# Admit it

| | | | | |
|---|---|---|---|---|
| The product description: | The manufacturer: | Welletronics Communication Technology Limited | Project type: | GTX02 |
| | The name of the material: | Bluetooth GPS metal middle frame RF antenna | Specification/Color: | |
| | Material code: | | Sign the sample date: | 2023.07.24 |
| | The version number: | V1.0 | note: | |
| The attachment: | O Description of electrical and mechanical properties (Specification) O Manufacturing flow chart<br>O QCEngineering drawing O The sample O CPK report O Full size measurement report<br>O Reliability test report O The packing way O Raw material list report /RoHS report/HF/REACH | | | |
| Supplier sign and approve | artificial: | audit: | approval: | |

**The above shall be filled in by the supplier and the following shall be filled in by Aidu**

| | **department** | **Confirm the content** | | | | **Verify the results** | **Confirm person/date** |
|---|---|---|---|---|---|---|---|
| Technical confirmation column | Supplier quality | ☐ RoHS material<br>☐ no RoHS material | ☐Meet REACH requirements | ☐ Meet halogen-free requirements | ☐Other Environmental Requirements | | |
| | ID of Design Department | ☐The customer request ID | ☐Color confirmation | ☐Surface process confirmation | ☐Shell, hardware, key material | | |
| | Structural engineer | ☐ Confirm the size of 2D drawing files<br>☐Specifications and technical requirements | ☐Focus on size marking control<br>☐Electrical performance parameter | ☐Adapter validation<br>☐function | ☐Shell, hardware, key material<br>☐The effect | | |
| | Hardware engineer | ☐ Confirm the size of 2D drawing files<br>☐Specifications and technical requirements | ☐Focus on size marking control<br>☐Electrical performance parameter | ☐Adapter validation<br>☐function | ☐Shell, hardware, key material<br>☐The effect | | |
| | R&d quality | ☐Test standard confirmation<br>☐appearance | ☐Standardization of dimension marking (key dimensions) | ☐ Reliability verification<br>☐Adapter validation | ☐function<br>☐The effect | | |
| Final confirmation | Project Manager | ☐Acknowledge the completeness of the documents<br>☐Standardization of dimension marking (key dimensions) | ☐Specifications and technical requirements<br>☐appearance | ☐Electrical performance parameter | ☐function<br>☐The effect | | |

| | |
|---|---|
| Admitted conditions: | ☐ Official recognition<br>☐ Set limit to admit<br>☐ Refuse to admit |
| Distribution department: | ☐ IQC ☐ supplier ☐ The customer ☐ after-sales ☐ SQE/ Document control<br>☐ other _____ |

# Catalog

## Three 、Change history

Change of resume

| Serial number | Date of change | entry name | Edition | Change content | Remarks |
|---|---|---|---|---|---|
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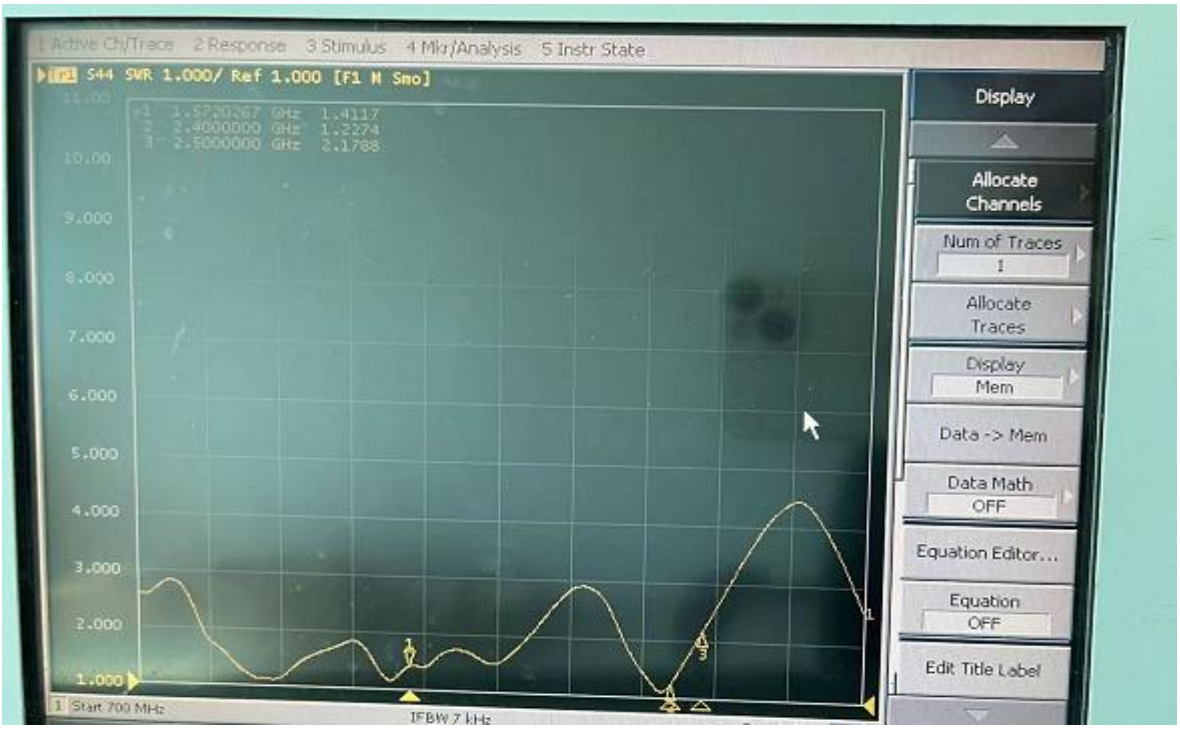
# Four、 Electrical characteristics

