

2J7182BGF

CELLULAR/LTE, 2.4/5.0 GHz ISM, TETRA and GNSS

Key Features

Cable 1: CELLULAR / LTE

Cable 2: 2.4/5.0 GHz ISM

Cable 3: TETRA

Cable 4: GPS/GLONASS/QZSS/Galileo

Screw Mount

Heavy Duty antenna

High Performance

28 dB Gain

Pre-Filter

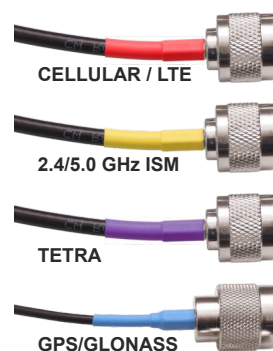
Ground Plane Dependent

Anti-Rotation Mounting

Customizable Cable and Connector

Dimensions: Ø 96 x H 130 mm

Certificates: IP67, IP69, IK09



1. Antenna and electrical specifications

Cable 1

Parameters	CELLULAR / LTE Antenna		
Standards	2G,3G and 4G		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~-6.1	~-10.3	~-10.6
VSWR	~3.0:1	~2.0:1	~1.9:1
Efficiency (%)	~41.3	~42.4	~43.0
Peak Gain (dBi)	~1.9	~3.0	~2.9
Average Gain (dB)	~-3.9	~-3.8	~-3.7
Impedance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male (Other connectors available)		
Cable Length	300 cm (Customizable length available)		
Cable Type	LL195 (Other cable type 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)	~-10.4	~-13.6
VSWR	~1.9:1	~1.6:1
Efficiency (%)	~58	~64
Peak Gain (dBi)	~5.6	~5.5
Average Gain (dB)	~-2.3	~-1.9
Impedance (Ohm)	50	
Polarisation	Linear	
Radiation Pattern	Omni-Directional	
Max. Input Power (W)	25	
Connector Type	SMA-Male-RP Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LL195 Standard (Other Cables Available)	

Antenna Measurement Conditions:

Mounted on 60 x 60 cm Ground Plane

LL195 200 cm Cable Length

Measured in Certified CTIA 3D Anechoic Chamber

Cable 3

Parameters	TETRA Antenna
Standards	TETRA
Band (MHz)	390, 420, 460
Frequency (MHz)	380-470
Return Loss (dB)	~-16.6
VSWR	~1.5:1
Efficiency (%)	~64.4
Peak Gain (dBi)	~2.1
Average Gain (dB)	~-1.9
Impedance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	25
Connector Type	Most RF Connectors (SMA-Male Standard)
Cable Length	Any Cable Length (300 cm Standard)
Cable Type	Other Cables Available (LL195 Standard)

Cable 4

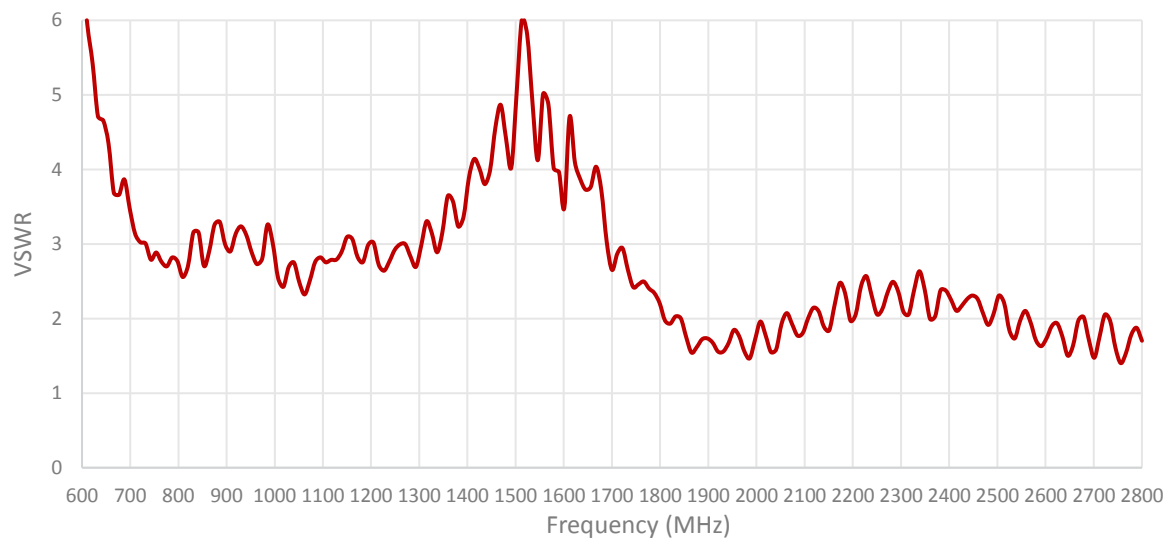
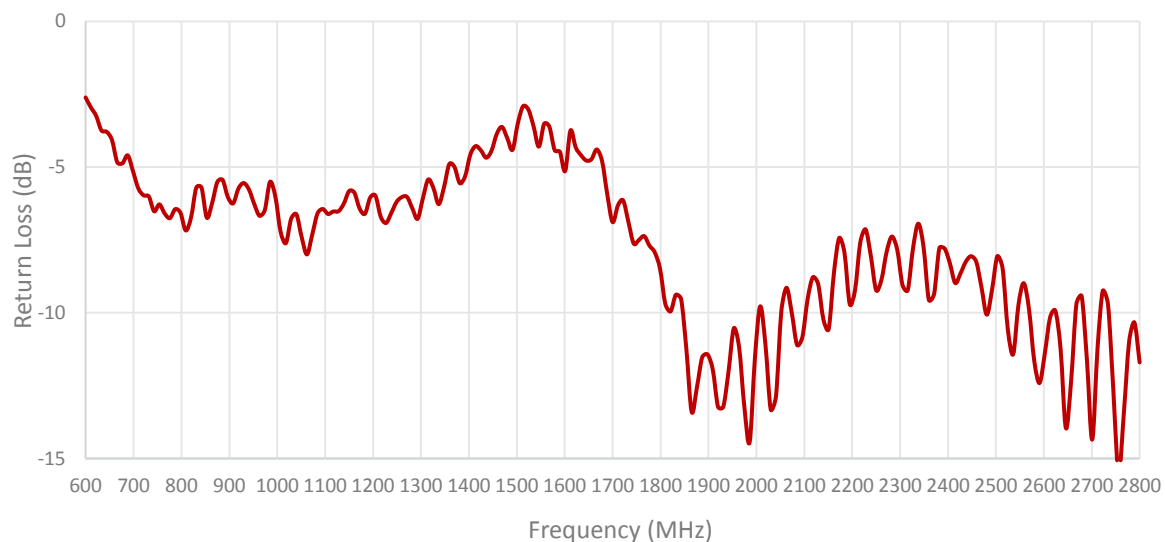
Parameters	GPS/GLONASS Antenna	
Standards	GPS/QZSS/Galileo	GLONASS
Bands (MHz)	1575	1602
Frequency (MHz)	1575.42	1598-1606
Passive Gain (dBi)	~3.6	
Impedance (Ohms)	50	
Radiation Pattern	Hemispherical	
Voltage Range (V)	1.5 - 3.6	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.8 @ 2.7 V	
Current Consumption (mA)	9 @ 2.7 V	
Power Consumption (mW)	24.3 @ 2.7 V	
Saw Filter Type	Pre-Filter	
Out of Band Rejection (dB)	~43	
ESD Protection (kV)	6	
Connector Type	SMA-Male Standard (Other Connectors Available)	
Cable Length	300 cm Standard (Any Cable Length Available)	
Cable Type	LL100 Standard (Other Cables Available)	

