



## Gar VFD69383x2NNN

### 2-Port Vehicular MIMO Antenna 698960/1690-3800 MHz

The Gar VFD69383x2NNN multiport/multiband antenna provides an excellent solution for Public safety, transportation, and Aftermarket Fleet applications. Configured for two-port MIMO operation over the 3G/4G/5G/ISM/CBRS bands.

### FEATURES AND BENEFITS

- One single-hole mount/fixing- reduces vehicle damage and the cost of installation
- Attractive IP67 low profile aerodynamic housing
- Multiband/Multiport MIMO 3G/4G/ISM/CBRS operation
- Operates well on a ground plane and without a ground plane.

### APPLICATIONS

- FirstNet/Public safety
- Transportation
- Aftermarket fleet
- 5G-ready
- Rugged LTE gateways
- Others

### ELECTRICAL SPECIFICATIONS

Antenna Model	VFD69383x2NNN								
Number of Ports	2								
Port Configuration	2x - 3G/4G/5G/ISM/CBRS (LTE/CELL)								
Operating Frequency (MHz)	698-806	824-894	880-960	1690-1880	1850-1990	1910-2180	2300-2500	2500-2700	3300-3800
Avg. Peak Gain* (dBi) - Gnd. Plane [No Gnd. Plane]	0.2 [1.0]	1.0 [2.0]	1.5 [2.3]	3.6 [1.6]	3.5 [1.5]	2.9 [1.3]	3.2 [1.2]	4.0 [1.6]	5.1 [2.3]
Max Peak Gain* (dBi) - Gnd. Plane [No Gnd. Plane]	1.8 [2.0]	1.8 [2.4]	2.1 [3.0]	4.9 [2.5]	3.9 [2.3]	3.9 [2.3]	3.9 [2.1]	4.7 [2.6]	7.2 [3.7]
VSWR** - Avg, Gnd. Plane [No Gnd. Plane]	1.7 [2.0]	1.8 [1.7]	1.8 [1.7]	1.4 [1.5]	1.4 [1.4]	1.4 [1.5]	1.6 [1.6]	1.4 [1.6]	1.3 [1.3]
VSWR** - Max, Gnd. Plane [No Gnd. Plane]	2.5 [2.5]	2.2 [2.5]	2.3 [2.5]	2.0 [2.1]	2.0 [2.1]	2.1 [2.1]	2.0 [2.1]	2.0 [2.1]	2.0 [2.1]
Isolation **(dB) LTE1 to LTE2 - Gnd. Plane [No Gnd. Plane]	-10 [-14]	-12 [-15]	-14 [-15]	-18 [-16]	-17 [-16]	-17 [-16]	-21 [-23]	-19 [-23]	-27 [-30]
Azimuth Plane 3 dB Beamwidth	360°, Omnidirectional								
Nominal Impedance (Ohms)	50								
Polarization	Linear Vertical								
Max Power - Ambient 25°C (W)	30 (LTE/CELL)								

**Notes:** (\*) - This parameter is based on a 30cm (1ft) cable length. For the ground plane measurement, a 30cm (1ft) ground plane was used. (\*\*) - This parameter is based on a 518cm (17ft) cable length. For the ground plane measurement, a 30cm (1ft) ground plane was used. Antenna specifications are subject to change according to the ground plane size.

MECHANICAL SPECIFICATIONS	
Dimensions – L x W x H – mm (inches)	179 x 63 x 48 (7.04 x 2.48 x 1.69)
Weight – kg (lbs.)	0.65 kg (1.4 lbs)
Mounting	P-Mount
Cable Type	LMR 100- pigtails, LMR 195- jumper cables, Black
Color	Black or White
Radome Material	PC, UL94-V0
Baseplate Material	Aluminum

ENVIRONMENTAL SPECIFICATIONS	
Operating Environment	Outdoor Vehicle
Operating Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Ingress Protection Rating	IP67
Rail Compliance Standards	EN61373 (Shock & Vibration), EN50155 (Temperature)
Material Substance Compliance	RoHS

