



TAOGLAS®



Datasheet

GPS/GLONASS/BeiDou Patch

Part No:
CGGBP.35.6.A.02

Description:

35mm*35mm*6.5mm 3~4dBi GPS/GLONASS/GALILEO/BeiDou Embedded Patch Antenna

Features:

Dielectric Ceramic

BeiDou 1561MHz / GPS-GALILEO 1575MHz / GLONASS 1602MHz

Pin Mount

RoHS & Reach Compliant

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1. Introduction



This 35mm square ceramic GPS/GLONASS/GALILEO/BeiDou patch antenna's wide band of operation leads to excellent gain and radiation pattern stability on all three GNSS system bands.

Compared to using a smaller antenna, this will translate into the GNSS system having much higher location accuracy, improved reliability of lock in urban areas, better signal reception, with more satellites acquired and a quicker time to first fix.

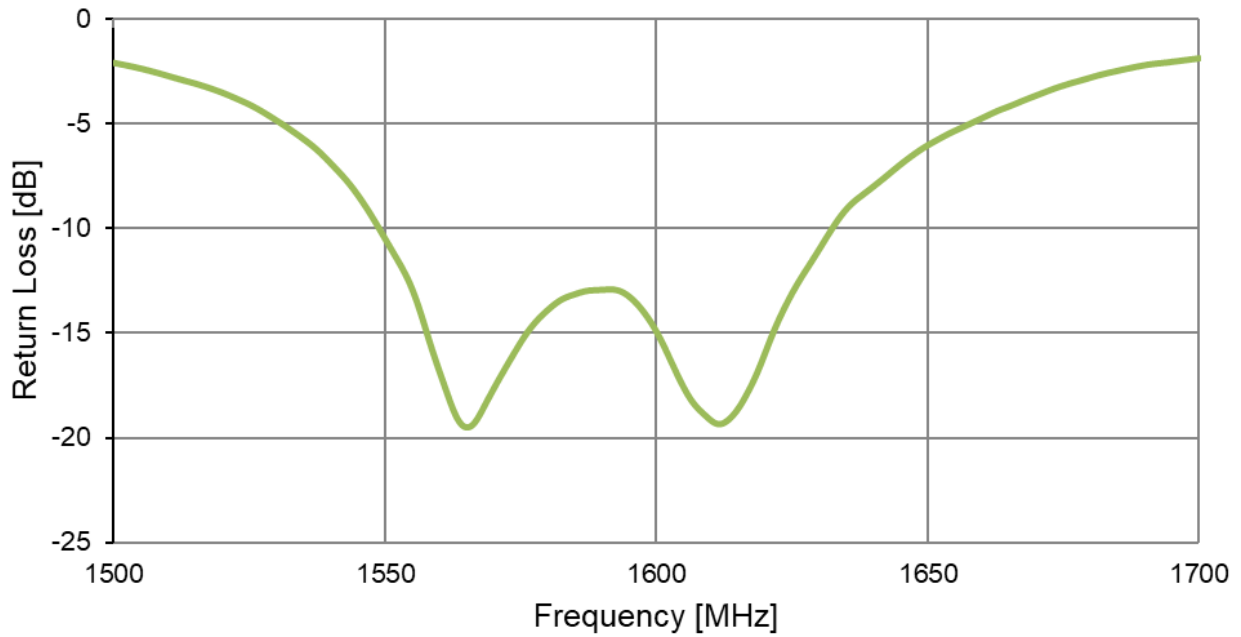
The patch is mounted via pin and double-sided adhesive.

2. Specifications

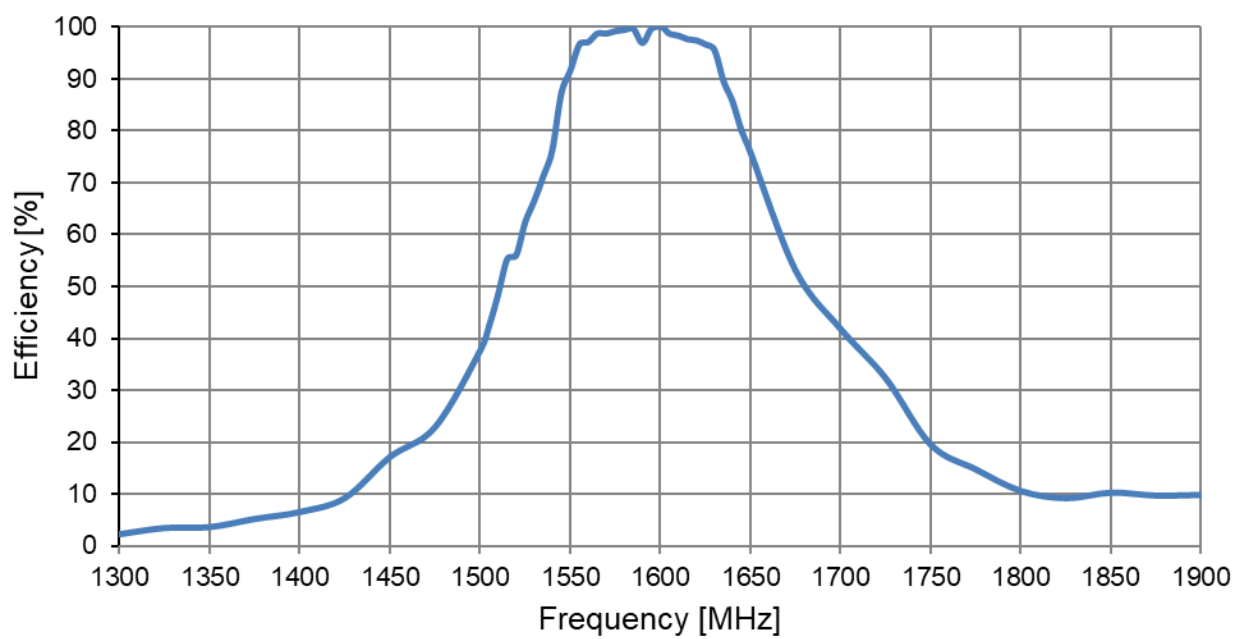
Electrical	
Frequency	BeiDou: 1561.098MHz \pm 2.046MHz GPS/GALILEO: 1575.42 \pm 1.023MHz GLONASS: 1602 \pm 5MHz
Centre Frequency	1594MHz \pm 6MHz
VSWR	1.8: 1 max
Bandwidth	80MHz Return Loss @-10dB
Peak Gain	BeiDou: +6.0dBi typ. GPS/GALILEO: +6.0dBi typ. GLONASS: +6.1dBi typ.
Impedance	50 Ω
Mechanical	
Dimensions	35 x 35 x 6.5mm
Material	Ceramic
Pin Diameter	0.9mm
Pin Length	1.25mm
Environmental	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 105°C
Humidity	Non-condensing 65°C 95% RH

