

Test Report for Antenna Specifications for PA2MA4, PA2MA5, PA2MA3

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Frequency range and operation

Antenna-1: 2.400 to 2.480 GHz and 5.18 to 5.85 GHz

Antenna-2: 2.400 to 2.480GHz and 5.18 to 5.85 GHz

Antenna type

Antenna-1: Monopole type flex ANT

Antenna-2: Monopole type flex ANT

Antenna Gain

Band	Peak Gain (dBi)	
	ANT1	ANT2
2.4GHz(2400-2480MHz) BT, BLE, 2.4 GHz Wifi	-6.1	-4.5
5GHz Band I (5150-5250MHz)	-3.2	-4.5
5GHz Band II-A (5250-5350MHz)	-2.2	-4.3
5GHz Band II-C (5470-5725MHz)	-2.0	-2.80
5GHz Band III (5725-5850MHz)	-3.7	-2.9

Test Date:

2025/7/15

Test Engineer:

Wynn Yang

Test Viewer :

Haven Xu

Measurement Test method

Solder pigtails on feeding point of antennas and measure passive antenna performance by VNA and OTA chamber system. And the measurement was done in devices level.

Test Equipment used:

Test Lab: Sporton International Inc. (Shenzhen)

Test Equipment:

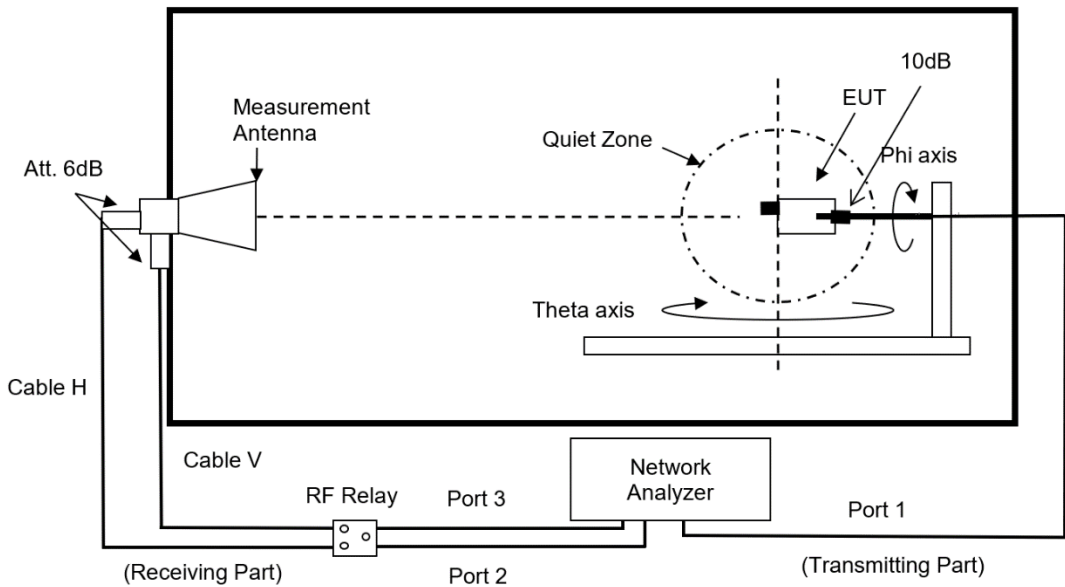
- 1. VNA: R&S ZVB8
- 2. OTA chamber: ETS 8500 Antenna Measurement System

OTA02-SZ					
Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Network Analyzer	R&S	ZVB8	100106	2024/10/15	2025/10/14
Switch Control	ETS-Lindgren	EMCenter	00116609	NCR	NCR
Diagonal Dual Polarized Horn	ETS-Lindgren	3164-08	00138285	NCR	NCR
Multi-Devices Controller	ETS-Lindgren	2090-OPT1	00155901	NCR	NCR
Medium Duty Holder	ETS-Lindgren	2015	N/A	NCR	NCR

