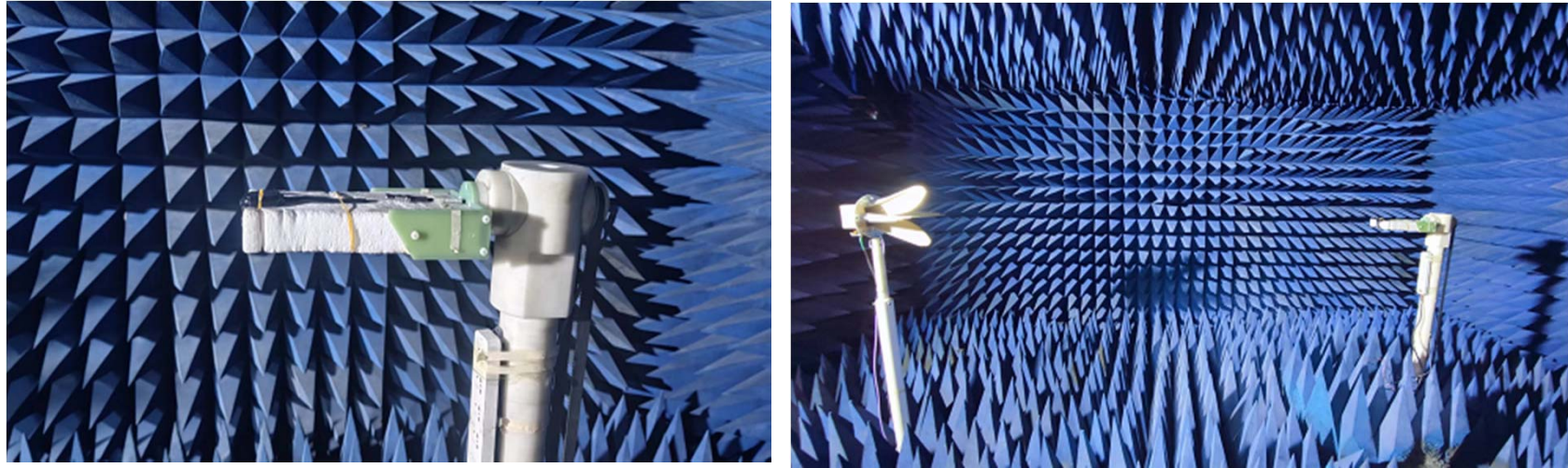


|                 |                                                                                     |
|-----------------|-------------------------------------------------------------------------------------|
| Project Name    | DF55-G4CM                                                                           |
| Frequency Range | 2400-2500MHz                                                                        |
| Revision        | Rev01                                                                               |
| Report Date     | 2022/8/30                                                                           |
| Specification   | WIFI+BT                                                                             |
| EUT Picture     |  |

Manufacturer: Shenzhen Goodboy Technology Co., Ltd.

