

## 2J7A02Bc

4× 2.4/5.0/6.0 GHz ISM MIMO Screw Mount

### Key Features

**Cable 1 and 4: 2.4/5.0/6.0 GHz ISM**

- 2410-2490 MHz

- 4920-5925 MHz

- 5915-7125 Mhz

Screw Mount

Lightweight Plastic Base

High Performance

Ground Plane Independent

Customizable Cable and Connector

Dimensions: Ø 96 x H 90 mm

Certificates: IP67, IP69, IK09



## 1. Antenna and electrical specifications

Cable 1

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
<b>Standards</b>	WiFi, BT, ZigBee, ISM		
<b>Band (MHz)</b>	2.4 GHz	5.0 GHz	6.0 GHz
<b>Frequency (MHz)</b>	2410-2490	4920-5925	5925-7125
<b>Return Loss (dB)</b>	~-11.0	~-9.3	~-7.6
<b>VSWR</b>	~1.8:1	~2.2:1	~2.6:1
<b>Efficiency (%)</b>	~46.4	~40.9	~33.4
<b>Peak Gain (dBi)</b>	~4.0	~3.2	~3.2
<b>Average Gain (dB)</b>	~-3.3	~-4.2	~-4.9
<b>Impedance (Ohm)</b>	50		
<b>Polarisation</b>	Linear		
<b>Radiation Pattern</b>	Omni-Directional		
<b>Max. Input Power (W)</b>	25		
<b>Connector Type</b>	SMA-Male-RP Standard (Other Connectors Available)		
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)		
<b>Cable Type</b>	LL195 Standard (Other Cables Available)		

Cable 2

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
<b>Standards</b>	WiFi, BT, ZigBee, ISM		
<b>Band (MHz)</b>	2.4 GHz	5.0 GHz	6.0 GHz
<b>Frequency (MHz)</b>	2410-2490	4920-5925	5925-7125
<b>Return Loss (dB)</b>	~-11.2	~-8.4	~-7.2
<b>VSWR</b>	~1.8:1	~2.4:1	~2.8:1
<b>Efficiency (%)</b>	~46.7	~40.5	~33.2
<b>Peak Gain (dBi)</b>	~3.2	~3.7	~2.8
<b>Average Gain (dB)</b>	~-3.3	~-4.3	~-4.9
<b>Impedance (Ohm)</b>	50		
<b>Polarisation</b>	Linear		
<b>Radiation Pattern</b>	Omni-Directional		
<b>Max. Input Power (W)</b>	25		
<b>Connector Type</b>	SMA-Male-RP Standard (Other Connectors Available)		
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)		
<b>Cable Type</b>	LL195 Standard (Other Cables Available)		

**Cable 3**

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
<b>Standards</b>	WiFi, BT, ZigBee, ISM		
<b>Band (MHz)</b>	2.4 GHz	5.0 GHz	6.0 GHz
<b>Frequency (MHz)</b>	2410-2490	4920-5925	5925-7125
<b>Return Loss (dB)</b>	~-11.3	~-8.2	~-6.9
<b>VSWR</b>	~1.8:1	~2.5:1	~2.9:1
<b>Efficiency (%)</b>	~48.0	~38.0	~32.3
<b>Peak Gain (dBi)</b>	~3.5	~3.0	~3.2
<b>Average Gain (dB)</b>	~-3.3	~-4.5	~-5.0
<b>Impedance (Ohm)</b>	50		
<b>Polarisation</b>	Linear		
<b>Radiation Pattern</b>	Omni-Directional		
<b>Max. Input Power (W)</b>	25		
<b>Connector Type</b>	SMA-Male-RP Standard (Other Connectors Available)		
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)		
<b>Cable Type</b>	LL195 Standard (Other Cables Available)		

**Cable 4**

Parameters	2.4/5.0/6.0 GHz ISM Antenna		
<b>Standards</b>	WiFi, BT, ZigBee, ISM		
<b>Band (MHz)</b>	2.4 GHz	5.0 GHz	6.0 GHz
<b>Frequency (MHz)</b>	2410-2490	4920-5925	5925-7125
<b>Return Loss (dB)</b>	~-11.4	~-8.8	~-6.9
<b>VSWR</b>	~1.8:1	~2.3:1	~2.8:1
<b>Efficiency (%)</b>	~48.4	~40.2	~31.7
<b>Peak Gain (dBi)</b>	~3.9	~3.2	~3.0
<b>Average Gain (dB)</b>	~-3.3	~-4.3	~-5.1
<b>Impedance (Ohm)</b>	50		
<b>Polarisation</b>	Linear		
<b>Radiation Pattern</b>	Omni-Directional		
<b>Max. Input Power (W)</b>	25		
<b>Connector Type</b>	SMA-Male-RP Standard (Other Connectors Available)		
<b>Cable Length</b>	300 cm Standard (Any Cable Length Available)		
<b>Cable Type</b>	LL195 Standard (Other Cables Available)		

**Antenna Measurement Conditions:**

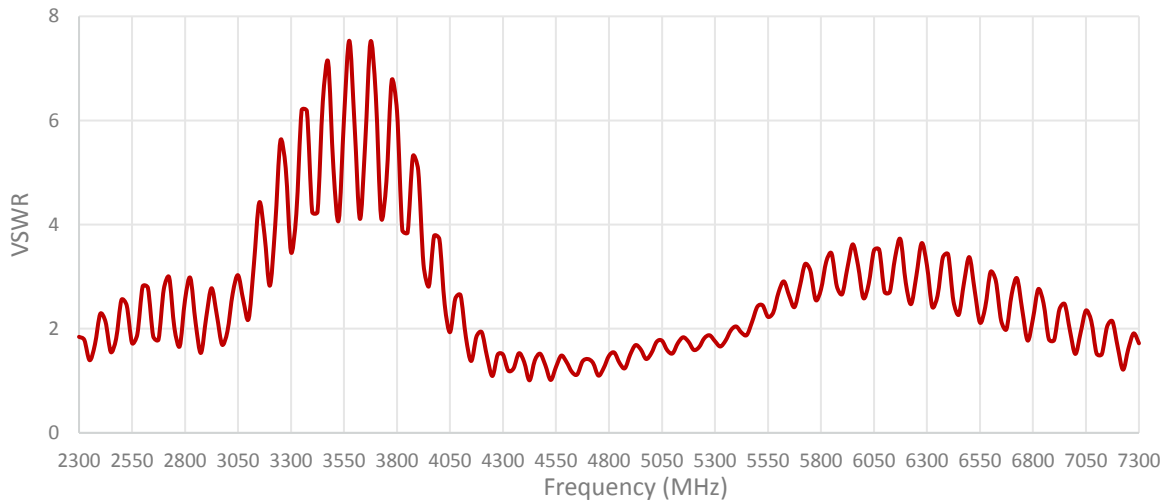
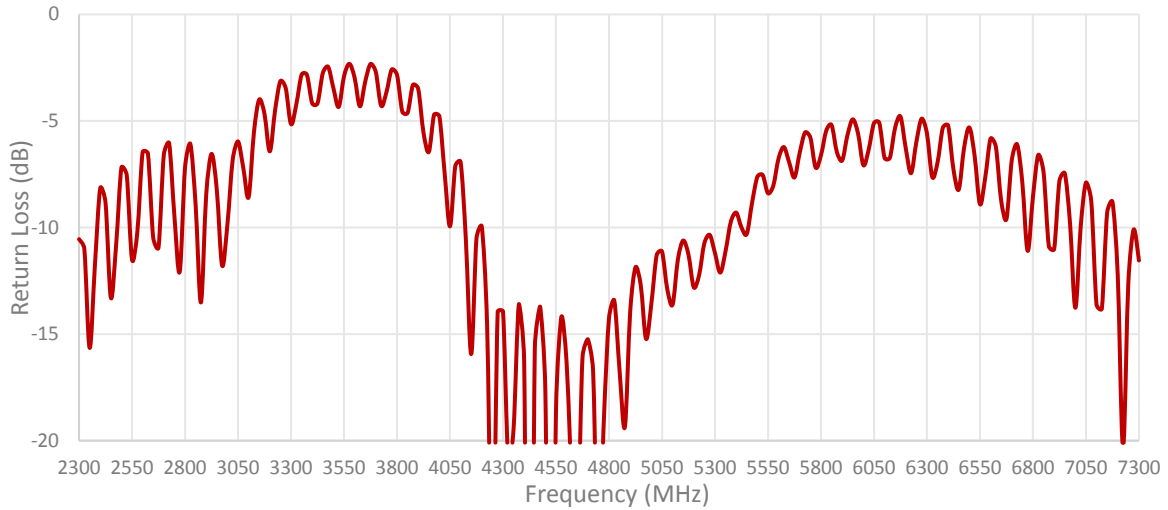
Mounted on Metal Plate of 30 x 30 cm  
 100 cm of Cable LL195  
 Measured in Certified CTIA 3D Anechoic Chamber

