antenna conceptor

Product Datasheet

2J6A24Ba

CELLULAR / LTE MIMO Screw Mount

Key Features

Cable 1: CELLULAR / LTE
- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz

Cable 2: CELLULAR / LTE
- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz

Screw Mount
Anti-Rotation Mechanism
Ground Plane Dependent
Customizable Cable and Connector
IP67, IK09, IP69K
Dimensions Ø 77.3 x 65.5 mm



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)	~-7.6	~-10.2	~-8.7
VSWR	~2.4:1	~1.9:1	~2.1:1
Efficiency (%)	~33	~32	~23
Peak Gain (dBi)	~-1.0	~0.6	~0.4
Average Gain (dB)	~-4.8	~-4.9	~-6.3
Impendance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LMR100 Standard (Other Cables Available)		

Cable 2

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	~-7.4	~-5.4
VSWR	~3.0:1	~2.5:1	~3.3:1
Efficiency (%)	~32	~33	~22
Peak Gain (dBi)	~-0.9	~0.8	~-0.7
Average Gain (dB)	~-4.9	~-4.8	~-6.5
Impendance (Ohm)	50		
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male Standard (Other Connectors Available)		
Cable Length	300 cm Standard (Any Cable Length Available)		
Cable Type	LMR100 Standard (Other Cables Available)		

Antenna Measurement Conditions:

Mounted on 30x30 cm Ground Plane

200 cm of Cable LMR100

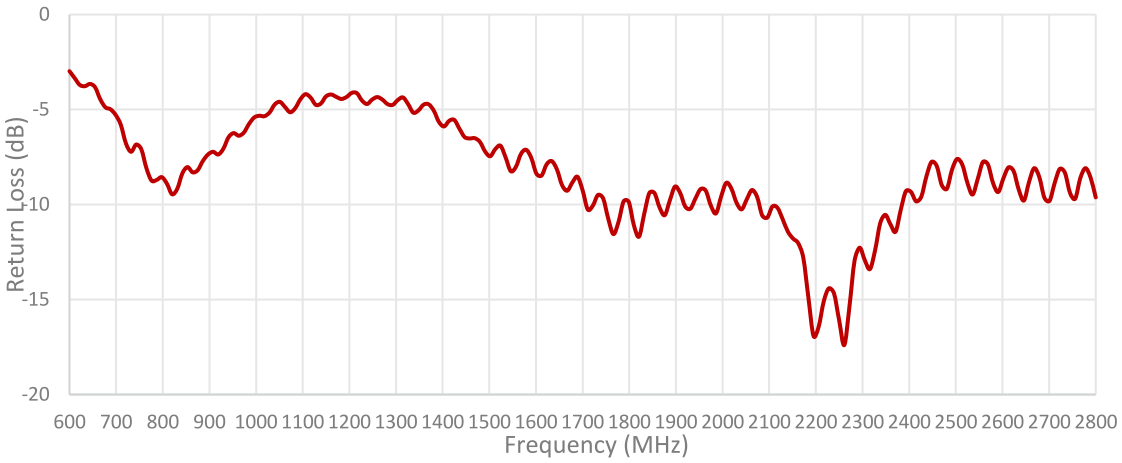
Measured in Certified CTIA 3D Anechoic Chamber

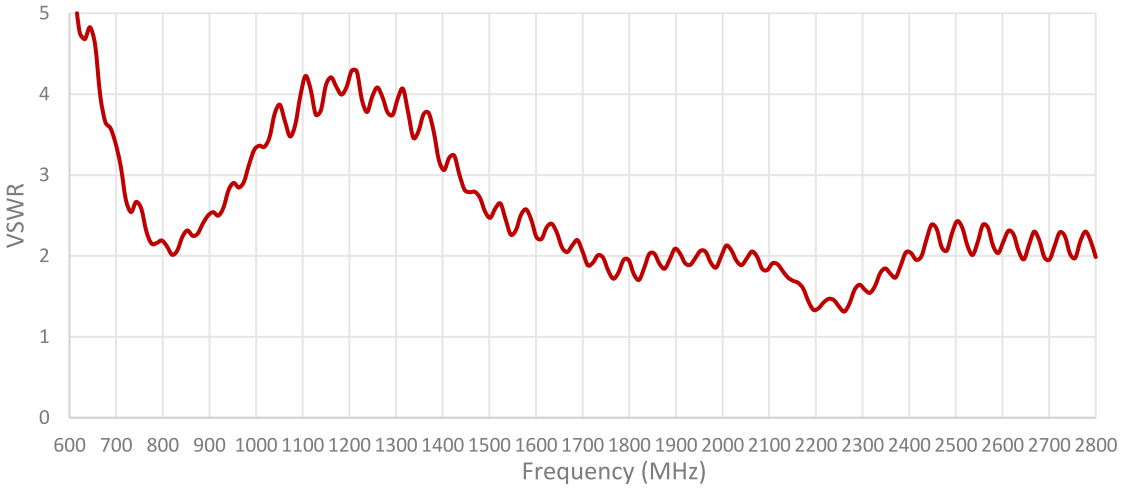
2. Mechanical and environmental specifications

