

Description: 25253+35354 GPS L1&L5
Stack Patch Antenna

PART NUMBER: ANT2535BS0WTL1L5S

Features:

- Size : Stack 25x25x3+35x35x4mm
- High radiation efficiency
- Combining GNSS and L5 bands
- Pin-solder process
- RoHS compliant



Applications:

- GPS system
- Navigation device
- Telematics box
- Fleet management

All dimensions are in mm / inches

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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ELECTRICAL SPECIFICATIONS

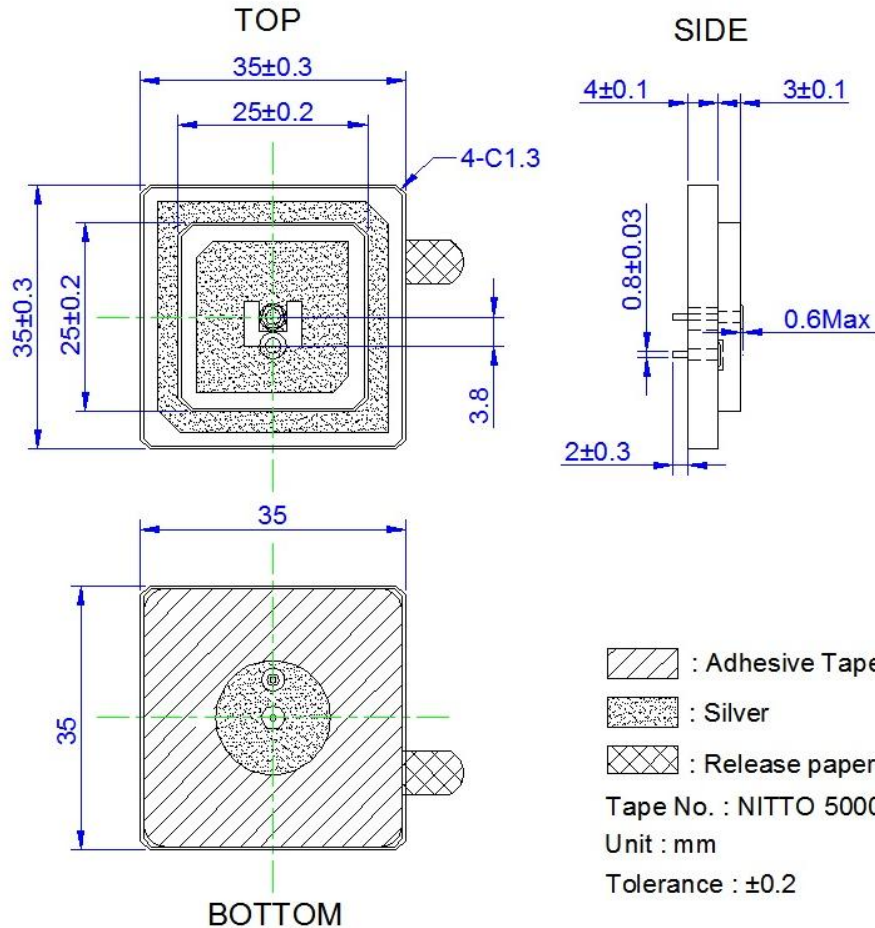
Working Frequency	L5 : 1176 MHz GNSS-Beidou : 1561 MHz GNSS-GPS : 1575 MHz GNSS-Glonass : 1602 MHz
Gain(Peak)	L5: 2.3 dBic GNSS Beidou : 3.7 dBic GNSS GPS : 4.1 dBic GNSS Glonass : 4.5 dBic
Gain(Average)	L5: -1.13 dB GNSS Beidou : -1.82 dB GNSS GPS : -1.59 dB GNSS Glonass : -1.36 dB
Polarization	RHCP
Axis Ratio	L5 \leq 5 dB GNSS \leq 6 dB
Impedance	50 Ω
Operating Temperature	- 40 ~ 85 °C

- NOTE**
1. Based on 70×70 mm² square ground plane.
 2. Centre frequency will be offset to working frequency while changes of customer's housing and ground plane.

