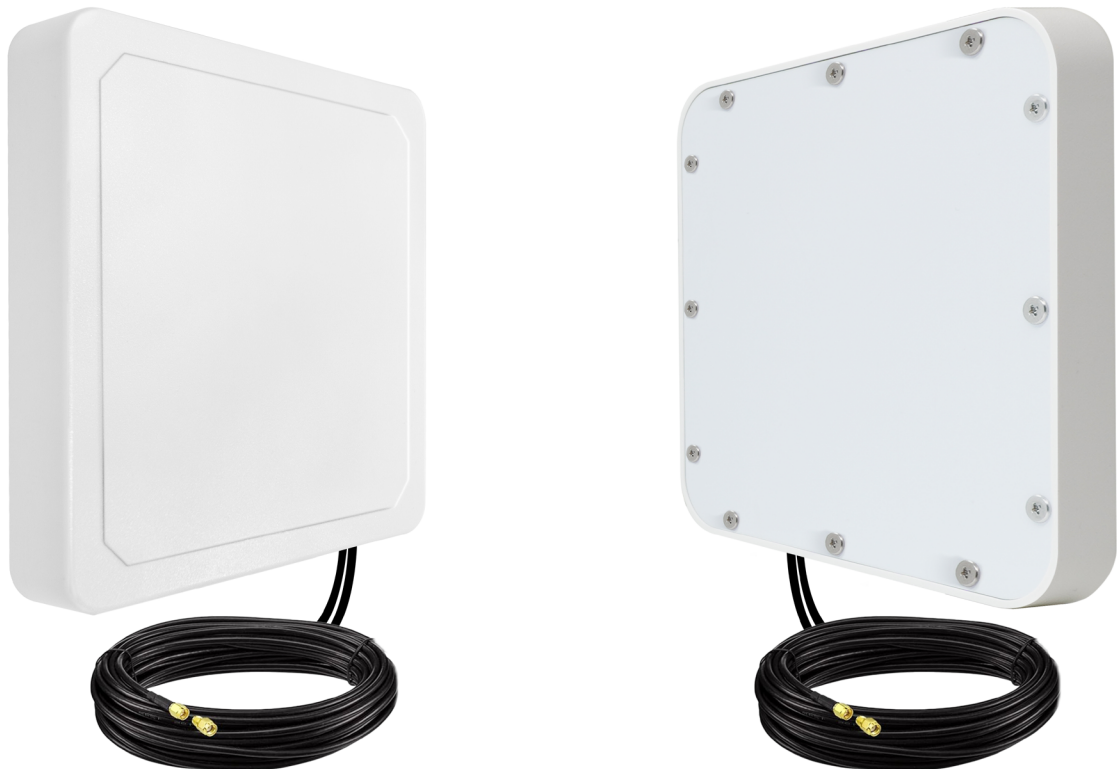


5G/4G/3G

MIMO ADHESIVE MOUNT PANEL ANTENNA



617-960 MHz | 1400-6000 MHz



Model: AECA013
PN: M02-0100110R0A
Dimensions: 129 x 129 x 20 mm





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1 FEATURES & BENEFITS

- Omni-directional MIMO Performance
- 4G/5G LTE Worldwide Ready
- Multiple Mounting Options
- Perfect for Indoor or Outdoor Use
- RF Cables and Connectors Customization Supported

2 APPLICATIONS

- Smart cities, smart agriculture
- Public spaces, small cells and hotspots
- Residential areas, tourist destinations
- Connectivity for IoT devices
- Transportation hubs
- Maritime & Port areas
- Branch Office & Enterprise
- Failover
- Rural broadband

20mm
129mm
129mm
SMA Male Connector
RG174(Φ2.8)
2000mm

Equipped with an assistant tool for easy tightening or removal of the SMA connector

| Items | Dimensions (mm) |
|--------------|-----------------|
| Length | 129±2 |
| Width | 129±2 |
| Thickness | 20±1 |
| Cable Length | 2000±30 |



3 ORDER INFORMATION

| | |
|--------------|--|
| Product Name | 5G/4G/3G MIMO Adhesive Mount Panel Antenna |
| Model | AECA013 |
| Part Number | M02-0100110R0A |
| Dimensions | 129 x 129 x 20 mm |
| Weight | 190 g |
| Color | White |
| Mounting | Adhesive / Panel Mount |
| Cable | Default \varnothing 2.8 x 2000 mm cable, customizable. |
| Connector | Default SMA MALE connector, customizable. |

4 REFERENCE GUIDE

| Technical Features (MHz) | ANT 1 (Left port) | | ANT 2 (Right port) | |
|--------------------------------------|----------------------|-----------|----------------------|-----------|
| | 617-960 | 1400-6000 | 617-960 | 1400-6000 |
| Max VSWR | 3.10:1 | 1.69:1 | 3.16:1 | 2.05:1 |
| Max Efficiency | 54.1% | | 64.81% | |
| Peak Gain | Up to 4.23 dBi (Typ) | | Up to 1.49 dBi (Typ) | |
| Correlation Co-efficient (all bands) | <0.1 | | | |
| Max Input Power | 10 Watts CW | | | |
| Radiation Pattern | Omnidirectional | | | |
| Polarization | Linear | | | |
| Input Impedance | 50 Ω | | | |
| Operating Temperature | -40°C to +85°C | | | |
| Storage Temperature | -40°C to +85°C | | | |
| Relative Humidity | 10 to 70% | | | |
| Material Substance Compliance | RoHS Compliant | | | |

All data were measured with two RG174 2-meter-long coaxial cables. Application data might vary.

