

BLE-0101 Antenna Specification

Version 1.0

1. **General Information**

1.1. General product infomation

| Model | BLE-0101 |
|----------------|---|
| Manufacture | RYSE Inc. |
| Address | 20 Camden St. Suite 200, Toronto, Ontario, Canada |
| Antenna Type | PCB trace |
| Test Items | Gain; Efficiency; Radiation Pattern |
| Test Frequency | 2400-2500MHz |
| Test Standard | ANSI/IEEE Std 149-1979 IEEE Standard Test Procedures for Antennas |
| Test Location | CVC Testing Technology (Shenzhen) Co., Ltd. |

2. Test Configurations

2.1. Test Environment

| Temperature (°C) | 22.4 |
|----------------------------|------|
| Humidity (%RH) | 54.9 |
| Atmospheric Pressure (kPa) | 101 |

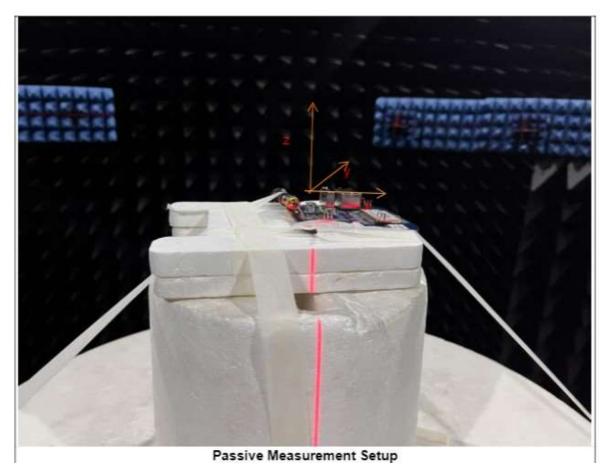
2.2. **Technical Information**

| Frequency Range | 2400MHz-2500MHz | |
|-----------------|-----------------|--|
| Test Frequency | 2400MHz-2500MHz | |