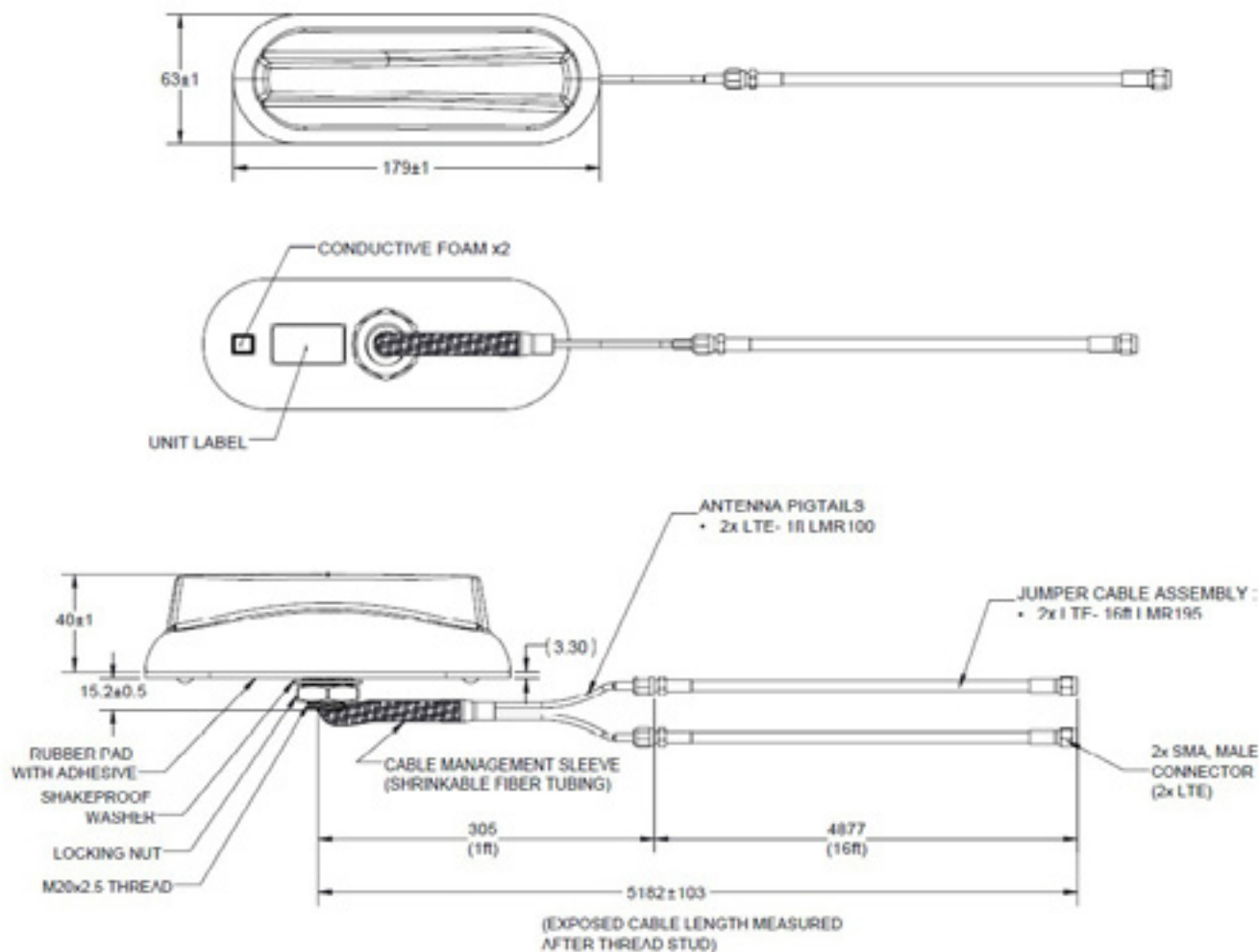
## CONFIGURATION

PART NUMBER	PIGTAIL CABLE LENGTH	JUMPER CABLE LENGTH	CONNECTOR – LTE PORTS	COLOR
VFD69383B2NNN-518R	0.3 m (1 ft.)	4.9 m (16 ft)	SMA-male	Black
VFD69383W2NNN-518R	0.3 m (1 ft.)	4.9 m (16 ft)	SMA-male	White

## PACKAGING INFORMATION

PACKAGED DIMENSIONS	CARTON	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	1	4	140	196
Height – mm (in.)	130 (5.12)	235 (9.25)	1335 (52.56)	1813 (71.38)
Length – mm (in.)	222 (8.74)	543 (21.38)	1200 (47.24)	1200 (47.24)
Width – mm (in.)	222 (8.74)	232 (9.13)	800 (31.5)	800 (31.5)
Shipping Weight – kg (lb.)	0.88 (1.9)	4.06 (8.95)	155 (342)	212 (467)

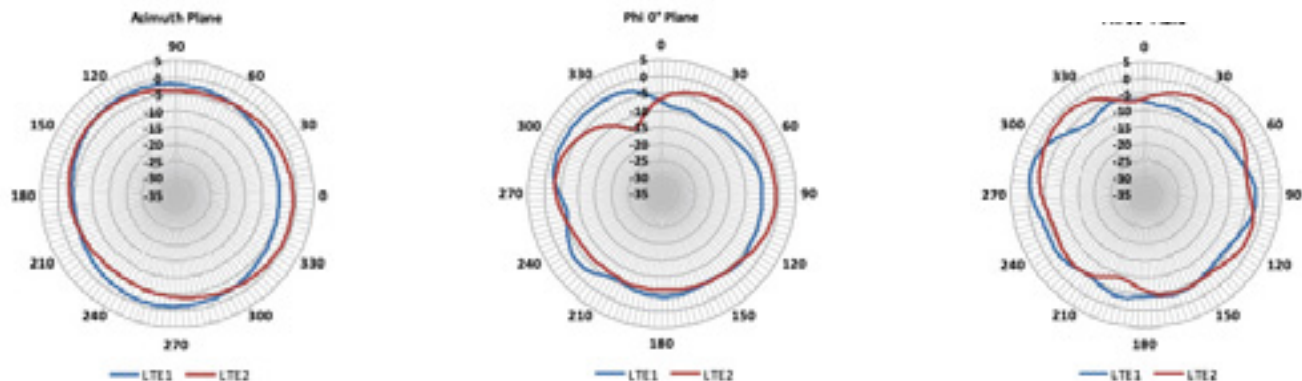
## MECHANICAL DRAWINGS



The Gar antenna can create an IP67 water-tight seal when installed on vehicles. Certain vehicles such as a Ford Explorer Interceptor have more narrow roof ridges that are tightly spaced together. For this type, vehicle special adapters are available. See parts [BKIT-VFX69383-001](#) (between ridges installation) and [BKIT-VFX69383-003](#) (atop ridge installation) for product details.

