



High Gain



Omnidirectional



4X4 MIMO



LTE Antenna



GPS Antenna



5G Ready



Antenna 107

4x4 MIMO 5G Ready Cellular Antenna System with GPS Receiver

Features

- 4x4 MIMO 5G ready cellular antenna system with GPS receiver
- Cellular frequencies 698-960 MHz & 1710-6000 MHz
- Durable and UV-stable housing
- IP67 rated

Description

The Peplink ANT-107 is a 5G ready multi-band antenna built for land-based mobile applications. It supports 4x4 MIMO for high bandwidth and solid reliability. It is also 5G ready and supports a wide range of global cellular frequencies. The GPS receiver is equipped with high gain LNA, making it ideal for location tracking.

The ANT-107 has a solid housing made of UV stable plastic materials. For easier installation, the antenna comes with a 6'7" / 2m cable, available in SMA or QMA.

Applications

- Public Safety and mission critical connectivity
- Mobile healthcare
- Transportation Connectivity

Overview

ANT-107	
Antenna elements	4x LTE, 1x GPS
Cellular frequency bands	1.3dBi: 698-960MHz 6.1dBi: 1710-2700MHz 6.2dBi: 3400-3800MHz 6.1dBi: 3800-4200MHz 4.5dBi: 5000-6000MHz
GPS frequency bands	1.6dBi, LNA 28dB: 1561-1602MHz
IP rating	IP67
Dimensions	Height: 1.42" / 36mm (spigot not included) Diameter: 5.12" / 130mm
Coax cable type	CFD200
Coax Cable Length	6' 7" / 2m

Ordering information

Product Code	Description
ANT-107-LTE4-G	5G ready, 4xLTE, 1xGPS 698-6000MHz, IP67, SMA, White
ANT-107-Q-LTE4-G	5G ready, 4xLTE, 1xGPS 698-6000MHz, IP67, QMA, White