Test set up

Refer to Below

SPORTON CHAMBER AXIS



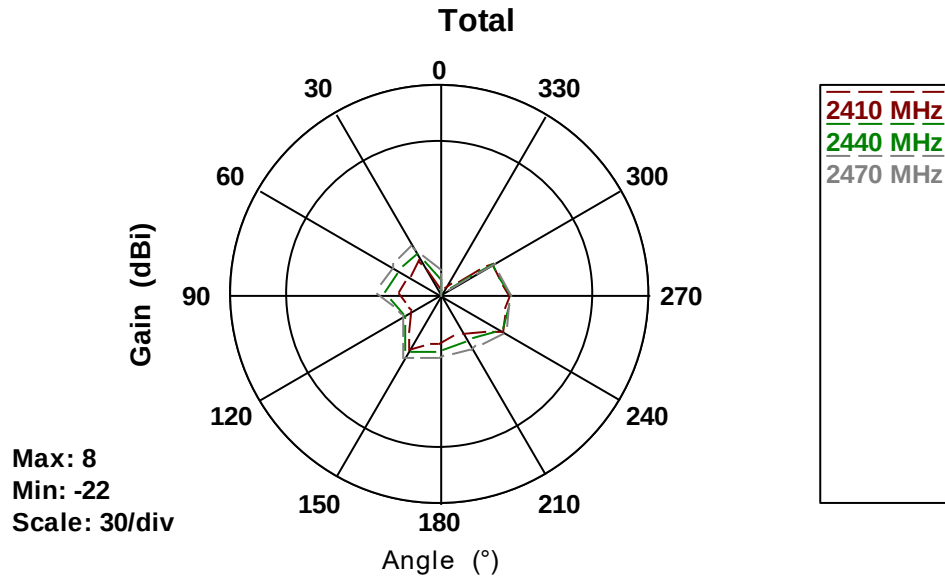
Device Image and Antenna locations – Refer to document – A_B_C_FCC_Antenna Report Photos

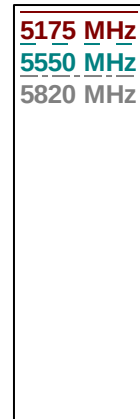
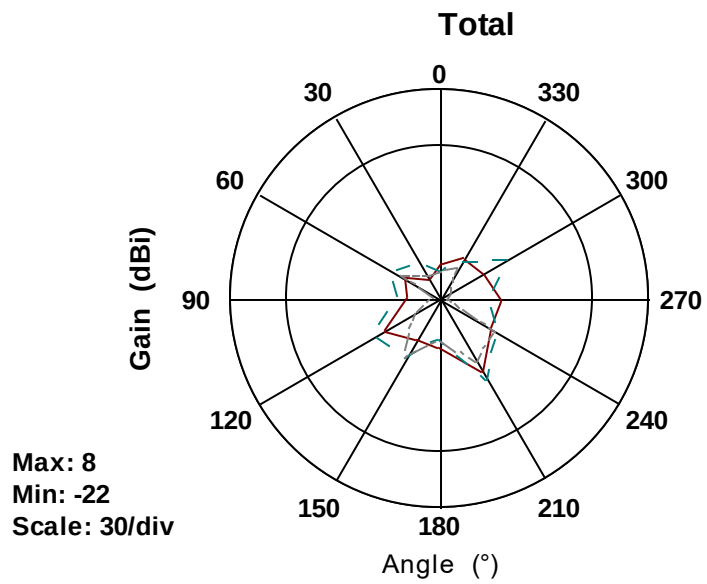
Top:

2D RADIATION PATTERN

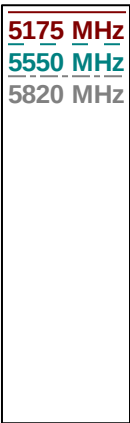
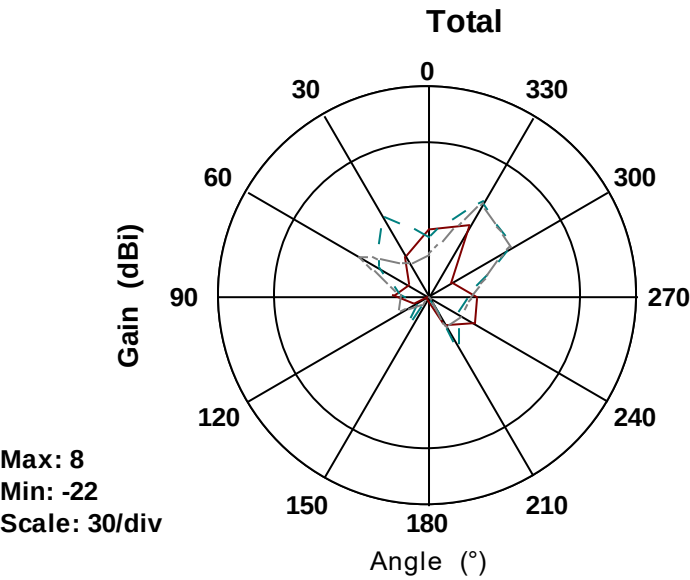
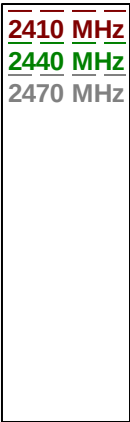
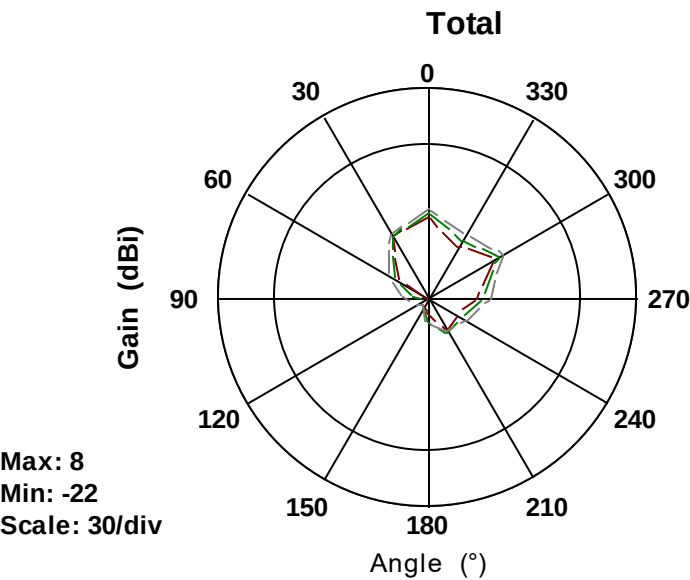
Antenna-1 (TOP Antenna)

