SPECIFICATION

Part No. : **GP.1575.12.4.A.02**

Product Name : **4mm thick GPS Patch Antenna, 1575MHz**

Features : 12mm*12mm*4mm
Halogen Free
RoHS Compliant

:

I. Introduction

This miniaturized ceramic GPS patch antenna is based on smart ***XtremeGain™*** technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the customer device environment.

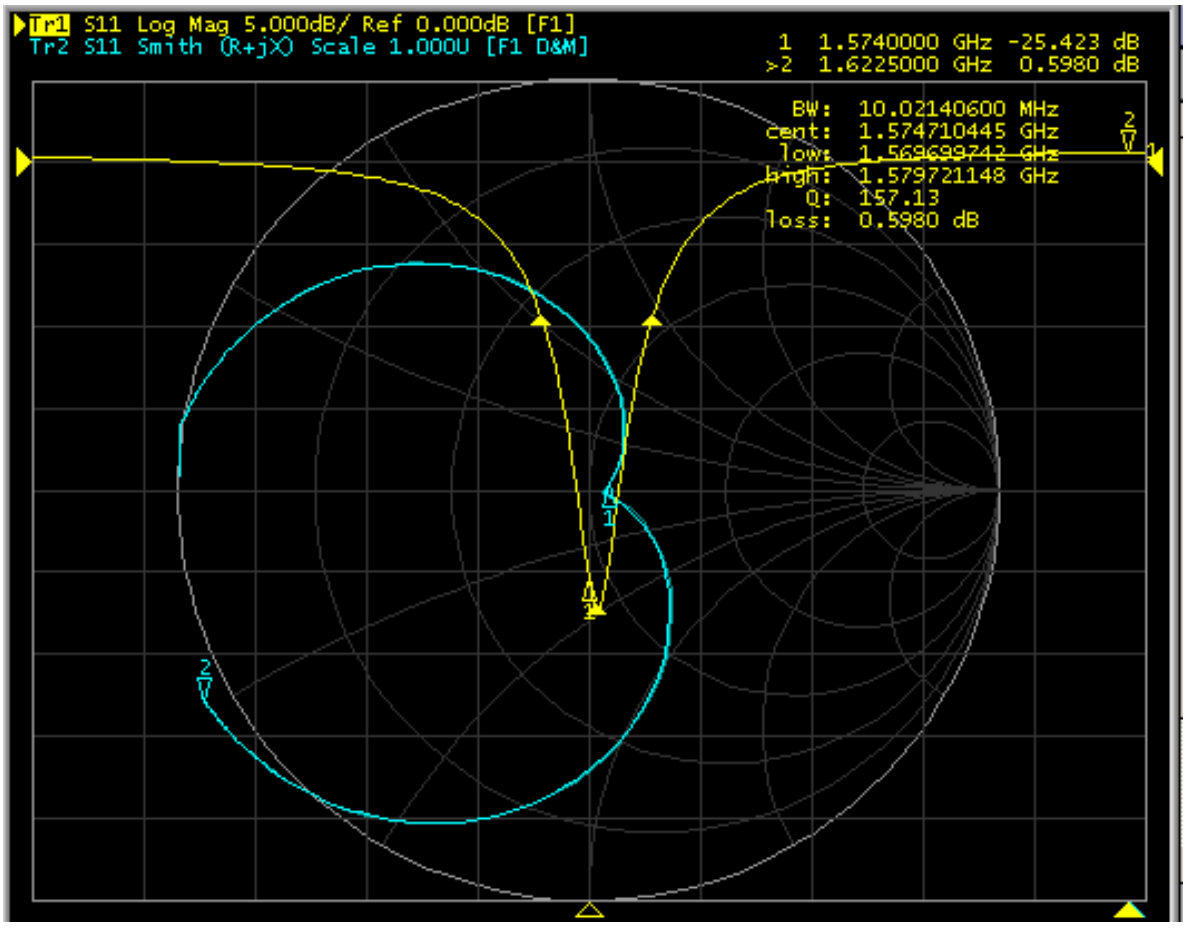
II. Specification Table

Original Patch Specification tested on 50*50mm ground plane

