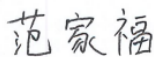


Antenna Passive Test Report

Project No. : TCWD250600461
Product Type : Flat Antenna
Test Mode : Free Space
Date of Receipt : 2025/06/023
Date of Test : 2025/06/23
Issued Date : 2025/06/26
Test Sample : TCWD250600461-M-01
Standard(s) : ANSI/IEEE Std 149-2008
Applicant : Jiangsu Zhong Heng Pet Articles Joint-stock Co., Ltd
Address : NO.1388 Century Avenue, Yandu District, Yancheng City, Jiangsu
Manufacturer : Ningbo MagorTek Electronic Technology Co., Ltd.
Address : Room 308, Building C10, R&D Park, Lane 299, Guanghua Road,
Yinzhou District, Ningbo City, Zhejiang Province

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



Fan Jiafu
Approved By:



Lin Qilong
Reviewed By:

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REVISION HISTORY

Rev.	Issue Date	Description	Revised by
01	2025/06/26	Original	Fan Jiafu

1. CERTIFICATE OF COMPLIANCE

1.1 DESCRIPTION OF EUT AND TEST(S) PERFORMED

Manufacturer	Ningbo MagorTek Electronic Technology Co., Ltd.
Model	MG58F18
Serial Number(s) / ESN(s) / IMEI(s)	N/A
Hardware Version	N/A
Software Version	N/A

1.2 LABORATORY ENVIRONMENT

Temperature	Min = 20°C , Max = 24°C	
Relative humidity	Min = 30% , Max = 70%	
Shield effect	0.6 – 8.5G	> 100dB
Ground resistance	< 0.5Ω	

2. MEASUREMENT SYSTEM INFORMATION

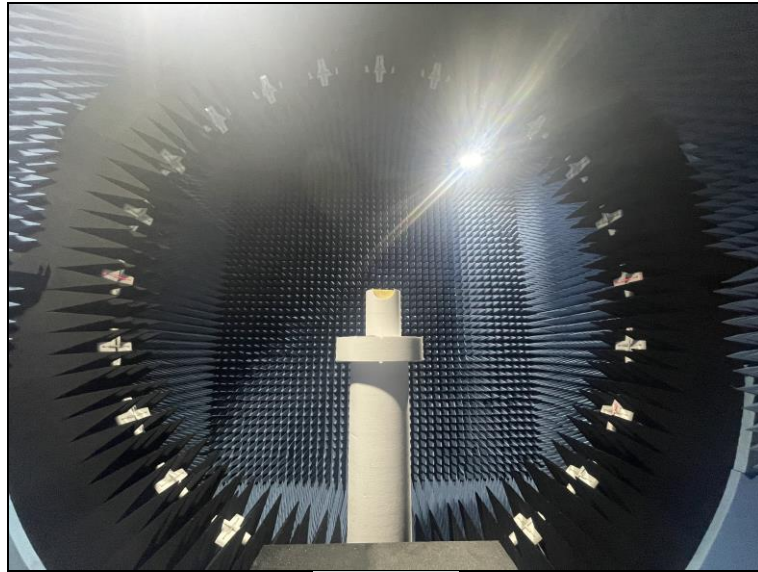
2.1 GENERAL INFORMATION

Measurement Facility:

- Measurement Chamber: ETS-Lindgren 3D fully anechoic chamber and its measuring system (AMS-8923)
- ETS-Lindgren EMCenter
- Vector Network Analyzer: R&S ZNB8



Instruments View



Inside View

2.2 LIST OF EQUIPMENT

Equipment Description	Manufacturer	Identification No.	SN	Current Calibration Date	Next Calibration Date
Vector Network Analyzer	R&S	ZNB8	101413	2024/7/17	2025/7/16
RF switch control	ETS-Lindgren	EMCenter	00251211	N/A	N/A
Measurement software	ETS-Lindgren	EMQuest	N/A	N/A	N/A