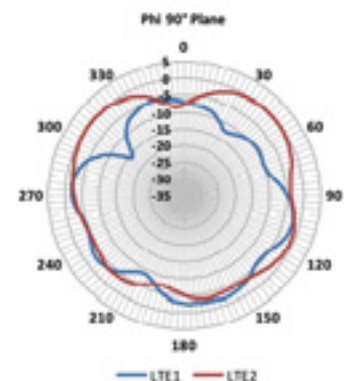
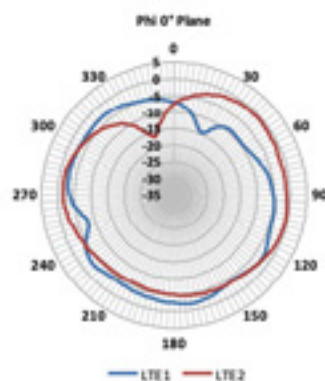
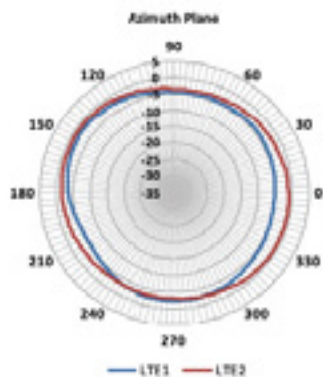
## RADIATION PATTERNS WITH GROUND PLANE - LTE ANTENNAS

698 MHz

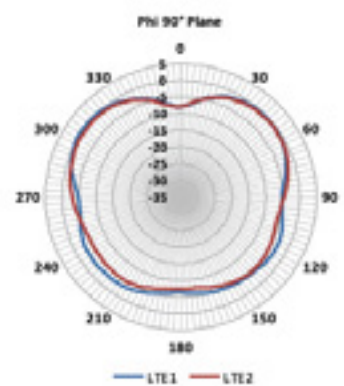
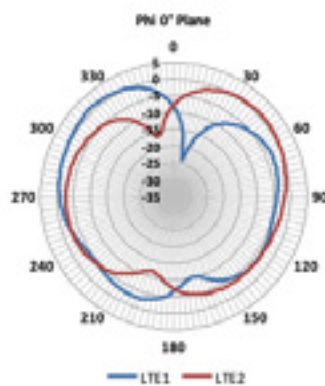
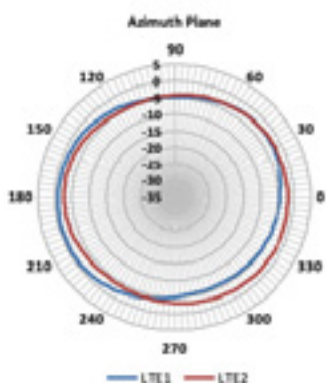


## RADIATION PATTERNS WITH GROUND PLANE - LTE ANTENNAS

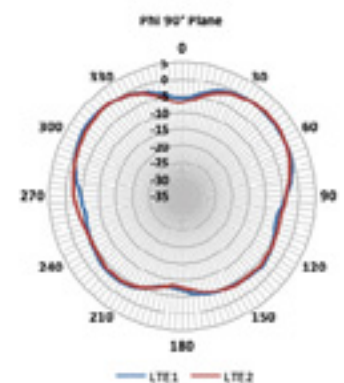
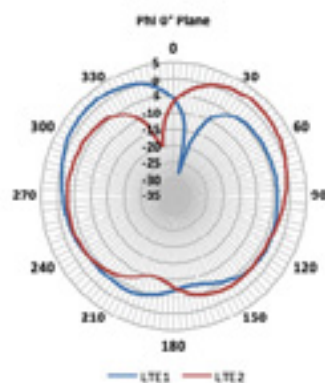
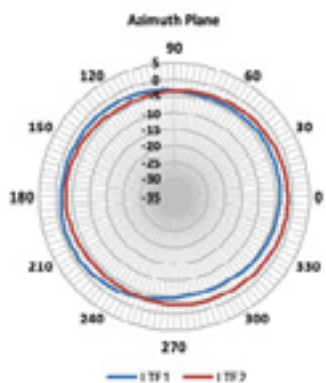
725 MHz



880 MHz

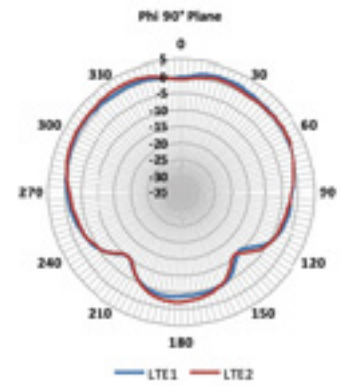
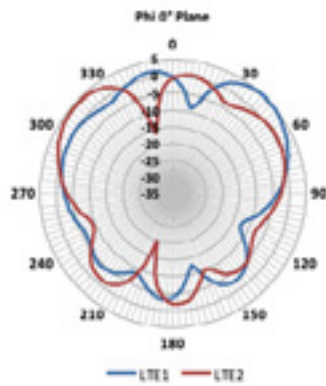
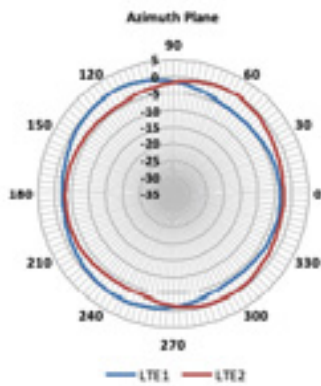


