



VLT69273x2NJ

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

The Laird Connectivity vehicular three-port MIMO antenna covers the 698-960/1710-2700 MHz frequency range with an added global navigational antenna. Configured with two 3G/4G ports, and a third port with a GNSS navigational antenna, this product is ideal for global Vehicular IoT applications.

Connector options include, but not limited to, SMA male connectors for 3G/4G LTE and GNSS ports. 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.

APPLICATIONS

- Unique V-Pol / H-Pol cellular elements ensure highest signal retention and data throughput
- Ideal for vehicle under-dash locations mounted to ventilation ducting
- Dual axis bonding via VHB tape provides a rugged mount to jarring vehicle movements.

ELECTRICAL SPECIFICATIONS

Antenna Model Number	VLT69273x2NJ							
Number of Ports	2x- 3G/4G LTE							
Operating Frequency, (MHz)	698-806	824-894	880-960	1710-1880	1850-1990	1910-2170	2300-2500	2500-2700
Peak Gain - Average* (dBi)	1.8	2.0	2.4	4.0	4.0	4.5	4.5	5.1
Peak Gain - Max* (dBi)	3.3	2.3	2.7	4.6	4.8	5.0	4.9	5.7
VSWR- Average**	1.3	1.3	1.5	1.4	1.3	1.3	1.2	1.3
VSWR- Max**	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Isolation** LTE1 to LTE2 (dB)	-14	-14	-14	-19	-24	-24	-24	-25
Nominal Impedance (Ohms)	50							
Max Power - Ambient 25°C/77°F (W)	50							
Polarization	Vertical Linear							
Azimuth Beamwidth	360°- 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)	0.75 (1.65)
Cable Type	LMR195M
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 PORTS	COLOR	NAVIGATION
VLT69273B2NJ-518A	5.18m (17ft)	SMA Male	Black	GNSS
VLT69273W2NJ-518A	5.18m (17ft)	SMA Male	White	GNSS

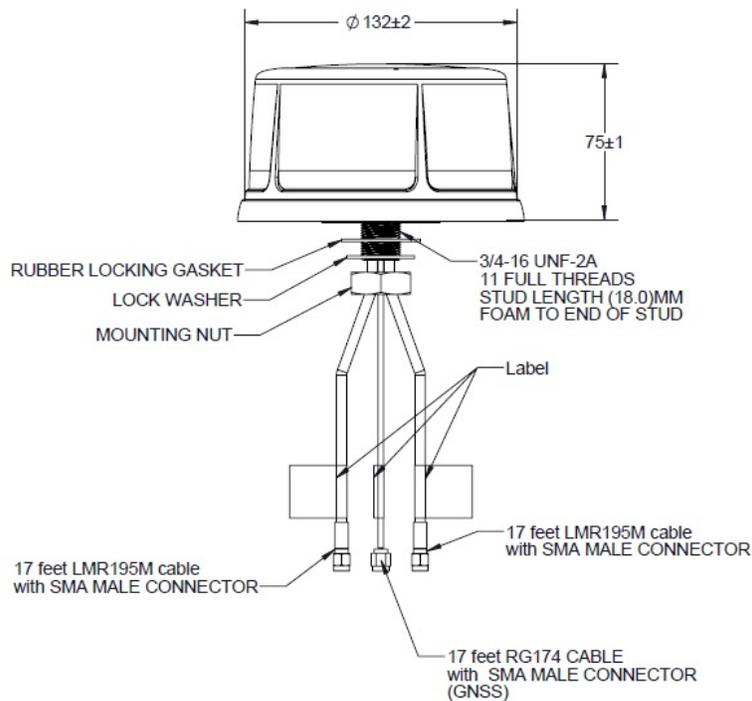
GNSS ANTENNA SPECIFICATIONS

Model Number	VLT69273x2NJ		
Number of Ports	1x- GNSS		
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.)		