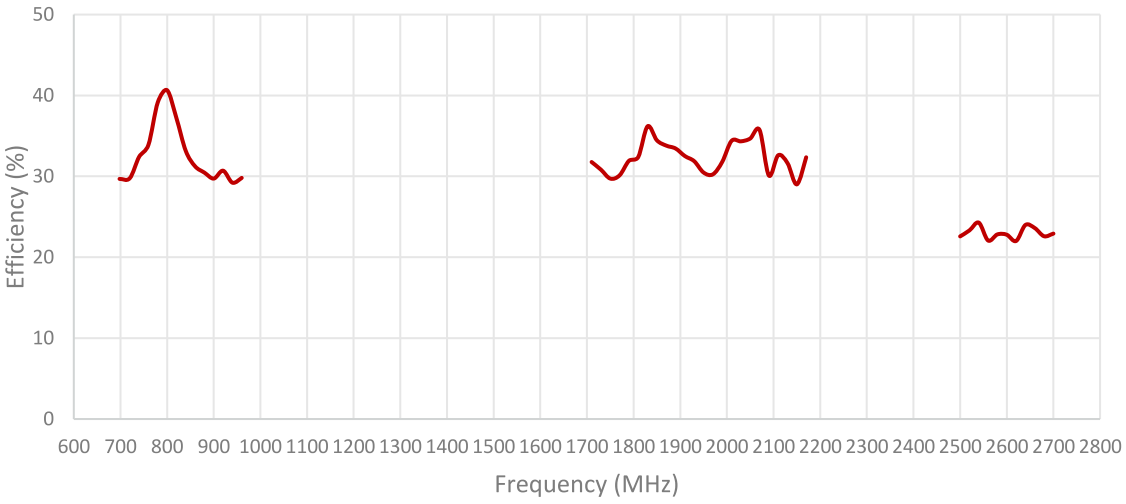
Specifications	2J6A24Ba
Mounting Type	Screw Mount
Dimensions (mm)	Ø 77.3 x 66.5
Radome	PC/ABS UV Stable
Radome color	Black
Antenna Base	Zamak
Gasket	TPE
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS
Certificates	IP67, IK09, IP69K

