

OTA TEST REPORT(Passive)

Applicant Product Shenzhen Kaipushen Communication Technology
Co., Ltd.

WX09-Latin American version

Issue Date July 15, 2026

Shenzhen Kaipushen Wireless Communication Co., Ltd .

Tested the above equipment in accordance with the requirements in **ANTI/IEEE Std 149-2008**.The test results show that the equipment tested is capable of demonstrating compliance with the Requirements as documented in this report.

Prepared by: Huan Chen

Approved by: ChangXing Jiang

Shenzhen Kaipushen Communication Co., Ltd

2nd Floor, Yulong Office Building, Longcheng Industrial Zone, No. 440 Longguan Avenue,
Longhua District, Shenzhen

1. Test Laboratory

1.1 Notes of the Test report

This report shall not be reproduced in full or partial. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of applicable standards stated above.

1.2 Test facility

SATIMO Microwave Anechoic Chamber : testing frequency ranges from 650MHz to 8GHz.

1.3 Testing Location

Company: Shenzhen Kaipushen Wireless Communication Co., Ltd

Address: 2nd Floor, Yulong Office Building, Longcheng Industrial Zone, No. 440

Longguan Avenue, Longhua District, Shenzhen

Contact: ChangXing Jiang

Telephone: 15014104367

E-mail: kpsyanfa1@szkps.com

1.4 Laboratory Environment

Temperature	Min.= 19°C, Max.=25°C	
Relative humidity	Min.=40%, Max.=72%	
Shield effect	0.6-7GHz	>100dB
Ground resistance	<0.5Ω	

2. General Description of Equipment under Test

2.1 Applicant and Manufacturer information

Applicant Name	Shenzhen Onewave Communication Technology Co., Ltd
Applicant address	1st Building, 404, Jinchi Convention & Innovation Park, Fuhai Street, Bao'an District, Shenzhen,
Manufacturer Name	Shenzhen Onewave Communication Technology Co., Ltd
Manufacturer address	1st Building, 404, Jinchi Convention & Innovation Park, Fuhai Street, Bao'an District, Shenzhen,

2.2 General information

EUT Description	
Product Name	WX09-Latin American version
Model	WX09-Latin American version
HW Version	WX09-Latin American version
SW Version	RadStation
Antenna Type	FPC Antenna
Antenna Manufacturer	Shenzhen Kai Pushen Wireless Communication Co., Ltd
Test Frequency	650MHz-8000MHz

2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: **ANSI/IEEE Std 149-2008**

3. Test Conditions

3.1 Test Configuration

The method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 1m.

