Product: NANO LTE

Product Order Code:

BM-02055

Rugged High Efficiency Boundary Box 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		97.5mm (Overall Height) x 127mm Diameter (Base Max.)
Weight		133g (Excluding Cable)
Construction Materials		PC/ABS UL94 V0 UV Stable
Mounting Arrangement		ABS 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 (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		300mm x 300mm Ground Plane / 500mm LL100 Cable

dBi: Referenced to an isotropic radiator

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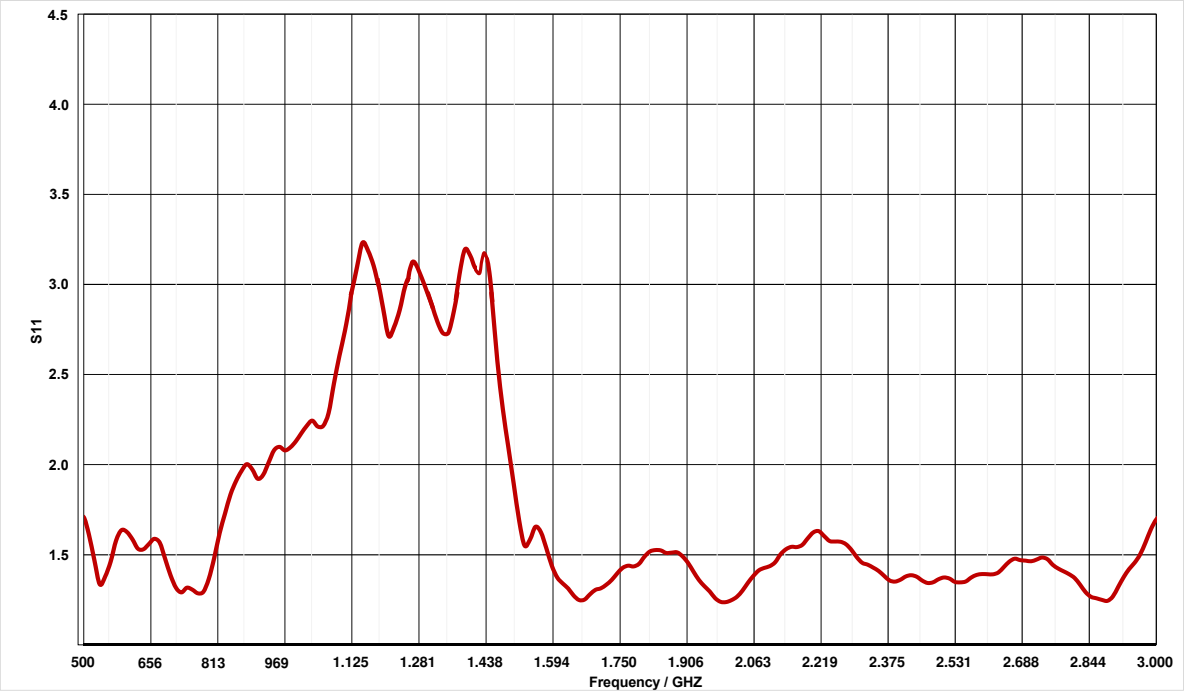
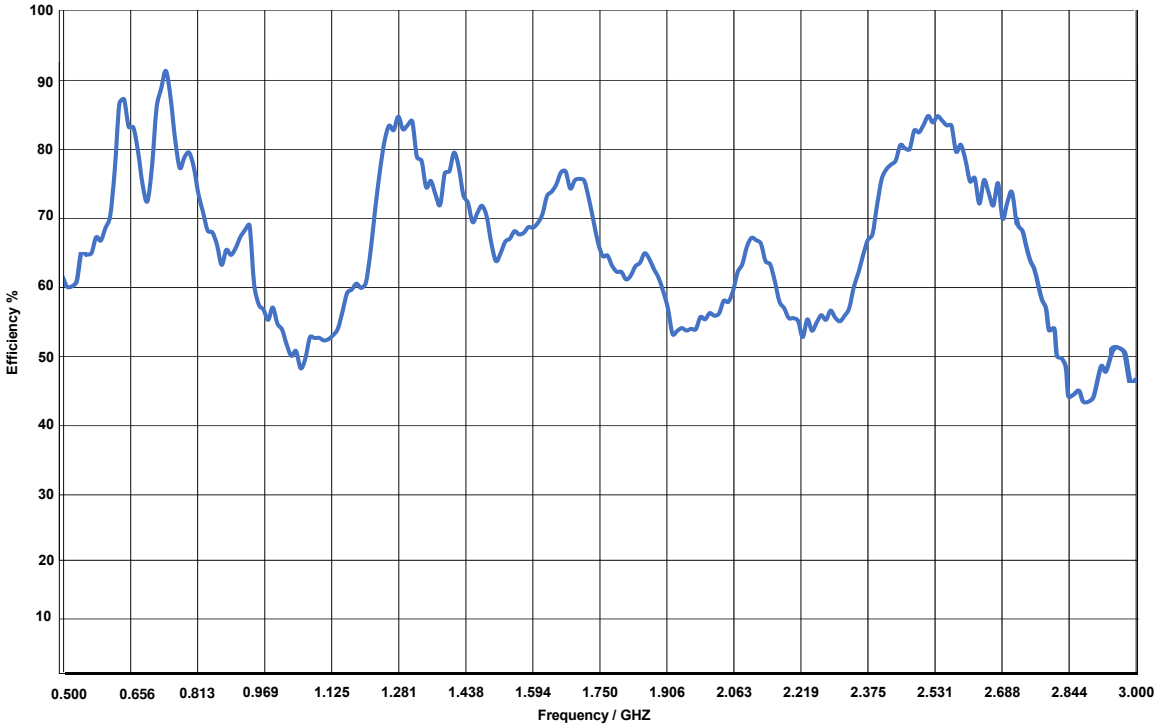
Typical VSWR Data (LTE)



