



## M6 Stud Vehicular Whips

### Single-Band Vehicle Whip Antenna Family UHF, 700/800/900 MHz

The M6 Stud Vehicular Whip single-band antenna family has been designed as an addition or replacement for existing vehicle whip antennas which accept an M6 x 0.75mm stud. It is compatible with TE's **FP20 auto** antenna family and other popular vehicular antenna bases.

The family includes four antennas operating over UHF and 700/800/900 MHz bands with impressive gain and consistent radiation patterns across all frequencies.

### FEATURES AND BENEFITS

- Three UHF options - 380-430, 450-470, 470-512 MHz
- One 700/800/900 MHz option
- M6 x 0.75 stud compatible with the TE Connectivity FP20 auto and other popular vehicular antenna bases

### APPLICATIONS

- Public Safety
- Emergency Services
- First Responders
- Freight
- Transportation

#### ELECTRICAL SPECIFICATION

Part Number	L000410-01	L000410-02	L000410-03	L000410-04
Operating Frequency (MHz)	380-430	450-470	470-512	740-960
VSWR - Max*	<1.6:1	<1.2:1	<1.6:1	<2.3:1
Peak Gain - Max (dBi)**	3.98	4.93	5.17	4.28
Input Max Power (W)	45	45	45	35
Polarization	Linear, Vertical			
Azimuth Beamwidth (All Models)	360 °, Omnidirectional			
Nominal Impedence (Ohms)	50			

#### Notes:

The specification is based on the measurement when antenna is attached to FP20 auto base antenna

\*Measured with a 5m cable length & (3x3)ft ground plane

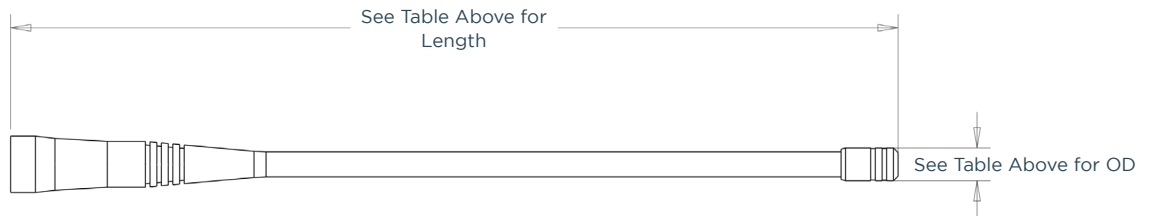
\*\*Measured with a 5m cable length & (4x4)ft ground plane.

Antenna performance is subject to change according to ground-plane size, base antenna structure and any adaptors used. Antenna base structure must have proper grounding features and sufficient ground plane size.

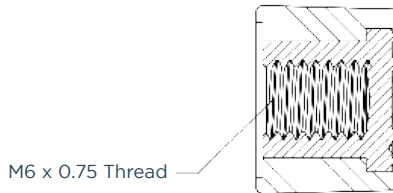
## MECHANICAL SPECIFICATION

Part Number	L000410-01	L000410-02	L000410-03	L000410-04
Dimensions L x OD mm (in.)	149 x 3.2 (5.87 x 0.13)	130 x 3.2 (5.12 x 0.13)	122 x 3.2 (4.80 x 0.13)	64 x 3.2 (2.52 x 0.13)
Weight g (Oz.)	16.5 (0.58)	15 (0.53)	14.8 (0.52)	10.3 (0.36)
Connector	M6 x 0.75mm Stud			