3.2 Test Measurement

Spherical coordinate system

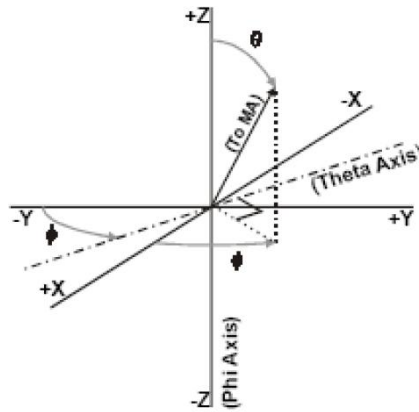
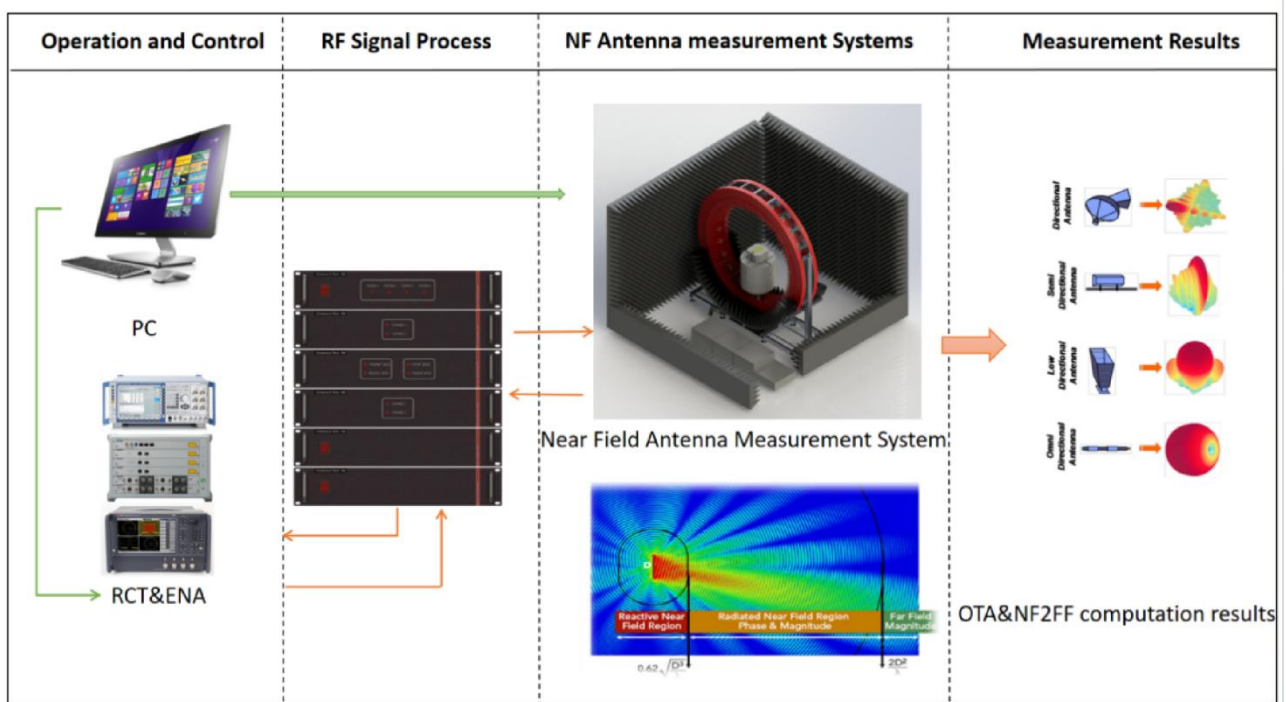


Figure 1 Test coordinate system

Note: Theta is from 0-180degree. Phi is from EUT and record the Date, the step of rotation is 15 degree.

Test Setup



4. Antenna location map



5. Test Results

5.1 Antenna Max. Peak Gain

GSM850: -3.26 dBi GSM900: -3.22 dBi DCS1800: 0.8 dBi PCS1900: 1.26 dBi
WCDMA1: 1.38 dBi WCDMA2: 1.26 dBi WCDMA4: 0.8 dBi WCDMA5: -3.26 dBi
WCDMA8: -3.22 dBi
LTE1: 1.38 dBi LTE2: 1.26 dBi LTE3: 0.8 dBi LTE4: 0.8 dBi
LTE5: -3.26 dBi LTE7: 0.23 dBi LTE8: -3.22 dBi LTE13: -2.64 dBi LTE26:
-3.26 dBi LTE28A: -3.65 dBi LTE28B: -3.65 dBi LTE66: 0.8 dBi LTE38: 0.06
dBi LTE40: 1.33 dBi LTE41: 0.23 dBi

