



## VLT69273X11J

**Vehicular 3-Port MIMO Antenna**  
**698-960 MHz/1710-2700 MHz**  
**4900-5900 MHz/GNSS**

The Laird Connectivity vehicular three-port MIMO antenna covers the 698-960/1710-2700 MHz and 2300-2700/4900-5900 MHz frequency ranges with an added global navigational antenna. Configured with one 3G/4G port, one dual band Wi-Fi port and a third port configured with a GNSS navigational antenna.

Connector options include, but not limited to, SMA male connectors for 3G/4G LTE and GNSS ports with an RPSMA male connector for the Wi-Fi port. The housing incorporates a low-profile, rugged design that meets IP67, EN61373 Shock & Vibration and EN50155 Temperature and Humidity standards. The antenna also features high impact, UV-resistant polycarbonate plastic radome available in black or white.

### APPLICATION

- FirstNet/Public Safety
- Passenger Fleet
- Commercial Vehicle Fleet
- Rail Transit

### ELECTRICAL SPECIFICATIONS

Number of Ports	3G/4G LTE - 1		Wi-Fi - 1	
	698-960	1710-2700	2300-2700	4900-5900
Operating Frequency (MHz)	698-960	1710-2700	2300-2700	4900-5900
Peak Gain - Average* (dBi)	2.0	4.1	4.2	4.9
Peak Gain - Max* (dBi)	2.6	4.7	4.9	6.0
VSWR- Average**	1.4	1.2	1.3	1.2
VSWR- Max**	2.0	2.0	2.0	2.0
Isolation** LTE to WIFI (dB)	-25	-25	-25	-38
Nominal Impedance (Ohms)	50			
Max Power - Ambient 25°C (W)	50			
Polarization	Vertical Linear			
Horizontal Plane 3 dB Beamwidth Port 1	Omnidirectional			

\* Measured on 1 ft (30.48 cm) diameter ground plane

\*\* Measured on 1 ft (30.48 cm) diameter ground plane and 17 ft (518 cm) Antenna specification is subjected to change according to the ground plane size

## MECHANICAL SPECIFICATIONS

Dimensions - diameter x height - mm (in.)	132 x 75 (5.20 x 2.9)
Weight - kg (lbs)	0.74 (1.63)
Cable Type	LMR®-195 or equivalent
Mounting	P- Mount
Radome and Base Plate Material	PC, UL94 - V0 Rating, UV Stable

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature - °C (°F)	-30 to +70 (-22 to +158)
Storage Temperature - °C (°F)	-40 to +85 (-40 to +185)
Shock and Vibration Tests	EN61373 Compliant
Temperature and Humidity Tests	EN50155 Compliant
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

## CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR LTE PORT	CONNECTOR WI-FI PORT	COLOR	NAVIGATION
VLT69273B11J-518A	5.18M (17FT)	SMA MALE	RPSMA MALE	BLACK	GNSS
VLT69273W11J-518A	5.18M (17FT)	SMA MALE	RPSMA MALE	WHITE	GNSS

