# ANTENNA TEST REPORT

| | |
|---|---|
| **Product :** | **PCB antenna** |
| **Brand:** | **Fanstel** |
| **Model:** | **BM05F** |
| **Model Difference:** | **N/A** |
| **Applicant:** | **Fanstel Corporation, Taipei** |
| **Address:** | **10F-10, No. 79, Sec. 1, Hsin Tai Wu Rd., Hsi-Chih, New Taipei City 221 Taiwan** |

**Test Performed by:**

**International Standards Laboratory Corp. LT Lab.**
TEL: +886-3-263-8888 FAX: +886-3-263-8899
No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan

Report No.: **ISL-25LR0118ANT-A**

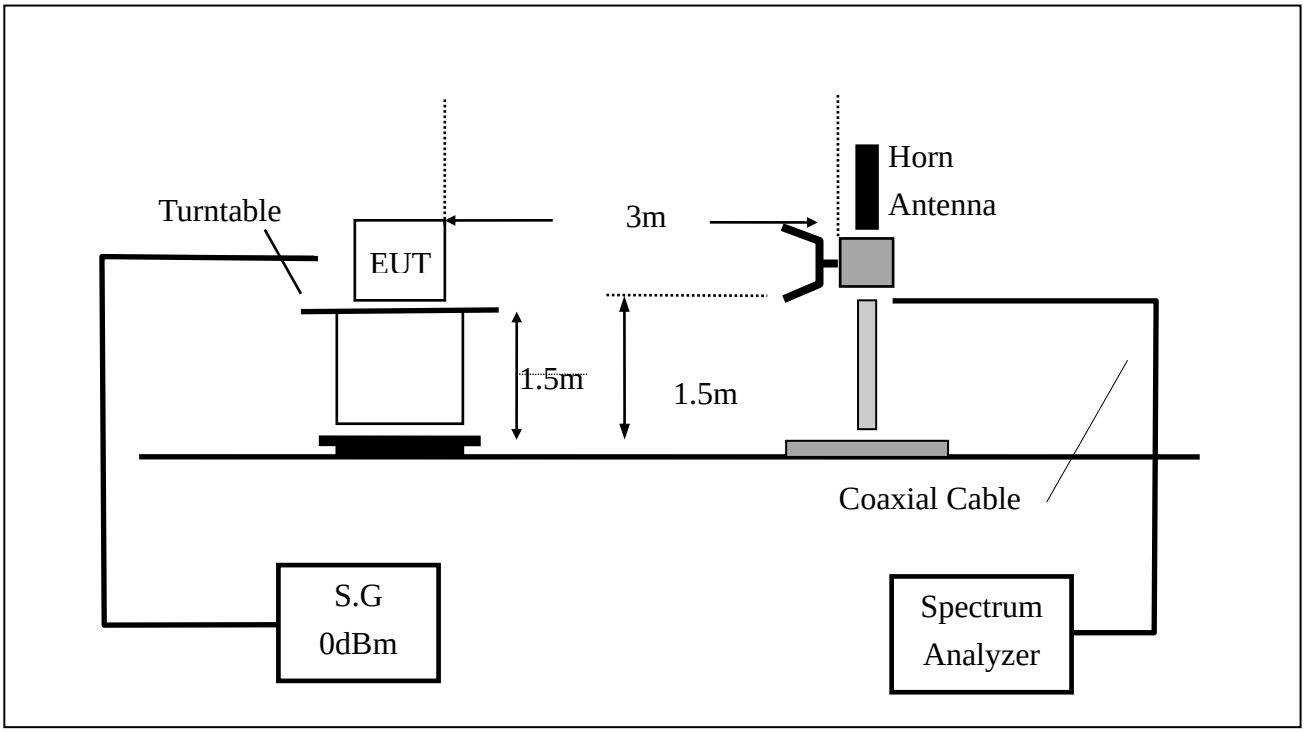
Issue Date : **2025/08/04**

Test By: Barry Lee

Test results given in this report apply only to the specific sample(s) tested and are traceable to national or international standard through calibration of the equipment and evaluating measurement uncertainty herein.

