

DRAFT SPECIFICATION

Part No. : **CGGP.25.4.A.14**

Product Name : GPS/GLONASS Patch Antenna

Feature : 25*25*4mm

Pin Mount Ceramic Patch

RoHS compliant



1. Specification

Measured on a 45*45mm ground plane

ELECTRICAL GPS BAND	
Working Frequency*	1575.42MHz
Bandwidth	6MHz min. for return loss < -10dB
VSWR	2.0 : 1 max
Polarization	RHCP
Gain	@Zenith 3.2dBic Typ.
	@10° Elevation -4.0dBic Typ.
Impedance	50 Ω
Temp. Coefficient of Frequency	0±20 max(@-40°C~85°C) ppm/°C
Electrode Plating Adhesion	>4kg

*Working Frequency will be offset to another frequency according to the conditions of users ground plane and Radome

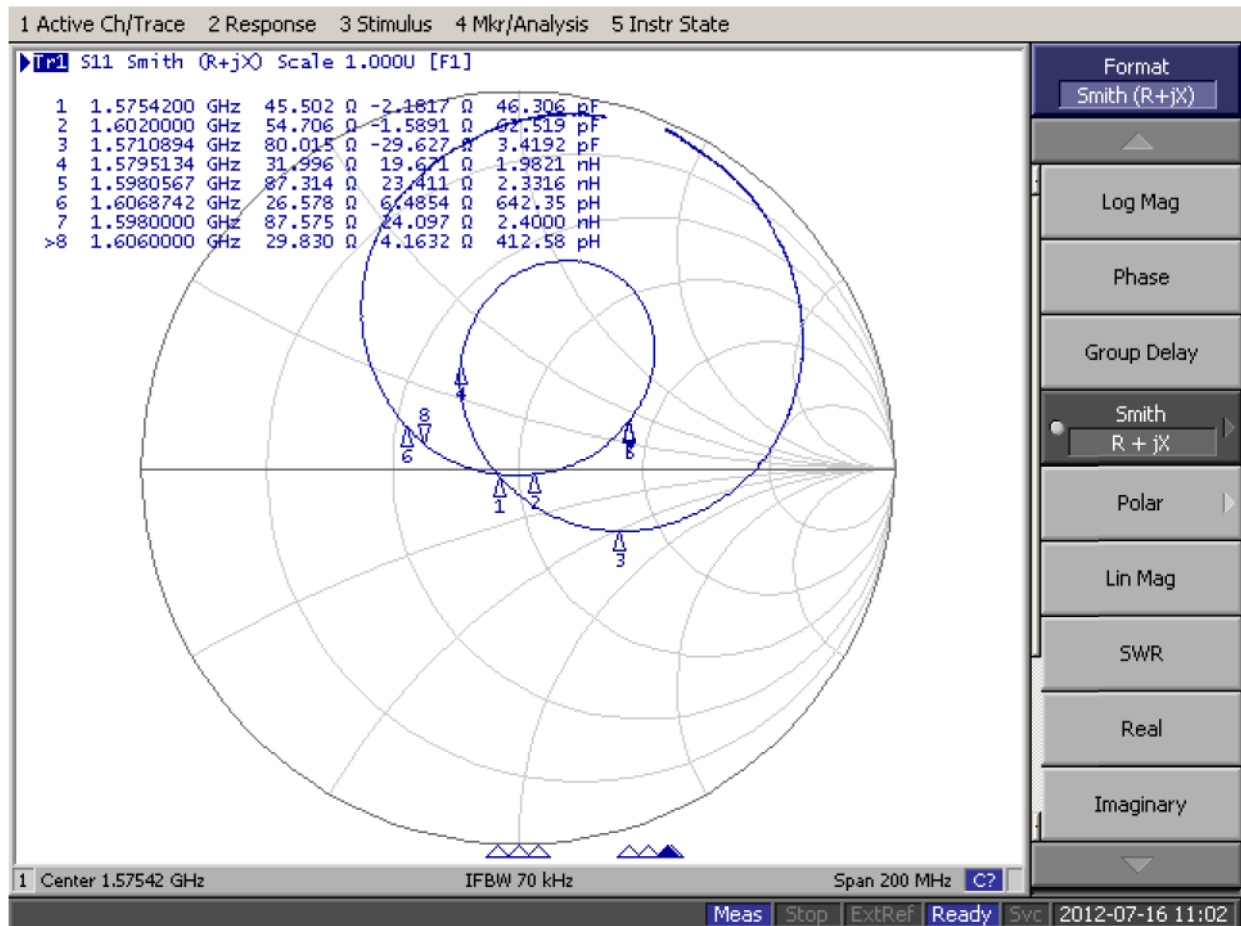
ELECTRICAL GLONASS BAND	
Working Frequency*	1598~1606MHz
Bandwidth	7MHz min. for return loss < -10dB
VSWR	2.0 : 1 max
Polarization	RHCP
Gain	@Zenith 3.1dBic Typ.
	@10° Elevation -4.3dBic Typ.
Impedance	50 Ω
Temp. Coefficient of Frequency	0±20 max(@-40°C~85°C) ppm/°C
Electrode Plating Adhesion	>4kg