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MECHANICAL DRAWING



Position	Dimension	Working Band	Feed
Upper	25x25x3 mm	GNSS (1561+1575+1602MHz)	Single Feed
Bottom	35x35x4 mm	L5 (1176MHz)	Single Feed

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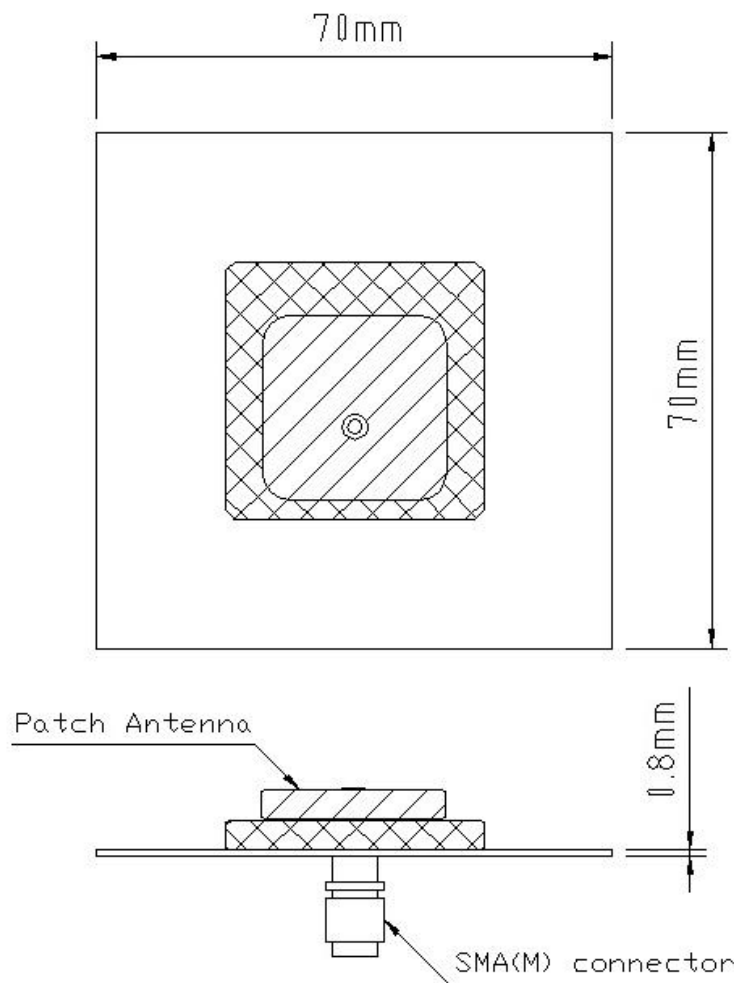
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REFERENCE DESIGN OF EVALUATION BOARD



Ground Plane Size: 70x70 mm²

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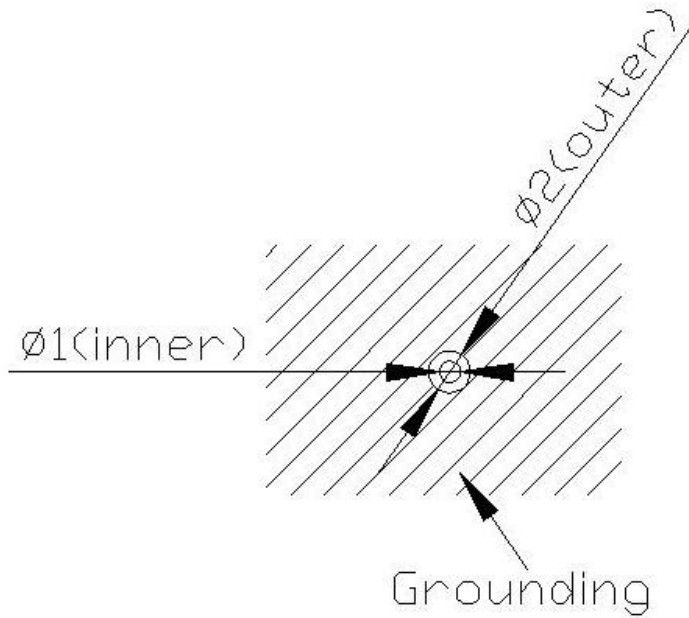
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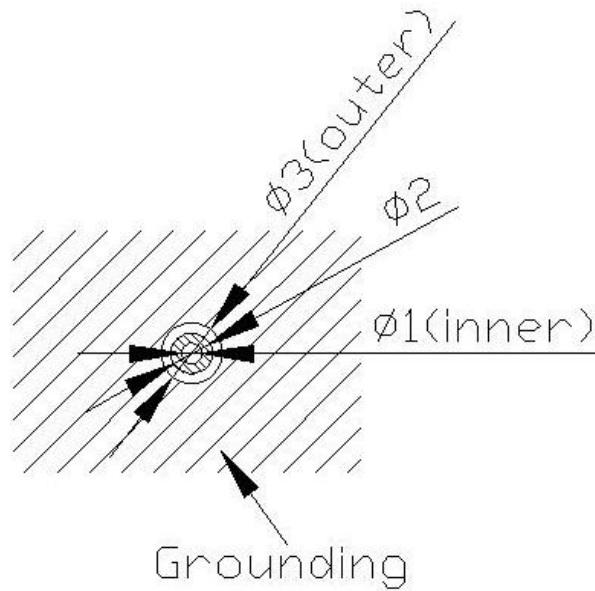
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FOOTPRINT

