權億科技股份有限公司
Master Wave Technology Co., Ltd

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Antenna Test Report

Total Solutions For your Needs

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Antenna Description

Company name	Address
Master Wave Technology Co.,Ltd.	No. 19, Hezun N. Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)

Location	Antenna model	Antenna application	Material	Antenna Type	Peak Gain
[4]、[5]	98110UNXX001	5G Antenna	Fiber Glass	Omni Dipole	6.54 dBi
[6]、[7]	98110VNXX001	6G Antenna	Fiber Glass	Omni Dipole	6.48 dBi

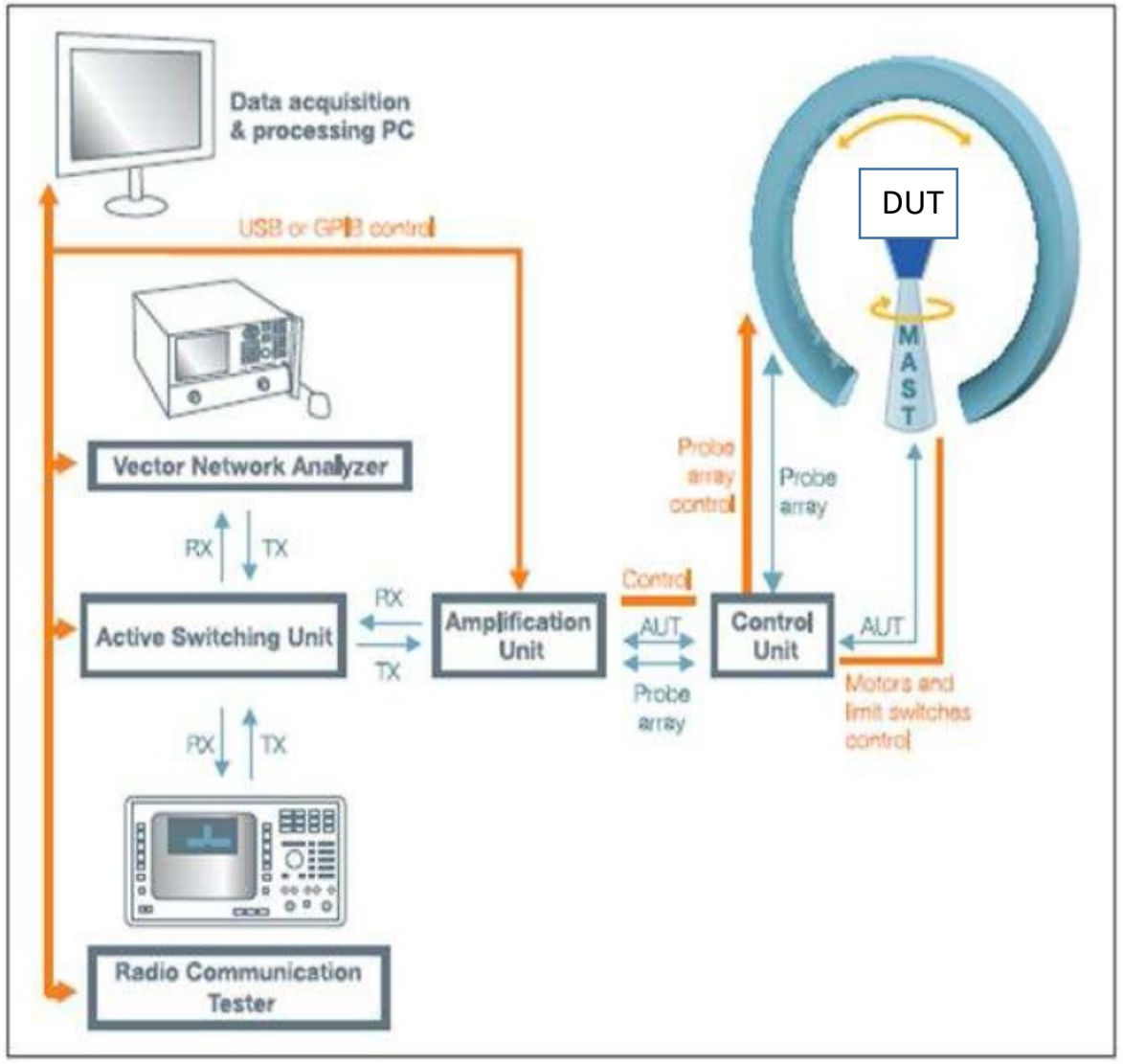
Location	RF Cable	5G Cable Loss	6G Cable Loss
5	RF CABLE N-F to MHF 1.37 L= 360mm White	2.13	X
4	RF CABLE N-F to MHF 1.37 L= 180mm Grey	1.1	X
7	RF CABLE N-F to MHF 1.37 L= 220mm Blue	X	1.5
6	RF CABLE N-F to MHF 1.37 L= 285mm Red	X	1.74

Antenna test diagram

Product location

Experimental Setup & Coordinate System

Satimo - SG24 Chamber Info.



