

Test Report

Antenna: CW324S

Version: B

Release date: 2025/3/18

Model : AR0206

Brand : Logitech, logitech G, logi, G

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Report Outline

1. Background

2. Measurement Setup

2.1 Reflection coefficient measurement

2.2 Radiation pattern measurement

2.3 Mechanical setting

3. Experimental Results

3.1 S Parameters

3.2 Radiation efficiency and peak gain

Measurement Setup

Reflection Coefficient Measurement

- a. Equipment : Network Analyzer(Agilent E5071A)
- b. Test items : S-parameters (Impedance, return loss, VSWR)

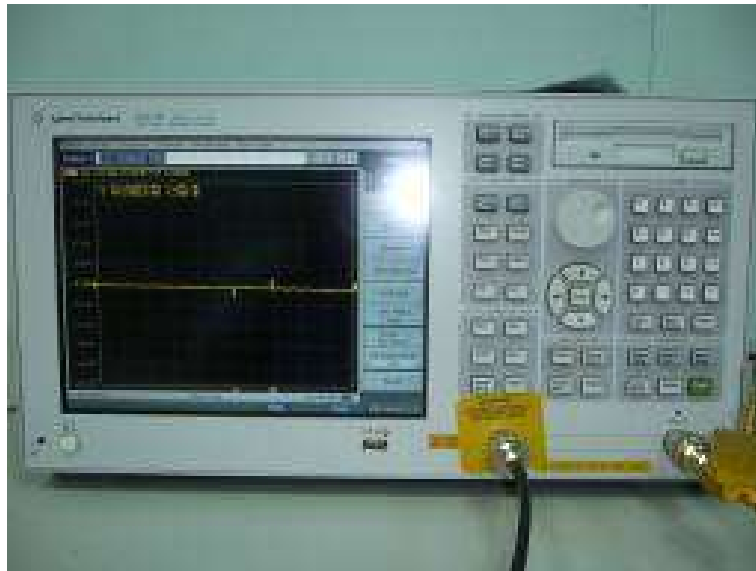


Figure. Network Analyzer(Agilent E5071A)

Measurement Setup

Radiation Pattern Measurement

- a. Equipment : Anechoic Chamber, Network Analyzer (Agilent E5071C), Standard Horn.
- b. Test items : Gain, efficiency, 2D gain pattern, 3D gain pattern