*Working Frequency will be offset to another frequency according to the conditions of users ground plane and Radome

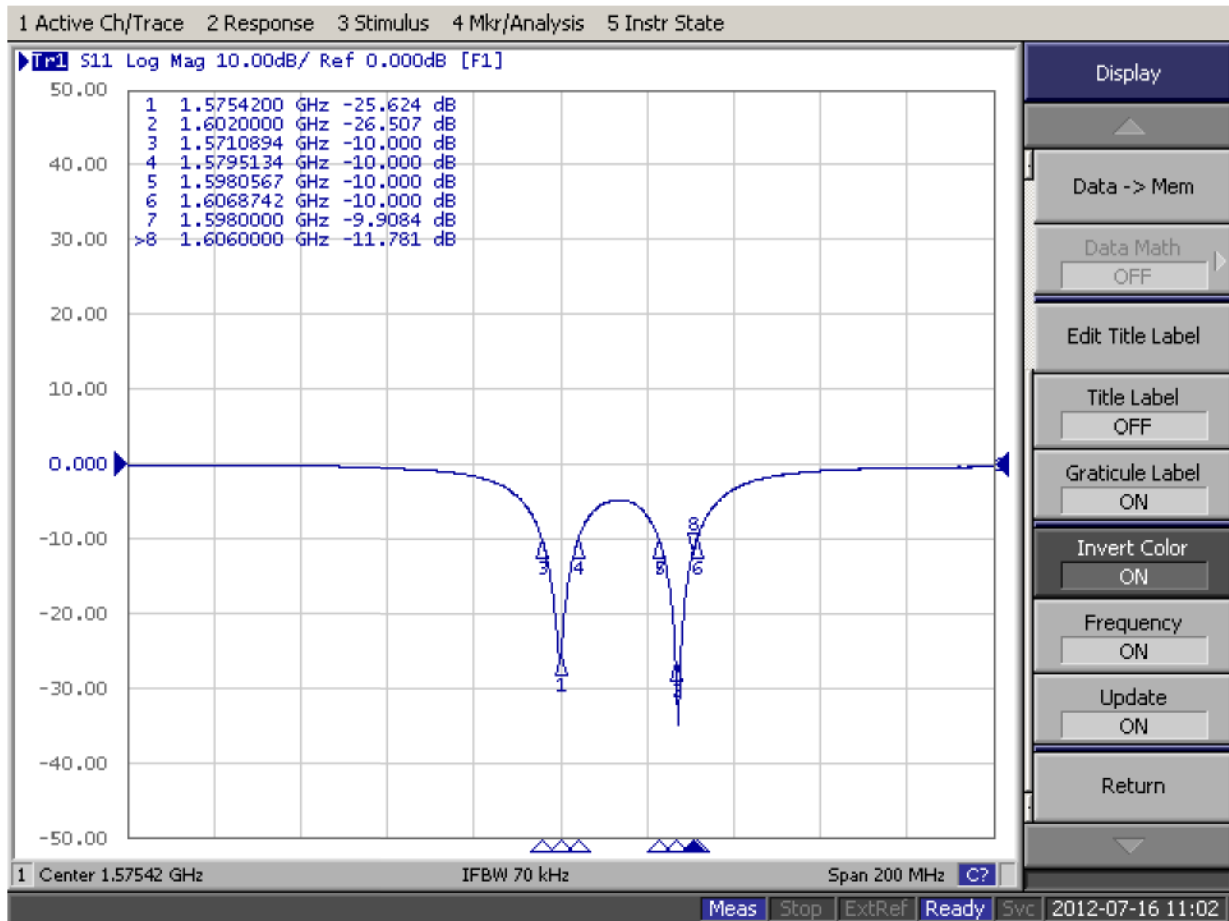
MECHANICAL	
Dimensions	25 x 25 x 4mm
Material	Ceramic
Pin Diameter	0.82mm
Pin Length	1.9mm

