

Antenna Gain Test Report

Test Date: 5/21/25-6/13/25

Table of Contents

1. General Information	2
2. Chamber information	2
3. Commercial Test Software	2
4. Test Equipment	3
5. Antenna Test Method	3
6. Antenna Gain Results and Plots	3
7. Antenna Photo	3

1. General Information

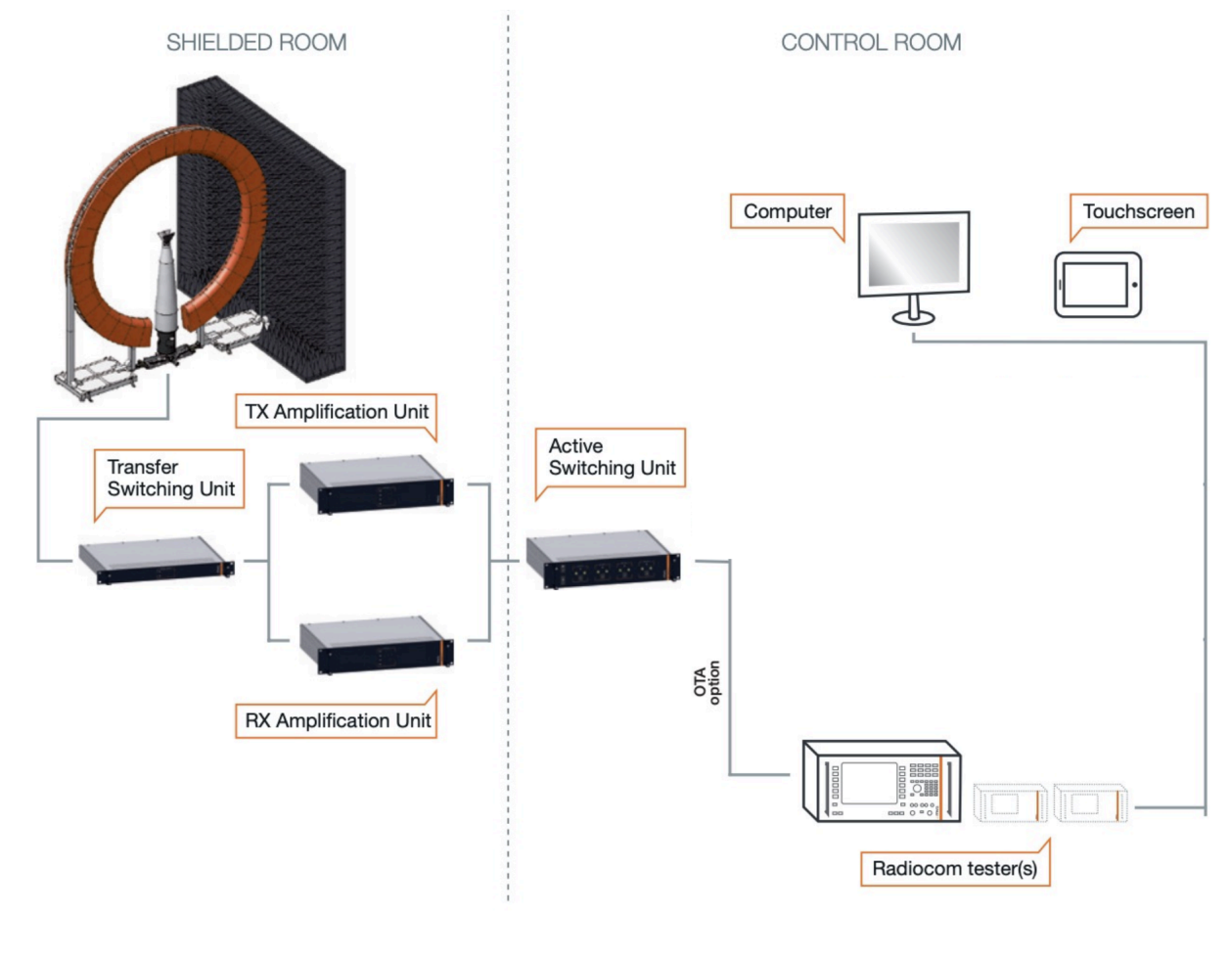
The purpose of this report is to demonstrate compliance to the FCC Part 15 Antenna requirement.

