



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

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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

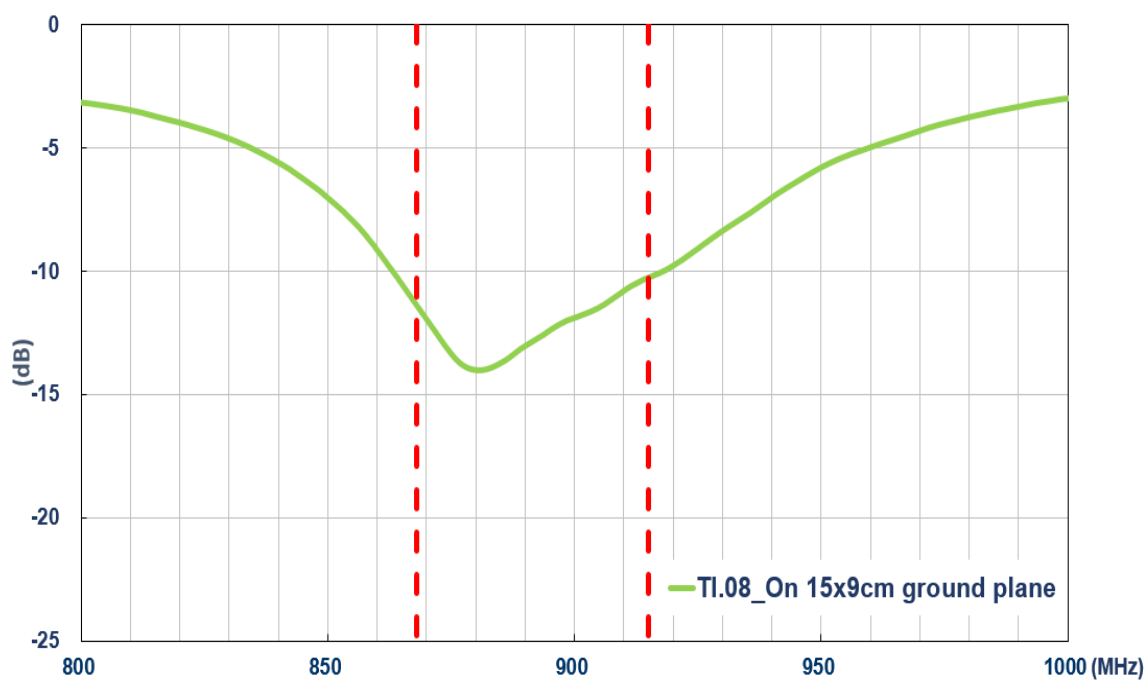
This antenna is fabricated using TPU, which is a lightweight robust material used on several other Taoglas products. The TI.08.0112 can function impressively with a small ground plane while maintaining high efficiencies, on the band 863~870 it can reach at least 53% on a 15x9cm ground plane. The antenna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

2. Specifications

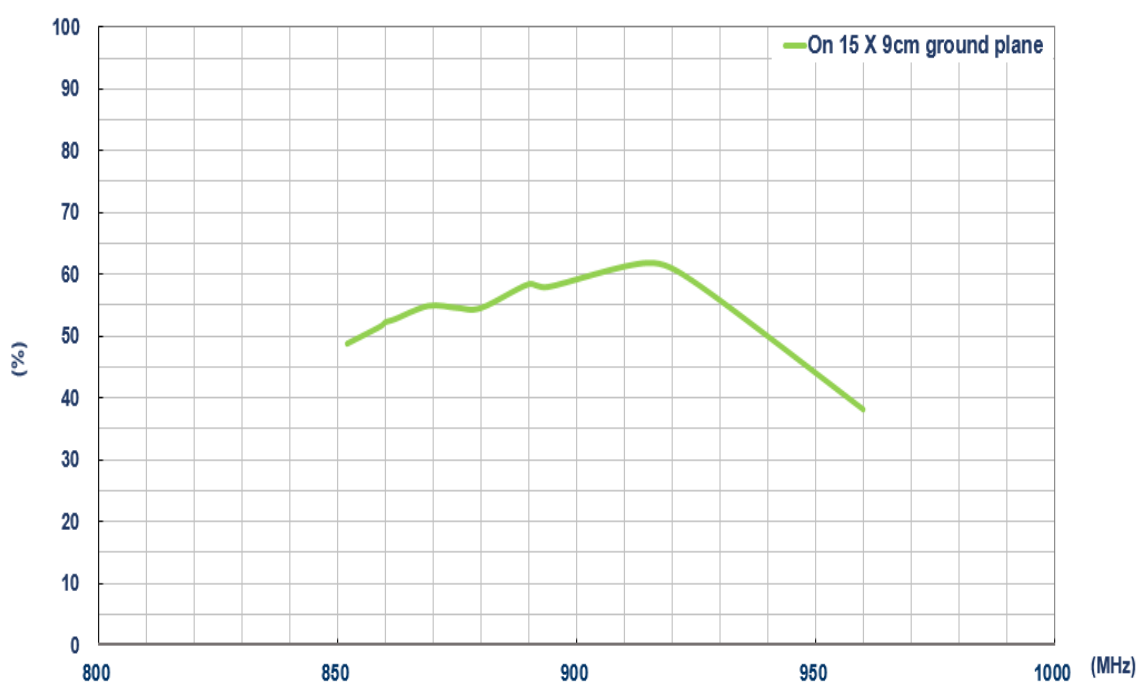
ISM		
Frequency (MHz)	863~870	902~928
Peak Gain (dBi)		
On 15 X 9cm ground plane	1.75	2.43
Average Gain (dBi)		
On 15 X 9cm ground plane	-2.74	-2.26
Efficiency (%)		
On 15 X 9cm ground plane	53.22	59.37
Impedance	50Ω	
Polarization	Linear	
Radiation Pattern	Omni-Directional	
Input Power	50 W	
Mechanical		
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