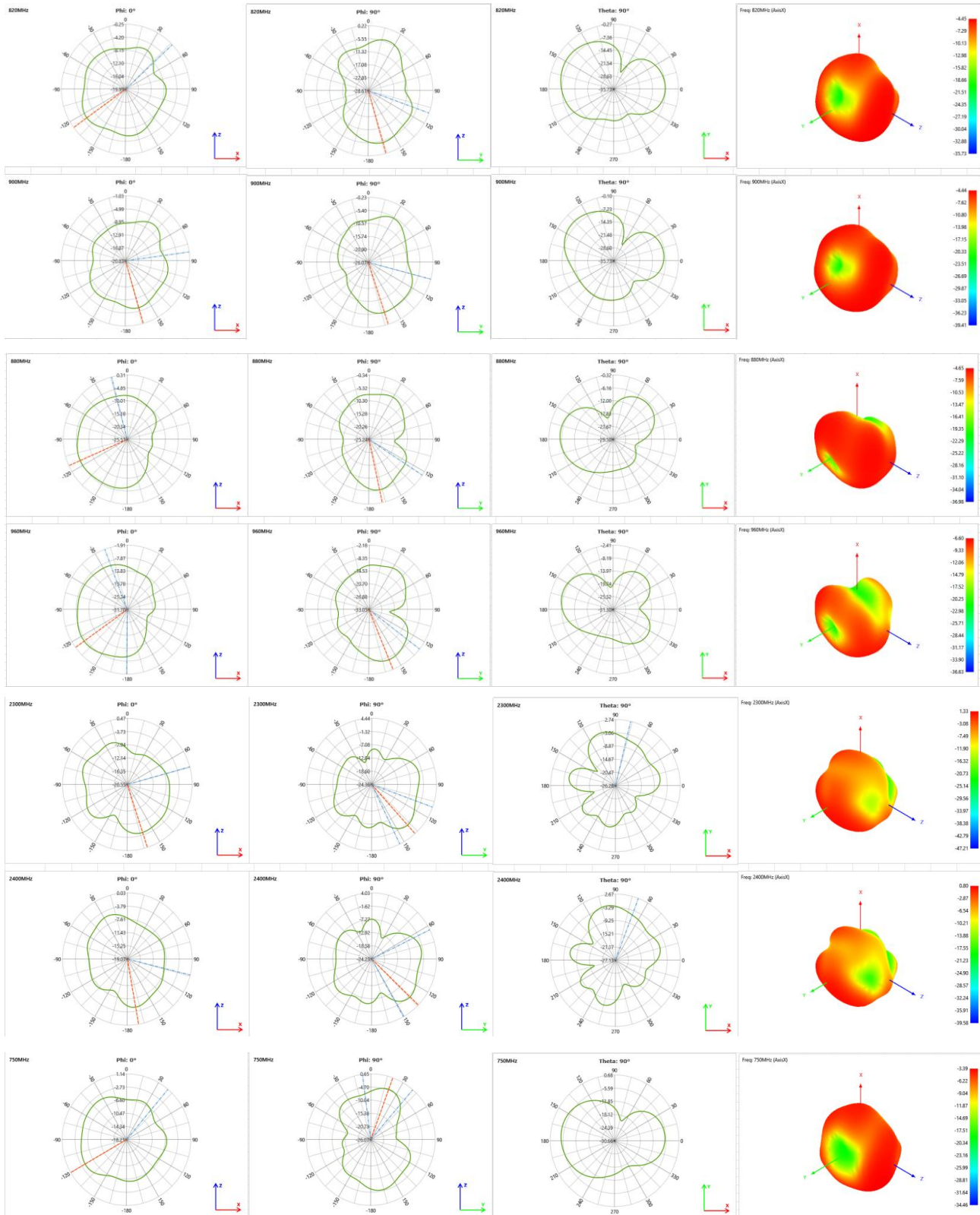
BT: 0.45 dBi

WIFI 2.4G: 0.45 dBi

WIFI 5.8G: 2.11 dBi

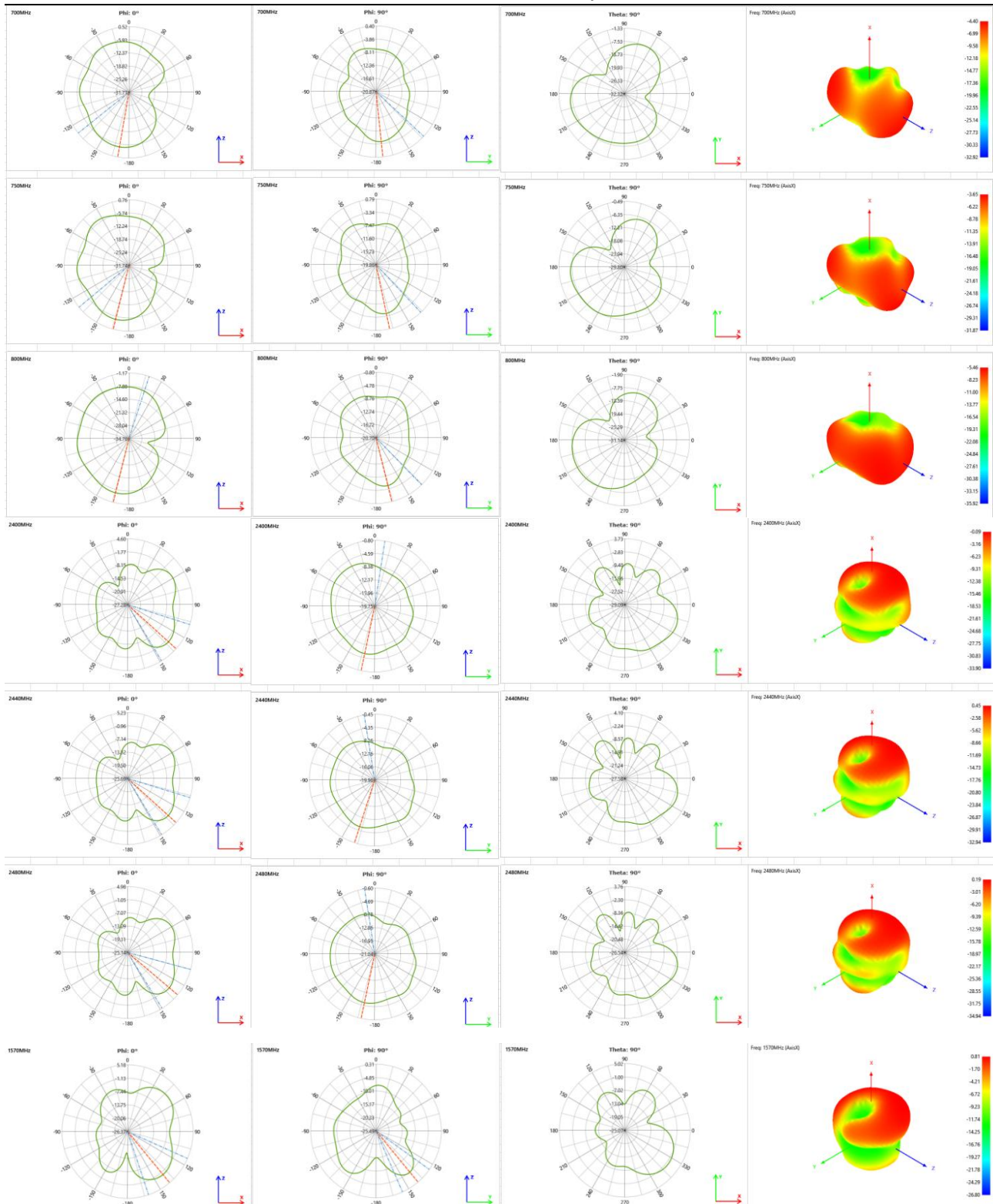
GPS: 0.81 dBi

5.2 Antenna radiation pattern



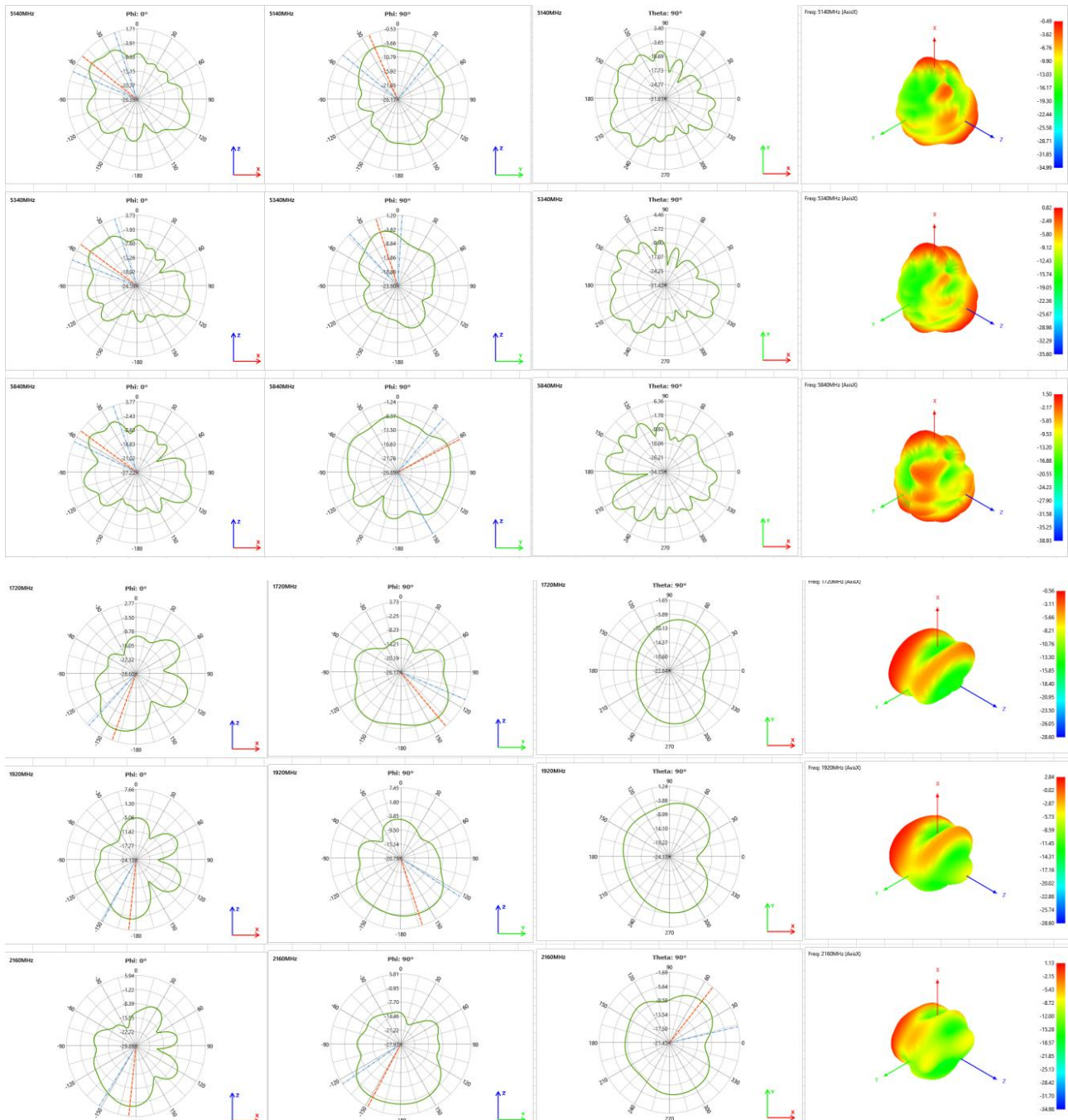


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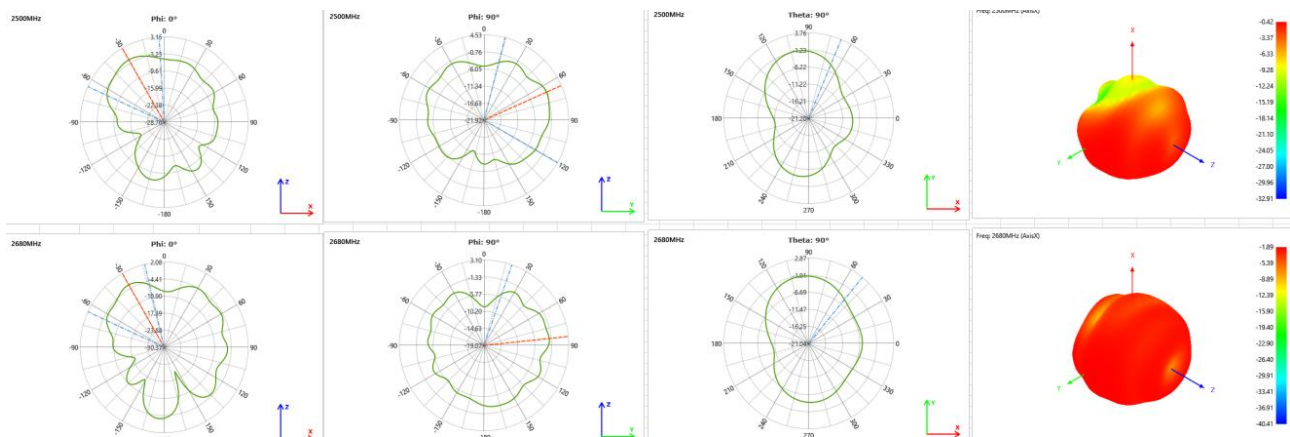


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5.3 Antenna efficiency

WiFi-2.4G-BT

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-0.09	-6.63	21.74
