

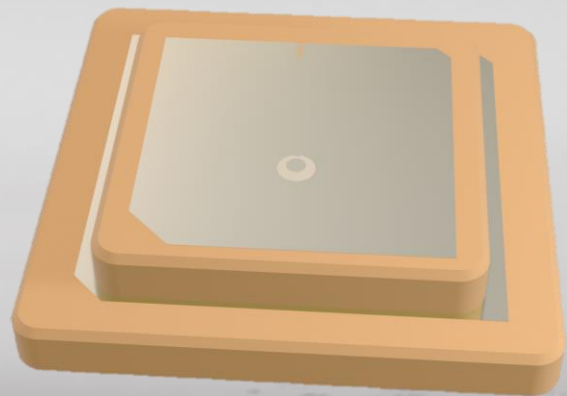
**RF
NEXUS**

Product Datasheet

NEX12-INT-CR-003

Key Features

- **L1 & L5 GPS & GNSS**
- **1170/1180 MHz & 1565/1585 MHz**
- **Through Hole Mount**
- **Ceramic**
- **Dimensions**
35 × 35 x 8 mm



1- Introduction

The NEX12-INT-CR-003 is a multi-band, high-performance directional antenna designed to deliver exceptional GPS and GNSS accuracy with rapid positioning capabilities. Engineered to support multiple satellite systems, this antenna is ideal for applications requiring high precision and reliability. It incorporates a 35x35x8mm advanced wide-band, dual-stacked ceramic patch design, ensuring superior performance across a range of frequencies, including GPS L1/L5, Galileo, and GLONASS bands.

The NEX12-INT-CR-003 is optimized for enhanced gain, making it particularly well-suited for applications that demand accurate satellite tracking and fast signal acquisition. This design helps ensure consistent performance even in environments with complex signal conditions, providing reliable, precise location data. Whether used in navigation systems, telematics, or other high-precision positioning solutions, the NEX12-INT-CR-003 offers dependable, top-tier performance, making it a valuable choice for demanding GNSS applications.

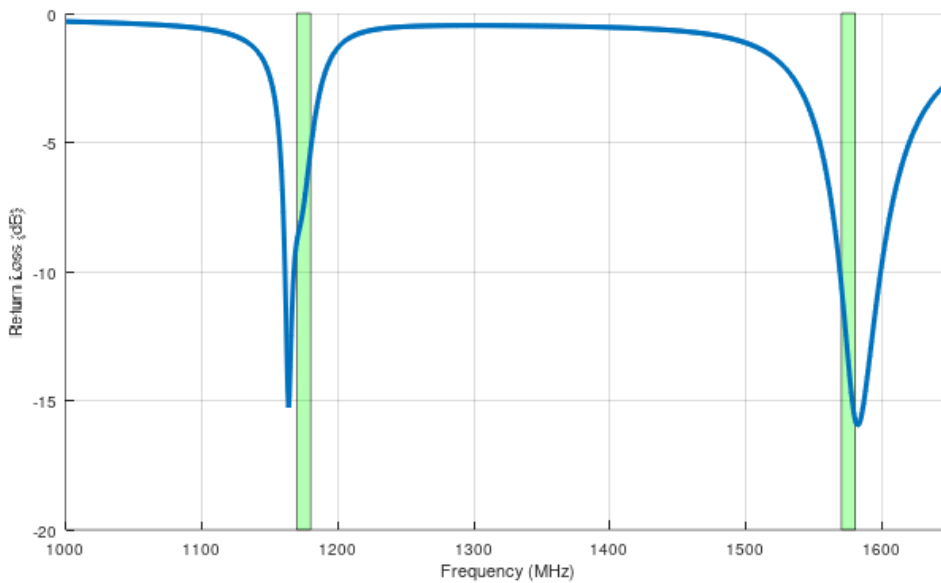
2- Specifications

Mechanical		
Height	35x35mm	
Thickness	8 mm	
Adhesive	3M	
Weight	9g	
Temperature Range	-40°C to 85°C	
Electrical		
Frequency (MHz)	1165/1185	1565/1585
Return Loss (dB)	-5	-8
VSWR	3.5:1	2.3:1
Efficiency	50%	80%
RHCP Peak Gain (dBi)	-1	3
Impedance	50Ω	
Polarization	Linear	
Pattern	Omni Directional	

