

# Antenna Gain Test Report

Test Date: 11/11/24-1/6/25

## 1. General Information

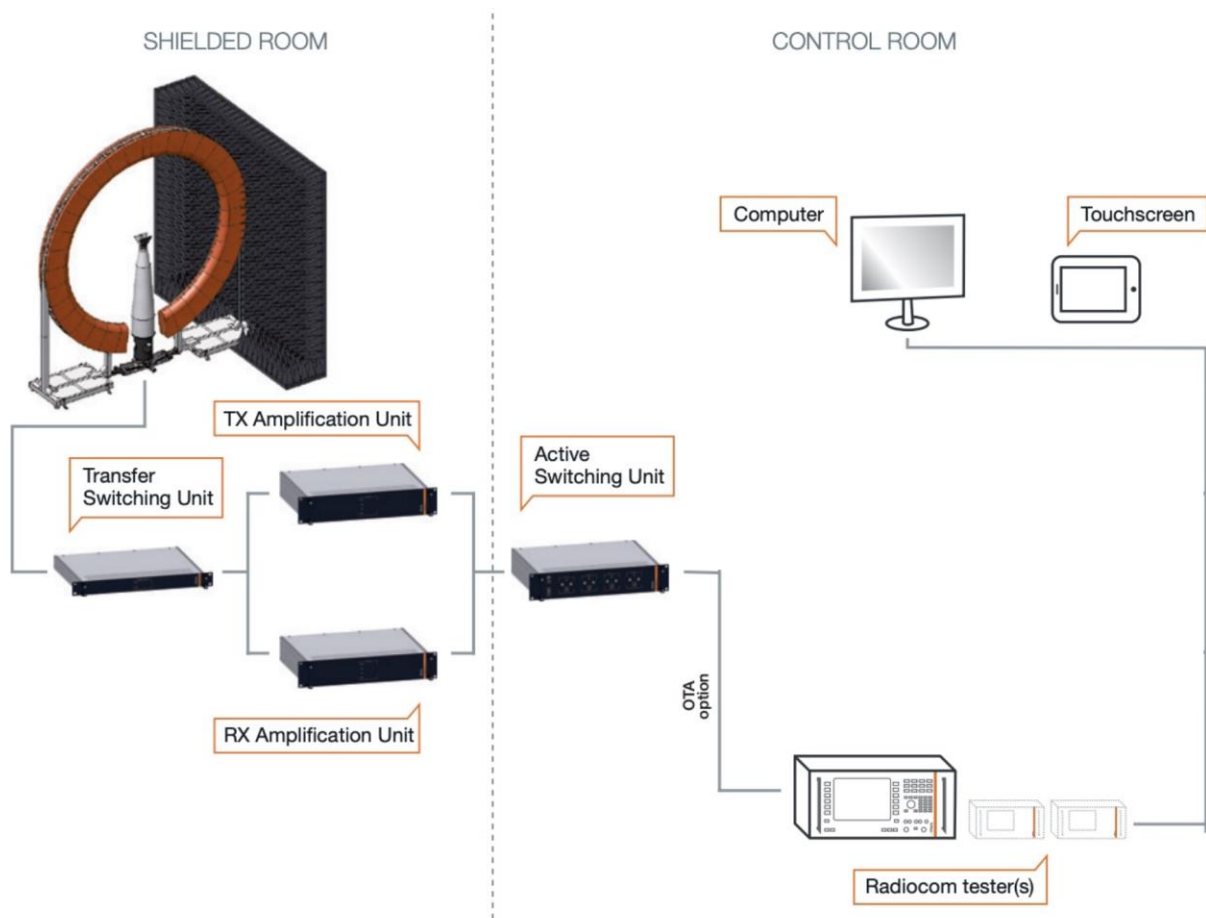
The purpose of this report is to demonstrate compliance to the FCC Part 15 Antenna requirement.

## 2. Chamber information

Multi-probe fully anechoic OTA chamber, MVG system model: SG64.

Chamber pathloss calibration is per CTIA test plan v3.9.5 Section 4 Range Reference Requirements.

