



TAOGLAS®



Datasheet

868MHz Terminal Antenna

Part No:
TI.08.C.0112

Description:

868MHz ISM Band Terminal Antenna Fixed Right-Angle SMA(M) Connector

Features:

- Omni-Directional Dipole Antenna
- TPU Housing
- Dimensions: 53x17mm
- SMA Male Right Angle Connector
- RoHS & Reach Compliant

1.	Introduction	3
2.	Specifications	4
3.	Antenna Characteristics	5
4.	2D Radiation Patterns	7
5.	3D Radiation Patterns	9
6.	Mechanical Drawing	11
7.	Packaging	12

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.



1. Introduction



The Taoglas TI.08.C.0112 is a high performance 868MHz, small form factor, dipole omni-direction terminal mount antenna. This antenna features an SMA(M) right angle connector as standard.

Some typical applications include:

- Smart Lighting
- Remote Monitoring
- IoT (Internet of Things)
- Smart Metering

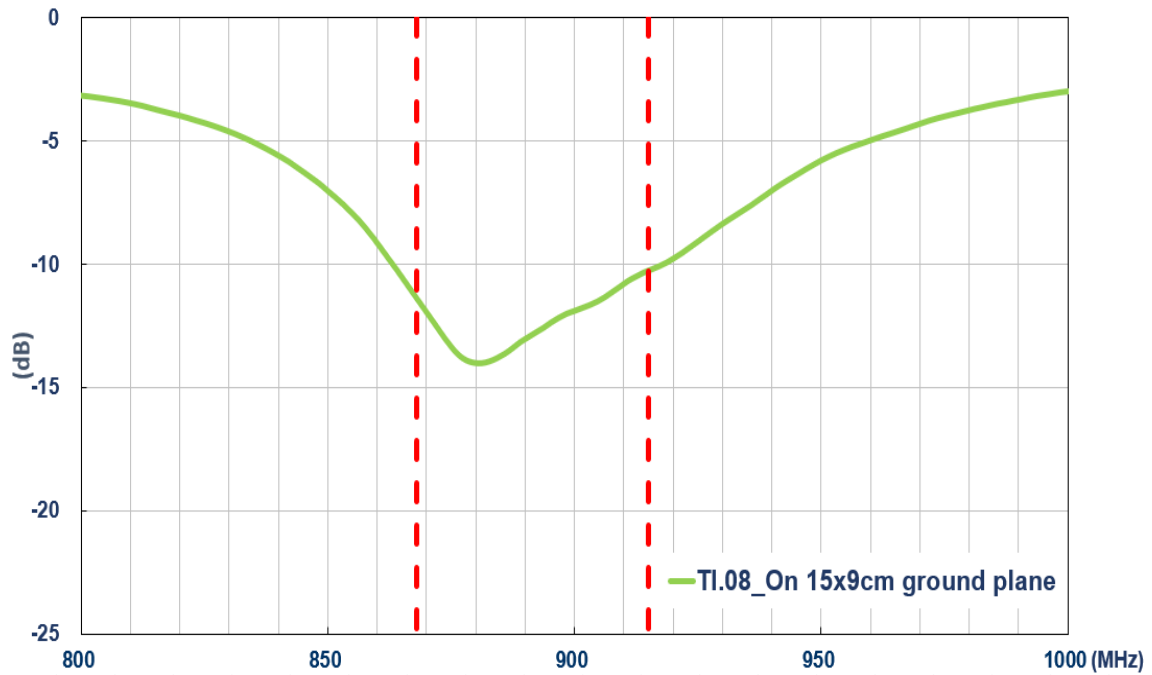
This antenna is fabricated using TPU, which is a lightweight robust material used on several other Taoglas products. The TI.08.0112 can function impressively with a small ground plane while maintaining high efficiencies, on the band 863~870 it can reach at least 53% on a 15x9cm ground plane. The antenna connector type can be customizable, please contact your regional Taoglas sales facility for support.