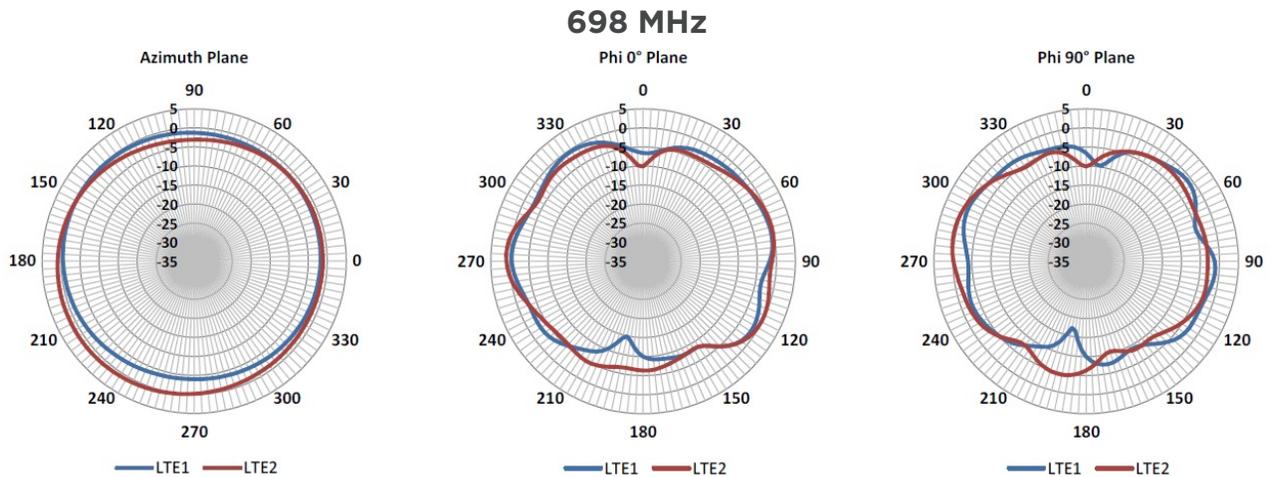
PACKAGING INFORMATION

PACKAGE 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.)	4.0 (8.7)	6.9 (15)	176 (388)	218 (481)

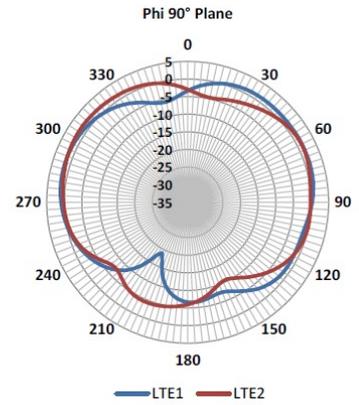
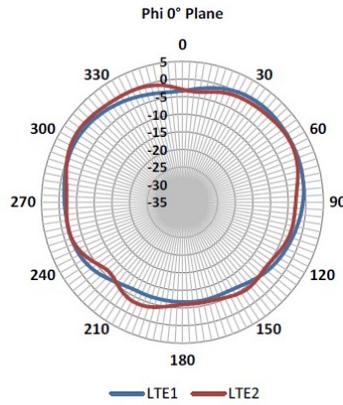
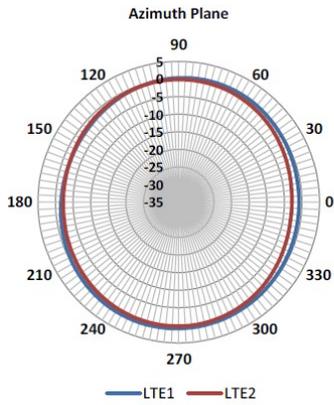
MECHANICAL DRAWING



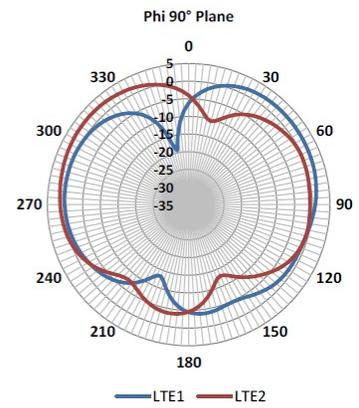
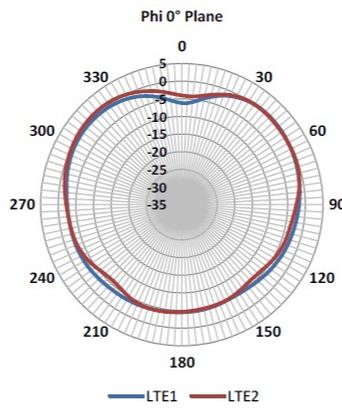
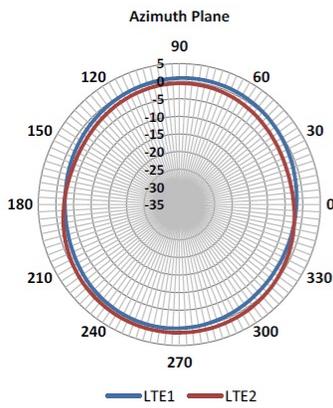
RADIATION PATTERNS- LTE/CELL PORTS