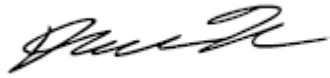
Chamber Location: Meta Lab at Fremont 6422



## 3. Commercial Test Software

Test software is from MVG, Wave Studio v2024.2.8

4. Test Operator  
Meta Employee ID #493972



5. Test Equipment

Equipment	Calibration Due Date
MVG Multi-probe Fully anechoic OTA Chamber	March 3, 2027
Anritsu Wireless Connectivity Test Set (WLAN Tester) MT8862A	September 3, 2025

Note: OTA Chamber was audited routinely to ensure accurate results and a 2 year calibration cycle.

6. Antenna Test Method

Measurement parameters follow CTIA Certification/Wi-Fi Alliance Test Plan for RF Performance Evaluation of Wi-Fi Mobile Converged Devices V2.2.1.

Active antenna measurement Steps:

- 1) DUT placed in free-space inside an anechoic chamber.
- 2) DUT establishes a connection with a communication call box.
- 3) EIRP are measured at 15 degree step size at each probe position 0 degree – 360 degree with respect to the turntable position from 0-180 degree for a full 3D pattern measurement.
- 4) Data and all pathloss will be processed by MVG Wave Studio.
- 5) Peak EIRP – Conducted power = Peak Antenna gain.
- 6) Repeat Step 2 to 5 for each testing channel/frequency.

7. Antenna Gain Results and Plots

Refer to Exhibit A for antenna gain results and plots.

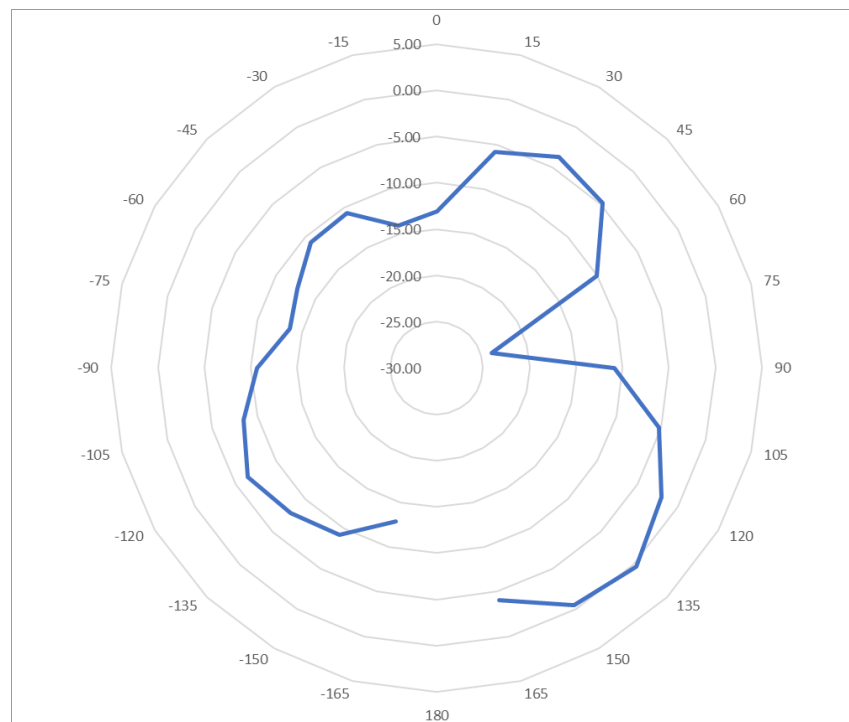
8. Antenna Information

<b>Antenna Manufacturer</b>	Meta
<b>Manufacturer Address</b>	900 5th Ave, Sunnyvale, CA 94089
<b>Antenna Type</b>	Monopole PCB Antenna

