



Antenna Approval Sheet

For

E206W Project

| | | | |
|----------|-----------|---------|----------|
| Customer | 福克创新 | Project | E206W |
| Band | BT 2.4GHZ | | |
| ZC PN | E205W-BT | | |
| Version | R:A | Data | 2023-2-8 |



1. Summary of the DUT

E205W-BT Picture



2. Electrical Specification:

| | |
|---------------|-----------------------------|
| Antenna types | 板载 2.4GHz Bluetooth antenna |
| Frequency | 2400-2500 MHz |
| Impedance | 50 Ω |
| VSWR | < 2 |
| Gain | 0.84 dBi REF |
| Efficiency | >30 % |



3. Test Condition

| 3.1 | 测试项目 | 测试设备和型号 | 备注 |
|--------|--|--|----|
| 1.无源测试 | 1. Antenna Gain 2.S.W.R 3. Return Loss 4. Radiation Pattern | 1. Network analyzer (R&S ZVL6) 2. Network analyzer (HP 8753D) | |

3.2 Matching Circuit The matching circuit was Default

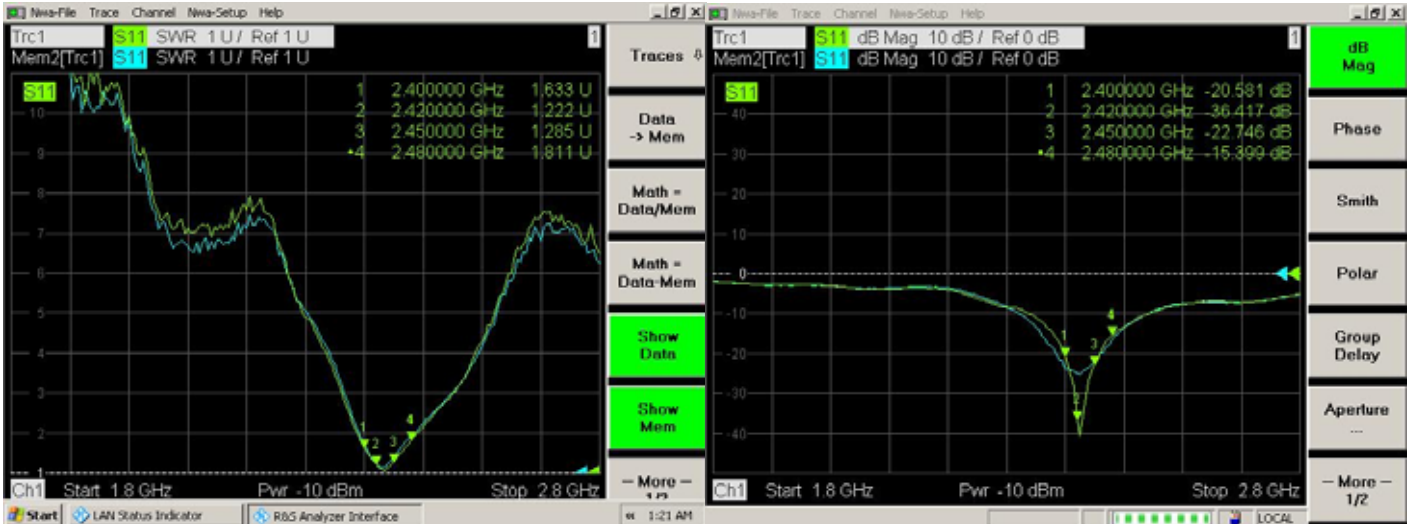
4. RF Performance

4.1 Passive parameters

| Freq. (MHz) | 2400 | 2410 | 2420 | 2430 | 2440 | 2450 | 2460 | 2470 | 2480 | 2490 | 2500 |
|-------------------|------|------|------|------|------|---------|------|------|------|------|------|
| Gain (dBi) | 0.64 | 0.61 | 0.44 | 0.82 | 0.67 | 0.53 | 0.84 | 0.81 | 0.02 | 0.18 | 0.22 |
| Antenna Peak Gain | | | | | | 0.84dBi | | | | | |