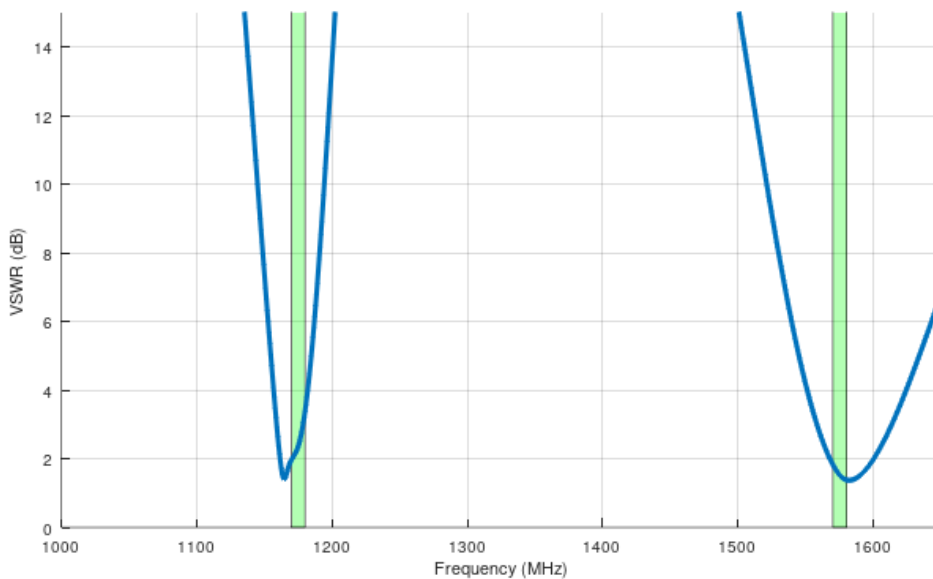
*Data are given for antenna on 70x70 mm metal ground plane.