ENVIRONMENTAL	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 90°C
Humidity	Non-condensing 65°C 95% RH

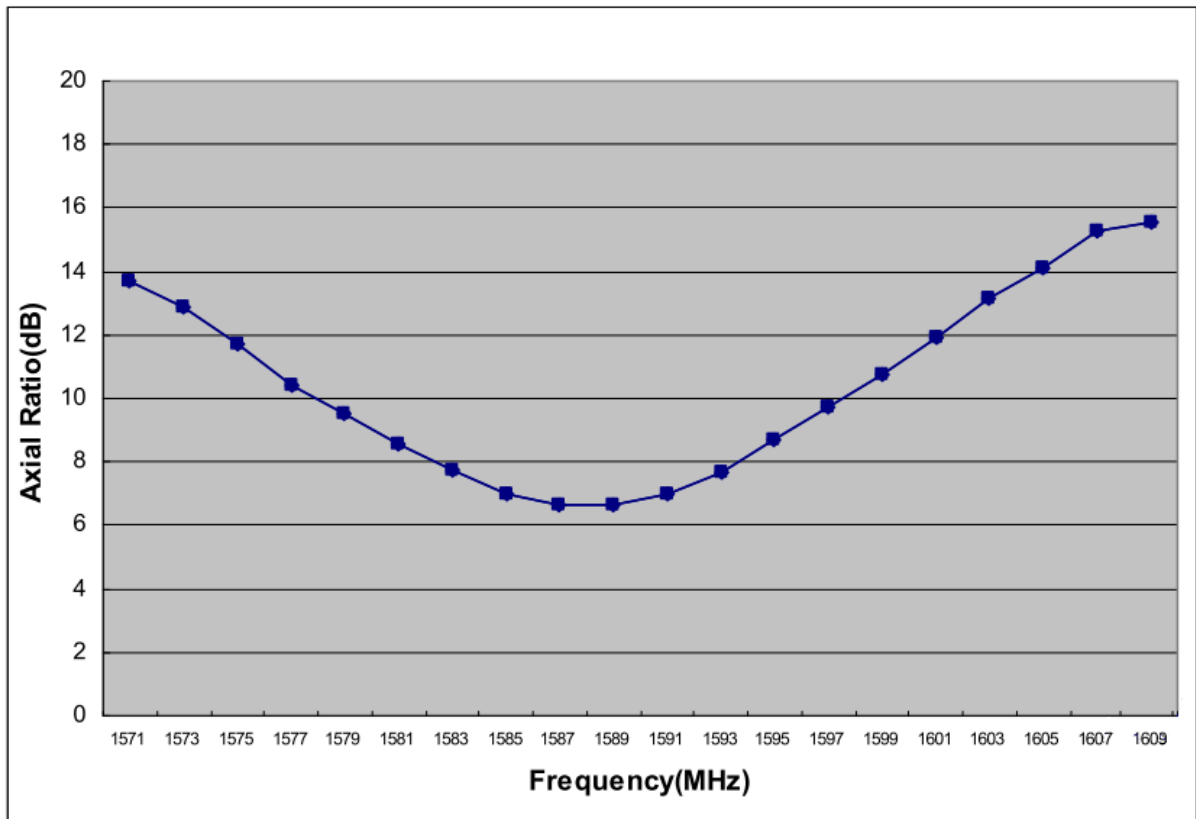
2. Smith Chart (S11)



