Product: LD LTE

Product Order Code:

BM-02070

Compact High Efficiency Water Chamber Antenna

LTE-4G, CELLULAR (2G, 3G)

- Rugged wideband body mounted antenna
- RoHS 2011/65/EU & RoHS3 (2015/863/EU compliant)
- Request samples for test & evaluation via enquiry@bloomice.com

Technical Data

Dimensions		122mm (Overall Height) x 57mm Diameter (Base)
Weight		112g (Excluding cable)
Construction Materials		PC/ABS UL94 V0 UV Stable
Mounting Arrangement		ABS Enclosure / ZAMAK Base Ground Plane Independent
Temperature Range		-40°C to +85°C
Protection Class		IP67 / IK09 (IEC 60529)
Cellular LTE / 2G / 3G		
Frequency Range	LTE 700 + GSM 900: GSM 1800: UMTS: LTE (High):	700 - 960 MHz 1710 - 1880 MHz 1920 - 2170 MHz 2300 - 2655MHz
Impedance		50 Ohm
Polarisation		Linear
Radiation Pattern		Omni-Directional
Max Power @ 30°C	LTE 700 & GSM 900: GSM 1800: UMTS: LTE (High):	35 Watts @ 790-960 MHz 35 Watts @ 1710-1880 MHz 35 Watts @ 1920-2170 MHz 35 Watts @ 2300-2700 MHz
Return loss (VSWR)		≤ 2.1:1 (All Featured Bands)
Cable types Available		LL100 50 Ohm Low Loss
Cable Length		According to customer specification
Connector		According to customer specification
Test & Measurement Conditions		Free Space / 500mm LL100 Cable

dBi: Referenced to an isotropic radiator

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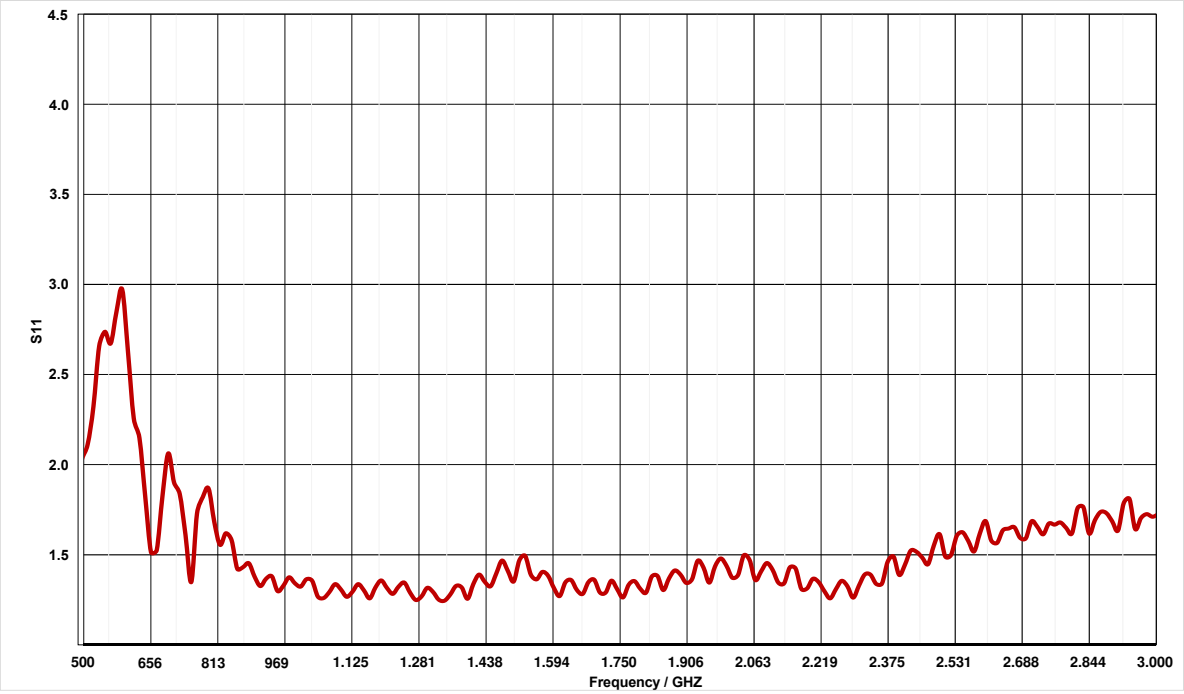
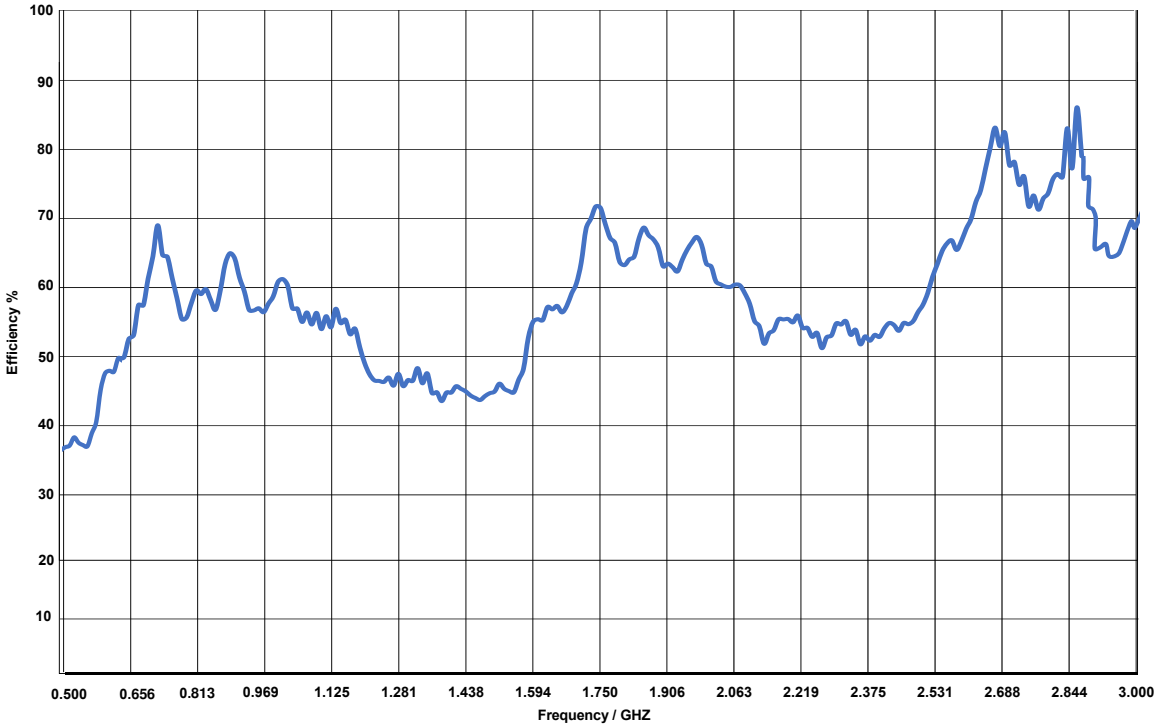
Typical VSWR Data (LTE)