3- Antenna Parameters

3.1- Return Loss

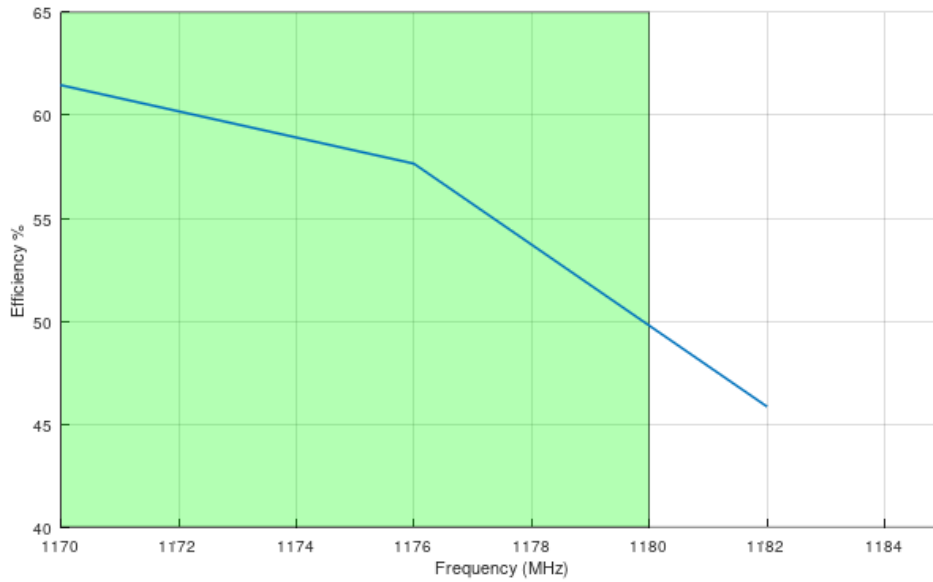


3.2- VSWR

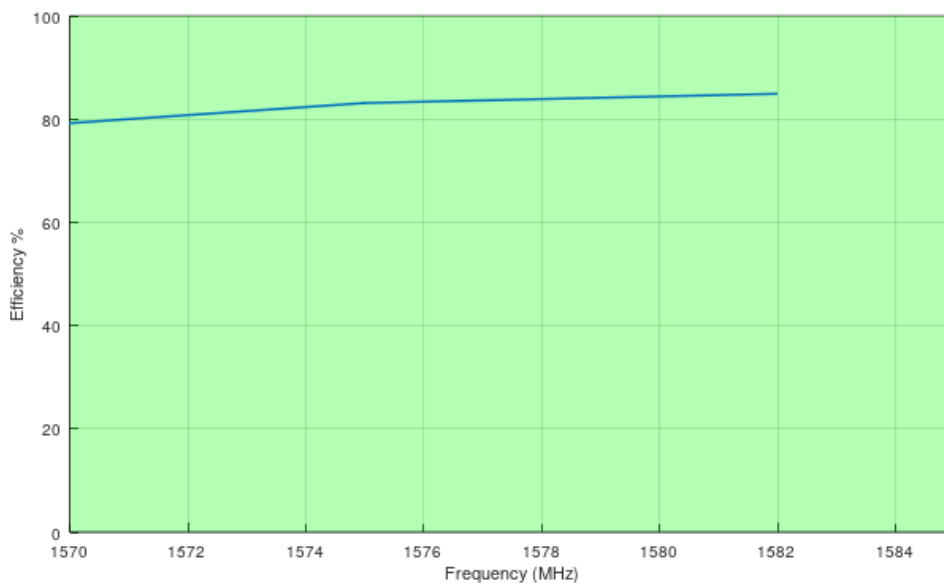


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3.3- Efficiency L5



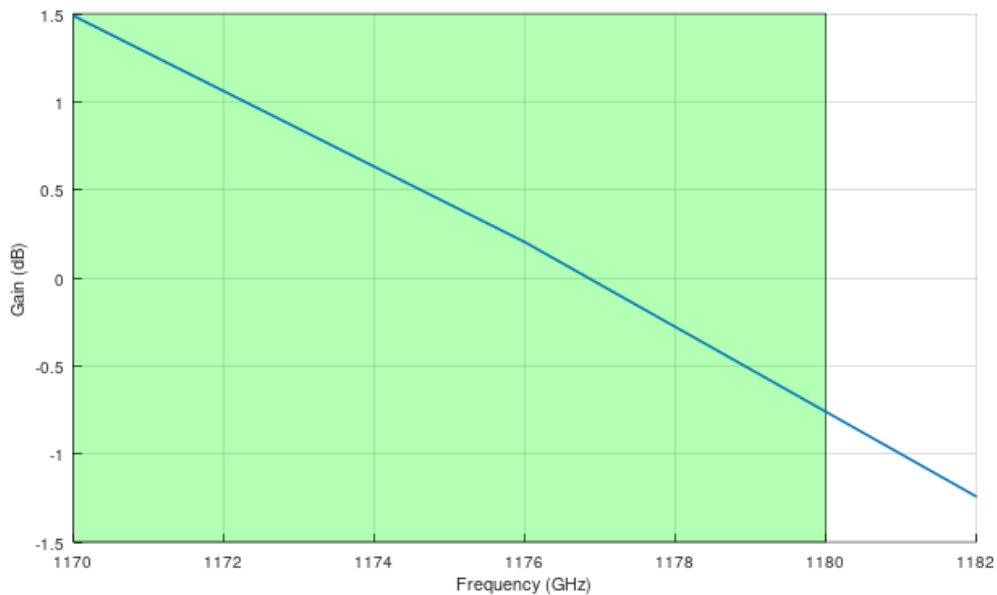
3.4- Efficiency L1



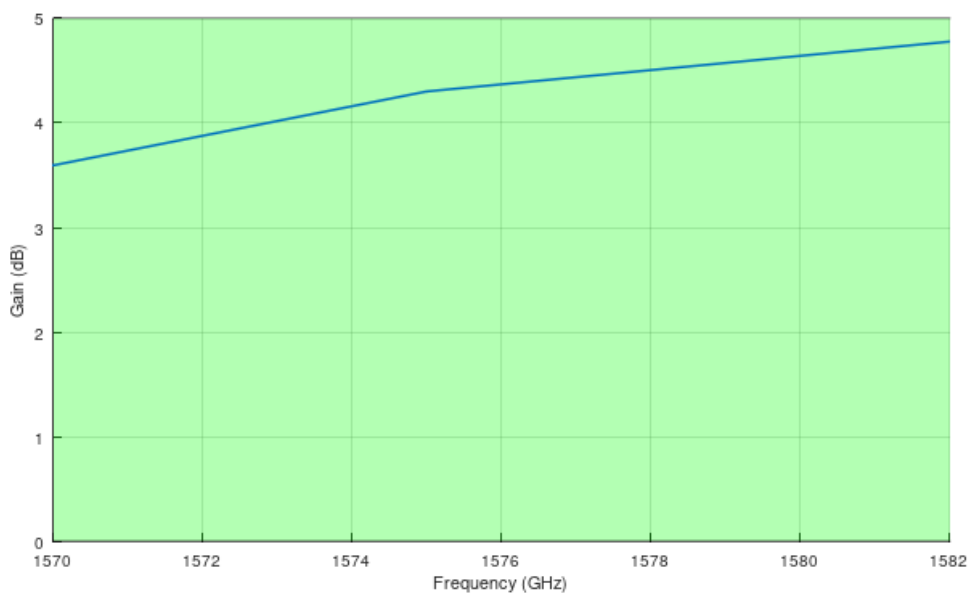
*Data are given for antenna on 70x70 mm metal ground plane.