Radiated Efficiency (LTE)



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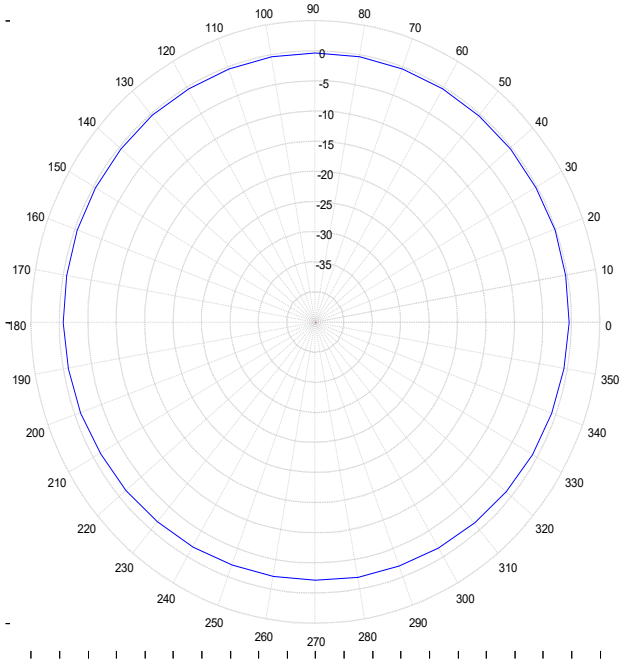
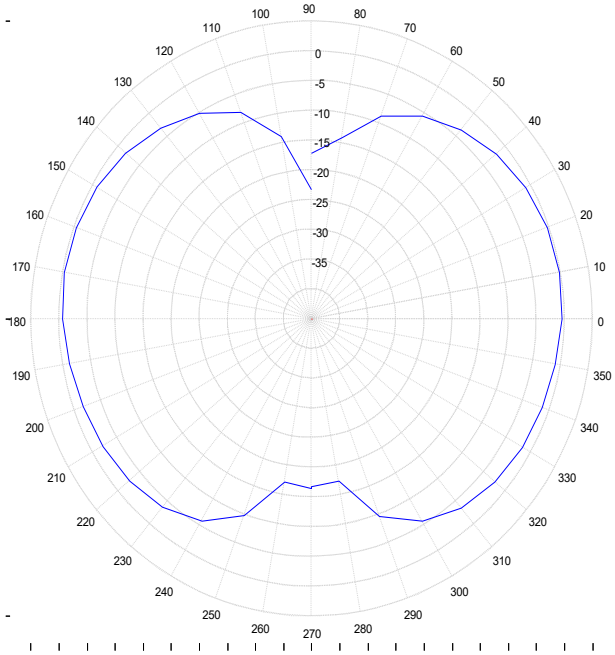
Radiation Patterns