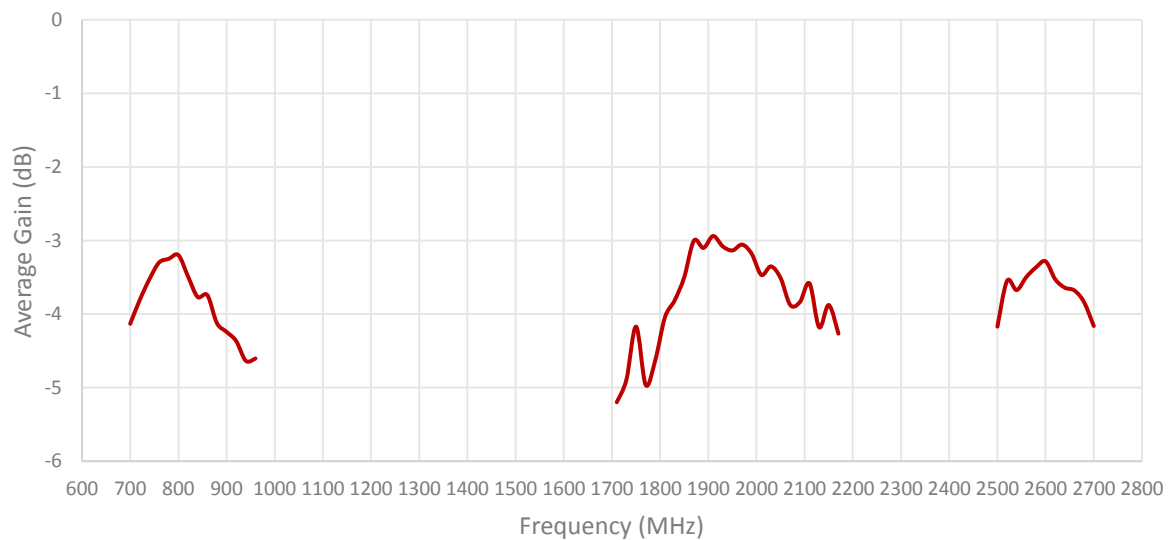
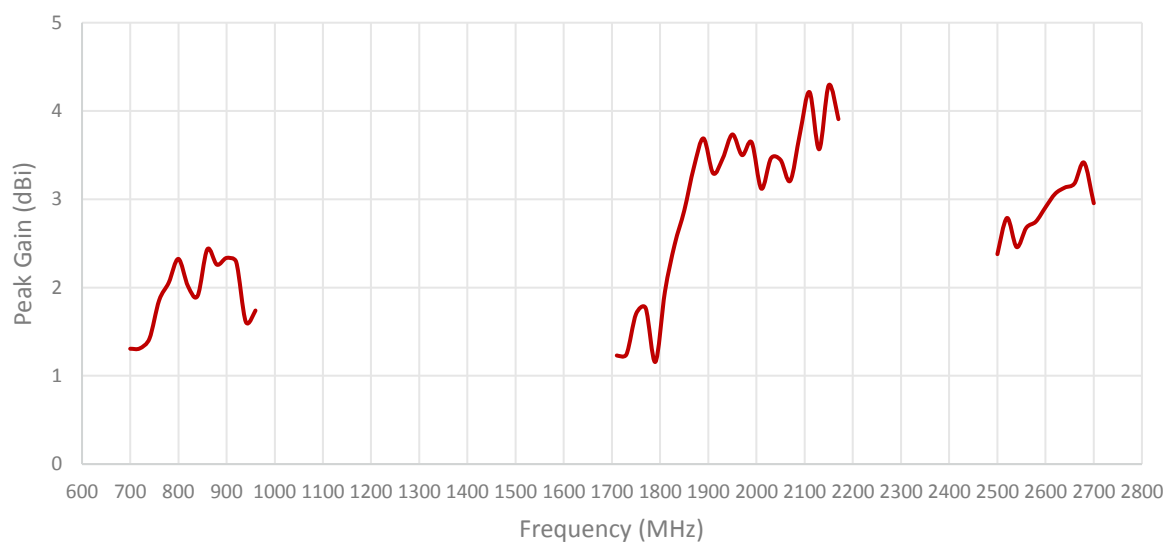
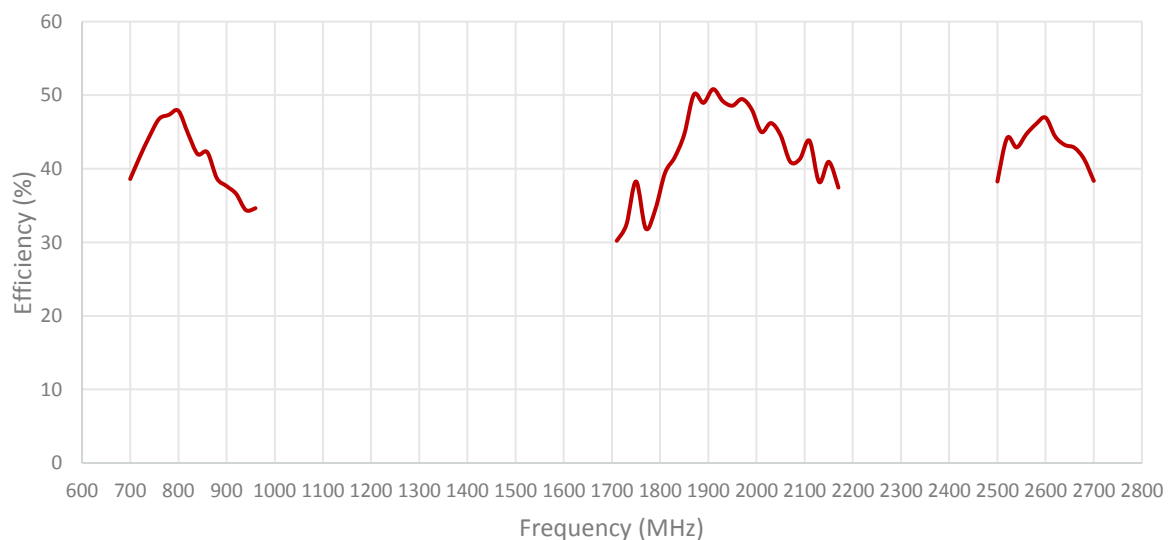
2. Mechanical and environmental specifications

Specifications	2J7182BGF
Mounting Type	Screw Mount
Dimensions (mm)	Ø 96 x H 130
Max. Tighten Torque (Nm)	15 Nm
Radome	ASA
Radome color	White, Black
Antenna Base	Alluminium alloy
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IP69, IK09