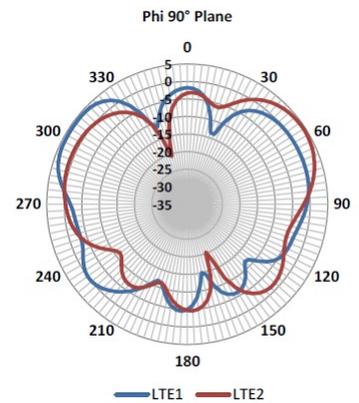
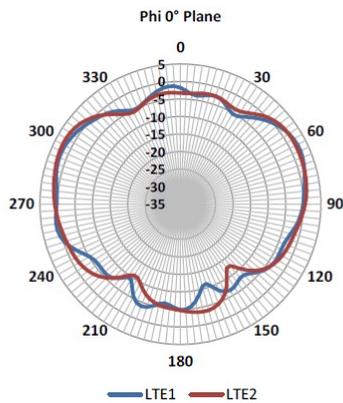
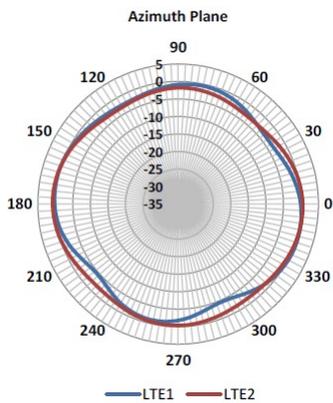
850 MHz



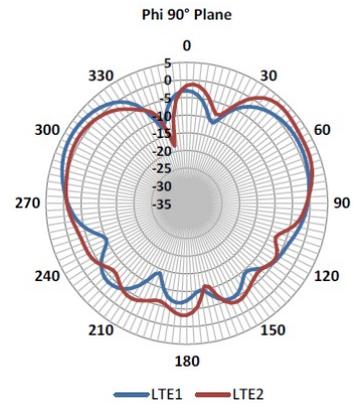
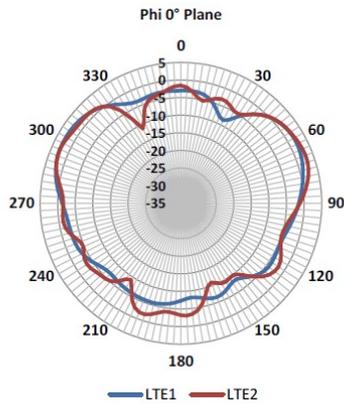
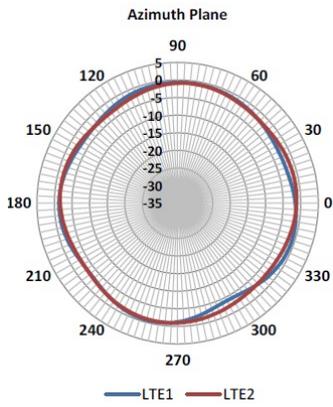
960 MHz



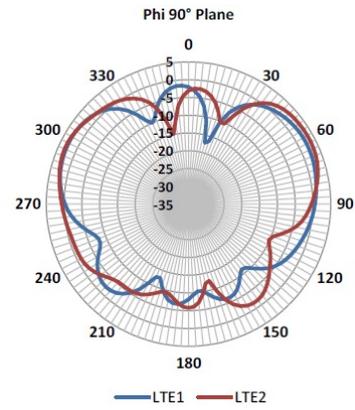
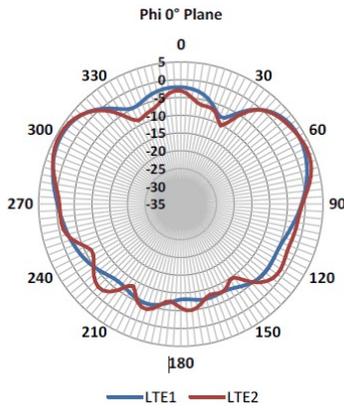
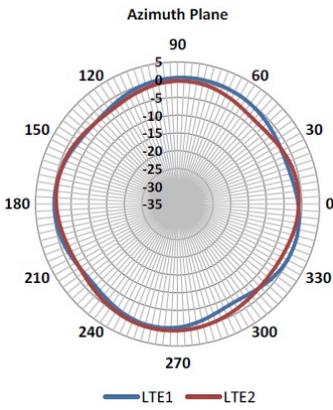
1710 MHz