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 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.

5. 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 with maximum 15 degree step size at each probe position 0 degree – 360 degrees with respect to the turntable position from 0-180 degrees 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.

6. Antenna Gain Results and Plots

Refer to Exhibit A for antenna gain results and plots.

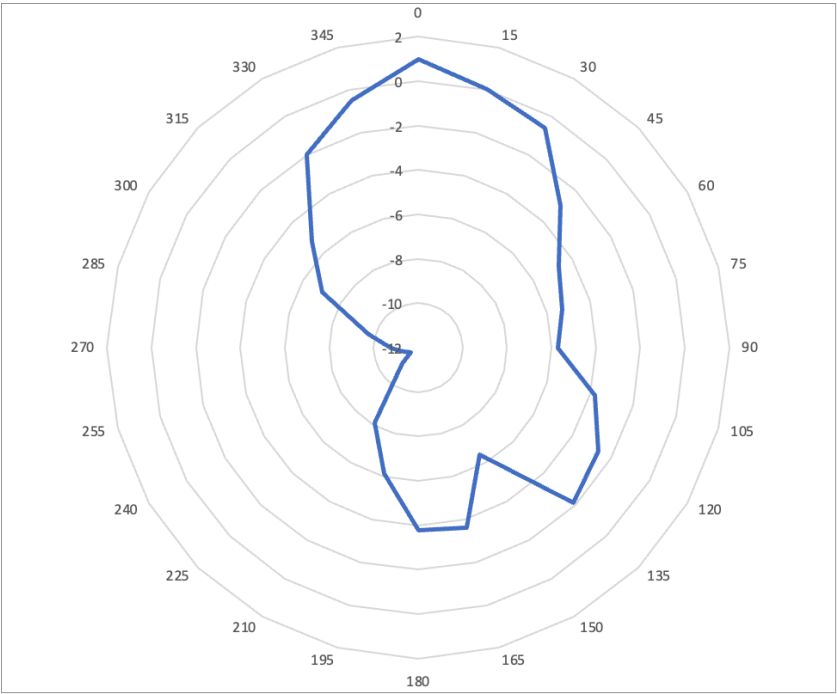
7. Antenna Photo

Refer to Exhibit B for Antenna information and photo.