Radiated Efficiency (LTE)



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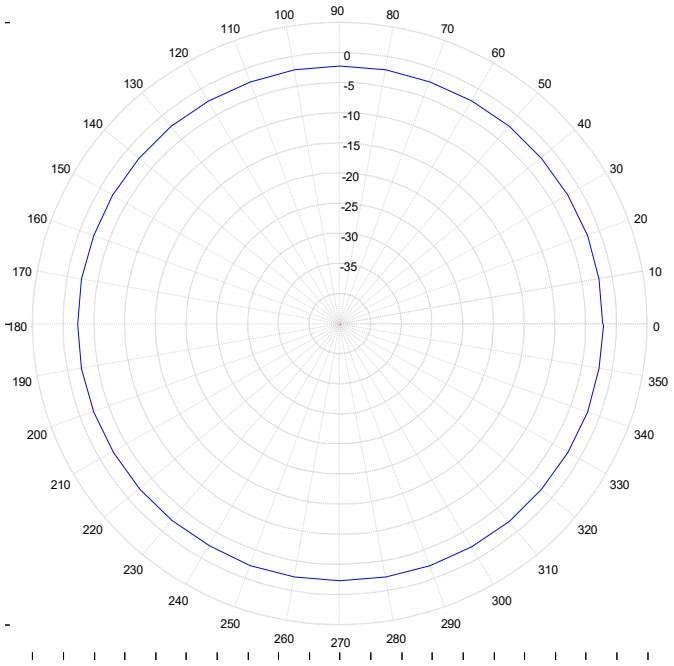
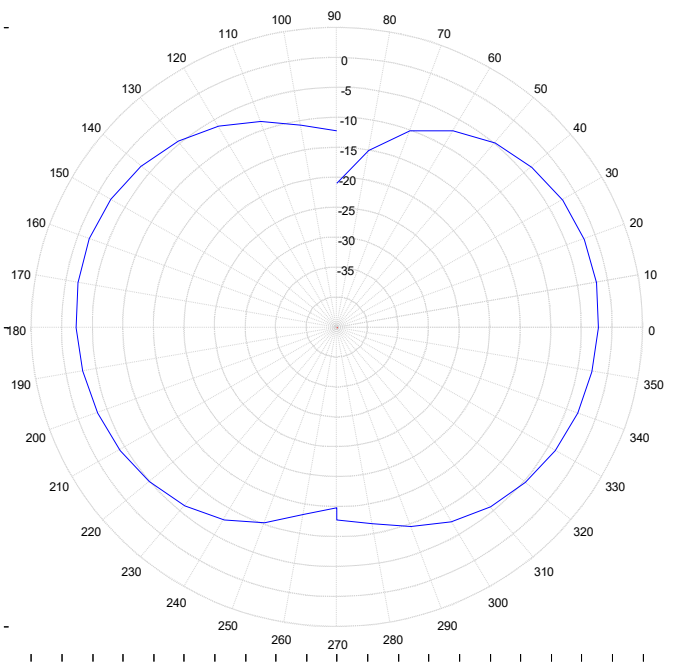
Radiation Patterns



