

2J7703BGF-RB-SP

2.4/5.0/6.0 GHz ISM and GNSS Screw Mount

Key Features

Cable 1: 2.4/5.0/6.0 GHz ISM

- 2410-2490 MHz
- 4920-7125 MHz

Cable 2: GPS/GLONASS/QZSS/Galileo

- 1575-1606 MHz

Screw Mount

High Performance

Ground Plane Dependent

Customizable Cable and Connector

Dimensions: Ø 54 x 69 mm

Certificates IP67, IP69, IK09



1. Antenna and electrical specifications

Cable 1

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
Standards	WiFi, BT, ZigBee, ISM		
Band (MHz)	2.4 GHz	5.0 GHz	6.0 GHz
Frequency (MHz)	2410-2490	4920-5925	5925-7125
Return Loss (dB)	~-17.5	~-10.9	~-9.1
VSWR	~1.6:1	~2.0:1	~2.1:1
Efficiency (%)	~55.0	~40.1	~30.1
Peak Gain (dBi)	~3.7	~2.6	~1.3
Average Gain (dB)	~-2.7	~-4.2	~-5.3
Impedance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	RP-SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LL100 Standard (Other Cables Available)		

Cable 2

Parameters	GPS/GLONASS Antenna	
Standard	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (MHz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Return Loss (dB)	<=-15.0 dB	
VSWR	<=1.4:1 dB	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Pre-filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 Typ	
Voltage (V)	1.5 – 3.6	
Current (mA)	9 Typ	
Power Consumption (mW)	24.3 Typ	
ESD Protection (kV)	2kV	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LL100 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Ground Plane

200 cm of Cable LL100

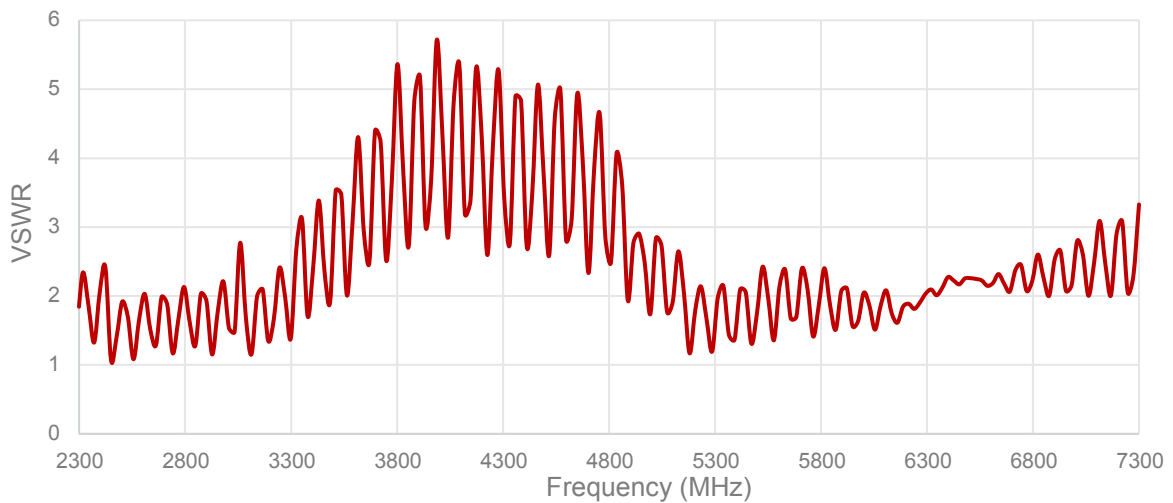
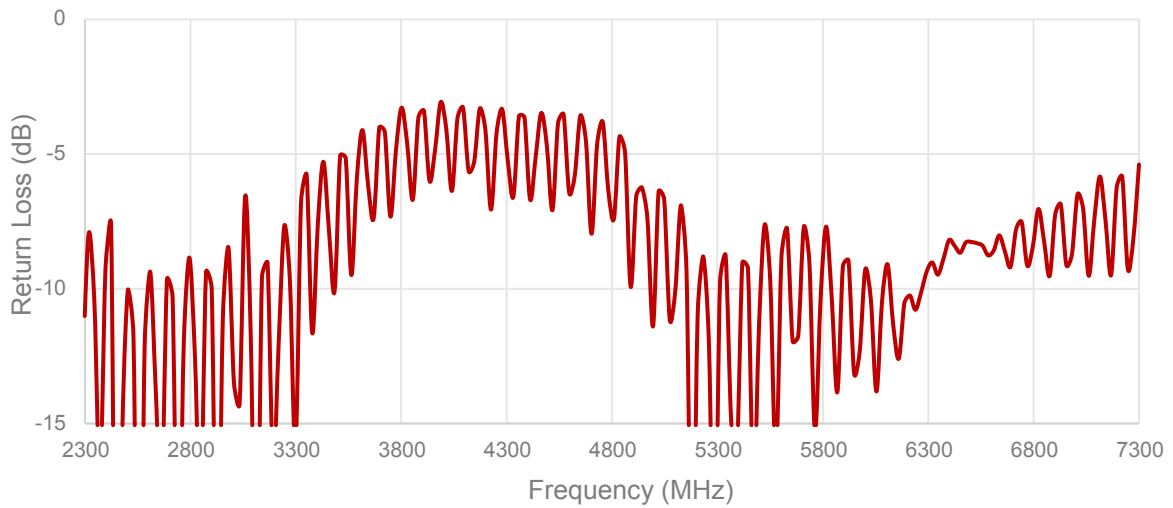
Measured in Certified CTIA 3D Anechoic Chamber

