



FX4200 Wi-Fi Antenna Specifications

1. Antenna Part Number:

- Manufacturer: Inseego Corp.
- Wi-Fi Ant #0 Part Number: RQ-FX4210-WIFI0-V4
- Wi-Fi Ant #1 Part Number: RQ-FX4210-WIFI1-V4

2. Antenna Construction:

- Material: Printed Circuit FR4 Design consists of Copper and Adhesive
- Type: Planar Dipole Antenna

3. Antenna Passive Gain Table:

Wi-Fi Ant #0	Frequency Range	Gain
DTS	2412MHz to 2462MHz	2.5 dBi
UNI-1	5170MHz to 5250MHz	4.8 dBi
UNI-2A	5250MHz to 5330MHz	4.8 dBi
UNI-2C	5490MHz to 5730MHz	5.5 dBi
UNI-3	5735MHz to 5835MHz	5.1 dBi
Wi-Fi Ant #1	Frequency Range	Gain
DTS	2412MHz to 2462MHz	3.5 dBi
UNI-1	5170MHz to 5250MHz	5.8 dBi
UNI-2A	5250MHz to 5330MHz	5.5 dBi
UNI-2C	5490MHz to 5730MHz	5.4 dBi
UNI-3	5735MHz to 5835MHz	4.4 dBi

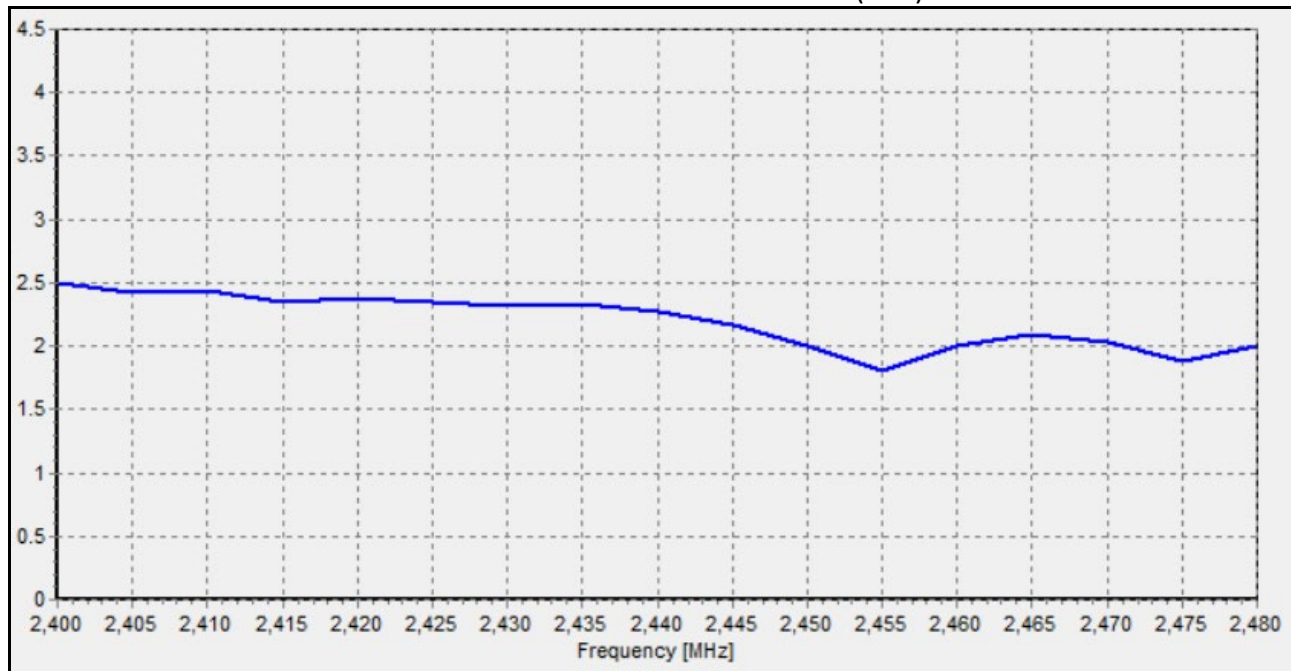
4. Antenna Passive Gain (dBi) Charts:

- Antenna Engineer: Younghwan Park
- Passive Measurement Date: 07-24-2025
- Measurement Test Site: Inseego Engineering Lab
6370 Nancy Ridge Drive, Suite 101
San Diego CA 9212, United States

