
Antenna Test Result of Tooling

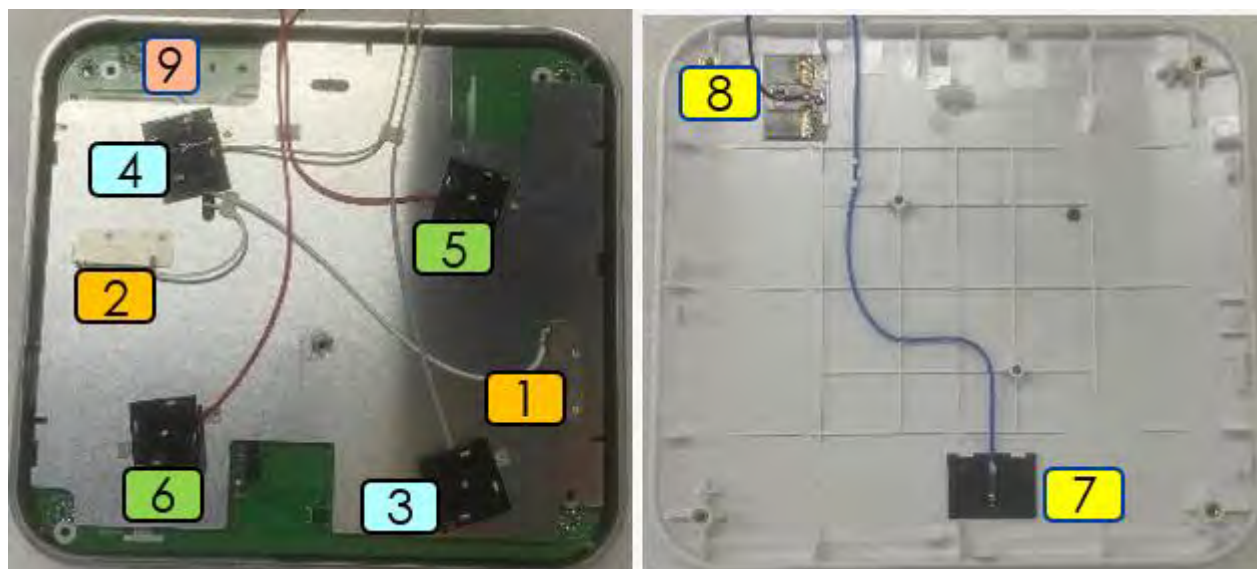


ACCTON

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Antenna Description



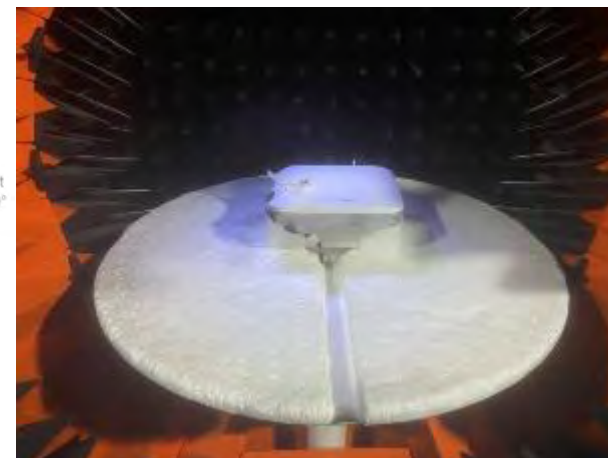
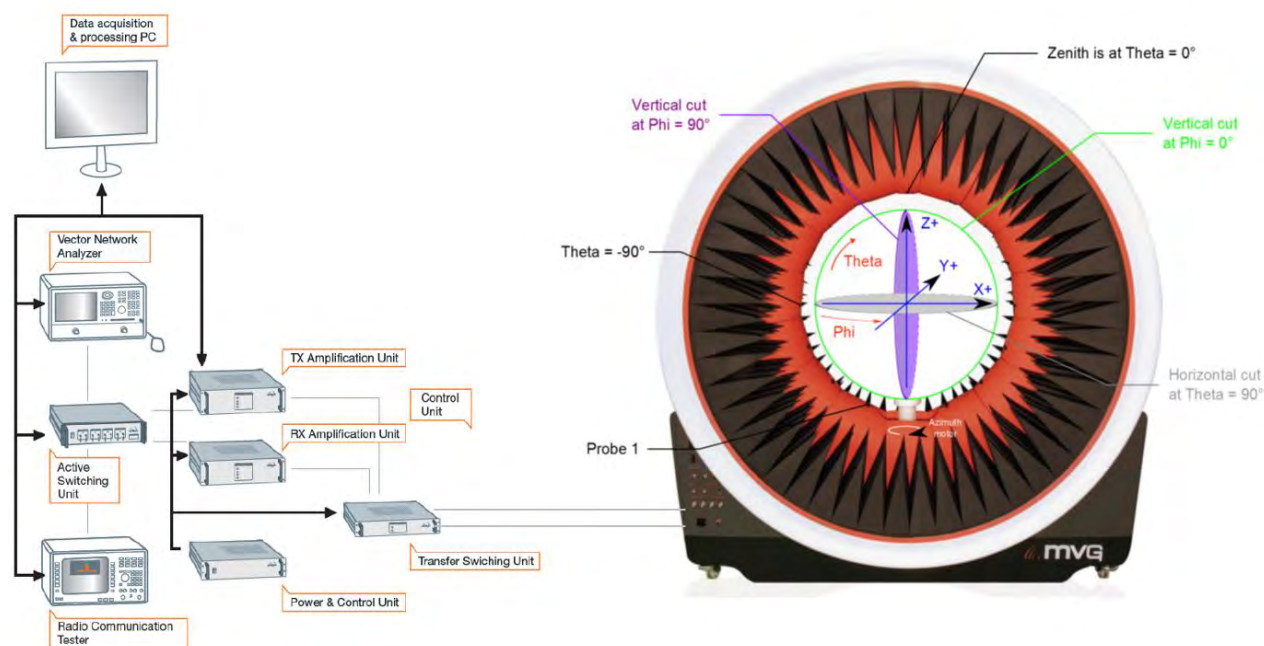
Company name	Address
ACCTON Technology Corporation	No. 1, Zhihui 1st Road, Zhubei City, Hsinchu County 302059, Taiwan, R.O.C

