

Brussels Antenna Report

MERRY Sounds Excellent

Presented by : Merry Team

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Test Equipment

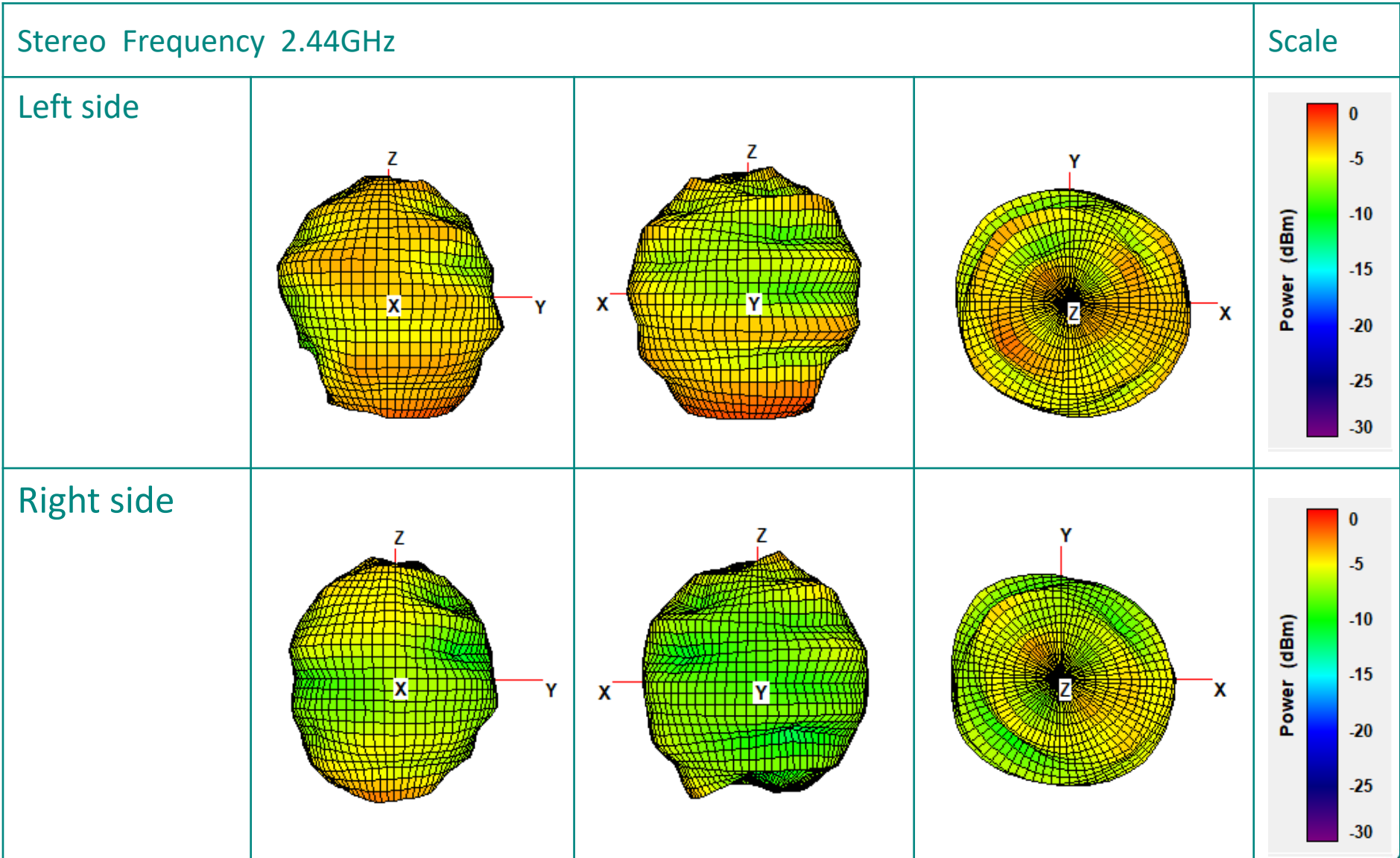
Passive	
Antenna Type:	PIFA
Antenna Gain	Left earbud: the maximum gain is -0.29 dB <i>i</i> . Right earbud: the maximum gain is -1.65 dB <i>i</i>
Test Equipment	E5071C ENA Vector Network Analyzer – Keysight / Calibration Date: 2023/02/10 Calibration due date: 2025/02/04
Test chamber	ETS-lindgren_AMS-8500 Antenna Measurement System
Testers	Amo Yang 楊詔閔 (Test date:20240111)
Test Software	ETS-Lindgren EMQuest

Antenna Efficiency and Peak gain

		unit	Frequency (MHz)									
			2400	2410	2420	2430	2440	2450	2460	2470	2480	AVG
Left side	Efficiency	(dB)	-4.88	-4.85	-4.80	-4.76	-4.64	-4.55	-4.34	-4.19	-3.98	-4.55
		(%)	32.50	32.70	33.13	33.42	34.34	35.04	36.83	38.12	40.04	35.13
	Peak gain	(dBi)	-0.95	-1.03	-1.12	-1.27	-1.22	-1.11	-0.84	-0.60	-0.29	-0.94
Right side	Efficiency	(dB)	-6.07	-6.15	-6.19	-6.22	-6.20	-6.19	-6.12	-6.10	-6.06	-6.15
		(%)	24.72	24.27	24.03	23.88	23.97	24.02	24.42	24.57	24.78	24.19
	Peak gain	(dBi)	-1.97	-1.95	-1.87	-1.92	-1.80	-1.77	-1.76	-1.74	-1.65	-1.82

- Left earbud: the maximum gain is -0.29dBi.
- Right earbud: the maximum gain is -1.65dBi.

Radiation pattern



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 earbud 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.