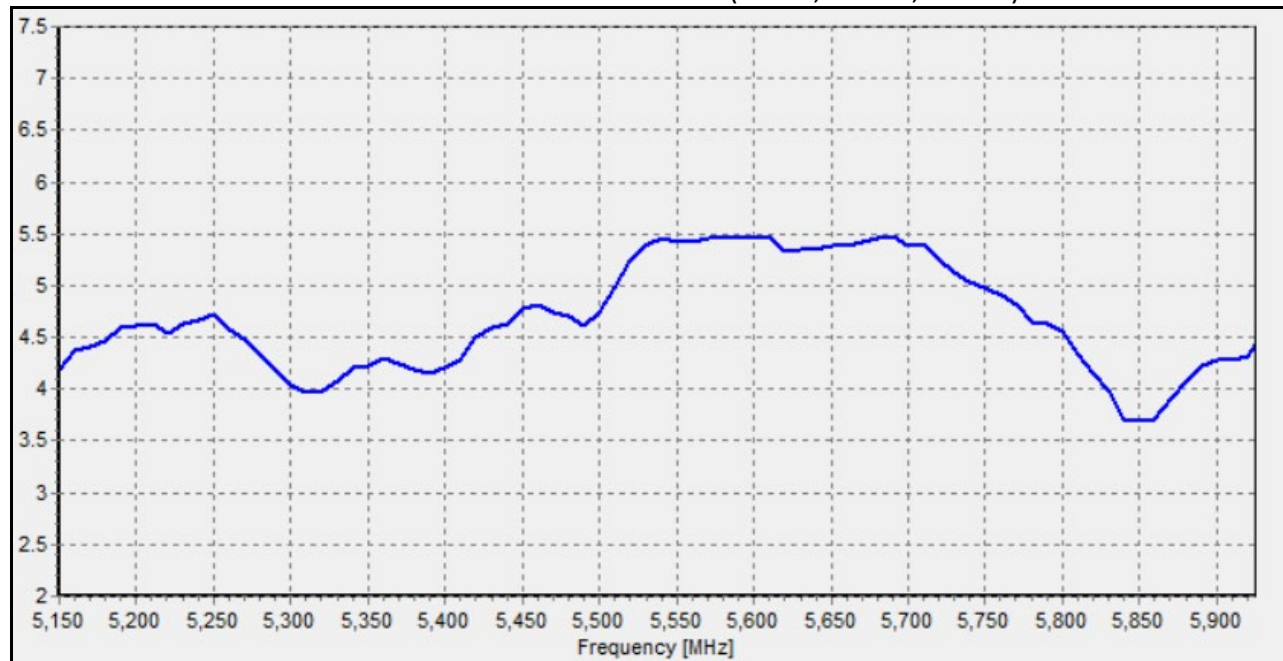
Inseego Corp.

9710 Scranton Road Suite 200, San Diego CA 92121, USA
Toll Free: 888.888.9231 • Main 858.812.3400
www.inseego.com

Maximum Gain Wi-Fi-Ant 0 –2.4GHz (DTS)



Maximum Gain Wi-Fi-Ant 0 –5GHz (UNI-1, UNII-2, UNII-3)