3. Antenna Characteristics

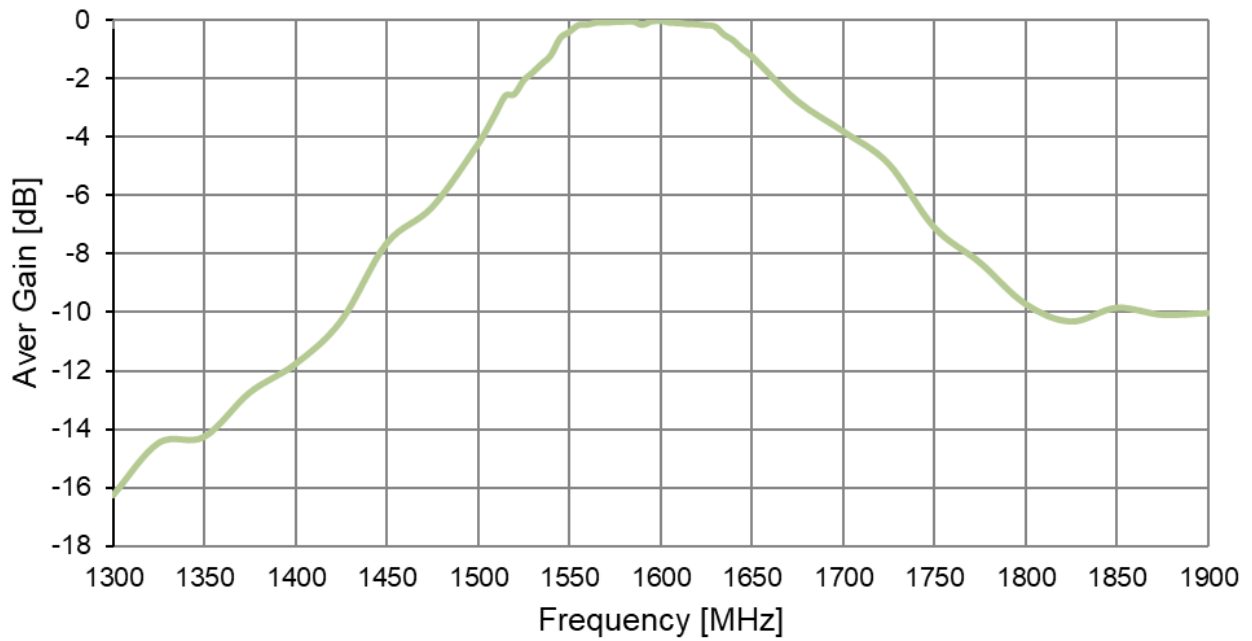
3.1 Return Loss



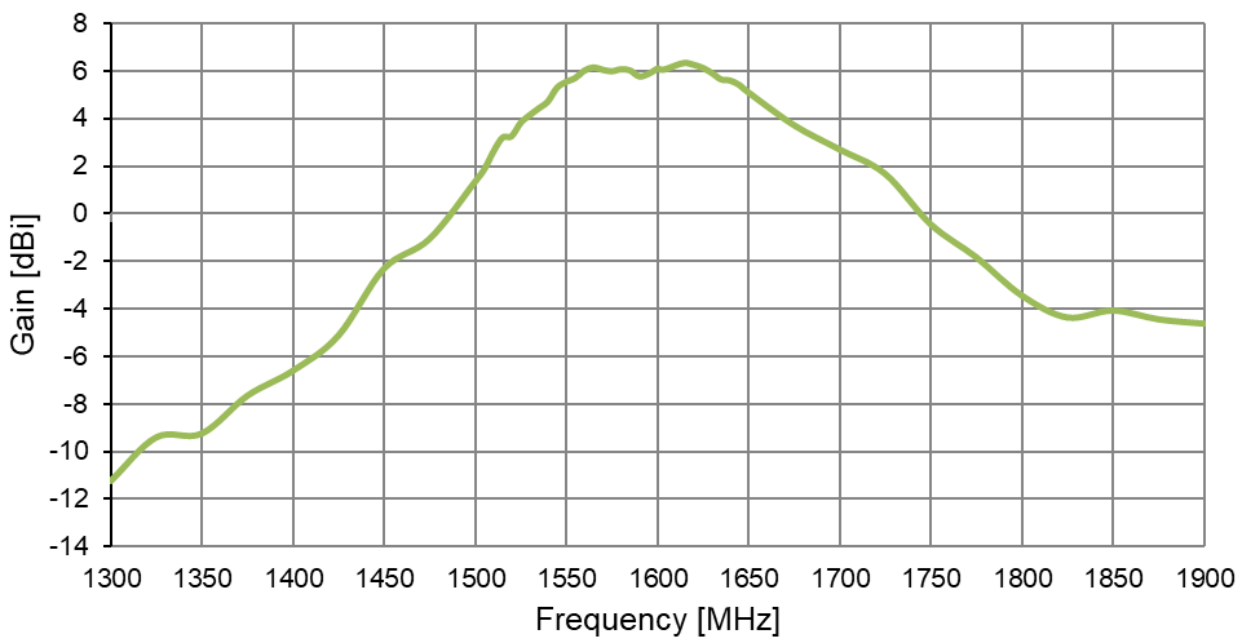
3.2 Efficiency



