# 3D Antenna Measurement Summary Report

**REPORT NO.:** ORBDKX-WTW-P25080236

**MODEL NAME:** KB726p-ANT

**TESTED DATE:** 2025.5.21

**ISSUED DATE:** 2025.9.9

**APPLICANT :** PRIMAX ELECTRONICS LTD.

**ADDRESS :** No. 669, Ruey Kuang Road, Neihu, Taipei, Taiwan, R.O.C.

**ISSUED BY:** Bureau Veritas Consumer Products Services (Hong Kong) Limited, Taoyuan Branch Mobile Communications Laboratory

**ADDRESS:** No.19, Hwa Ya 2nd Rd., Kwei shan Dist., Taoyuan City, Taiwan (R.O.C)

The client to claim product certification, approval, or endorsement by TAF, CTIA or any government agencies, should not use this report.

# RELEASE CONTROL RECORD

| REPORT NO. | REASON FOR CHANGE | DATE ISSUED |
|---|---|---|
| ORBDKX-WTW-P25080236 | Original release | 2025.9.9 |
| | | |
| | | |

# TABLE OF CONTENTS

## GENERAL INFORMATION

| | |
|---|---|
| **APPLICANT:** | PRIMAX ELECTRONICS LTD. |
| **MANUFACTURER:** | PRIMAX ELECTRONICS LTD. |
| **MODEL NAME:** | KB726p-ANT |
| **ANTENNA TYPE:** | PIFA Antenna |
| **MEASUREMENT STATNDARD** | ANSI/IEEE Std 149 2021 |

**TESTED BY :** Leo Chen / Engineer **, DATE :** 2025.9.9

**PREPARED BY :** Johnny Liu / Supervisor **, DATE :** 2025.9.9

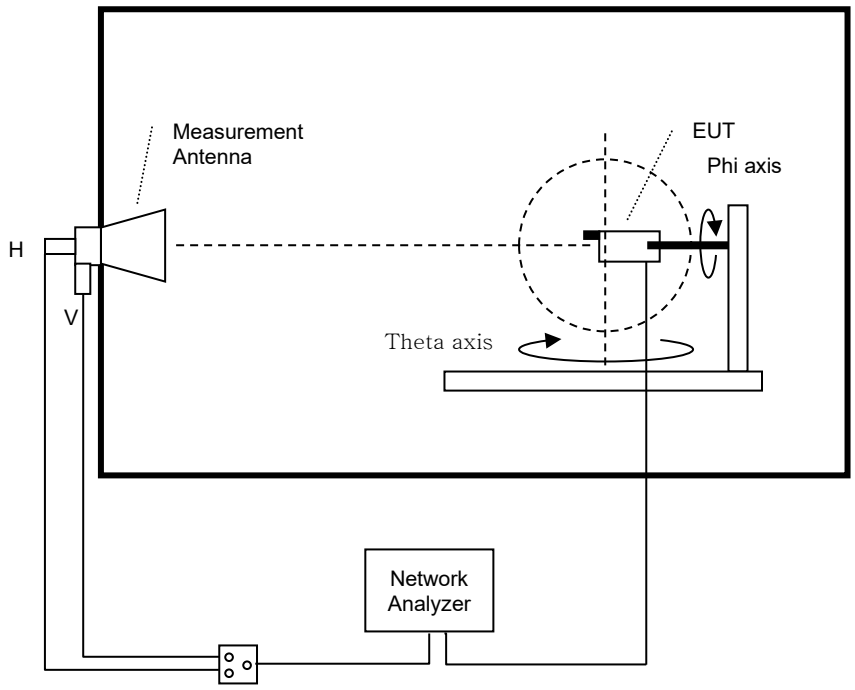
**APPROVED BY :** Ken Chan / Manager **, DATE :** 2025.9.9

# 1. Test Methods

The Antenna Gain Test is performed according to The ANSI/IEEE Std 149 12.3.1 Antenna Gain (Small size (< 42cm) Linear Polarization Antennas), using a two-axis support device and one fixed measurement antenna. The EUT is positioned along the required MAPS centerline fixture holder. The EUT is then stepped between 0 and 180 degrees along the theta axis in 15-degree increments. At each theta position, the phi axis is stepped from 0-360 degrees in 15-degree increments. Data is recorded using the Network analyzer for both theta and phi polarizations at each position. Depending on the protocol, an appropriate filter is used in the EMQuest software to process the data. Upon completion of the test, test results (angular dependent EIRP) is calculated at each measurement point and the required value is automatically calculated. This test procedure is repeated for frequency and configuration as required.

# 2. Description of the anechoic chamber:

**Length: 7.32 m**
**Width: 3.66 m**
**Height: 3.51 m**



## 3. Test Equipment List

| TYPE OF EQUIPMENT | MODEL NUMBER | SERIAL NUMBER | CALIBRATION DUE DATE |
|---|---|---|---|
| (OTA3-HY) ETS Anechoic Chamber | ETS-Lindgren AMS-8500 | CT0000411-1132 | N/A |
| Measurement Software | ETS-Lindgren EMQuest V1.14 build 31654 | 1281 | N/A |
| Multi-Axis Positioning System | ETS-Lindgren 2090-OPTI | 00086248 | N/A |
| Switch Control | Agilent 3499A | MY42005285 | N/A |
| Network Analyzer | Agilent E5071C | MY46104190 | 2026/7/10 |

## 4. Measurement Uncertainty

Expanded Uncertainty for Measurement (k=2 or 95.45% Confidence Level) at Passive antenna test over frequency range:.

| FREQUENCY RANGE | MEASUREMENT UNCERTAINTY |
|---|---|
| 780~2200 MHz | 1.40 dB |
| 2200~3000 MHz | 1.72 dB |
| 3000~6000 MHz | 3.86 dB |

## 5. Testing Setup Photograph

Please refer to another document - Test Setup and EUT photographs. (APPENDIX.)

