



ANTENNA PASSIVE TEST RESULTS

Manufacturer	Dandan Electronics Factory, Chenghai District, Shantou City
Product Name	2.4G antenna
Model No.	2.4G-ANT-001
Standards	ANSI/IEEE Std 149-2008

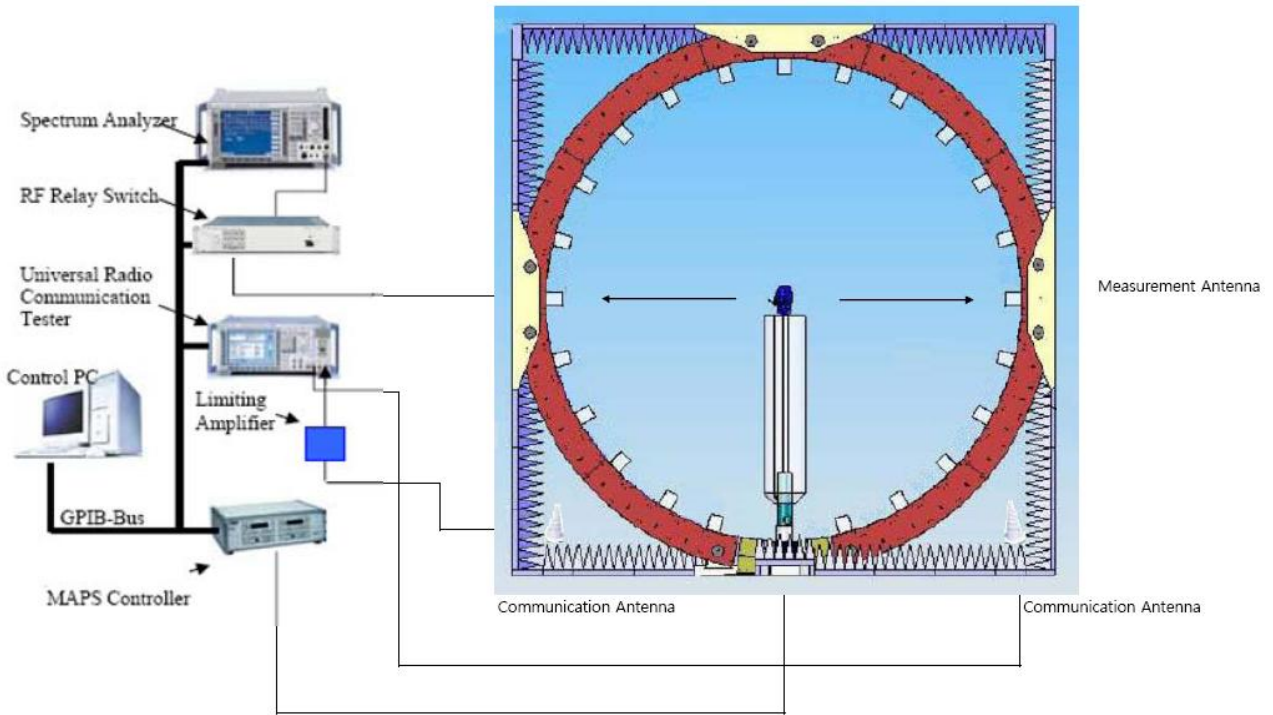
1. General Information

1.1 Testing Laboratory

Test Lab	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Address	No.1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057

1.2 Test Configuration

Great-Circle-Cut 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 5m



2. Equipment List

Type of Equipment	Model Number	Manufacture	Calibration Date	Valid Period
Network Analyzer	E5071C S/N MY46523591	Keysight	2025/4/11	2026/4/10
Quad-Ridge Horn Antenna	700 MHz-10 GHz EMCO 3164-08	ETS-Lindgren L.P.	N/A	N/A
MAPS Controller	EMCENTER S/N 160485	ETS-Lindgren L.P.	N/A	N/A