Calibrated and measurement equipment table list

Describe	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Due Date
Full Anechoic Wireless Test chamber	MVG	SG - 24	N/A	06-Jun.-2022	06-Jun.-2023
Test Software	MVG	Wave Studio	N/A	N.C.R	-----
Multi-Axis Positioning System (MAPS)	MAC23	DUT positioner	N/A	N.C.R	-----
Turn Table	MAC23	N/A	N/A	N.C.R	-----
ENA Series Network Analyzer	Keysight	E5080B	MY59201608	Jun.-2021	Jun.-2023

Note:

1. N.C.R. = No Calibration Request.
2. This ant. test chamber is located in Master wave which address is :
   Add: No. 19, Hezun N. Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)
   Tel: +886-3-452-9998

Peak Gain& Peak gain at polarization

5G ANT [98110UNXX001]			
Frequency	5150 MHz	5500 MHz	5850MHz
Peak Gain	6.54 dBi	6.31 dBi	6.34 dBi
Peak gain at polarization	(Φ) 177°(θ)180°	(Φ) 177°(θ)180°	(Φ) 177°(θ)180°
6G ANT [98110VNXX001]			
Frequency	5925 MHz	6525 MHz	6925 MHz
Peak Gain	6.41 dBi	6.35 dBi	6.48 dBi
Peak gain at polarization	(Φ) 177°(θ)180°	(Φ)177°(θ)180°	(Φ) 177°(θ)180°

※**Φ**(Phi) ; **Θ**(Theta)

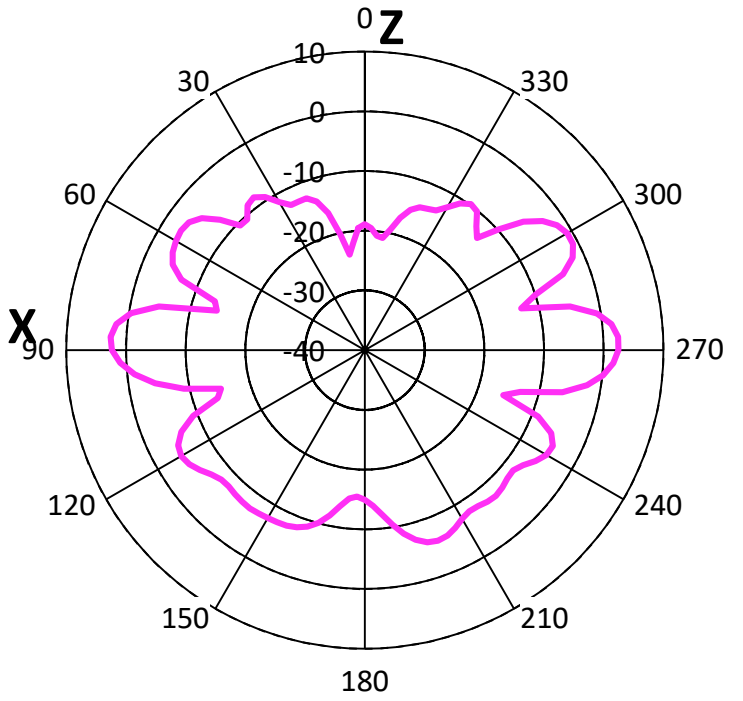
※Peak Gain (G) and directivity (D) are linked by the formula G = k x D, where the antenna effective factor k ($0 \leq k \leq 1$) corresponds to the overall losses of the antenna. Accordingly antenna gain can be calculated by the following formula, where represents antenna losses comprising of all ohm and dielectric losses between the input connector and the outer surface of the radome and the loss due to the impedance mismatch.