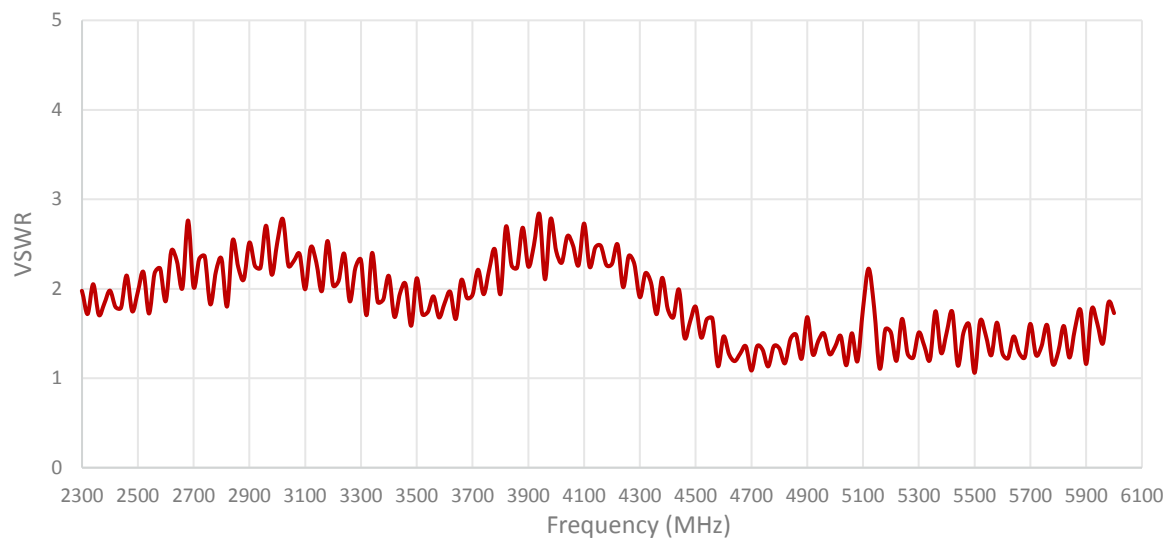
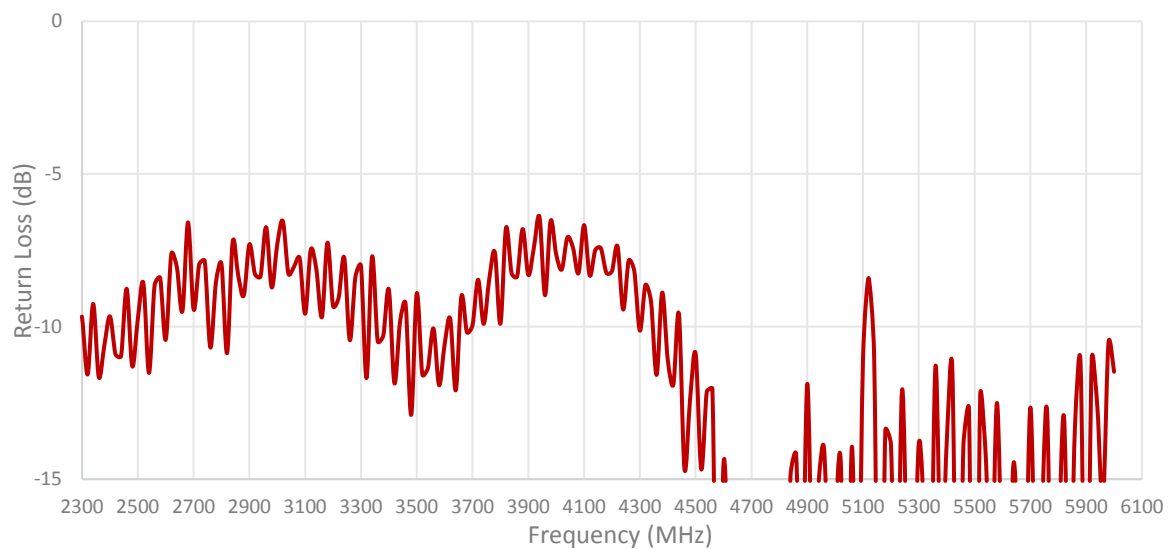
3. Antenna parameters

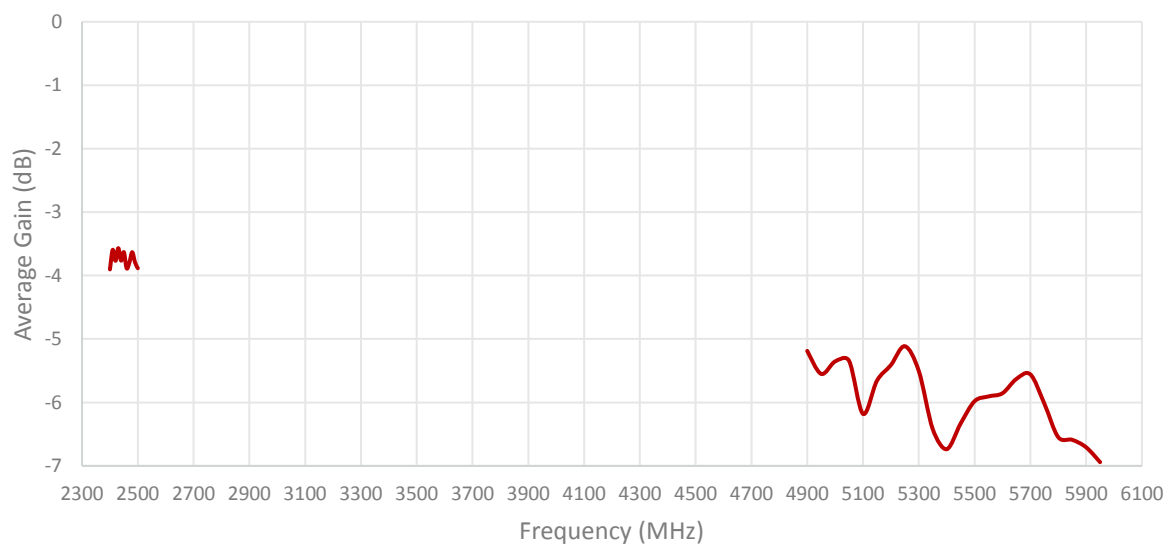
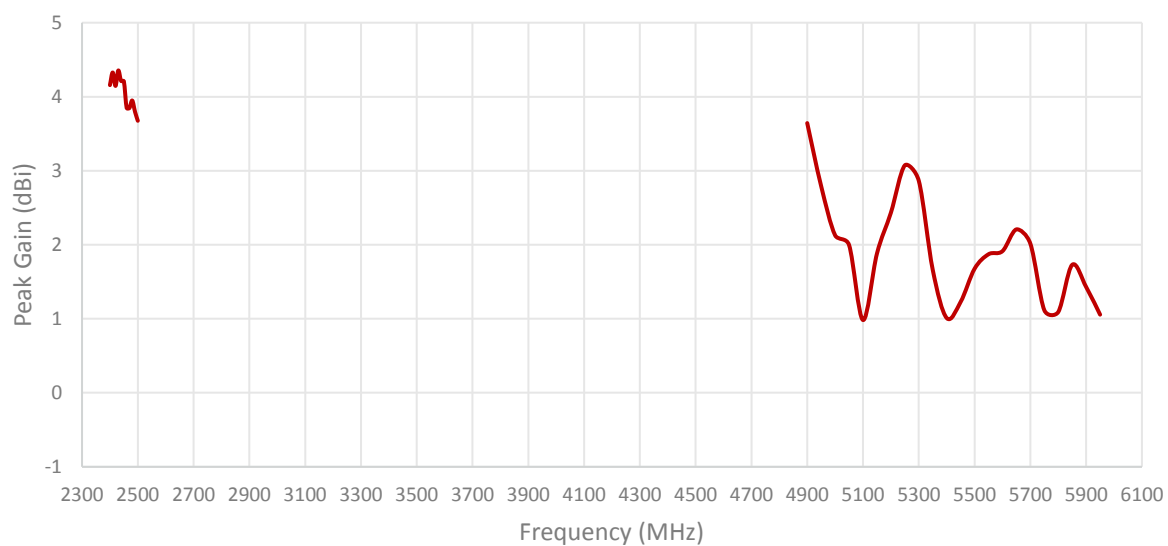
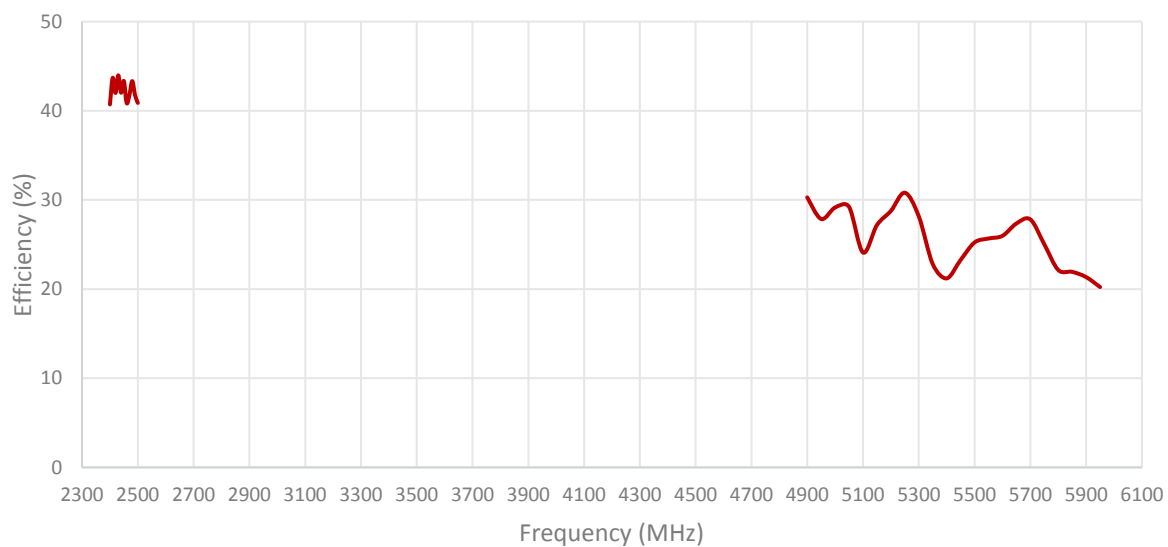
Cable 1: CELLULAR/LTE



