



The Gar VFT69383x11JN multiport/multiband antenna provides an excellent solution for public safety, transportation, and aftermarket fleet applications. Configured for one-port operation over the 3G/4G/5G/ISM/CBRS bands and one-port operation over the low/high frequency Wi-Fi bands. An additional third 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/Multiport operation with GNSS navigation

#### APPLICATIONS

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

#### ELECTRICAL SPECIFICATIONS

Antenna Model	VFT69383x11JN					
Number of Ports	3					
Port Configuration	1x- 3G/4G/5G/ISM/CBRS (LTE/CELL)				1x- Wi-Fi (WIFI)	
Operating Frequency (MHz)	698-806	824-894	880-960	1690-3800	2400-2500	4900-6000
Peak Gain (*) – Avg (dBi)	-0.3	0.6	1.6	4.3	3.4	4.6
Peak Gain (*) – Max (dBi)	0.8	1.4	2.3	7.3	3.9	5.4
VSWR (**) – Avg	1.7	1.6	1.6	1.4	1.4	1.2
VSWR (**) – Max	2.5	2.0	2.0	2.1	2.0	2.0
Isolation (**) LTE to WiFi (dB)	-46	-45	-46	-24	-24	-35
Isolation (**) LTE1 to GNSS (dB)	-46	-44	-43	-44	-60	-51
Isolation (**) WiFi to GNSS (dB)	-74	-74	-74	-55	-55	-52
Azimuth Plane 3 dB Beamwidth	360°, Omnidirectional					
Nominal Impedance (Ohms)	50					
Polarization	Linear Vertical					
Max Power - Ambient 25°C (W)	30 (LTE/CELL); 10 (WIFI)					

**Notes:** (\*) – This parameter is based on a 30cm (1ft) cable length and 30cm (1ft) ground plane.

(\*\*) – This parameter is based on a 518cm (17ft) cable length and 30cm (1ft) ground plane.

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.)	0.73 kg (1.6 lbs)
Cable Type	LMR 100- pigtails, LMR 195- jumper cables
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
Rail Compliance Standards	EN61373 (Shock & Vibration), EN50155 (Temperature)
Material Substance Compliance	RoHS

#### CONFIGURATION

PART NUMBER	CABLE LENGTH		CONNECTORS			COLOR
	PIGTAIL	JUMPER	LTE/CELL	WIFI	GNSS	
VFT69383B11JN-518L	0.3 m (1 ft)	4.9 m (16 ft)	SMA-male	RPSMA-male	SMA-male	Black
VFT69383W11JN-518L	0.3 m (1 ft)	4.9 m (16 ft)	SMA-male	RPSMA-male	SMA-male	White