## 1.Antenna Structure

**Figure antenna structure**

# 2. Test Results

### BT-Return Loss/VSWR



**Test Repor No source by space test efficiency/pattern**

free arm

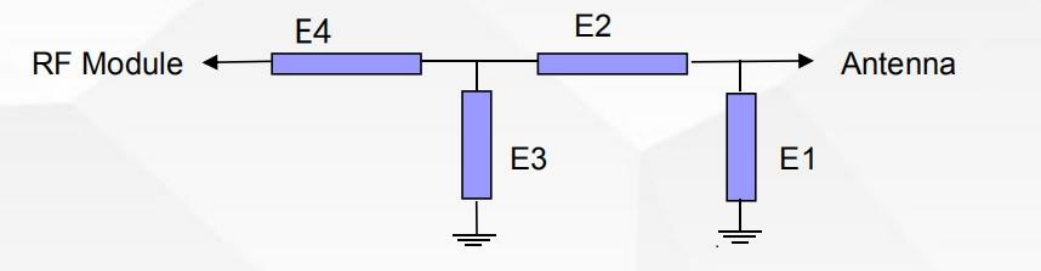
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|---|---|---|---|
| 1530 | 17.64 | -7.53 | -2.95 |
| 1540 | 17.14 | -7.66 | -3.02 |
| 1550 | 19.18 | -7.17 | -2.48 |
| 1560 | 20.16 | -6.95 | -2.29 |
| 1570 | 21.11 | -6.76 | -2 |
| 1580 | 22.18 | -6.54 | -1.63 |
| 1590 | 22.25 | -6.53 | -1.5 |
| 1600 | 23.21 | -6.34 | -1.19 |
| 1610 | 24.37 | -6.13 | -0.78 |
| 1620 | 21.86 | -6.6 | -1.15 |

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|---|---|---|---|
| 1530 | 12.75 | -8.94 | -3.01 |
| 1540 | 12.13 | -9.16 | -3.06 |
| 1550 | 12.71 | -8.96 | -2.74 |
| 1560 | 12.52 | -9.02 | -2.95 |
| 1570 | 12.26 | -9.11 | -3.22 |
| 1580 | 11.98 | -9.22 | -3.42 |
| 1590 | 11.4 | -9.43 | -3.52 |
| 1600 | 11.55 | -9.38 | -3.39 |
| 1610 | 11.74 | -9.3 | -3.3 |
| 1620 | 10.46 | -9.8 | -3.92 |

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|---|---|---|---|
| 2400 | 16.03 | -7.68 | -3.78 |
| 2410 | 16.69 | -8.04 | -3.66 |
| 2420 | 17.07 | -8 | -3.5 |
| 2430 | 15.84 | -8.14 | -3.8 |
| 2440 | 15.39 | -8.13 | -3.71 |
| 2450 | 15.22 | -8.18 | -3.75 |
| 2460 | 16.34 | -8.25 | -3.54 |
| 2470 | 17.61 | -8.05 | -3.14 |
| 2480 | 18.24 | -7.87 | -3 |
| 2490 | 19.28 | -7.54 | -2.73 |
| 2500 | 19.07 | -7.39 | -2.84 |

