

ANTENNA PASSIVE TEST RESULTS

Manufacturer	
Product Name	2.4G antenna
Model No.	2.4G-ANT-001
Standards	ANSI/IEEE Std 149-2008

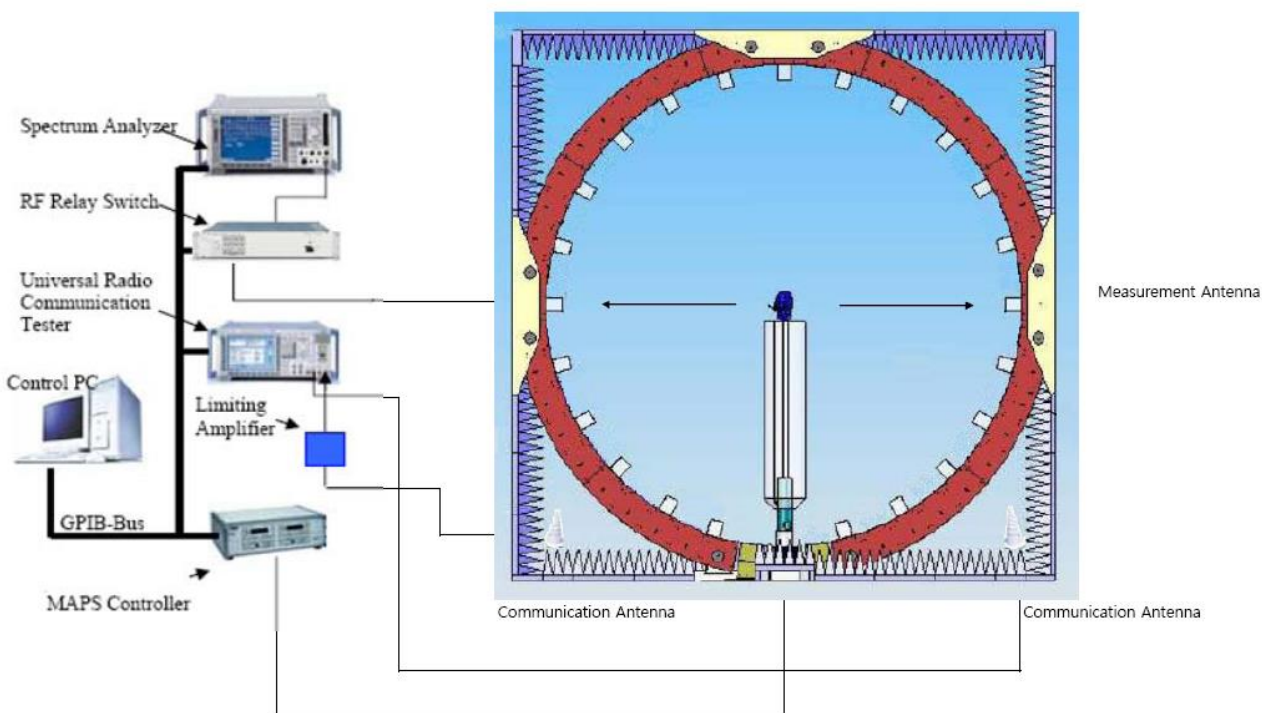
1. General Information

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	0.88
Efficiency	0.88

Measurement Uncertainty (95% CONFIDENCE INTERVAL) K=2

4. Test Results

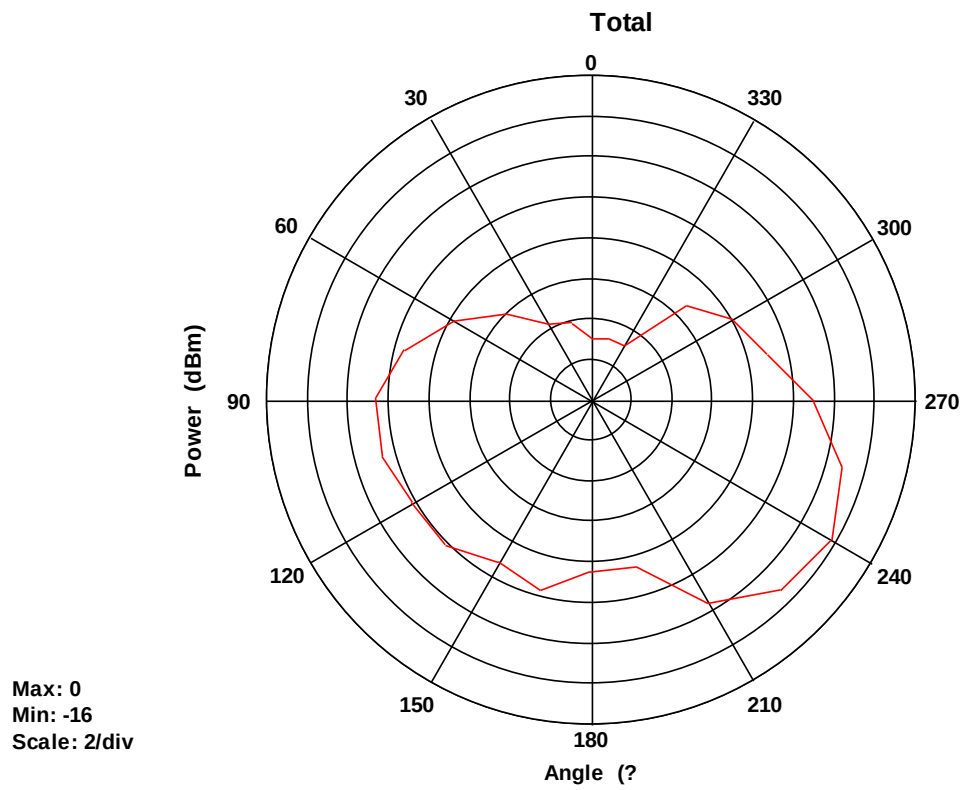
4.1 Test Summary

Product	Frequency (MHz)	Efficiency (%)	Gain (dBi)
2.4G antenna	2420	31.7147	0.053567

4.2 2.4G On-board PCB antenna Test Results

Free Space

Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	-5.12453	30.7289	-0.33405
2410	-5.19936	30.2039	-0.24623
2420	-4.98739	31.7147	0.053567
2430	-5.17834	30.3505	-0.30583
2440	-5.43403	28.6152	-0.75517
2450	-5.56938	27.7372	-0.80236
2460	-6.02223	24.9906	-1.31491
2470	-6.58964	21.9299	-1.7541
2480	-7.05158	19.7171	-2.18277
2490	-7.04525	19.7458	-2.27274
2500	-6.52322	22.2678	-1.72211

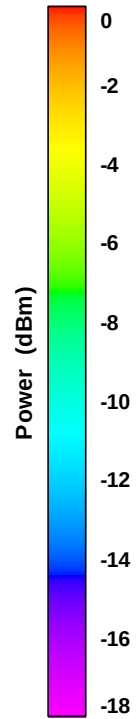
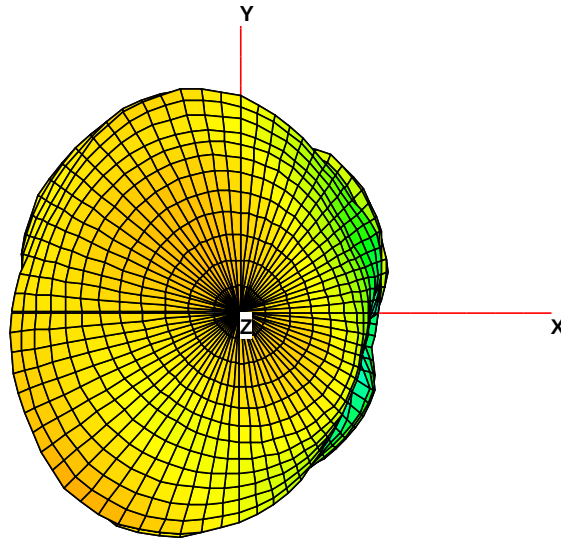


2400 MHz

6. 3-D Antenna Pattern

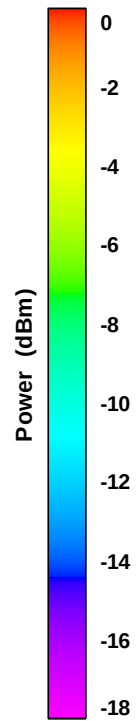
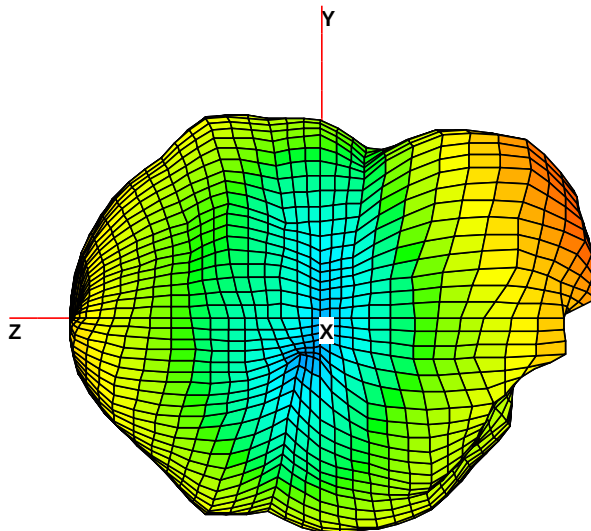
Total