Top Layer



Bottom Layer

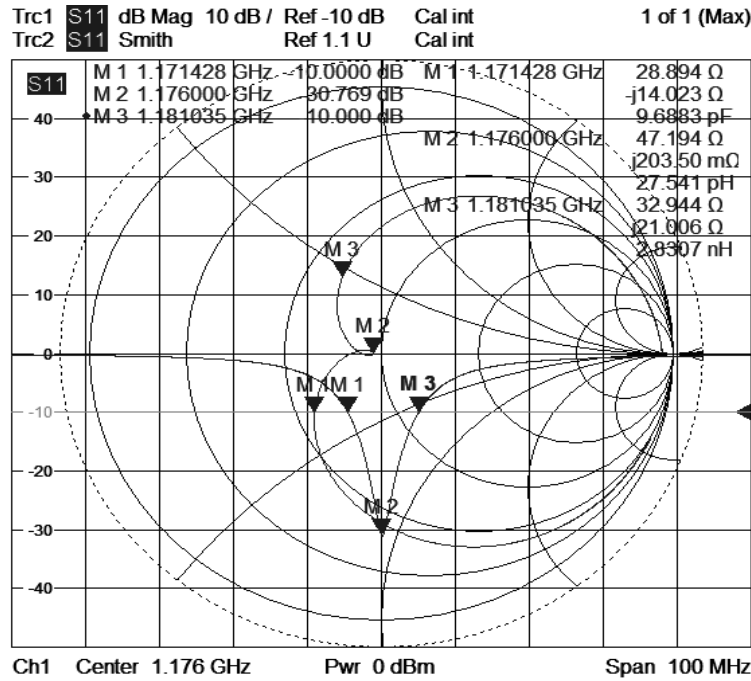


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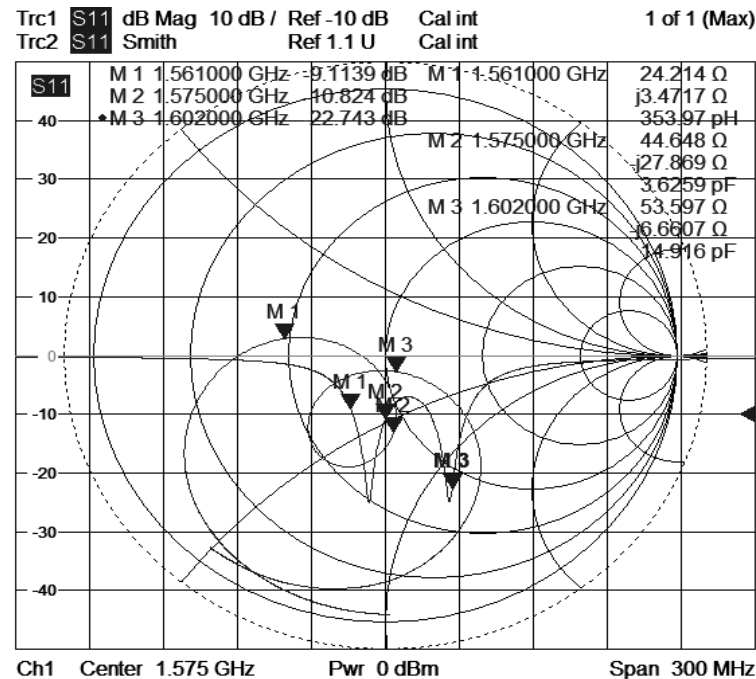
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RETURN LOSS