3. Return Loss

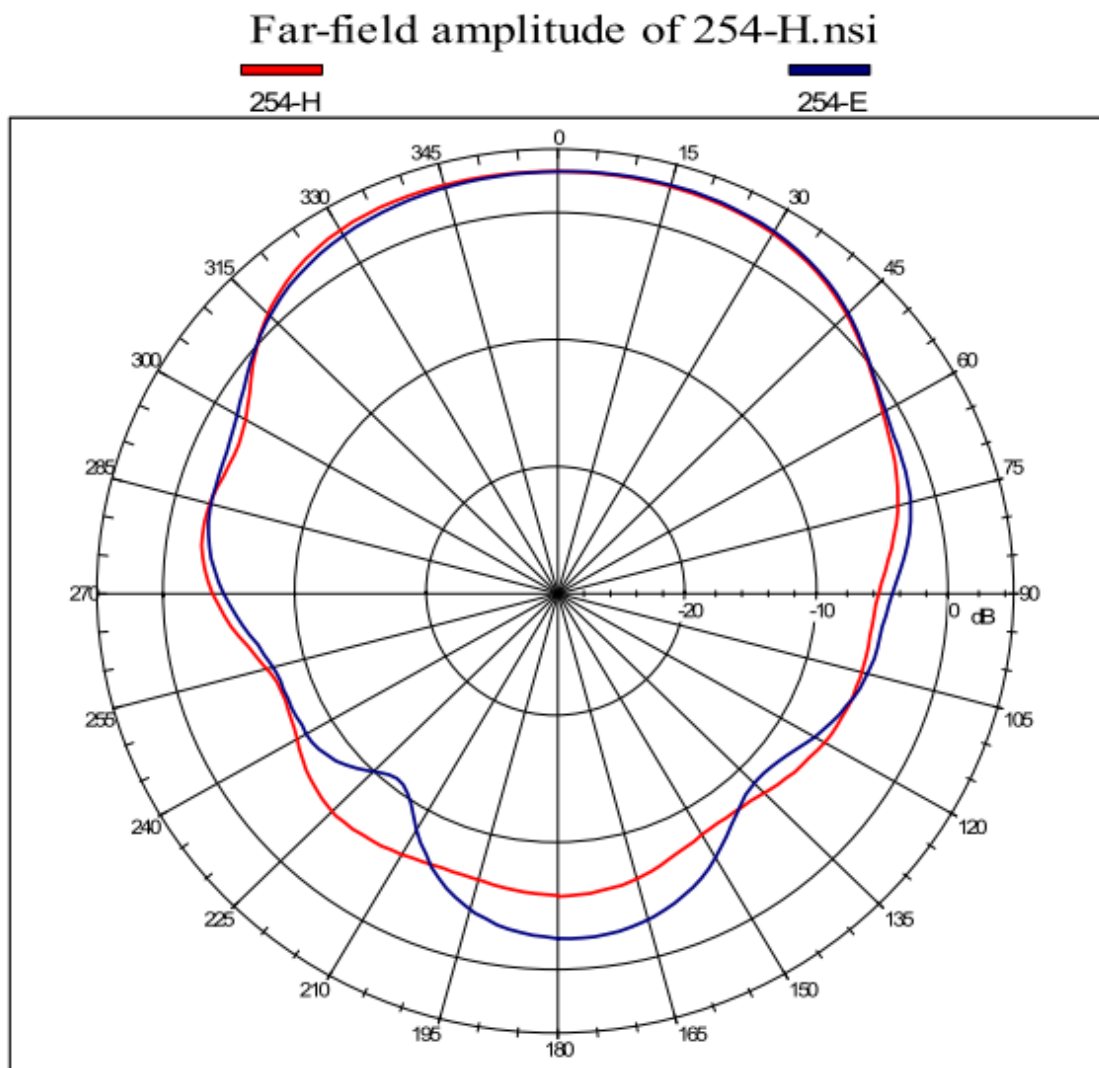


4. Axial Ratio (on 45*45mm Ground Plane)



