antenna conceptor

Product Datasheet

2J6702Ba

2.4/5.0 GHz ISM MIMO Screw Mount

Key Features

Cable 1: 2.4/5.0 GHz ISM
- 2410-2490 MHz
- 4920-5925 MHz

Cable 2: 2.4/5.0 GHz ISM
- 2410-2490 MHz
- 4920-5925 MHz

Screw Mount
Anti-Rotation Mechanism
Ground Plane Dependent
Customizable Cable and Connector
Certificates: IP67, IP69K,
IK09 and IK10 version possible
Dimensions Ø 77.3 × 36.5 mm



1. Antenna and electrical specifications

Cable 1

Parameters	2.4/5.0 GHz ISM Antenna	
Standards	WiFi, BT, ZigBee, ISM	
Band (MHz)	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~-12.4	~-13.4
VSWR	~1.7:1	~1.6:1
Efficiency (%)	~40.6	~21.8
Peak Gain (dBi)	~1.9	~1.6
Average Gain (dB)	~-3.9	~-6.7
Impendance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	10	
Connector Type	SMA-Male-RP Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	DACAR302 Standard (Other Cables Available)	

Cable 2

Parameters	2.4/5.0 GHz ISM Antenna	
Standards	WiFi, BT, ZigBee, ISM	
Band (MHz)	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~-11.5	~-13.5
VSWR	~1.7:1	~1.6:1
Efficiency (%)	~40.9	~19.5
Peak Gain (dBi)	~1.8	~1.3
Average Gain (dB)	~-3.9	~-7.2
Impendance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	10	
Connector Type	SMA-Male-RP Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	DACAR302 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm Metal Plate

200 cm of DACAR302

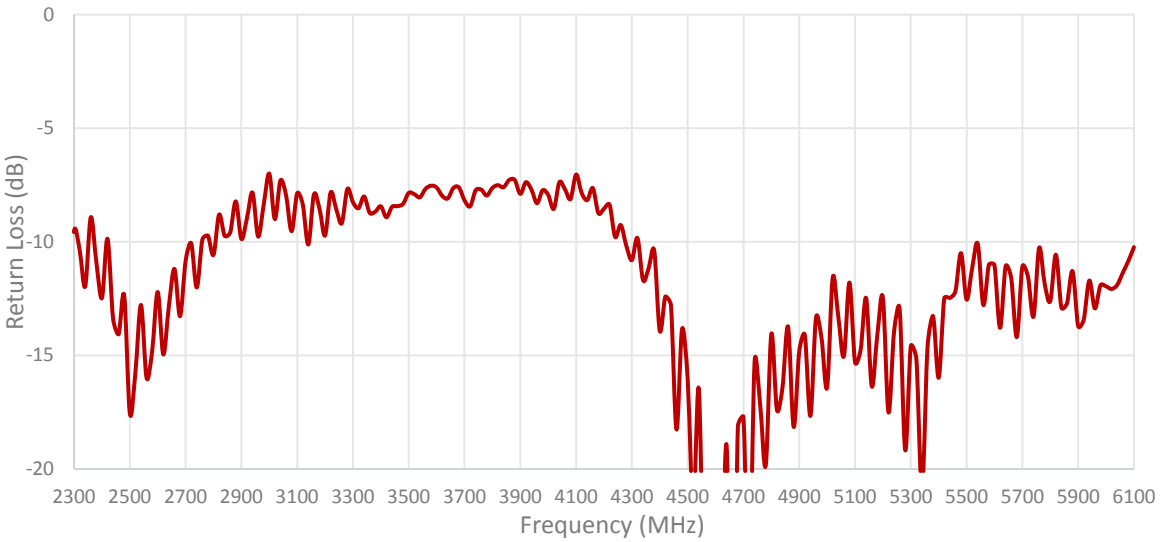
Measured in Certified CTIA 3D Anechoic Chamber

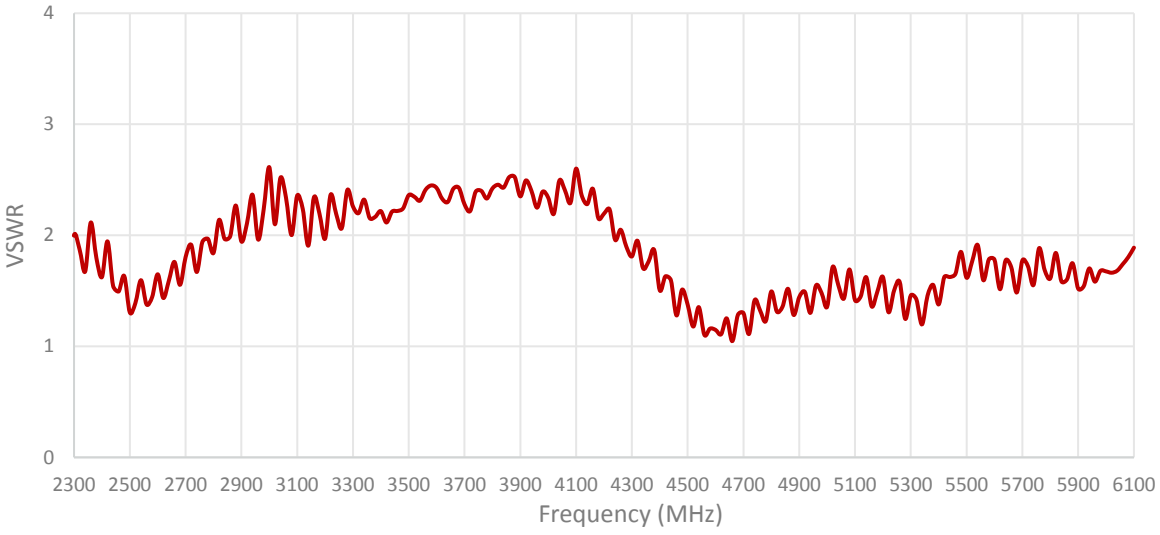
2. Mechanical and environmental specifications

