

SPECIFICATION

Ultra-Wideband Adhesive Type External Antenna

Part No.	:	GSA.8827R.A.101111 Phoenix
Product Name	:	2G/3G/4G Ultra-wideband I-bar Antenna for First-Tier Automotive Application
Feature	:	LTE / GSM / CDMA /DCS /PCS / WCDMA / UMTS / HSDPA / GPRS / EDGE /GPS /Wi-Fi 698MHz to 960MHz, 1575.42MHz, 1710MHz to 2700Mhz 1M RG.174 cable with SMA(M) connector AntD© Antenna Diagnostic Compatible Ingress protection rating IP65 Low profile for easy installation Fully customizable cable length and connector 105mm*30mm*7.7mm



1. Introduction

The GSA.8827R Phoenix Ultra-Wideband I-Bar antenna is a robust high efficiency cellular antenna for use with all 2G/3G/4G cellular modules worldwide.

Its slim-line design allows for covert and convenient installation in automotive vehicles, its omni-directional gain across all bands ensures constant reception and transmission. GSA.8827R is manufactured and tested in a TS16949 first tier automotive approved facility, and it has gone through full PPAP design, reliability and quality audits.

The Phoenix finds its application particularly in first-tier automotive application, aftermarket and telematics. With its unique ultra-wide band dipole design, the Phoenix has exceptional industry performance characteristics considering its very low profile at 7.7mm and has a compact size of only 105mm*30mm.

This antenna is designed to be mounted on glass or plastic (not on metal). It comes with strong 3M double-sided adhesive for a permanent and secure fix to your vehicle interior. The antenna is UV Resistant. Cable lengths and connectors are fully customizable.

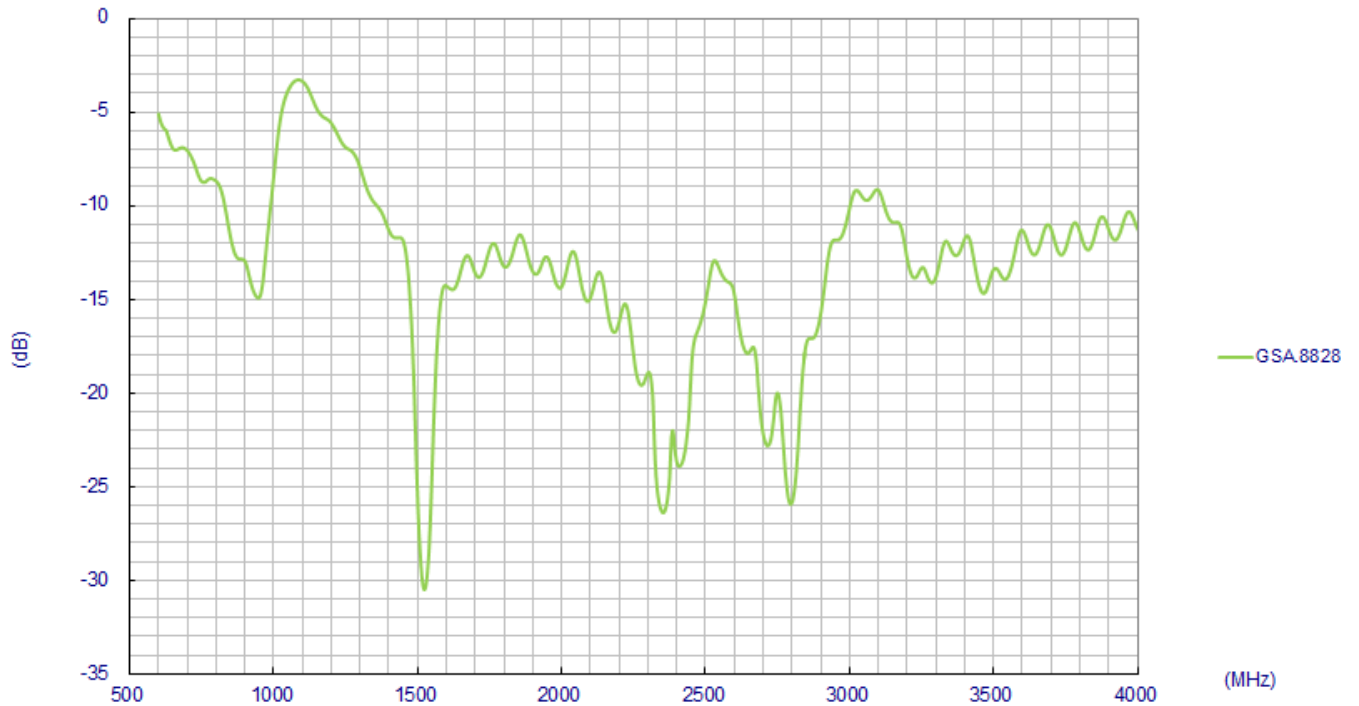
GSA.8827R features Taoglas' AntD© antenna diagnostic technology. AntD© allows connected radio products using the latest cellular modules and recommended circuits from Telit and uBlox to perform diagnostics on the antenna. This includes detection that the proper antenna is connected and that the connection isn't shorted or broken. Contact Taoglas engineering for examples on how to implement AntD© antenna diagnostics in your product.