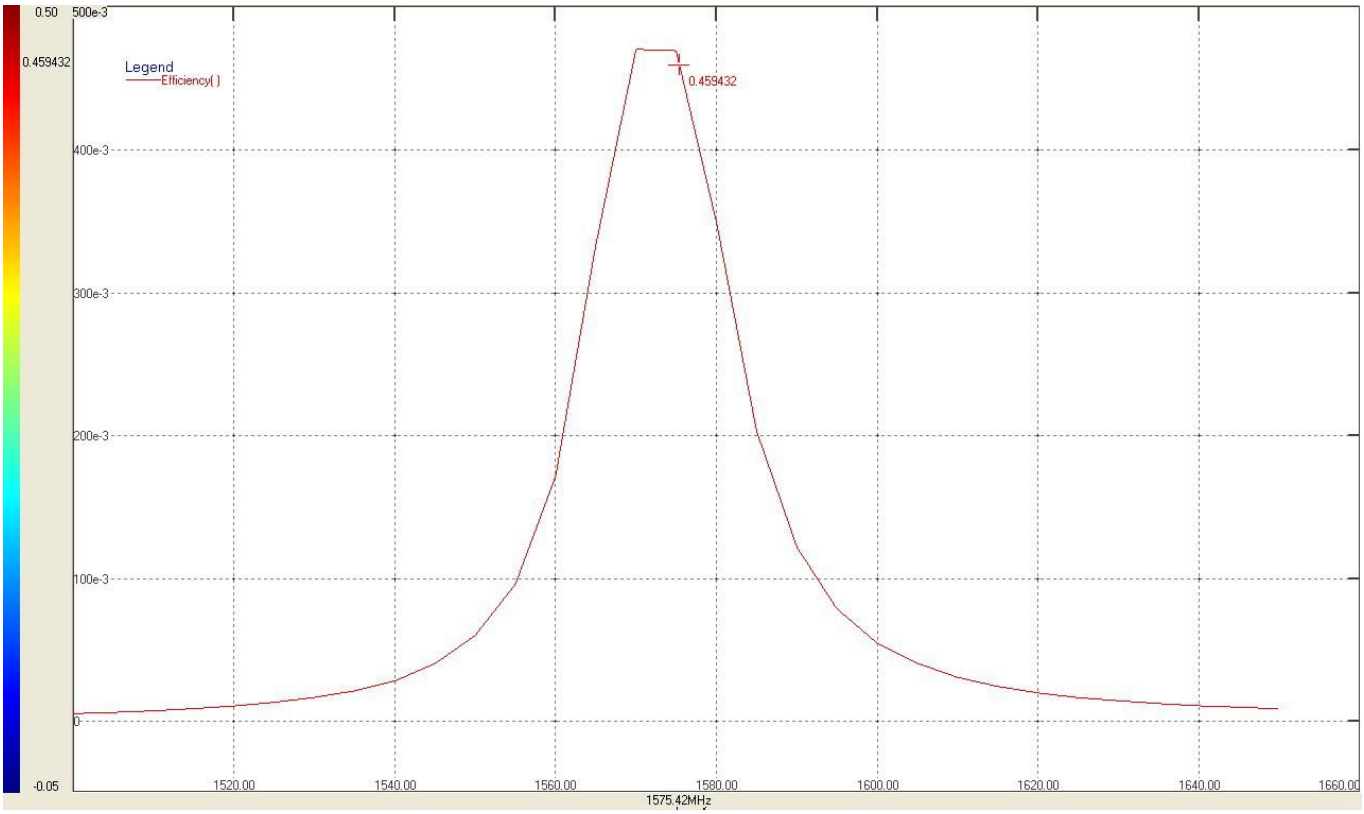
No	Parameter	Specification	
1	Center Frequency	1575MHz +/- 3MHz	
2	Impedance	50Ω	
3	Bandwidth	8MHz min Return Loss <-10dB	
4	VSWR	1.5 max	Center Frequency
5	Gain toward Zenith	-0.5 dBic typ.	
6	Gain at 10°Elevation	-----	
7	Axial Ratio	4dB Max.	
8	Polarization	Right Hand Circular Polarization	
9	Frequency Temperature Coefficient（τf）	0 ± 20ppm/°C	
10	Operating Temperature	-40ºC to +85ºC	

