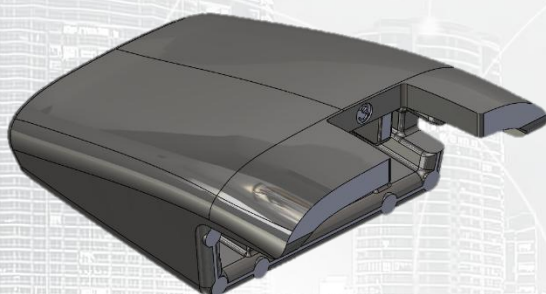




TAOGLAS®



Datasheet

Part No:
LDS.BC.006.A

Description

LDS Antenna for LTE 698-2700MHz and WIFI 2.4GHz.

Features:

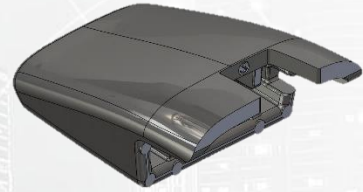
LDS Antenna for Tractive TG7 – Cat Tracker
1* LTE 698-2700MHz and WIFI 2.4GHz
RoHS & Reach Compliant

1.	Introduction	3
2.	Specification	4
3.	Antenna Characteristics	5
4.	Radiation Patterns	9
5.	Mechanical Drawing	19
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1. Introduction



This datasheet shows LDS.BC.006.A antenna performances inside Tractive's TG7 Cat Tracker.
Part number and description: LDS.BC.006.A - LDS Antenna for LTE 698-2700MHz and WIFI 2.4GHz.

2. Specification

Electrical								
Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Max. input power
Bands 2,4,66,1,3 & Wi-Fi	1700-2500	39.1	-4.08	1.47	50 Ω	Linear	Omni directional	2W
Bands 12 & 28	699-800	19.5	-7.09	-1.83				
Bands 20 & 5	790-920	33.5	-4.75	-0.85				
Band 13	720-800	21.4	-6.70	-1.83				
Band 8	880-960	23.9	-6.21	-1.75				
Bands 7 & 38	2500-2700	13.9	-8.57	-3.13				

Mechanical	
Dimensions	See ME Drawing (Section 5)
Material	See ME Drawing (Section 5)
Weight	0.9g

Environmental	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C
Relative Humidity	Non-condensing 65°C 95% RH