4.2 S Parameter

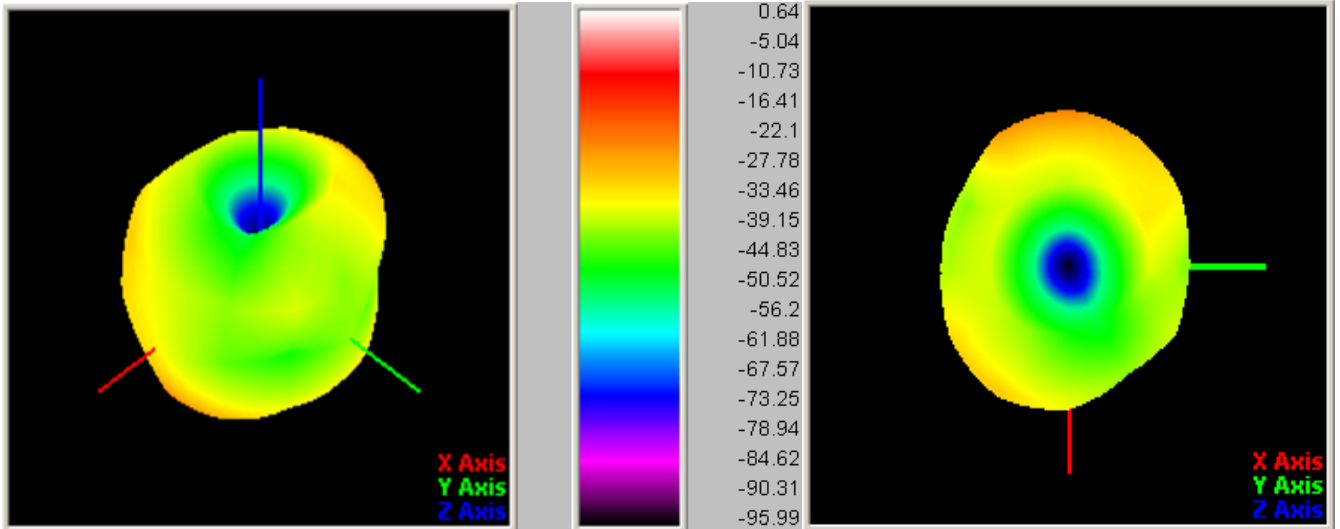
| | | | |
|-----------------|--------|--------|--------|
| Frequency (MHz) | 2400 | 2450 | 2480 |
| Return Loss(dB) | -20.58 | -22.74 | -15.39 |
| VSWR | 1.63 | 1.28 | 1.81 |