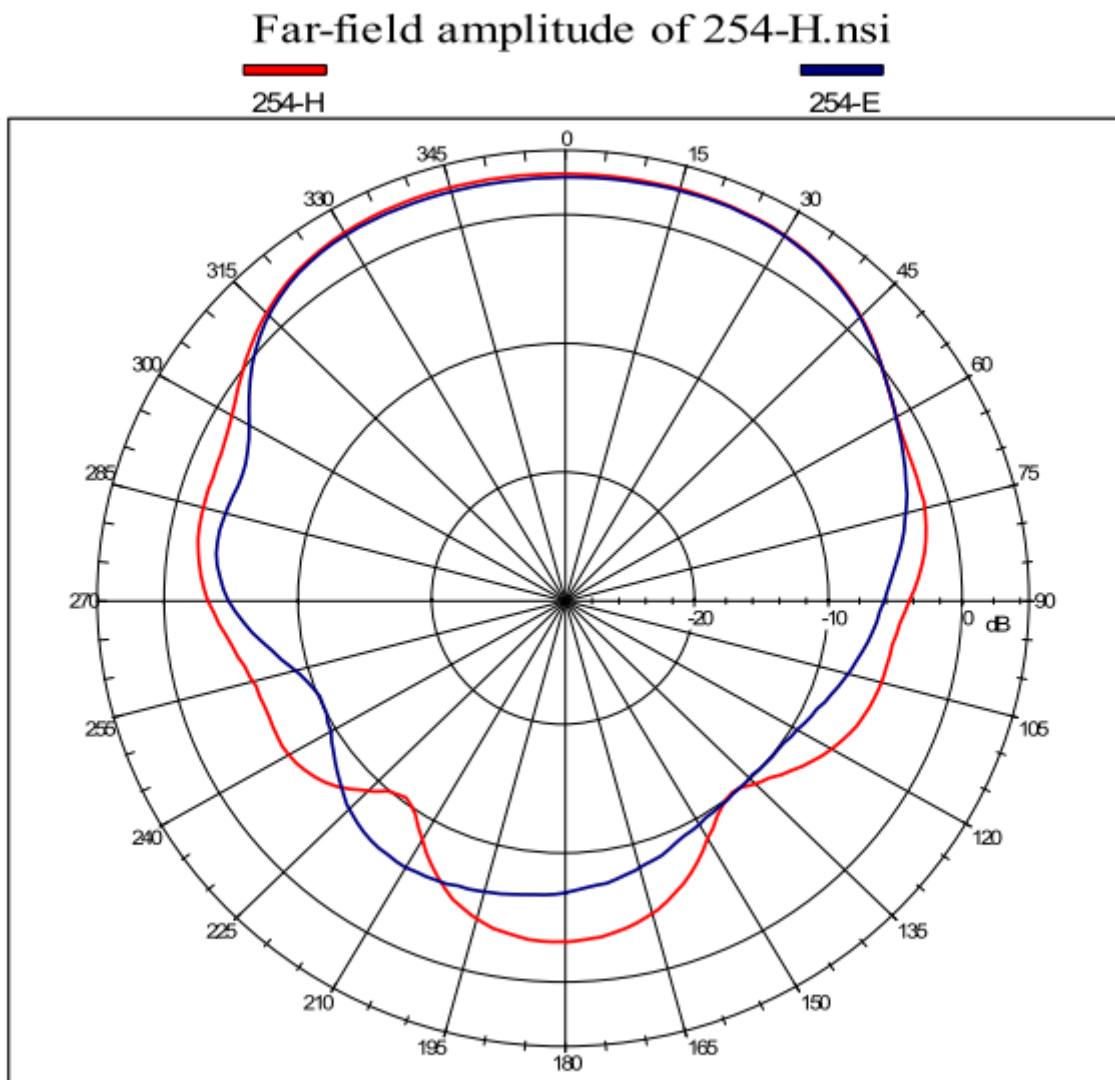
5.2D Antenna Radiation

5.1 1575.42MHz (45*45mm Ground Plane)



