



The Laird VFP69383B22JN multiport/multiband antenna provides an excellent solution for Public Safety, Transportation and Aftermarket Fleet applications. Configured for 2-port MIMO operation over the 3G/4G/ISM/CBRS bands and 2-port MIMO operation over the low/high frequency Wi-Fi bands. An additional 5<sup>th</sup> port provides an active antenna for enabling GNSS global navigation services.

#### FEATURES AND BENEFITS

- One single-hole mount/fixing- reduces vehicle damage and the cost of installation
- Attractive IP67 low profile aerodynamic housing
- Multiband/MIMO operation with GNSS navigation

#### APPLICATIONS

- FirstNet/Public Safety
- Transportation
- Aftermarket fleet
- Others

#### ELECTRICAL SPECIFICATIONS

Number of Ports	2x- 3G/4G/ISM/CBRS		2x- Wi-Fi	
	698-960	1690-3800	2400-2500	4900-5900
Operating Frequency (MHz)	698-960	1690-3800	2400-2500	4900-5900
VSWR – Max	2.0:1	2.0:1	2.0:1	2.0:1
Peak Gain (dBi)	2.2	6.4	4.5	8.0
Isolation, LTE1 to LTE2 (dB)	16	20	-	-
Isolation LTE to WiFi (dB)	20	20	14	40
Isolation WiFi1 to WiFi2 (dB)	-	-	30	30
Isolation GNSS to LTE	40	20	-	-
Isolation GNSS to WiFi	-	-	30	40
Nominal Impedance (Ohms)	50			
Polarization	Linear Vertical			
Max Power - Ambient 25°C (W)	10			
Pattern	Omnidirectional			

#### MECHANICAL SPECIFICATIONS

Dimensions – diameter x height – mm (inches)	179 x 48 x 63 (7.04 x 1.69 x 2.48)
Weight – kg (lbs.)	0.56 (1.23)
Cable Type	LMR100, Black
Mounting	P-Mount
Radome Material	PC, UL94-V0
Baseplate Material	Aluminum

#### ENVIRONMENTAL SPECIFICATIONS

Operating Environment	Outdoor Vehicle
Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

#### GNSS ANTENNA SPECIFICATIONS

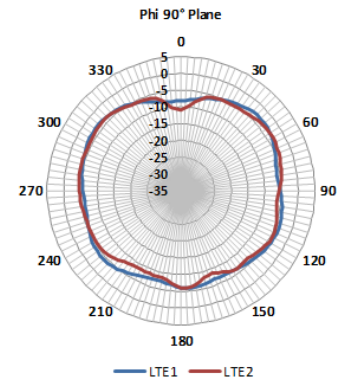
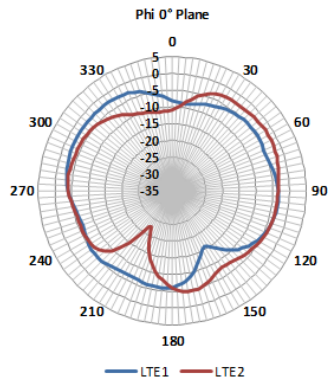
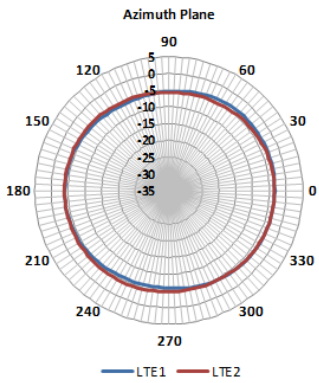
Frequency of Operation (MHz)	1559 - 1606		
	BEIDOU	GPS	GLONASS
Band	BEIDOU	GPS	GLONASS
Frequency Band (MHz)	1559.052 - 1563.144	1574.42 - 1576.42	1598.0625 - 1605.89
Gain, Typ. @ room temp. (dBi)	26	27	26
Nominal Impedance (Ohms)	50		
Max VSWR	2.0:1		
DC Voltage (Vdc)	3.3		
Operating Supply Voltage (Vdc)	2.5 - 7.0		
Current Consumption, Max (@ room temp.)	20		
Out-of-Band Signal Rejection Min @ room temp. (dBc)	60 (@1-1525 MHz)	60 (@1675-2000 MHz)	50 (@2000-3000 MHz)
Input Max Power (dBm)	-30		
Cable Type	RG14		