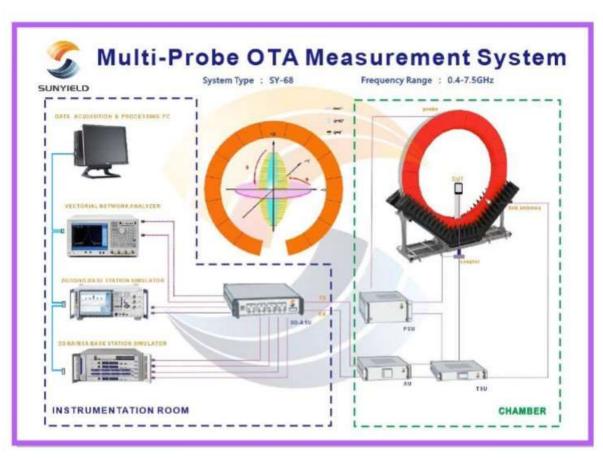
2.3. Measurement uncertainty

| Item | Uncertainty |
|------|-------------|
| Gain | ±0.8dB |

2.4. **Test Configurations**



2.5. **Test Principle**



2.6. **Test Equipments**

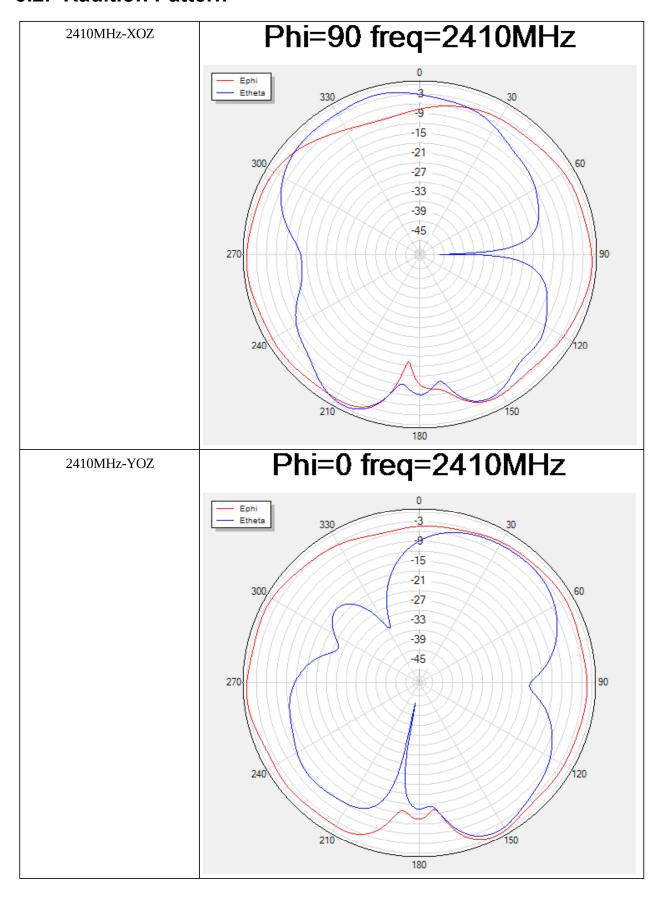
| TestEquipment | Equipment No. | Serial No. | Manufacturer | Type/Mode | Cal.Due | Using |
|--|---------------|------------|--------------|--------------------------------|------------|--------------|
| Shielded Room | CS0300038 | 20211221 | SUN YIELD | 6m*6m*6m | 2024/12/20 | √ |
| Wide band Radio Communication Tester | CS0300068 | 102635 | R&S | CMW270 | 2023/07/04 | × |
| Vector Network Analyzer | CS0300067 | 101544 | R&S | ZNB40 | 2023/06/26 | √ |
| Automatic switching Unit | CS0300039 | 81612472 | / | 5G ACTIVE SWITCHING UINT | 1 | \checkmark |

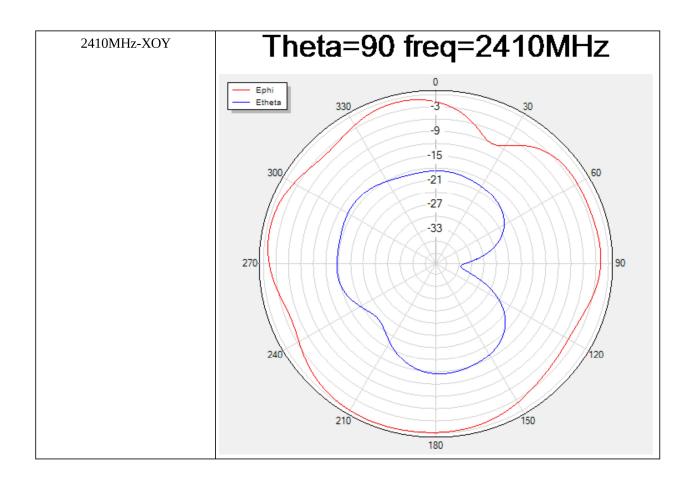
3. Test results

3.1. Gain and Efficienty

| Test Model | BLE-0101 | | |
|-----------------|-------------|----------------|--|
| Sample No. | 1-1 | | |
| Frequency (MHz) | Gain(dBi) | Efficiency(dB) | |
| 2400 | 0.44 | -4.08 | |
| 2410 | <u>0.62</u> | -3.93 | |
| 2420 | 0.49 | -4.06 | |
| 2430 | 0.35 | -4.15 | |
| 2440 | 0.35 | -4.22 | |
| 2450 | 0.43 | -4.15 | |
| 2460 | 0.06 | -4.48 | |
| 2470 | -0.12 | -4.65 | |
| 2480 | -0.41 | -5.06 | |
| 2490 | -0.36 | -5.09 | |
| 2500 | -0.87 | -5.53 | |

3.2. Radition Pattern





4. Antenna Dimension