960 MHz

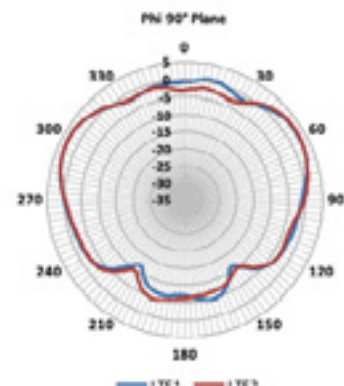
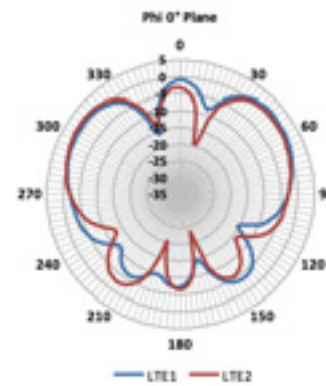
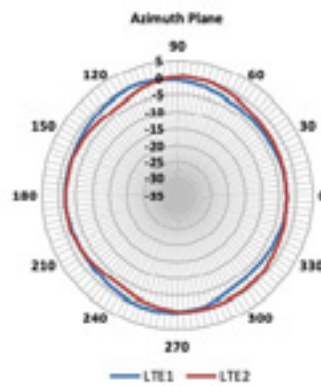


## RADIATION PATTERNS WITH GROUND PLANE - LTE ANTENNAS

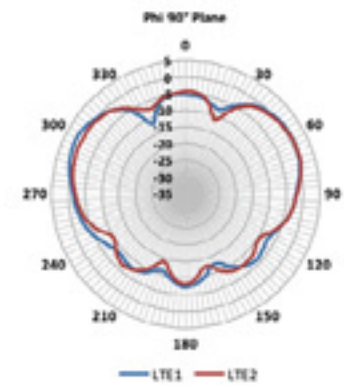
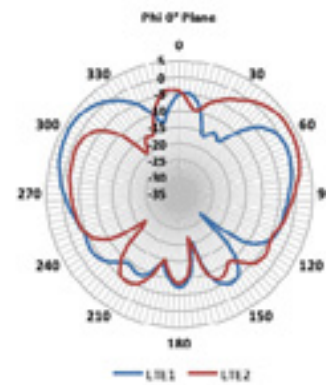
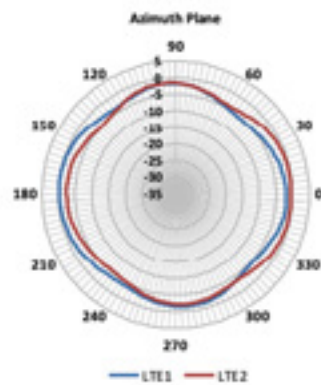
1690 MHz



1920 MHz



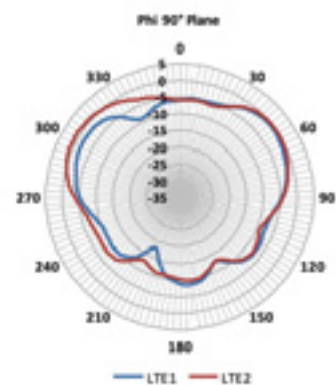
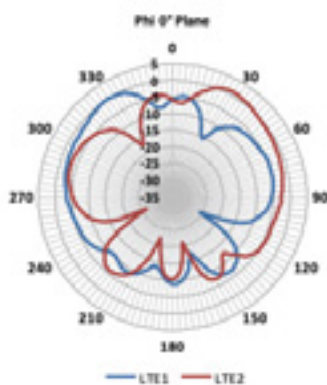
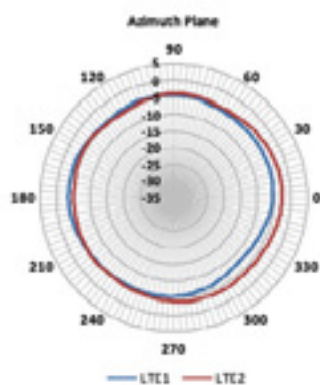
2110 MHz



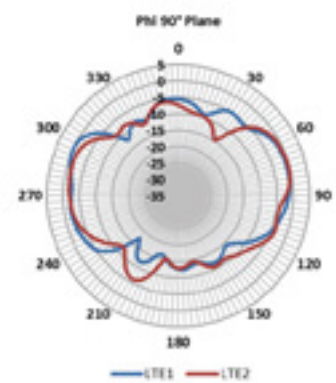
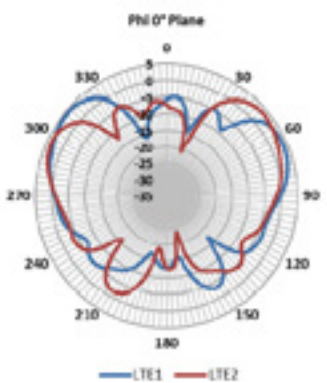
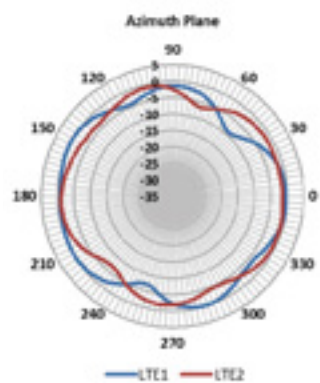


## RADIATION PATTERNS WITH GROUND PLANE - LTE ANTENNAS

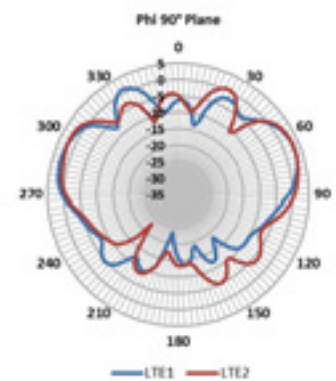
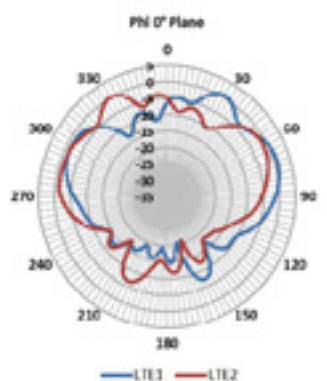
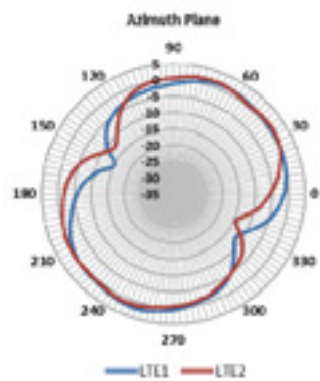
2400 MHz