2. Specification

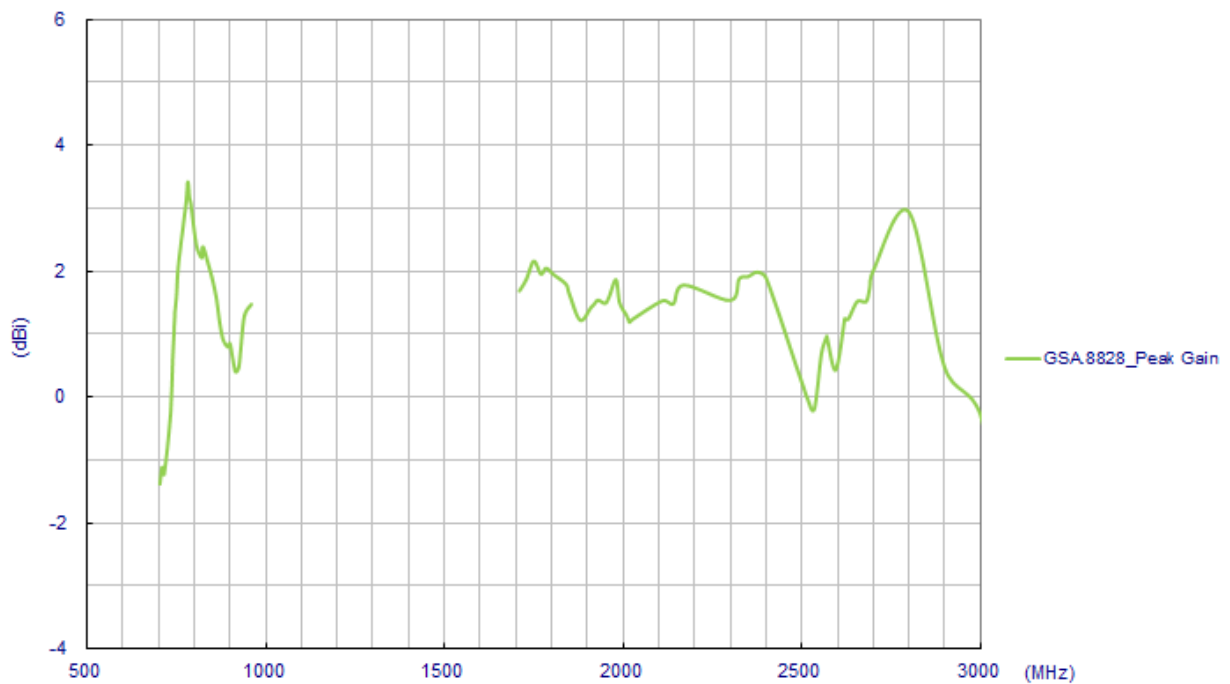
ELECTRICAL									
Frequency (MHz)	698~803	824~894	880~960	1575.42	1710 ~ 1880	1850 ~ 1990	1920 ~ 2170	2490~2690	
Free Space Peak Gain (dBi)									
Cable length (meter)	1	3.42	2.38	1.47	1.28	2.16	1.86	1.86	1.74
Free Space Average Gain (dBi)									
Cable length (meter)	1	-4.34	-3.72	-3.71	-1.75	-2.47	-2.43	-2.56	-4.36
Free Space Efficiency (%)									
Cable length (meter)	1	37.38	42.47	42.54	66.83	56.71	57.14	55.50	37.03
Impedance	50Ω								
Polarization	Linear								
Radiation Pattern	Omni								
Input Power	50 W								
Integrate Resistor	Shunt 15K Ohm to Ground								
MECHANICAL									
Casing	UV Resistant PC/ABS								
Connector	SMA Male (customizable)								
ENVIRONMENTAL									
Temperature Range	-40°C to 85°C								
Humidity	Non-condensing 65°C 95% RH								