Name: .
Date/Time = 12/12/2023 14:09:56
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

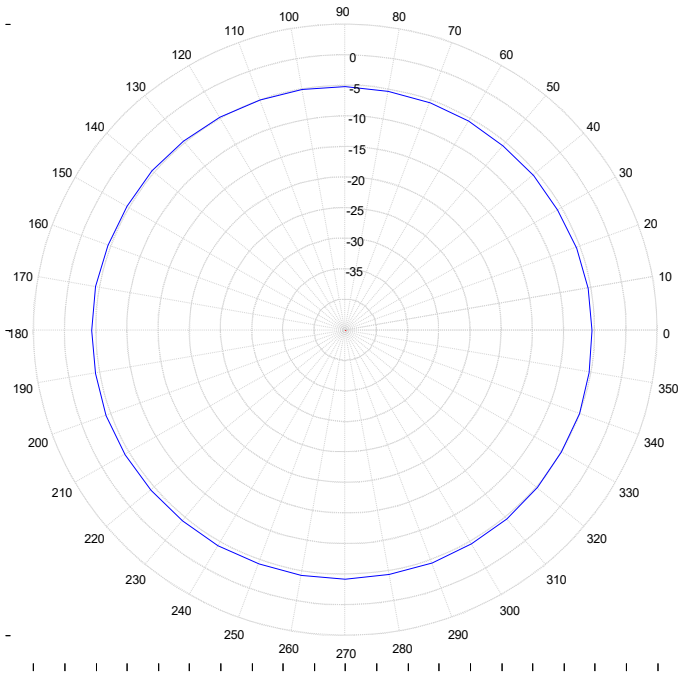
Frequency: 693 MHz
MAX dB= -2.226 @ 330 Deg.
MIN dB= -2.415 @ 240 Deg.
dB Min/Max Delta = 0.1892 dB



Name: .
Date/Time = 12/12/2023 14:17:19
Plot Scale: 5 dB/Div
Beamwidth: 92.22 Degrees

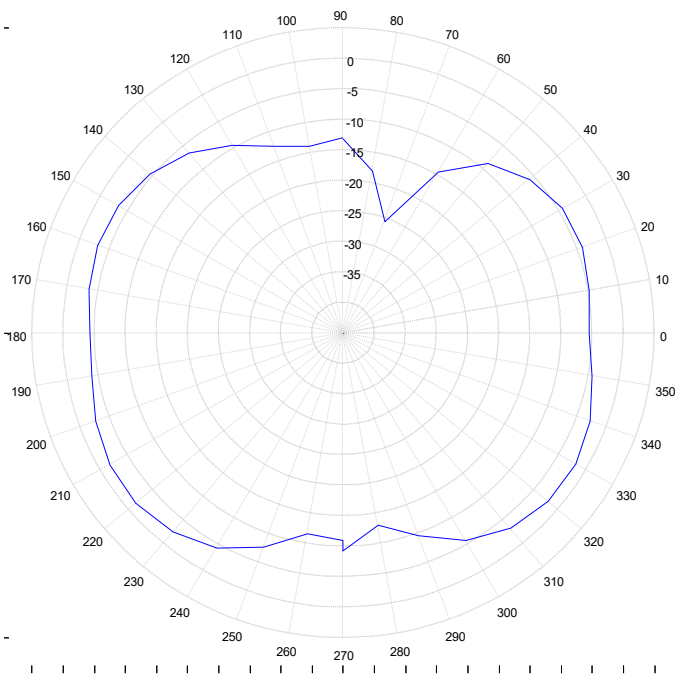
Frequency: 693 MHz
MAX dB= -1.909 @ -200 Deg.
MIN dB= -20.99 @ 90 Deg.
dB Min/Max Delta = 19.083 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 690MHZ



