

Antenna Datasheet

Product OC: QSM565DP-WFPI

Version: 1.0

Date: 2025-10-30

Status: Preliminary

Product Name: WIFI Antenna

Key Features:

Frequency Band: 2400-2500MHz, 5150-5850MHz

Antenna Type: PIFA

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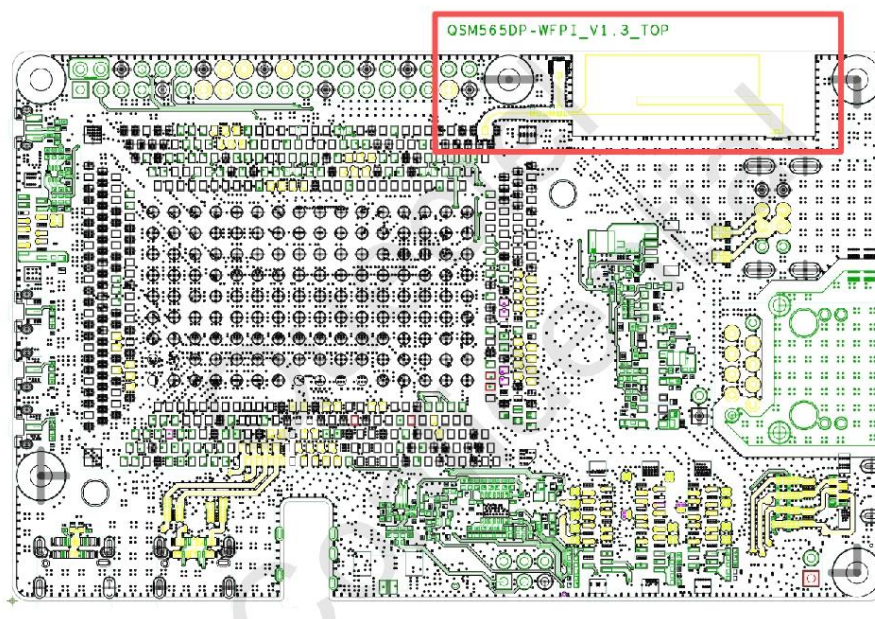
1 Specification

Test Condition: Assembled in test device

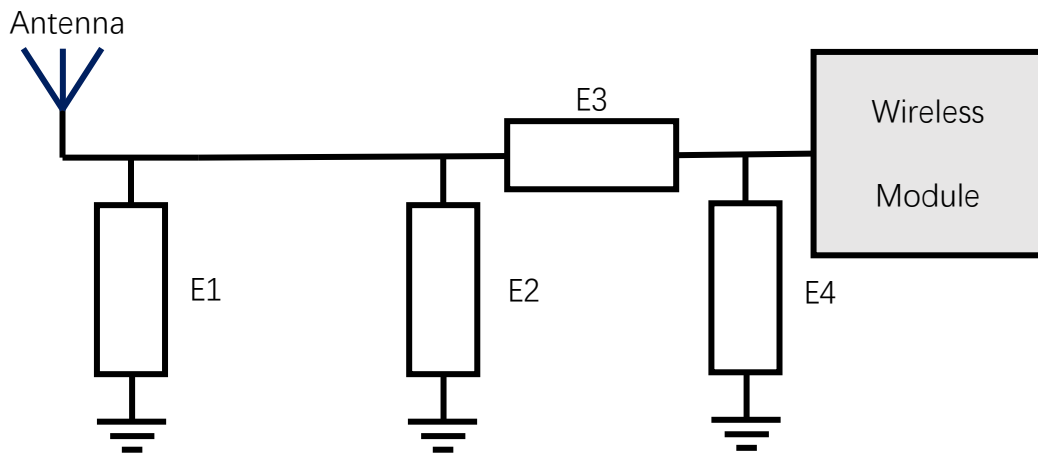
1.1. Electrical

Electrical	
Frequency Range	2400-2500MHz, 5150-5850MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 2.4
Peak Gain	5.0 dBi