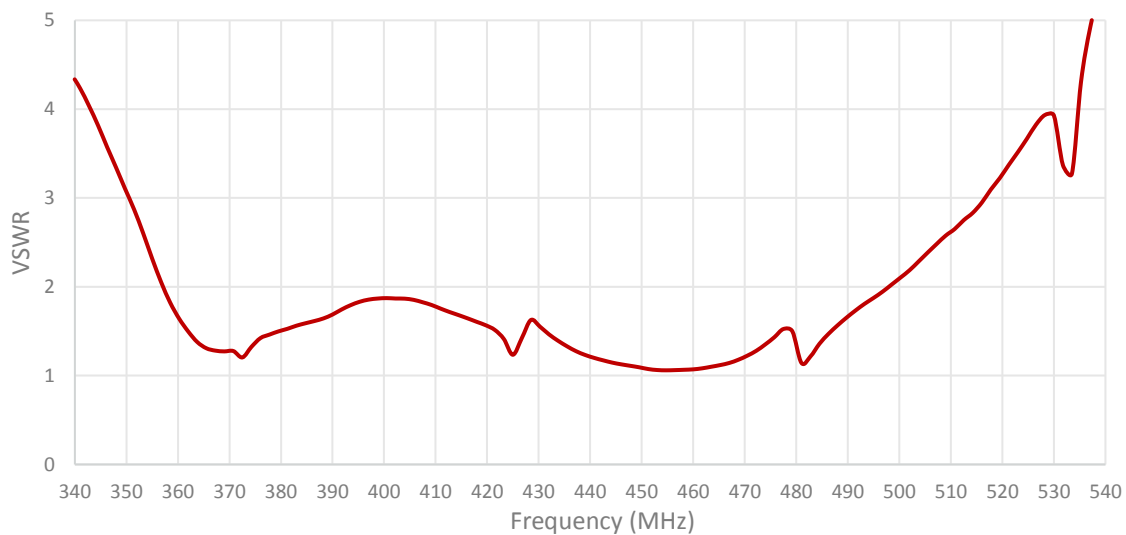
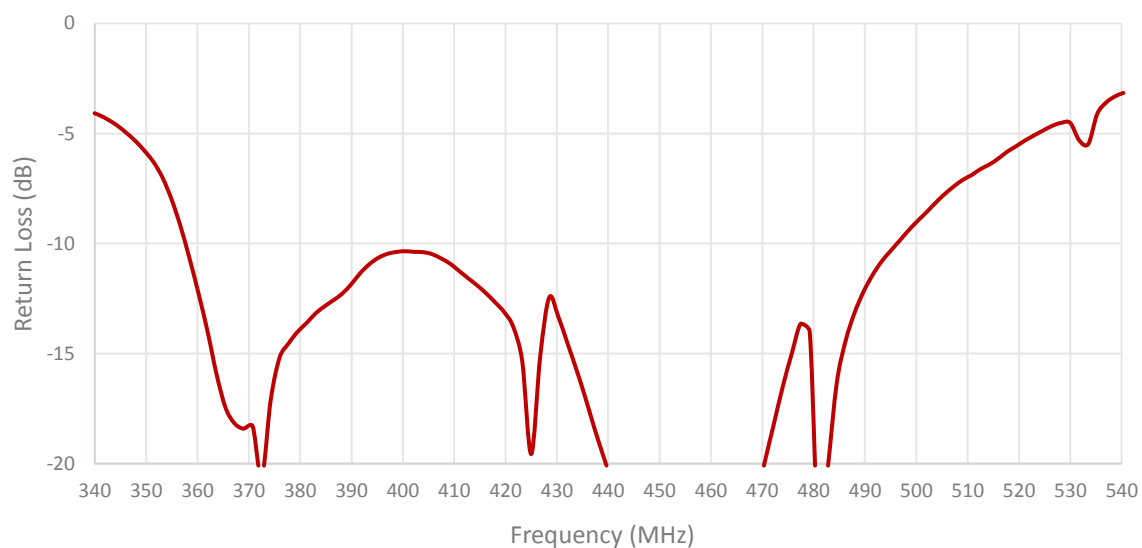