NO.	Manufacturer	Model No.	Type	Gain (dBi)	Function
1	ACCTON Technology Corporation	A8M8M-800000-2G1	Omni	5.31dBi	WiFi 2.4GHz
2	ACCTON Technology Corporation	A8M8M-800000-2G2	Omni	5.25dBi	WiFi 2.4GHz
3	ACCTON Technology Corporation	A8M8M-800000-5G1	Omni	6.42dBi	WiFi 5GHz
4	ACCTON Technology Corporation	A8M8M-800000-5G2	Omni	6.76dBi	WiFi 5GHz
5	ACCTON Technology Corporation	A8M8M-800000-6G1	Omni	6.88dBi	WiFi 6GHz
6	ACCTON Technology Corporation	A8M8M-800000-6G2	Omni	6.83dBi	WiFi 6GHz
7	ACCTON Technology Corporation	A8M8P-100266	Omni	5.58dBi @2.4G 5.43dBi @5G 5.26dBi @6G	Scanning
8	ACCTON Technology Corporation	A8M8P-100267	Omni	5.52dBi @2.4G 5.33dBi @5G 5.77dBi @6G	Scanning
9	ACCTON Technology Corporation	GT128V007S-001	Omni	3.71dBi	Bluetooth

Experimental Setup & Coordinate System

Describe	Manufacturer	Model Number	Serial Number	Cal.Date	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42402996	Jul.-2025	Jul.-2027

Chamber name: MVG SASTION SG24L Anechoic Chamber



Test instrument calibration information:

Vendor	Model	Calibrated Date	Calibrated Until
Satimo	StarLab	2025/12/23	2026/12/22
R&S Vector Network Analyzer	ZND	2026/03/24	2027/03/23

Gain

2.4GHz ANT-1			
Frequency (MHz)	2400	2447	2484
Peak Gain (dBi)	5.31	4.99	4.55
Peak Gain at Polarization	(Φ)123° (Θ)45°	(Φ)126° (Θ)45°	(Φ)126° (Θ)48°

2.4GHz ANT-2			
Frequency (MHz)	2400	2447	2484
Peak Gain (dBi)	5.25	4.94	4.77
Peak Gain at Polarization	(Φ)6° (Θ)33°	(Φ)6° (Θ)36°	(Φ)9° (Θ)36°

5GHz ANT-1			
Frequency (MHz)	5150	5500	5850
Peak Gain (dBi)	6.42	6.04	6.41
Peak Gain at Polarization	(Φ)132° (Θ)54°	(Φ)117° (Θ)51°	(Φ)117° (Θ)57°

5GHz ANT-2			
Frequency (MHz)	5150	5500	5850
Peak Gain (dBi)	5.37	6.36	6.76
Peak Gain at Polarization	(Φ)174° (Θ)33°	(Φ)129° (Θ)54°	(Φ)0° (Θ)57°

6GHz ANT-1			
Frequency (MHz)	5925	6475	7125
Peak Gain (dBi)	6.88	5.50	6.61
Peak Gain at Polarization	(Φ)174° (Θ)324°	(Φ)0° (Θ)300°	(Φ)177° (Θ)294°

6GHz ANT-2			
Frequency (MHz)	5925	6475	7125
Peak Gain (dBi)	5.64	6.83	5.87
Peak Gain at Polarization	(Φ)102° (Θ)318°	(Φ)105° (Θ)311°	(Φ)110° (Θ)306°

Scanning Radio ANT-1									
Frequency (MHz)	2400	2447	2484	5150	5500	5850	5925	6475	7125
Peak Gain (dBi)	5.58	4.54	4.85	4.6	5.11	5.43	5.14	5.26	5.06
Peak Gain at Polarization	(Φ)165° (Θ)24°	(Φ)162° (Θ)24°	(Φ)162° (Θ)24°	(Φ)168° (Θ)12°	(Φ)168° (Θ)18°	(Φ)3° (Θ)357°	(Φ)3° (Θ)357°	(Φ)12° (Θ)342°	(Φ)165° (Θ)18°

Scanning Radio ANT-2									
Frequency (MHz)	2400	2447	2484	5150	5500	5850	5925	6475	7125
Peak Gain (dBi)	5.52	5.44	4.63	5.01	5.07	5.33	5.77	5.19	5.08
Peak Gain at Polarization	(Φ)156° (Θ)348°	(Φ)147° (Θ)351°	(Φ)141° (Θ)348°	(Φ)78° (Θ)312°	(Φ)99° (Θ)330°	(Φ)141° (Θ)351°	(Φ)126° (Θ)351°	(Φ)36° (Θ)348°	(Φ)87° (Θ)345°