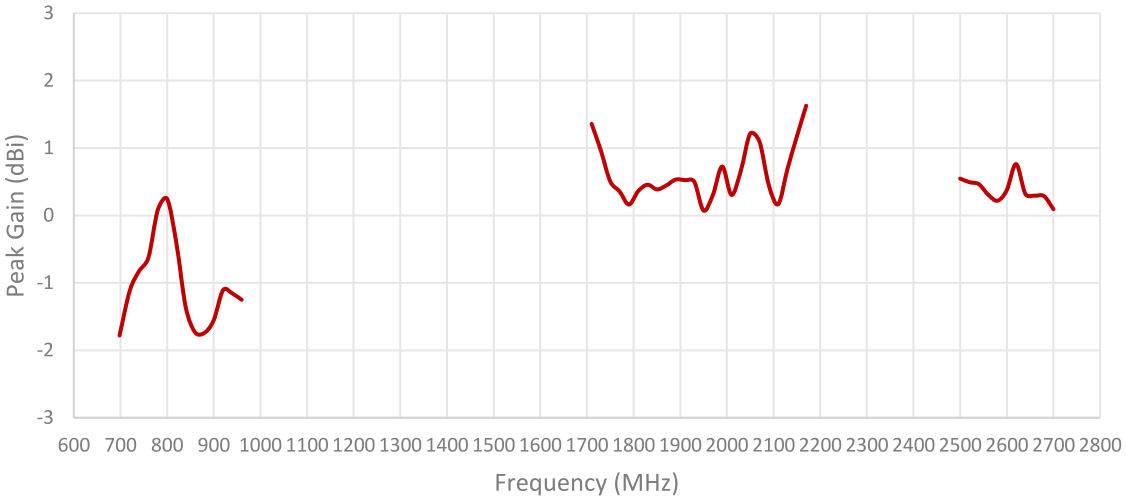
3. Antenna parameters

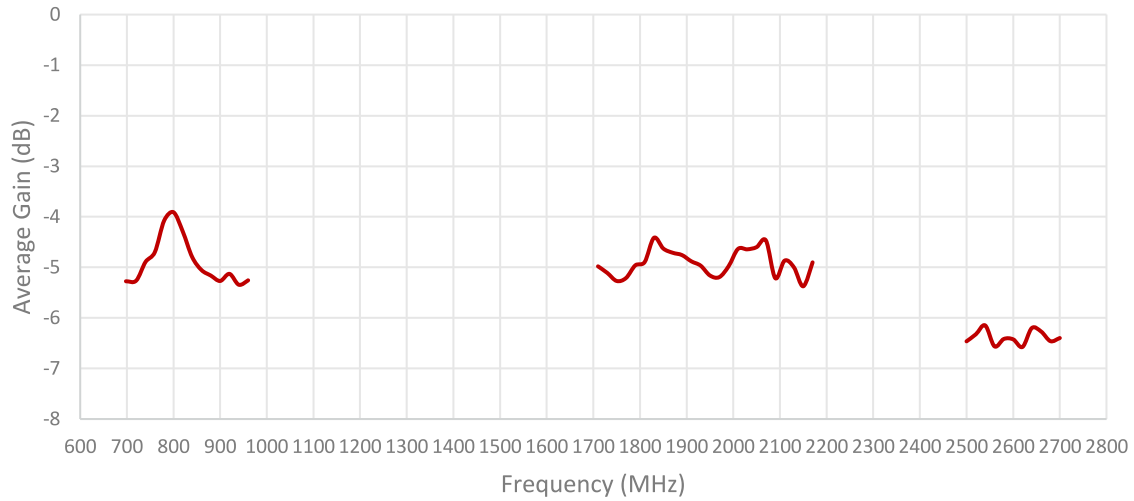
Cable 1: CELLULAR / LTE



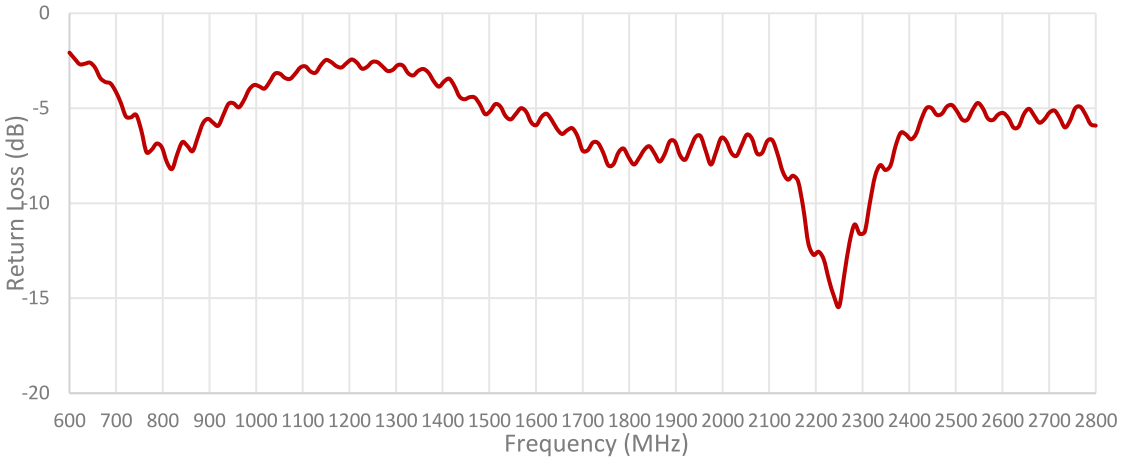


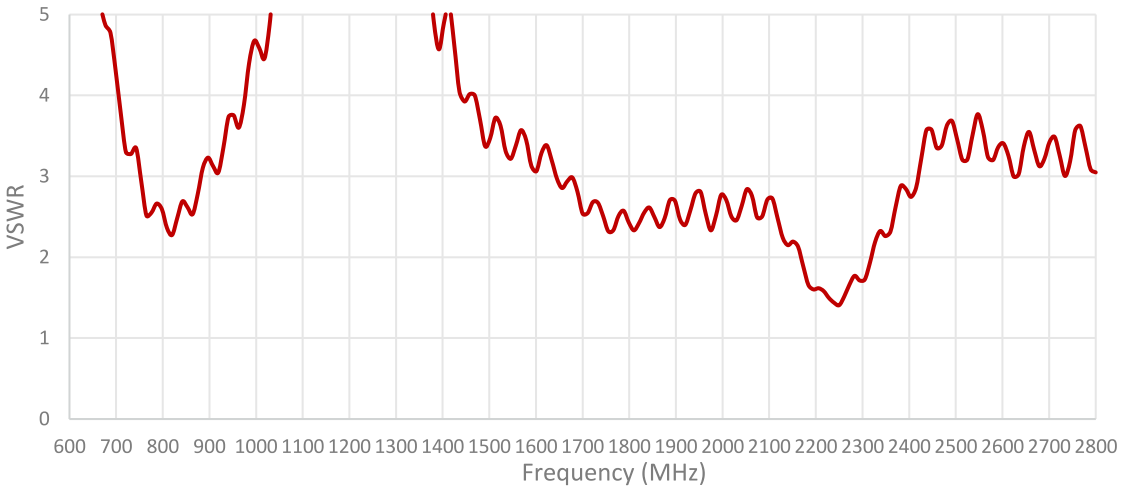

50
40
30
20
10
0
Efficiency (%)
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

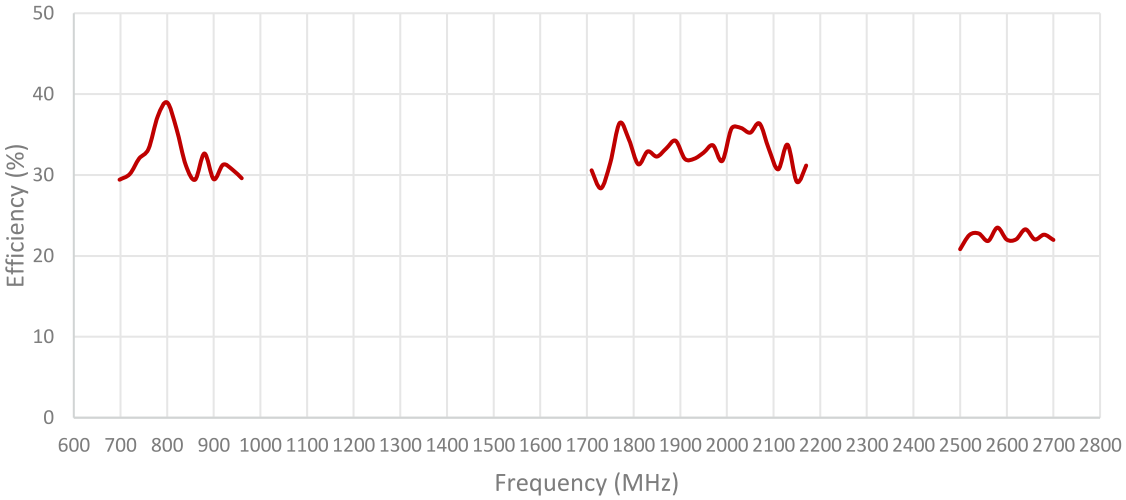

3
2
1
0
-1
-2
-3
Peak Gain (dBi)
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