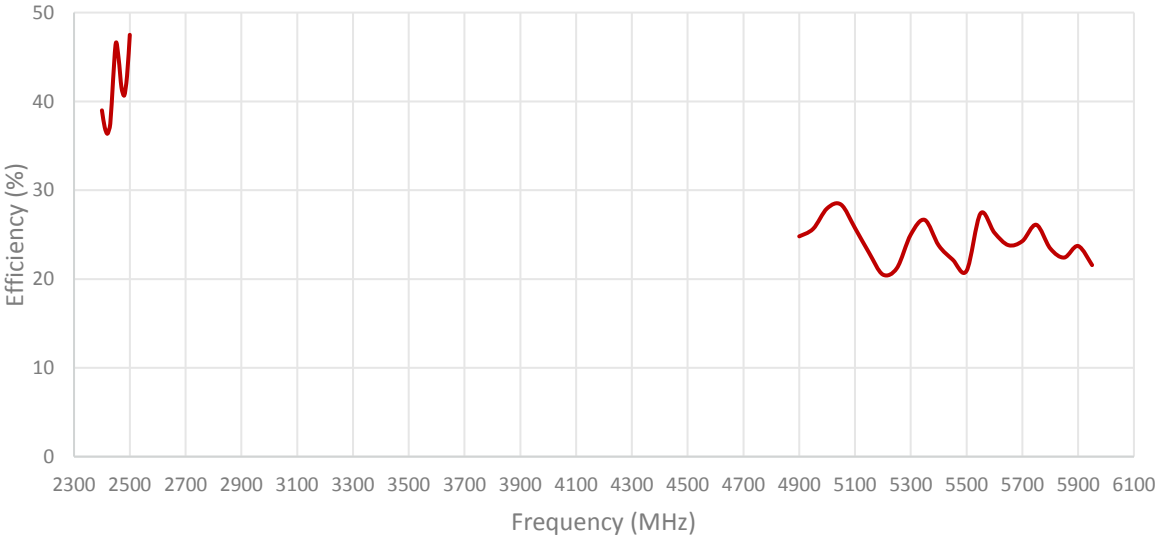
Specifications	2J6702Ba
Mounting Type	Screw Mount
Dimensions (mm)	Ø 77.3 × 36.5
Max. Tighten Torque (Nm)	6 Nm
Radome	ABS
Radome color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69K. IK09 and IK10 version possible with different material