Name: .
Date/Time = 19/10/2023 12:27:27
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

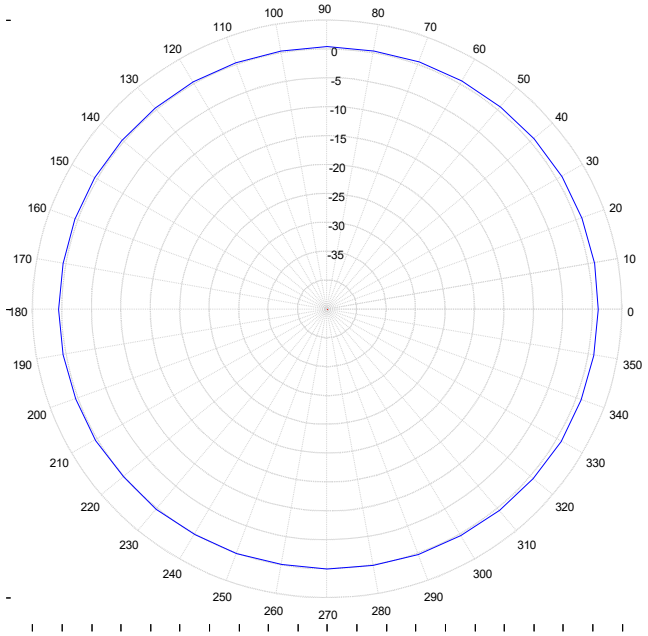
Frequency: 693 MHz
MAX dB= -0.263 @ 40 Deg.
MIN dB= -2.168 @ 270 Deg.
dB Min/Max Delta = 1.9045 dB



Name: .
Date/Time = 19/10/2023 12:28:08
Plot Scale: 5 dB/Div
Beamwidth: 94.67 Degrees

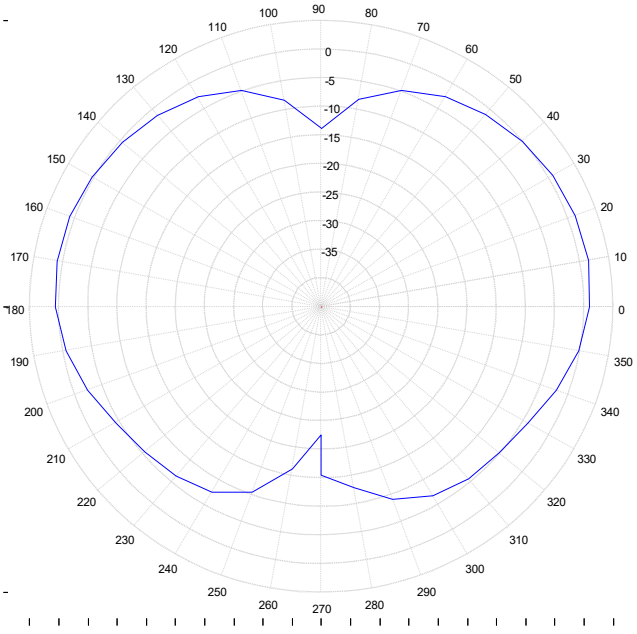
Frequency: 693 MHz
MAX dB= -0.206 @ 10 Deg.
MIN dB= -23.34 @ -270 Deg.
dB Min/Max Delta = 23.138 dB

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



Name: .
Date/Time = 19/10/2023 12:30:03
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

Frequency: 800.5 MHz
MAX dB= 0.9696 @ 10 Deg.
MIN dB= -0.099 @ 260 Deg.
dB Min/Max Delta = 1.0687 dB



Name: .
Date/Time = 19/10/2023 12:30:45
Plot Scale: 5 dB/Div
Beamwidth: 68.92 Degrees

Frequency: 800.5 MHz
MAX dB= 1.4566 @ 10 Deg.
MIN dB= -22.55 @ -90 Deg.
dB Min/Max Delta = 24.010 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH – 800 MHZ