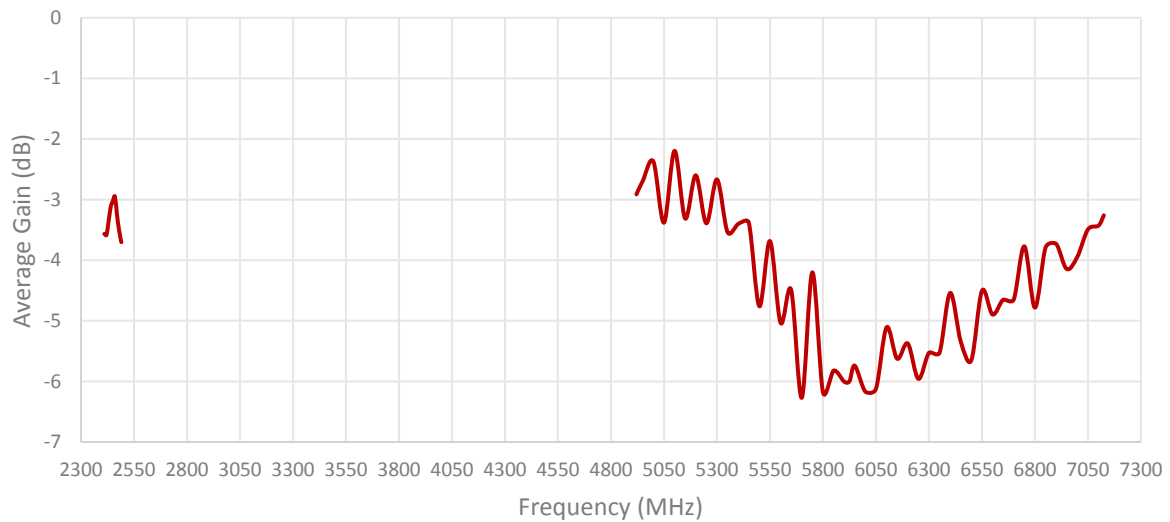
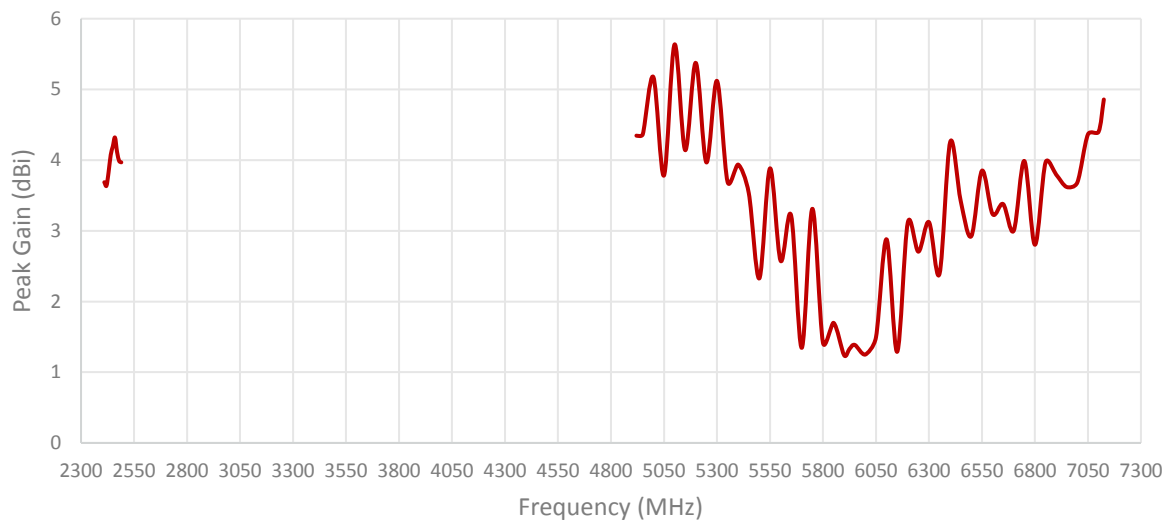
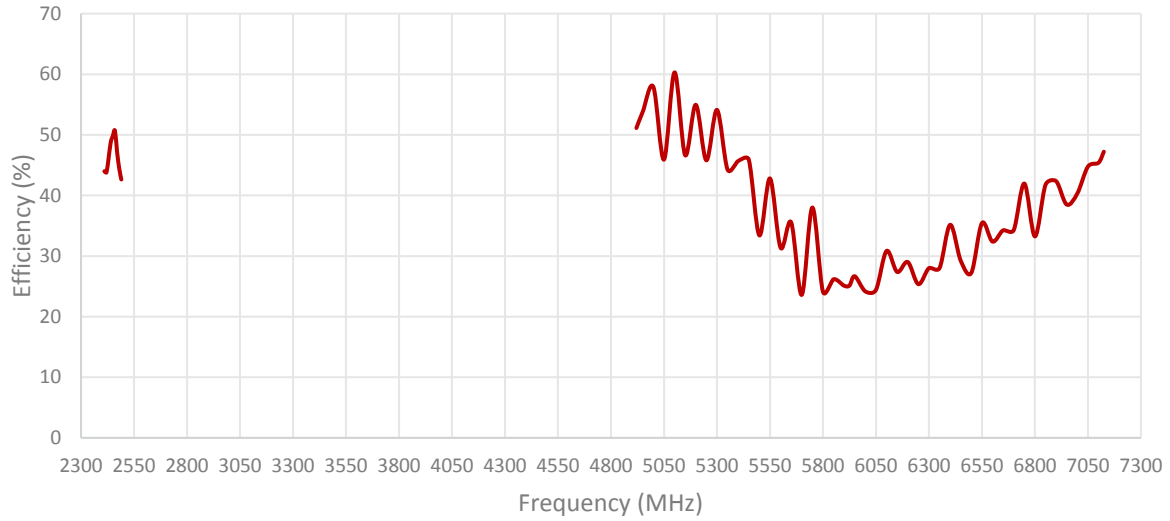
## 2. Mechanical and environmental specifications

Specifications	2J7A02Bc
<b>Mounting Type</b>	Screw Mount
<b>Dimensions (mm)</b>	Ø 96 x H 90
<b>Max. Tighten Torque (Nm)</b>	6 Nm
<b>Radome</b>	ASA
<b>Radome color</b>	White, Black
<b>Antenna Base</b>	ASA
<b>Operating Temperature (C)</b>	-40 to +85
<b>Storage Temperature (C)</b>	-40 to +85
<b>Substance Compliance</b>	RoHS
<b>Certificates</b>	IP67, IP69, IK09

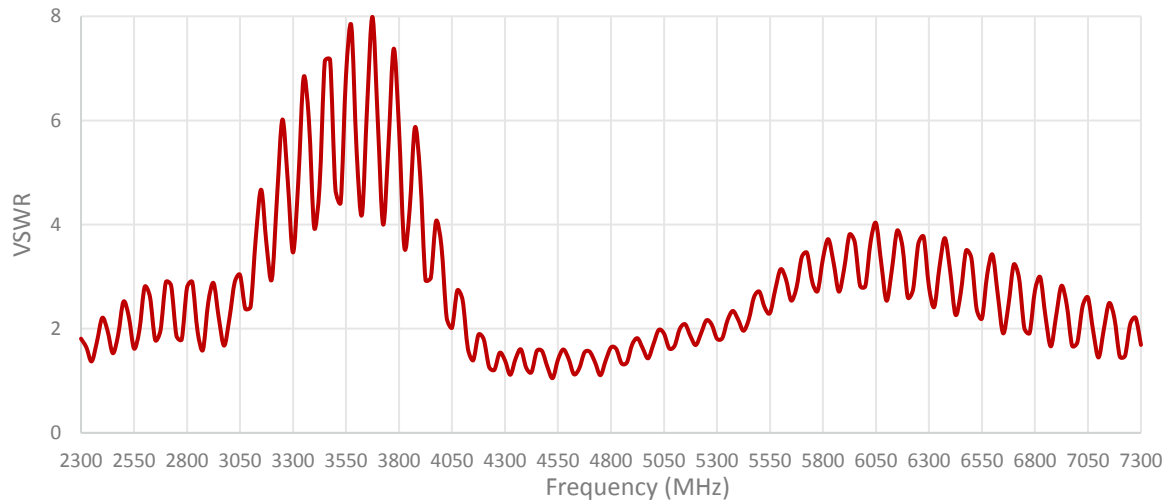
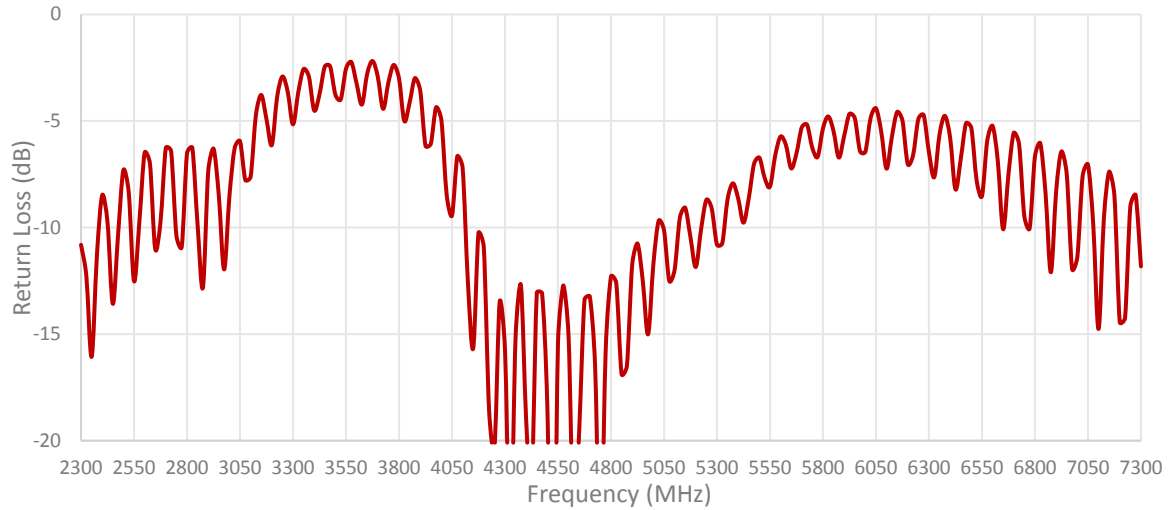
### 3. Antenna parameters

