

天线测试报告

Antenna Testing report

日期
DATE: 2025. 7. 31

版本
REV.: V01

客 户
CUSTOMER:

客 户 料 号
CUSTOMER P/N: Booster D1.2

品 名
PART NAME: Dongle

供 方 料 号
SUPPLIER P/N:

送样日期 **Date:** 送样数量 **Q'TY:**

客户确认 CUSTOMER APPROVED BY		
工程研发部	生产采购部	承认
ENGINEER R&D DEPT	BUSSINESS DEPT	APPROVED BY

供方确认 SUPPLIER SIGNATURE		
研发部	工程部	批准
ENGINEER R&D DEPT	ENGINEER R&D DEPT	APPROVAL

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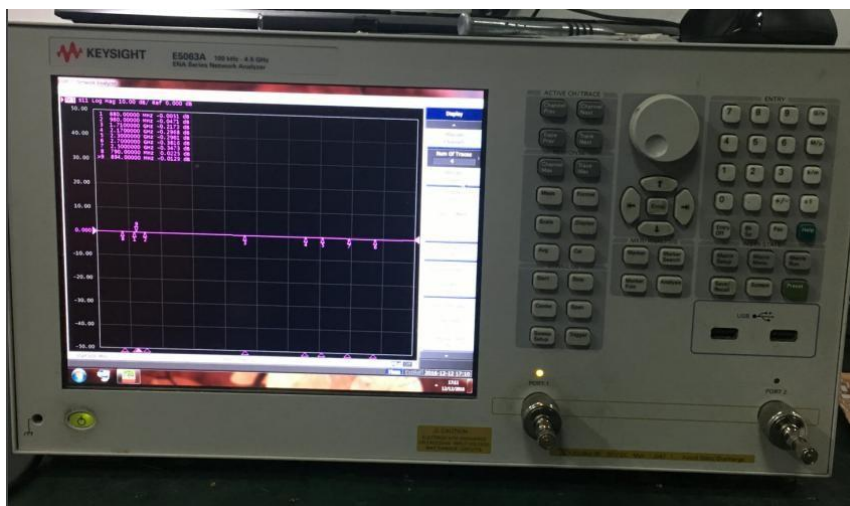
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1.RF Fixture Experiment

1.1 Test Setup

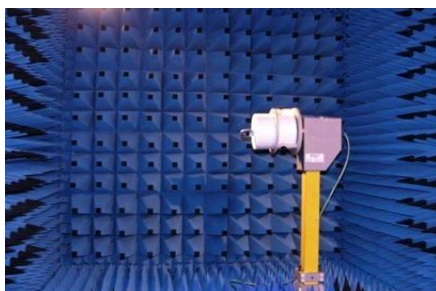
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S11) were performed using an KeySight E5071C Network Analyzer. The isolation between antennas is also teste. The testing was performed with apparatus in free space.

