



LANCOM LX-7200 WiFi Antenna Check Sheet

Model: ANT-LX7200-AL03



Revision History:

Version	Date	Change Description
1.0	2025/12/03	New Release
2.0	2026/4/10	Add test software, test configuration



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Antenna Specification

Ant.	Antenna Brand	Antenna. model	Antenna type	Antenna Gain (dBi)	Frequency Range from MHz to MHz	Connector type	Cable length (cm)	Cable Loss	Remark
A1-2G4	AOT	ANT-LX7200-AL03	PIFA	3.6	2400~2490	IPEX	15.5		Green
A2-2G4	AOT	ANT-LX7200-AL03	PIFA	4.8	2400~2490	IPEX	14		Red
A3-BLE	AOT	ANT-LX7200-AL03	Dipole	7.0	2400~2490	IPEX	6		Blue
A4-5G	AOT	ANT-LX7200-AL03	PIFA	6.2	5150-5850	IPEX	11.5		White
A5-5G	AOT	ANT-LX7200-AL03	PIFA	5.5	5150-5850	IPEX	17.8		Black
A6-6G	AOT	ANT-LX7200-AL03	Dipole	6.6	5925-7125	IPEX	18		Orange
A7-6G	AOT	ANT-LX7200-AL03	Dipole	6.7	5925-7125	IPEX	9.5		Blue



LANCOM LX-7200 WiFi Antenna Check Sheet

Date: 2026/4/10

Test information:

Test Condition	Test Engineer	Test Environment(°C/%)	Test Dste
Radiated	Changgang Lai	20-24/45-60	02.24.2025
Band(MHz)		Test Frequency(MHz)	
2400-2490		2400/2450/2490	
5150-5850		5150/5500/5850	
5925-7125		5925/6500/7125	
Testing Location			
	Address: 289 Jinghua Road,Shipai, Bacheng Town, Kunshan City, Jiangsu Province		

Instrument	Manufacturer	Model NO.	Asset No	Cali.Interval	Cali.Due Date
ENA Network Analyzer	Keysight	E5071C	NA	1 Year	2026/03/09
EMT24 Chamber	EMT-Testing	EMT24-S	NA	1 Year	2026/03/09
Horn Antenna	EMT-Testing	EMT800	NA	1 Year	2026/03/09
Logarithmic Periodic Antenna	EMT-Testing	LOG400	NA	1Year	2026/03/09

Test Method:

23 measuring probe antennas are fixed on a circular ring at equal angular intervals, while the device under test (DUT) is placed on a horizontal turntable at the center of the ring. During testing, the turntable rotates along the azimuth axis. For each azimuth-elevation angle combination (θ , φ), the RF switch matrix sequentially connects each of the 23 probes (or conducts parallel measurements). A vector network analyzer (VNA) measures and records the S21 data (complex numbers, including magnitude and phase) corresponding to each probe. Therefore, for each sampling point on the spherical surface, 23 sets of near-field data from 23 probes at different fixed spatial positions are obtained.

Depending on the size and frequency of the device under test (DUT), set appropriate sampling intervals for θ and φ to meet the near-field sampling density requirements. Integrate and process the sampled near-field data to perform far-field calculation, and then consolidate the far-field values for each θ and φ angle. This allows for a comprehensive characterization of the DUT's far-field radiation performance.

