Antenne combinée 4G-LTE 3G/2G LPWA/IoT GPS/GNSS WiFi/BT 2.4/5GHz traversante IP69

Référence GC-6A50BCF

Gain	4dBi LTE / 5dBi WiFi / 28dB GNSS
Connecteurs	SMA (M) / RP-SMA (M)
Dimensions (mm)	Ø77.3 x 65.5
T° de fonctionnement	-40°C à +85°C

Couleurs : noir / blanc

CARACTÉRISTIQUES

Câble 1 : 2G, 3G et 4G

BANDES (MHZ)	700/850/900	1700/1800/1900/2100	2600
FRÉQUENCES (MHZ)	698-960	1710-2170	2500-2700
PERTE DE RETOUR (DB)	~-10.3	~-14.8	~-15.1
VSWR	~2.1:1	~1.5:1	~1.5:1
EFFICACITÉ (%)	~52	~62	~50
GAIN DE CRÊTE (DBI)	~0.7	~3.4	~4.0
GAIN MOYEN (DB)	~-2.9	~-2.1	~-3.0
IMPÉDANCE (OHM)		50	
POLARISATION	Linéaire		
RAYONNEMENT	Omnidirectionnel		
PUISSANCE D'ENTRÉE MAX. (W)	25		

Câble 2 : 2.4/5GHz - WiFi, Bluetooth, ZigBee, ISM

BANDES (MHZ)	2.4 GHz	5.0 GHz
FRÉQUENCES (MHZ)	2410-2490	4920-5925
PERTE DE RETOUR (DB)	~-20.2	~-11.1
VSWR	~1.2:1	~1.8:1
EFFICACITÉ (%)	~60.5	~38.4
GAIN DE CRÊTE (DBI)	~5.0	~3.9
GAIN MOYEN (DB)	~-2.2	~-4.2
IMPÉDANCE (OHM)	50	
POLARISATION	Linéaire	
RAYONNEMENT	Omnidirectionnel	
PUISSANCE D'ENTRÉE MAX. (W)	25	

Conditions de mesure de l'antenne :

- Montée sur un plan de masse de 30 x 30 cm
- Câble DACAR302 de 200 cm
- Mesurée dans une chambre anéchoïque 3D certifiée CTIA

Câble 3 : GNSS

NORMES	Beidou	GPS/QZSS/Galileo	GLONASS
BANDES (MHZ)	1561	1575	1602
FRÉQUENCES (MHZ)	1561.098	1575.42	1598-1606
TAILLE DU PATCH (MM)	25mm x 25mm x 4mm		
PERTE DE RETOUR (DB)	<= - 15,0 dB		
VSWR	<= 1,4: 1 dB		
IMPÉDANCE	50		
RAYONNEMENT	Hémisphérique		
POLARISATION	RHCP		
FILTRE SAW	Préfiltre		
GAIN ACTIF (DB)	28 à 2,7 V		
BRUIT (DB)	1,5 Typ		
TENSION (V)	1.5 – 3.6		
COURANT (MA)	9 Typ		
CONSOMMATION D'ÉNERGIE (MW)	24,3 Typ		
ESD PROTECTION (KV)	2kV		

Caractéristiques communes câbles 1, 2 et 3

CONNECTEUR	SMA(M) / RP-SMA (M) Standard (autres connecteurs disponibles)
LONGUEUR DE CÂBLE	300 cm standard (toute longueur de câble disponible)
TYPE DE CÂBLE	DACAR302 Standard (autres câbles disponibles)

SPÉCIFICATIONS

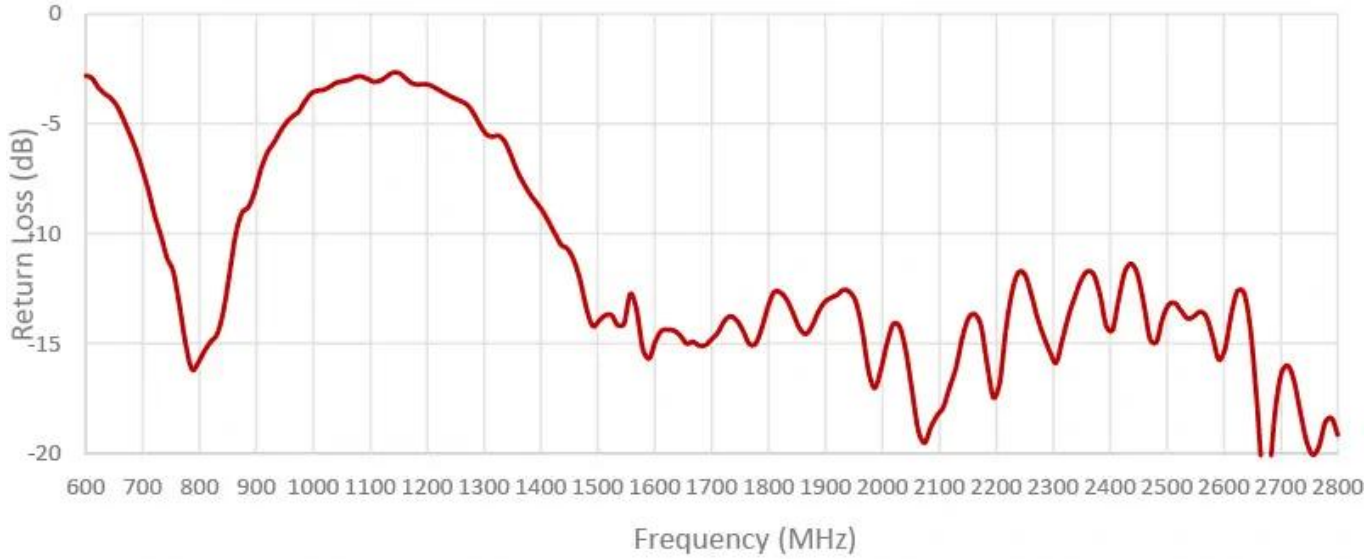
TYPE DE MONTAGE	Traversant / Montage à vis
DIMENSIONS (MM)	Ø 77.3mm x 65.5mm
MATÉRIAU	PC / ABS stable aux UV
COULEUR	Noir ou blanc
BASE	Zamak
JOINT D'ÉTANCHÉITÉ	TPE
T° DE FONCTIONNEMENT (°C)	-40°C à +85°C
T° DE STOCKAGE (°C)	-40°C à +85°C
CONFORMITÉ	RoHS
CERTIFICATIONS	IP67, IK09, IP69K

