

Antenna  
Test Report

## BT3L Antenna test report

Version 1.0.0

Date: 2020-05-12

NO: 0000000001

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Intelligence  
Inside

|               |                   |
|---------------|-------------------|
| Product Name: | BT3L              |
| Antenna Type: | PCB antenna       |
| Writer:       | Yinhua Zhang      |
| Maximum       | Gain: 2.5dBi      |
|               | Efficiency:62.86% |

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## 1. General Description

|               |              |
|---------------|--------------|
| EUT Name      | BT3L Antenna |
| Wireless type | Bluetooth    |
| Antenna Type  | PCB antenna  |
| Dimensions    | Appendix A   |

## 2. Technical Information

|                 |                       |
|-----------------|-----------------------|
| Frequency Range | 2402MHz~2480MHz       |
| Test Frequency  | 2400,2410.....2500MHz |

## 3. Test Standards

| Identity      | Document Title                                |
|---------------|-----------------------------------------------|
| IEEE 149-1979 | IEEE Standard Test Procedures<br>for Antennas |

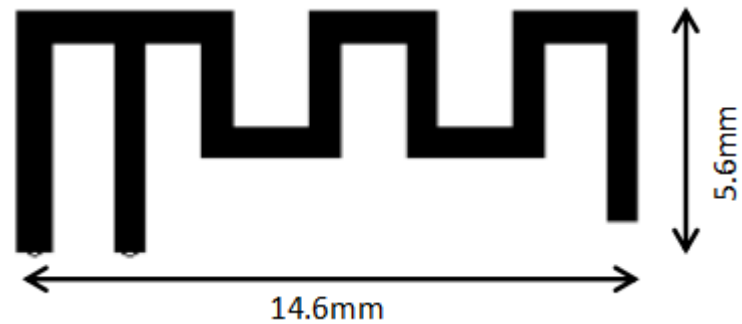
## 4. Test Item

| Report Section | Description                   |
|----------------|-------------------------------|
| Appendix B     | S11/VSWR                      |
| Appendix C     | Gain and Efficiency           |
| Appendix D     | Radiation Pattern (1D and 3D) |

