

# 5G/4G/3G MIMO

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## POLE/WALL MOUNT PANEL ANTENNA

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617-960 MHz | 1400-6000 MHz



Model: AECA014  
PN: M02-0100120R0A  
Dimensions: 200 x 200 x 34.5 mm





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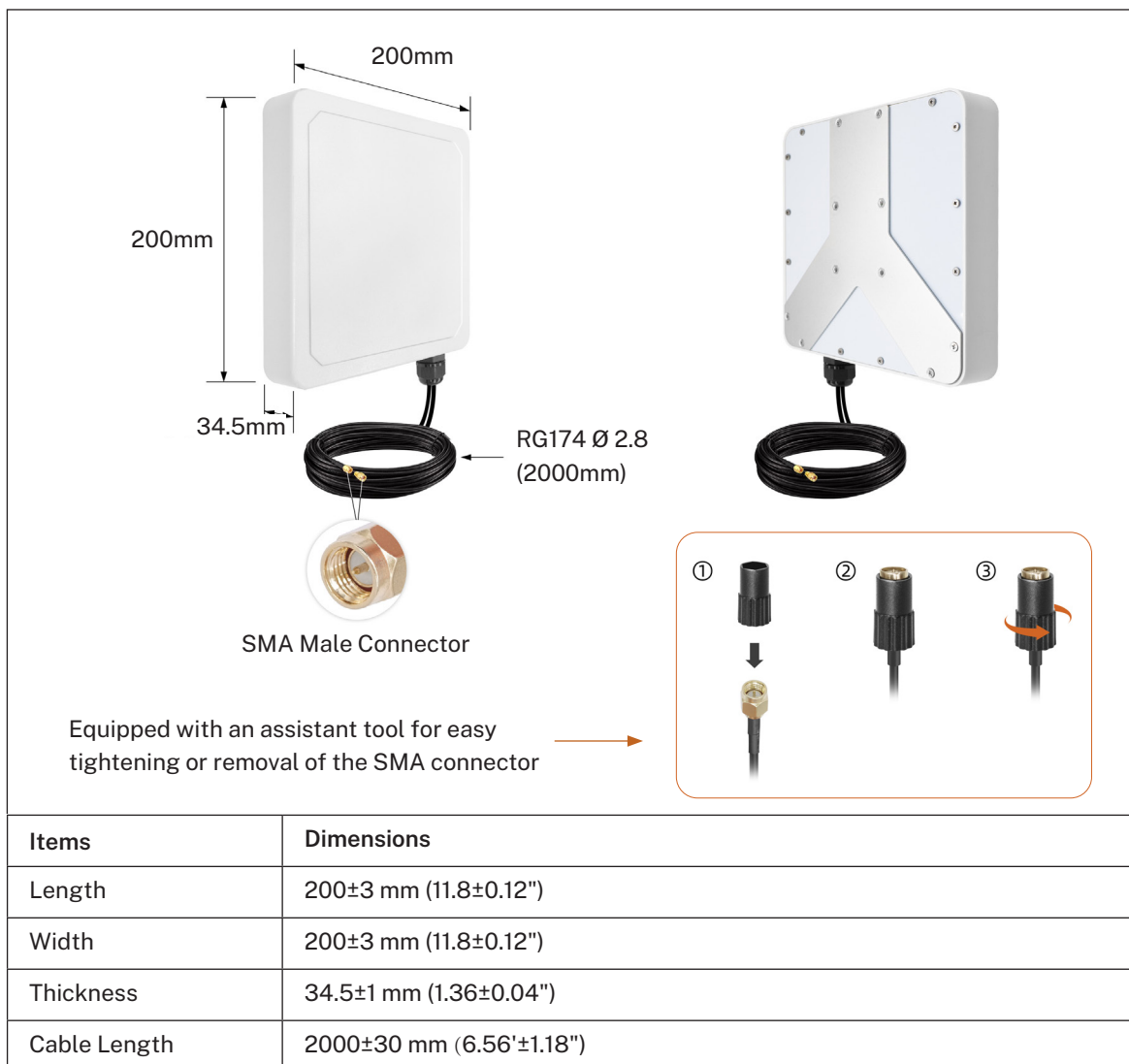


## FEATURES & BENEFITS

- Omni-directional MIMO performance
- Optimized design for wall, mast or panel mount
- Ultra-wideband frequency coverage, integrated low loss cables
- Future-proof antenna solution supporting global 4G/5G LTE bands
- RF Cables and connectors customization supported

## 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





## ORDER INFORMATION

Product Name	5G/4G/3G MIMO Pole/Wall Mount Panel Antenna
Model	AECA014
Part Number	M02-0100120R0A
Dimensions	200 x 200 x 34.5 mm
Weight	502 g
Color	White
Mounting	Pole/Wall/Mast/Panel mount
Cable	Default 2 x RG174 $\varnothing$ 2.8 x 2000 mm cable, customizable.
Connector	Default SMA MALE connector, customizable.

## REFERENCE GUIDE

Technical Features (MHz)	ANT 1 (Left port)		ANT 2 (Right port)	
	617-960	1400-6000	617-960	1400-6000
Max VSWR	1.96:1	2.64:1	1.70:1	2.47:1
Max Efficiency	73.46%		77.52%	
Max Return Loss	-6.88 dB		-6.66 dB	
Peak Gain	Up to 4.11 dBi (Typ)		Up to 4.09 dBi (Typ)	
Correlation Co-efficient (all bands)	<0.1			
Max Input Power	10 Watts CW			
Radiation Pattern	Omnidirectional			
Polarization	Linear			
Input Impedance	50 $\Omega$			
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.				