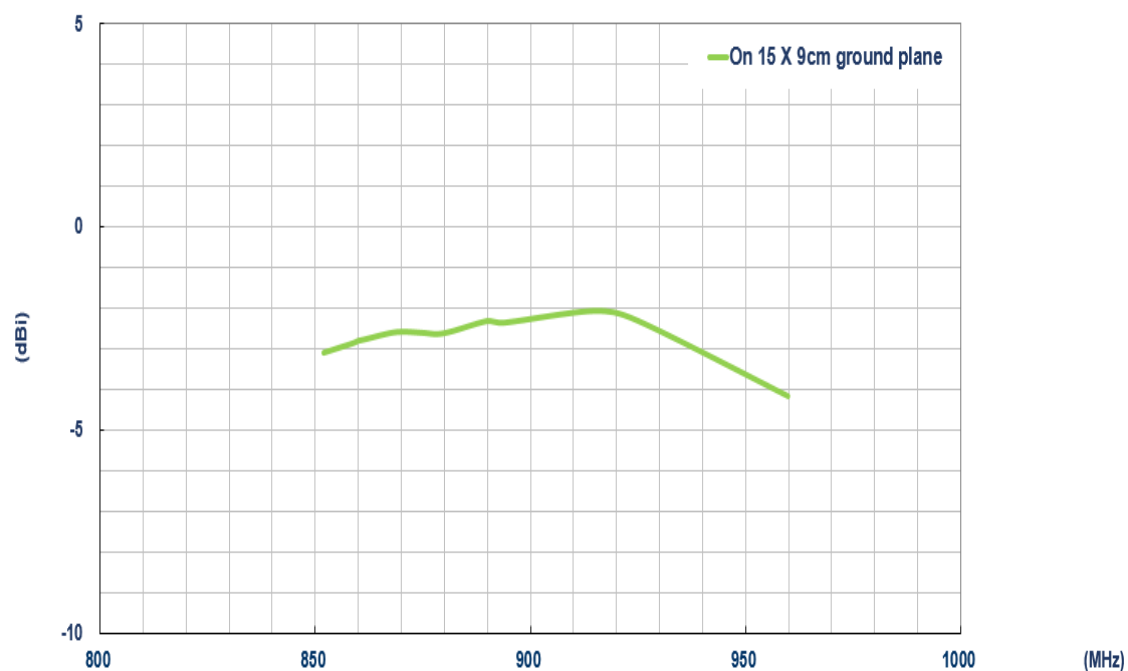
3.1 Return Loss



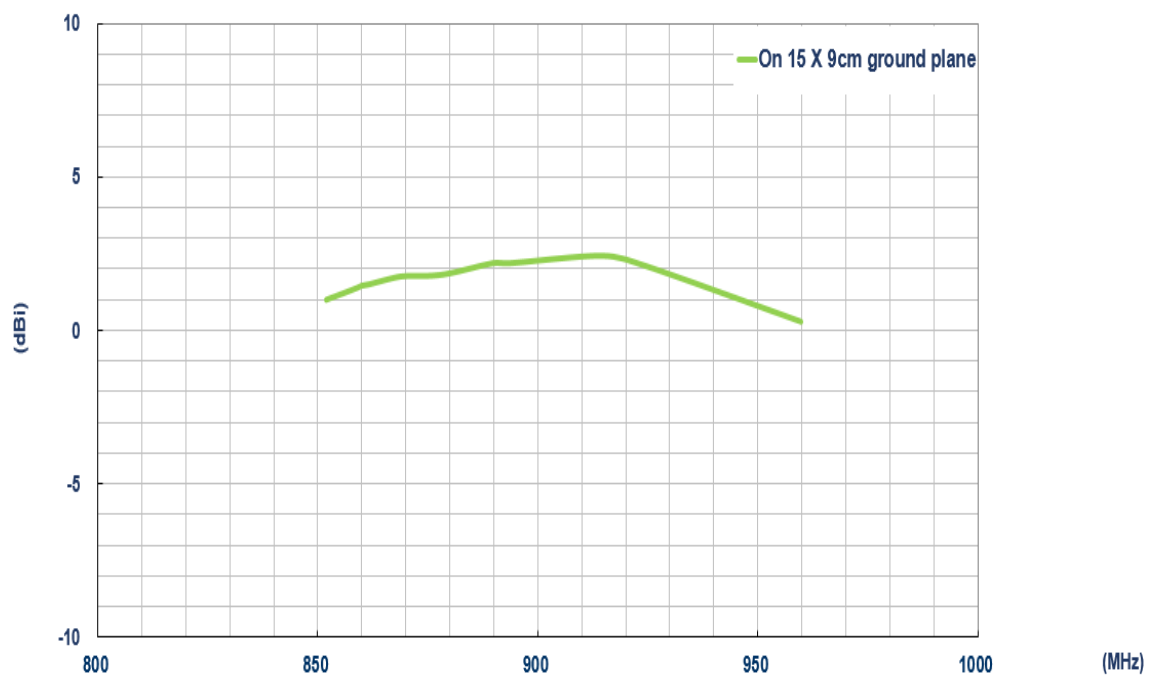
3.2 Efficiency