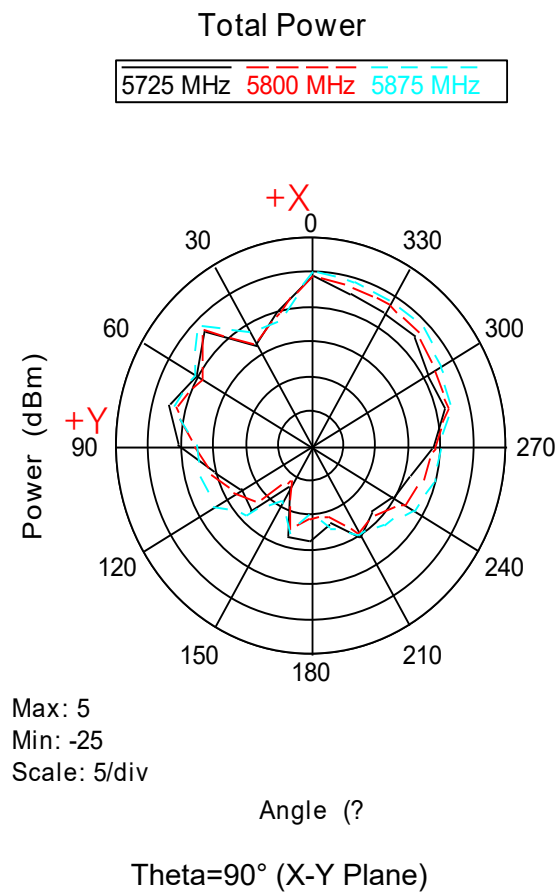
2.3 MEASUREMENT UNCERTAINTY

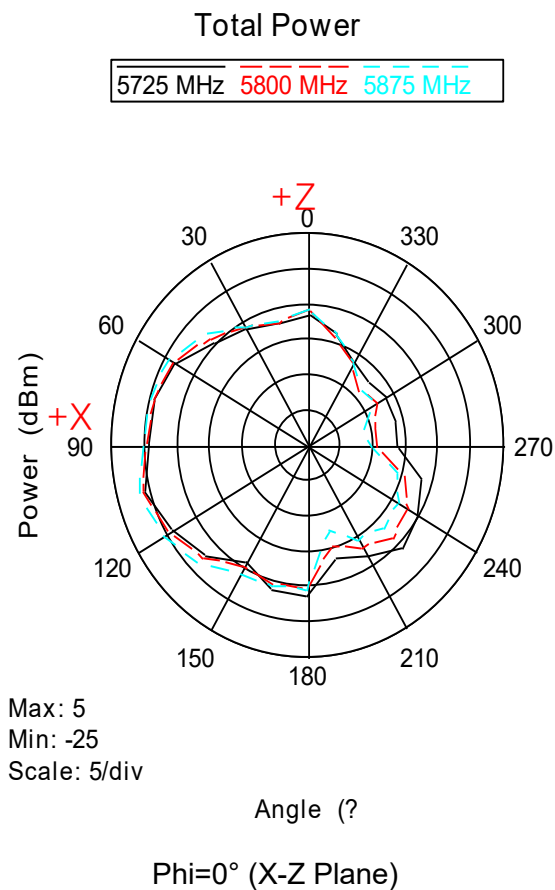
Item	5150 – 5925MHz
Gain	0.79 dB
Efficiency	0.79 dB
Measurement Uncertainty (95% Confidence Interval) K=2	