## ELECTRICAL PERFORMANCE

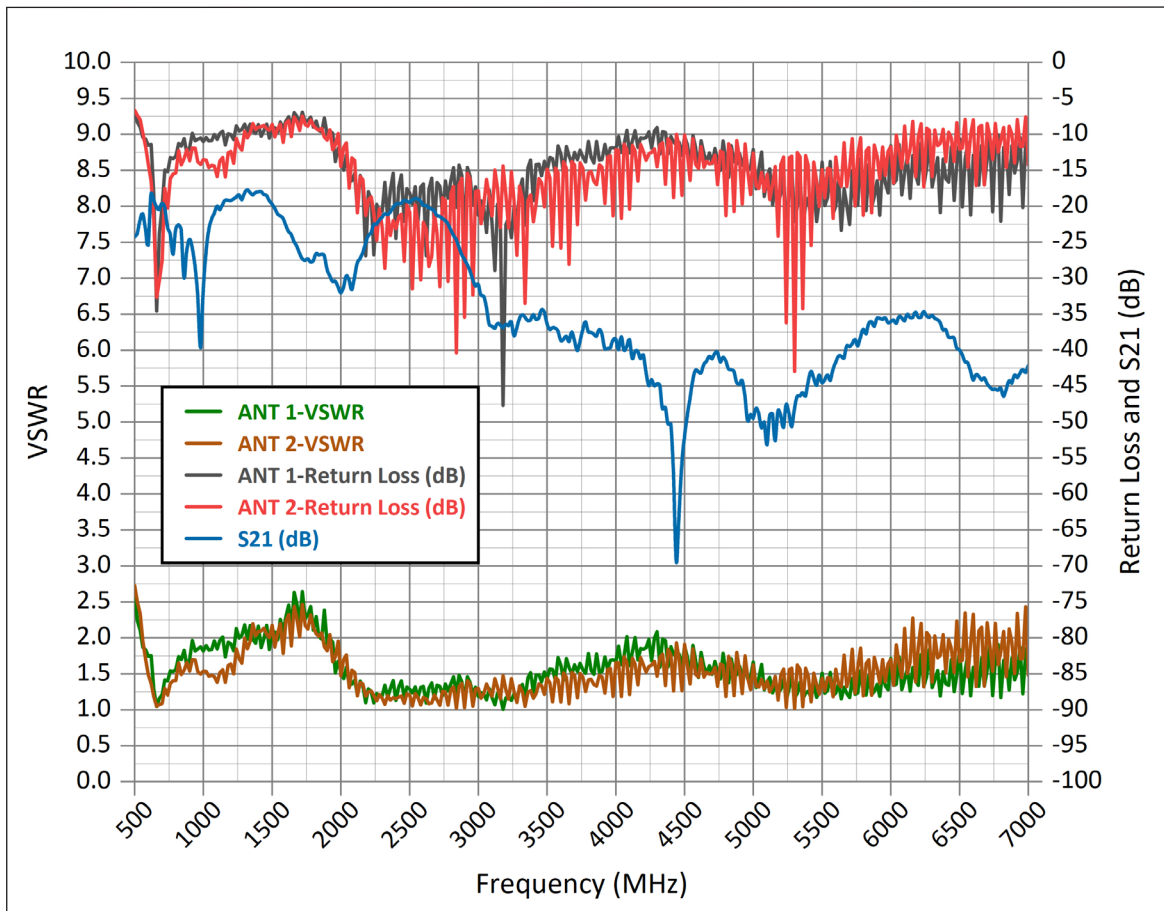
© **Note**

All data displayed below were measured using two RG174 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.





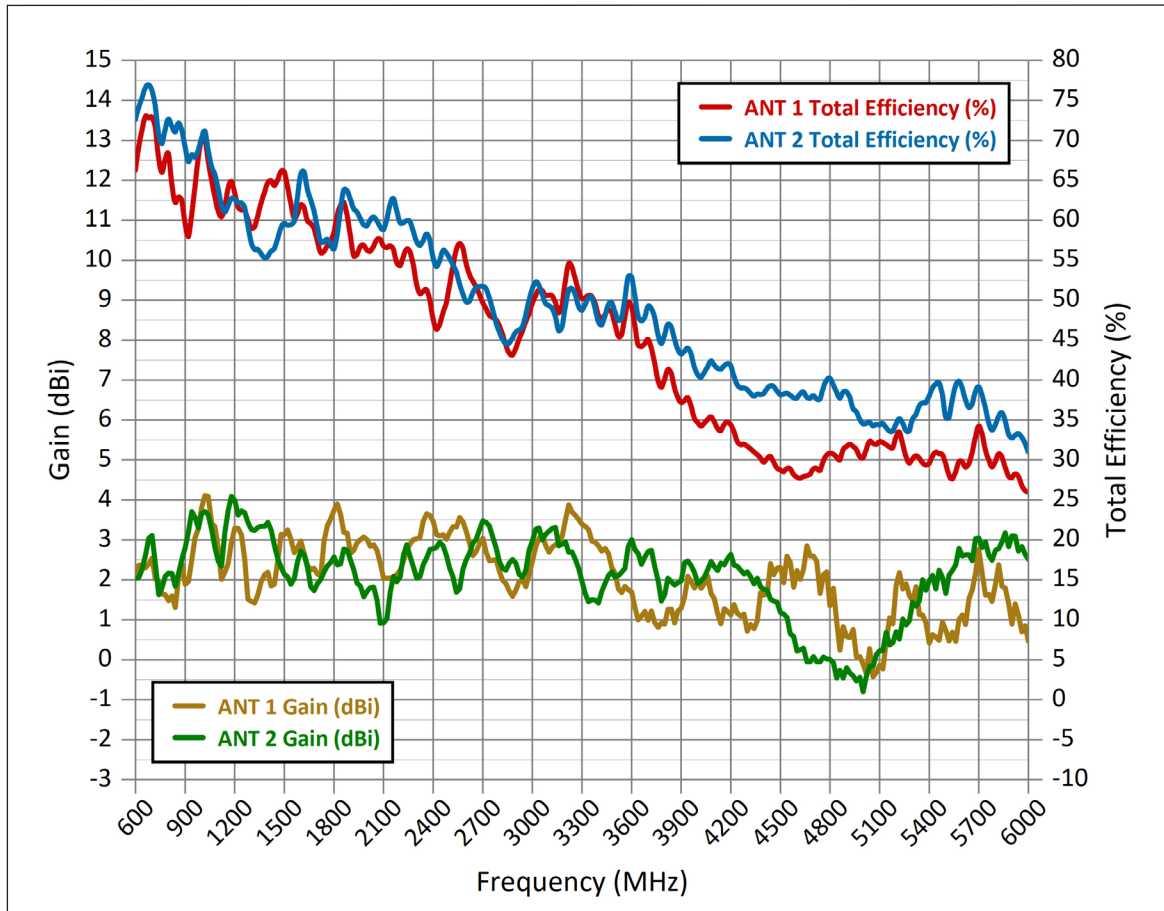
## VSWR, Return Loss and Isolation (S21)