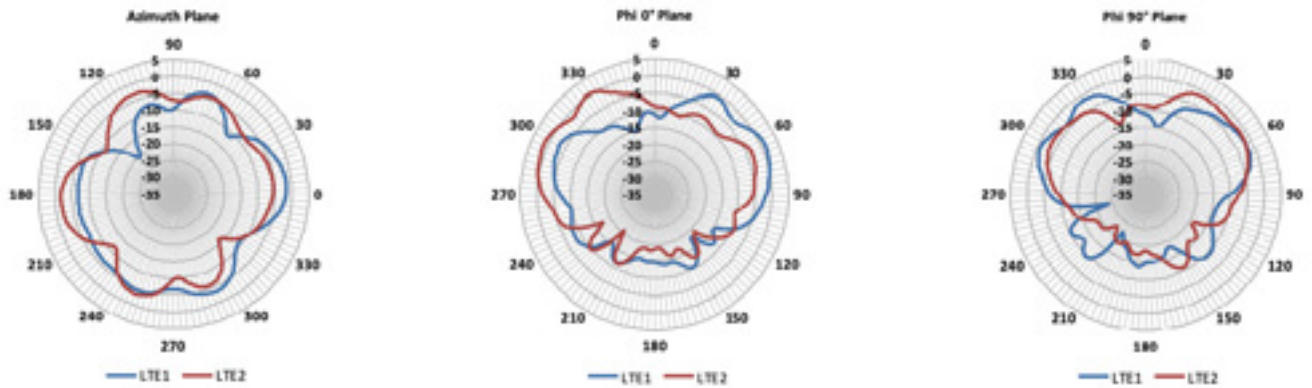
2700 MHz



3400 MHz

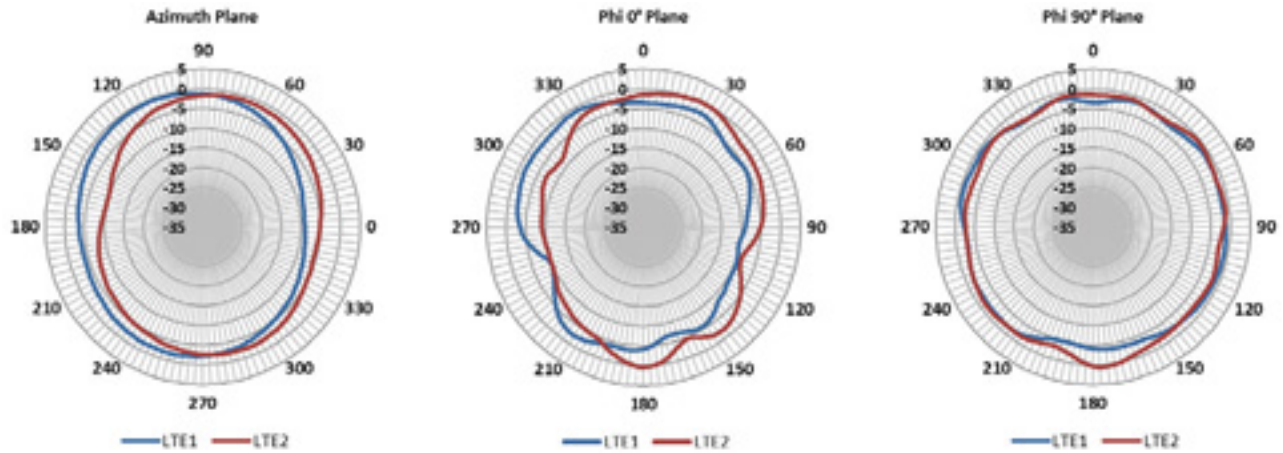


## 3800 MHz

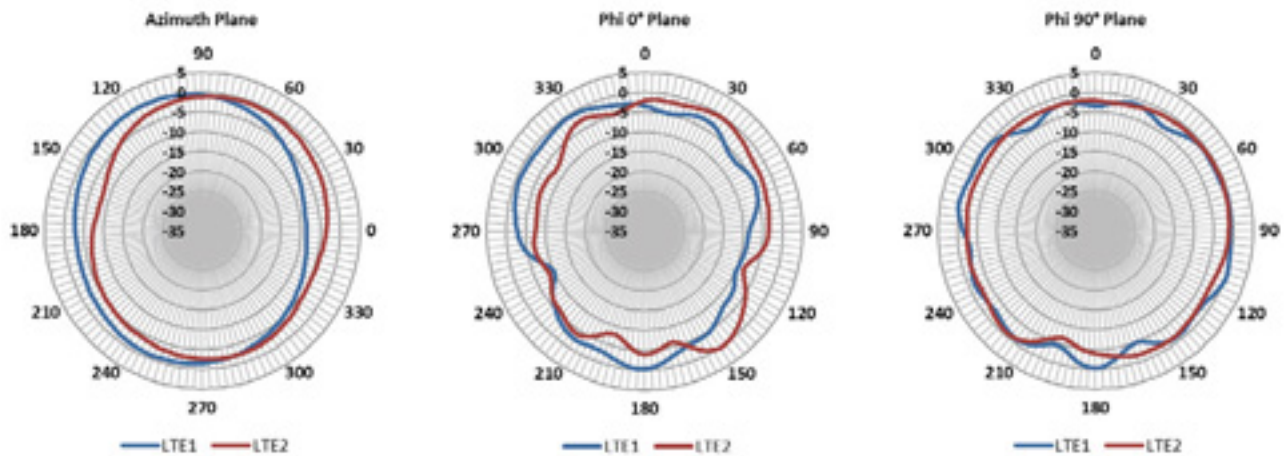


## RADIATION PATTERNS *without Ground Plane* - LTE ANTENNAS

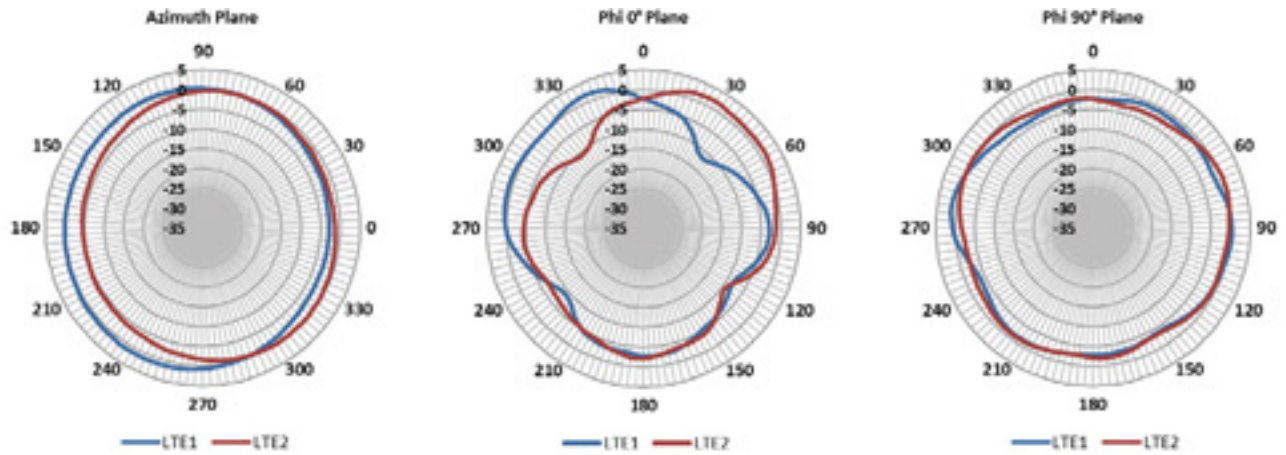
### 698 MHz



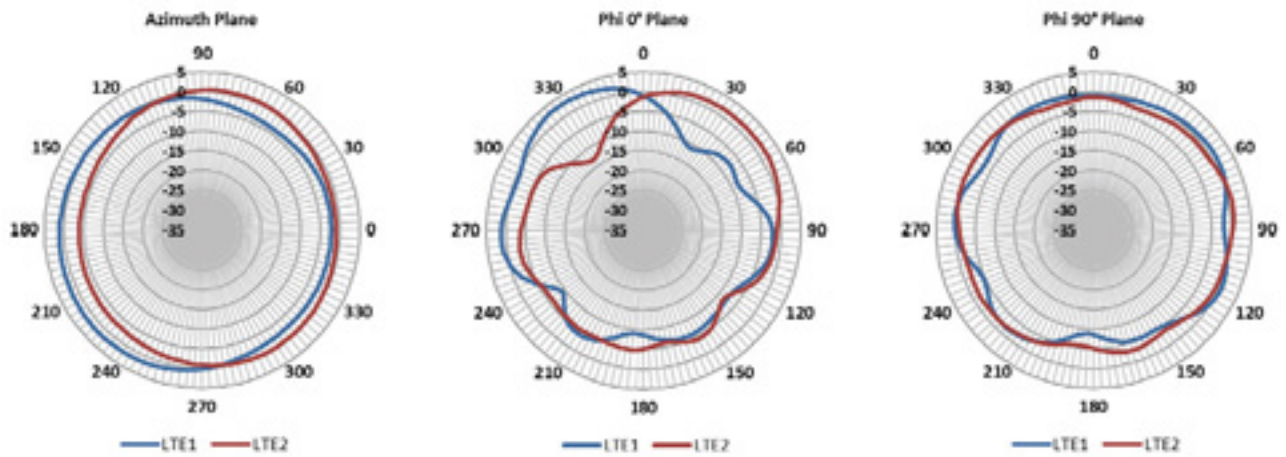
### 725 MHz



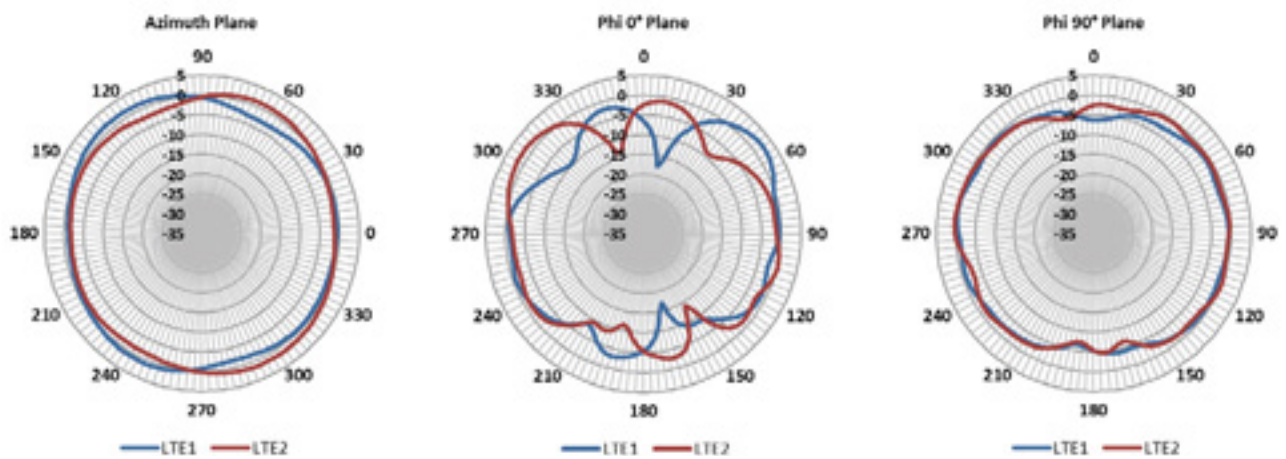