III. Electrical Specifications

III.1 Smith Chart

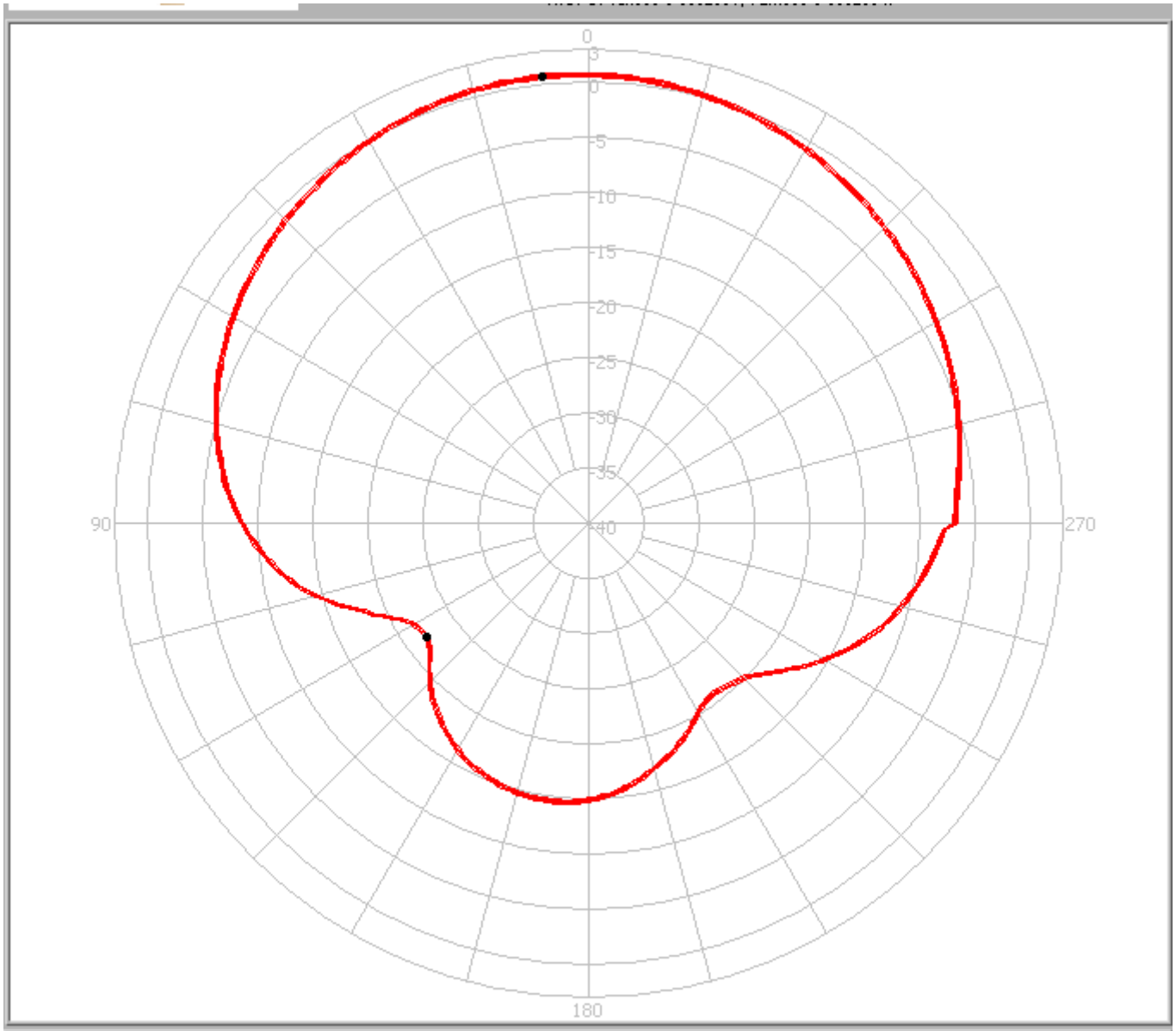


III.2 Efficiency



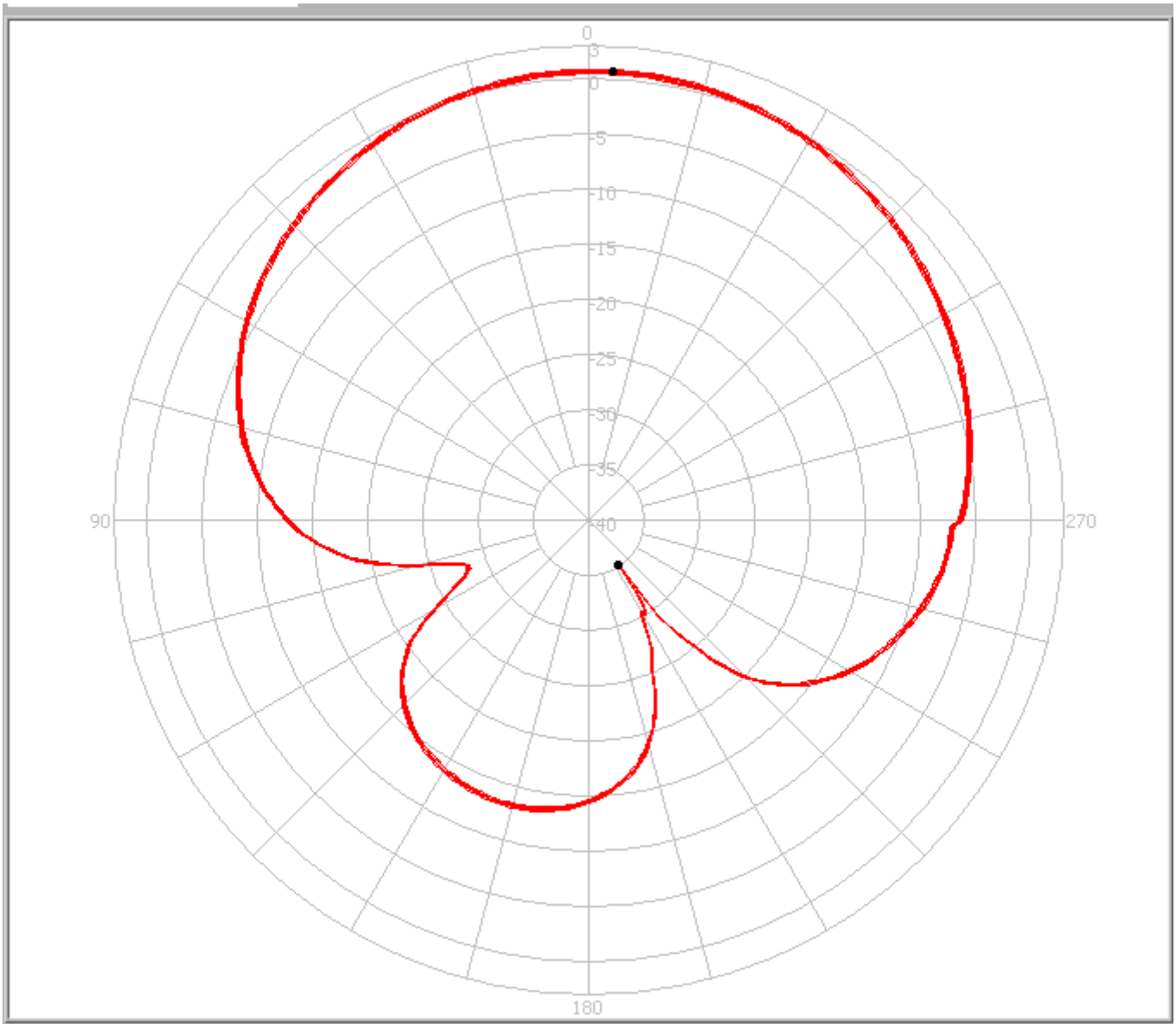
IV. 2D Radiation Patterns