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Specification

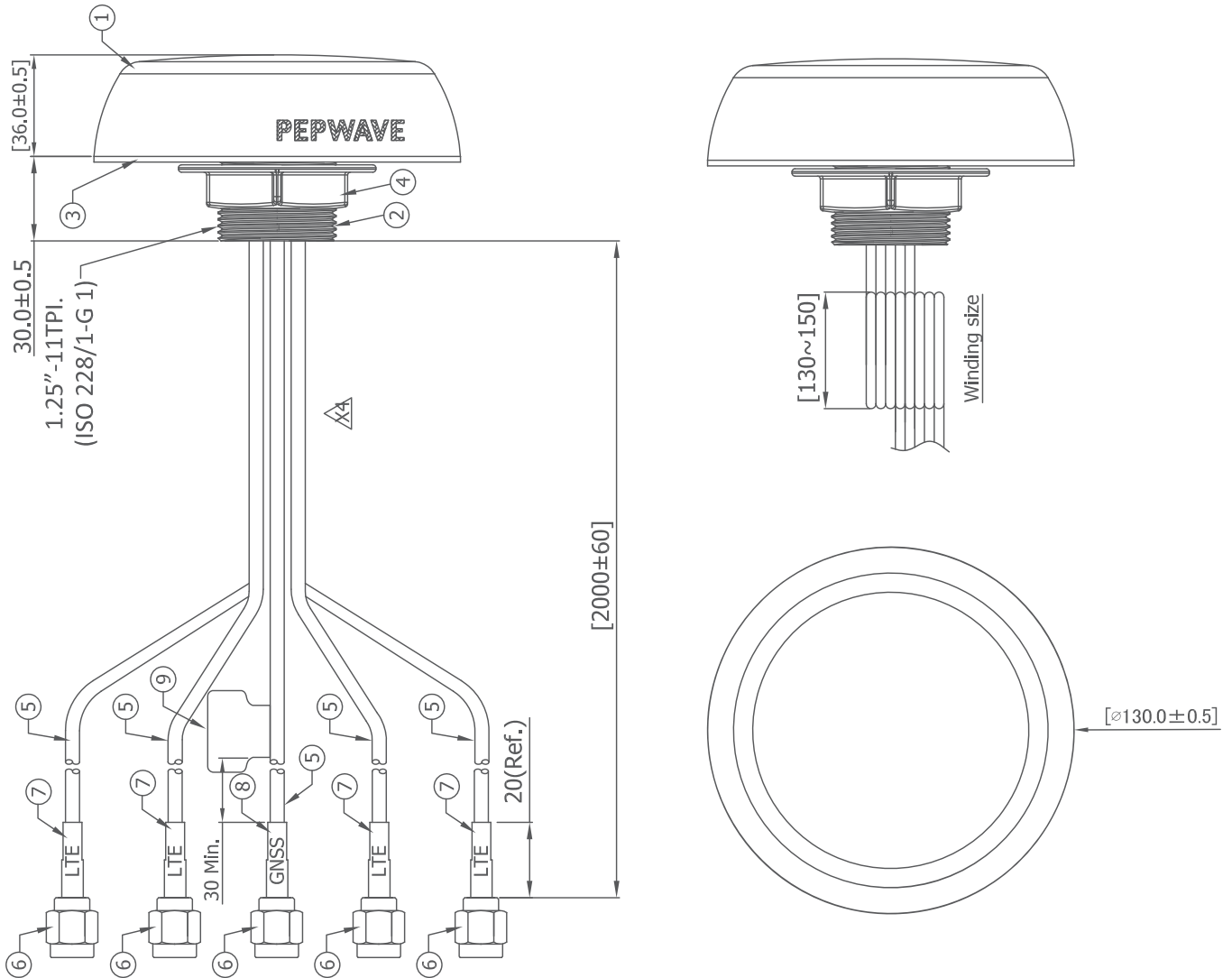
Cellular		Mounting	
Antenna elements	4 elements	Supported types	Panel
Cellular frequency bands	1.3dBi: 698-960MHz 6.1dBi: 1710-2700MHz 6.2dBi: 3400-3800MHz 6.1dBi: 3800-4200MHz 4.5dBi: 5000-6000MHz	Mounting hole	1 11/16" / 43mm
VSWR:	< 2.5	Max panel thickness	19/32" / 15mm
Feed power handling	10W	Mechanical	
Input impedance	50 Ω	Product dimensions	Height: 1.42" / 36mm (spigot not included) Diameter: 5.12" / 130mm
Polarisation	Linear	Packaged dimensions	8.90" x 8.46" x 4.29" / 226 x 215 x 109mm
GPS		Weight	2.43lbs / 1.1kg
Frequency range	1561-1602 MHz	Weight w/o RF cables	1.46lbs / 0.66kg
Peak gain	0.5dBi@1575MHz 1.6dBi@1602MHz	Radome material	UV stable PC+ABS
VSWR	< 2.5	Package contents	
Output return loss	10dB max	Antenna	ANT-107
Gain: LNA	28 ±3dB	Accessories	Double sided 3M adhesive pad Diameter: 5.08" / 129mm Thickness: 0.08" / 2mm
Noise figure	1.5dB max at 3.3V	Environmental, compliance	
Operating Voltage	3.3V	IP rating	IP67
Power consumption	8.5 ±2.5mA at 3.3V	Operating temperature	-40° - 176°F / -40° - 80°C
		Storage temperature	-40° - 176°F / -40° - 80°C
		Compliance	Complies with RoHS requirements
Coax cable			
Type	CFD200		
Length	6' 7" / 2m		
Loss	0.33 dB/m @ 900 MHz 0.49 dB/m @ 2000 MHz 0.55 dB/m @ 2500 MHz 0.87 dB/m @ 5800 MHz		
Diameter	13/64" / 5.0mm		
Jacket	Half matt PVC, UV resistant		
Termination	SMA male or QMA		

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Technical drawing (SMA connectors)