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



## Gain (dBi) and Total Efficiency (%)



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



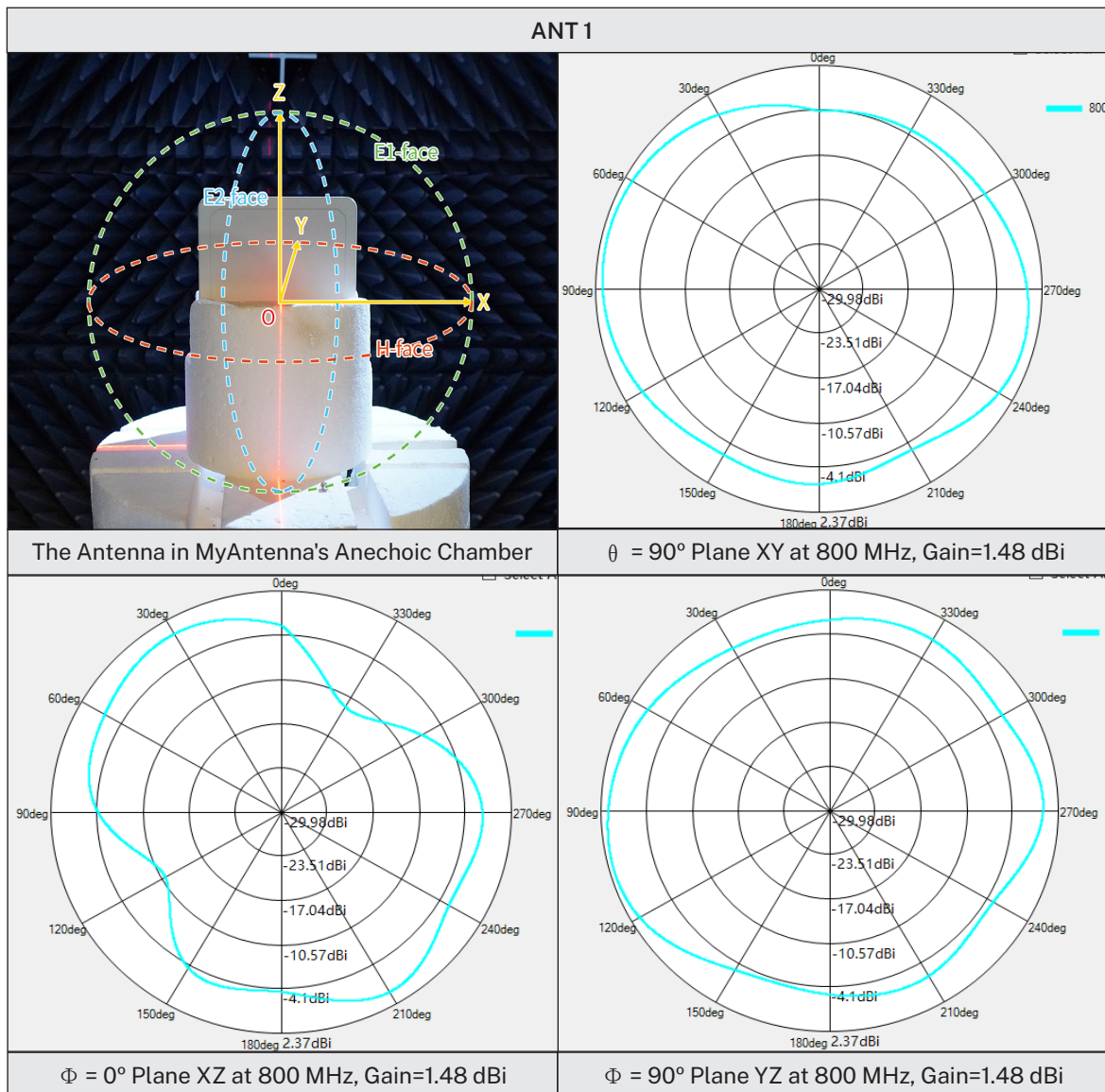
ANT 1 Data					
Freq (MHz)	Gain (dBi)	Efficiency (%)	Freq (MHz)	Gain (dBi)	Efficiency (%)
600	2.05	66.78	1000	3.82	71.1
620	2.37	68.05	1300	1.46	59.38
640	2.37	71.31	1600	2.97	62.44
660	2.3	73.46	1900	2.66	57.66
680	2.4	72.61	2180	2.13	54.7
700	2.54	72.15	2200	2.24	54
720	2.03	73.07	2500	3.19	51.84
740	1.97	67.65	2800	2.22	46.7
760	1.64	64.08	3100	2.69	50.35
780	1.63	69.35	3400	2.85	48.26
800	1.48	67.99	3700	0.99	44.04
820	1.6	64.97	4000	1.93	35.38
840	1.31	61.23	4300	0.72	30.71
860	2.04	62.82	4600	2.23	28.98
880	2.39	64.15	4900	0.58	31.17
900	1.89	58.43	5200	1.86	33.97
920	1.96	57.79	5500	0.74	29.2
940	2.49	60.79	5800	1.89	29.08
960	3.05	64.24	6000	0.46	25.37
980	3.29	67.16			