XY plane

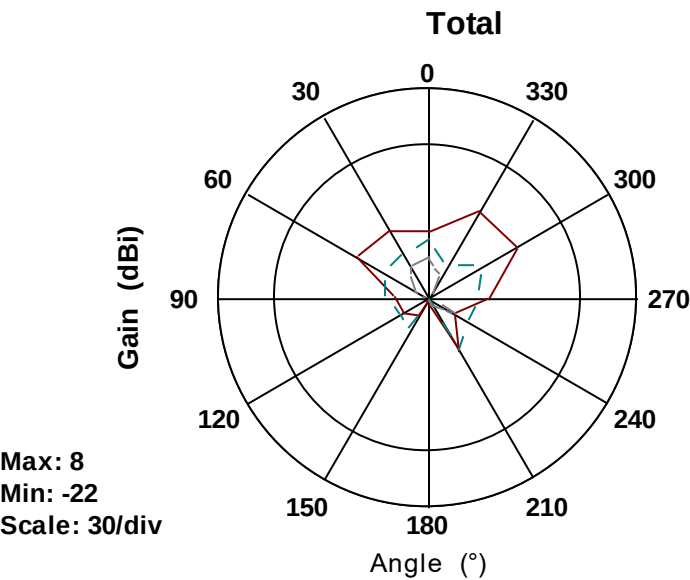
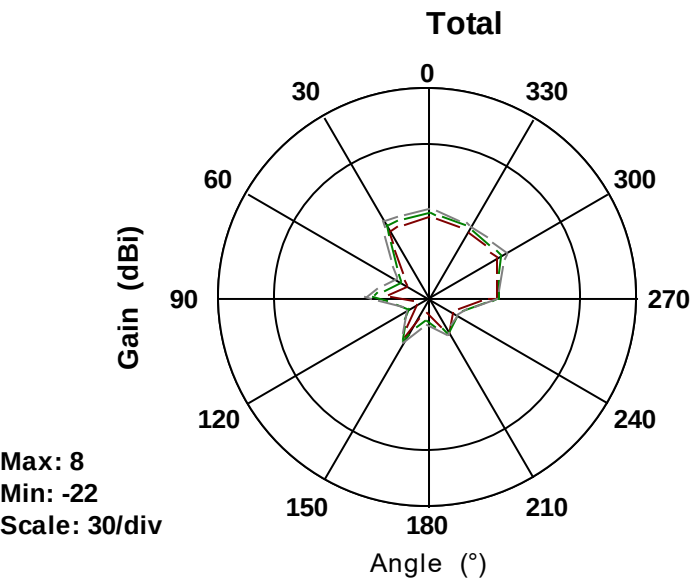




XZ plane

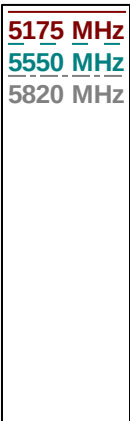
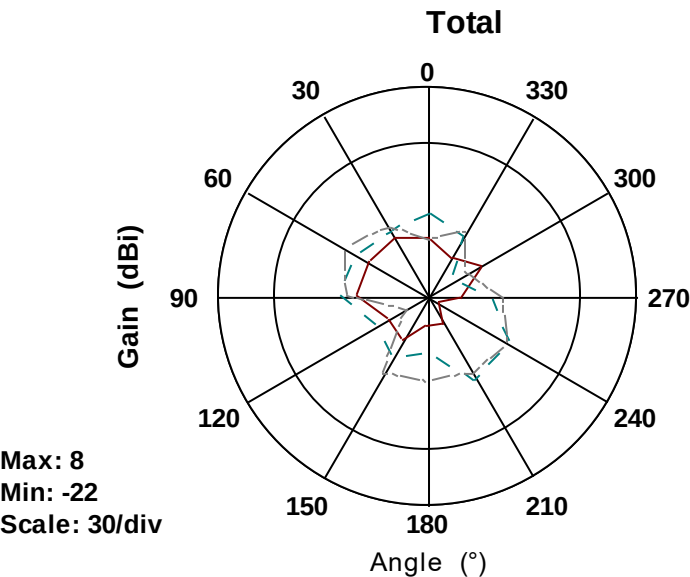
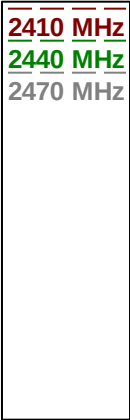
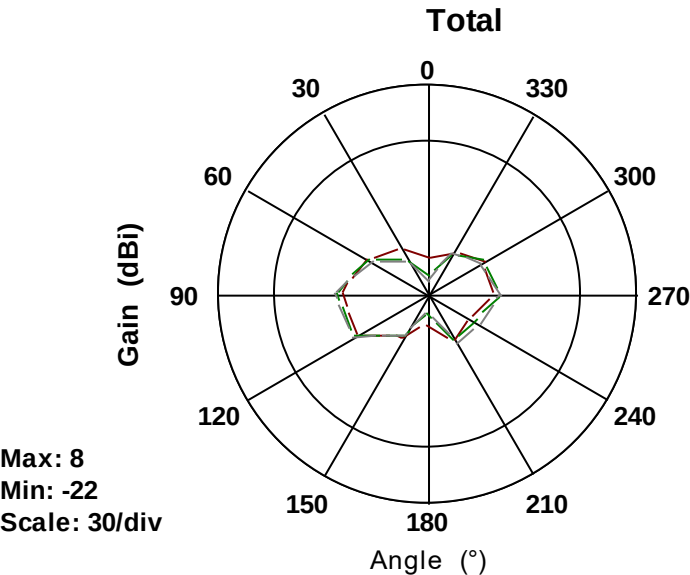