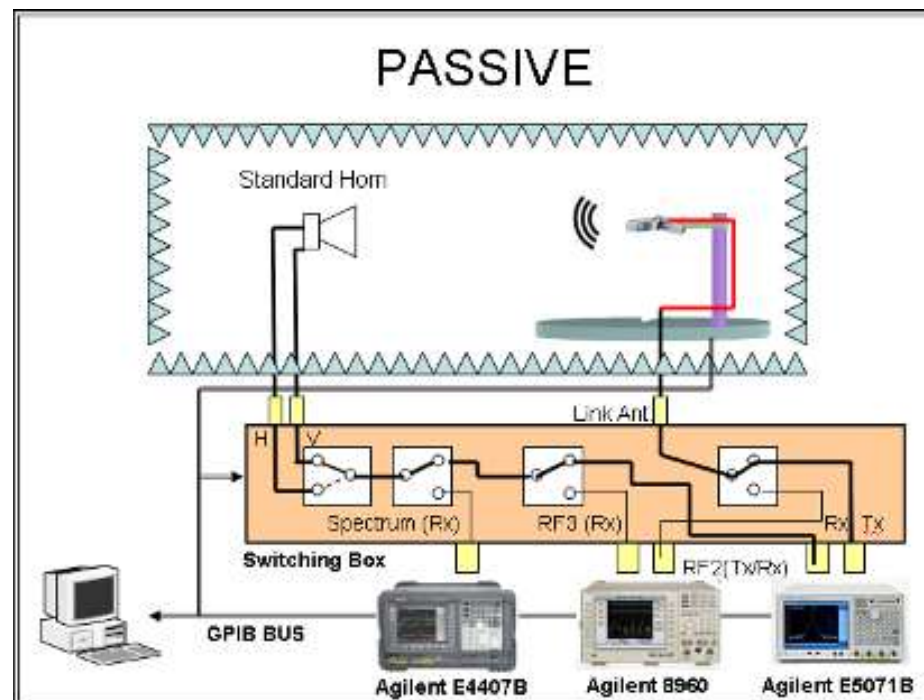
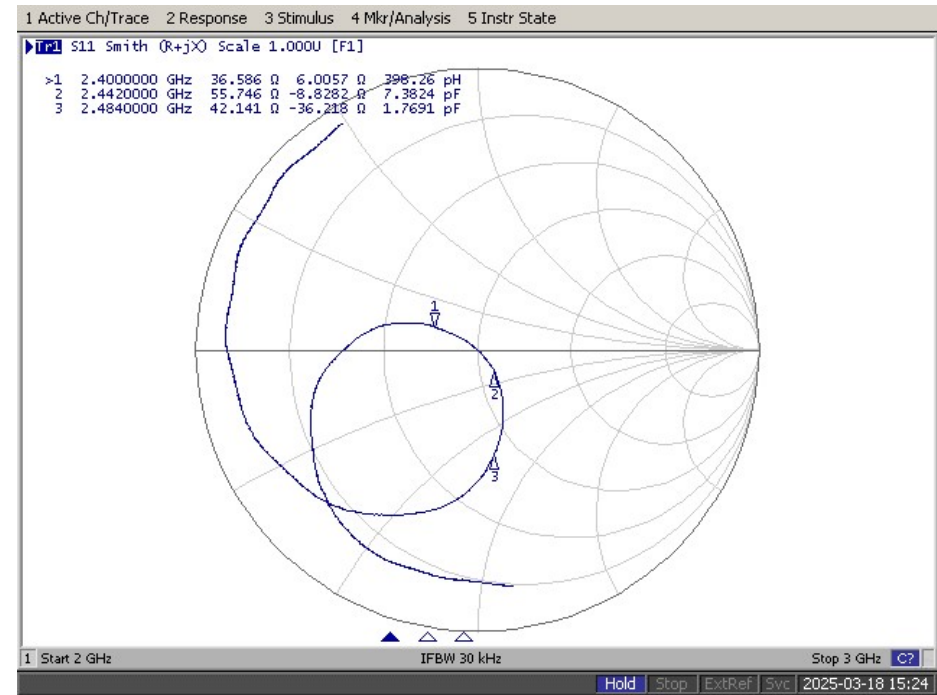
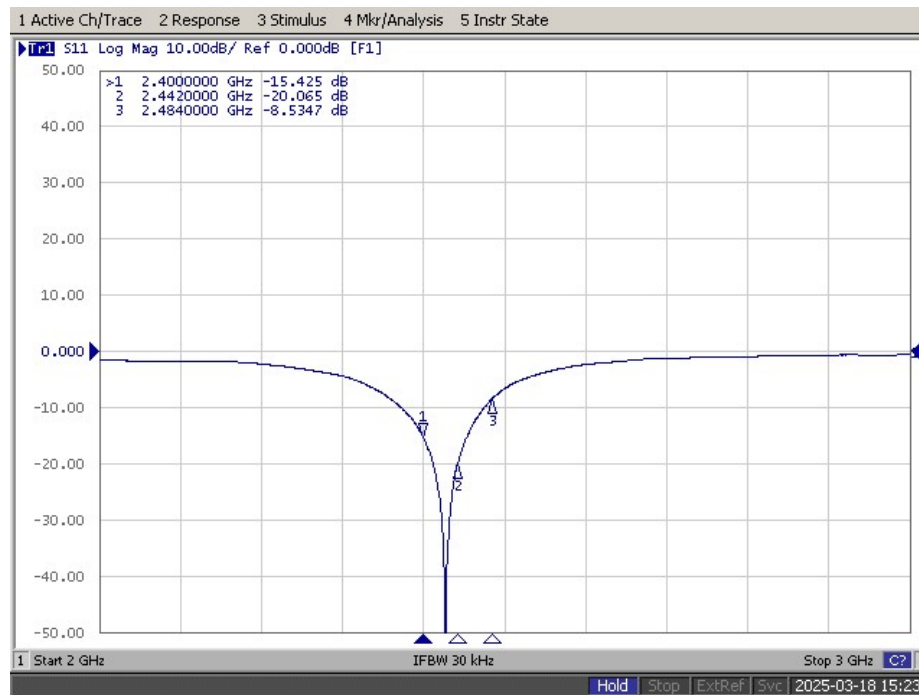


