Cyprus Antenna Report

Item	Description
Model Name	Cyprus
Test Engineer	Joey Liu
Manufacturer	FIH Mobile Limited
Manufacturer Address	No. 4, Minsheng St., Tucheng Dist., New Taipei City , Taiwan (R.O.C.)
Test Environment	ETS-Lindgren AMS-8500 Antenna Measurement System
Test Software	ETS-Lindgren EMQuest Data Acquisition and Analysis Software
Test date	Nov. 14 2022 ~ Nov. 18 2022

Outline

1. Antenna Gain

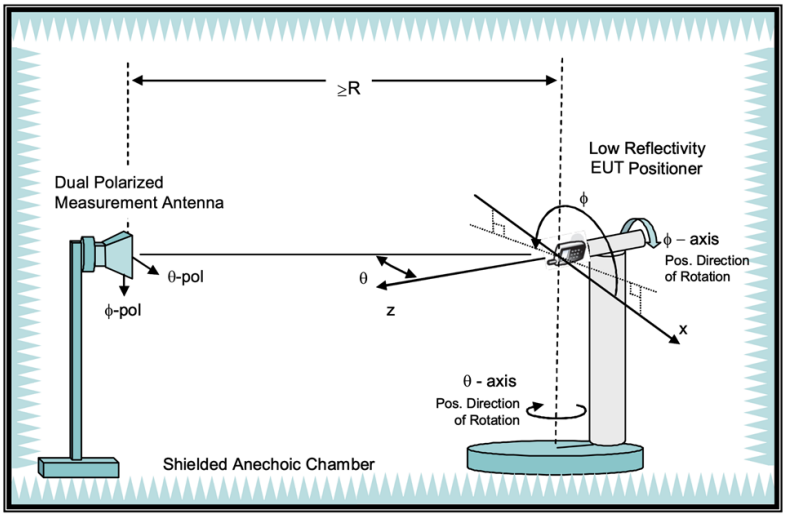
Antenna	RF Chain	Antenna Gain (dBi)	Frequency Range	Antenna Type
WiFi ANT4	Chain 0	5.05	2.4~2.5GHz	Dipole
	Chain 1	4.55	5.15~5.25GHz	
	Chain 2	4.76	5.25~5350GHz	
	Chain 3	6.32	5.47~5.725GHz	
	Chain 4	6.66	5.725~5.85GHz	
WIFI ANT5	Chain 0	4.85	2.4~2.5GHz	Dipole
	Chain 1	6.81	5.15~5.25GHz	
	Chain 2	6.48	5.25~5350GHz	
	Chain 3	5.89	5.47~5.725GHz	
	Chain 4	6.07	5.725~5.85GHz	

2. Test Method

The antenna gains are obtained through measurements in a fully anechoic OTA chamber with a 3D positioner.

Measurements are taken in discreet steps in theta and phi direction, data is being recorded using the spectrum analyzer (active) or network analyzer (passive) for both theta and phi polarizations at each position resulting in a 3D gain pattern. Step size is <30deg along both axes.

Gain is either derived directly through spatial averaging of VNA S21 measurements (passive measurement) or by the ratio of spatial averaging of 3D EIRP/TRP measurements vs the conducted power (active measurement).



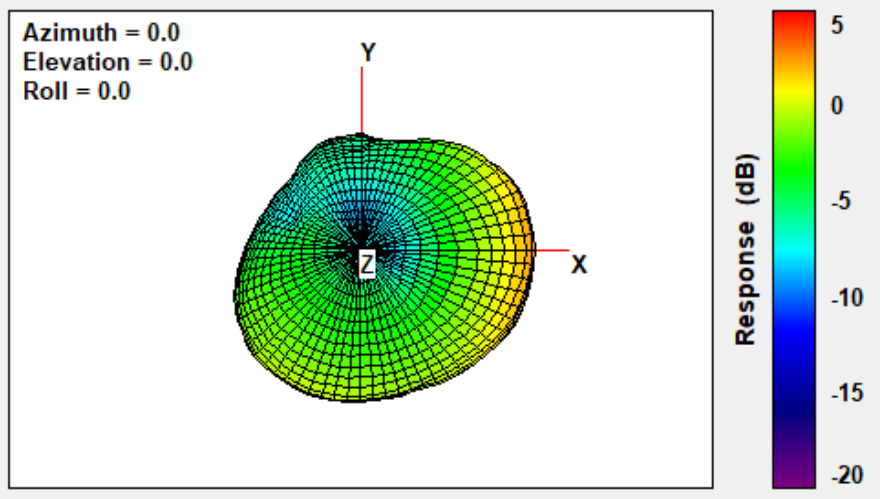
3. Test Equipment

Site Description	Chamber Manufacturer	Chamber Location	Type
AMS-8500	ETS-Lindgren	FIH Mobile Limited	fully anechoic