1.2. Antenna Assembly



1.3. Matching Circuit

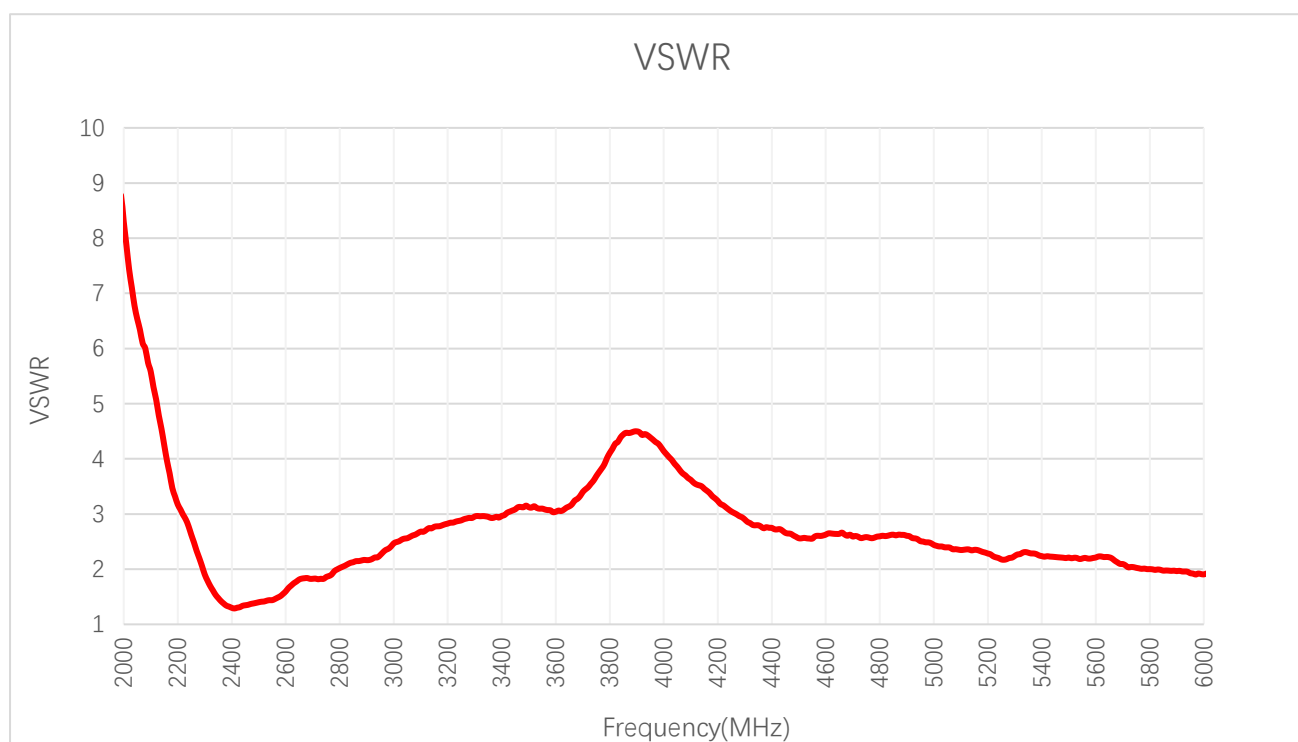


	E1	E2	E3	E4
Default Matching	DNI	DNI	0Ohm	DNI
Tolerance	NA	NA	/	N/A

2 Detailed Performance