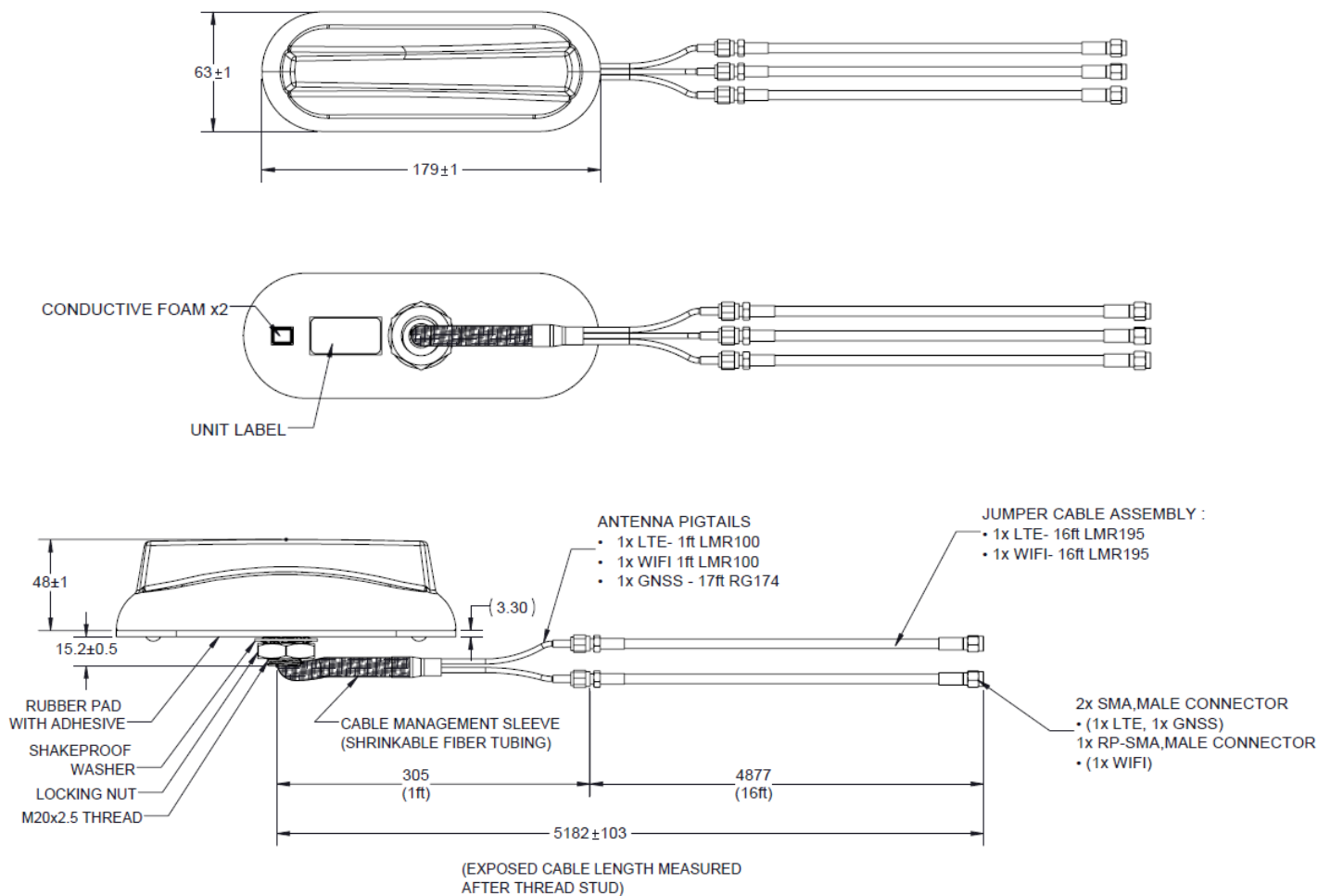
### GNSS ANTENNA SPECIFICATIONS

Frequency of Operation (MHz)	1559 - 1606		
Band	BEIDOU	GPS	GLONASS
Frequency Band (MHz)	1561.098 ±2.046	1575.42 ±1.023	1602 ±5
Antenna Gain (dBi)	3.4	4.5	5.6
LNA Gain, Typ. @ room temp. (dBi)	28 ±3		
Noise Figure @ room temp., Max (dB)	≤ 2.5 @ 1575 MHz		
Max VSWR @ room temp.	≤ 2.0		
Polarization	RHCP		
Nominal Impedance (Ohms)	50		
DC Voltage (Vdc)	2.5 - 7.0		
Current Consumption, Max @ room temp mA)	8.5 ± 3 @ 3.0V		
Out-of-band Signal Rejection Min @ room temp (dBc)	80 (@698-960MHz)	80 (@1428-2700 MHz)	70 (@4900-5800 MHz)
Input Max Power (dBm)	-10		
Cable Type	RG174		

