

Antenna Test Report

1. PRODUCT INFORMATION

Technical information	
Frequency Range	2400-2500MHz
Test Frequencies	2400MHz, 2410MHz, 2420MHz, 2430MHz, 2440MHz, 2450MHz, 2460MHz, 2470MHz, 2480MHz, 2490MHz, 2500MHz
Antenna Type	PCB-board antenna
Dimensions	40mm
Impedance	50 Ω
Maximum test values	Gain: 0.915dBi; Efficiency: 35.726%; VSWR: 1.202:1

2. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Cal. Date	Cal. Due
ANTENNA MEASUREMENT SYSTEM	ETS-Lindgren	AMS-8600	Nov. 26, 2020	Nov. 25, 2021
Network Analyzer	R&S	101443	Oct. 16, 2020	Oct. 15, 2021
Test software	ETS-Lindgren	EMQuest (Ver V1.12)	N/A	N/A

3. MEASUREMENT UNCERTAINTY

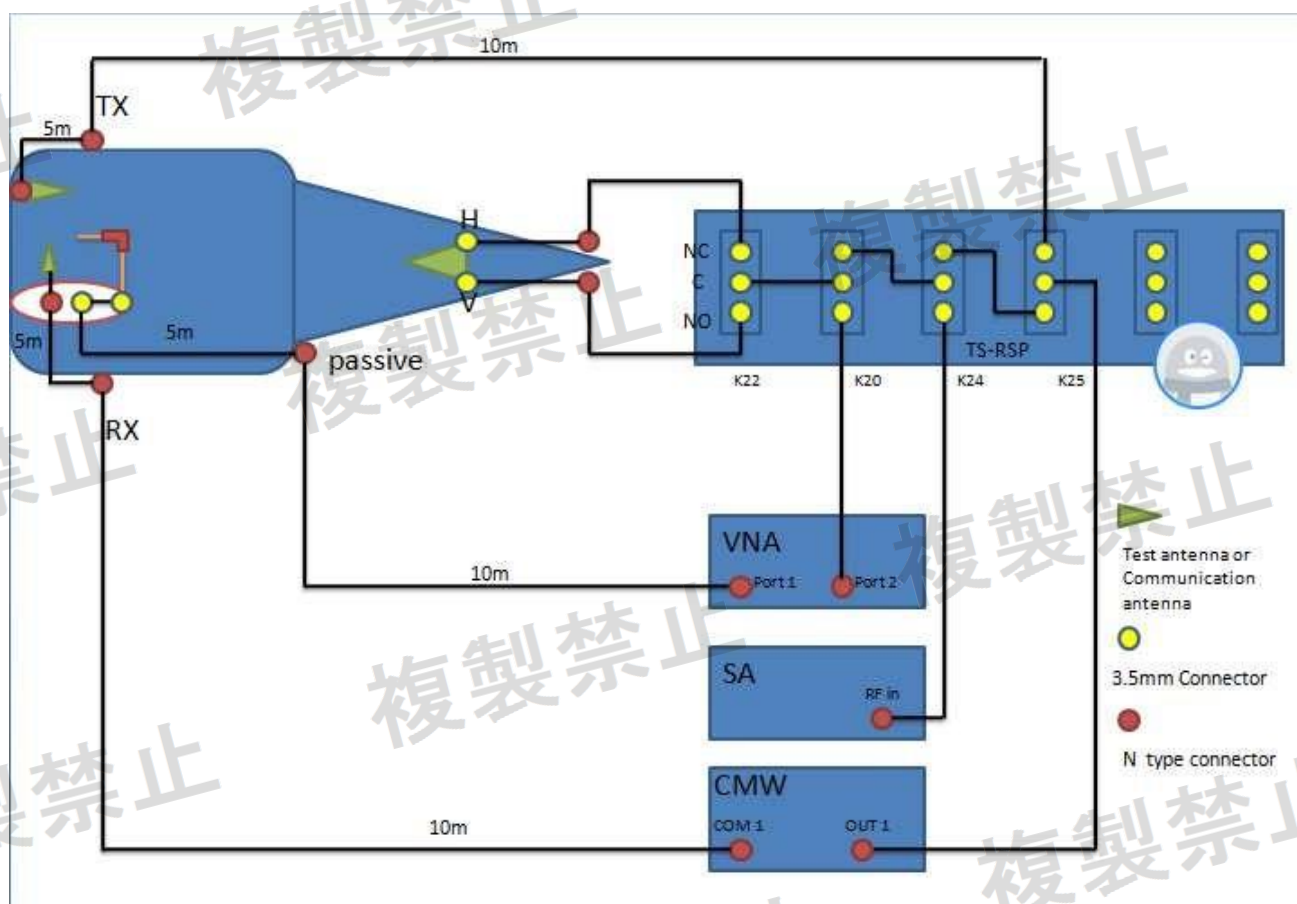
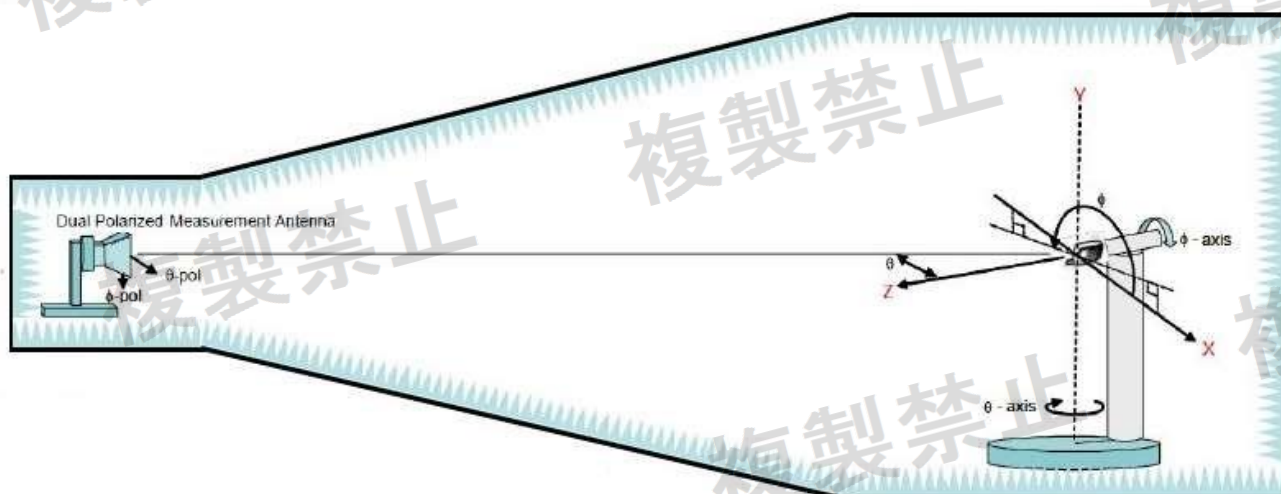
The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of VSWR, $U_c = \pm 1.5\text{dB}$
- Uncertainty of Gain, $U_c = \pm 0.8\text{dB}$