3. Antenna Characteristics

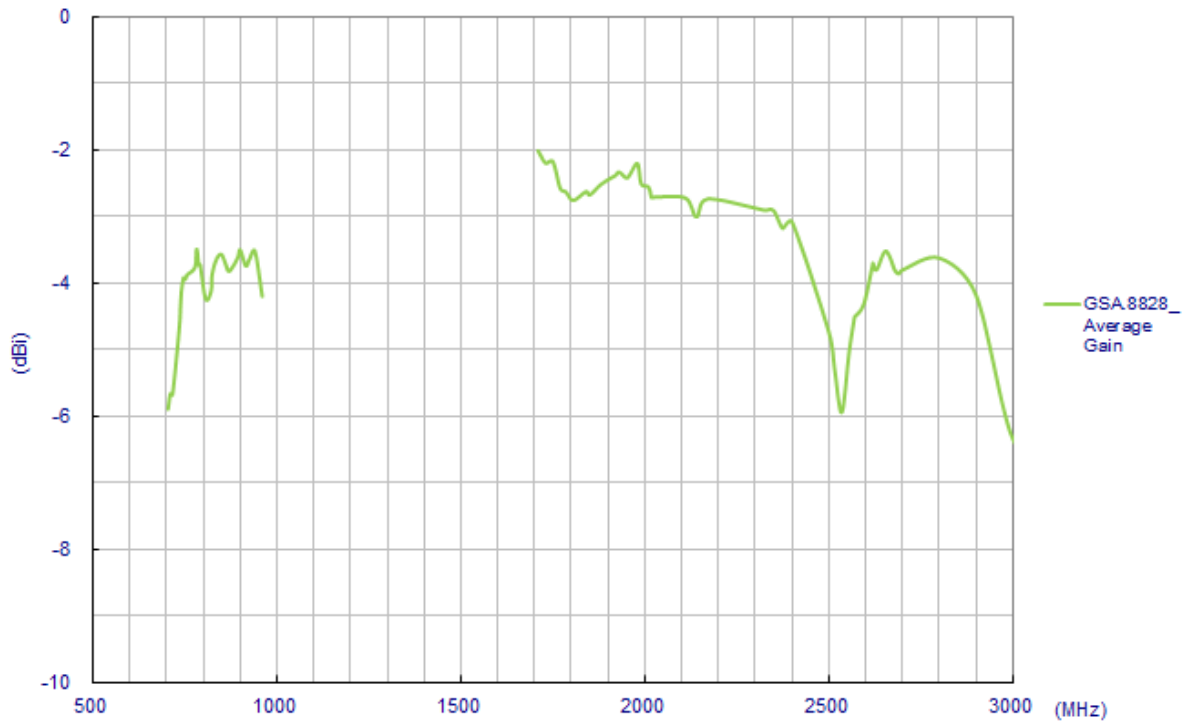
3.1. 1 Return Loss (in free space)



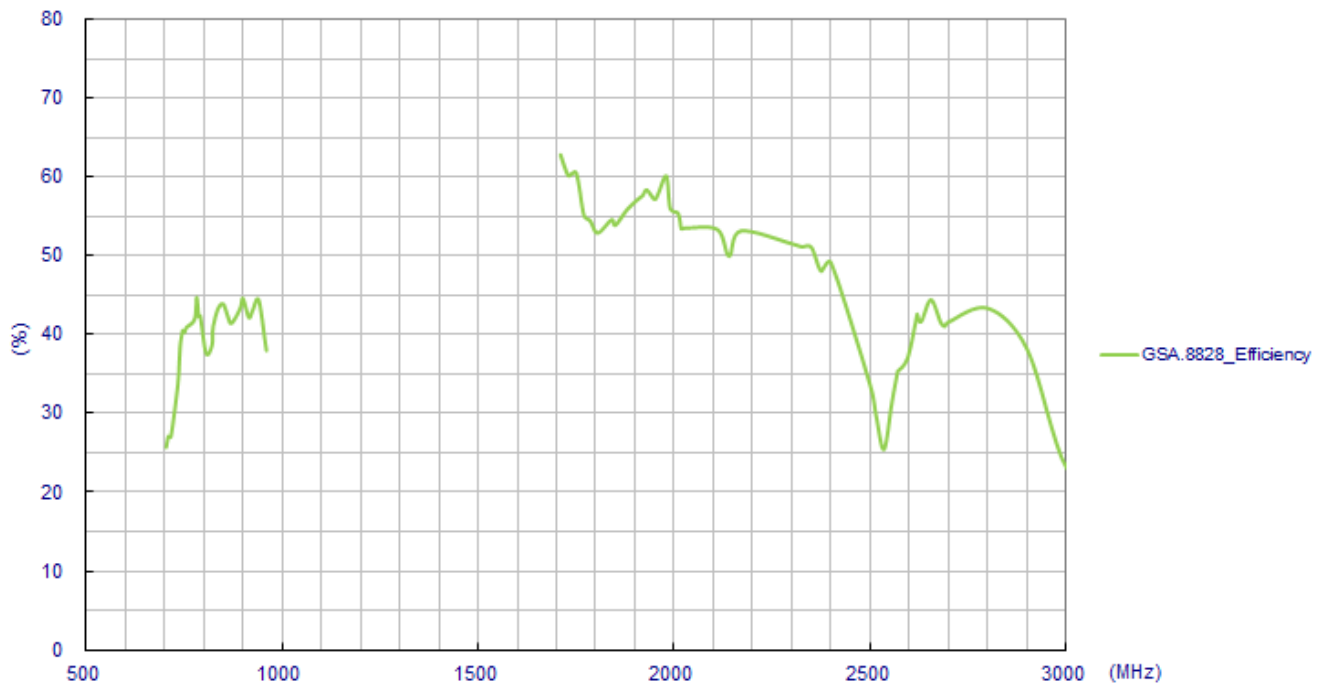
3.2.1 Peak Gain (in free space)