According to customer agreement, the laboratory issues test reports based on the regulations or standards specifications, the measurement uncertainty is not considered in conformity decision rules.

# 1. Test SET-UP (Block Diagram of Configuration)




| Equipment Name | Brand | Model | S/N | Last Cal. Date | Next Cal. Date |
|---|---|---|---|---|---|
| Spectrum Analyzer (44GHz) | R&S | FSV3044 | 101463 | 02/25/2025 | 02/05/2026 |
| Horn antenna (1GHz - 18GHz) | EM | EM-AH-10180 | 2011071401 | 11/28/2024 | 11/28/2025 |
| MXG Vector Signal Generator | Keysight | N5182B | MY53052399 | 12/26/2023 | 12/26/2025 |
| Test Software | Audix | E3 Ver:6.120203 | N/A | N/A | N/A |

## 2. EUT Photo

Figure 1

**2.4G Antenna**

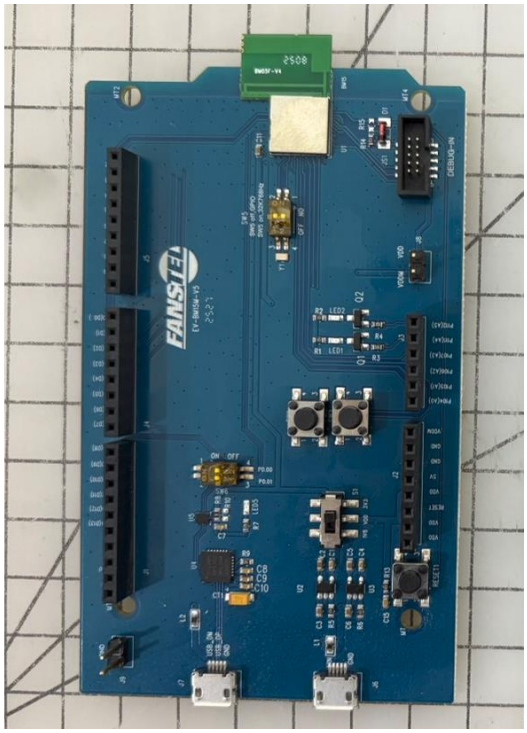
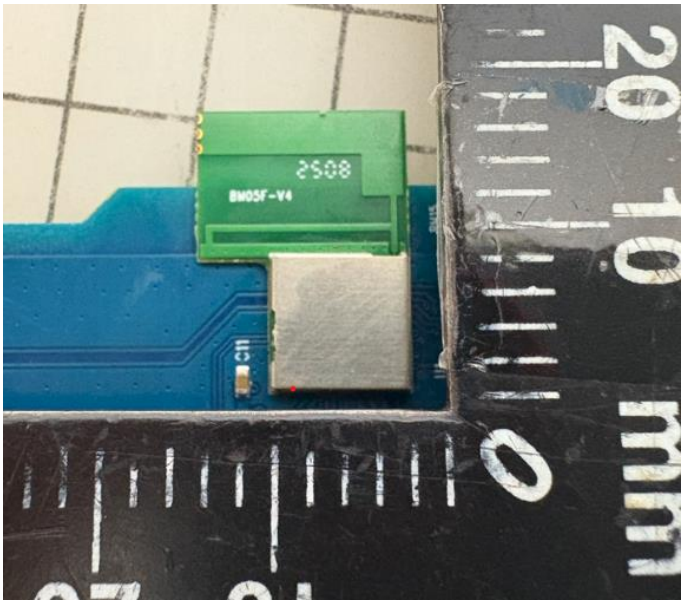