## MECHANICAL DRAWINGS



### M6 Stud Connector



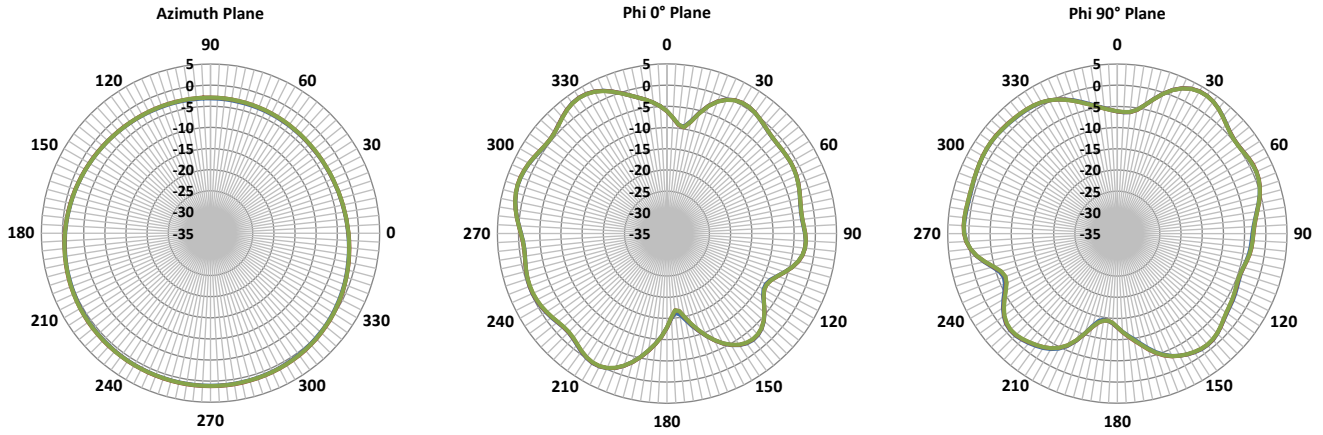
## ENVIRONMENTAL SPECIFICATION

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 (IP Rating)	IP67
Material Substance Compliance	RoHS Compliant CE & UKCA Compliant