2. Specifications

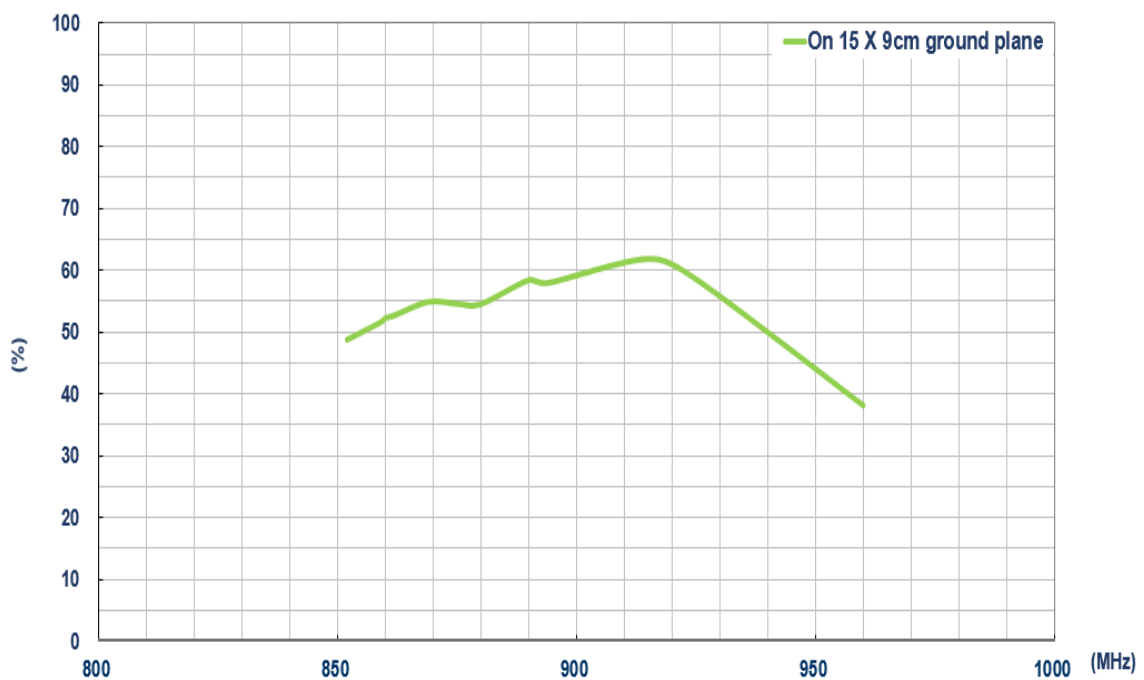
ISM		
Frequency (MHz)	863~870	902~928
Peak Gain (dBi)		
On 15 X 9cm ground plane	1.75	2.43
Average Gain (dBi)		
On 15 X 9cm ground plane	-2.74	-2.26
Efficiency (%)		
On 15 X 9cm ground plane	53.22	59.37
Impedance	50Ω	
Polarization	Linear	
Radiation Pattern	Omni-Directional	
Input Power	50 W	
Mechanical		
Height	53 ± 2 mm	
Diameter	Ø7 ± 0.2 mm	
Width	17 ± 0.8 mm	
Casing	TPU	
Connector	SMA(M) RA	
Environmental		
Temperature Range	-40°C to 70°C	