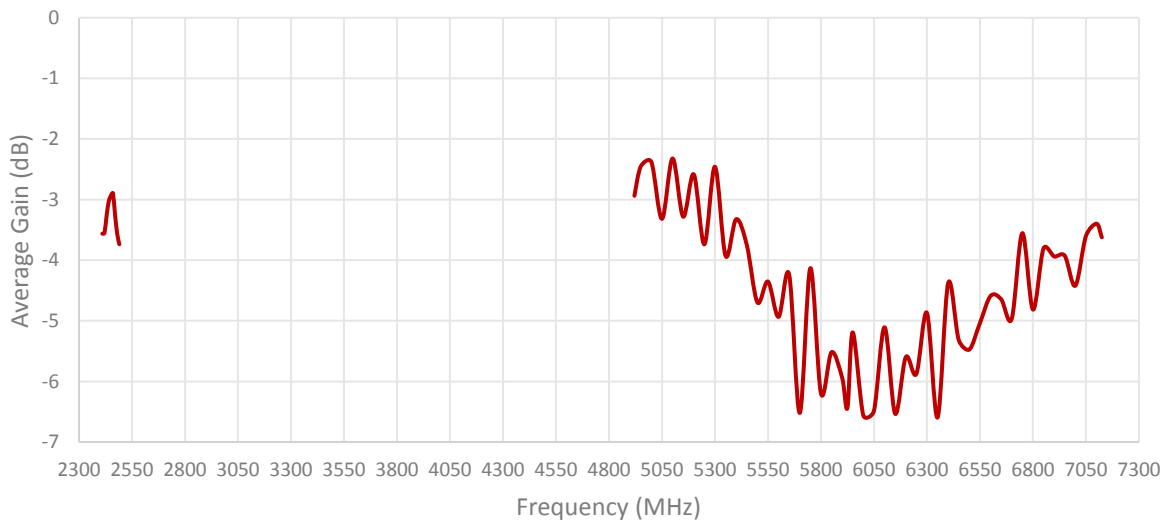
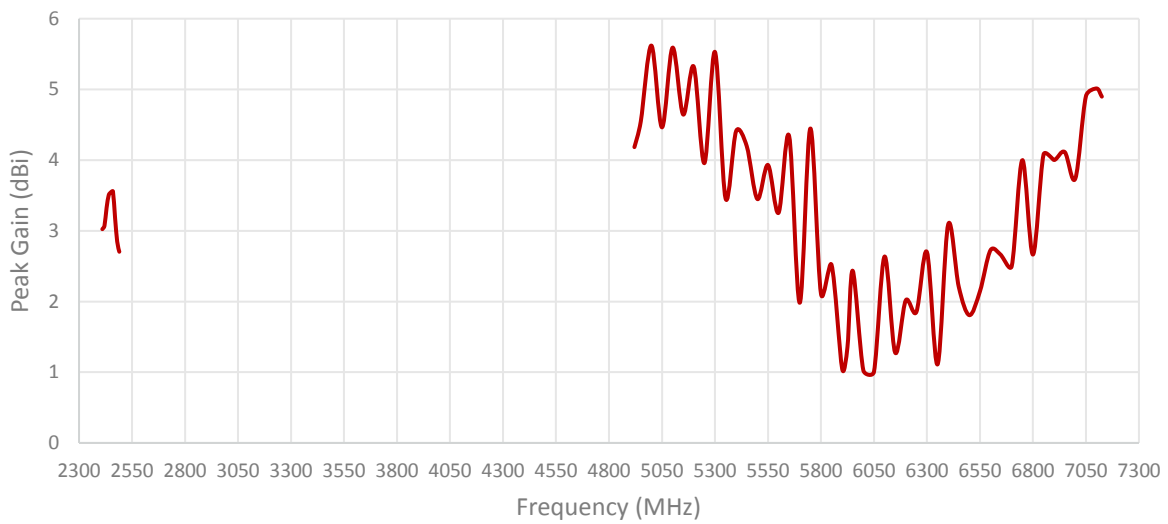
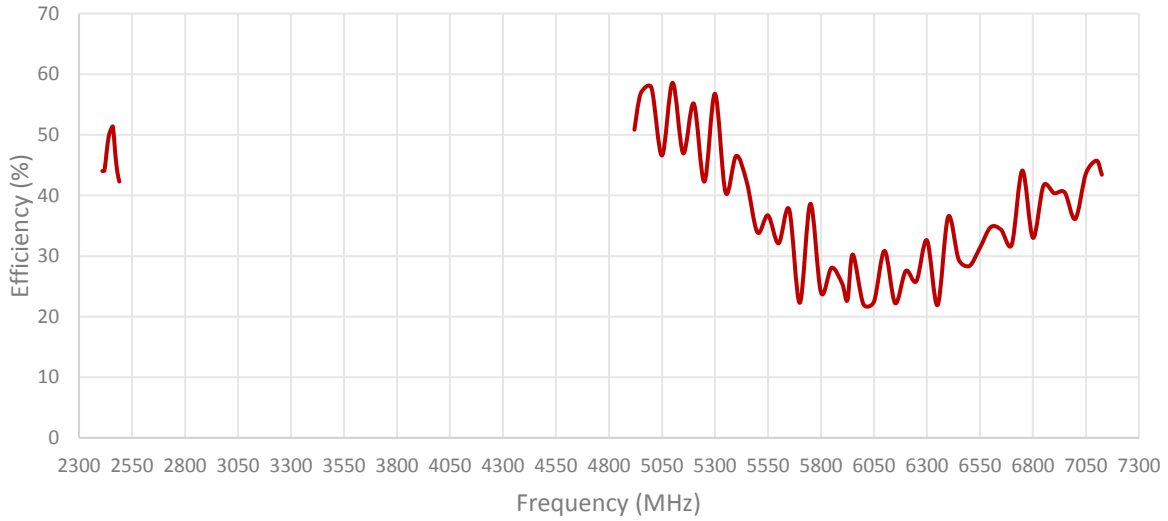
**Table 1: 2.4/5.0/6.0 GHz ISM**





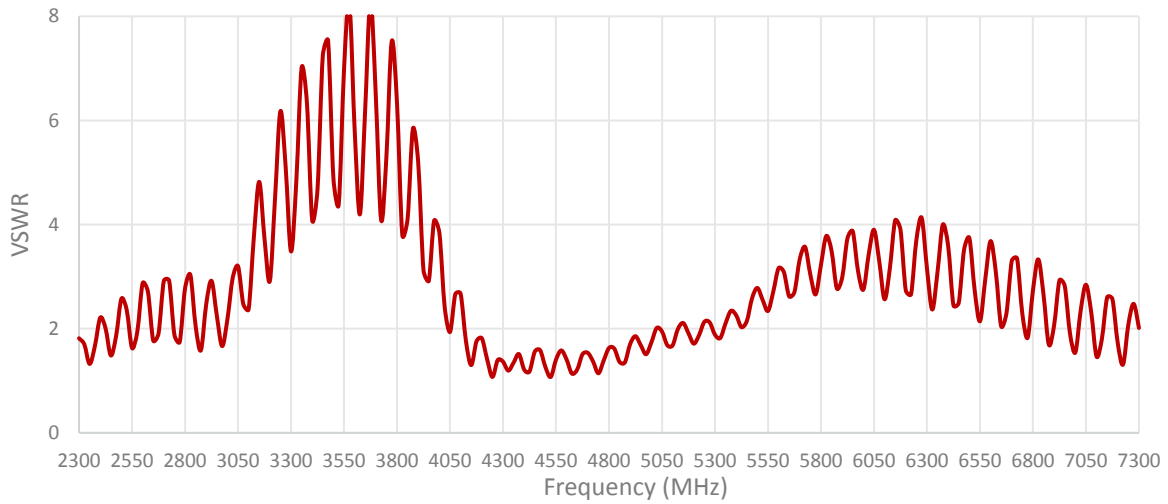
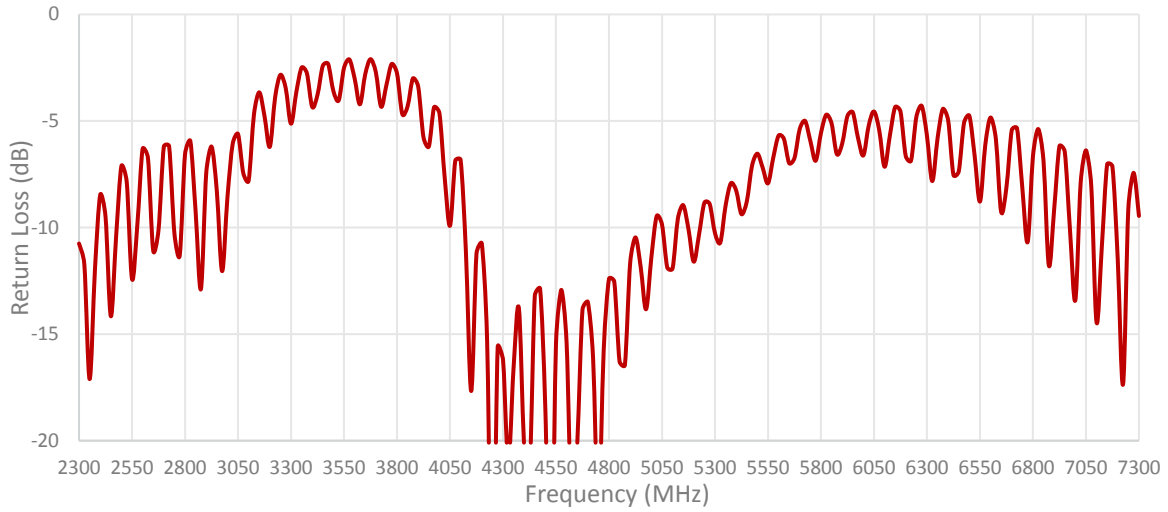
**Cable 2: 2.4/5.0/6.0 GHz ISM**