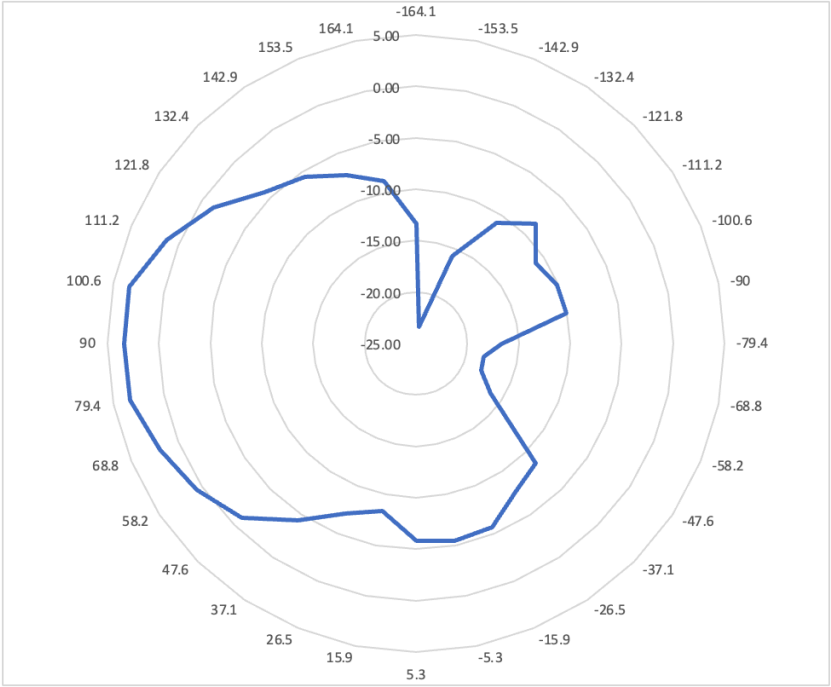
Exhibit A - Gain Results and Plots

Band	Freq (MHz)	Gain (dBi)
WiFi/BT 2.4 GHz	2402-2480	1.0
UNII-1	5150-5250	3.5
UNII-2A	5250-5350	2.8
UNII-2C	5470-5725	2.7
UNII-3	5725-5850	2.8
UNII-5	5925-6425	2.2
UNII-6	6425-6525	1.8
UNII-7	6525-6875	2.2
UNII-8	6875-7125	1.9

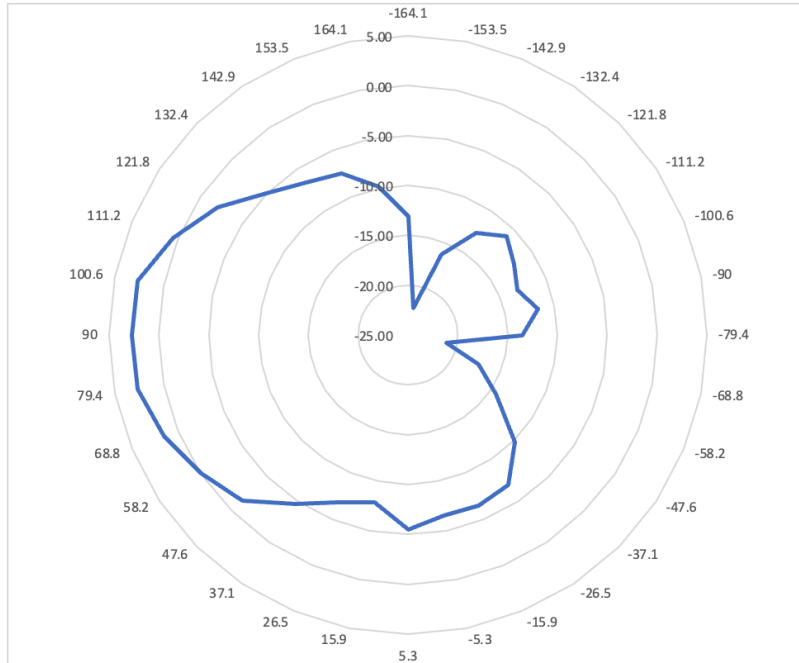
Antenna 2D Total Gain Plots (Phi cut with peak gain):
Wifi/BT 2.4GHz