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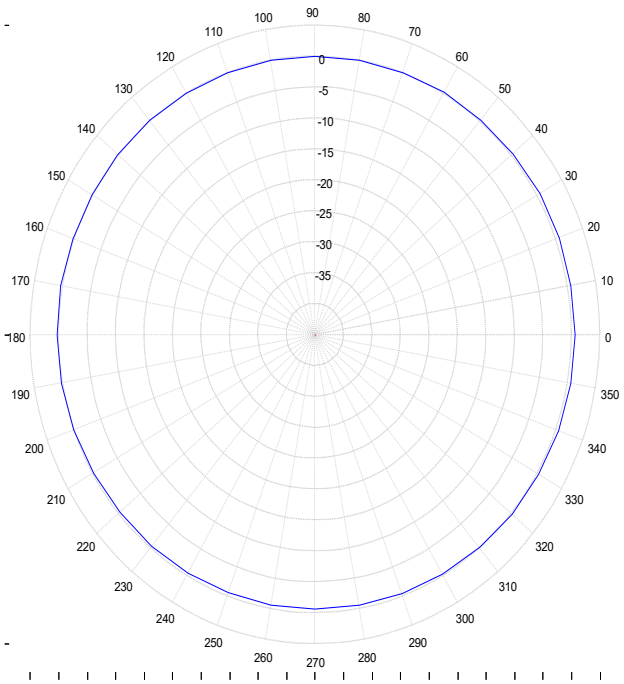
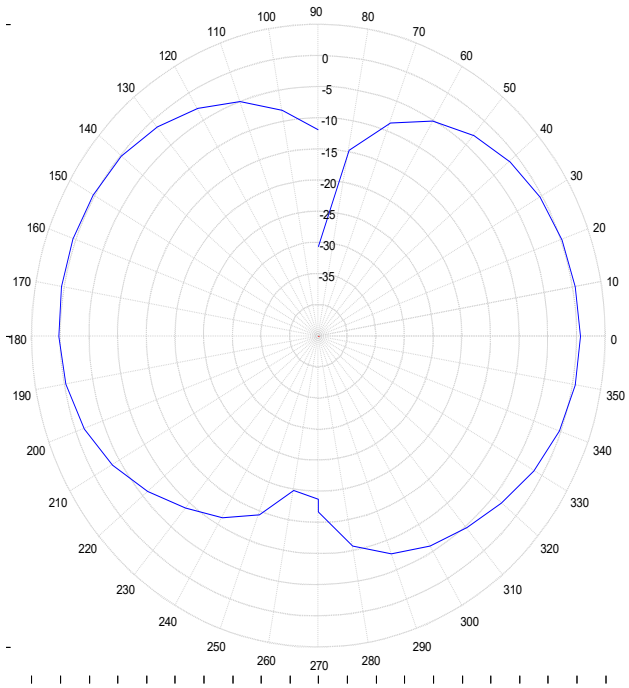
Radiation Patterns



Name: .
Date/Time = 19/10/2023 12:31:17
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

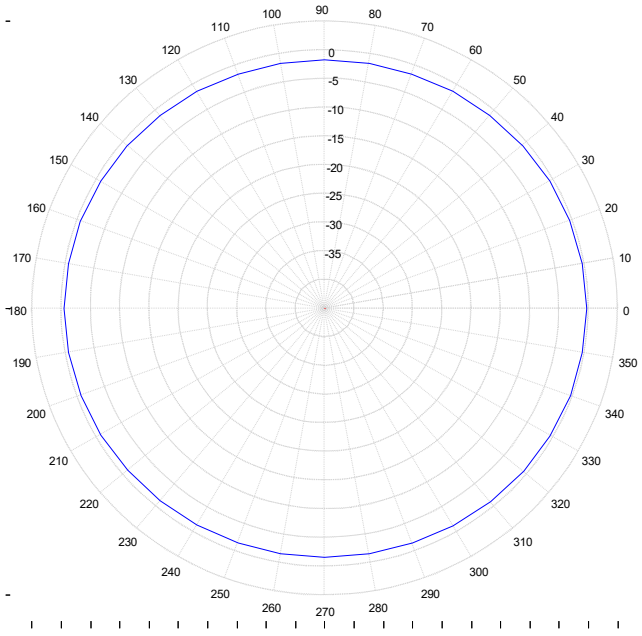
Frequency: 908 MHz
MAX dB= 0.5864 @ 10 Deg.
MIN dB= -0.664 @ 260 Deg.
dB Min/Max Delta = 1.2507 dB