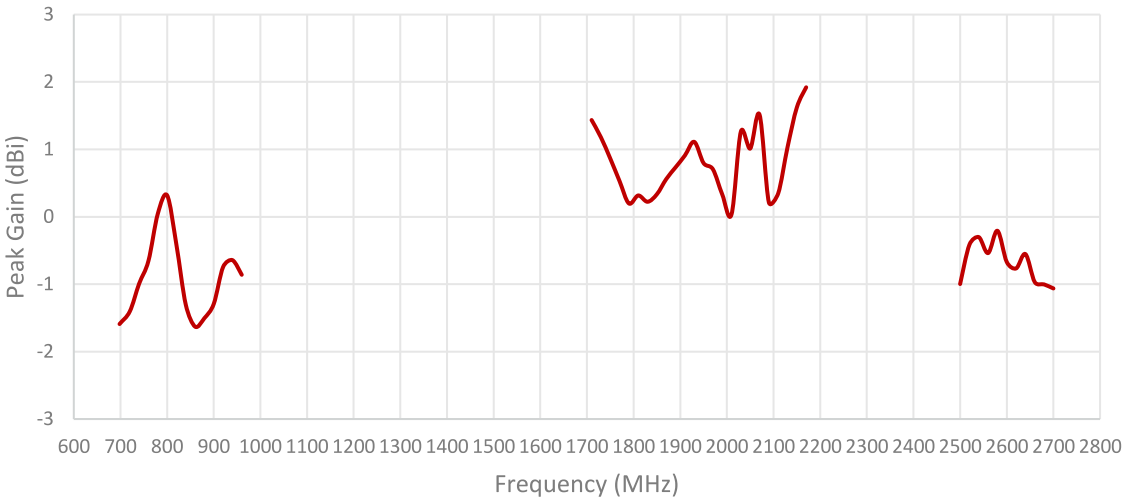


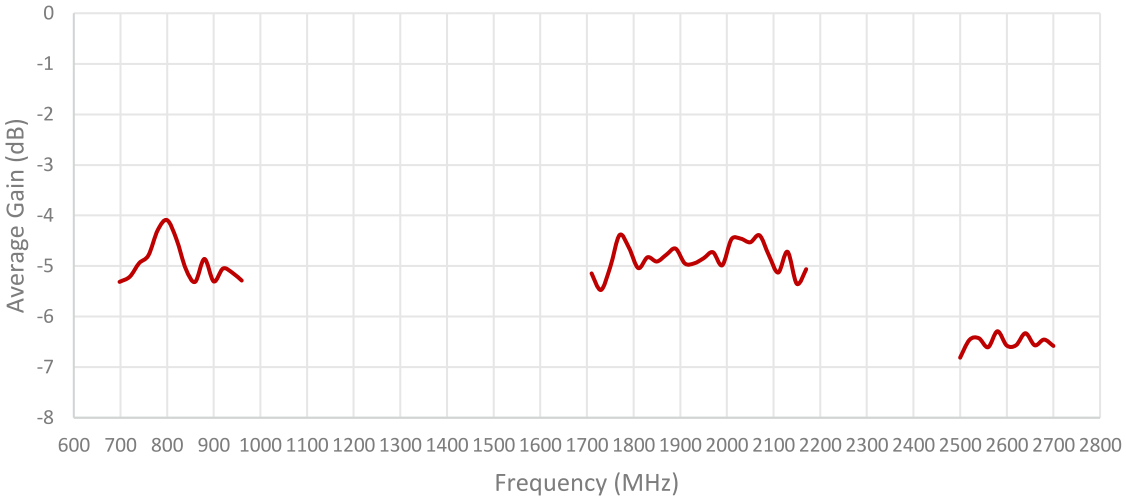
Cable 2: CELLULAR / LTE



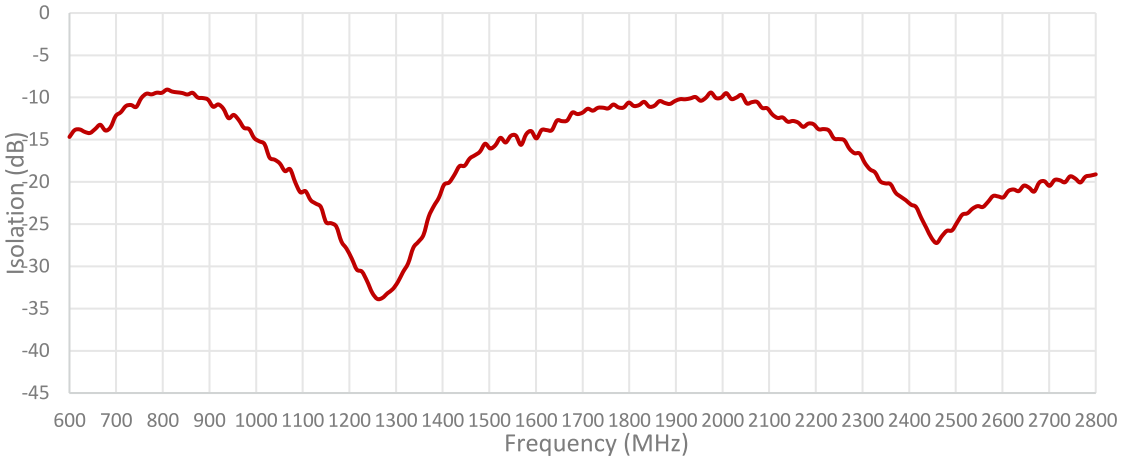

VSWR
0
1
2
3
4
5
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)


Efficiency (%)
0
10
20
30
40
50
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

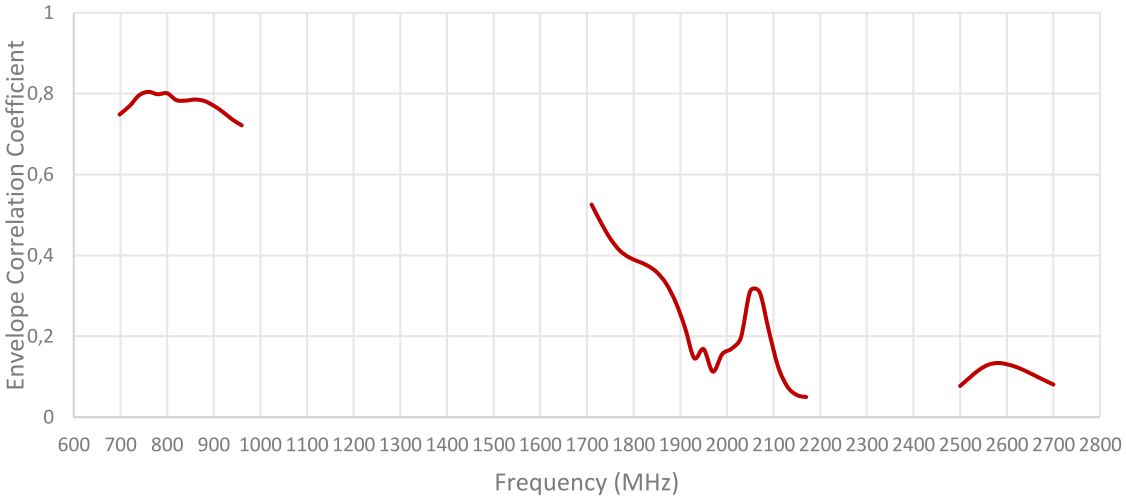

Peak Gain (dBi)
3
2
1
0
-1
-2
-3
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