Name: .
Date/Time = 12/12/2023 14:10:48
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

Frequency: 854.25 MHz
MAX dB= -4.217 @ 220 Deg.
MIN dB= -5.736 @ 40 Deg.
dB Min/Max Delta = 1.5193 dB



Name: .
Date/Time = 12/12/2023 14:17:41
Plot Scale: 5 dB/Div
Beamwidth: 101.0 Degrees

Frequency: 854.25 MHz
MAX dB= -1.572 @ -140 Deg.
MIN dB= -25.59 @ 70 Deg.
dB Min/Max Delta = 24.021 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH – 850 MHZ

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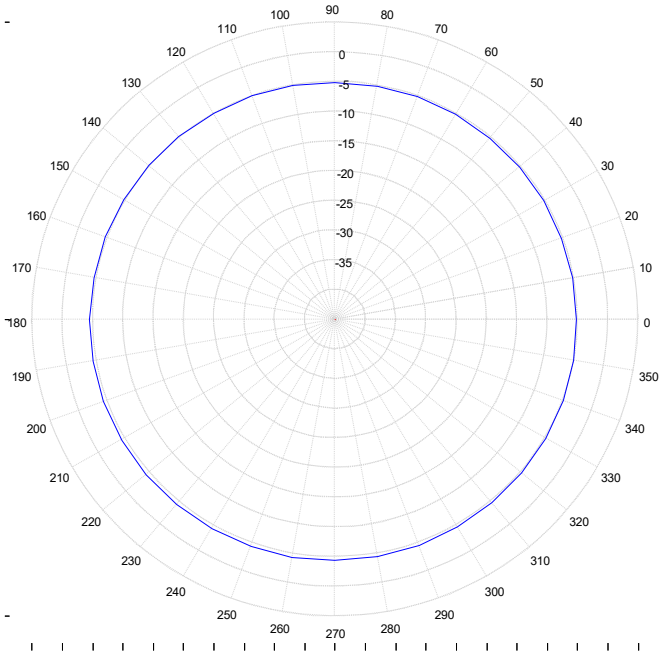
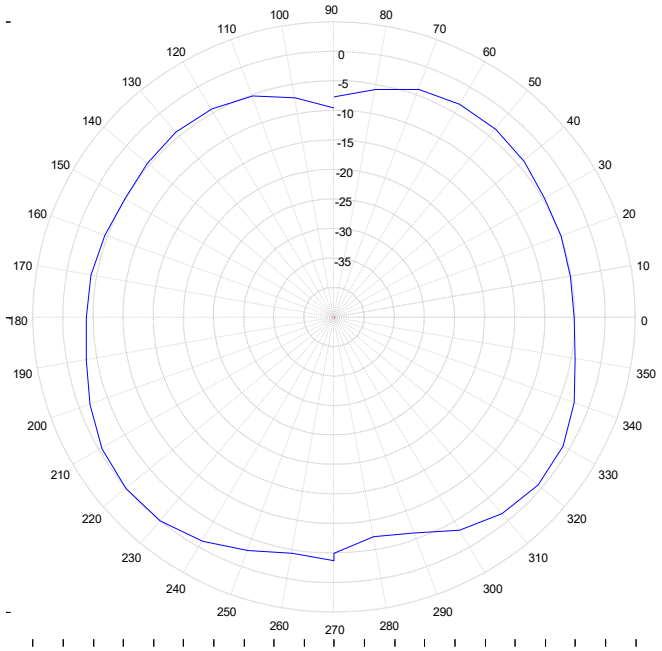
Radiation Patterns



Name: .
Date/Time = 12/12/2023 14:11:22
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