### PACKAGING INFORMATION

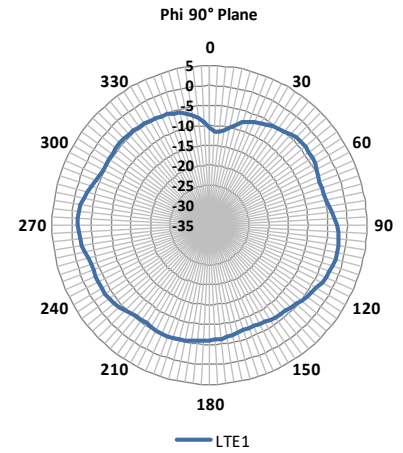
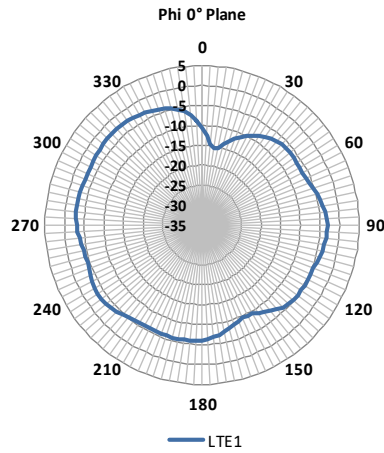
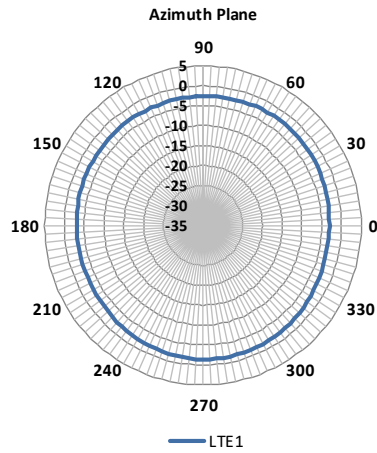
PACKAGED DIMENSIONS	CARTON	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	1	4	140	196
Height – mm (in.)	130 (5.12)	235 (9.25)	1335 (52.56)	1813 (71.38)
Length – mm (in.)	222 (8.74)	543 (21.38)	1200 (47.24)	1200 (47.24)
Width – mm (in.)	222 (8.74)	232 (9.13)	800 (31.5)	800 (31.5)
Shipping Weight – kg (lb.)	0.96(2.1)	4.39 (9.68)	167 (368)	228 (503)

### MECHANICAL DRAWINGS

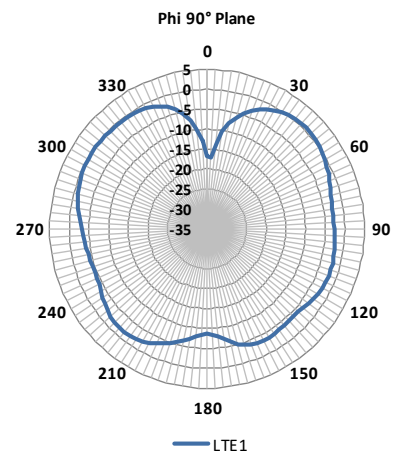
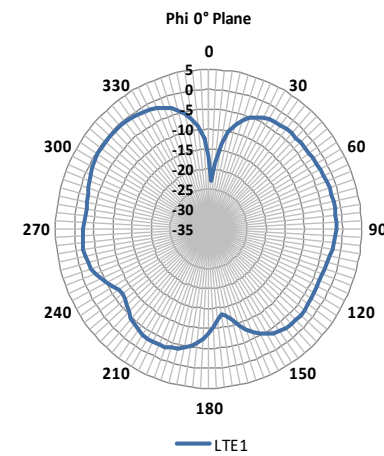
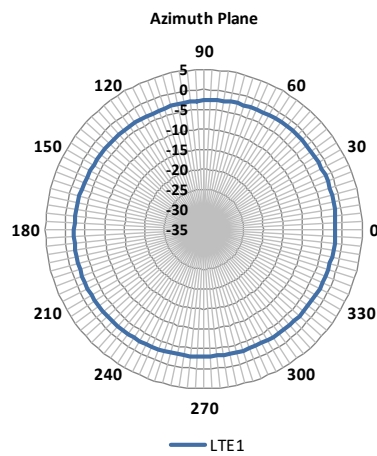