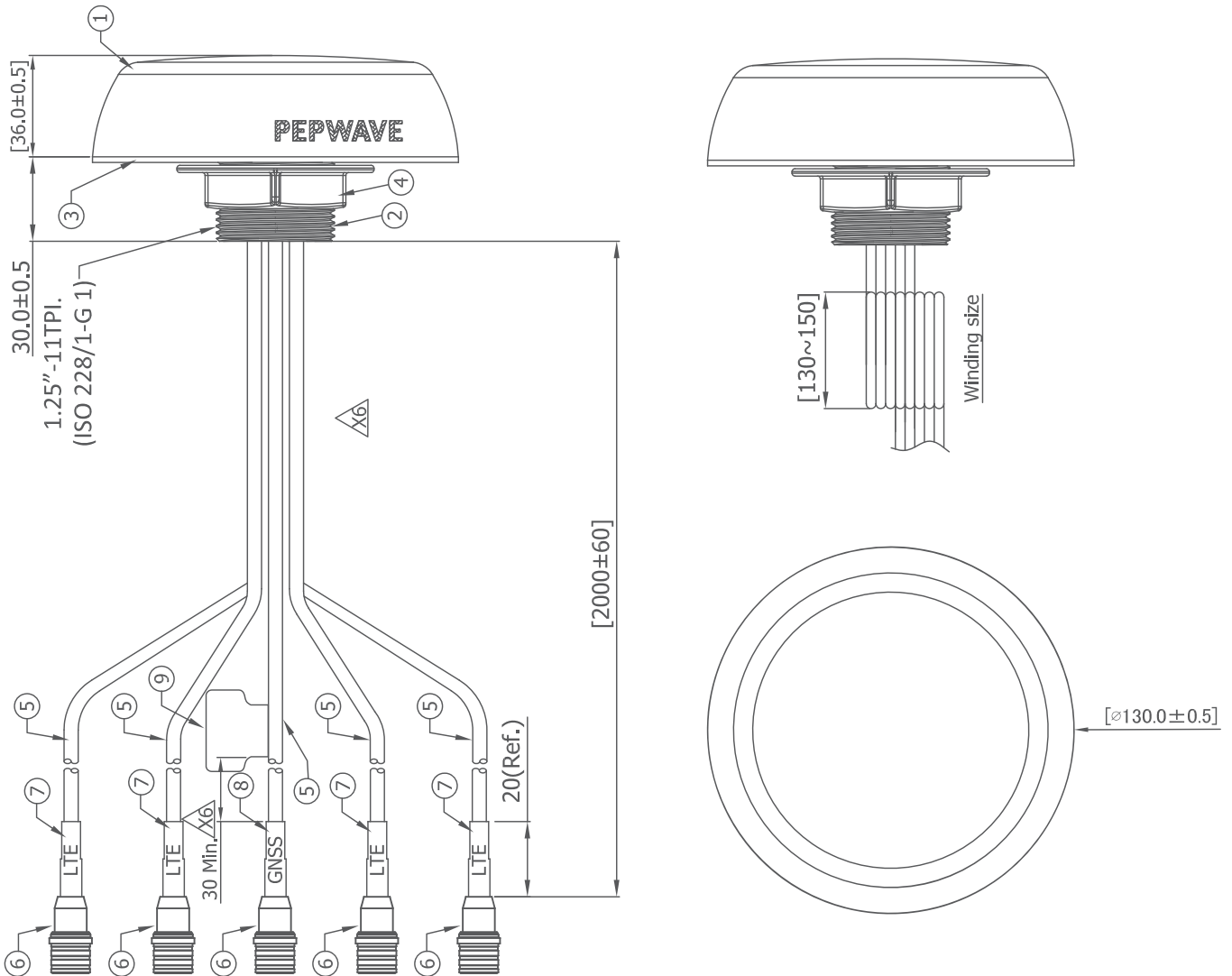
Index	Description
1	Antenna Top Cover (PC+ABS)
2	Antenna Bottom Cover (PC+ABS)
3	Double sided 3M adhesive pad
4	Hexagon NUT (PC+ABS)
5	Cable (CFD-200)
6	Connector (SMA)
7	LTE cable marking (red color)
8	GPS cable marking (blue color)
9	Label

Antenna 107

4x4 MIMO 5G Ready Cellular Antenna System with GPS Receiver



Technical drawing (QMA connectors)



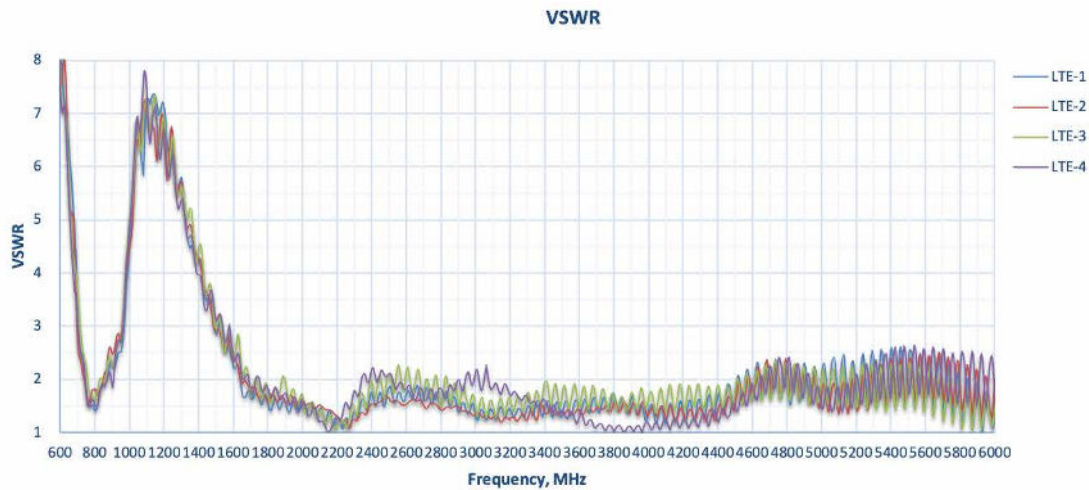
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Antenna 107