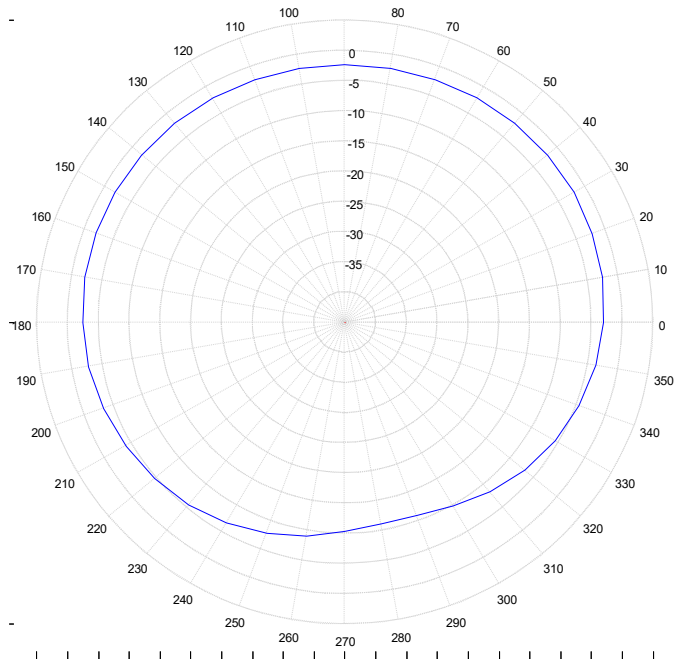
Frequency: 951 MHz
MAX dB= -4.305 @ 230 Deg.
MIN dB= -5.231 @ 50 Deg.
dB Min/Max Delta = 0.9254 dB



Name: .
Date/Time = 12/12/2023 14:18:14
Plot Scale: 5 dB/Div
Beamwidth: 56.96 Degrees

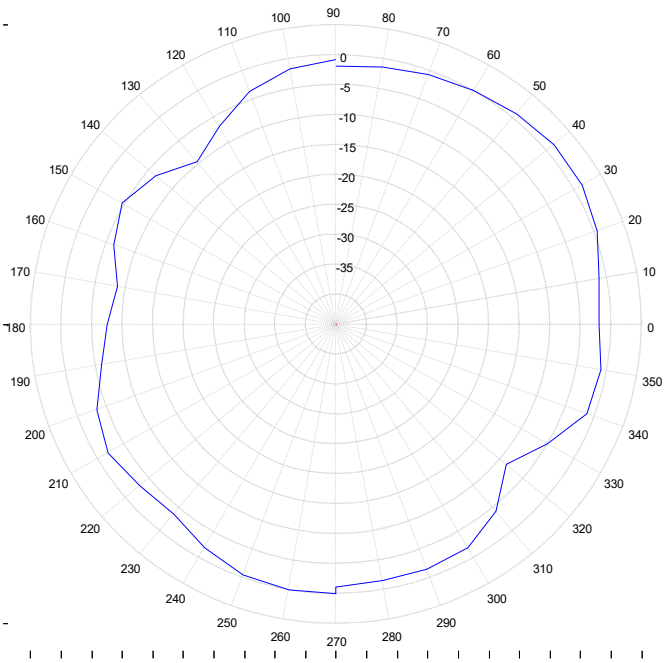
Frequency: 918.75 MHz
MAX dB= 0.1240 @ -140 Deg.
MIN dB= -9.482 @ -270 Deg.
dB Min/Max Delta = 9.6068 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 960MHZ



Name: .
Date/Time = 12/12/2023 14:12:18
Plot Scale: 5 dB/Div
Beamwidth: 245.6 Degrees

Frequency: 1714.25 MHz
MAX dB= -1.925 @ 150 Deg.
MIN dB= -11.10 @ 280 Deg.
dB Min/Max Delta = 9.1832 dB



Name: .
Date/Time = 12/12/2023 14:20:27
Plot Scale: 5 dB/Div
Beamwidth: 73.15 Degrees

Frequency: 1703.5 MHz
MAX dB= 1.5492 @ 40 Deg.
MIN dB= -9.522 @ -230 Deg.
dB Min/Max Delta = 11.071 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 1710MHZ