3.3 Average Gain

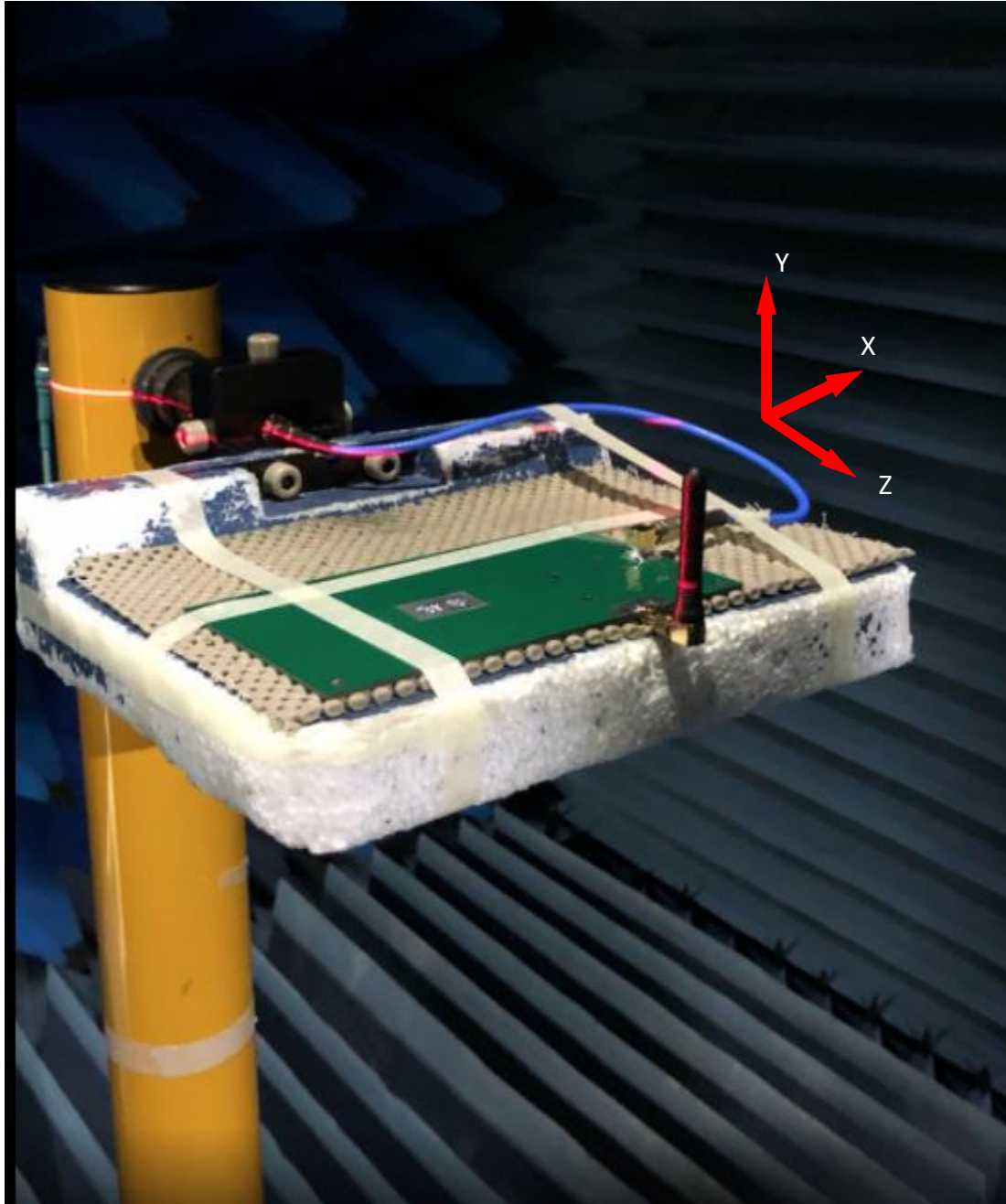


3.4 Peak Gain



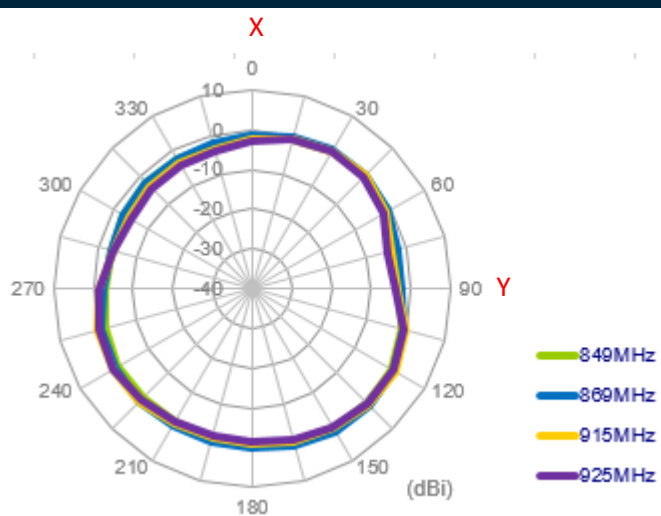