L5



GNSS



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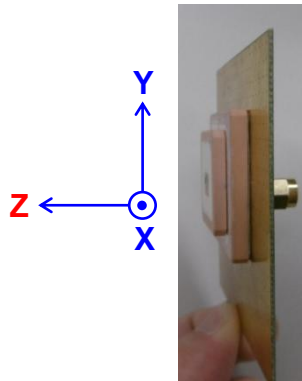
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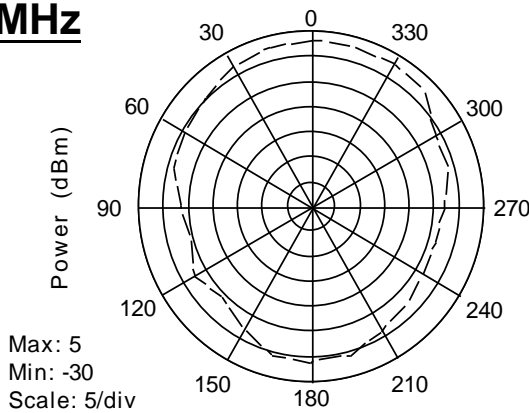
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RADIATION PATTERN

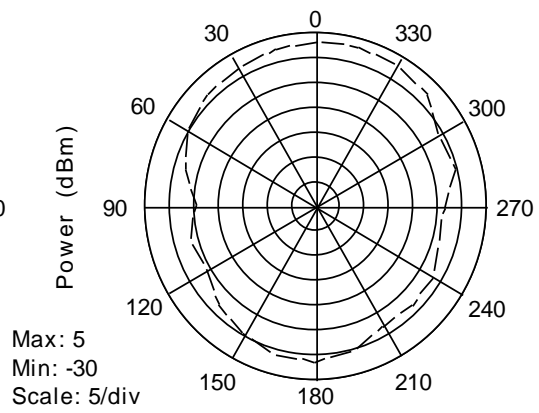


Evaluation board and XYZ direction

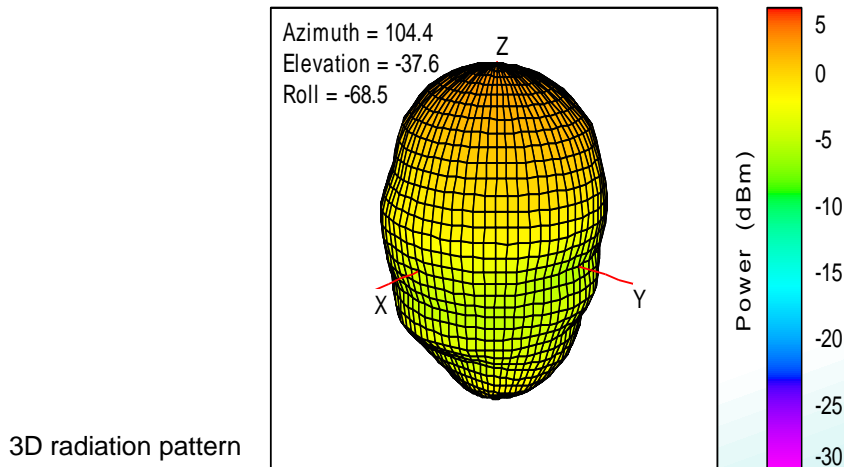
L5-1176MHz



2D x-z plane pattern



2D y-z plane pattern