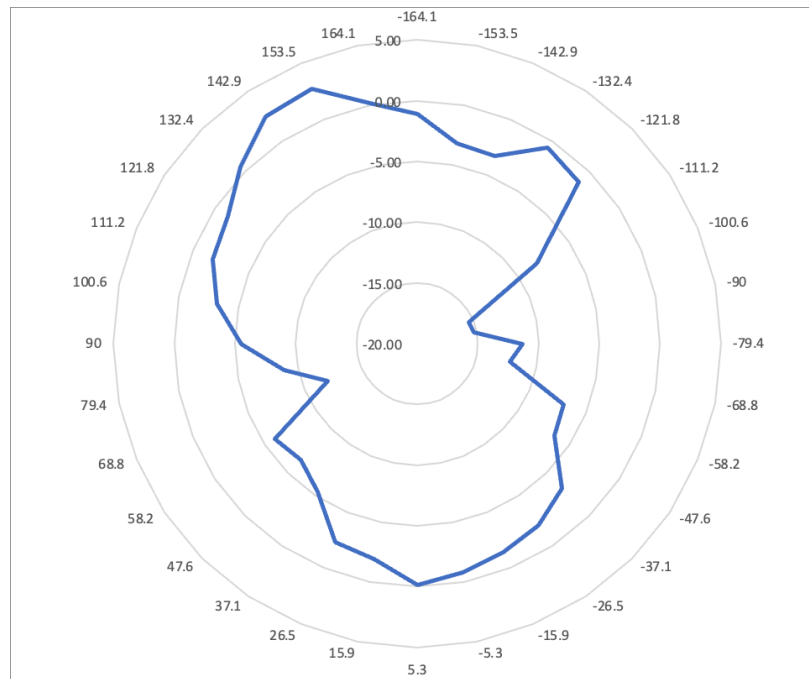
Wifi UNII-1



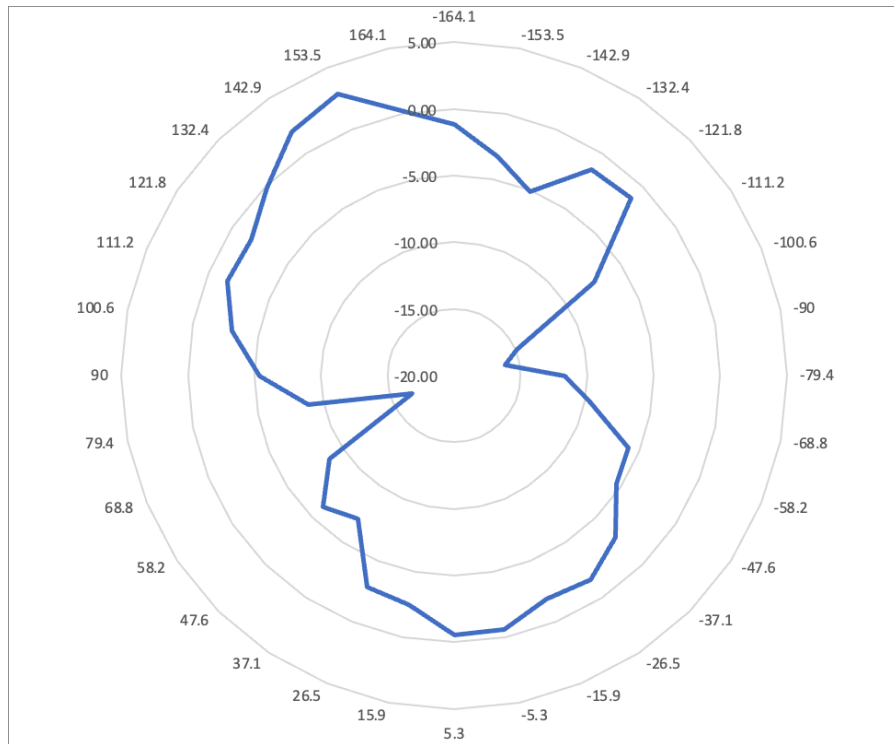
Wifi UNII-2A



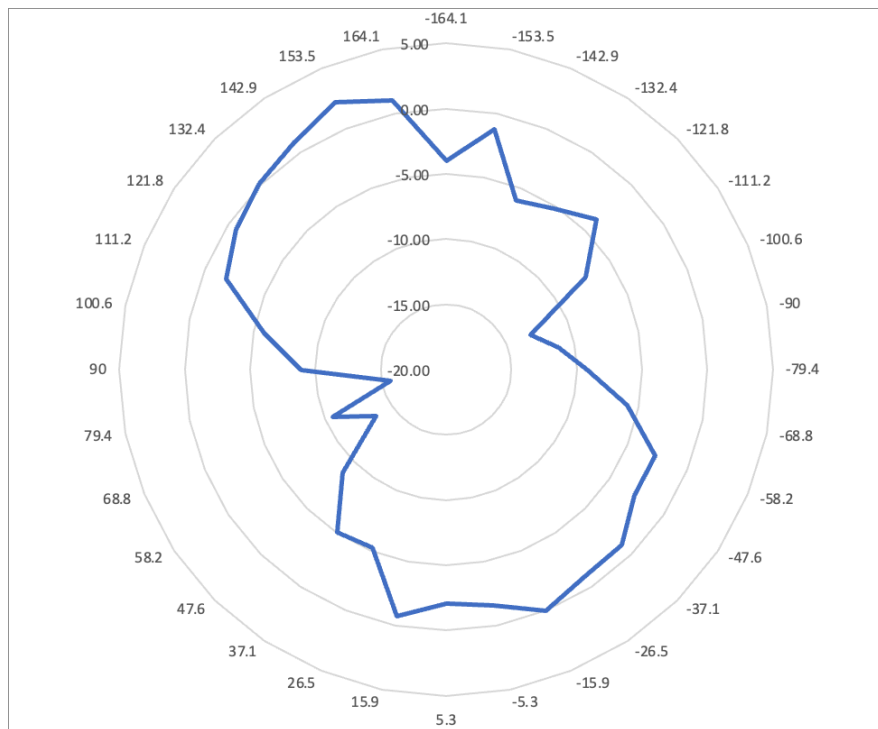
Wifi UNII-2C



