

YJ3F WiFi Antenna Report



Quanta
Product Design Center

Antenna Spec — WiFi

Quanta Product Design Center

Antenna	Brand	Model	Antenna Peak Gain (dBi)	Frequency Range	Antenna Type	Connector Type
WiFi Main	AWAN	DQ60ALP6Y02	2.87	2402~2480 MHz	PIFA	MHF 20565-001R-13
			4.45	5180~58590MHz		
			4.23	5925~7125 MHz		
WiFi Aux	AWAN	DQ60ALP6Y01	2.3	2402~2480 MHz	PIFA	MHF 20565-001R-13
			4.56	5180~5850 MHz		
			4.57	5925~7125 MHz		

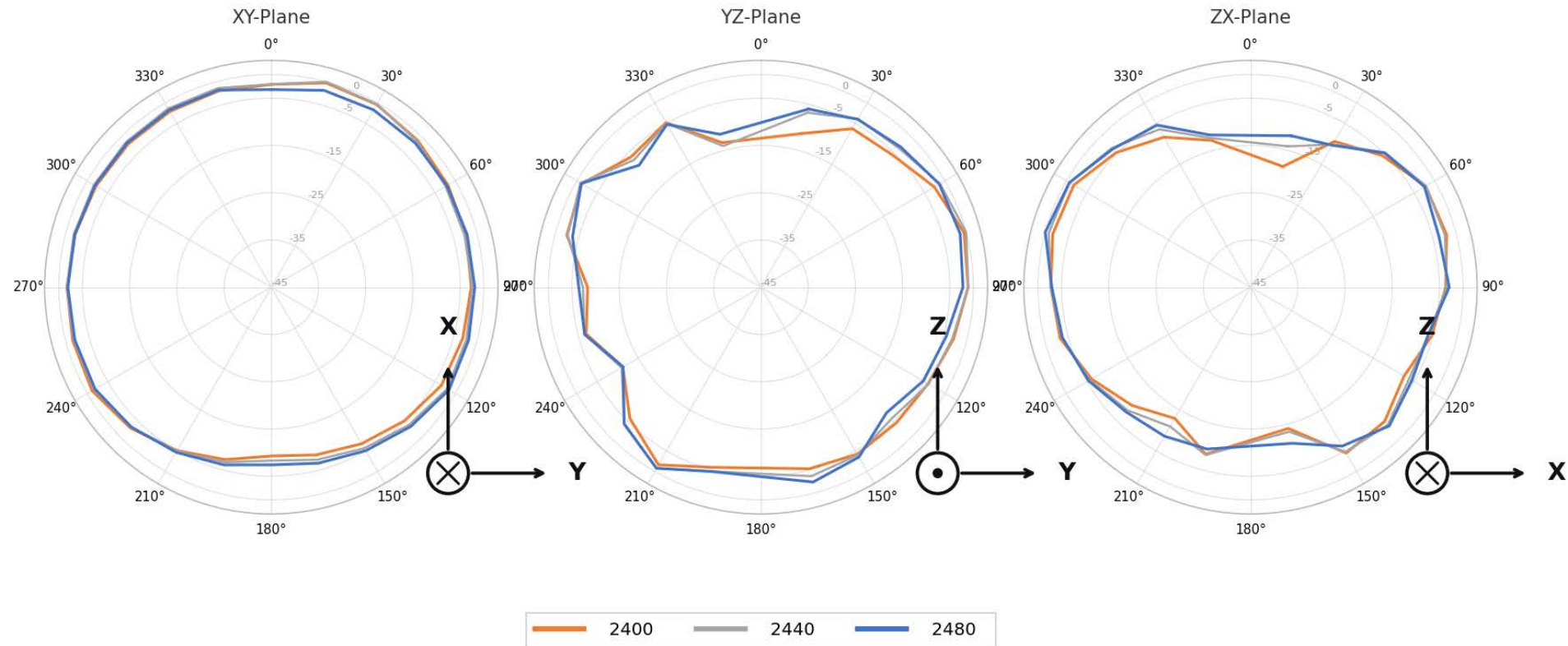
Supplier Name: Advanced Wireless & Antenna INC.
Supplier Location: 5F., No. 225, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