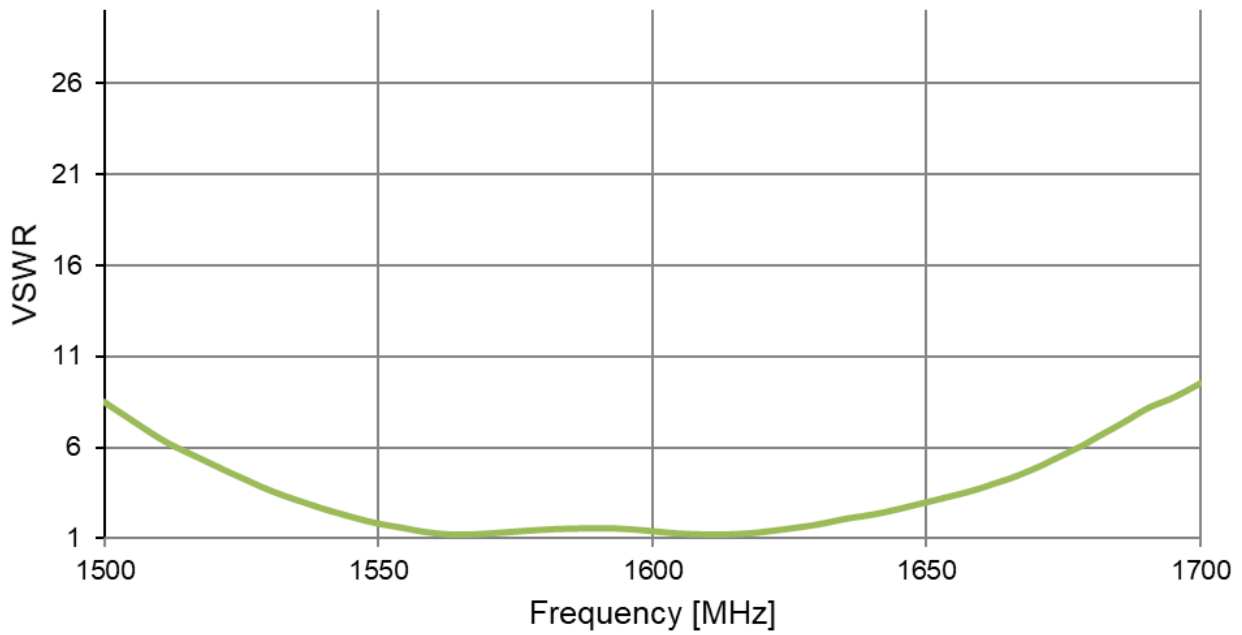
3.3 Average Gain



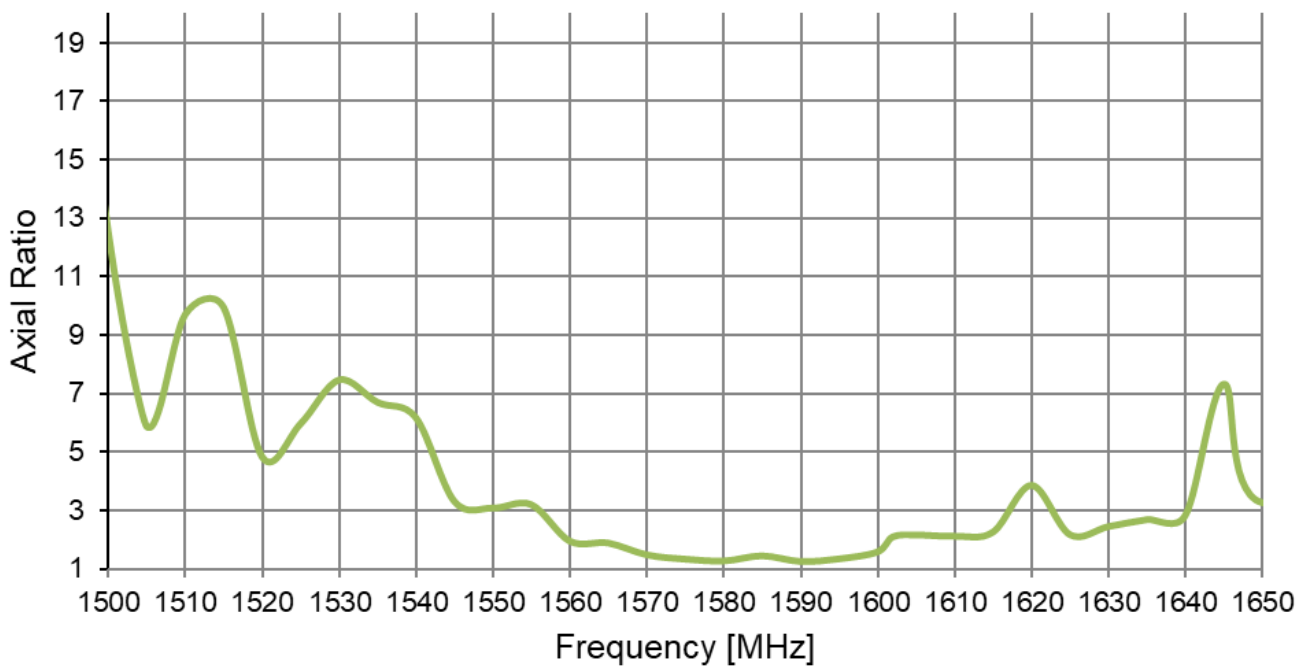
3.4 Peak Gain



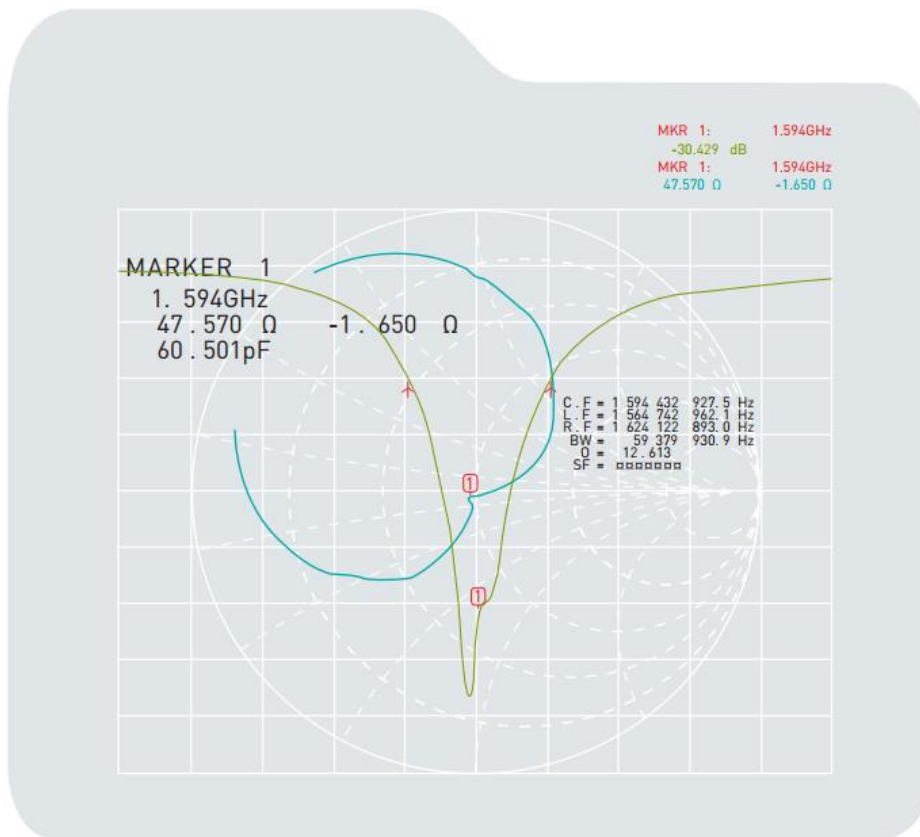