External Antenna 2D Radiation Pattern (2/1)

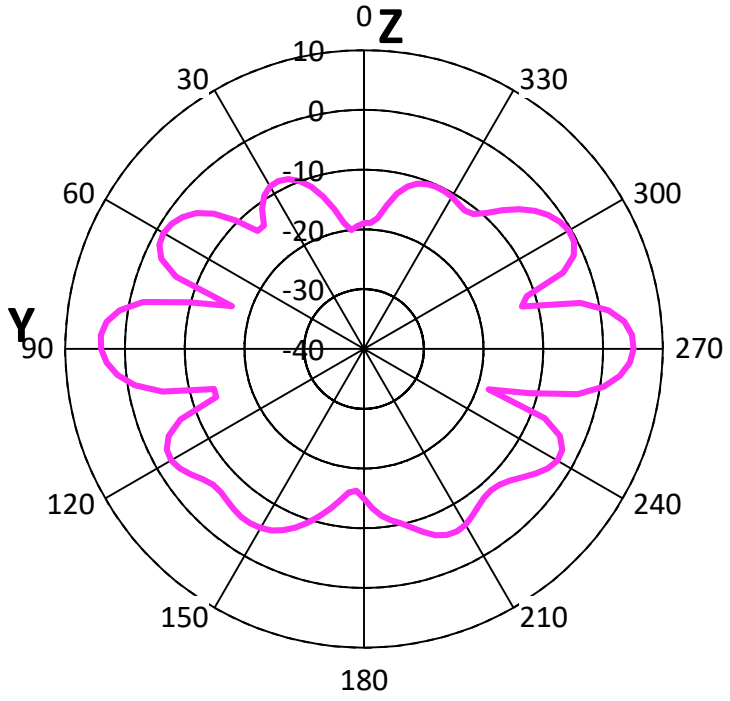
5G ANT [98110UNXX001]