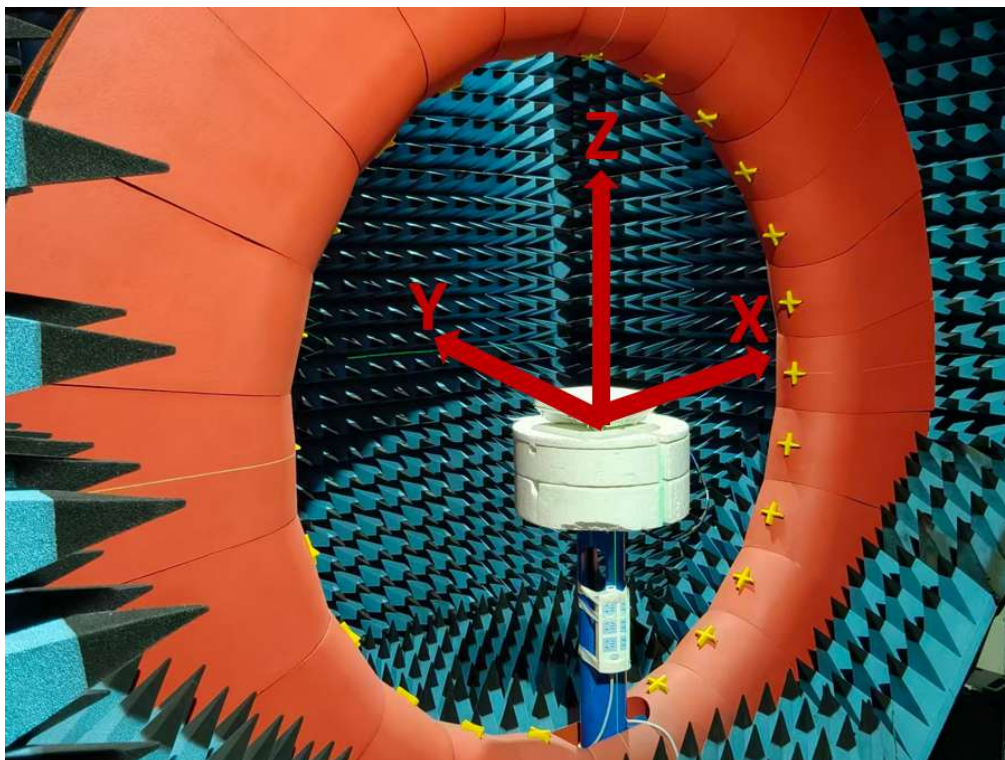
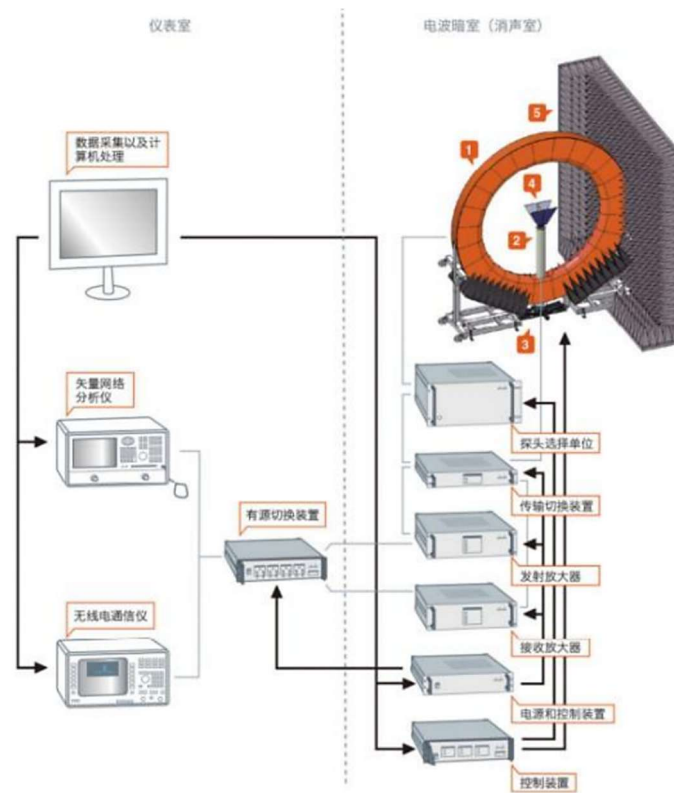
Test software

EM-Pro. Spherical Near-Field Antenna Measurement System

Test Procedure:

Place the device under test (DUT) at the center of a laser-aligned ring and secure it on a low-dielectric-constant foam turntable. Connect the RF cables from the vector network analyzer (VNA) into the anechoic chamber. Then, run the EM-Pro. Spherical Near-Field Antenna Measurement System to record the electric field amplitude and phase corresponding to each θ and φ angle, thereby completing the three-dimensional sampling that encloses the entire DUT.

