



## VLT69273X2NG

### Vehicular 3-Port MIMO Antenna 698-960 MHz/1710-2700 MHz

The Laird vehicular 3-port MIMO antenna covers the 698-960/1710-2700 MHz, as well as GPS (1575.42 MHz) frequency ranges. Configured with 2-port, dual-band elements in addition to 1-port with integrated GPS.

Connector options include SMA male connectors for 3G/4G LTE and GPS ports with an RSMA male connector for the Wi-Fi port. The housing incorporates a low profile, rugged design that meets IP67 standards. The antenna also features high impact, UV-resistant polycarbonate plastic available in black or white.

## APPLICATIONS

- FirstNet/Public Safety

### ELECTRICAL SPECIFICATIONS

Number of Ports	3 (2-ports - 3G/4G LTE; 1-port - GPS)	
Operating Frequency (MHz)	698-960 MHz	1710-2700 MHz
Peak Gain (dBi)*	2.6	4.7
Isolation Port 1 - 2 (dB)*	>15	>20
VSWR - Avg*	<1.8:1	
VSWR - Max*	<2.0:1	
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	50	
Polarization	Vertical Linear	
Azimuth Beamwidth	Omnidirectional	

\* Measured on 304.8 mm (1 ft.) diameter ground plane

## MECHANICAL SPECIFICATIONS

Dimensions - mm (in.)	132 x 75 (5.2 x 2.9)
Weight - kg (lb.)	0.74 (1.63)
RF Connector	SMA-Male (3G/4G ports)
Cable (exposed length) - cm (ft.)	LMR®-195 or equivalent- 518.2 (17)
Radome/Baseplate Material	PC, UL94 - V0 Rating, UV Stable (Black and White)

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature - °C (°F)	-30 to +70 (-22 to +158)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

## PART NUMBER

## DESCRIPTION

VLT69273B2NG-518A	2-Ports 4G/LTE, 1-Port GPS: SMA Male (Black)
VLT69273W2NG-518A	2-Ports 4G/LTE, 1-Port GPS: SMA Male (White)

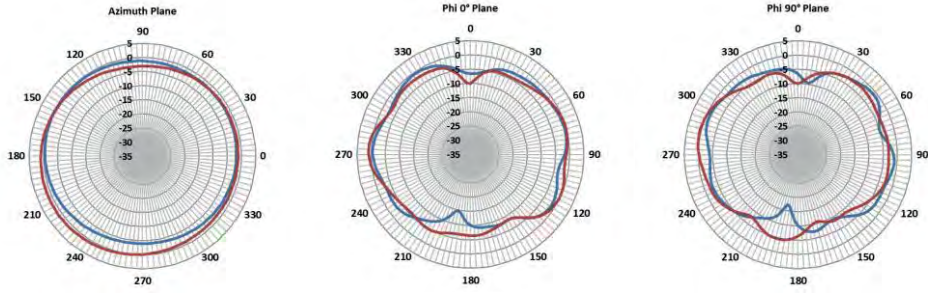
## GPS ANTENNA SPECIFICATIONS

Frequency Band (MHz)	1575.42 (GPS L1)		
Bandwidth (MHz)	6 (Typical)		
Amplifier Gain (dB)	27 (± 3 dBc)		
Nominal Impedance (Ohms)	50		
Output VSWR	<1.5:1		
DC Voltage	2.7 - 12 Vdc		
DC Current	20 mA (Nominal); 30 mA (-40°C - +85°C)		
Out-of-Band Signal Rejection	> 40 dB rejection @ ± 50 MHz from center frequency		
Intermodulation @ CW Mode (-40° C to +85° C)	Int1	Int2	IM3
Power, dBm	-10 (1842.8 MHz)	-10 (2110 MHz)	-100 (1575.6 MHz)
Power, dBm	-10 (829.58 MHz)	-10 (2405 MHz)	-100 (1575.42 MHz)
Power, dBm	-10 (755.42 MHz)	-10 (820 MHz)	-100 (1575.42 MHz)
Input 1 dB Compression @ 750 MHz, 2000 MHz, 3500 MHz	> 10 dBm (-40°C - +85°C)		
Connector	SMA-Male		
Cable - Exposed Length	RG174-518.2 cm (17 ft.)		