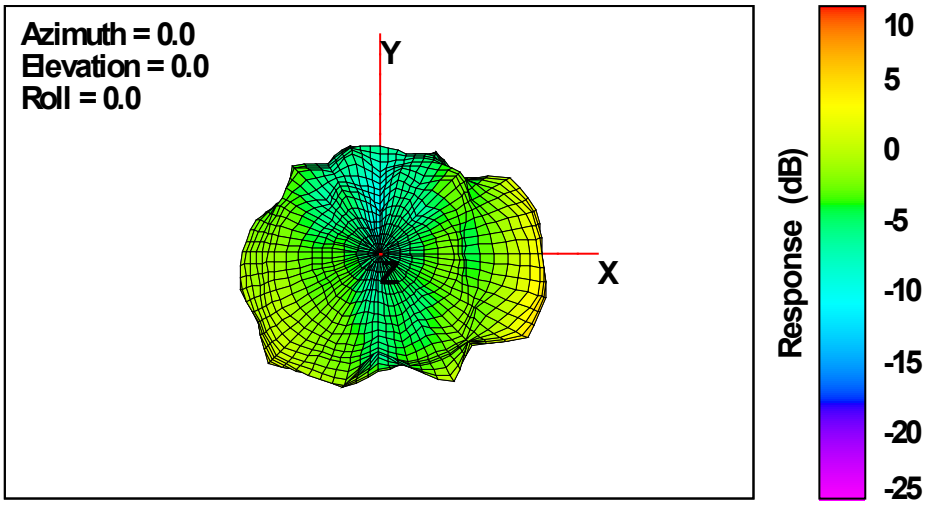
## 6. Antenna Radiation Performance

| Frequency (MHz) | 2350 | 2400 | 2402 | 2440 | 2450 | 2479 | 2480 | 2500 |
|---|---|---|---|---|---|---|---|---|
| Average Gain (dBi) | -1.94 | -1.90 | -1.90 | -1.82 | -1.89 | -2.01 | -2.01 | -2.02 |
| Peak Gain (dBi) | 5.40 | 4.94 | 4.93 | 4.59 | 4.43 | 4.10 | 4.09 | 3.93 |
| Efficiency (%) | 63.96 | 64.51 | 64.63 | 65.82 | 64.65 | 62.91 | 62.92 | 62.87 |

## 7. 3D Antenna Patterns

2350MHz

Total

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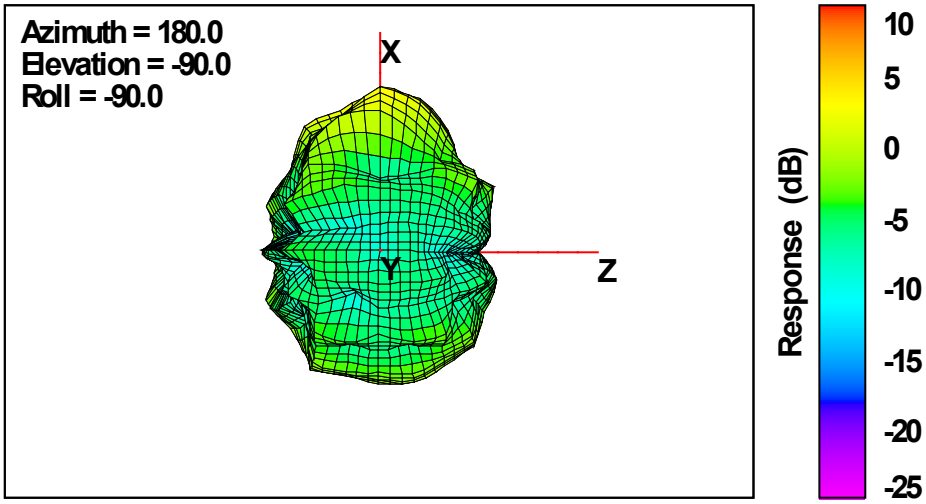


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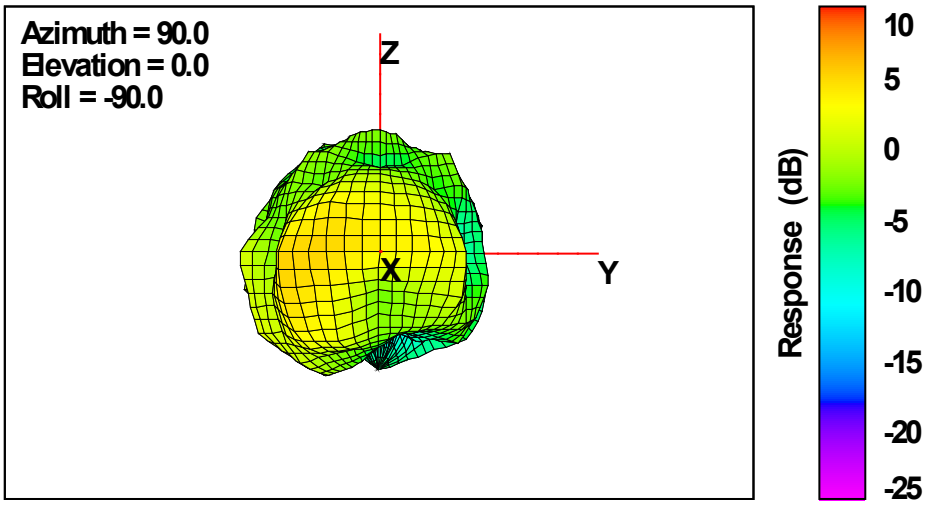