RADIATION PATTERNS - LTE ANTENNAS

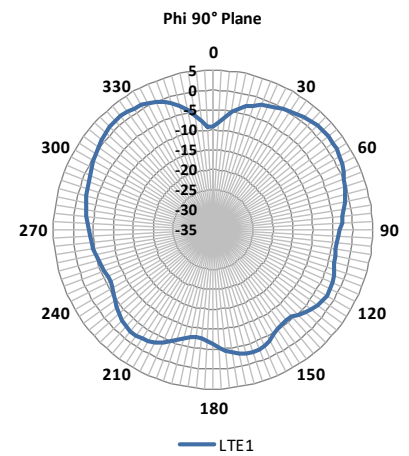
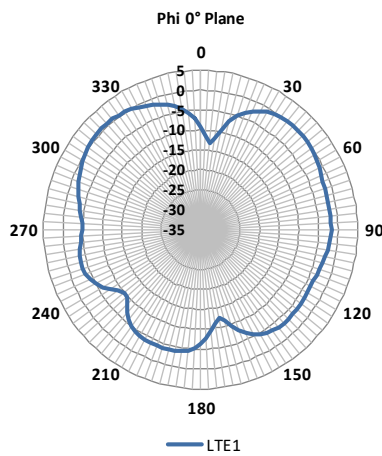
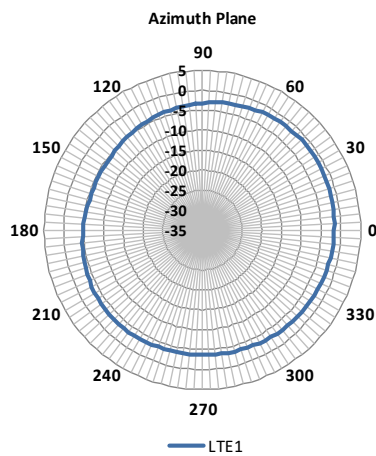
698 MHz



880 MHz

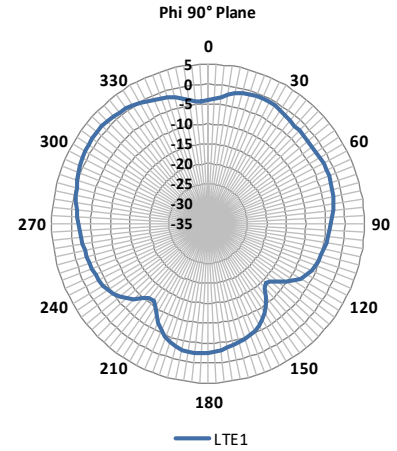
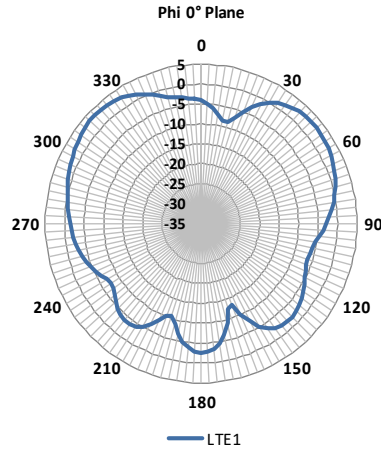
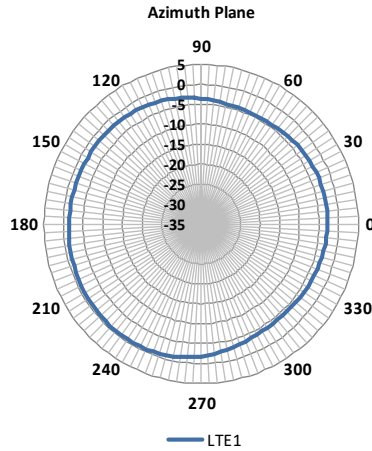