## 880 MHz



## 960 MHz

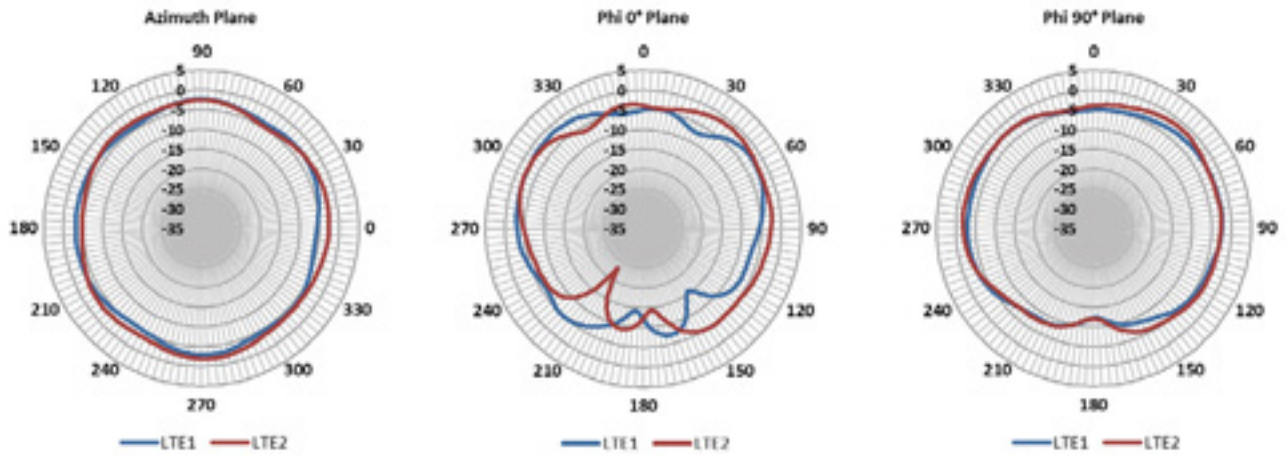


## 1690 MHz

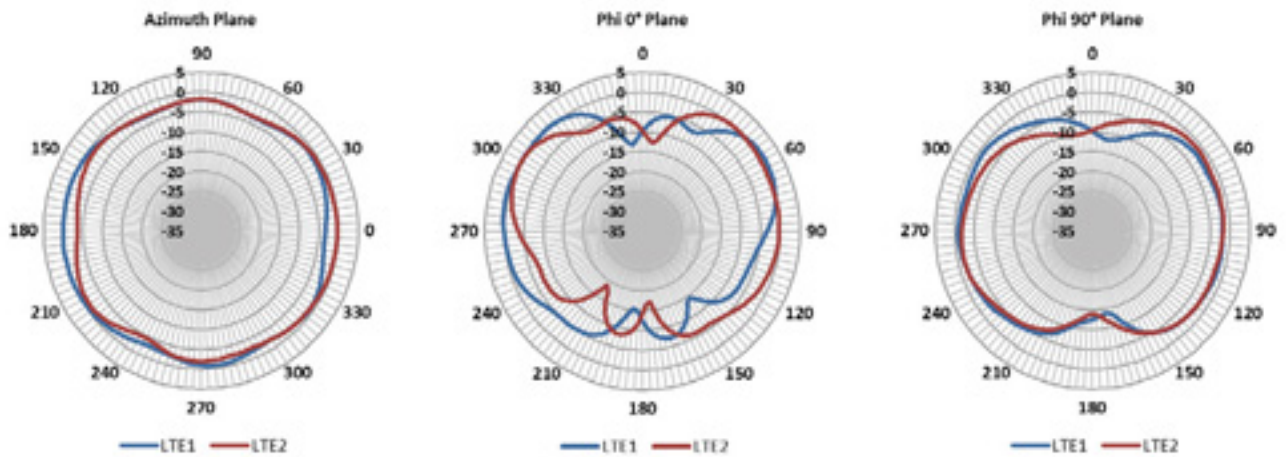




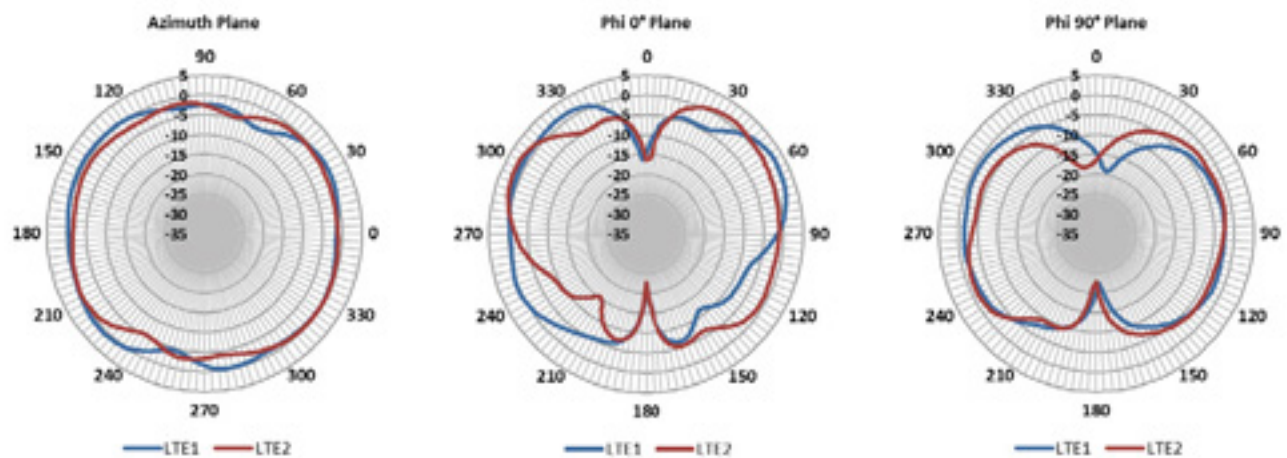
## 2110 MHz



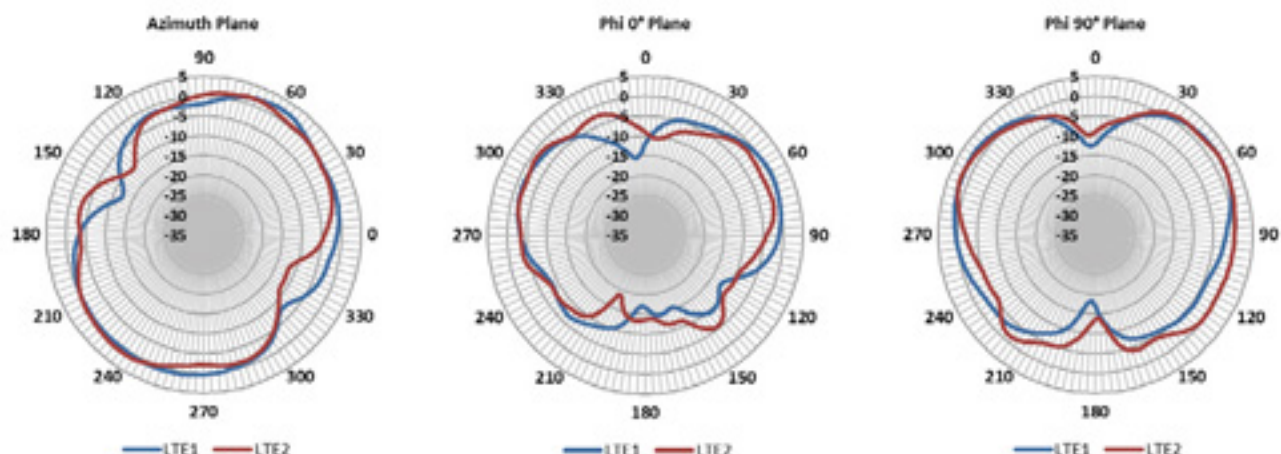
## 2400 MHz



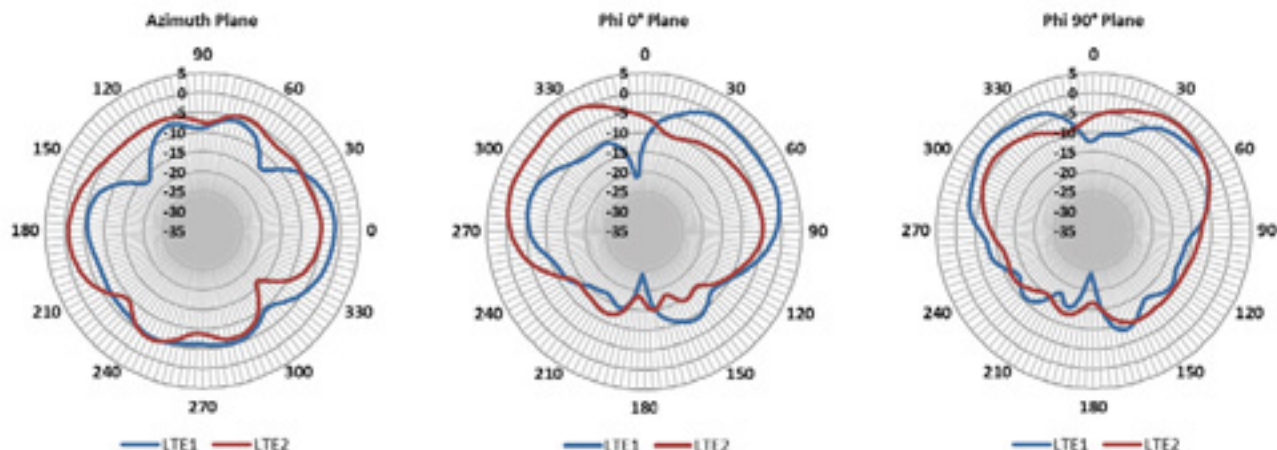
## 2700 MHz



## 3400 MHz



## 3800 MHz



### TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

### te.com

TE, TE Connectivity, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, complete, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event will TE be liable for any direct, indirect, incidental, special or consequential damages arising from or related to recipient's use of the information. It is the sole responsibility of recipient of this information to verify the results of this information using their engineering and product environment. Recipient assumes any and all risks associated with the use of the information. Antenna performance may vary. TE is a component manufacturer, and customer and/or end-user is responsible for all end-use compliance and regulatory requirements.

©2025 TE Connectivity. All Rights Reserved.

05/25 Original

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[VFD69383B2NNN-518R](#)