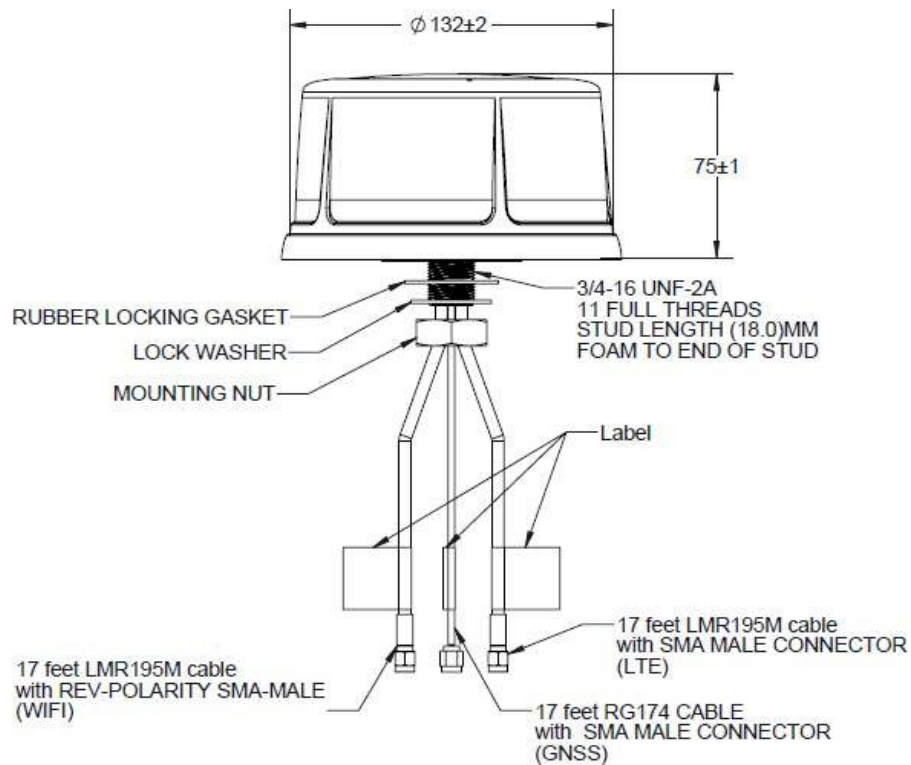
## GNSS ANTENNA SPECIFICATIONS

Model Number	VHP69273X22J		
Number of Ports	GNSS- 1		
Frequency Band (MHz)	BEIDOU	GPS	GLONASS
Frequency of Operation (MHz)	1561.098 ± 2.046	1.575.42 ± 1.023	1602.0 ± 5.0
Amplifier Gain (dB)	28 dB ± 3		
Nominal Impedance (Ohms)	50 Ω		
Output VSWR	< 2:1		
DC Voltage	2.5 - 7 VDC		
Current Consumption, mA	8.5 ± 3 ( AT 3.0V)		
Input Max Power, dBm	-10		
Out of Band Rejection, dBc	> 80 (698- 960 MHZ)	> 80 (1428- 2700 MHZ)	> 70 (4900- 5800 MHZ)
Working/Storage Temperature	-40°C - +85°C (-40°F - +185°F)		
Connector	SMA-Male		
Cable - Exposed Length	RG174-518.2 cm (17 ft.)		

## PACKAGING INFORMATION

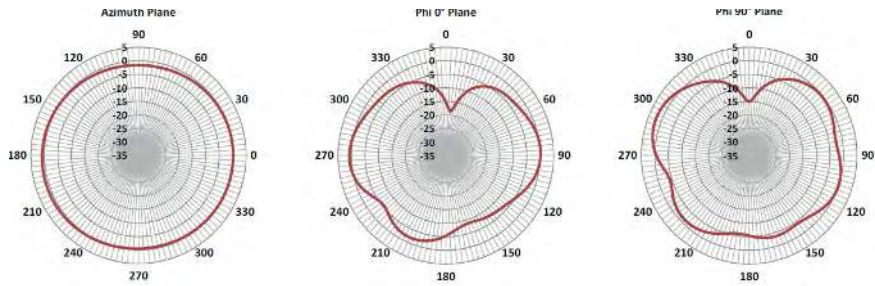
PACKAGED DIMENSIONS	CARTON	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	4	8	192	240
Height- mm (in.)	305 (12.0)	305 (12.0)	1363 (53.66)	1668 (65.67)
Length- mm (in.)	525 (20.7)	525 (20.7)	1200 (47.24)	1200 (47.24)
Width- mm (in.)	132 (5.22)	265 (10.4)	800 (31.5)	800 (31.5)
Shipping Weight- kg (lb.)	5.0 (11)	10.1 (22.3)	255 (562)	316 (697)