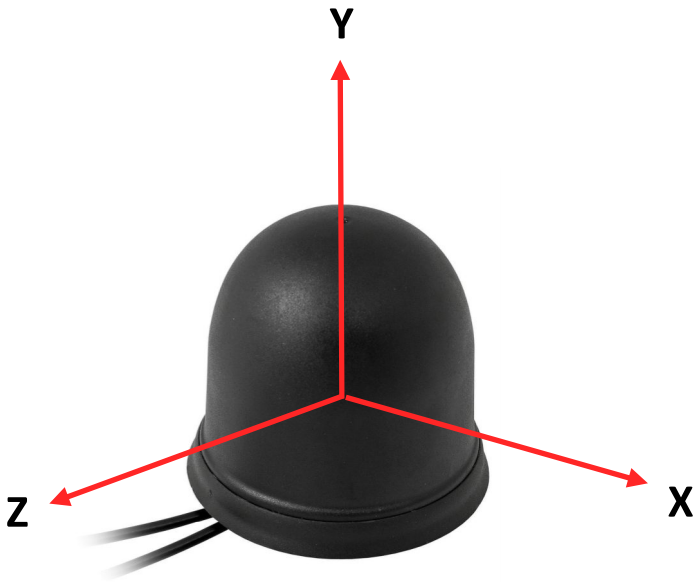

Average Gain (dB)
0
-1
-2
-3
-4
-5
-6
-7
-8
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

ISOLATION FOR CABLE 1 AND 2



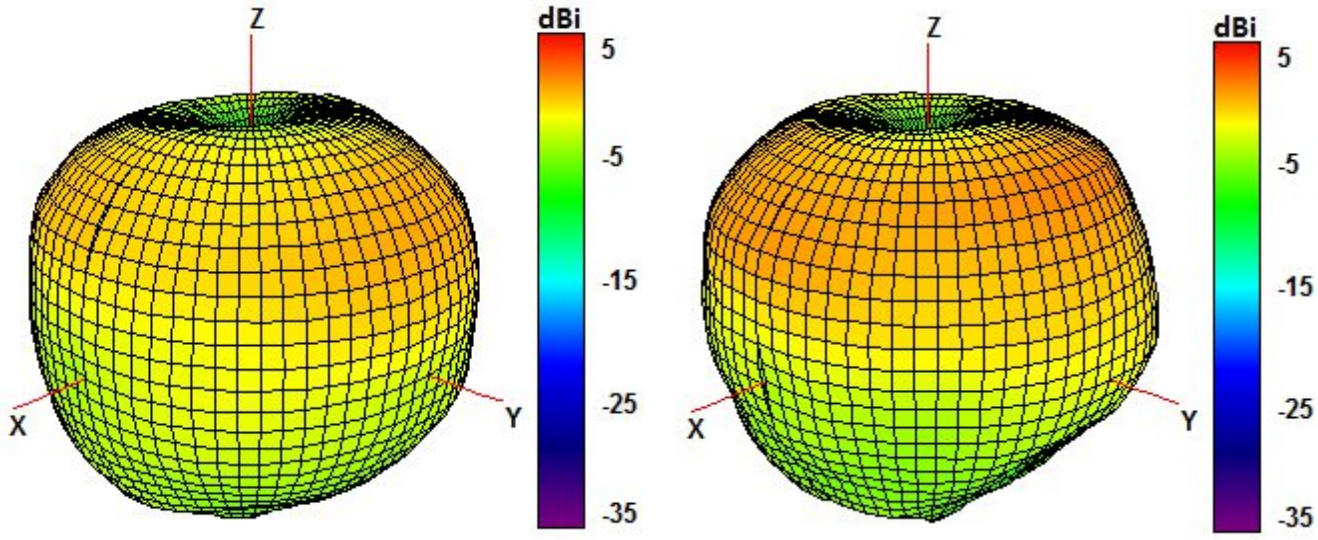
ENVELOPE CORRELATION COEFICIENT FOR CABLE 1 AND 2