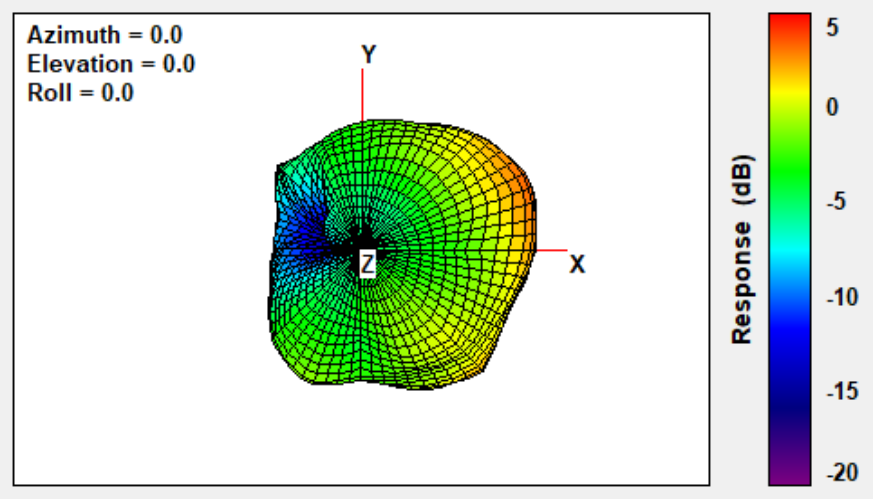
Description	Chamber Manufacturer	Type	Calibrated Date	Calibrated Until
Network Analyzer	Keysight	E5071C	2022/8/16	2023/8/16