3.3.1 Average Gain (in free space)

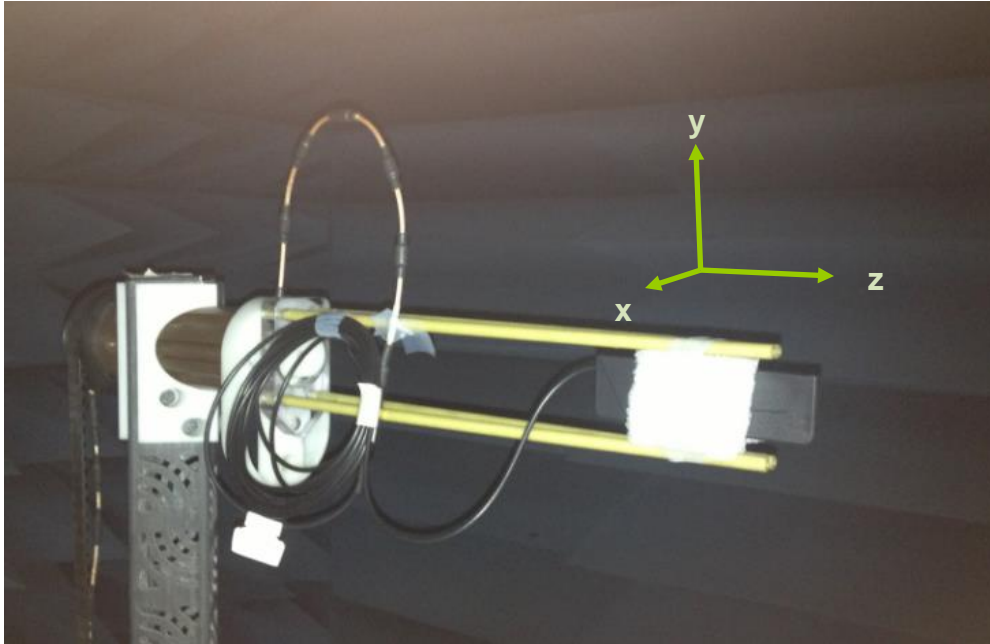


3.4.1 Efficiency (in free space)



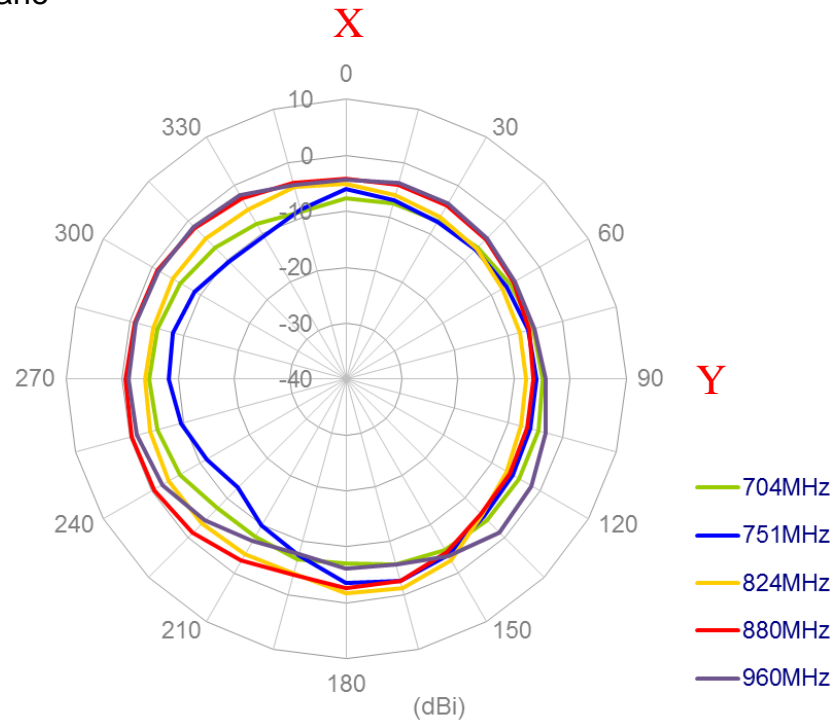
4. Antenna Radiation Patterns