YZ plane

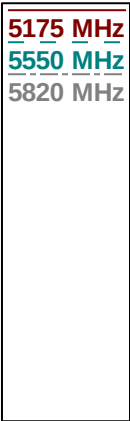
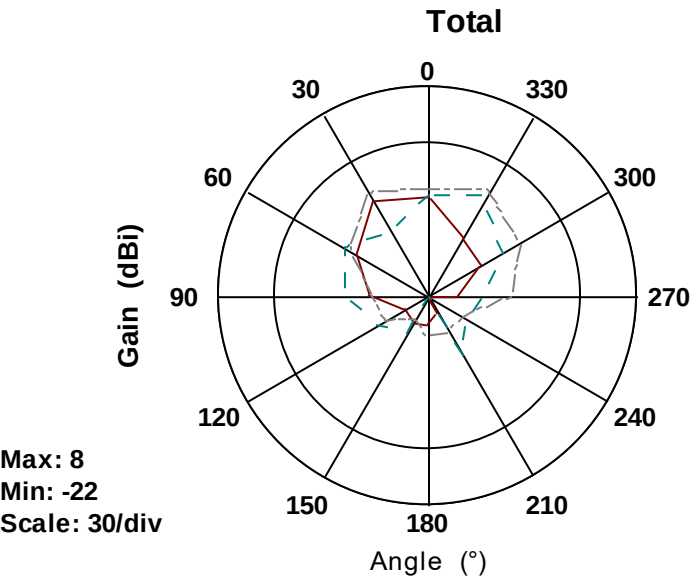
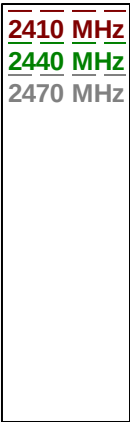
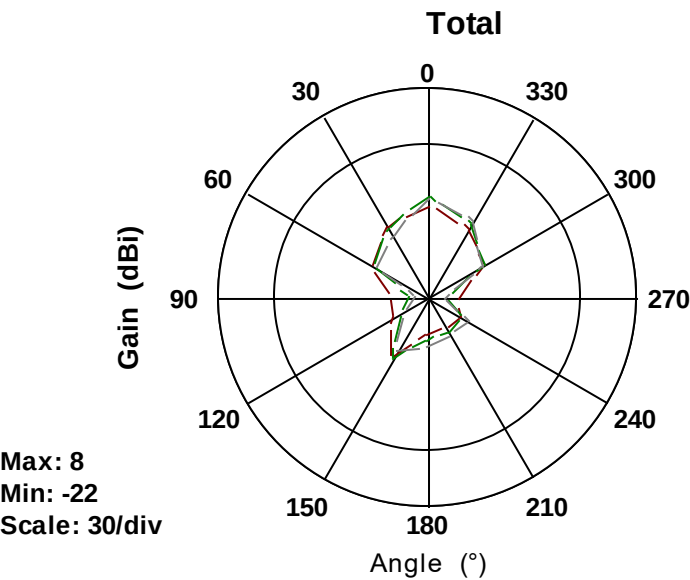


Antenna-2 (Bottom Antenna)

XY plane



XZ plane



YZ plane

