

test report

Name of sample: WIFI antenna

Model: single function /SMA male head male needle /soldering shell / RG174/1.5m/WIFI/SMA injection molding bend

Test standard: GB/T 9410-2008

Release date: February 25,2025

Version: A0

Write Prepared By	Audit Reviewed By	Approved Approved By
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chage record		
edition	date	Reasons for change
A0	2025/02/25	

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1. Test purpose:

According to customer project requirements, provide test reports that meet customer requirements for technical requirements and test standards of WIFI antenna electrical performance.

2. Sample information:

Product name: WIFI antenna

Product model: single function /SMA male head male needle /soldering shell /
RG174/1.5m/WIFI/SMA injection molding bend

material code:

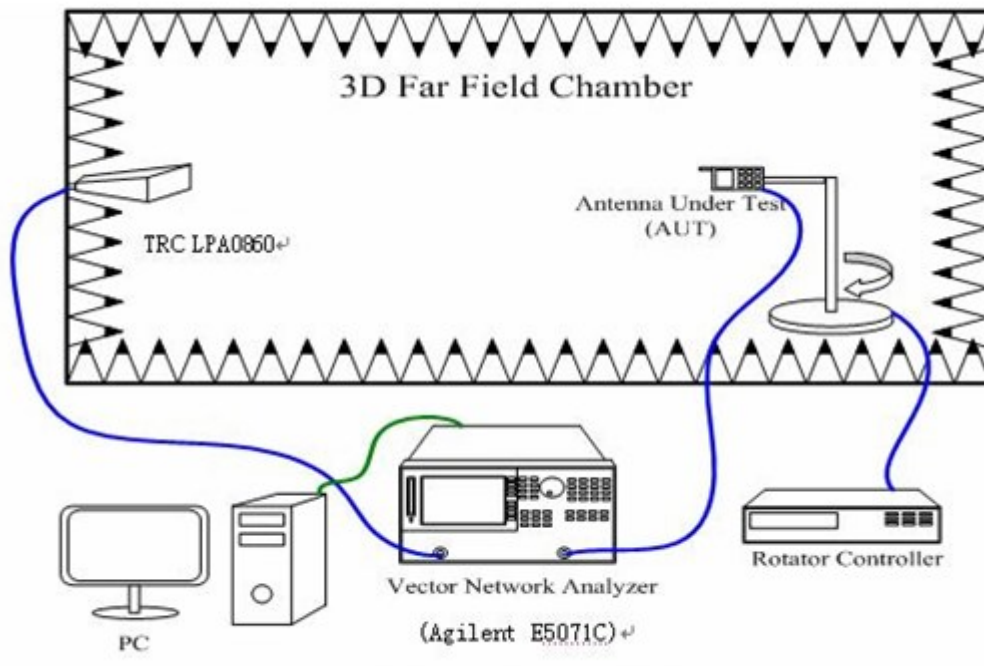
2. References

Main reference documents for testing:

Serial number	Document Name	Document Title
1	GB/T 9410-2008	General technical specifications for mobile communication antennas