4. 2D Radiation Patterns

4.1 Test Setup

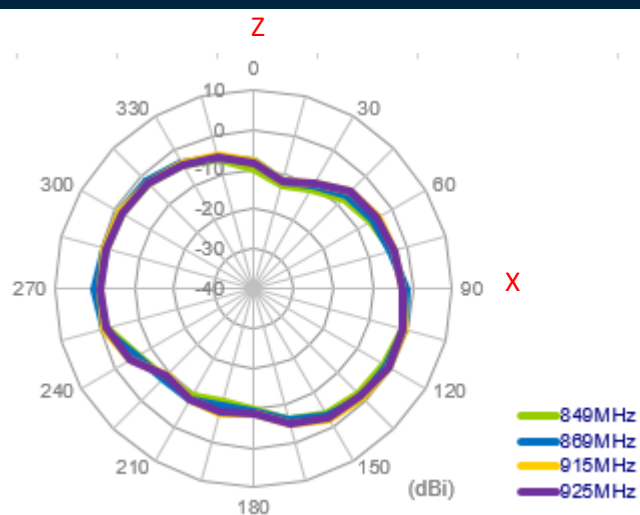


On 15 X 9cm ground plane

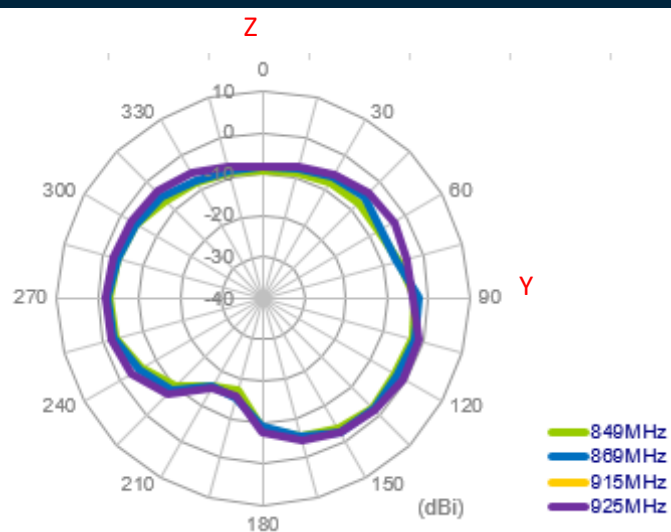