BLE ANT			
Frequency (MHz)	2400	2447	2484
Peak Gain (dBi)	2.26	3.71	3.32
Peak Gain at Polarization	(Φ)69° (Θ)303°	(Φ)69° (Θ)351°	(Φ)90° (Θ)351°

Test date: 2026/05/22

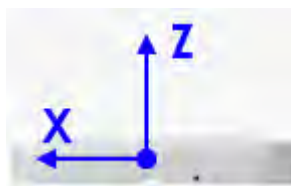
Φ(Phi) ; Θ(Theta)

※Peak Gain (G) and directivity (D) are linked by the formula $G = k \times D$, where the antenna effective factor k ($0 \leq k \leq 1$) corresponds to the overall losses of the antenna. Accordingly, antenna gain can be calculated by the following formula, where represents antenna losses comprising of all ohm and dielectric losses between the input connector and the outer surface of the radome and the loss due to the impedance mismatch.

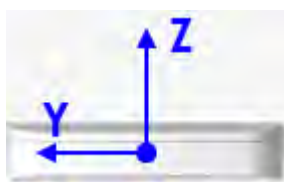
2D Radiation Pattern

2.4GHz ANT 1&2

ZX-Plane



ZY-Plane



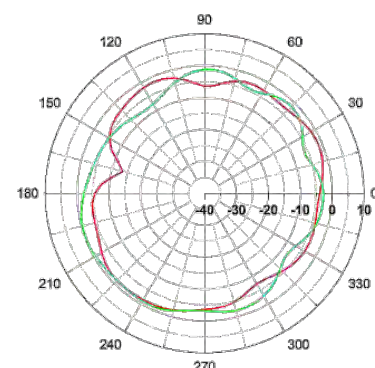
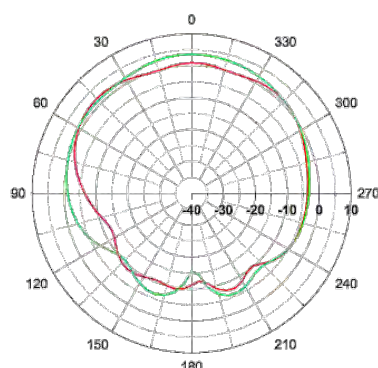
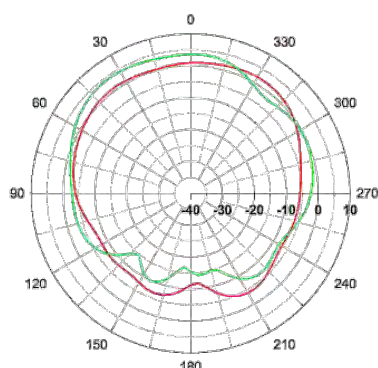
XY-Plane



2.4GHz

ANT 1

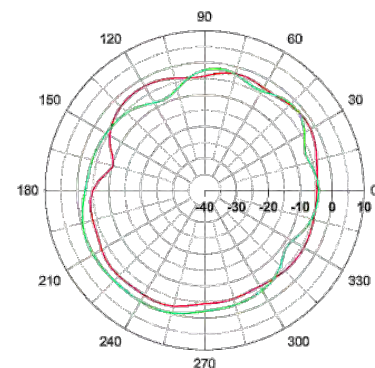
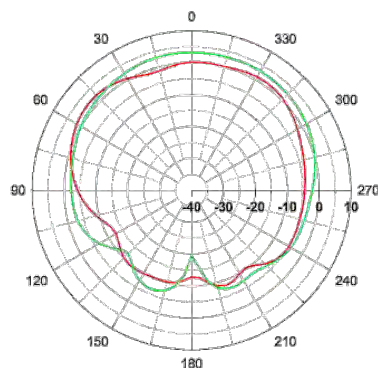
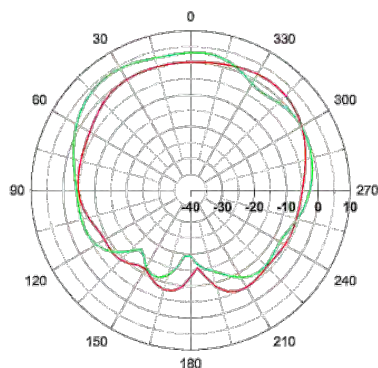
ANT 2



2.447GHz

ANT 1

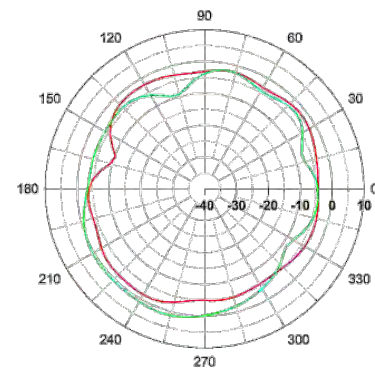
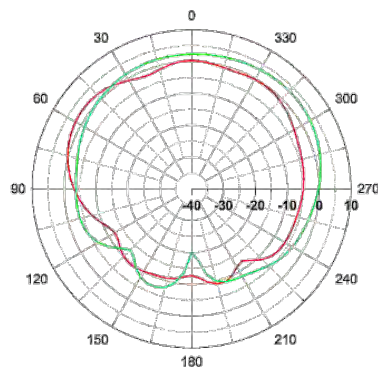
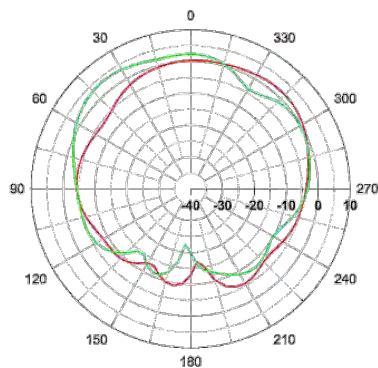
ANT 2