3D radiation pattern

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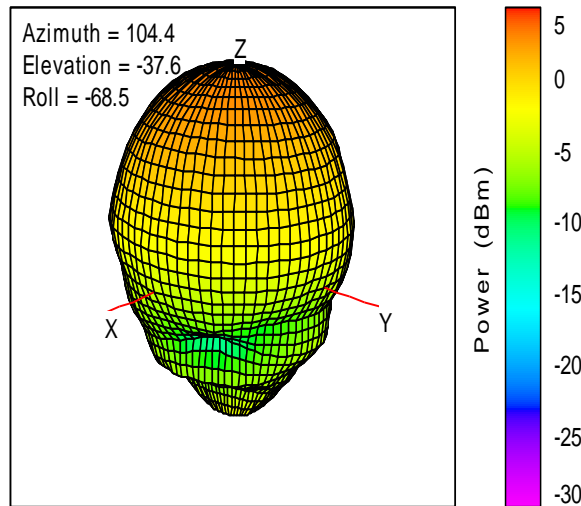
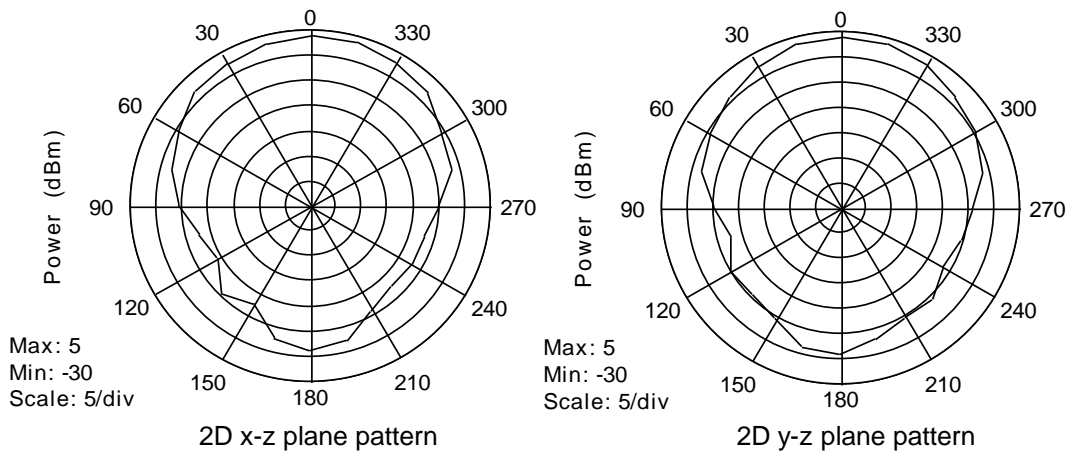
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RADIATION PATTERN

GNSS – 1561MHz



3D radiation pattern

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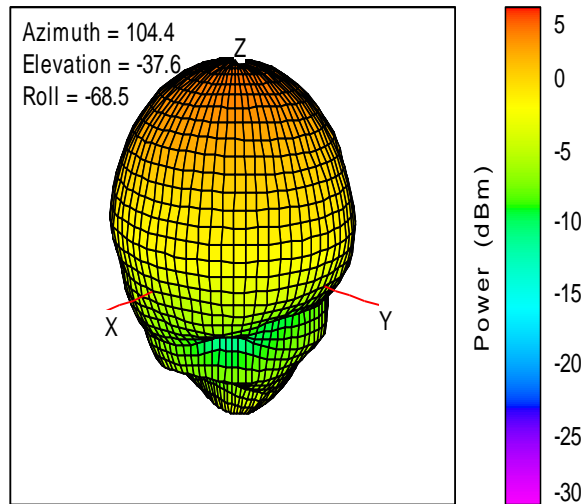
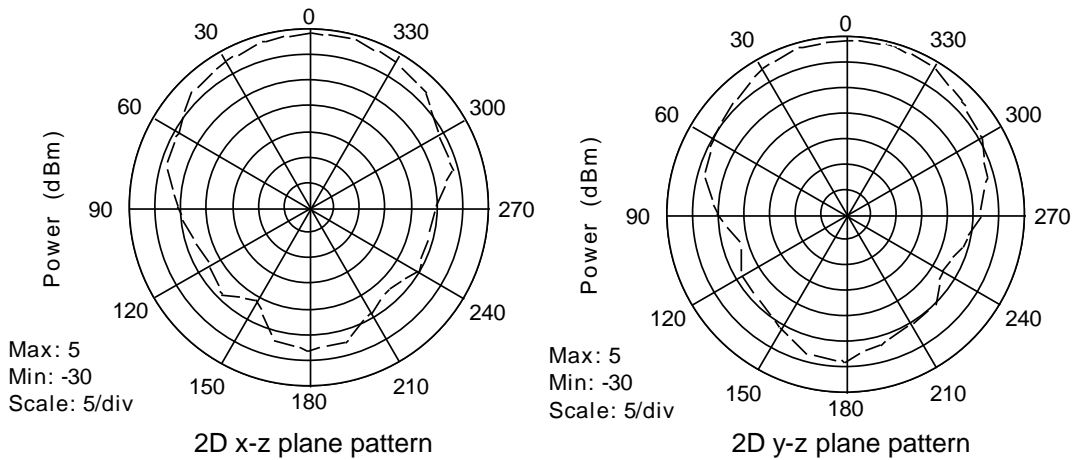
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RADIATION PATTERN

