

Antenna Test Report (DAP-E5960)

*Document Number: **NE1-23103***

*Version: **V 1.06***

*Released Date: **2025/01/07***

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*Reviewed By: **Stone***

Specification

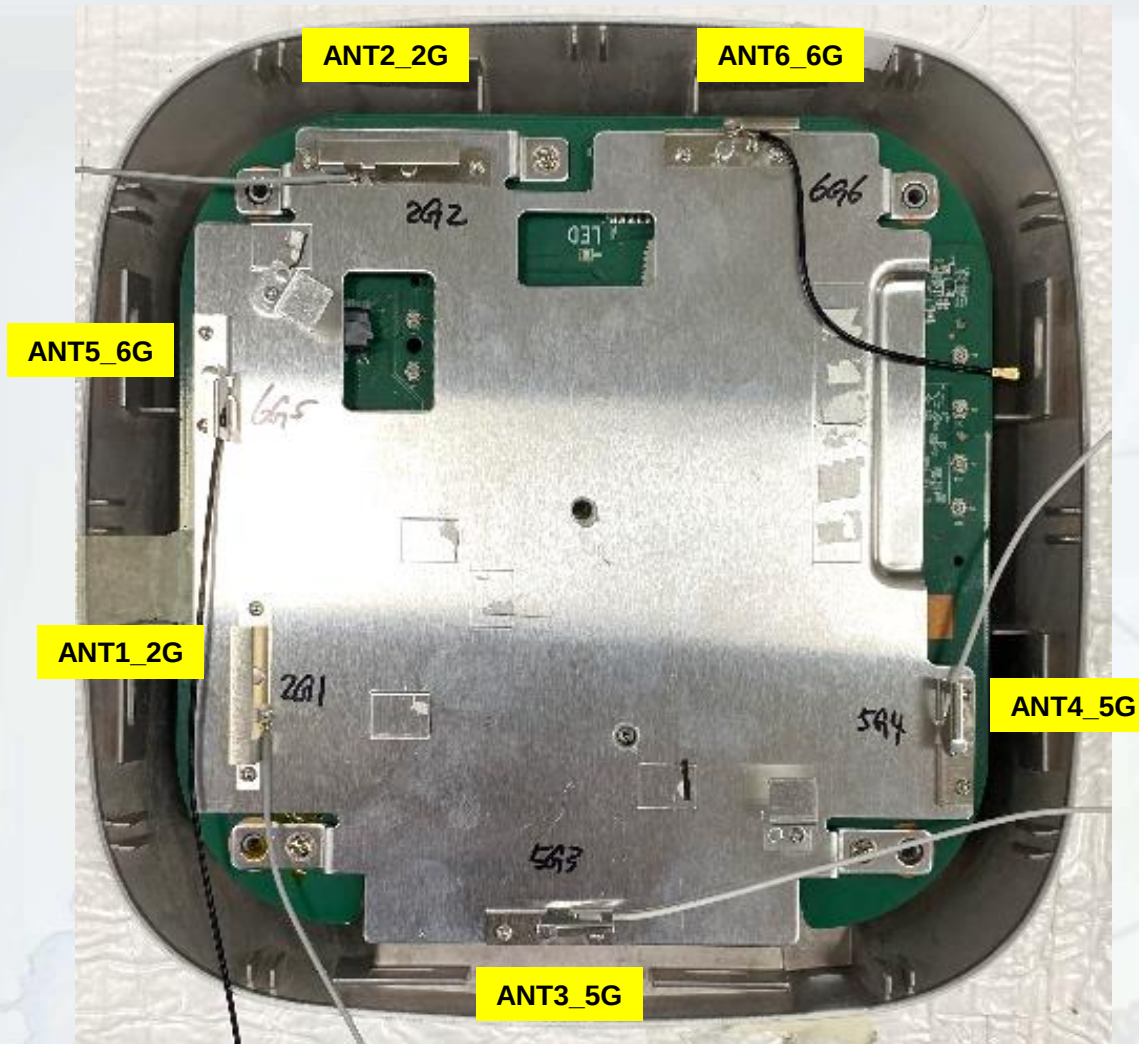
Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
WIFI 2G	2	2400-2500MHz	
WIFI 5G	2	5150-5875MHz	
WIFI 6G	2	5925-7125MHz	

Requirements of Measurement

Test Item	Specification	Remark
Return Loss	> 10dB	
Isolation	> 25dB	
Peak gain	< dBi for WIFI 2400-2500 MHz < dBi for WIFI 5150-5875MHz < dBi for WIFI 5925-7125MHz	
Efficiency	> 60%	
Radiation pattern	Scale: +10 ~ -40dBi, Angle step size: 5 degree	