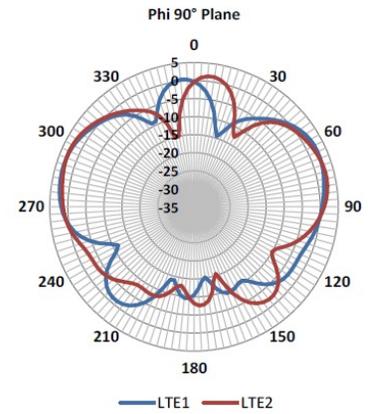
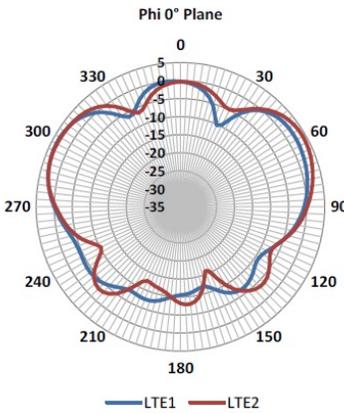
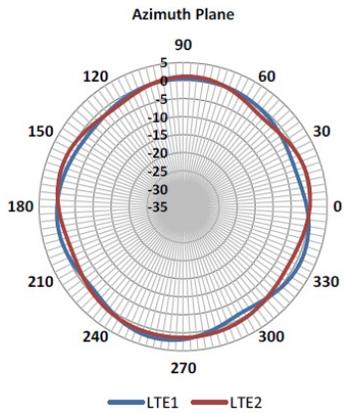
1880 MHz



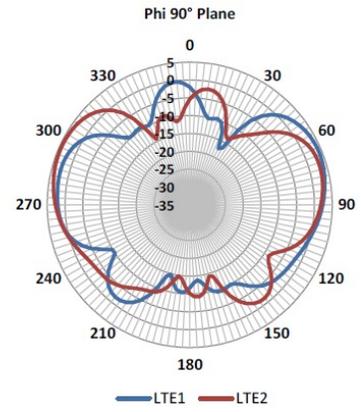
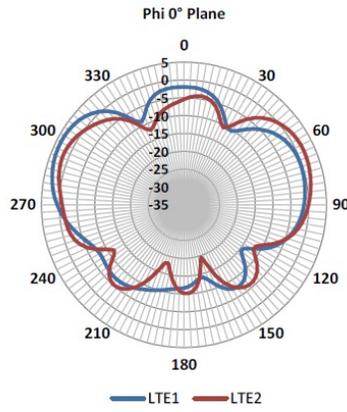
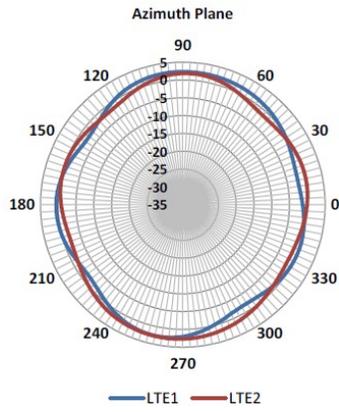
1930 MHz