Figure. Scheme of radiation pattern measurement system

Experimental results

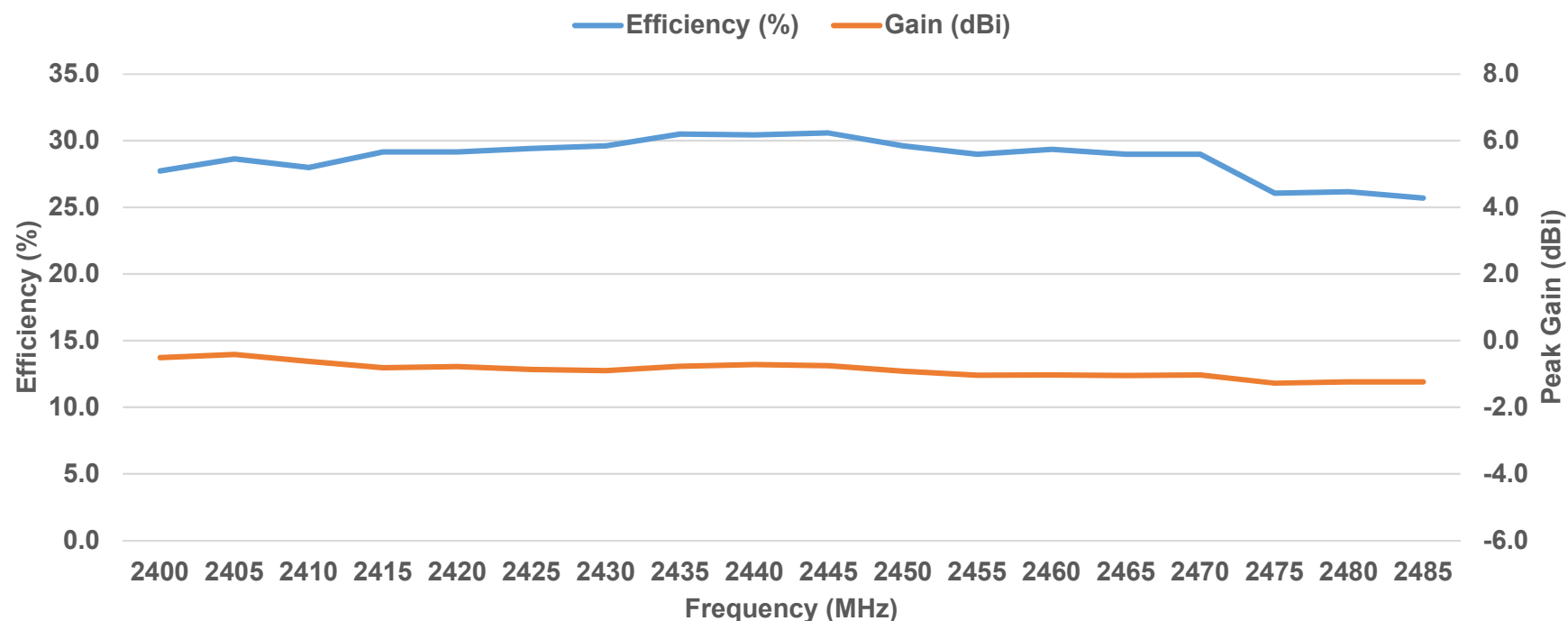
Experimental results

S-Parameters



Experimental results

Radiation efficiency and peak gain

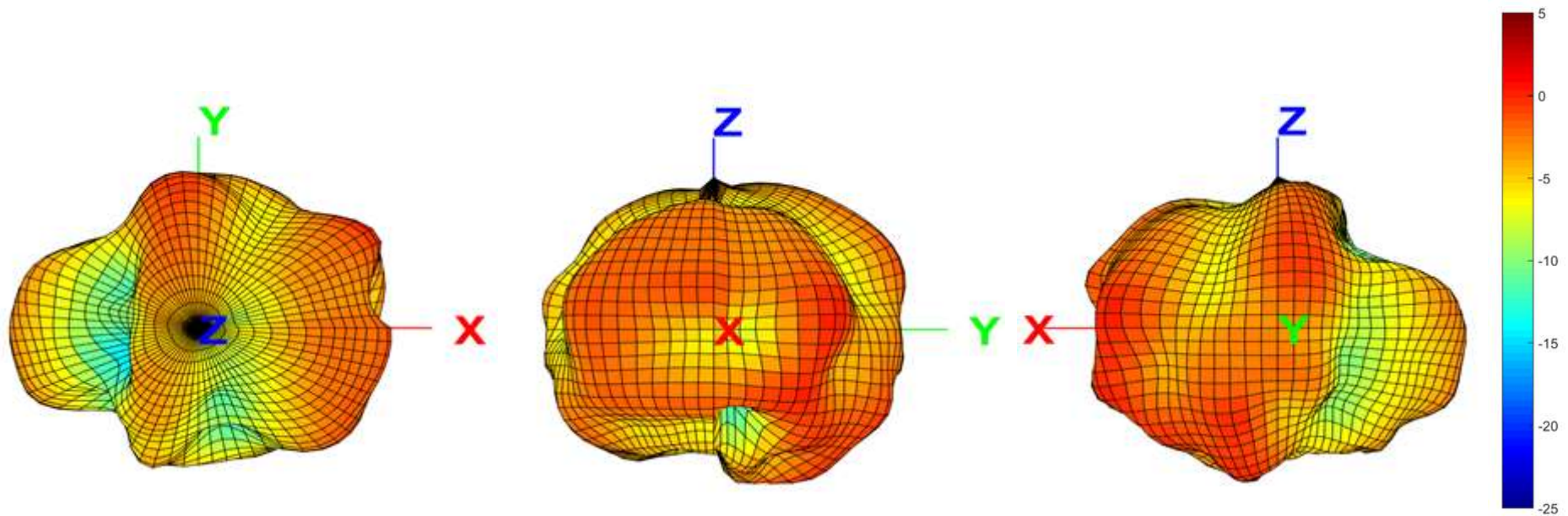


2400-2485 MHz

Frequency (MHz)	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency (dB)	-5.6	-5.4	-5.5	-5.4	-5.4	-5.3	-5.3	-5.2	-5.2	-5.1	-5.3	-5.4	-5.3	-5.4	-5.4	-5.8	-5.8	-5.9
Efficiency (%)	27.7	28.6	28.0	29.2	29.2	29.4	29.6	30.5	30.4	30.6	29.6	29.0	29.4	29.0	29.0	26.1	26.2	25.7
