

Test Report – Headset

Model:	Maxwell_RX_Printed_ANT
Antenna type:	PIFA
Antenna Brand	Ampacs Corporation
Release date:	2022/09/15

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Report Outline

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Background

Background

Sample information

1. Adjust the printing antenna to optimize, and compare the characteristics with the matching value of the previous version

Measurement Setup

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

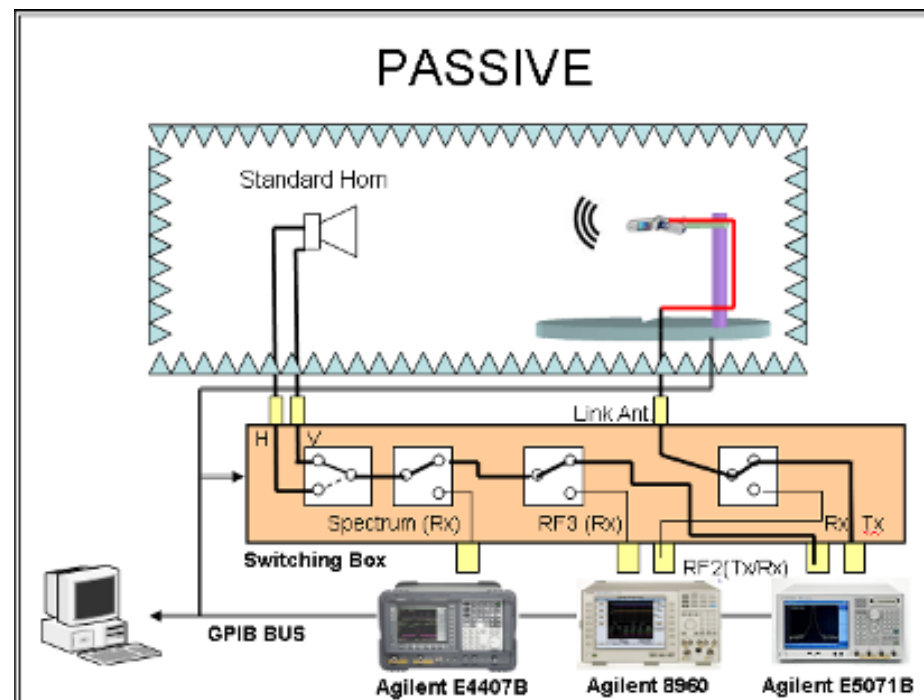
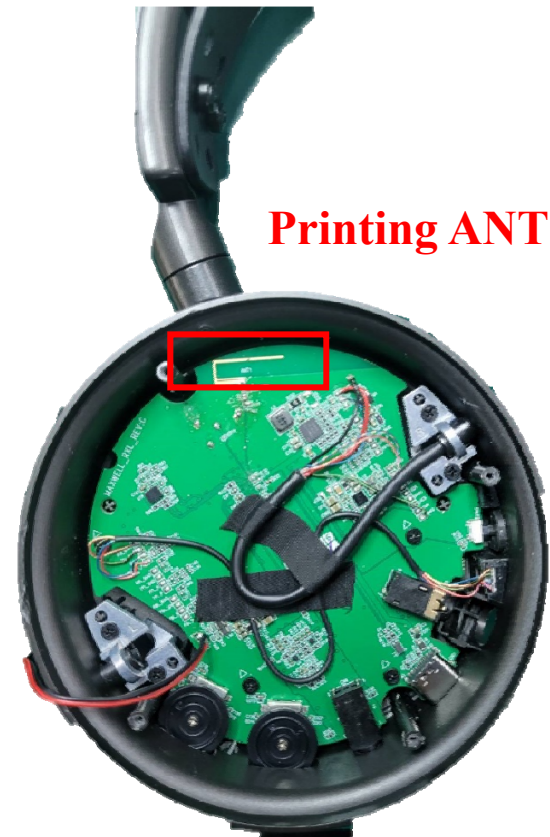


