



Underside View
(this side faces
the passenger)



Top View
(this side faces
the sky)

Stingray

MA206.A.AB.004

Specification

Part No.	MA206.A.AB.004
Product Name	Stingray MA.206 Stingray GPS/2.4~2.54GHz Combination Adhesive Antenna
Feature	GPS - High gain LNA up to 32dB 2.4~2.5GHz Height 10.8mm Diameter 55.1mm RoHS Compliant

1. Introduction

This is a combination high performance GPS and 2.4~2.5GHz antenna to simplify AVL or Fleet management antenna systems worldwide. Its high quality low profile covert housing can be attached onto the glass or even out of sight under

the dashboard. This combination is ideal for those applications that require durability, small size and covert installation.

The standard version has 3 metres RG174 cable and SMA(M) connector on GPS

and RP-SMA(M) on 2.4~2.5GHz. The cables and connectors are completely customizable according to customer request.

1.1 Features

GPS

High LNA Gain up to 32 dB

Antenna Gain 30 ± 2 dB

Miniaturized to 55.15x12mm

Low Noise 1.5 dB max

WiFi

Advanced 2.4~2.5GHz

Other

Water Resistant IP 65

Quality textured covert design. Low profile

UV resistant ABS housing

Comes with high grade 3M double sided tape for quick and easy mounting

Customizable cables and connectors

2. Specification

2.1 Performance Specifications

Items	GPS Patch Antenna	2.4~2.5GHz
Features	High performance GPS ceramic patch antenna with cutting edge low noise amplifier	2400MHz to 2500MHz
Frequency	1575.42 MHz $\pm$ 2MHz	As above
Gain	28dB typ. Gain at Zenith: -1.0 dBi min Axial Ratio :3.0 dB max	
Noise Figure	2dB max.	
Polarization	RHCP	
DC Power Input	2.7~3.3V	
Bandwidth	10 MHz min	
VSWR	≤ 1.92	≤ 1.92
Impedance	50 Ω	50 Ω
Cable / Connector	Standard 1/2/3/5/10m RG-174 Cables and Connectors Fully Customizable	Standard 1/2/3/5/10m RG-174 Cables and Connectors Fully Customizable
Operating Temperature	-40°C ~ +85°C	-40°C ~ +85°C
Storage Temperature	-40°C ~ +95°C	-40°C ~ +95°C
Size	55mm * 10.8mm	
Housing	UV resistant ABS	

***Note:** Specifications may be subject to change

3. Electrical Characteristic – 2.4~2.5GHz

3.1 Return Loss (2.4~2.5GHz Antenna)

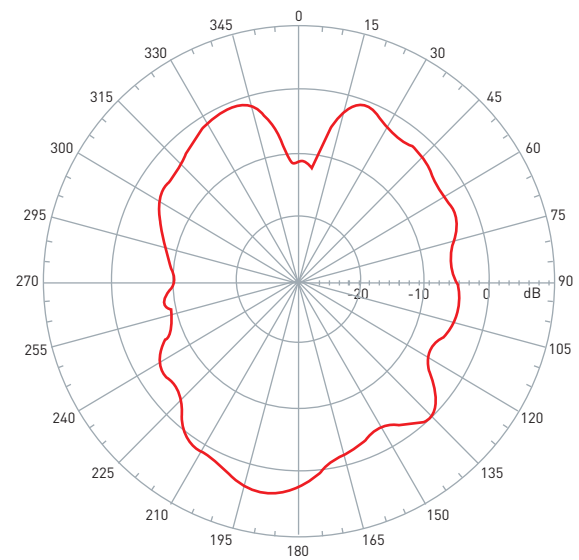
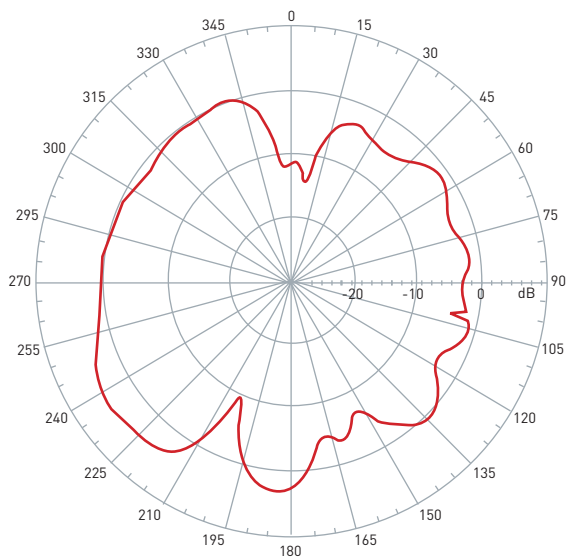