IV.1 XZ Plane Radiation



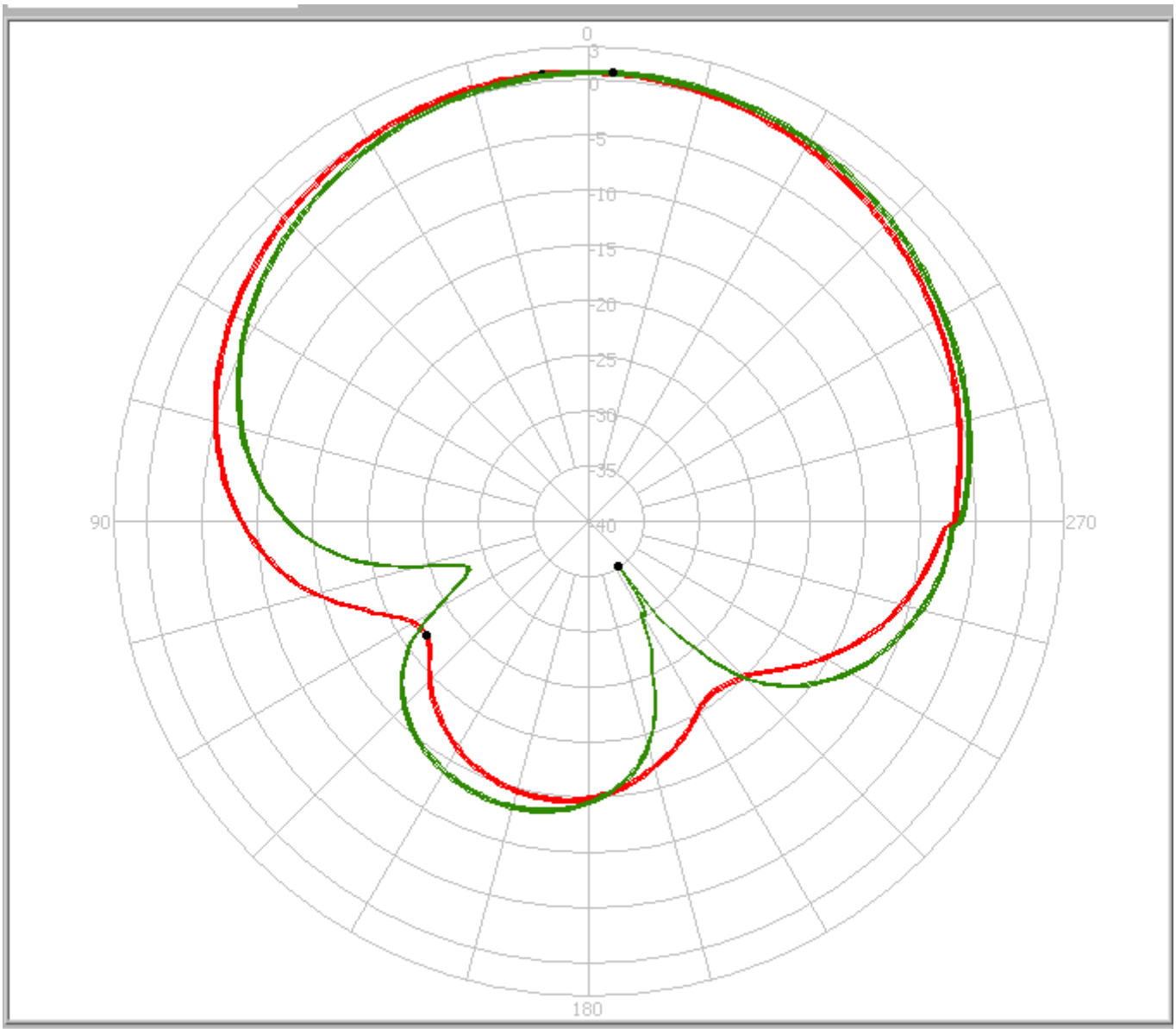
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	DA12	XZ	1575.42	0.70 / 6.00	-22.04 / 125.00	-4.37	RHCP	2010/3/11