XY Plane



XZ Plane

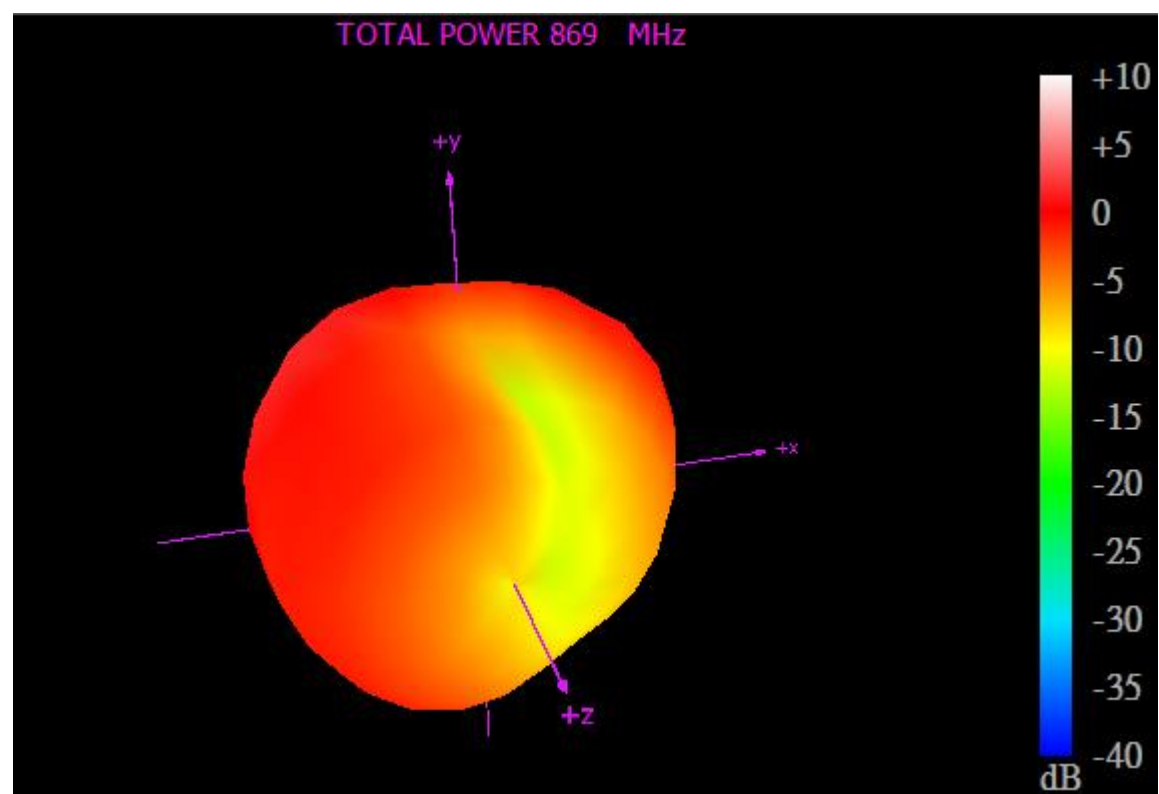
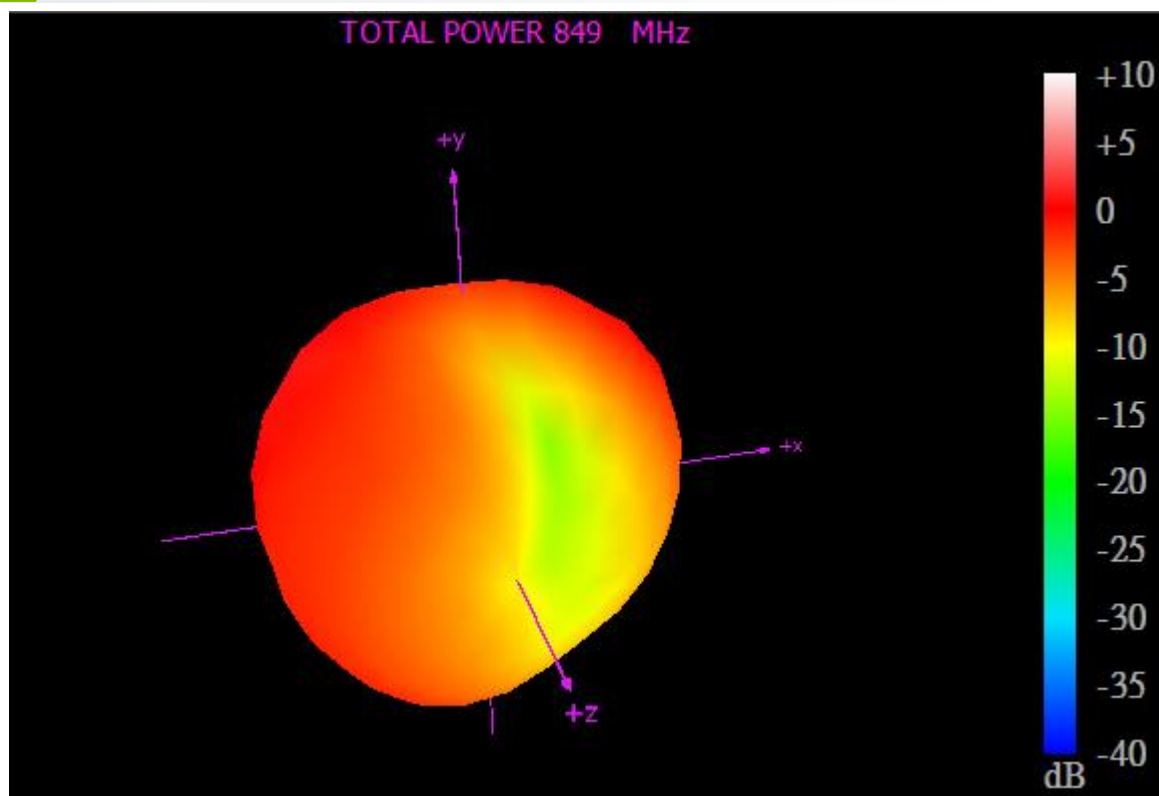