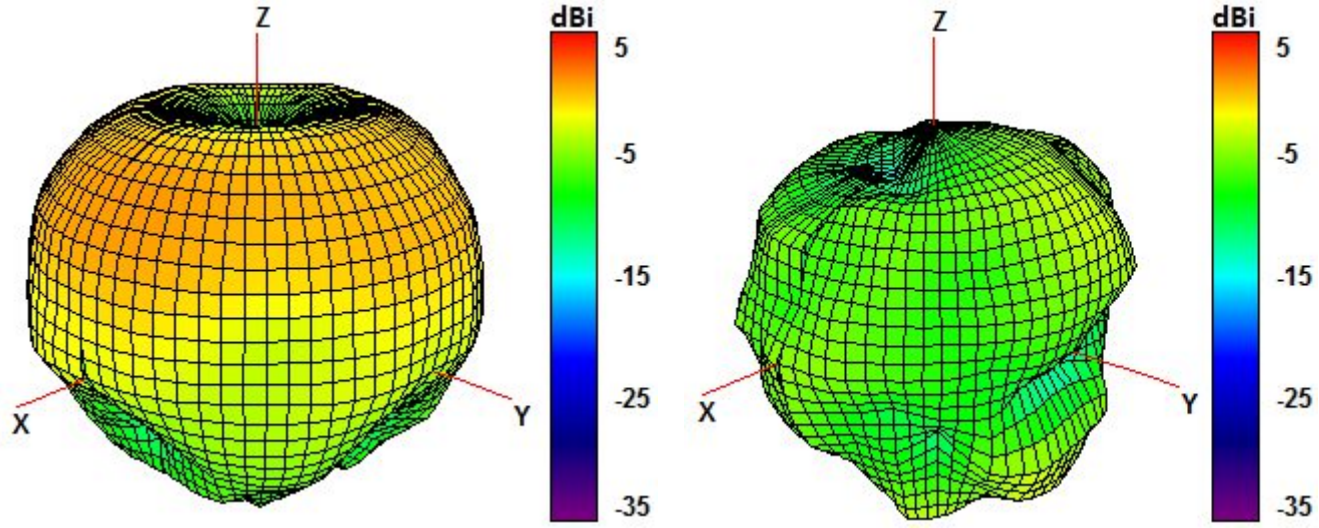


Radiation pattern reference

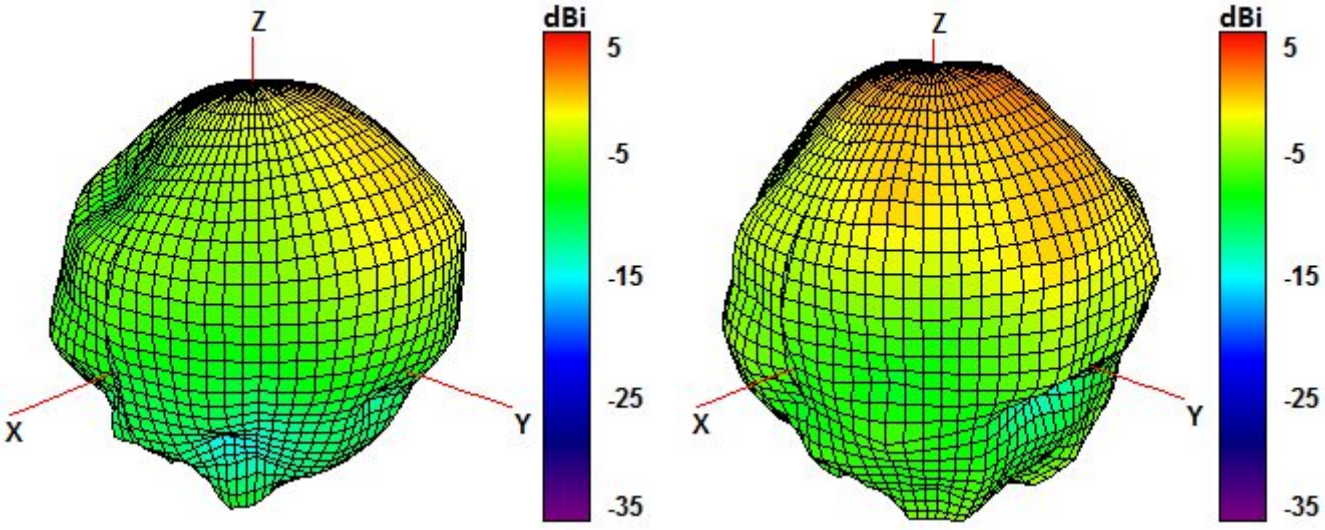
Cable 1: CELLULAR / LTE



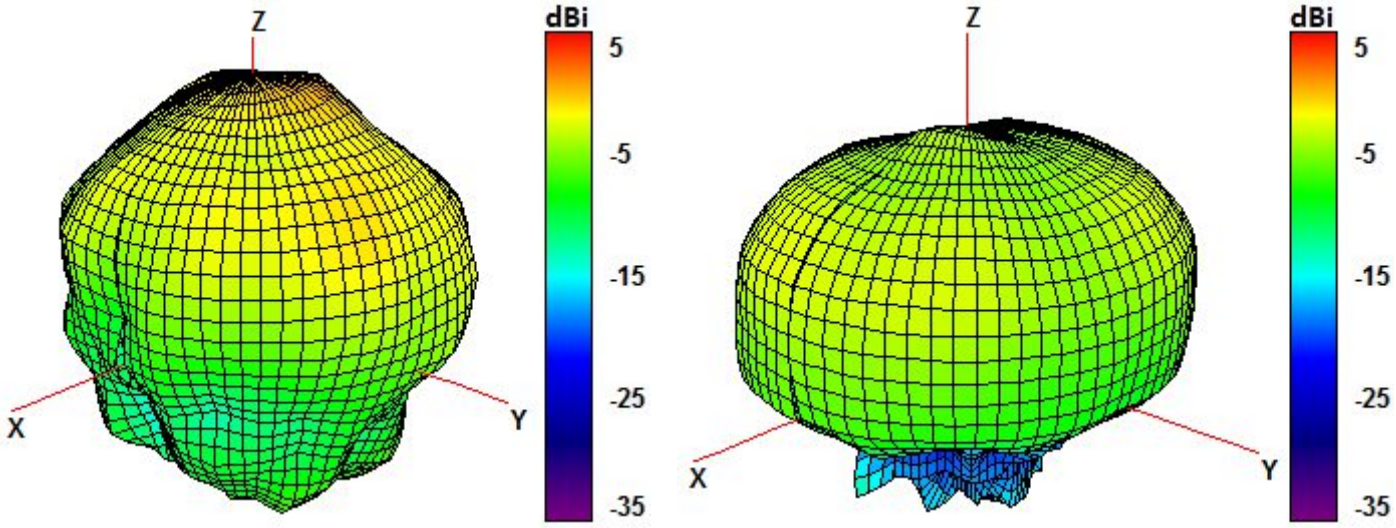
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