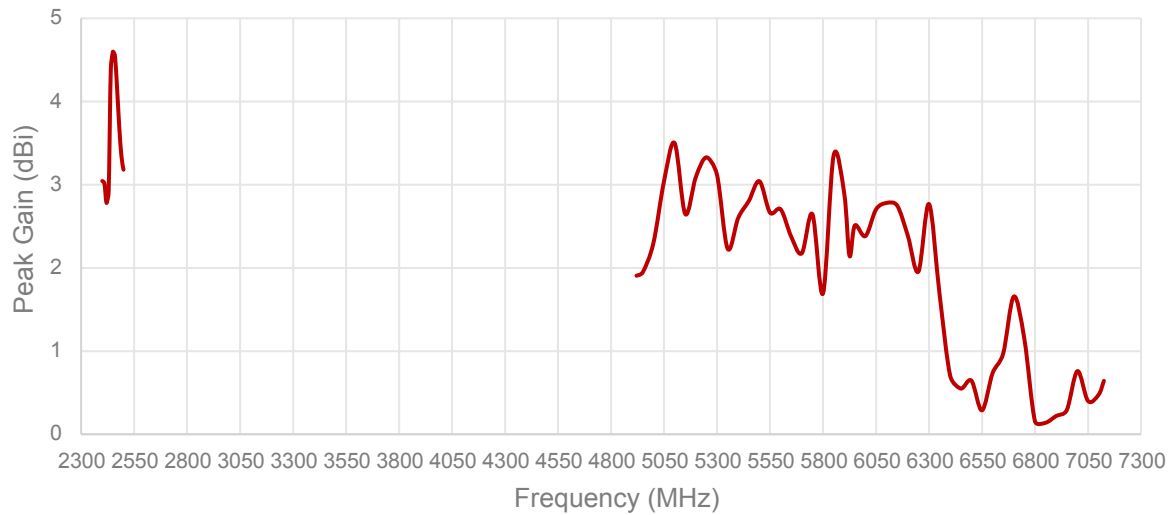
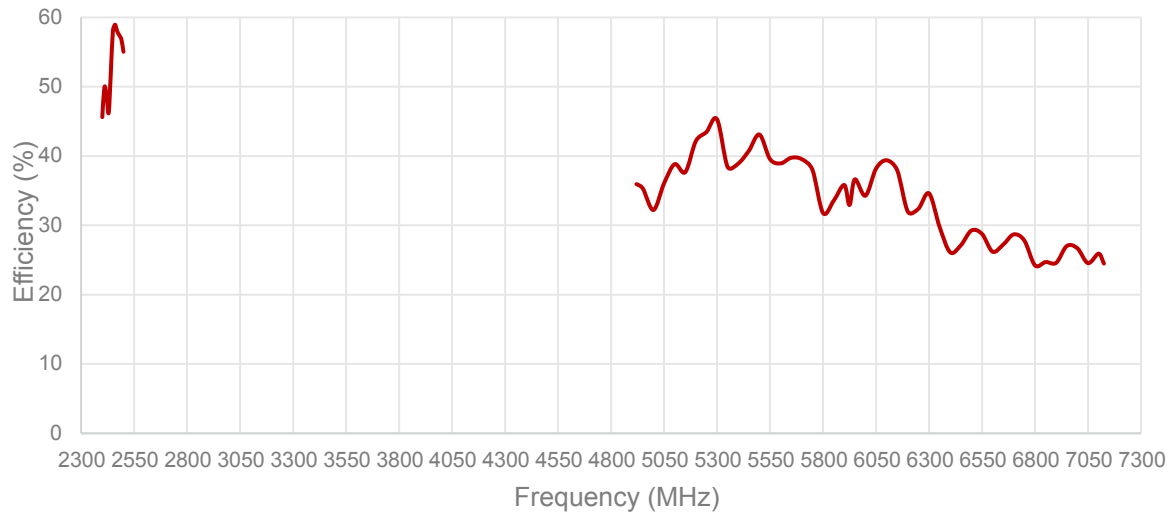
2. Mechanical and environmental specifications