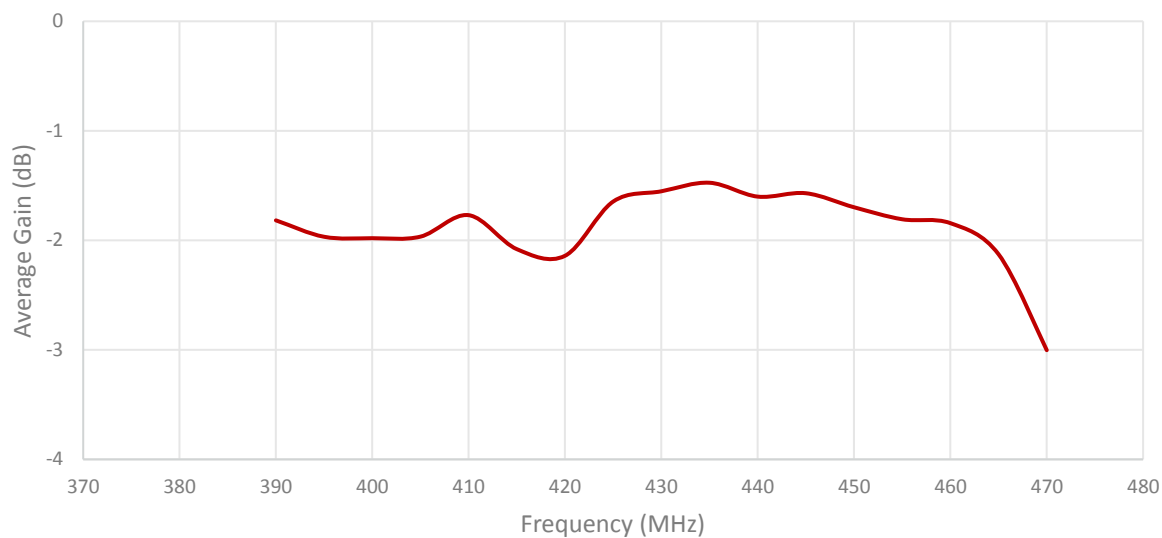
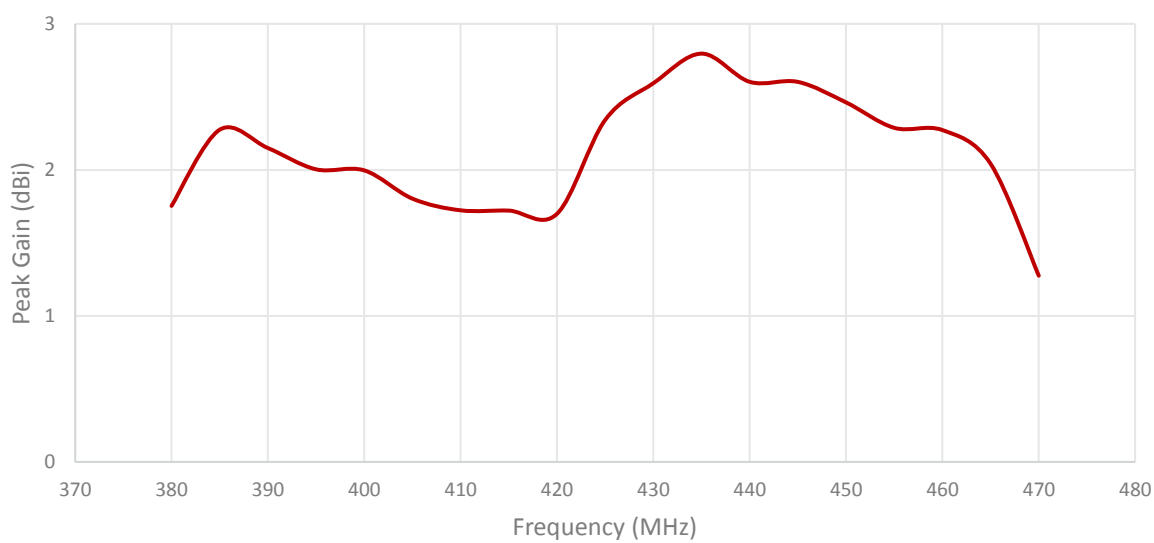
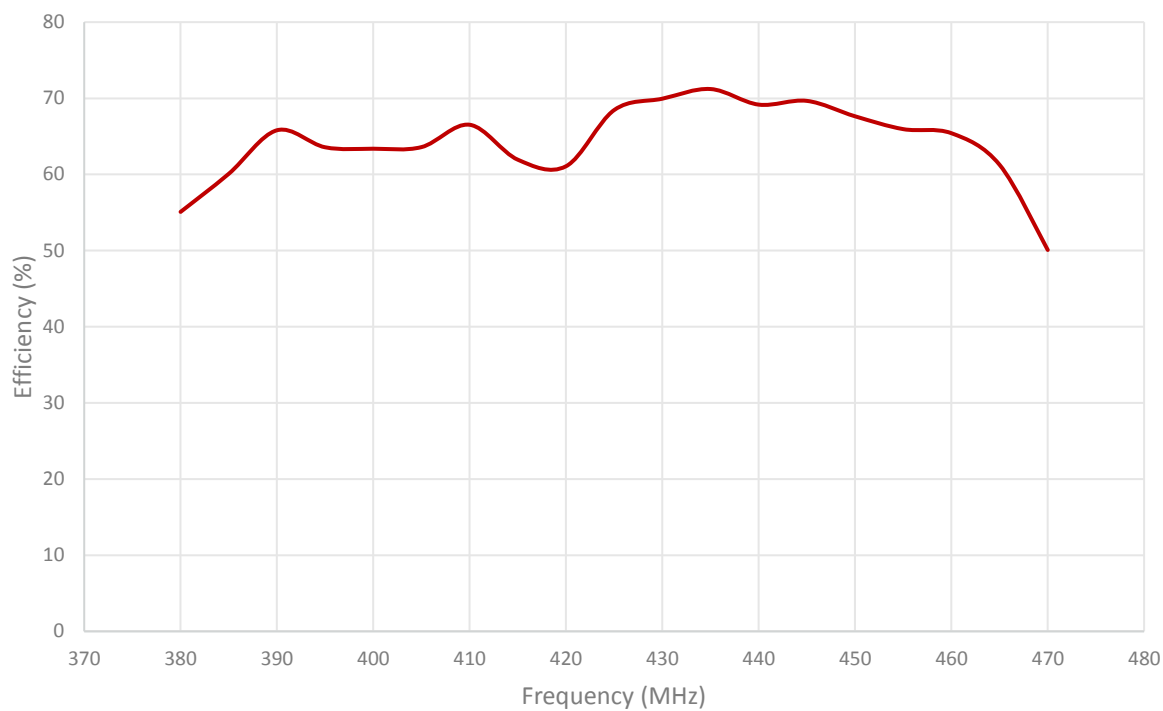
Cable 2: 2.4/5.0 GHz ISM