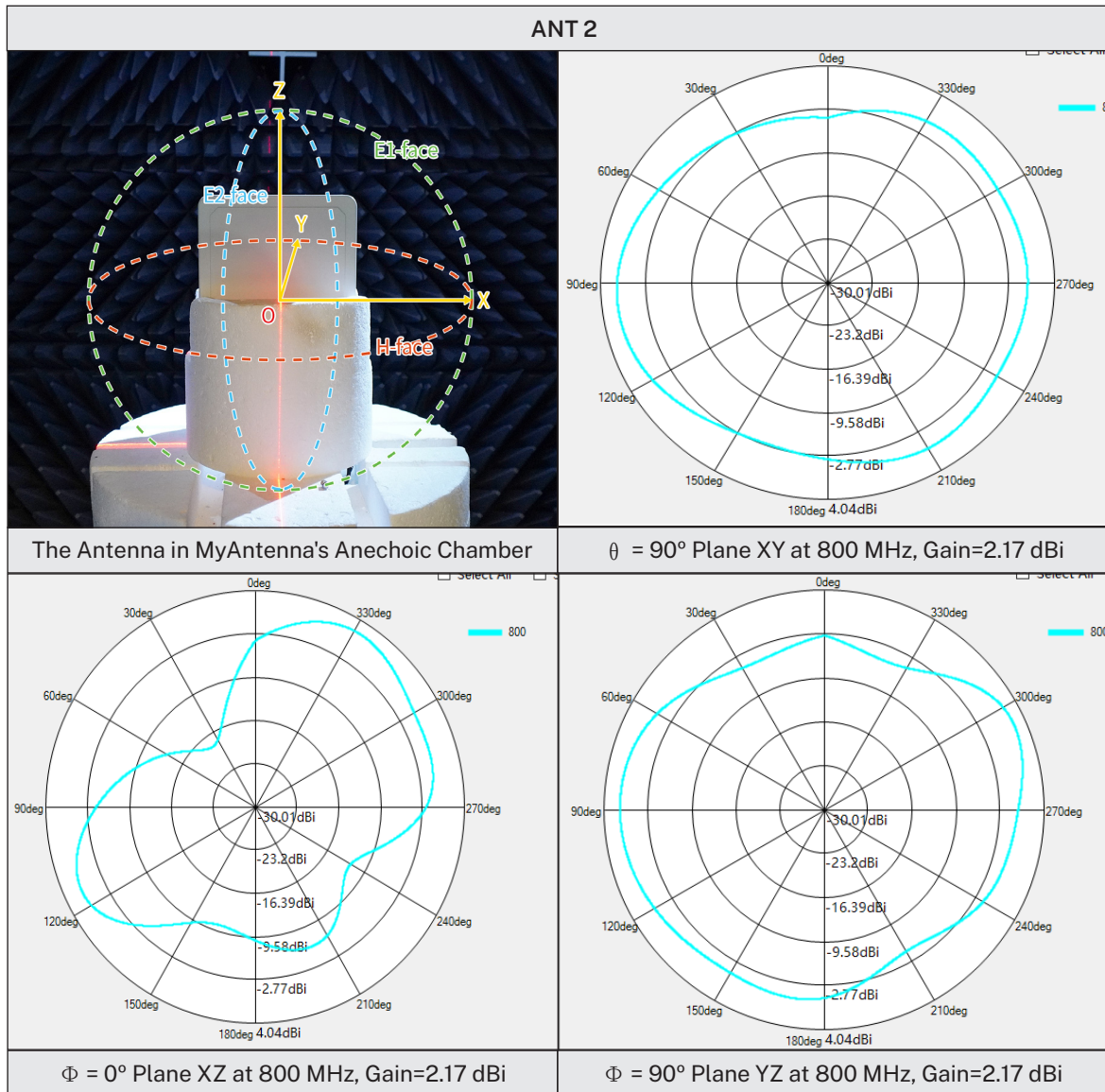




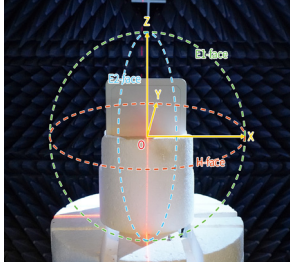
ANT 2 Data					
Freq (MHz)	Gain (dBi)	Efficiency (%)	Freq (MHz)	Gain (dBi)	Efficiency (%)
600	2.04	73.08	1000	3.66	71.07
620	2.06	73.33	1300	3.26	57.7
640	2.26	74.82	1600	2.72	66.47
660	2.62	77.52	1900	2.49	61.9
680	3.04	76.18	2180	1.95	60.72
700	3.11	76.41	2200	2.08	60.07
720	2.42	74.95	2500	2.29	54.59
740	1.63	70.52	2800	2.46	45.92
760	1.81	68.7	3100	3.22	49.08
780	2.09	72.07	3400	1.42	46.59
800	2.17	72.79	3700	2.71	49.24
820	2.16	71.66	4000	1.91	39.86
840	1.84	70.87	4300	2.2	39.47
860	2.16	71.6	4600	0.22	37.53
880	2.5	72.96	4900	-0.2	38.97
900	2.81	67.71	5200	0.7	35.31
920	3.21	67.8	5500	1.66	33.66
940	3.71	67.96	5800	2.74	35.21
960	3.57	68.65	6000	2.51	30.97
980	3.3	67.48			

## 2D Radiation Patterns (617-960 MHz)

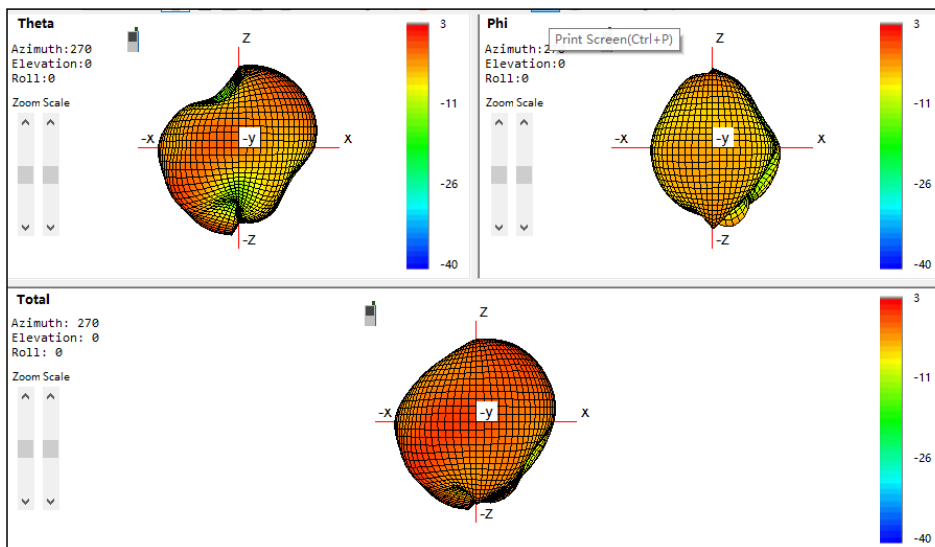




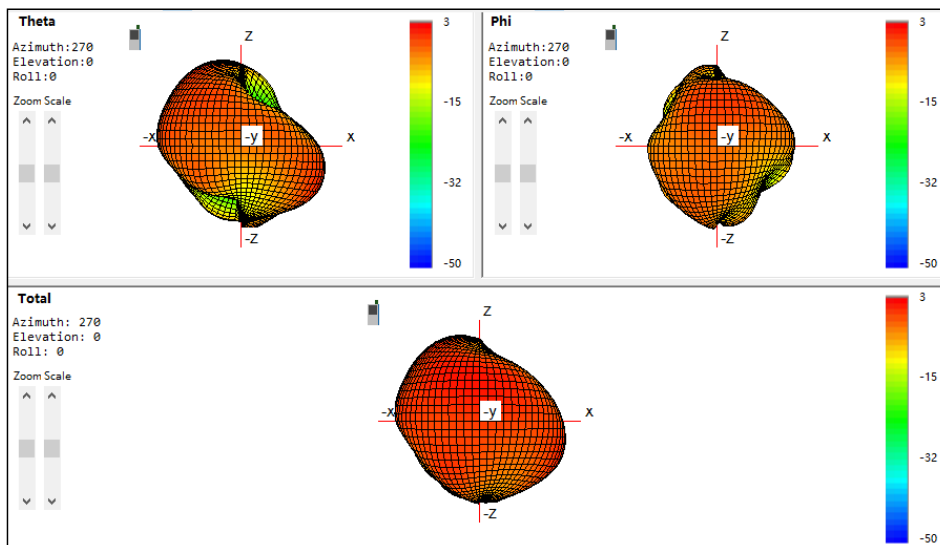
### 3D Radiation Patterns (617-960 MHz)