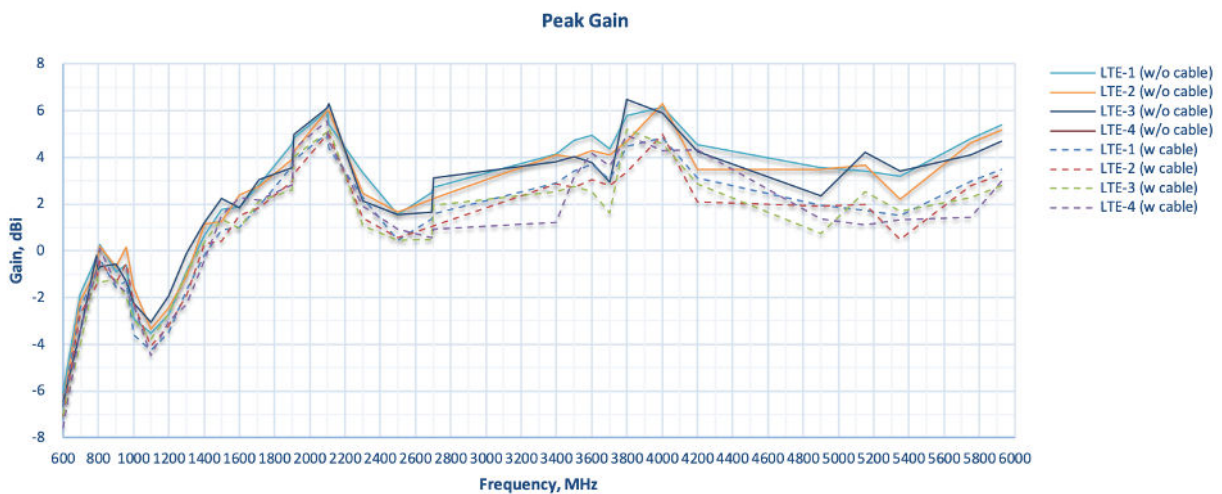
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Cellular antenna VSWR