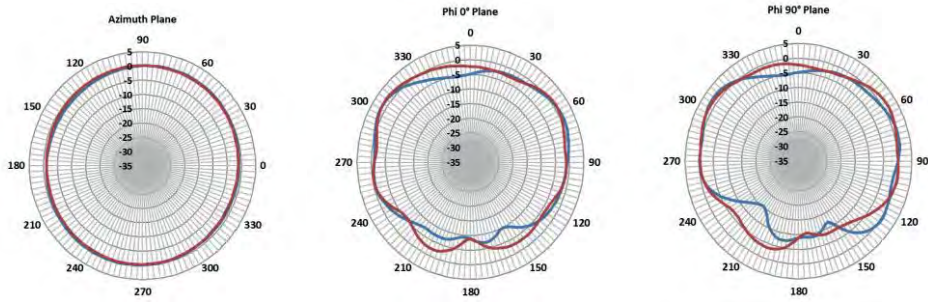
# RADIATION PATTERNS

— LTE1 — LTE2

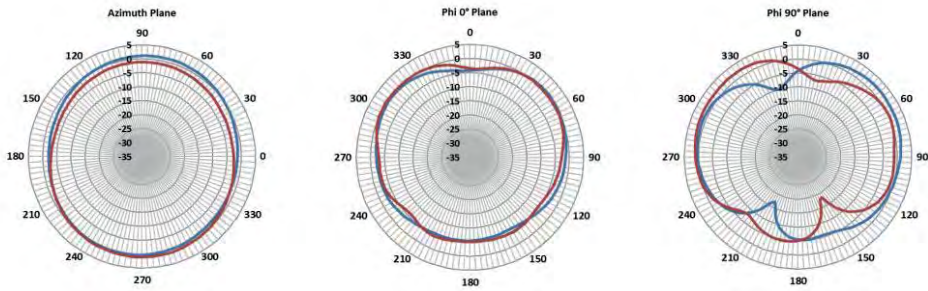
## 698 MHz



## 806 MHz



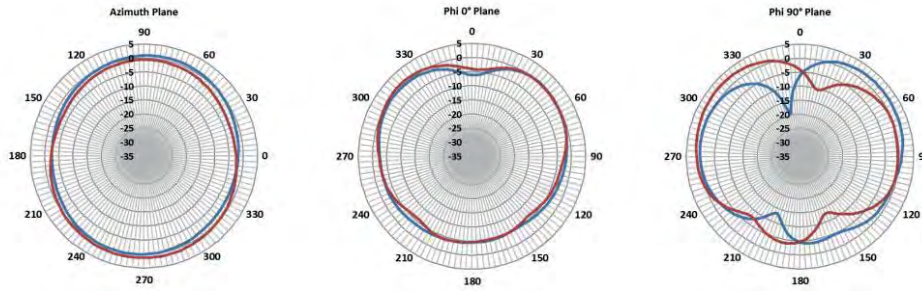
## 894 MHz



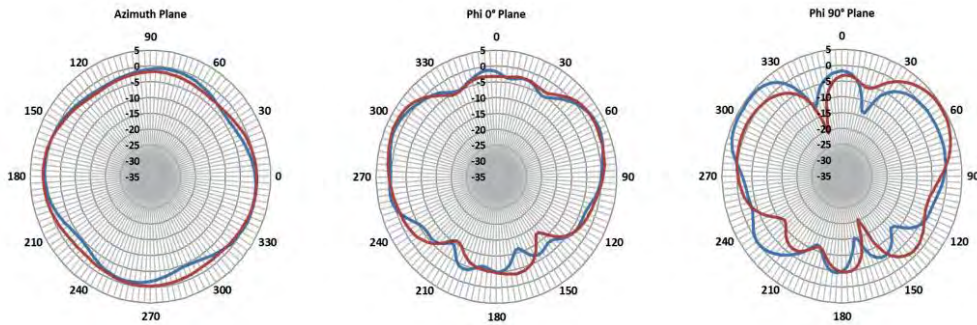
# RADIATION PATTERNS

— LTE1 — LTE2

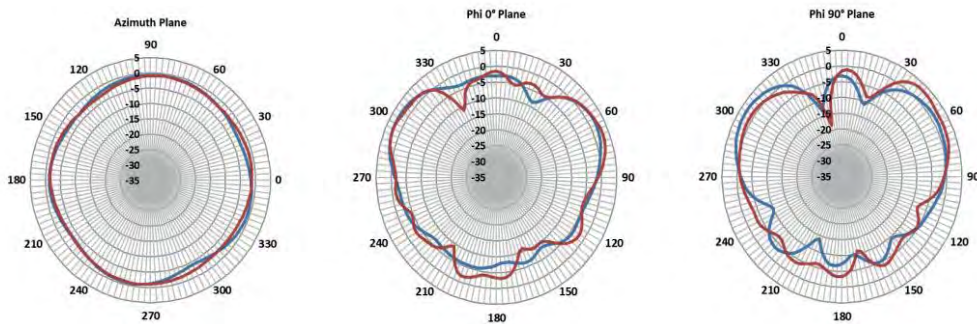
## 960 MHz



## 1710 MHz



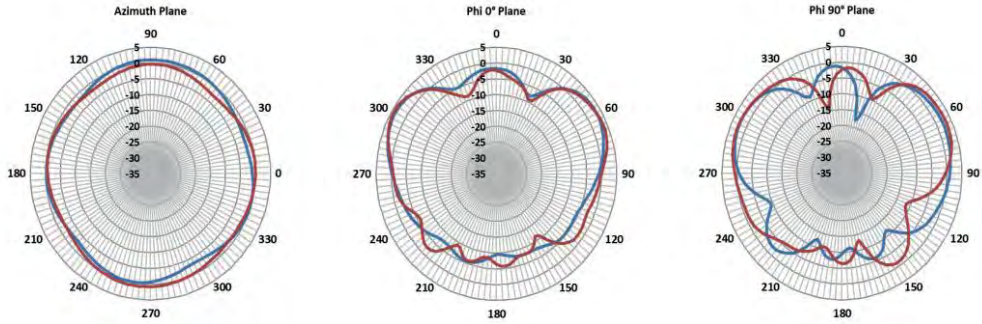