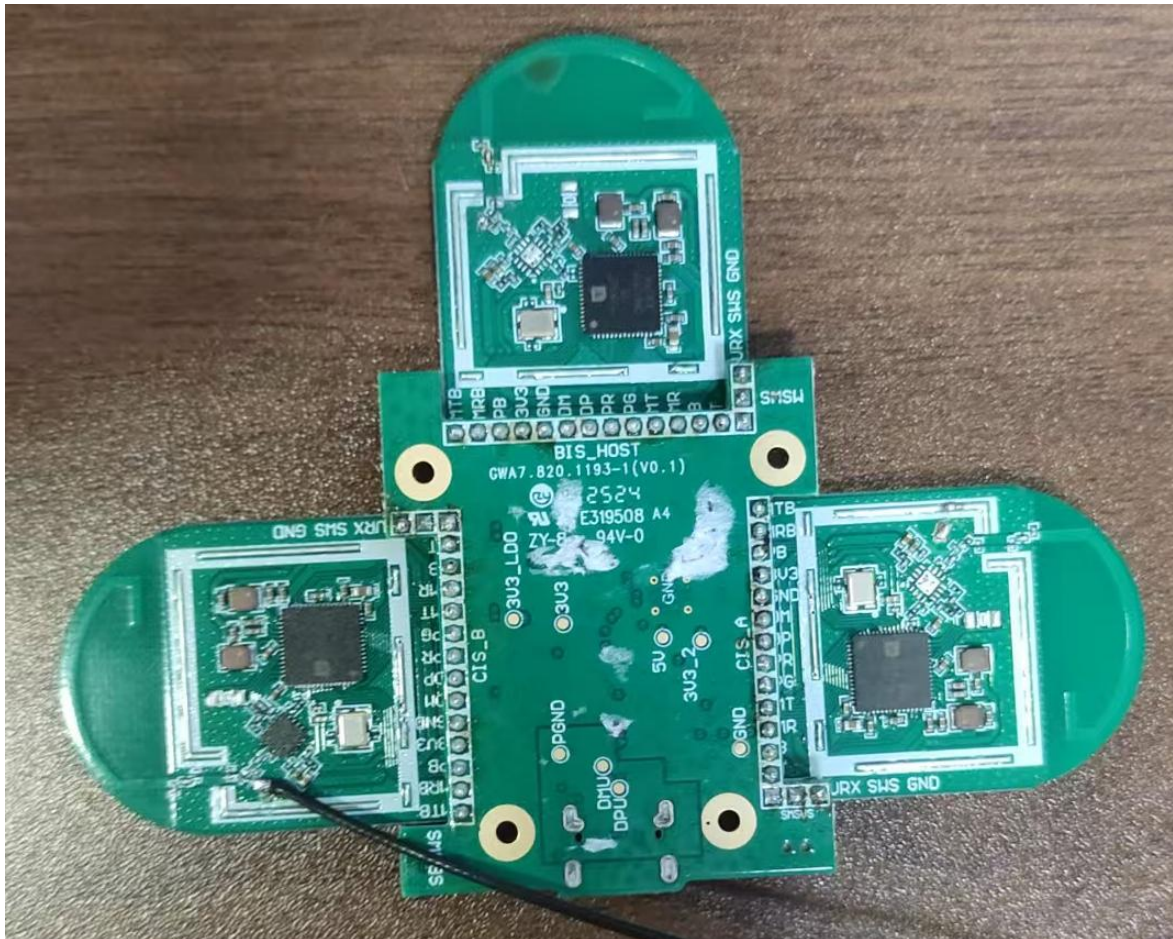


1.1.2 Anechoic Chamber Test Setup

When we test Gain and Efficiency of the antenna, we will use the ETS 3D chamber. The chamber provides test frequency from 400MHz to 6GHz. The real test environment is showing as following picture



2.Test Antennas' setup and enviroment With housing



3. Peak Gain & Efficiency

Dongle ANT for BIS (中)

Frequency (MHz)	Gain(dBi)	Efficiency(%)
2400	3.1772	29.7746
2410	3.688	33.4541
2420	4.0239	35.6261
2430	4.4156	38.4289
2440	4.6749	40.2563
2450	4.7194	39.9941
2460	4.5859	38.3251
2470	4.2226	35.1889
2480	3.5721	30.1777
2490	2.8955	25.9469
2500	1.9562	21.7283

Dongle ANT for CIS-A (左)