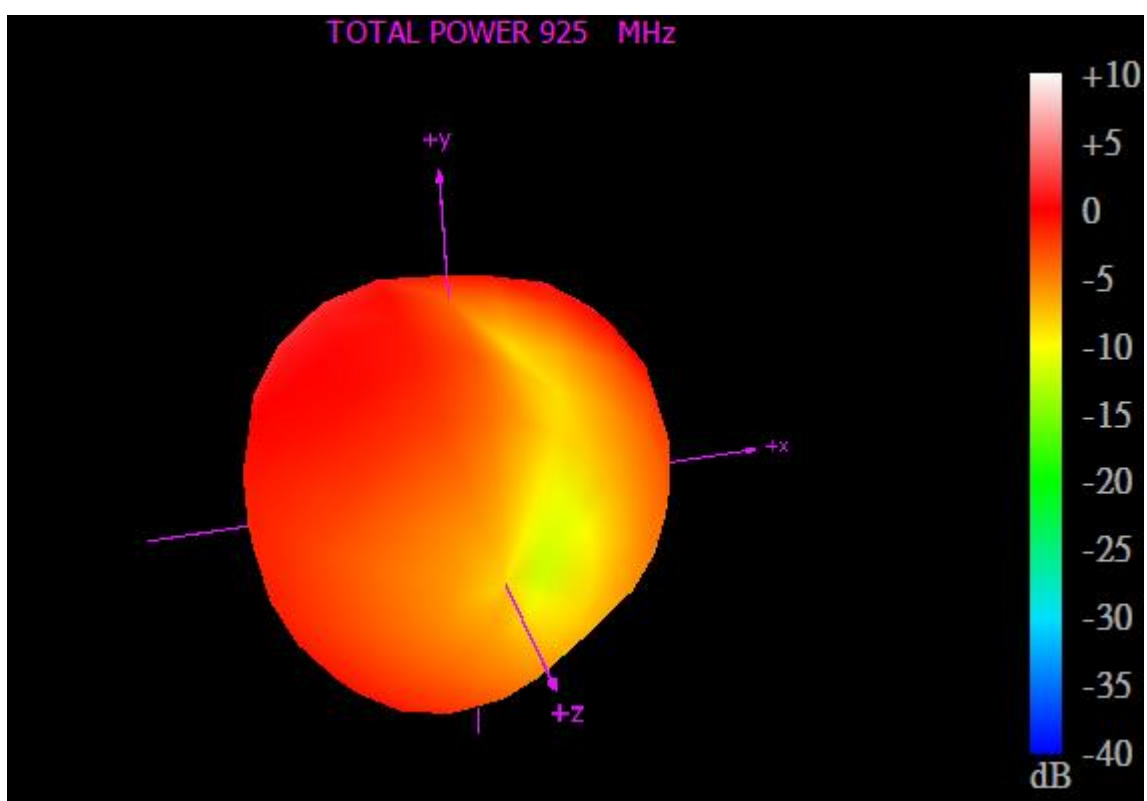
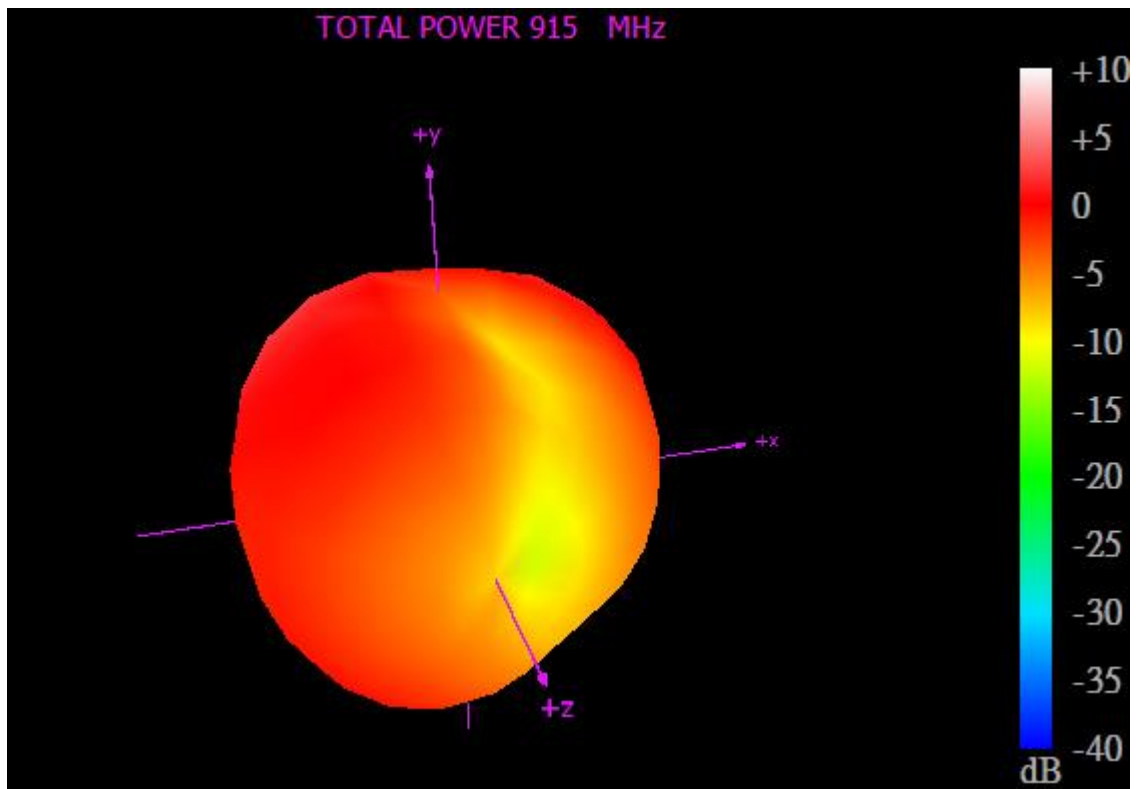
YZ Plane