4- Radiator Patterns

4.1- Peak Gain L5

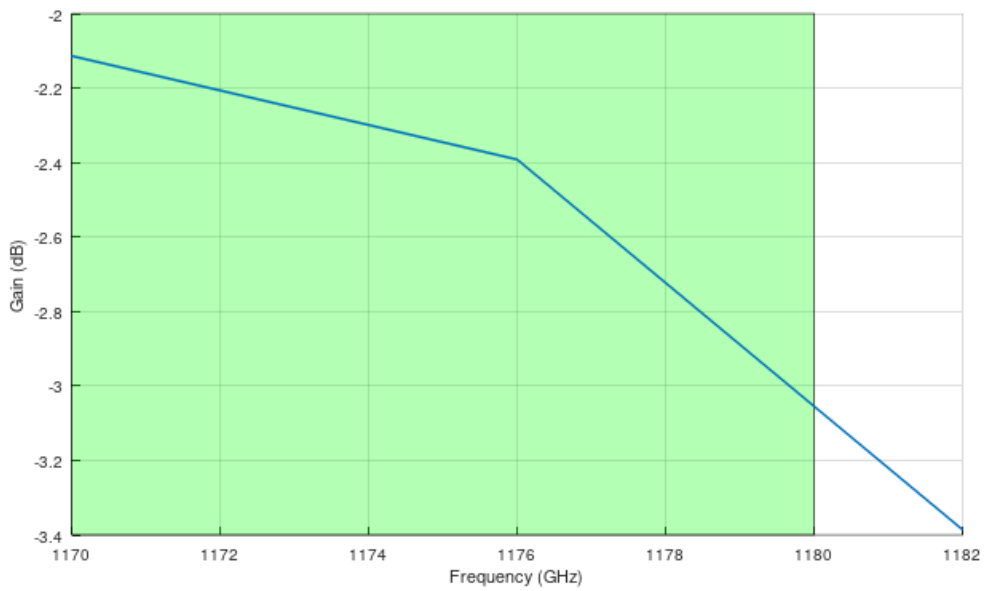


4.2- Peak Gain L1

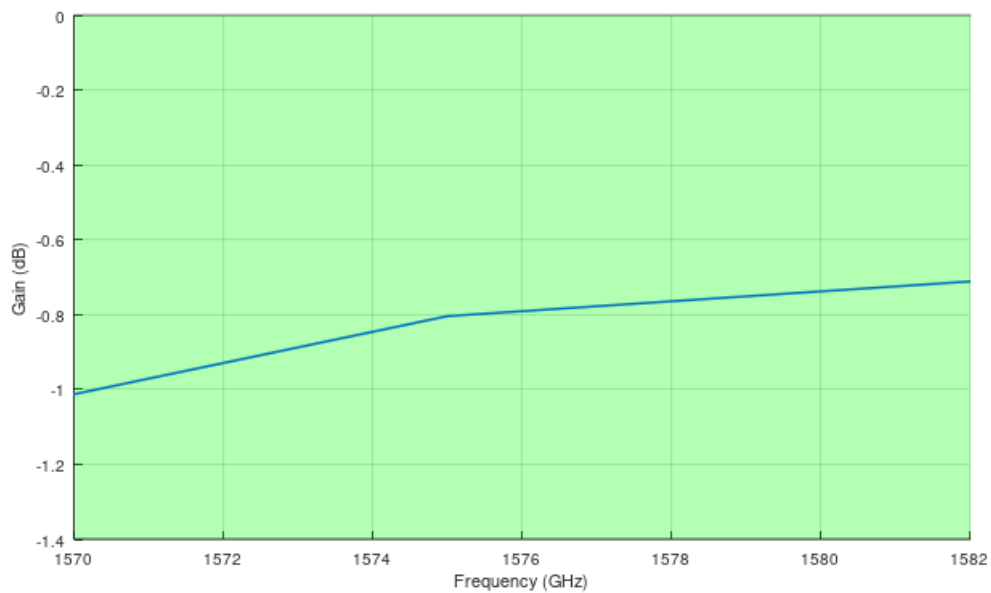


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4.3- Average Gain L5