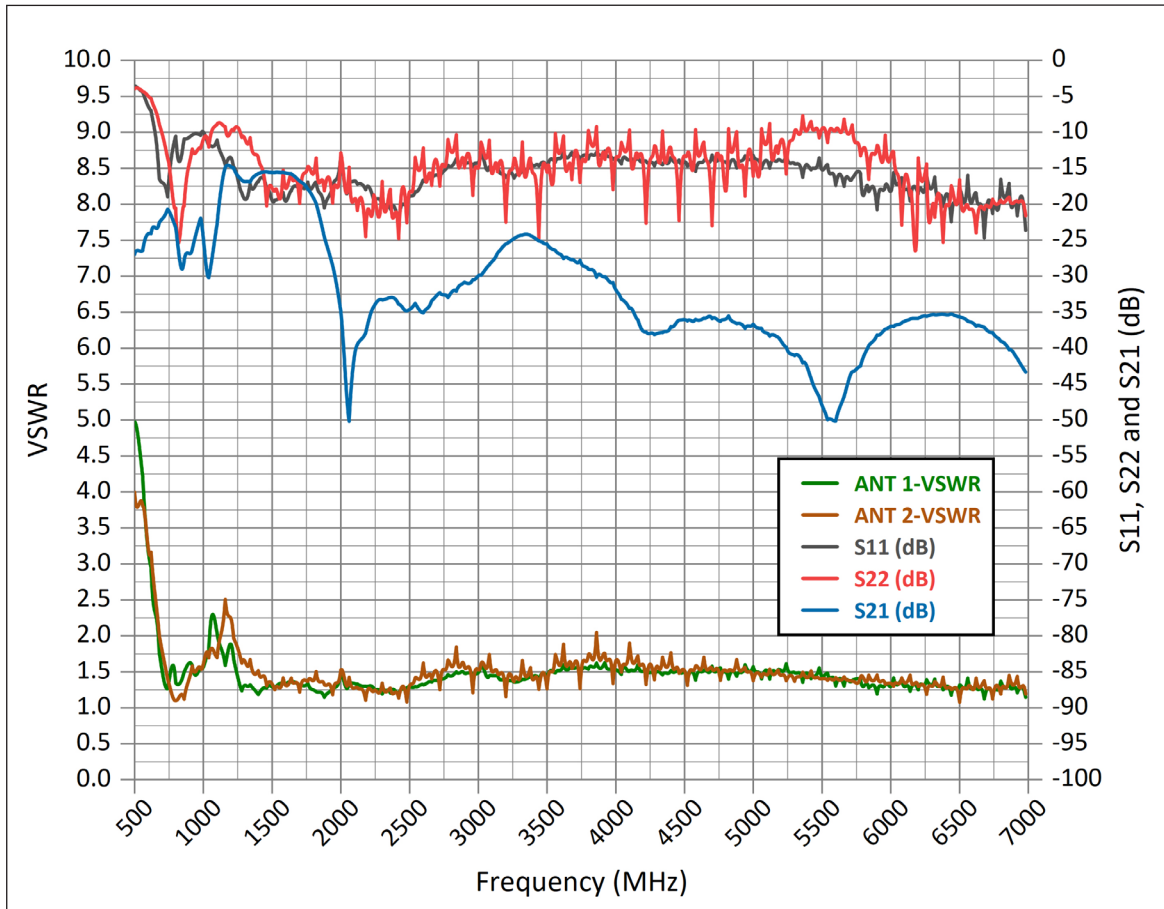
5 ELECTRICAL PERFORMANCE

© **Note**

All data displayed in Chapter 5 were measured using two 2-meter-long coaxial cables. 'ANT 1' refers to the antenna tested with cable 1, while 'ANT 2' refers to the antenna tested with cable 2, as shown below.



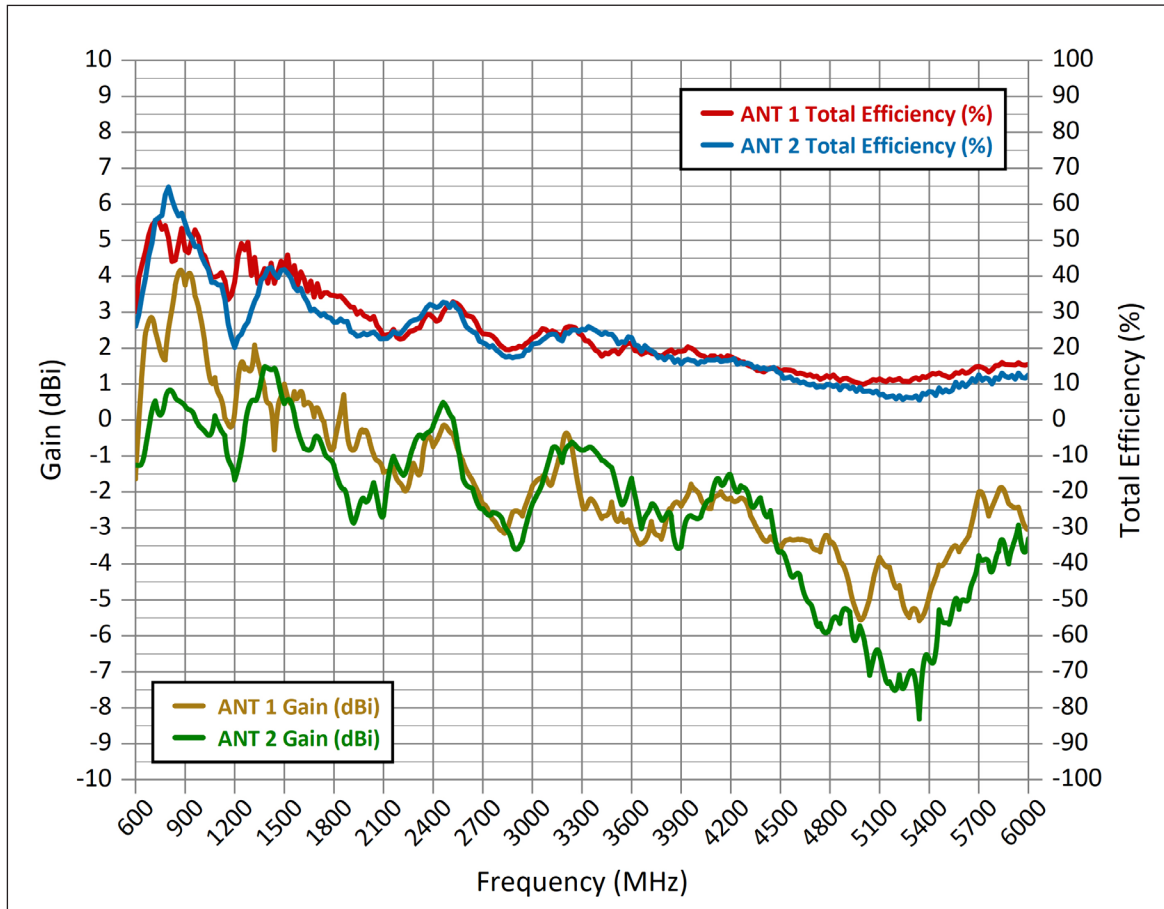
5.1 VSWR, S11, S22 and Isolation (S21)