4.1 Antenna setup (Free space with 1 meters cable length)

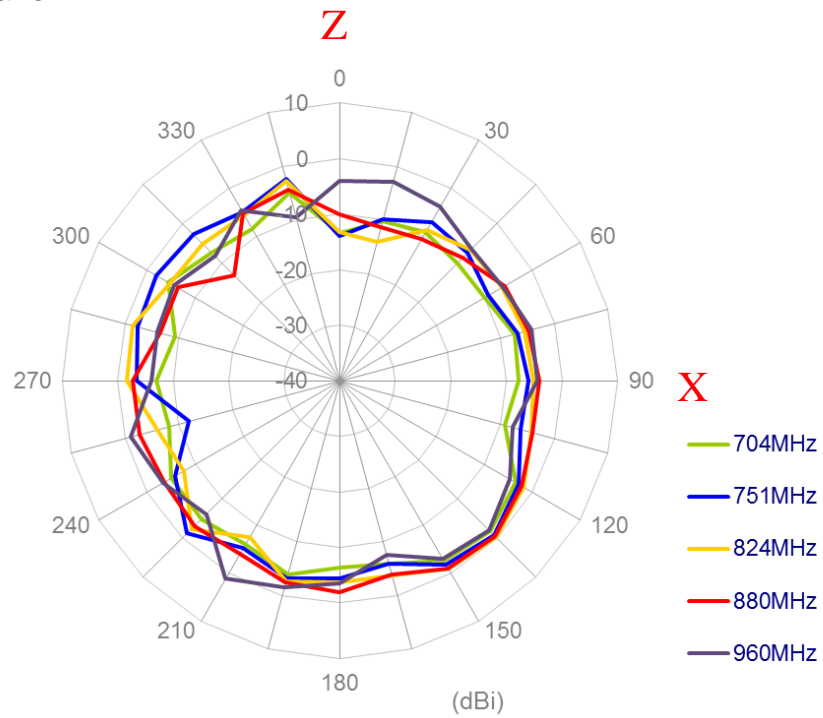


Radiation patterns

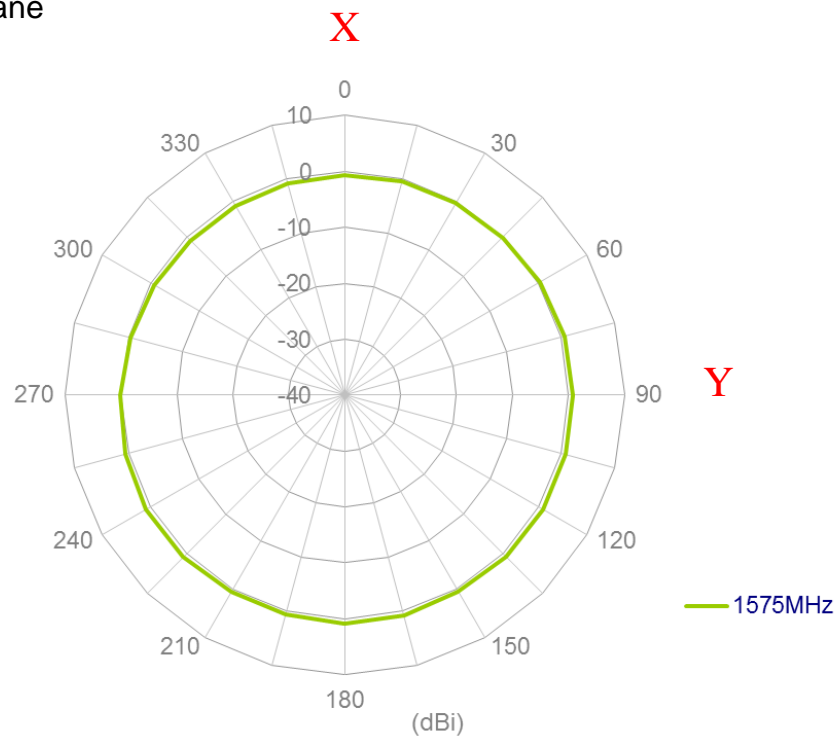
XY Plane