4. Radiation pattern

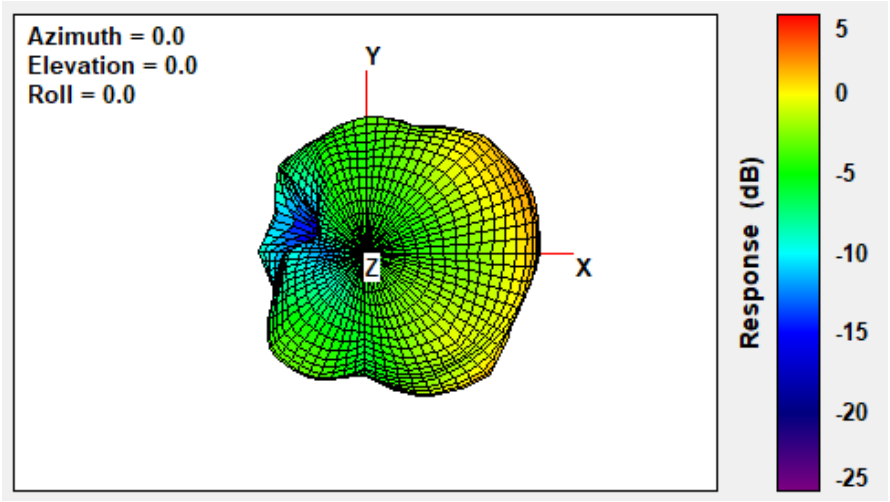
WiFi 2.4GHz Antenna 4 Radiation Pattern



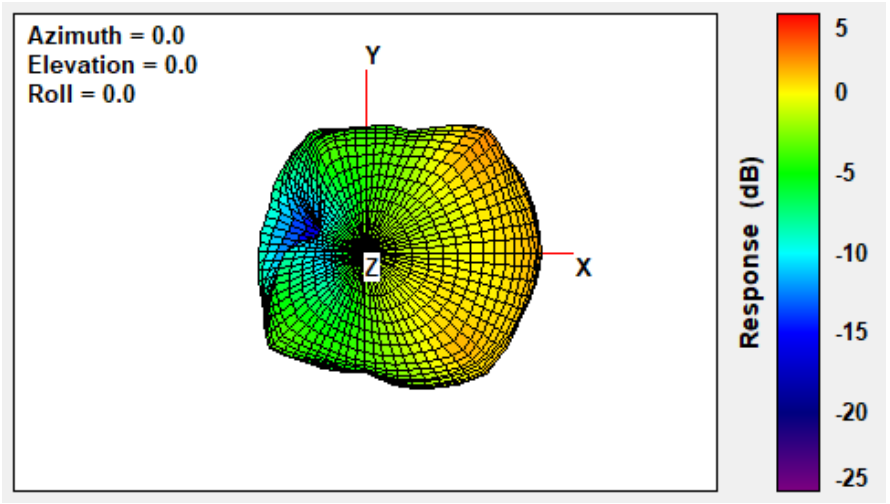
WiFi 5GHz Antenna 4 U-NII-1 Radiation Pattern



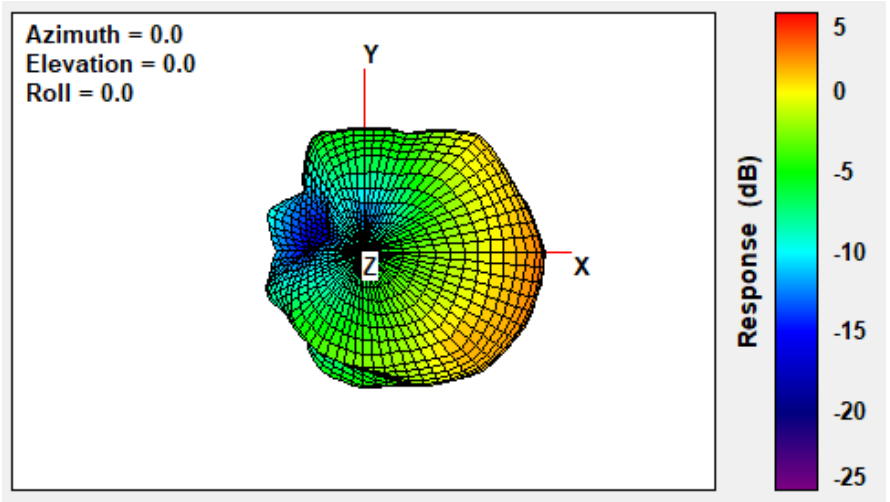
WiFi 5GHz Antenna 4 U-NII-2A Radiation Pattern



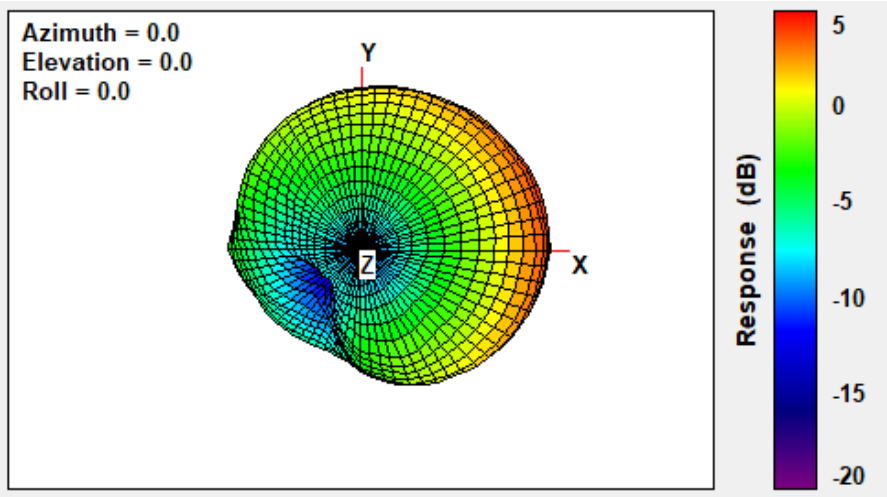
WiFi 5GHz Antenna 4 U-NII-2C Radiation Pattern