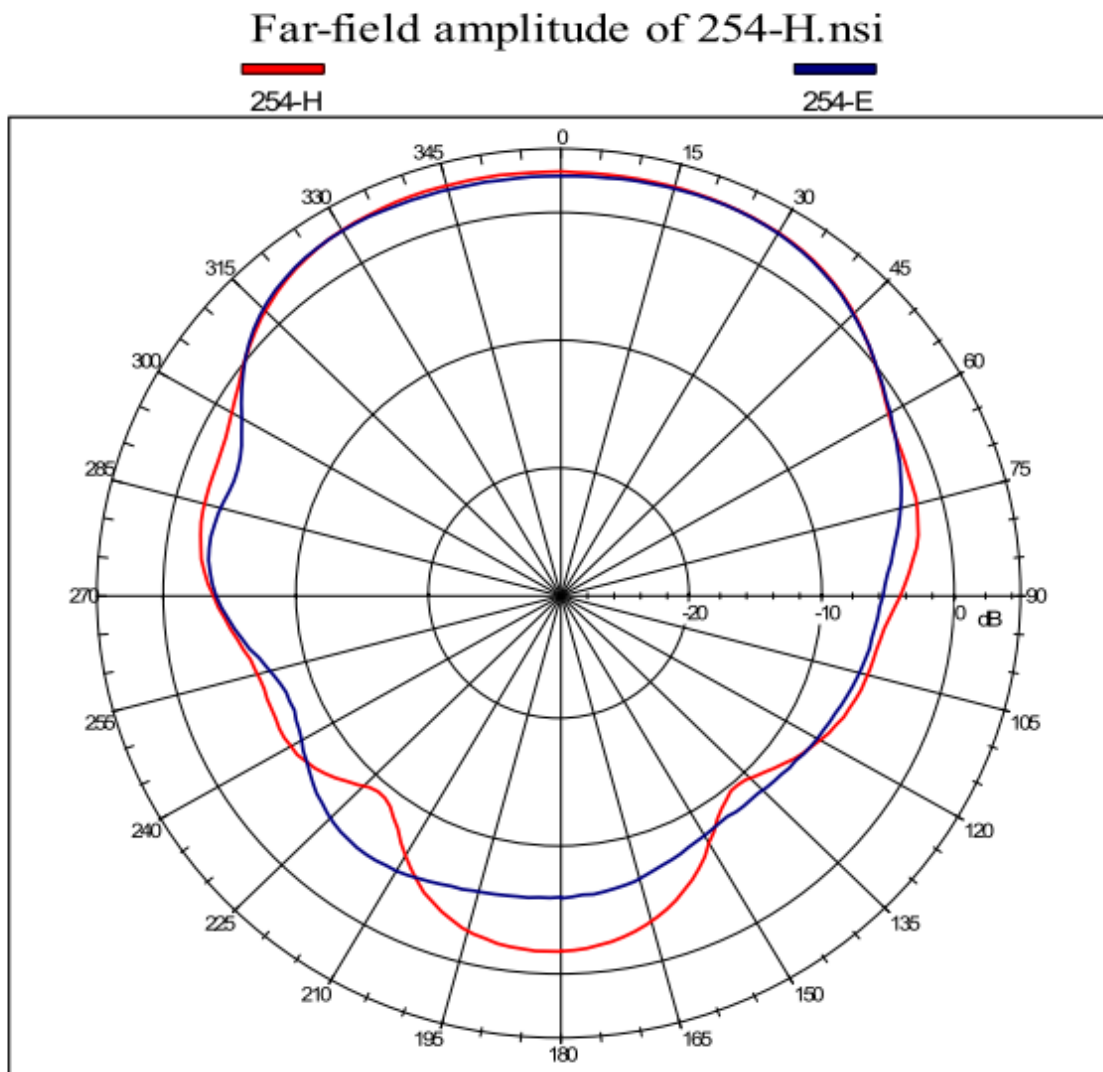
Right hand circular polarized signal $f_0=1575.42\text{MHz}$

5.2 1598MHz (45*45mm Ground Plane)