## 1880 MHz



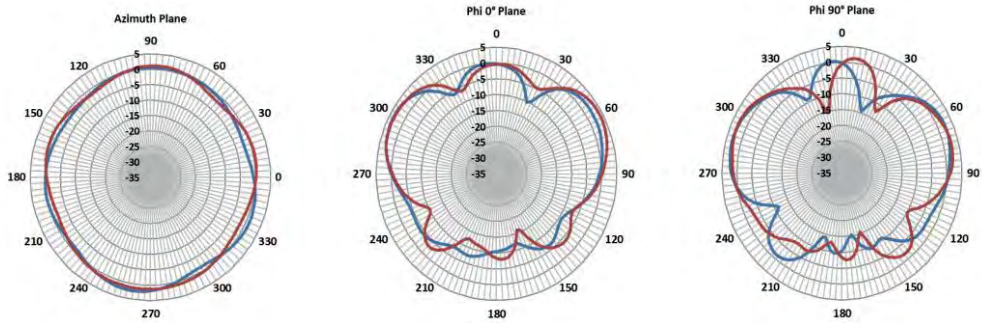
# RADIATION PATTERNS

— LTE1 — LTE2

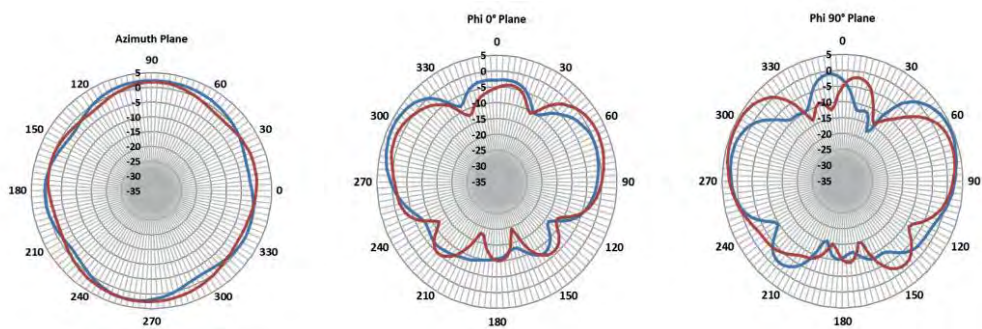
## 1950 MHz



## 2170 MHz



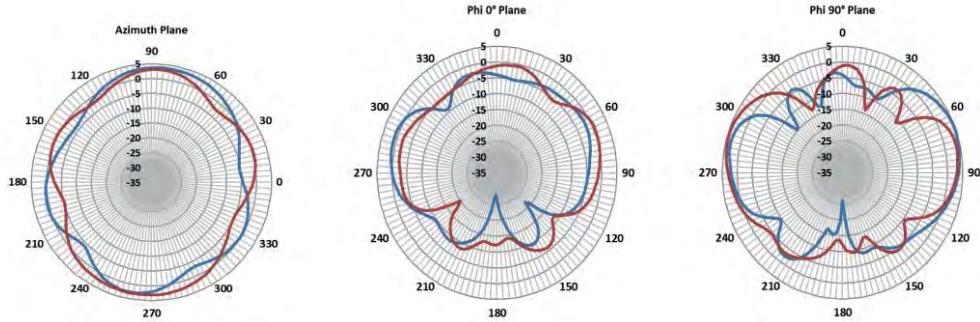
## 2305 MHz



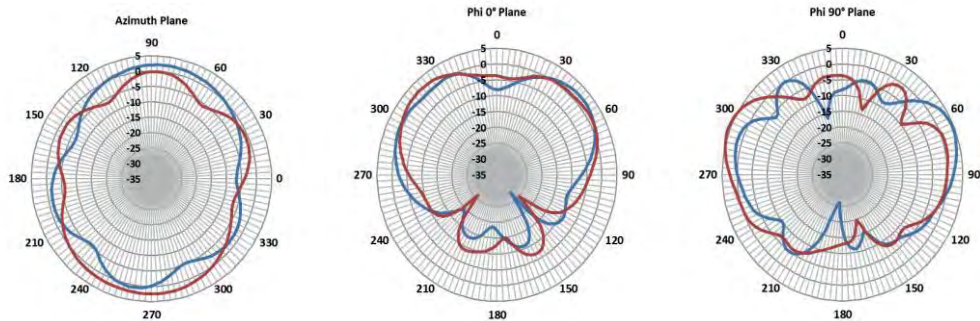
# RADIATION PATTERNS

— LTE1 — LTE2

## 2505 MHz



## 2700 MHz



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