



S-0071

Printed Dual Band Antenna 1 Spec

Revision History

Version	Date	Name	Description
0.1	1 Sept 2020	cweagle	Preliminary draft
A01	3 Sept 2020	cweagle	Initial Release

General Applicability	2
Description	3
Front & rear views	4
Return loss (typ.)	4
Antenna radiation patterns	5



General Applicability

Assemblies and components used in the fabrication of robots are high precision components that require special handling to mitigate the risk of damage from ESD, physical, or other types of damage. Following these guidelines will ensure that you, as a supplier, successfully provide quality goods to Boston Dynamics.

Deviation from this standard may only be done with prior approval from Boston Dynamics. Suppliers may (and should) request variances from this standard from Boston Dynamics when fulfilling these requirements is expected to incur significant cost or they have better methods than described here for achieving the same ends.

Description

Part No: 04-00158412-001

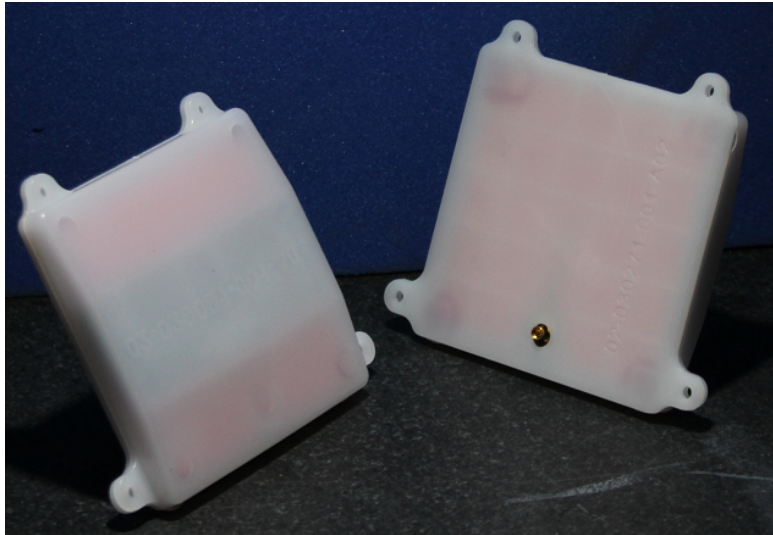
Product Name: Dual Band Printed Antenna Assembly 1

Description: 2.4/5Ghz ISM band integrated antenna/radome package

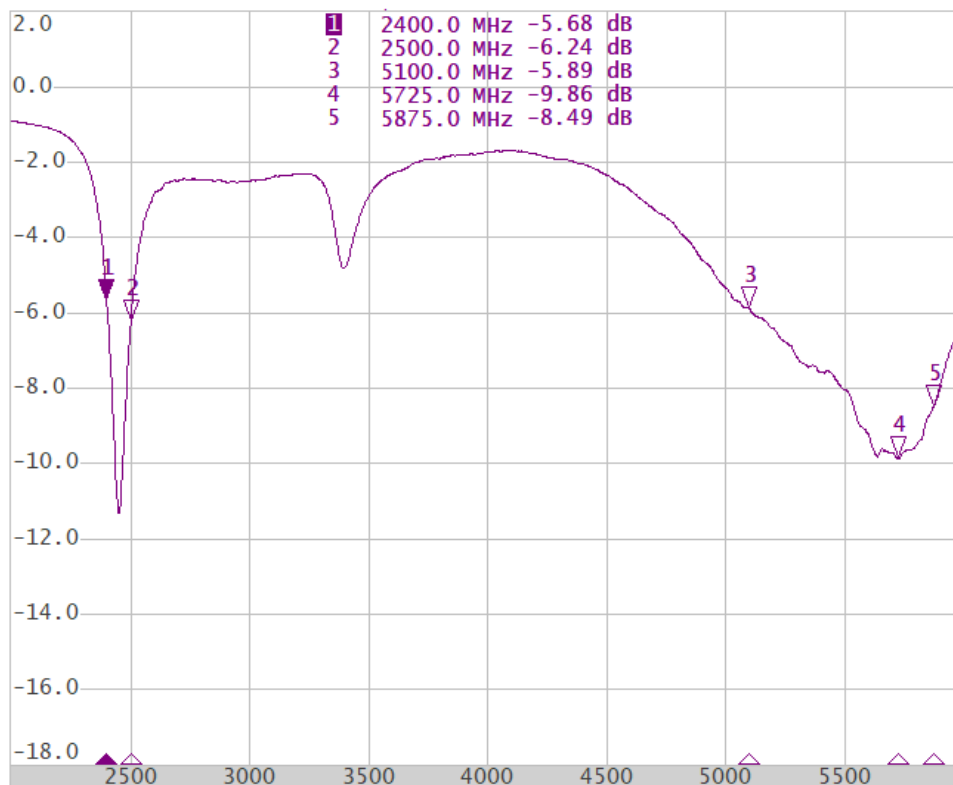
Features:

Electrical	
Frequency range	2400 - 2500 MHz, 5150 - 5850 MHz
Return loss (in band)	Min -11dB, max -5.5dB
Peak gain	7dBi in 2.4Ghz band, 5dBi in 5GHz band
Average gain	4dBi in 2.4GHz and 5GHz bands
Polarization	Dual crossed linear
Connection	MMCX 50 ohm
Mechanical	
Dimensions	90mm * 100mm * 15mm (radome envelope)
Mass	40g (without fasteners)
Radome material	UHMW
Mounting	Four M2.5 screws (or similar)
RoHS	Yes
Environmental	
Operating/storage temp	TBD to +85C
Humidity	TBD
Ingress rating	TBD
Shock/vibe	TBD

Front & rear views



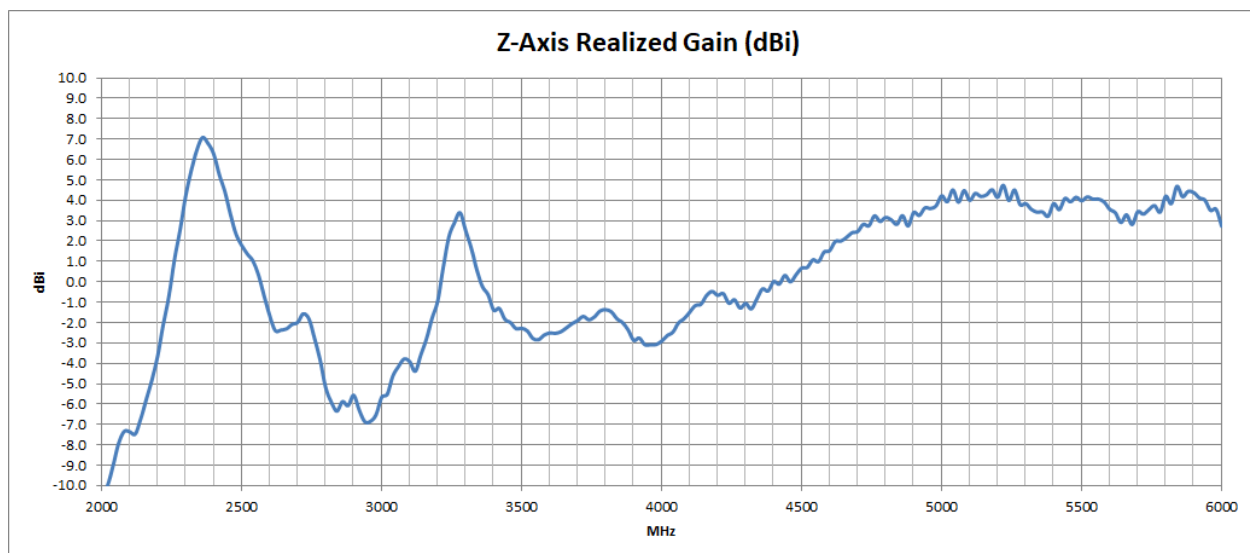
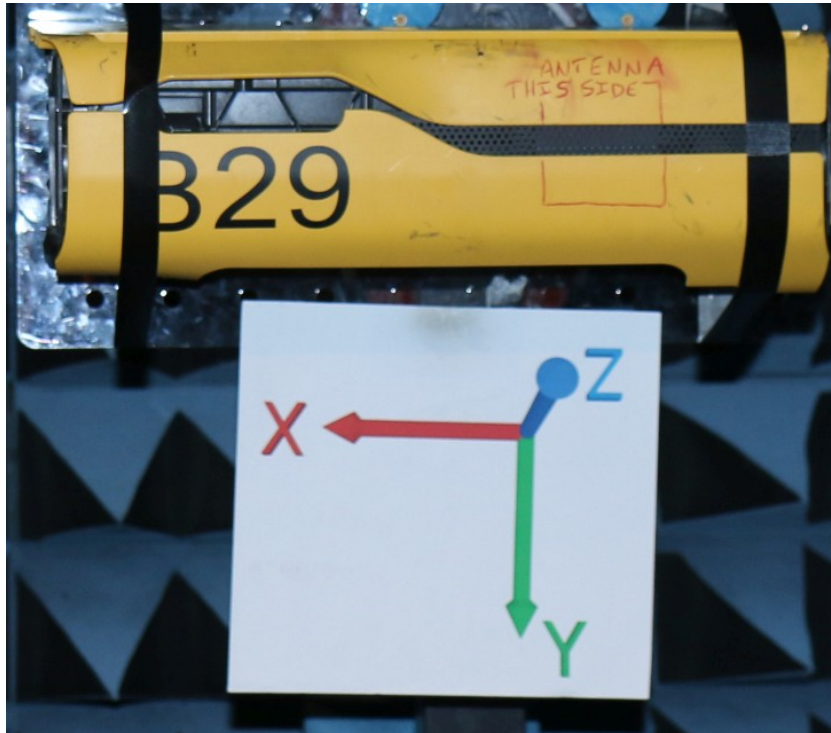
Return loss (typ.)