2410	0.08	-6.52	22.28
2420	0.26	-6.39	22.95
2430	0.36	-6.3	23.44
2440	0.45	-6.26	23.63
2450	0.42	-6.27	23.62
2460	0.29	-6.34	23.24
2470	0.23	-6.43	22.74
2480	0.19	-6.48	22.5

WIFI-5.8G

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
5100	-1.75	-8.11	15.44
5120	-1.26	-7.84	16.45
5140	-0.49	-7.43	18.09
5160	-0.49	-7.43	18.06
5180	-0.48	-7.37	18.34
5200	0.16	-7.11	19.44
5220	0.09	-6.96	20.12
5240	0.4	-6.89	20.47
5260	0.72	-6.84	20.71
5280	0.65	-6.64	21.67
5300	0.69	-6.65	21.61
5320	0.6	-6.68	21.48
5340	0.82	-6.59	21.93
5360	0.8	-6.49	22.43



5380	0.78	-6.54	22.19
5400	0.69	-6.15	24.24
5420	0.73	-6.02	25.03
5440	0.75	-5.96	25.36
5460	0.74	-5.79	26.34
5480	1.05	-5.68	27.06
5500	1.09	-5.49	28.28
5520	0.93	-5.39	28.9
5540	1.04	-5.32	29.39
5560	0.94	-5.3	29.5
5580	1	-5.31	29.45
5600	0.97	-5.25	29.86
5620	1.41	-5.09	31
5640	1.51	-5.05	31.25
5660	1.31	-5.2	30.18
5680	1.53	-5.24	29.93
5700	1.24	-5.33	29.31
5720	1.24	-5.51	28.13
5740	1.72	-5.56	27.79
5760	2.11	-5.44	28.57
5780	1.88	-5.62	27.42
5800	1.38	-6.05	24.81
5820	1.74	-5.91	25.67
5840	1.5	-6.22	23.86

GPS

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
1560	0.91	-5.05	31.28
1570	0.81	-5.06	31.19
1580	0.46	-5.35	29.17

MAIN

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
820	-4.45	-8.09	15.52
830	-4.15	-7.75	16.8
840	-3.8	-7.38	18.26
850	-3.58	-7.24	18.87
860	-3.26	-7.15	19.27
870	-3.3	-7.18	19.16
880	-3.72	-7.54	17.63

