

**Antenna  
Test Report**

## BTU Antenna test report

Version 1.0.0

Date: 2021-05-07

NO: 0000000001

Powered by



Intelligence  
Inside

|               |                   |
|---------------|-------------------|
| Product Name: | BTU               |
| Antenna Type: | PCB antenna       |
| Writer:       | Chenlei           |
| Maximum       | Gain: 1.08dBi     |
|               | Efficiency:35.73% |

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## 1. General Description

|               |             |
|---------------|-------------|
| EUT Name      | BTU Antenna |
| Wireless type | BLE         |
| 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

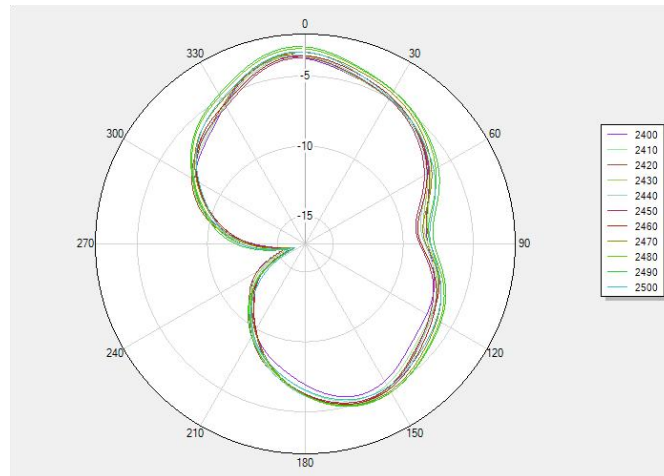
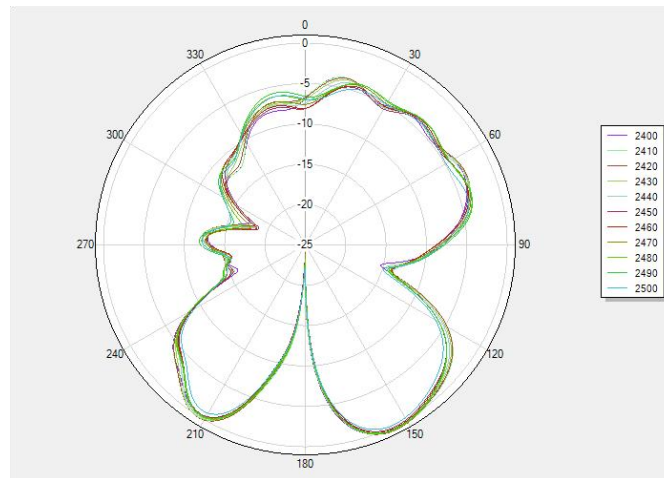
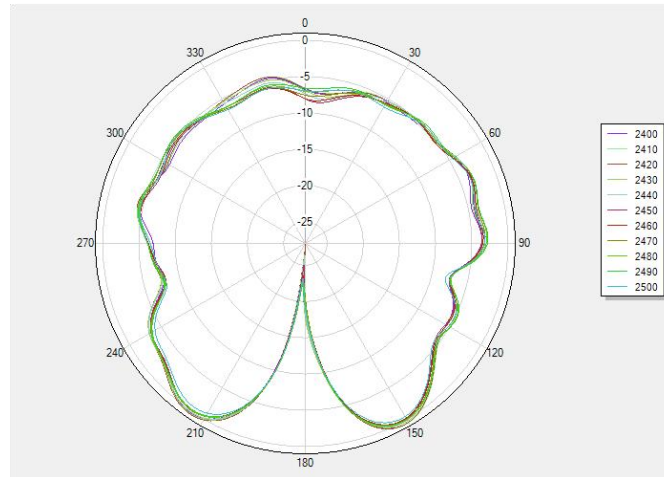
| Frequency (MHz) | 2400  | 2450   | 2500  |
|-----------------|-------|--------|-------|
| Return Loss     | -11.2 | -13.12 | -10.1 |
| VSWR            | 1.8   | 1.6    | 1.9   |