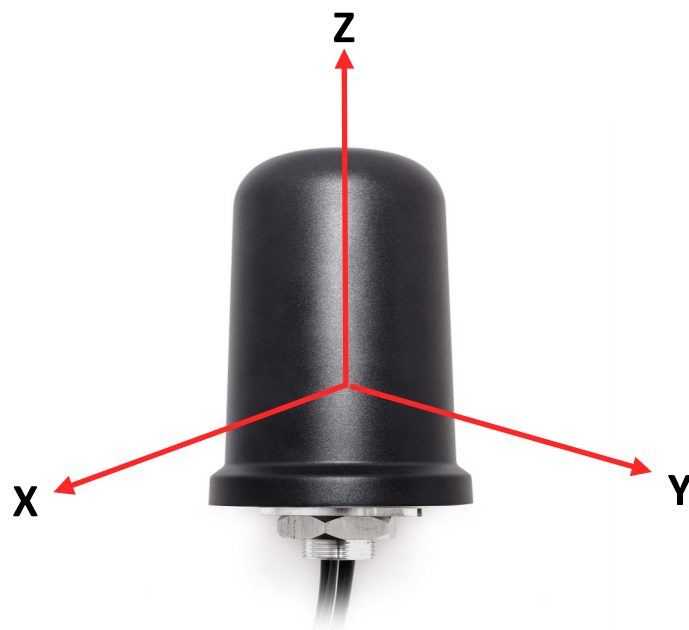




Cable 3: TETRA

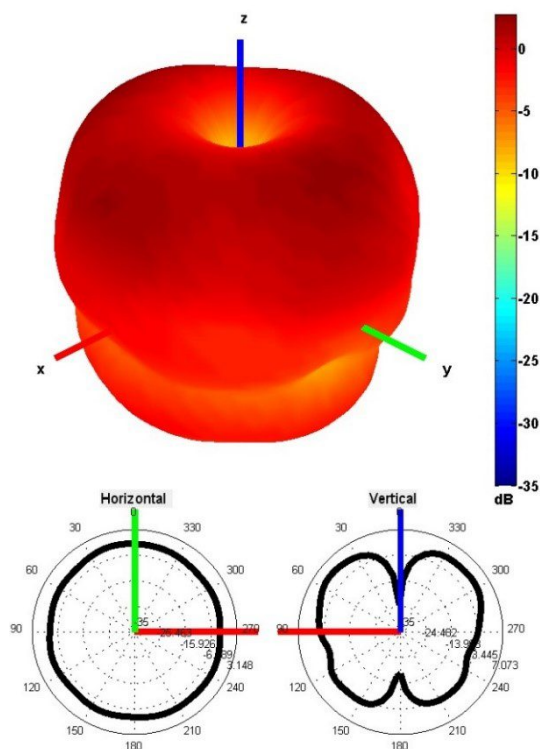
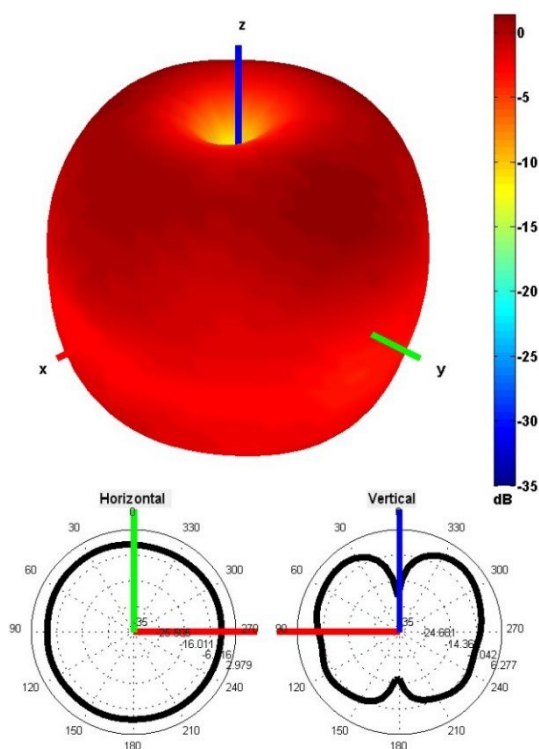




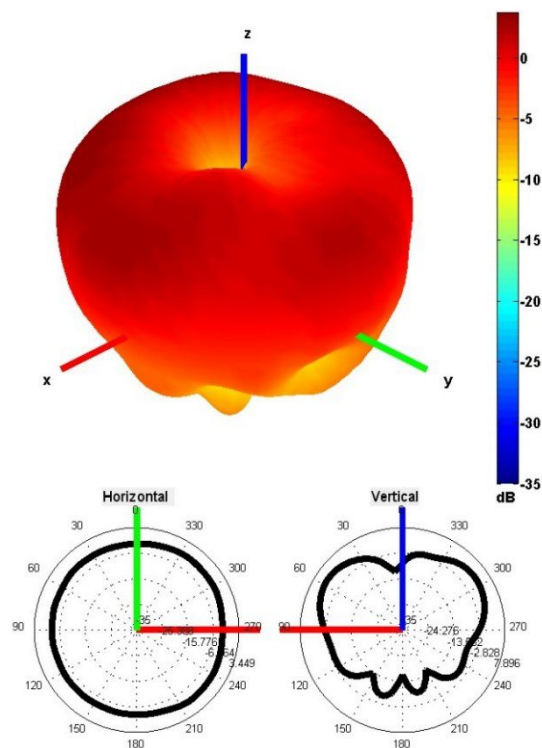
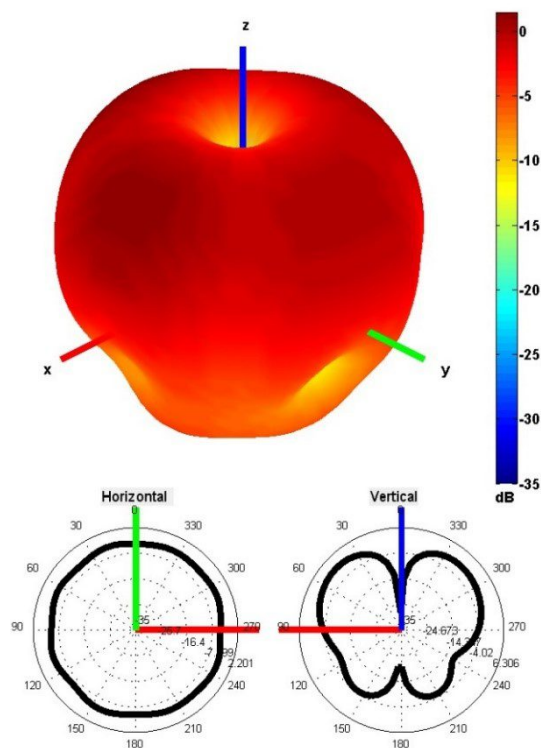


Radiation pattern reference

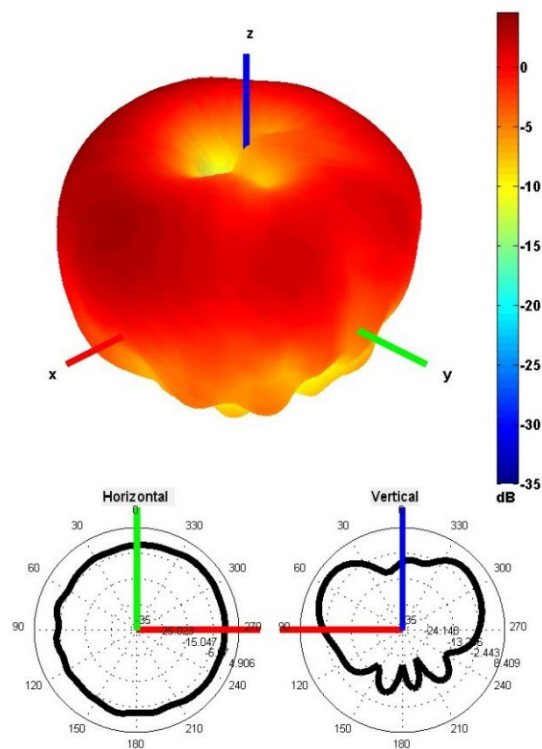
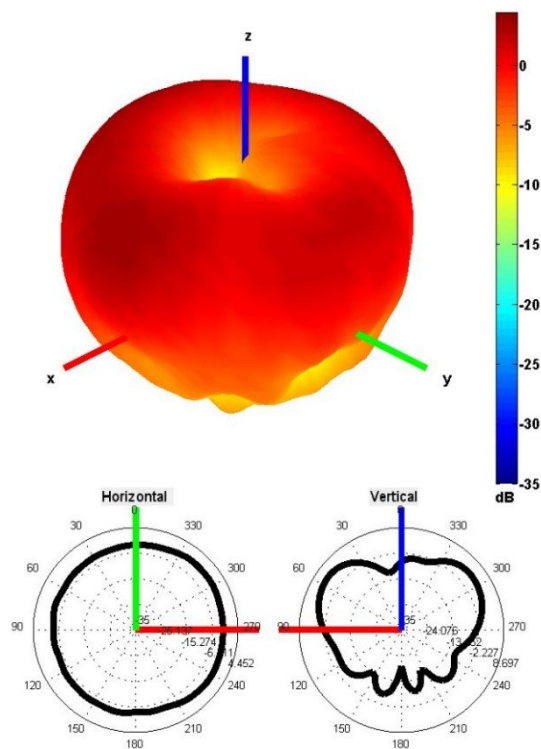
Cable 1: CELLULAR/LTE