IV.2 YZ Plane Radiation



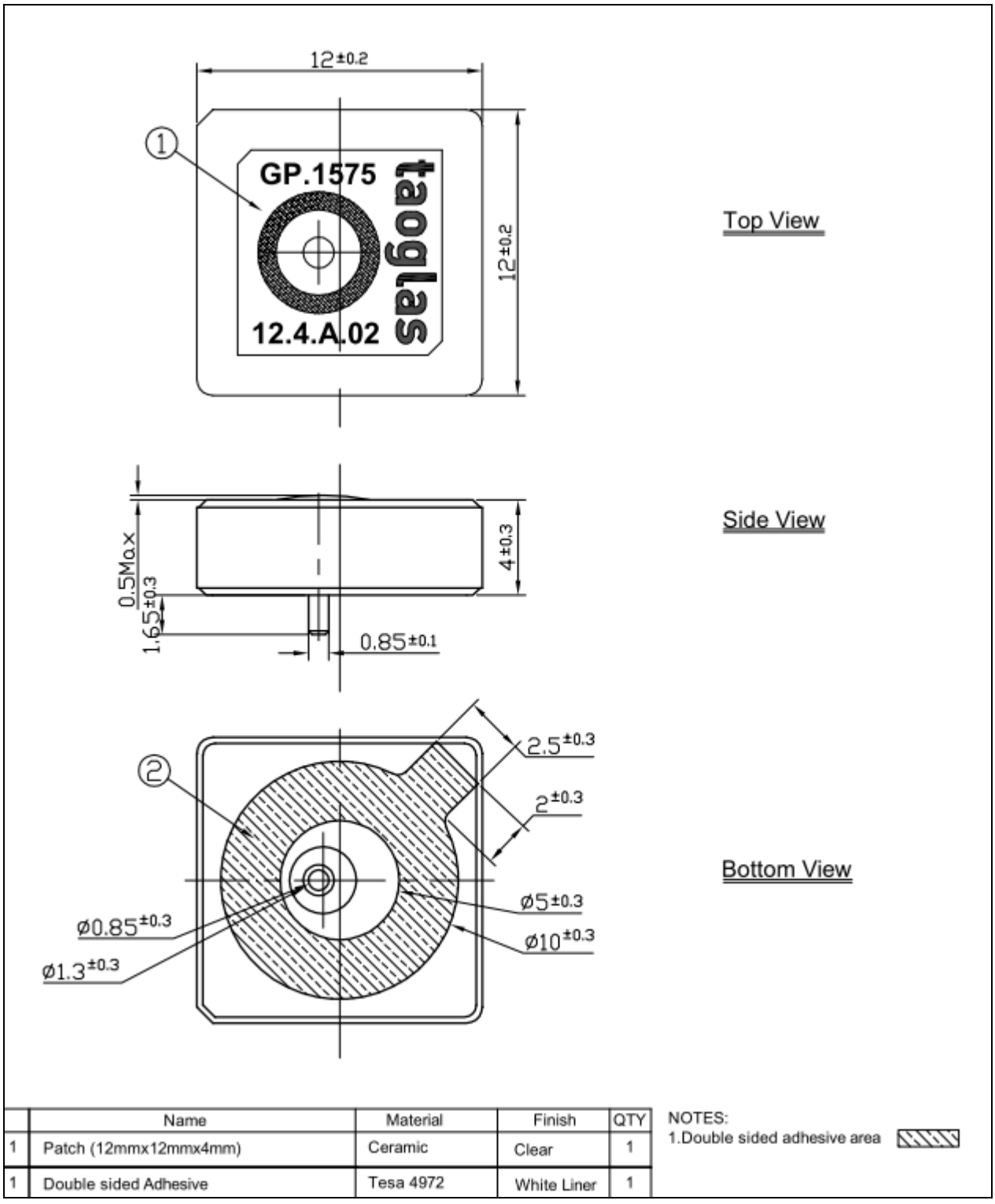
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	DA12	YZ	1575.42	0.65 / 357.00	-35.14 / 214.00	-4.50	RHCP	2010/3/11