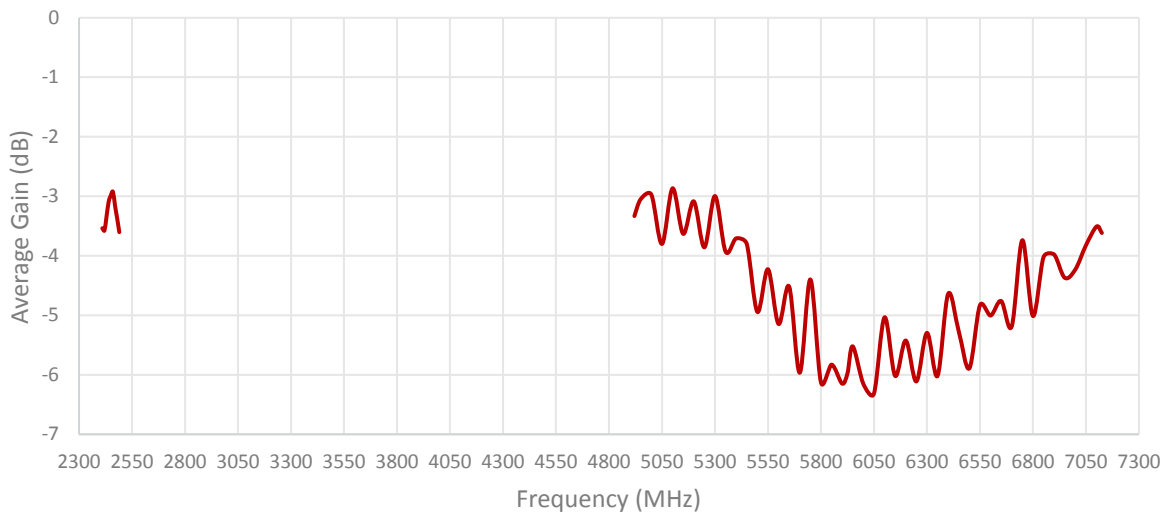
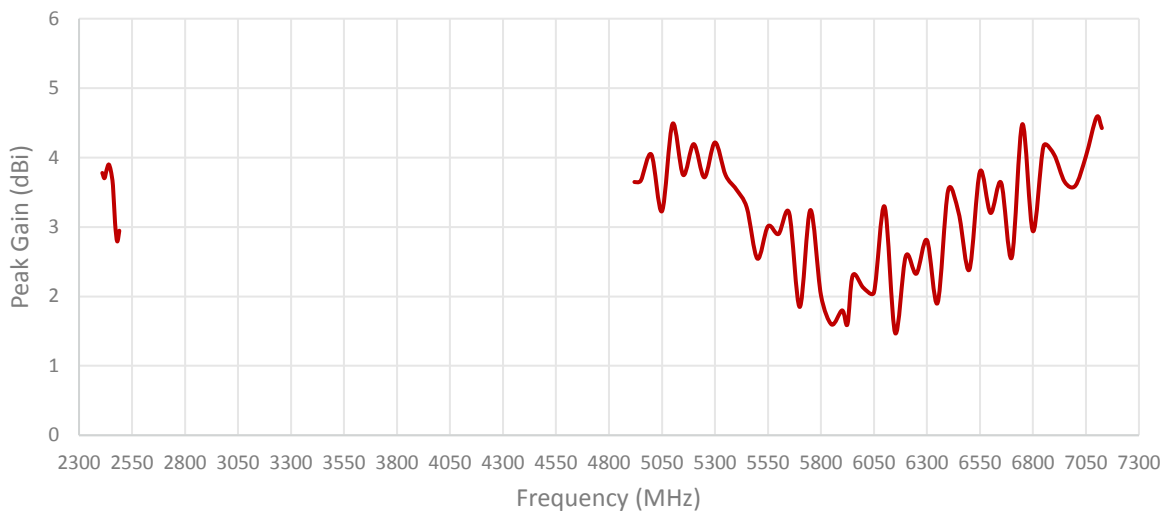
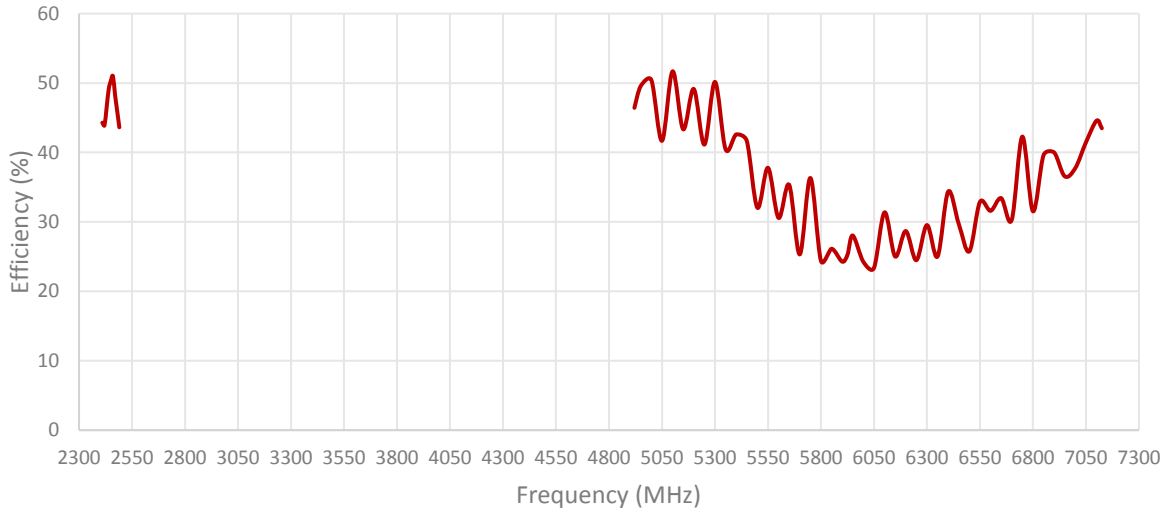




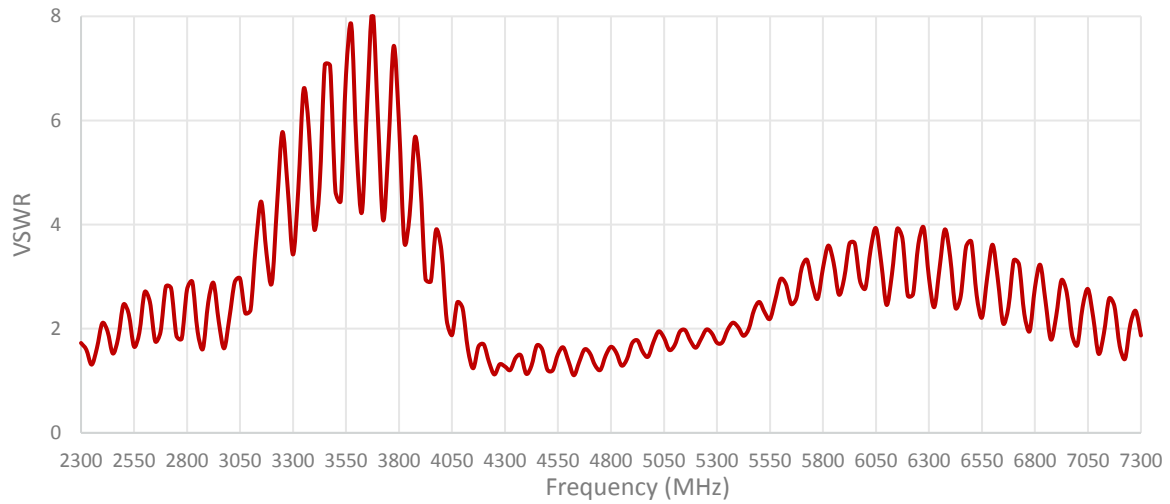
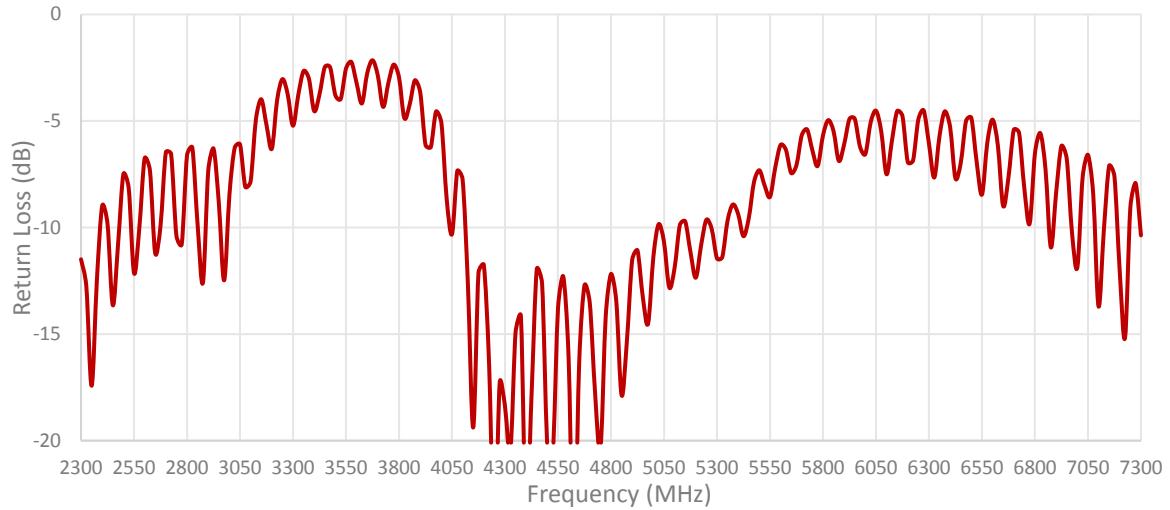