Antenna Placement & Solution



ANT	Cable color
ANT1	Gray
ANT2	Gray
ANT3	White
ANT4	White
ANT5	Black
ANT6	Black

Test Setup for S-parameter Measurement

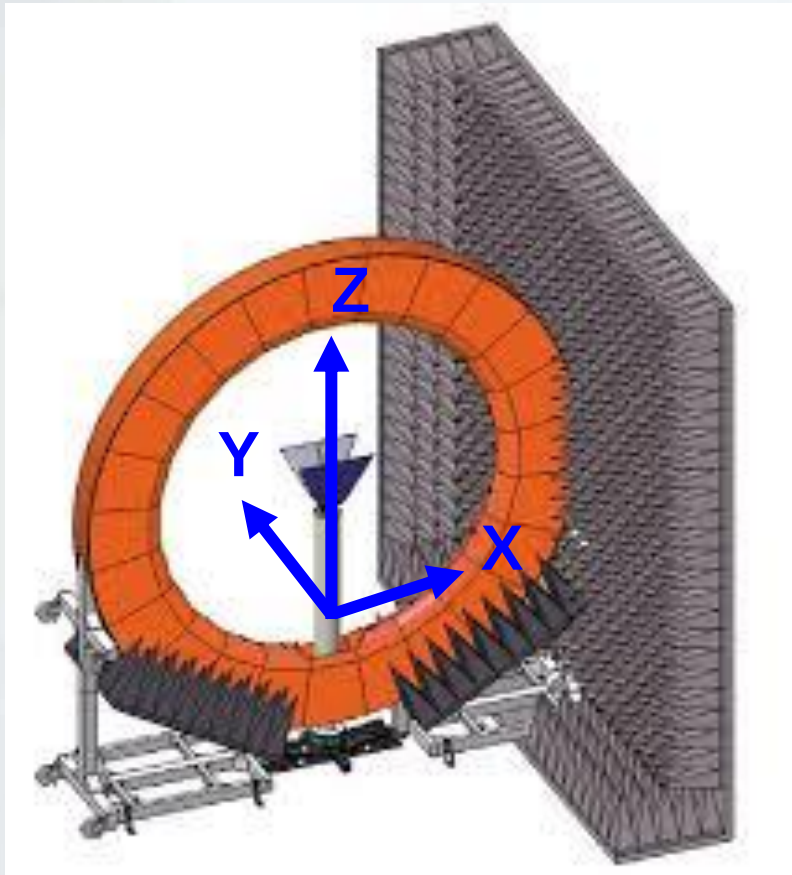


Equipment	Brand	Model	S/N
Network Analyzer	Keysight	E5071C	MY46107744

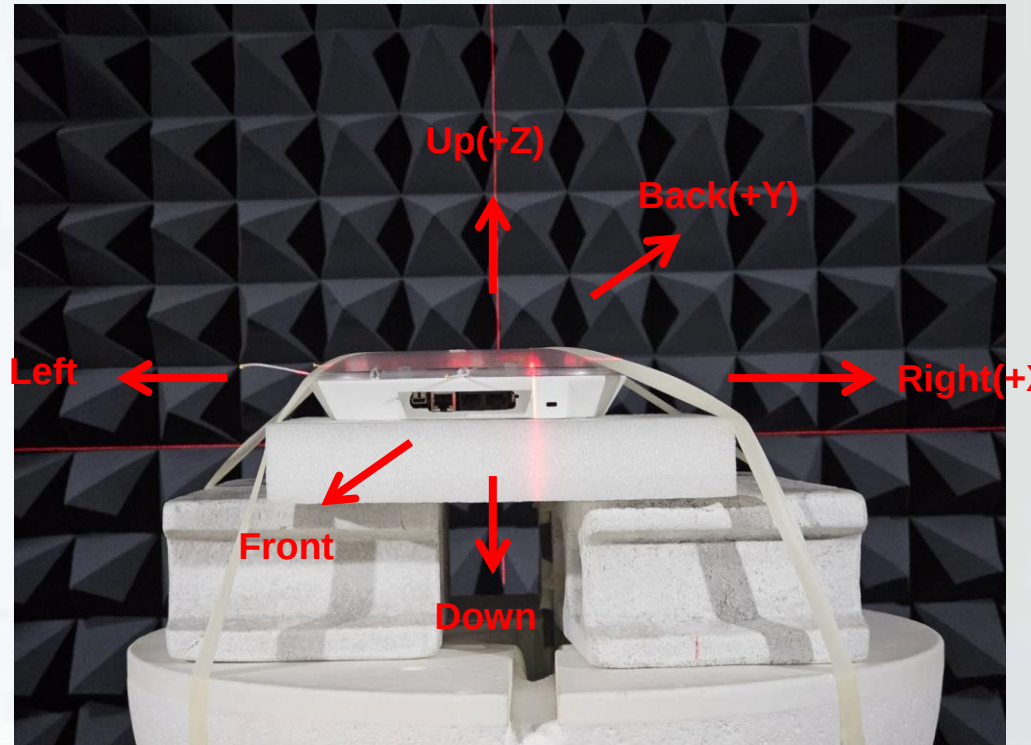


Test Setup for Radiation Pattern Measurement

Chamber Information