3.5 VSWR



3.6 Axial Ratio

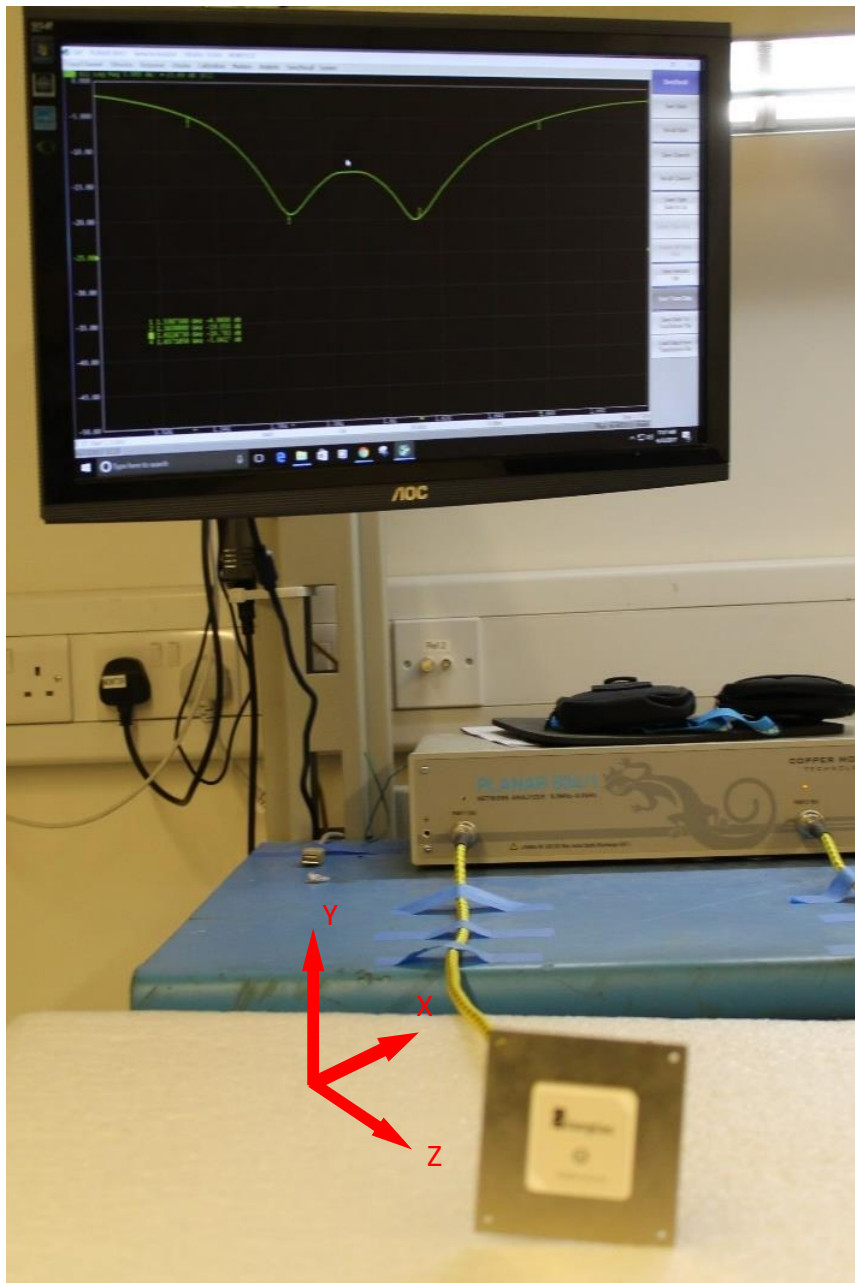


3.7 S11



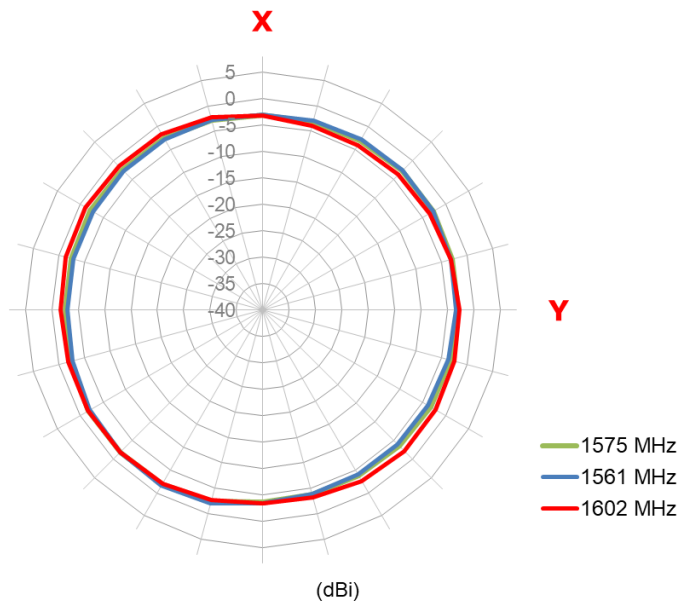
4. 2D Radiation Patterns