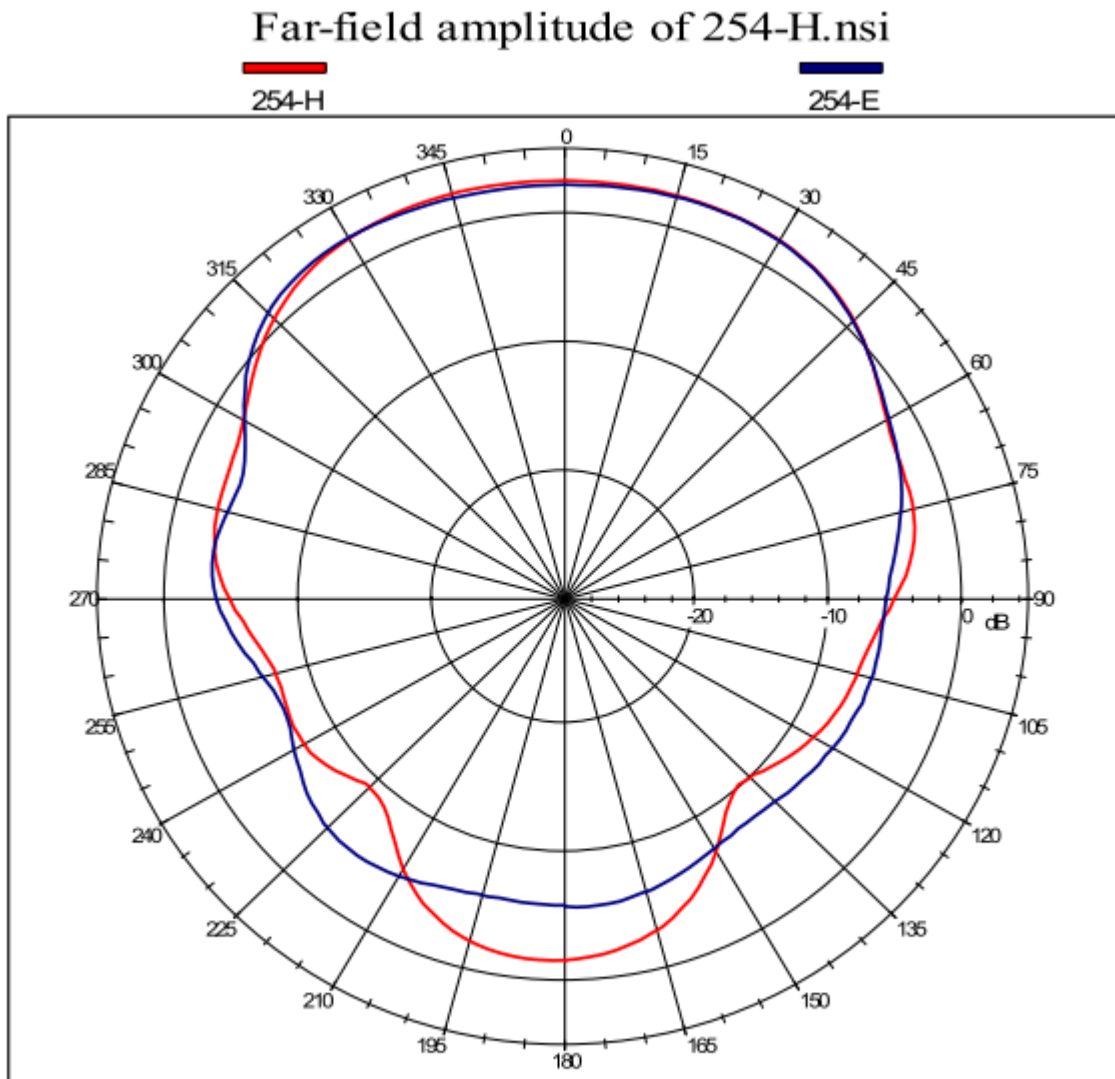
Right hand circular polarized signal $f_0=1598\text{MHz}$

5.3 1602MHz (45*45mm Ground Plane)