### Test equipment



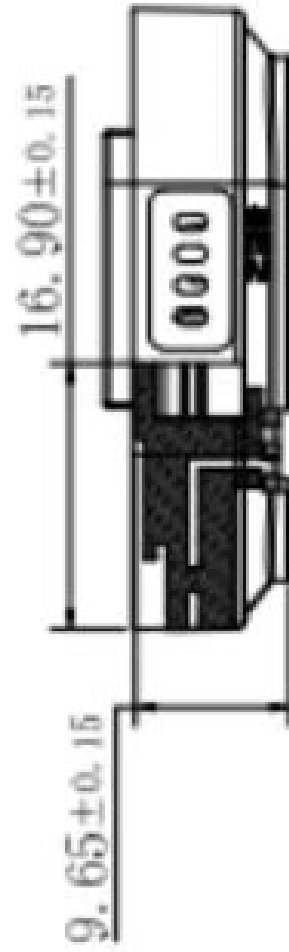
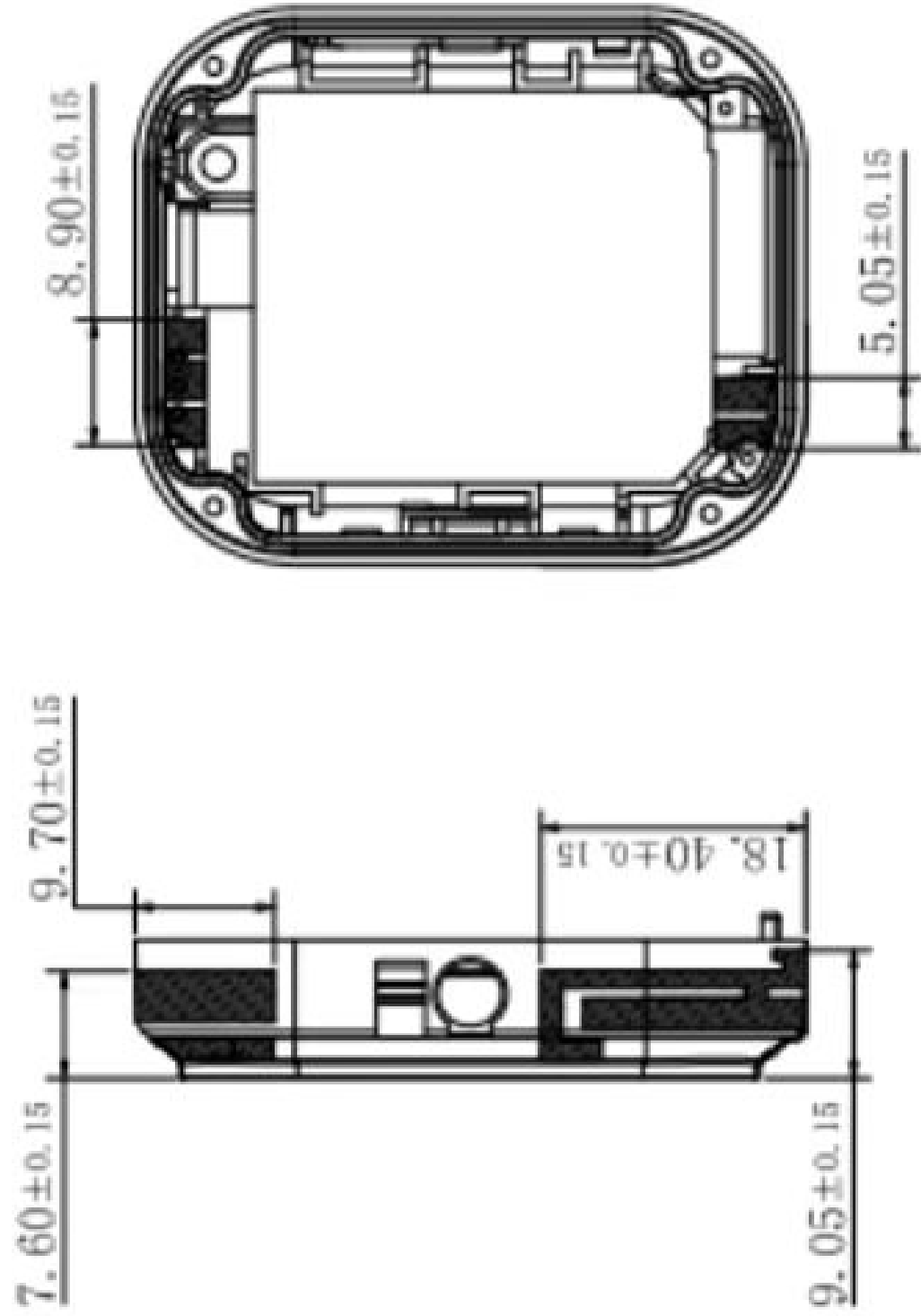
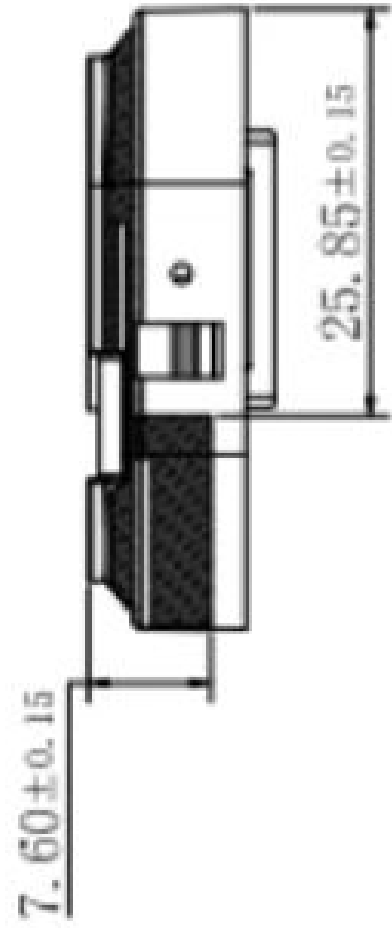
Antenna measurements such as VSWR were measured with an Agilent E5071C vector network analyzer. Radiation patterns were measured with a CMT Planar 804/1 vector network analyzer in a Howland Company 3100 chamber equivalent. Phase center is nine inches above the Phi positioner.