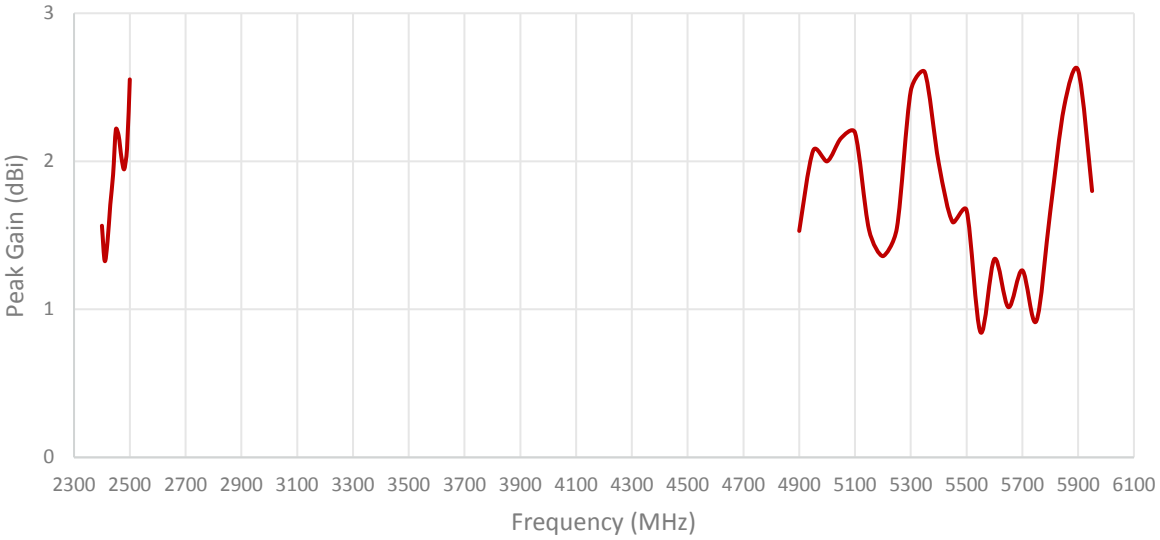
3. Antenna parameters

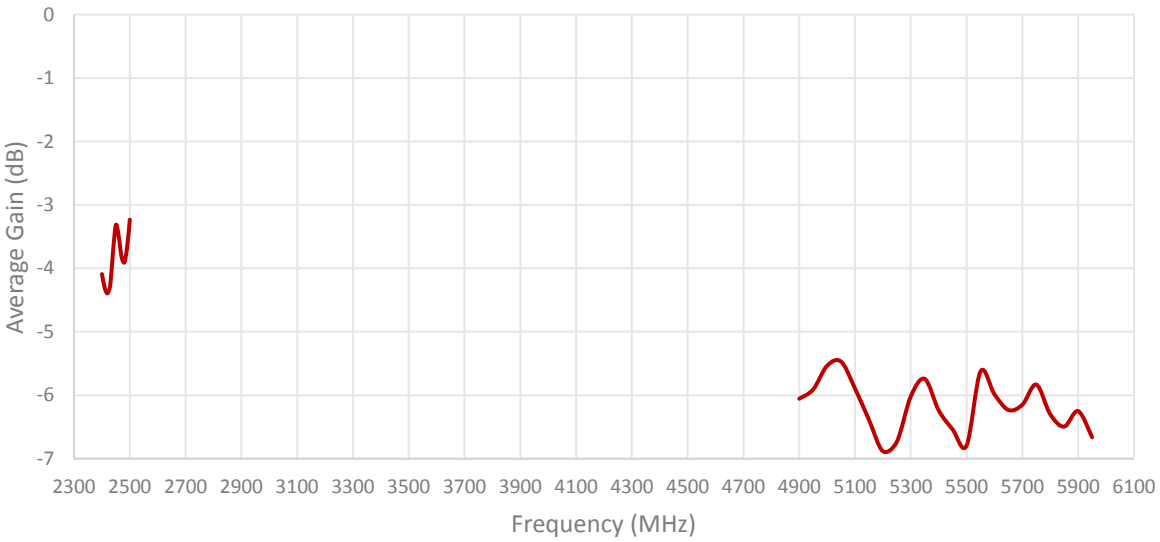
Cable 1: 2.4/5.0 GHz ISM



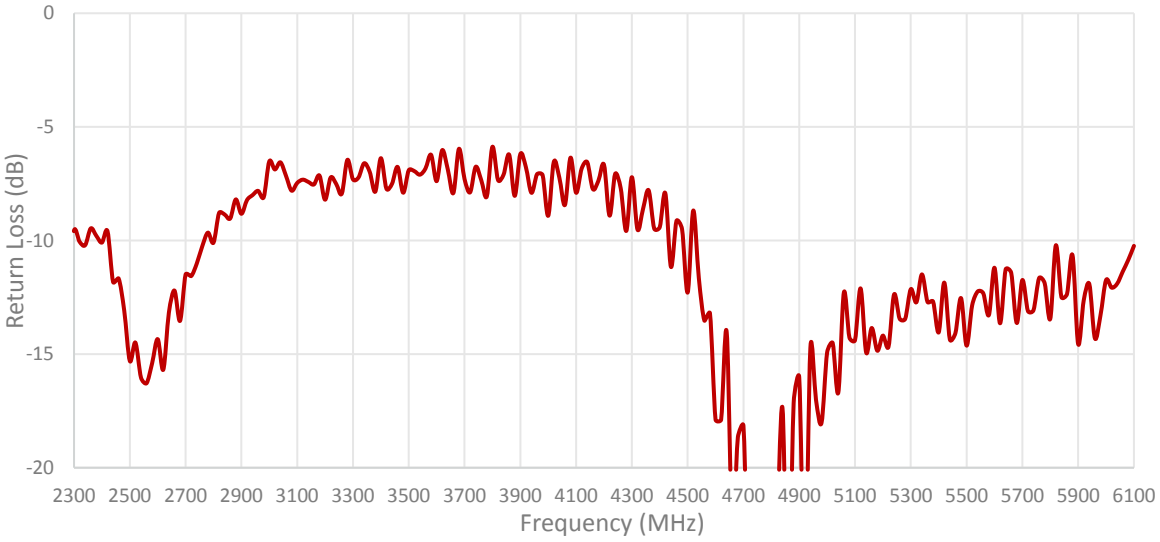


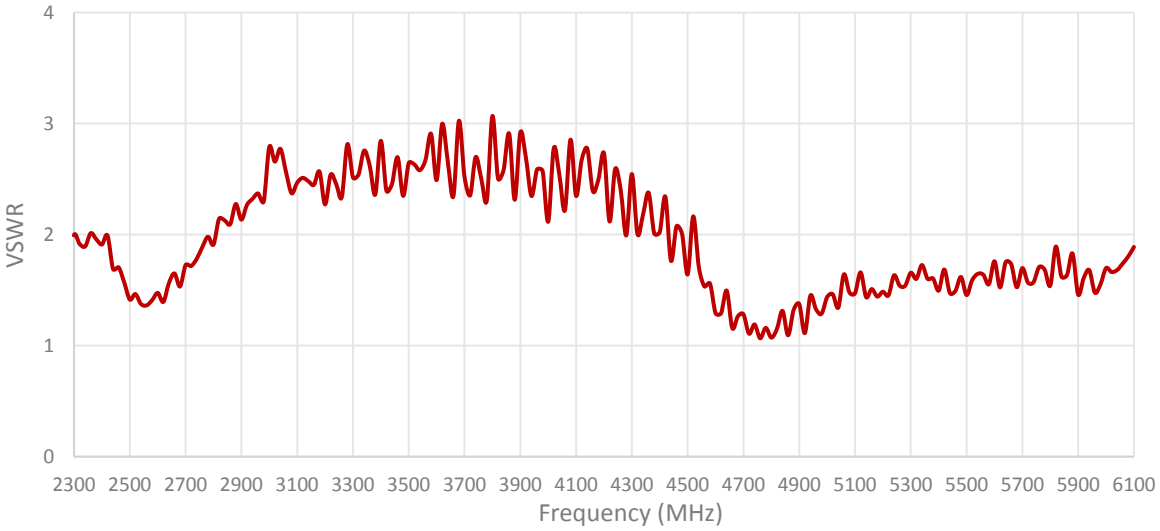

50
40
30
20
10
0
Efficiency (%)
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