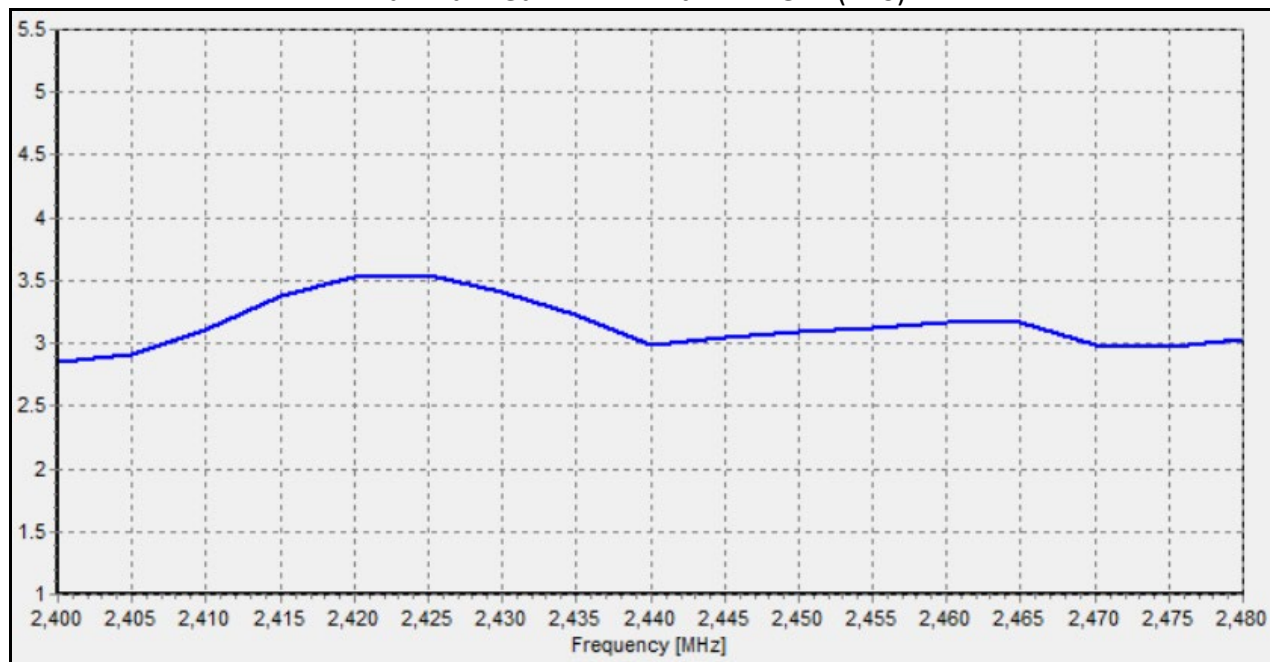
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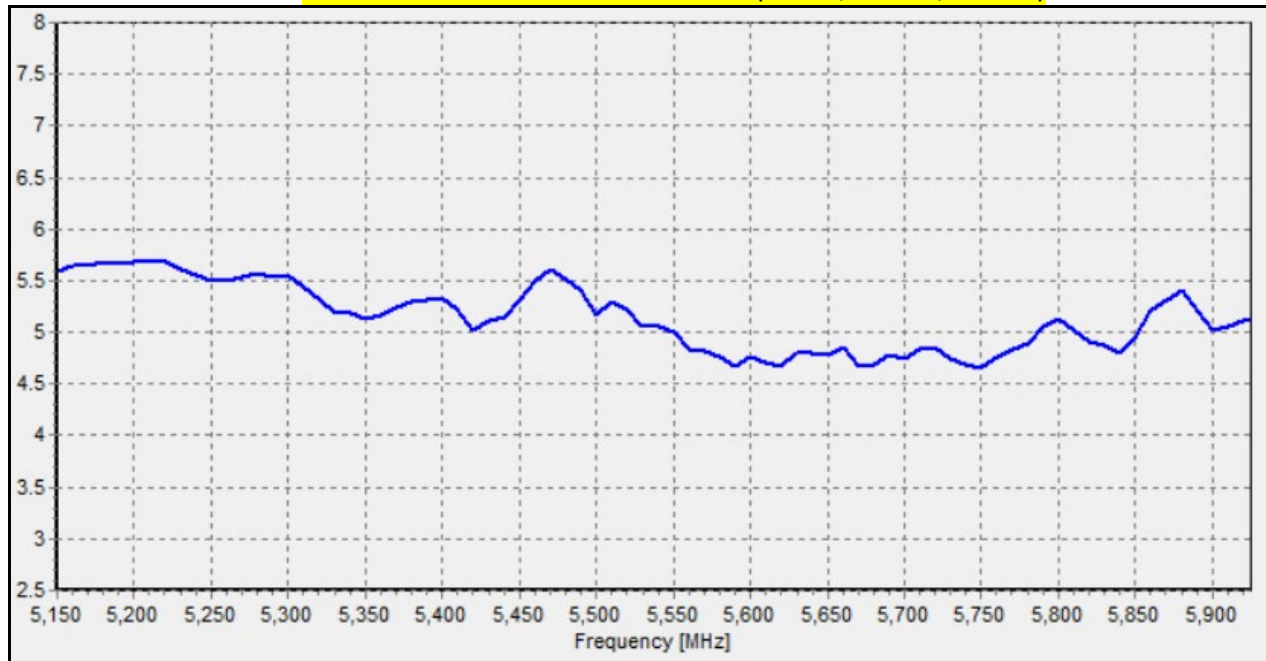
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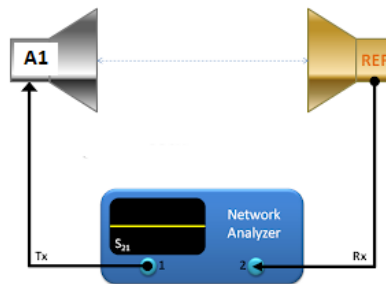
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Gain Measurement Method Explained:

- a) **Calibration:** Use Two Antennas (one has to have a known gain [In this case Ref]) to measure and record the S parameter S₂₁ which is the input/output relationship between the ports on the Network analyzer
 - a. Normalize the calibration to produce 0 DB reference on the network Analyzer.
 - b. All cable loss factors are accounted for in the system.

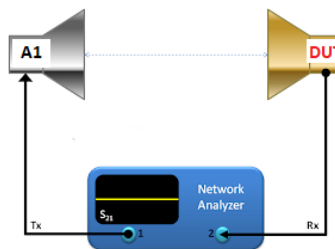
Notes: A1 represents Arch antennas in system

The software instructs the VNA to produce a sweep signal over the frequency range specified. The it will generate the signal is a swept CW between the start and end frequency and pausing at predetermined points long enough to collect measurement.



Calibration diagram

- b) **DUT Measurements:** Replace reference Antenna with DUT Antenna (maintaining the same conditions) distance etc.



DUT Measurement diagram

- c) Remeasure S₂₁ response which now represents the gain relative to reference antenna. Collect G(Rel).
- d) Calculate $G(Dut)=G(ref)+ G(rel)$

Note: The chamber measurement system is automated. The measurement is taken at multiple locations points by rotating the DUT and the Arch.

7. Passive Measurement Equipment Calibration:

- 0.6-6GHz Passive System Calibration performed by Inseego with MVG SH600 Dual-Ridge Horn (0.6-6.0Ghz).
 - OTA Engineer: Albert Yazakel
 - Data: 07/23/2025
- MVG StarLab Multi-Probe Compact Passive Antenna Measurement Chamber Calibration Certificate: (5yr Cycle)

 				
<h3>Calibration Certificate</h3>				
Manufacturer's Name :	MVG Industries			
Manufacturer's Address :	13, rue du Zéphir Parc d'Activité de l'Océane 91140 Villejust FRANCE			
Declares that product				
Customer name :	INSEEGO			
Product Name:	SL v1			
Serial Number :	C253			
Calibration date	19/02/2022			
Has been calibrated according MVG procedure and \ Or according ISO 9001 requirements.				
19 February, 2022	MVG Quality Manager			
				
<table border="1"> <tr> <td> MICROWAVE VISION www.microwavevision.com </td> <td> Société Anonyme Capital Social: 691 041€ RCS Evry B 340 342 163 Numéro SIREN : 340 342 163 </td> <td> 47, Blvd St Michel 75005 Paris, FRANCE Tel. : + 33 (0)1 75 77 88 60 Fax : +33 (0)1 46 33 39 02 </td> </tr> </table>		MICROWAVE VISION www.microwavevision.com	Société Anonyme Capital Social: 691 041€ RCS Evry B 340 342 163 Numéro SIREN : 340 342 163	47, Blvd St Michel 75005 Paris, FRANCE Tel. : + 33 (0)1 75 77 88 60 Fax : +33 (0)1 46 33 39 02
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- E5071C Network Analyzer Calibration Certificate: (5yr Cycle)

 Certificate of Calibration ISO/IEC 17025:2017 and ANSI/NCSL Z540.1-1994 Certificate Number 1-13571508236-1			 
Model Number Manufacturer Description Serial Number	E5071C Keysight Technologies Inc ENA Series Network analyzer MY46103762	Customer Inseego Corp 9710 Scranton Rd Ste 200 SAN DIEGO CA 92121-1744 United States	
Date of Calibration Procedure Temperature Humidity	17 Dec 2020 STE-50114528-C.06.06 (23 ± 5) °C (50 ± 30) %RH	Location of Calibration Keysight Technologies Inc 10090 Foothills Blvd. Roseville CA 95747-7102 UNITED STATES	
This certifies that the equipment has been calibrated using applicable Keysight Technologies procedures and in compliance with ISO/IEC 17025:2017 and ANSI/NCSL Z540.1-1994 (R2002). The quality management system is registered to ISO 9001:2015.			