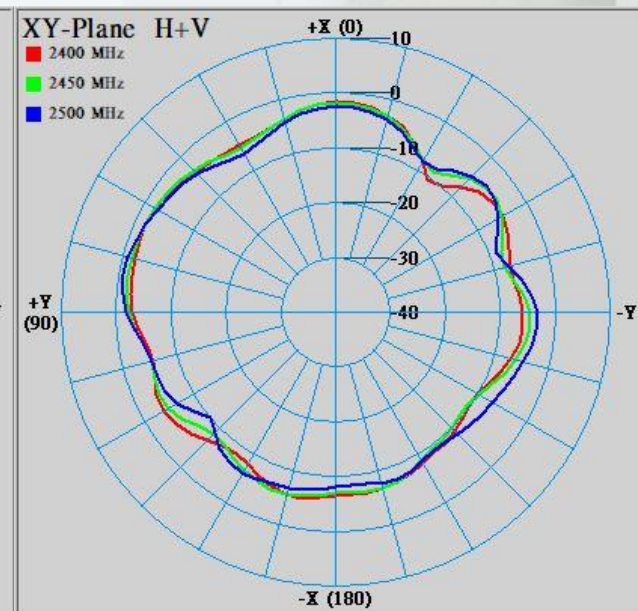
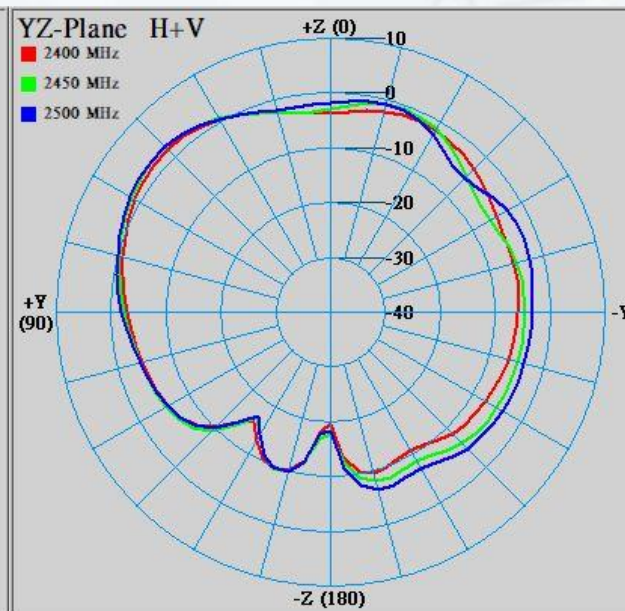
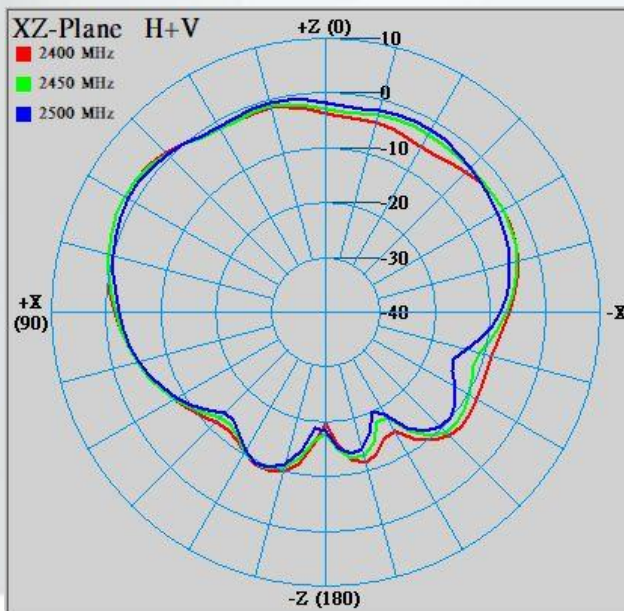
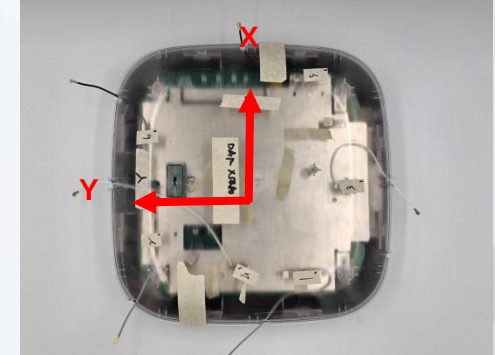
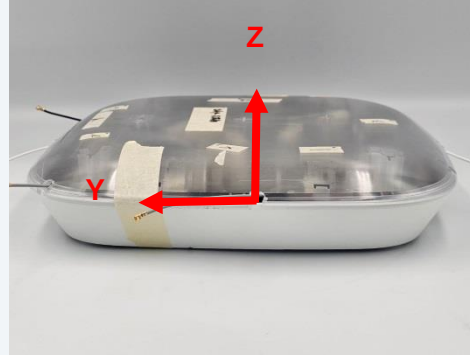
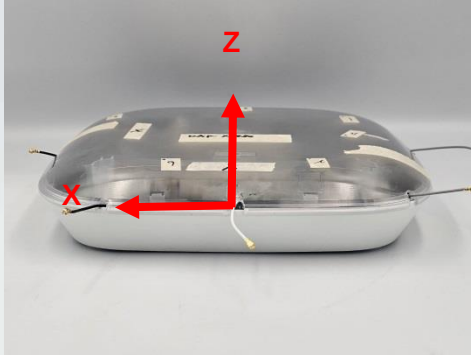


- SATIMO SG-24L Multi-Probe Antenna Measurement System
 - Angle between probes: 15°
 - Frequency range: 400 MHz – 8.5 GHz
 - Chamber Room Size: 5m L x 5m W x 5m H