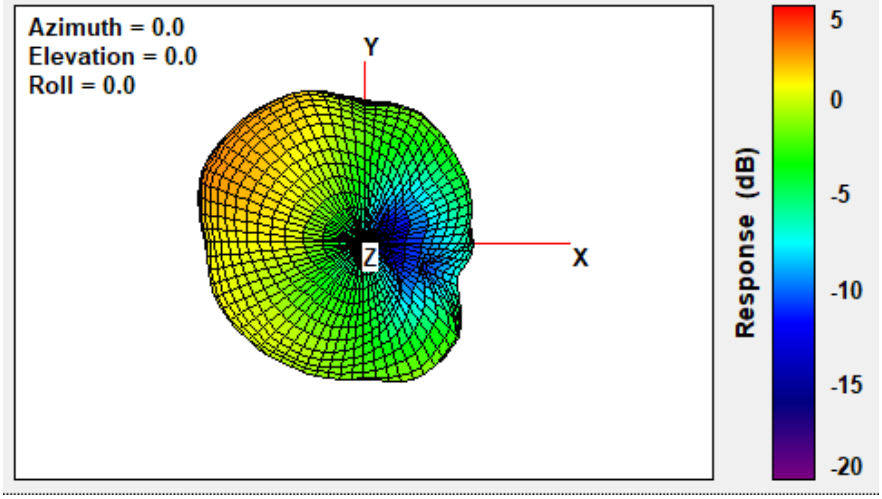
WiFi 5GHz Antenna 4 U-NII-3 Radiation Pattern



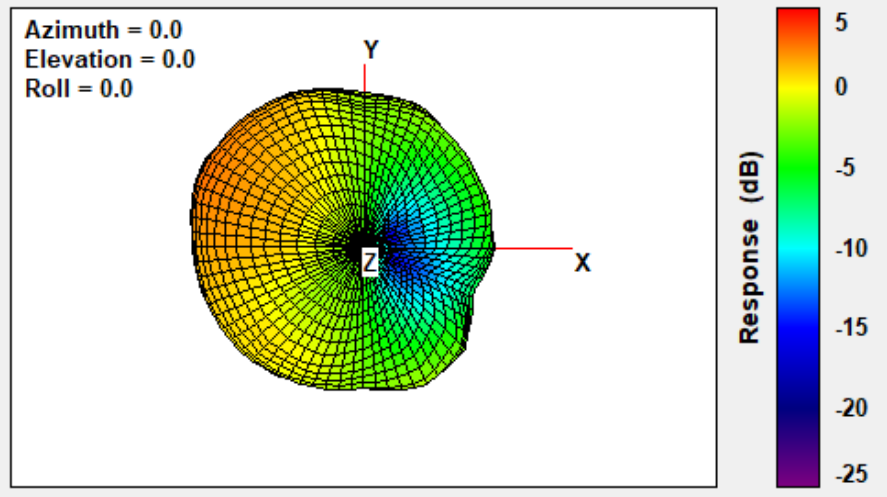
WiFi 2.4GHz Antenna 5 Radiation Pattern



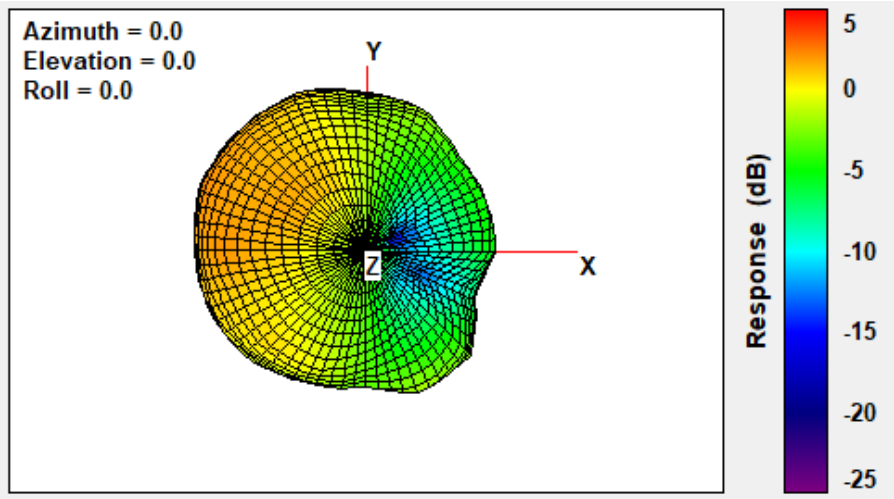
WiFi 5GHz Antenna 5 U-NII-1 Radiation Pattern



WiFi 5GHz Antenna 5 U-NII-2A Radiation Pattern



WiFi 5GHz Antenna 5 U-NII-2C Radiation Pattern



WiFi 5GHz Antenna 5 U-NII-3 Radiation Pattern