Figure 2



# Test Photo

Figure 1

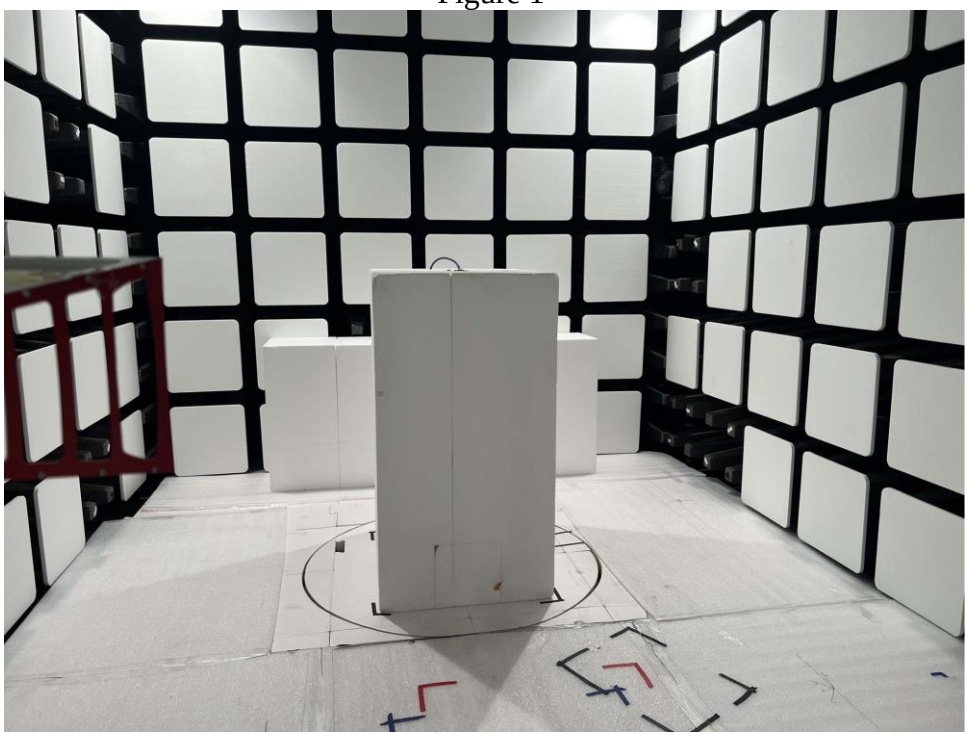
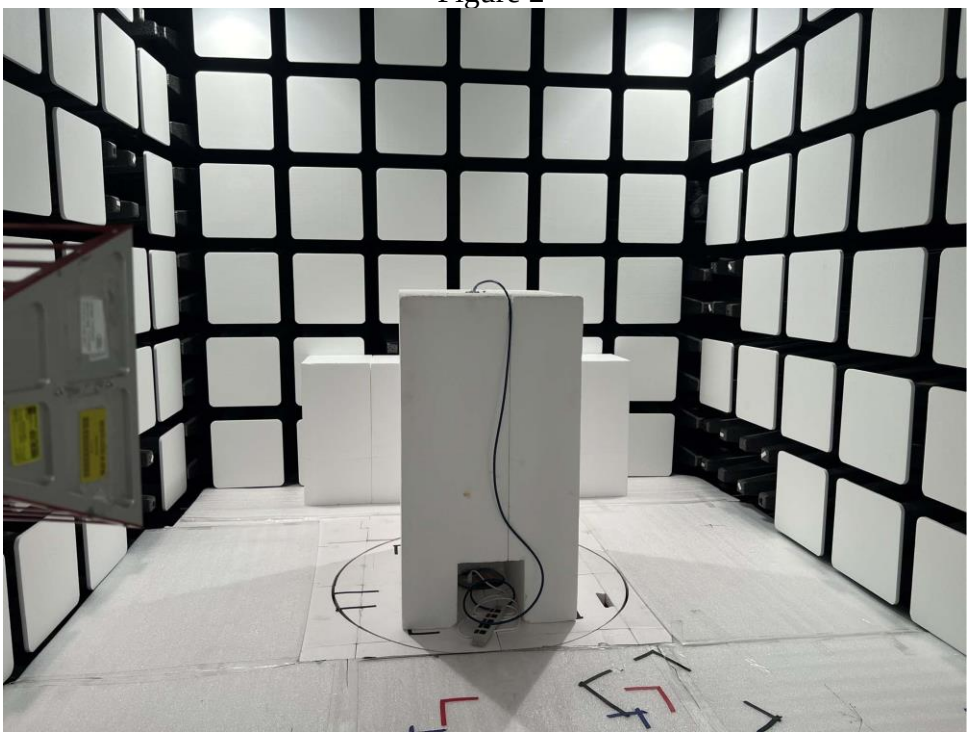