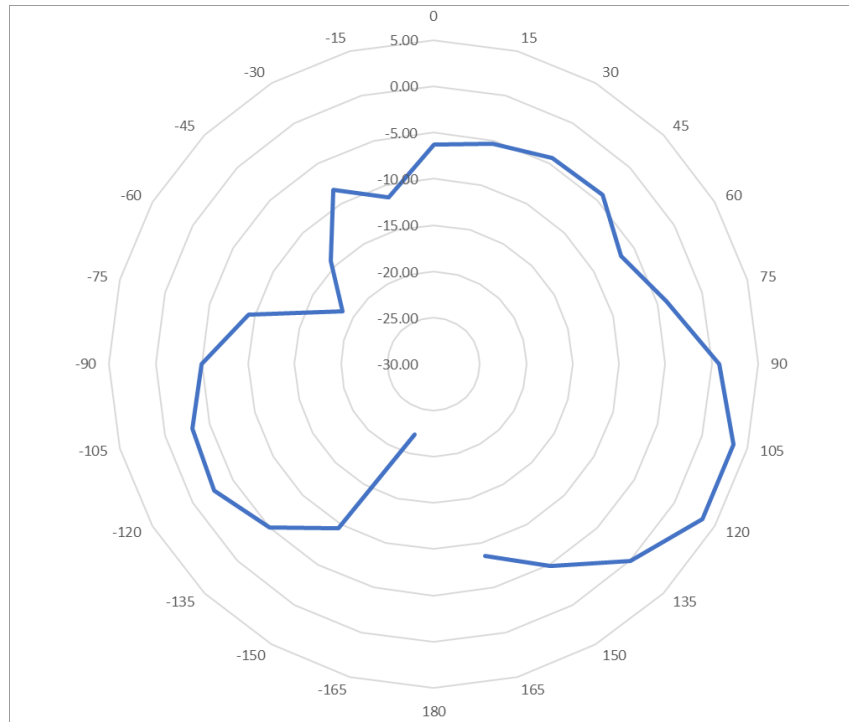
## Exhibit A - Gain Results and Plots

Band	Freq (MHz)	Max of H/V Gain (dBi)
WiFi/BT 2.4 GHz	2400-2483.5	0.33
UNII-1	5150-5250	3.52
UNII-2A	5250-5350	3.55
UNII-2C	5470-5725	4.11
UNII-3	5725-5850	3.60
UNII-5	5925-6425	2.03
UNII-6	6425-6525	1.81
UNII-7	6525-6875	3.37
UNII-8	6875-7125	5.08

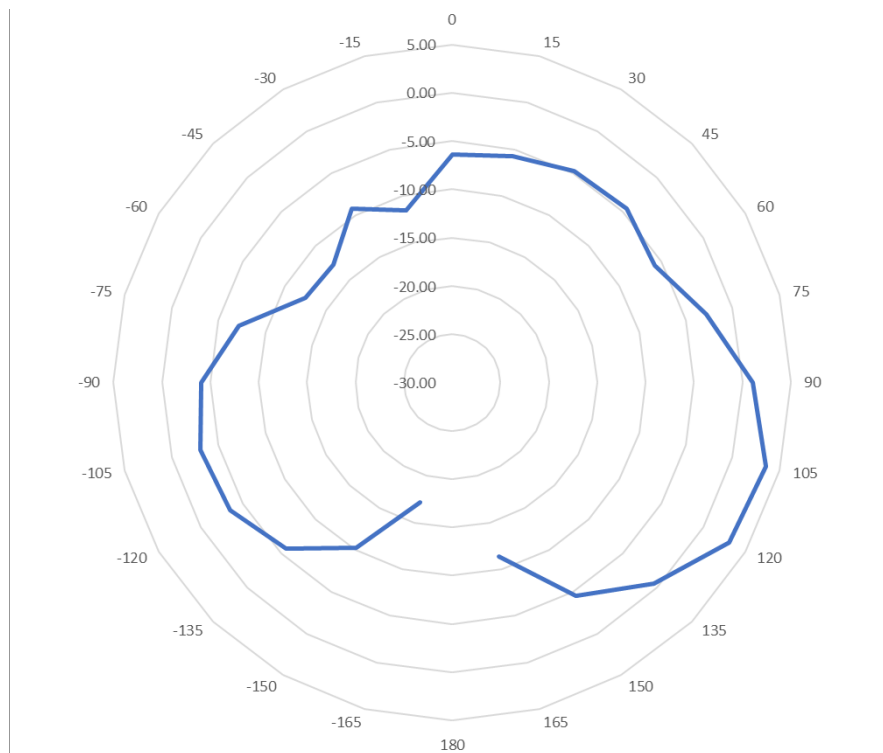
### Antenna 2D Total Gain Plots (Phi cut with peak gain): Wifi/BT 2.4GHz