Note: Data measured in free space with 2m(6') of RG174 Cable



5.2 Gain (dBi) and Total Efficiency (%)



Note: Data measured in free space with 2m(6') of RG174 Cable

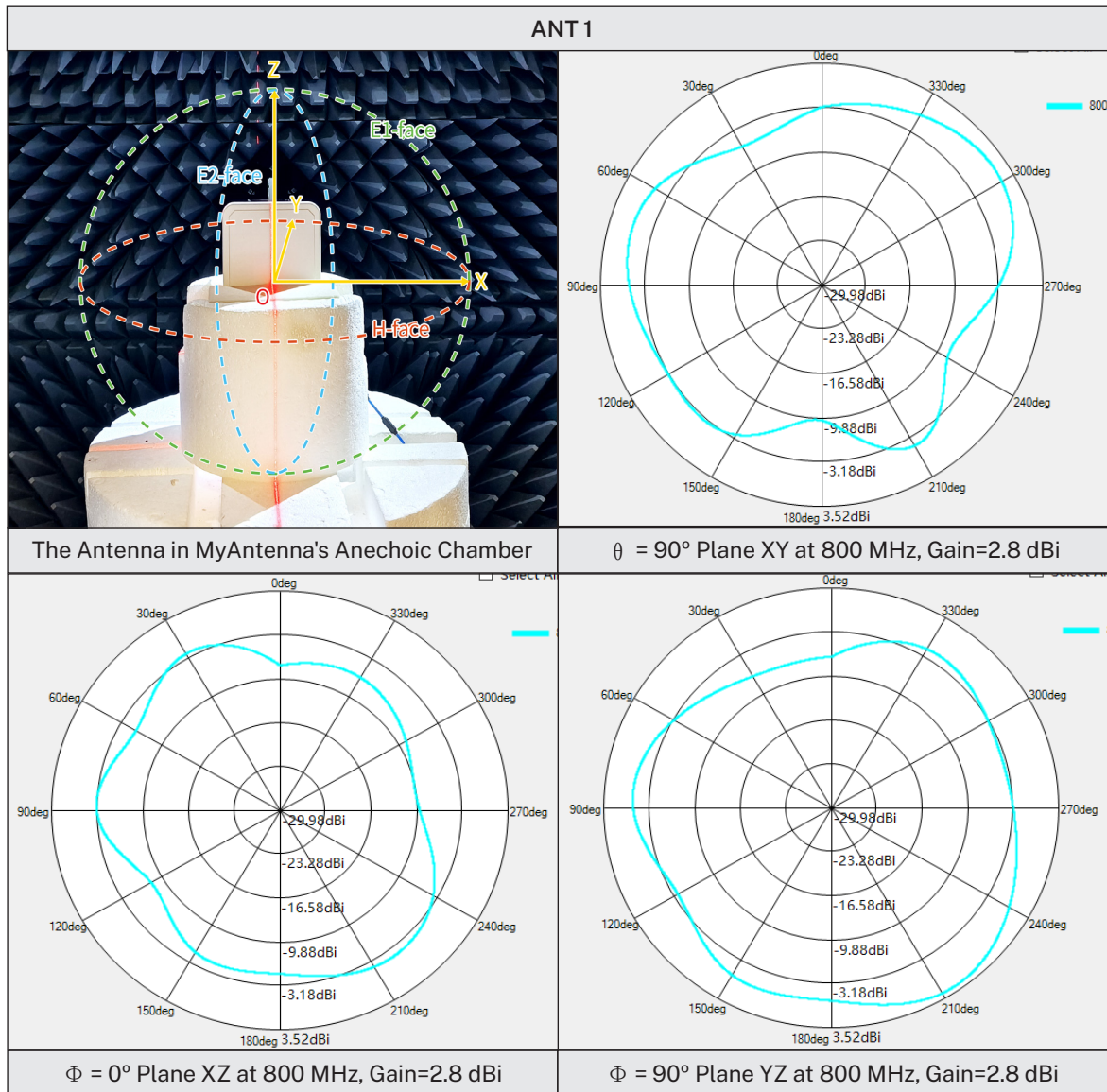


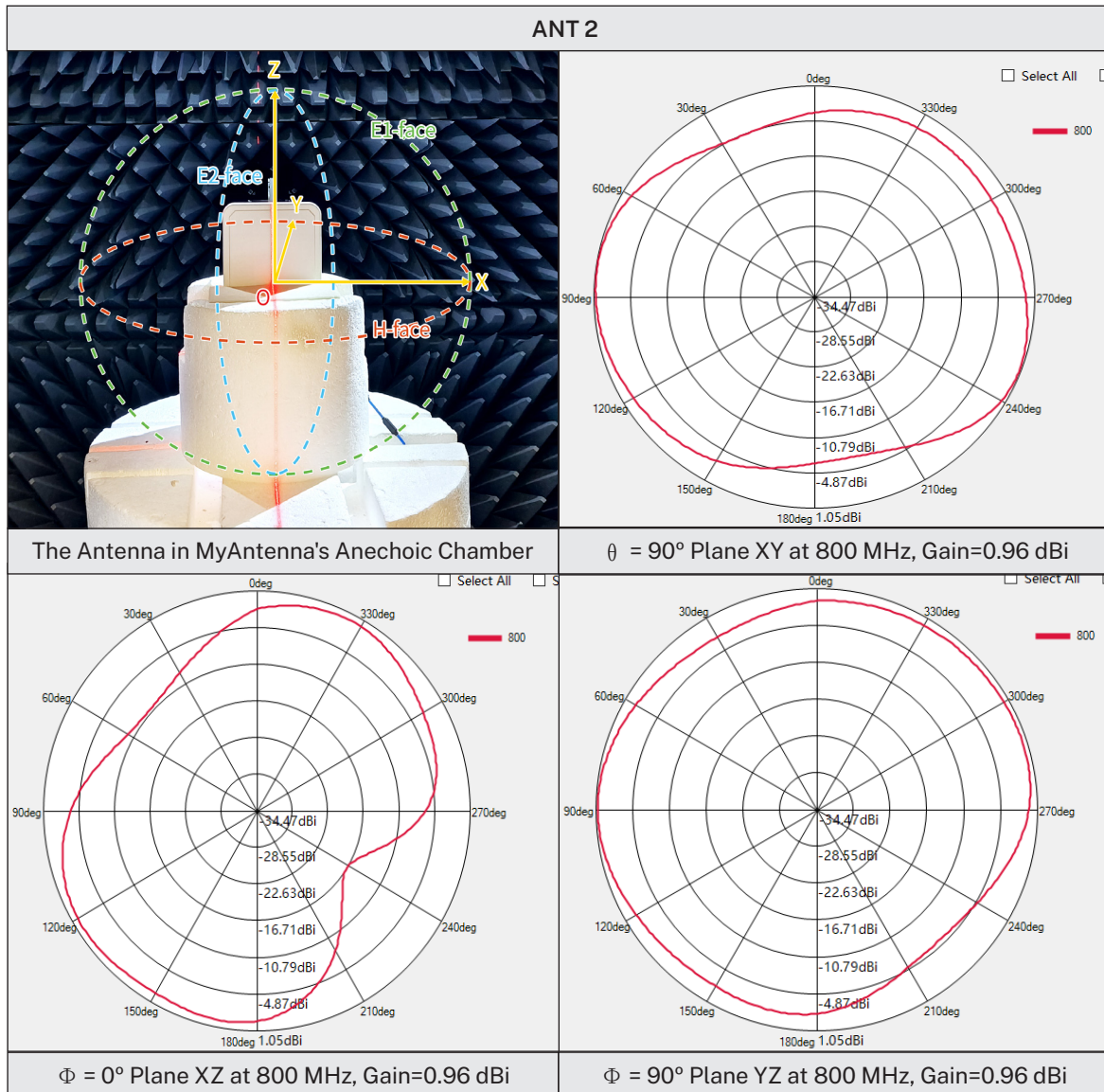
| ANT 1 Data | | | | | |
|------------|------------|----------------|------------|------------|----------------|
| Freq (MHz) | Gain (dBi) | Efficiency (%) | Freq (MHz) | Gain (dBi) | Efficiency (%) |
| 600 | -1.64 | 30.24 | 1400 | -0.11 | 38.1 |
| 620 | 0.04 | 39.56 | 1640 | 0.48 | 35.85 |
| 640 | 1.39 | 43.3 | 1920 | -0.83 | 31.36 |
| 660 | 2.4 | 46.93 | 2080 | -0.99 | 25.1 |
| 680 | 2.74 | 51.39 | 2320 | -2.04 | 25.71 |
| 700 | 3.18 | 54.1 | 2560 | -0.98 | 31.78 |
| 720 | 2.46 | 55.37 | 2800 | -3.13 | 21.05 |
| 740 | 2.16 | 55.32 | 3040 | -1.63 | 24.12 |
| 760 | 1.65 | 53.02 | 3280 | -1.93 | 24.11 |
| 780 | 1.67 | 54.07 | 3520 | -2.97 | 18.39 |
| 800 | 2.8 | 50.64 | 3760 | -3.09 | 17.97 |
| 820 | 2.88 | 44.06 | 4000 | -1.89 | 18.46 |
| 840 | 3.72 | 44.45 | 4240 | -2.26 | 16.79 |
| 860 | 4.16 | 48.85 | 4480 | -3.41 | 14.24 |
| 880 | 4.43 | 53.3 | 4720 | -3.56 | 12.24 |
| 900 | 3.75 | 47.16 | 4960 | -5.31 | 10.45 |
| 920 | 4.23 | 46.51 | 5200 | -4.84 | 11.18 |
| 940 | 4.23 | 50.06 | 5440 | -4.48 | 12.76 |
| 960 | 3.45 | 52.87 | 5680 | -2.43 | 14.75 |
| 980 | 3.21 | 51 | 5920 | -2.48 | 15.29 |
| | | | 6000 | -3.05 | 15.48 |