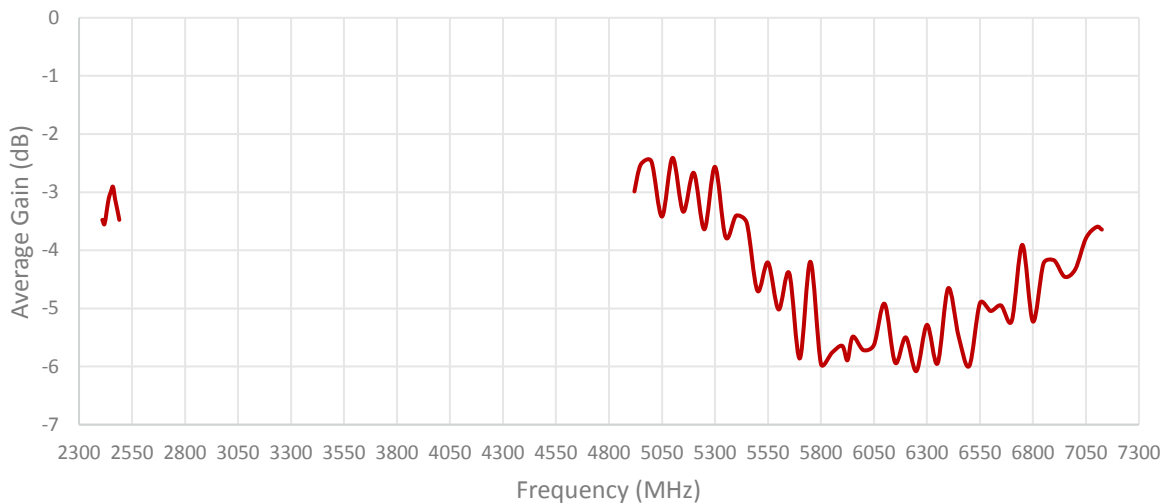
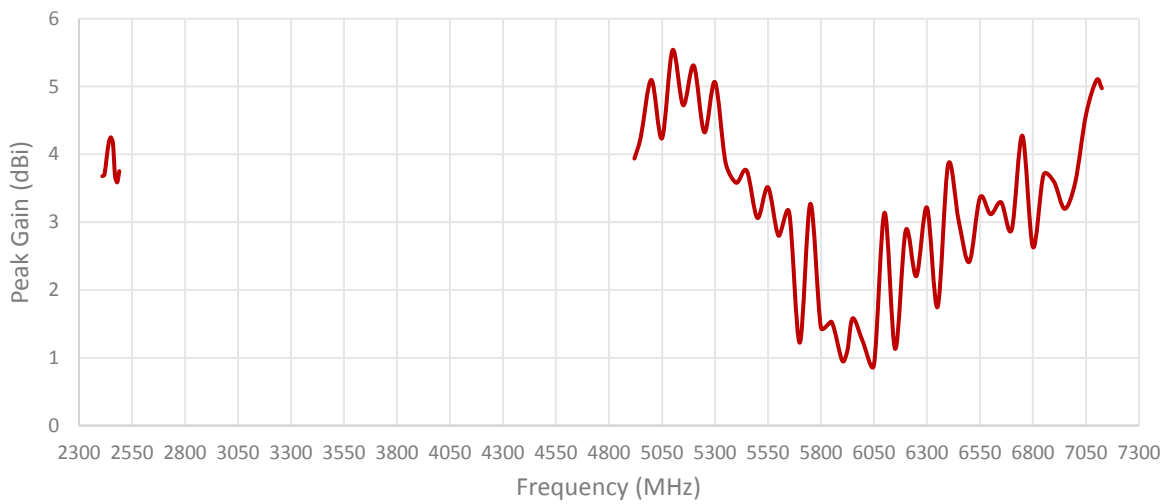
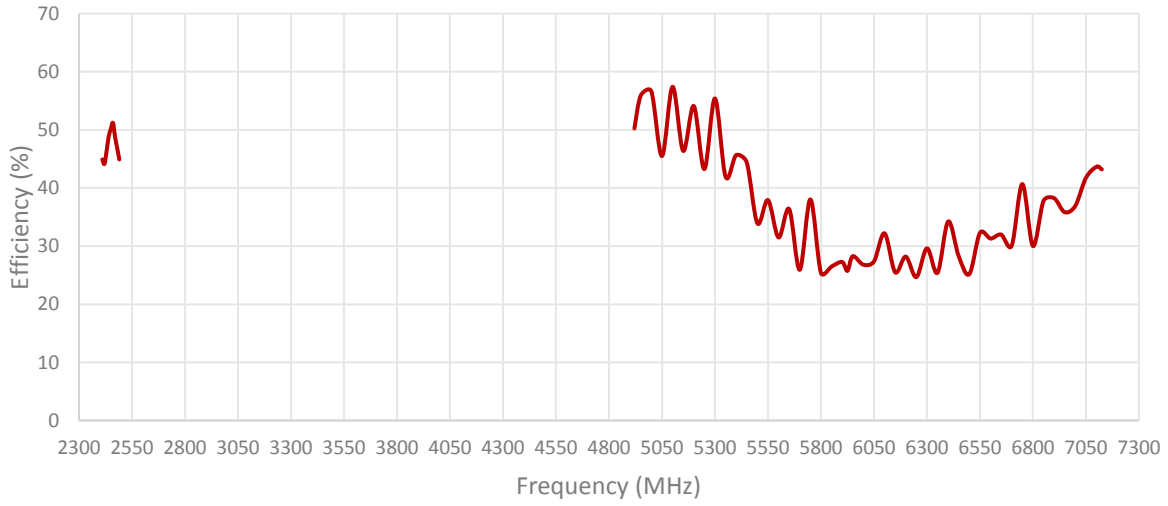
**Table 3: 2.4/5.0/6.0 GHz ISM**



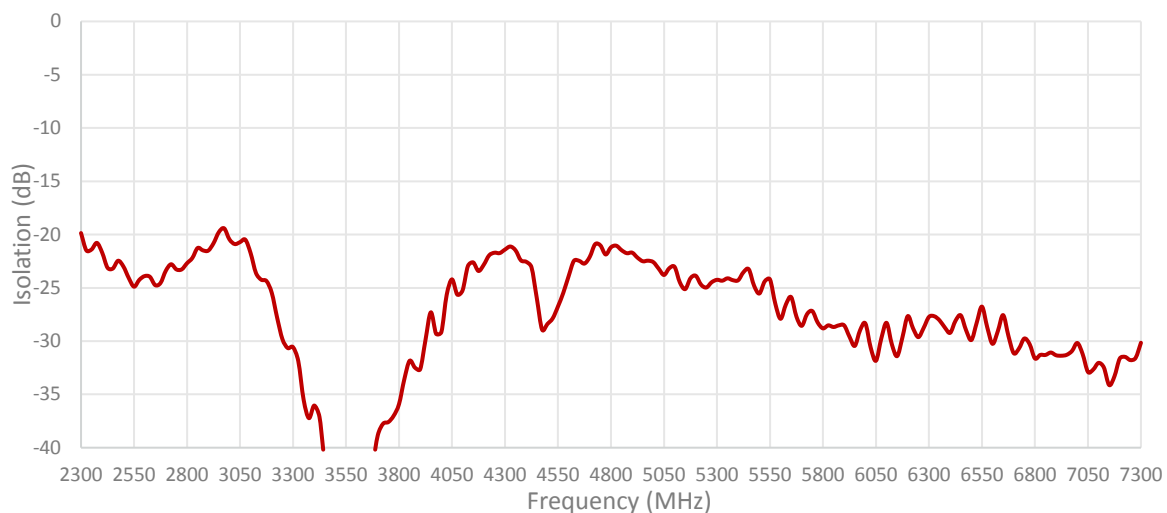


**Table 4: 2.4/5.0/6.0 GHz ISM**

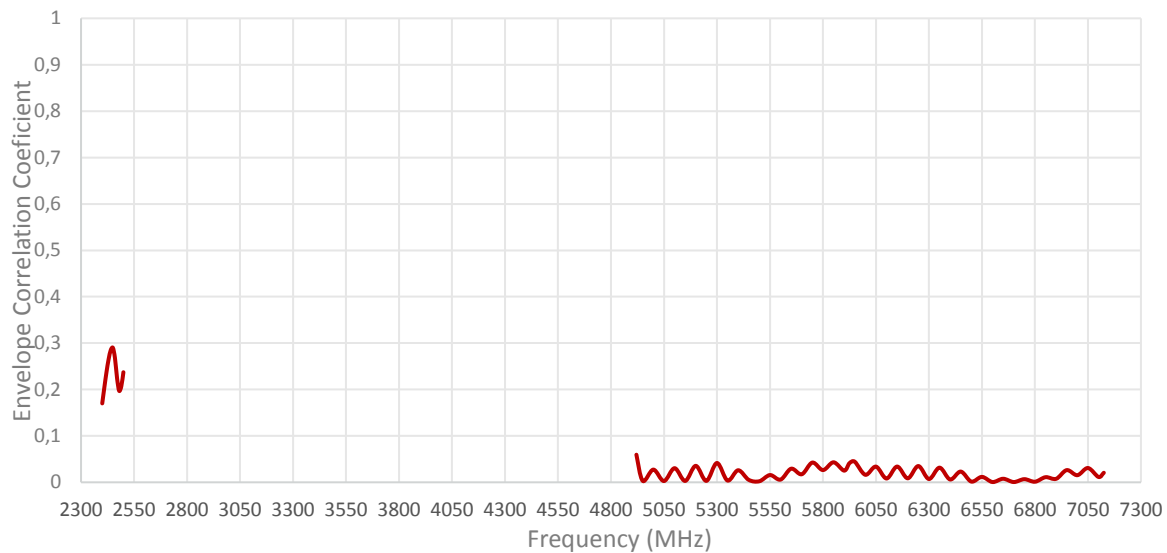




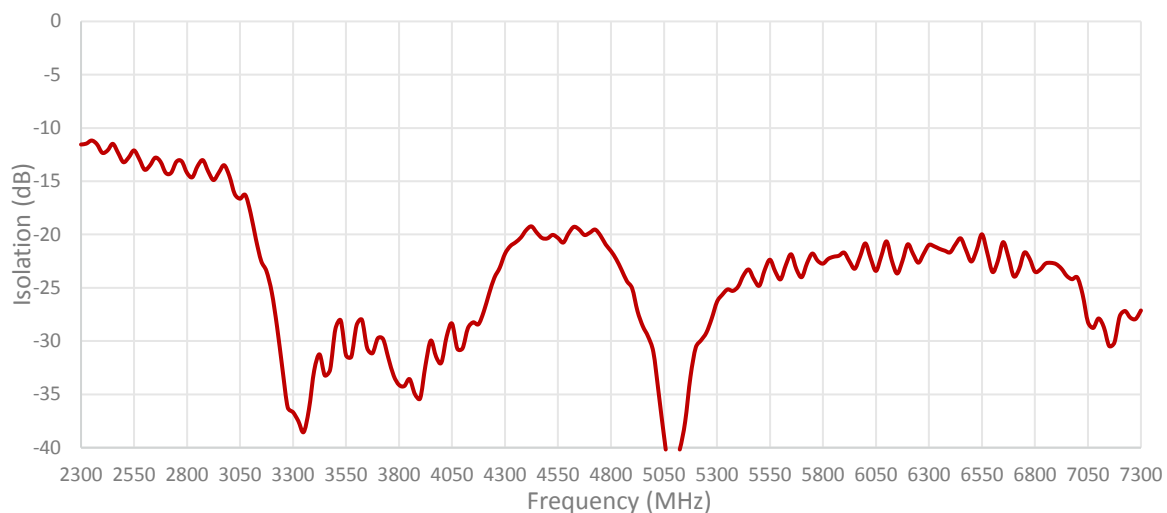
**ISOLATION FOR CABLES 1 AND 2**



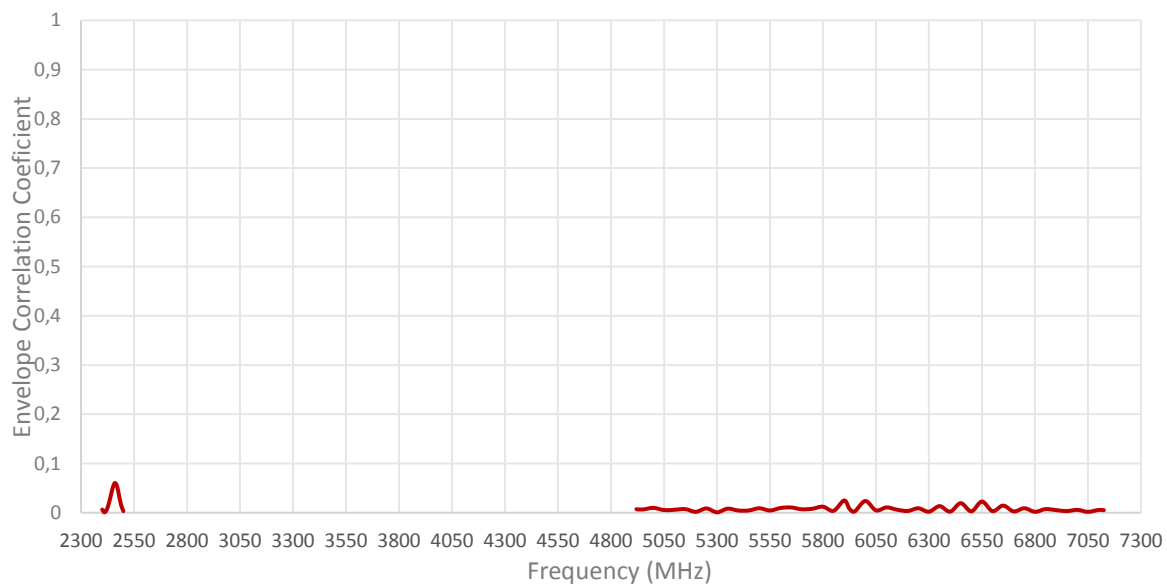
**ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2**