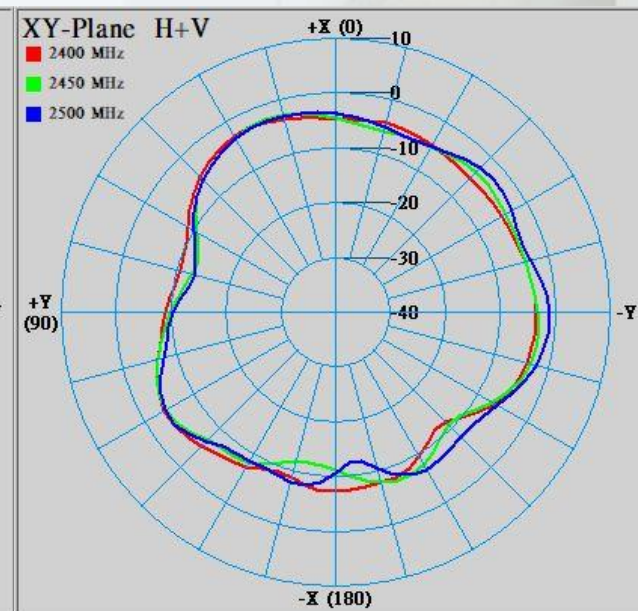
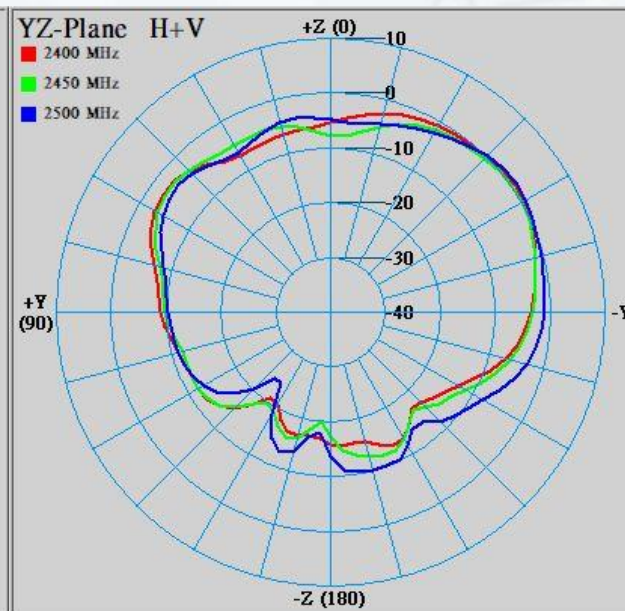
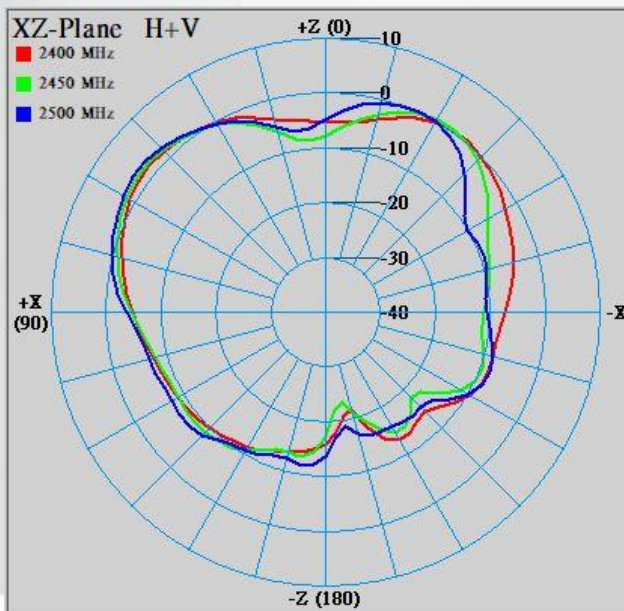
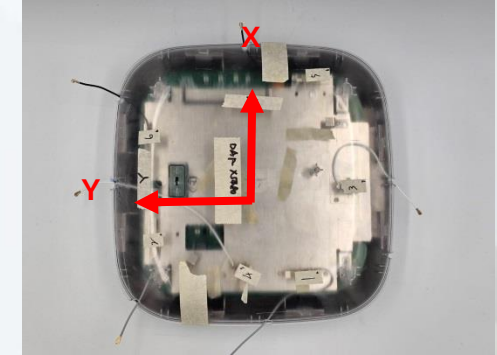
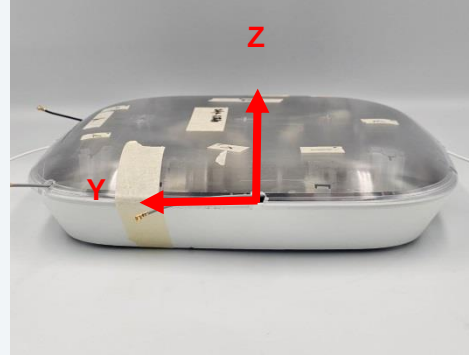
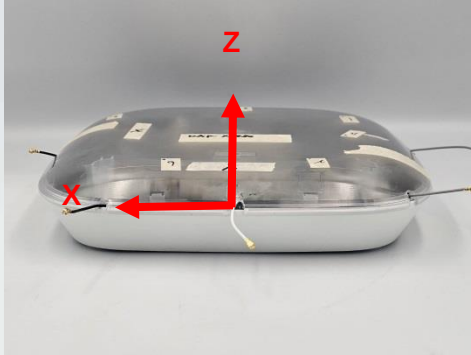
2D Radiation Pattern Results