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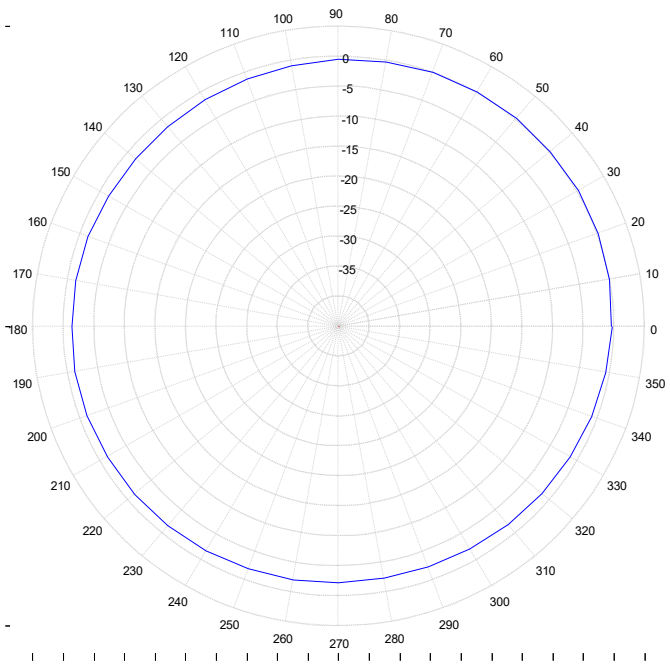
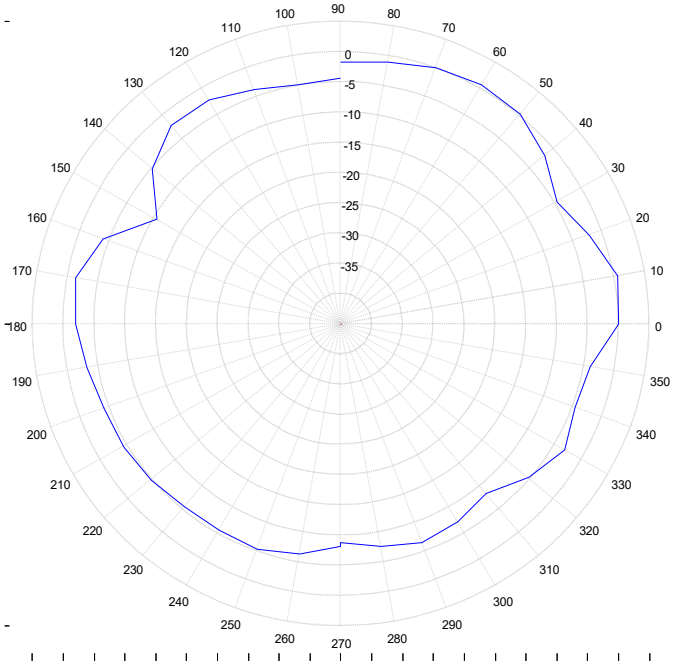
Radiation Patterns



Name: .
Date/Time = 12/12/2023 14:12:43
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

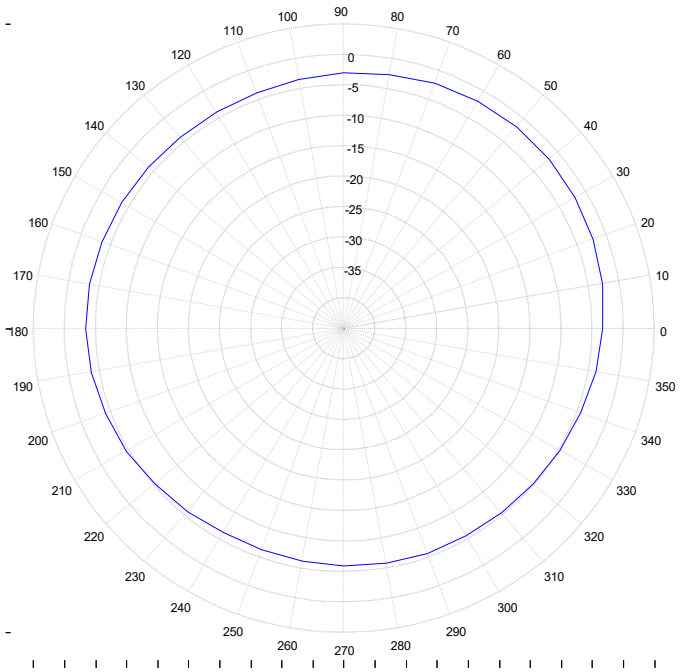
Frequency: 1907.75 MHz
MAX dB= 0.2232 @ 50 Deg.
MIN dB= -2.353 @ 280 Deg.
dB Min/Max Delta = 2.5770 dB



Name: .
Date/Time = 12/12/2023 14:21:16
Plot Scale: 5 dB/Div
Beamwidth: 54.21 Degrees