4.1 Test Setup

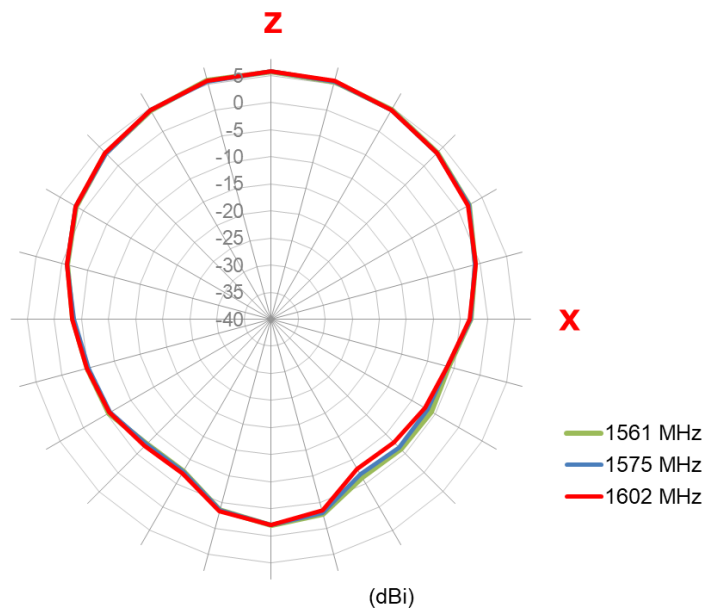


On Evaluation Board

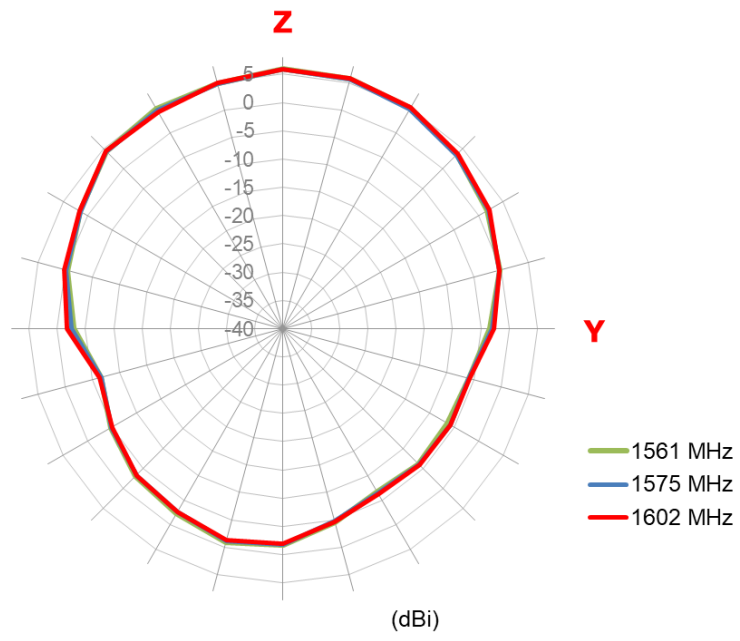
XY Plane



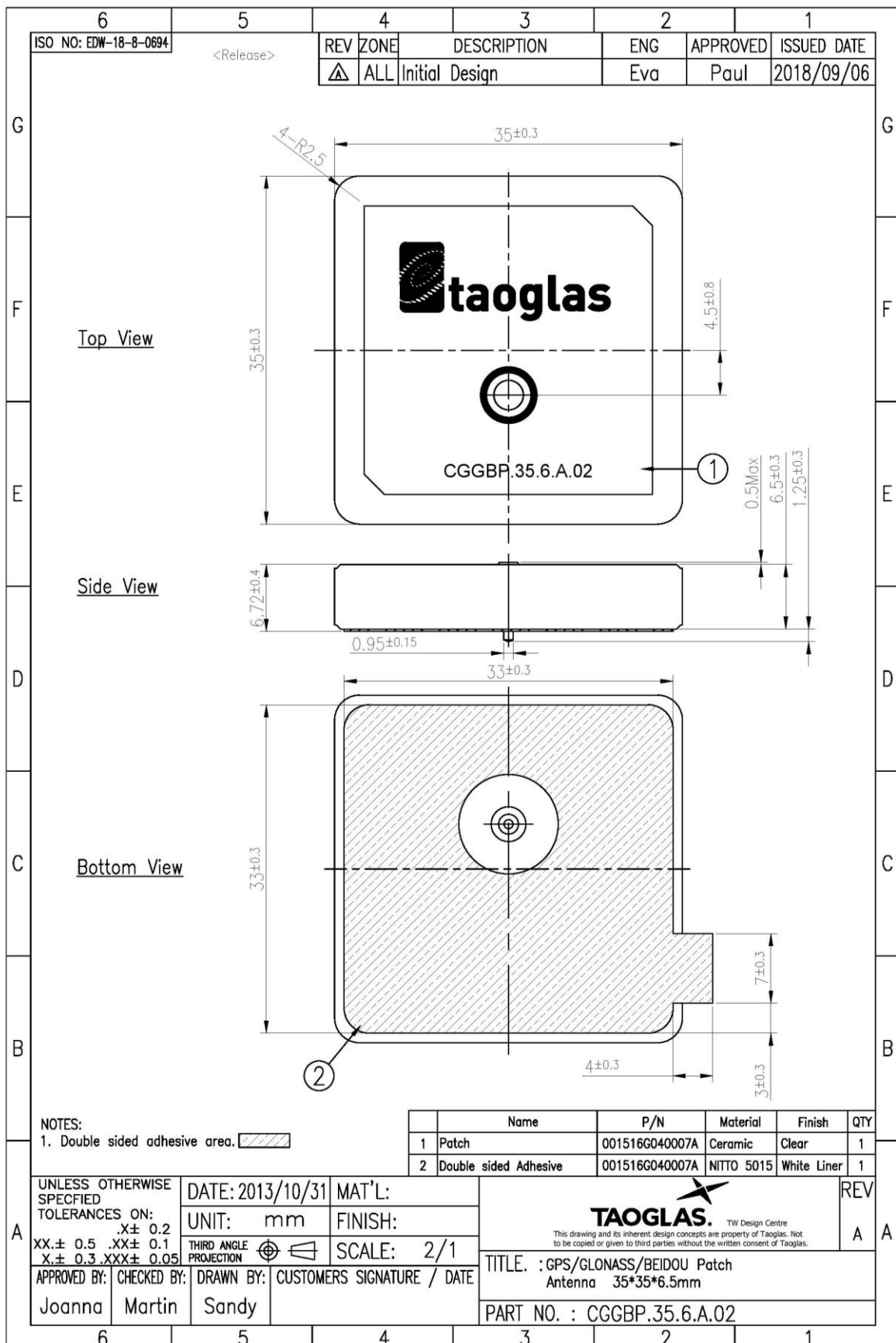