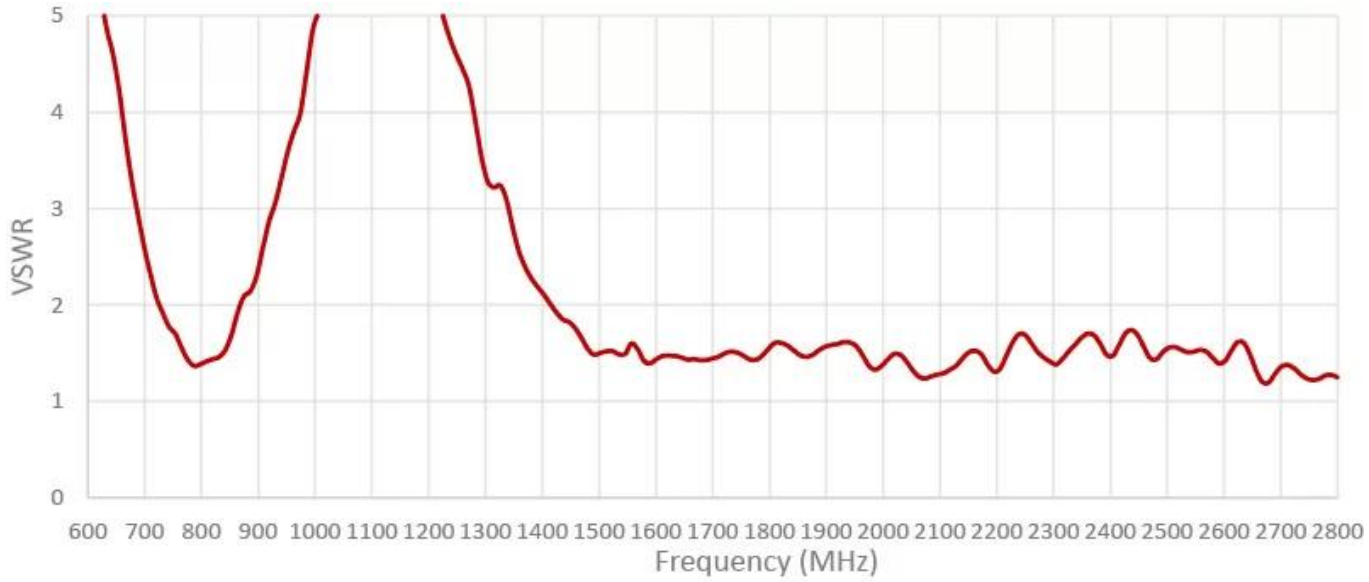
ENVIRONNEMENT

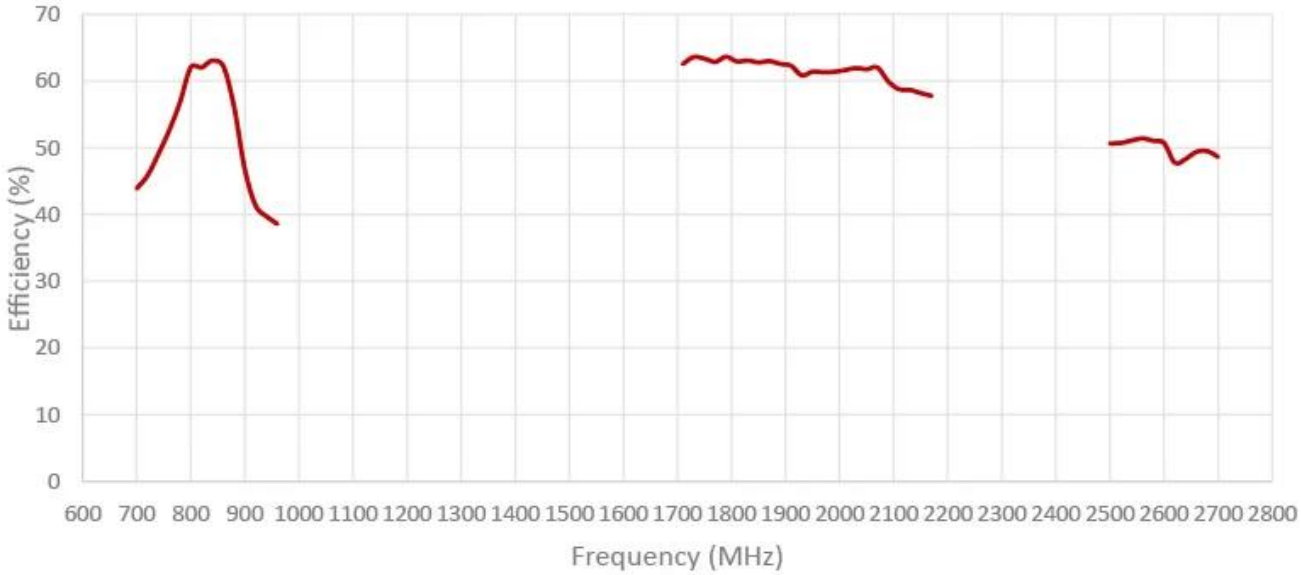
Cette gamme d'antenne est fabriquée sans matières dangereuses tout en maintenant une conformité totale avec **REACH et RoHS**.