## MECHANICAL DRAWINGS

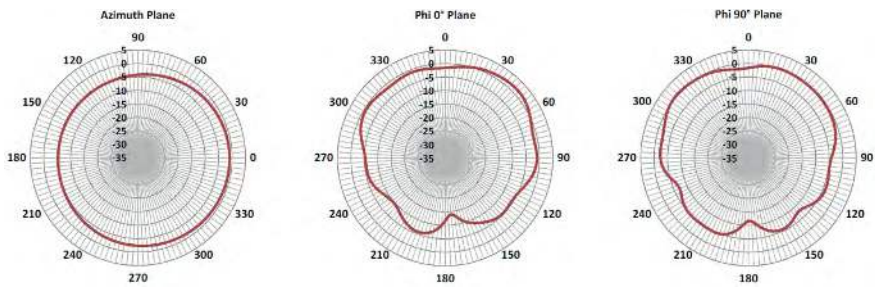


# RADIATION PATTERNS- LTE/CELL PORTS

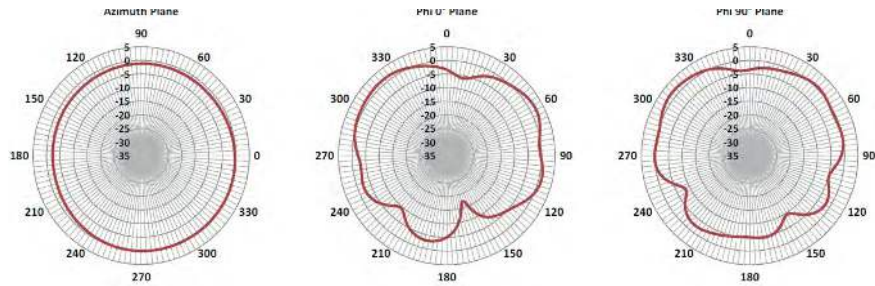
## 698 MHz



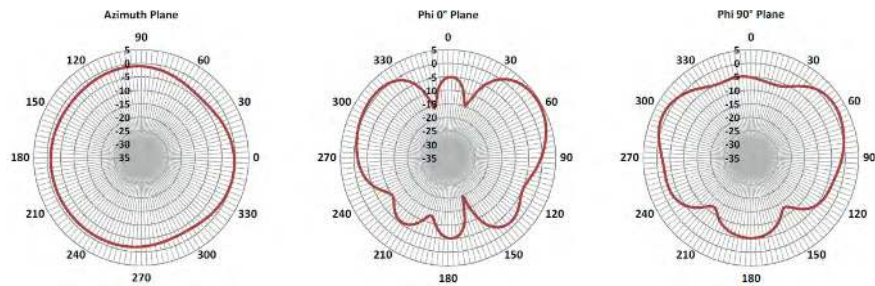
## 850 MHz



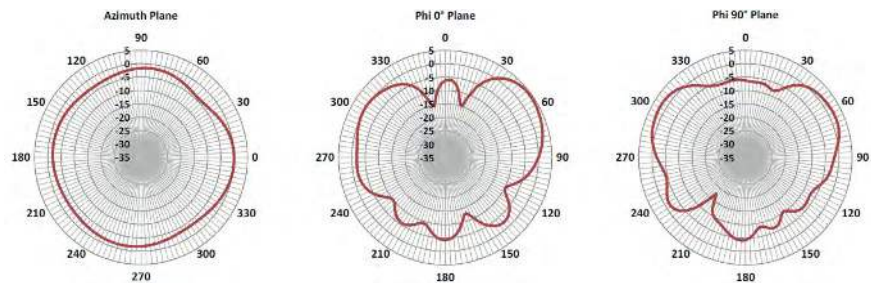
