

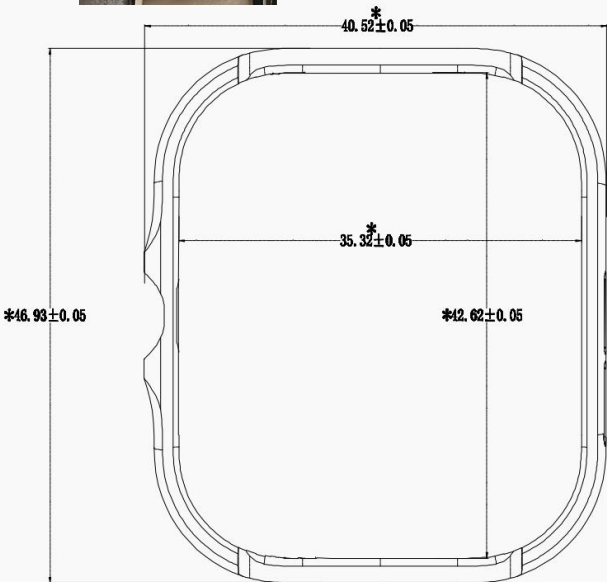
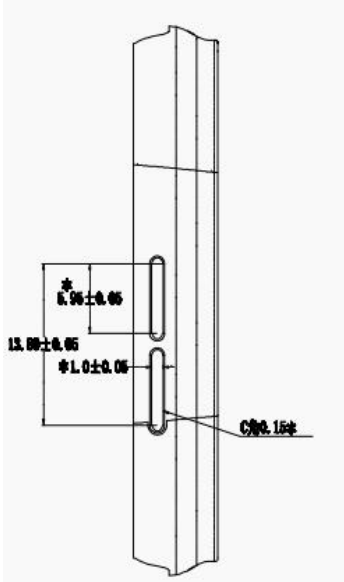
### CWS08G antenna specifications

#### Antenna Description

The antenna of the CWS08G project uses a metal frame and a face ring as the antenna radiator, and the motherboard end is connected to the antenna body by shrapnel to connect the main feed point and ground feed point.

#### Antenna appearance



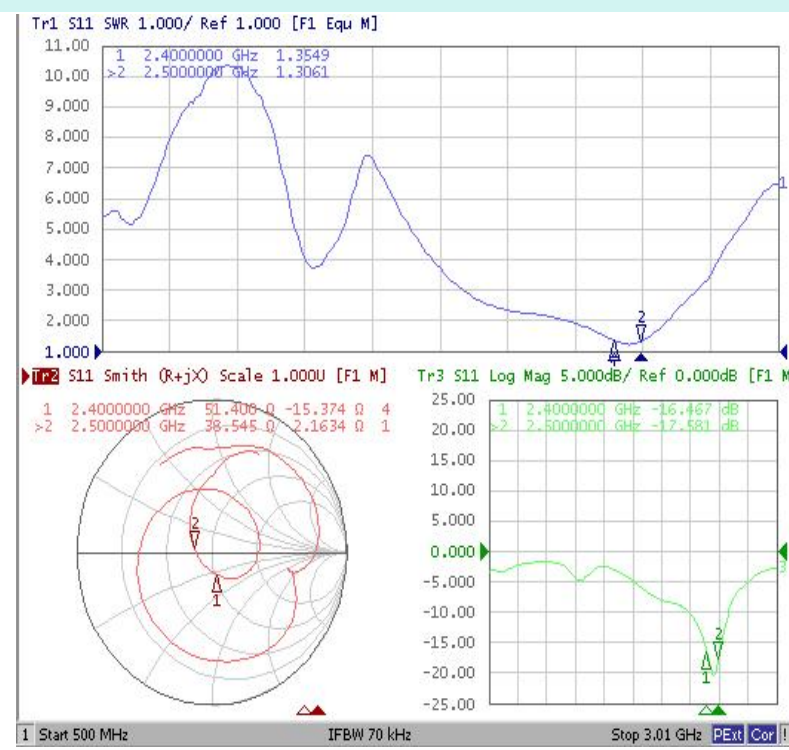
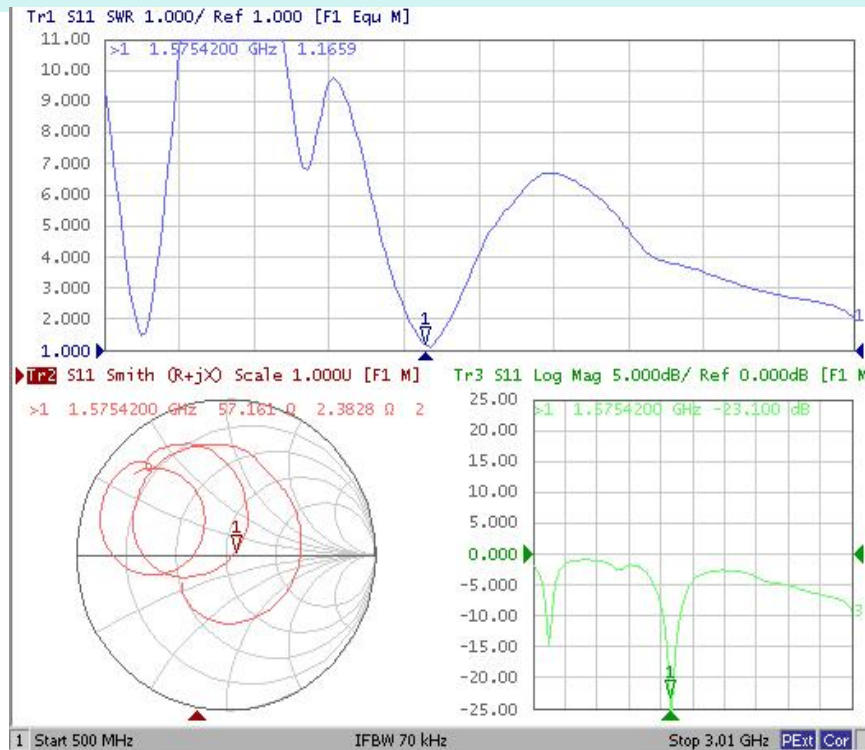
|                        |                                                                                    |                           |                                                                                     |
|------------------------|------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|
| Antenna Size           |  |                           |  |
| Antenna Specifications | 40.52mm*46.93mm                                                                    | Type: Metal Panel Antenna | Material: Aluminum Alloy                                                            |