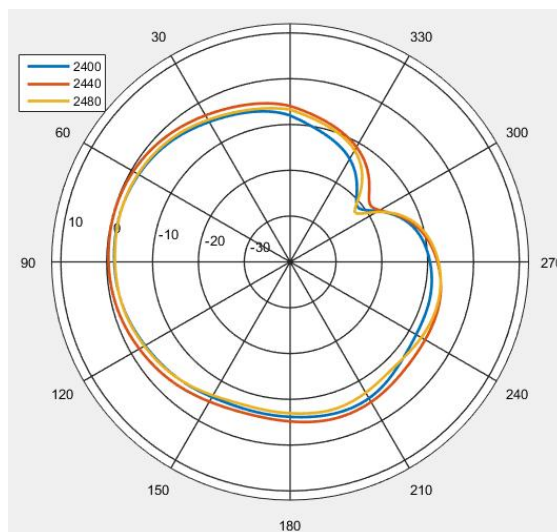
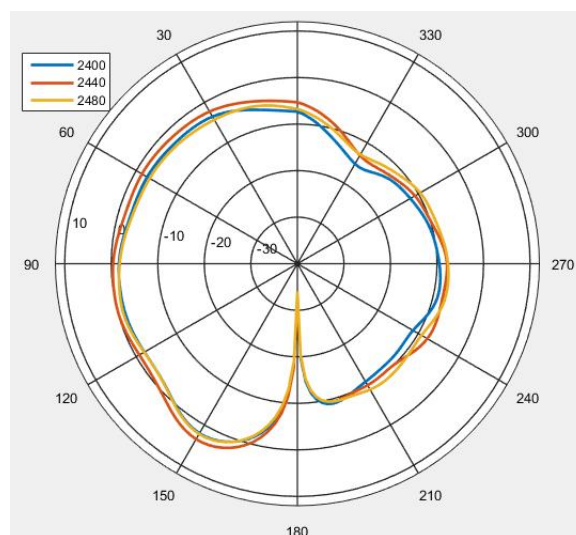
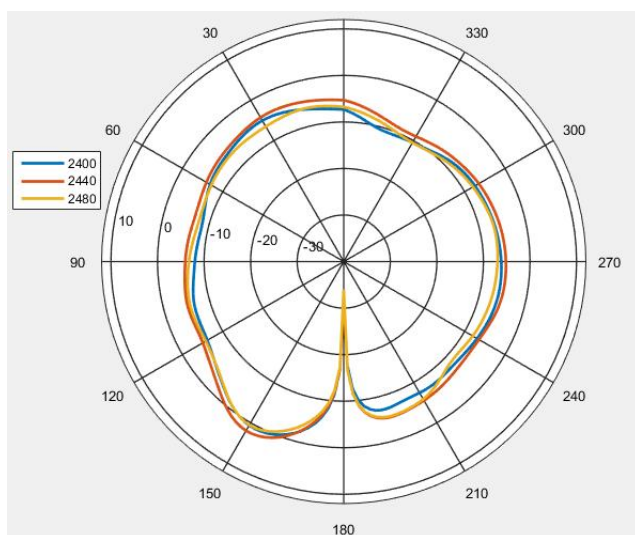
Frequency (MHz)	Gain(dBi)	Efficiency(%)
2400	-1.1394	26.1573
2410	-0.6632	29.4021
2420	-0.2163	31.4835
2430	0.362	34.1724
2440	0.7543	36.1447
2450	0.8478	36.6359
2460	0.7741	36.1048
2470	0.8208	34.6039
2480	0.609	31.2647
2490	0.2753	28.0992
2500	-0.3348	24.5874