XZ Plane



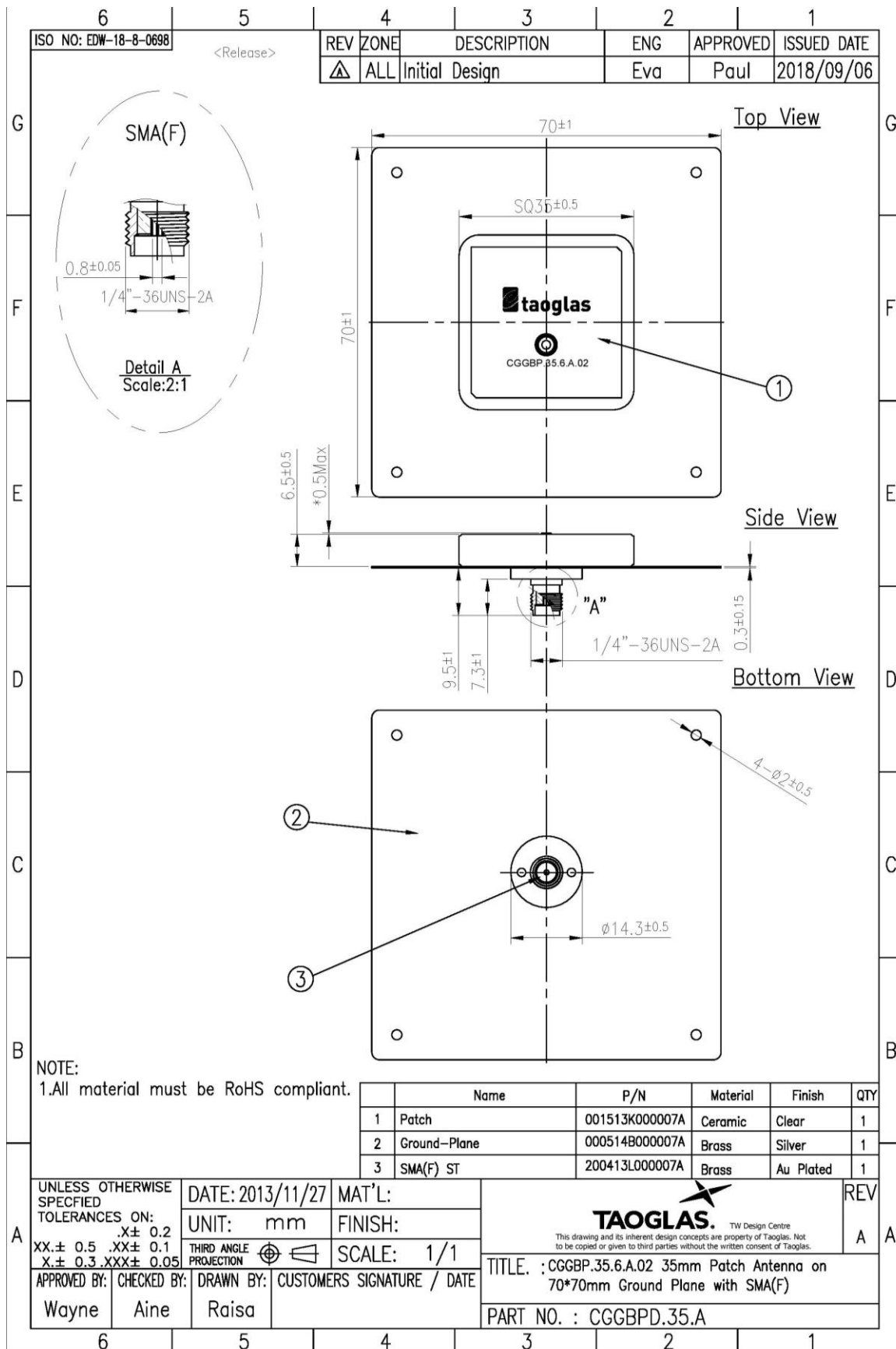
YZ Plane



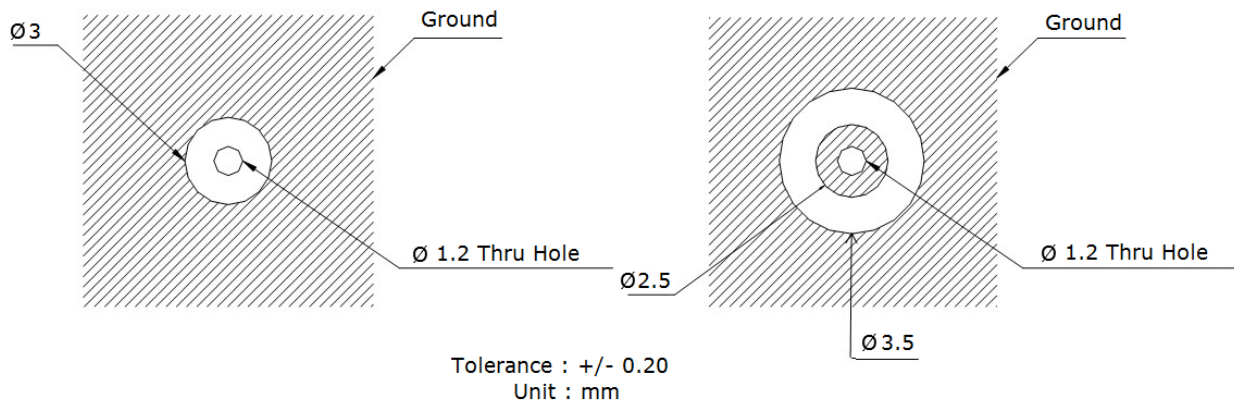
5. Mechanical Drawing (Units: mm)