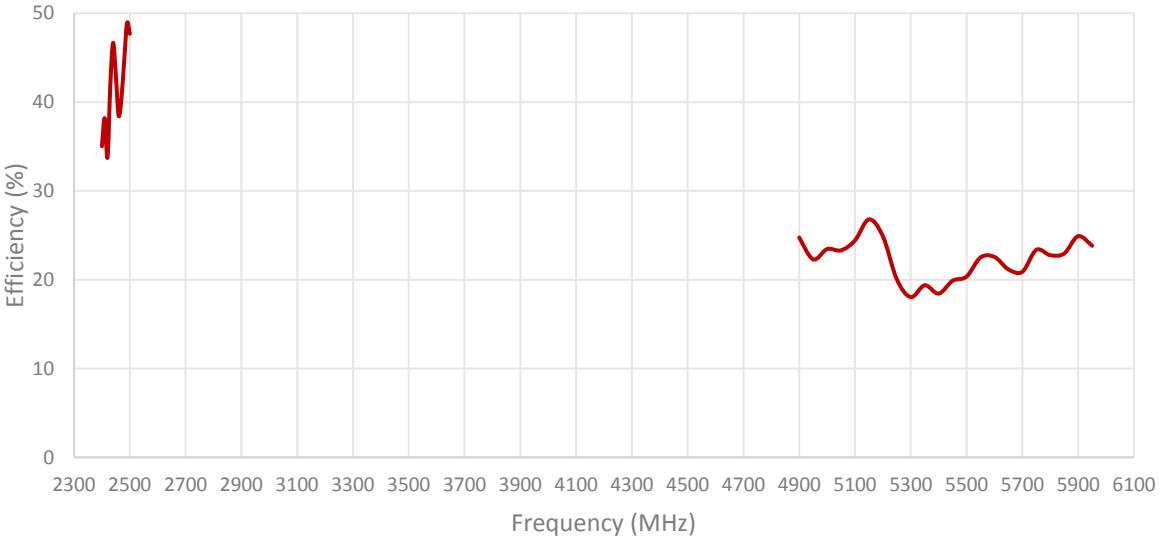

3
2
1
0
Peak Gain (dBi)
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

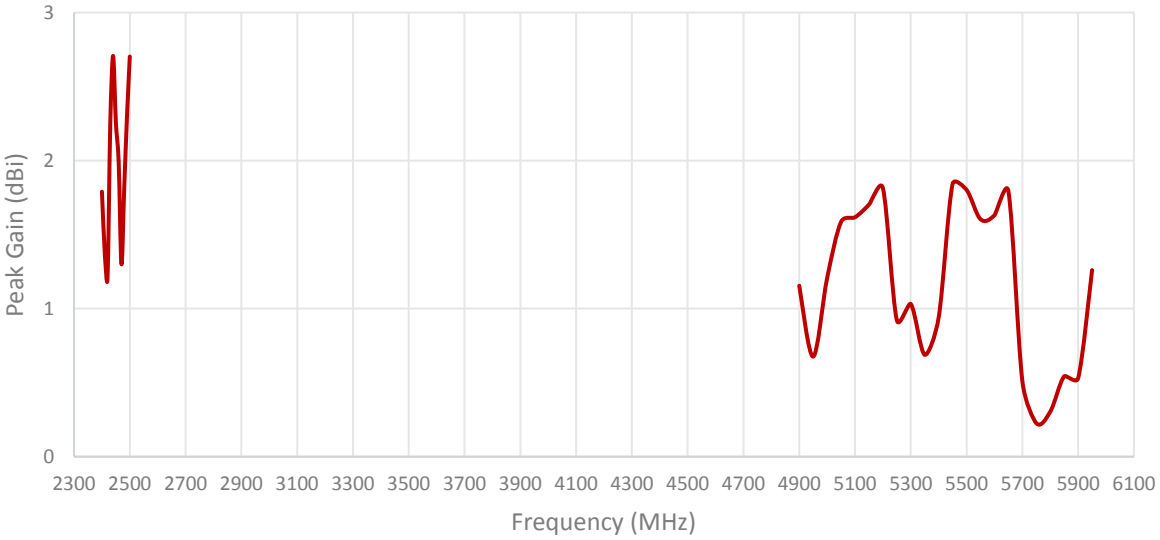


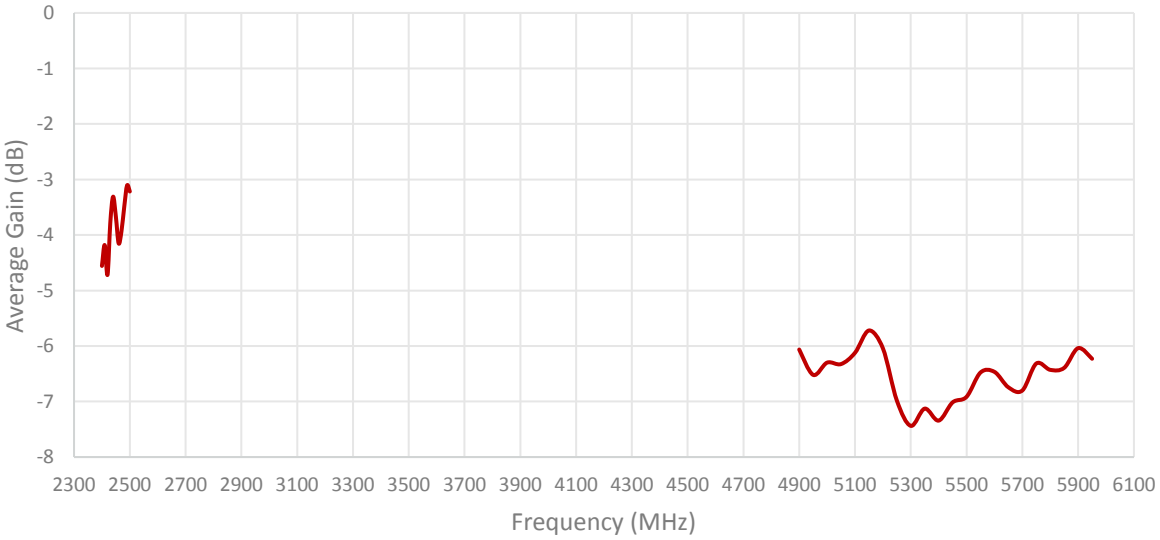