Dongle ANT for CIS-B（右）

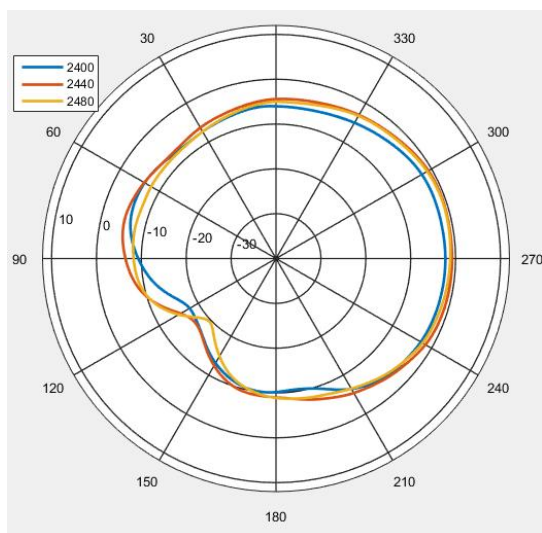
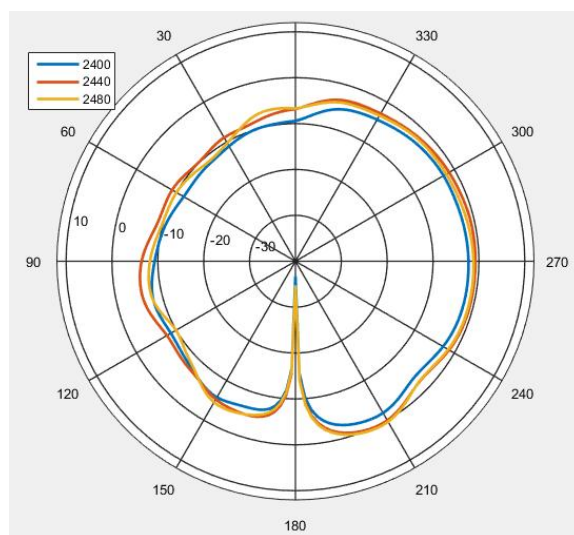
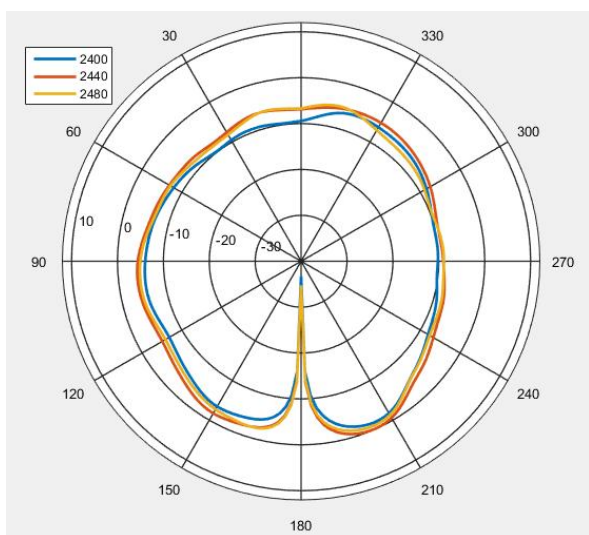
Frequency (MHz)	Gain(dBi)	Efficiency(%)
2400	3.6619	39.3037
2410	3.9709	42.5653
2420	4.1822	44.1177
2430	4.5811	46.7841
2440	4.9486	48.8077
2450	5.1484	48.8778
2460	5.2036	47.949
2470	5.03	45.5774
2480	4.6195	41.0916
2490	4.2208	37.0237
2500	3.6257	32.6132

4. 2D

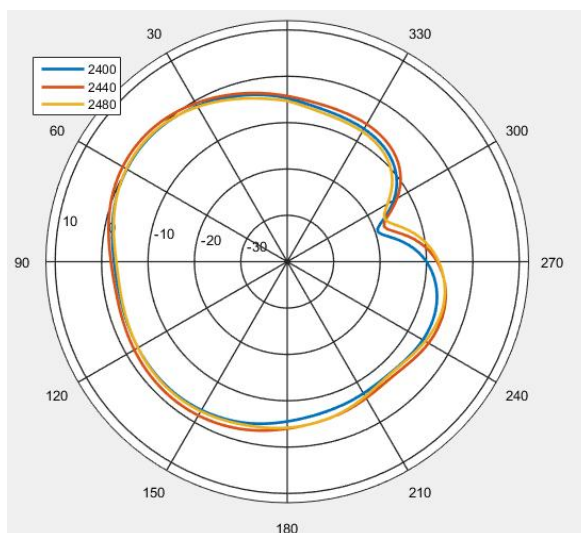
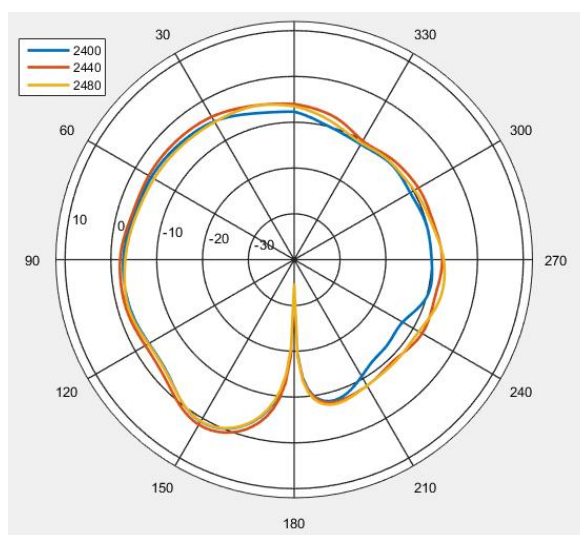
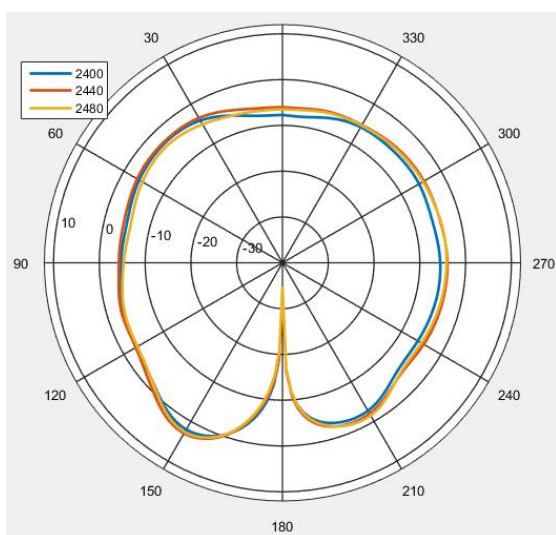
Dongle ANT for BIS (中)