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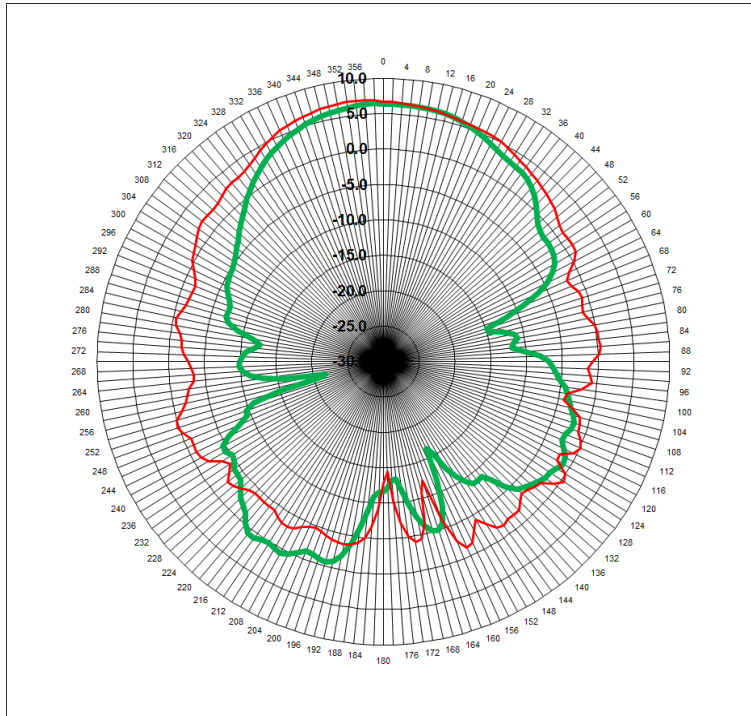
Antenna radiation patterns

Setup:

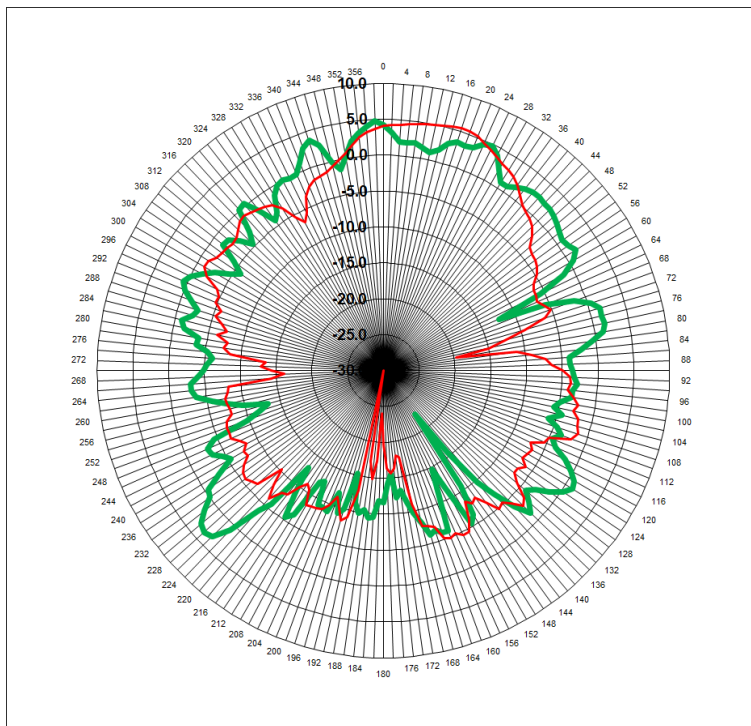


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2400MHz Pattern: Red XY-Plane Green XZ-Plane



5800 MHz Pattern: Red XY-Plane Green XZ-Plane



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