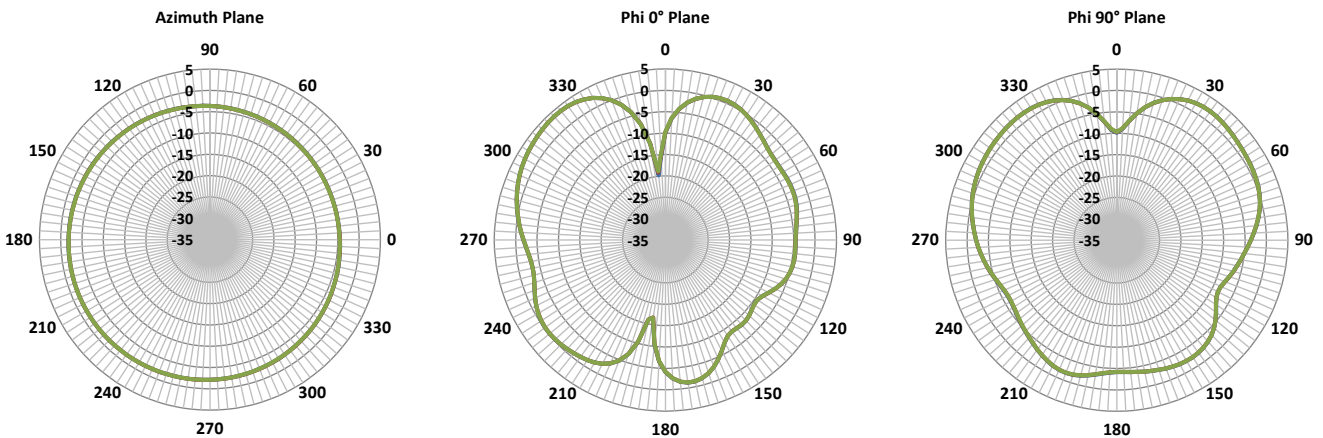
# RADIATION PATTERNS

## L000410-01 - UHF (380-430 MHz) RADIATION PATTERNS

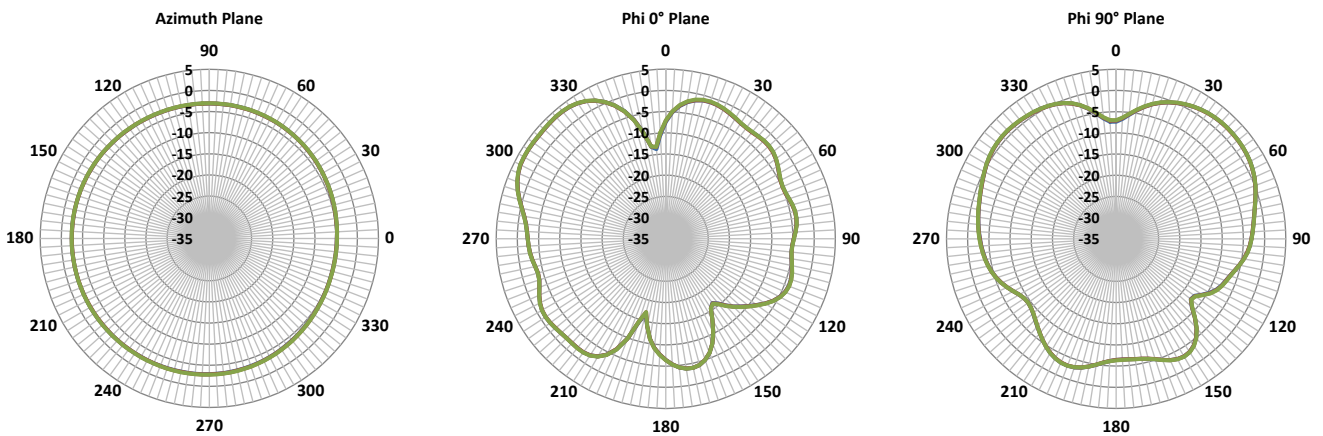
### Radiation Pattern at 380 MHz



### Radiation Pattern at 405 MHz

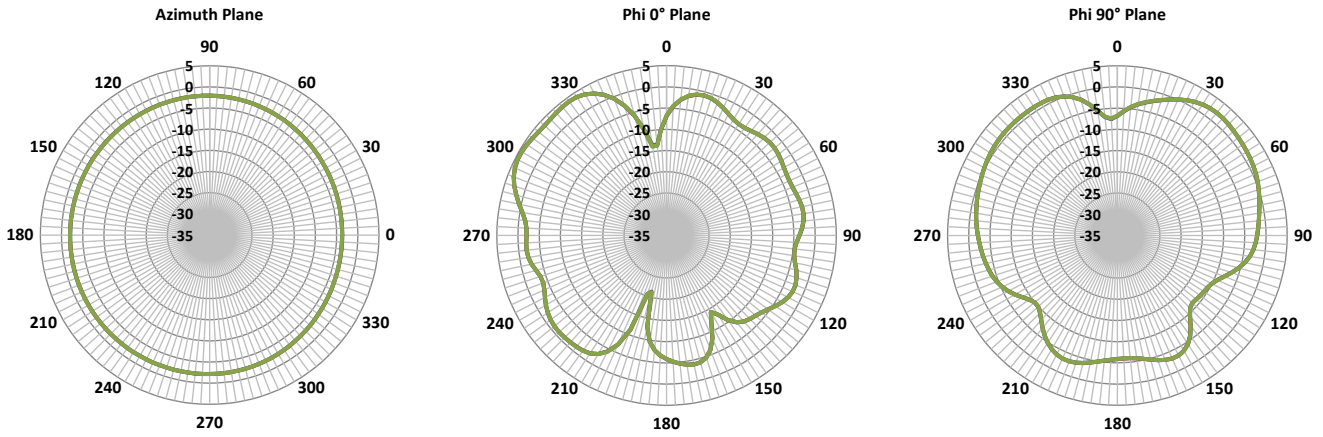