Dongle ANT for CIS-A (左)

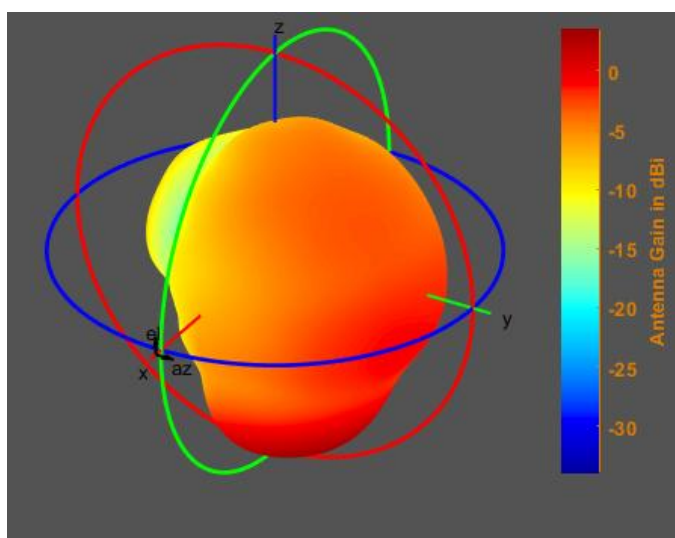
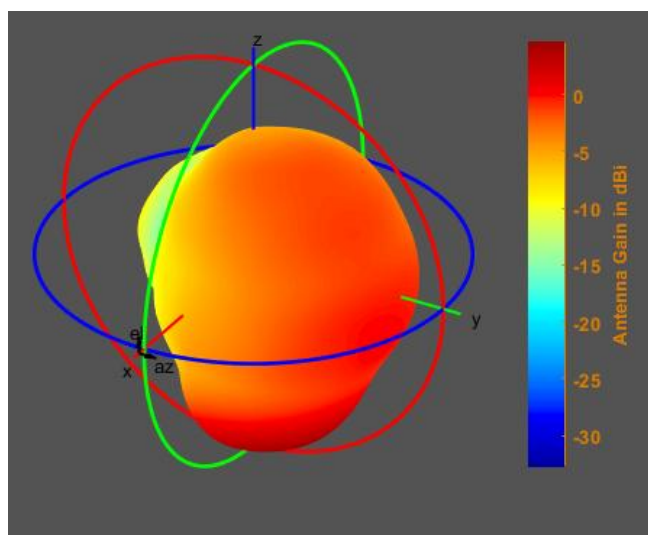
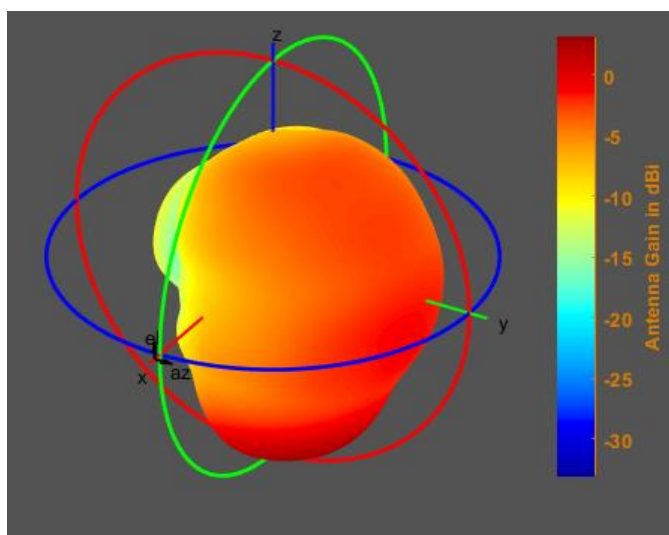