The Antenna in MyAntenna's Anechoic Chamber

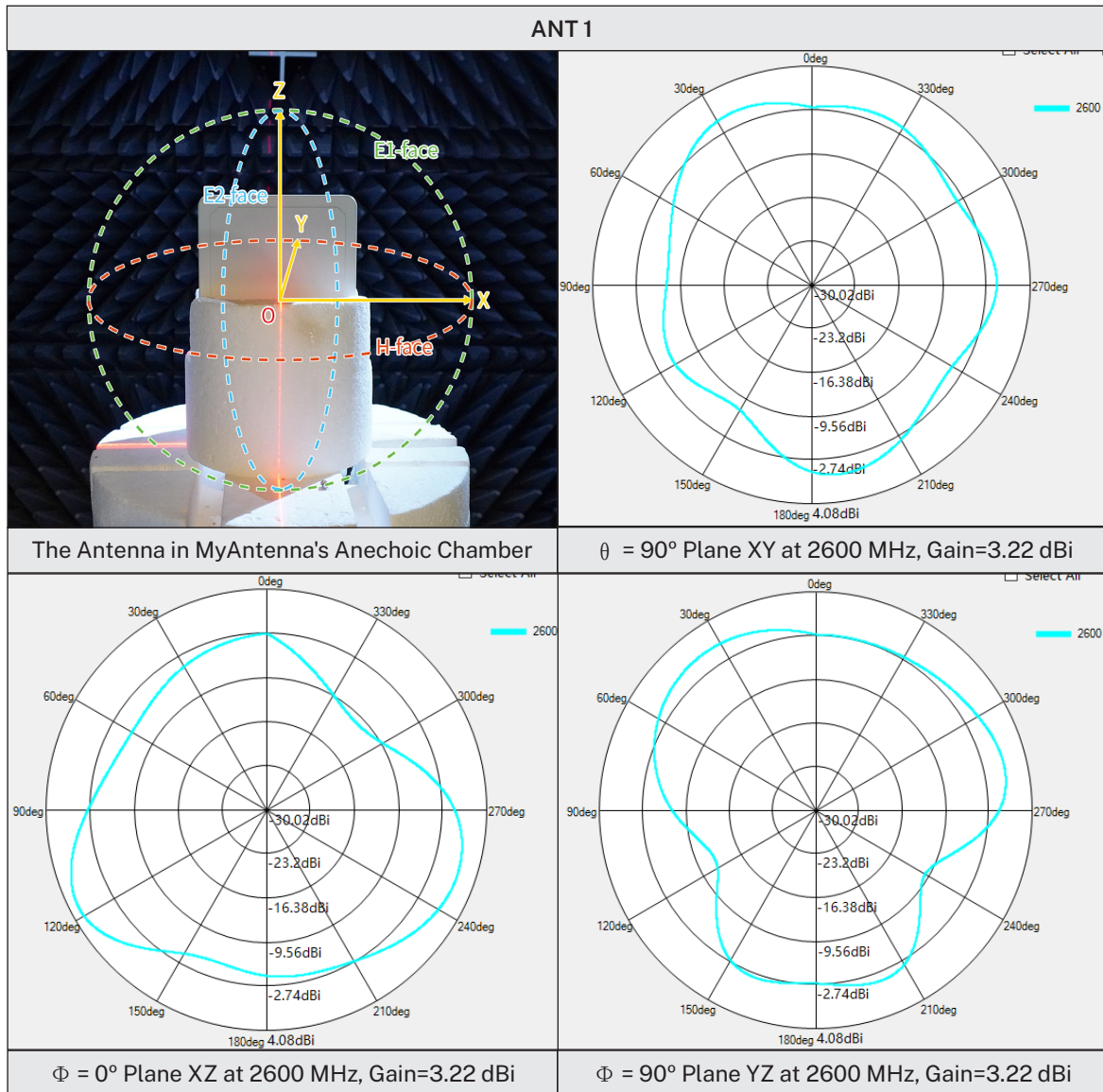


ANT 1 at 800MHz, Gain = 1.48 dBi

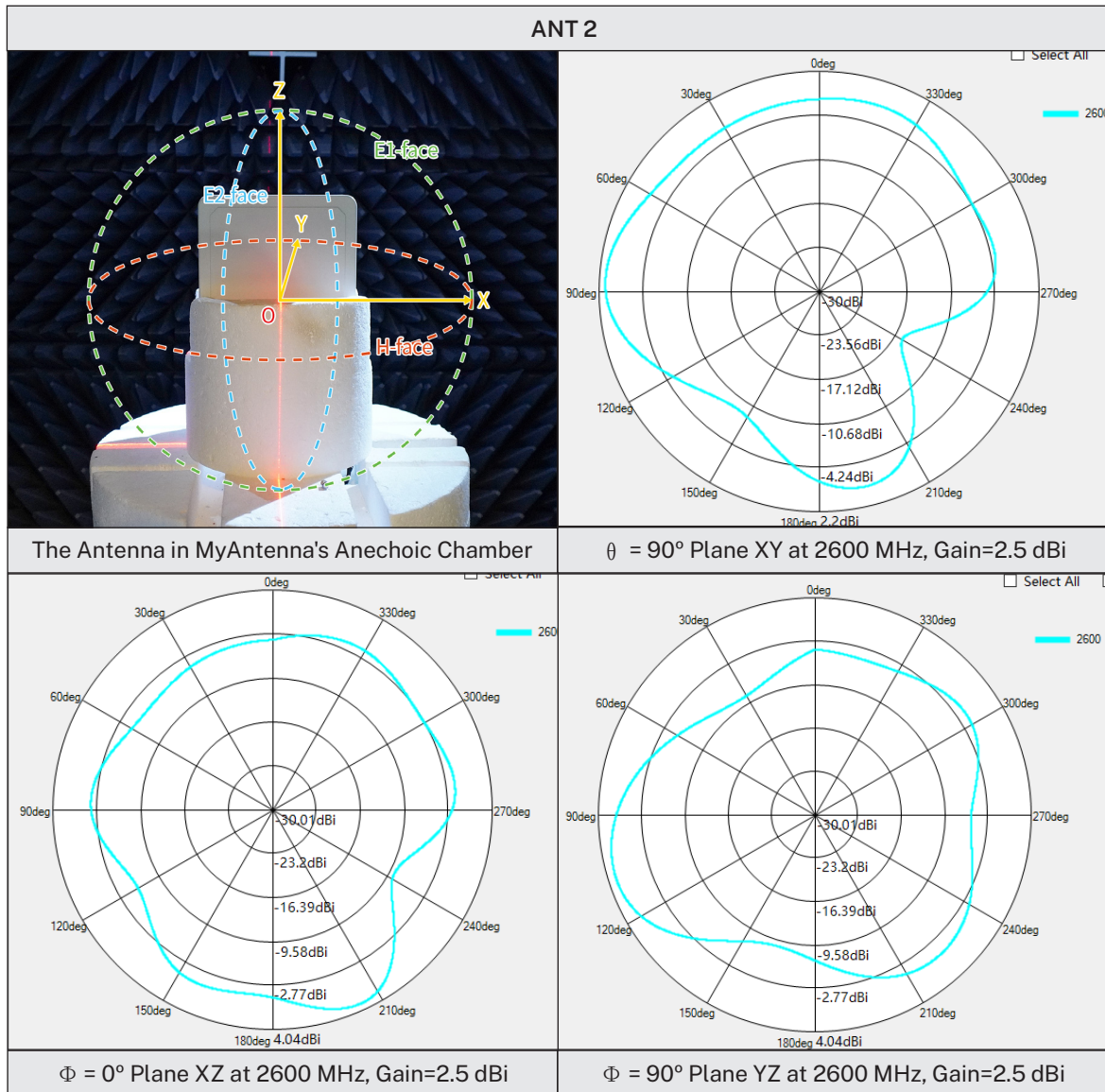


ANT 2 at 800MHz, Gain = 2.17 dBi

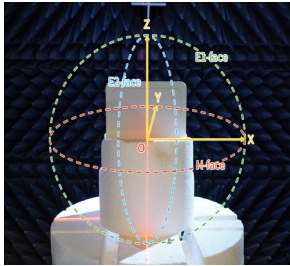
## 2D Radiation Patterns (1400-2690 MHz)