Note: the results above were obtained in Free space

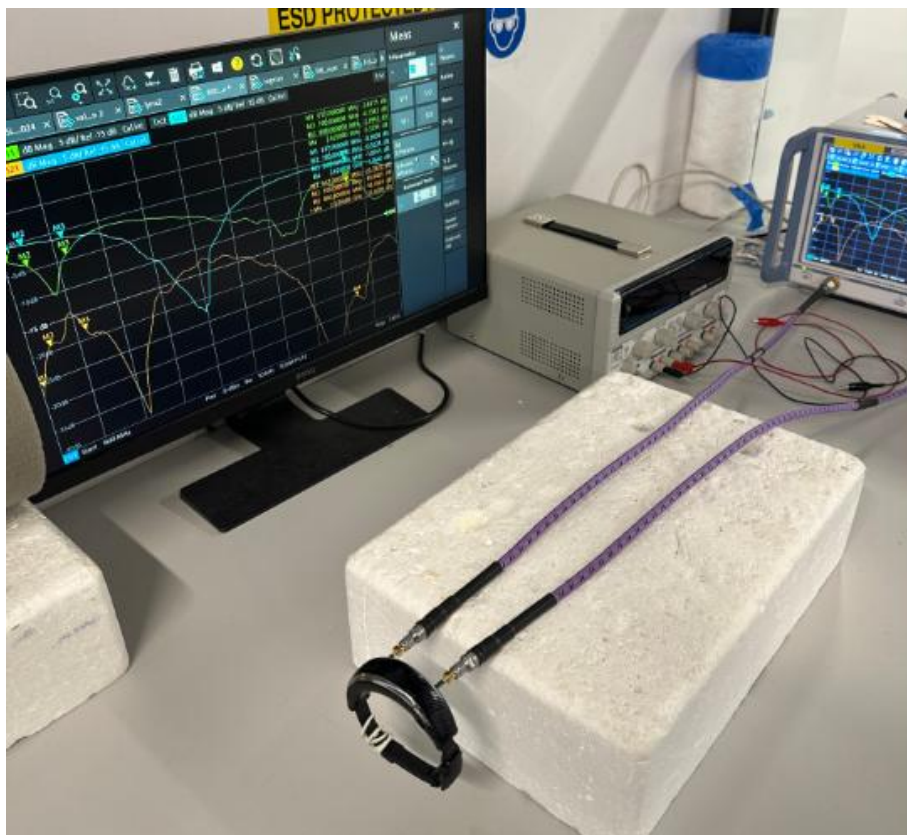
3. Antenna Characteristics

3.1 Test Setup

AUT

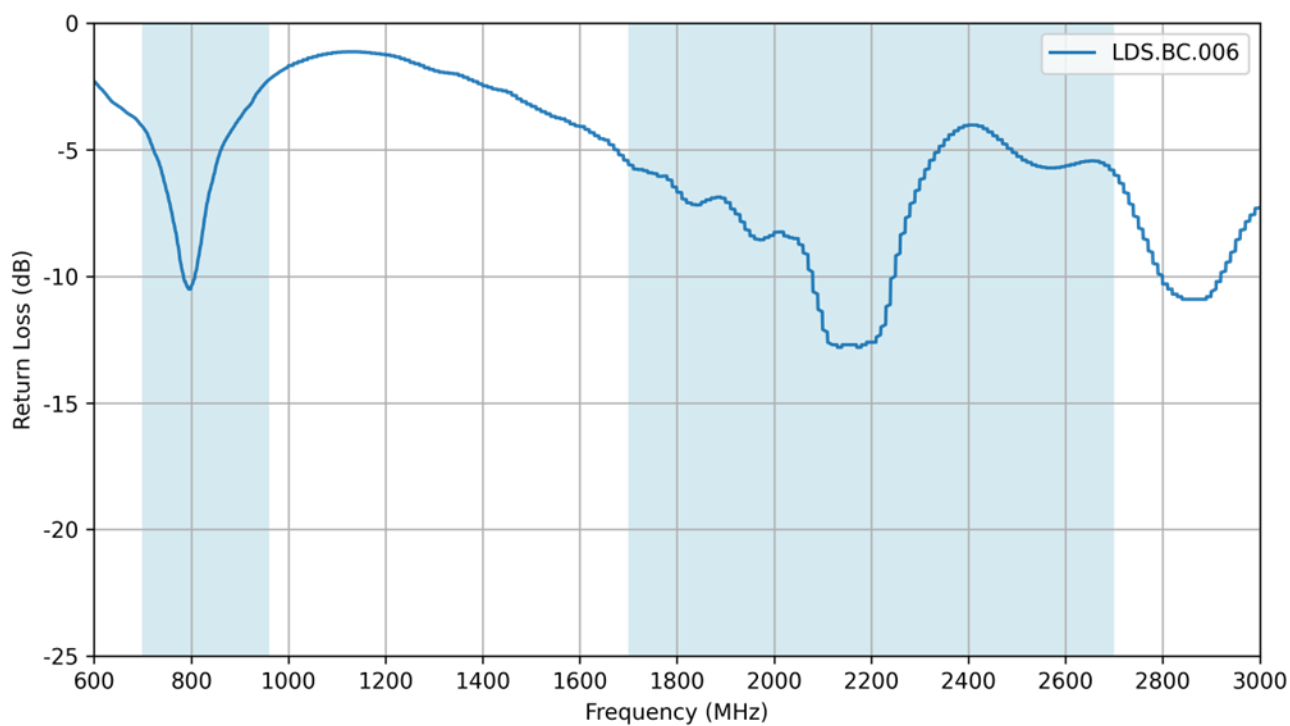


Vector Network Analyzer

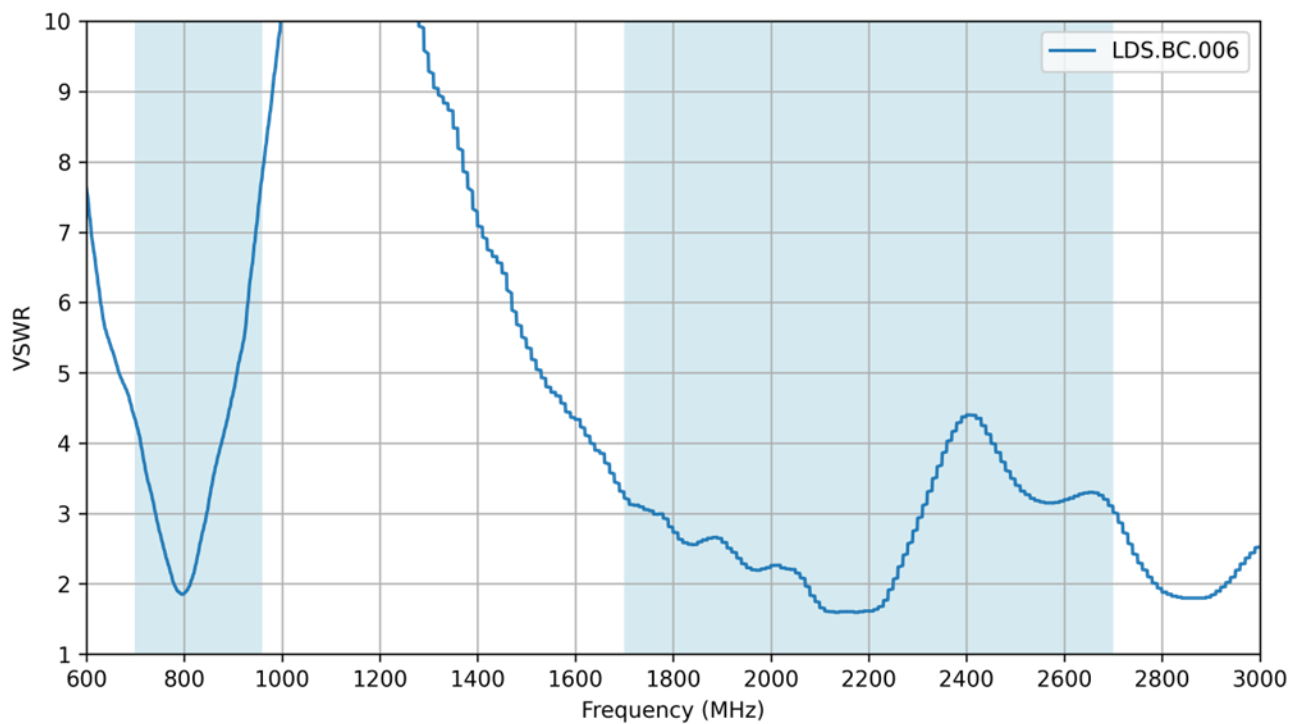


VNA Test Setup.