Dongle ANT for CIS-B (右)

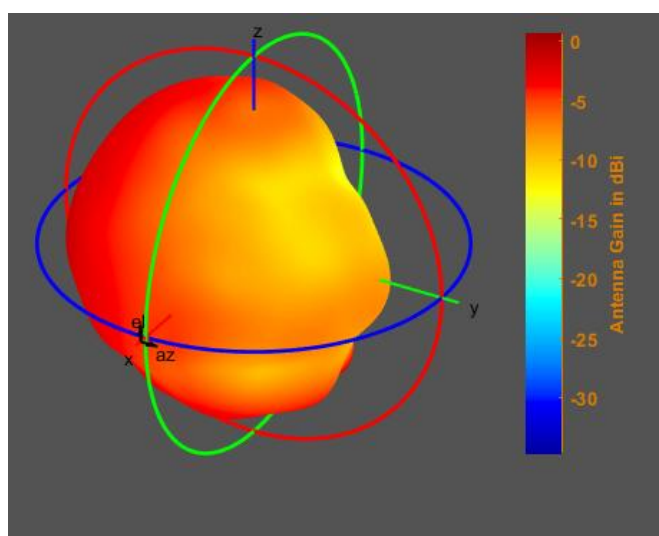
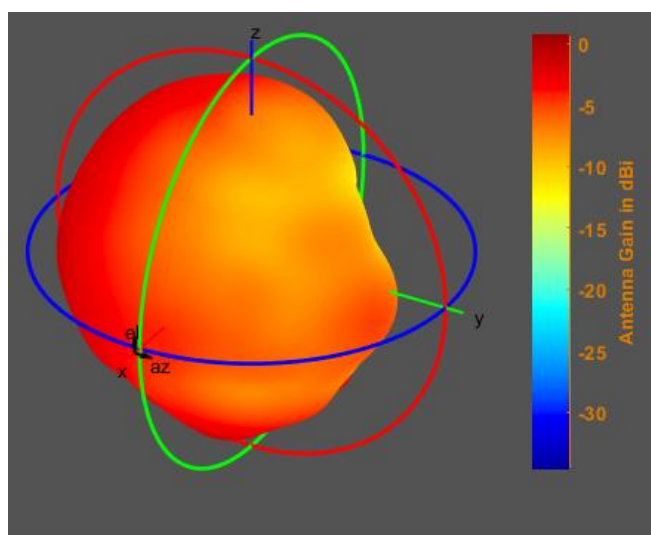
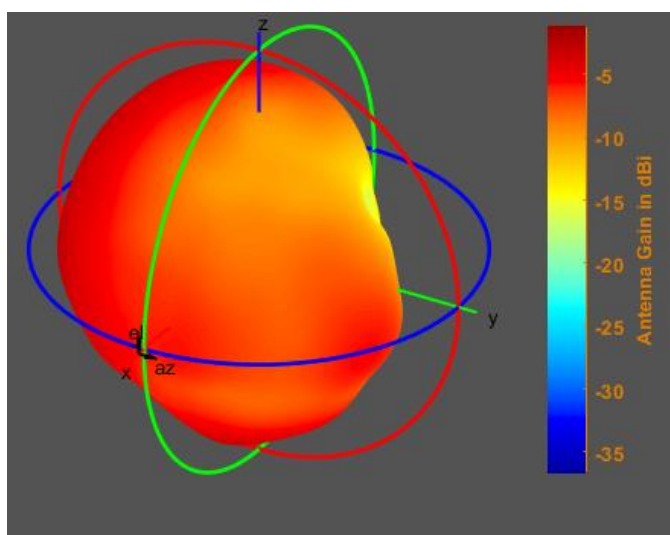


5. 3D

Dongle ANT for BIS (中)



Dongle ANT for CIS-A (左)



Dongle ANT for CIS-B (右)