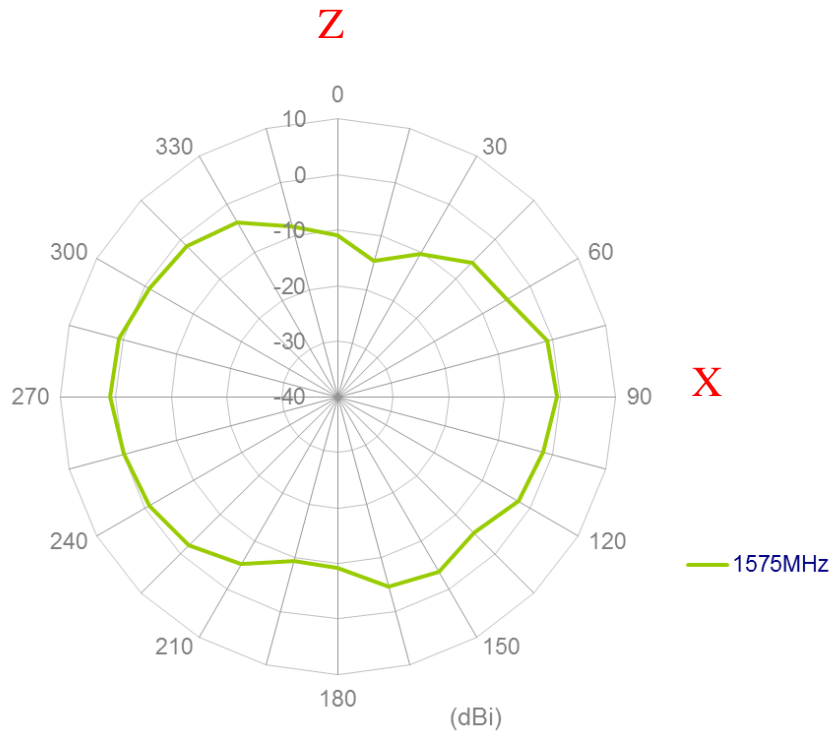
XZ Plane



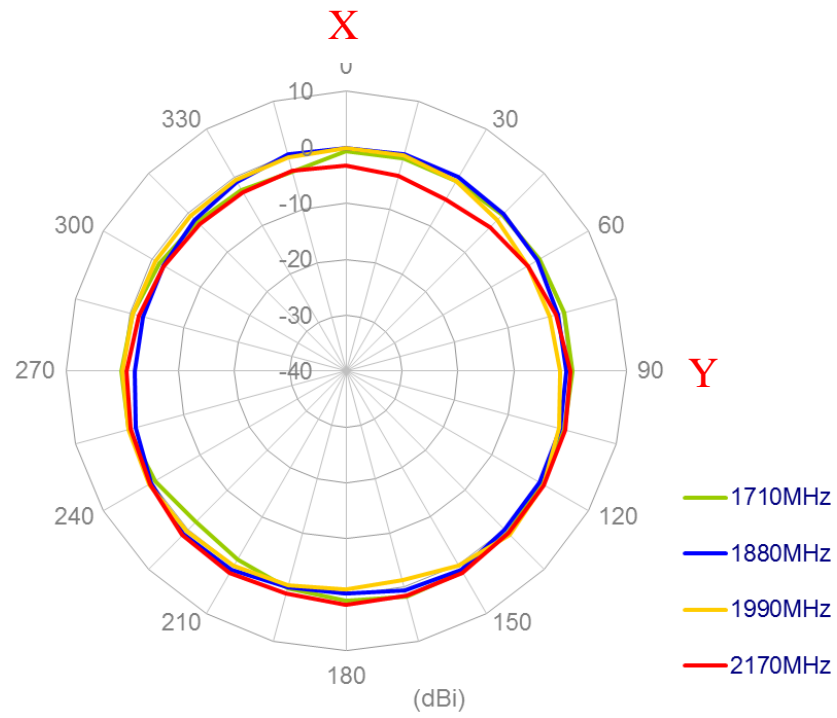
XY Plane



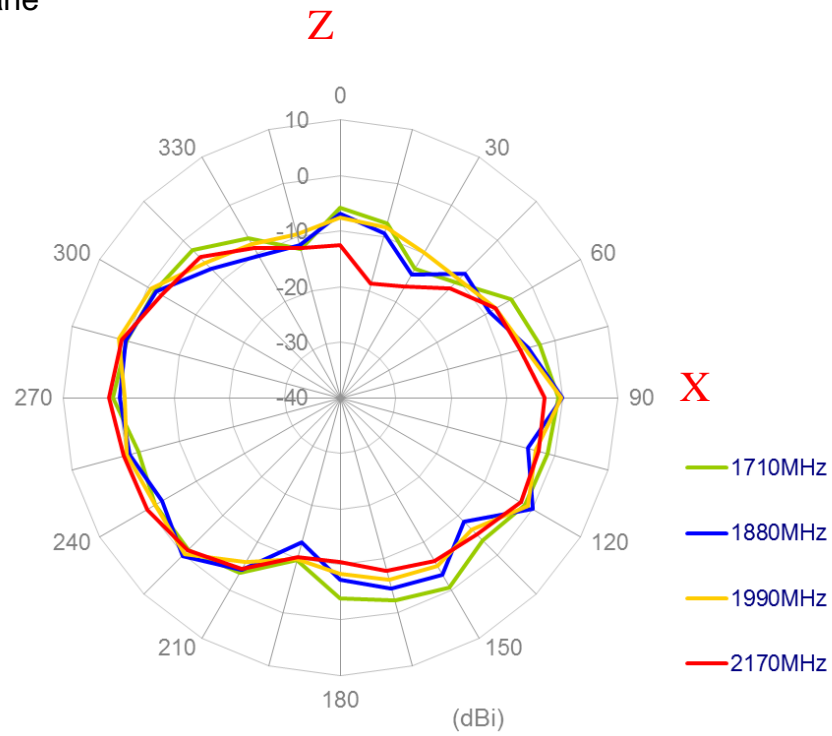
XZ Plane



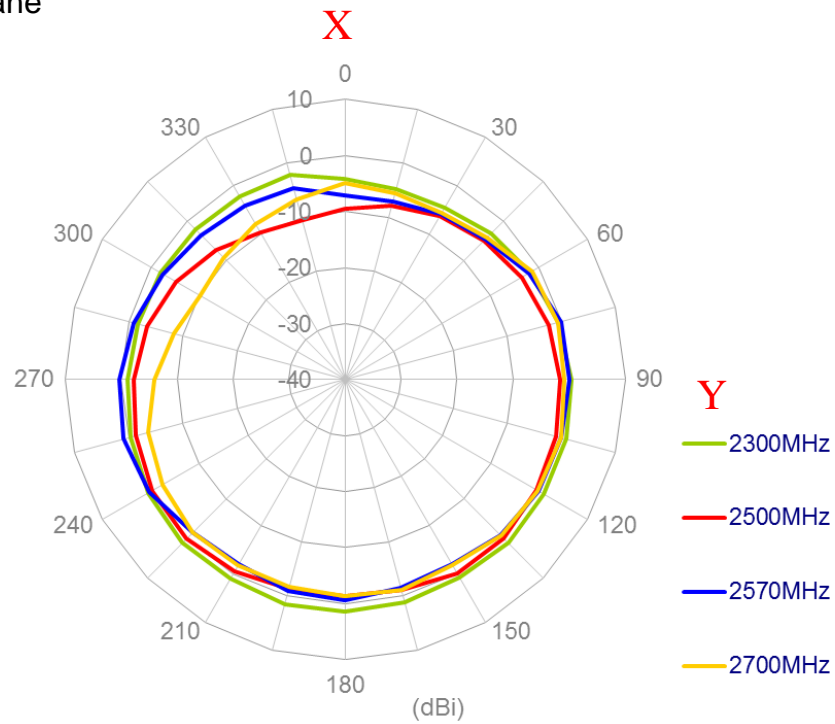