Ant1-2G



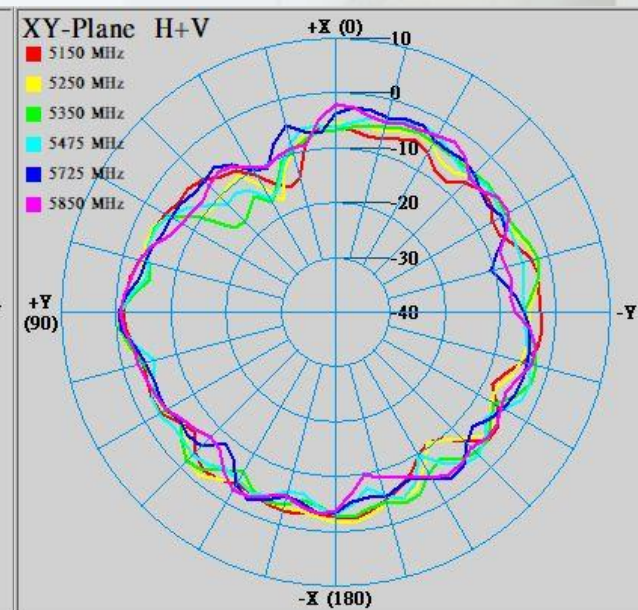
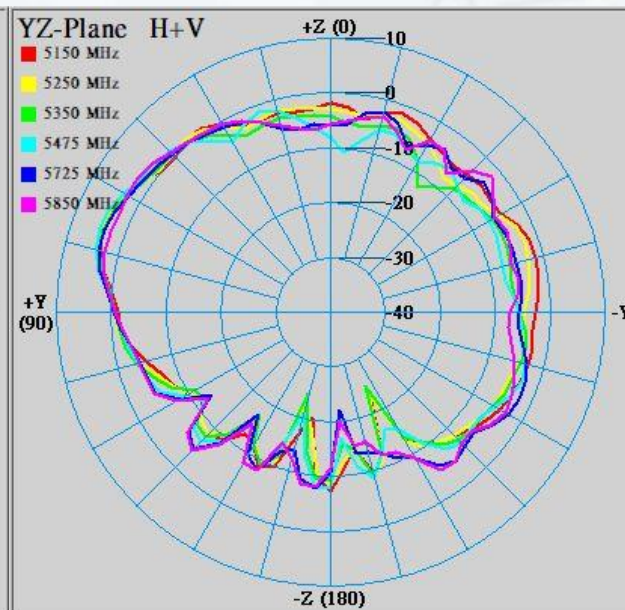
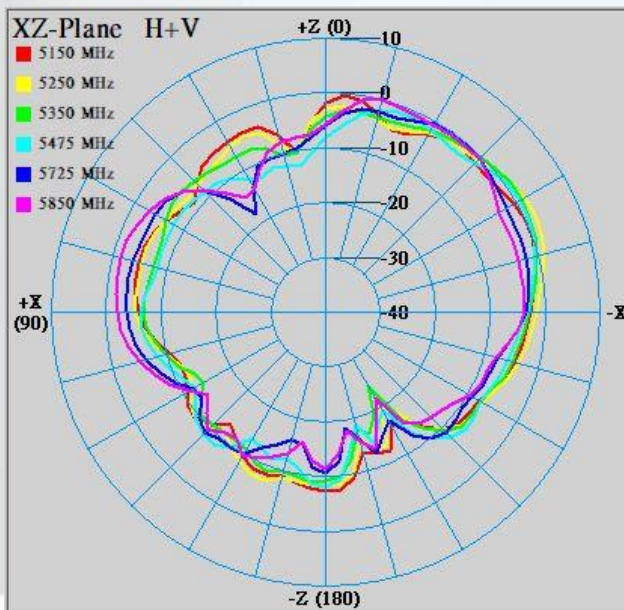
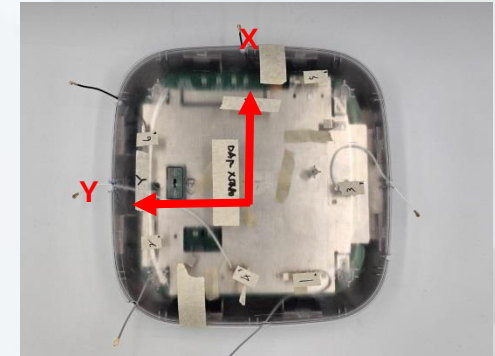
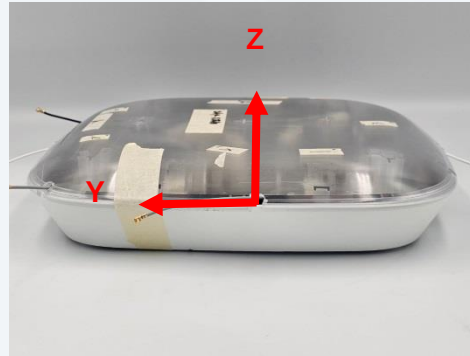
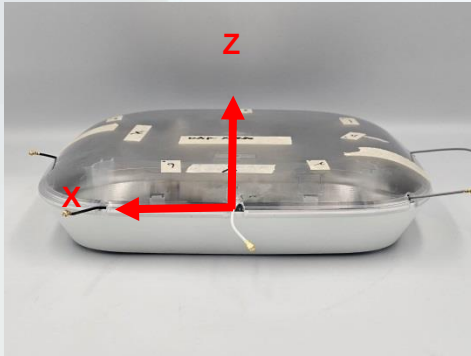
2D Radiation Pattern Results