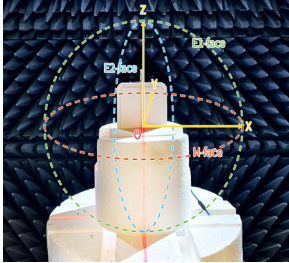
| ANT 2 Data | | | | | |
|------------|------------|----------------|------------|------------|----------------|
| Freq (MHz) | Gain (dBi) | Efficiency (%) | Freq (MHz) | Gain (dBi) | Efficiency (%) |
| 600 | -1.26 | 26.03 | 1400 | 1.49 | 42.07 |
| 620 | -1.23 | 29.32 | 1640 | -0.81 | 32.69 |
| 640 | -1.44 | 34.83 | 1920 | -2.87 | 24.22 |
| 660 | -0.8 | 39.54 | 2080 | -2.91 | 22.6 |
| 680 | -0.28 | 45.62 | 2320 | -0.33 | 28.42 |
| 700 | 0.41 | 49.3 | 2560 | -0.98 | 30.46 |
| 720 | 0.53 | 55.57 | 2800 | -2.59 | 18.83 |
| 740 | 0.01 | 56.25 | 3040 | -2.02 | 21.52 |
| 760 | -0.02 | 56.92 | 3280 | -0.83 | 24.6 |
| 780 | 0.57 | 62.58 | 3520 | -2.13 | 21.18 |
| 800 | 0.96 | 64.81 | 3760 | -2.63 | 17.33 |
| 820 | 0.86 | 61.29 | 4000 | -2.81 | 15.56 |
| 840 | 0.63 | 58.67 | 4240 | -2.23 | 15.52 |
| 860 | 0.49 | 56.77 | 4480 | -3.81 | 13.46 |
| 880 | 0.53 | 57.54 | 4720 | -6.01 | 9.07 |
| 900 | 0.39 | 54.69 | 4960 | -6.21 | 7.97 |
| 920 | 0.21 | 51.96 | 5200 | -7.81 | 5.89 |
| 940 | 0.38 | 50.56 | 5440 | -7.06 | 6.87 |
| 960 | 0.07 | 48.28 | 5680 | -4.62 | 10.67 |
| 980 | -0.19 | 48.33 | 5920 | -3.47 | 11.39 |
| | | | 6000 | -3.3 | 12.59 |

5.3 2D Radiation Patterns (617-960 MHz)

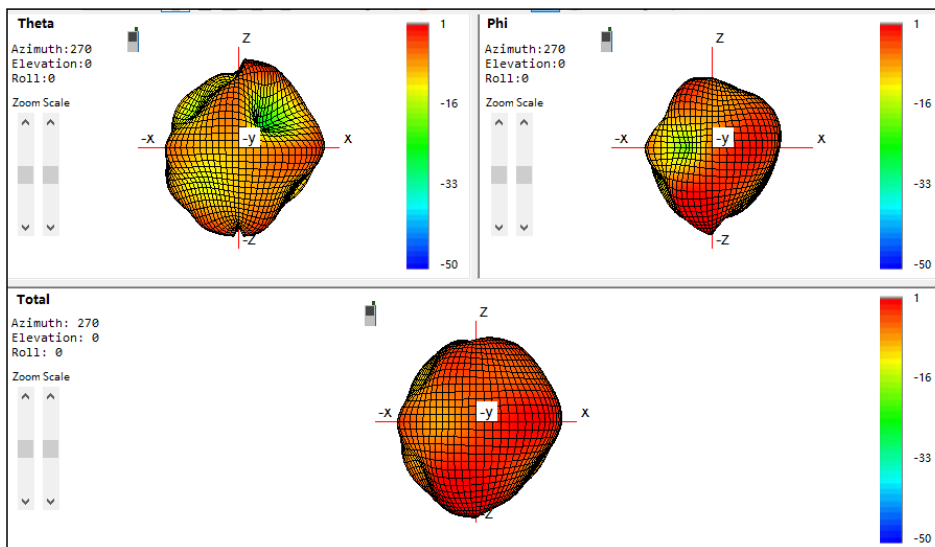




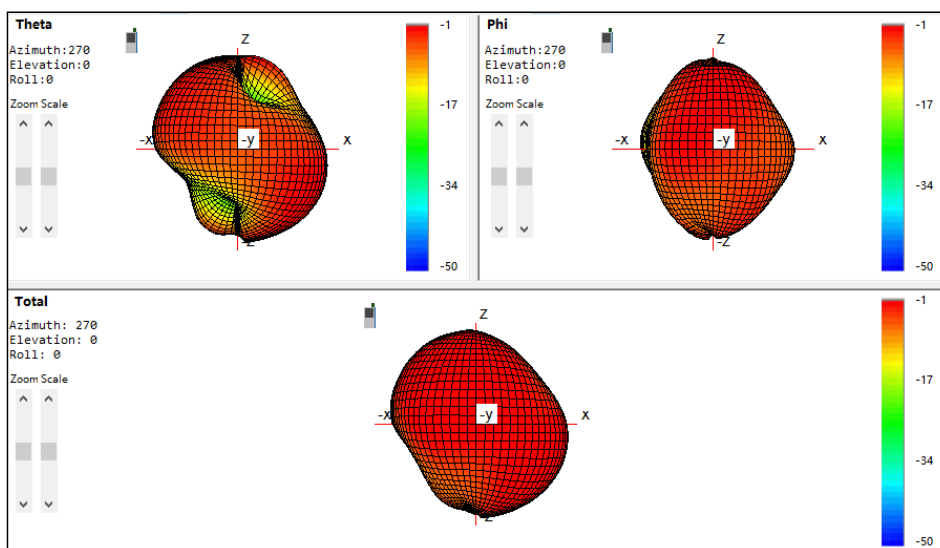
5.4 3D Radiation Patterns (617-960 MHz)