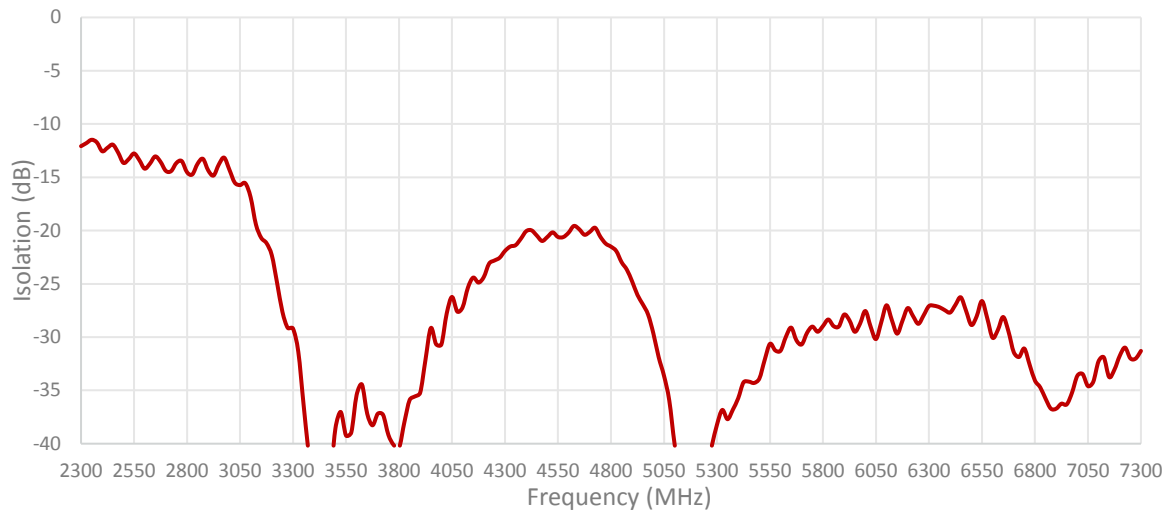
**ISOLATION FOR CABLES 1 AND 3**



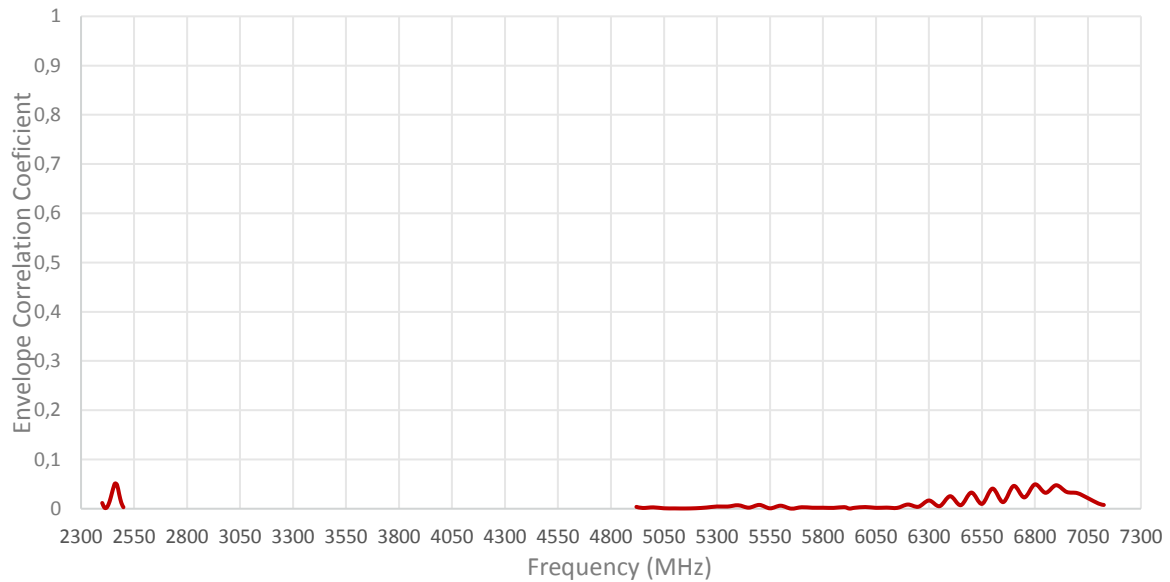
**ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 3**



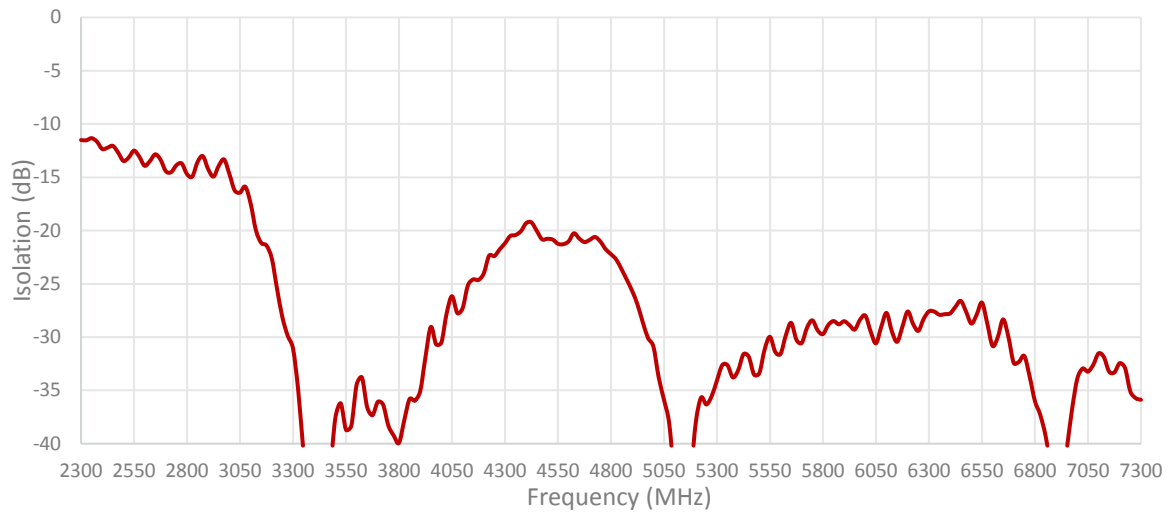
**ISOLATION FOR CABLES 1 AND 4**



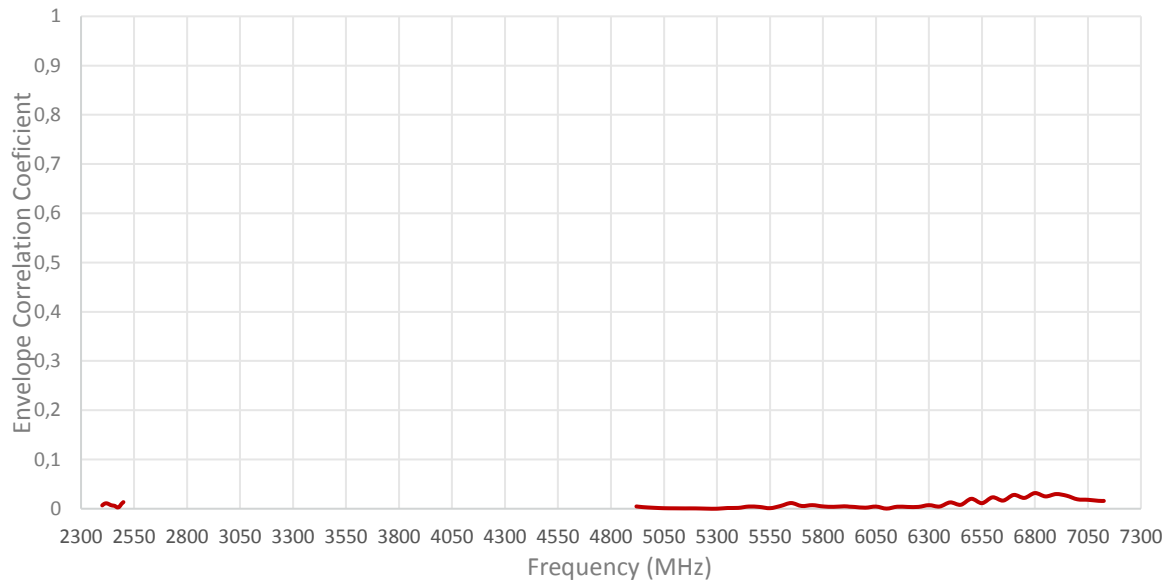
**ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 4**