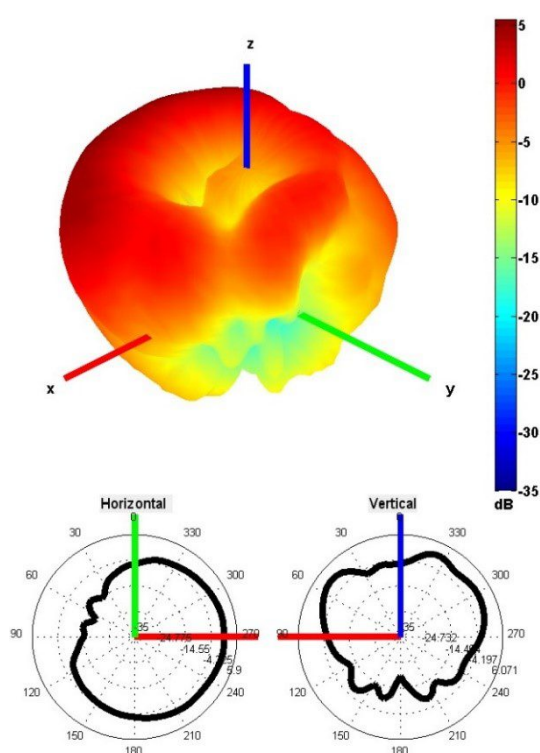
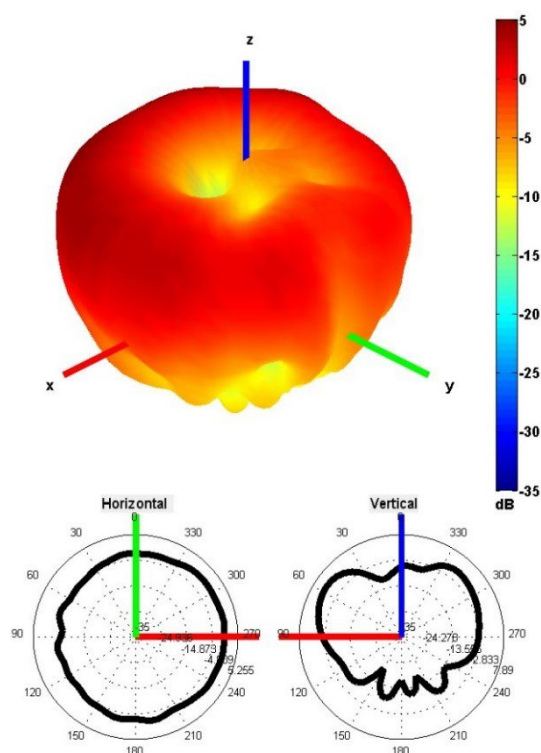
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

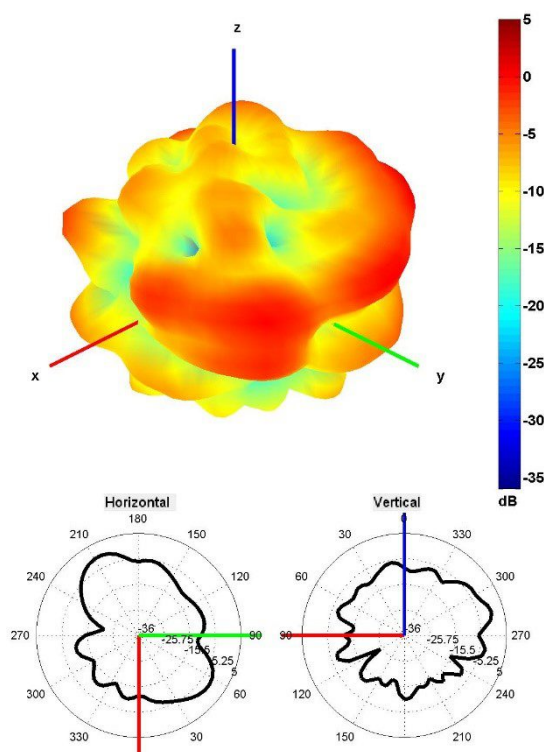
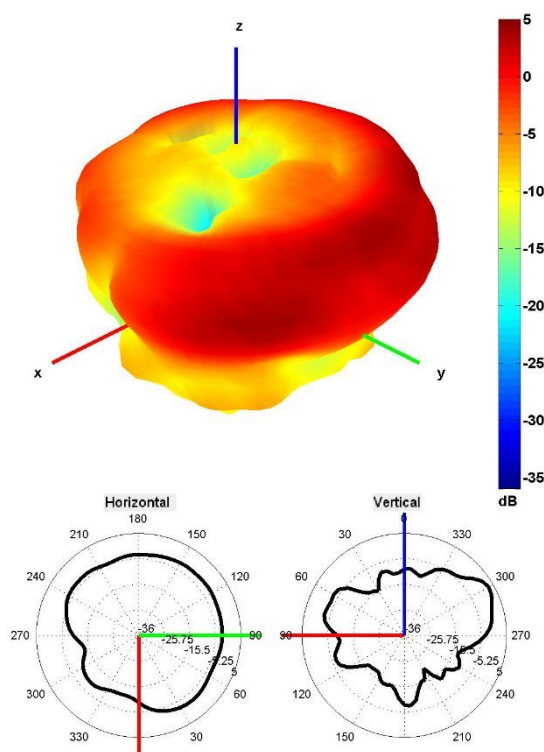