Cellular antenna Gain

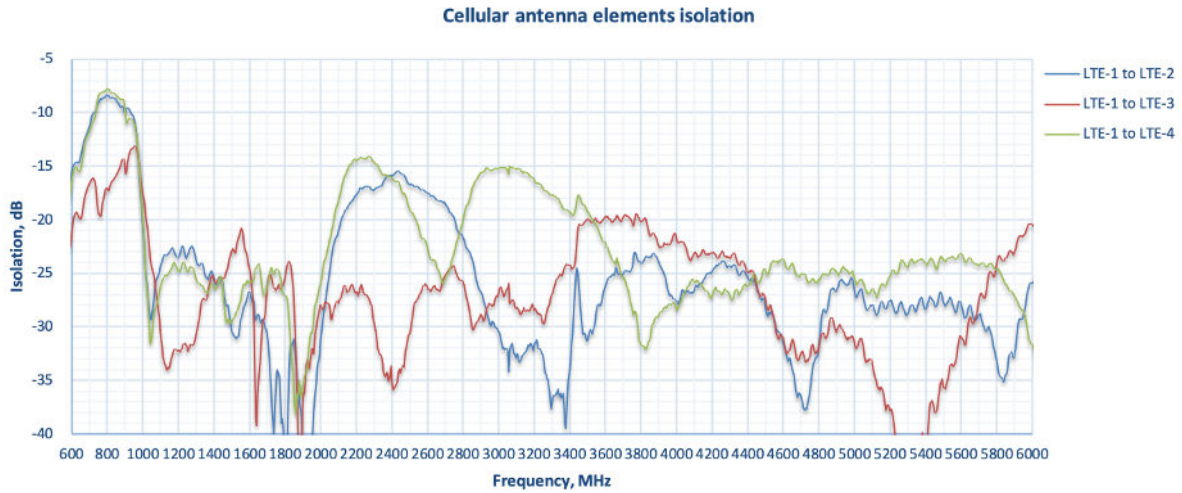


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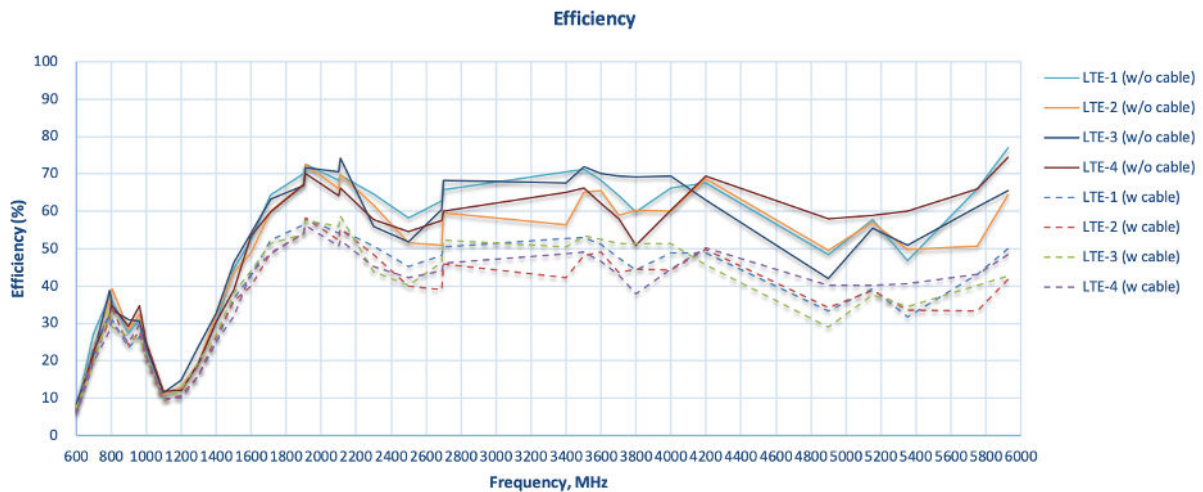
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Cellular antenna isolation

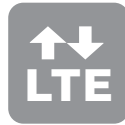