**ISOLATION FOR CABLES 2 AND 3**



**ENVELOPE CORRELATION COEFFICIENT FOR CABLES 2 AND 3**

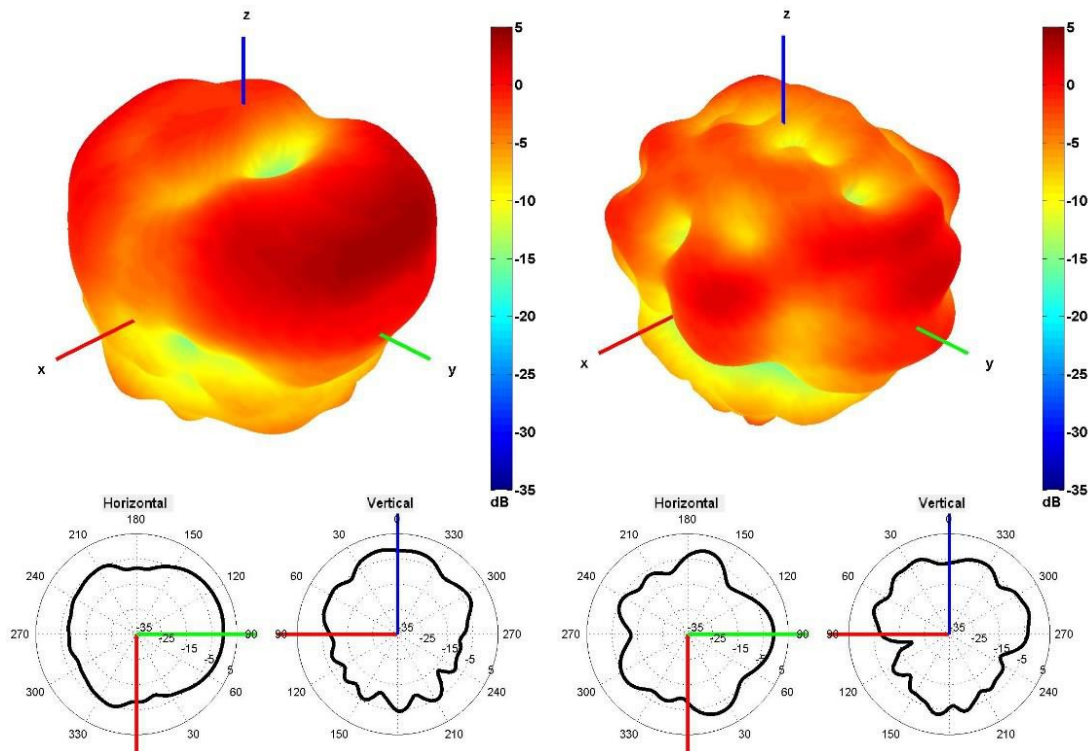




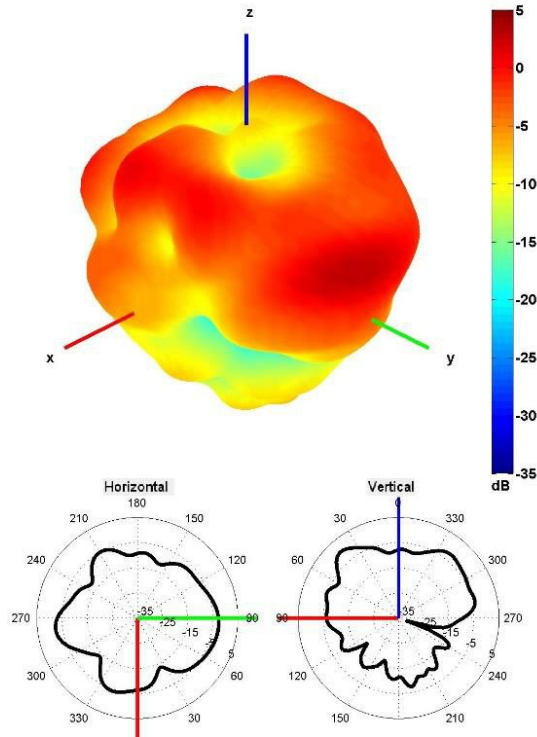


Radiation pattern reference

Cable 1: 2.4/5.0/6.0 GHz ISM

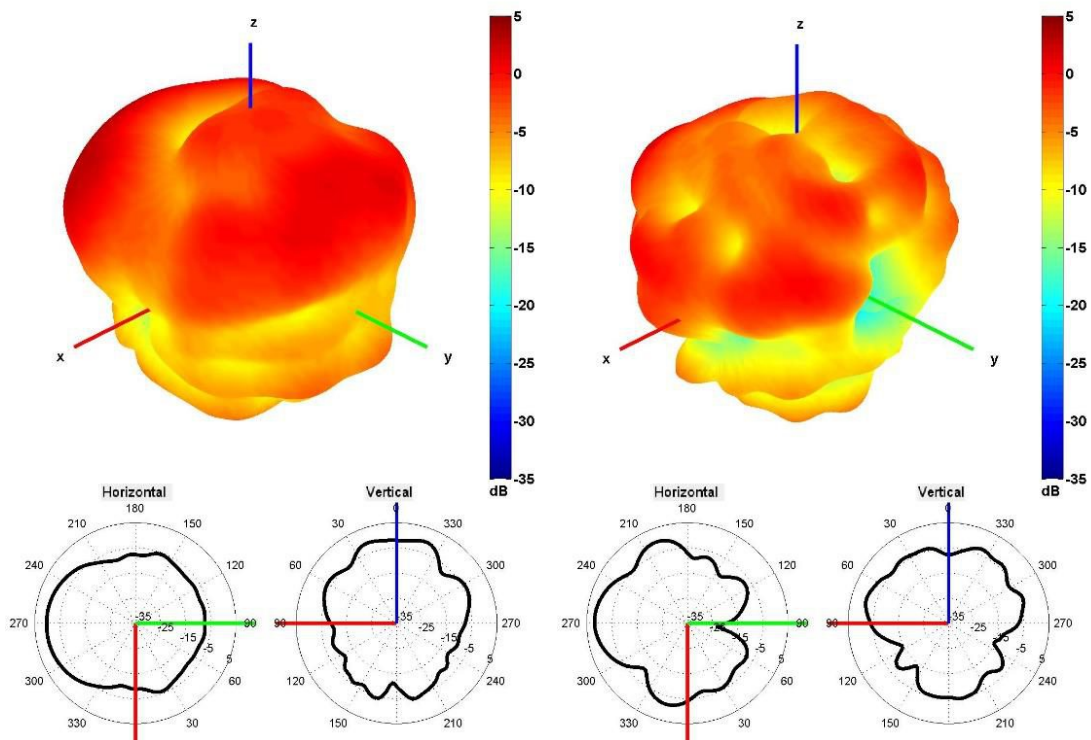


2450 and 5500 MHz Radiation pattern

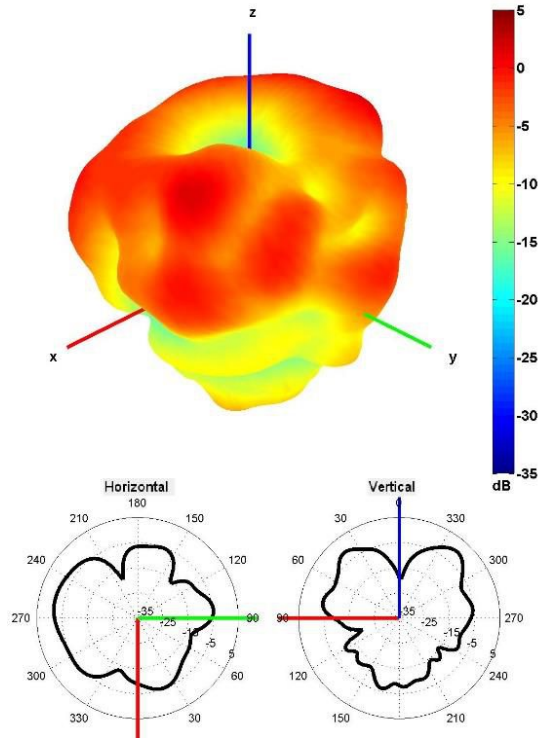


6500 MHz Radiation pattern

Cable 2: 2.4/5.0/6.0 GHz ISM

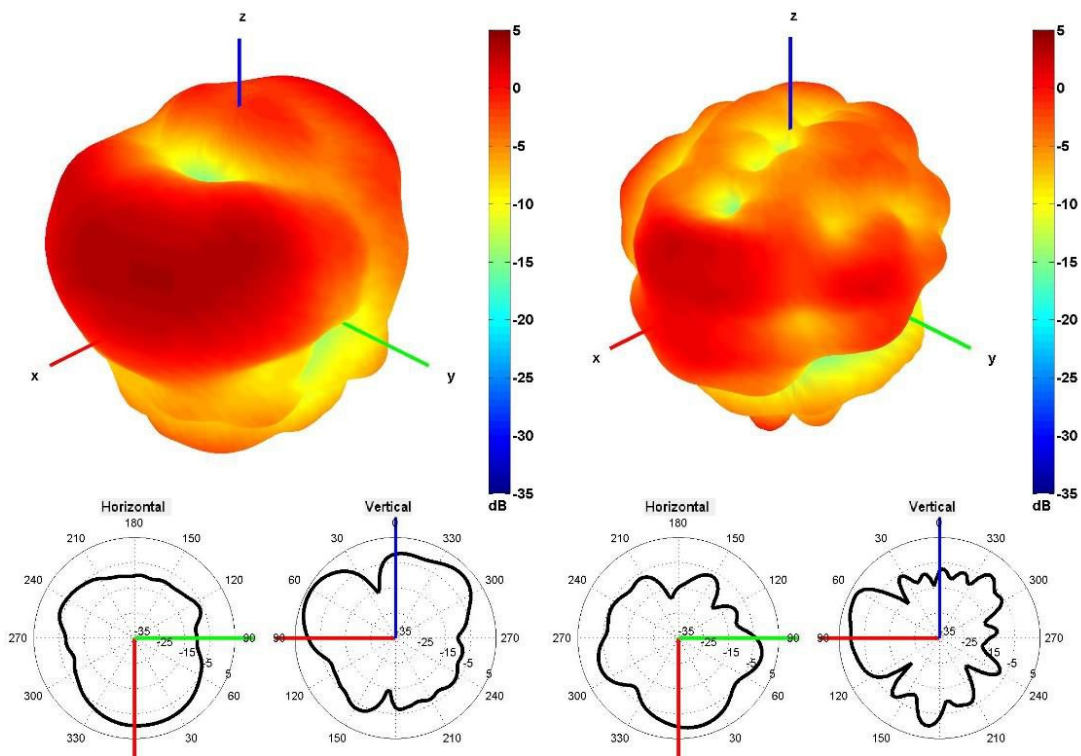


2450 and 5500 MHz Radiation pattern