Cable 2: 2.4/5.0 GHz ISM



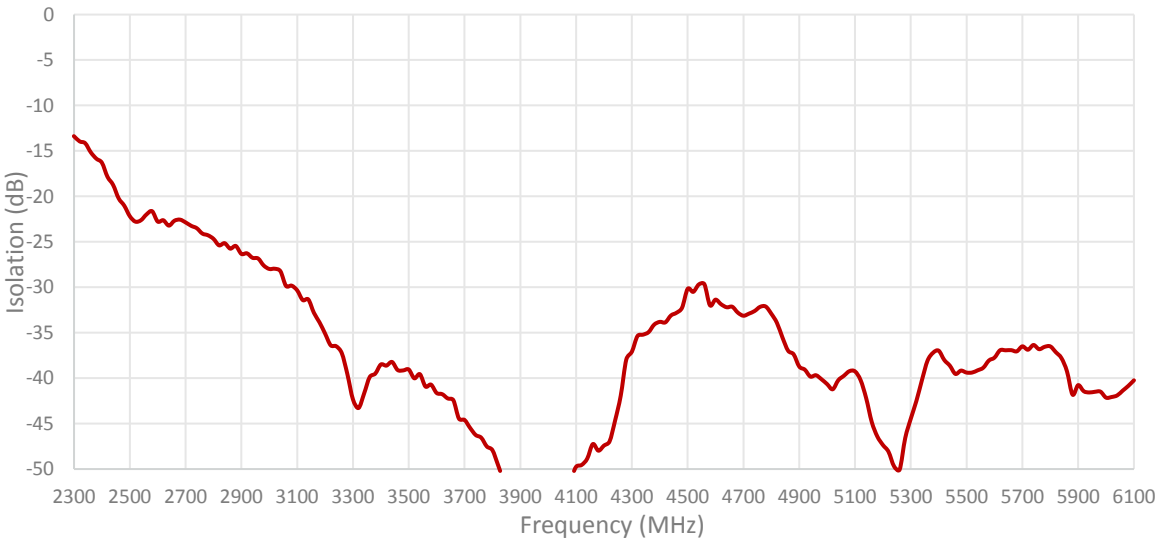

VSWR
4
3
2
1
0
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)


Efficiency (%)
50
40
30
20
10
0
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