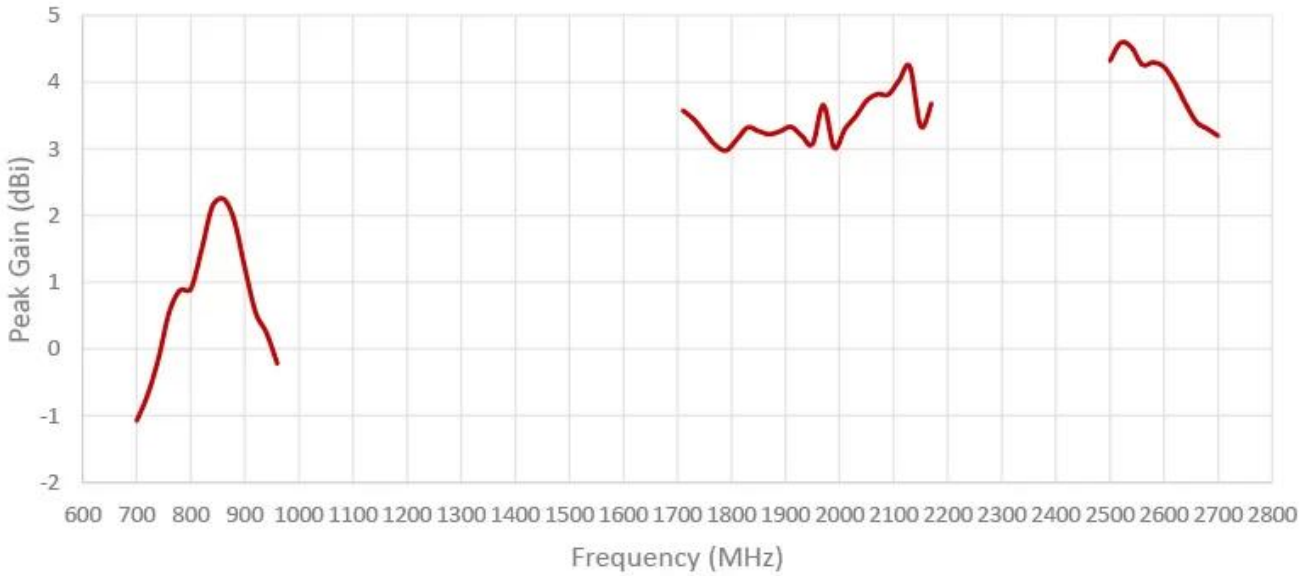
MESURES

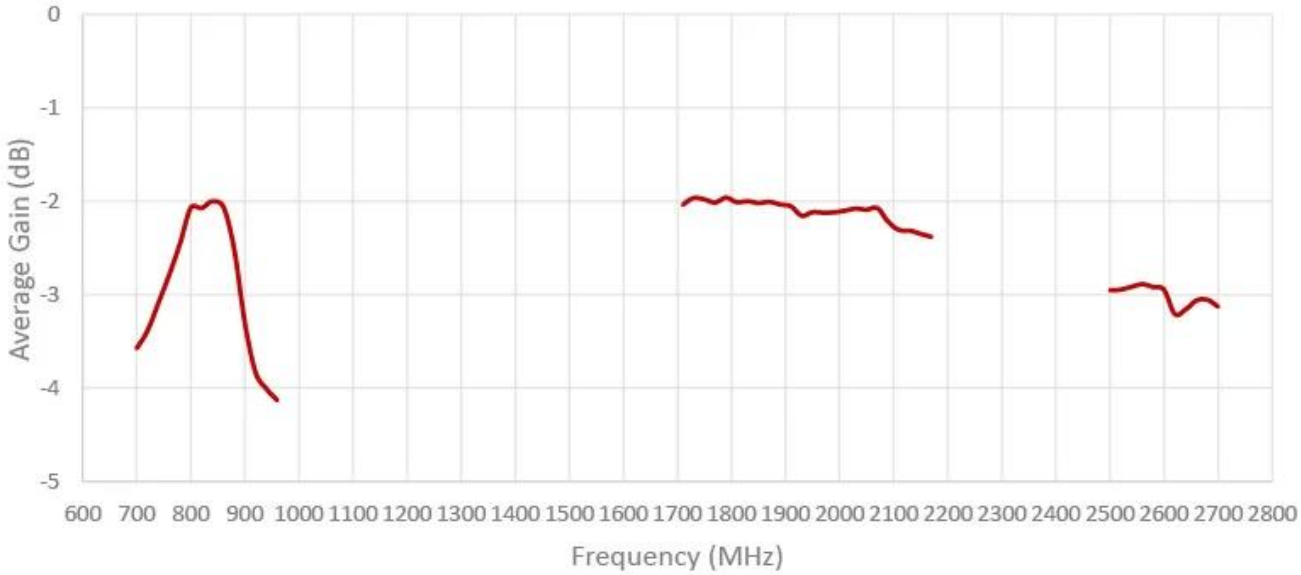
Câble 1 : 2G, 3G et 4G



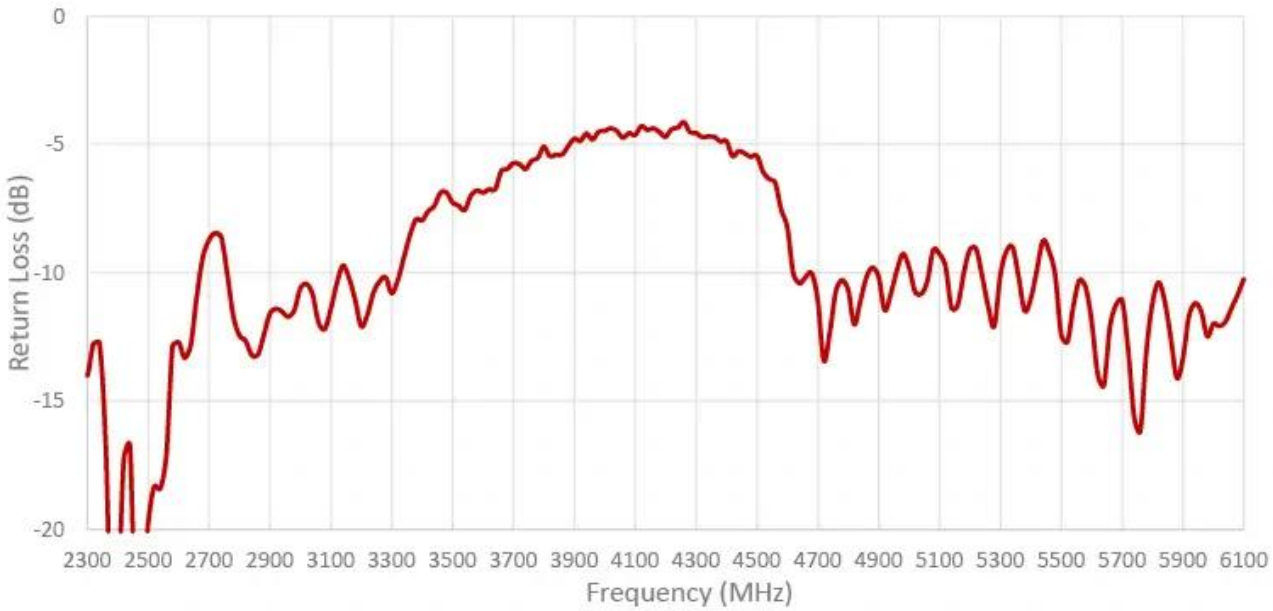


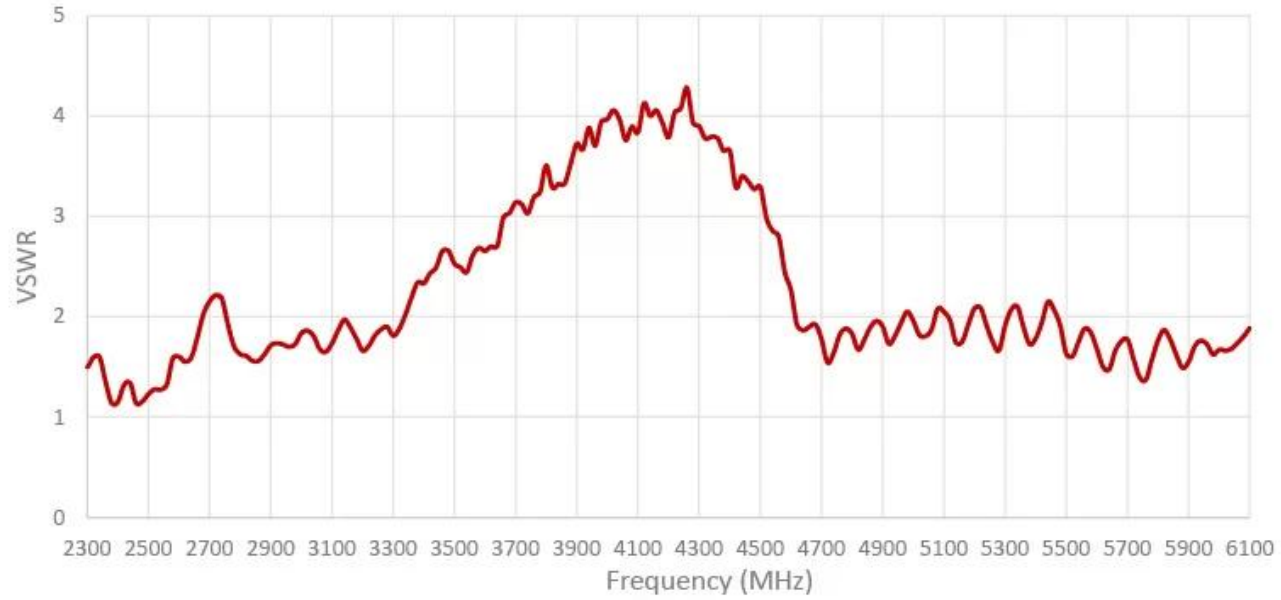

70
60
50
40
30
20
10