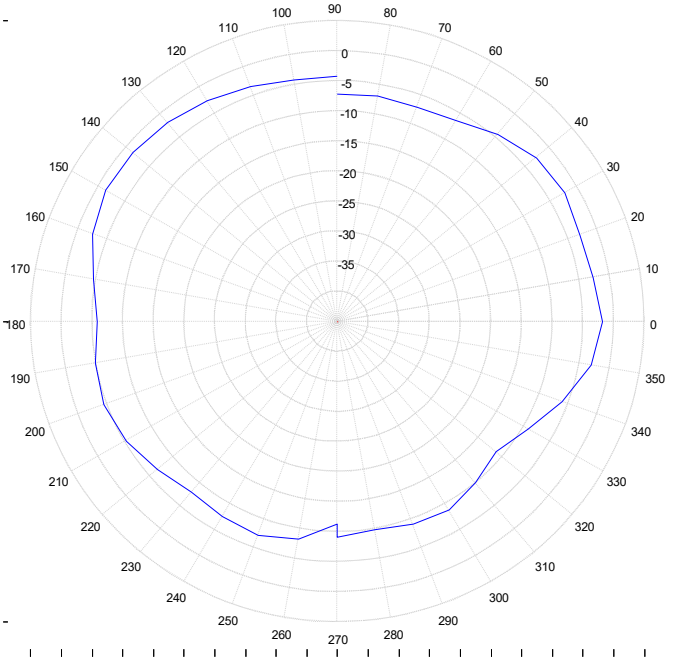
Frequency: 1907.75 MHz
MAX dB= 0.6571 @ 60 Deg.
MIN dB= -10.52 @ -210 Deg.
dB Min/Max Delta = 11.183 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 1900MHZ



Name: .
Date/Time = 12/12/2023 14:13:21
Plot Scale: 5 dB/Div
Beamwidth: 240.9 Degrees

Frequency: 2176.5 MHz
MAX dB= -1.795 @ 50 Deg.
MIN dB= -6.290 @ 250 Deg.
dB Min/Max Delta = 4.4948 dB



Name: .
Date/Time = 12/12/2023 14:22:07
Plot Scale: 5 dB/Div
Beamwidth: 69.17 Degrees

Frequency: 2176.5 MHz
MAX dB= -1.349 @ -210 Deg.
MIN dB= -11.35 @ -40 Deg.
dB Min/Max Delta = 10.002 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 2170MHZ

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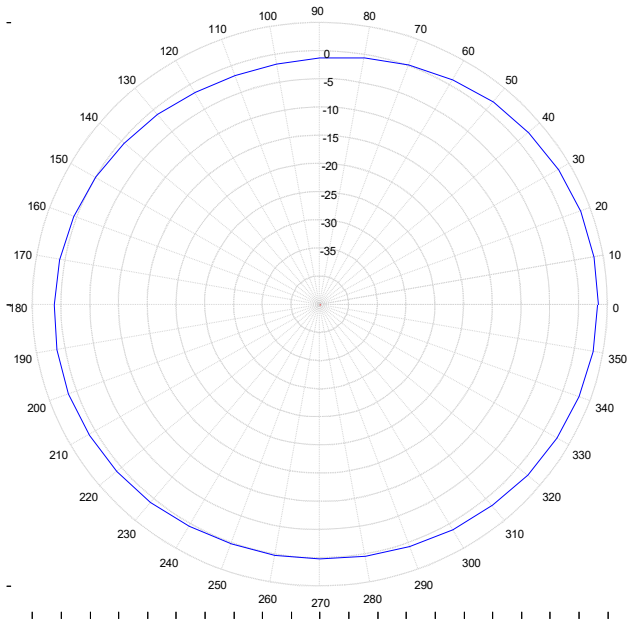
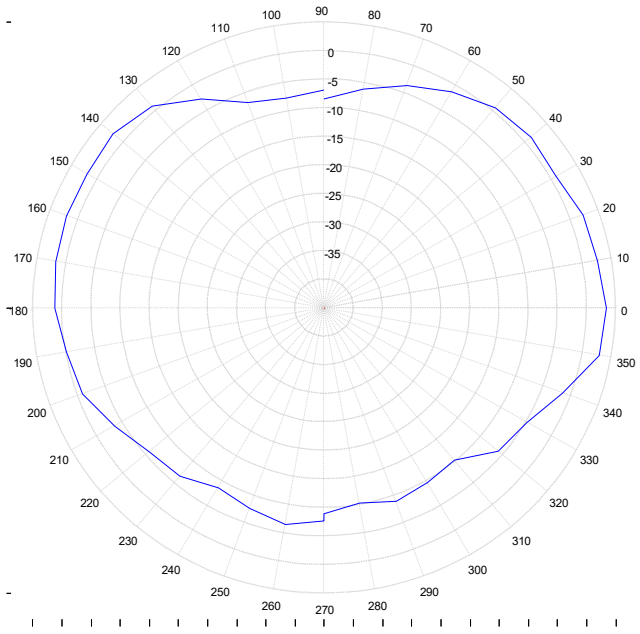
Radiation Patterns