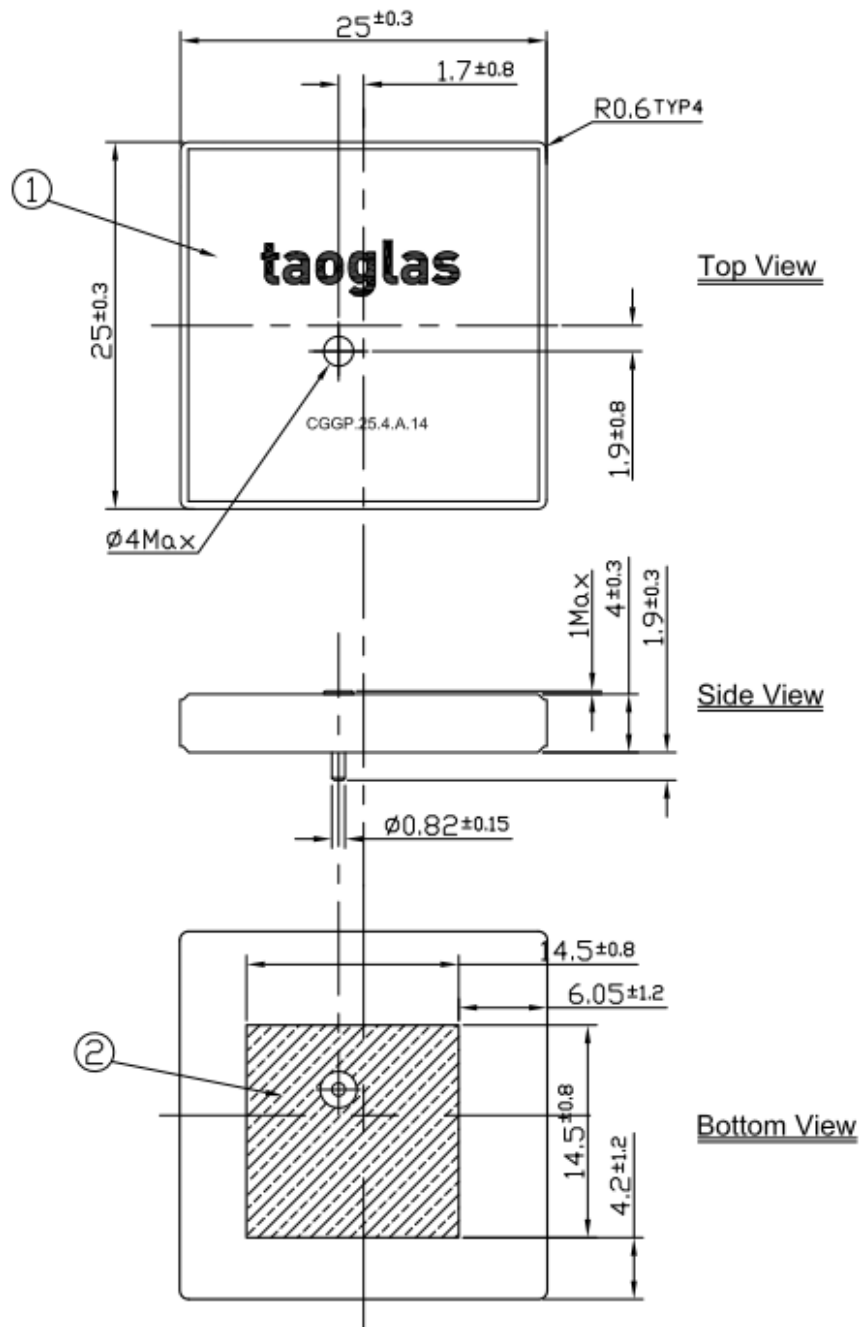
Right hand circular polarized signal $f_0=1602\text{MHz}$

5.4 1606MHz (45*45mm Ground Plane)



Right hand circular polarized signal $f_0=1606\text{MHz}$

6. Drawing



NOTES:

1. Double sided adhesive area 

	Name	Material	Finish	QTY
1	Patch 25x25x4	Ceramic	Clear	1
1	Double sided Adhesive	TT18	White Liner	1