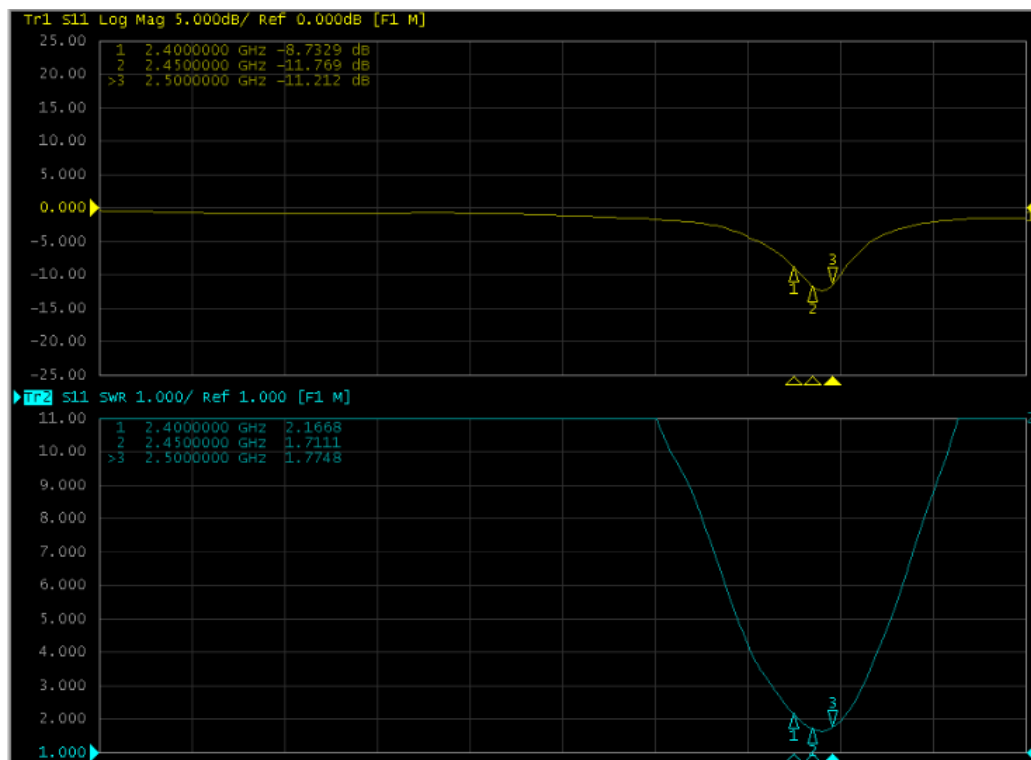
## 5. Test Photo

| Report Section | Description      |
|----------------|------------------|
| Appendix E     | Test Setup Photo |

## Appendix A Antenna Dimension



## Appendix B S11/VSWR



| Frequency (MHz) | 2400  | 2450   | 2500   |
|-----------------|-------|--------|--------|
| Return Loss     | -8.73 | -11.76 | -11.21 |

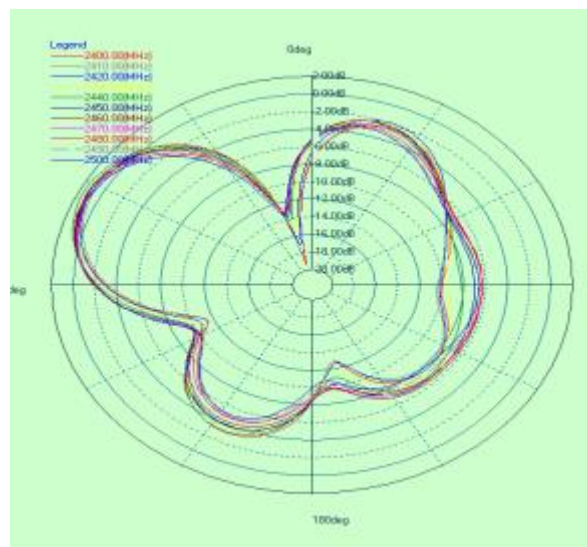
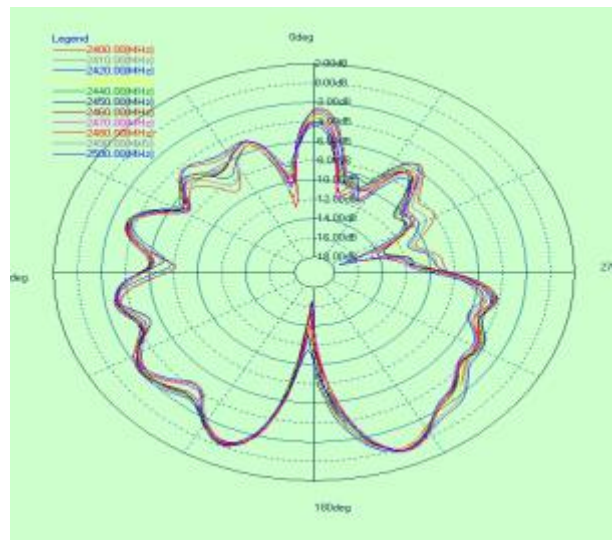
|      |      |      |      |
|------|------|------|------|
| VSWR | 2.16 | 1.71 | 1.77 |
|------|------|------|------|