IV.3 XY Plane Radiation



Pattern		Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1		DA12	XZ	1575.42	0.70 / 6.00	-22.04 / 125.00	-4.37	RHCP	2010/3/11
2		DA12	YZ	1575.42	0.65 / 357.00	-35.14 / 214.00	-4.50	RHCP	2010/3/11

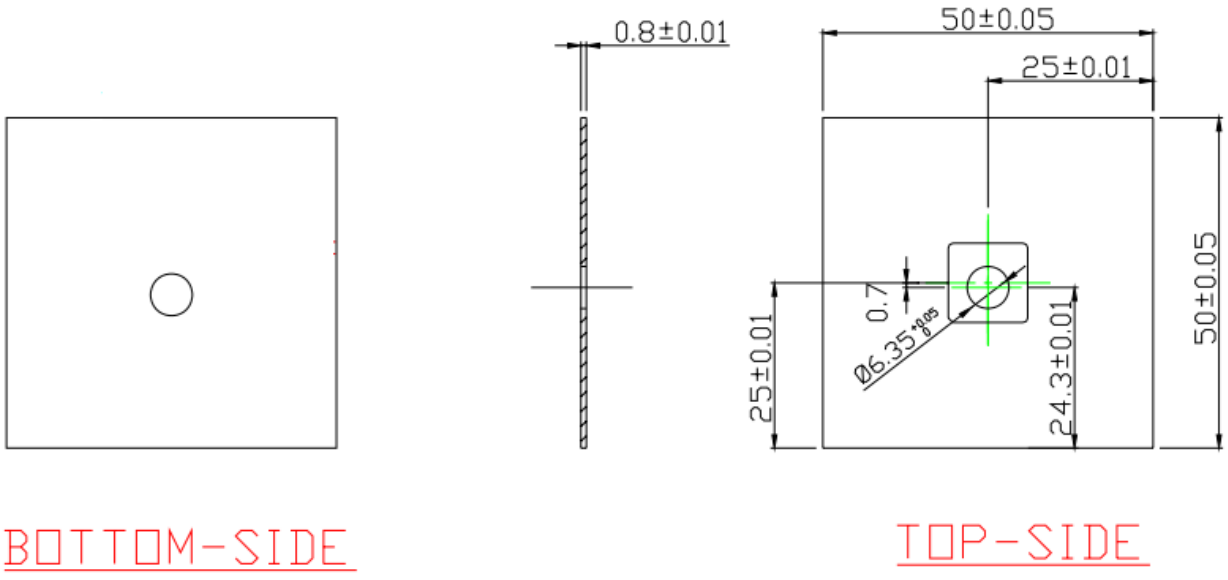
V. Mechanical Drawing



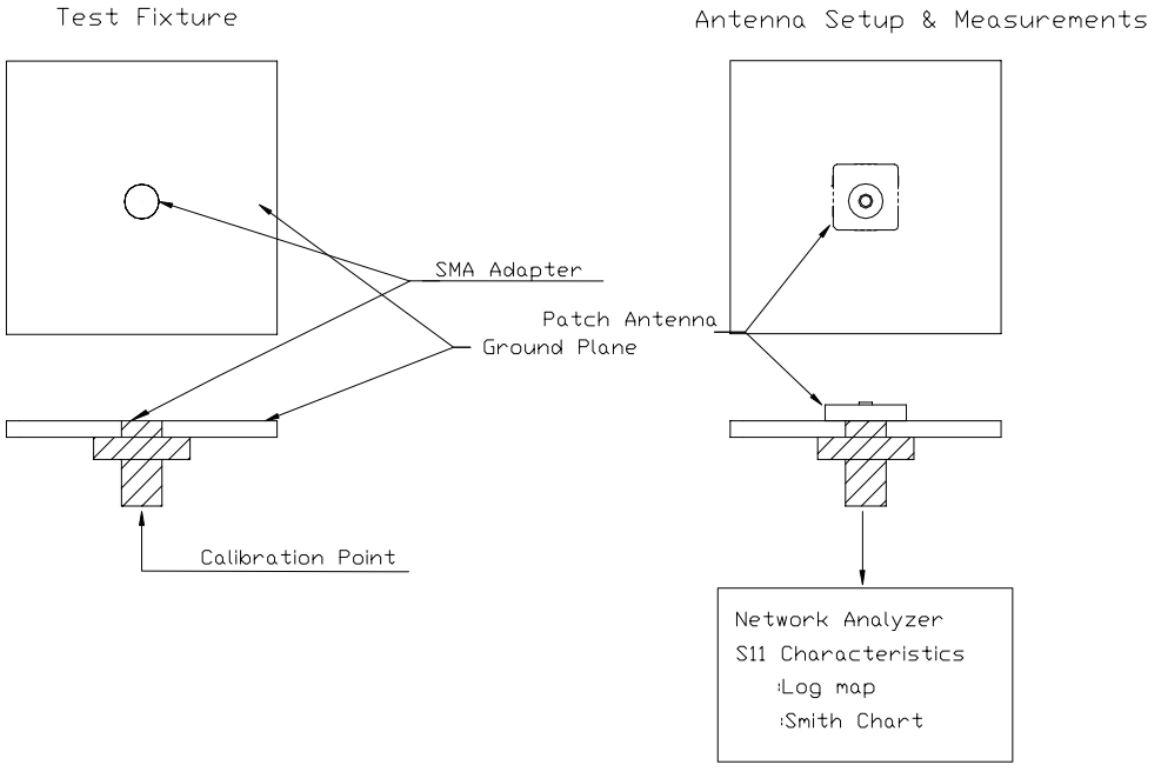
	Name	Material	Finish	QTY
1	Patch (12mmx12mmx4mm)	Ceramic	Clear	1
1	Double sided Adhesive	Tesa 4972	White Liner	1