3. Antenna Characteristics

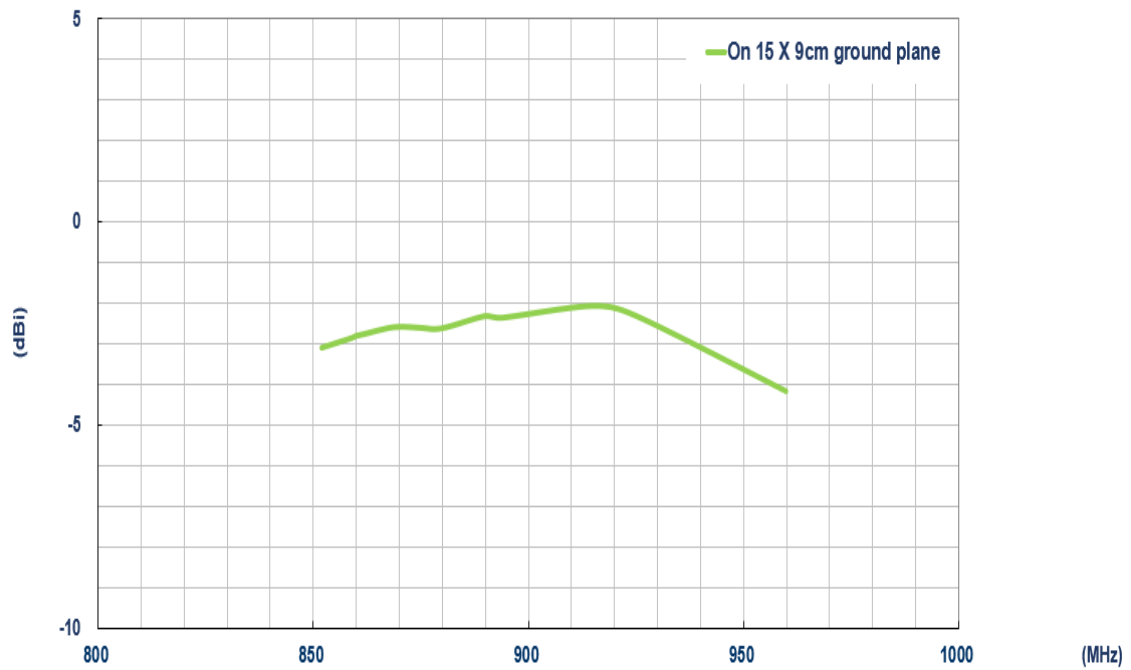
3.1 Return Loss



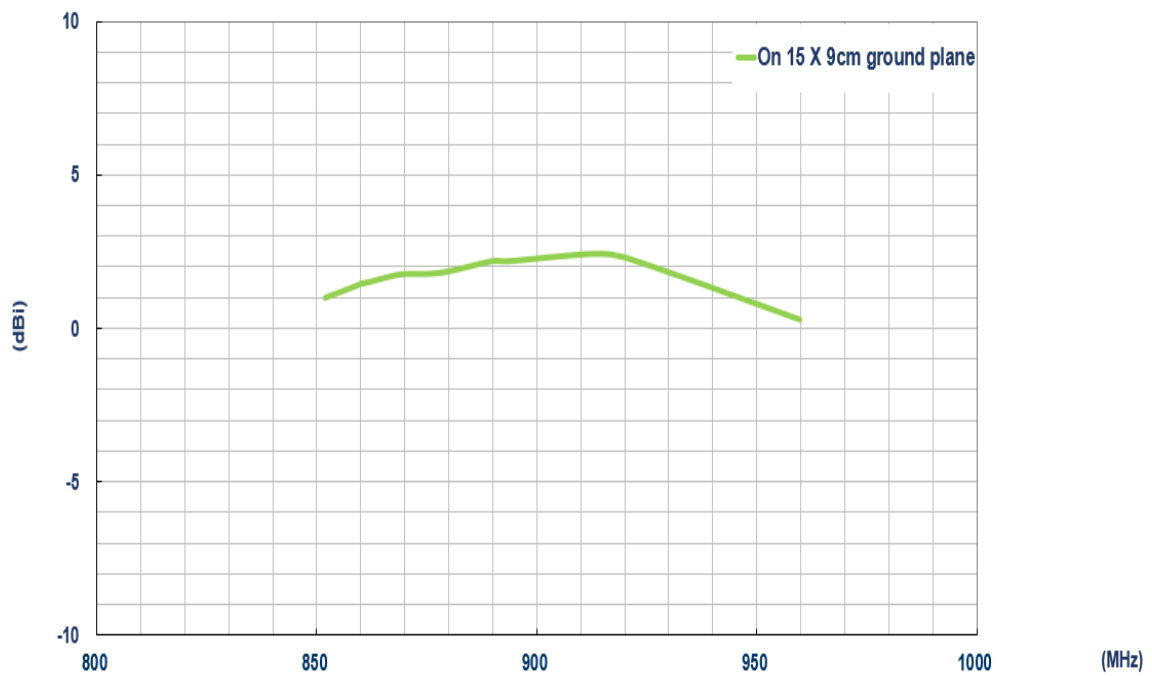
3.2 Efficiency



3.3 Average Gain