Name: .
Date/Time = 19/10/2023 12:32:03
Plot Scale: 5 dB/Div
Beamwidth: 80.55 Degrees

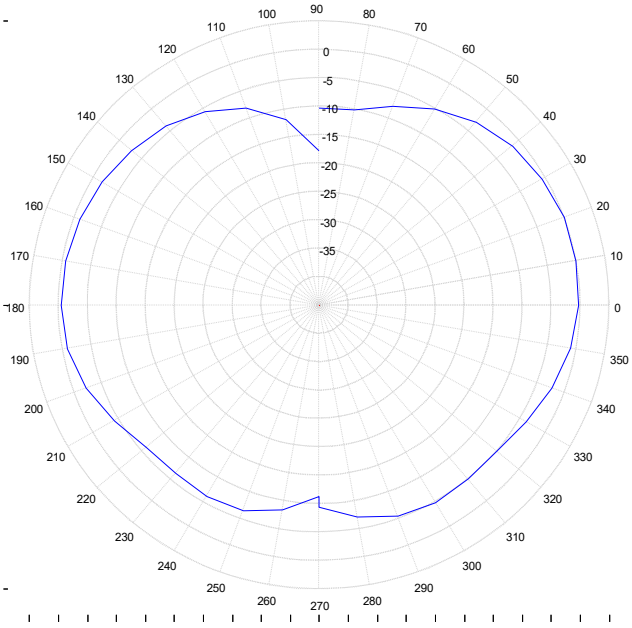
Frequency: 908 MHz
MAX dB= 0.5584 @ -0 Deg.
MIN dB= -30.65 @ 90 Deg.
dB Min/Max Delta = 31.216 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 900MHZ



Name: .
Date/Time = 19/10/2023 12:02:36
Plot Scale: 5 dB/Div
Beamwidth: 360 Degrees

Frequency: 961.75 MHz
MAX dB= -0.342 @ 350 Deg.
MIN dB= -1.712 @ 90 Deg.
dB Min/Max Delta = 1.3697 dB



Name: .
Date/Time = 19/10/2023 12:03:27
Plot Scale: 5 dB/Div
Beamwidth: 74.83 Degrees

Frequency: 961.75 MHz
MAX dB= -0.044 @ 10 Deg.
MIN dB= -17.86 @ -270 Deg.
dB Min/Max Delta = 17.817 dB