2400MHz

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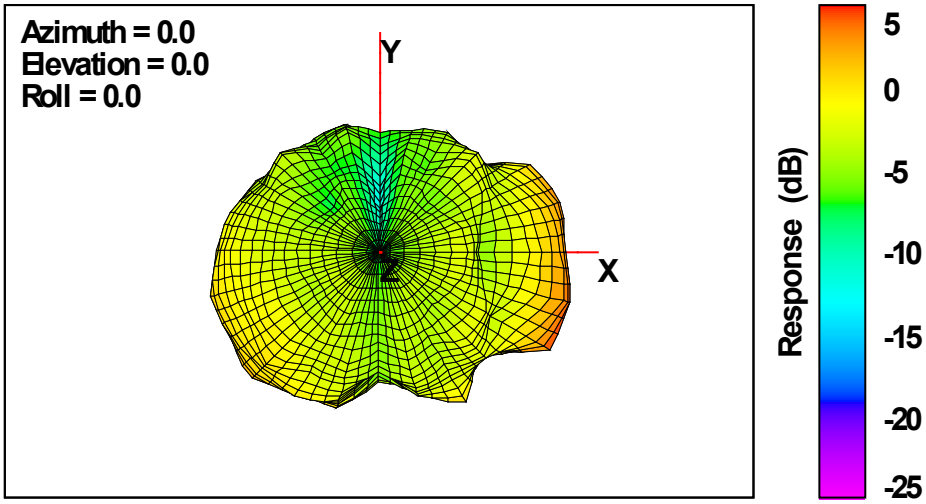


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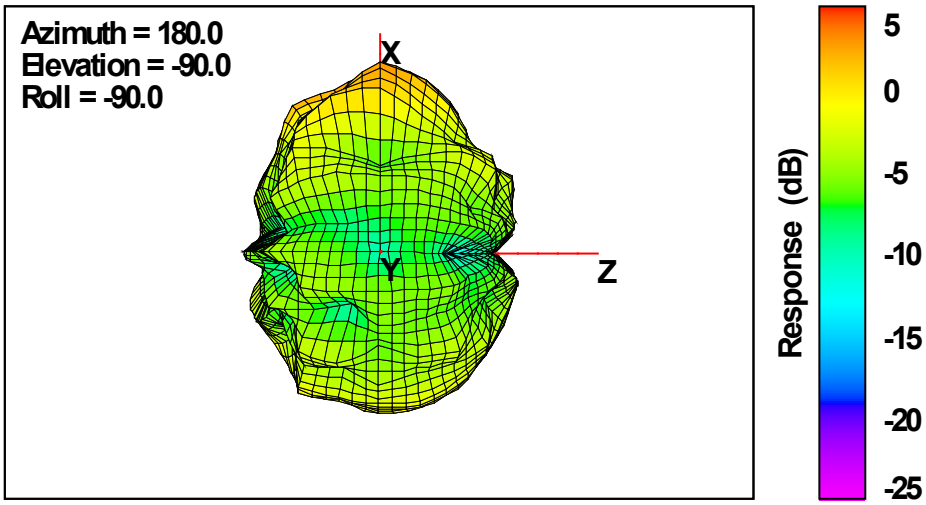