## 960 MHz



## 1710 MHz

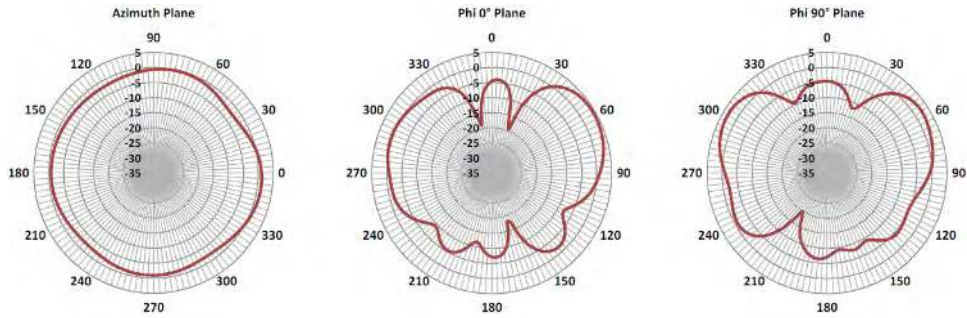


## 1880 MHz

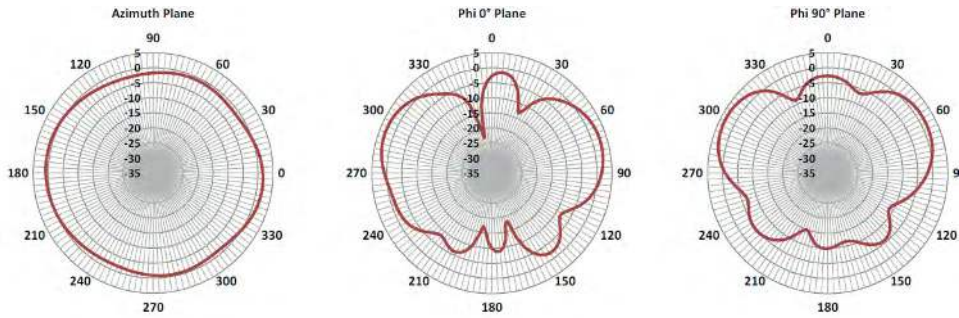


# RADIATION PATTERNS- LTE/CELL PORTS

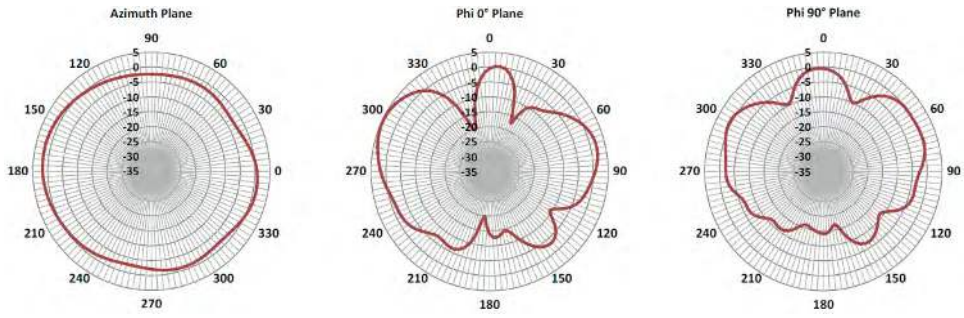
## 1930 MHz



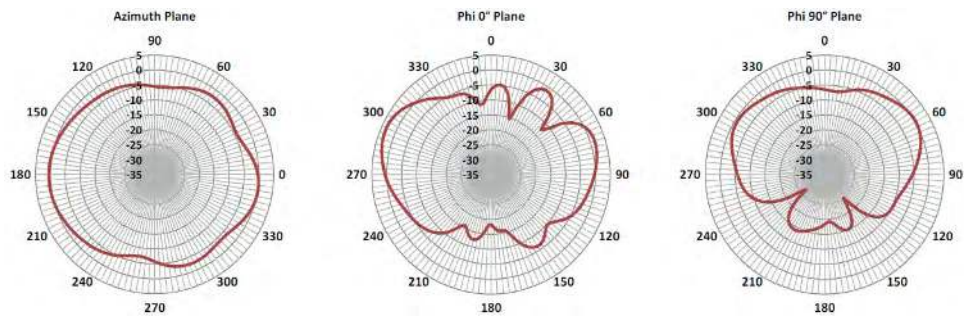