WiFi Main Antenna

Radiation Pattern Characteristics

WiFi Main Antenna Radiation Pattern

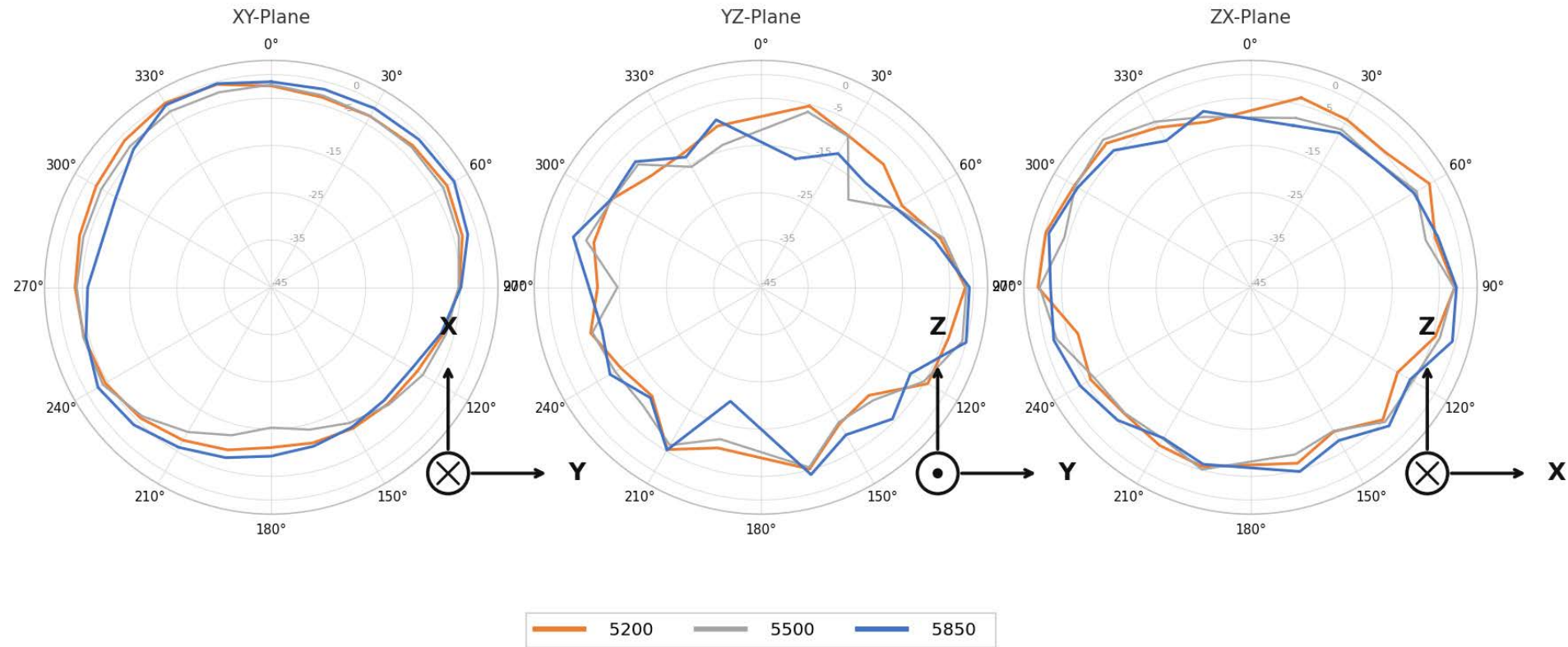
2402–2480 MHz radiation characteristic 2.4 GHz



Center Frequency	2402 MHz	2442 MHz	2480 MHz
Horizontal (dBi) peak	0.35	0.76	0.64
Vertical (dBi) peak	0.16	0.28	0.71
Total (dBi) peak	2.06	2.71	2.84