4. TEST SUMMARY LIST

NO.	Test item	Remark
1	VSWR	--
2	Gain and efficiency	--
3	Radiation pattern	--

5. TEST SETUP



6. TEST RESULTS

6.1. VSWR

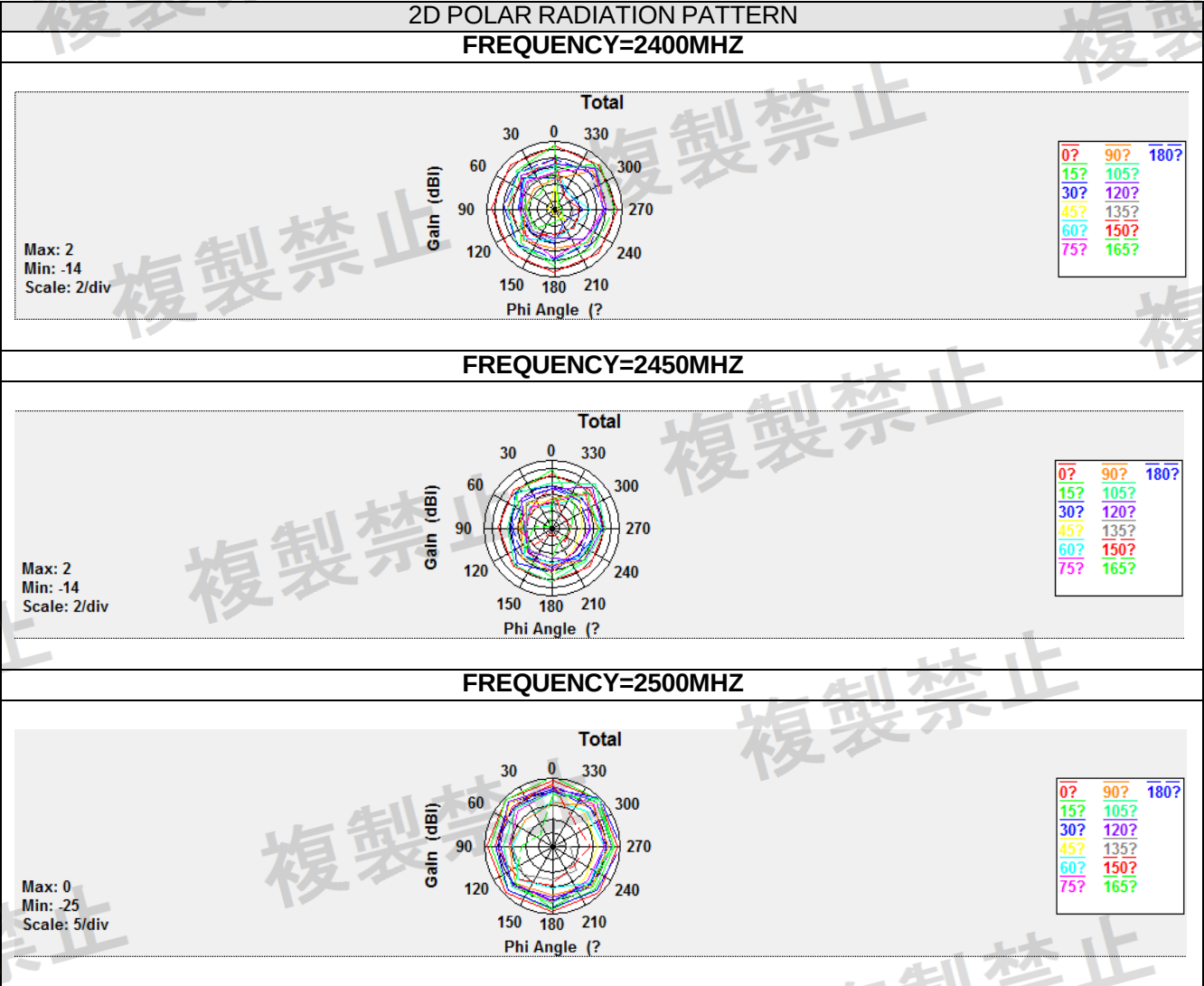
Frequency(MHz)	VSWR
2402	1.177:1
2450	1.202:1
2480	1.088:1