NOTES:
1.Double sided adhesive area

VI. Test Jig and Dimension

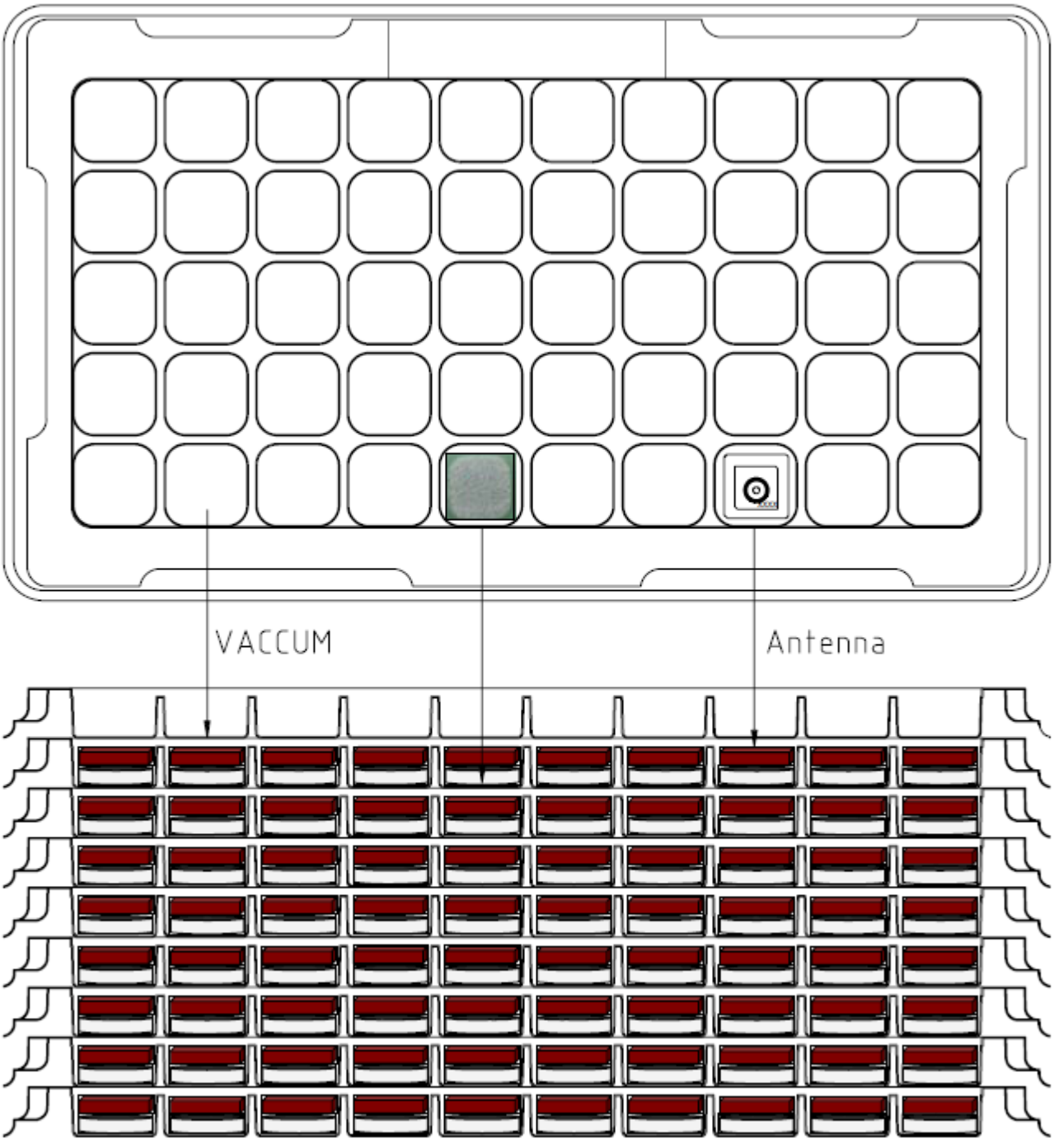


VI.1 Test Fixture Antenna Setup and Measurements



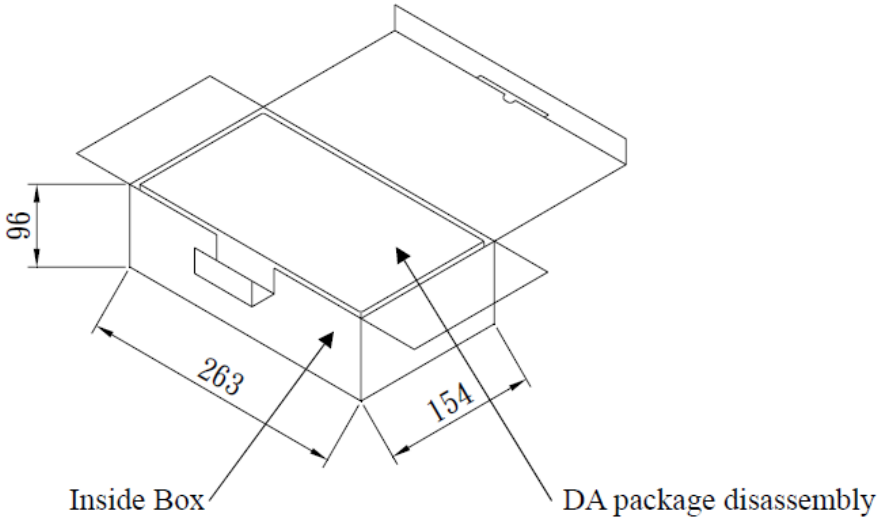