WiFi Main Antenna Radiation Pattern

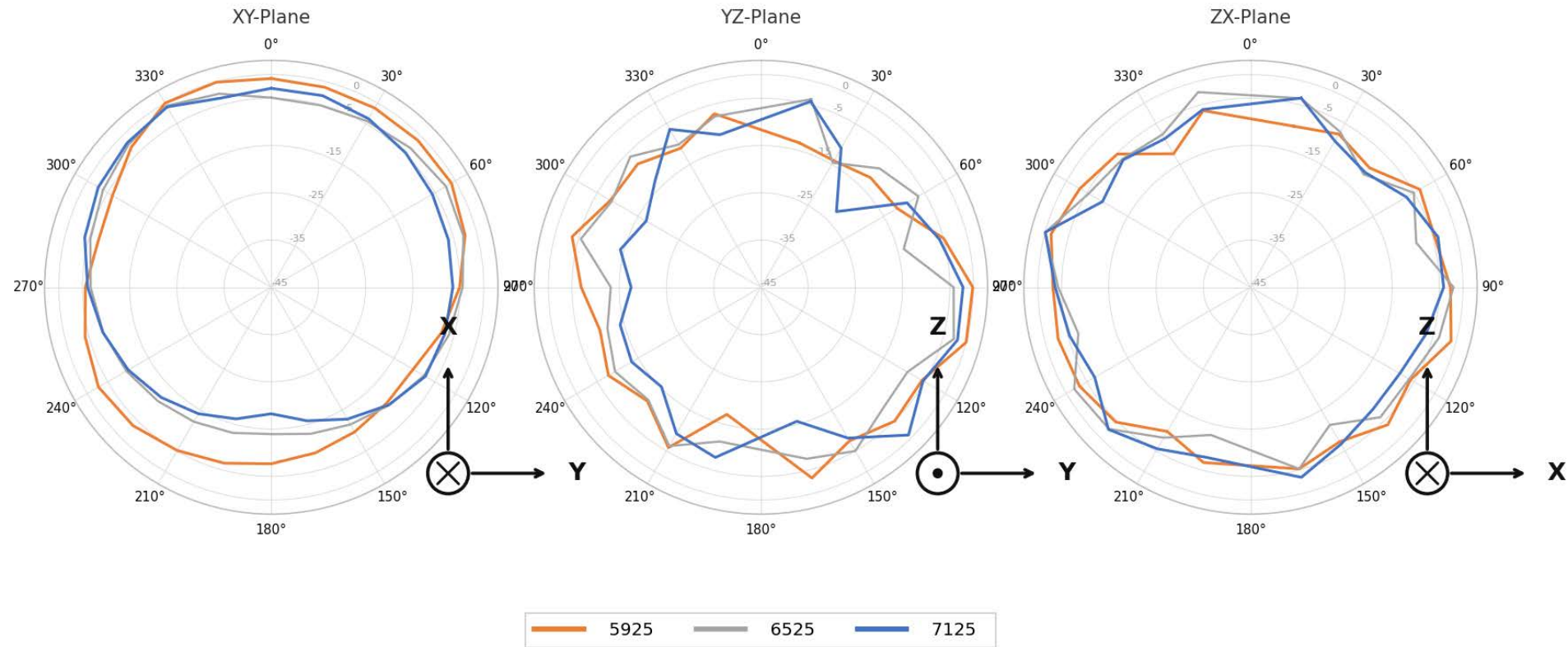
5180–5850 MHz radiation characteristic 5 GHz



Center Frequency	5180 MHz	5500 MHz	5850 MHz
Horizontal (dBi) peak	-1.95	-0.82	-0.32
Vertical (dBi) peak	4.05	2.72	4.44
Total (dBi) peak	4.22	3.12	4.45