0
Efficiency (%)
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)

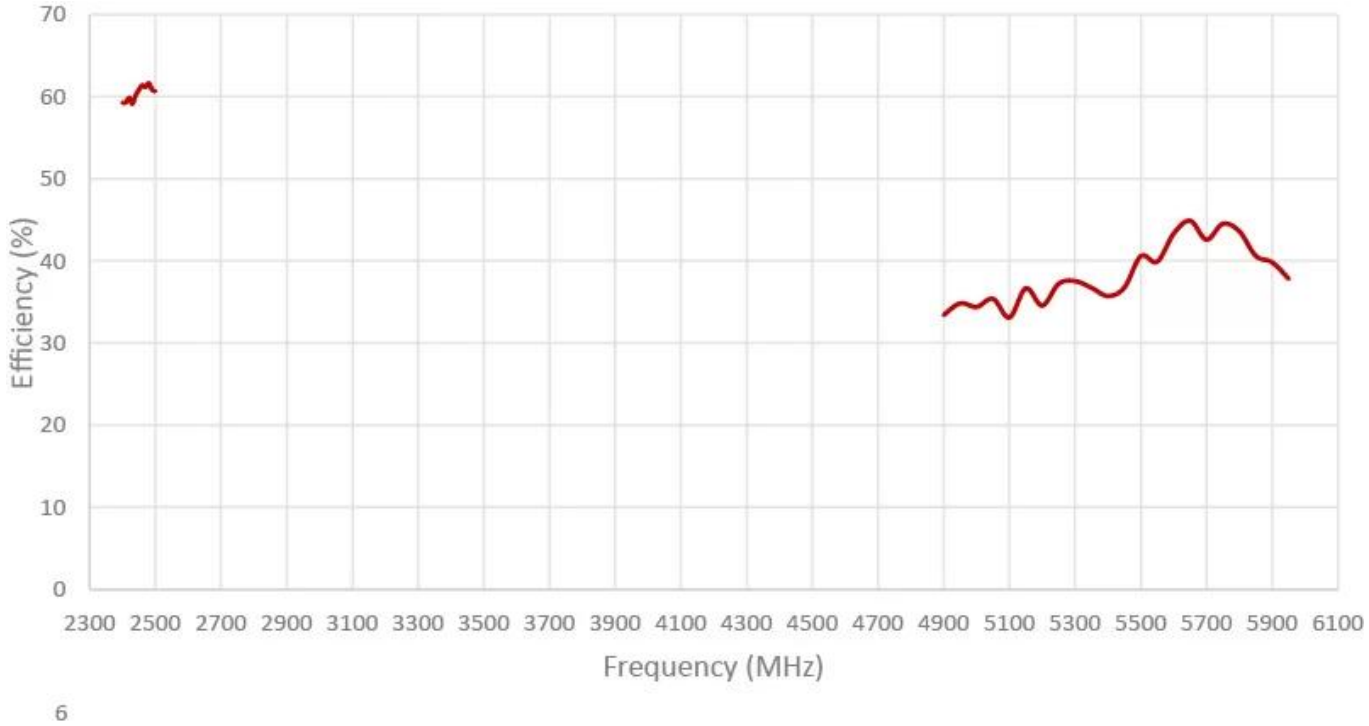

5
4
3
2
1
0
-1
-2
Peak Gain (dBi)
600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
Frequency (MHz)