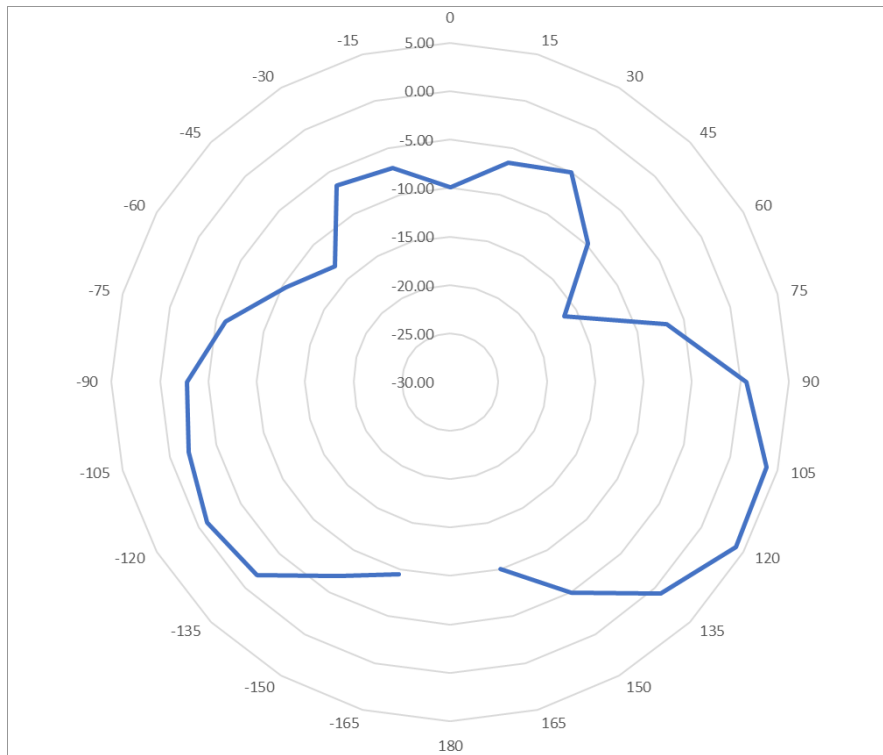
### Wifi UNII-1



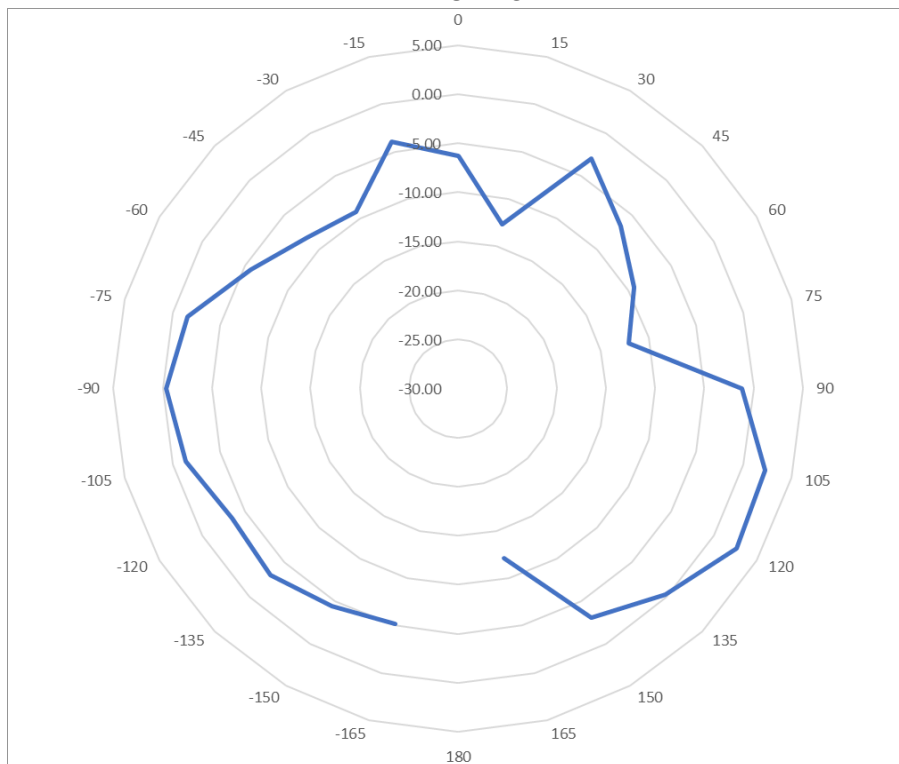
**Wifi UNII-2A**