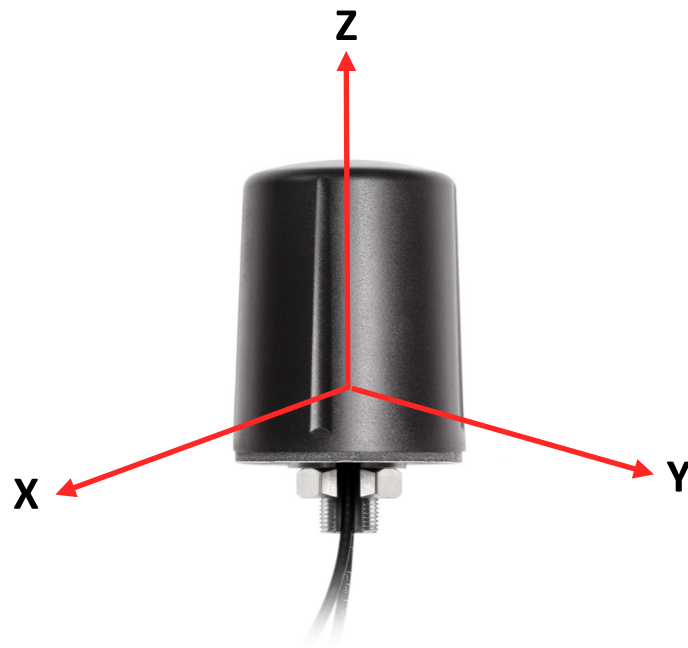
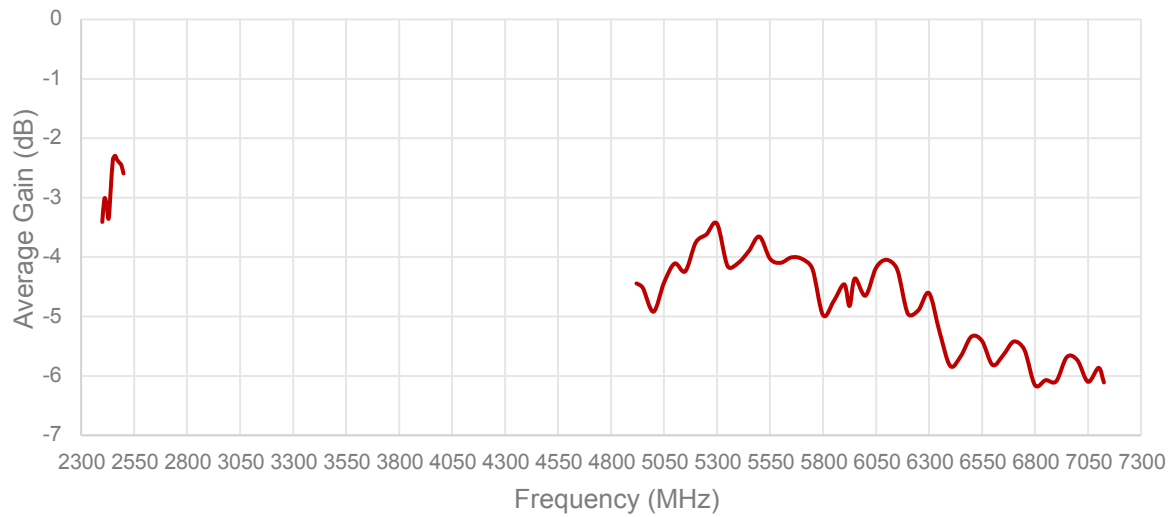
Specifications	2J7703BGF-RB-SP
Mounting Type	Screw Mount
Dimensions (mm)	Ø 54 x 69
Rec. Tighten Torque (Nm)	6 Nm
Radome Type	ASA
Radome Color	Black
Antenna Base	Zamak
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69, IK09