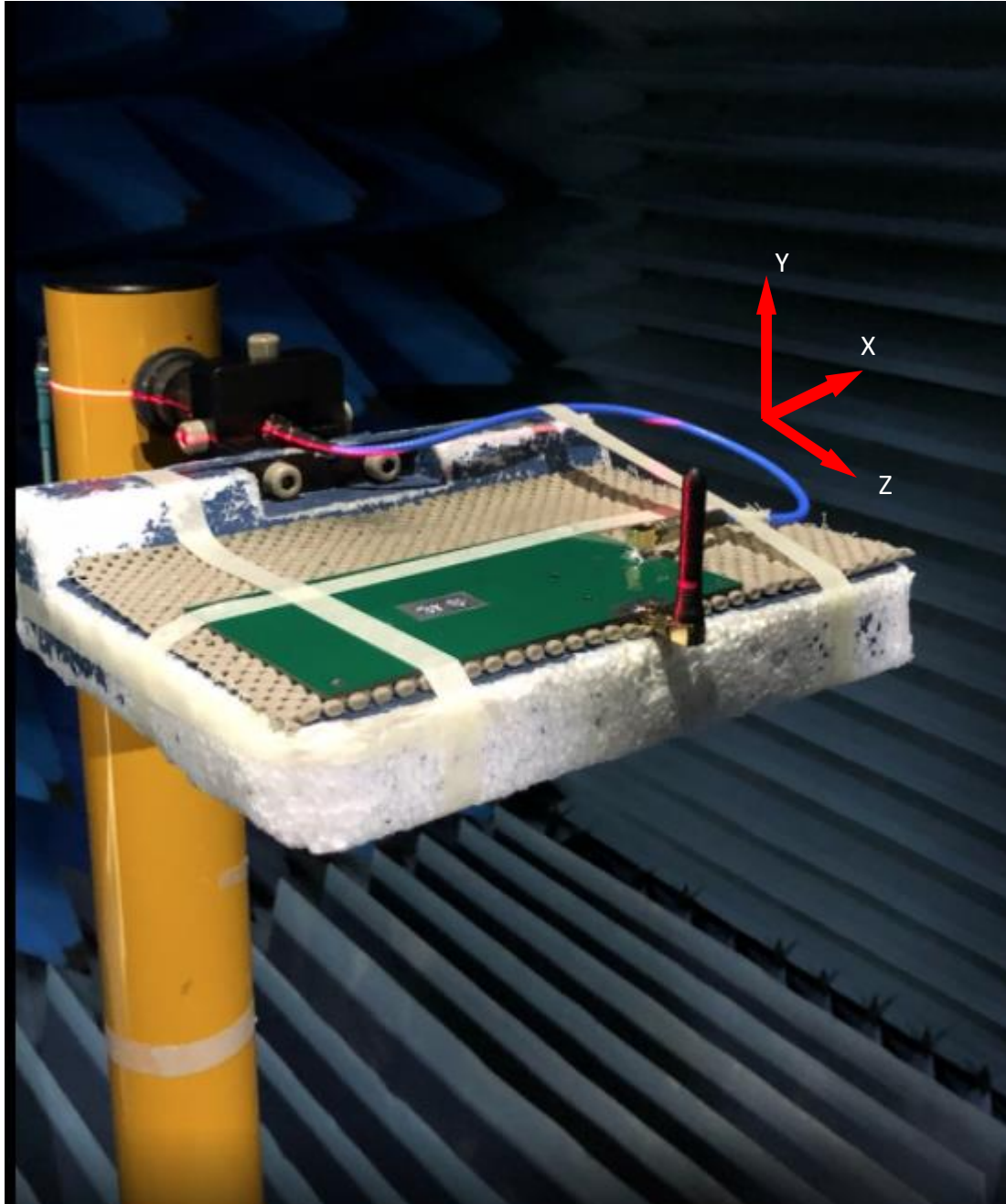


3.4 Peak Gain



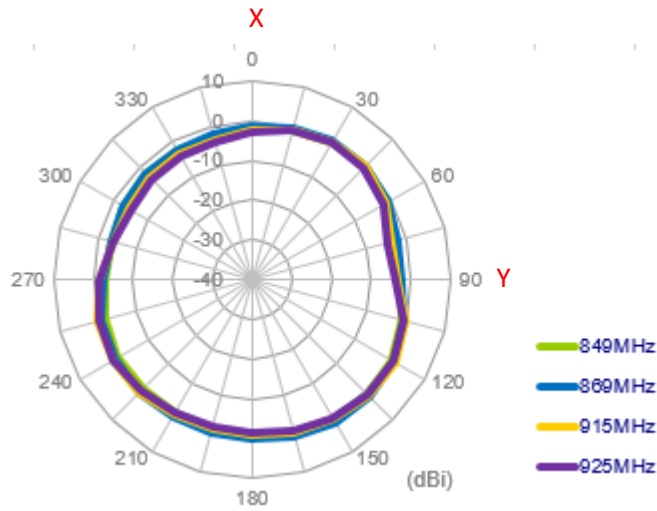
4. 2D Radiation Patterns

4.1 Test Setup

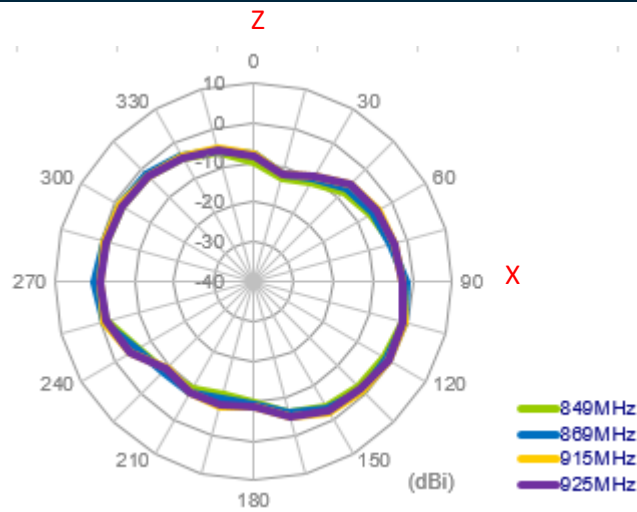


