

# **Antenna Report**

Model No: HM34BR

FCC ID: 2BFEG-9397

IC: 32170-9397

**Frequency Range of operation:** 2.402GHz-2.480GHz

**Antenna Types:** PCB-Onboard

**Peak Antenna Gain:** 2.51dBi

**Measurement Test Method:**

- 1) Maintain the test ambient temperature of  $23 \pm 2$  C, the instrument is powered on and preheated for more than 30 minutes;
- 2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- 3) Outline sets the test content objectives and conducts calibration tests;
- 4) Run the software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.

**Test Equipment calibration information:**

| Name                    | Manufacturer | Type/Model                     | Serial Number | Calibration |           |
|-------------------------|--------------|--------------------------------|---------------|-------------|-----------|
|                         |              |                                |               | Last Cal.   | Due Date  |
| Network Aanlyzer        | Agilent      | E5071C                         | MY46630767    | 2024.4.24   | 2025.4.23 |
| Network Aanlyzer        | Agilent      | E5071C                         | MY46630767    | 2024.4.24   | 2025.4.23 |
| Microwave chamber       | GTS          | GTS Maxsign-Dart7000           |               | 2024.4.14   | NA        |
| Turn table              | GTS          | Dart-700 turn table            |               | 2024.4.14   | NA        |
| turn table controller   | GTS          | Dart-700 turn table controller |               | 2024.4.14   | NA        |
| Broad-Band Horn Antenna | GTS          | AT-6000                        | MA-D0460      | 2024.4.14   | NA        |
| Test Software           | GTS          | Libra Version-3.0.3.1          |               | 2022.8.23   | 2024.8.23 |

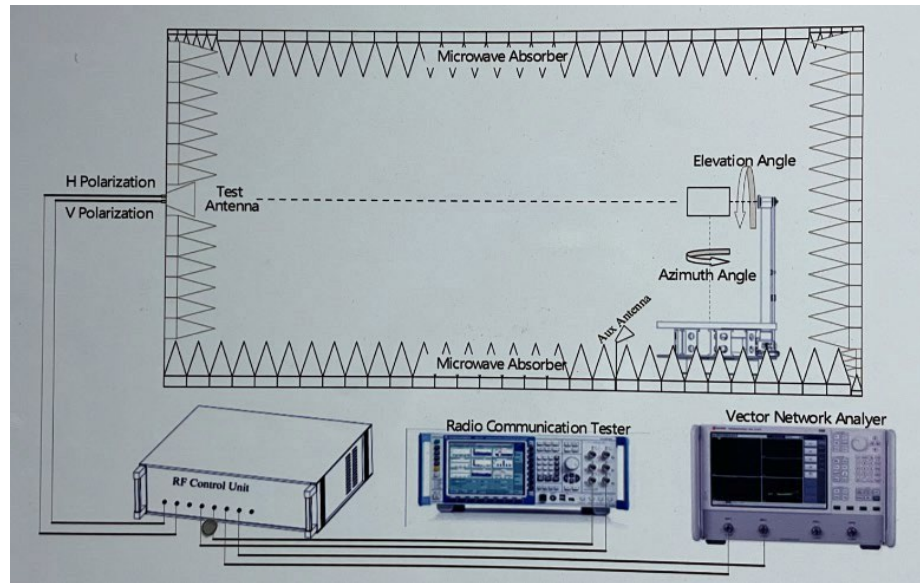
**Company:** Tonly Technology Co., Ltd.

**Test site information:** Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, 516006 China

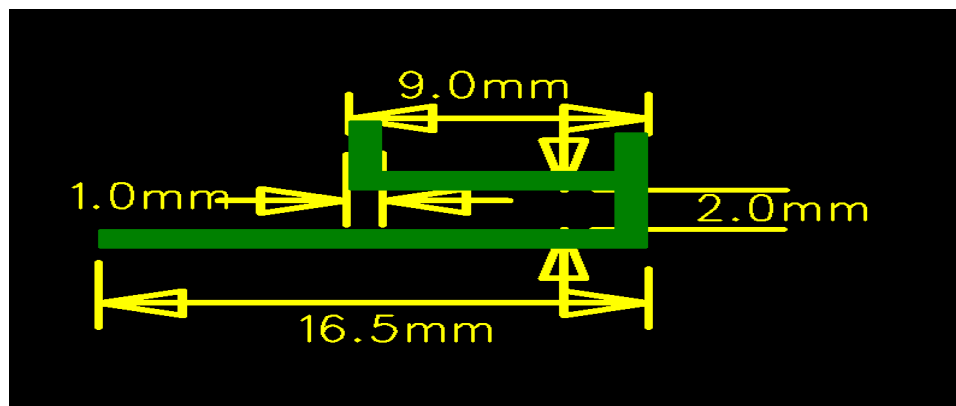
**Test date :** 2024-06-15

Test engineer information: 周麟 Austin.zhou

Test Set up:



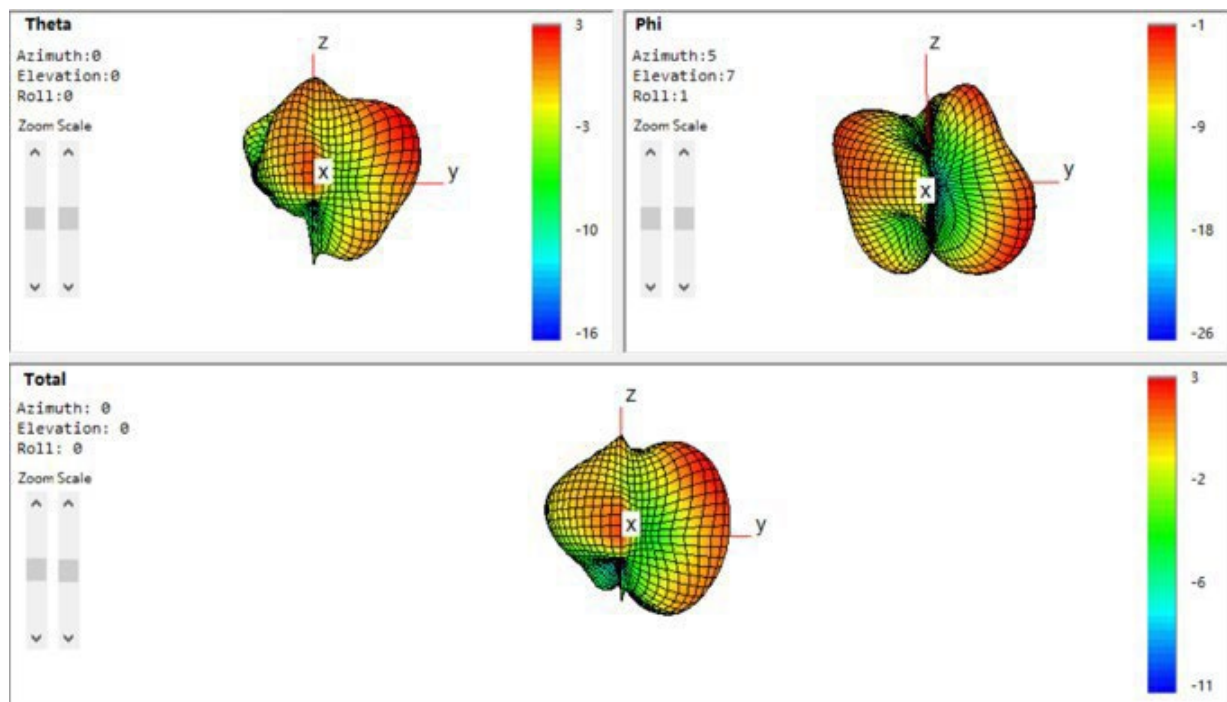
Antenna Size:



## Antenna Performance

| Freq(MHz) | Efficiency(dB) | Efficiency(%) | Gain(dBi) |
|-----------|----------------|---------------|-----------|
| 2400      | -2.24          | 59.74         | 2.41      |
| 2410      | -2.34          | 58.4          | 2.41      |
| 2420      | -2.37          | 57.99         | 2.36      |
| 2430      | -2.23          | 59.86         | 2.4       |
| 2440      | -2.14          | 61.14         | 2.50      |
| 2450      | -2.29          | 58.99         | 2.41      |
| 2460      | -2.31          | 58.8          | 2.44      |
| 2470      | -2.19          | 60.4          | 2.49      |
| 2480      | -2.25          | 59.6          | 2.45      |
| 2490      | -2.12          | 61.33         | 2.51      |
| 2500      | -2.51          | 56.05         | 2.27      |

## Antenna radiation pattern (3D)



Antenna radiation pattern (2D)

