

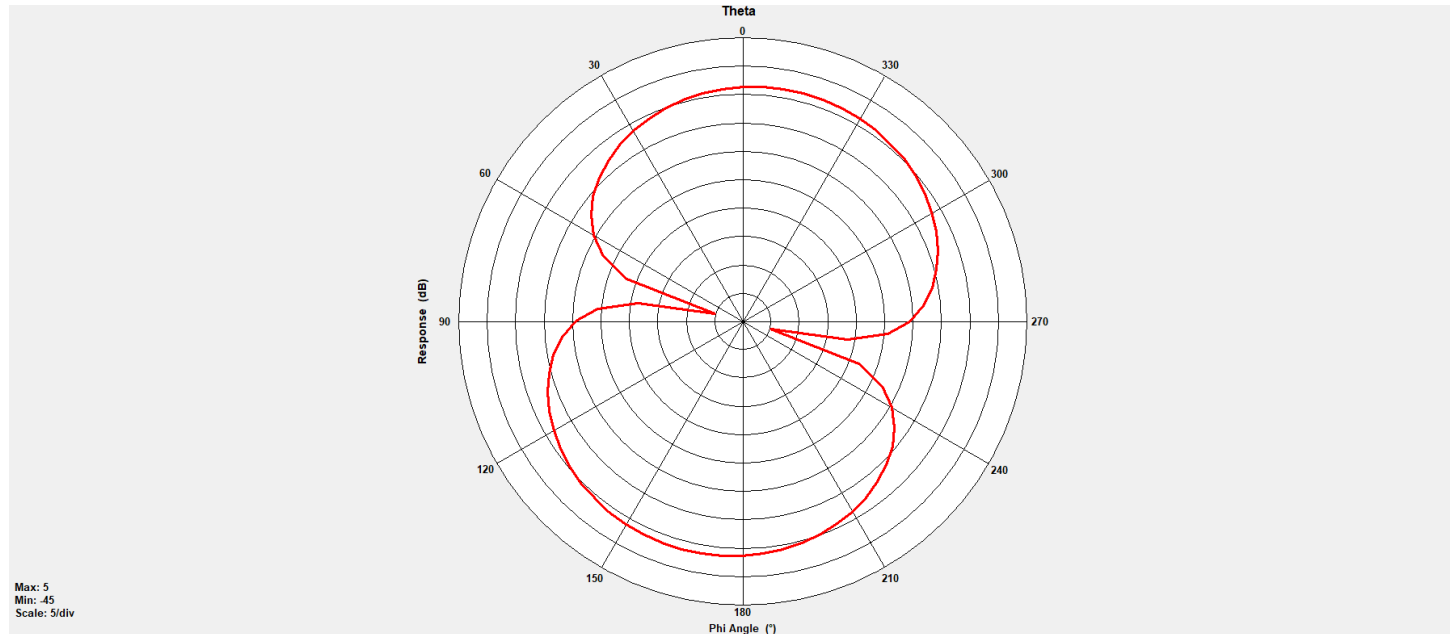
## A04394 Antenna Gain Information

### Equipment Description:

This report contains the antenna gain information for the Wi-Fi /ANT/BLE antenna for Garmin Model A04394. The maximum gain within each of the frequency bands is reported below.

### Reported Data:

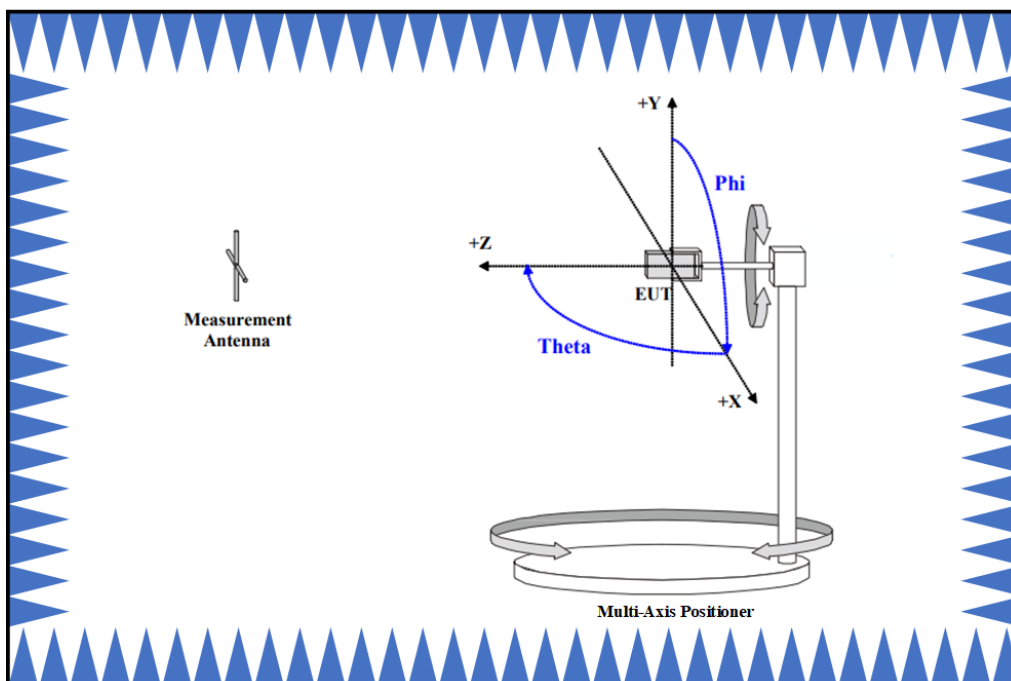
Maximum Gain for Wi-Fi /ANT/BLE antenna: 2.2 dBi



### Procedure:

Garmin uses an ETS-Lindgren AMS-8500 3D Fully Anechoic Automated Antenna Measurement System. The measurement chamber is fully anechoic and contains both the Equipment Under Test (EUT) and the measurement antenna. The EUT is mounted on a Multi-Axis Positioner, which can orient the antenna in all orientations relative to the measurement antenna. The measurement antenna is dual-polarized and measures both horizontal and vertical polarization simultaneously. The other equipment includes a Vector Signal Generator, a multi-channel Vector Network Analyzer, and a control PC. Data is taken and analyzed using EMQuest Data Acquisition and Analysis Software. The output includes the maximum 3D antenna gain within the frequency band.

### Setup:



**Equipment List:**

|  |
|--|
| 3D Chamber PC interfaced to Test Equipment                   |
| EMQuest Software w/ Required Drivers for Equipment Installed |
| AMS-8500 Anechoic Wireless Test Chamber                      |
| Dual Polarization Measurement Antenna (ETS 3164)             |
| Multi-Axis Positioning System (MAPS)                         |
| Multi-Axis Positioning Controller (ETS EMCO Model 2090)      |
| Network Analyzer (Agilent E5017C)                            |
| Automated RF Switch Controller (Agilent)                     |

**Additional Information:**

- Photos of the antennas and location are provided in the separate Internal Photos exhibit.
- The Confidential Operating Description includes dimensions for each antenna.

**Signature:**



Doug Burroughs  
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Garmin International, Inc. Date:  
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