Flat surface measurements were done with the antenna centered on a 1.5 mm-thick plate of polycarbonate.

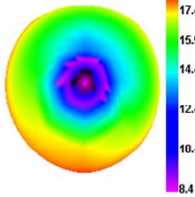
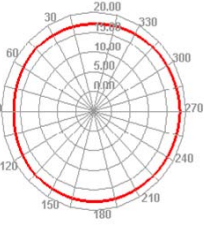
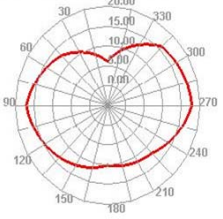
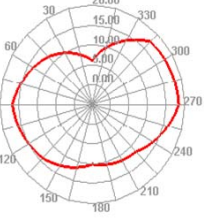
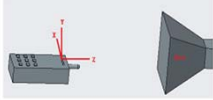
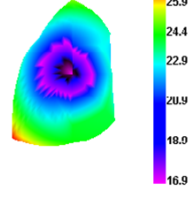
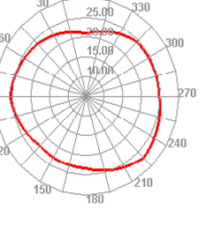
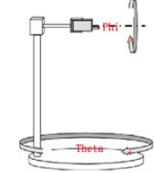
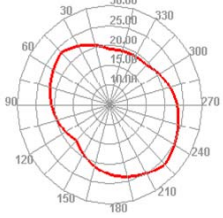
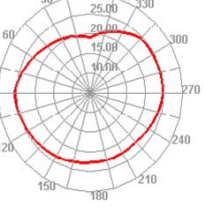
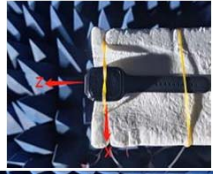
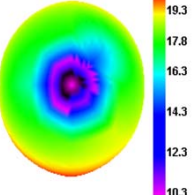
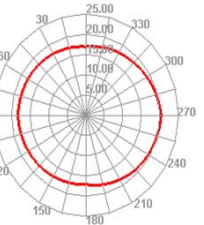
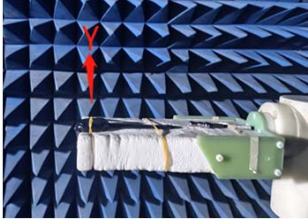
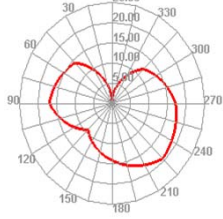
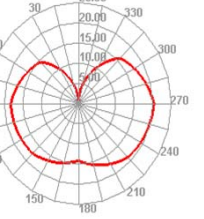
Curved surface measurements

were taken by placing the antenna on the inside and outside of different diameter PVC tubing.

# Size



Test setup and Test picture

| 2.4G-2.5G                                                                                                                                                                                                                         |  | Note                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------|
| <div><div>3D</div><div></div><div>H</div><div></div></div>      |  | (H/E1/E2)                                                                                      |
| <div><div>E1</div><div></div><div>E2</div><div></div></div>     |  | 2D                                                                                             |
| <div></div>                                                                                                                                     |  | <div>E1: XZ面切面 PHI=0<br/>E2: YZ面切面 PHI=90<br/>H: XY面切面 Theta=90</div>                          |
| <div></div> <div>H</div> <div></div>                          |  | <div></div>  |
| <div><div>E1</div><div></div><div>E2</div><div></div></div> |  | <div></div>  |
| <div><div>3D</div><div></div><div>H</div><div></div></div>  |  | <div></div> |
| <div><div>E1</div><div></div><div>E2</div><div></div></div> |  |                                                                                                |

**Passive efficiency and gain:**

| Frequency  | Efficiency |           | Peak Gain  |
|------------|------------|-----------|------------|
| Freq (MHz) | Effi (%)   | Effi (dB) | Gain (dBi) |
| 2400       | 24.94      | -6.03     | -0.12      |
| 2410       | 25.1       | -6        | -0.17      |
| 2420       | 25.38      | -5.95     | -0.14      |
| 2430       | 25.87      | -5.87     | 0.00       |
| 2440       | 24.54      | -6.1      | -0.31      |
| 2450       | 20.73      | -6.83     | -1.07      |
| 2460       | 23.47      | -6.29     | -0.57      |
| 2470       | 20.71      | -6.84     | -1.1       |
| 2480       | 18.78      | -7.26     | -1.56      |
| 2490       | 17.67      | -7.53     | -1.84      |
| 2500       | 17.52      | -7.57     | -1.86      |

**VSWR**