890	-4	-8.02	15.76
900	-4.44	-8.67	13.6

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
880	-4.65	-8.44	14.32
890	-3.91	-7.74	16.82
900	-3.36	-7.27	18.73
910	-3.22	-7.34	18.47
920	-3.51	-7.78	16.67
930	-4.22	-8.54	14.01
940	-4.99	-9.42	11.42
950	-5.87	-10.42	9.08
960	-6.6	-11.3	7.42

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2300	1.33	-6.31	23.39
2320	1.29	-6.31	23.38
2340	1.13	-6.28	23.53
2360	1.23	-6.23	23.85
2380	1.03	-6.27	23.6
2400	0.8	-6.25	23.72

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
750	-3.39	-7.28	18.73
760	-2.97	-6.93	20.26
770	-2.84	-6.69	21.41
780	-2.64	-6.52	22.29
790	-2.79	-6.55	22.14

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
700	-4.4	-8.41	14.43
710	-4.22	-8.11	15.44
720	-4.11	-7.75	16.79
730	-3.92	-7.61	17.34
740	-3.7	-7.52	17.68
750	-3.65	-7.53	17.65
760	-3.68	-7.84	16.46
770	-3.86	-8.04	15.71
780	-4.46	-8.43	14.36
790	-4.95	-8.84	13.05
800	-5.46	-9.08	12.35

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
1700	-1.11	-6.82	20.79
1720	-0.56	-6.62	21.77
1740	-0.11	-6.25	23.7
1760	0.42	-5.87	25.9
1780	0.75	-5.59	27.62
1800	1.06	-5.34	29.22
1820	1.26	-5.09	30.97
1840	0.74	-4.73	33.65
1860	1.14	-4.38	36.49
1880	1.45	-4.03	39.49
1900	1.68	-3.72	42.43
1920	1.84	-3.47	44.98
1940	2.09	-3.28	47.03
1960	2.11	-3.14	48.54
1980	2.26	-2.97	50.42
2000	2.22	-3	50.1
2020	2.21	-3.09	49.09
2040	2.15	-3.41	45.66
2060	2.45	-3.87	41.01
2080	2.27	-4.08	39.12
2100	2.14	-4.46	35.83
2120	1.8	-5.03	31.38
2140	1.63	-5.44	28.6
2160	1.13	-6.07	24.72
2180	0.69	-6.47	22.54
2200	0.47	-6.76	21.08
2220	-0.07	-7.35	18.43
2240	-0.49	-7.78	16.66
2260	-0.59	-8.04	15.69
2280	-1.09	-8.53	14.04
2300	-1.39	-8.84	13.06
2320	-1.69	-8.93	12.79
2340	-2.26	-9.09	12.32
2360	-2.7	-9.17	12.11
2380	-3.01	-8.88	12.95
2400	-3.61	-8.56	13.94
2420	-3.38	-8.07	15.59
2440	-2.91	-7.42	18.1
2460	-2.03	-6.79	20.93

2480	-1.07	-5.95	25.42
2500	-0.42	-5.3	29.52
2520	-0.05	-4.79	33.18
2540	0.23	-4.47	35.71
2560	0.22	-4.4	36.32
2580	0.06	-4.33	36.88
2600	-0.49	-4.55	35.09
2620	-0.91	-4.77	33.36
2640	-1.13	-4.9	32.34
2660	-1.5	-5.19	30.28
2680	-1.89	-5.53	27.99
2700	-2.24	-5.85	25.99

5. Equipment List

Type of Equipment	Manufacture	Model Number
Network Analyzer	Agilent Technologies	E5071B
Switch control System	OWT	OWT-900
Software	OWT	RadStation

ANNEX B: The EUT Appearance and Test Configuration

B.1EUT Appearance



B.2 Test Configuration