960 MHz

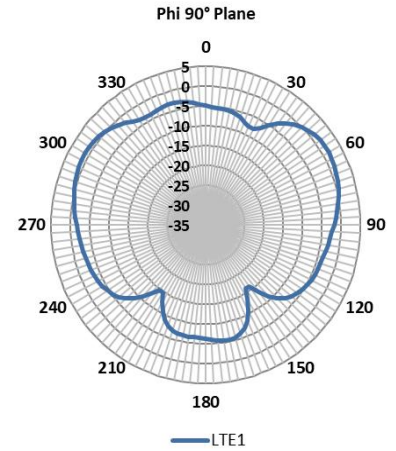
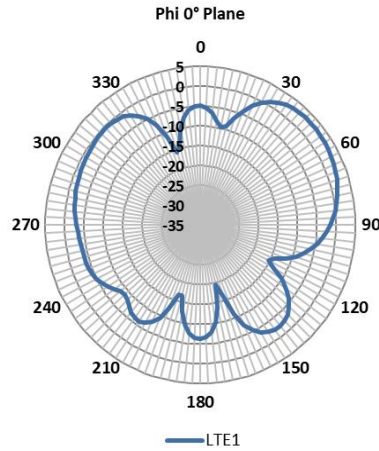
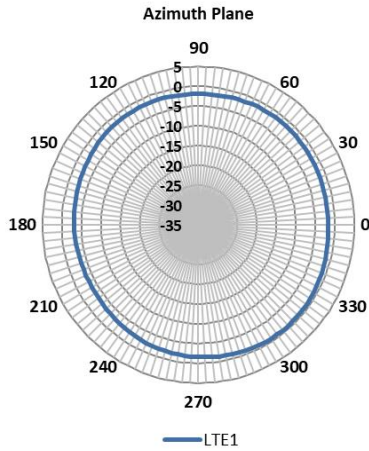


RADIATION PATTERNS - LTE ANTENNAS

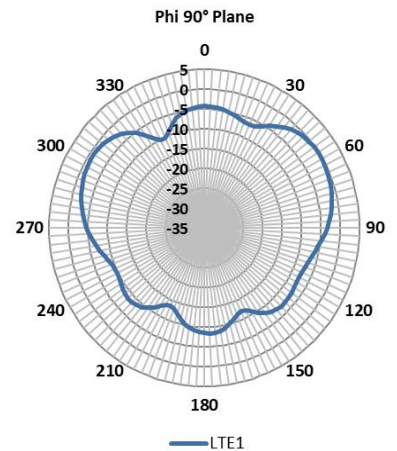
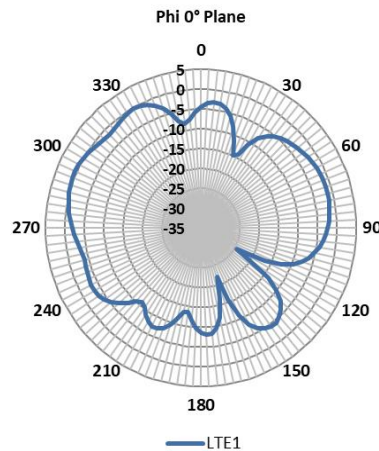
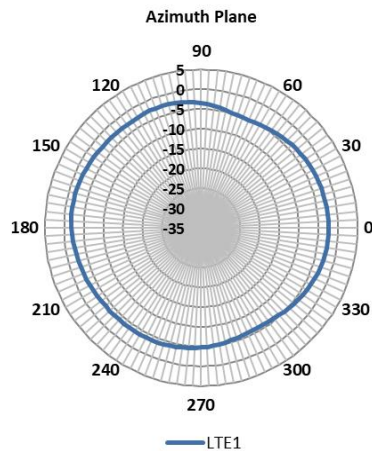
**1690 MHz**



**1920 MHz**



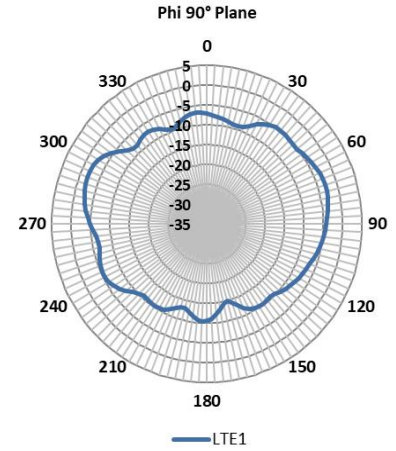
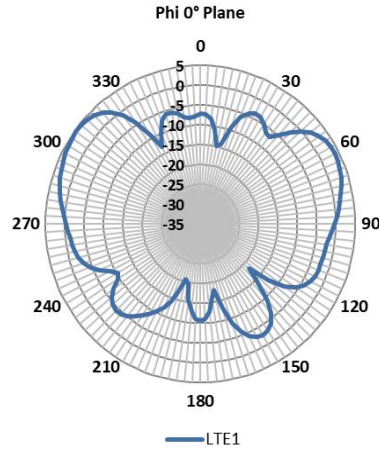
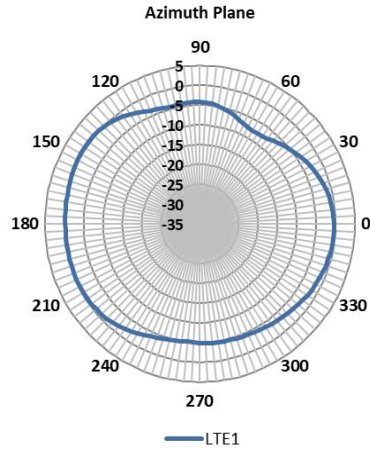
**2170 MHz**