Ant2-2G



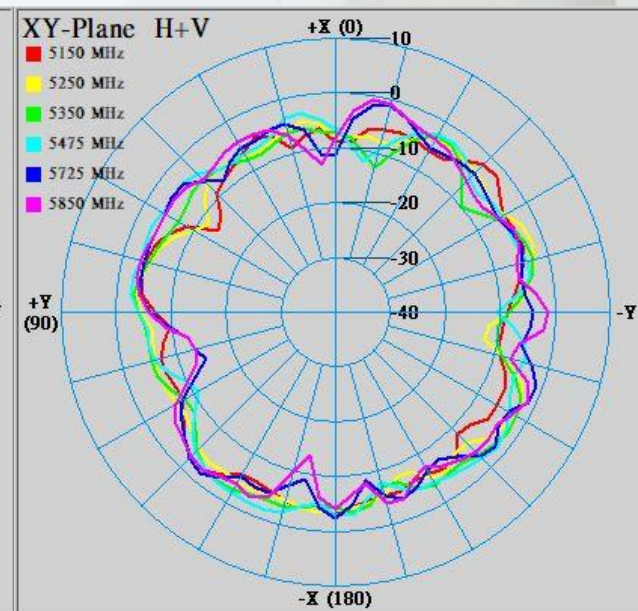
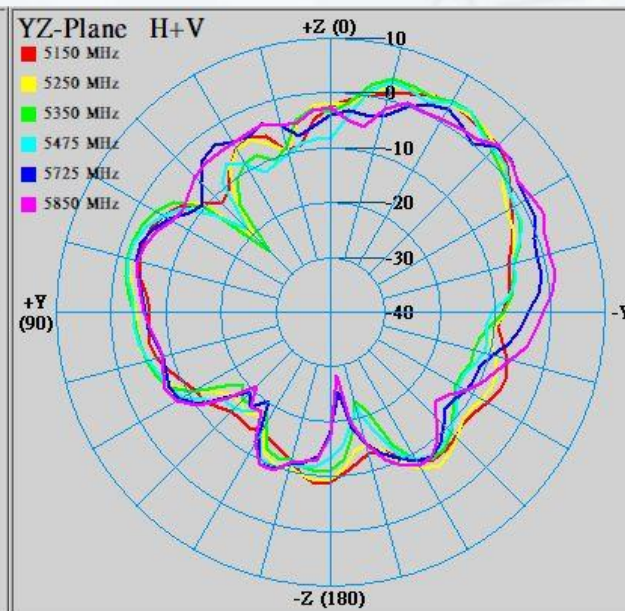
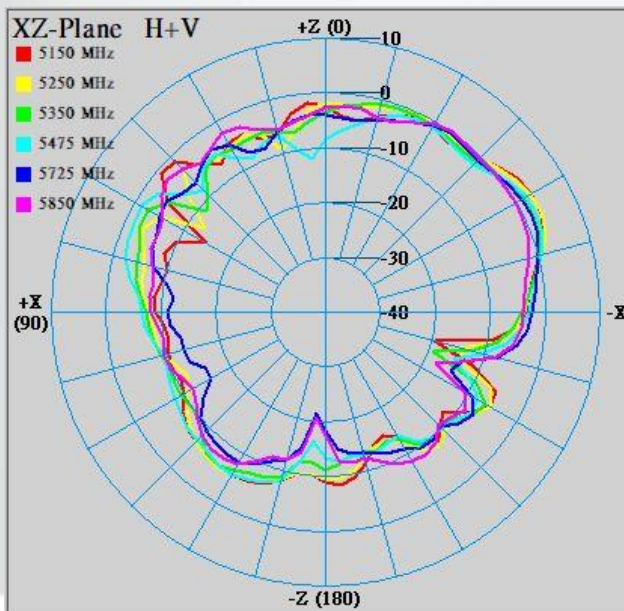
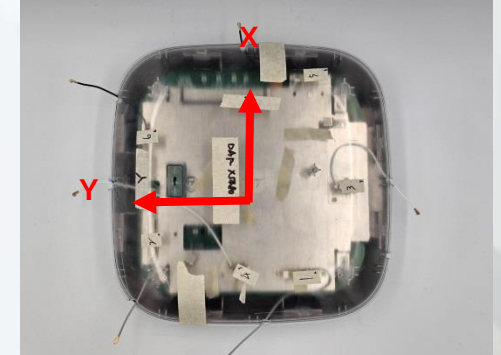
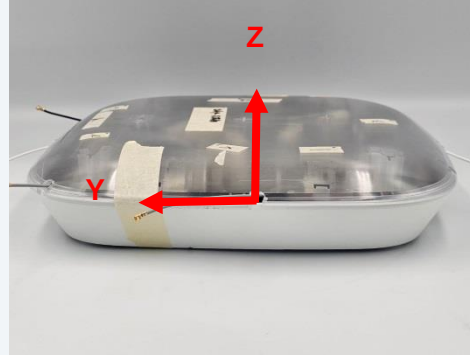
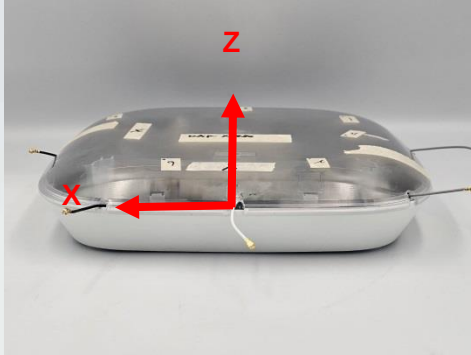
2D Radiation Pattern Results