Cellular antenna efficiency

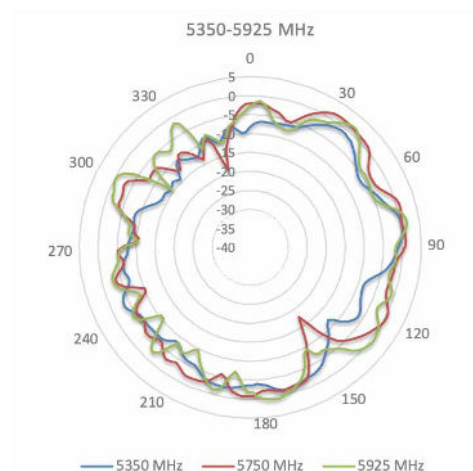
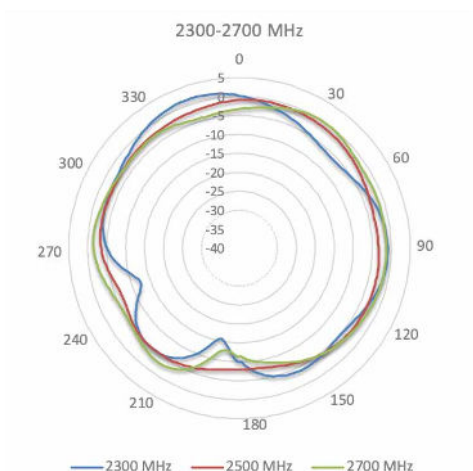
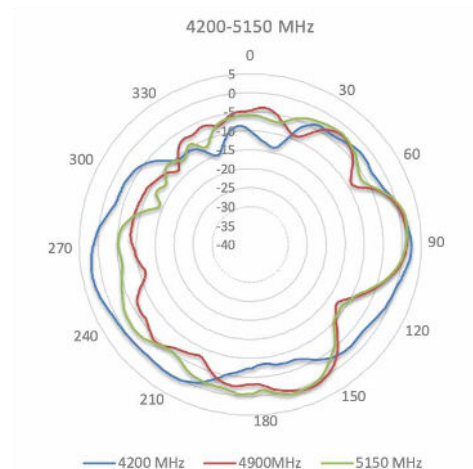
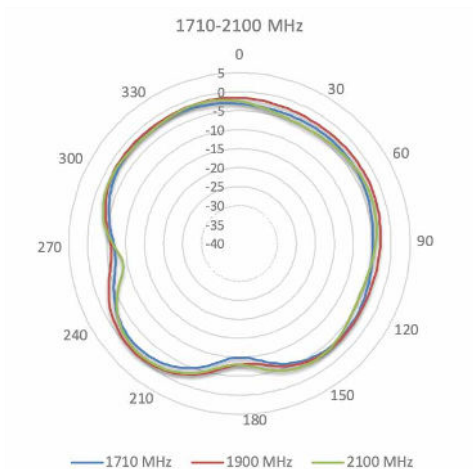
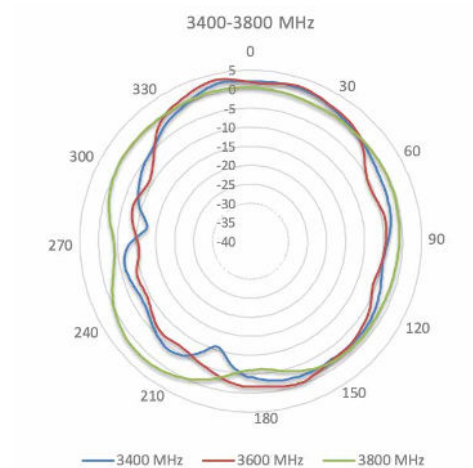
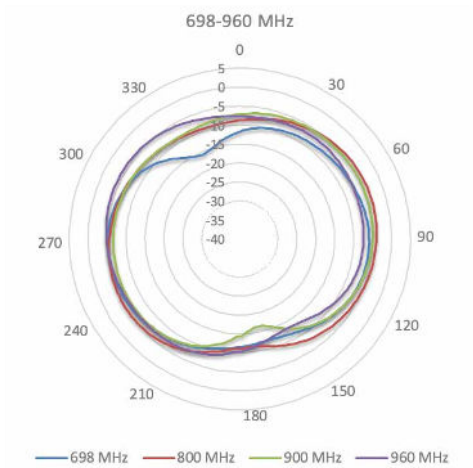