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

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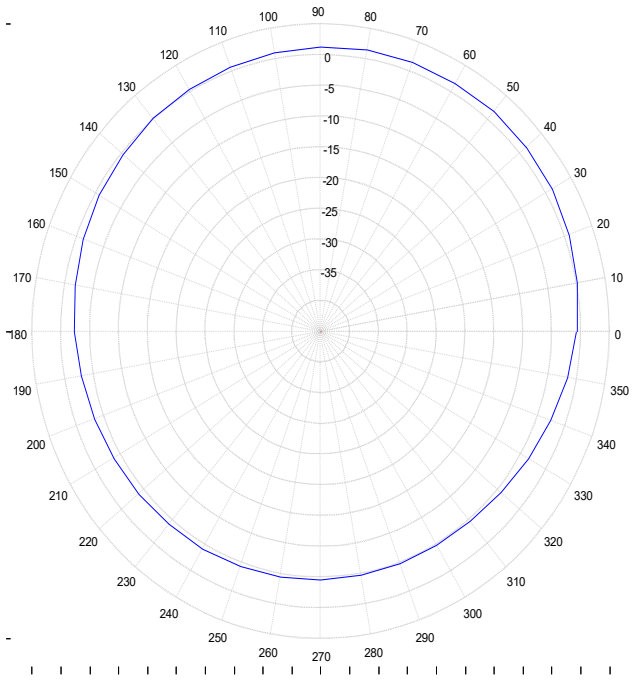
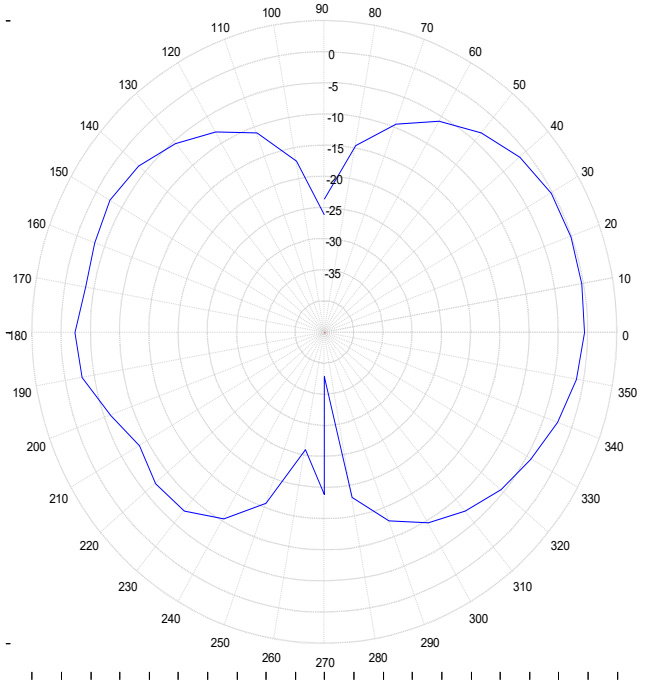
Radiation Patterns



Name: .
Date/Time = 19/10/2023 12:34:18
Plot Scale: 5 dB/Div
Beamwidth: 169.4 Degrees

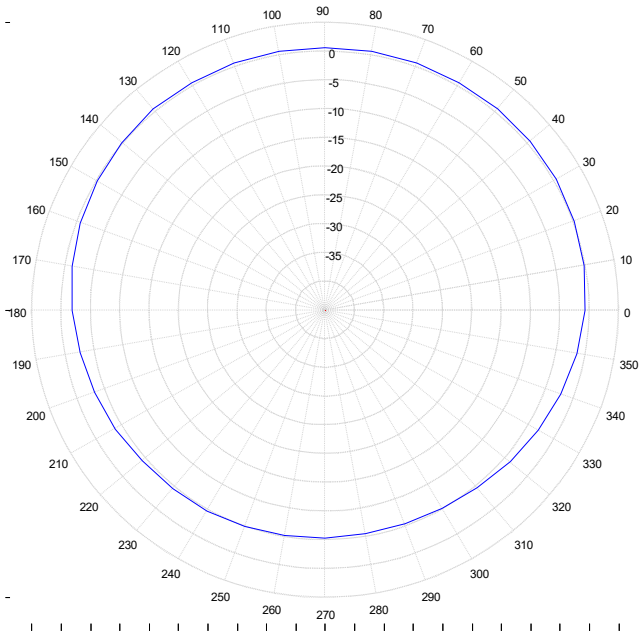
Frequency: 1714.25 MHz
MAX dB= 1.6131 @ 50 Deg.
MIN dB= -4.918 @ 300 Deg.
dB Min/Max Delta = 6.5321 dB



Name: .
Date/Time = 19/10/2023 12:35:05
Plot Scale: 5 dB/Div
Beamwidth: 72.44 Degrees

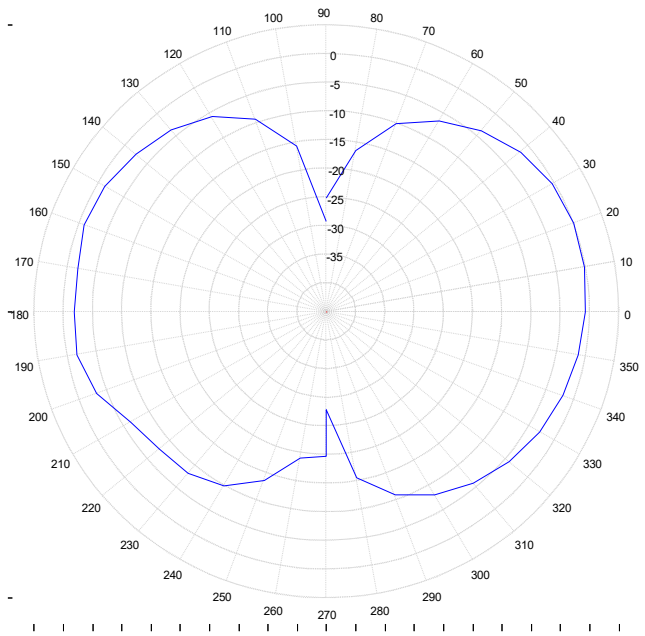
Frequency: 1714.25 MHz
MAX dB= -0.201 @ 20 Deg.
MIN dB= -37.83 @ -90 Deg.
dB Min/Max Delta = 37.631 dB