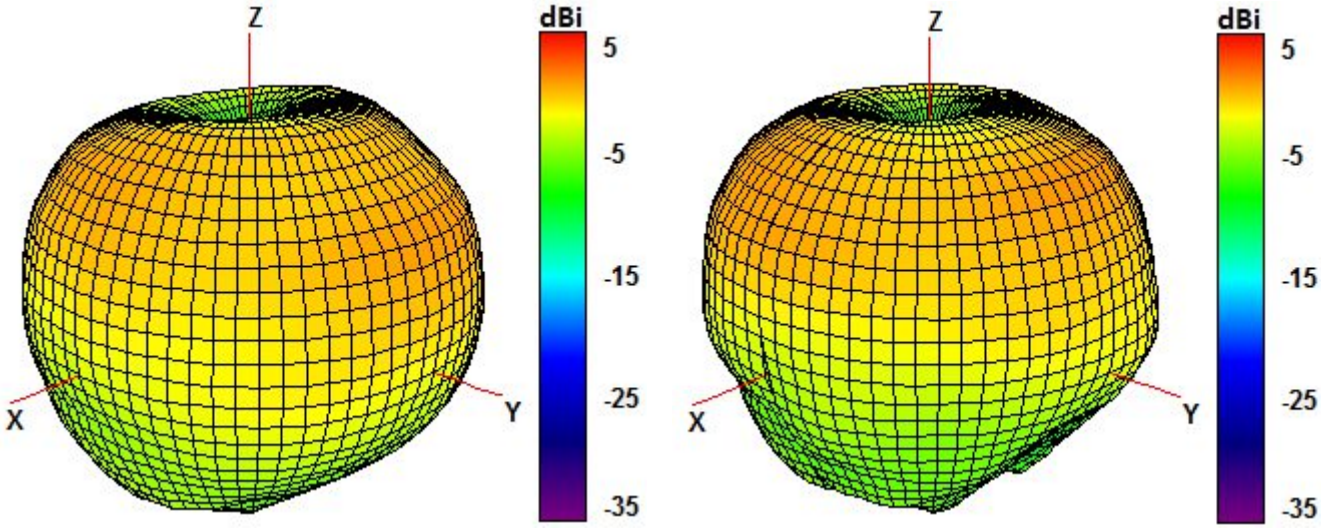


1850 and 1950 MHz Radiation pattern

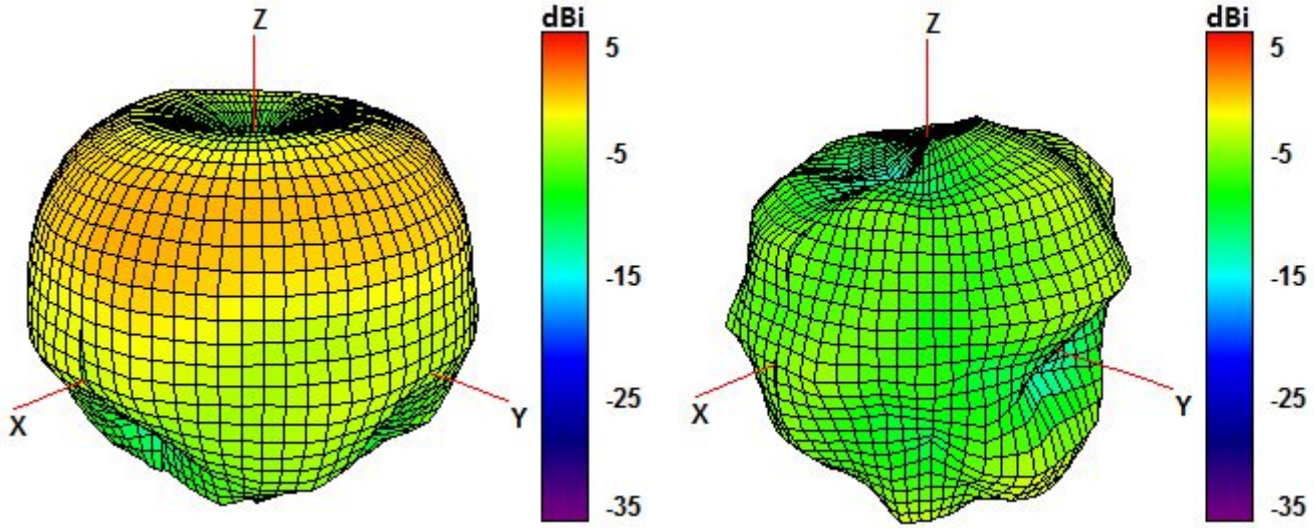


2100 and 2600 MHz Radiation pattern

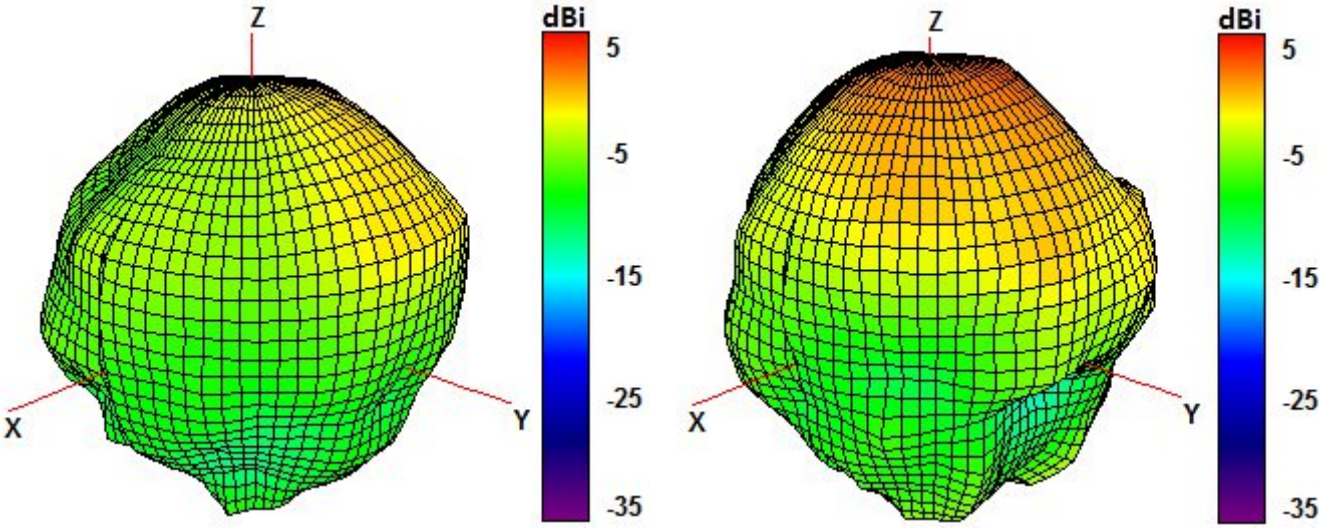
Cable 2: CELLULAR / LTE



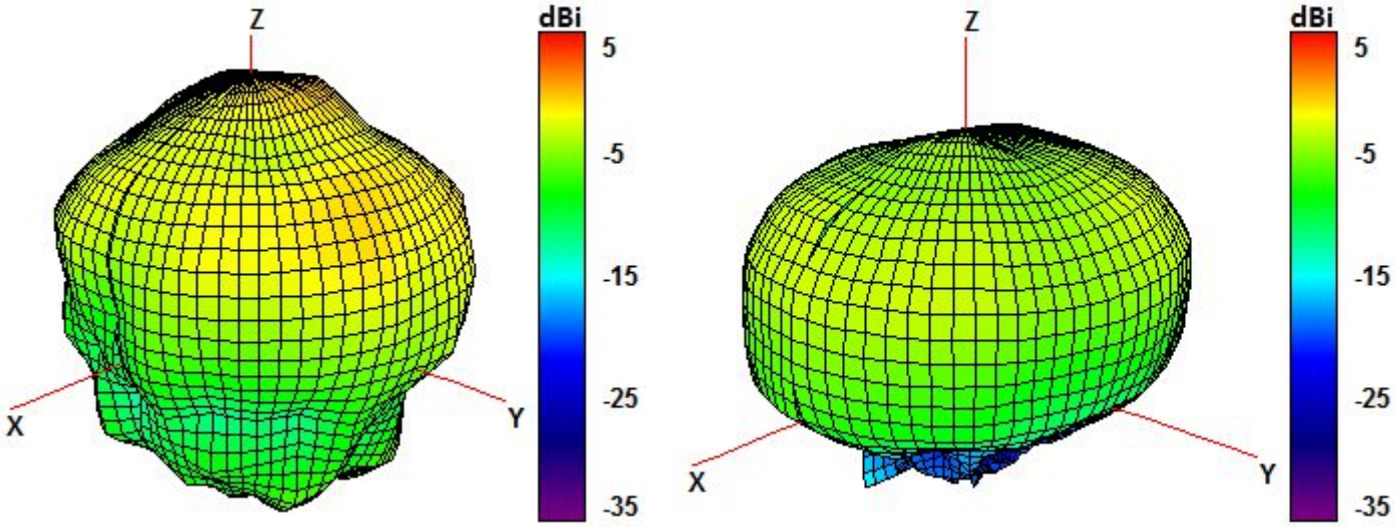