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Radiation patterns (Azimuth)

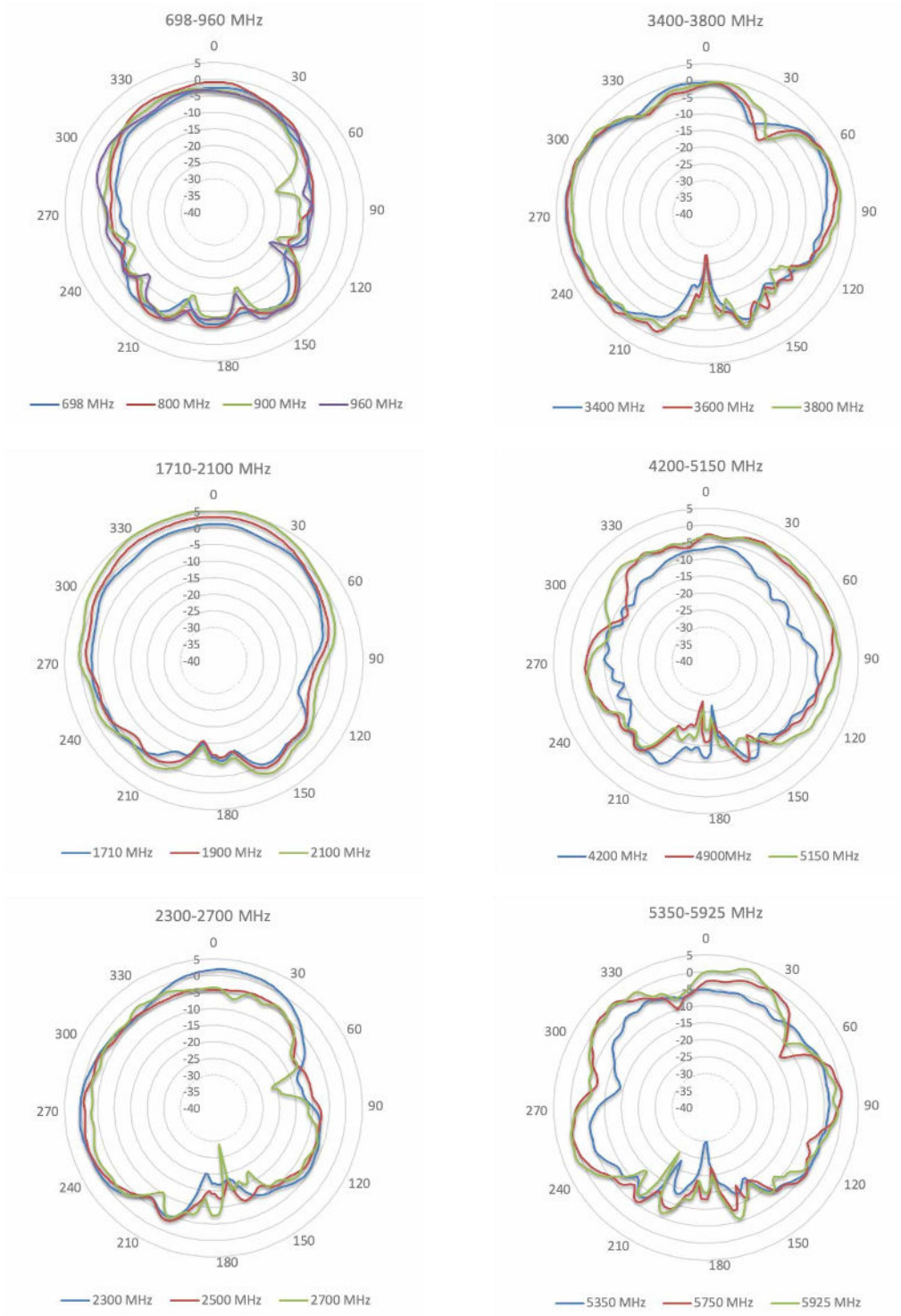


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Radiation patterns (Elevation 1)