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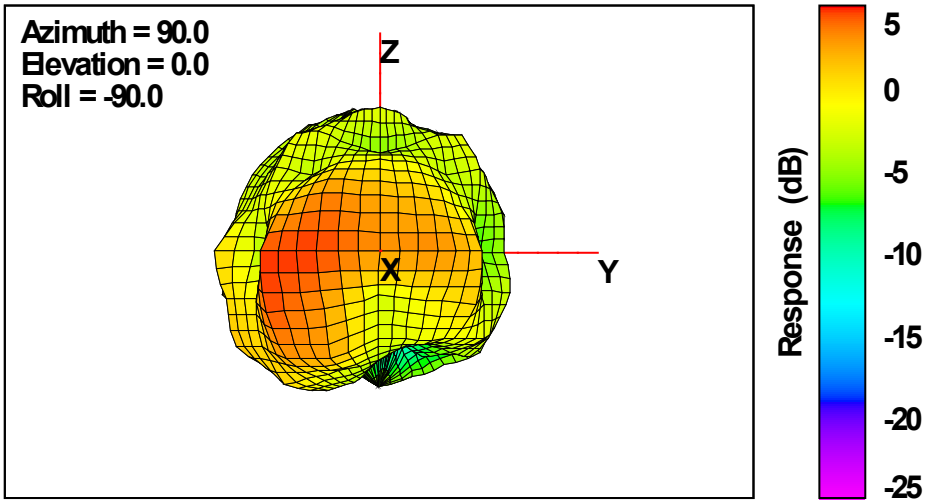
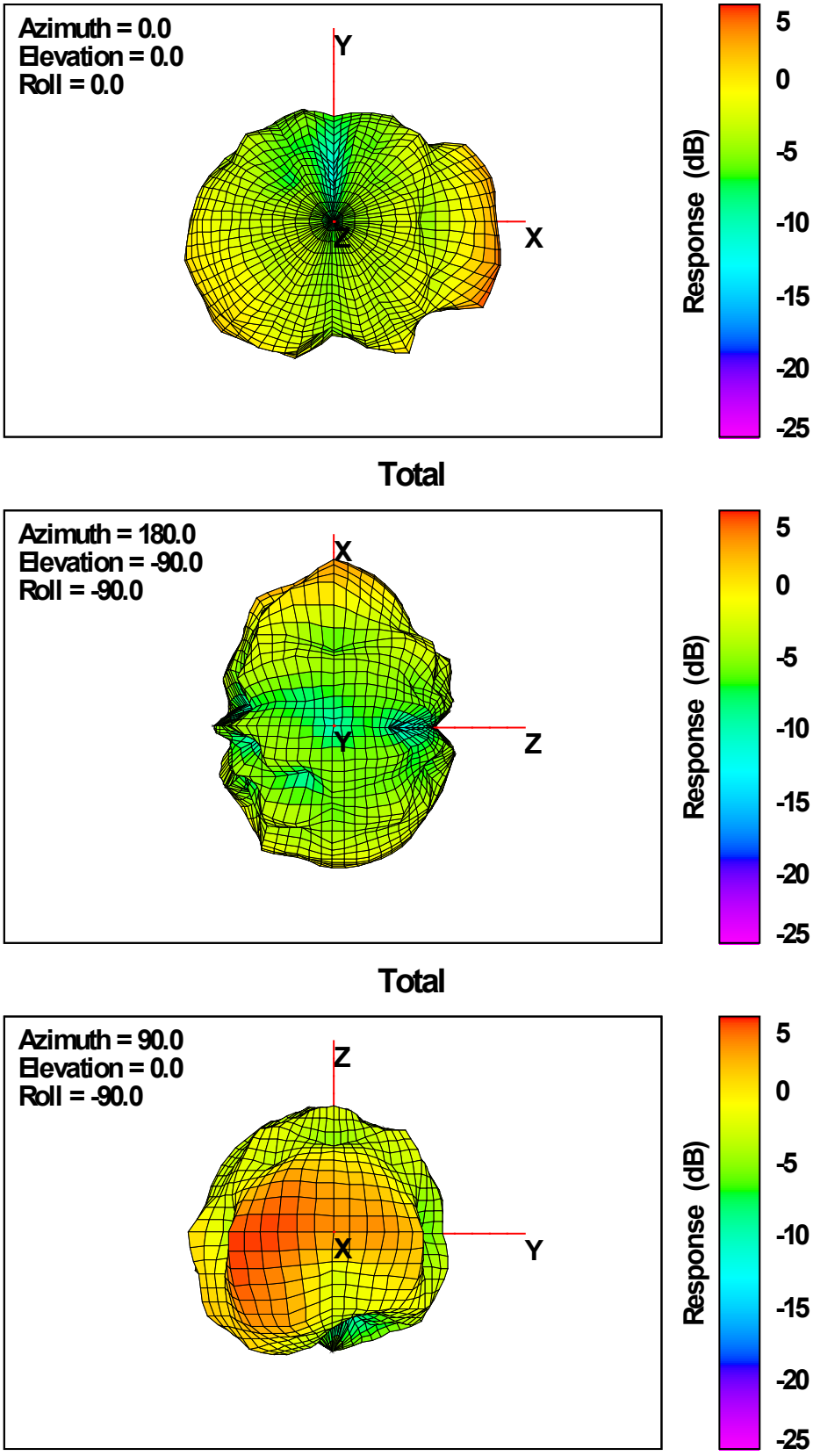