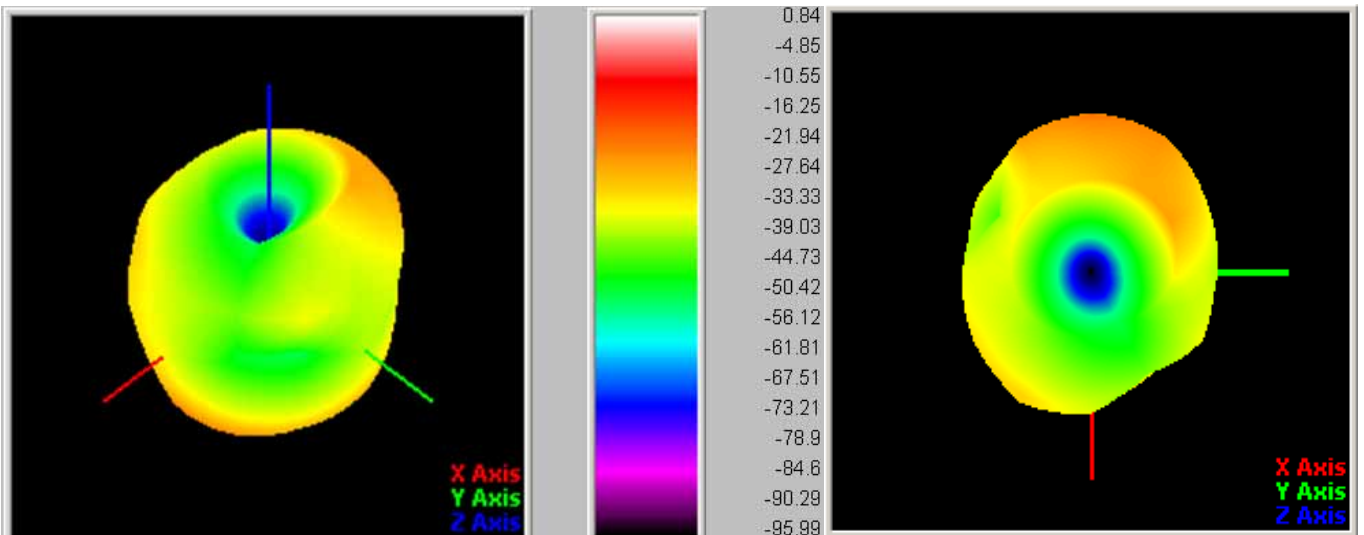


4.3 Radiation Pattern

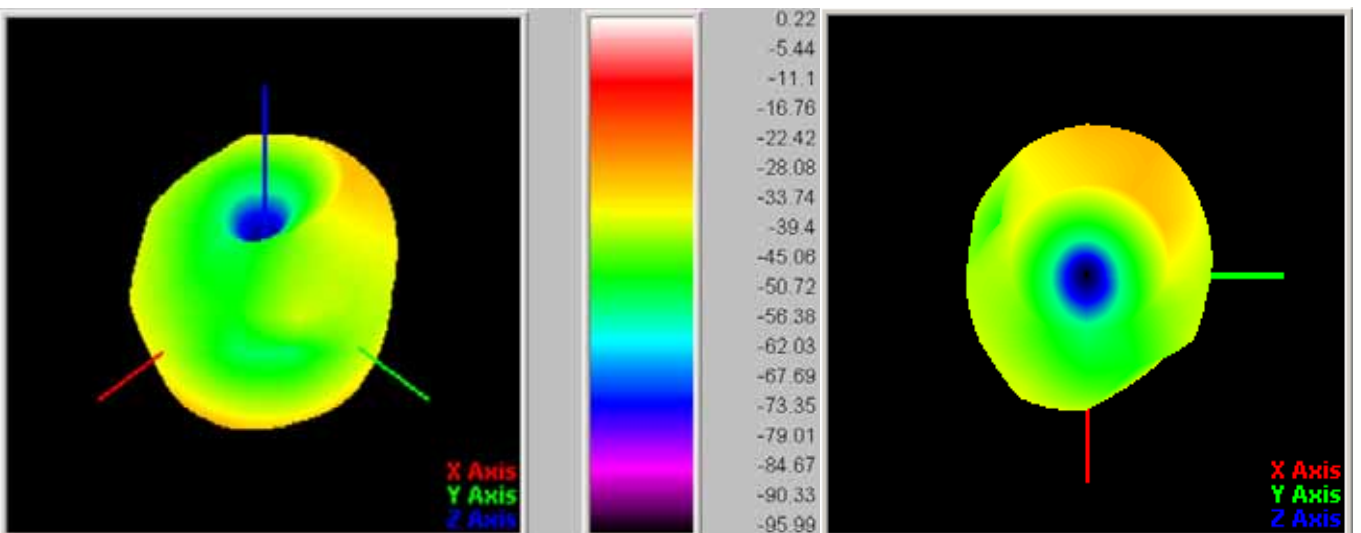
4.3.1 Antenna 3D Radiation Pattern



Freq2400.00MHZ



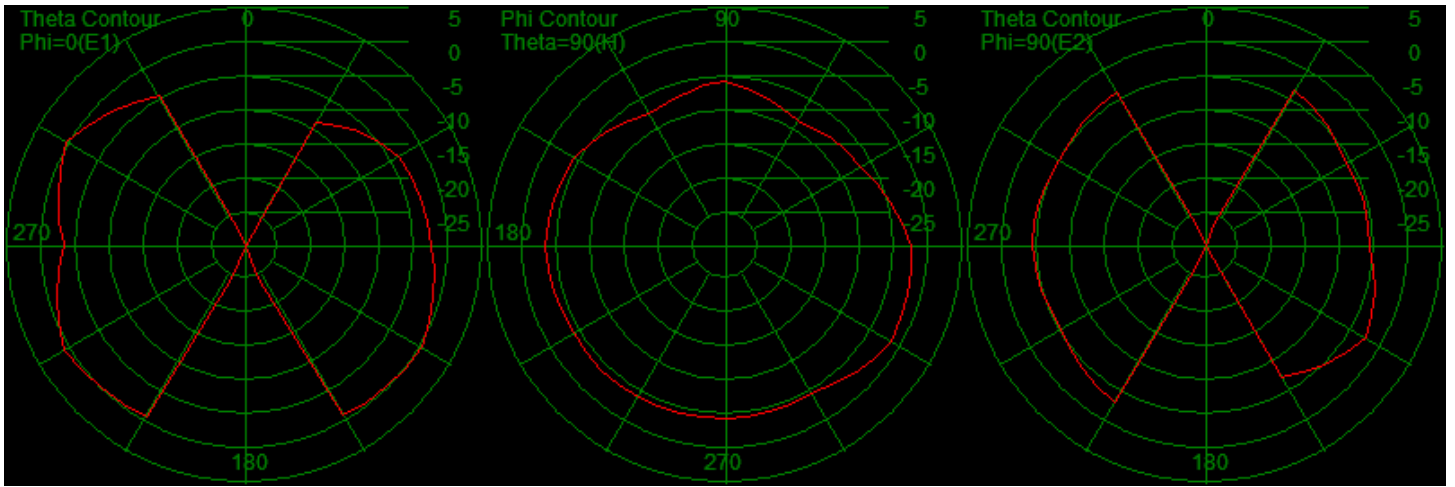