#### CONFIGURATION

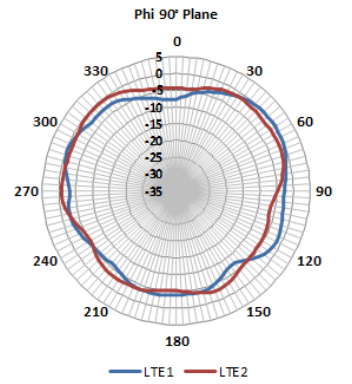
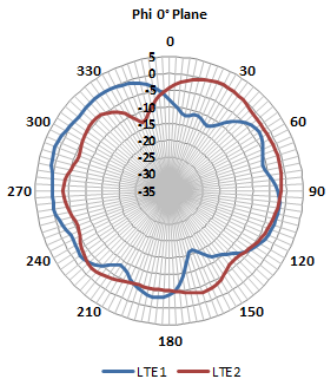
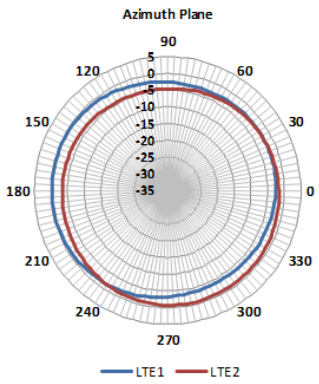
PART NUMBER	CABLE LENGTH	CONNECTOR – LTE PORTS	CONNECTOR – WI-FI PORTS	CONNECTOR – GNSS PORT
VFP69383B22JN-518J	5.18 m (17.0 ft.)	SMA- male	SMA- male	SMA- male

RADIATION PATTERNS - LTE ANTENNAS

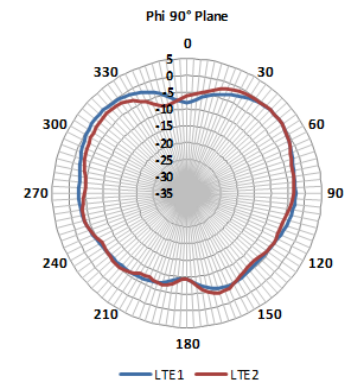
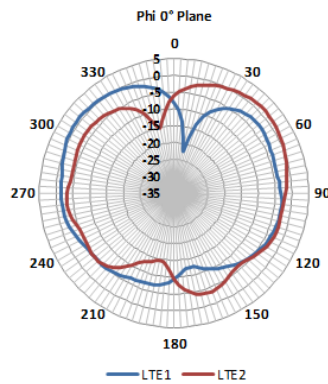
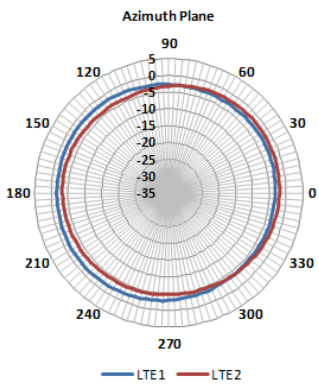
698 MHz



880 MHz

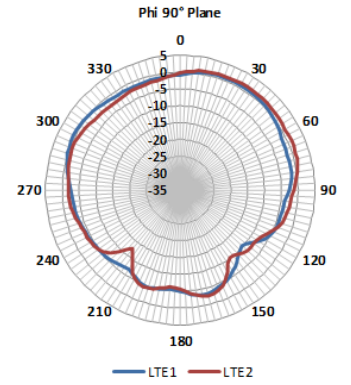
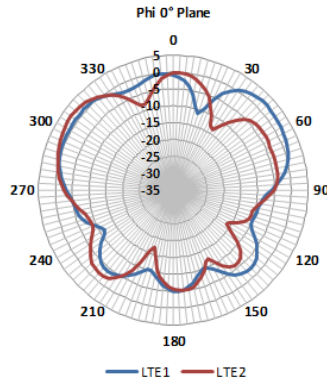
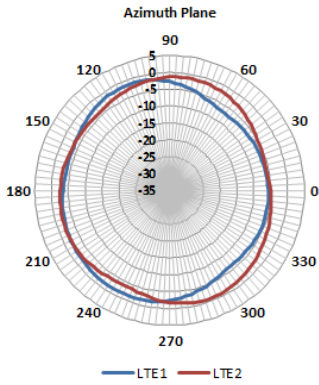