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) |
|---|---|---|---|
| 2400 | 6.81 | -11.67 | -6.35 |
| 2410 | 6.95 | -11.58 | -6.37 |
| 2420 | 7.03 | -11.53 | -6.32 |
| 2430 | 6.84 | -11.65 | -6.37 |
| 2440 | 6.76 | -11.7 | -6.11 |
| 2450 | 6.74 | -11.71 | -6.14 |
| 2460 | 6.66 | -11.76 | -6.45 |
| 2470 | 6.62 | -11.79 | -6.5 |
| 2480 | 6.47 | -11.89 | -6.31 |
| 2490 | 6.04 | -12.19 | -6.51 |
| 2500 | 5.74 | -12.41 | -6.72 |

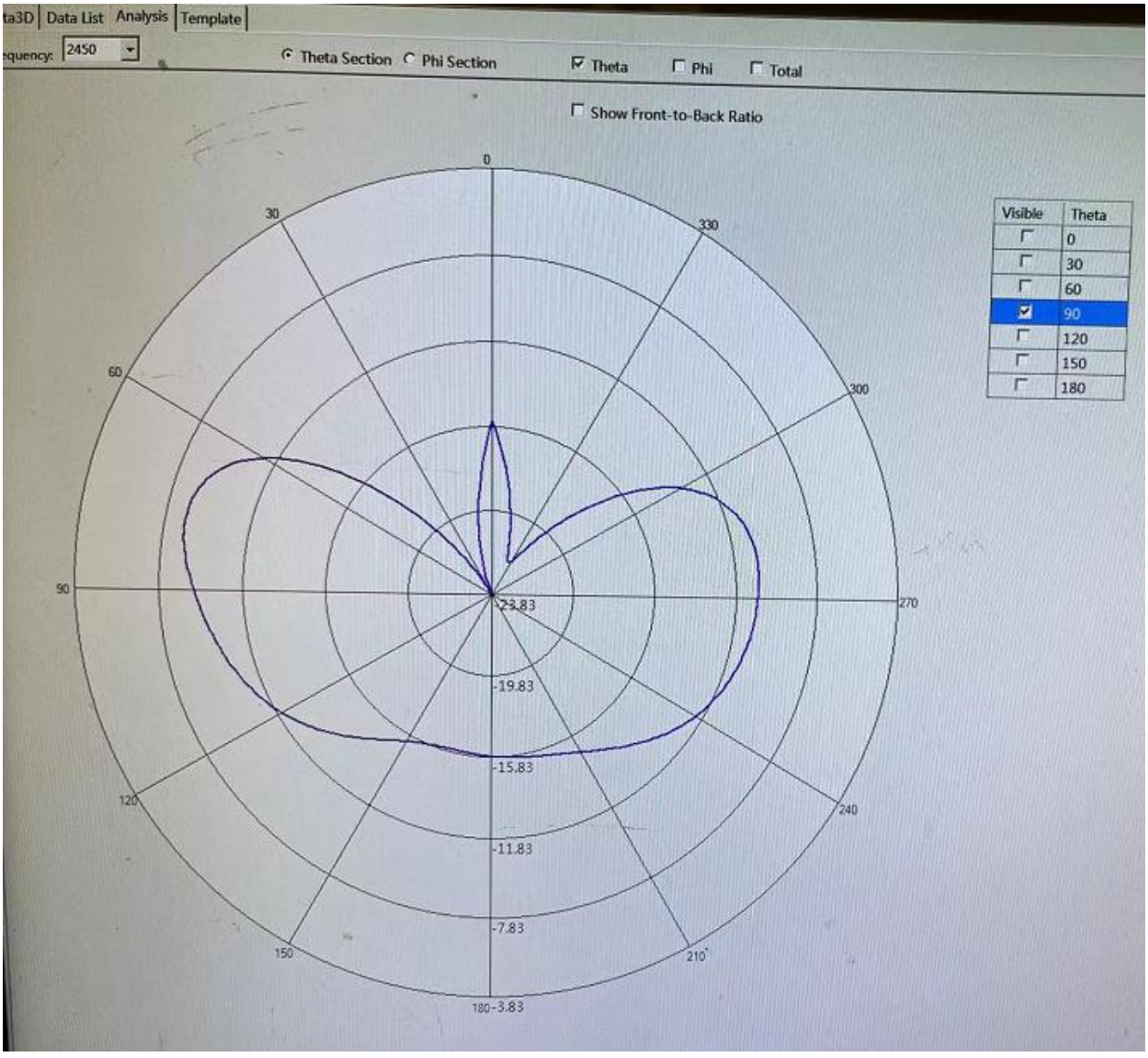