1850 and 1950 MHz Radiation pattern



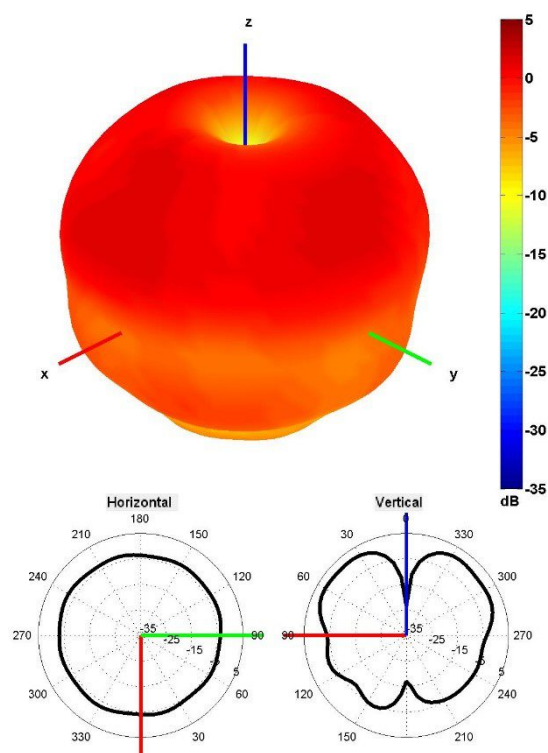
2100 and 2600 MHz Radiation pattern

Cable 2: 2.4/5.0 GHz ISM



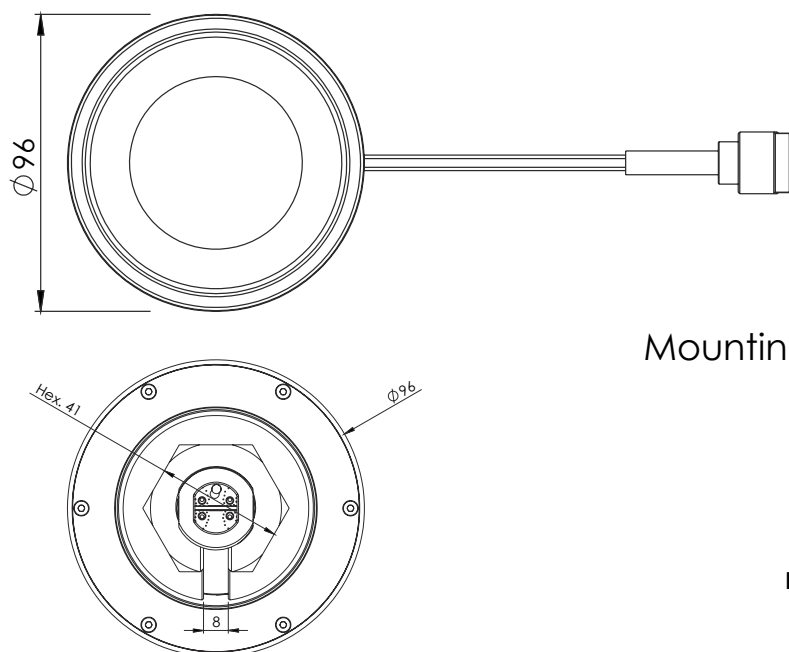
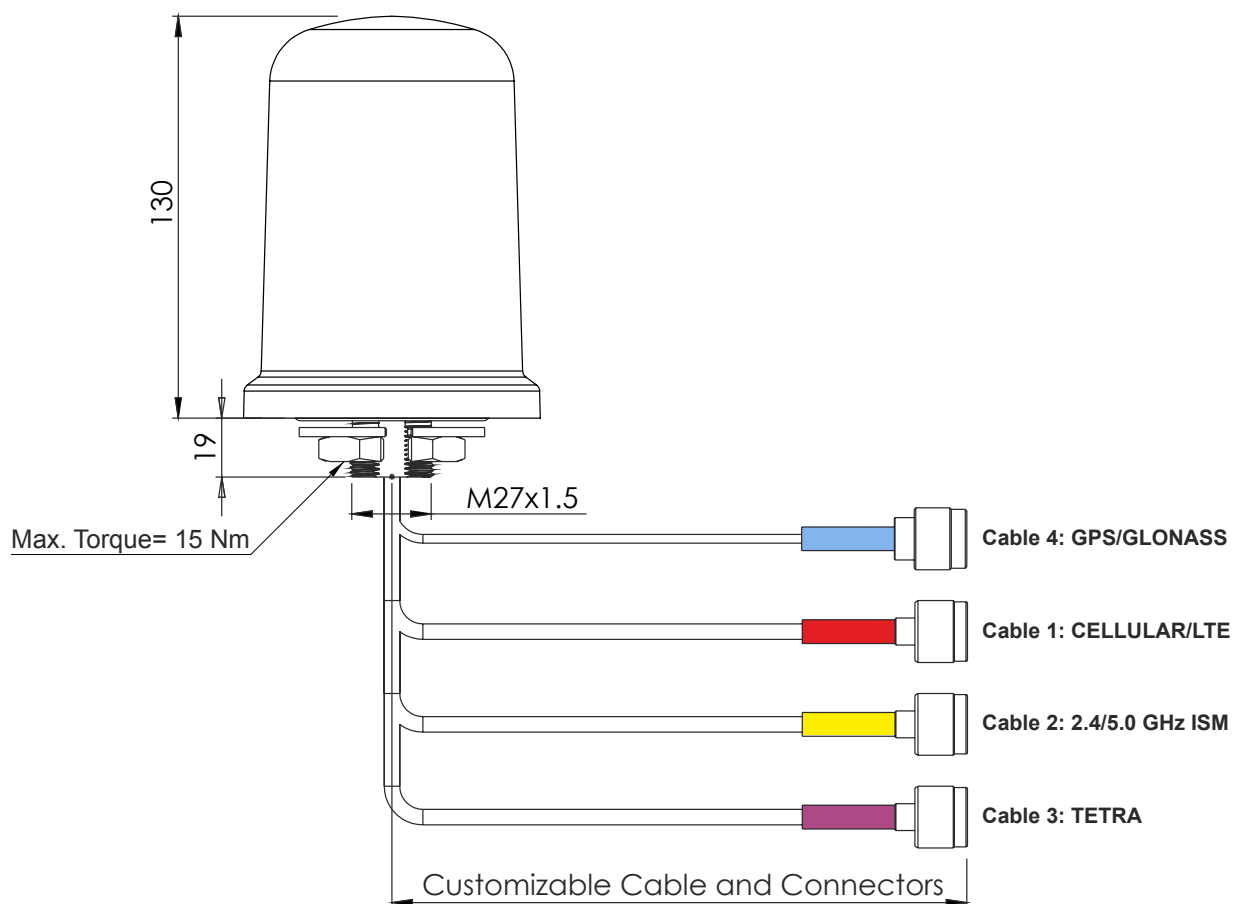
2450 and 5500 MHz Radiation pattern

Cable 3: TETRA

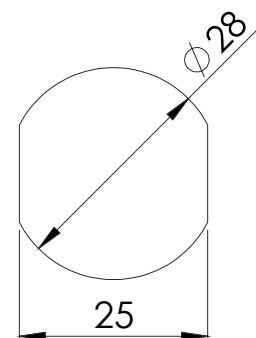


425 MHz Radiation pattern

4. Antenna drawings



Mounting hole



Note: Dimensions are in millimeters
***Dimensions are after mounting**
****Max. Torque= 15 Nm**

5. Antenna Images





Макро Групп – это:

- дистрибьютор электронных компонентов с 1994 года
- контрактный производитель электроники с 2007 года с собственным производством в Санкт-Петербурге (компания Макро ЕМС, входит в ГК Макро Групп)
- поставщик полупроводниковых материалов
- комплексный поставщик электронных компонентов
- моделирование и производство полупроводниковых эпитаксиальных гетероструктур для задач оптоэлектроники

Головной офис расположен в Санкт-Петербурге. Собственные представительства в крупных промышленных городах России и стран СНГ.

Преимущества для наших заказчиков:

- работа по тендерам с 2012 года
- оформление банковских гарантий
- отсрочки платежей
- поставка электронных компонентов по проектным ценам
- инженерная поддержка проектов заказчиков
- сертификат системы менеджмента качества ISO 9001-2015
- необходимые сертификаты и лицензии

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