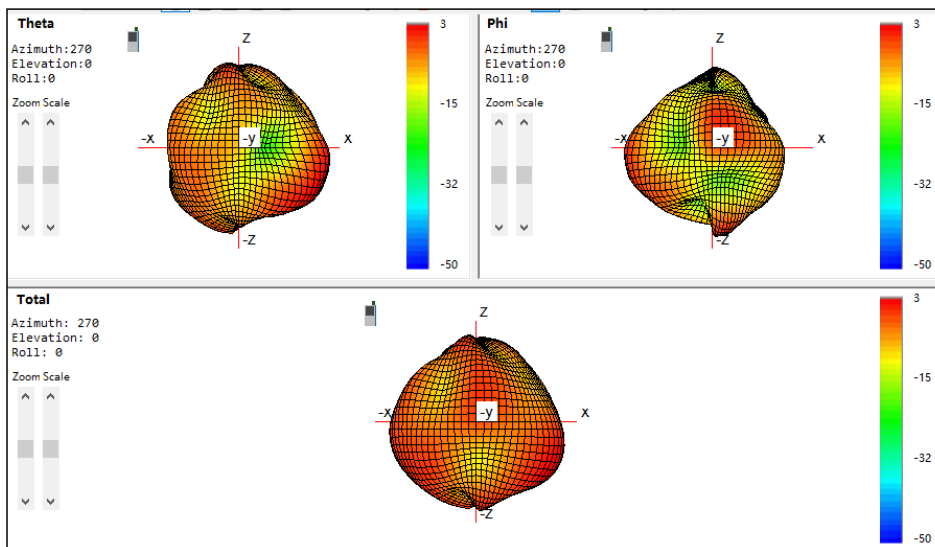




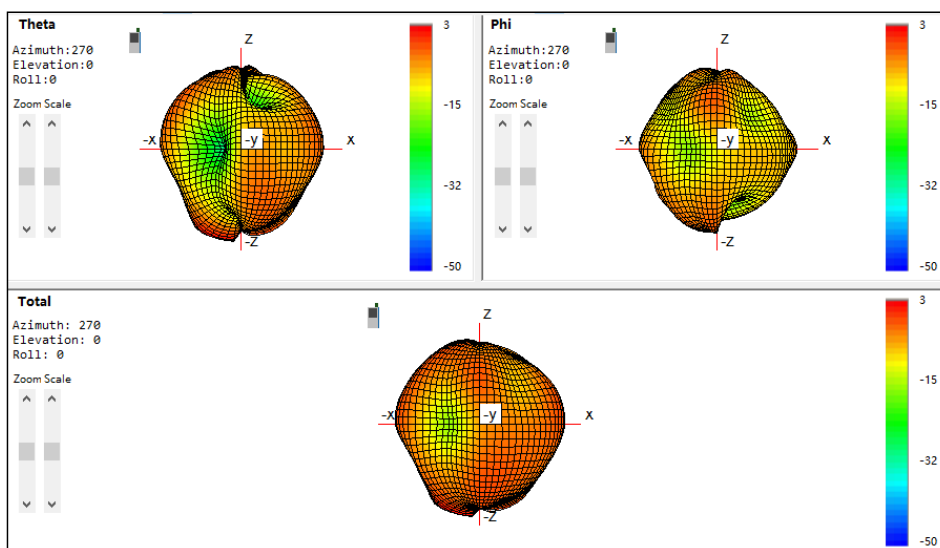
### 3D Radiation Patterns (1400-2690 MHz)