3.2 Radiation Patterns WiFi Antenna

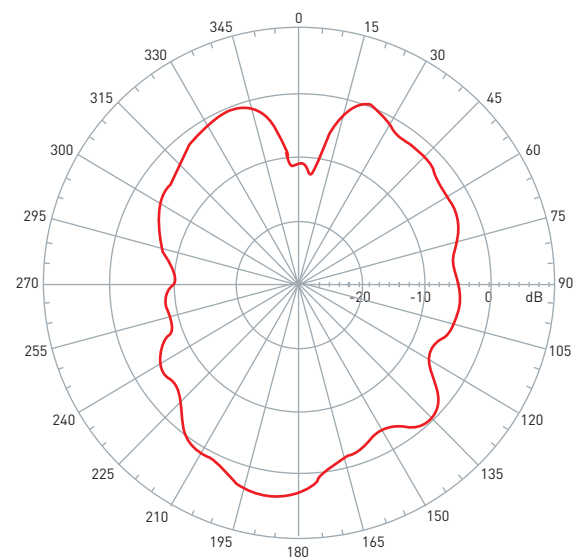
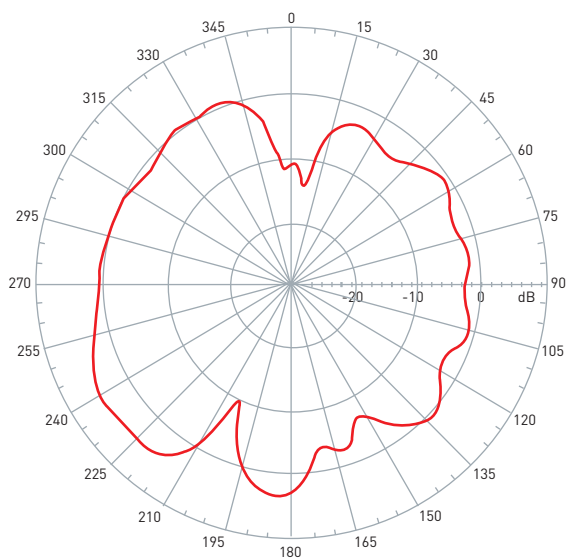
XZ Plane

YZ Plane

2400 MHz



2412 MHz

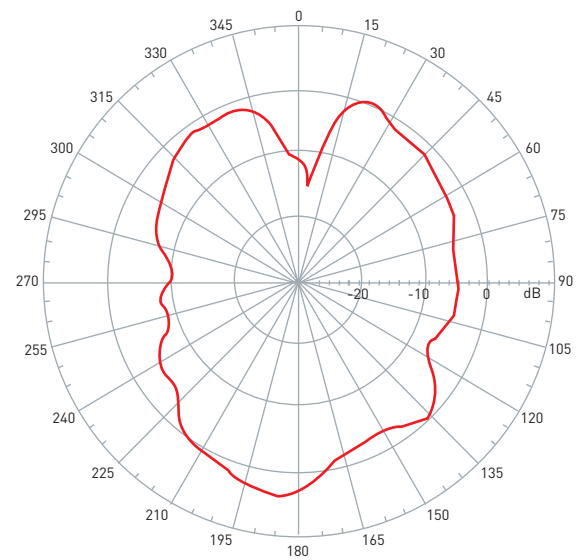
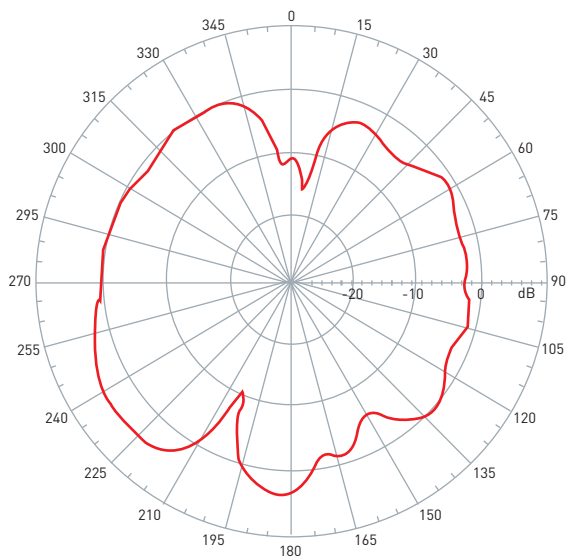


3.2 Radiation Patterns WiFi Antenna

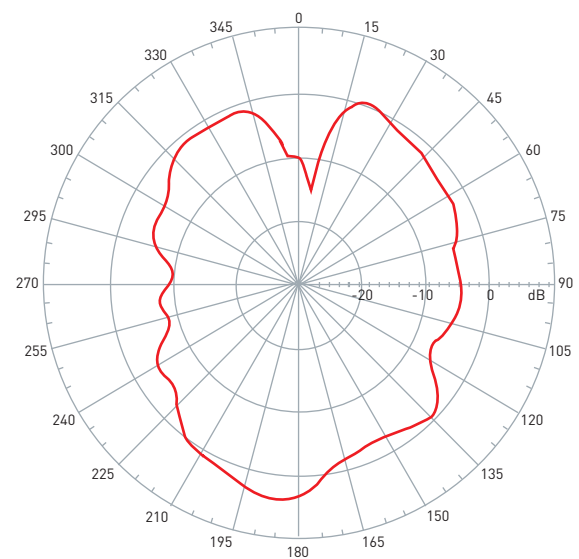
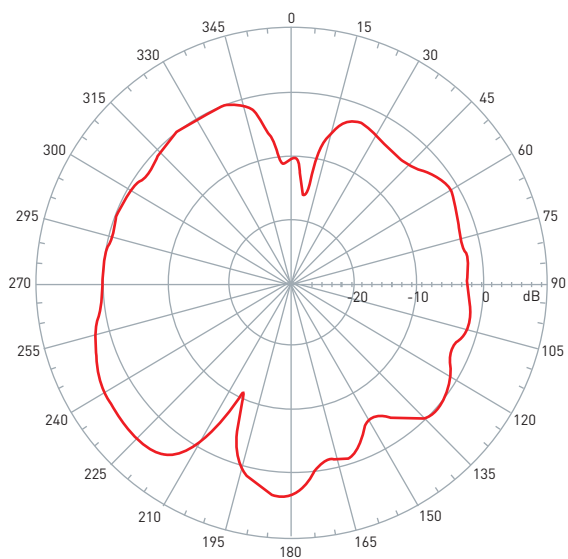
XZ Plane