3. Measurement Uncertainty

Item	2400-2500 MHz (dB)
Gain	1.09
Efficiency	0.88

Measurement Uncertainty (95% CONFIDENCE INTERVAL) K=2

4. Test Results

4.1 Test Summary

Product	Frequency (MHz)	Efficiency (%)	Gain (dBi)
2.4G On-board PCB	2420	12.79	-2.51

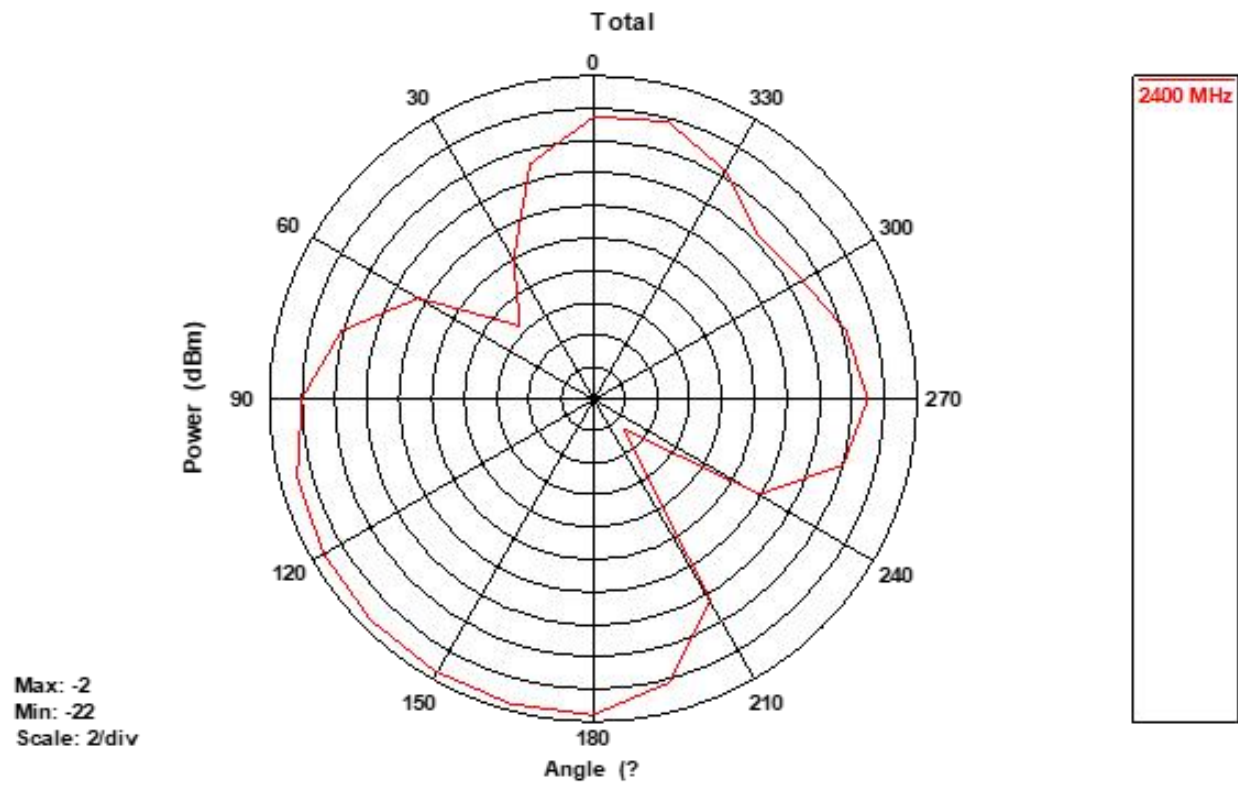


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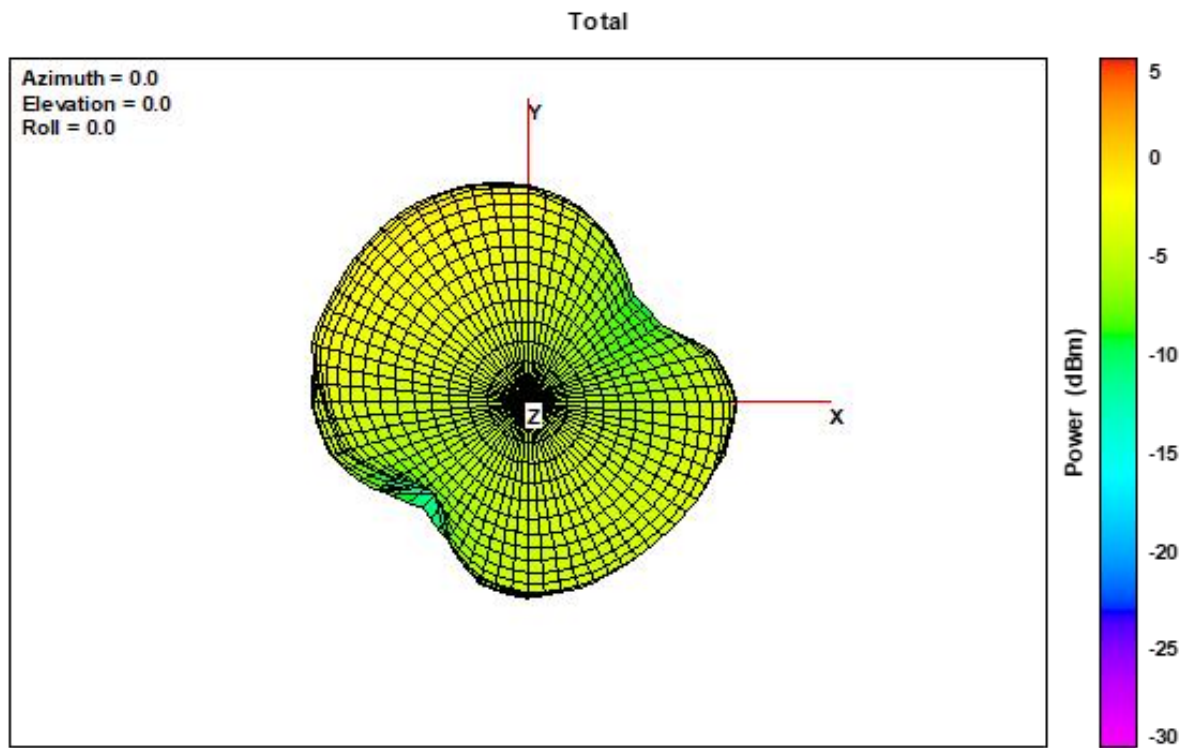
4.2 2.4G On-board PCB antenna Test Results