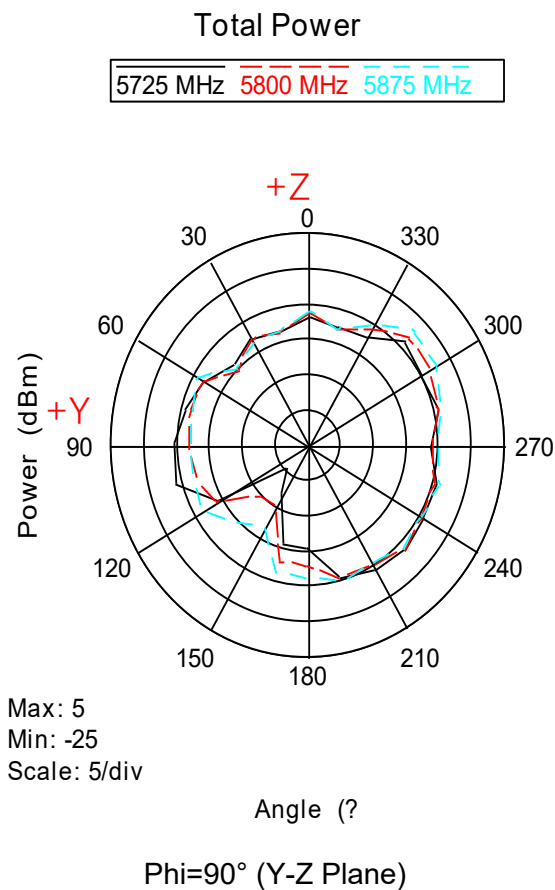
3.TEST RESULTS

Free Space		
Frequency (MHz)	Efficiency (%)	Gain (dBi)
5725	25.91	0.60
5730	25.90	0.48
5735	25.98	0.43
5740	26.11	0.45
5745	26.10	0.57
5750	26.33	0.62
5755	26.85	0.87
5760	27.04	0.69
5765	27.20	0.71
5770	27.34	0.93
5775	27.29	0.91
5780	26.83	0.81
5785	26.27	0.49
5790	26.36	0.79
5795	26.88	0.76
5800	27.27	0.81
5805	27.53	0.79
5810	28.39	1.01
5815	28.94	0.93
5820	30.04	1.40
5825	30.17	1.25
5830	30.68	1.40
5835	30.72	1.31
5840	30.78	1.36
5845	30.56	1.31
5850	31.08	1.33
5855	31.36	1.34
5860	31.84	1.44
5865	32.33	1.32
5870	32.26	1.42
5875	32.52	1.41