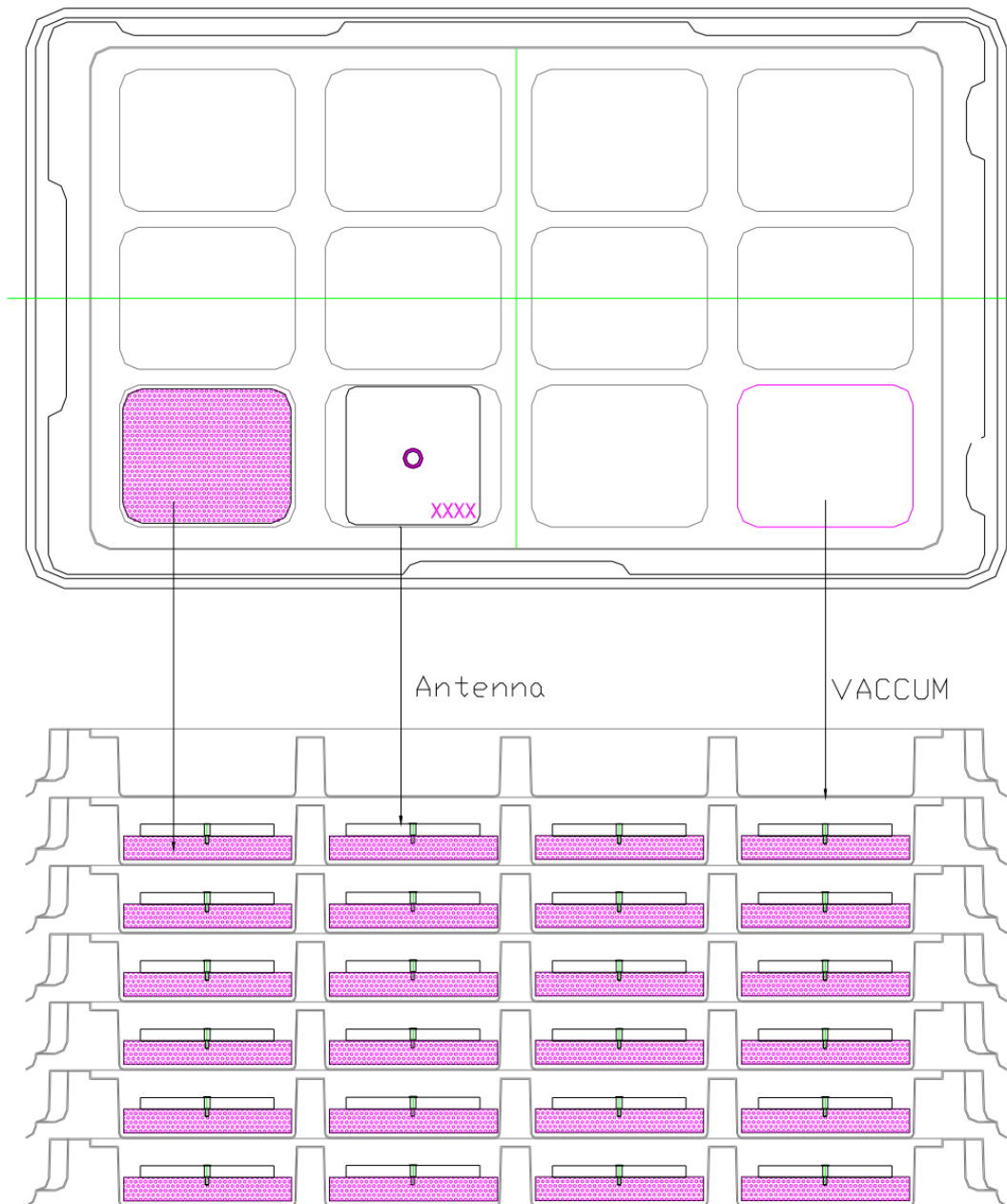
6. Evaluation Board Drawing



7. Footprint



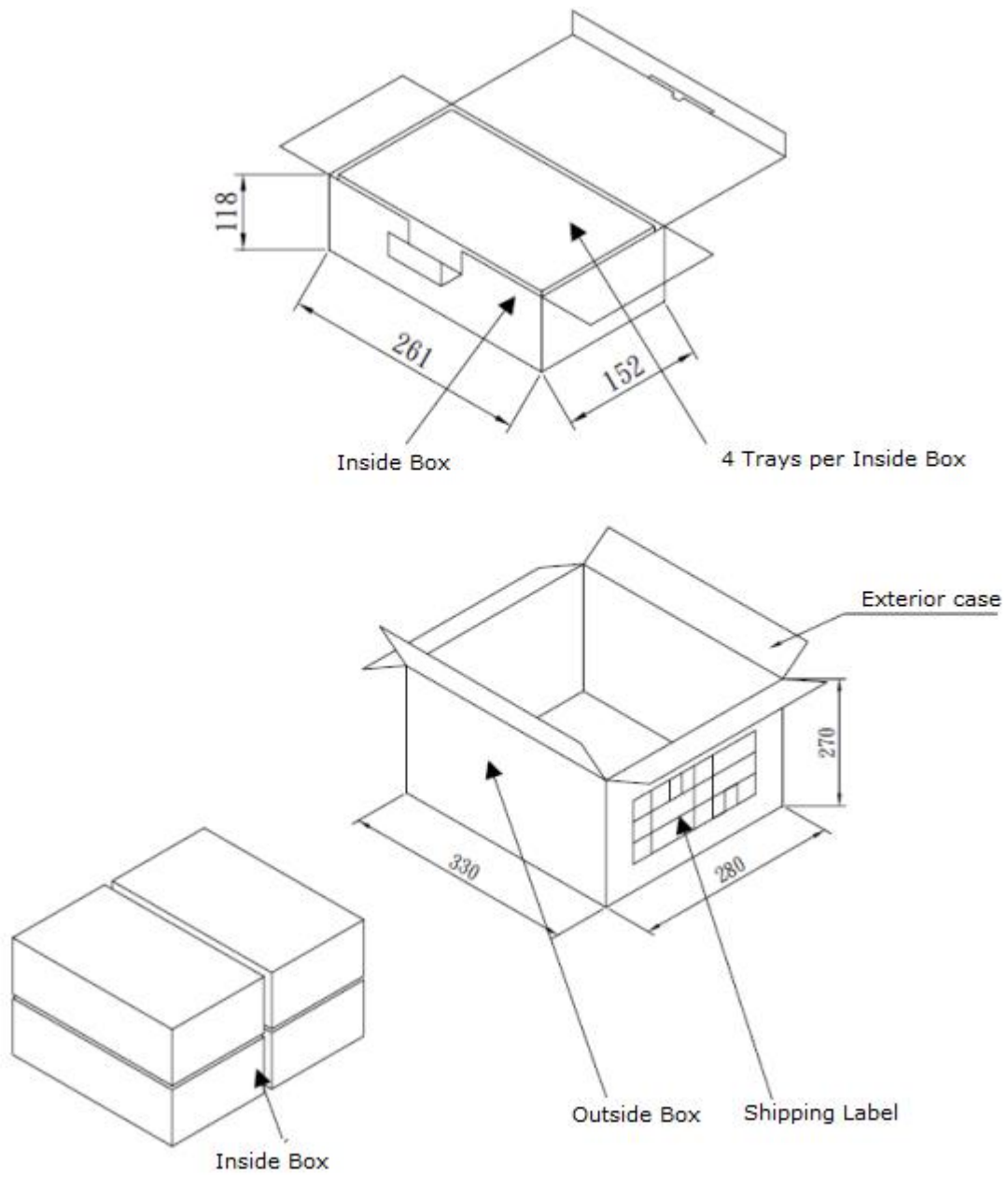
8. Packaging



12 pieces per tray

6 Trays per Inside Box = 72

4 Inside Boxes per Outer Carton -Outer Carton contains 288 pieces



Changelog for the datasheet

SPE-14-8-018 – CGGBP.35.6.A.02

Revision: E (Current Version)

Date:	2018-03-27
Changes:	Installation Guide Amended
Changes Made by:	Jack Conroy

Previous Revisions

Revision: D

Date:	2017-06-27
Changes:	
Changes Made by:	David Connolly

Revision: C

Date:	2015-01-06
Changes:	PCB Footprint
Changes Made by:	Made by Andy Mahoney

Revision: B

Date:	2014-11-17
Changes:	Evaluation Board Added
Changes Made by:	Aine Doyle

Revision: A (Original First Release)

Date:	2014-03-04
Notes:	
Author:	Aine Doyle



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