The Antenna in MyAntenna's Anechoic Chamber

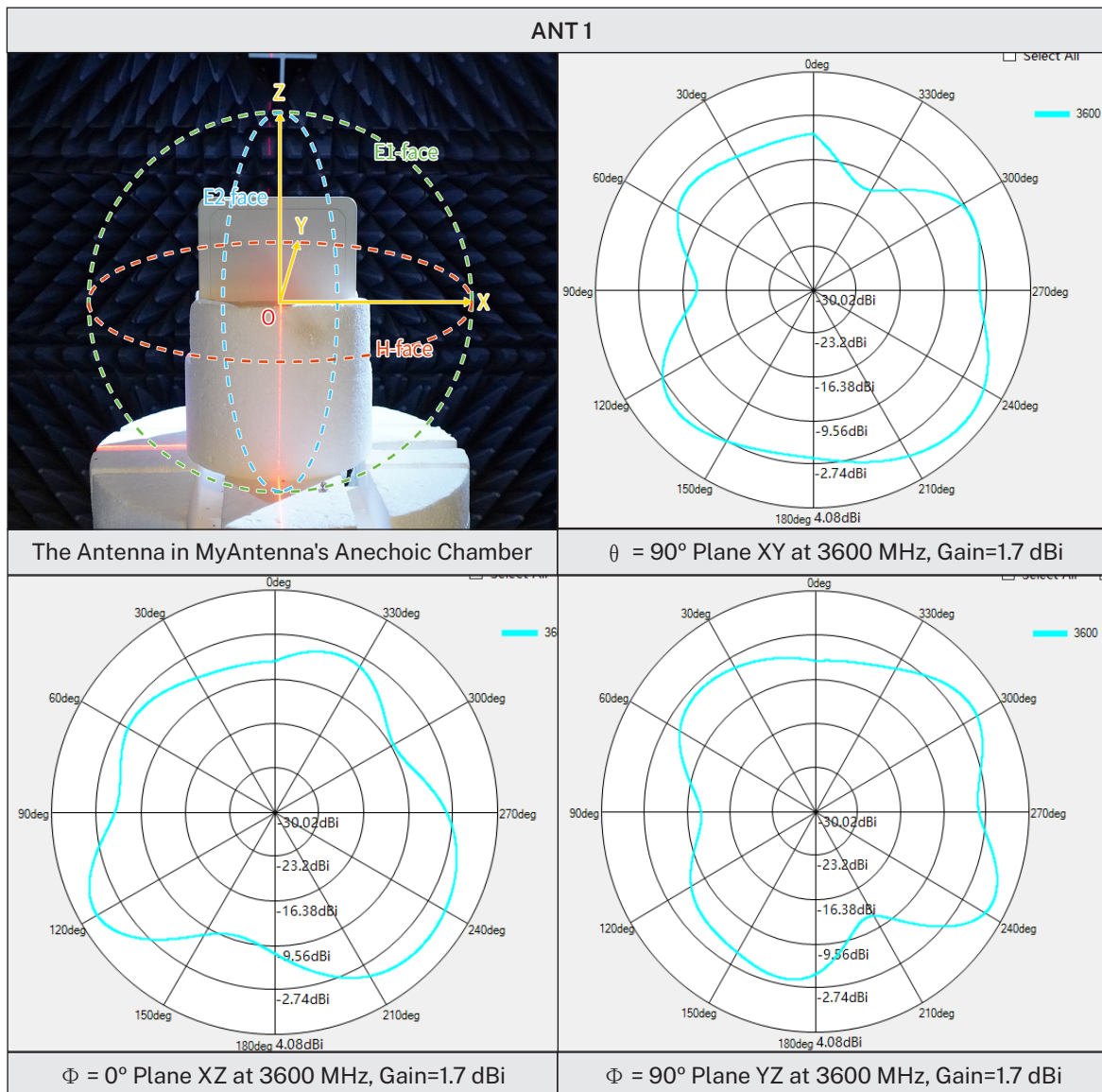


ANT 1 at 2600MHz, Gain = 3.22 dBi

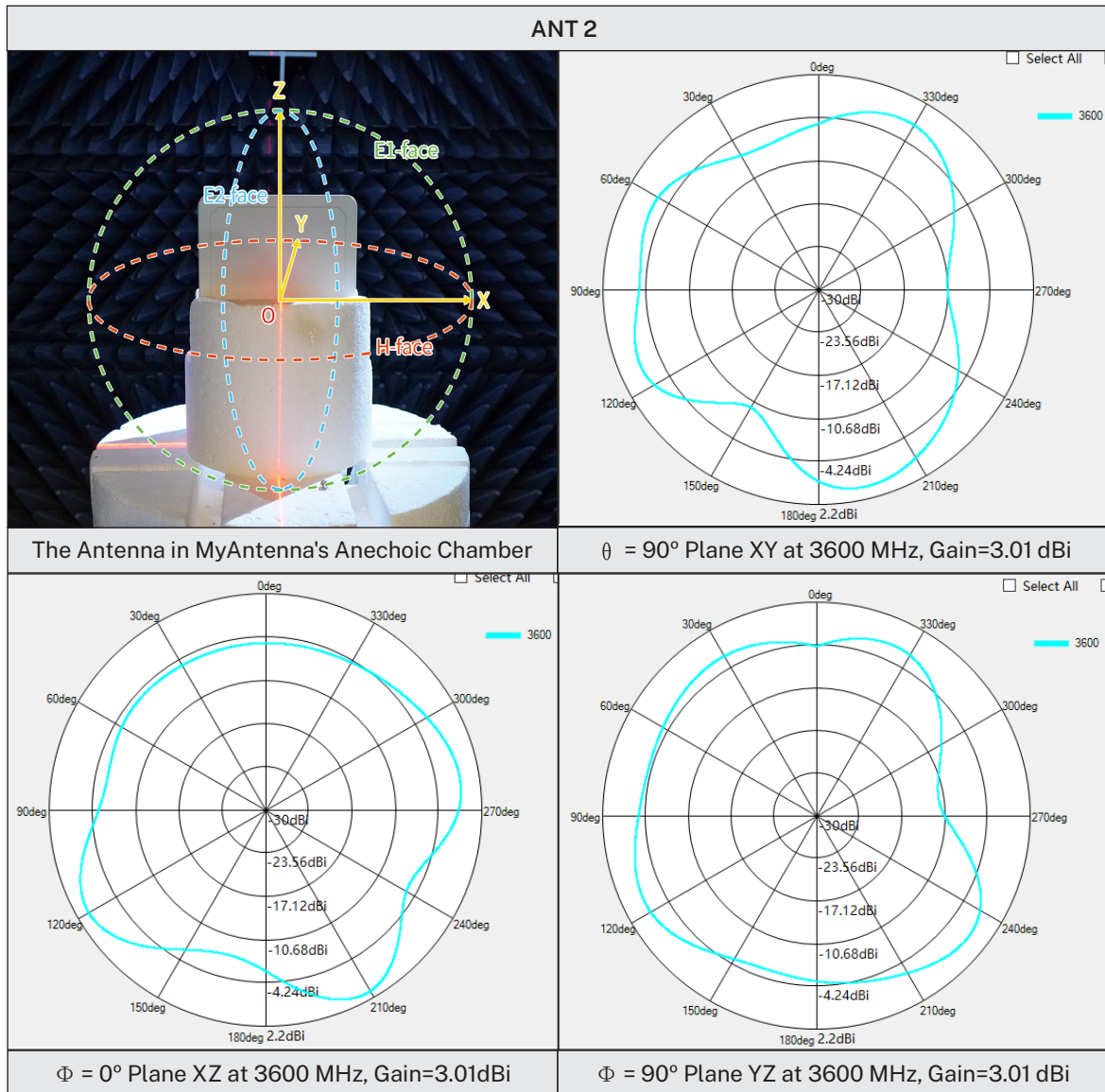


ANT 2 at 2600MHz, Gain = 2.5 dBi

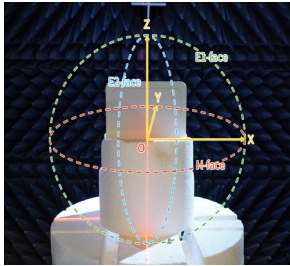
## 2D Radiation Patterns (3300-6000 MHz)



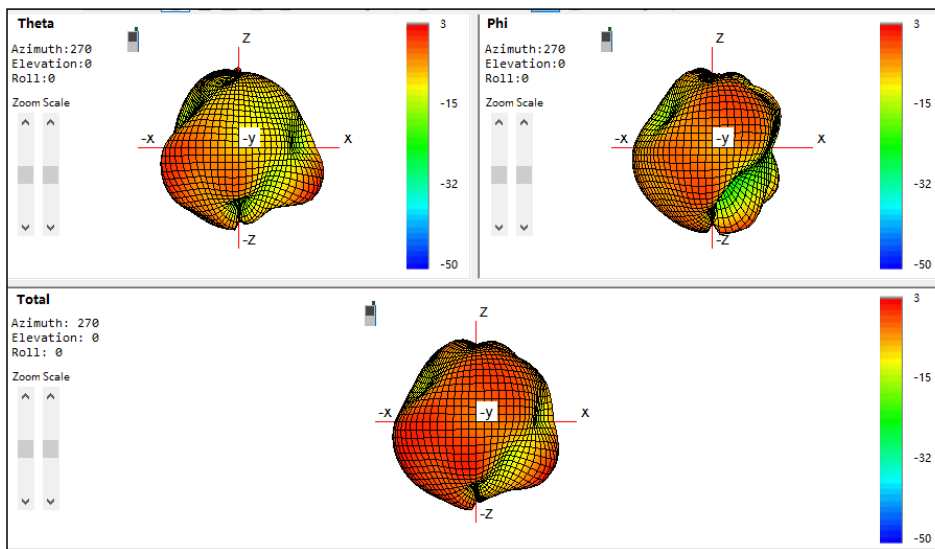




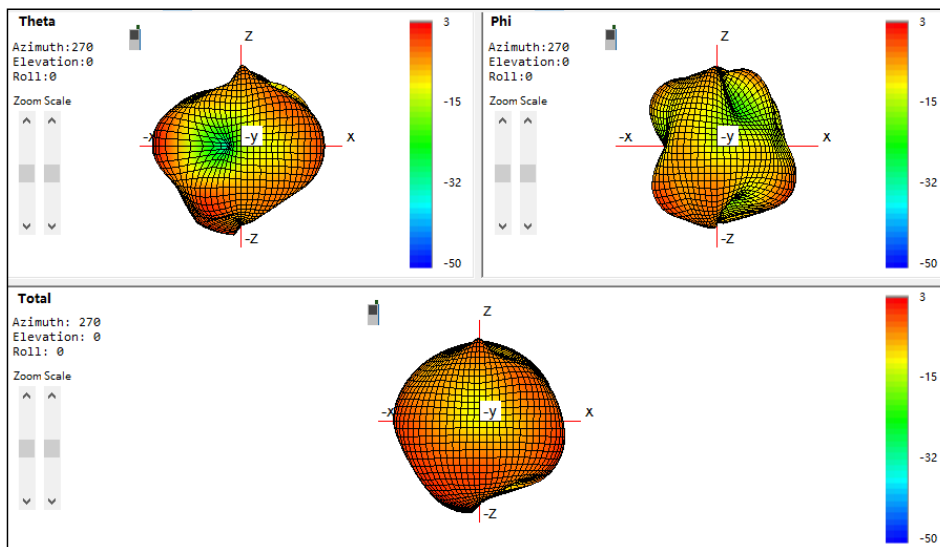
### 3D Radiation Patterns (3300-6000 MHz)