Free Space

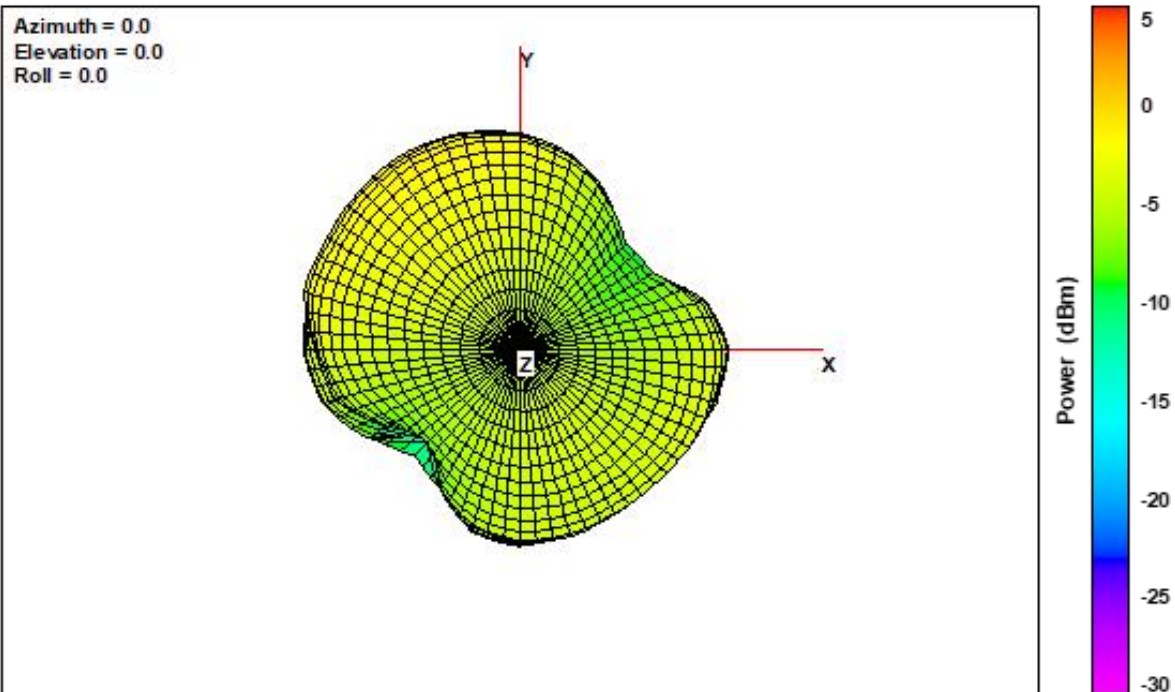
Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	-4.48813	35.5784	0.981075
2410	-4.61412	34.5611	0.985322
2420	-4.54509	35.1149	1.09477
2430	-4.8266	32.9109	0.982451
2440	-5.07844	31.0567	0.849666
2450	-5.21612	30.0876	0.821263
2460	-5.70823	26.8644	0.483978
2470	-6.32302	23.3183	-0.08267
2480	-6.89433	20.4441	-0.56882
2490	-7.01996	19.8611	-0.59378
2500	-6.58582	21.9492	-0.13295