WiFi Main Antenna Radiation Pattern

5925–7125 MHz radiation characteristic 6 GHz



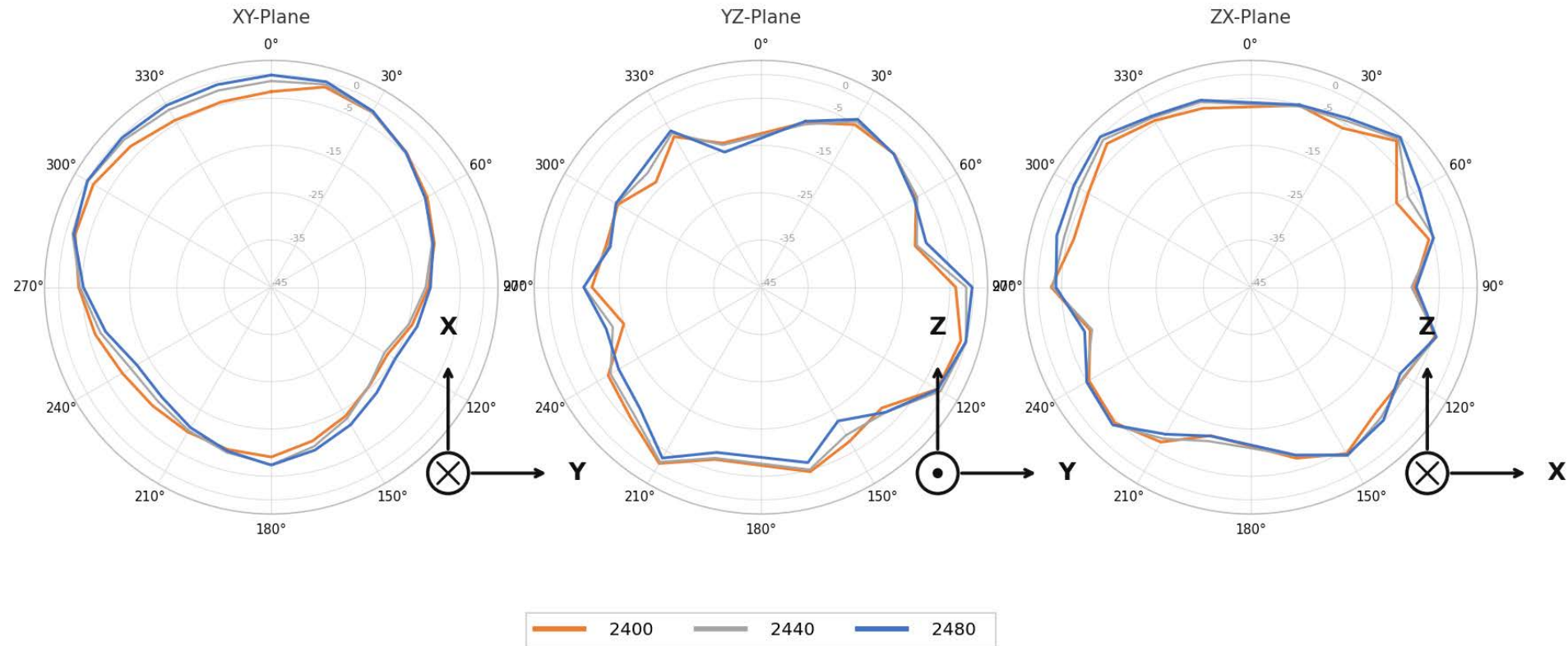
Center Frequency	5925 MHz	6525 MHz	7125 MHz
Horizontal (dBi) peak	-1.05	-0.24	0.66
Vertical (dBi) peak	4.02	2.02	2.23
Total (dBi) peak	4.03	3.81	3.80

