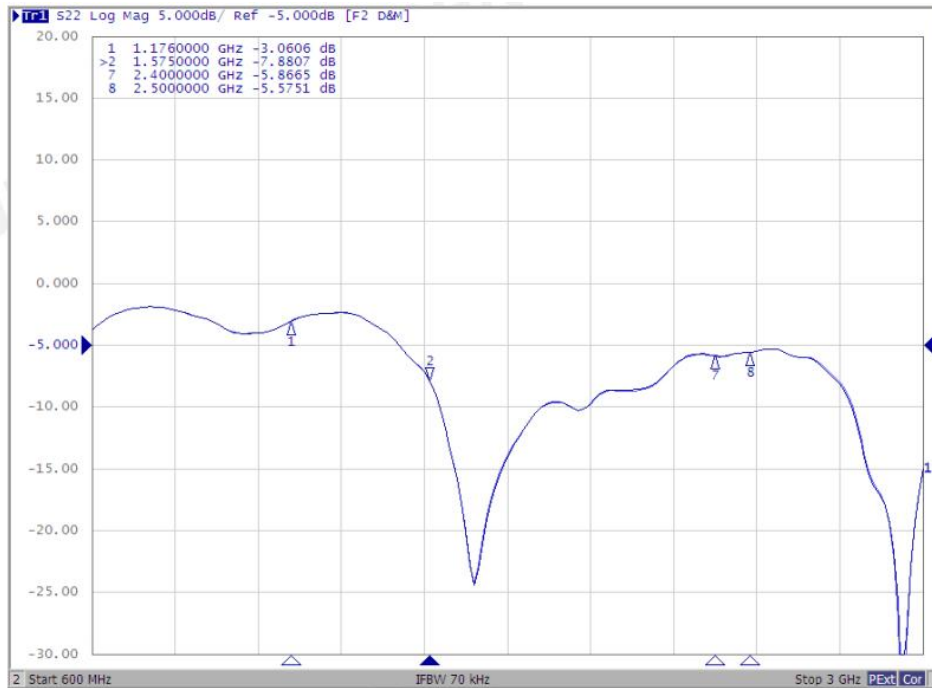


| GPS  |               |       |  |
|------|---------------|-------|--|
| Freq | Efficiency_dB | Gain  |  |
| 1160 | -12.11        | -8.05 |  |
| 1165 | -12.16        | -8.22 |  |
| 1170 | -12.24        | -8.38 |  |
| 1175 | -12.37        | -8.54 |  |
| 1180 | -12.56        | -8.7  |  |
| 1185 | -12.75        | -8.78 |  |
| 1190 | -12.86        | -8.82 |  |
| 1560 | -10.72        | -5.15 |  |
| 1565 | -10.64        | -5.18 |  |
| 1570 | -10.57        | -5.18 |  |
| 1575 | -10.48        | -5.21 |  |
| 1580 | -10.37        | -5.27 |  |
| 1585 | 10.27         | -5.3  |  |
| 1590 | -10.19        | -5.34 |  |



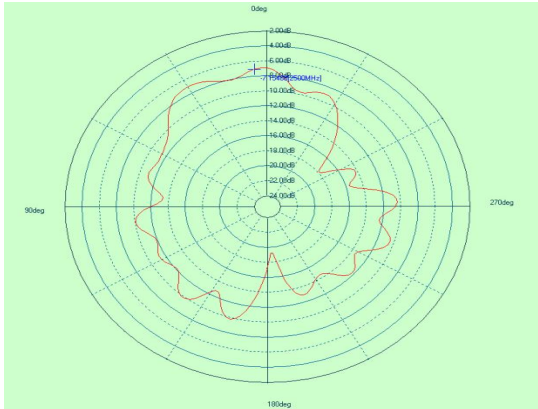
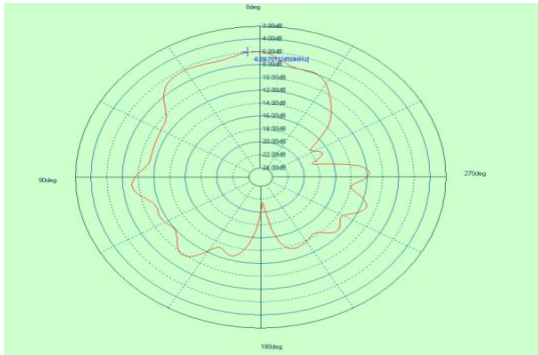
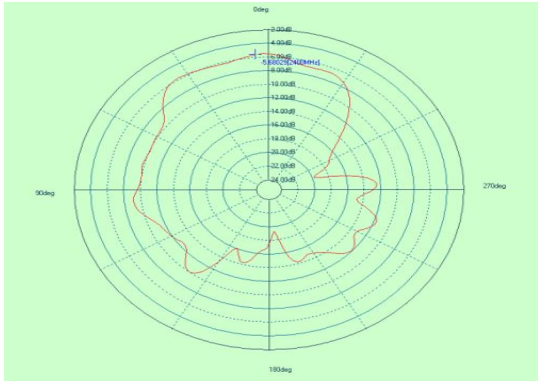
# WIFI/BT:

## Test Result-VSWR/Antenna directivity diagram

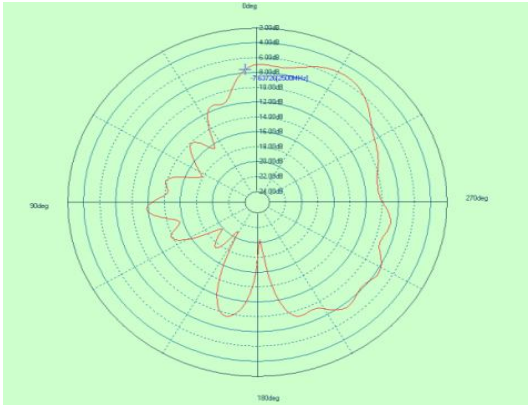
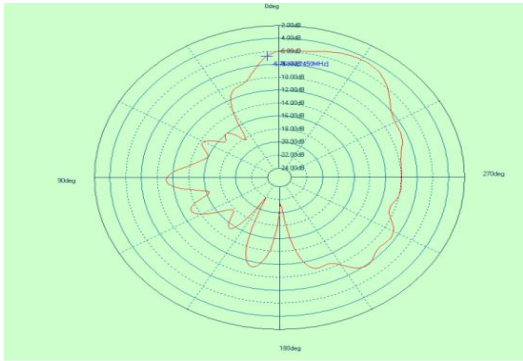
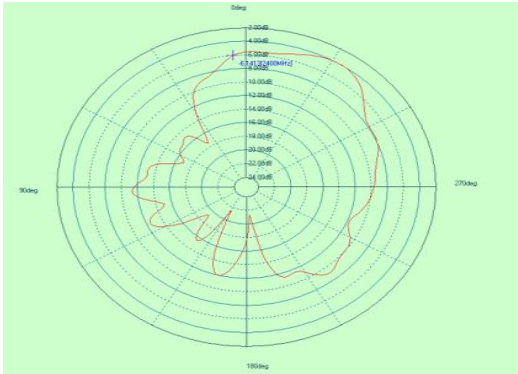


# Efficiency and gain

PHI=0



PHI=90



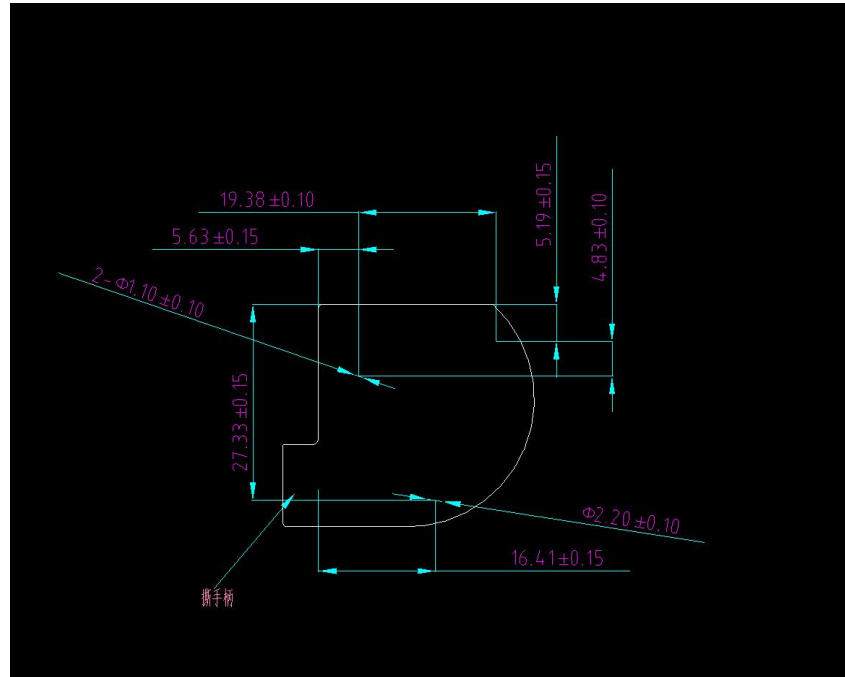
2400MHz

2450MHz

2500MHz

| Frequency/Hz | Efficiency . dB | Gain  |
|--------------|-----------------|-------|
| 2400000000   | -10.05          | -4.54 |
| 2410000000   | -10.36          | -4.76 |
| 2420000000   | -10.11          | -4.83 |
| 2430000000   | -10.2           | -5.17 |
| 2440000000   | -10.09          | -5.16 |
| 2450000000   | -10.4           | -5.22 |
| 2460000000   | -10.33          | -5.34 |
| 2470000000   | -10.48          | -5.42 |
| 2480000000   | -10.44          | -5.38 |
| 2490000000   | -10.66          | -5.66 |
| 2500000000   | -10.6           | -5.78 |

# NFC Antenna specification



|                                            |
|--------------------------------------------|
| Format :Round ,FPC+Ferrite and 5 turns     |
| PN:F1476-ferrite-DA-1                      |
| Company:Shenzhen Deman Electronics Co.,Ltd |
| Permeability : 150+/-10%                   |
| Size:31*30.4                               |
| Type:Stick it on the FPC                   |

Frequency range: 13.56MHz  
gain: 0dBi