YJ7A Wi-Fi Antenna Report

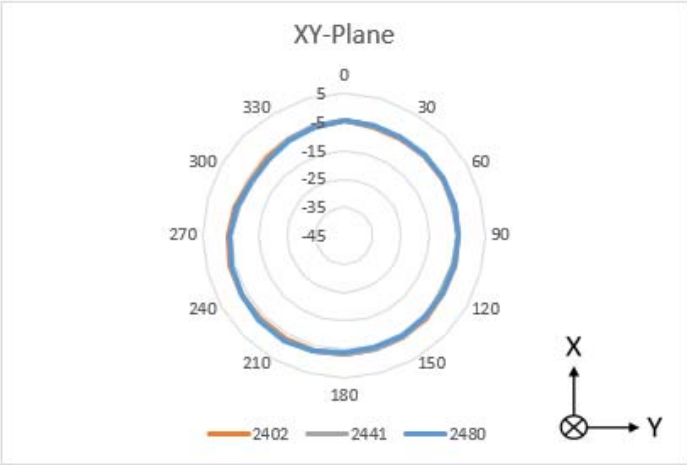
Quanta
Product Design Center

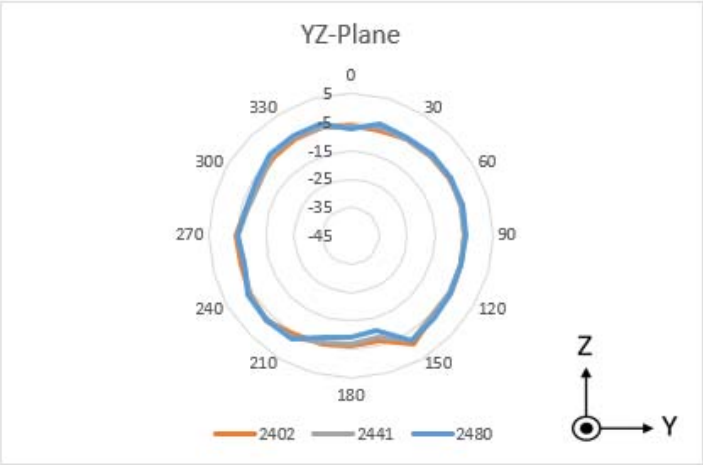
Antenna Spec

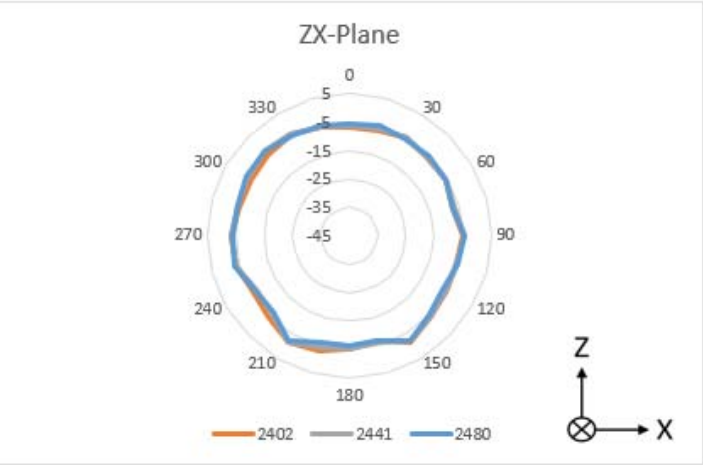
Antenna	Brand	Model	Antenna peak Gain (dBi)	Frequency range	Antenna Type
Wi-Fi	AWAN	DQ60ALF0011	-1.11	2402~2480MHz	Dipole
			3.07	5180~5859MHz	