Freq2460.00MHZ



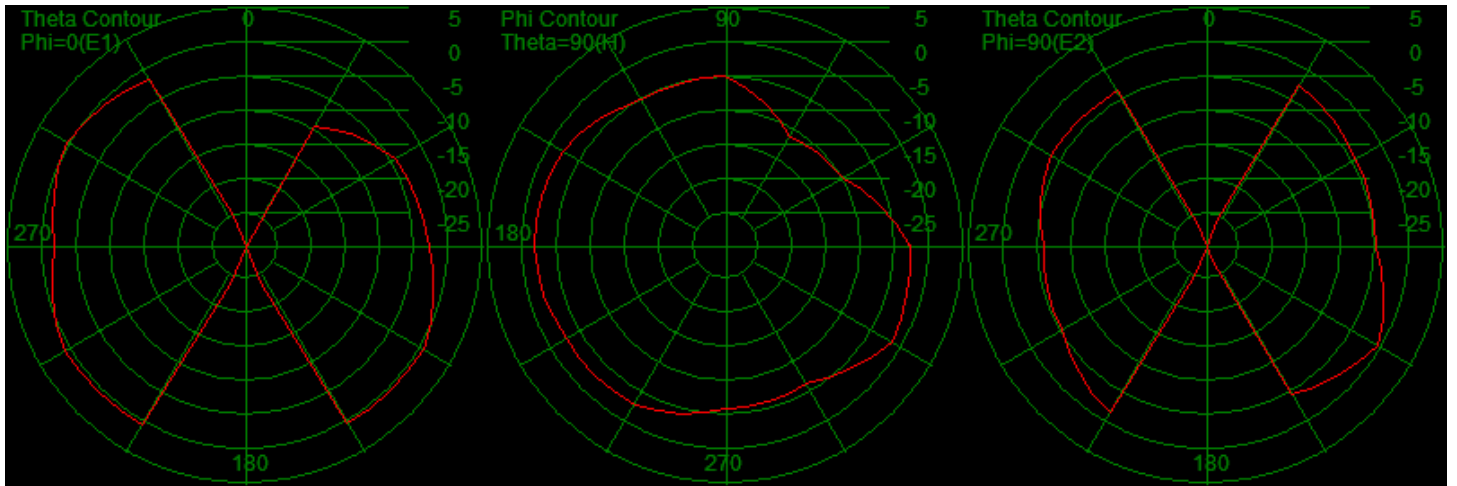
Freq2500.00MHZ



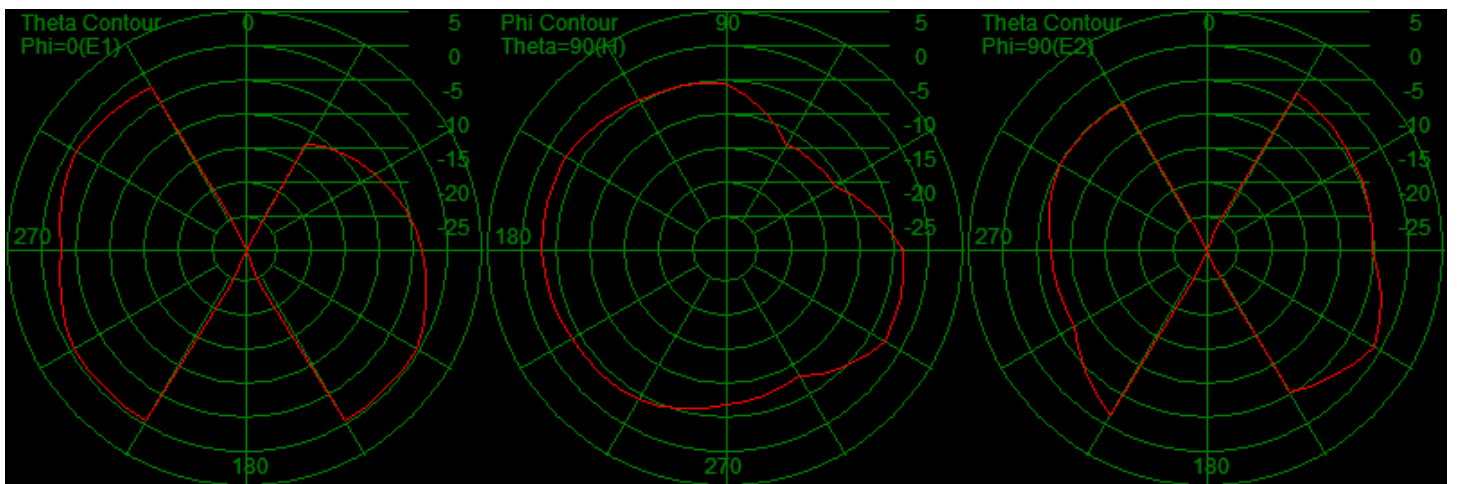
4.3.2 Antenna 2D Radiation Pattern (UNIT :db)



Freq2400.00MHZ



Freq2460.00MHZ



Freq2500.00MHZ