### Radiation Pattern at 405 MHz

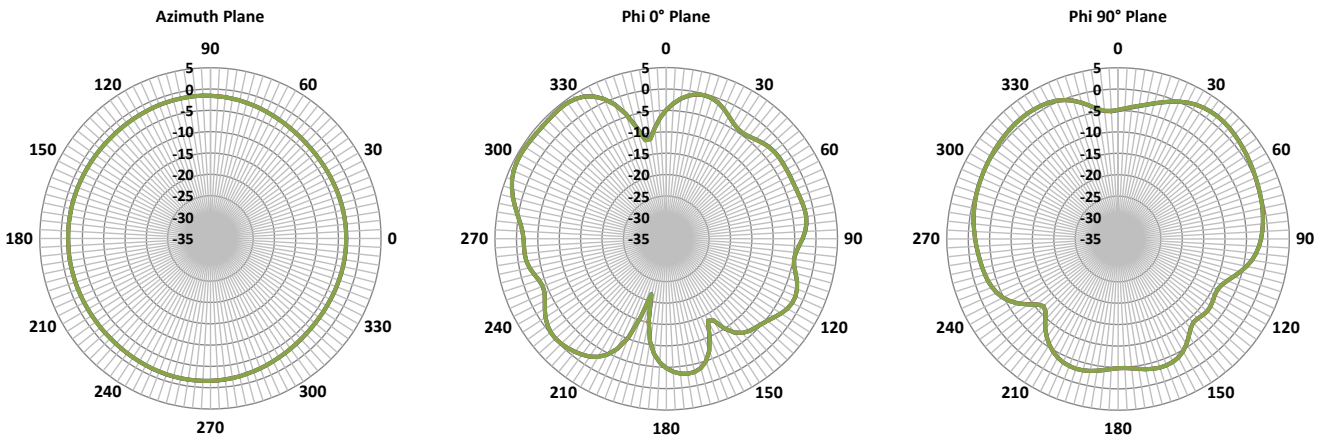


# L000410-02 - UHF (450-470 MHZ) RADIATION PATTERNS

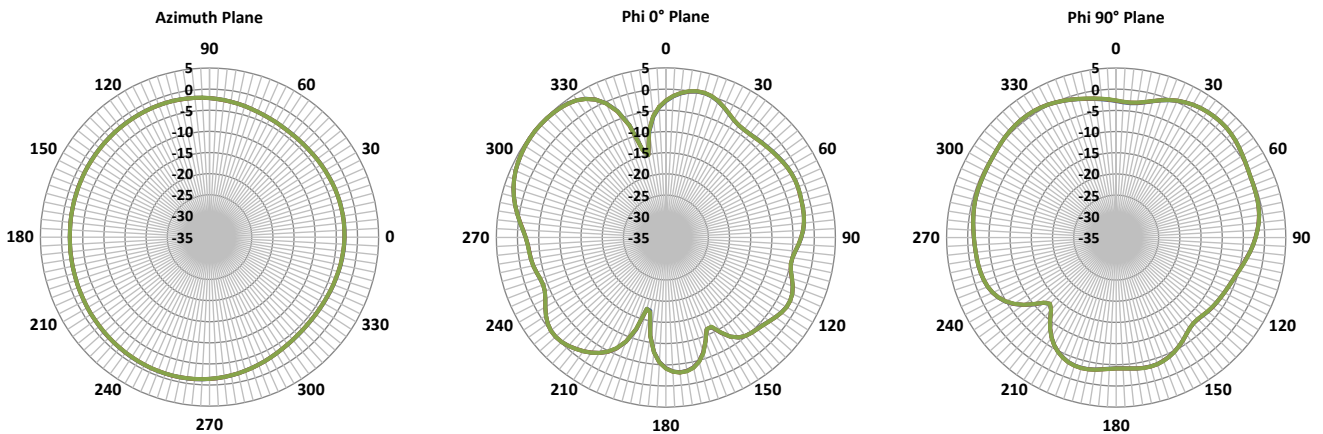
## Radiation Pattern at 450 MHz



## Radiation