GNSS – 1575MHz



3D radiation pattern

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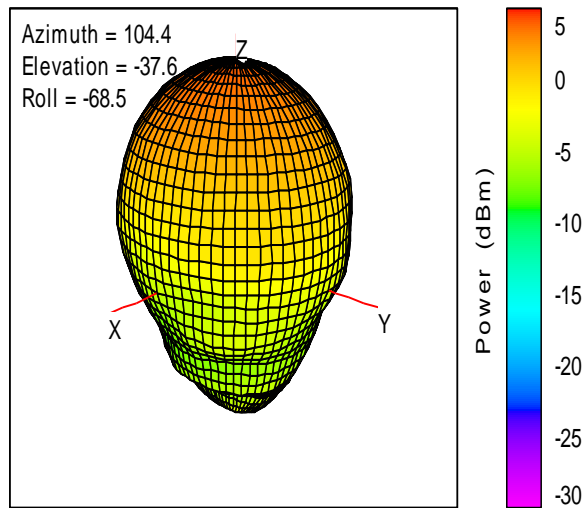
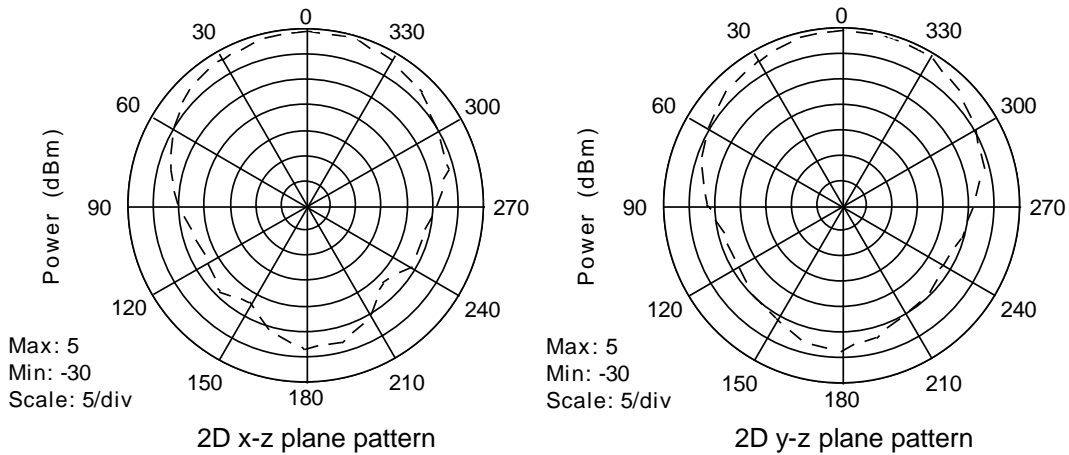
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RADIATION PATTERN

GNSS – 1602MHz



3D radiation pattern

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REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 26, 2020	- New issue