The Antenna in MyAntenna's Anechoic Chamber

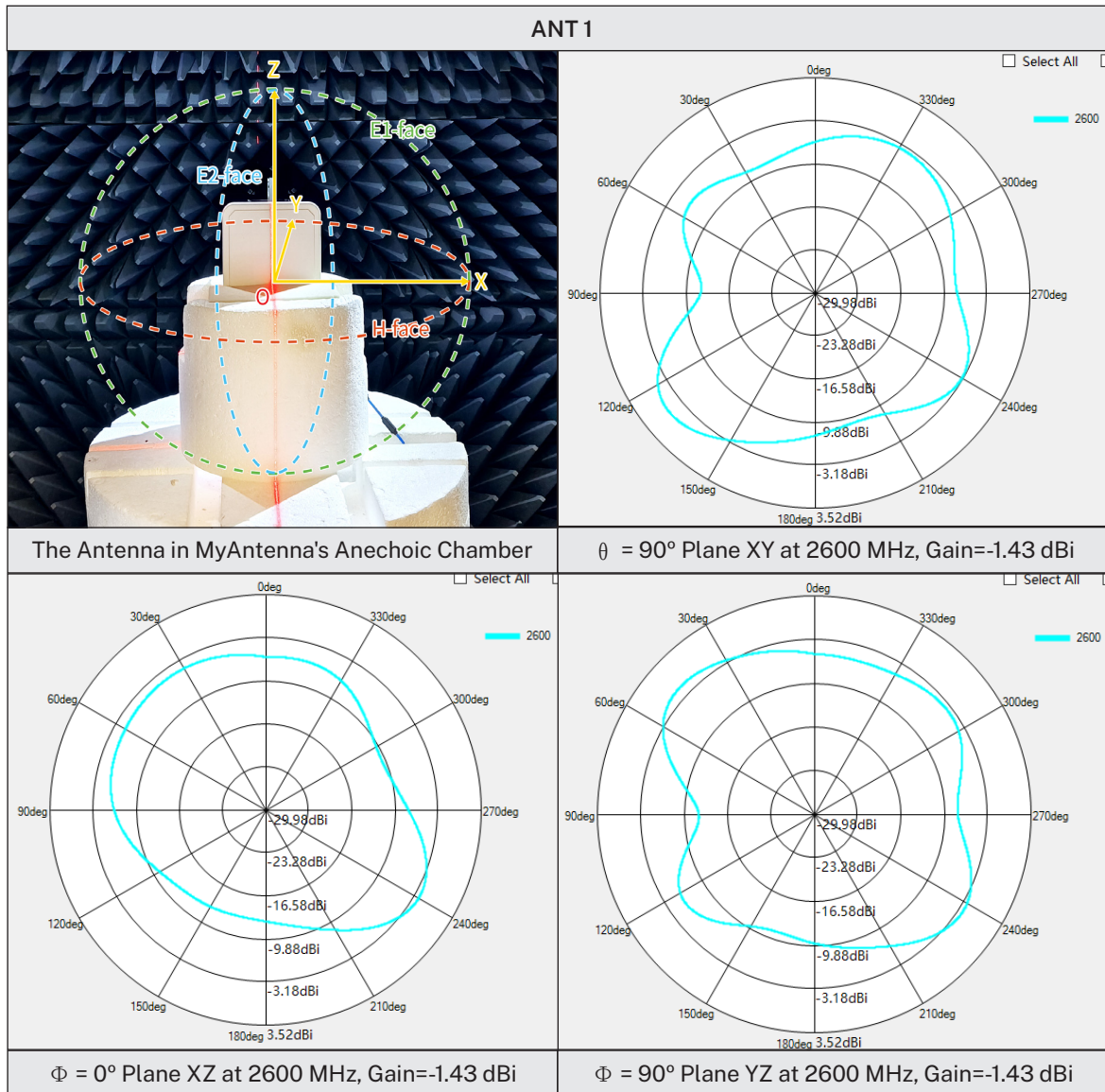


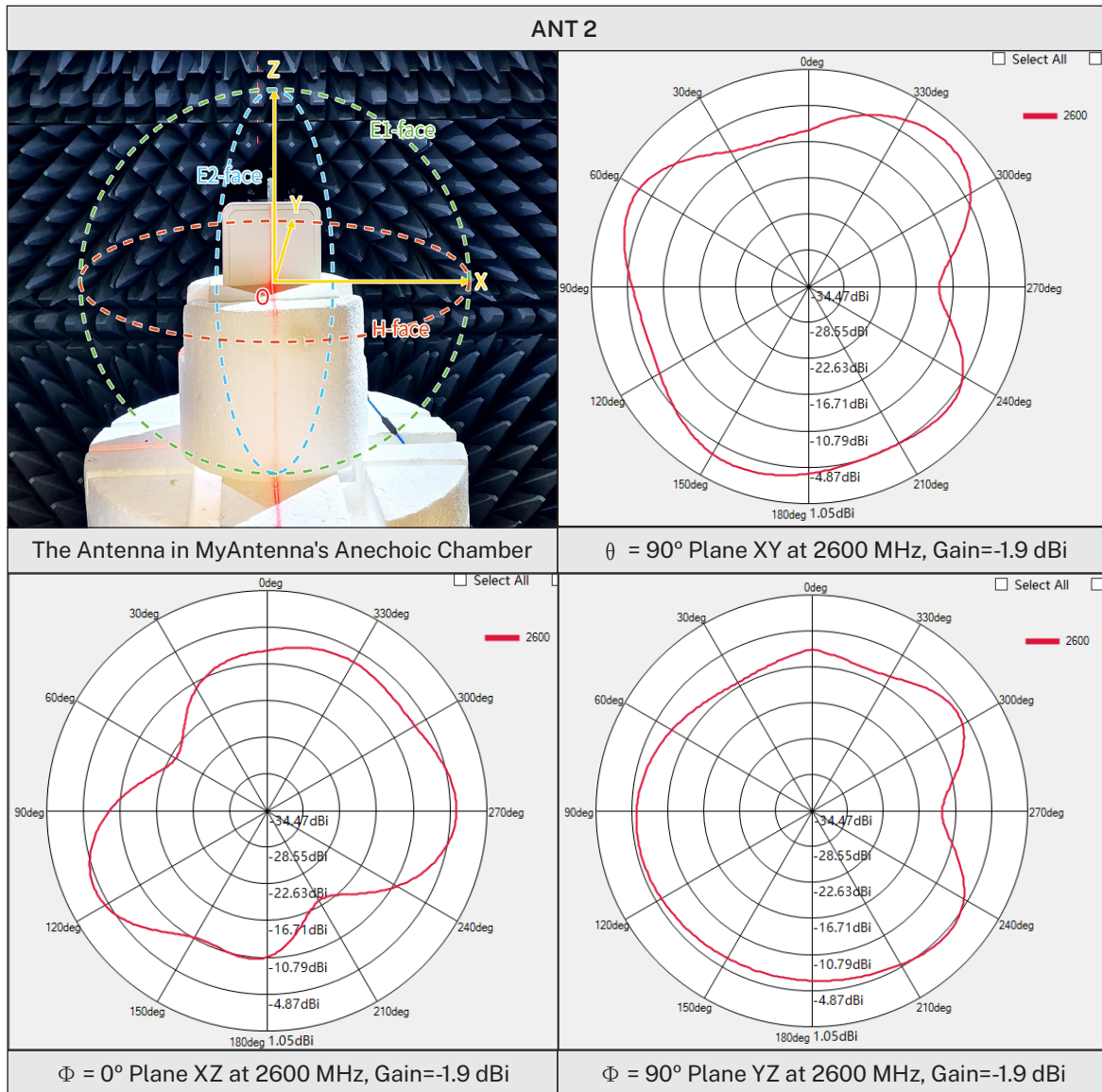
ANT 1 at 800MHz, Gain =2.8 dBi



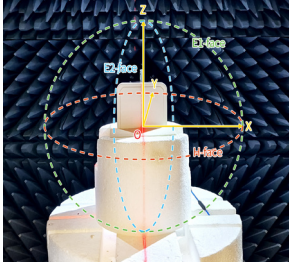
ANT 2 at 800MHz, Gain = 0.96 dBi

5.5 2D Radiation Patterns (1400-2690 MHz)