XY Plane



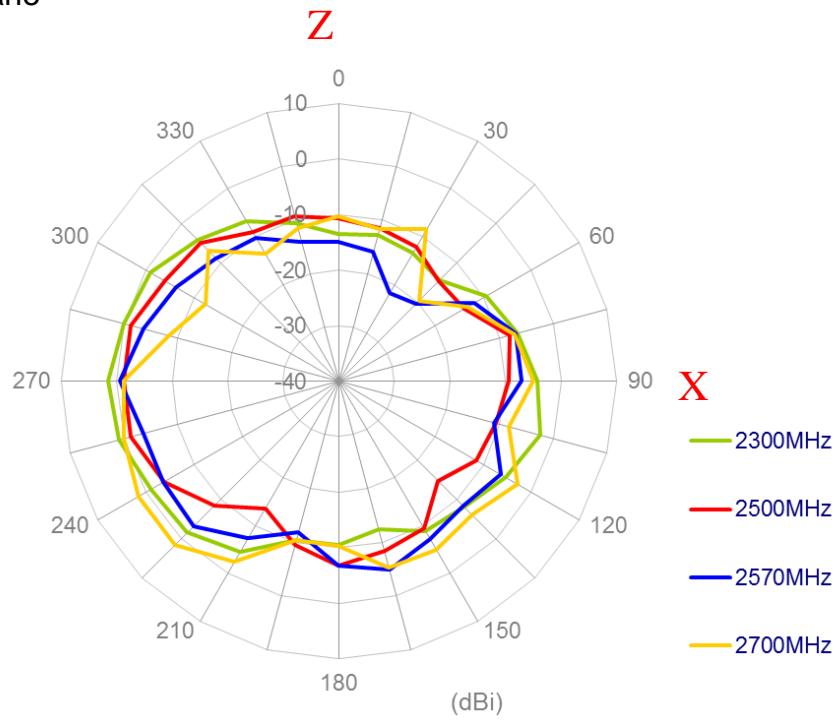
XZ Plane



XY Plane



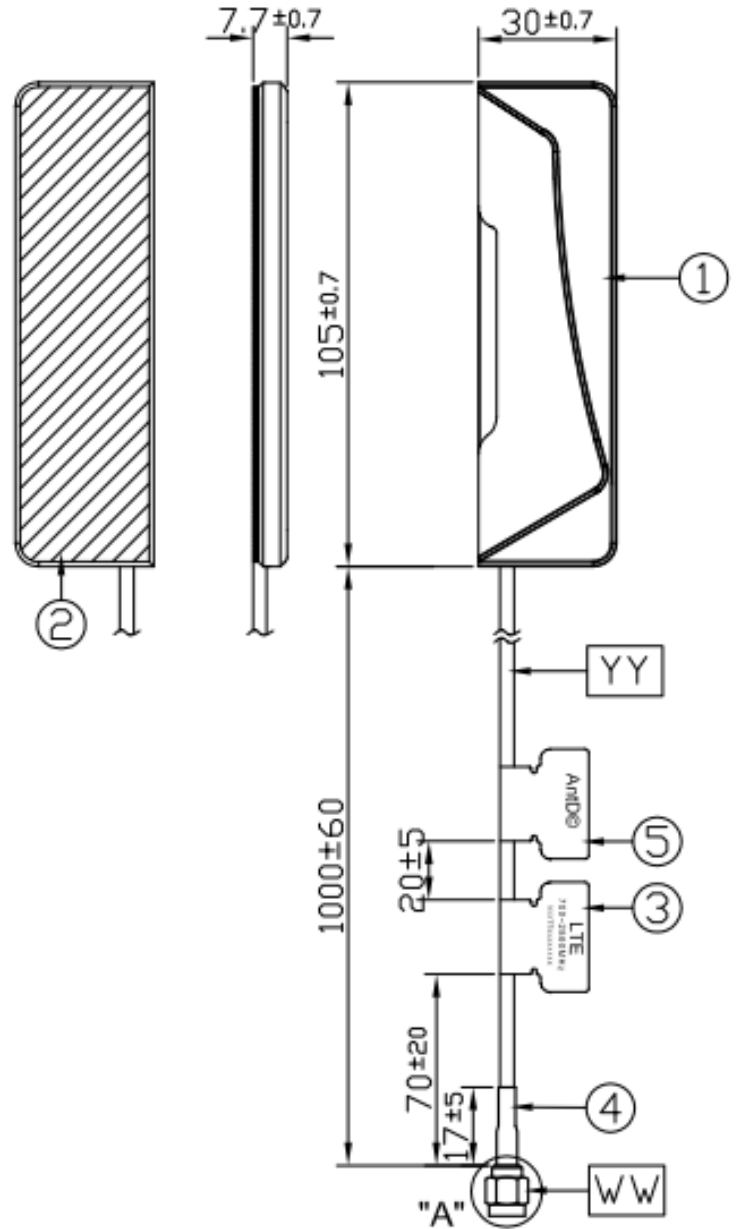
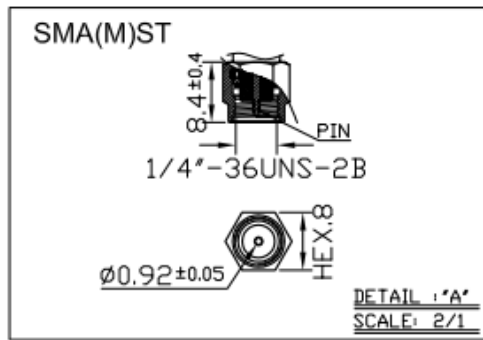
XZ Plane