Figure. Scheme of radiation pattern measurement system

Measurement Setup

Mechanical setting

Placement of antenna

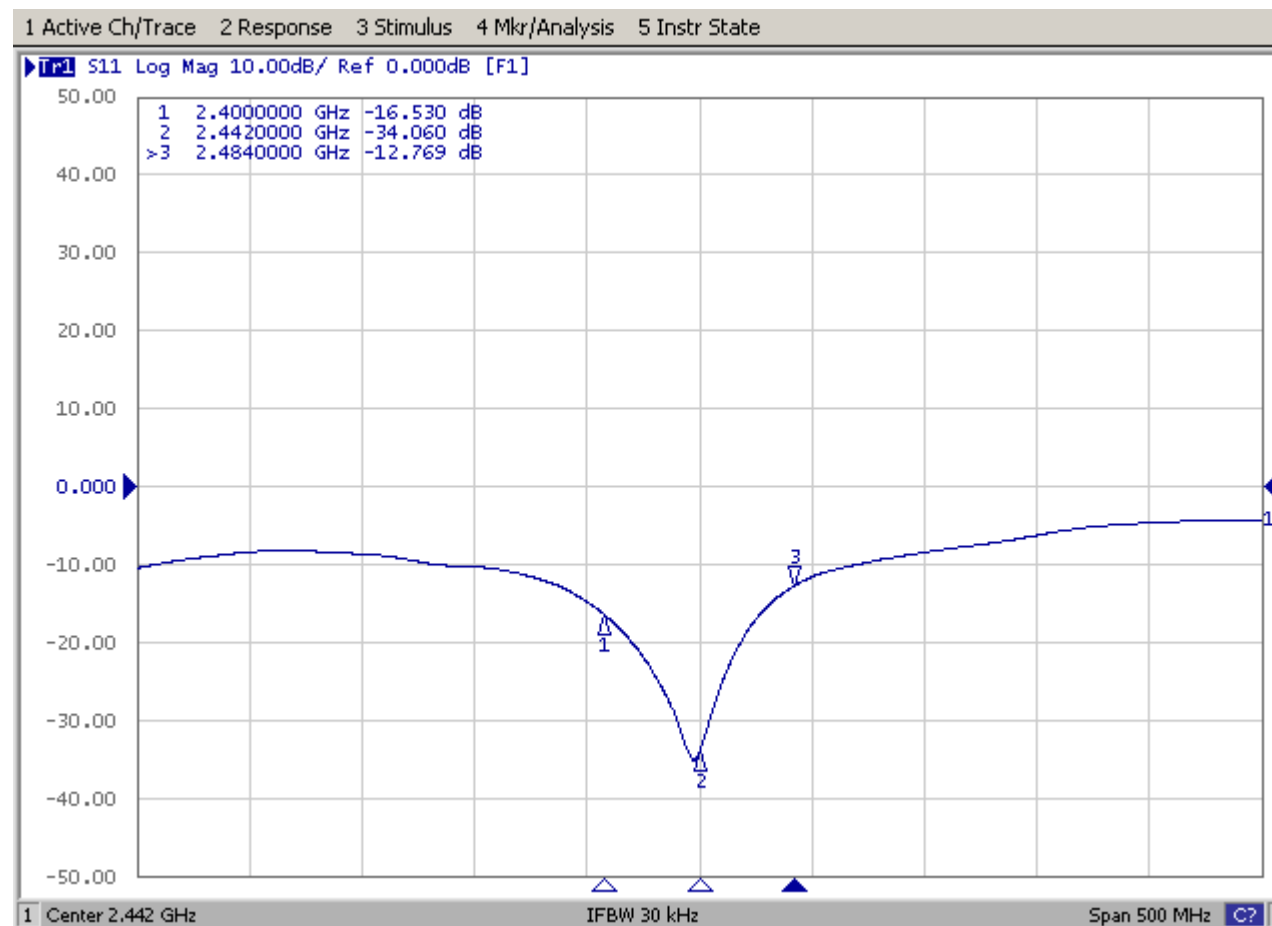


Experimental results

Experimental results