## 2170 MHz



## 2310 MHz

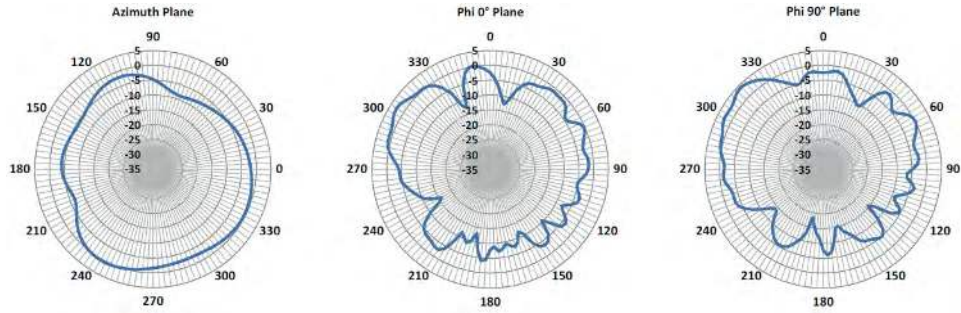


## 2700 MHz

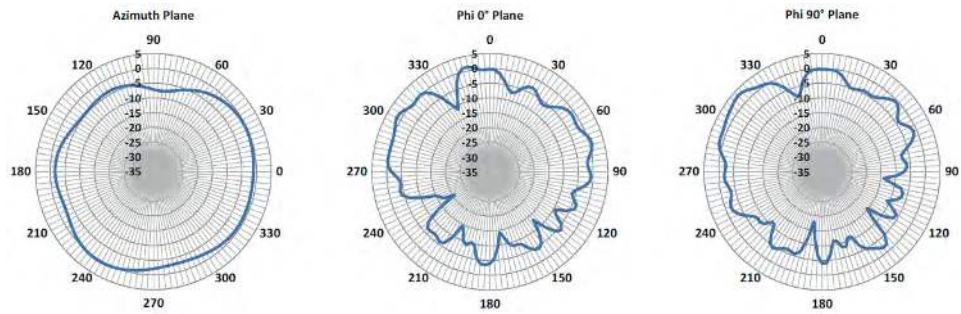


# RADIATION PATTERNS- WI-FL PORTS

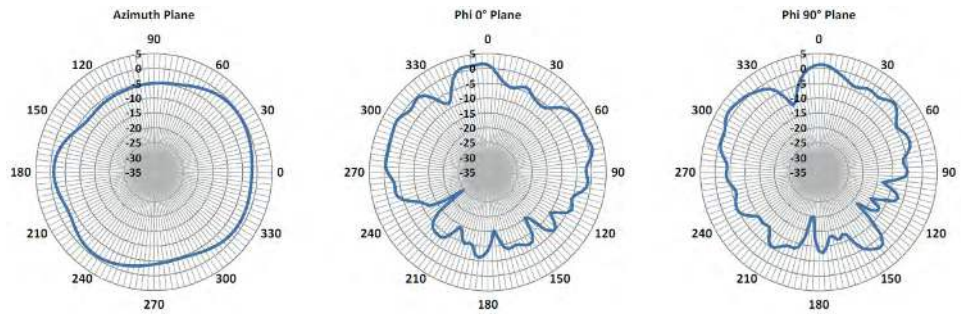
## 2400 MHz



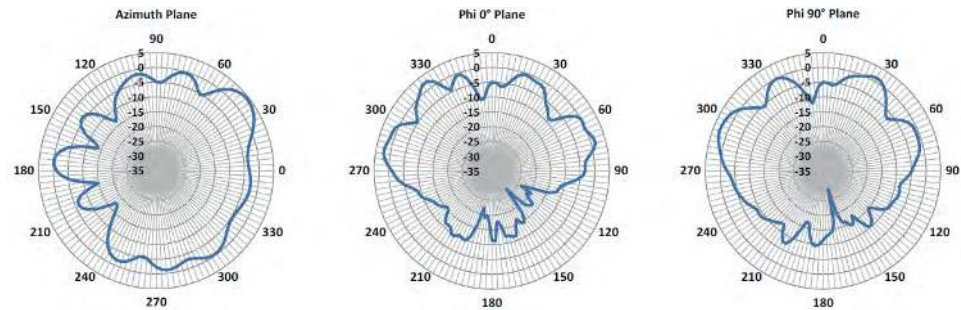