On 15 X 9cm ground plane

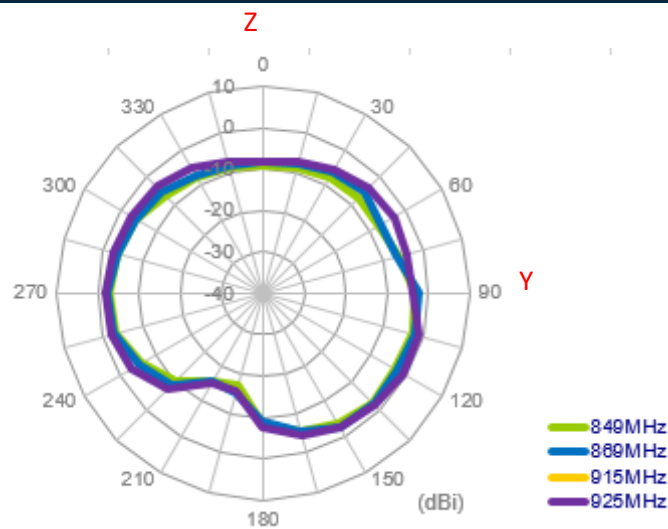
XY Plane



XZ Plane

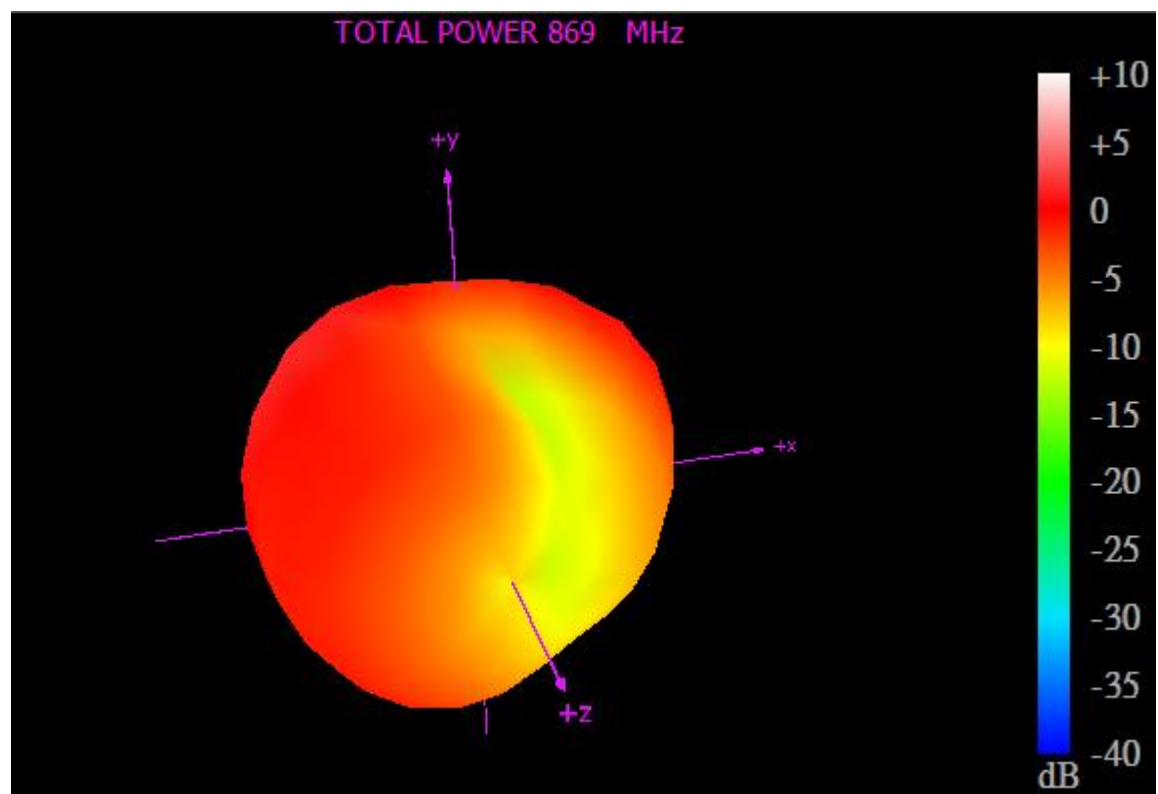
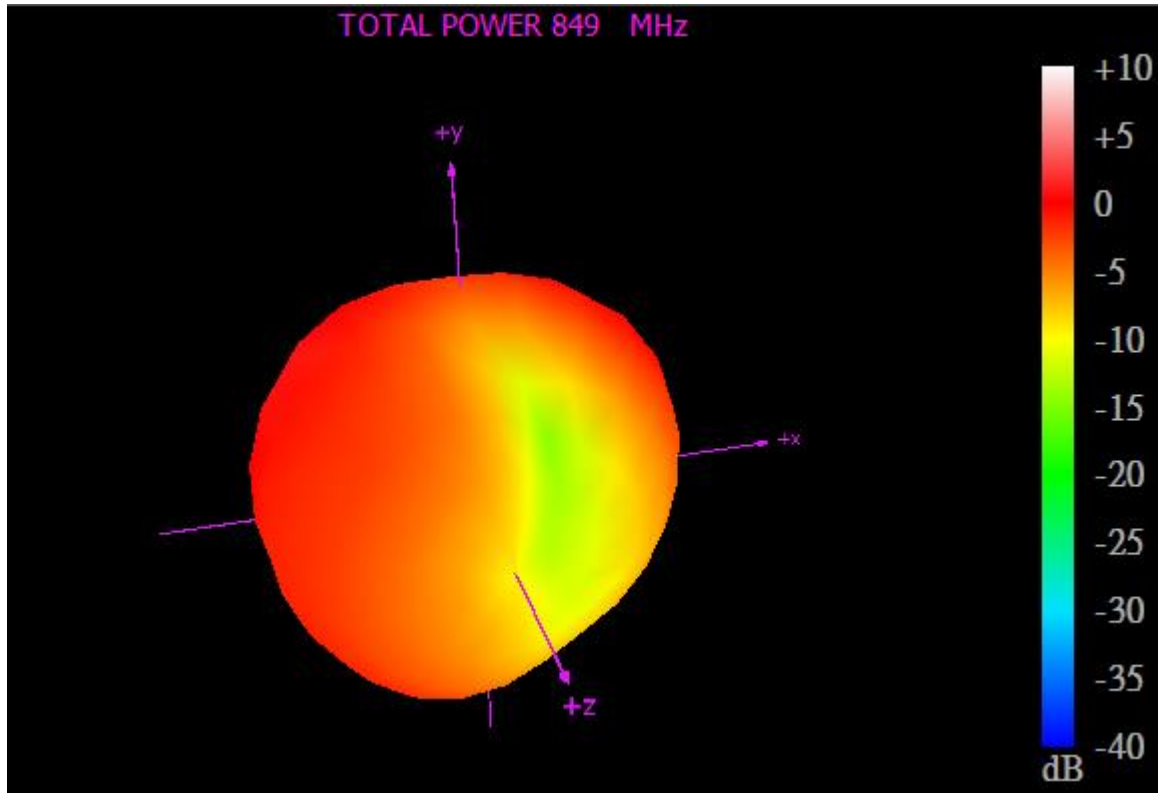


