Sec.Level Confidential

MERRY

Wolverine
Antenna Report

MERRY Sounds Excellent

Presented by : Merry Team

Contents

- Test Equipment
- Antenna Efficiency Measurement Setup
- Antenna Efficiency and gain values
- Radiation Pattern
- Measurements description
- Antenna photo

Test Equipment

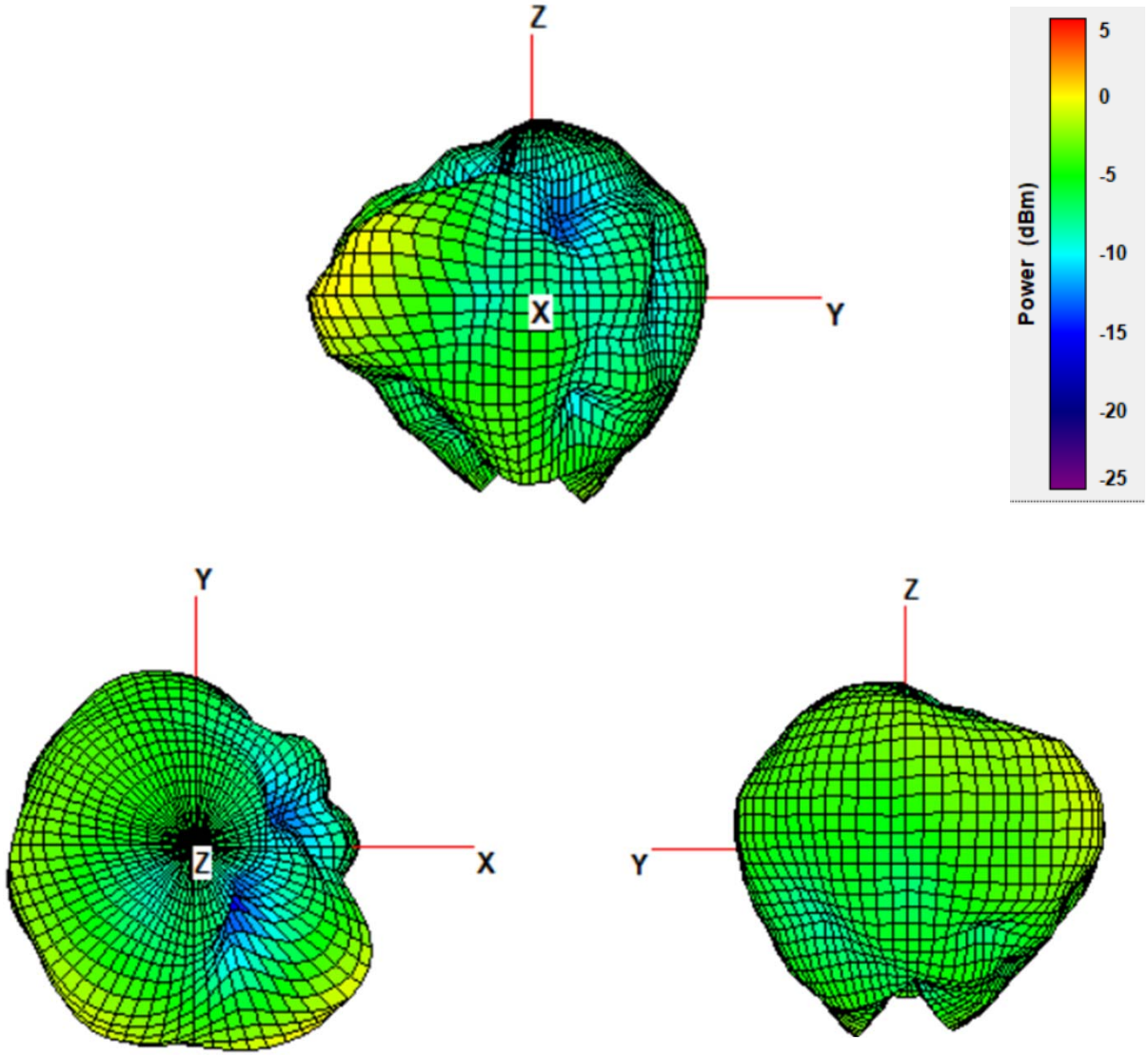
Passive	
Antenna Type:	Printed antenna
Antenna Gain	Free Space 0.7 dBi
Test Equipment	E5071C ENA Vector Network Analyzer – Keysight / Calibration Date: 2024/05/31
Test chamber	ETS-lindgren_AMS-8500 Antenna Measurement System/Calibration Date: 2024/06/25
Testers	Leo WN Chen 陳偉信
Test Software	ETS-Lindgren EMQuest
Test date	2025/3/10

Antenna Efficiency and Peak gain

	unit	Frequency (MHz)									
		2400	2410	2420	2430	2440	2450	2460	2470	2480	AVG
Efficiency	(dB)	-4.81	-4.81	-4.83	-4.93	-4.93	-5.11	-5.26	-5.42	-5.59	-5.08
	(%)	33.05	33.06	32.86	32.11	32.14	30.85	29.78	28.73	27.60	31.13
Peak gain	(dBi)	0.57	0.62	0.62	0.63	0.7	0.61	0.55	0.56	0.47	0.58

- the maximum gain is 0.7 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 Patten Measurements

Radiation Pattern

Measurements was done in the ETS-lindgren anechoic chamber through radiation, the headphones 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.