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Elevation = 0.0
Roll = 0.0



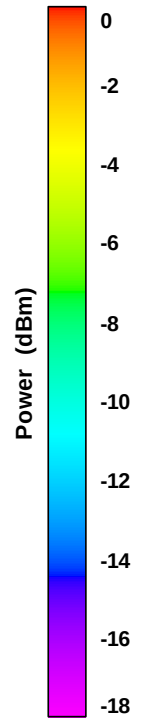
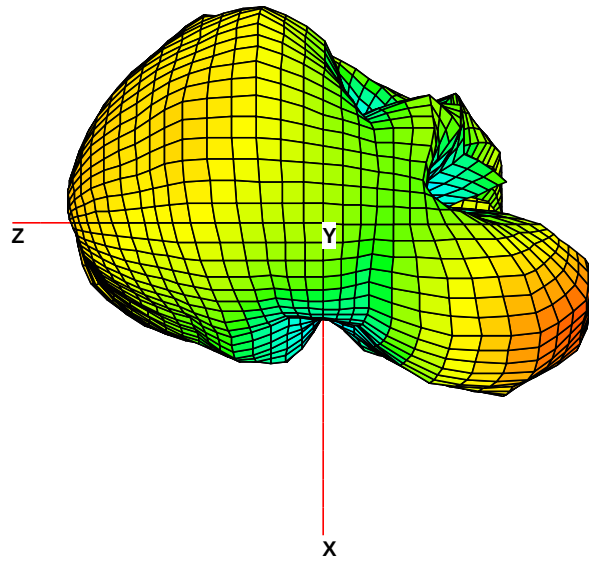
Total

Azimuth = 0.0
Elevation = 0.0
Roll = -90.0



Total

Azimuth = 90.0
Elevation = -90.0
Roll = 0.0



7. The EUT and Test Configuration

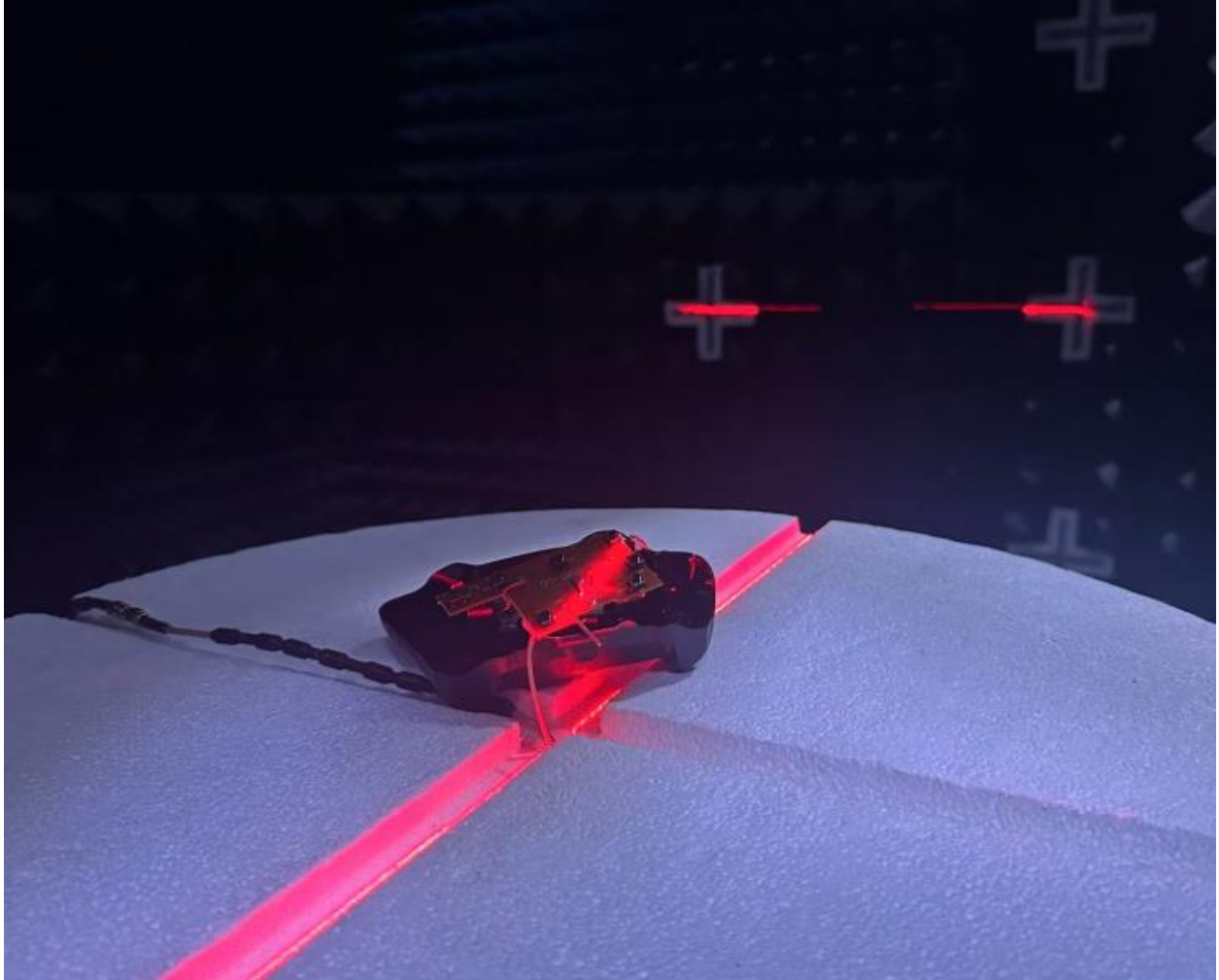


Photo of EUT(Please check the highlighted part)





- End of the Results -