2.484GHz

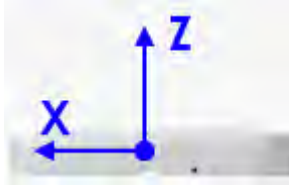
ANT 1

ANT 2

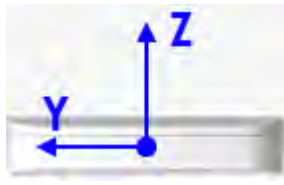


5GHz ANT 1&2

ZX-Plane



ZY-Plane



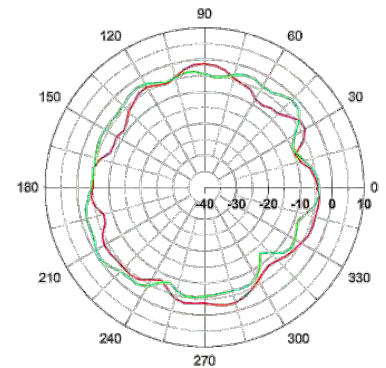
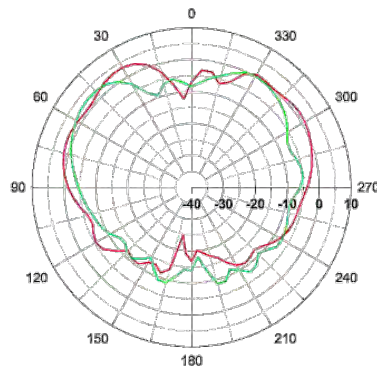
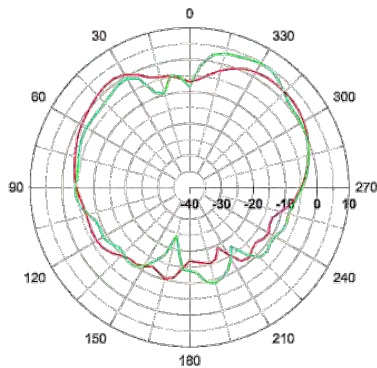
XY-Plane



5.15GHz

ANT 1

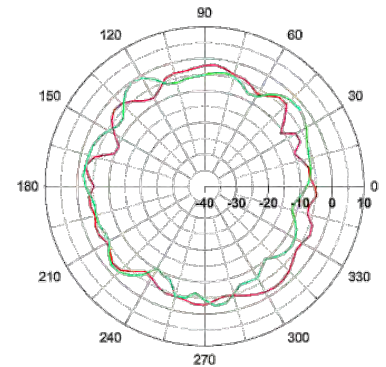
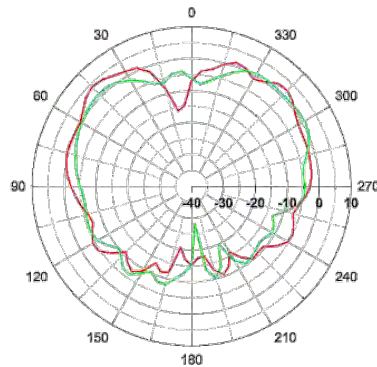
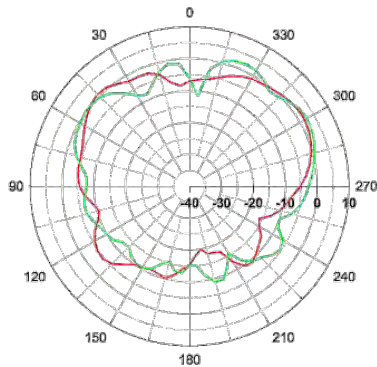
ANT 2



5.5GHz

ANT 1

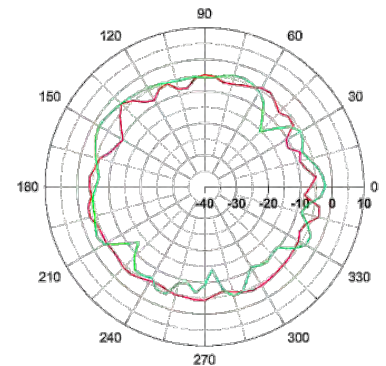
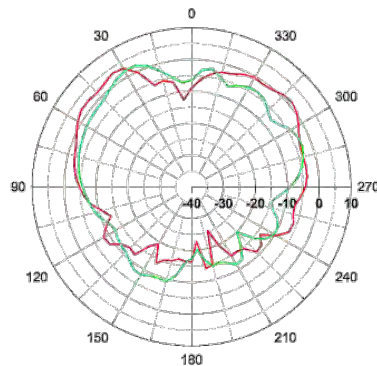
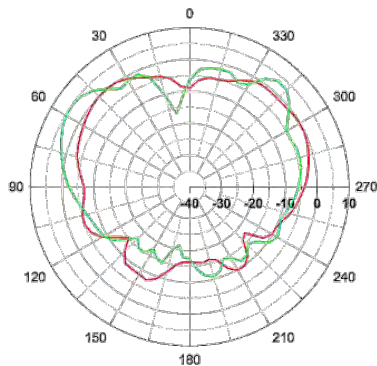
ANT 2