YZ Plane

2437 MHz



2450 MHz

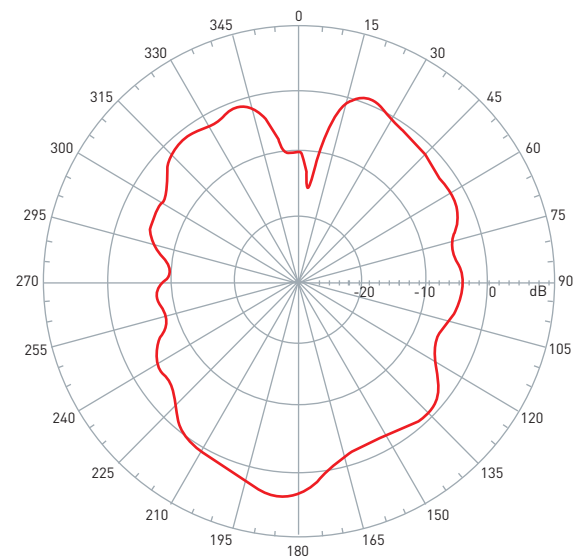
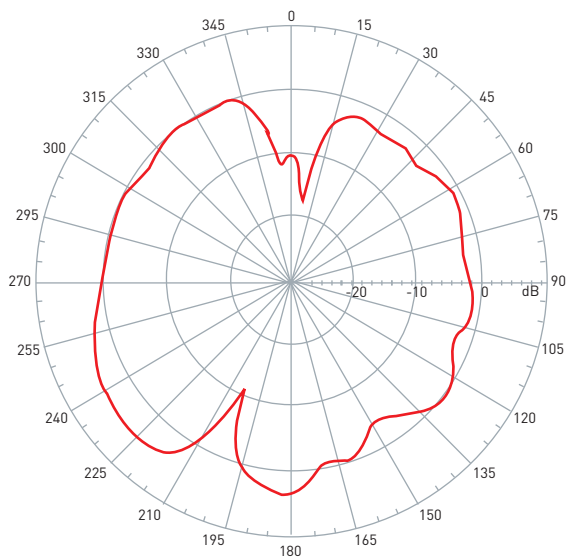


3.2 Radiation Patterns WiFi Antenna

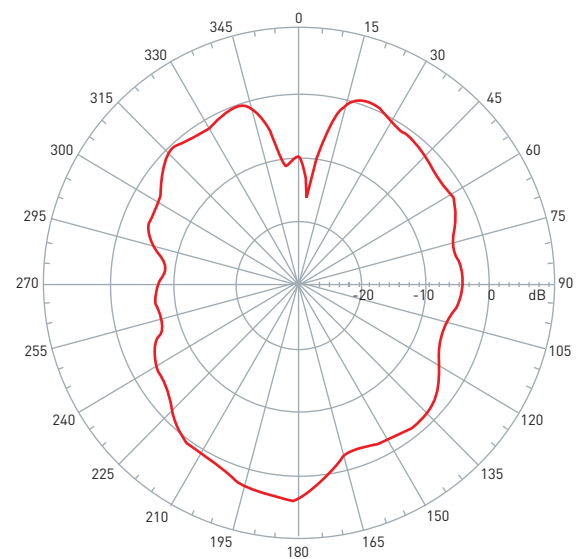
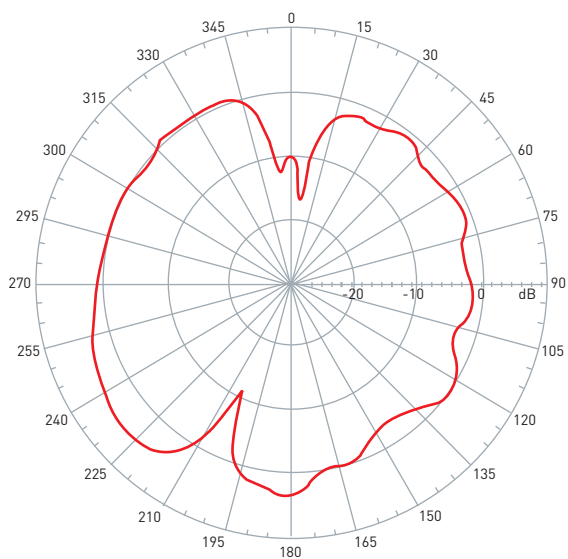
XZ Plane