Wi-Fi Antenna Radiation Pattern

2400-2500 MHz radiation characteristic



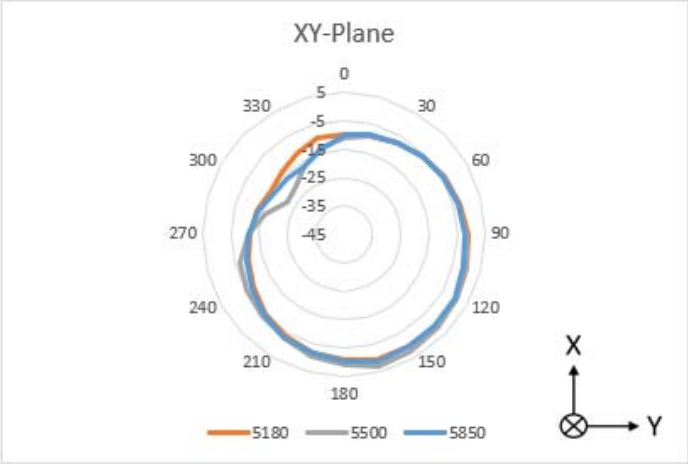


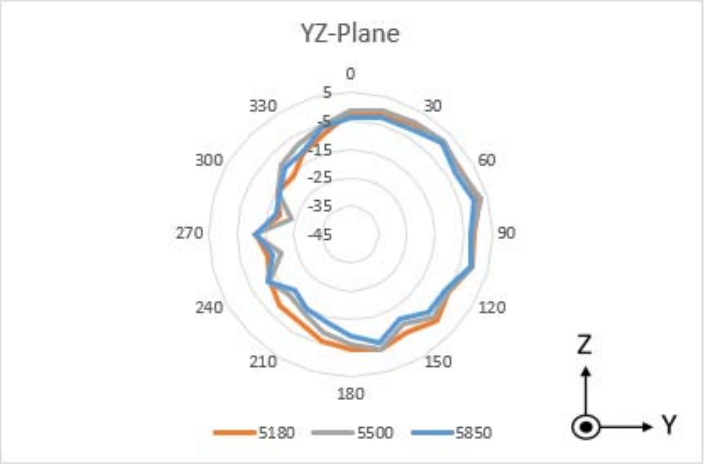


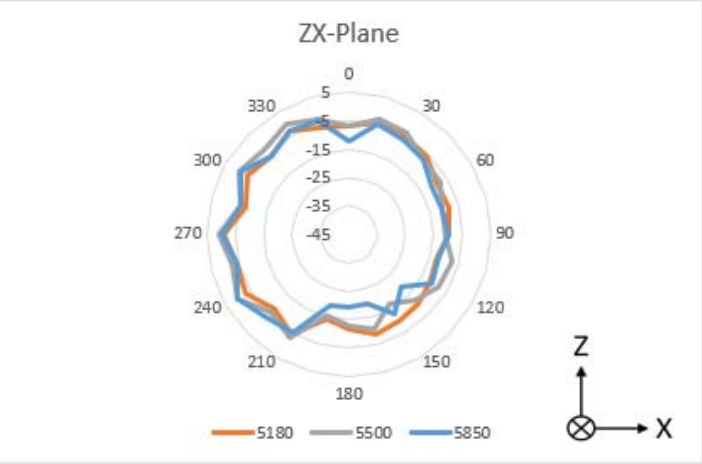
Center Frequency	2402 MHz	2442 MHz	2480 MHz
Horizontal (dBi) peak	-3.25	-3.50	-3.16
Vertical (dBi) peak	-2.70	-2.73	-2.96
Total (dBi) peak	-1.11	-1.79	-2.05

Wi-Fi Antenna Radiation Pattern

5150-5850 MHz radiation characteristic







Center Frequency	5180 MHz	5500 MHz	5850 MHz
Horizontal (dBi) peak	0.52	1.67	-0.41
Vertical (dBi) peak	-0.32	0.9	-2.31
Total (dBi) peak	1.96	3.07	1.23

Test Information

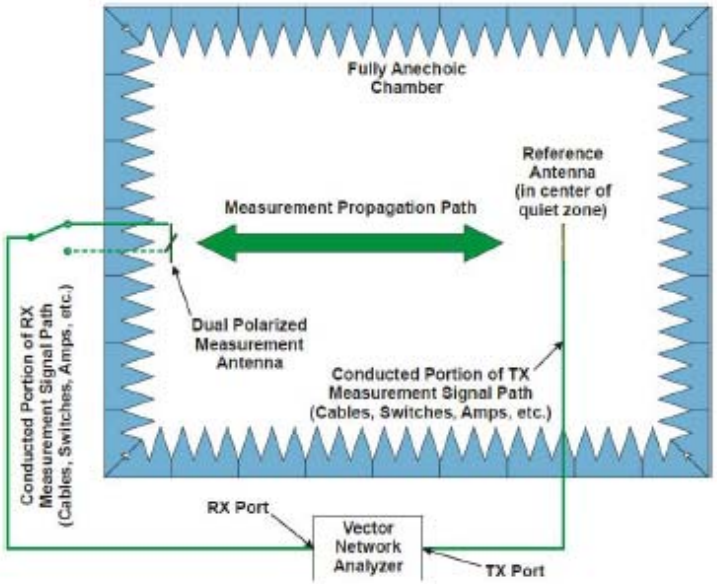
Item	Description
Model Name	YJ7A
Test condition	Passive Measurement
Test Engineer	Richard Tang
Company	Quanta Computer Inc.
Company Address	NO.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C.)
Test Environment	ETS-Lindgren AMS-8923 Antenna Measurement System
Test Software	ETS-Lindgren EMQuest Data Acquisition and Analysis Software
Test Date	May. 02 2024 ~ May. 03 2024

Test setup and Produce

1. Fix the DUT on the dielectric support structure and connect the feeding cable to the antenna used for test.
2. Set measurement paraments such as frequency range and sample angle.
3. Perform test and then get far-field data. (radiation pattern, gain, efficiency)
4. 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.



Equipment Description	Manufacture	Model No.	Calibrated Date	Calibrated Until
Network Analyzer	Agilent	E5080B	2023/07/04	2024/07/04
Field Monitor	ETS-Lindgren	EMCenter	N/A	N/A