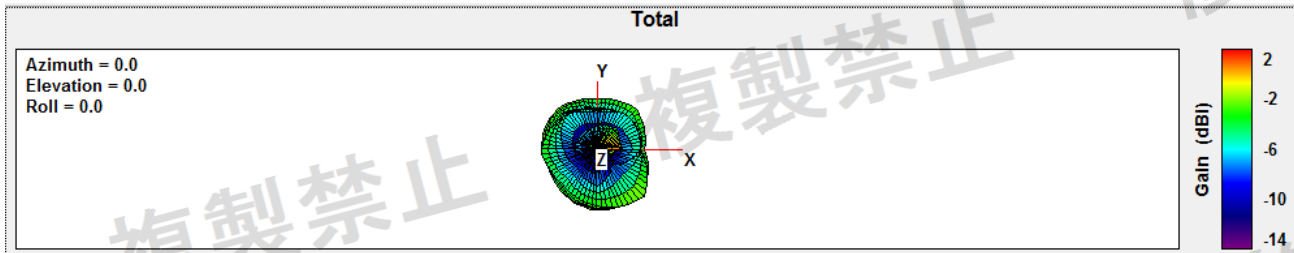
6.2. GAIN AND EFFICIENCY

Frequency(MHz)	Efficiency(dB)	Efficiency (%)	Gain(dBi)
2400	-4.549	35.077	0.789
2410	-4.539	35.162	0.915
2420	-4.470	35.726	0.389
2430	-4.541	35.143	-0.495
2440	-4.740	33.569	-0.020
2450	-4.678	34.054	0.402
2460	-4.605	34.633	0.106
2470	-5.021	31.463	-0.777
2480	-5.242	29.906	-0.887
2490	-5.521	28.0438	-0.443
2500	-5.282	29.631	-0.136