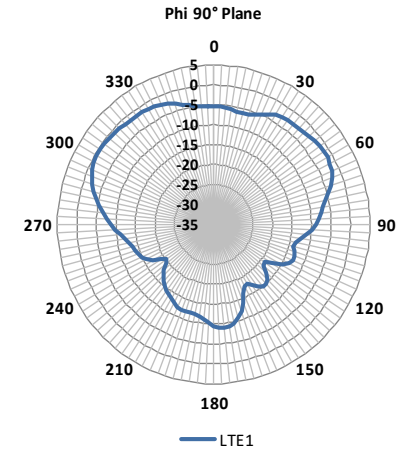
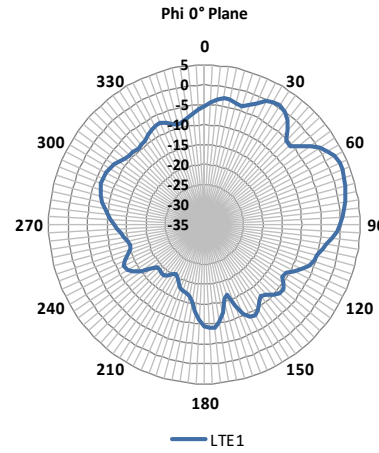
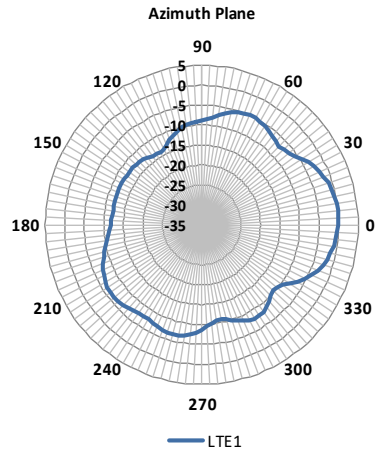


RADIATION PATTERNS - LTE ANTENNAS

2700 MHz

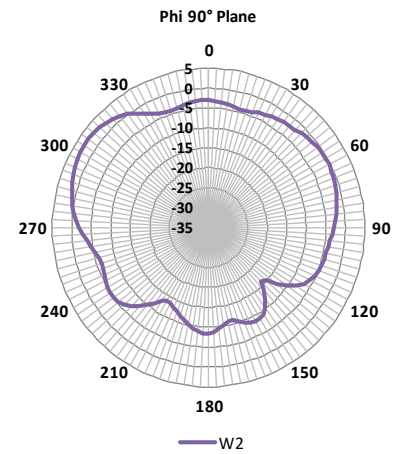
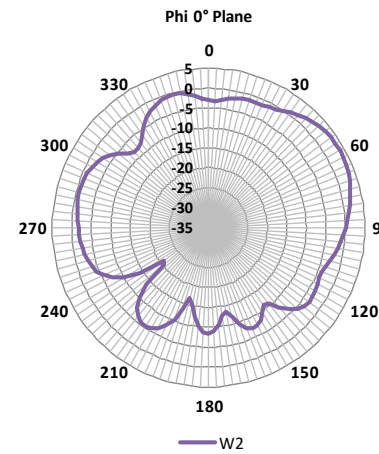
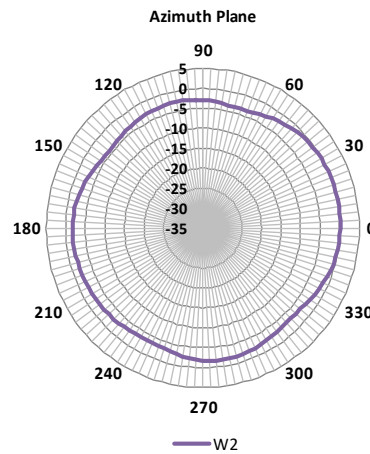