5.85GHz

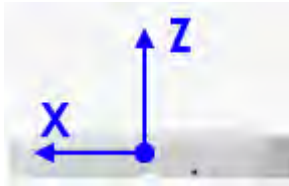
ANT 1

ANT 2



6GHz ANT 1&2

ZX-Plane



ZY-Plane



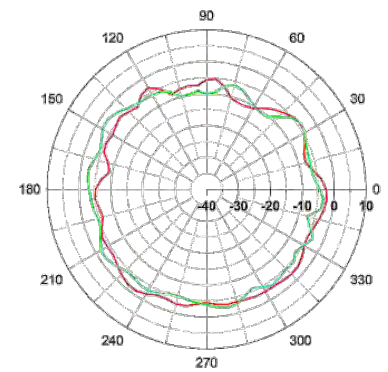
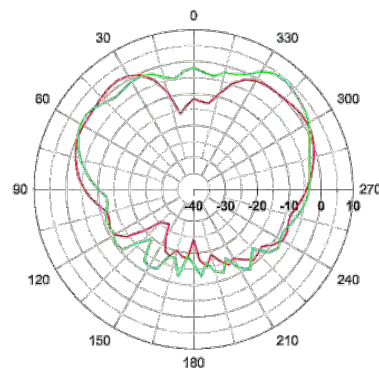
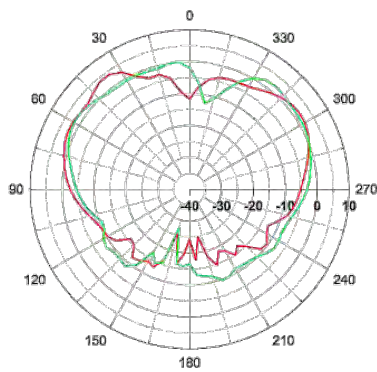
XY-Plane



5.925GHz

ANT 1

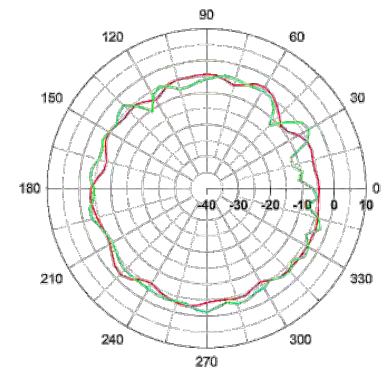
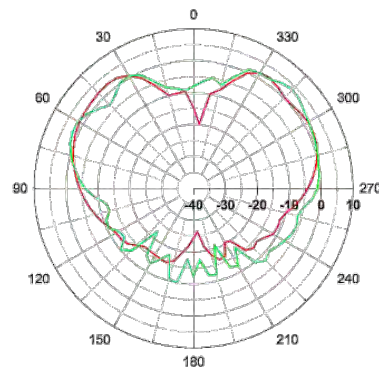
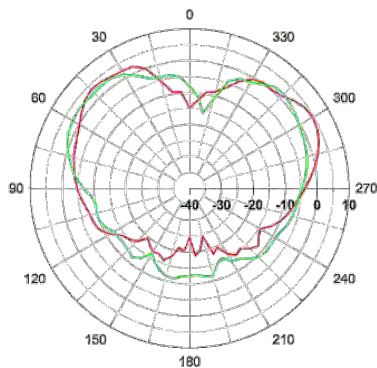
ANT 2



6.475GHz

ANT 1

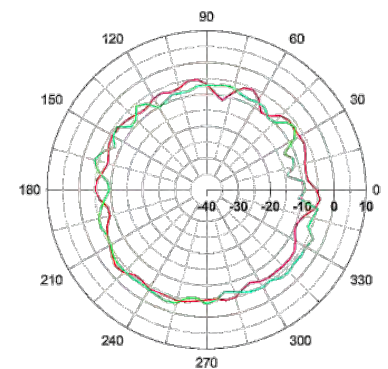
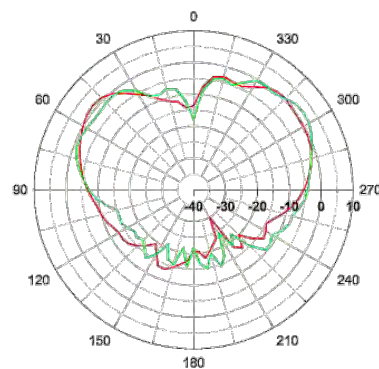
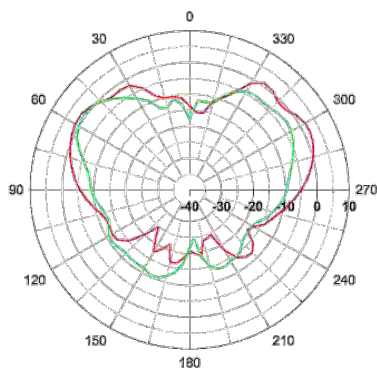
ANT 2