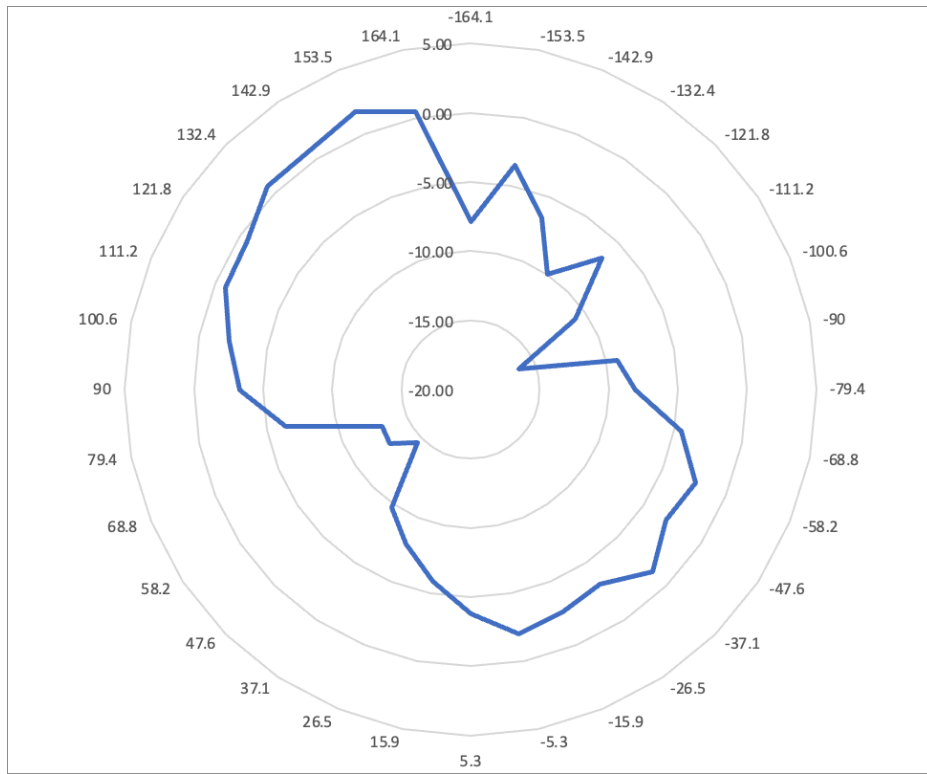
Wifi UNII-3



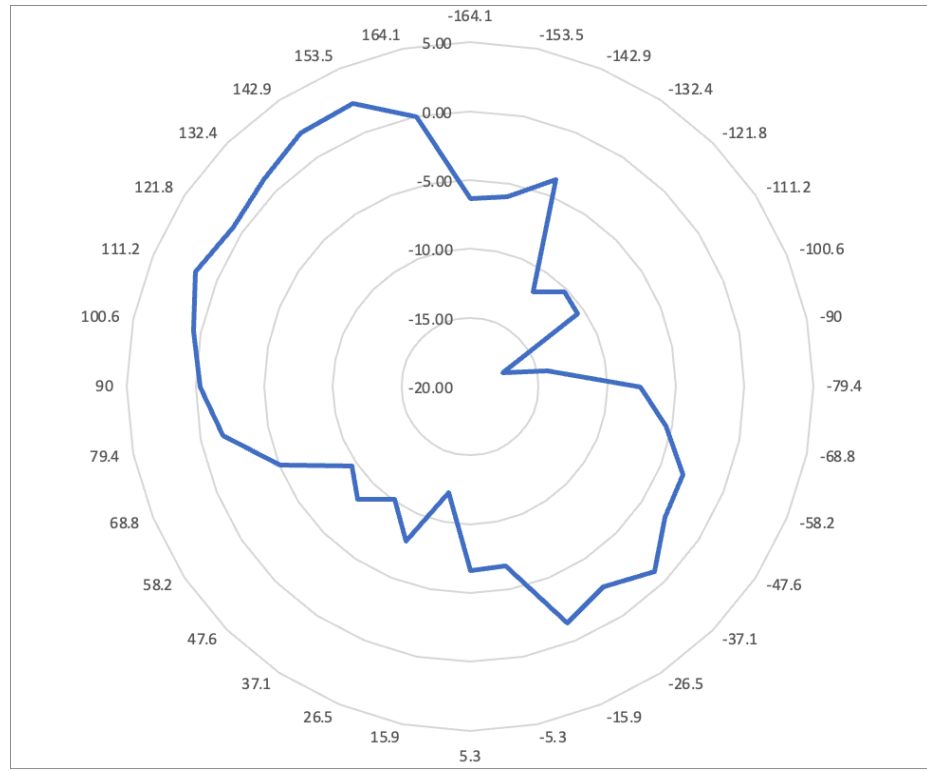
Wifi UNII-5



Wifi UNII-6



Wifi UNII-7



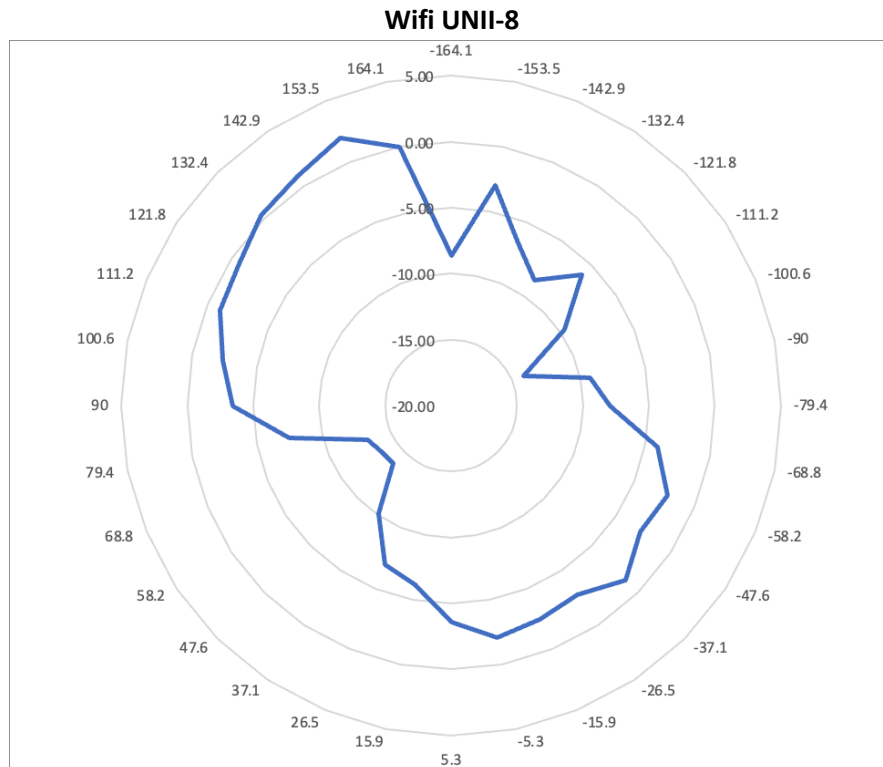


Exhibit B - Antenna Information and Photo

Antenna Manufacturer	Meta
Manufacturer Address	900 5th Ave, Sunnyvale, CA 94089
Antenna Part/Model Number	N/A
Antenna Type	Multiband IFA with Parasitic