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



Name: .
Date/Time = 19/10/2023 12:35:49
Plot Scale: 5 dB/Div
Beamwidth: 205.3 Degrees

Frequency: 1800.25 MHz
MAX dB= 0.7010 @ 100 Deg.
MIN dB= -5.533 @ 280 Deg.
dB Min/Max Delta = 6.2342 dB



Name: .
Date/Time = 19/10/2023 12:36:29
Plot Scale: 5 dB/Div
Beamwidth: 75.31 Degrees

Frequency: 1800.25 MHz
MAX dB= 0.0151 @ 20 Deg.
MIN dB= -29.31 @ -270 Deg.
dB Min/Max Delta = 29.330 dB

AZIMUTH @ 0°ELEVATION AND ELEVATION @ 0° AZIMUTH - 1800MHZ

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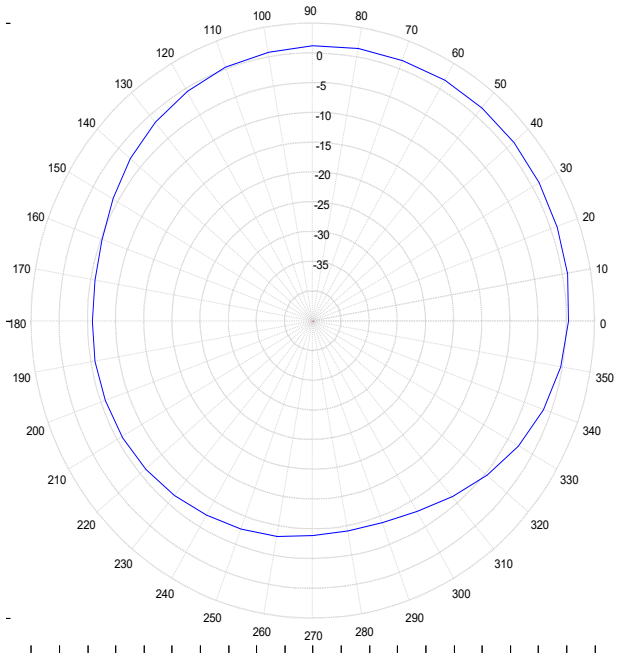
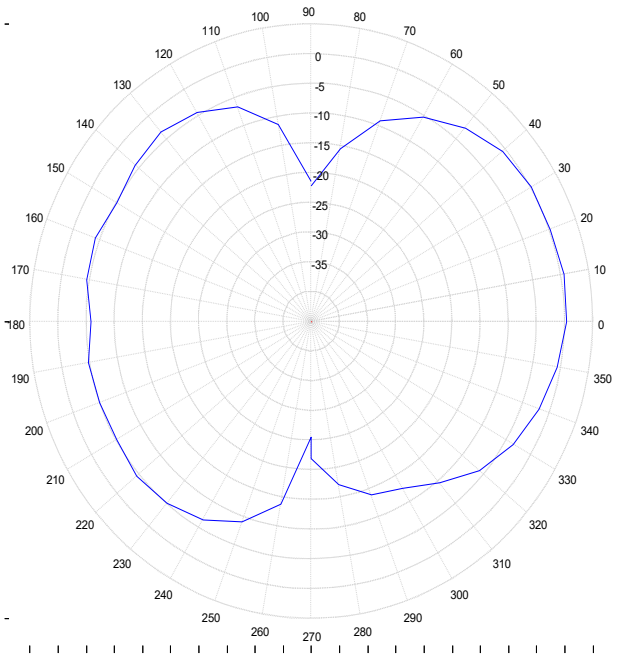
Radiation Patterns