4. 2-D PATTERN PLOTS

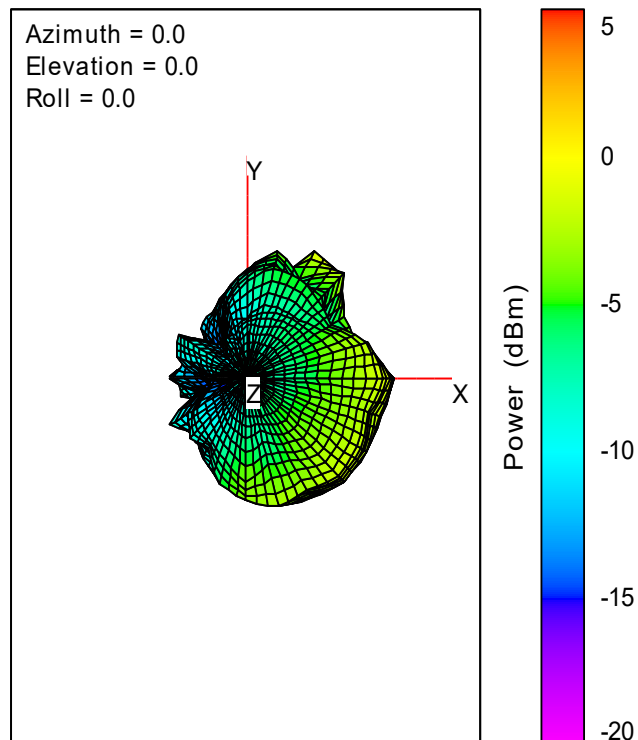




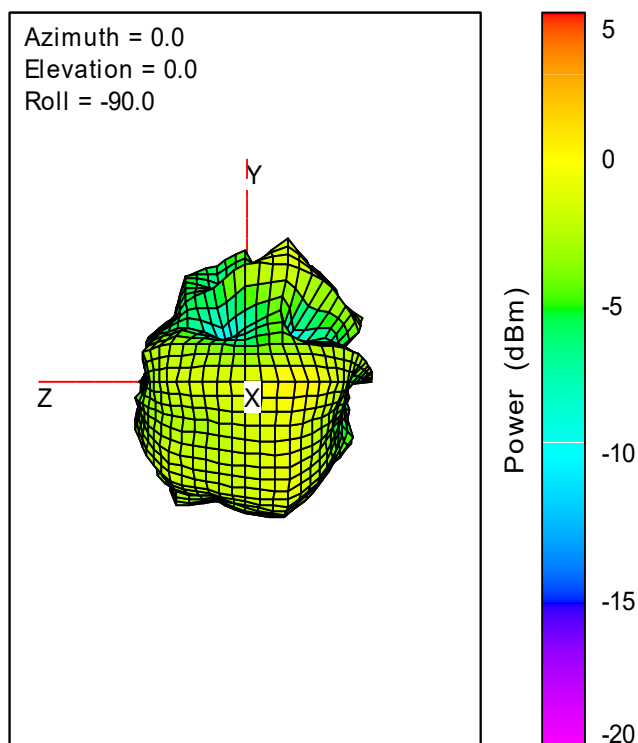


5. 3-D PATTERN PLOTS

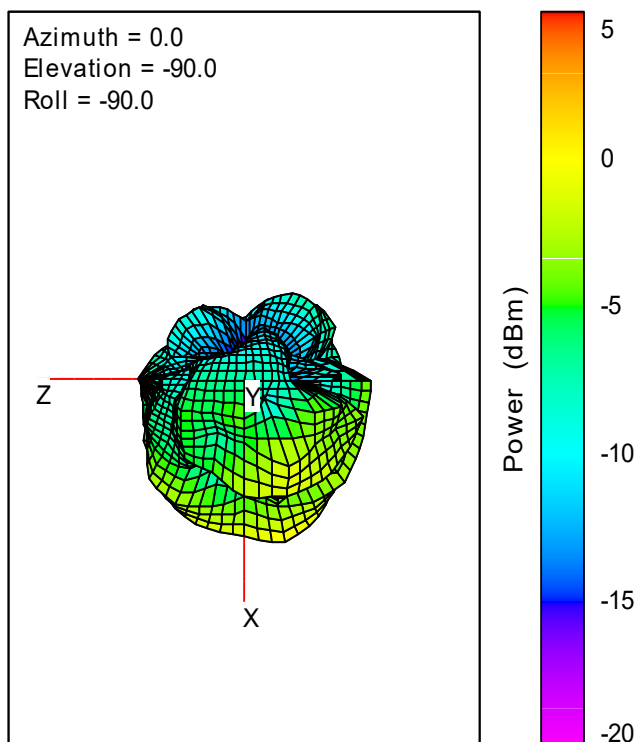
Total Power