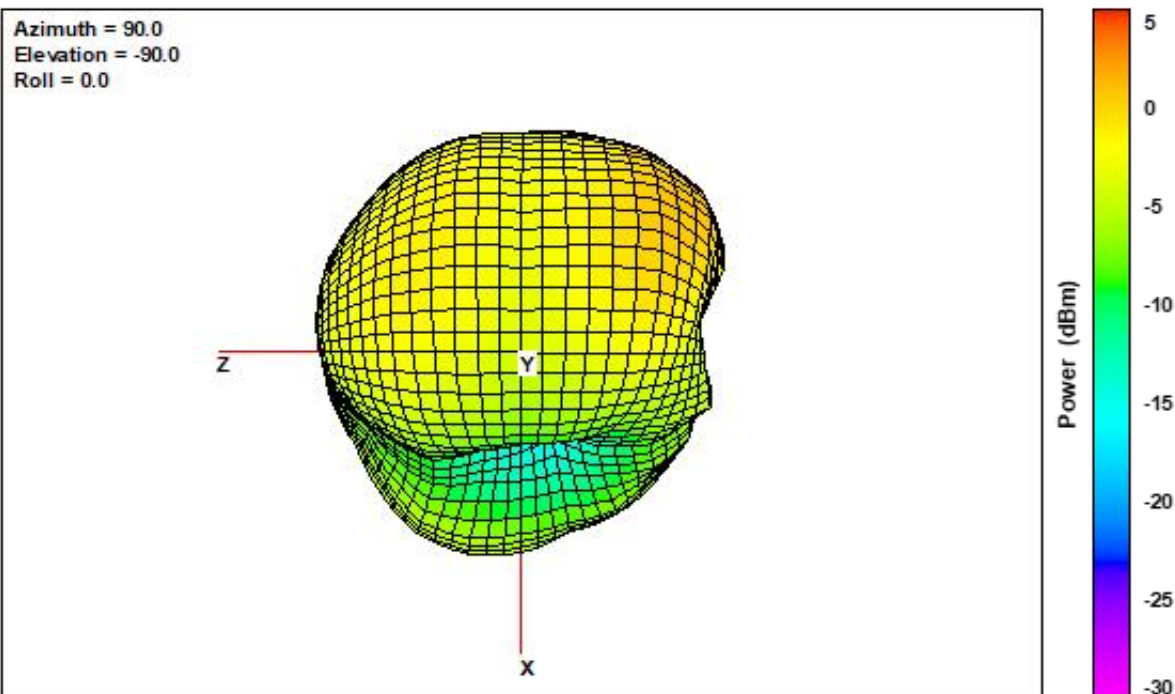
6. 3-D Antenna Pattern



Total



Total



7. The EUT and Test Configuration

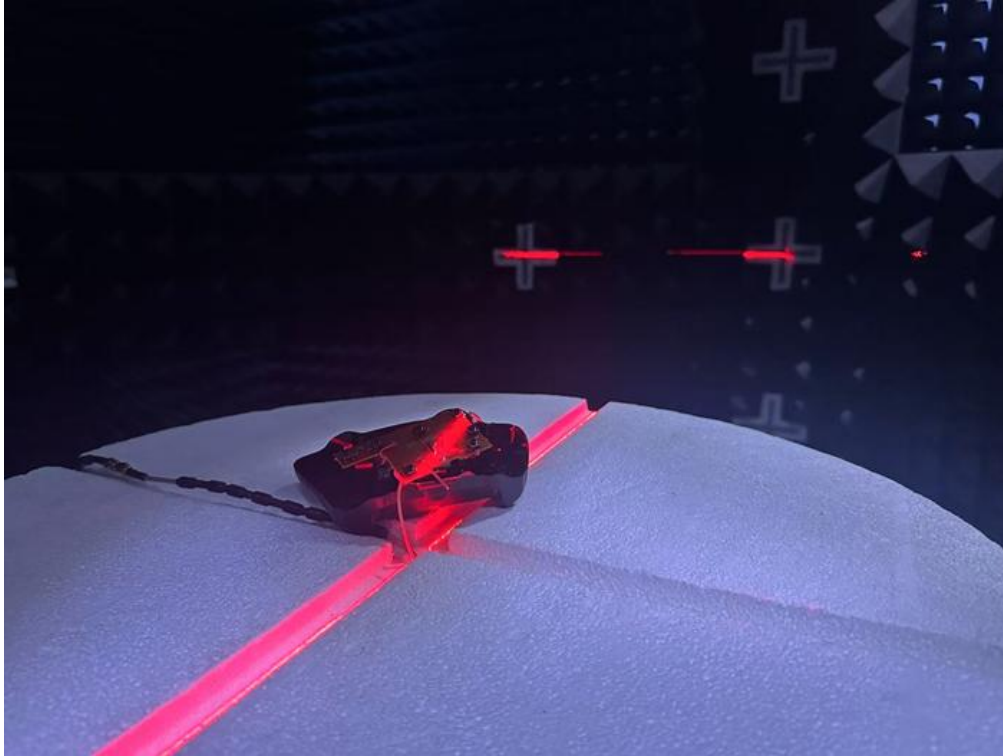
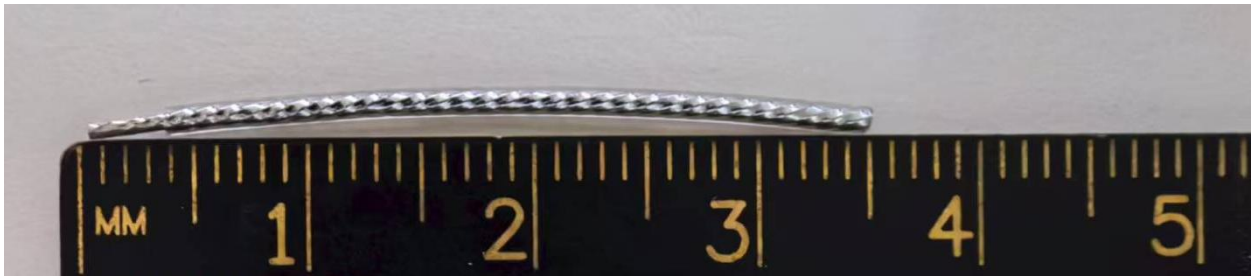


Photo of EUT(Please check the highlighted part)



- End of the Results -