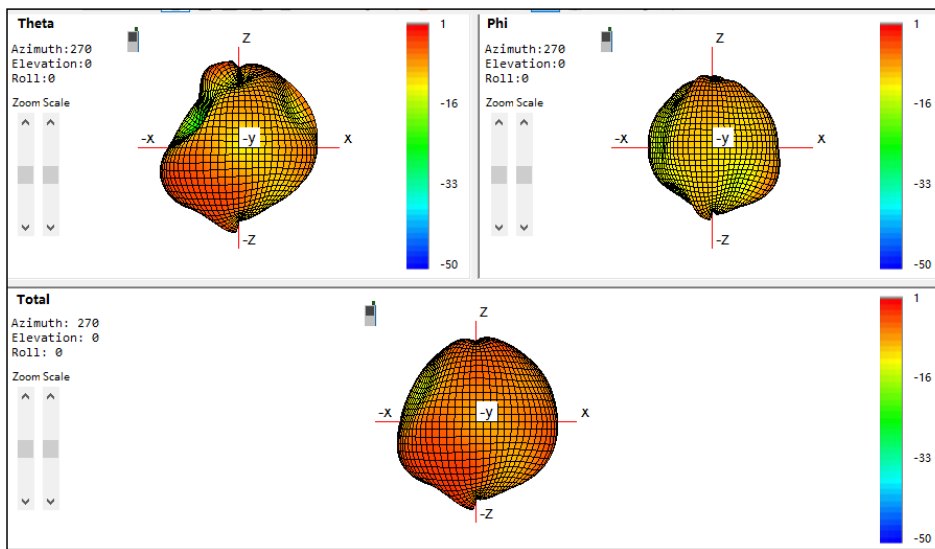




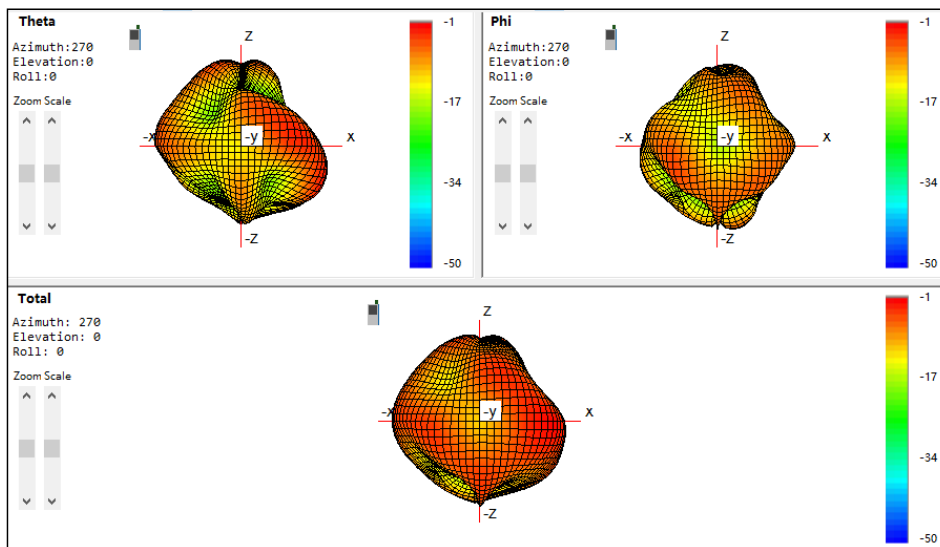
5.6 3D Radiation Patterns (1400-2690 MHz)