Figure 2



Test Result

**2.4G Antenna**

| **Maximum gain test result:** | |
|---|---|
| Maximum antenna Gain | = 4.54 dBi |

| **Antenna Gain** | **2400** | **2450** | **2500** | **Unit** |
|---|---|---|---|---|
| | 4.42 | 4.54 | 3.77 | dBi |

Figure 1. 2.4G Antenna 2400MHz

Figure 2. 2.4G Antenna 2450MHz

Figure 3. 2.4G Antenna 2500MHz

Figure 1

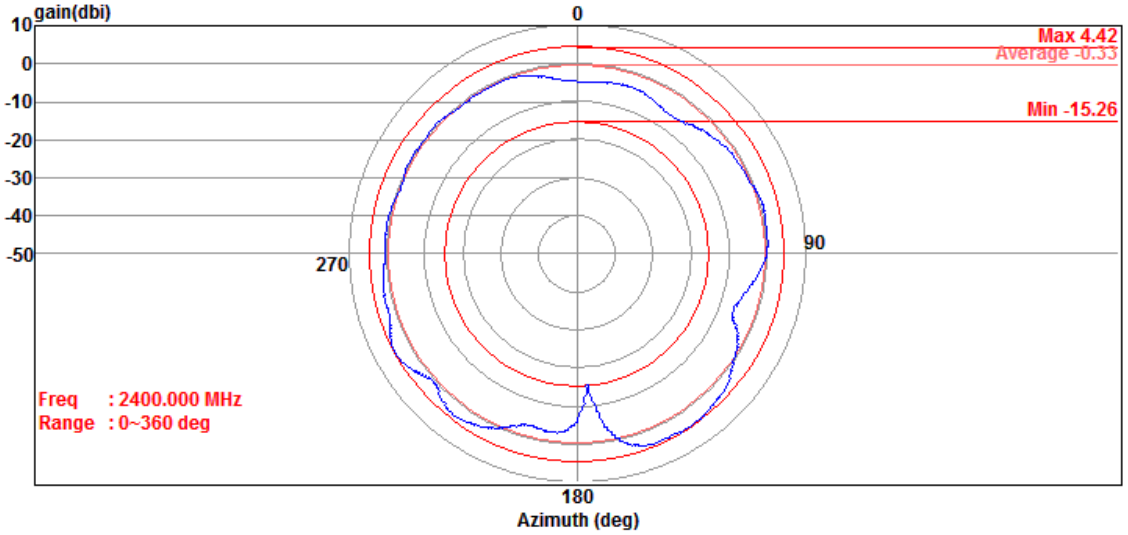



Figure 2

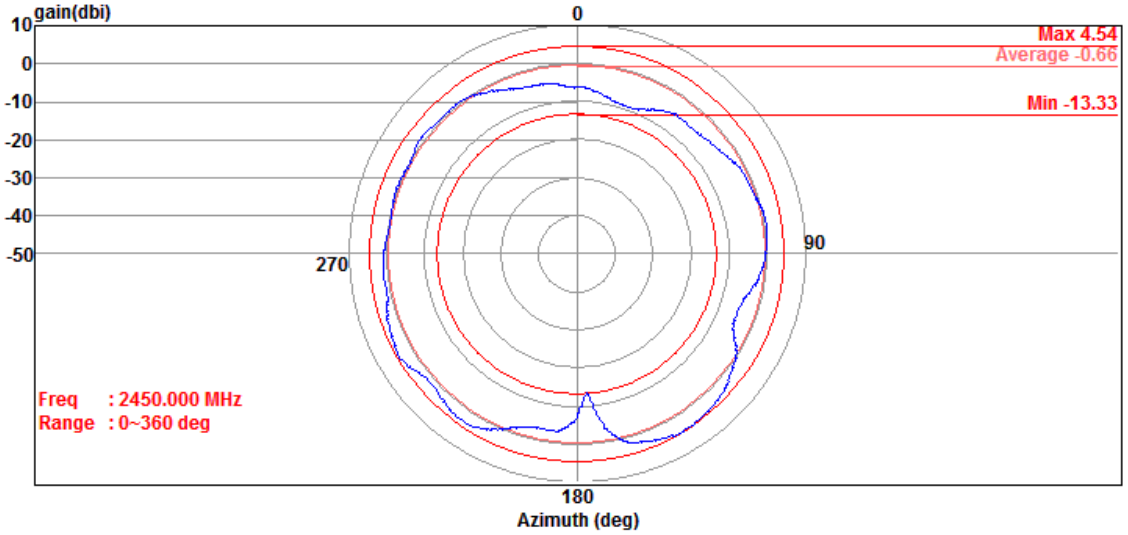
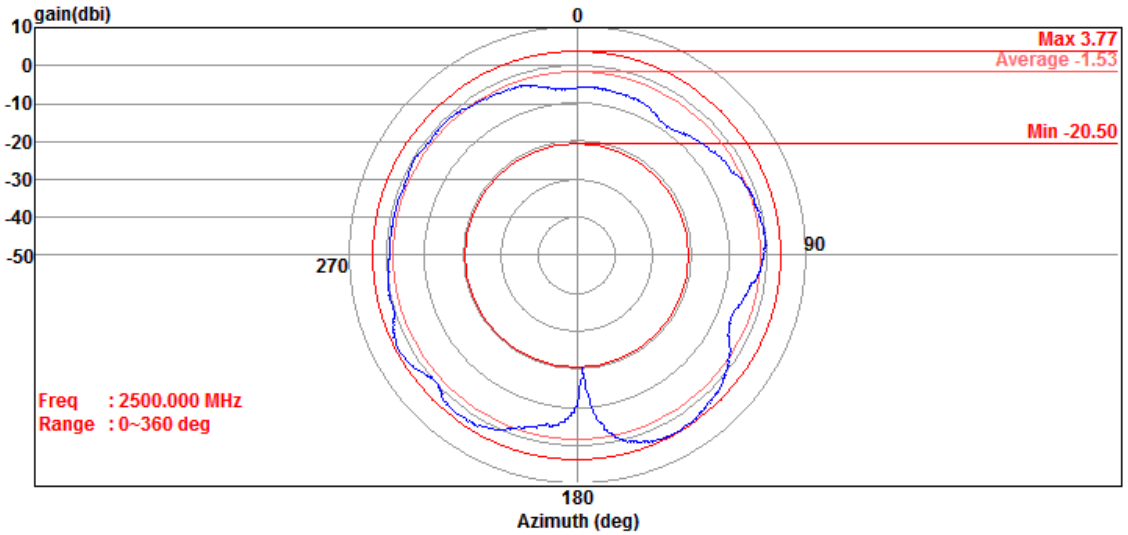


Figure 3


gain(dbi)
10
0
-10
-20
-30
-40
-50
0
90
180
270
Max 3.77
Average -1.53
Min -20.50
Freq : 2500.000 MHz
Range : 0~360 deg
Azimuth (deg)