2402MHz

Total



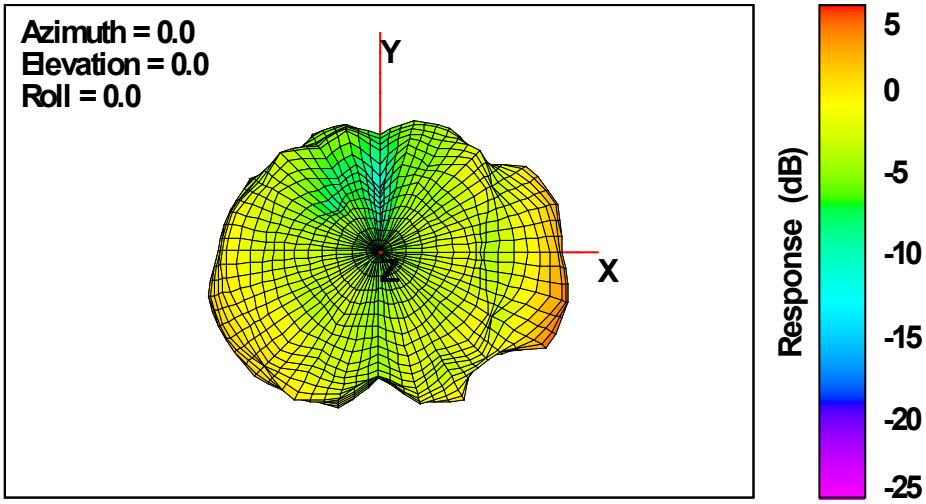

Total




Total

2440MHz

Total

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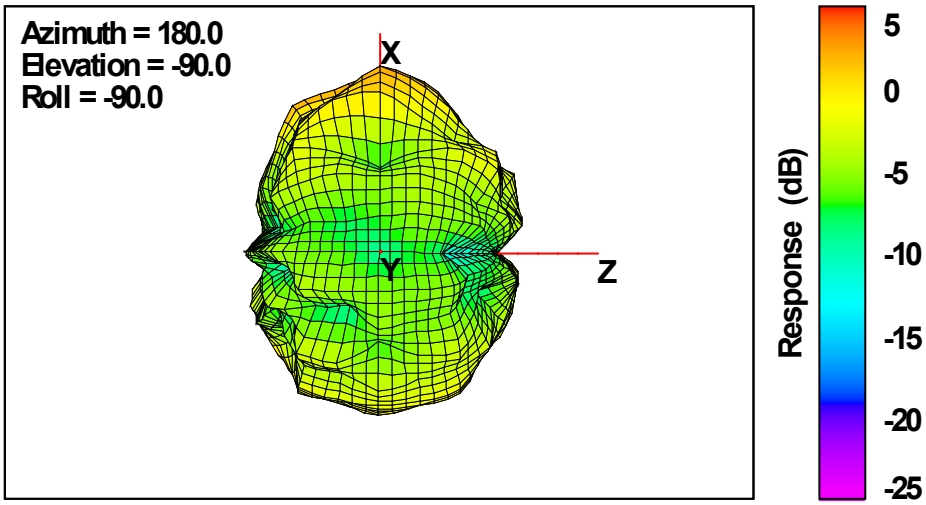


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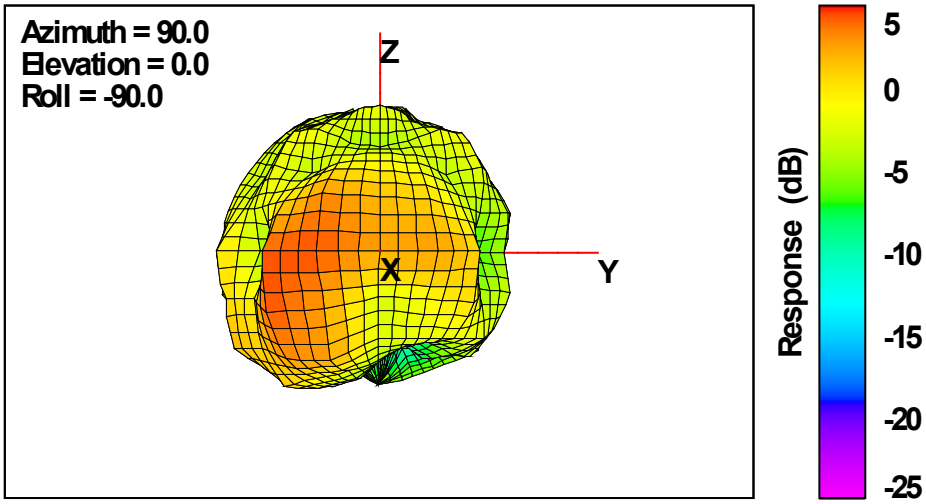
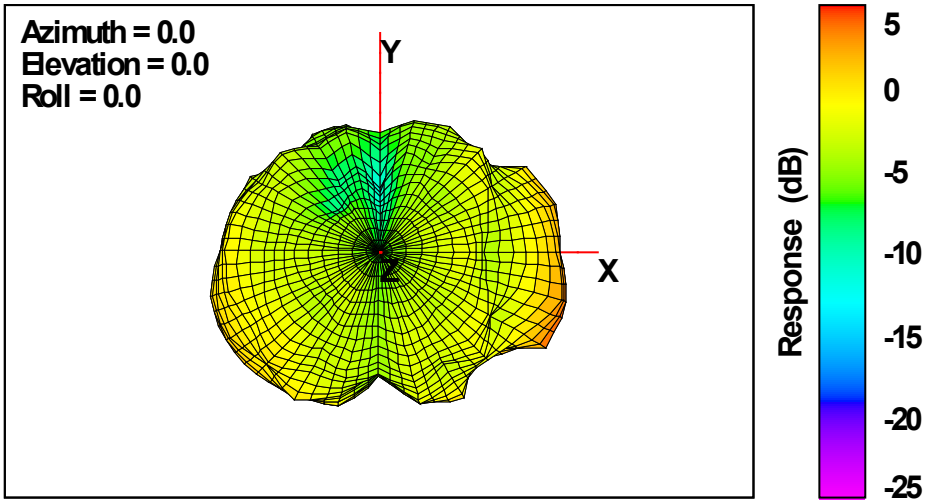


2450MHz

Total

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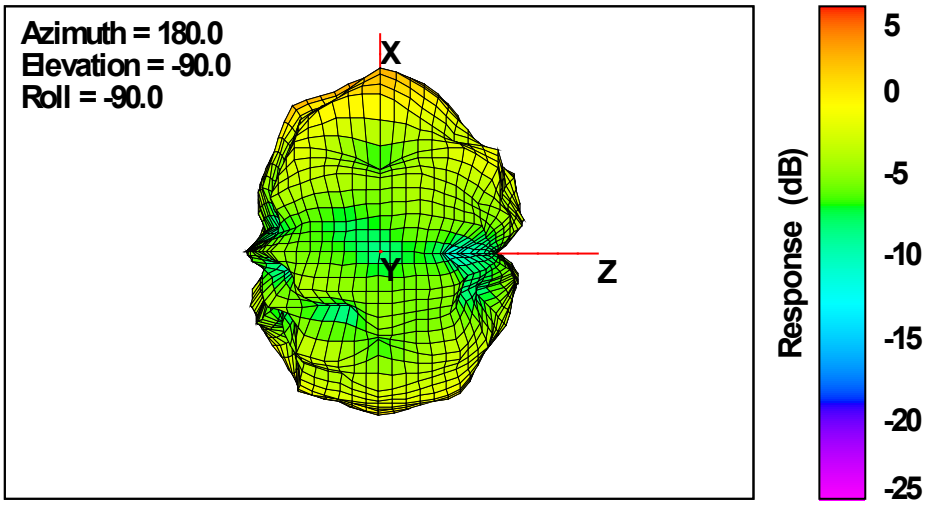