7.125GHz

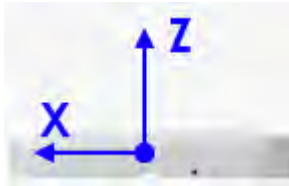
ANT 1

ANT 2



Scanning Radio ANT 1&2

ZX-Plane



ZY-Plane



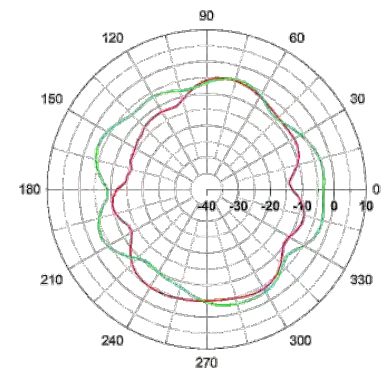
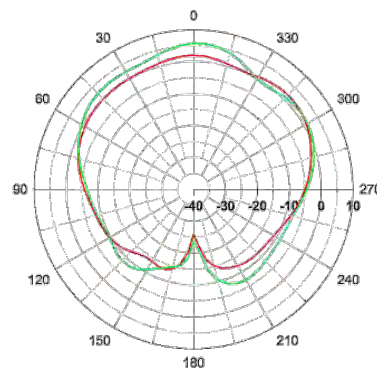
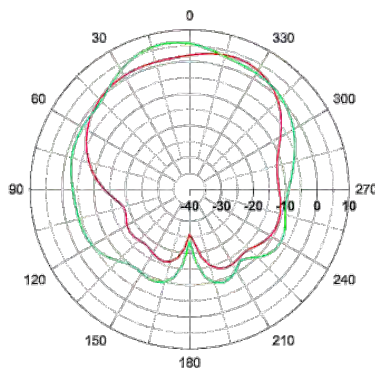
XY-Plane



2.4GHz

ANT 1

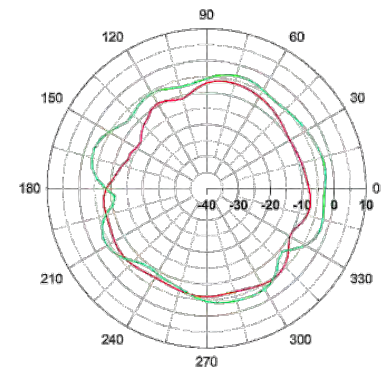
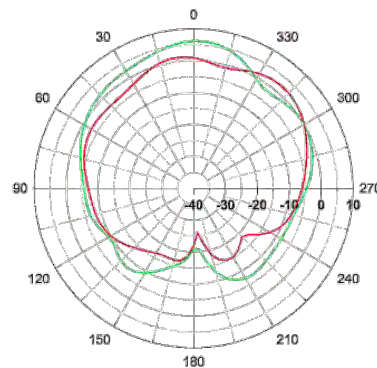
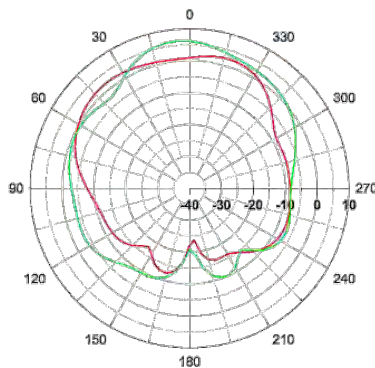
ANT 2



2.447GHz

ANT 1

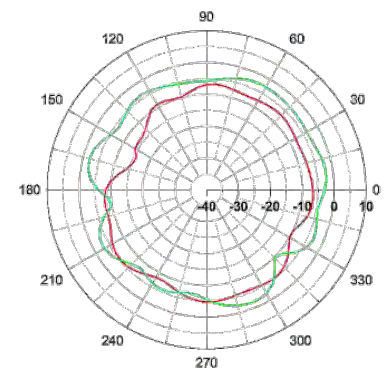
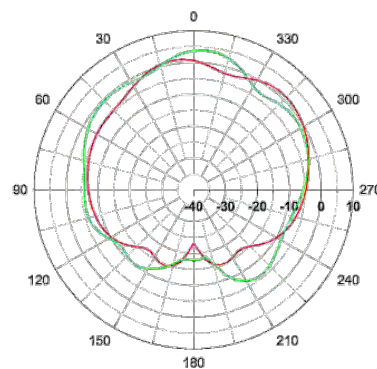
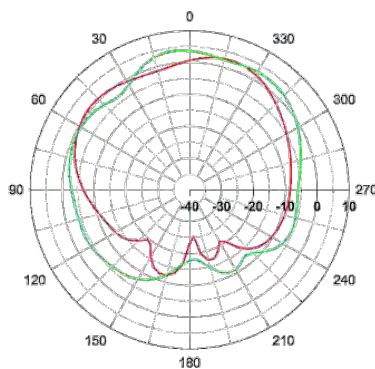
ANT 2



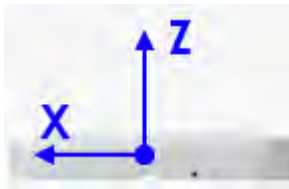
2.484GHz

ANT 1

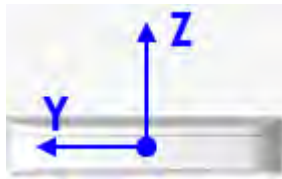
ANT 2



ZX-Plane



ZY-Plane



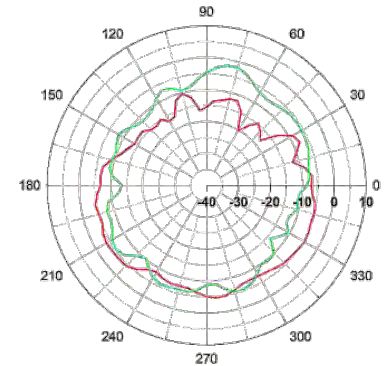
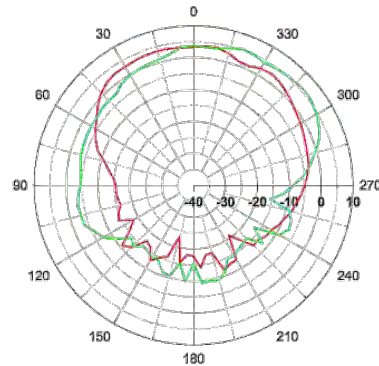
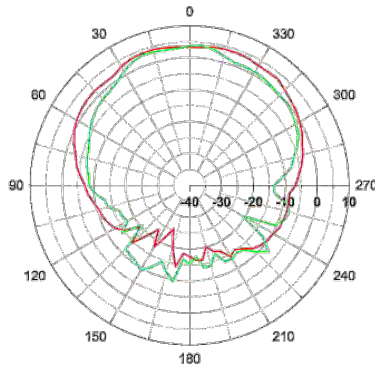
XY-Plane