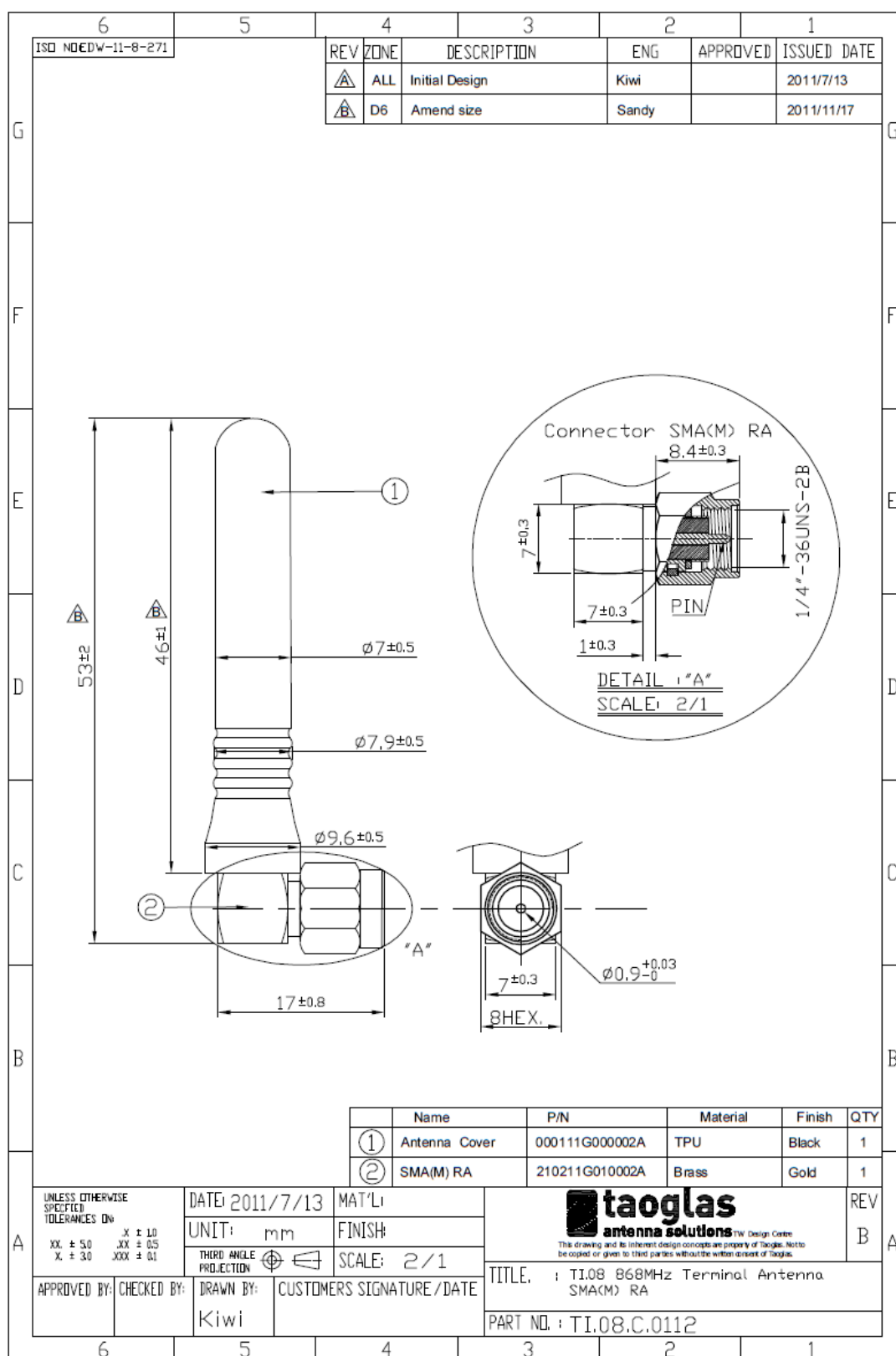
5. 3D Radiation Patterns

5.1 On 15 X 9cm ground plane



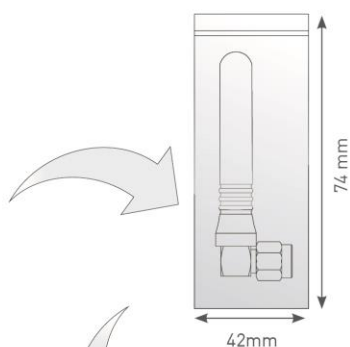


6. Mechanical Drawing (Units: mm)

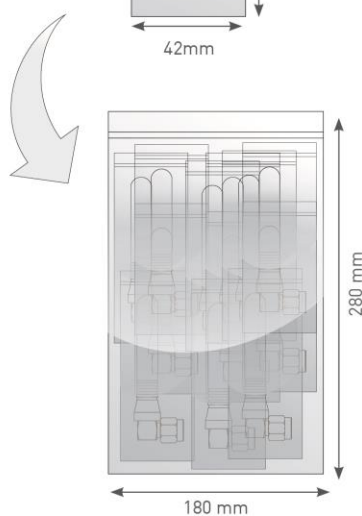


7. Packaging

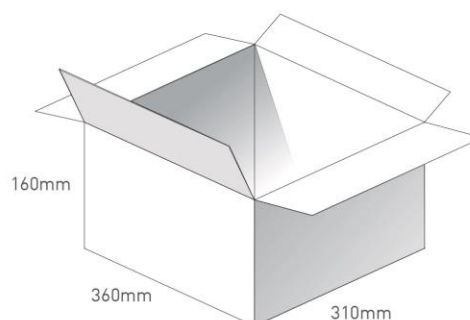
1 pcs TI.08.C.0112 per PE Bag
PE Bag Dimensions - 42*74mm
Weight - 7.5g



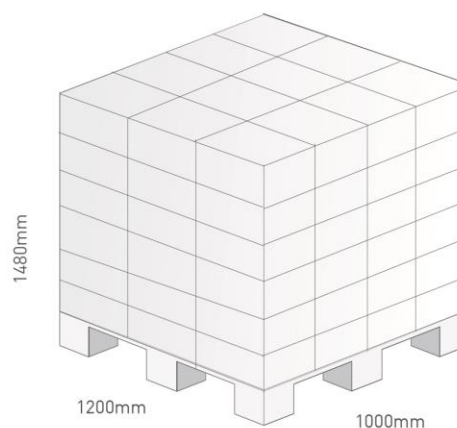
100 PE Bags per Large PE Bag
100 pcs TI.08.C.0112 per Large PE Bag
Large PE Dimensions - 180*280mm
Weight - 0.761kg



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)



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