WiFi AUX Antenna

Radiation Pattern Characteristics

WiFi AUX Antenna Radiation Pattern

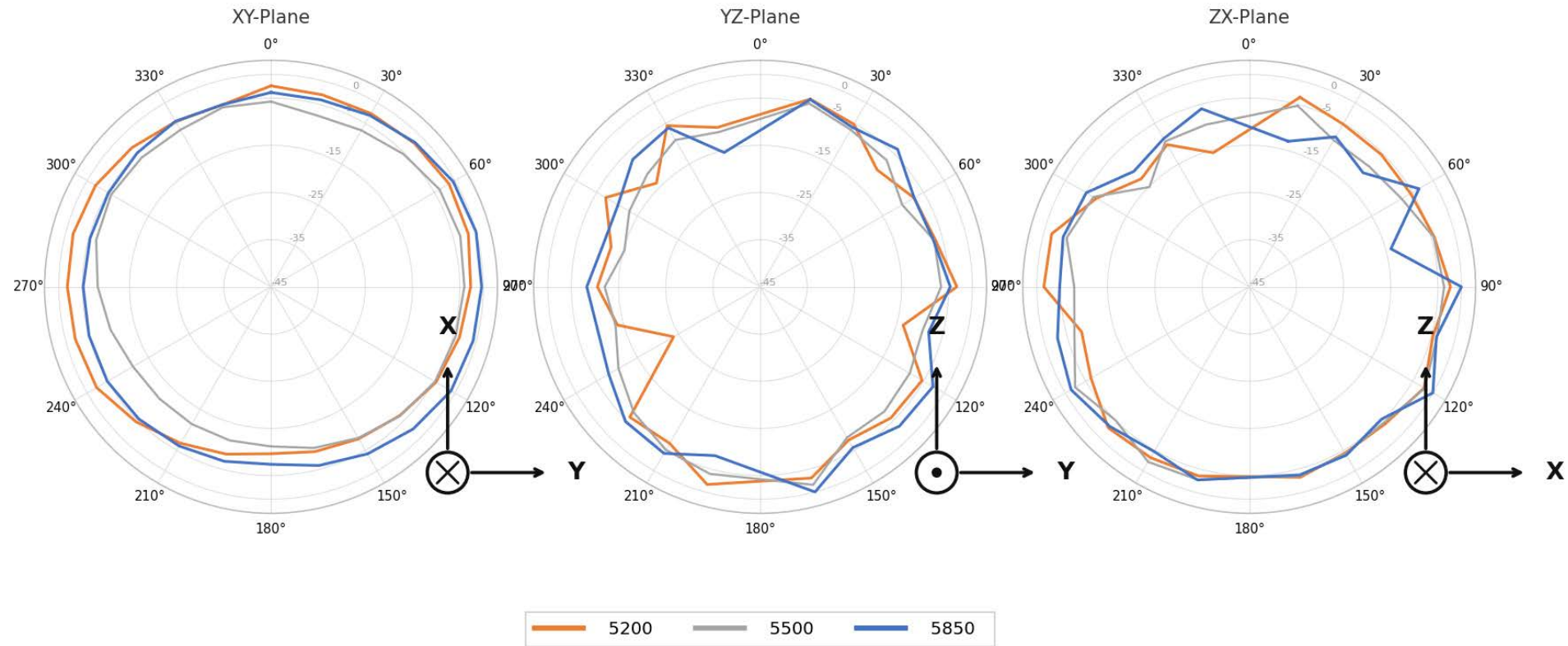
2402–2480 MHz radiation characteristic 2.4 GHz



Center Frequency	2402 MHz	2442 MHz	2480 MHz
Horizontal (dBi) peak	-1.09	-1.45	-1.68
Vertical (dBi) peak	0.60	1.65	1.38
Total (dBi) peak	1.48	1.99	1.86