The Antenna in MyAntenna's Anechoic Chamber

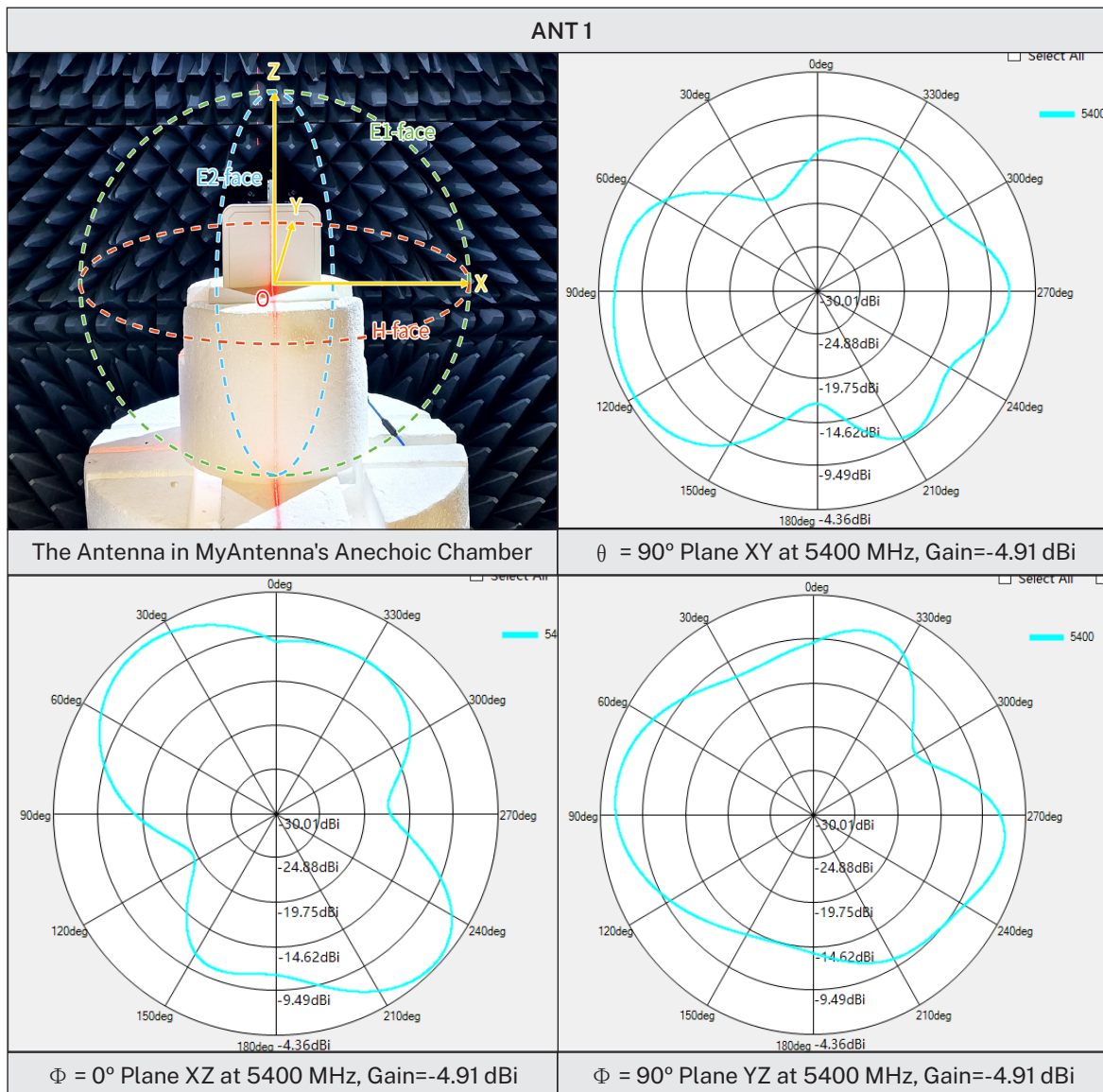


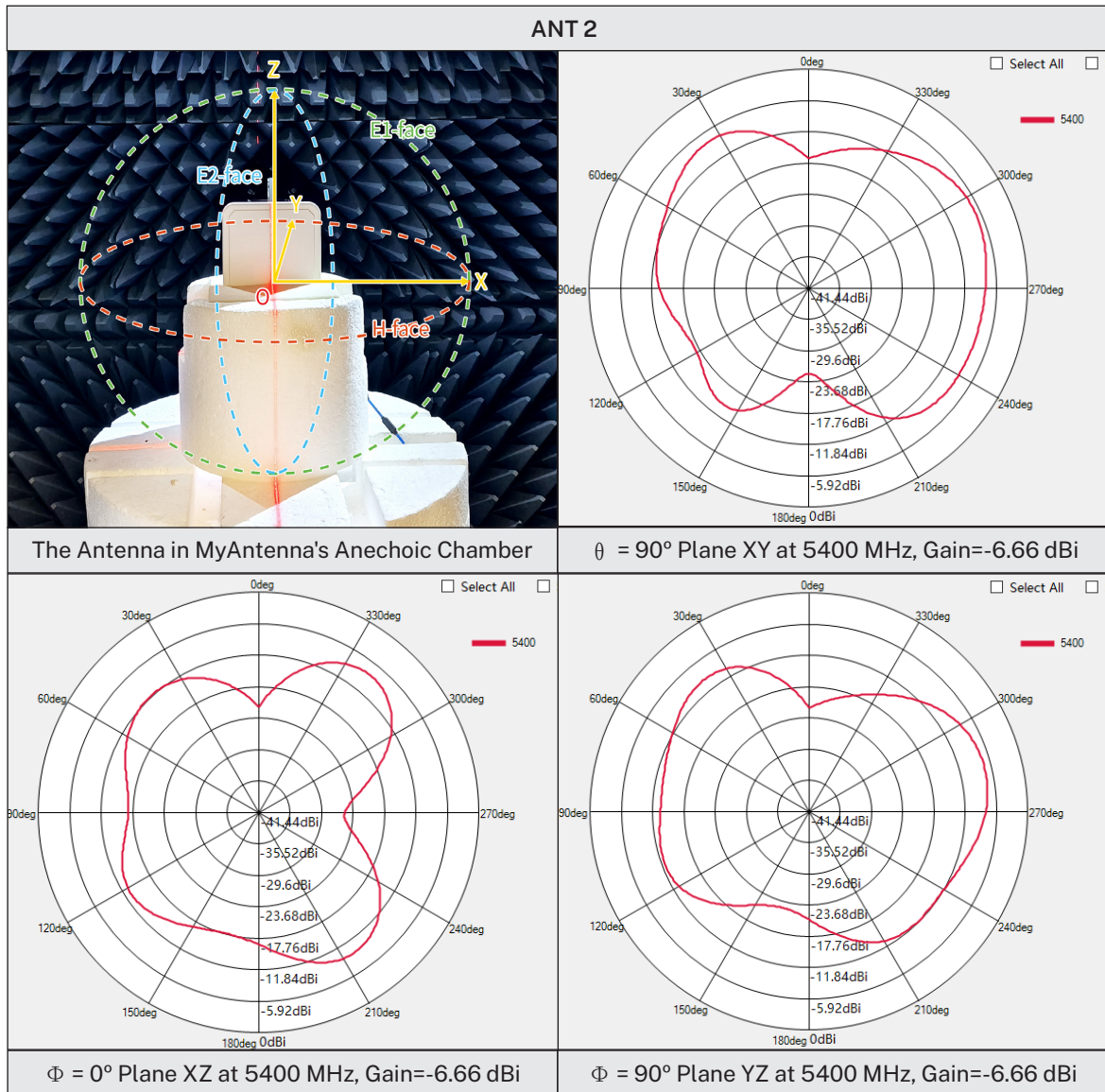
ANT 1 at 2600MHz, Gain = -1.43 dBi



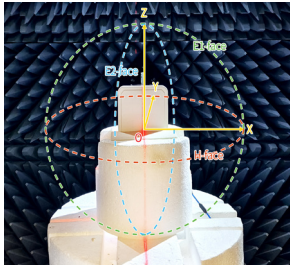
ANT 2 at 2600MHz, Gain = -1.9 dBi

5.7 2D Radiation Patterns (3300-6000 MHz)

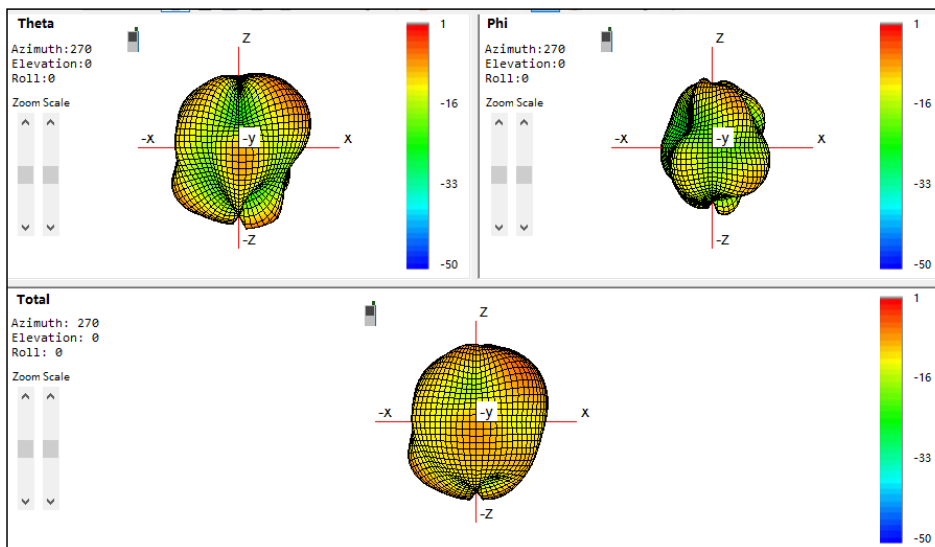




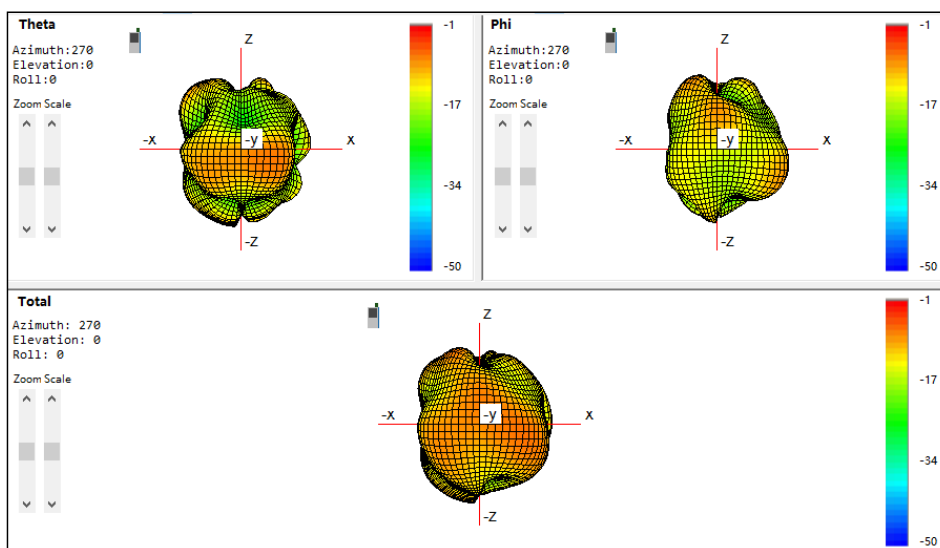
5.8 3D Radiation Patterns (3300-6000 MHz)