3800 MHz



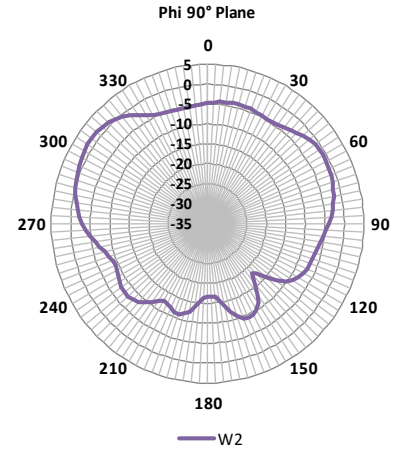
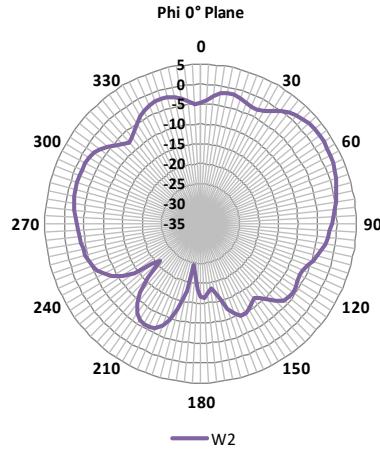
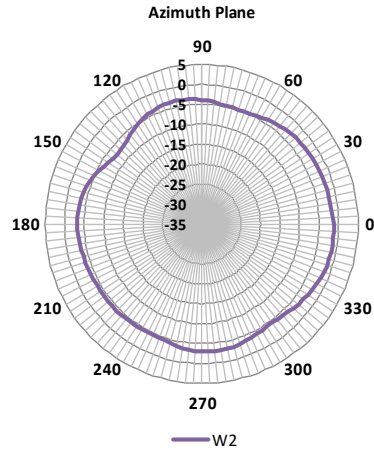
RADIATION PATTERNS - WI-FI ANTENNAS

2400 MHz

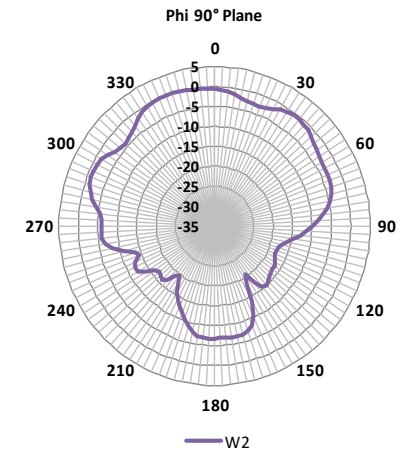
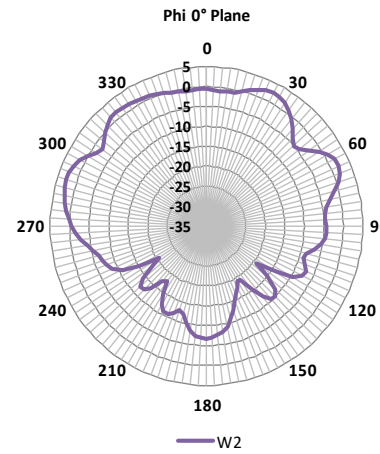
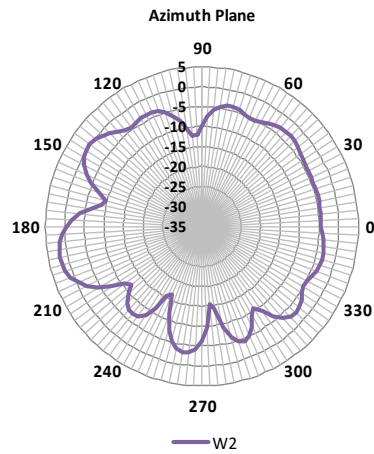