Ant3-5G



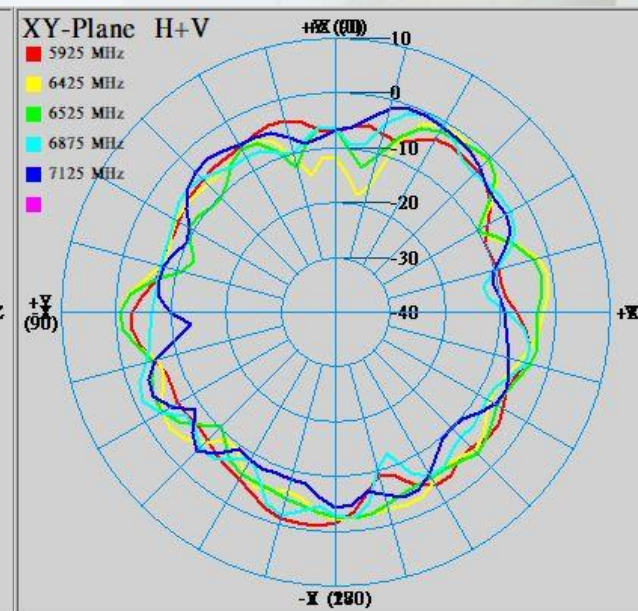
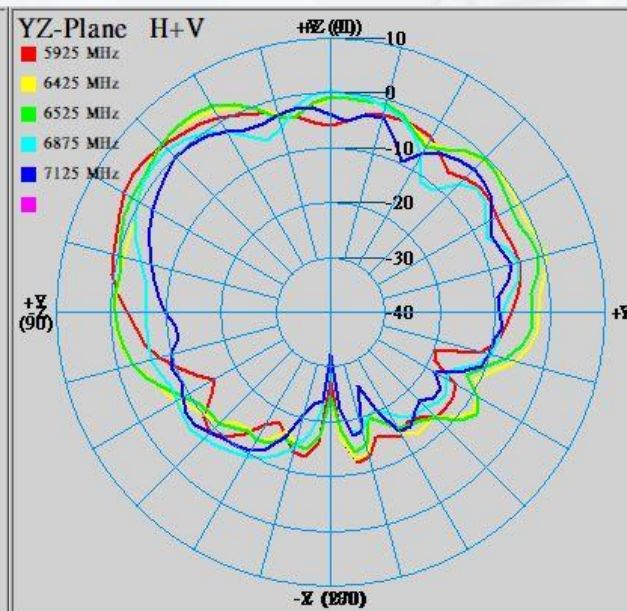
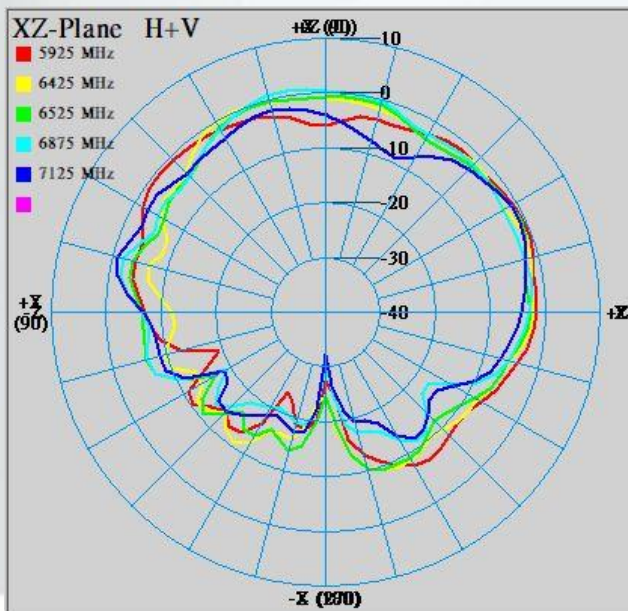
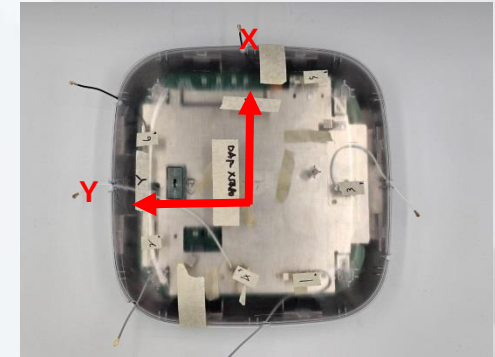
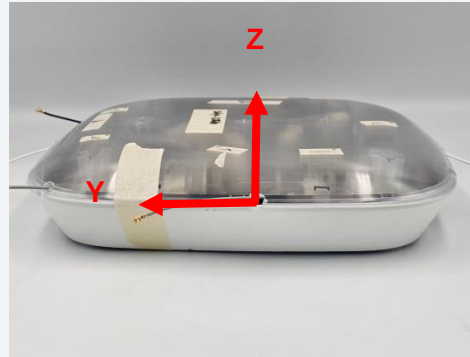
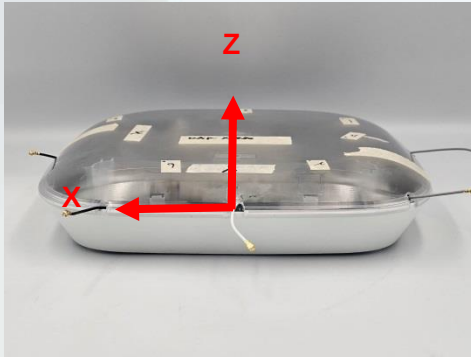
2D Radiation Pattern Results