WiFi AUX Antenna Radiation Pattern

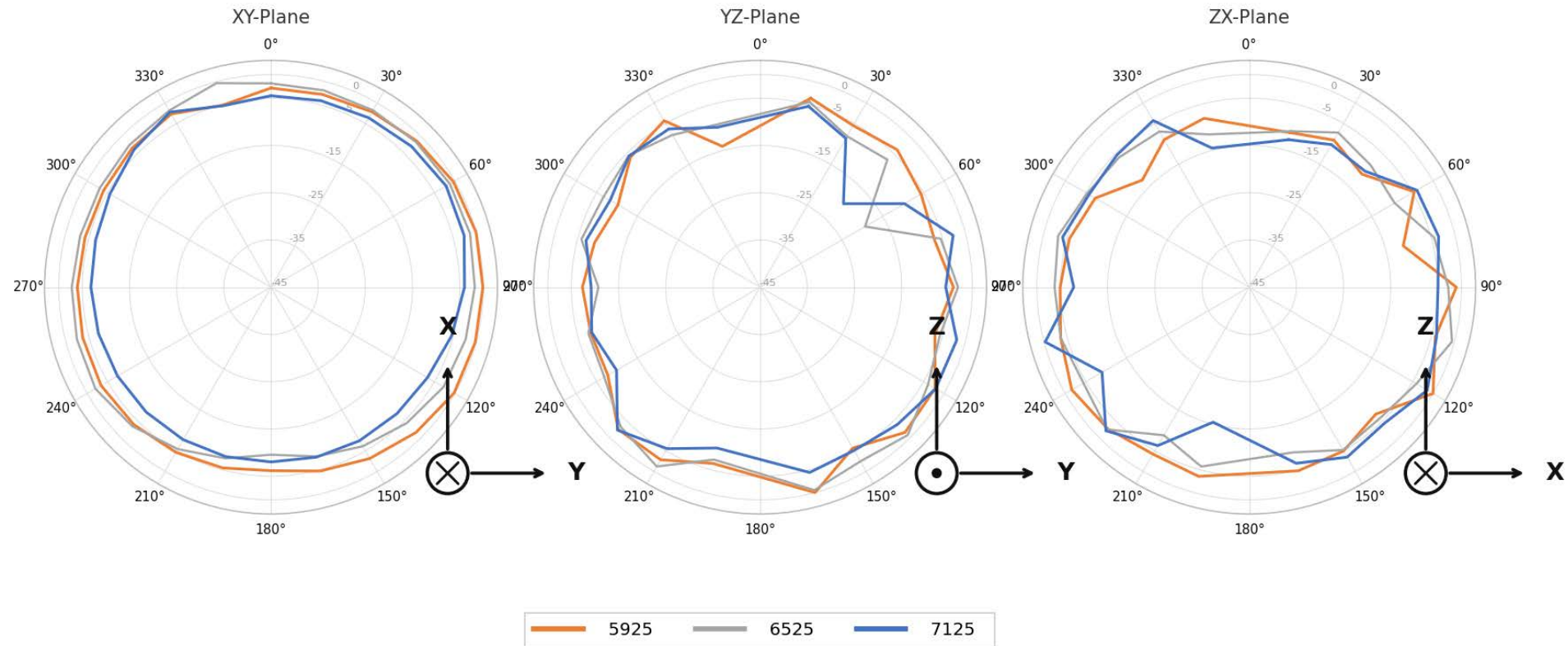
5180–5850 MHz radiation characteristic 5 GHz



Center Frequency	5180 MHz	5500 MHz	5850 MHz
Horizontal (dBi) peak	1.59	3.39	4.18
Vertical (dBi) peak	1.29	-0.06	2.15
Total (dBi) peak	2.97	3.68	4.56

WiFi AUX Antenna Radiation Pattern

5925–7125 MHz radiation characteristic 6 GHz



Center Frequency	5925 MHz	6525 MHz	7125 MHz
Horizontal (dBi) peak	3.95	-1.02	-0.19
Vertical (dBi) peak	1.37	0.54	0.91
Total (dBi) peak	4.57	1.45	1.62

Item	Description
Model Name	YJ3F
Test Condition	Passive Measurement
Test Engineer	Andy Lee
Company	Quanta Computer Inc.
Company Address	NO.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C.)
Test Environment	ETS-Lindgren AMS-8923 Antenna Measurement System
Test Software	ETS-Lindgren EMQuest Data Acquisition and Analysis Software
Test Date	June 4, 2026 – June 10, 2026

1 Mount DUT

Fix the DUT on the dielectric support structure and connect the feeding cable to the antenna used for test.