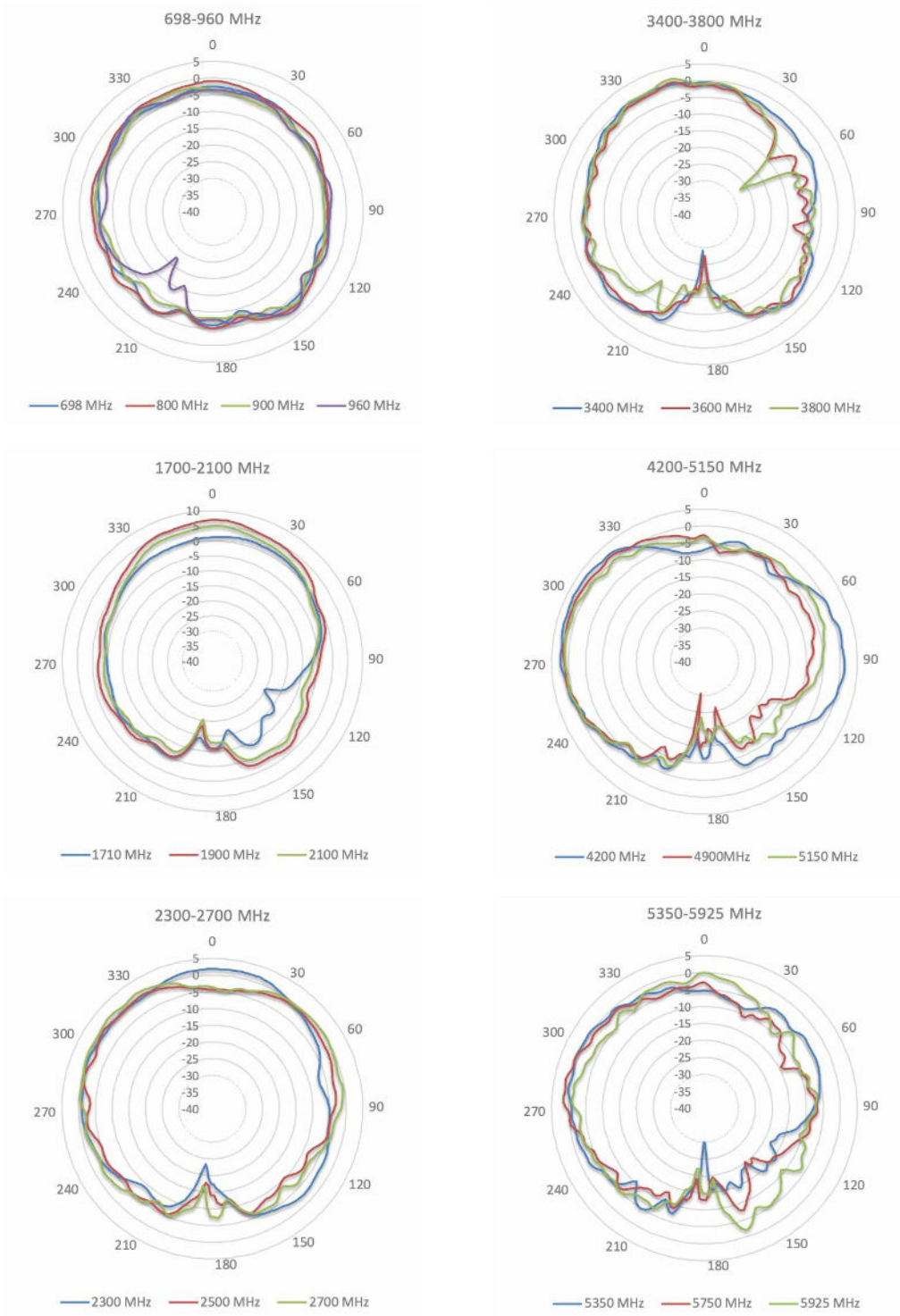


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Radiation patterns (Elevation 2)

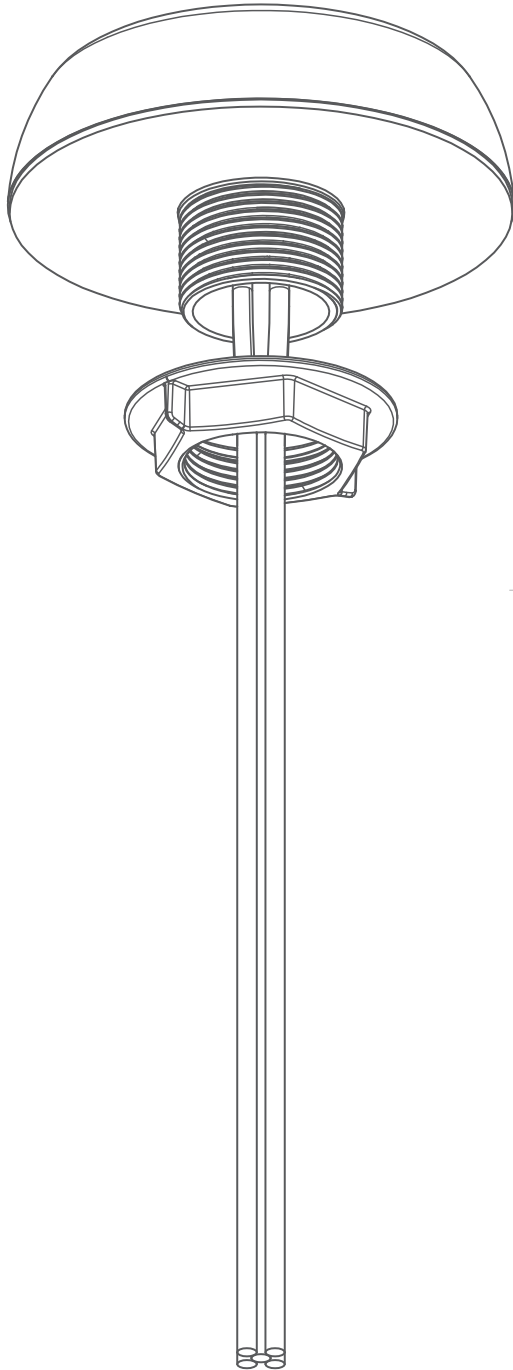


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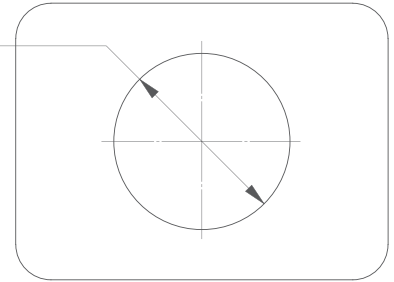
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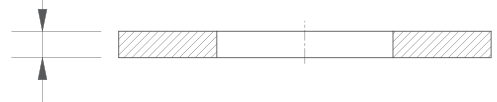
Installation recommendation



CUT OUT
DIAMETER



THICKNESS



Cover panel surface to protect the paint work. When drilling a hole, start with a small one, then increase it.

Cut out diameter should be 1 11/16" / 43mm.

Maximum allowed panel thickness - 15mm.

After a drill clean up the surface and apply some paint around the hole to prevent corrosion. Attach the antenna.