RADIATION PATTERNS - WI-FI ANTENNAS

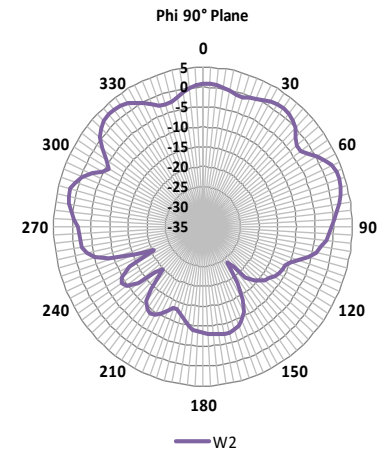
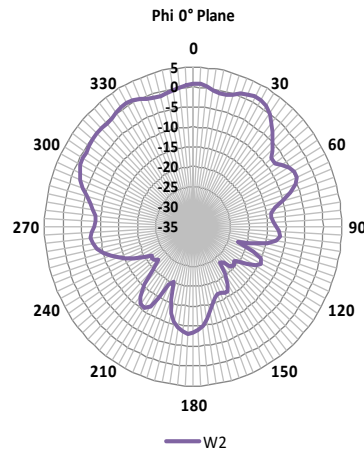
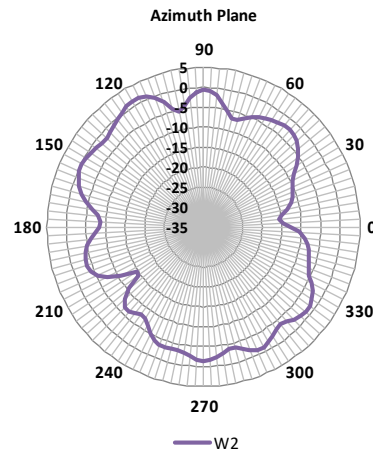
2500 MHz



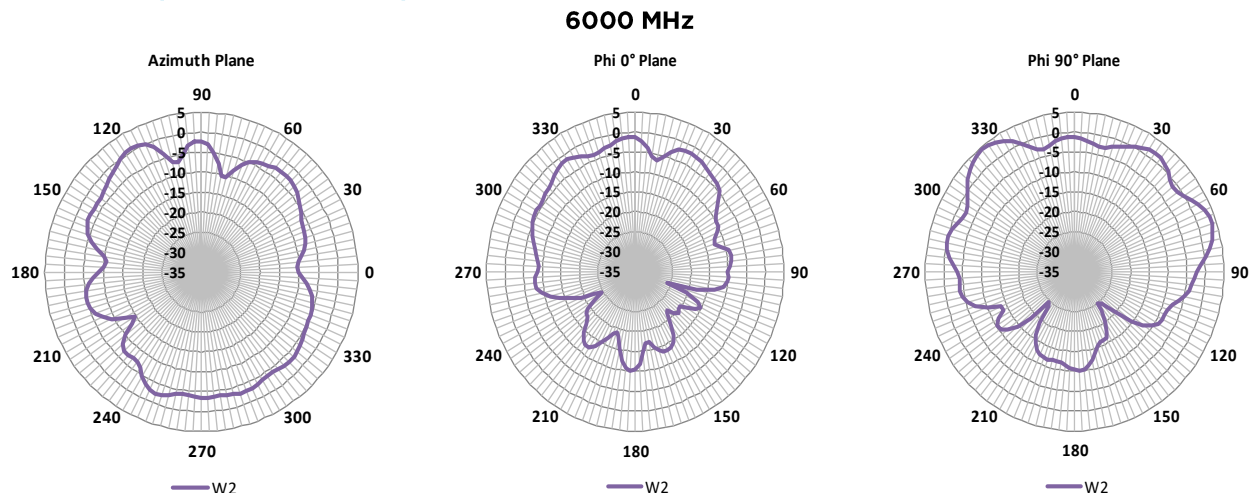
4900 MHz



5750 MHz



### RADIATION PATTERNS - WI-FI ANTENNAS



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