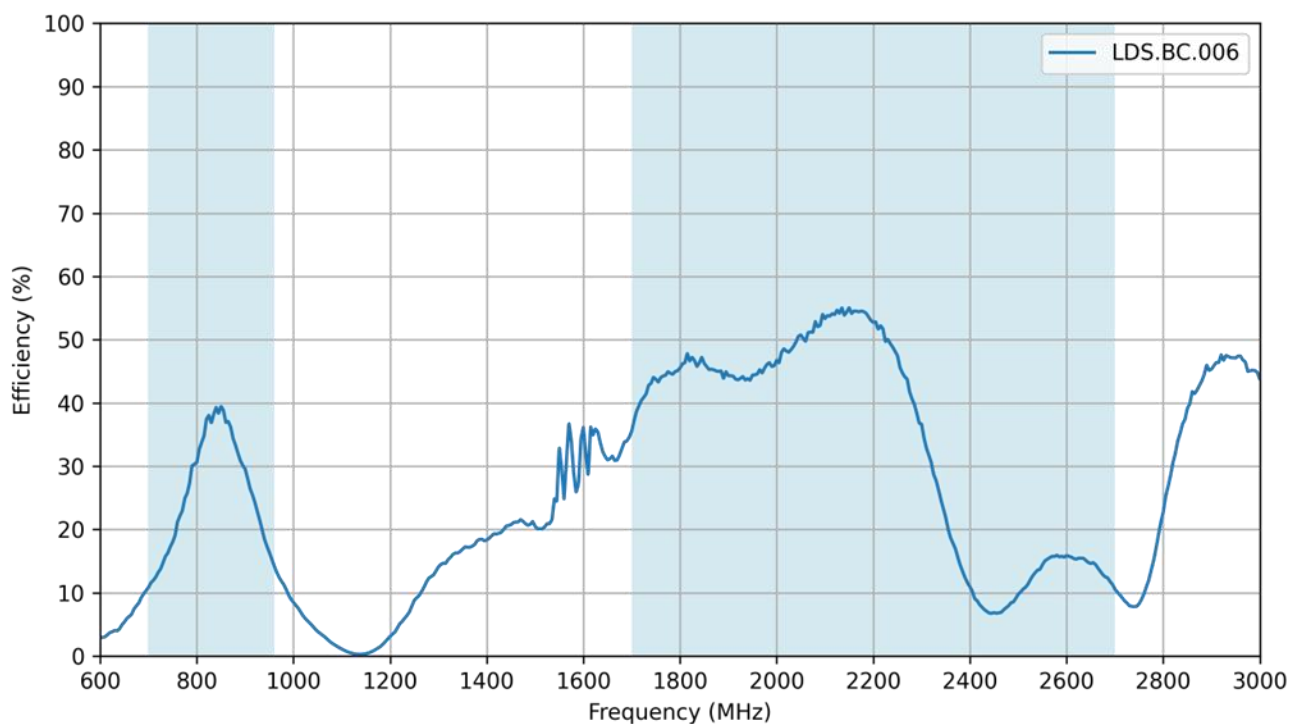
3.2 Return Loss



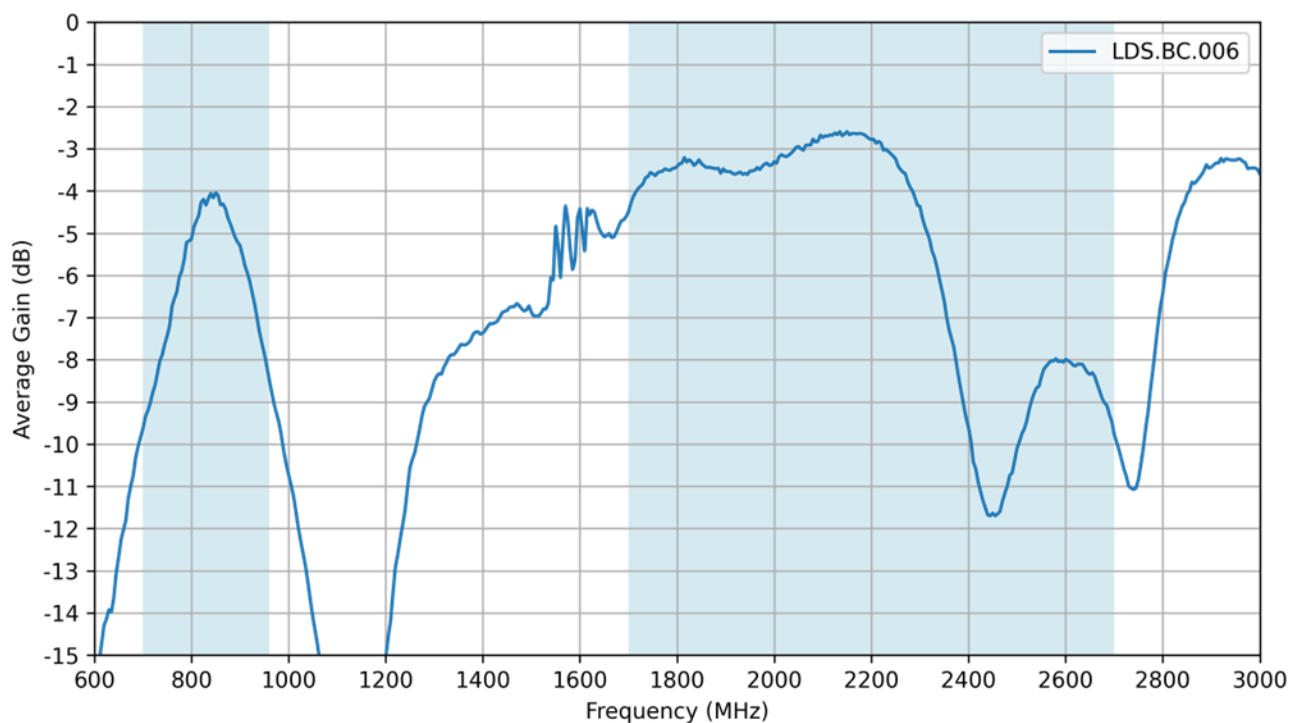
3.3 VSWR



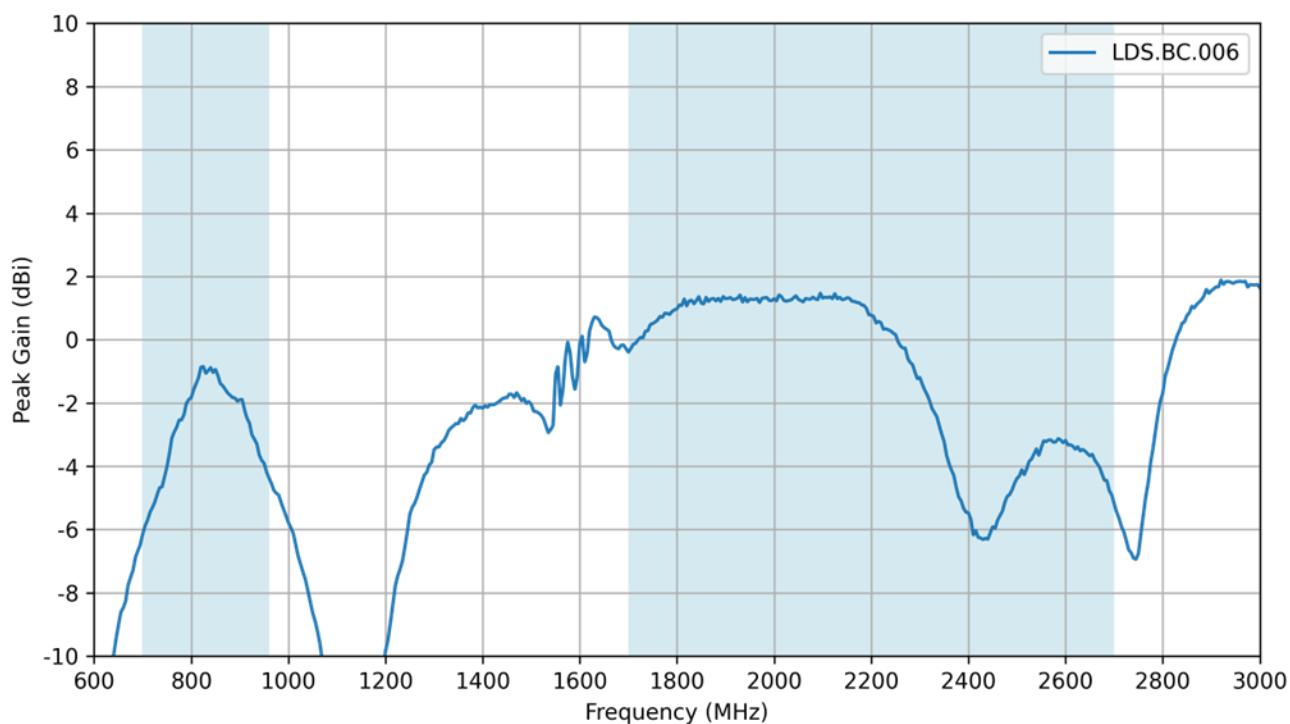
3.4 Efficiency



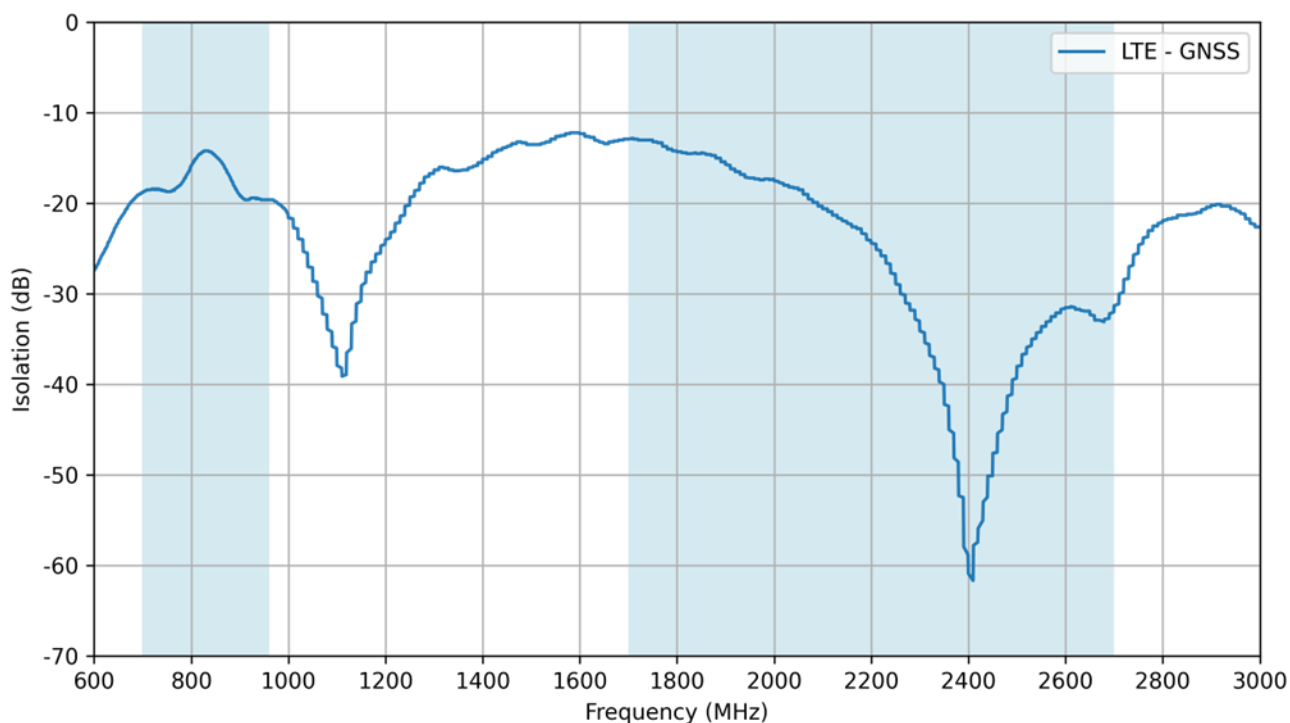
3.5 Average Gain



3.6 Peak Gain