YZ Plane

2472 MHz

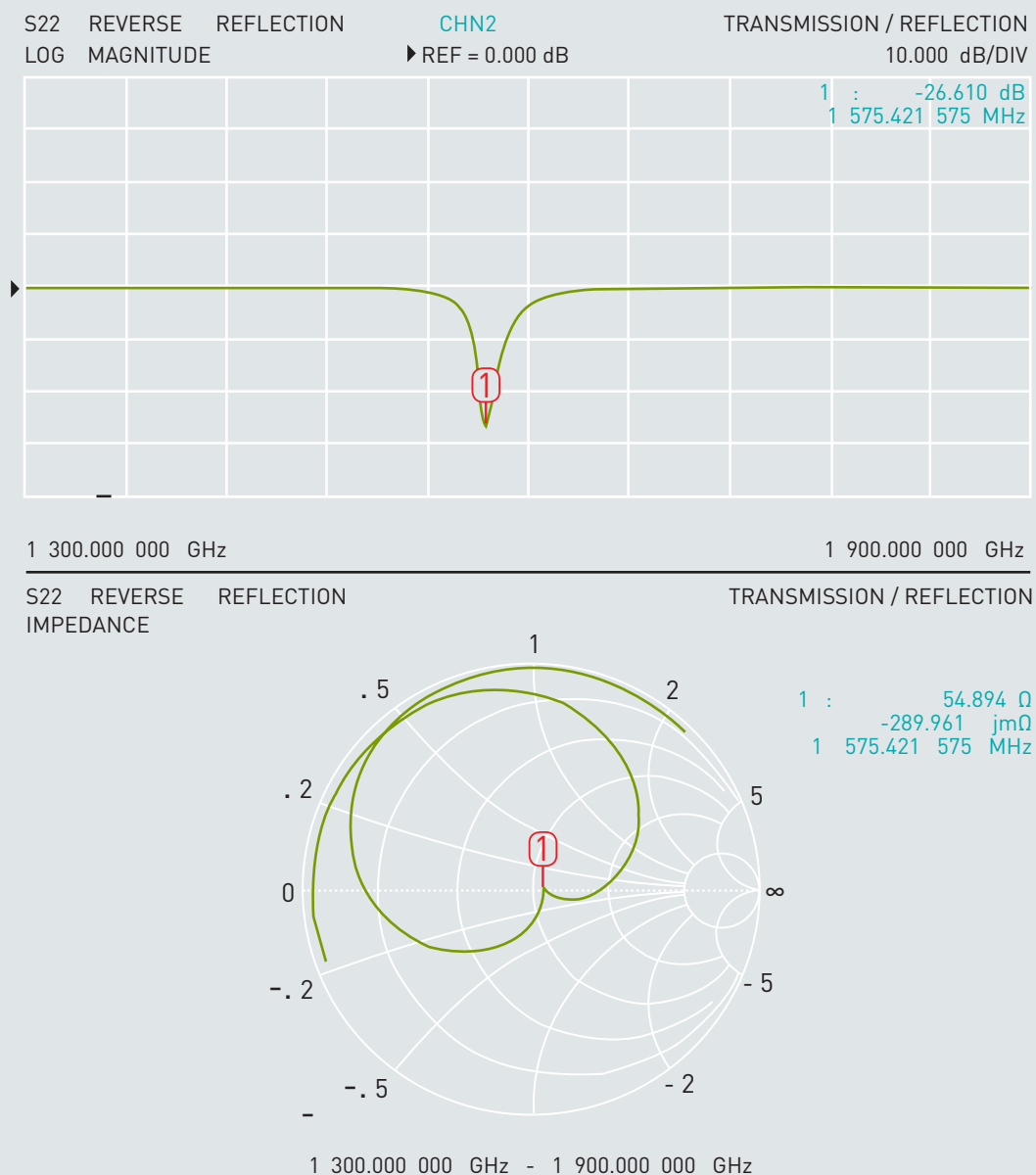


2500 MHz

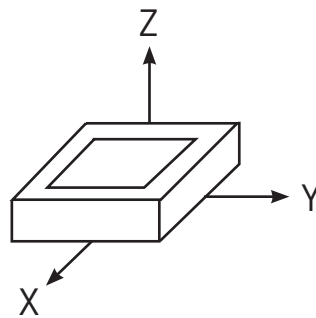


4. Electrical Characteristic - GPS

4.1 Return Loss

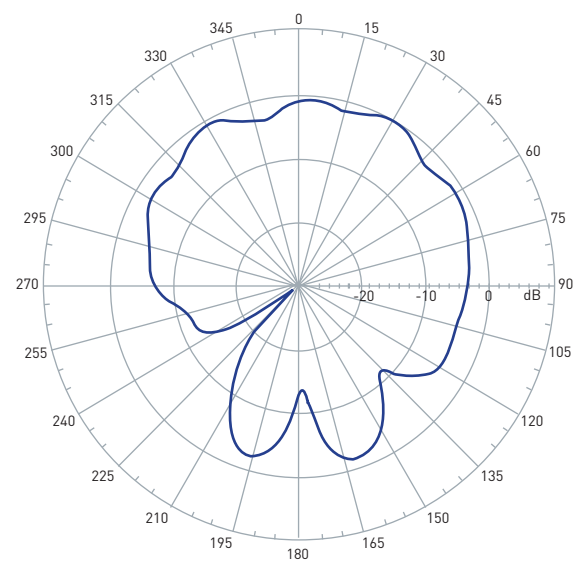
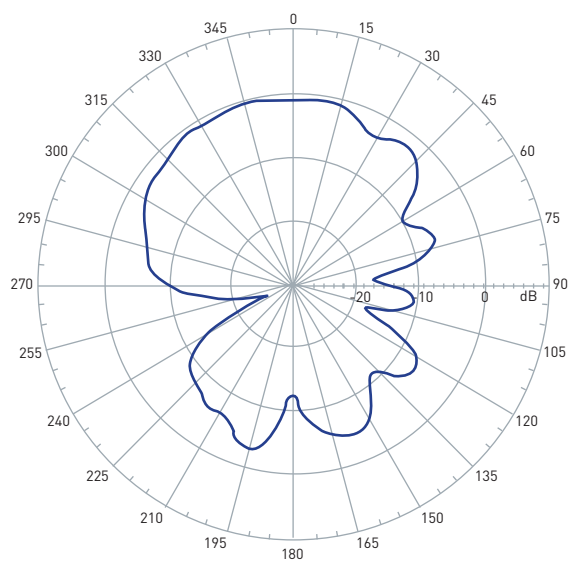