5.15GHz

ANT 1

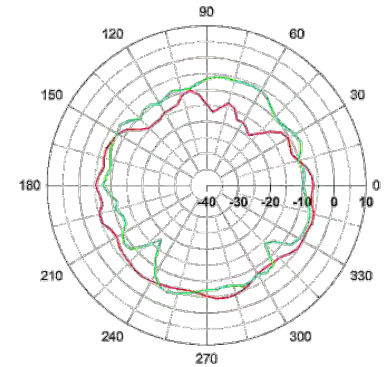
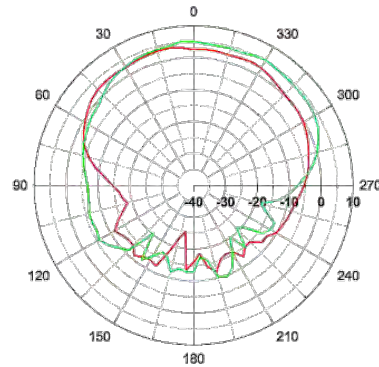
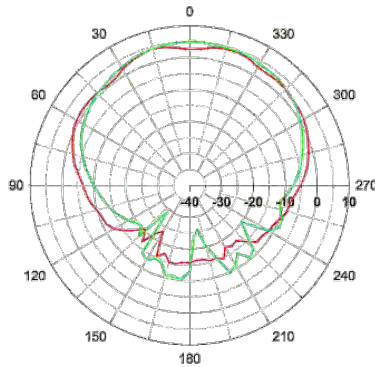
ANT 2



5.5GHz

ANT 1

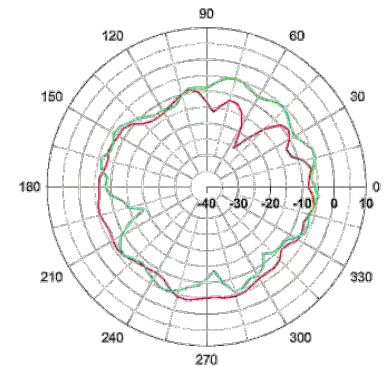
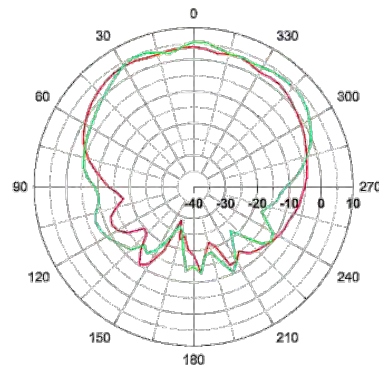
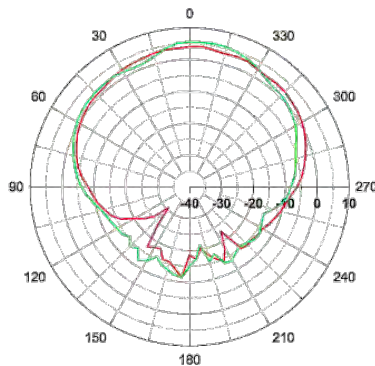
ANT 2



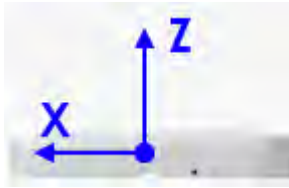
5.85GHz

ANT 1

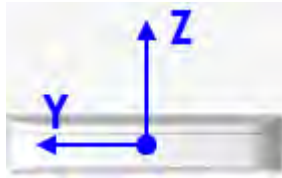
ANT 2



ZX-Plane



ZY-Plane



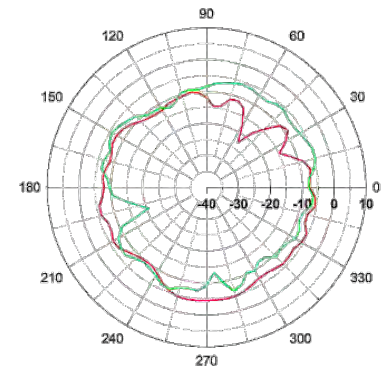
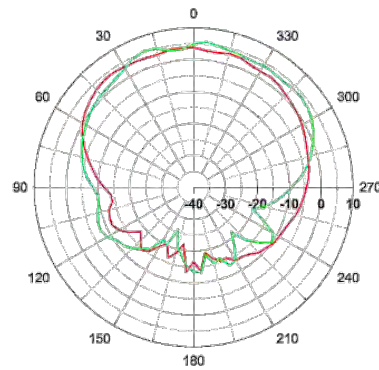
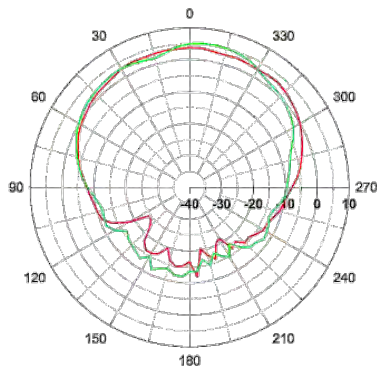
XY-Plane