## Antenna efficiency parameter

### Preliminary Debugging Results:

1. The efficiency of the Arm GPS antenna is tuned to around 7%.
2. The efficiency of the Arm Bluetooth (BT) antenna is tuned to around 5%.

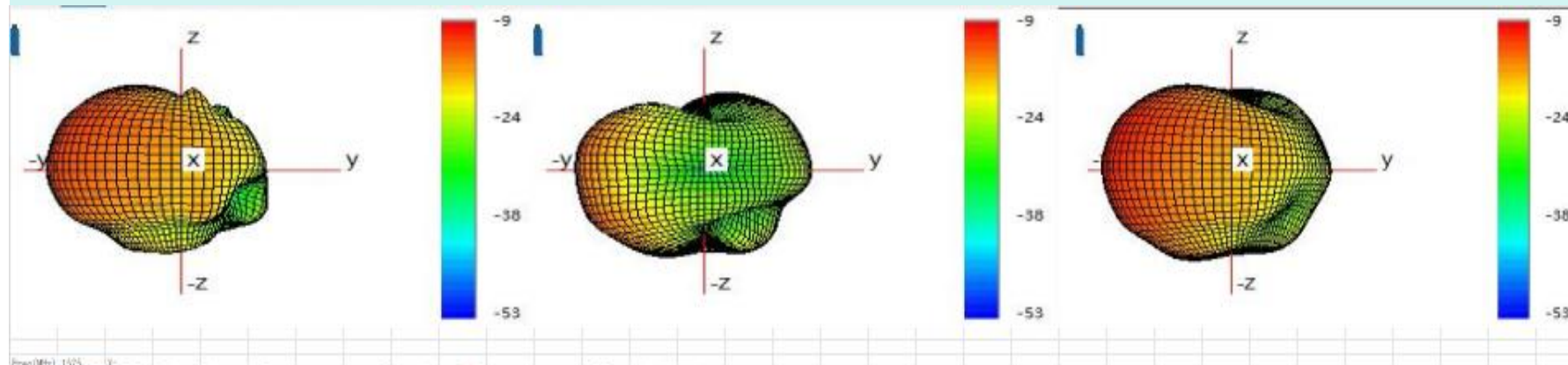
### GPS/BT passive diagram

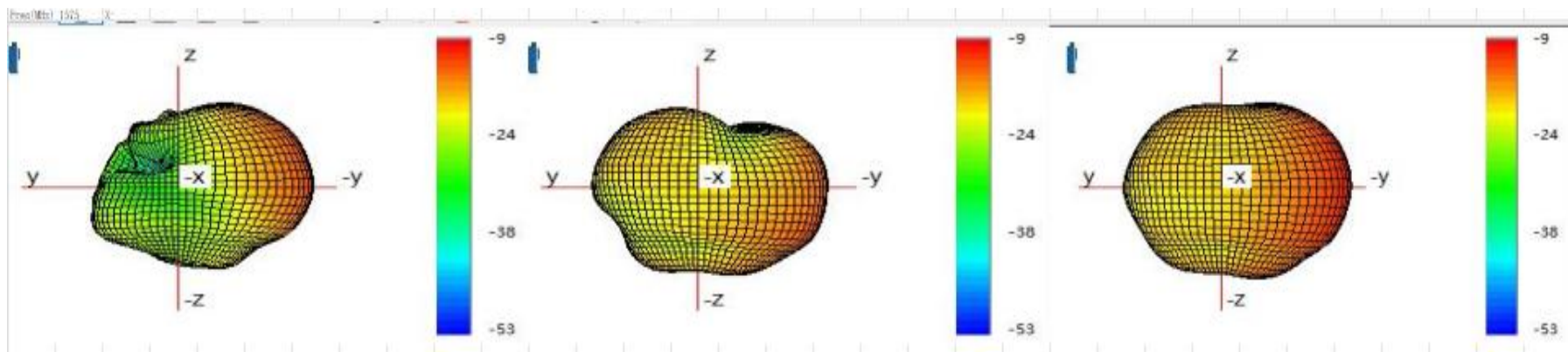


### Testing of antenna efficiency parameters

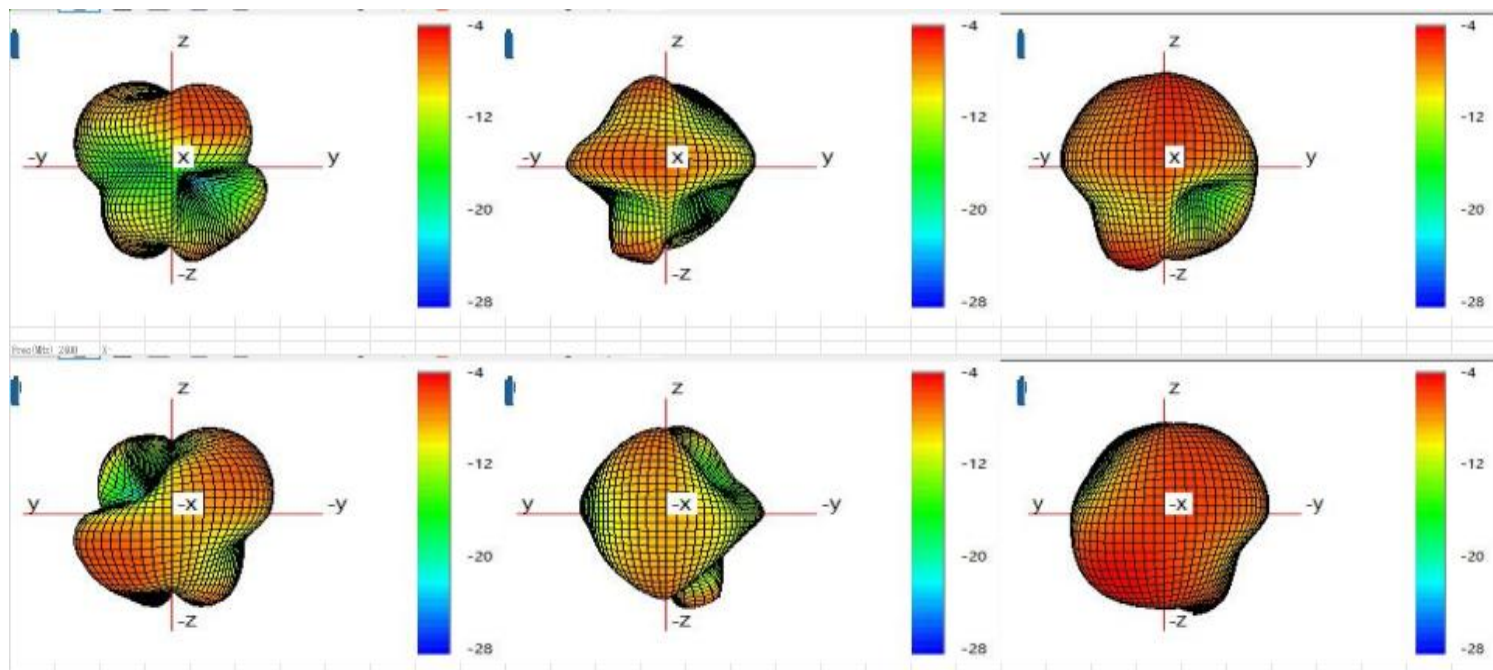
| BT Arm | 效率% | 效率db   | 增益   | GPS Arm | 频点   | 效率% | 效率db   | 增益   |
|--------|-----|--------|------|---------|------|-----|--------|------|
|        | 3%  | -14.80 | -9.1 |         | 1550 | 5%  | -13.27 | -8.0 |
|        | 4%  | -13.84 | -8.6 |         | 1555 | 6%  | -12.58 | -7.6 |
|        | 4%  | -13.60 | -8.5 |         | 1560 | 6%  | -12.31 | -7.2 |
|        | 5%  | -12.51 | -8.1 |         | 1565 | 6%  | -11.92 | -6.4 |
|        | 5%  | -12.23 | -7.9 |         | 1570 | 7%  | -11.78 | -6.6 |
|        | 5%  | -12.18 | -7.4 |         | 1575 | 7%  | -11.73 | -6.4 |
|        | 4%  | -13.69 | -7.6 |         | 1580 | 6%  | -12.53 | -7.8 |
|        | 4%  | -13.72 | -8.1 |         | 1585 | 5%  | -12.86 | -7.9 |
|        | 4%  | -13.65 | -8.5 |         | 1590 | 5%  | -13.17 | -8.1 |
|        | 4%  | -13.98 | -8.7 |         |      |     |        |      |
|        | 3%  | -14.90 | -9.3 |         |      |     |        |      |

### 1575MHz passive directional map/field pattern map





2450MHzpassive directionalmap/field pattern map



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