The Antenna in MyAntenna's Anechoic Chamber



ANT 1 at 3600MHz, Gain =1.7 dBi



ANT 2 at 3600MHz, Gain = 3.01 dBi

## ANTENNA INSTALLATION GUIDE





## 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



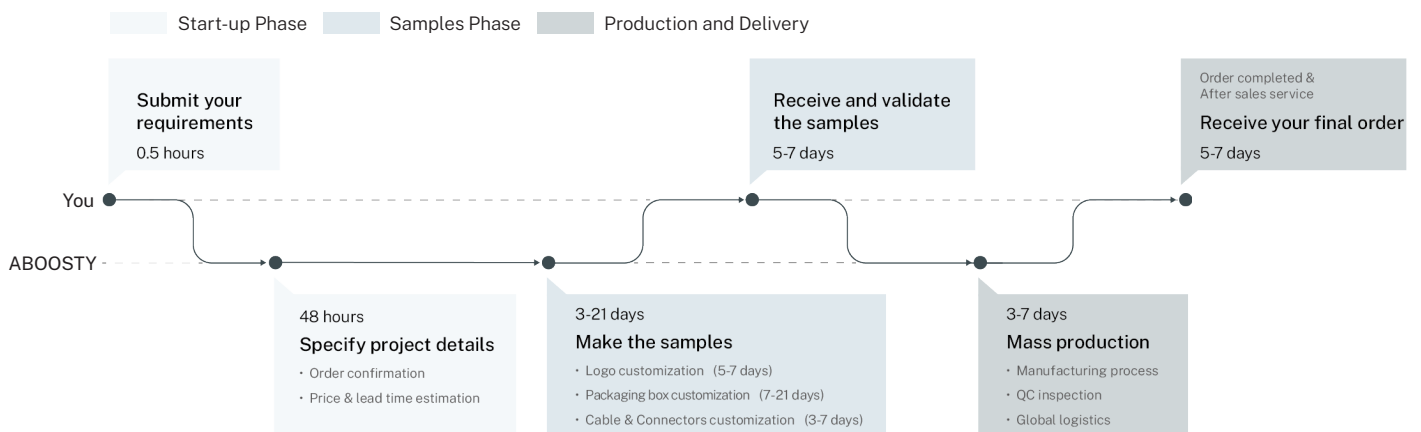
Prompt reply within 24h

### What We Provide

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

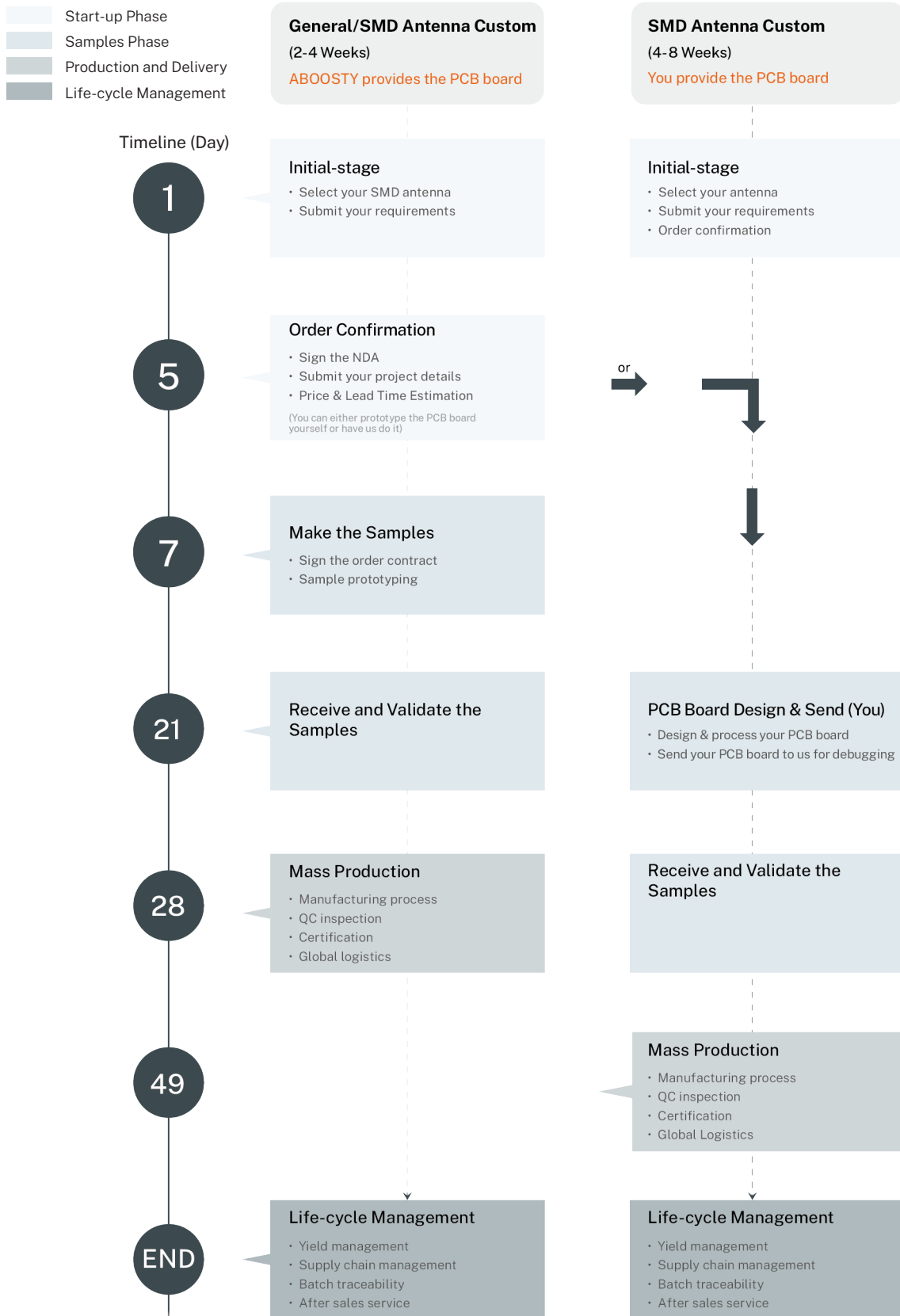
### Custom Process

#### Light Customization Process





## Deep Customization Process



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