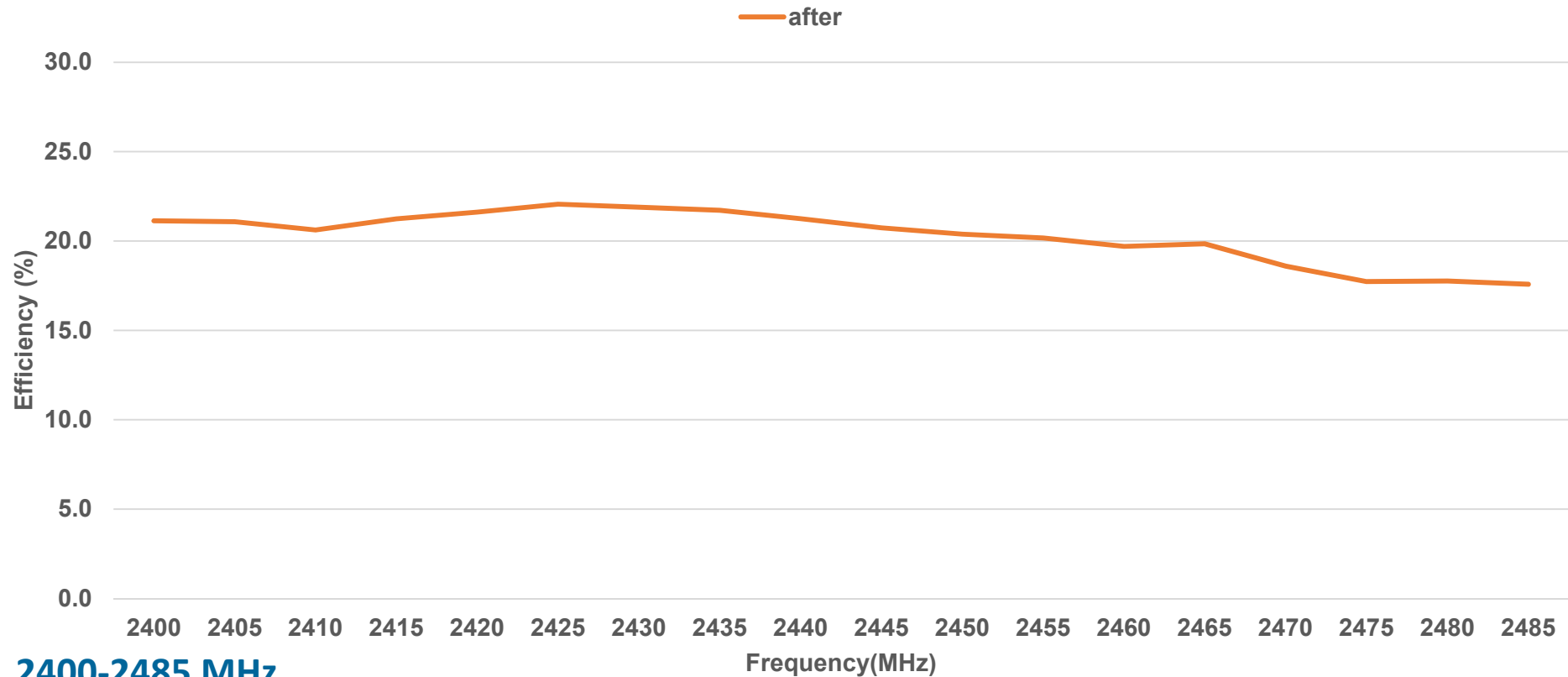
S-Parameters

Return Loss



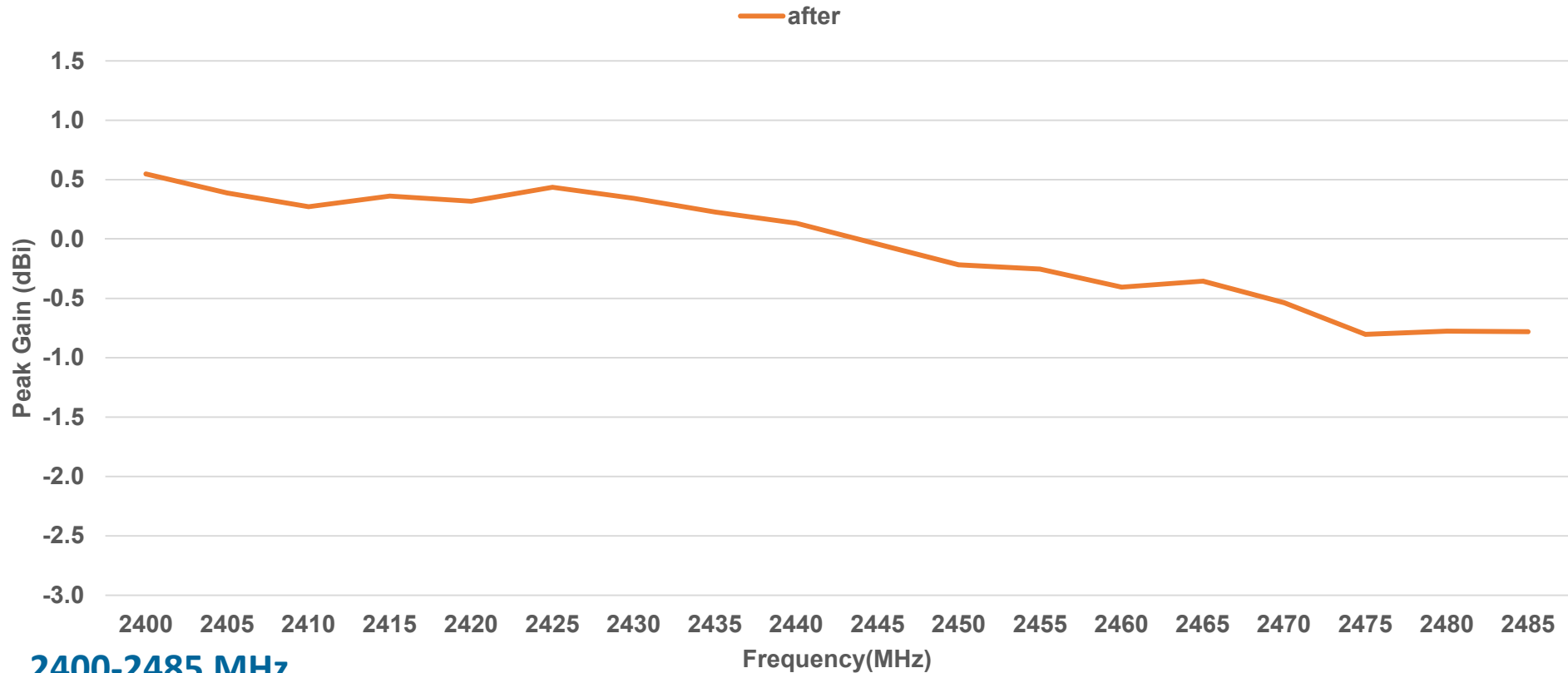
Experimental results

Radiation efficiency



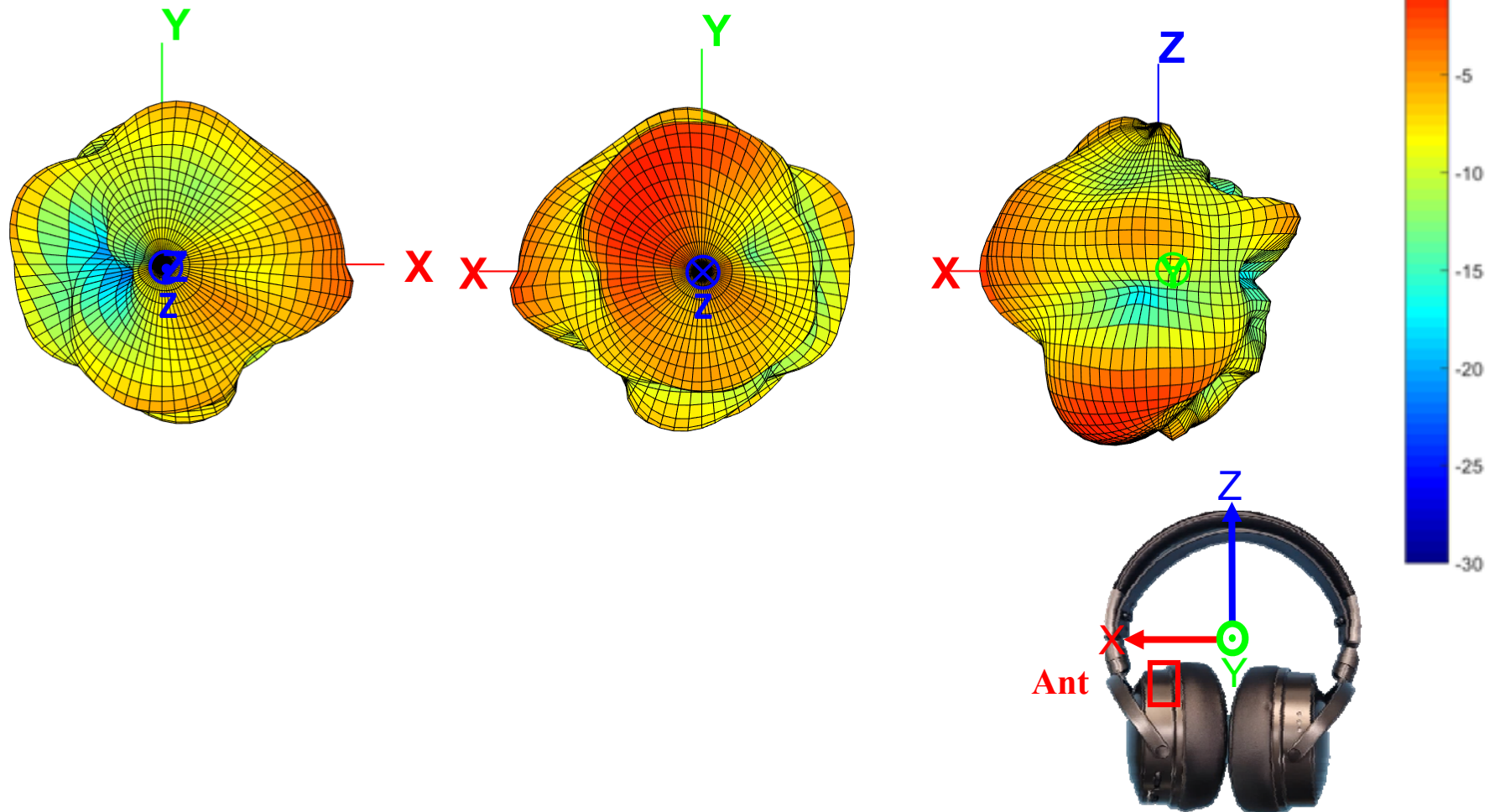