Pattern at 460 MHz

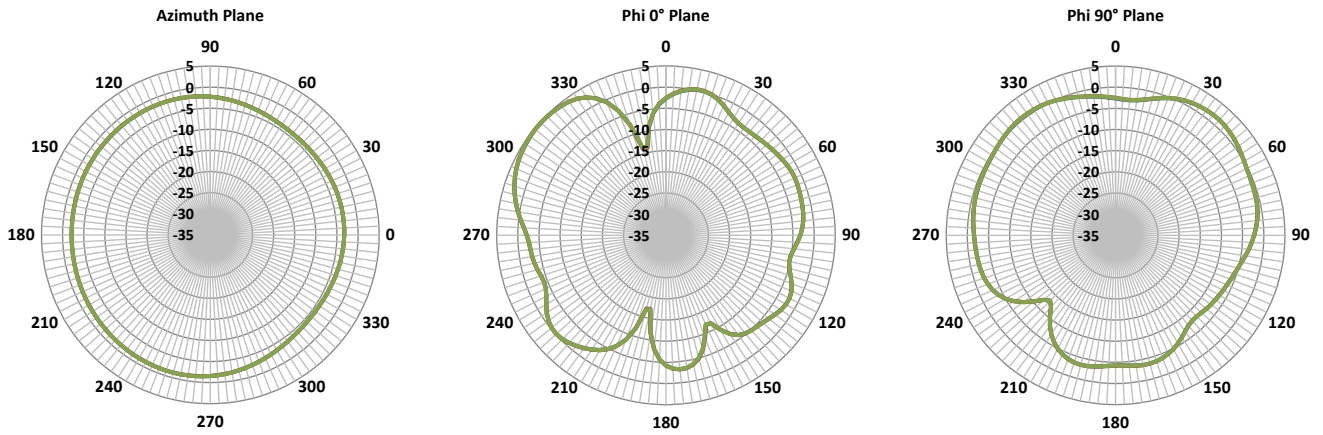


## Radiation Pattern at 470 MHz

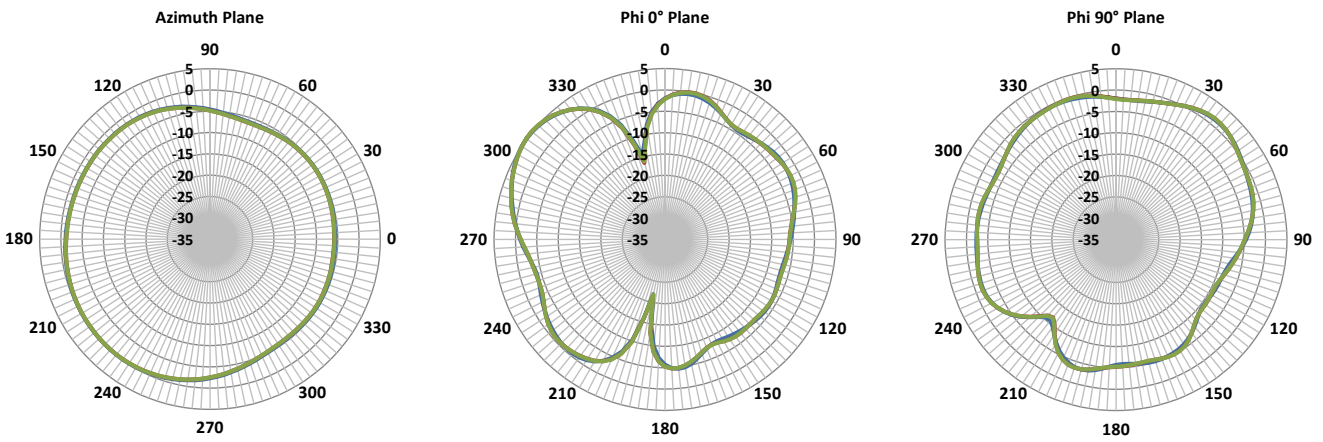


# LO00410-03 - UHF (470-512 MHZ) RADIATION PATTERNS

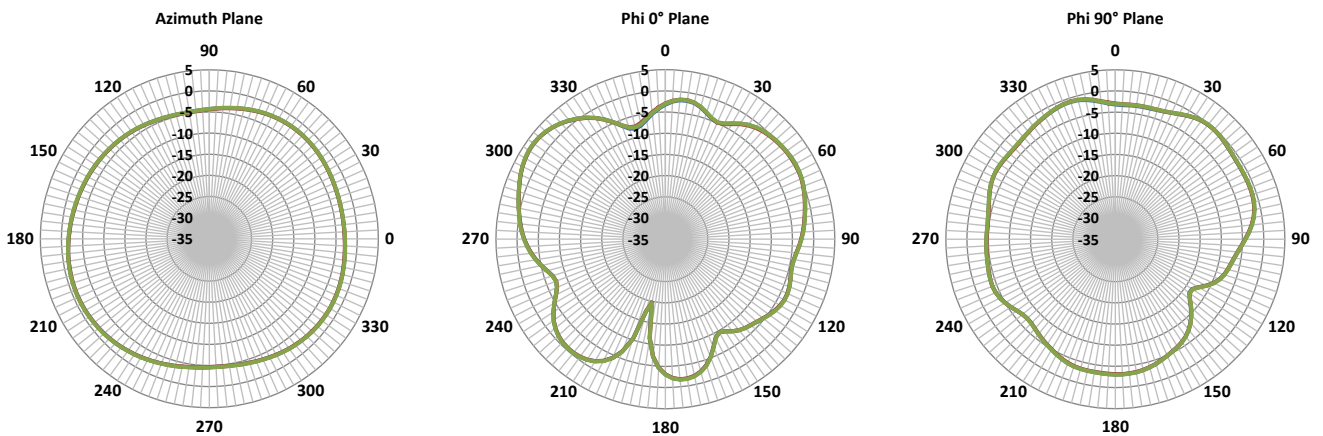