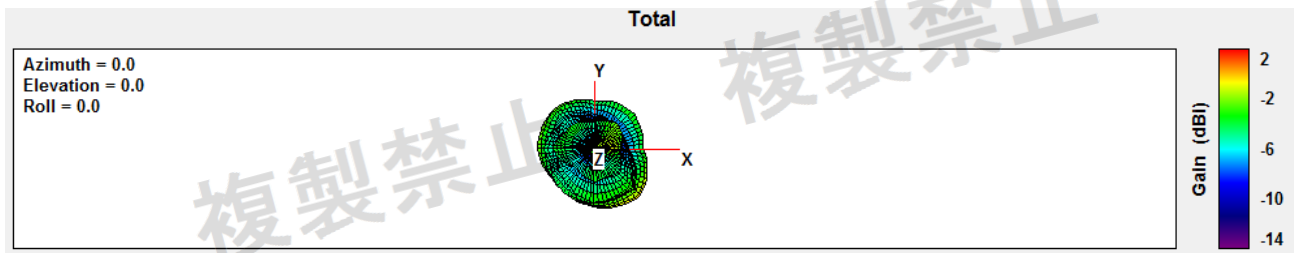
6.3. RADIATION PATTERN



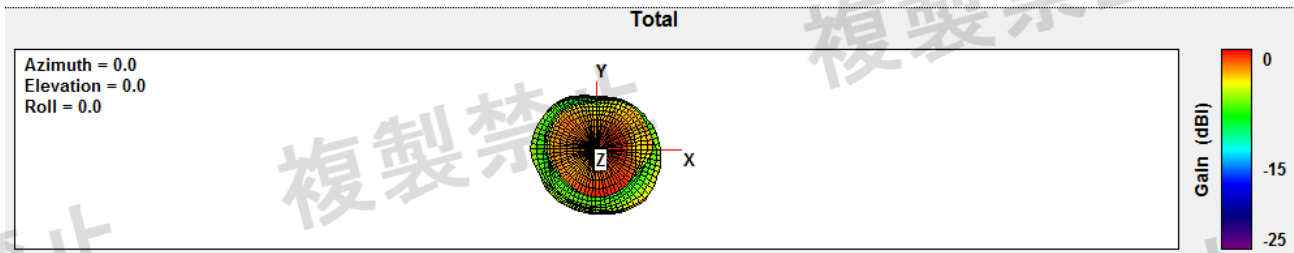
3D RADIATION PATTERN
FREQUENCY=2400MHZ



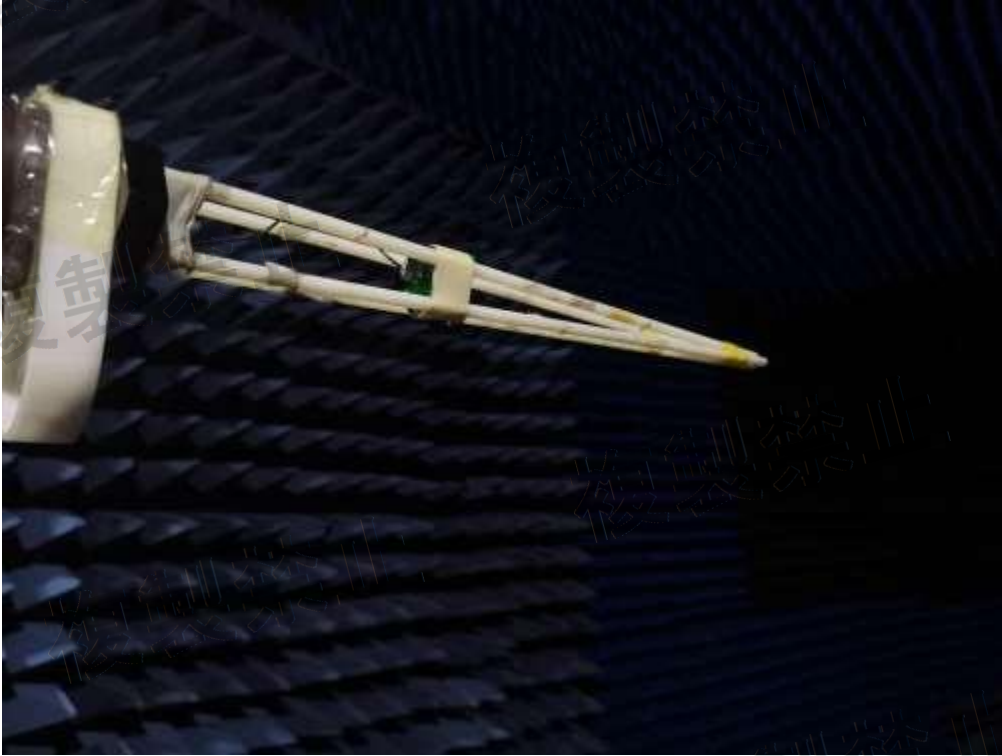
FREQUENCY=2450MHZ



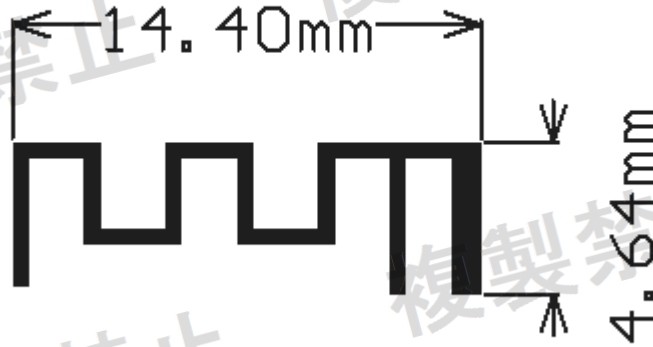
FREQUENCY=2500MHZ



APPENDIX A: PHOTOGRAPHS OF TEST SETUP



APPENDIX B: PHOTOGRAPHS OF EUT



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