Name: .
Date/Time = 12/12/2023 14:15:38
Plot Scale: 5 dB/Div
Beamwidth: 148.8 Degrees

Frequency: 2606.5 MHz
MAX dB= 3.3074 @ 10 Deg.
MIN dB= -1.798 @ 110 Deg.
dB Min/Max Delta = 5.1055 dB



Name: .
Date/Time = 12/12/2023 14:23:00
Plot Scale: 5 dB/Div
Beamwidth: 67.66 Degrees

Frequency: 2606.5 MHz
MAX dB= 3.2934 @ -0 Deg.
MIN dB= -10.26 @ -50 Deg.
dB Min/Max Delta = 13.560 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 2600MHZ

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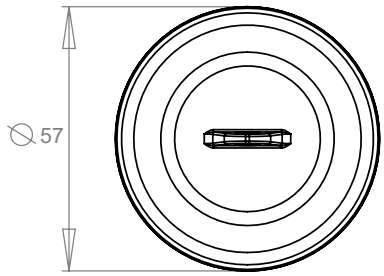
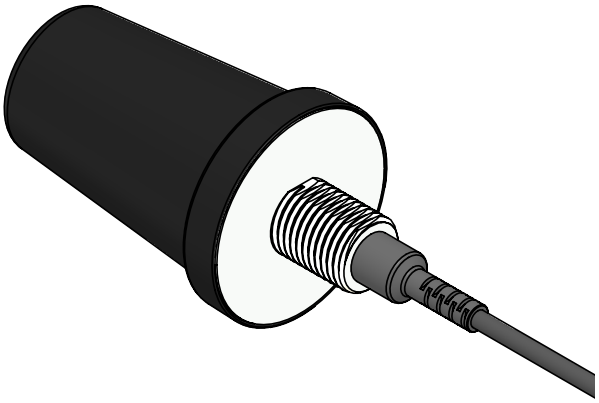
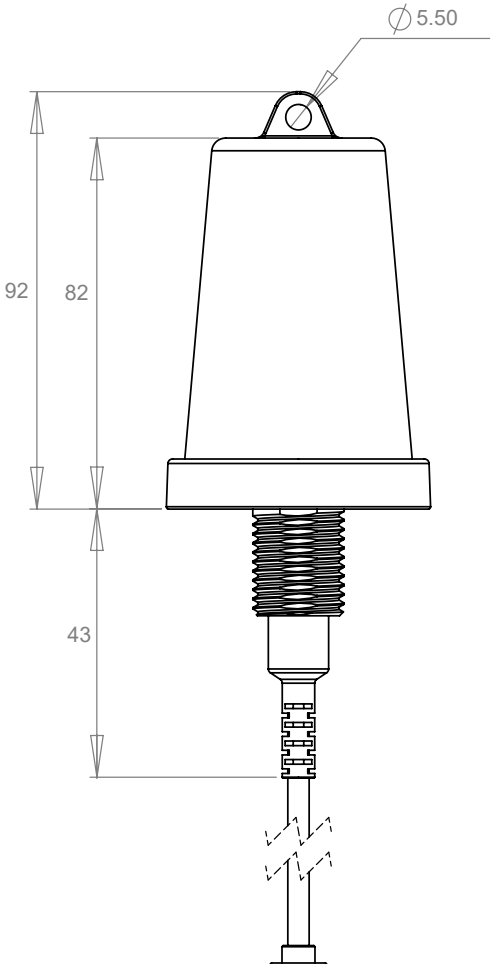
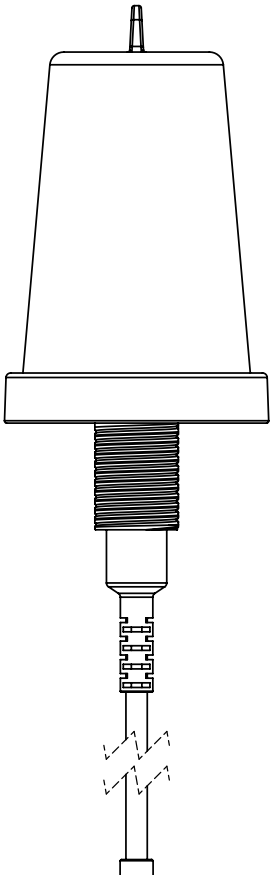
CAD Data









1. Connector type to customer specification
2. Cable type is LL195. Length according to customer specification.
3. Dimensions in millimetres