2.1. S-Parameter Test

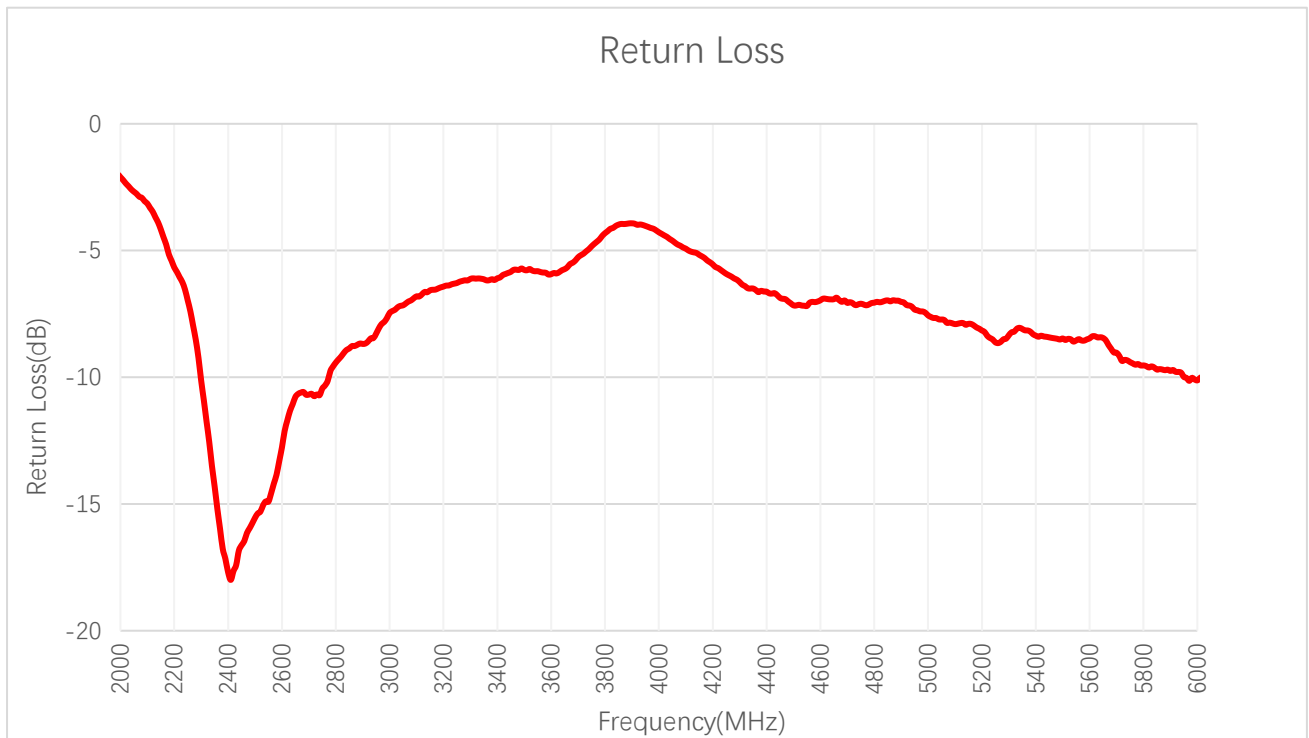
2.1.1. VSWR



VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	1.3	1.3	1.4	2.4	2.2	2.0	-	-	-	-

