



# Brussels Antenna Report

MERRY Sounds Excellent

Presented by : Merry Team





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### Test Equipment

Passive Passiv									
Antenna Type:	PIFA								
Antenna Gain	Left earbud: the maximum gain is -0.29dBi. Right earbud: the maximum gain is -1.65dBi								
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 楊韶閔 (Test date:20240111)								
Test Software	ETS-Lindgren EMQuest								





## Antenna Efficiency and Peak gain

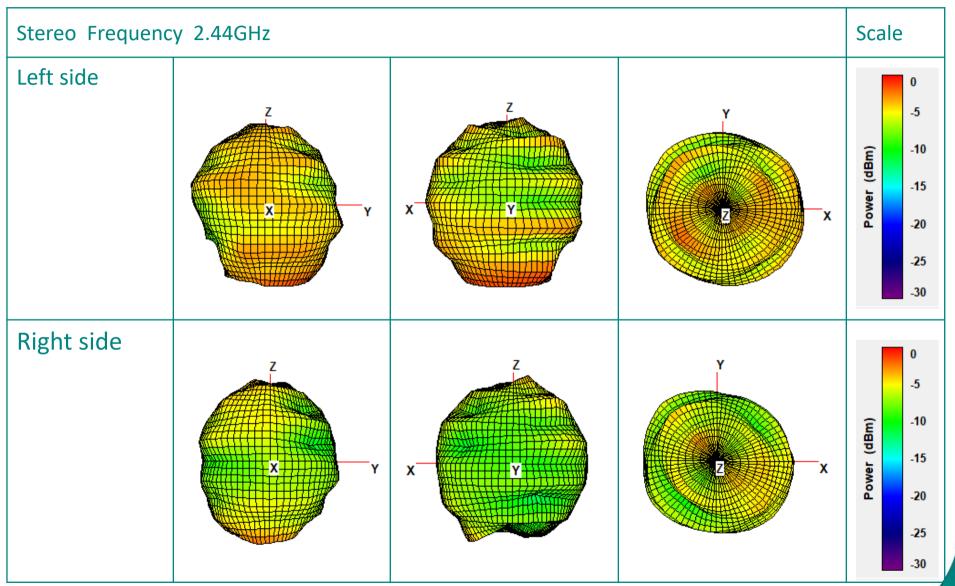
		_	Frequency (MHz)									
		unit	2400	2410	2420	2430	2440	2450	2460	2470	2480	AVG
Left side	Efficiency	(dB)	-4.88	-4.85	-4.80	-4.76	-4.64	-4.55	-4.34	-4.19	-3.98	-4.55
		(%)	32.50	32.70	33.13	33.42	34.34	35.04	36.83	38.12	40.04	35.13
	Peak gain	(dBi)	-0.95	-1.03	-1.12	-1.27	-1.22	-1.11	-0.84	-0.60	-0.29	-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.

Radiation Patten

Antenna

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.