Peak Gain (dBi)	-0.5	-0.4	-0.6	-0.8	-0.8	-0.9	-0.9	-0.8	-0.7	-0.8	-0.9	-1.0	-1.0	-1.1	-1.0	-1.3	-1.2	-1.2

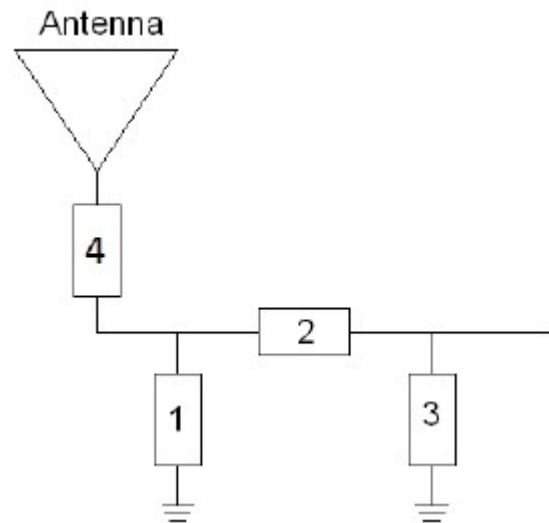
Experimental results

3D Gain Pattern (Radiation Pattern @ 2442 MHz) (unit: dBi)



Experimental results

Matching Circuit



System Matching Circuit Component			
Location	Description	Vendor	P/N
1	NA	-	-
2	2.7nH, (0201)	MURATA	LQP03TG2N7B02D
3	0.7pF, (0201)	MURATA	GRM0335C1HR70WA01D
4	6.8nH, (0201)	MURATA	LQP03TG6N8H02D