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

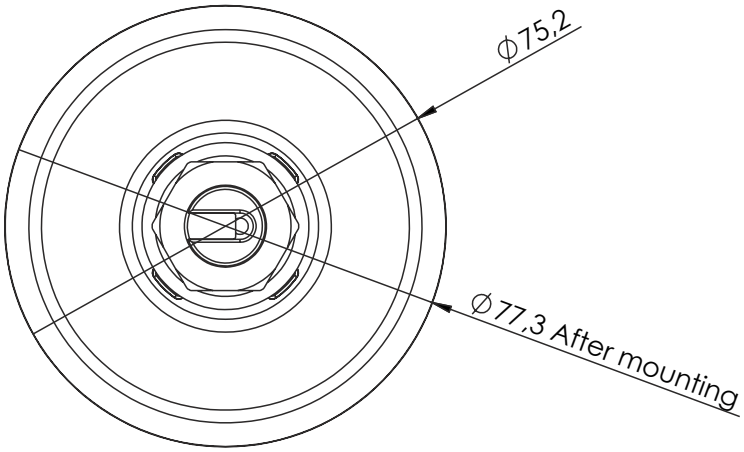


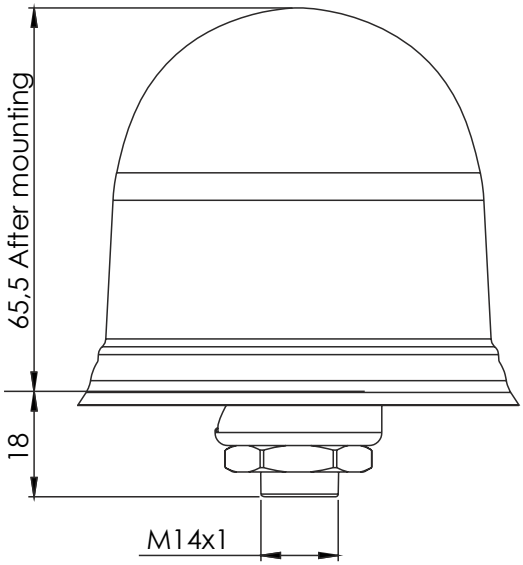
1850 and 1950 MHz Radiation pattern

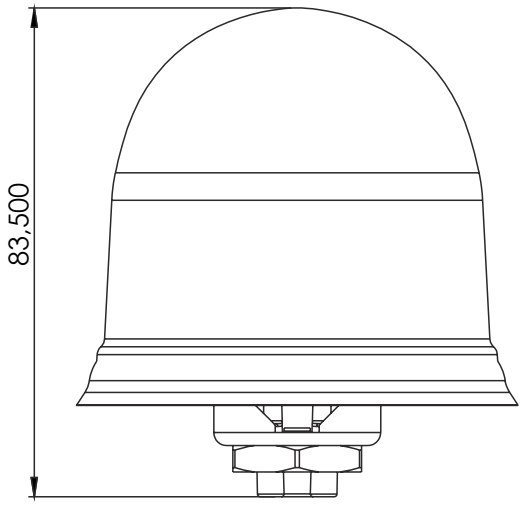


2100 and 2600 MHz Radiation pattern

4. Antenna drawings







5. Antenna Images