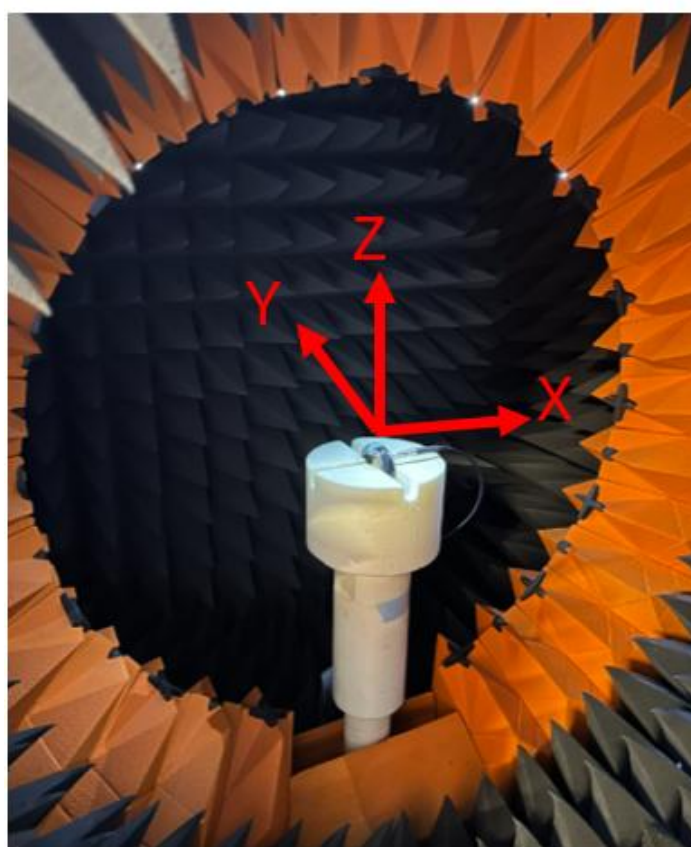
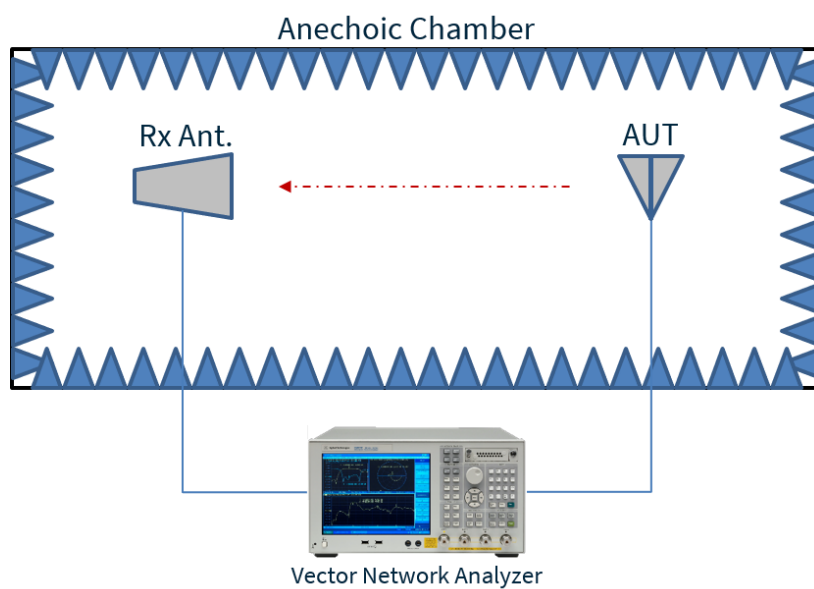


3.7 GNSS-LTE – Isolation



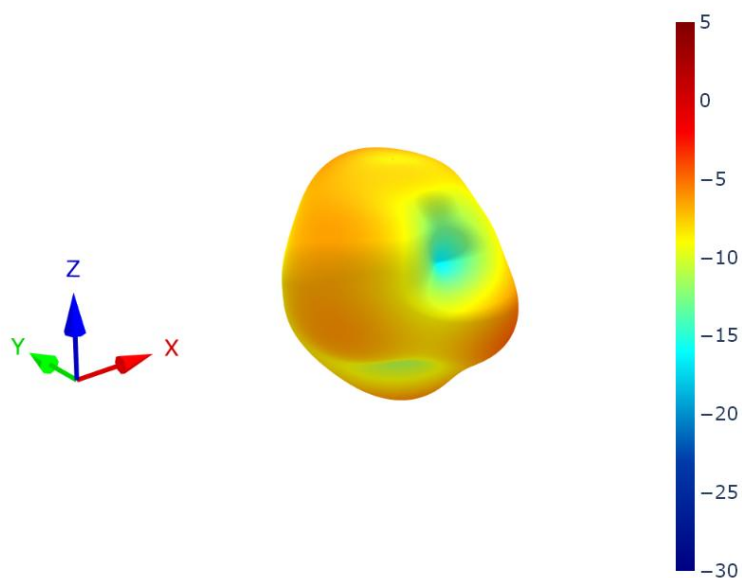
4. Radiation Patterns

4.1 Test Setup

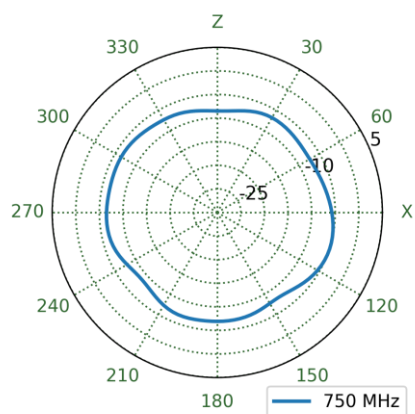


Chamber Test Setup.