Ant4-5G



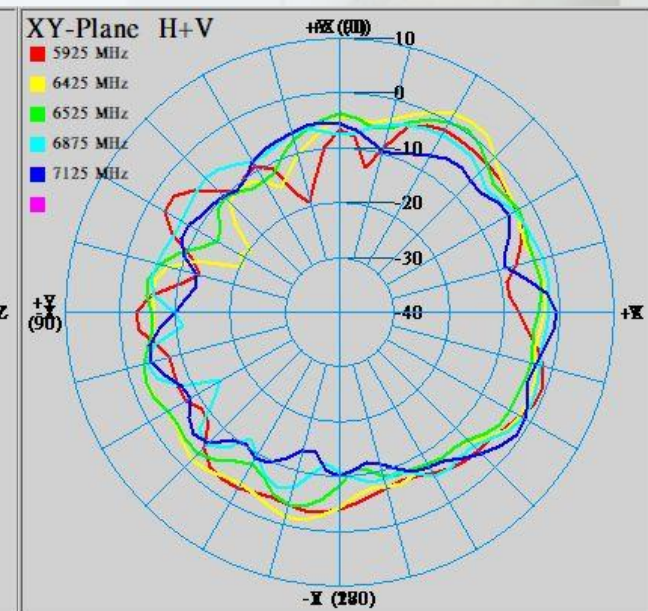
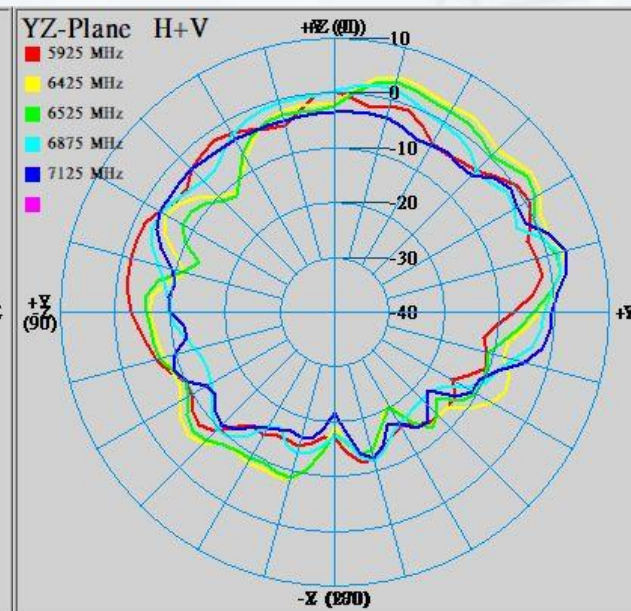
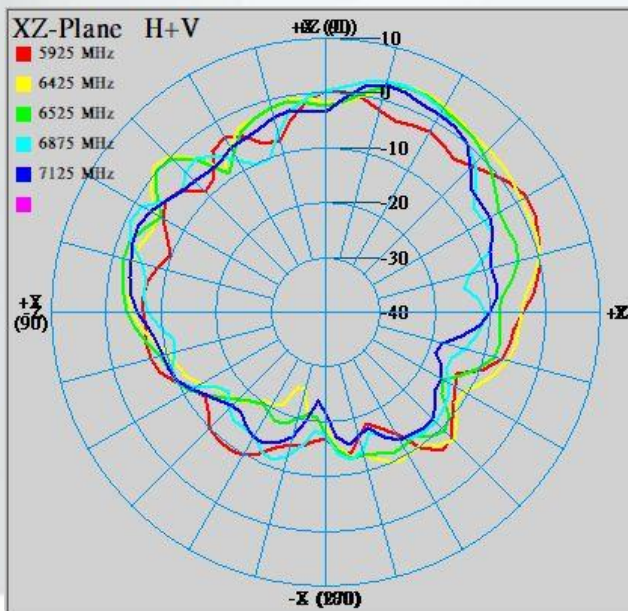
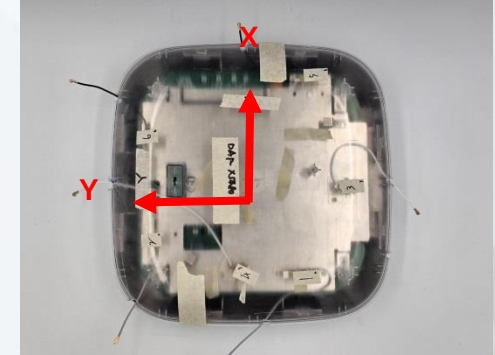
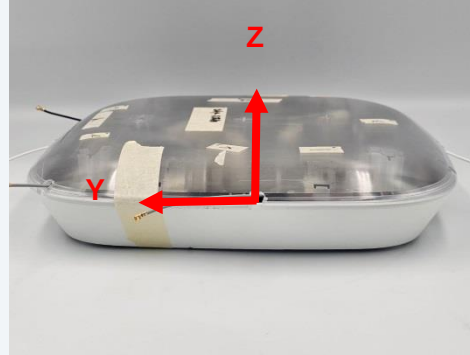
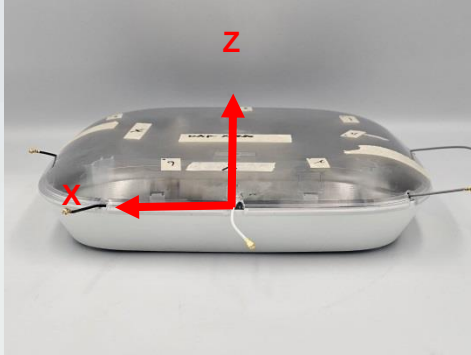
2D Radiation Pattern Results

Ant5-6G



2D Radiation Pattern Results

Ant6-6G



Results Summary

Peak gain & Efficiency – ANT 1 2G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	3.1	72
2450	3.3	69
2500	3.1	70

Results Summary

Peak gain & Efficiency – ANT 2 2G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	2.4	62
2450	2.4	64
2500	3.1	68

Results Summary

Peak gain & Efficiency – ANT 3 5G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
5150	4.4	72
5250	4.7	71
5350	4.3	73
5475	4.8	73
5725	4.2	71
5850	4.1	72

Results Summary

Peak gain & Efficiency – ANT 4 5G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
5150	4.8	74
5250	4.5	71
5350	4.7	74
5475	4.7	69
5725	4.1	70
5850	4.7	72

Results Summary

Peak gain & Efficiency – ANT 5 6G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
5925	4.2	70
6425	4.4	69
6525	4.6	67
6875	4.4	67
7125	3.4	69

Results Summary

Peak gain & Efficiency – ANT 6 6G (Criterion: Efficiency >60%)

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
5925	4.4	68
6425	4.3	74
6525	3.9	74
6875	4.2	66
7125	4.5	64