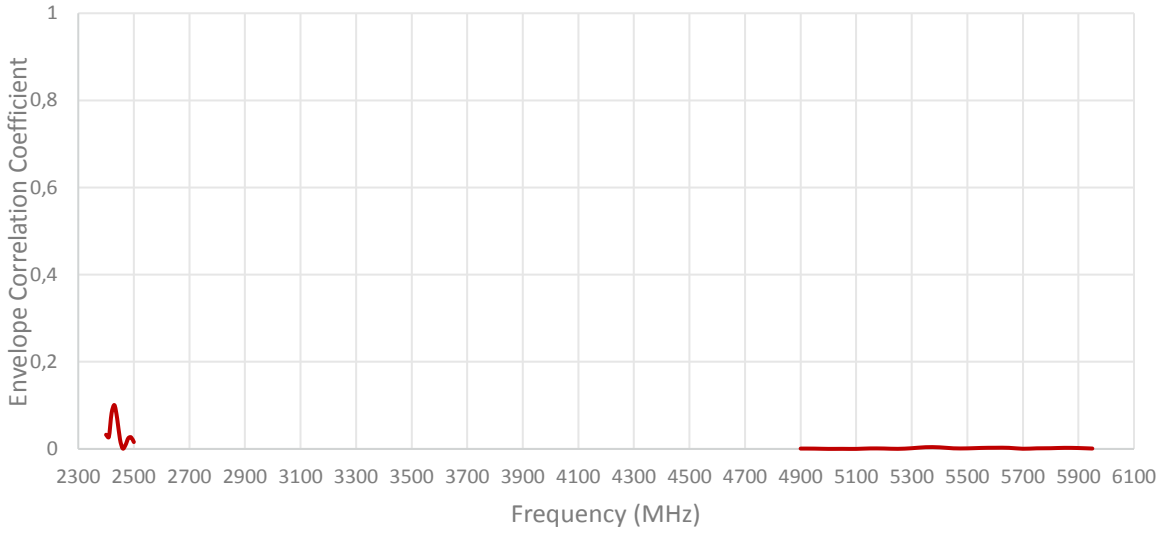

Peak Gain (dBi)
3
2
1
0
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

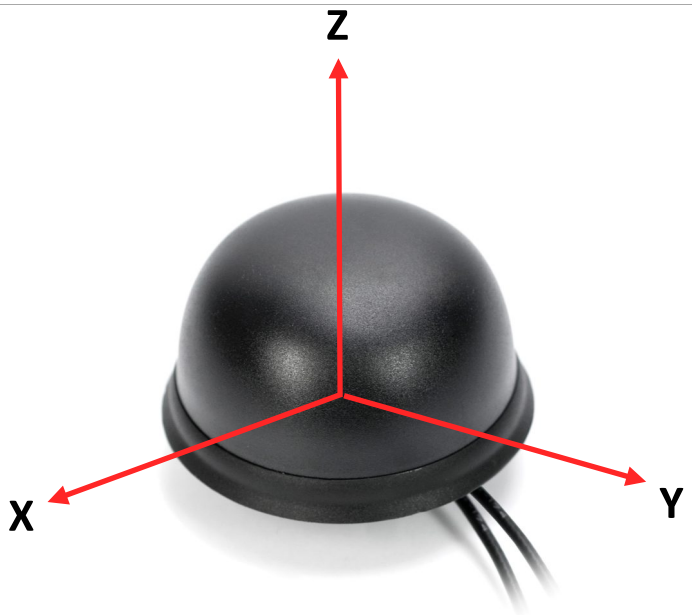

Average Gain (dB)
0
-1
-2
-3
-4
-5
-6
-7
-8
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