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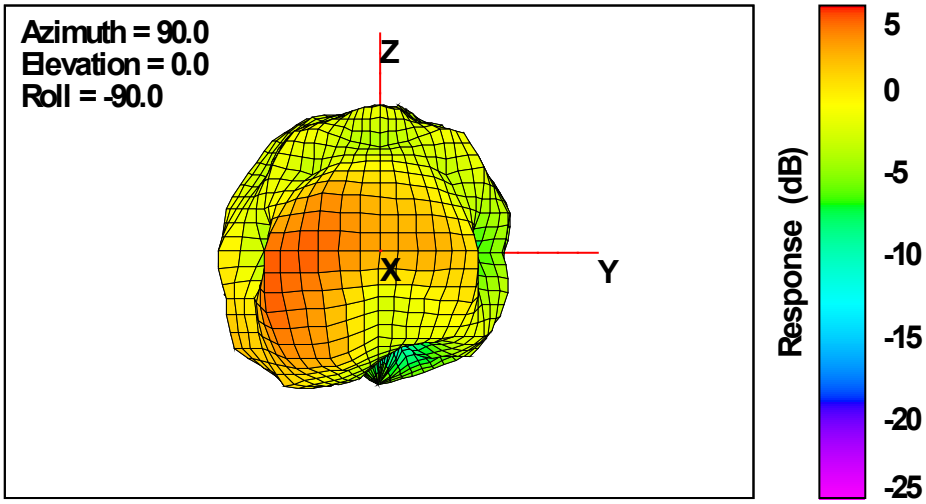
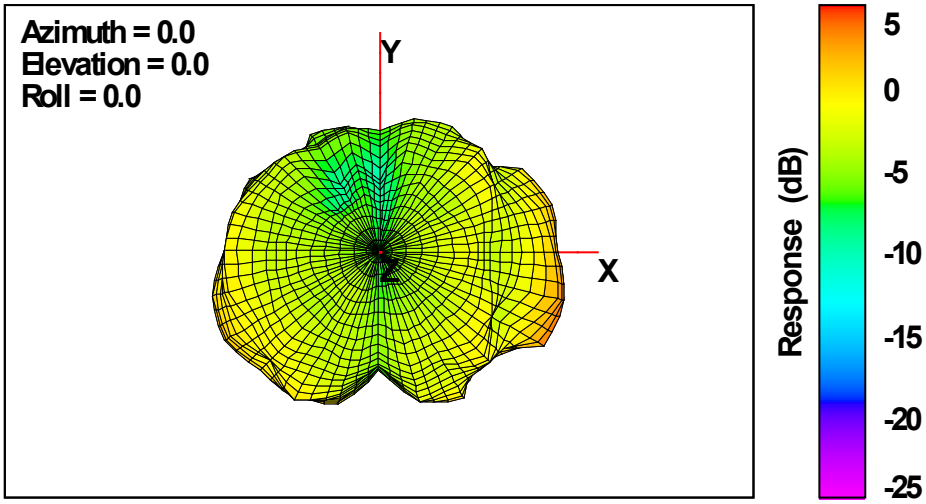


2479MHz

Total

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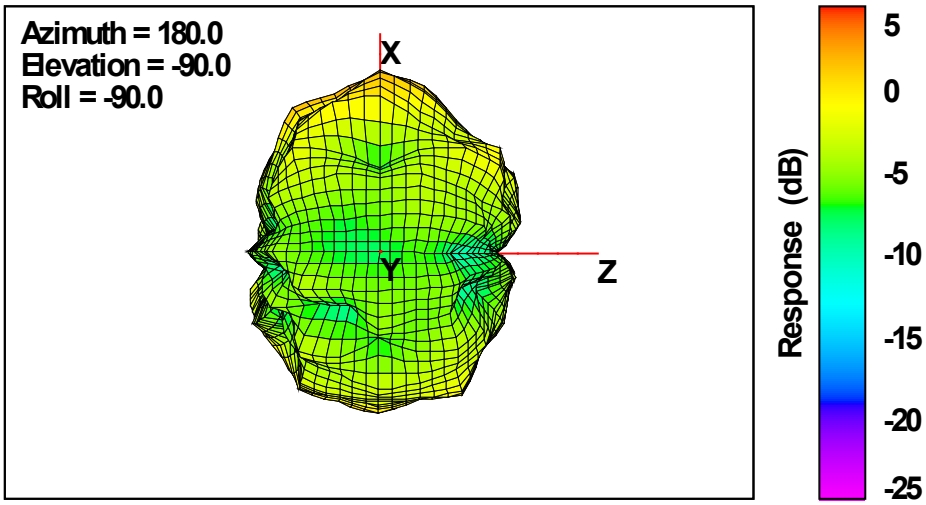