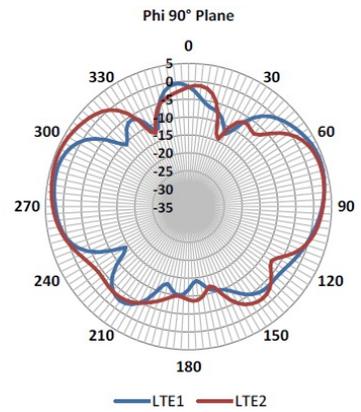
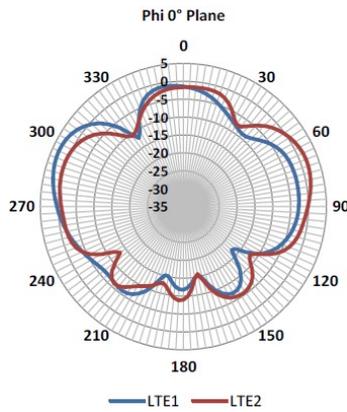
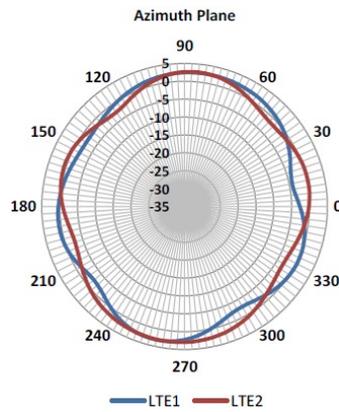
2170 MHz



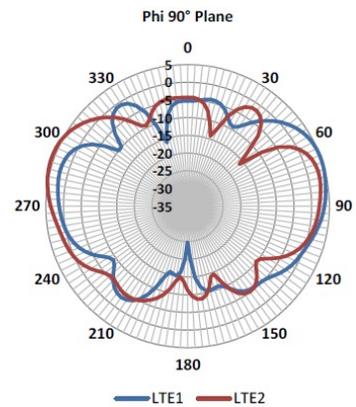
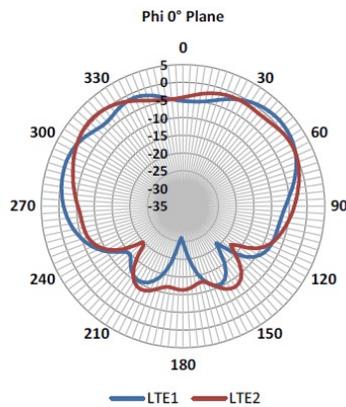
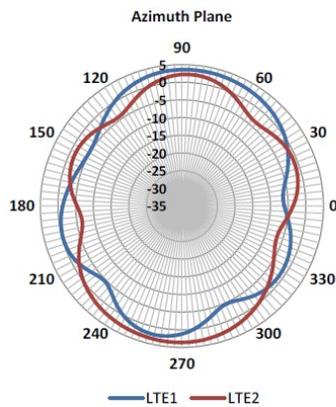
2310 MHz



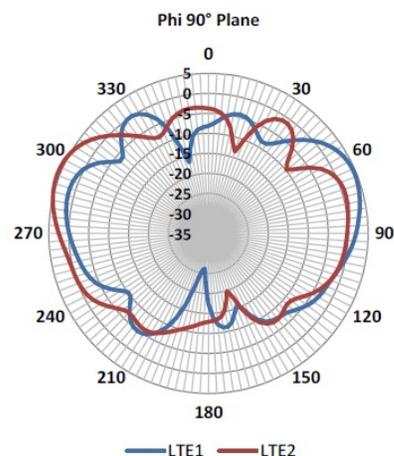
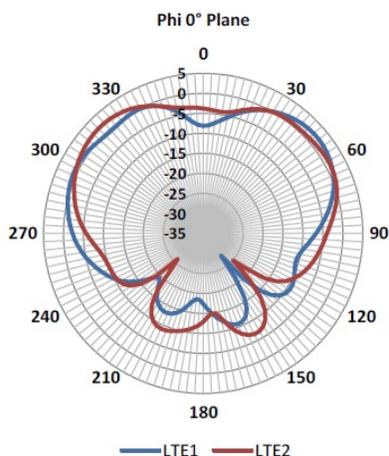
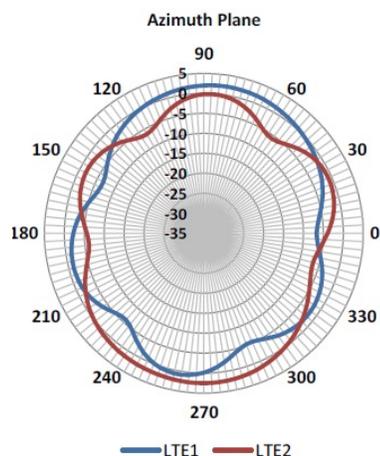
2412 MHz



2600 MHz



2700 MHz



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