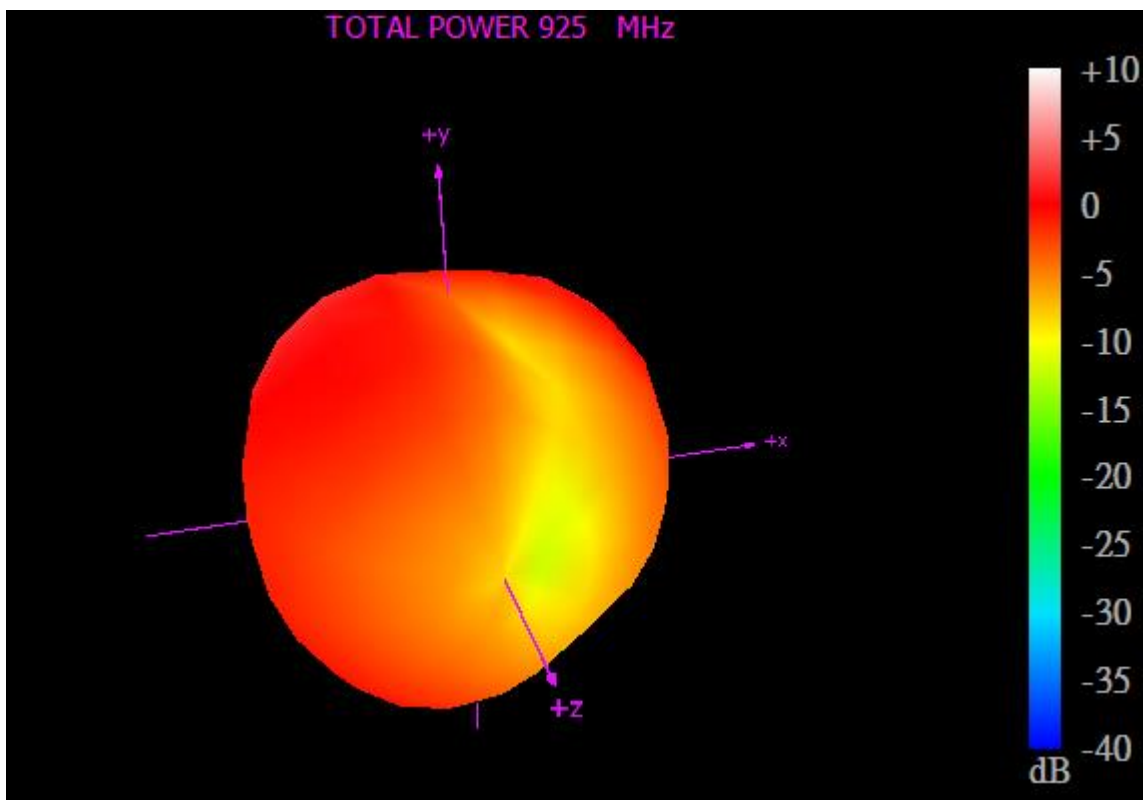
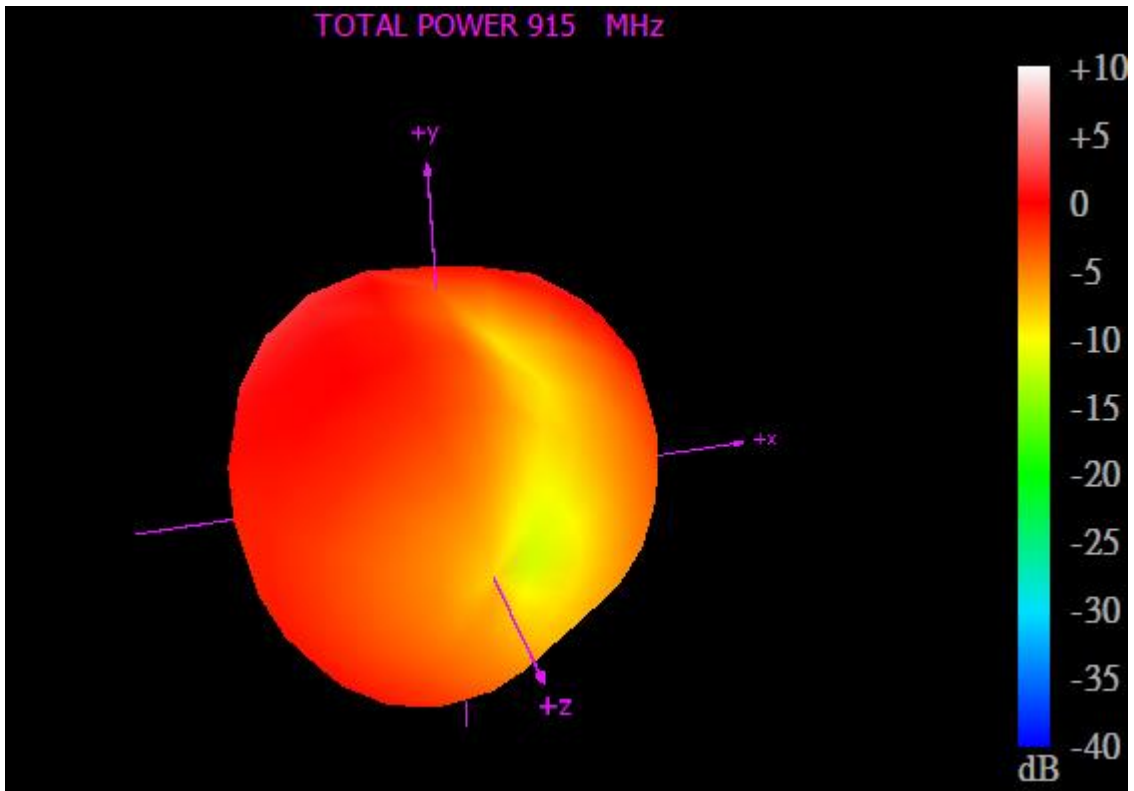
YZ Plane