2.1.2. Return Loss

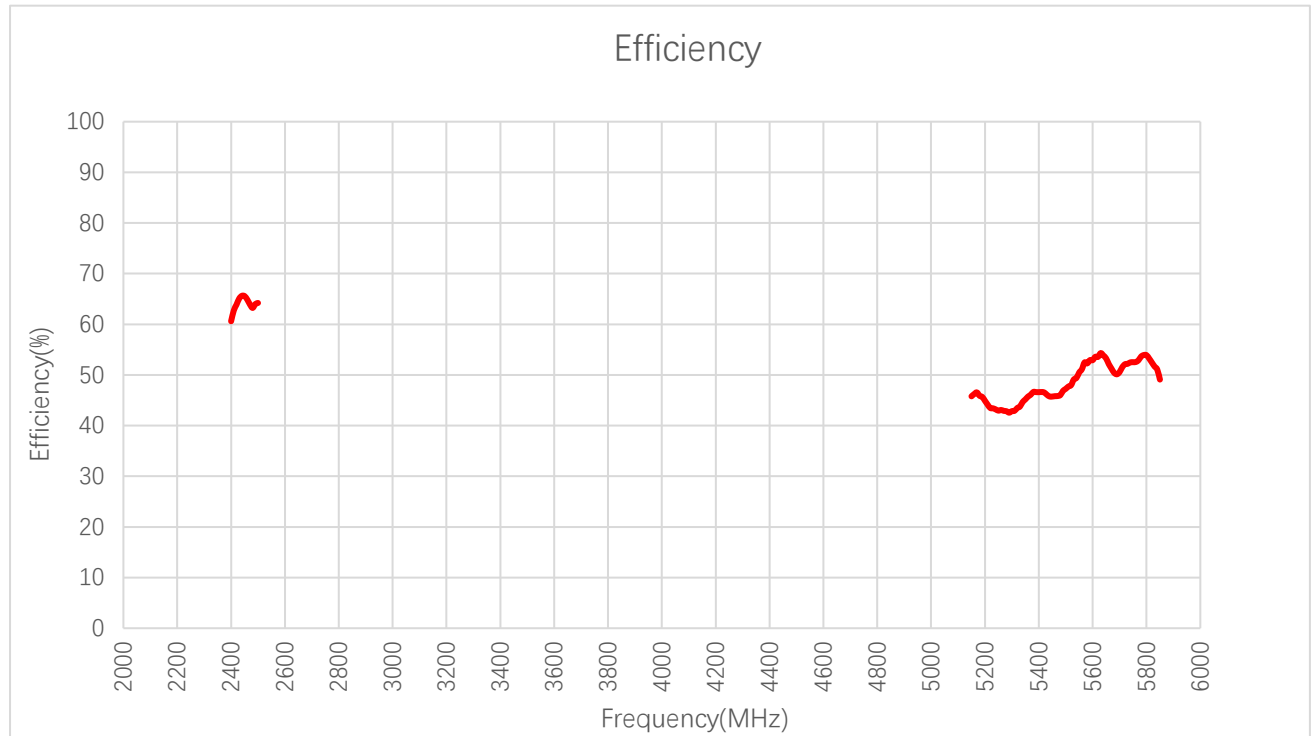


Return Loss (dB)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Return Loss (dB)	-17.7	-16.6	-15.5	-7.9	-8.5	-9.7	-	-	-	-

2.2. Radiation Performance Test

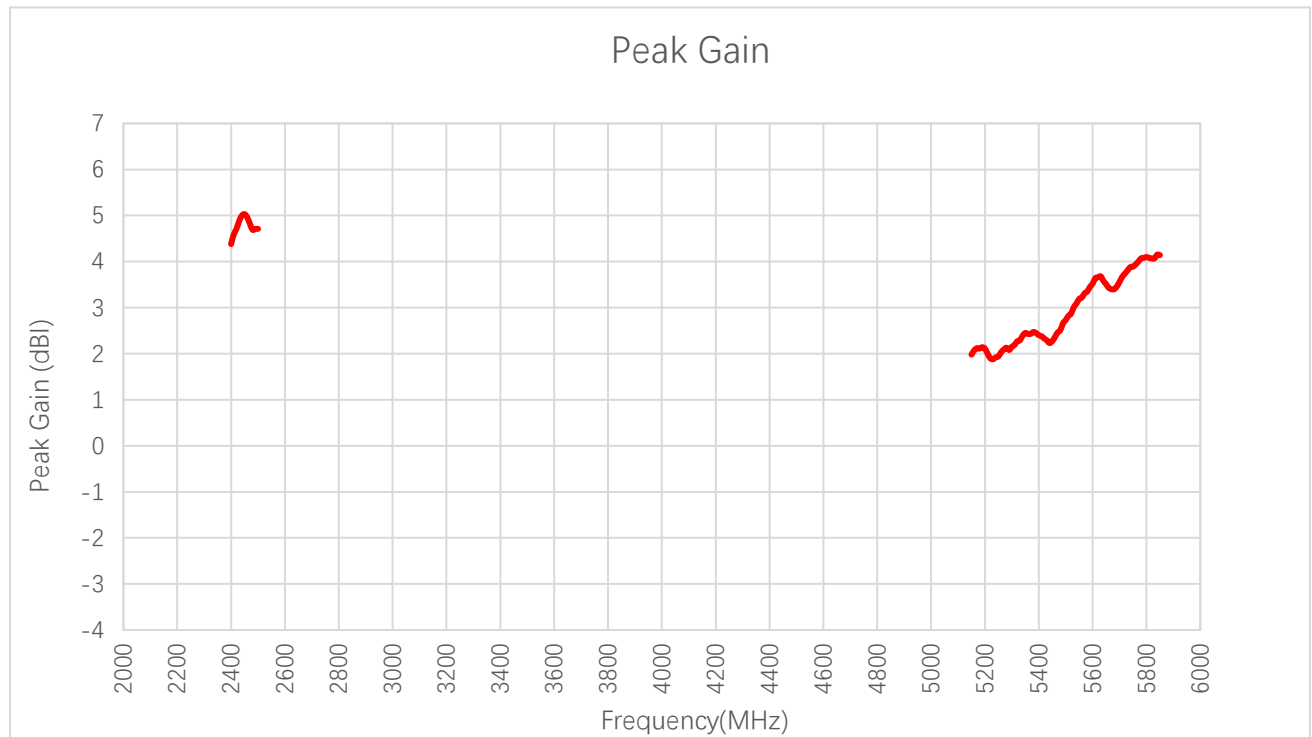
2.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	60.6	65.6	64.2	45.8	47.3	49.1	-	-	-	-