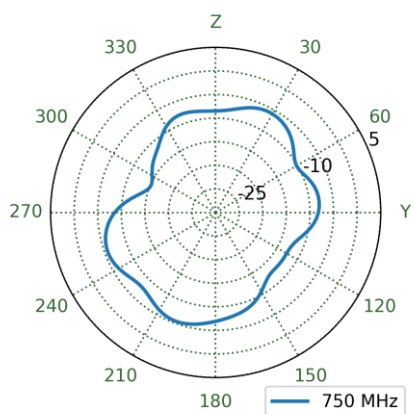
4.2 Patterns at 750 MHz



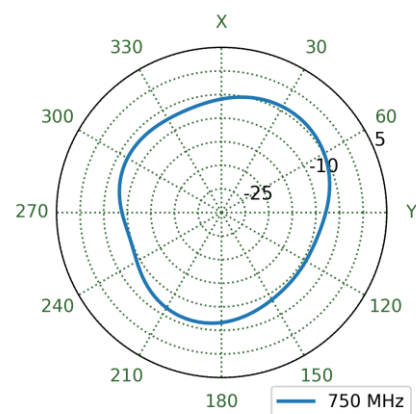
XZ Plane



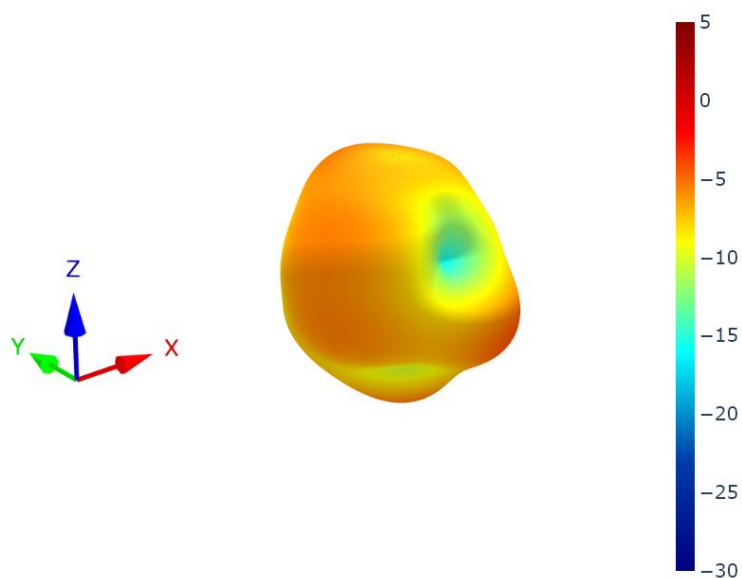
YZ Plane



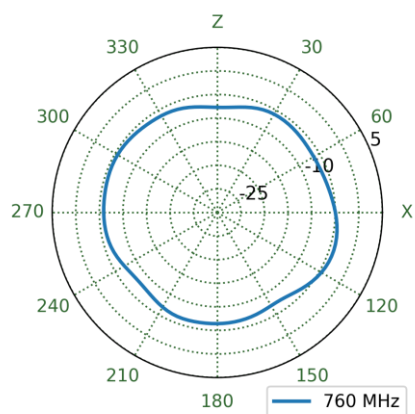
XY Plane



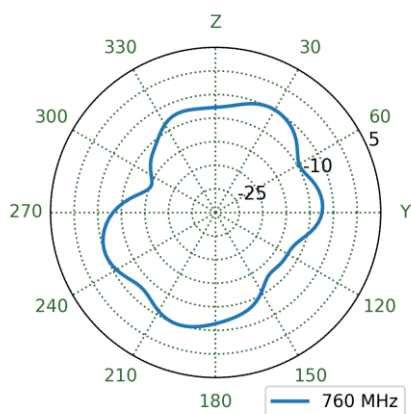
4.3 Patterns at 760 MHz



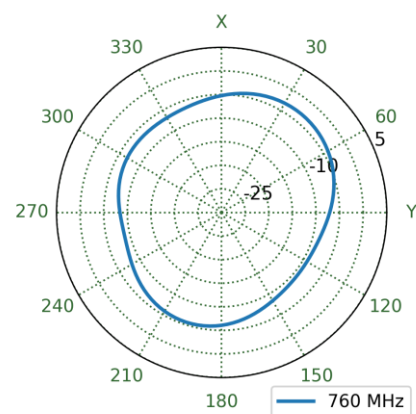
XZ Plane



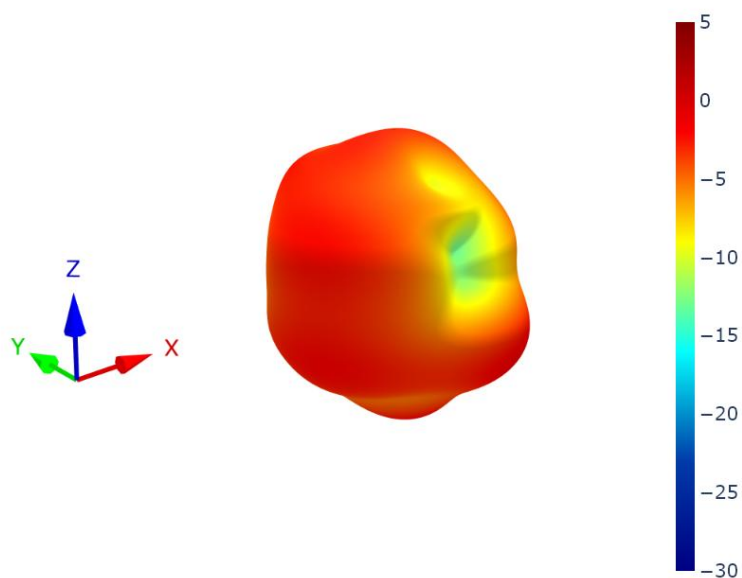
YZ Plane



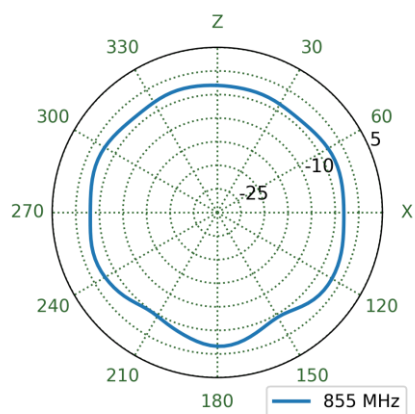
XY Plane



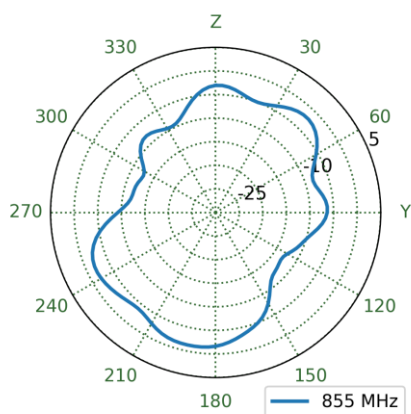
4.4 Patterns at 855 MHz



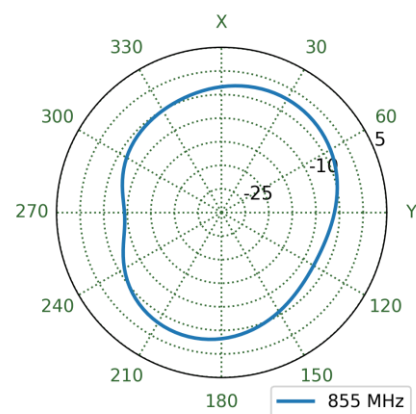
XZ Plane



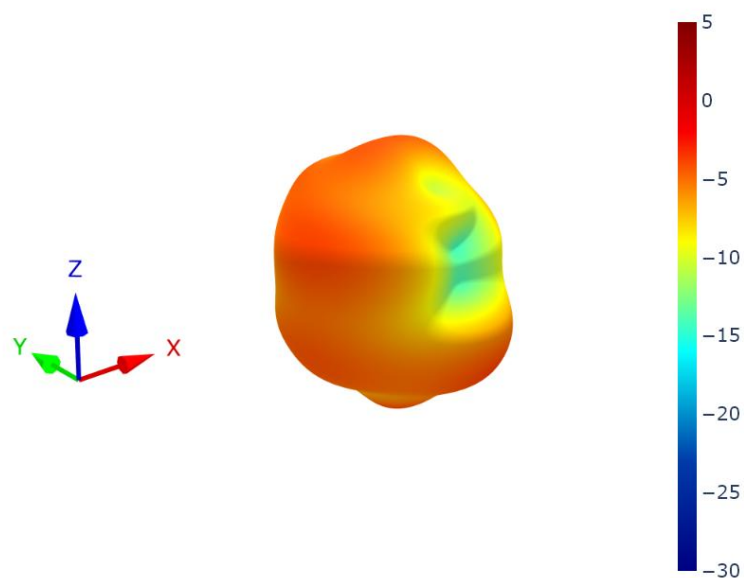
YZ Plane



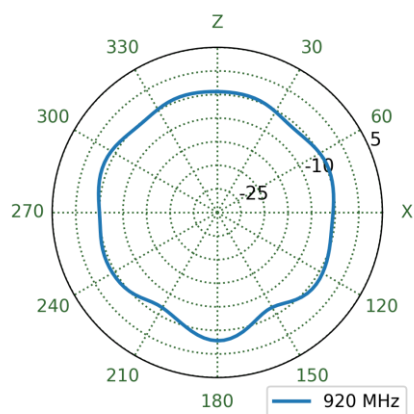
XY Plane



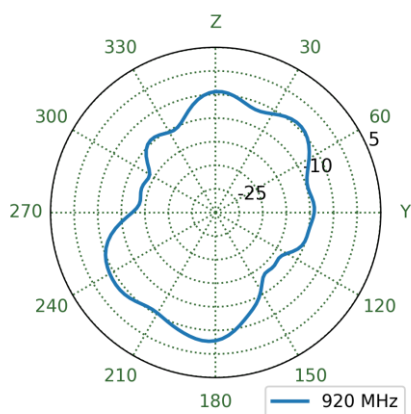
4.5 Patterns at 920 MHz



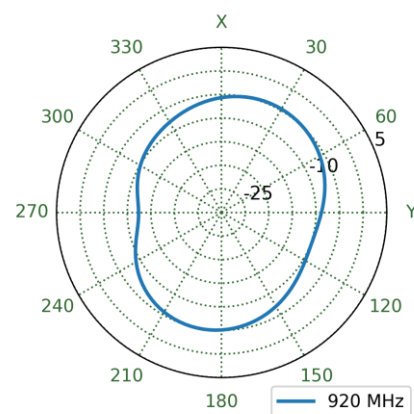
XZ Plane



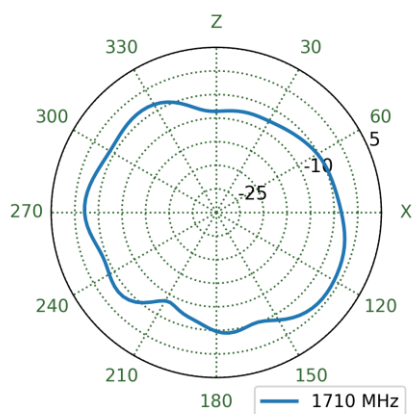
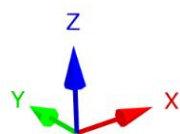
YZ Plane