960 MHz

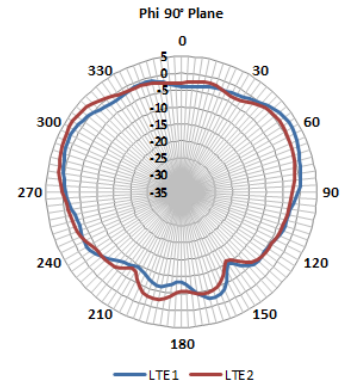
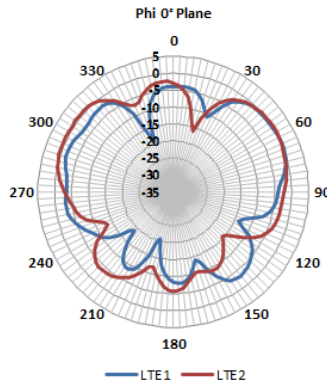
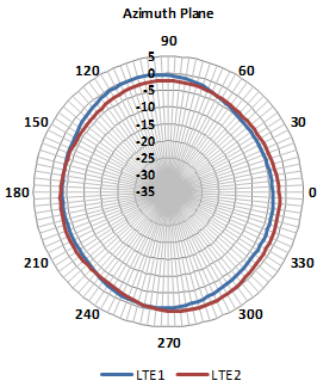


RADIATION PATTERNS - LTE ANTENNAS

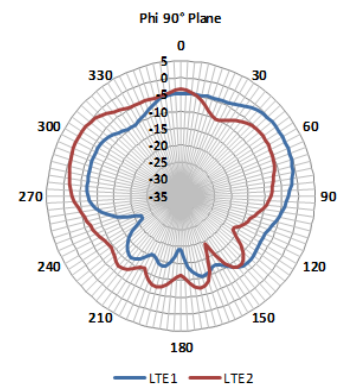
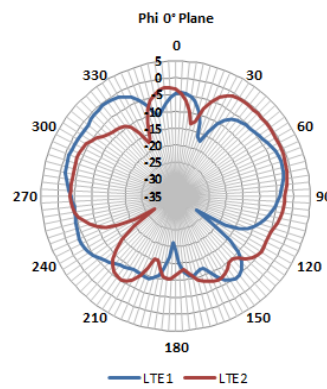
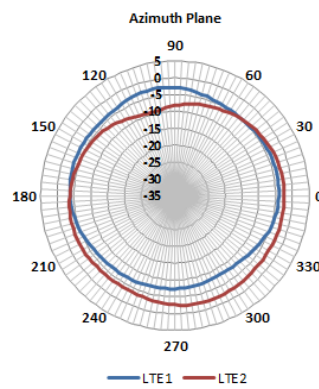
1690 MHz