Experimental results

Radiation peak gain



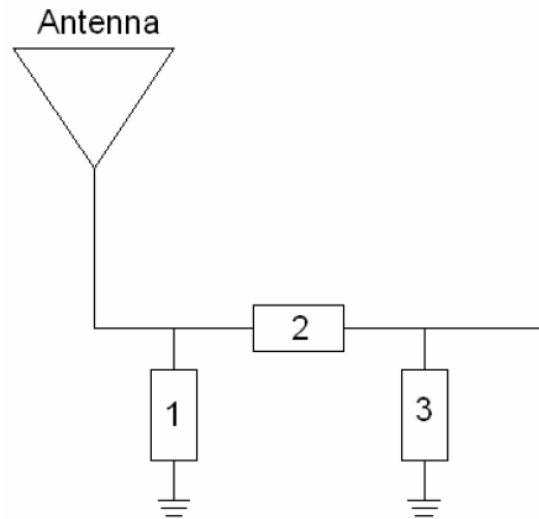
Experimental results

3D Gain Pattern (Radiation Pattern @ **2445 MHz**) (unit: dBi)



Experimental results

Matching Circuit



System Matching Circuit Component			
Location	Description	Vendor	Part number
1	N/A	-	-
2	1.8nH, (0402)	MURATA	LQG15HS1N8S02D
3	0.6pF, (0402)	MURATA	GRM1555C1HR60WA01D