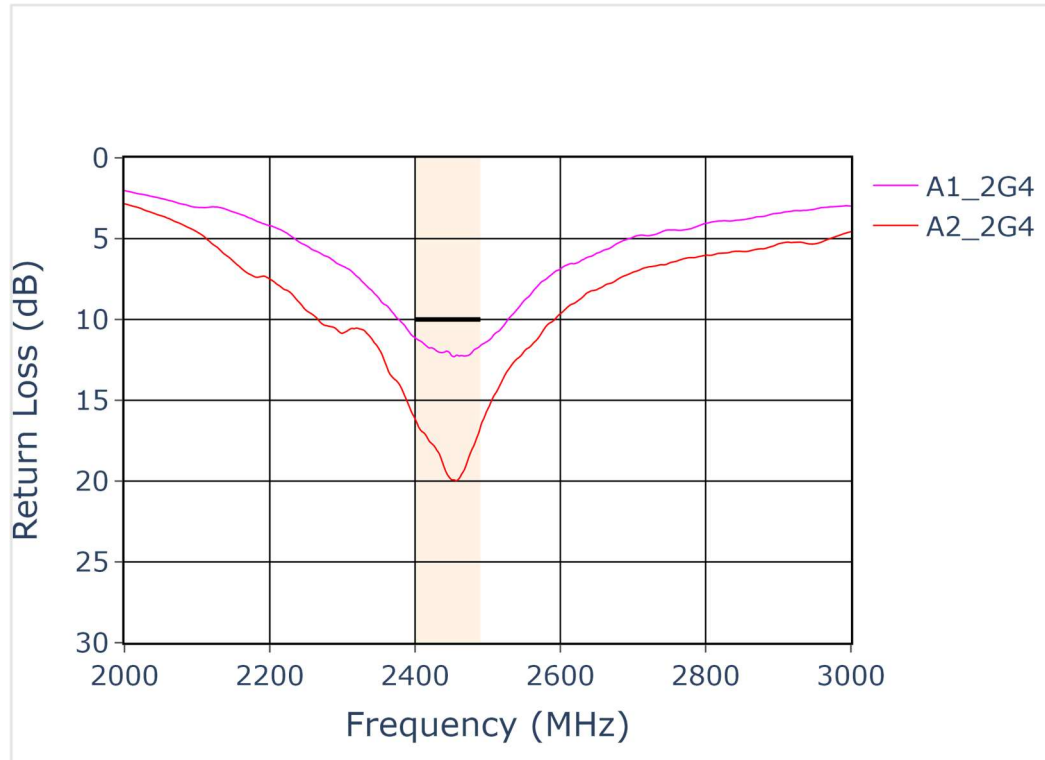
Test Configuration



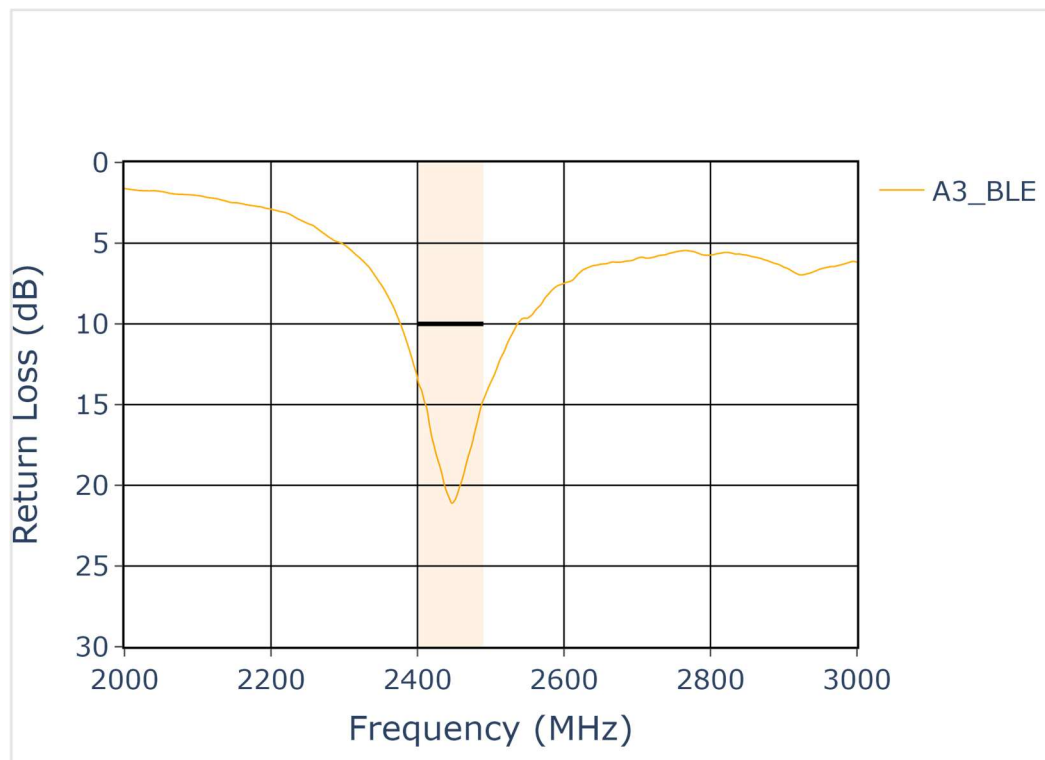
Test Result:

Return Loss

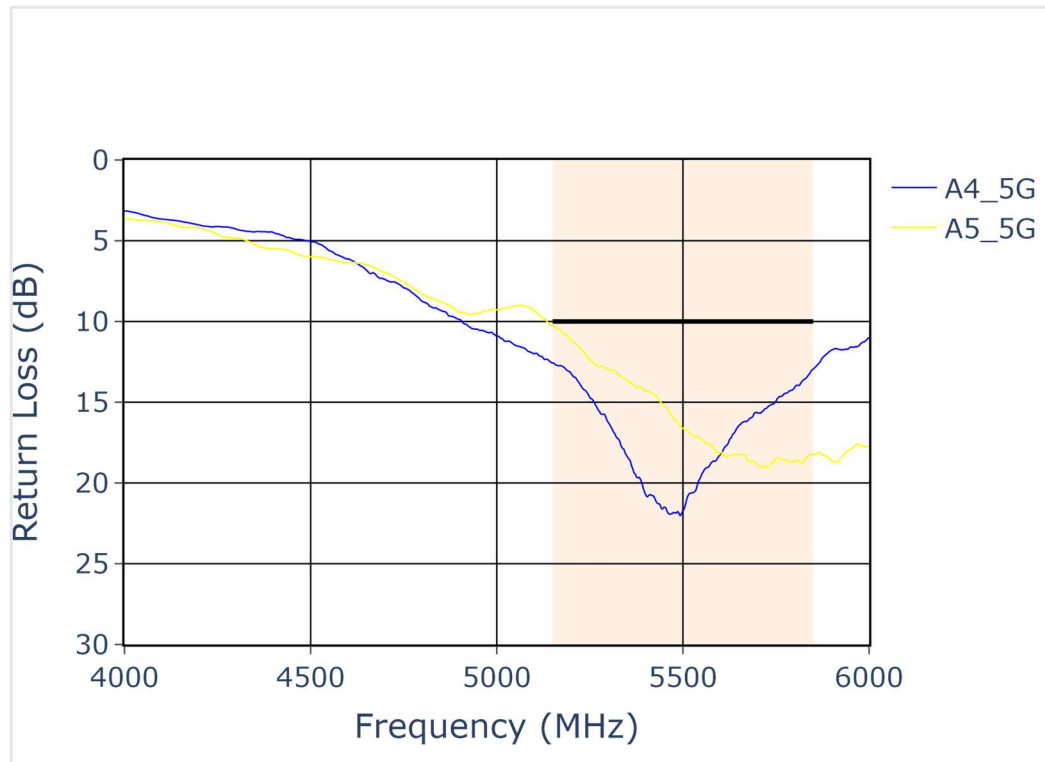
2G band



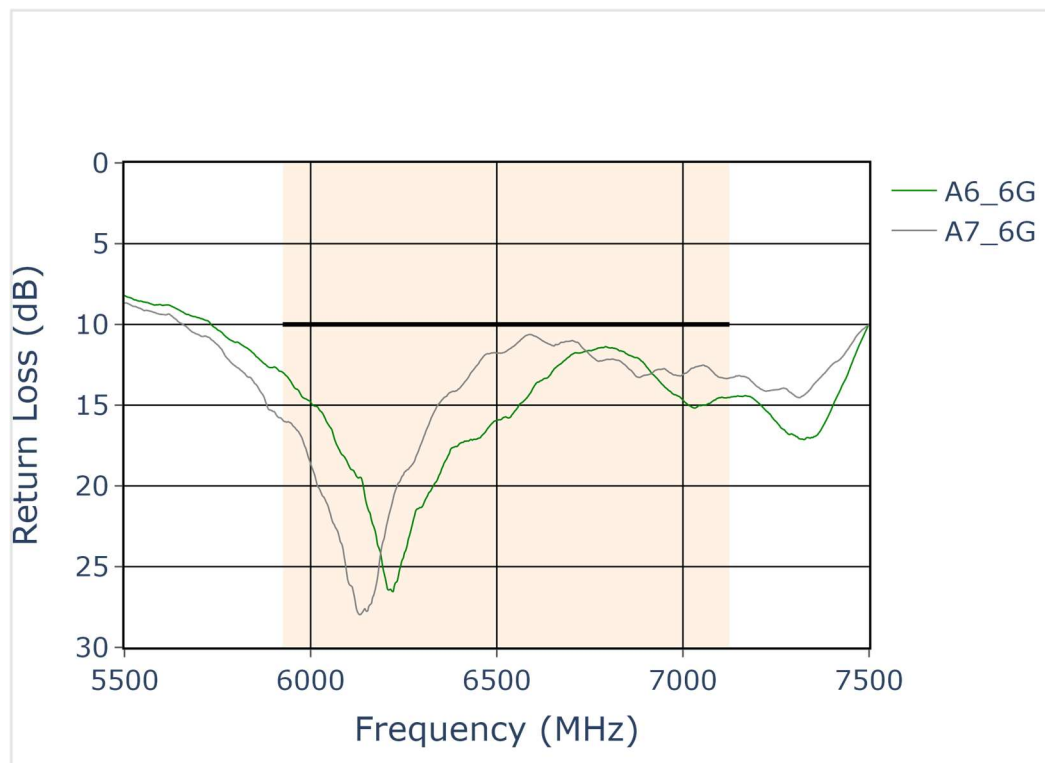
BLE band



5G band