1850 MHz

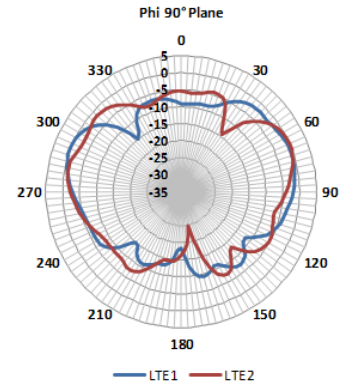
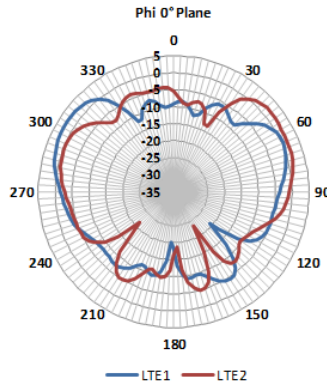
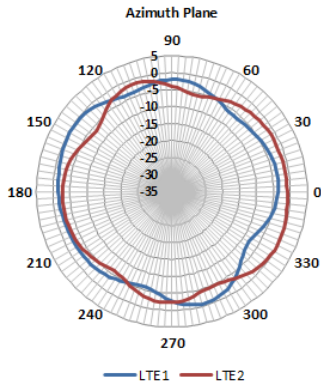


2170 MHz

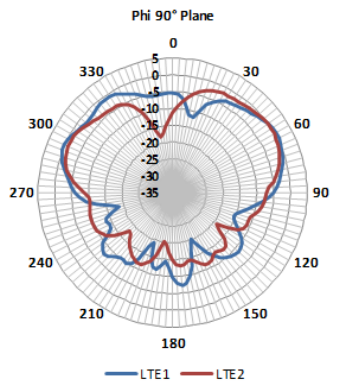
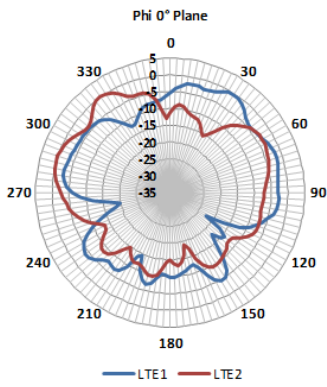
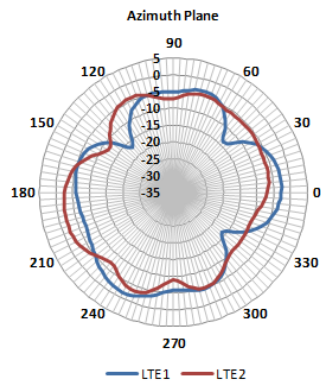


RADIATION PATTERNS - LTE ANTENNAS

2700 MHz

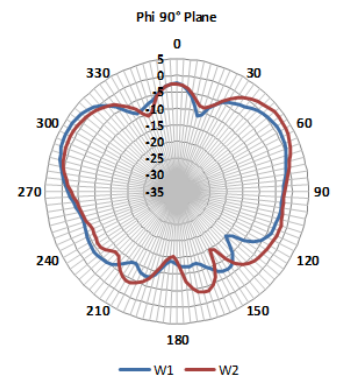
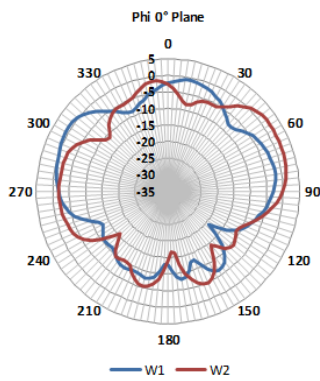
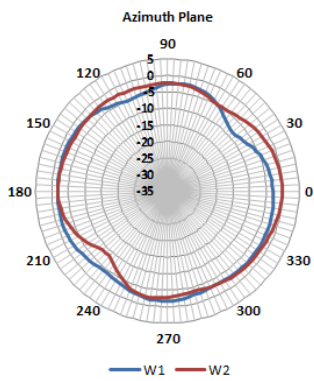