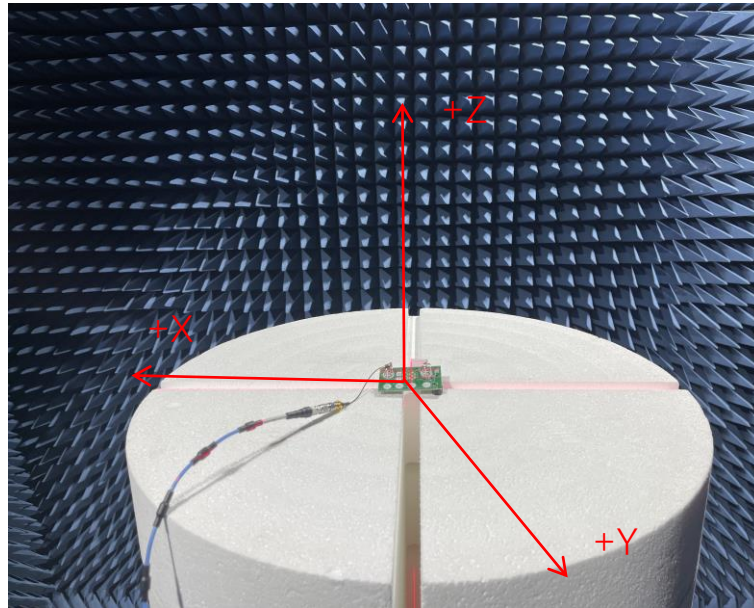
Total Power



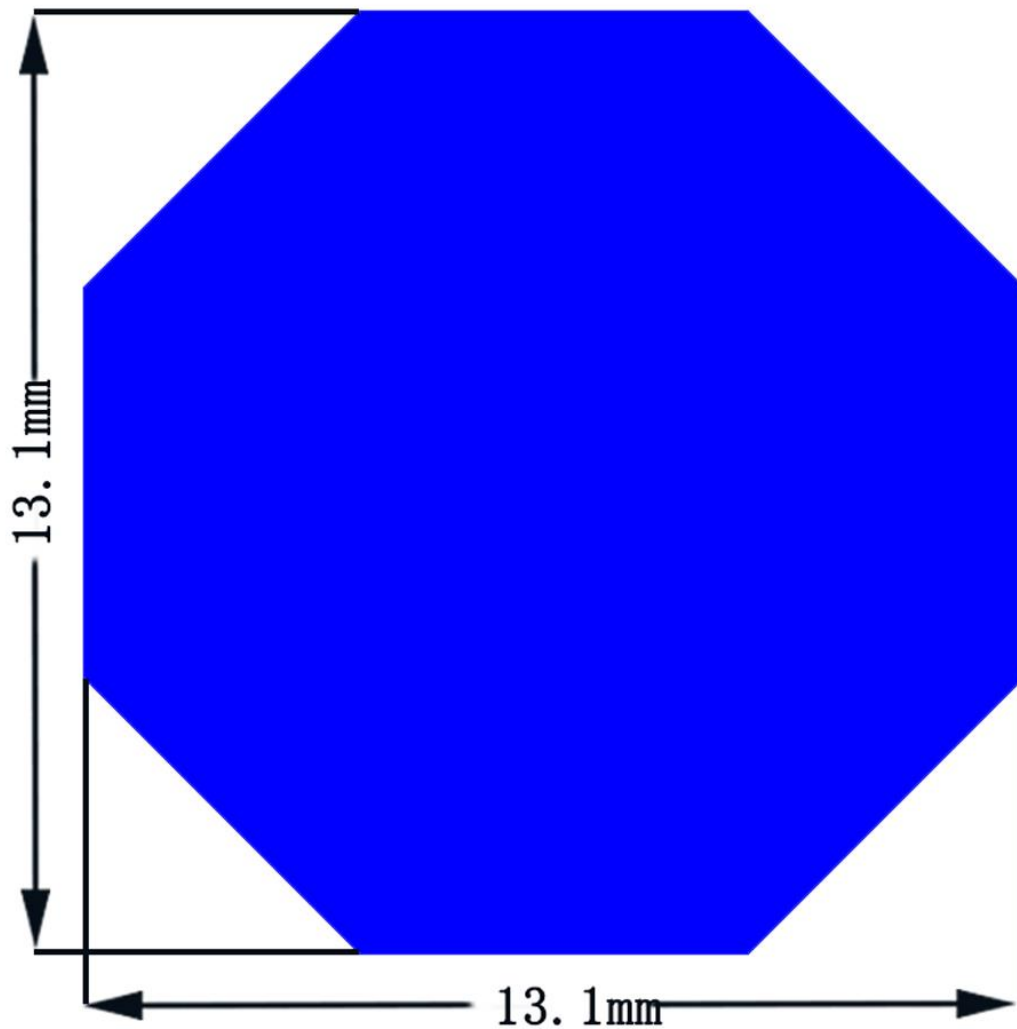
Total Power



6. THE EUT AND TEST CONFIGURATION



Free Space View

APPENDIX A 5G FLAT ANTENNA SPECIFICATION

End of Test Report