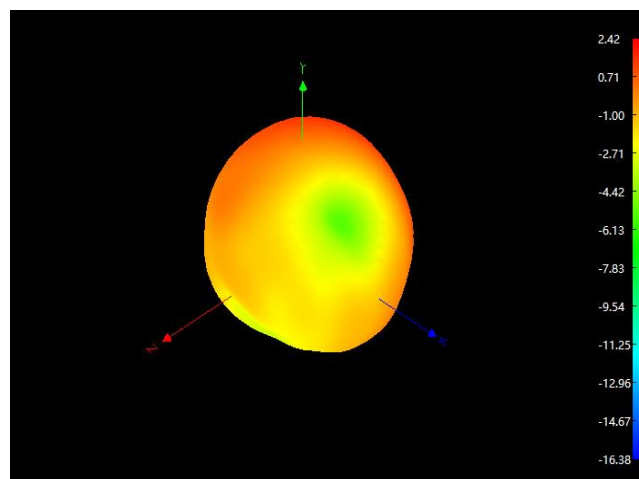
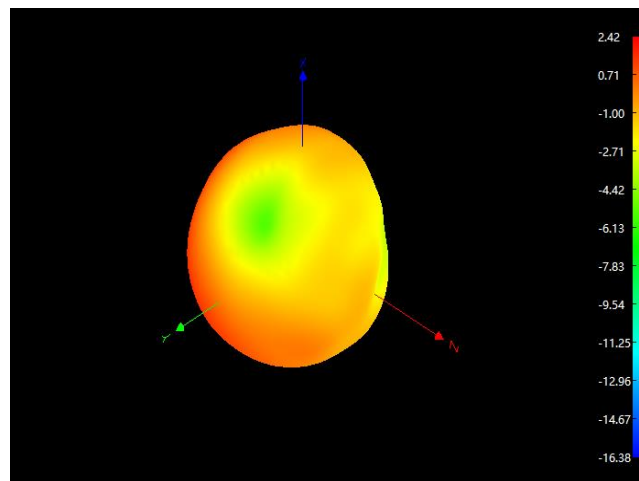
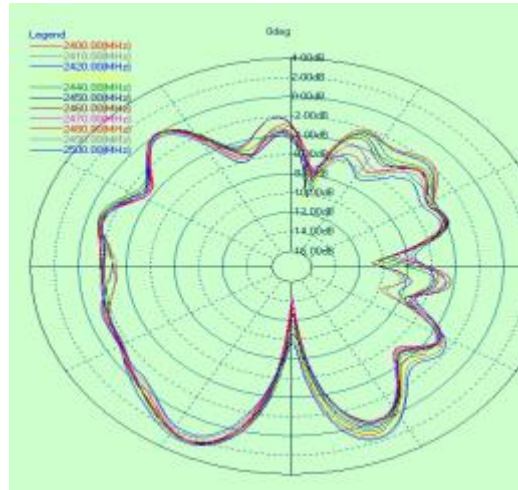
## Appendix C Gain and Efficiency

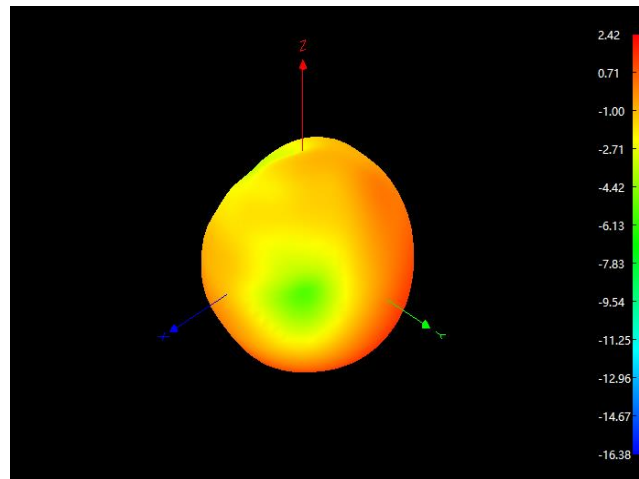
| Frequency (MHz) | Efficiency(%) | Gain (dBi) |
|-----------------|---------------|------------|
| 2400            | 52.29%        | 1.62       |
| 2410            | 52.17%        | 1.71       |
| 2420            | 53.14%        | 1.93       |
| 2430            | 54.16%        | 1.98       |
| 2440            | 57.62%        | 2.00       |
| 2450            | 59.64%        | 2.17       |
| 2460            | 61.55%        | 2.45       |
| 2470            | 60.64%        | 2.38       |

|      |        |      |
|------|--------|------|
| 2480 | 62.86% | 2.50 |
| 2490 | 59.85% | 2.30 |
| 2500 | 60.41% | 2.49 |

## Appendix D Radiation Pattern(1D and 3D)







## Appendix E Test Setup Photo