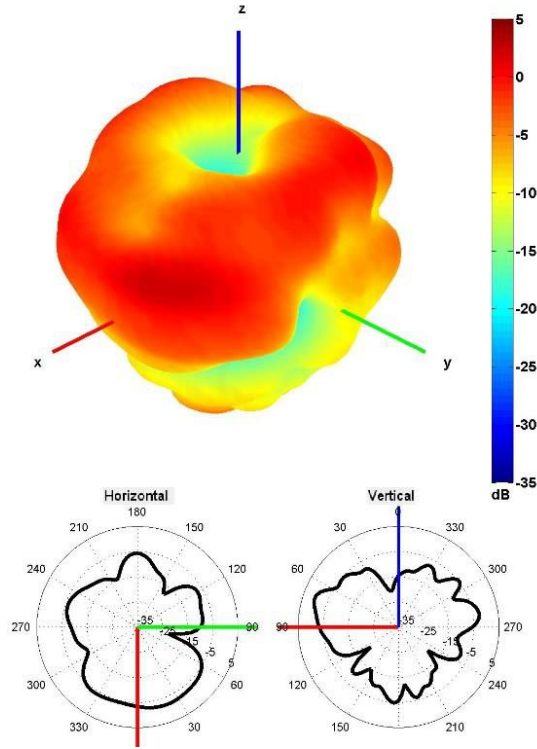


6500 MHz Radiation pattern

Cable 3: 2.4/5.0/6.0 GHz ISM

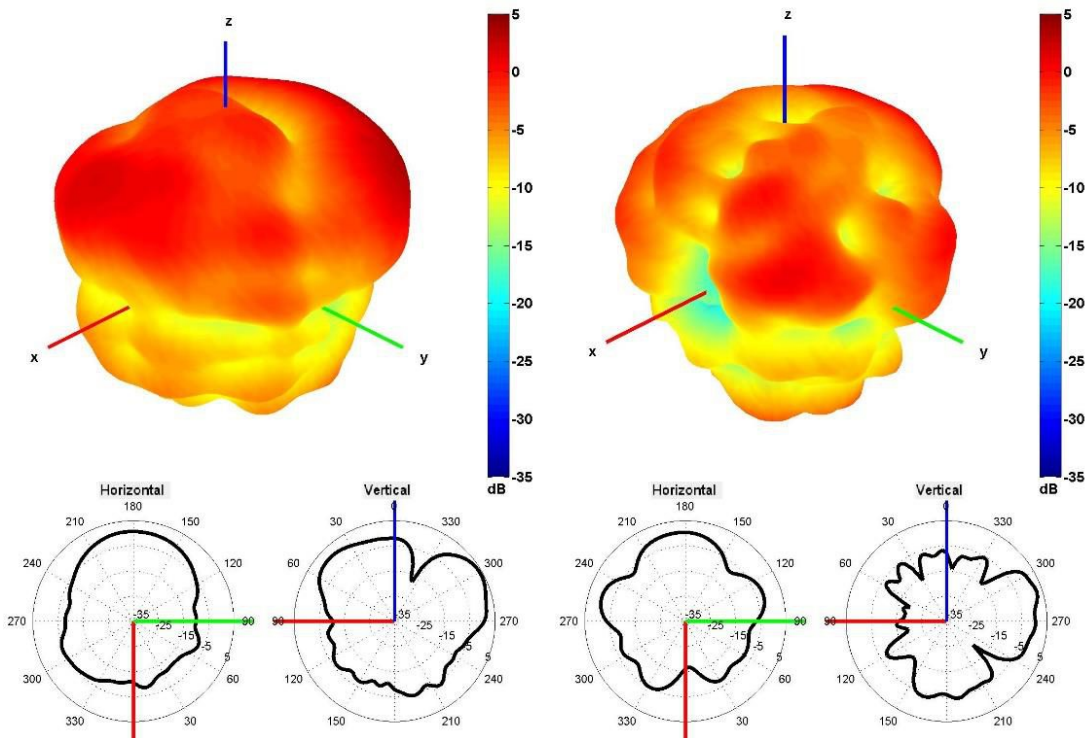


2450 and 5500 MHz Radiation pattern

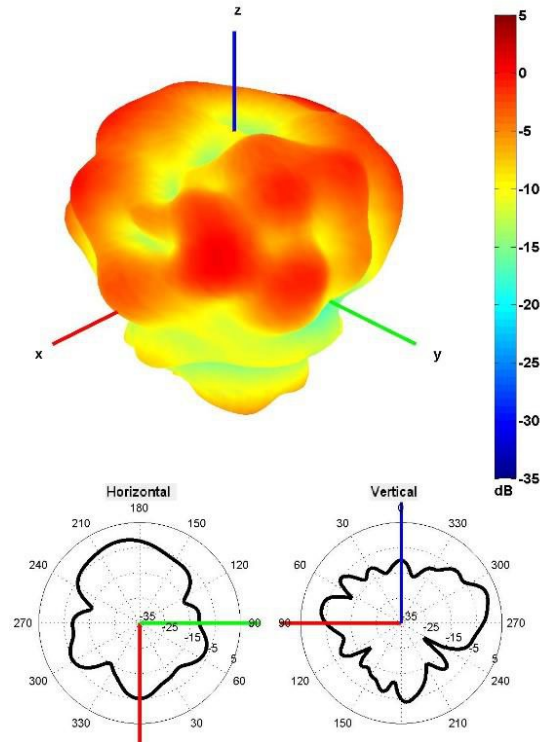


6500 MHz Radiation pattern

Cable 4: 2.4/5.0/6.0 GHz ISM

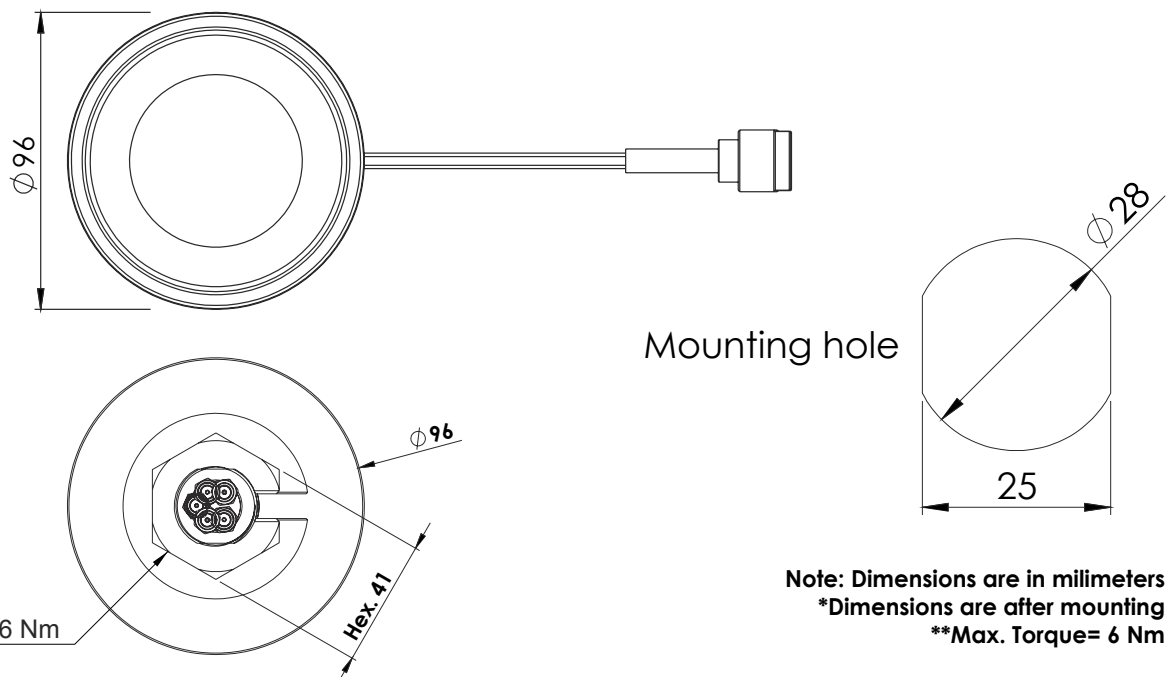
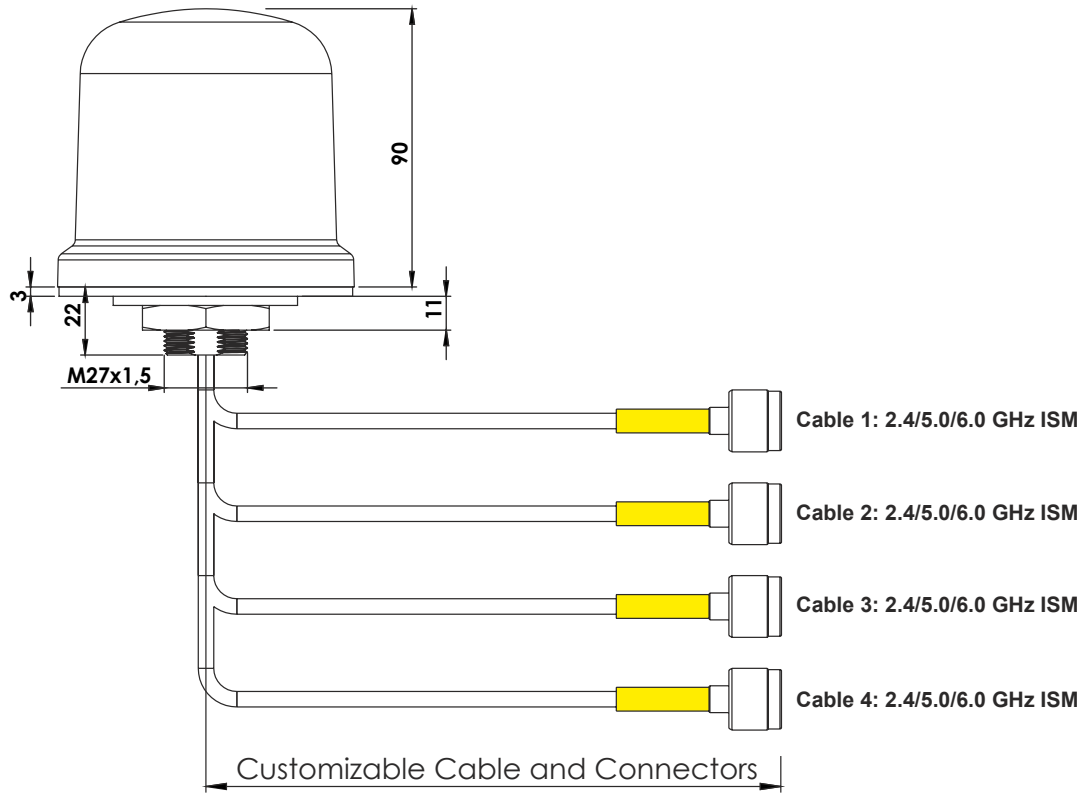


2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern

## 4. Antenna drawings



## 5. Antenna Images