4.2 Radiation Patterns

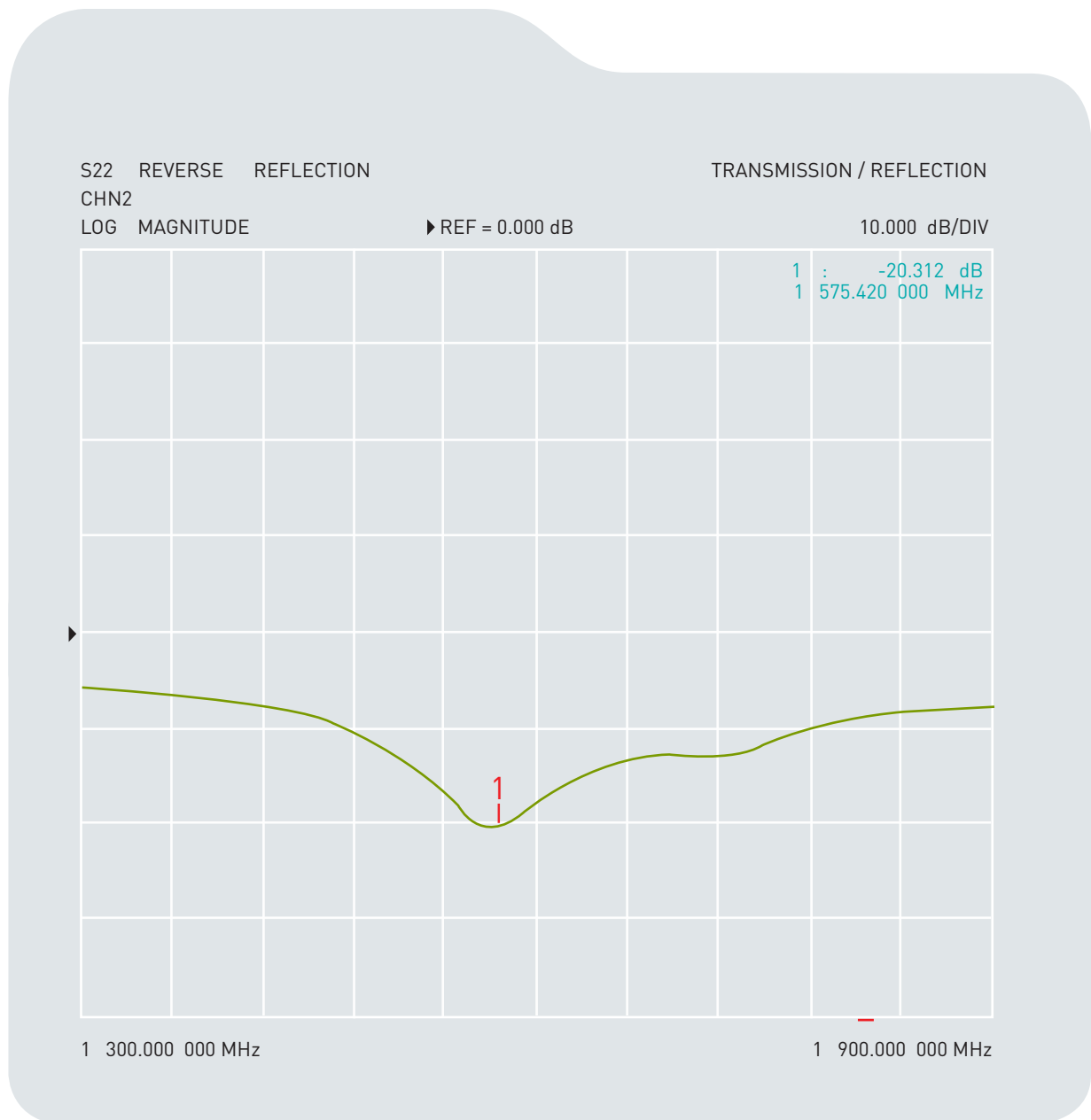


XZ Plane

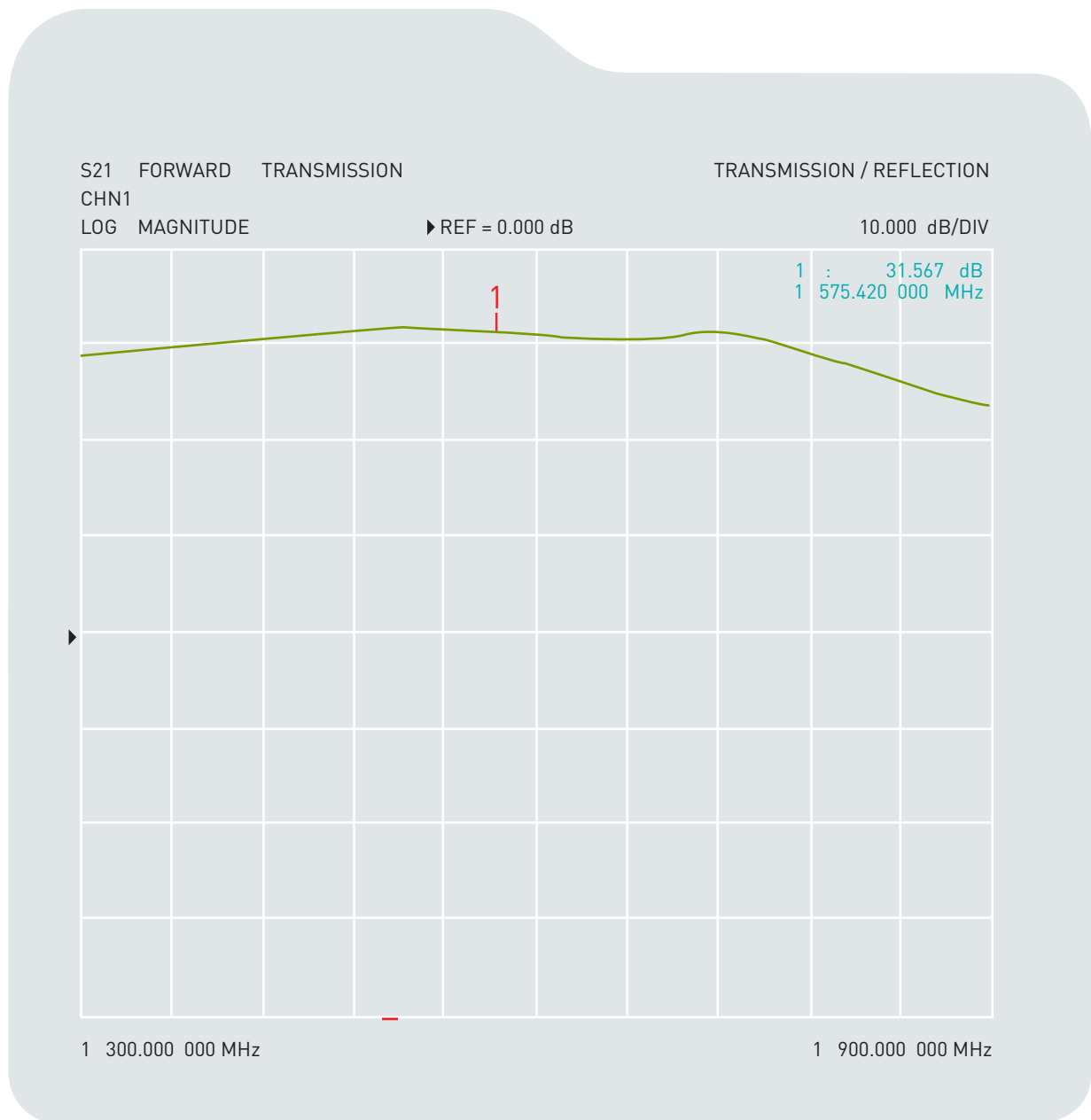
YZ Plane



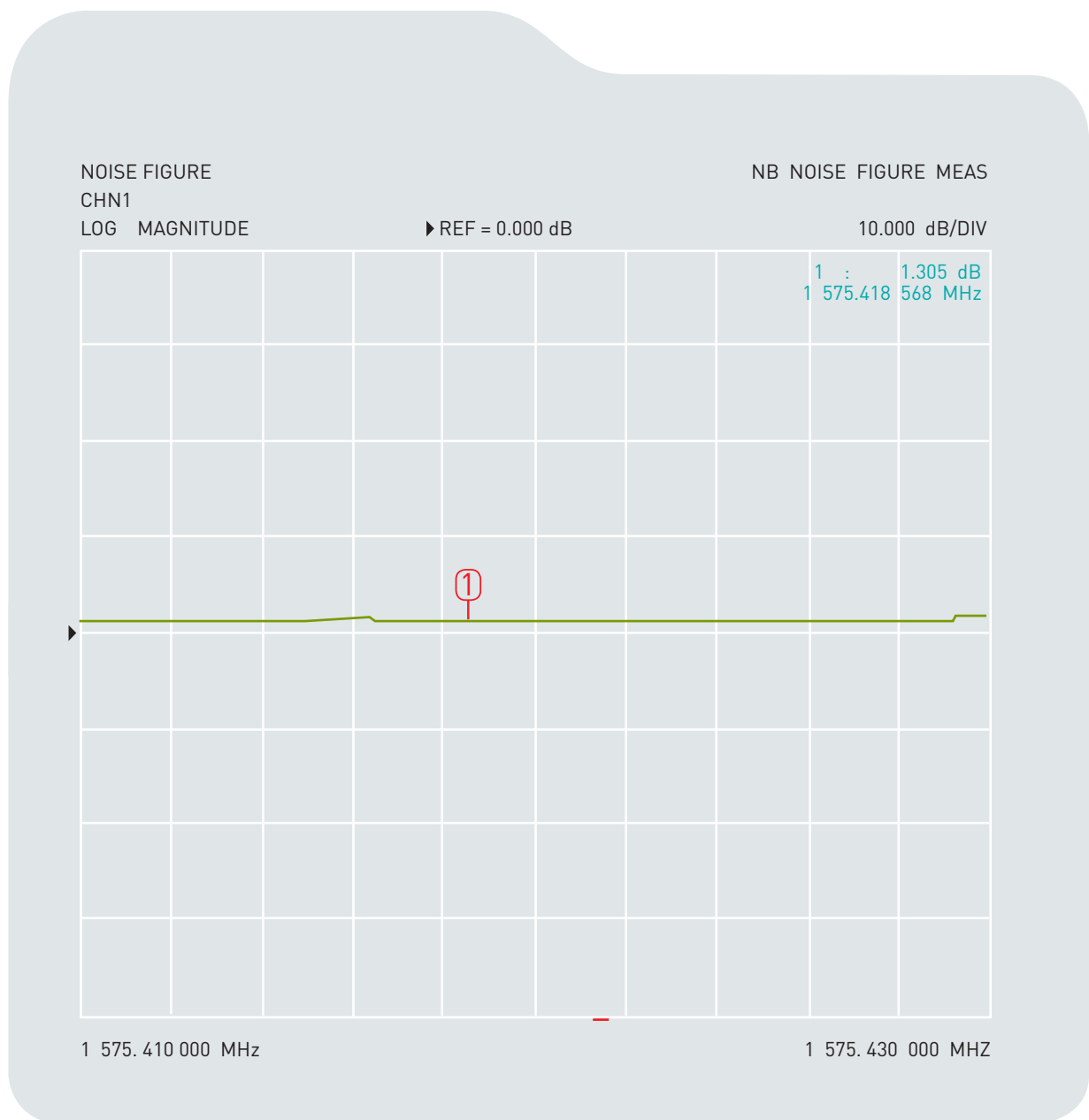
4.3 LNA S22



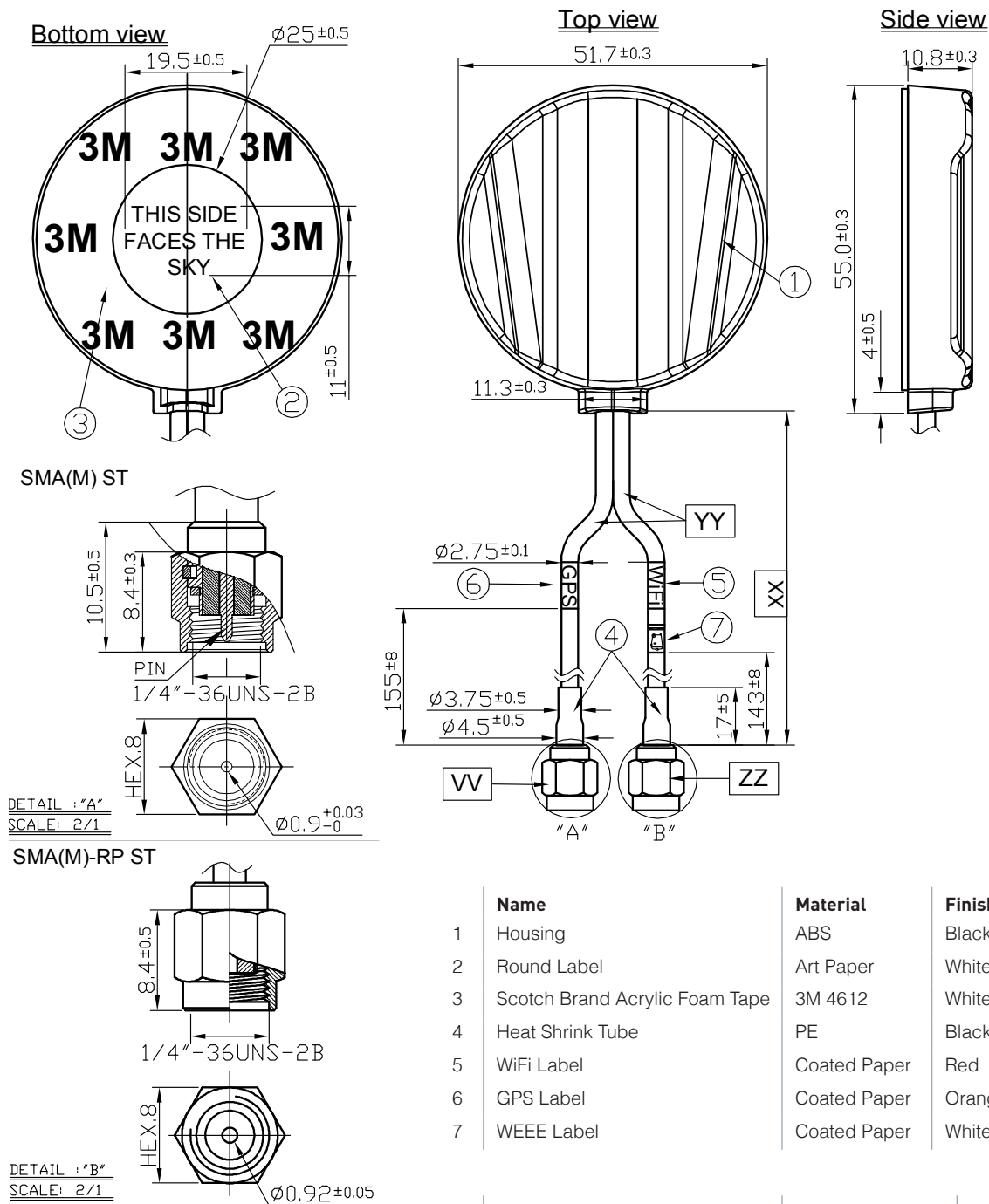
4.3 LNA S21