5.925GHz

ANT 1

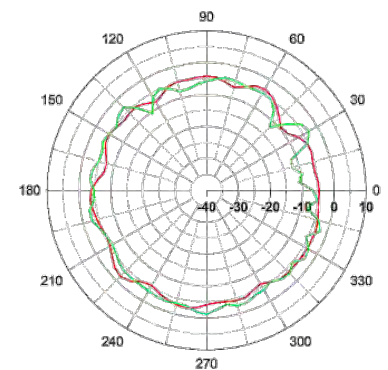
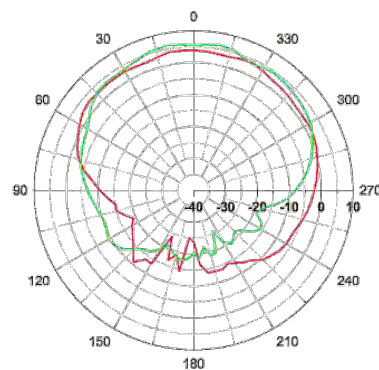
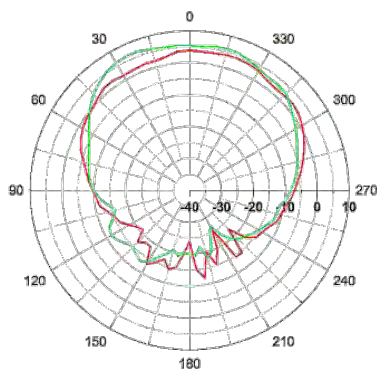
ANT 2



6.475GHz

ANT 1

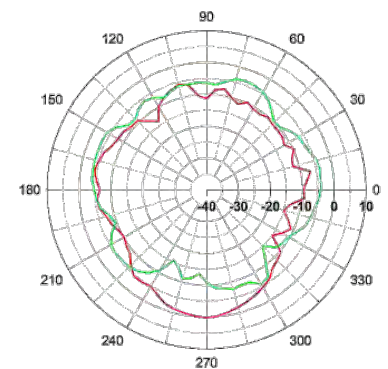
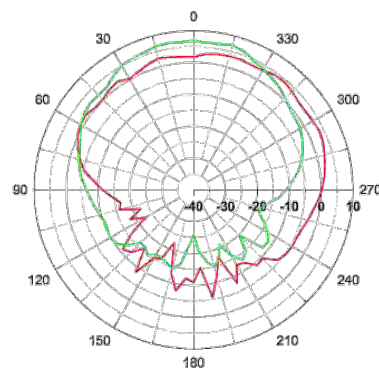
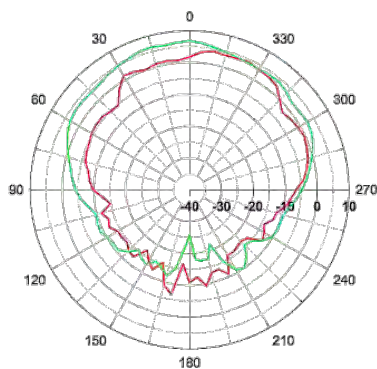
ANT 2



7.125GHz

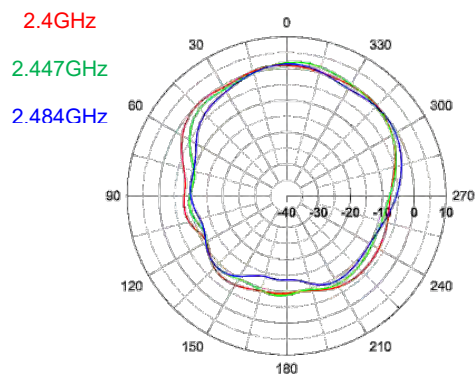
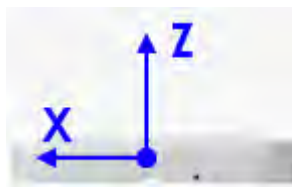
ANT 1

ANT 2

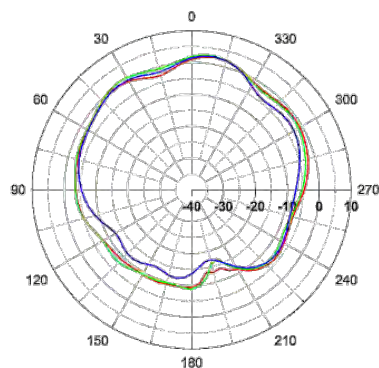
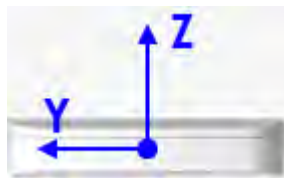


BLE ANT

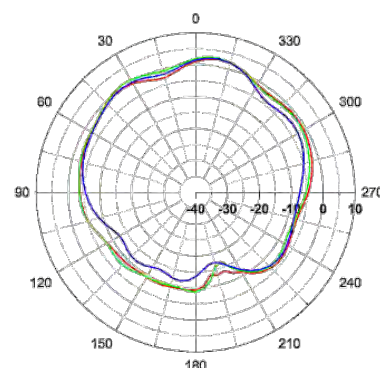
ZX-Plane



ZY-Plane



XY-Plane



Test date: 2026/05/22