Match



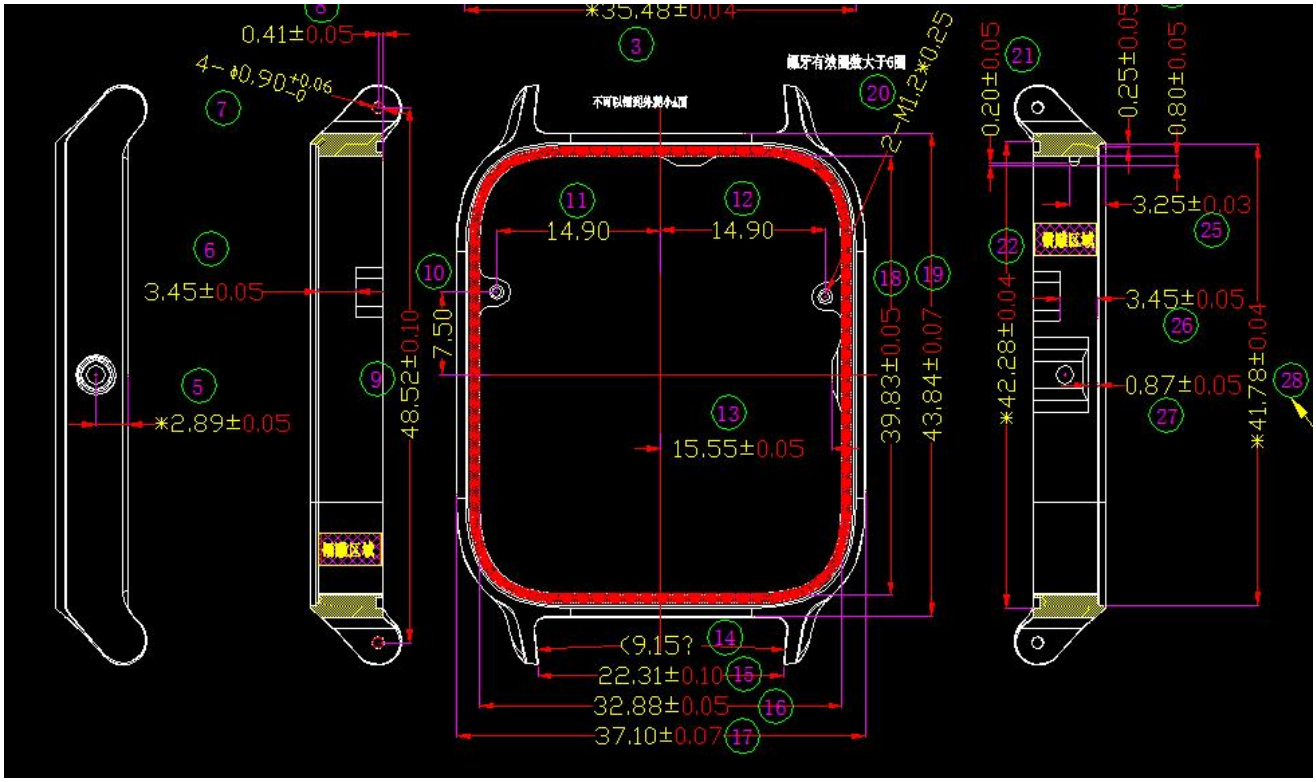

| | Element | Value |
|---|---|---|
| Antenna | E1 | |
| | E2 | 0R |
| | E3 | |
| | E4 | 0R |

## 3. The direction of figure

BT arm pattern




## Five、The 2D drawings


*35.48±0.04
0.41±0.05
4- φ0.90 +0.06 -0
3.45±0.05
*2.89±0.05
48.52±0.10
7.50
14.90
14.90
15.55±0.05
39.83±0.05
43.84±0.07
2-M1.2*0.25
(9.15?
22.31±0.10
32.88±0.05
37.10±0.07
0.20±0.05
0.25±0.05
0.80±0.05
3.25±0.03
3.45±0.05
*42.28±0.04
0.87±0.05
*41.78±0.04