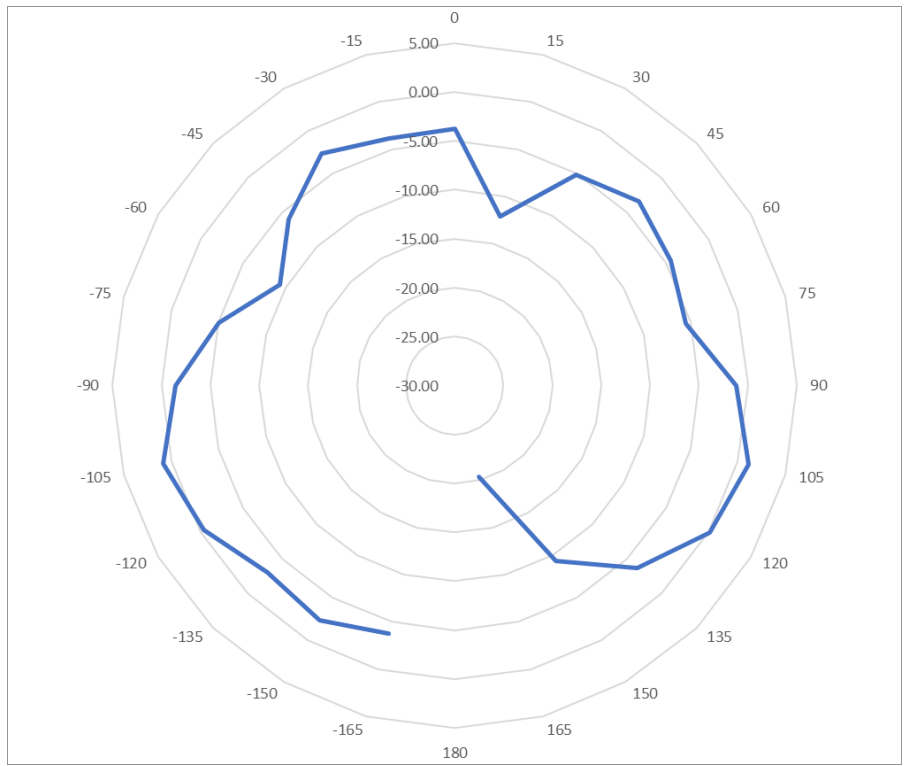
**Wifi UNII-2C**



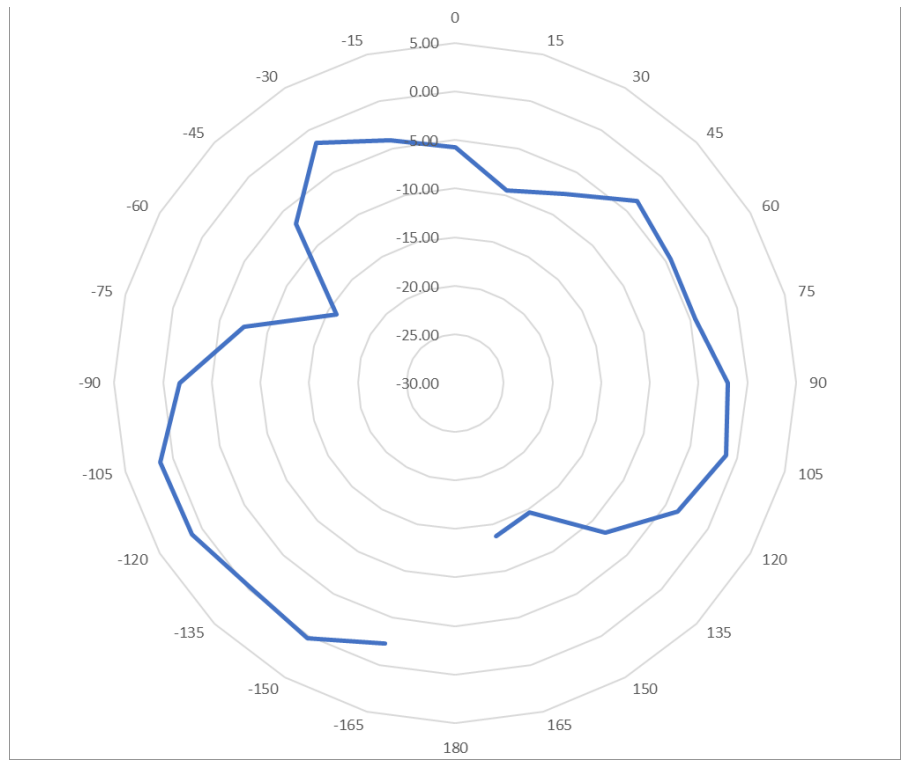