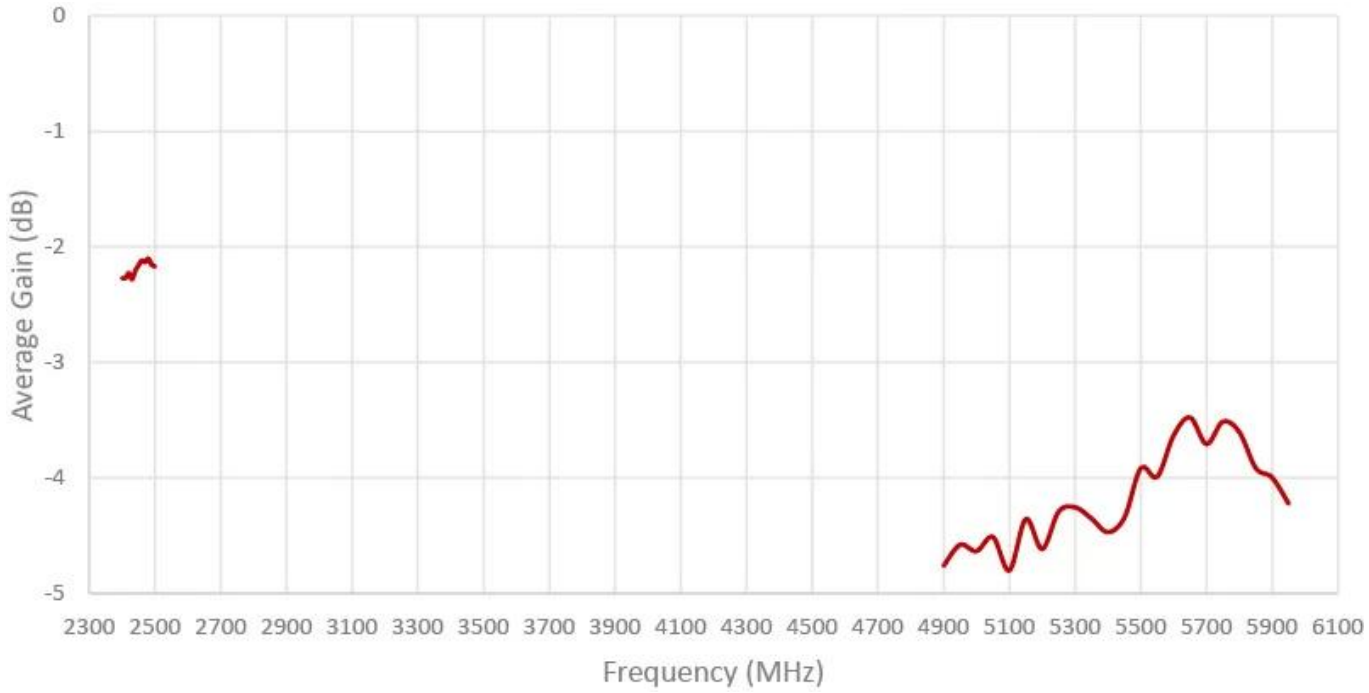
Câble 2 : 2.4/5GHz - WiFi / Bluetooth / Zigbee