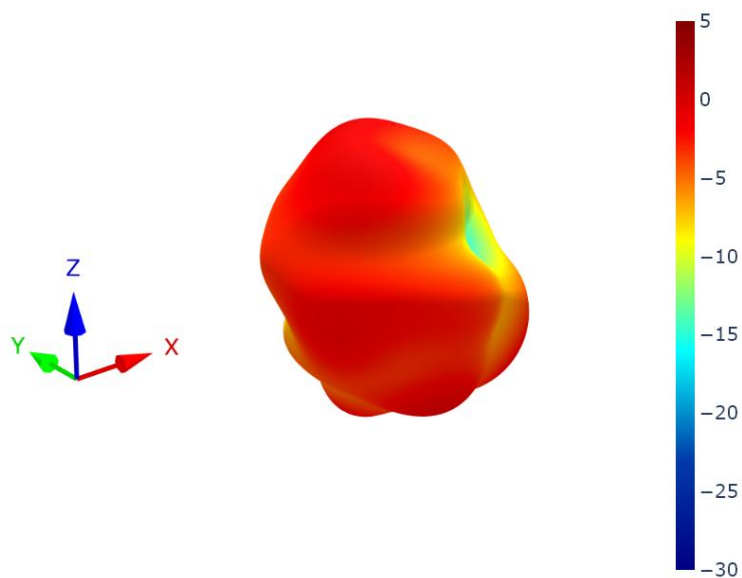
XY Plane



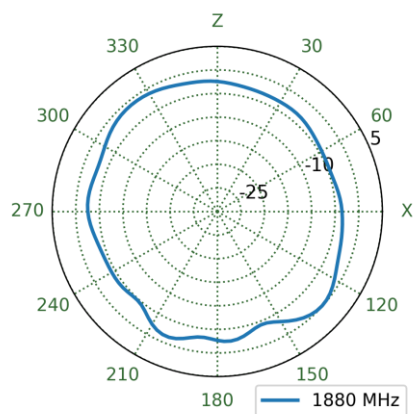
4.6



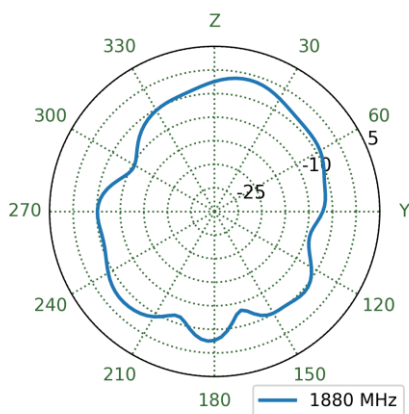
4.7 Patterns at 1880 MHz



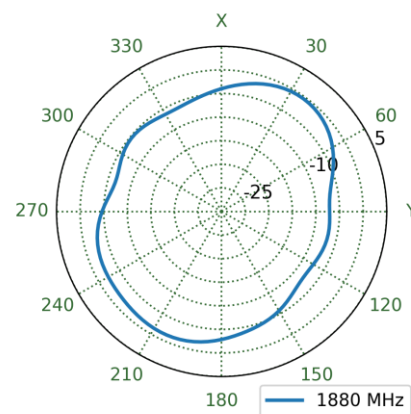
XZ Plane



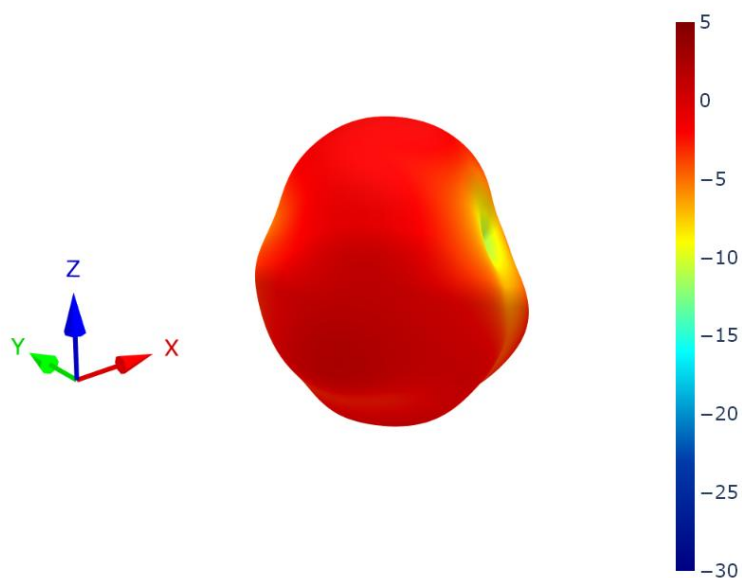
YZ Plane



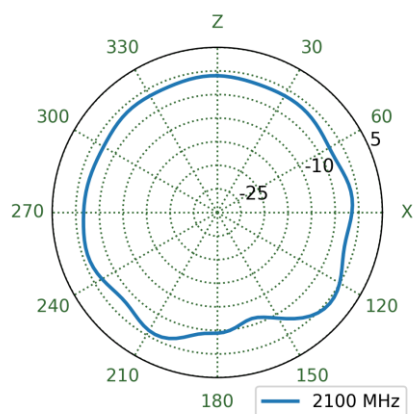
XY Plane



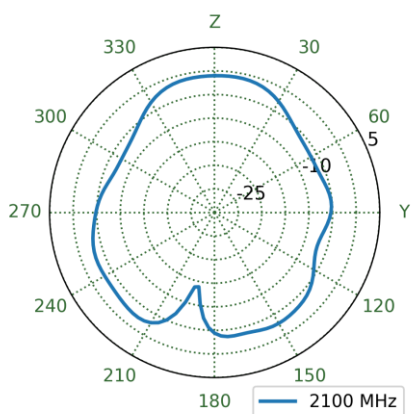
4.8 Patterns at 2100 MHz



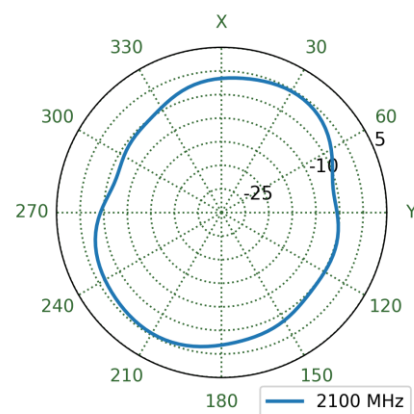
XZ Plane



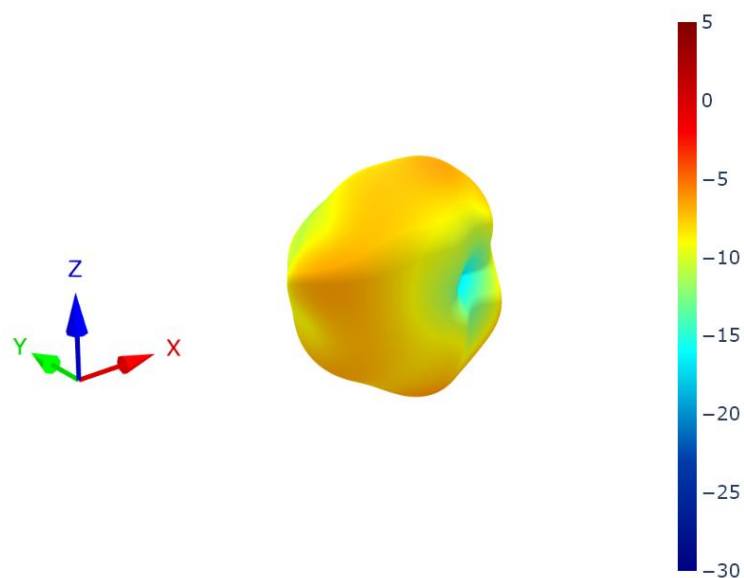
YZ Plane



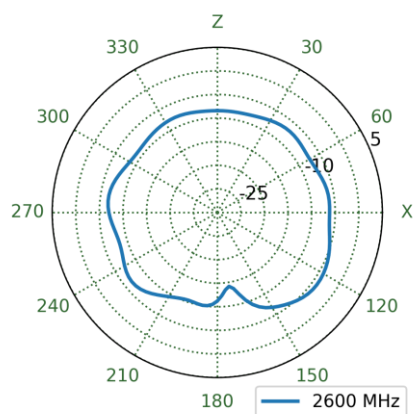
XY Plane



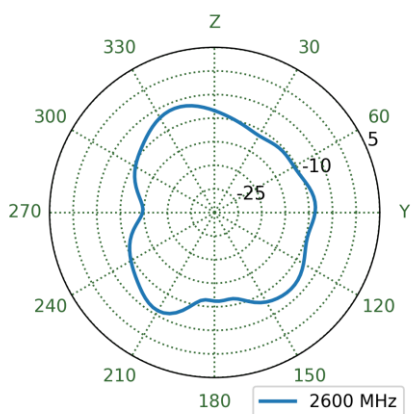
4.9 Patterns at 2600 MHz



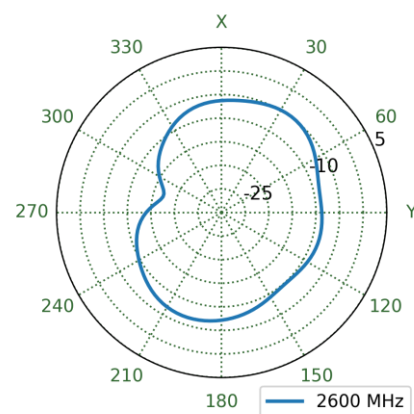
XZ Plane



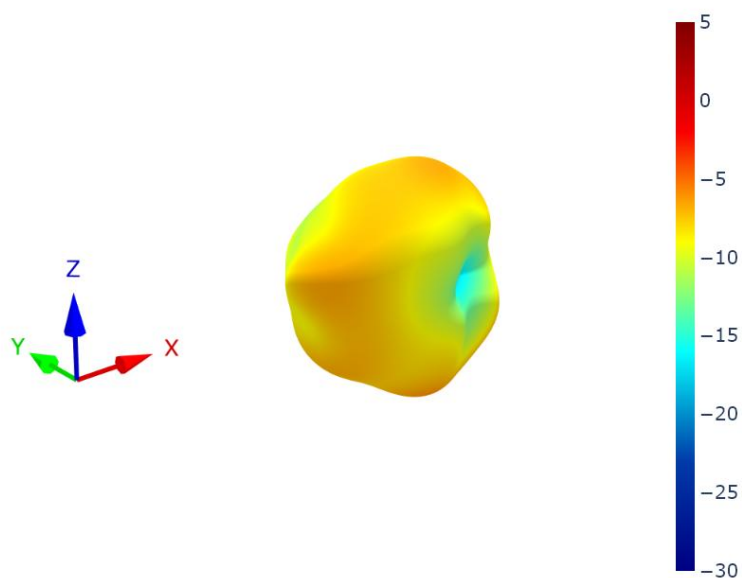
YZ Plane



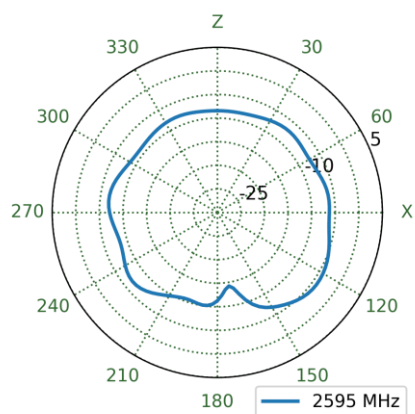
XY Plane



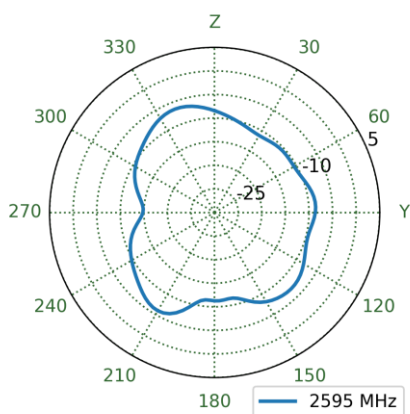
4.10 Patterns at 2595 MHz



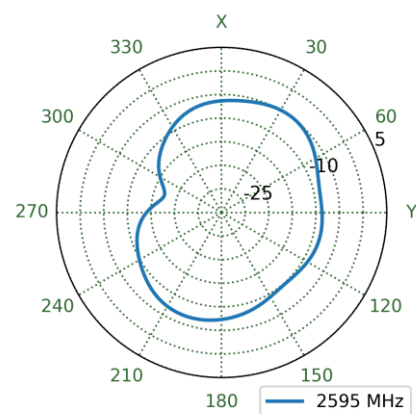
XZ Plane



YZ Plane



XY Plane



5. Mechanical Drawing