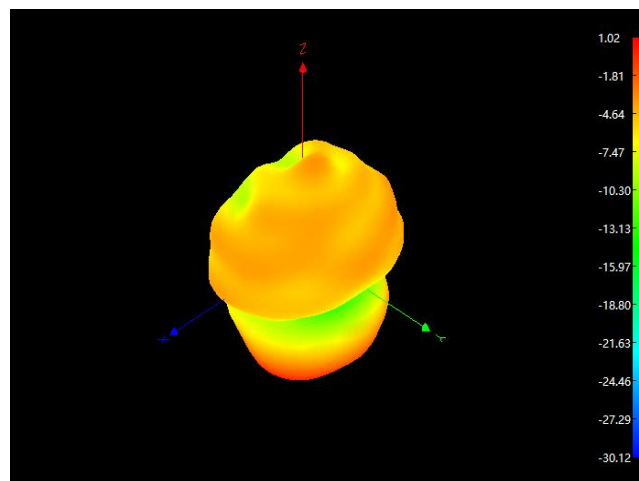
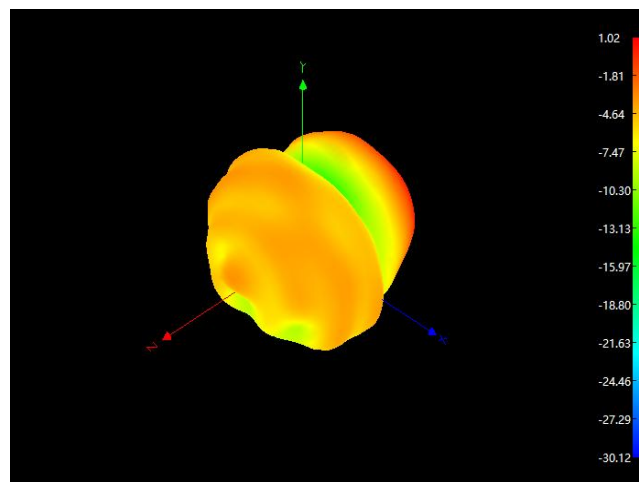
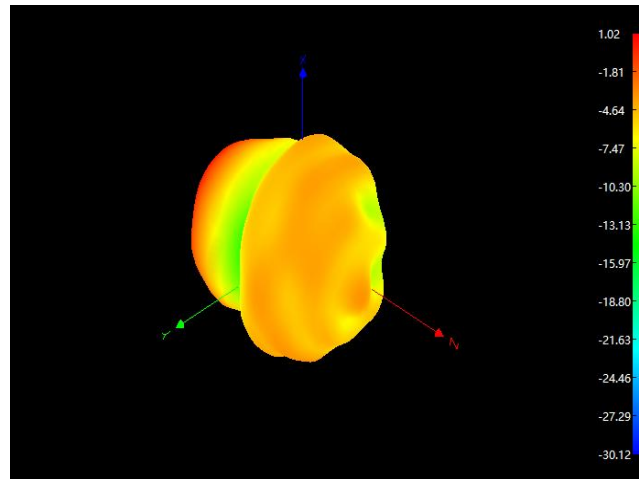
## Appendix C Gain and Efficiency

| Frequency (MHz) | Efficiency(%) | Gain (dBi) |
|-----------------|---------------|------------|
| 2400            | 35.24         | 1.02       |
| 2410            | 35.73         | 1.08       |

|      |       |      |
|------|-------|------|
| 2420 | 35.24 | 1.01 |
| 2430 | 34.91 | 0.81 |
| 2440 | 33.96 | 0.73 |
| 2450 | 32.14 | 0.54 |
| 2460 | 32.06 | 0.65 |
| 2470 | 32.51 | 0.72 |
| 2480 | 33.96 | 0.76 |
| 2490 | 33.19 | 0.67 |
| 2500 | 30.97 | 0.14 |

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







## Appendix E Test Setup Photo