2.2.2. Peak Gain

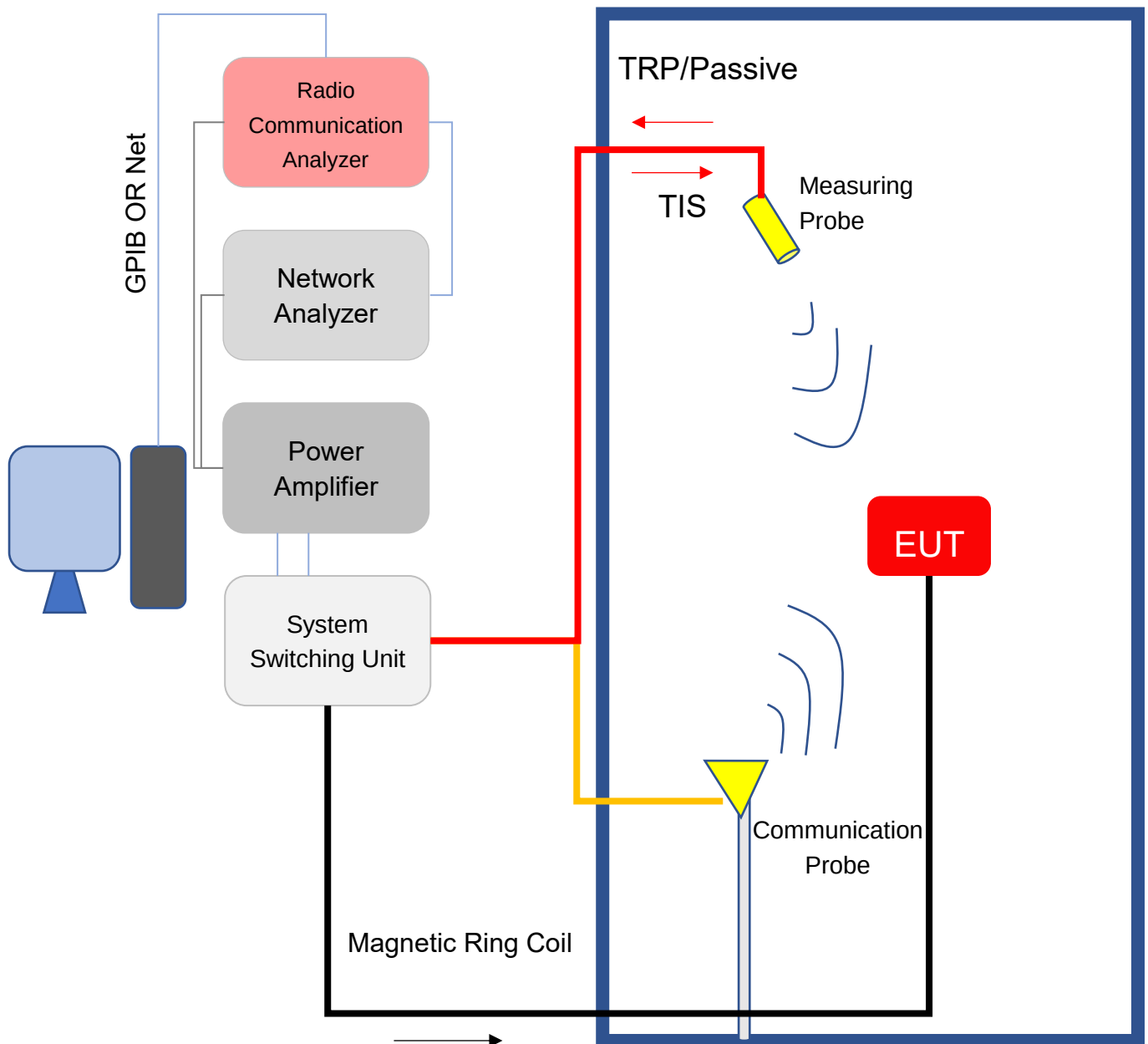


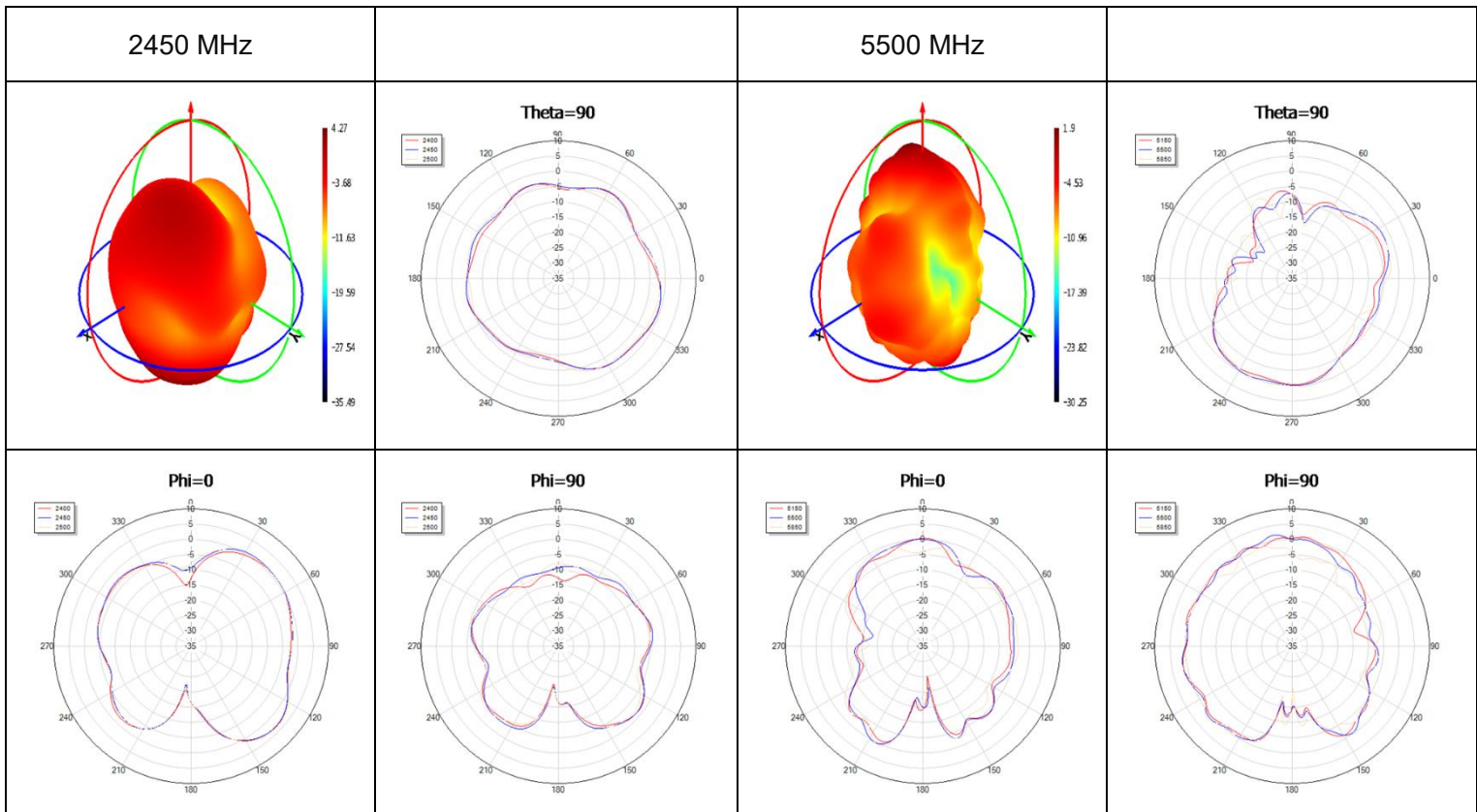
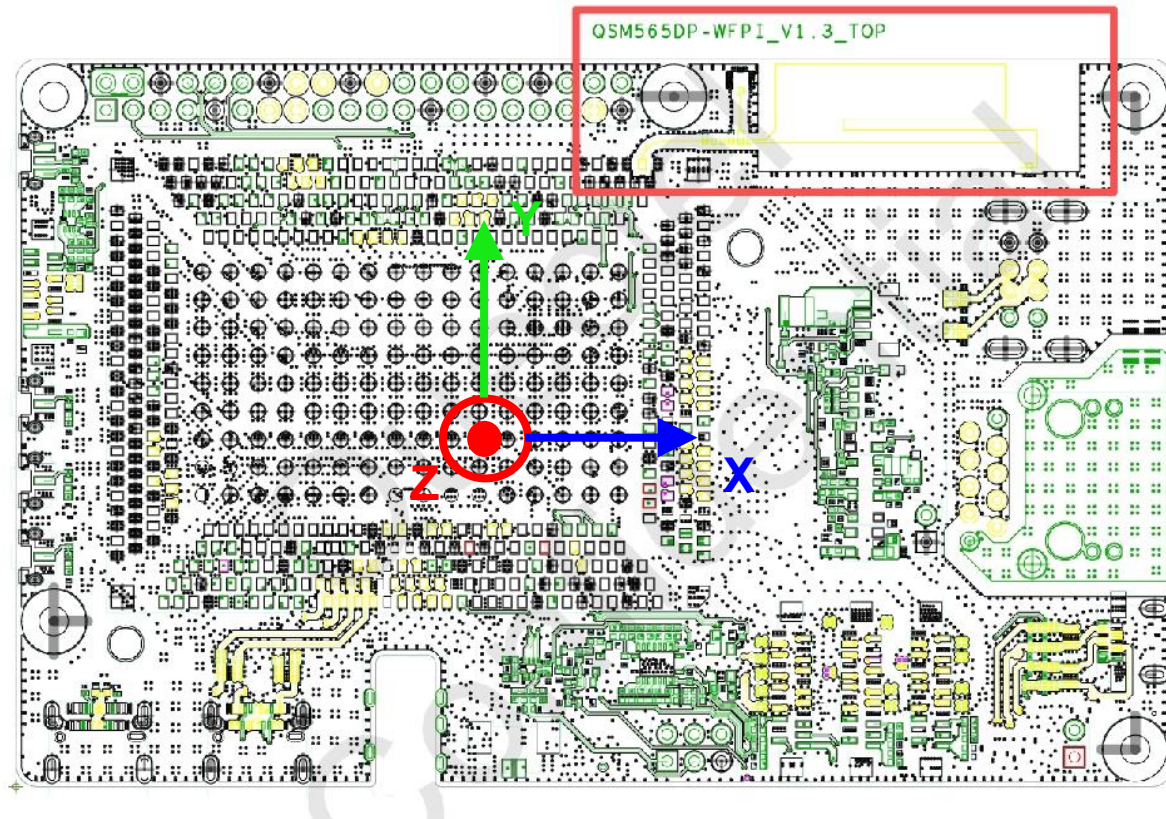
Peak Gain (dBi)

Frequency (MHz)	2400-2500	5150-5250	5250-5350	5470-5725	5725-5850					
Peak Gain (dBi)	5	2.2	2.5	3.9	4.2		-	-	-	-

2.2.3. 2D Radiation Pattern

- Test Condition: Assembled in test device
- Test Chamber: HF-S-1





Contact US

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Revision History

Version	Date	Author	Note
-	2025-10-30	Winfred.Wu	Creation of the document
1.0	2025-10-30	Winfred.Wu	First official release



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