## 2460 MHz



## 2500 MHz

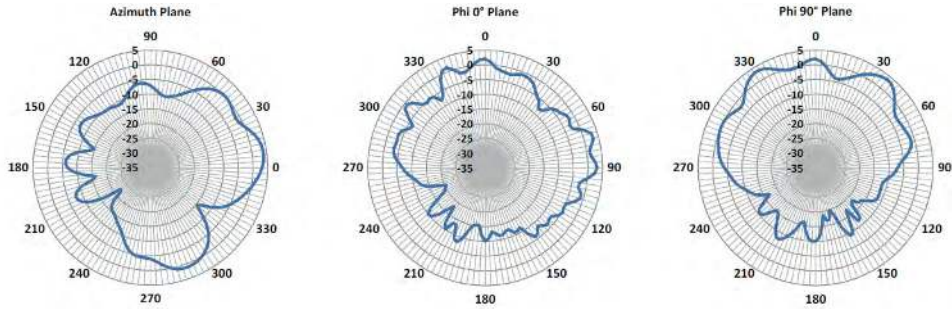


## 4900 MHz

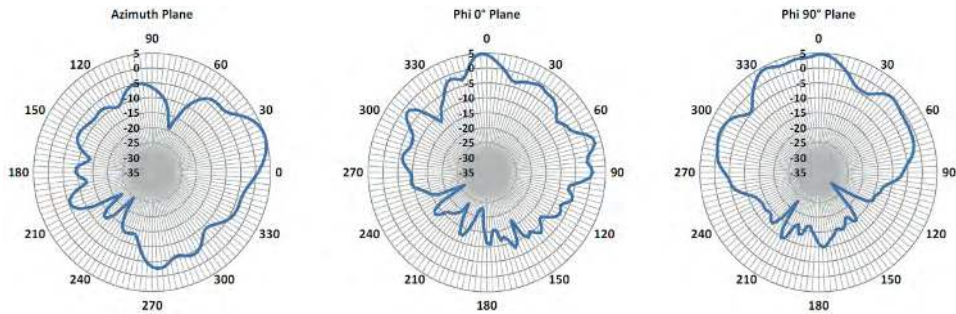


# RADIATION PATTERNS- WI-FL PORTS

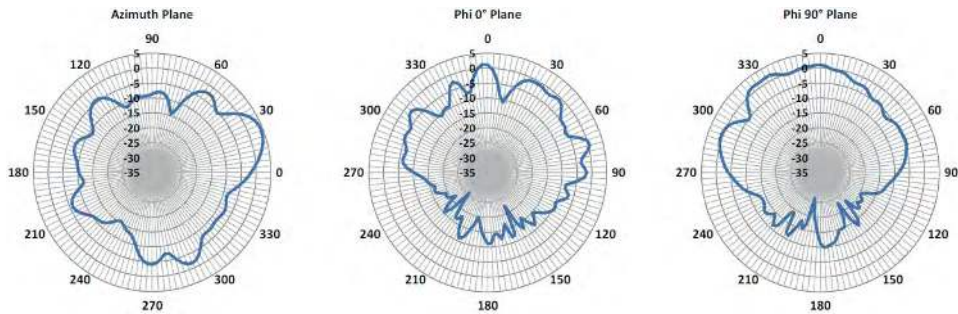
## 5470 MHz



## 5725 MHz



## 5925 MHz



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