VII. Packaging

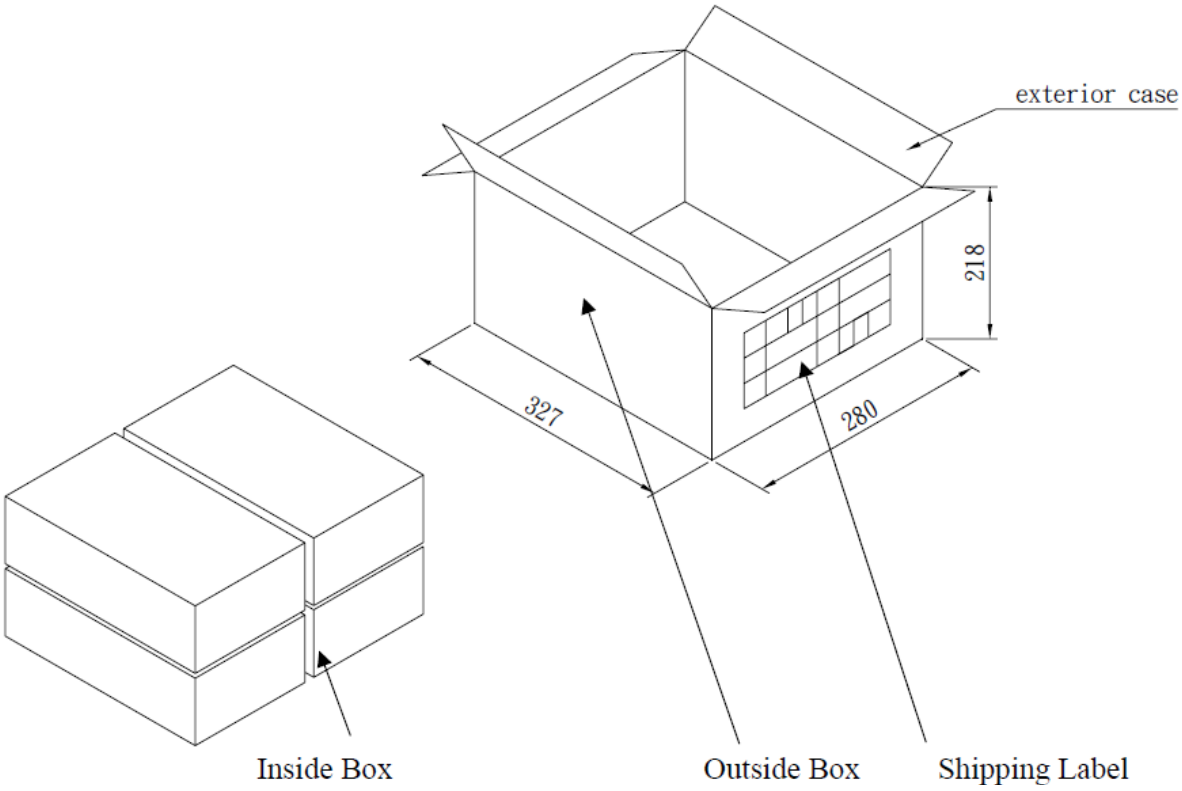
Pieces per Inner Carton: 400



v

Packing


96
263
154
Inside Box
DA package disassembly


exterior case
218
327
280
Inside Box
Outside Box
Shipping Label