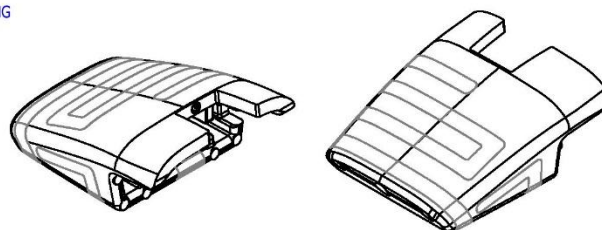
ISO NO.: EDW.007879

STATE: RELEASE

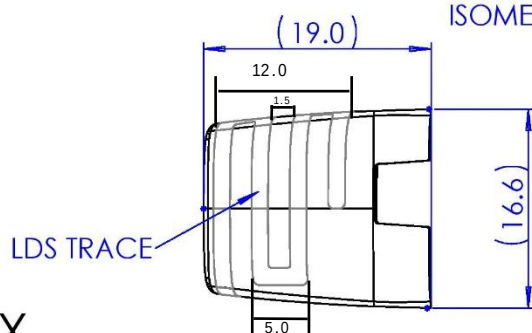
NOTES:

1. ALL MATERIAL MUST BE ROHS COMPLIANT.
2. COLOR: BLACK
3. USE THIS DRAWING TOGETHER WITH THE CORRESPONDING 3D CAD DATABASE FILE TO FULLY DESCRIBE THE PART.

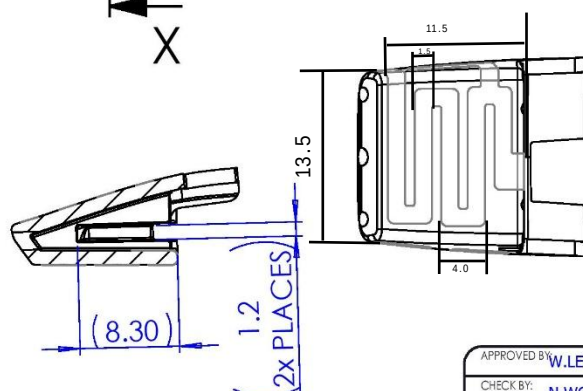
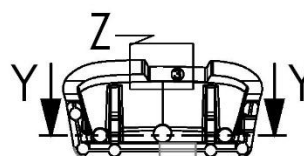
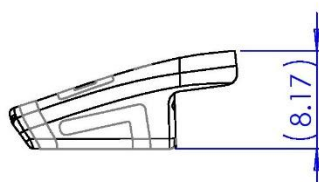
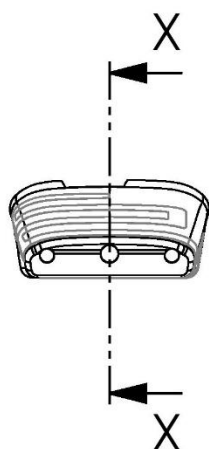
Revisions				
Rev	Description	Date	Engineer	Approved
A	Release	10-Feb-26	W.Levingstone	S.Carroll



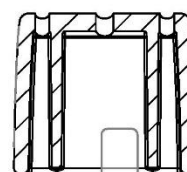
ISOMETRIC VIEWS



DETAIL Z
SCALE 4 : 1
CAVITY NO. LOCATION



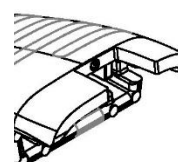
SECTION X-X



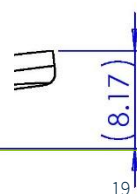
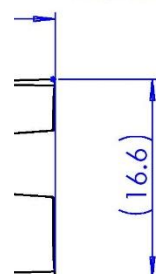
SECTION Y-Y

APPROVED BY: W.LEVINGSTONE	 This drawing is Taoglas Confidential information and its inherent design concepts are property of Taoglas. This is not to be copied or shared with third parties without the prior written consent of Taoglas.
