

BOSE _ 443644

Antenna Report

MERRY Sounds Excellent

Presented by : Merry Team

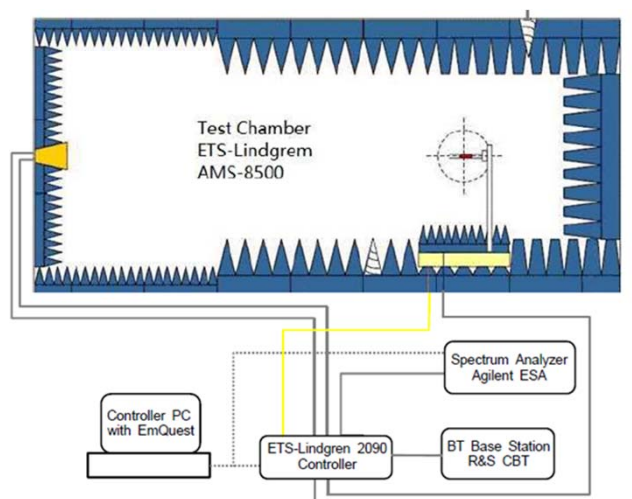
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Test Equipment

Passive	
Test Date:	2025/10/09
Antenna Type:	Printed antenna
Antenna Type:	Free Space 2.78 dBi
Test Equipment	E5071C ENA Vector Network Analyzer – Keysight / Calibration Date: 2025/07/01
Test chamber	ETS-lindgren_AMS-8500 Antenna Measurement System/Calibration Date: 2025/08/15
Testers	Leo WN Chen 陳偉信
Test Software	ETS-Lindgren EMQuest

Antenna Efficiency Measurement Setup



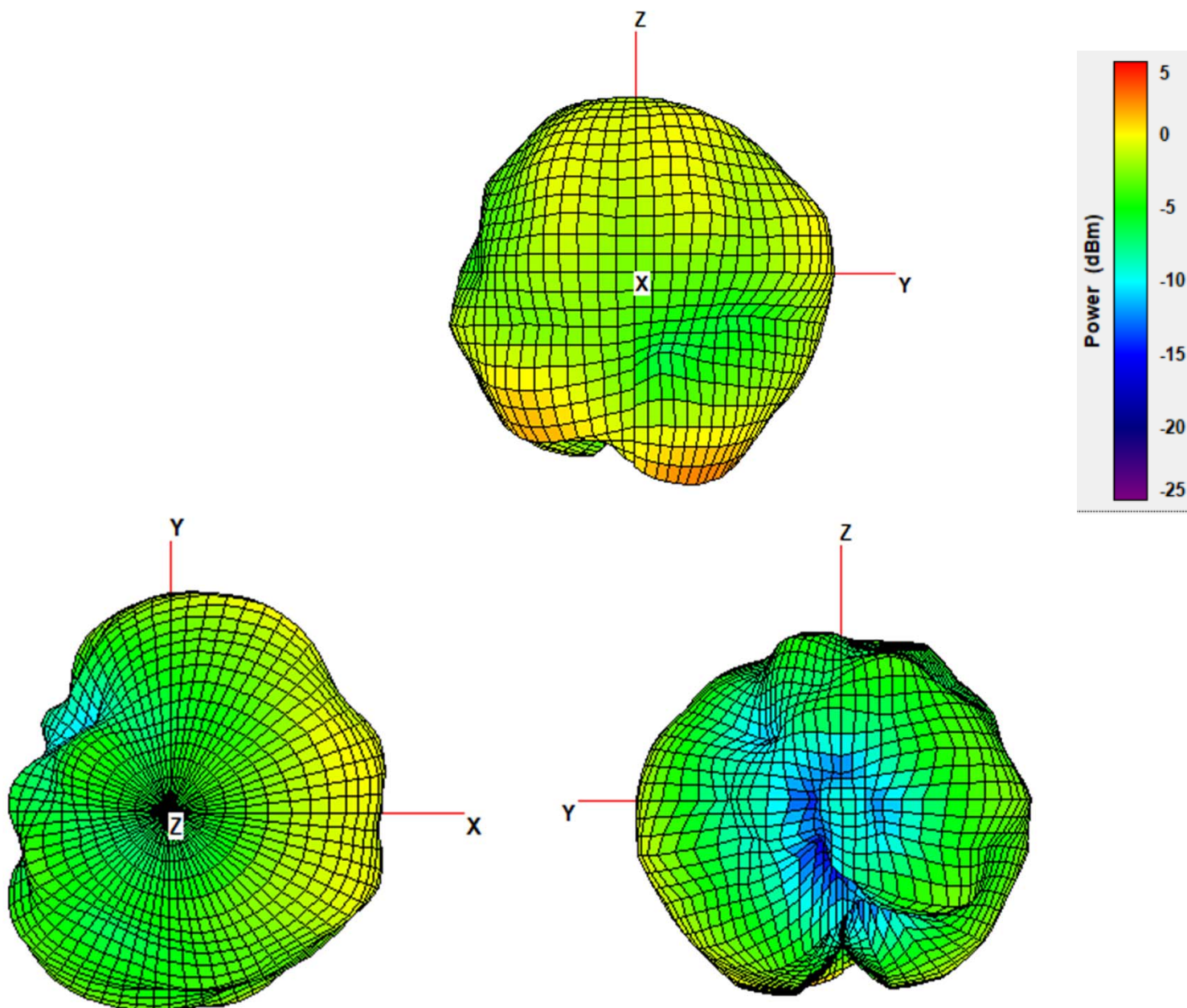
Free Space

Antenna Efficiency and Peak gain

	unit	Frequency (MHz)									
		2400	2410	2420	2430	2440	2450	2460	2470	2480	AVG
Efficiency	(dB)	-1.69	-1.68	-1.68	-1.76	-1.81	-1.89	-2.01	-2.18	-2.30	-1.89
	(%)	67.80	67.99	67.94	66.67	65.93	64.77	62.95	60.56	58.85	64.83
Peak gain	(dBi)	2.78	2.72	2.70	2.61	2.54	2.48	2.39	2.33	2.30	2.54

- the maximum gain is 2.78 dBi.

3D Radiation pattern@ 2.44GHz



Measurements description

Conducted Measurements

Conducted measurements was done using Network Analyzer – Keysight, the Return Loss of the Antenna was obtained to ensure the efficiency over the operation frequency.

Antenna Radiation Pattern Measurements

Radiation Pattern Measurements was done in the ETS-lindgren anechoic chamber through radiation, the Headphone was set to continuous radiation and the AMS-8500 receive the RF power in 360degree angel with rotation of EUT.

Antenna Gain Calculation

The antenna gain was calculated as the difference between the measured Peak EIRP(dBm) and Ant. port input pwr(dBm) in previous page.