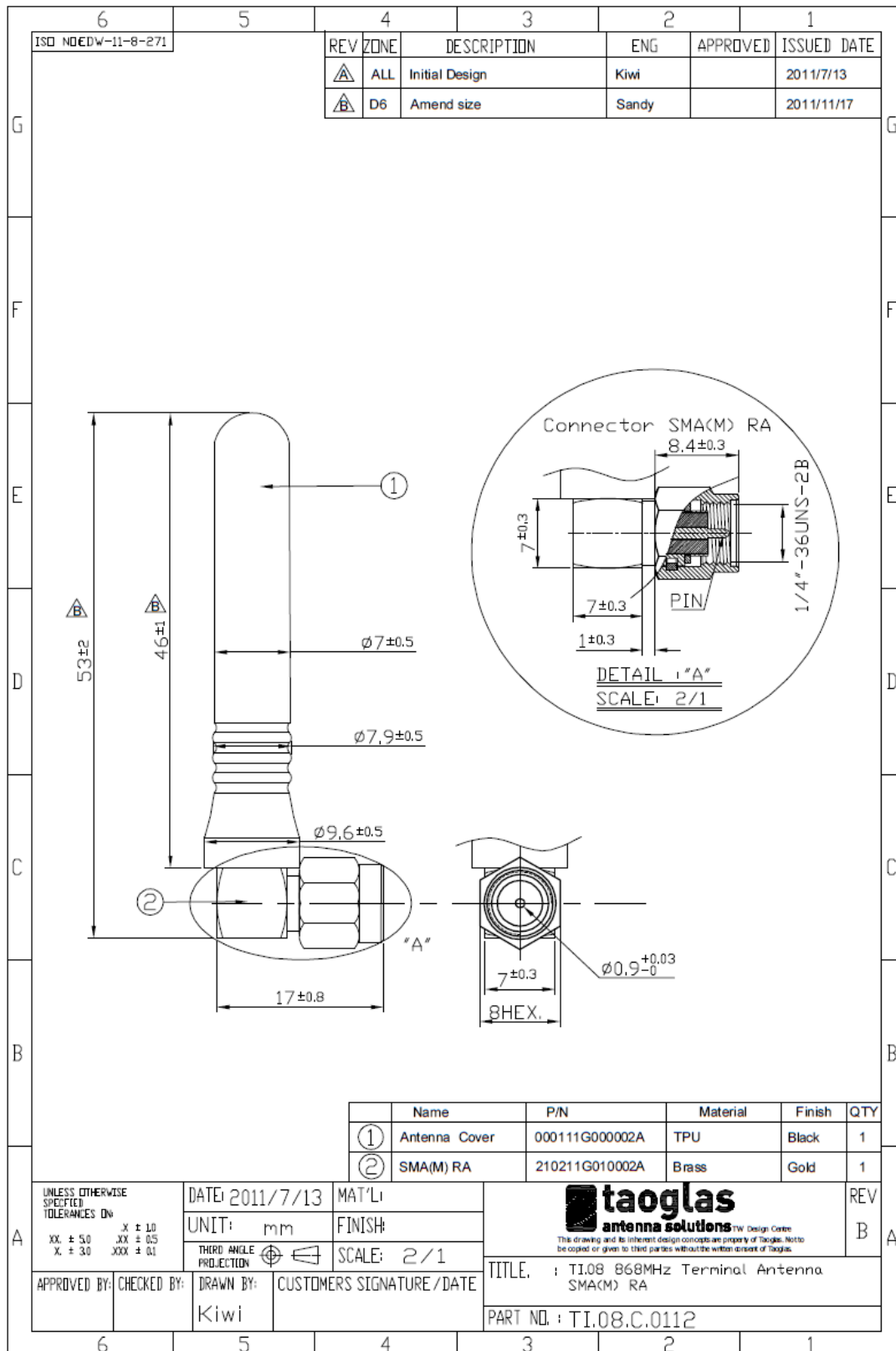
5. 3D Radiation Patterns

5.1 On 15 X 9cm ground plane



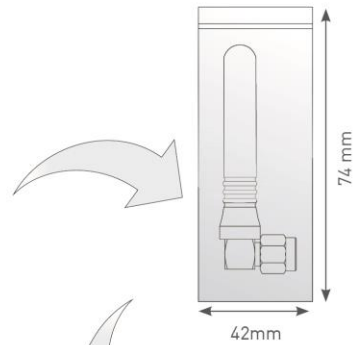


6. Mechanical Drawing (Units: mm)

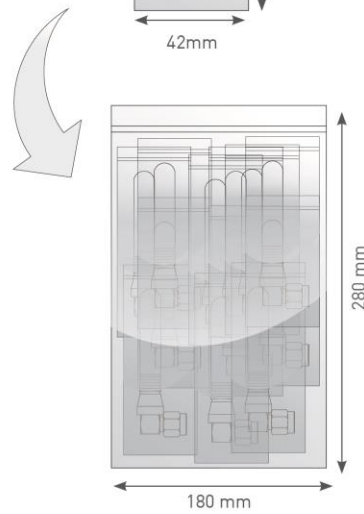


7. Packaging

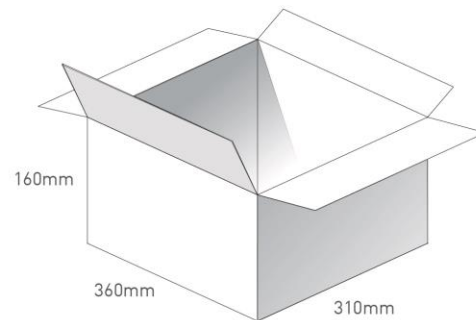
1 pcs TI.08.C.0112 per PE Bag
 PE Bag Dimensions - 42*74mm
 Weight - 7.5g



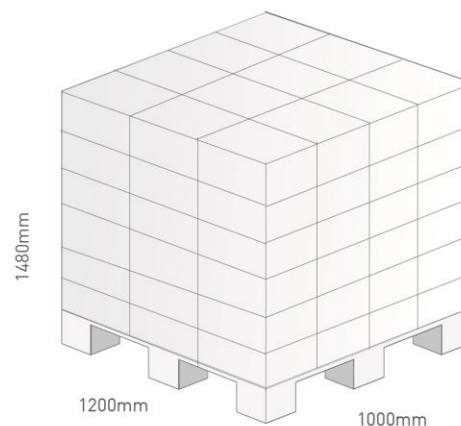
100 PE Bags per Large PE Bag
 100 pcs TI.08.C.0112 per Large PE Bag
 Large PE Dimensions - 180*280mm
 Weight - 0.761kg



15 Large PE bags per carton
 1500 pcs TI.08.C.0112 per carton
 Carton Dimensions - 360*310*160mm
 Weight - 12kg



Pallet Dimensions 1200mm*1000mm*1480mm
 72 Cartons per Pallet
 9 Cartons per layer
 8 Layers



Changelog for the datasheet

SPE-11-8-039 – TI.08.C.0112

Revision: C (Current Version)	
Date:	2019-04-02
Changes:	Added new introduction and data
Changes Made by:	Jack Conroy

Previous Revisions

Revision: B	
Date:	2011-11-15
Changes:	Packaging amended
Changes Made by:	Aine Doyle

Revision: A (Original First Release)	