3. OTA passive parameters for testing WIFI antenna:

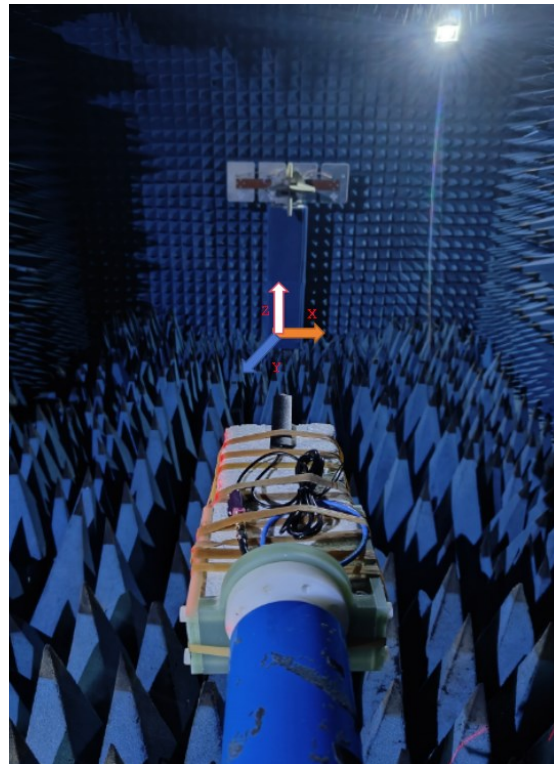
4.1 Test system connection



4.2 Test equipment

Network analyzer E5071C
WIFI antenna
computer
Microwave anechoic chamber

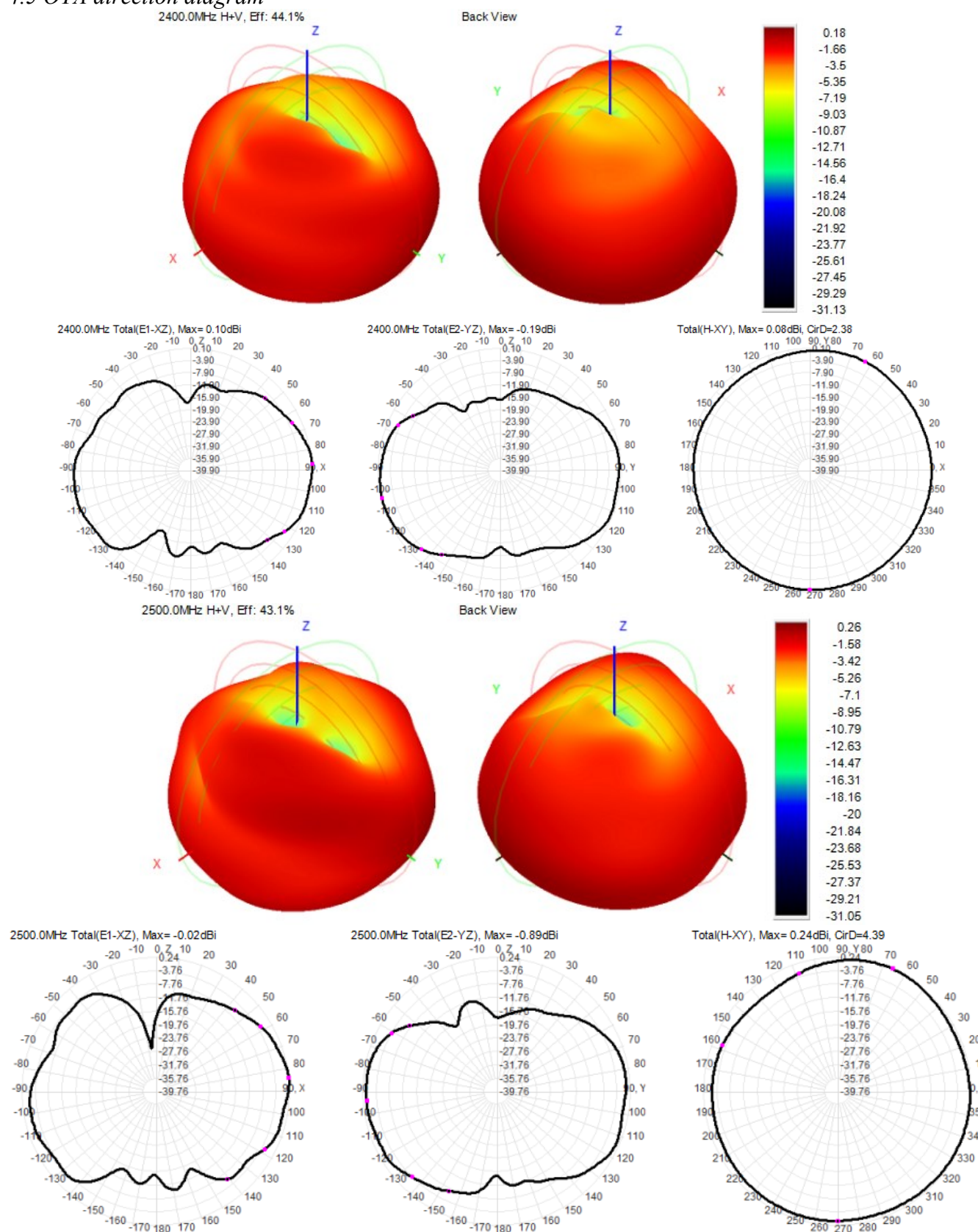
4.3 Antenna test scenario diagram

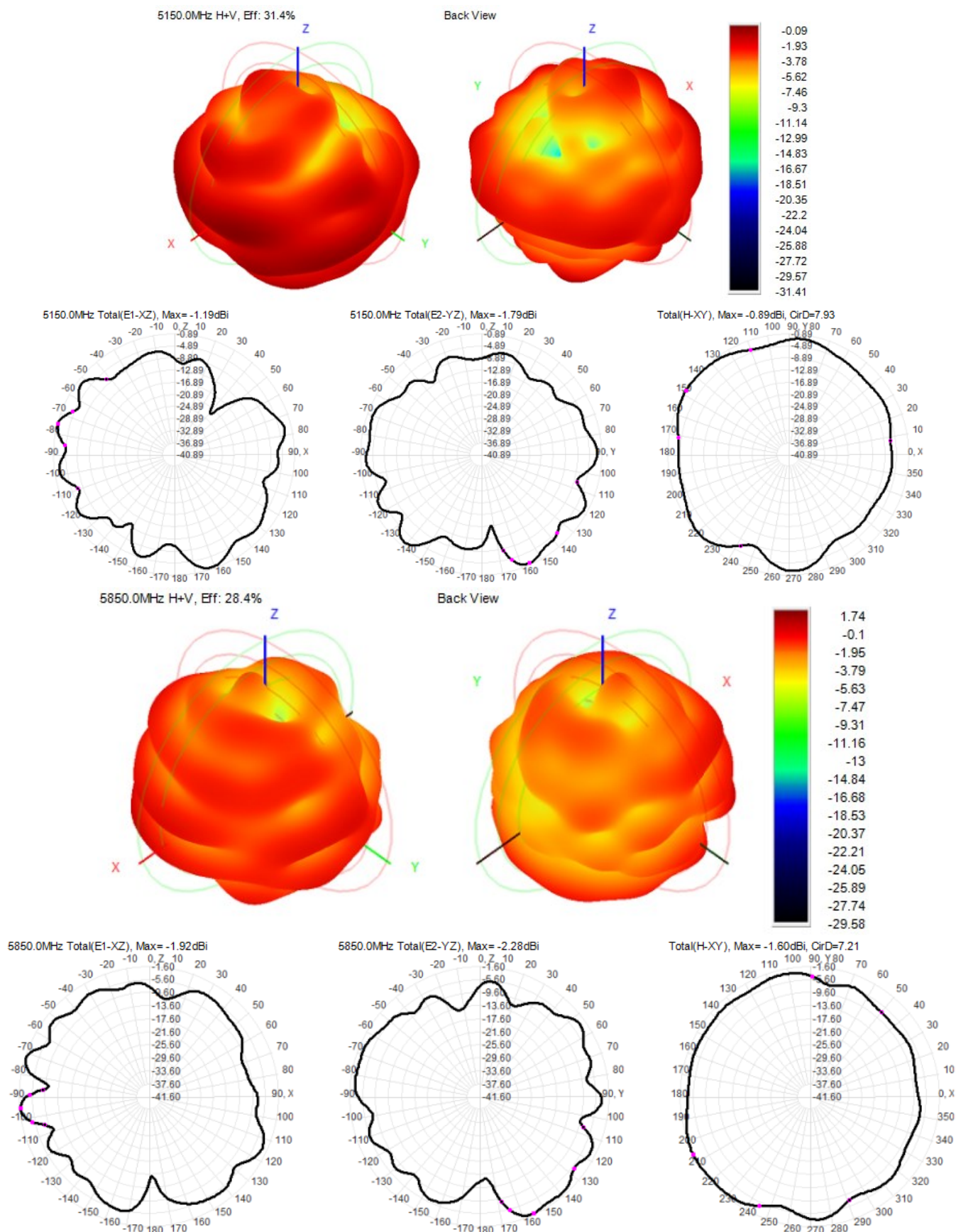


4.4 OTA passive test data:

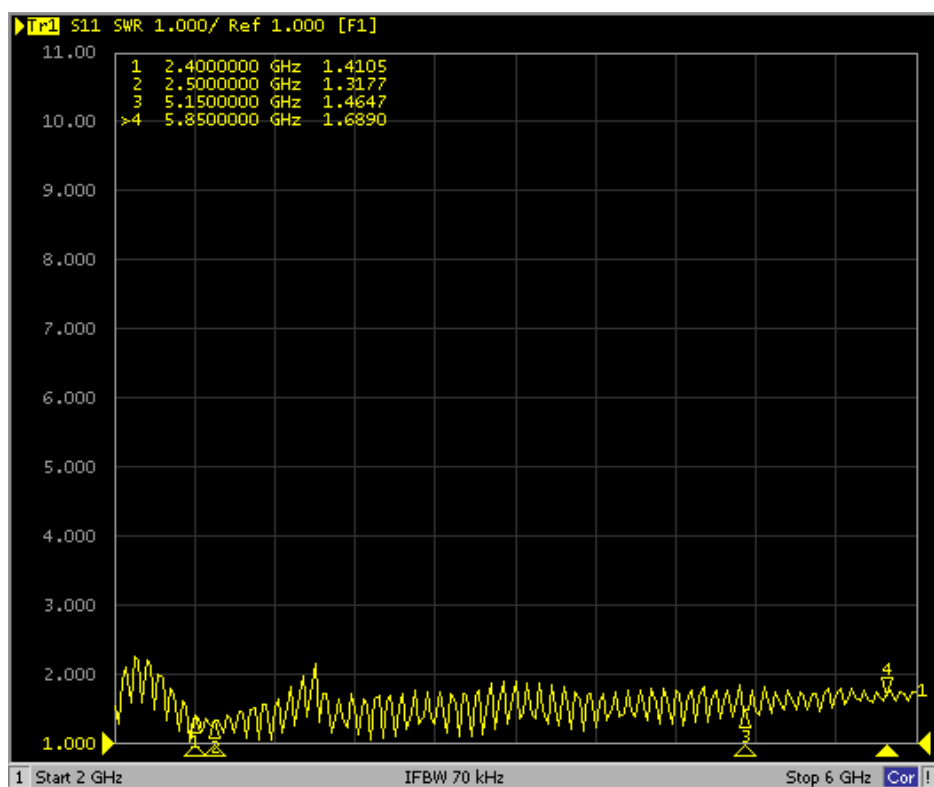
Frequency (MHz)	Gain (dBi)	Efficiency(%)	Frequency (MHz)	Gain (dBi)	Efficiency(%)
2400.0	0.18	44.11	5150.0	-0.09	31.37
2410.0	0.53	46.91	5200.0	0.77	33.69
2420.0	0.93	41.53	5250.0	-0.14	28.96
2430.0	0.53	46.90	5300.0	1.40	34.61
2440.0	0.37	45.09	5350.0	1.39	32.94
2450.0	0.38	45.61	5400.0	2.37	39.33
2460.0	0.34	45.30	5450.0	2.37	36.63
2470.0	0.62	46.50	5500.0	2.11	33.92
2480.0	1.21	41.72	5550.0	2.07	35.18
2490.0	1.04	40.08	5600.0	2.43	27.15
2500.0	0.26	43.11	5650.0	1.82	31.60
			5700.0	2.25	29.56
			5750.0	2.04	28.72
			5800.0	1.25	28.83
			5850.0	1.74	28.40

4.5 OTA direction diagram





4.6 Standing wave ratio test diagram



Frequency (MHz)	VSWR
2400	1.41
2500	1.31
5150	1.46
5850	1.68