ISOLATION FOR CABLE 1 AND 2



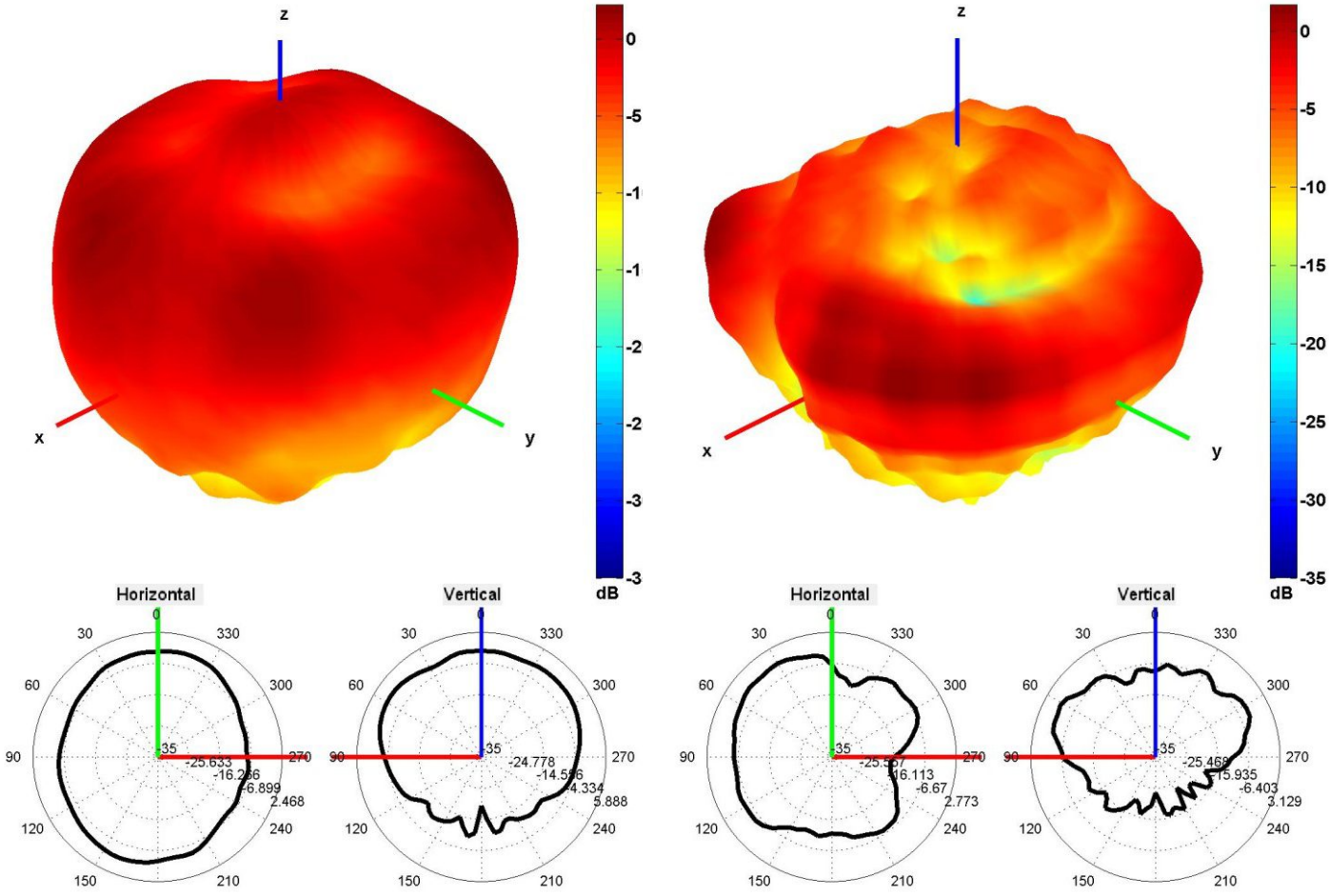
ENVELOPE CORRELATION COEFICIENT FOR CABLE 1 AND 2