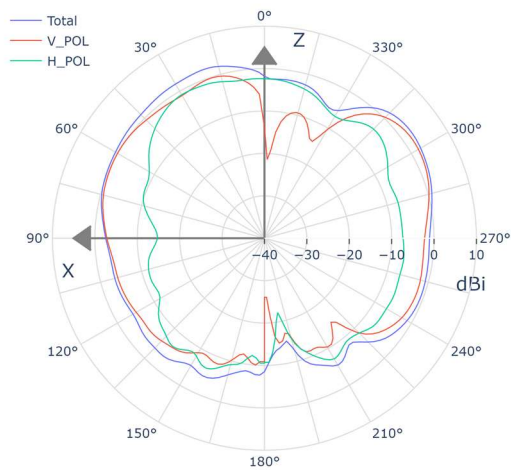


6G band

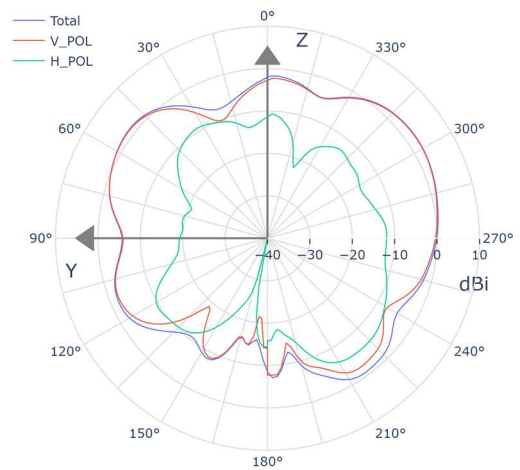


2D Radiation Patterns:

Ant1@2.45GHz

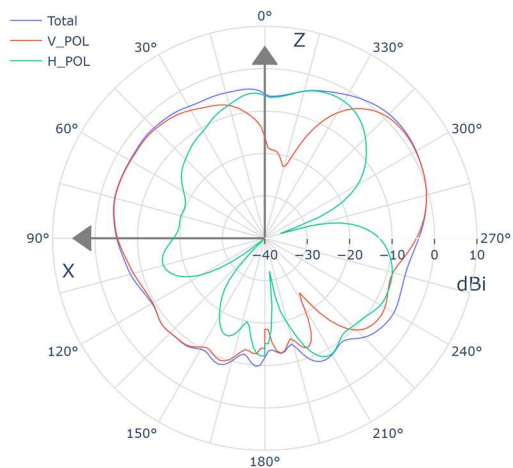


XZ-plane

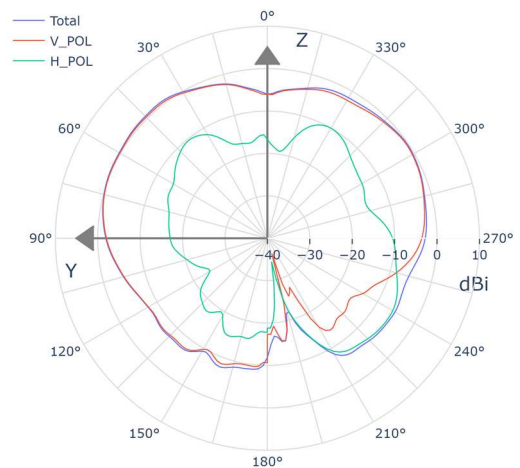


YZ-plane

Ant2 @2.45GHz

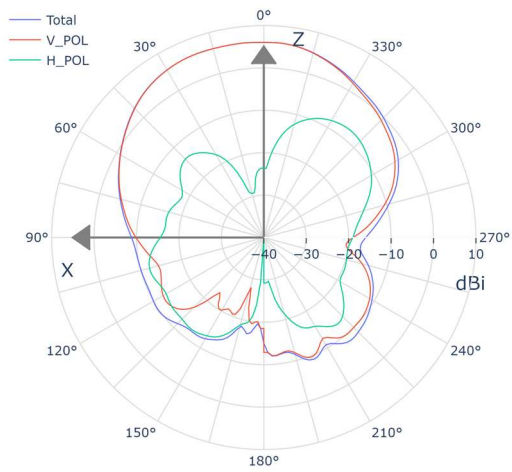


XZ-plane

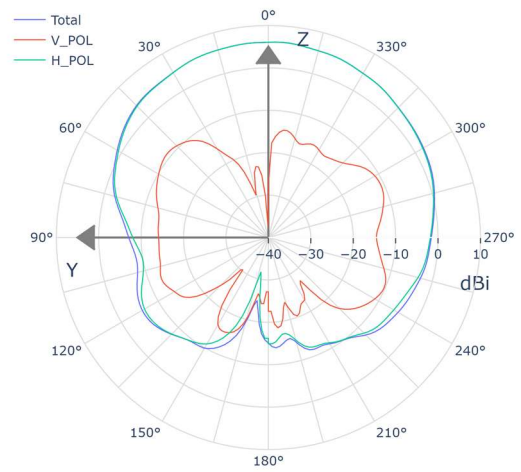


YZ-plane

Ant3 @2.45GHz

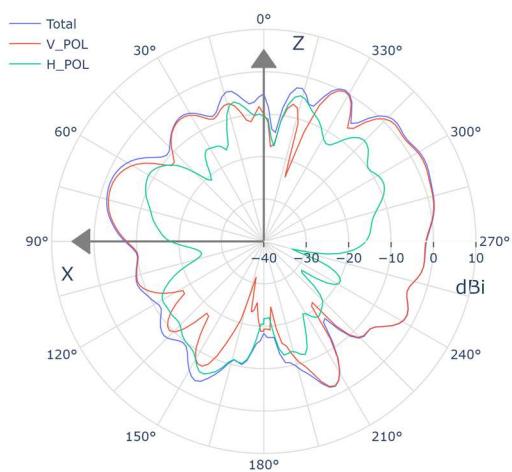


XZ-plane

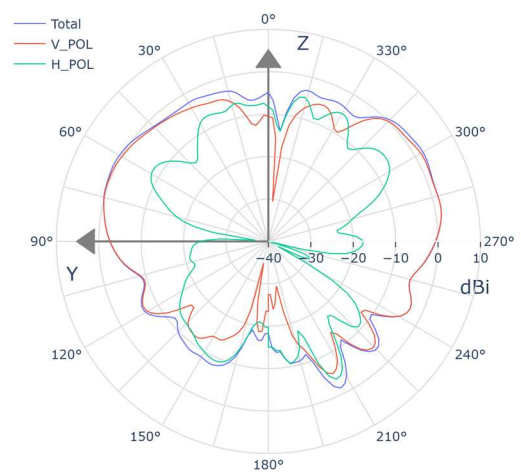


YZ-plane

Ant4 @5.5GHz



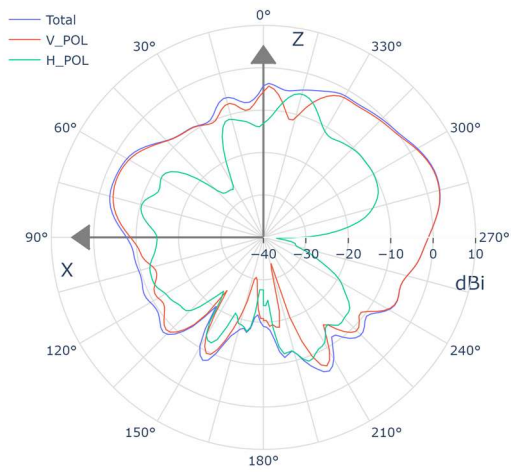
XZ-plane



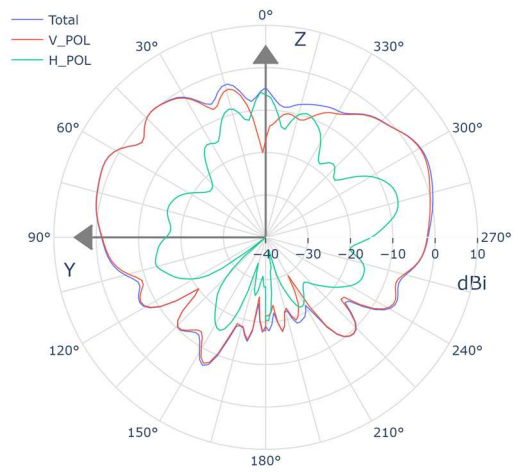
YZ-plane



Ant5 @5.5G

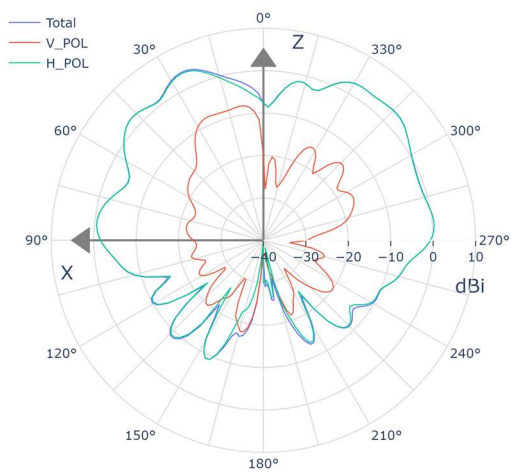


XZ-plane

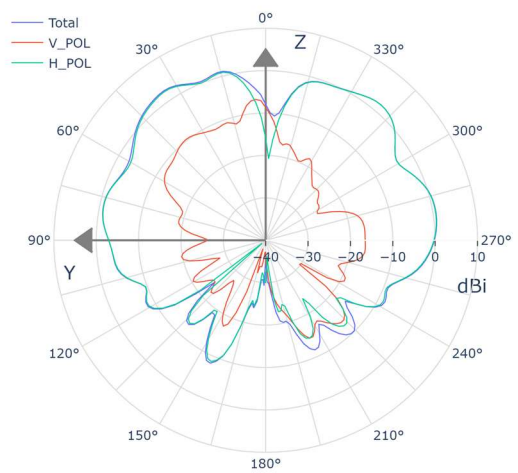


YZ-plane

Ant6 @6.5G



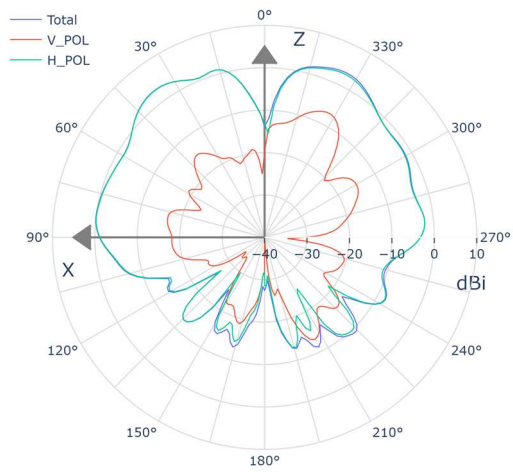
XZ-plane



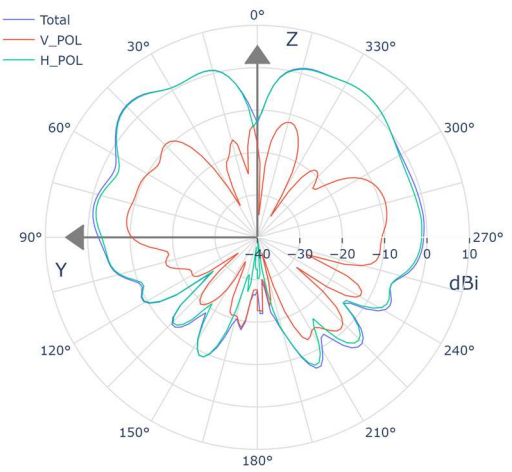
YZ-plane