4.4 Noise Figure



5. Drawings



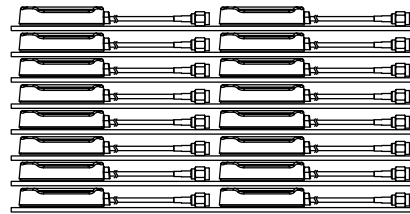
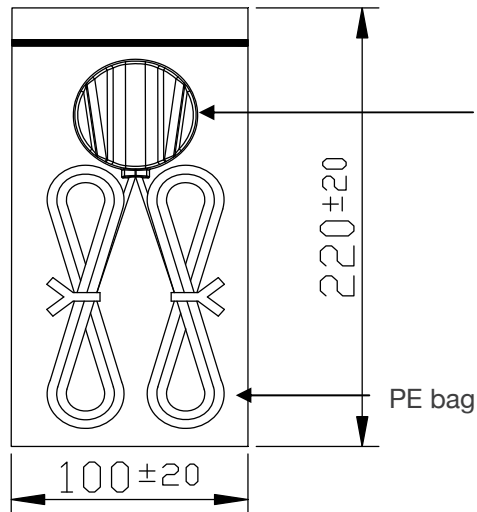
	Name	Material	Finish	QTY
1	Housing	ABS	Black	1
2	Round Label	Art Paper	White	1
3	Scotch Brand Acrylic Foam Tape	3M 4612	White Liner	1