Name: .
Date/Time = 19/10/2023 12:37:30
Plot Scale: 5 dB/Div
Beamwidth: 148.4 Degrees

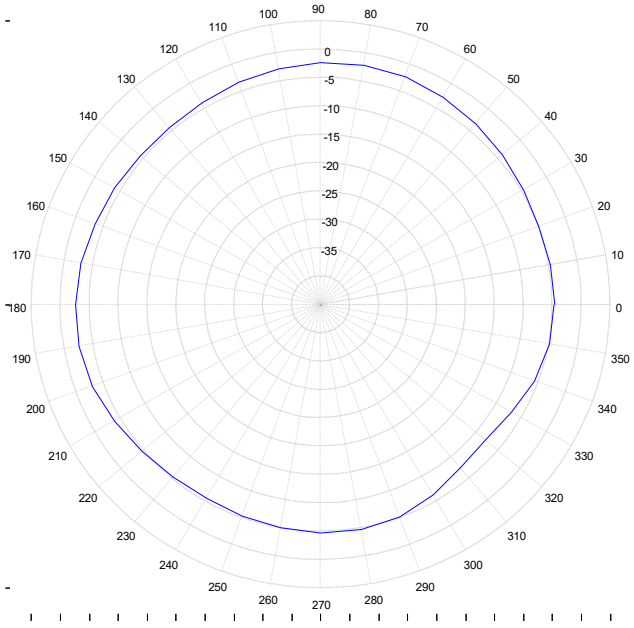
Frequency: 2176.5 MHz
MAX dB= 1.6257 @ 60 Deg.
MIN dB= -9.187 @ 280 Deg.
dB Min/Max Delta = 10.813 dB



Name: .
Date/Time = 19/10/2023 12:38:17
Plot Scale: 5 dB/Div
Beamwidth: 72.76 Degrees

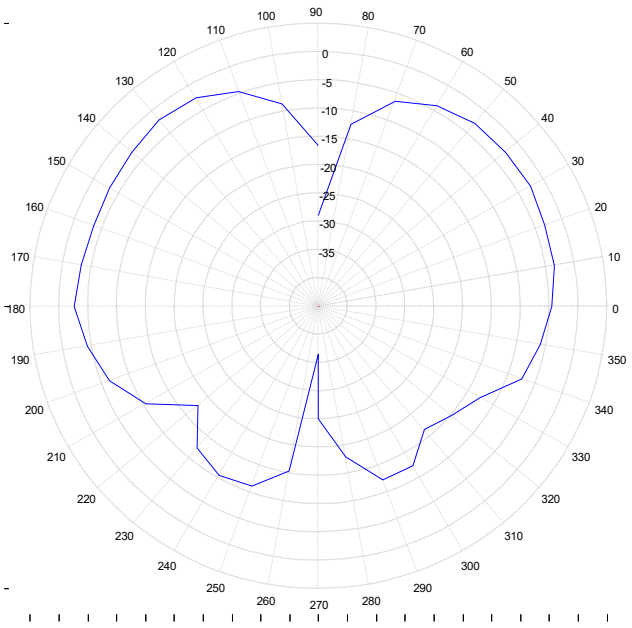
Frequency: 2176.5 MHz
MAX dB= 0.4878 @ 10 Deg.
MIN dB= -25.47 @ -90 Deg.
dB Min/Max Delta = 25.961 dB

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



Name: .
Date/Time = 19/10/2023 12:39:08
Plot Scale: 5 dB/Div
Beamwidth: 240.5 Degrees

Frequency: 2606.5 MHz
MAX dB= -2.213 @ 80 Deg.
MIN dB= -7.878 @ 320 Deg.
dB Min/Max Delta = 5.6653 dB



Name: .
Date/Time = 19/10/2023 12:39:51
Plot Scale: 5 dB/Div
Beamwidth: 84.34 Degrees

Frequency: 2606.5 MHz
MAX dB= -1.997 @ -230 Deg.
MIN dB= -36.52 @ -90 Deg.
dB Min/Max Delta = 34.527 dB

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

DIMENSIONS IN MM

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CAD Data