Ant7 @6.5G



XZ-plane



YZ-plane



Antenna Gain Table:

Frequency(MHz)	Ant1(dBi)	Ant2 (dBi)	Ant3 (dBi)
2400	3.1	4.8	7.0
	Theta 56 ° / Phi 156 °	Theta -54 ° / Phi 32 °	Theta 14 ° / Phi 20 °
2450	3.2	4.8	6.8
	Theta 56 ° / Phi 158 °	Theta -56 ° / Phi 34 °	Theta 20 ° / Phi 26 °
2490	3.6	4.2	6.3
	Theta 60 ° / Phi 158 °	Theta -56 ° / Phi 32 °	Theta 14 ° / Phi 38 °

Frequency(MHz)	Ant4(dBi)	Ant5(dBi)
5150	6.2	5.3
	Theta -42 ° / Phi 138 °	Theta -62 ° / Phi 66 °
5500	6.1	4.7
	Theta 74 ° / Phi 138 °	Theta 66 ° / Phi 122 °
5850	5.7	5.5
	Theta -66 ° / Phi 124 °	Theta 72 ° / Phi 154 °

Frequency(MHz)	Ant6(dBi)	Ant7(dBi)
5925	3.0	3.8
	Theta 34 ° / Phi 68 °	Theta -36 ° / Phi 30 °
6500	4.2	4.8
	Theta 32 ° / Phi 142 °	Theta -28 ° / Phi 56 °
7125	6.6	6.7
	Theta 34 ° / Phi 90 °	Theta -28 ° / Phi 42 °



Antenna Vendor information: AOT WIRELESS TECHNOLOGY PTE.LTD

Antenna Vendor : AOT WIRELESS TECHNOLOGY PTE.LTD

Test date: 2025/02/24

Test Engineer: Changgang Lai

Address of test site: West Unit, Building 2, No. 328, Shengxi Road, Kunshan Economic Development Zone, Jiangsu Province

Measurement Setup:

Reflection Coefficient Measurement:

-Instrument : Agilent E5071C

-Setup:

VNA RF port connect to DUT

Pattern Measurement:

-Chamber : EMT-24

-Test Program:AMS

The antenna gain of the antenna model: LR was measured by AOT.

Test instrument calibration information:

Vendor	Model	Calibrated Date	Calibrated Until
Agilent	E5071C	2025/03/10	2026/03/9