CHECK BY: N.WOODHOUSE	
DRAWN BY: W.LEVINGSTONE	
DATE: 01-SEPT-2025	
UNLESS OTHERWISE SPECIFIED TOLERANCES ON:	
XXX.XX	XXX.XX
XXX.XX	XXX.XX
XXX.XX	XXX.XX
THIRD ANGLE PROJECTION	TITLE: LDS ANTENNA FOR TRACTIVE FOR LTE 698-2700MHZ AND WI-FI 2.4GHZ PART NO.: LDS.BC.006.A UNIT: mm SCALE: 2:1 PAGES: 1/1 REV: A

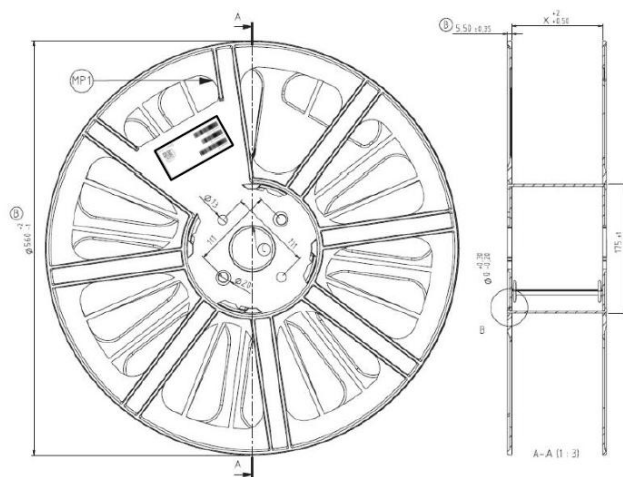
Rev	Description
A	Release



ISOMETRIC

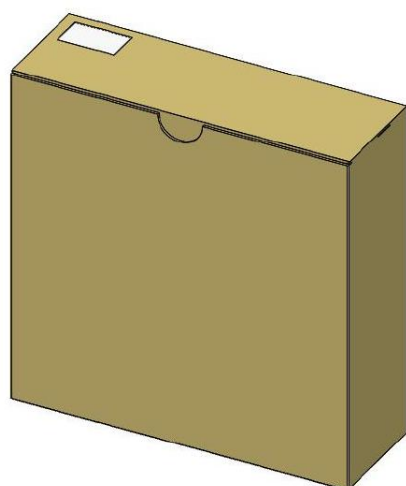


6. Packaging



✓ 756 PCS / Reel (22", width 43mm)

✓ SPQ Label

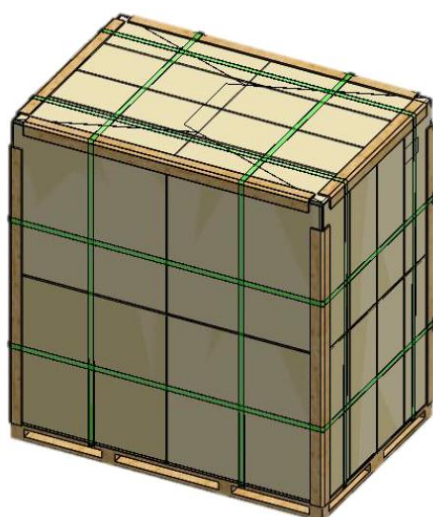


✓ 4 Rolls / Box

✓ Box (mm): 600x600x200

✓ Weight (Kg): 8.64 $\pm$ 3%

✓ Carton Label



✓ 8 Box / layer

✓ 2 Layers

✓ 16 Box

Changelog for the datasheet

SPE-25-8-321 - LDS.BC.006.A

Revision: A (Original First Release)	
Date:	2026-01-22
Notes:	Initial Release
Author:	Gary West

Previous Revisions



www.taoglas.com