**Wifi UNII-3**



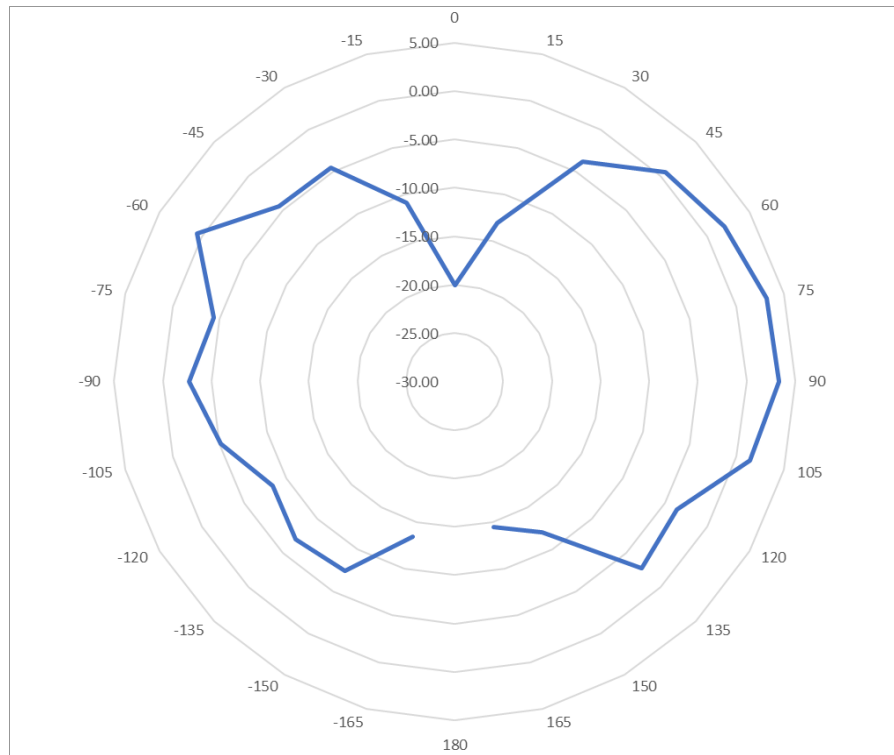
**Wifi UNII-5**



**Wifi UNII-6**



**Wifi UNII-7**



### Wifi UNII-8