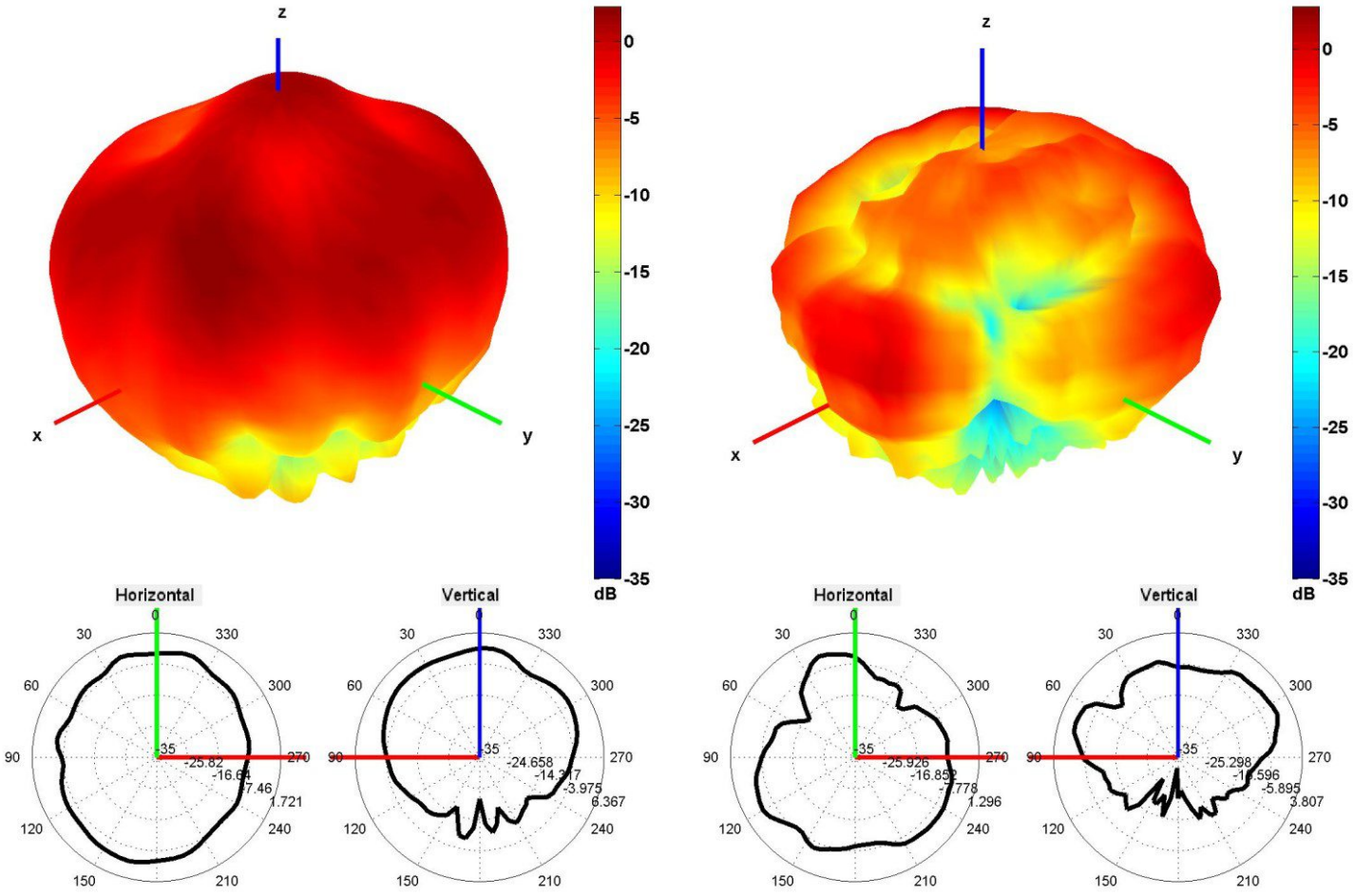
Radiation pattern reference

Cable 1: 2.4/5.0 GHz ISM



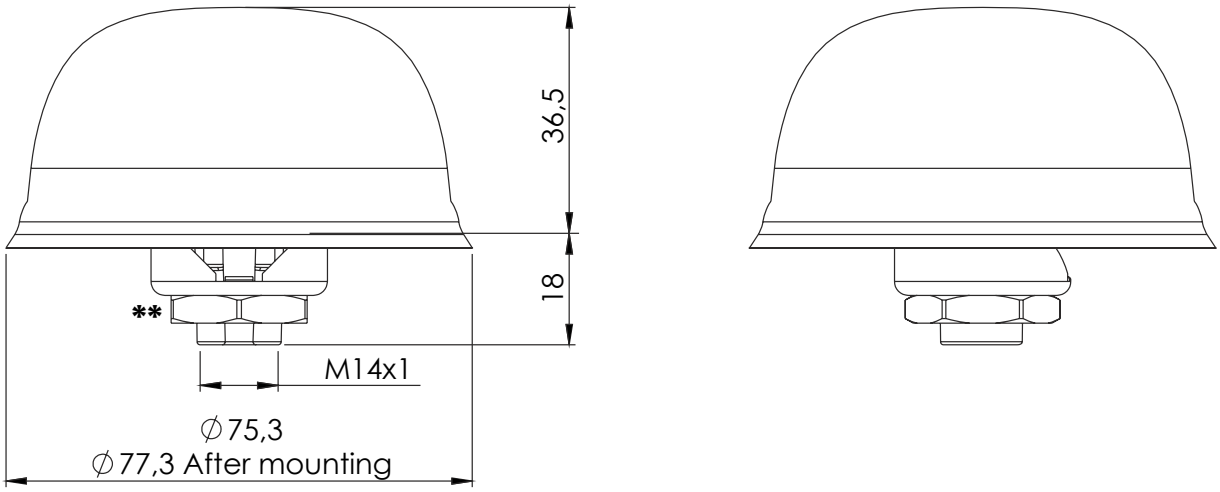
2450 and 5500 MHz Radiation pattern

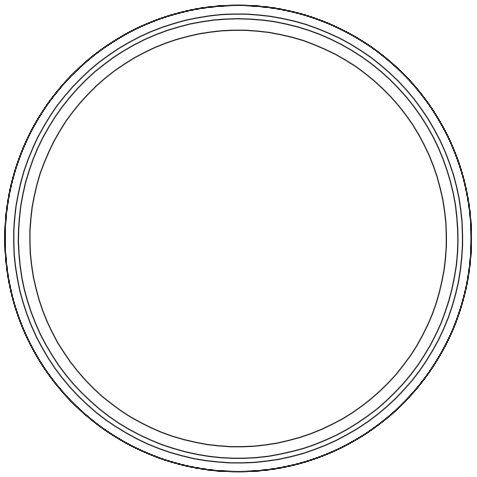
Cable 2: 2.4/5.0 GHz ISM

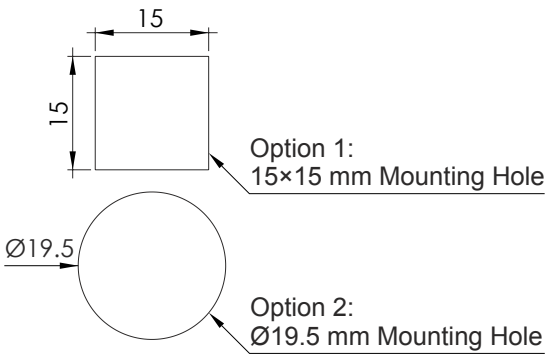


2450 and 5500 MHz Radiation pattern

4. Antenna drawings







Note: Dimensions are in milimeters
***Dimensions are after mounting**
****Max. Torque= 6 Nm**

5. Antenna Images