3. Antenna parameters

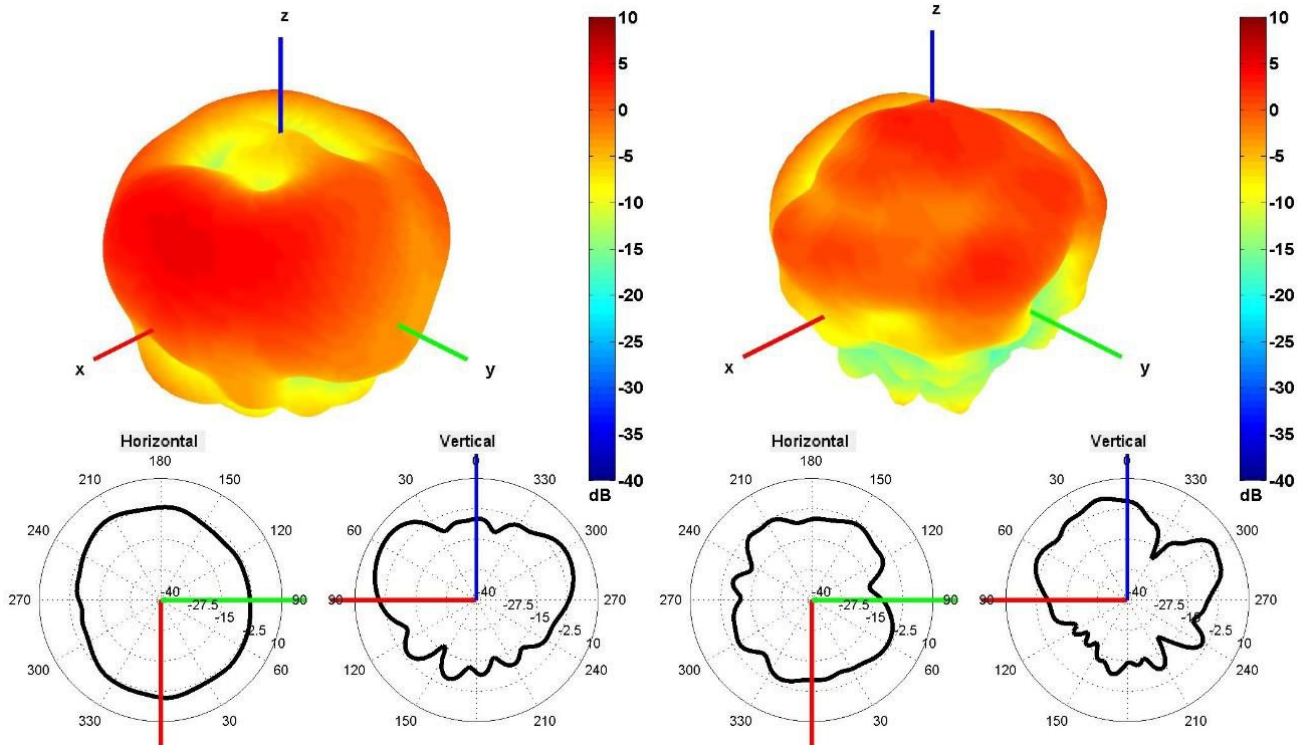
Table 1: 2.4/5.0/6.0 GHz ISM



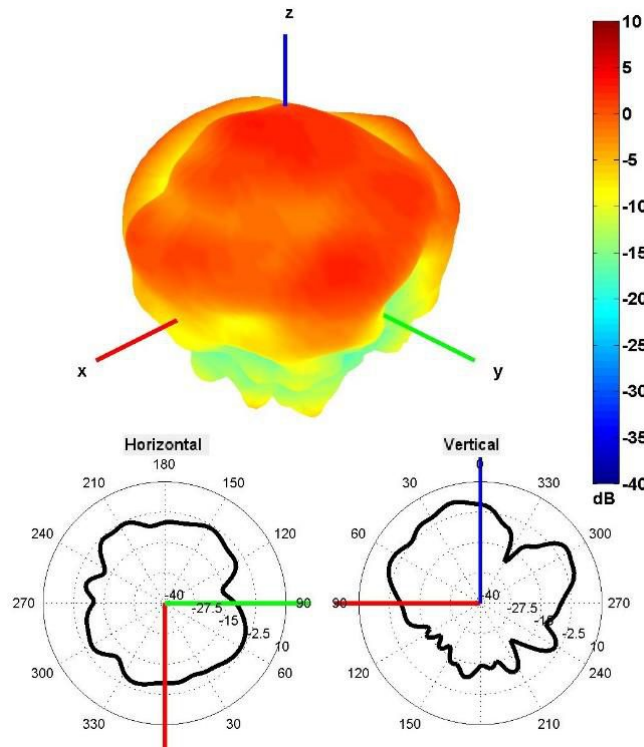




Cable 1: 2.4/5.0/6.0 GHz ISM

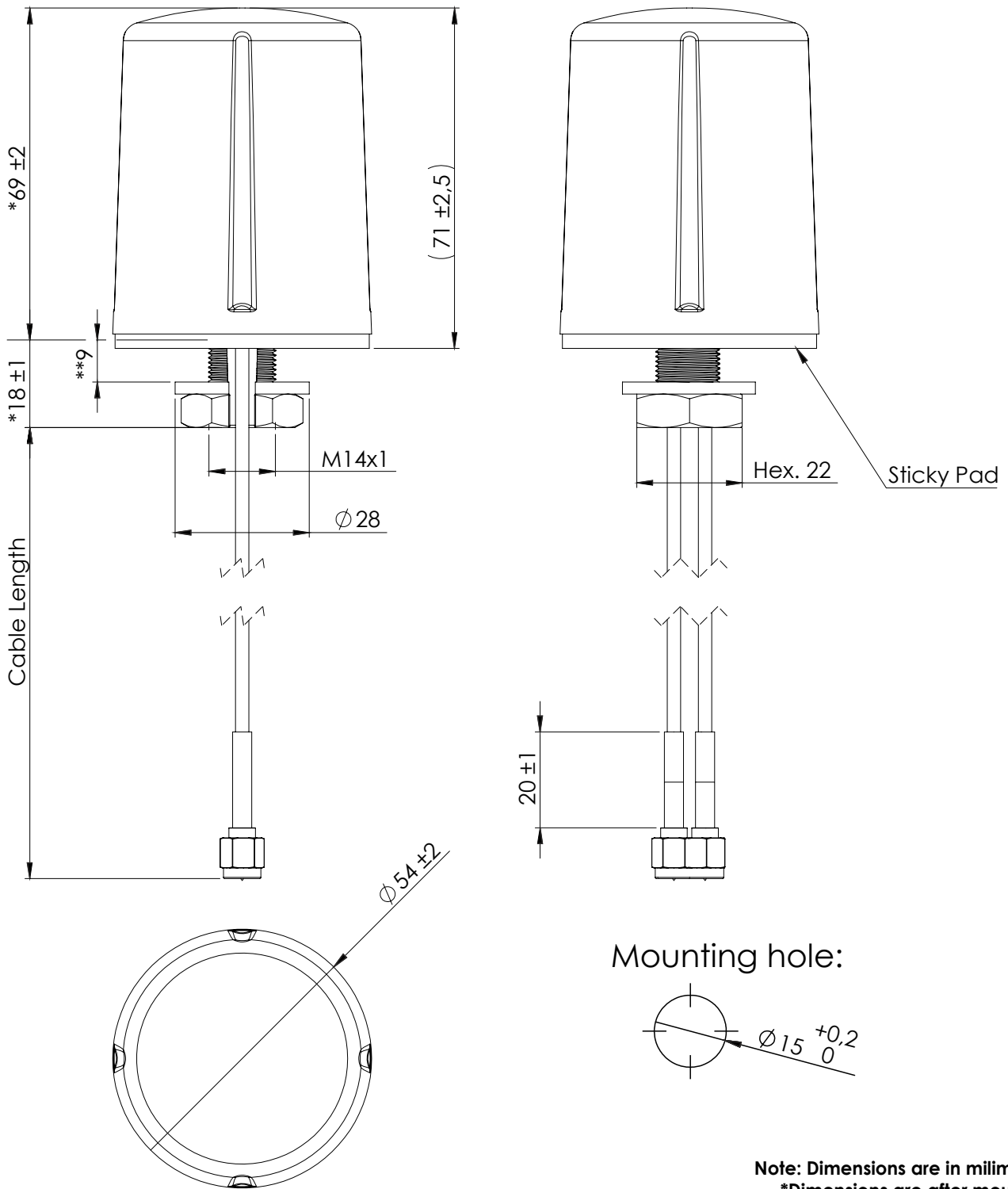


2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern

4. Antenna drawings



Note: Dimensions are in millimeters
***Dimensions are after mounting**
****Mounting thickness: 9 mm max.**
Rec. Torque= 6 Nm

5. Antenna Images