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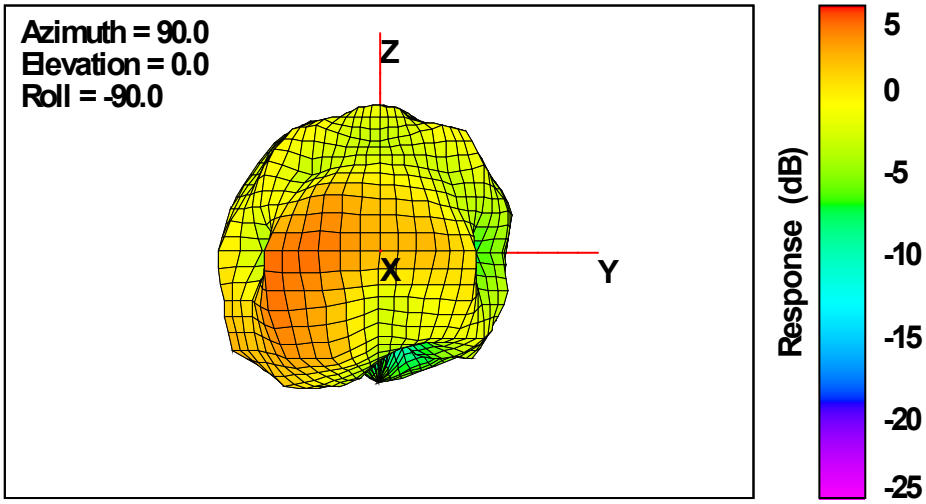
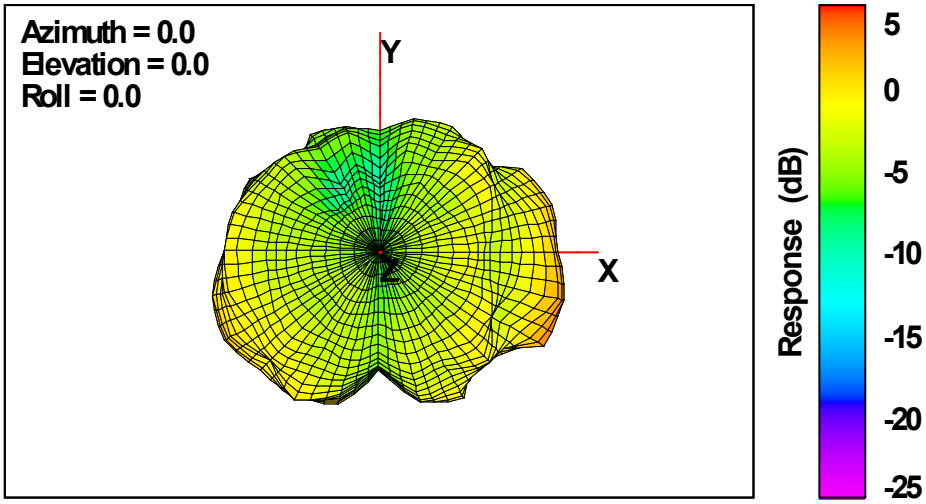


2480MHz

Total

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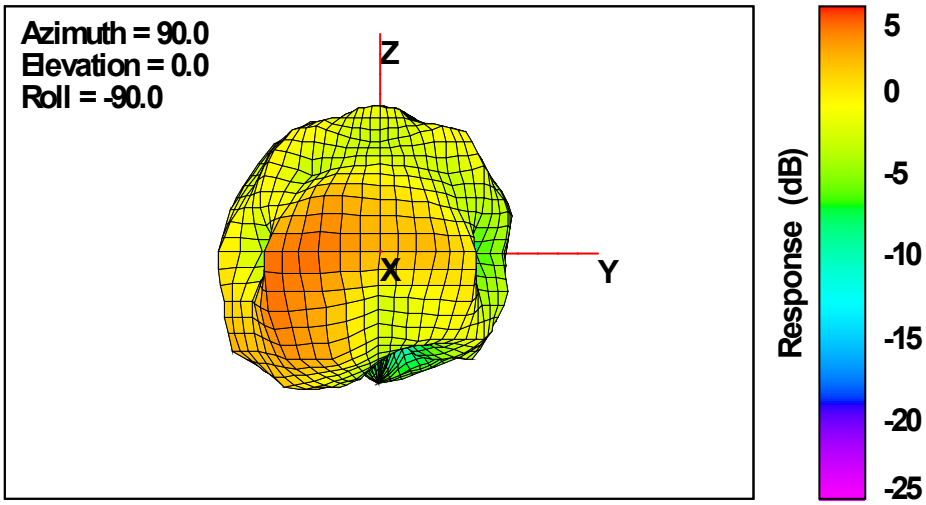