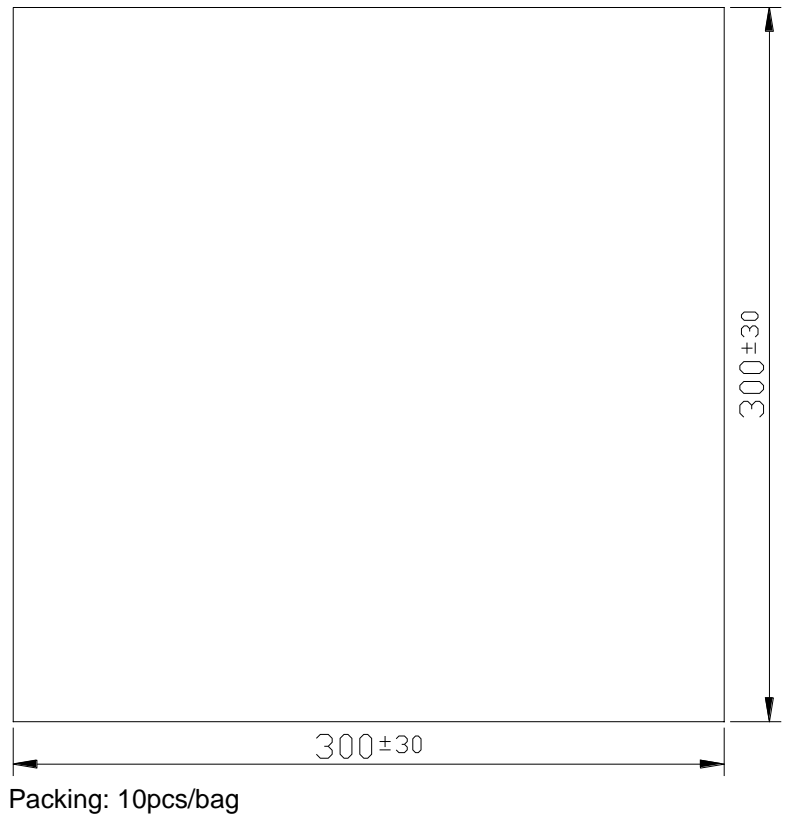
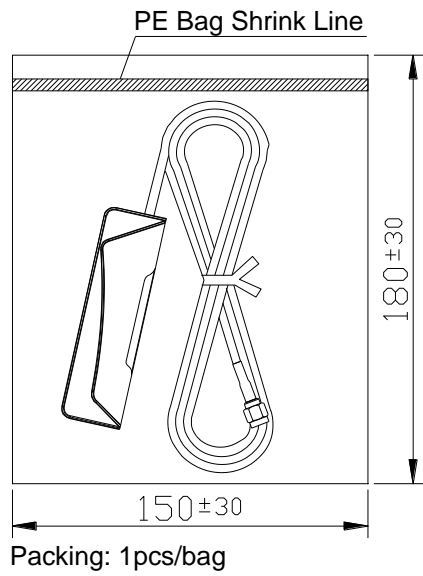
5 Drawing

	Name	Material	Finish	QTY
1	Housing	PC+ABS	Black	1
2	Double Sided Adhesive	3M 1600T	White	1
3	LTE Label	Coated Paper	White	1
4	Heat Shrink Tube	PE	Black	1
5	AntD® Label	Coated Paper	White	1

	Name	Spec	Finish	QTY
WW	Connector Type	SMA(M)ST	Gold	1
YY	Cable Type	RG-174	Black	1



6 Packaging



AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit www.ameya360.com

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