The Antenna in MyAntenna's Anechoic Chamber



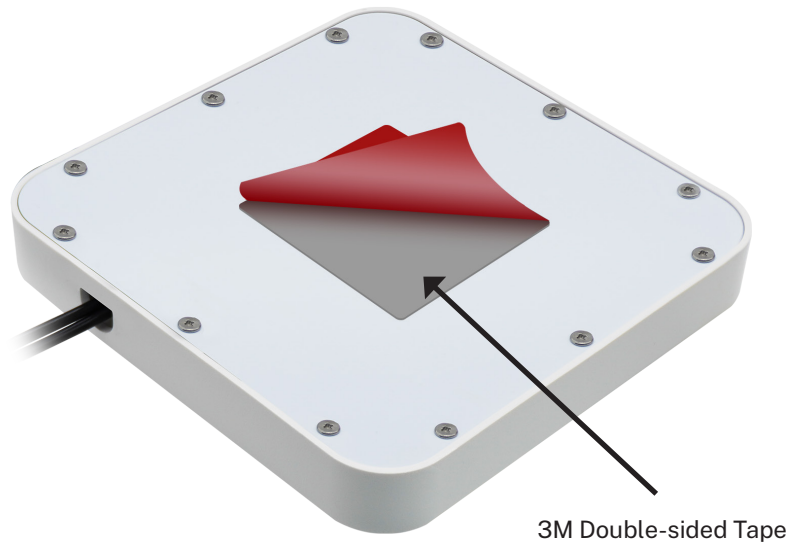
ANT 1 at 5400MHz, Gain = -4.91 dBi



ANT 2 at 5400MHz, Gain = -6.66 dBi

6 ANTENNA INSTALLATION GUIDE

Adhesive Mounting



Mounting on a Base





7 WELCOME ALL ANTENNA OEM/ODM PROJECTS

About ABOOSTY



10+ years in antenna R&D, production, and OEM/ODM



House of Aboosty: 450,000 units annual output capacity



Factory directly competitive price



Industry-leading quality levels



Professional team-work & support



Quick price and lead time estimation

Why Choose ABOOSTY



Innovative and patented design solutions



Full terminal devices anechoic chamber test



Co-location with its custom



Competitive price



Strict inspection



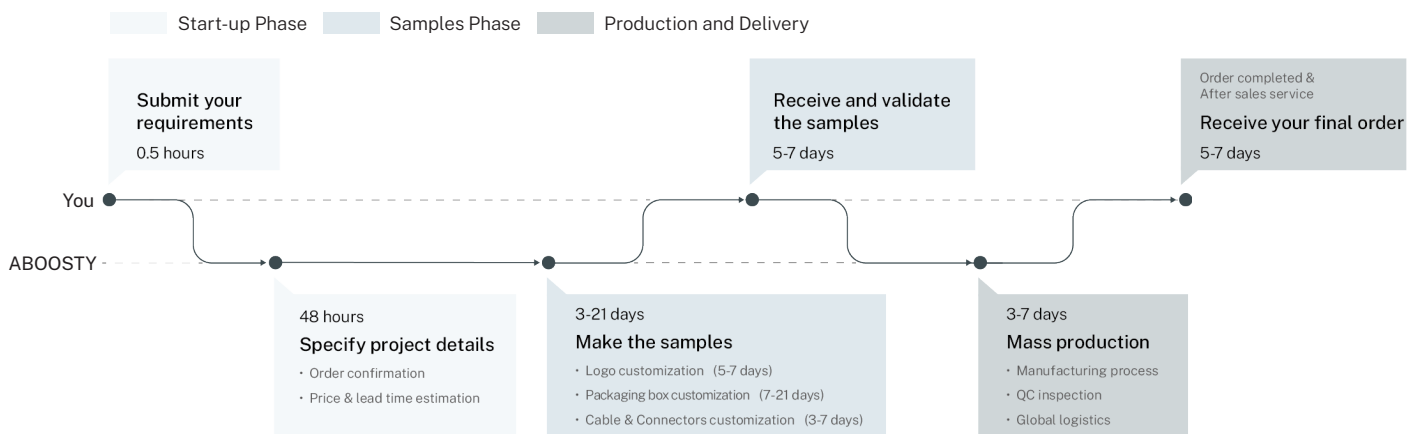
Prompt reply within 24h

What We Provide

| OEM/ODM Services | |
|--|--|
| Light Customization | Deep Customization |
| <ul style="list-style-type: none"> Logo Packaging Cables&Connectors | <ul style="list-style-type: none"> In-depth tailoring for specific applications Functional enhancements Environmental adaptations Vertical certifications ... |

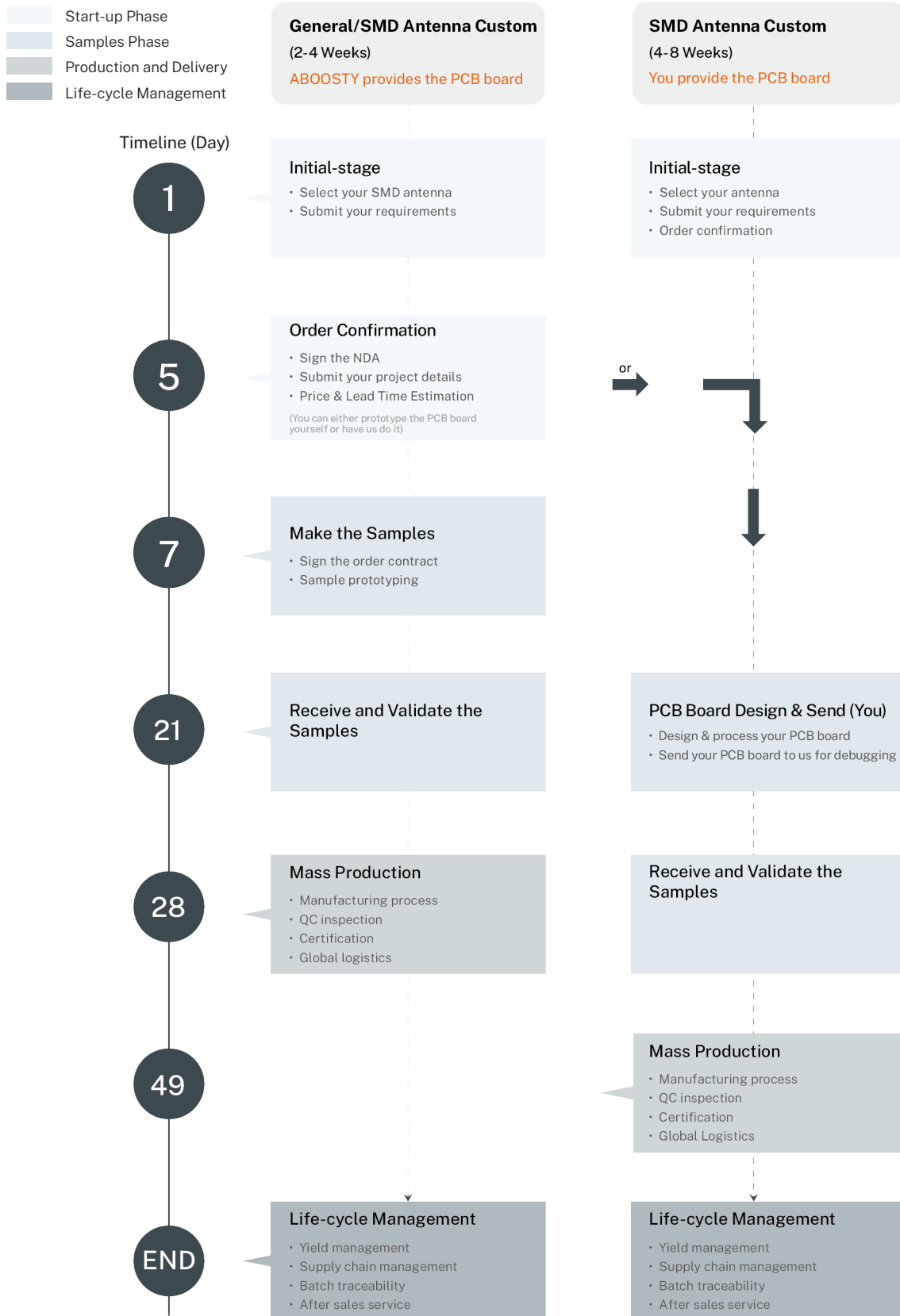
Custom Process

Light Customization Process





Deep Customization Process



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Multi-band Combination Antennas

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