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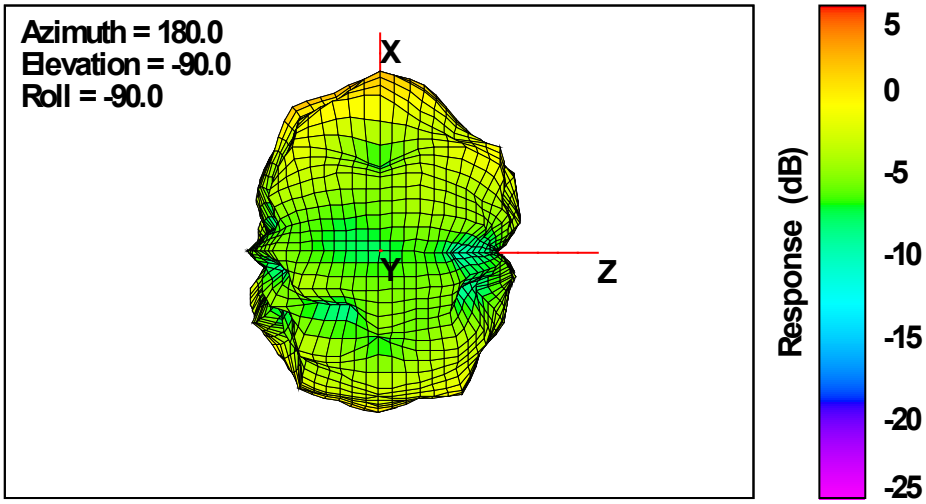
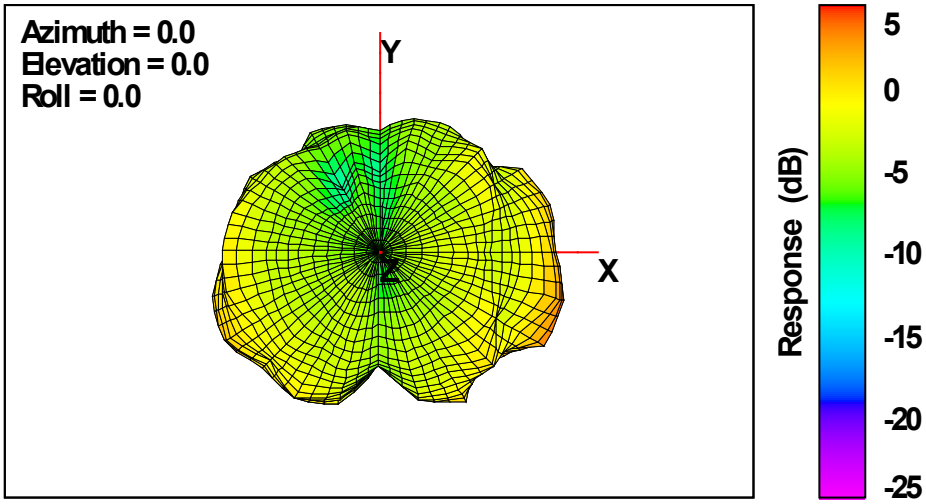


2500MHz

Total

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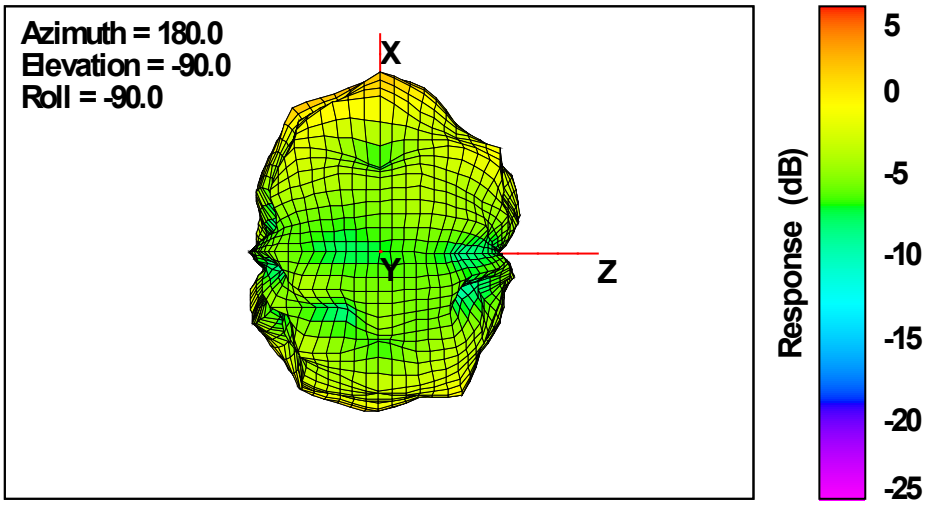


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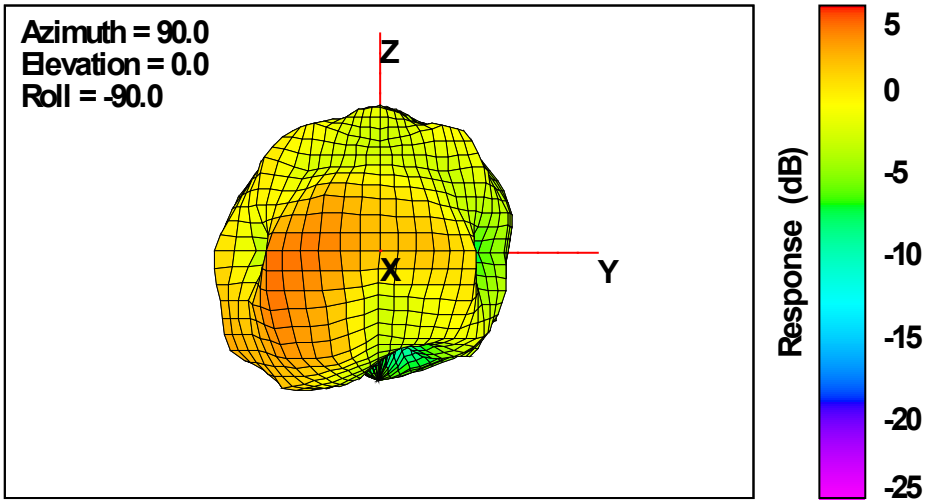

## APPENDIX. EUT photographs

Please refer to another document - Test Setup and EUT photographs. (APPENDIX.)