Date:	2011-07-16
Notes:	
Author:	Aine Doyle

Previous Revisions (Continued)



TAOGLAS®

www.taoglas.com



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Antennas](#) category:

Click to view products by [Taoglas](#) manufacturer:

Other Similar products are found below :

[GAN30084EU](#) [930-033-R](#) [GW17.07.0250E](#) [1513563-1](#) [EXE902SM](#) [APAMPG-117](#) [MAF94383](#) [W3908B0100](#) [W6102B0100](#) [YE572113-30RSMM](#) [108-00014-50](#) [66089-2406](#) [SPDA17RP918](#) [A09-F8NF-M](#) [A09-F5NF-M](#) [RGFRA1903041A1T](#) [W3593B0100](#) [W3921B0100](#) [SIMNA-868](#) [SIMNA-915](#) [SIMNA-433](#) [W1044](#) [W1049B090](#) [A75-001](#) [WTL2449CQ1-FRSMM](#) [CPL9C](#) [EXB148BN](#) [0600-00060](#) [TRA9020S3PBN-001](#) [GD5W-28P-NF](#) [MA9-7N](#) [GD53-25](#) [GD5W-21P-NF](#) [C37](#) [MAF94051](#) [MA9-5N](#) [EXD420PL](#) [B1322NR](#) [QWFTB120](#) [MAF94271](#) [MAF94300](#) [GPSMB301](#) [FG4403](#) [AO-AGSM-OM54](#) [5200232](#) [MIKROE-2349](#) [WCM.01.0111](#) [MIKROE-2393](#) [MIKROE-2352](#) [MIKROE-2350](#)