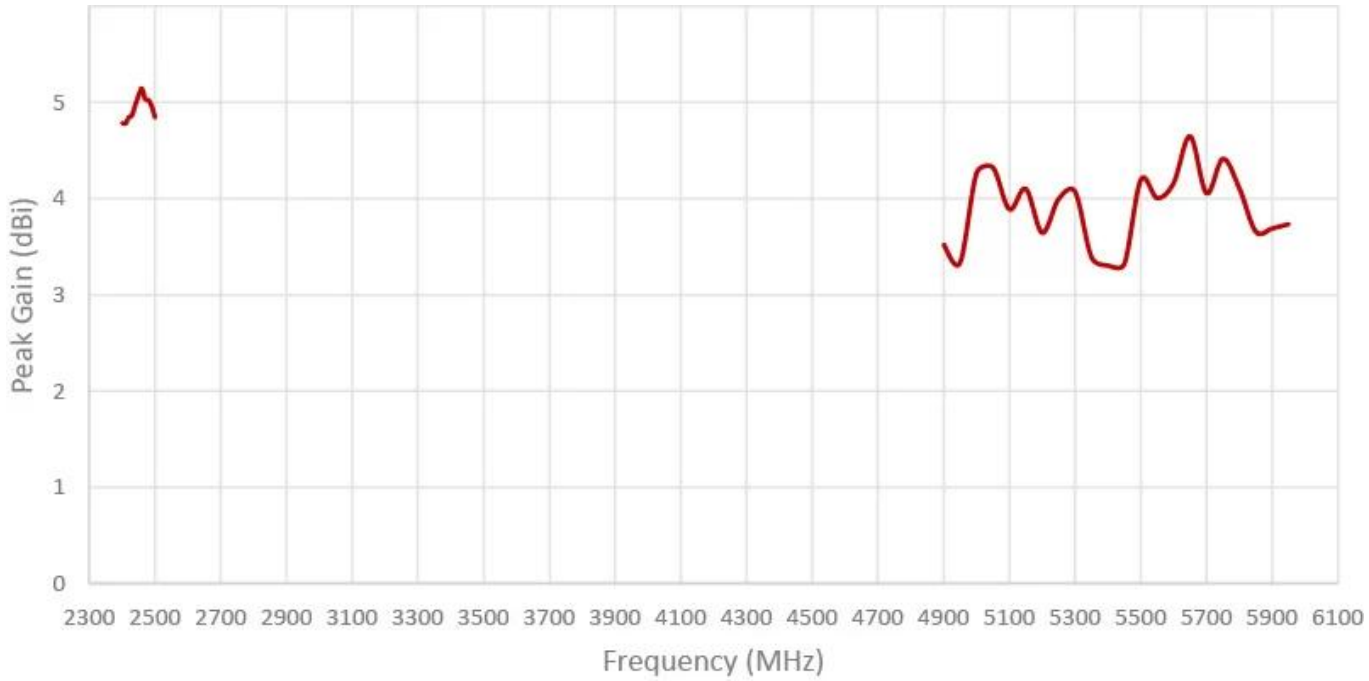


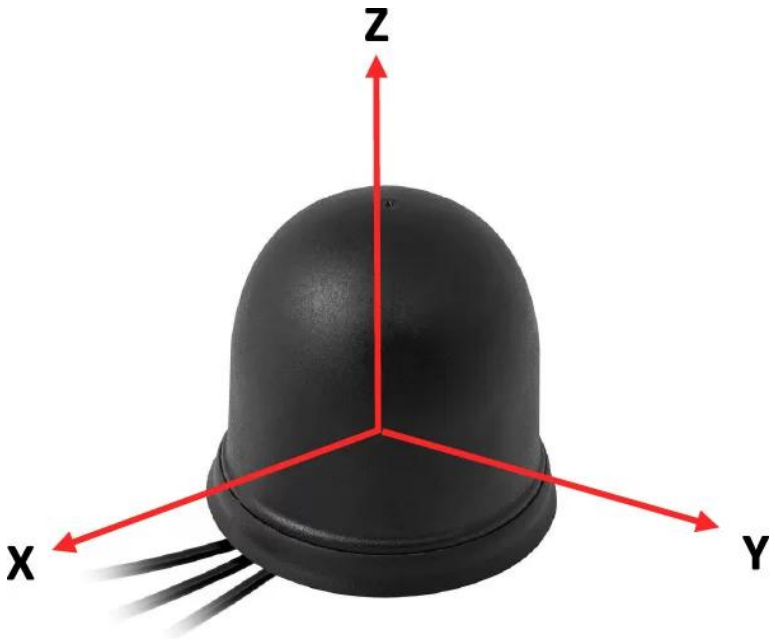

VSWR
0
1
2
3
4
5
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)


Efficiency (%)
0
10
20
30
40
50
60
70
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)

6

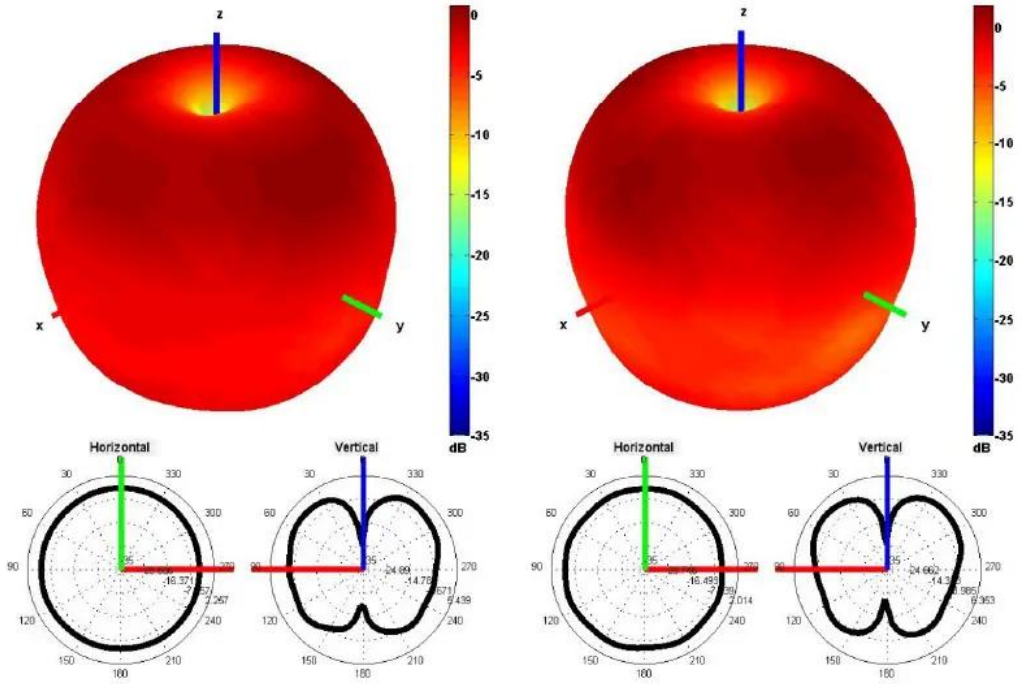

0
-1
-2
-3
-4
-5
Average Gain (dB)
2300 2500 2700 2900 3100 3300 3500 3700 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100
Frequency (MHz)


5
4
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)