4	Heat Shrink Tube	PE	Black	2
5	WiFi Label	Coated Paper	Red	1
6	GPS Label	Coated Paper	Orange	1
7	WEEE Label	Coated Paper	White	1

	Name	Spec	Finish	QTY
XX	Cable Length	3000mm ± 30mm		1
YY	Cable Type	RG174	Black	2
VV	Connector Type	SMA(M) ST	Gold	1
ZZ	Connector Type	SMA(M) - RP ST	Gold	1

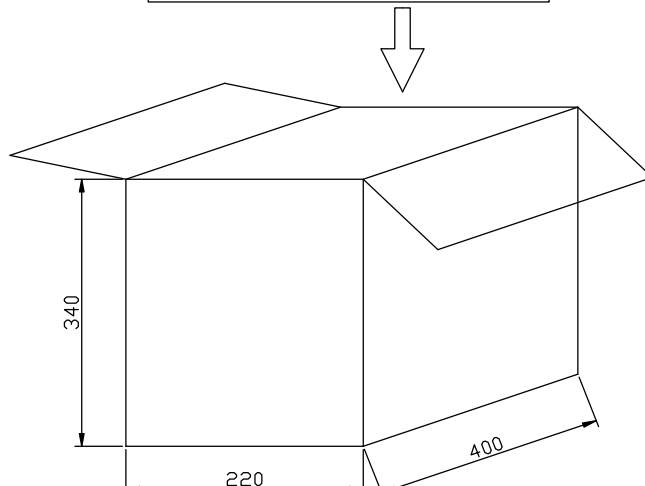
6. Packaging

1pcs antenna per small PE bag

80 small PE bag per box



10 pcs/pad



80 pcs per carton

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