3800 MHz



RADIATION PATTERNS - WI-FI ANTENNAS

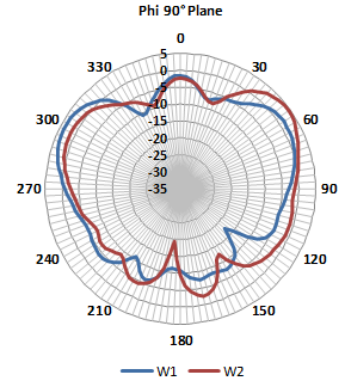
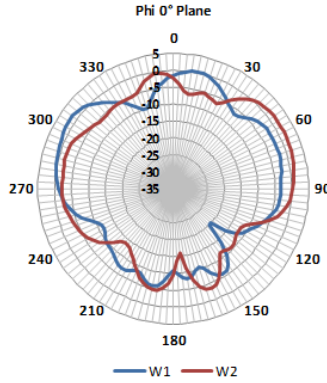
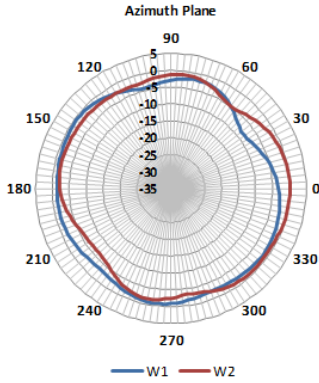
2400 MHz



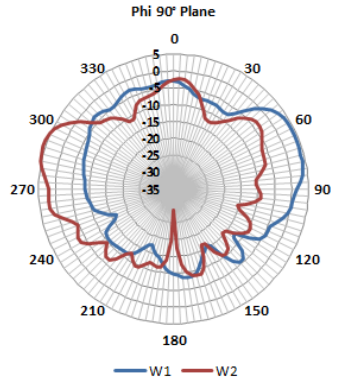
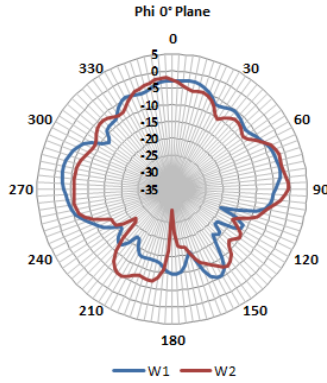
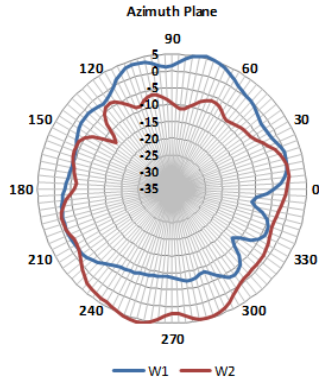


RADIATION PATTERNS - WI-FI ANTENNAS

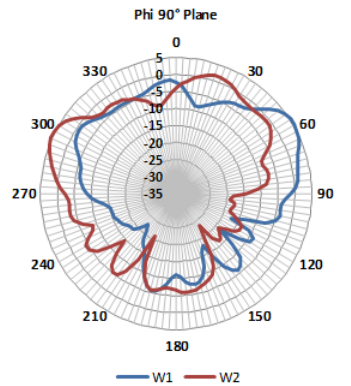
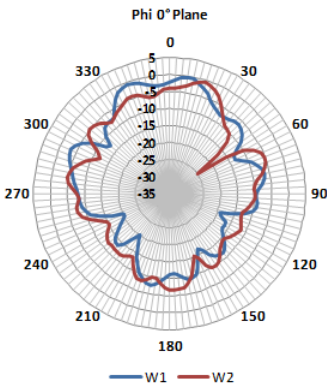
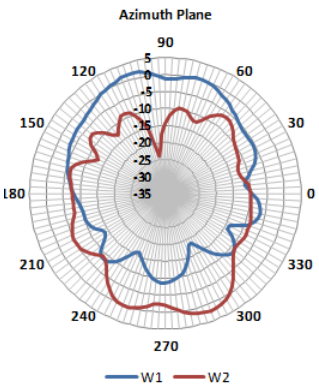
2500 MHz



4900 MHz



5900 MHz



✓RoHS

Americas: +1.847.839.6925  
IAS-AmericasSales@lairdtech.com  
Europe: +44.1628.858941  
IAS-EUSales@lairdtech.com  
Asia: IAS-AsiaSales@lairdtech.com  
Middle East and Africa: +44.1628.858941  
IAS-MEASales@lairdtech.com  
<https://connectivity.lairdtech.com>

Laird warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request.

© Copyright 2018 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trademarks or registered trademarks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.