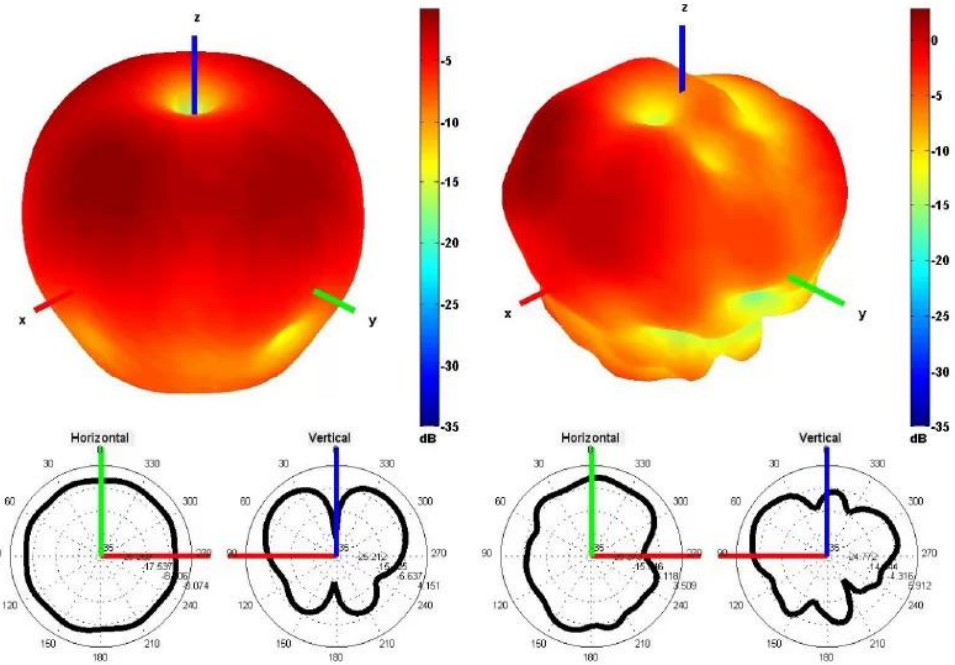


Radiation pattern reference

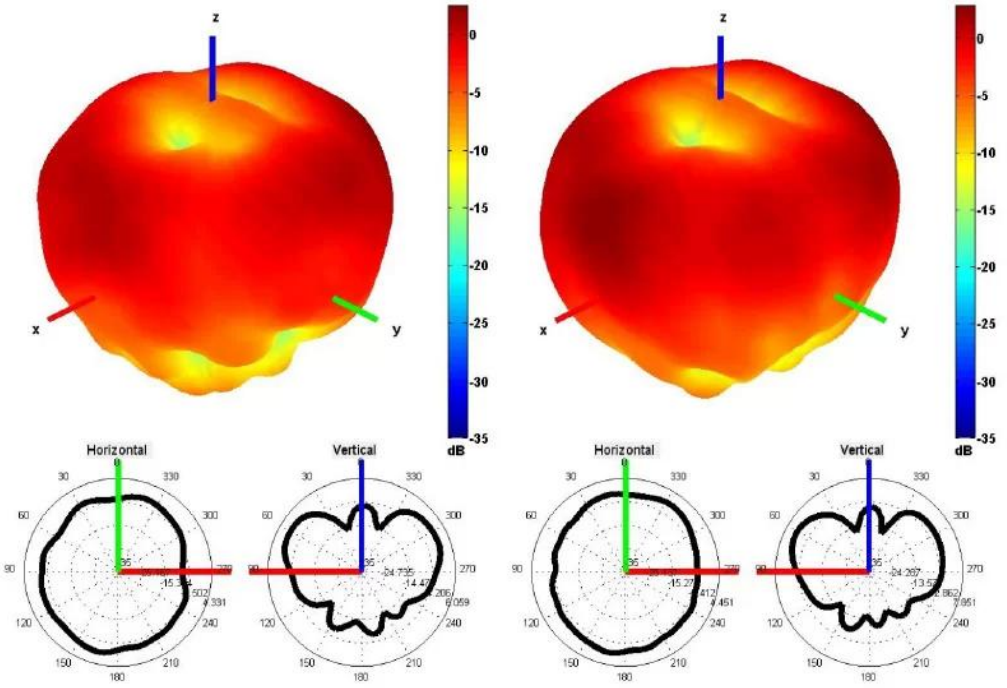
Câble 1 : 2G, 3G et 4G



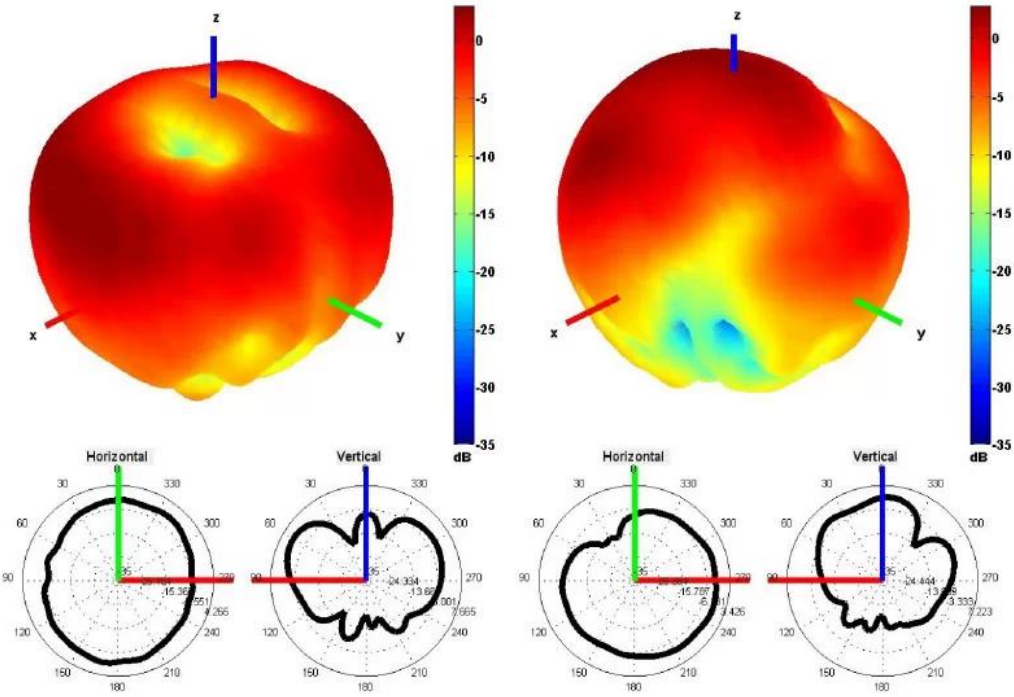
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