2 Configure Parameters

Set measurement parameters such as frequency range and sample angle.

3 Run Test

Perform test and then get far-field data including radiation pattern, gain, and efficiency.

4 Repeat

Repeat test procedure for other antenna.

Test Equipment & Calibration

Network analyzer and reference antennas are used for calibration. Path loss and cable loss for different frequency bands can be checked and calculated.

Path Loss Calibration

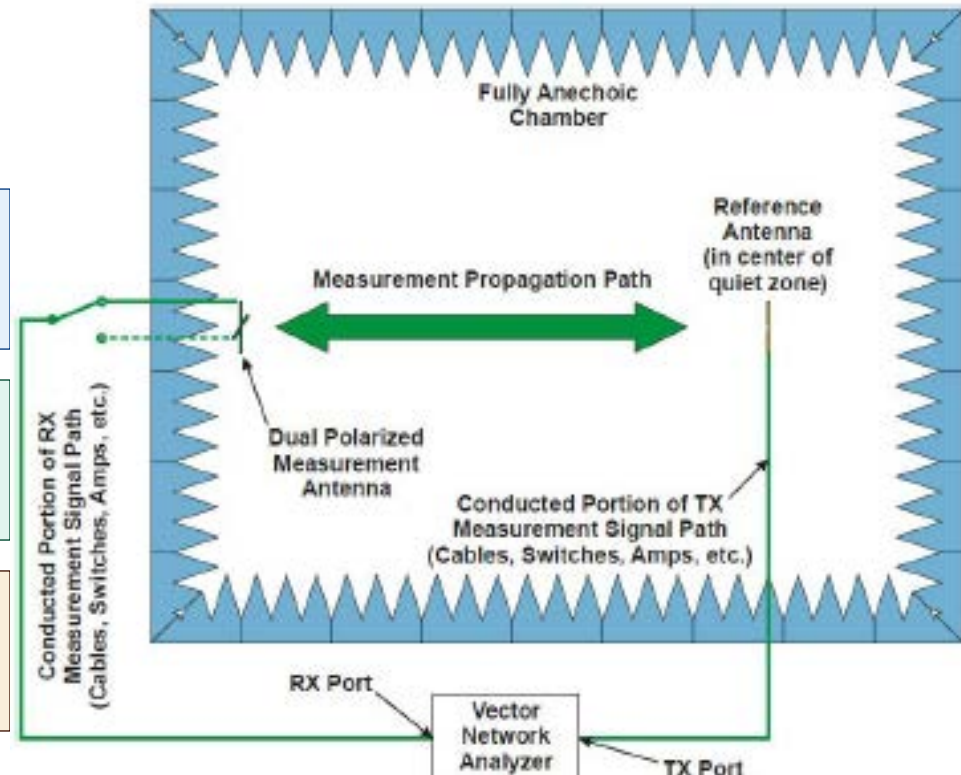
Measured across all frequency bands

Cable Loss Compensation

Applied per-band for accurate results

Reference Antenna

Positioned in center of quiet zone



Test Equipment & Calibration

Equipment Description	Manufacturer	Model No.	Calibrated Date	Calibrated Until
Network Analyzer	Agilent	E5071C	2025/11/05	2026/11/05
Base Station Simulators	Anritsu	8820C	2025/10/30	2026/10/30
Base Station Simulators	Agilent	8960	2025/10/30	2026/10/30
Spectrum Analyzer	Agilent	N9030A	2025/10/30	2026/10/30
Switch	Agilent	3499A	N/A	N/A
MAPS Controller	ETS-Lindgren	EMCO 2090	N/A	N/A
Receive Antenna	ETS-Lindgren	EMCO 3164	N/A	N/A
Anechoic Chamber	ETS-Lindgren	AMS-8500	N/A	N/A

All calibrated equipment was within valid calibration period during the test dates (June 4 – 10, 2026).