5500MHz

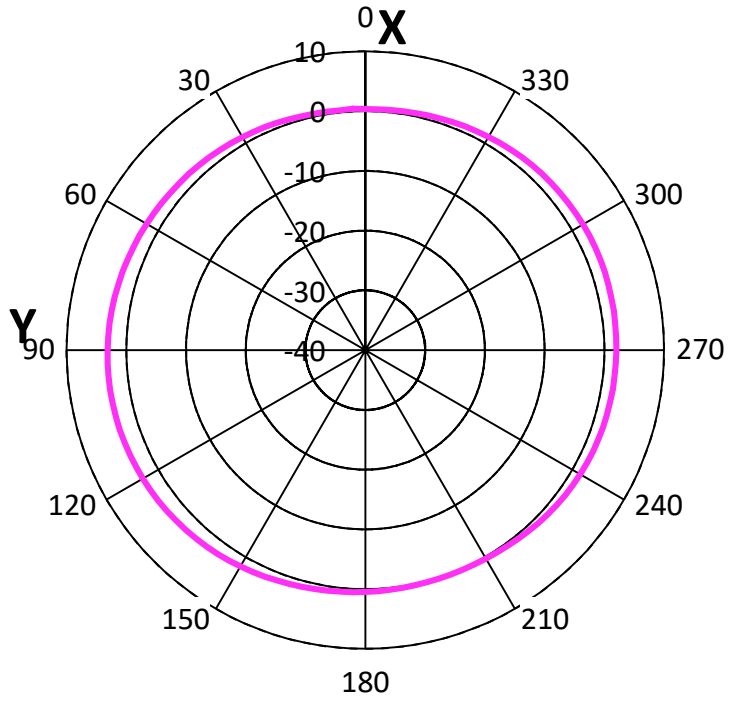
ZX-Plane



ZY-Plane



XY-Plane

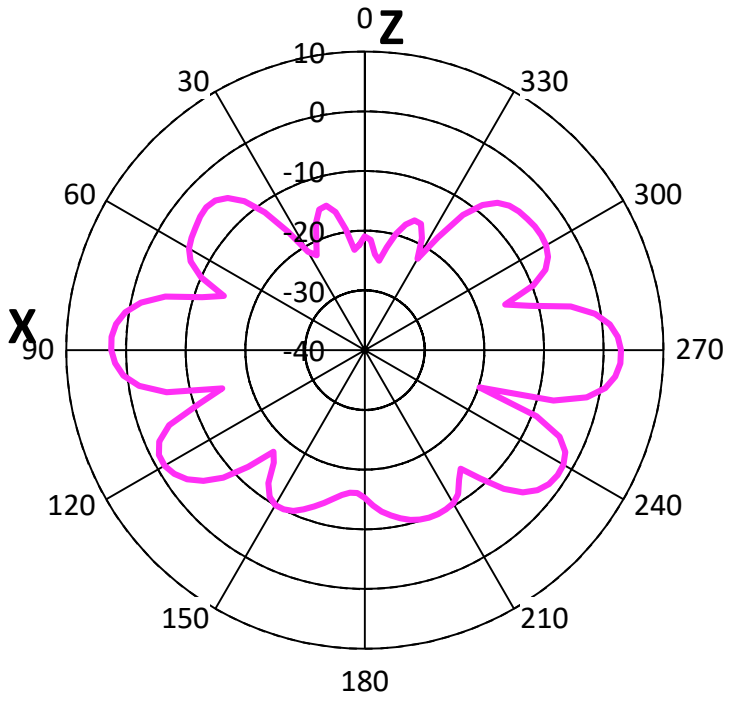


External Antenna 2D Radiation Pattern (2/2)

6G ANT [98110VNXX001]

6475MHz

ZX-Plane



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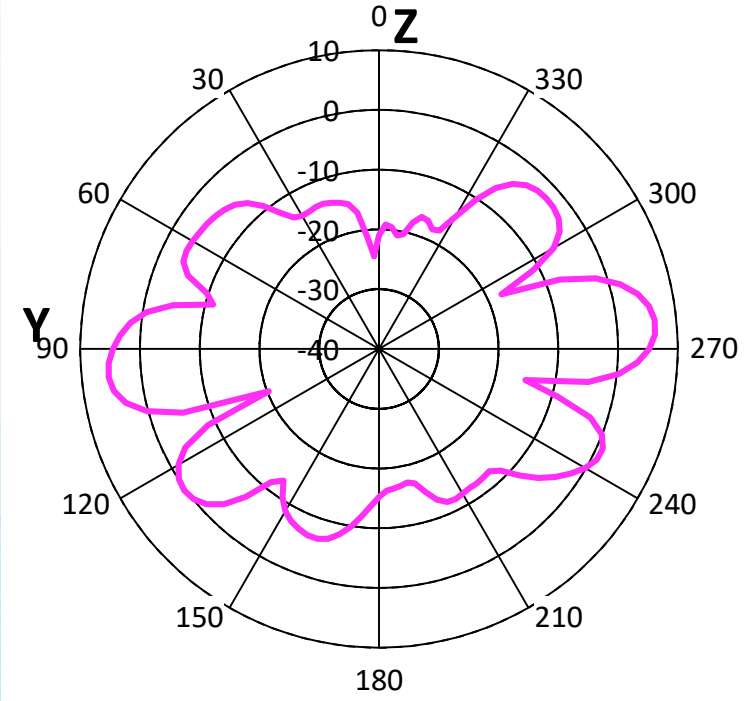
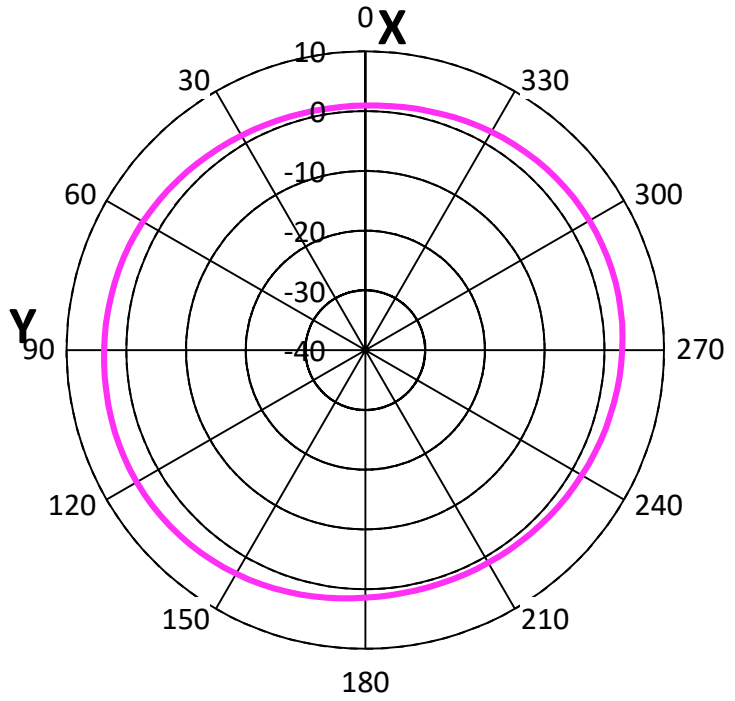


XY-Plane



THANK YOU
FOR YOUR ATTENTION.

We welcome your questions, suggestions and comments!