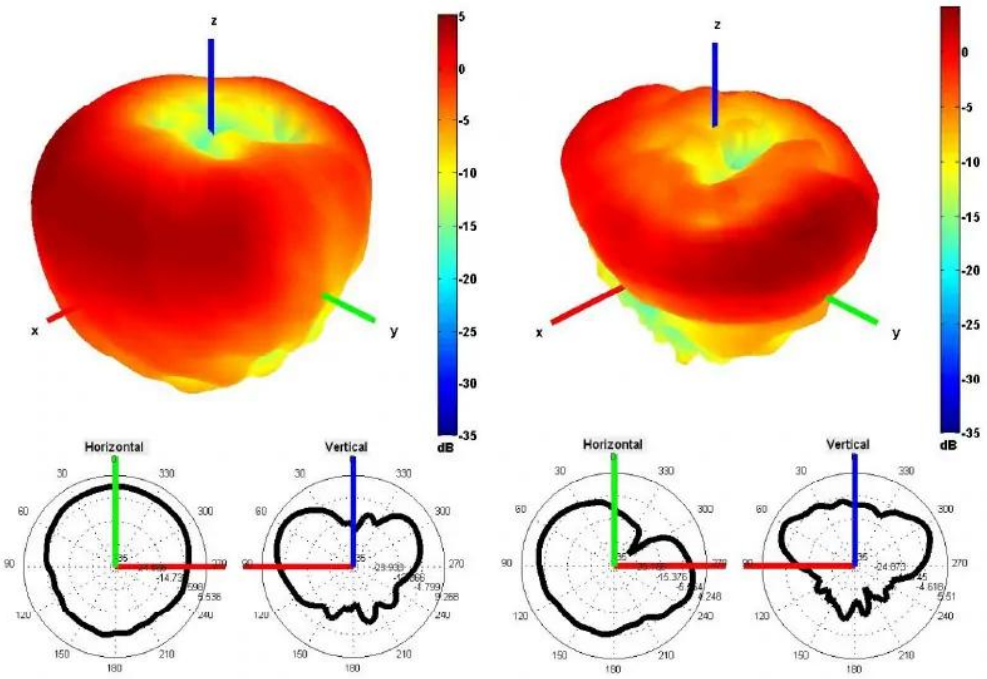


1850 and 1950 MHz Radiation pattern



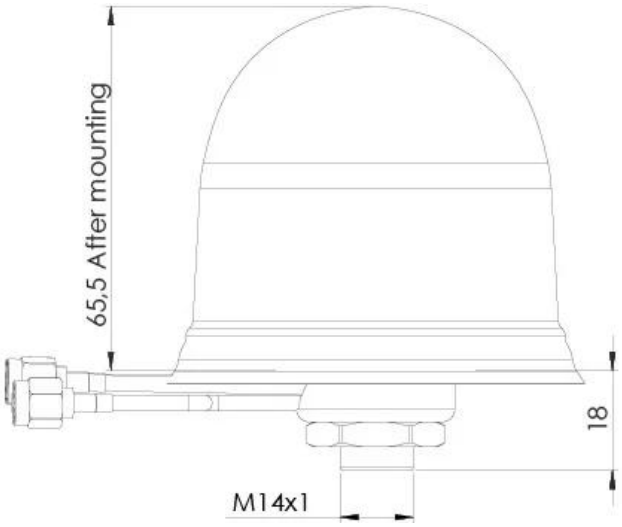
2100 and 2600 MHz Radiation pattern

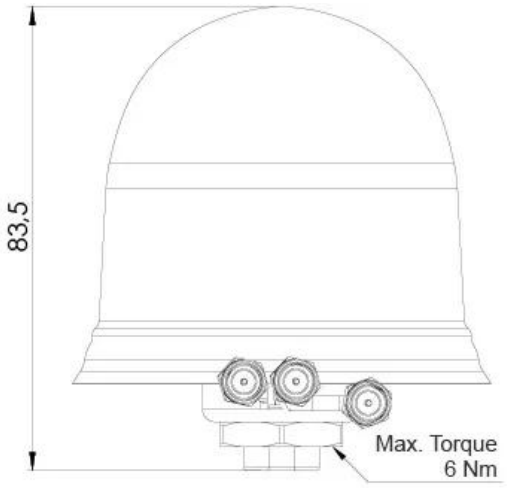
Câble 2 : 2.4/5GHz - WiFi / Bluetooth / Zigbee

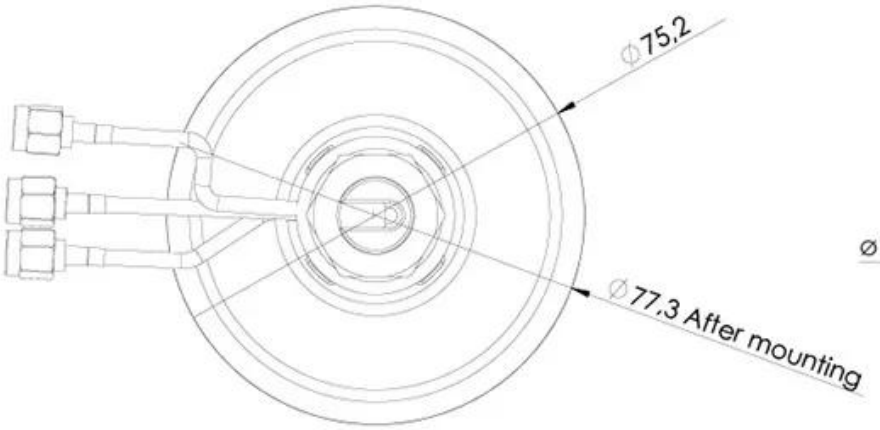


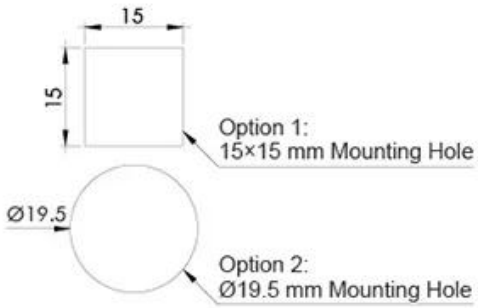
2450 and 5500 MHz Radiation pattern

SCHÉMAS


65,5 After mounting
18
M14x1


83,5
Max. Torque
6 Nm


Ø75,2
Ø77,3 After mounting


15
15
Option 1:
15×15 mm Mounting Hole
Ø19.5
Option 2:
Ø19.5 mm Mounting Hole