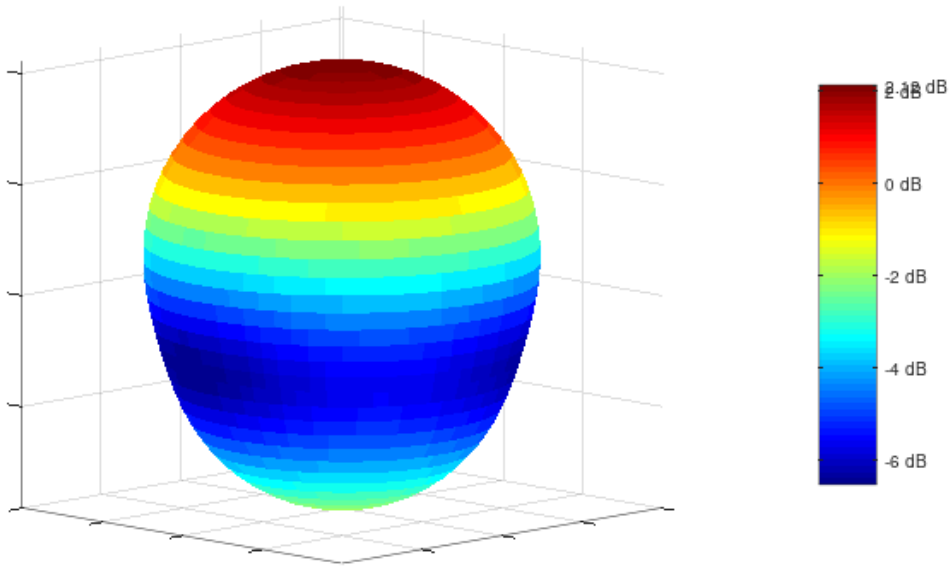


4.4- Average Gain

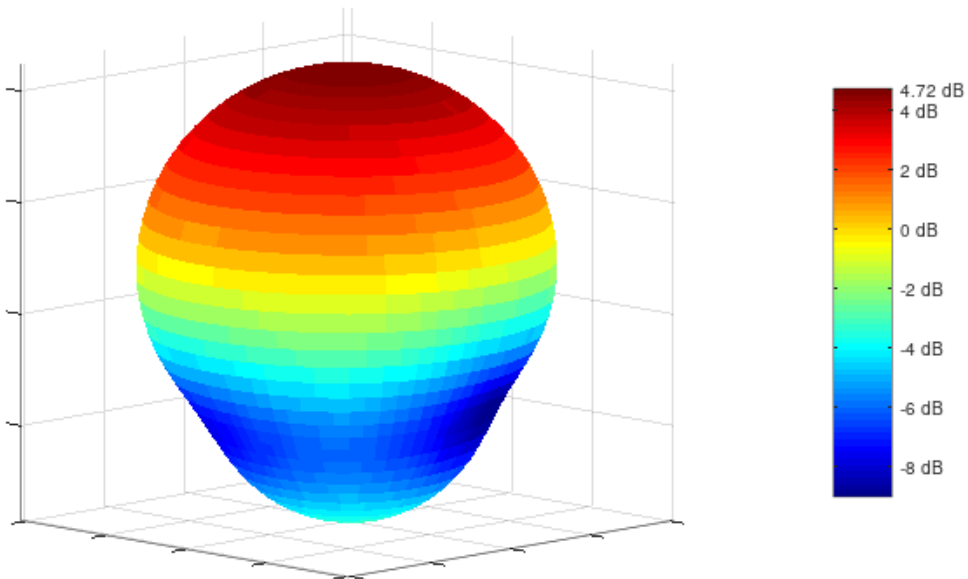


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4.5- 1176 MHz Pattern

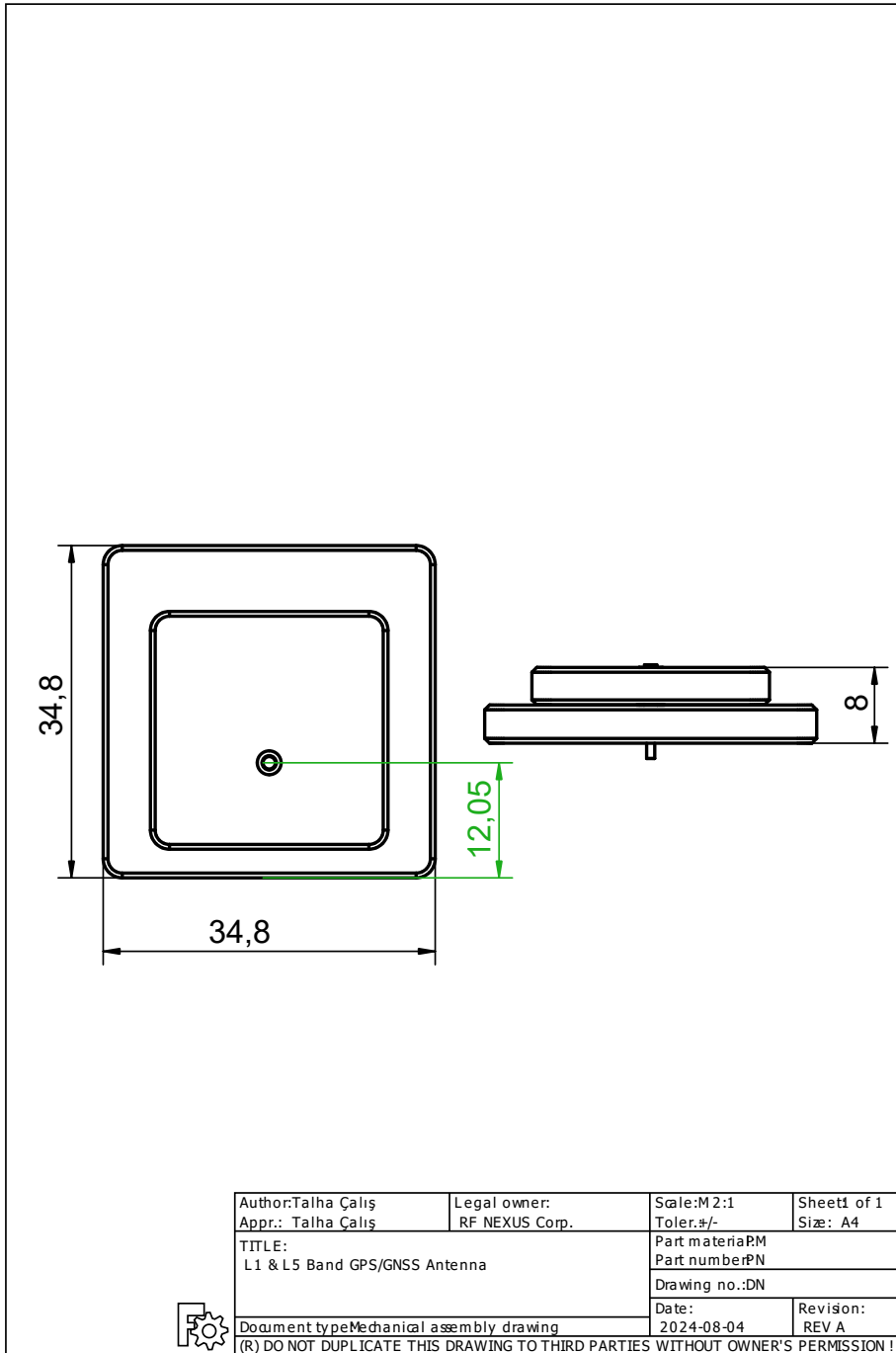


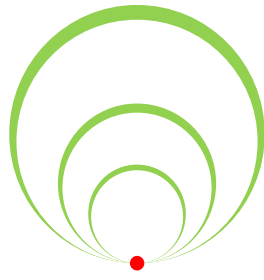
4.6- 1176 MHz Pattern



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5- Technical Drawing





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