## Radiation Pattern at 470 MHz



## Radiation Pattern at 491 MHz

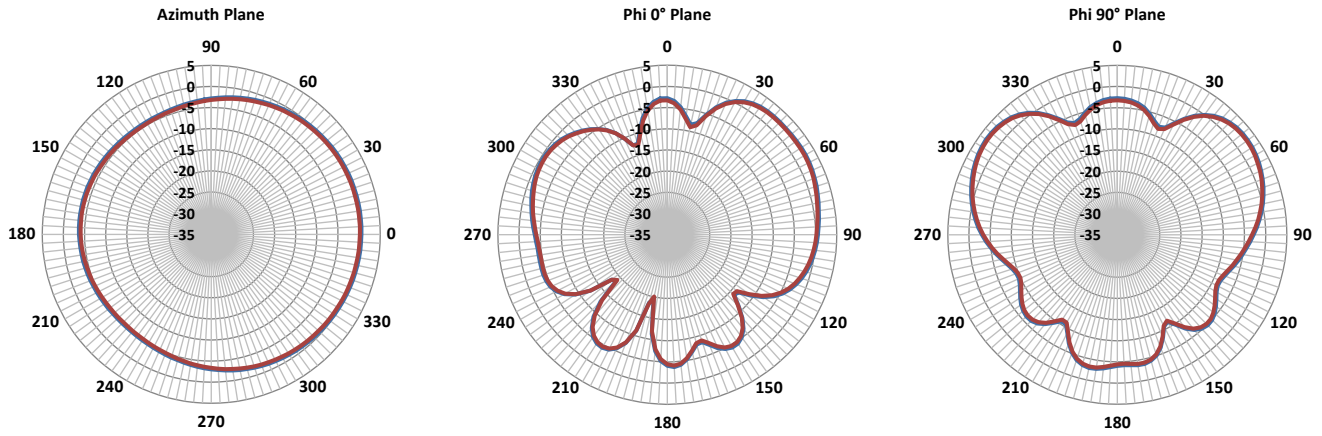


## Radiation Pattern at 512 MHz

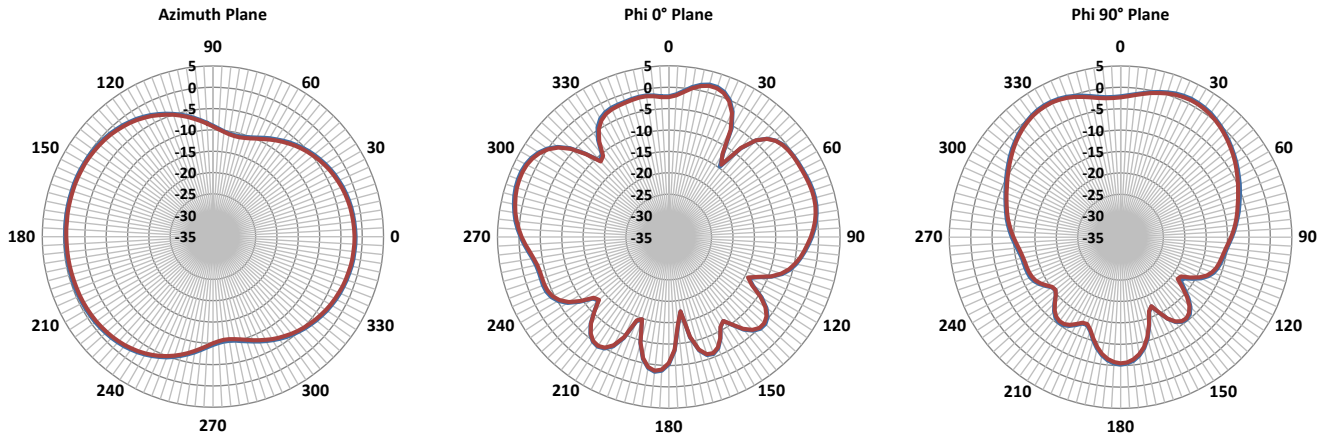


# L000410-04 - 700/800/900 (740-960 MHz) RADIATION PATTERNS

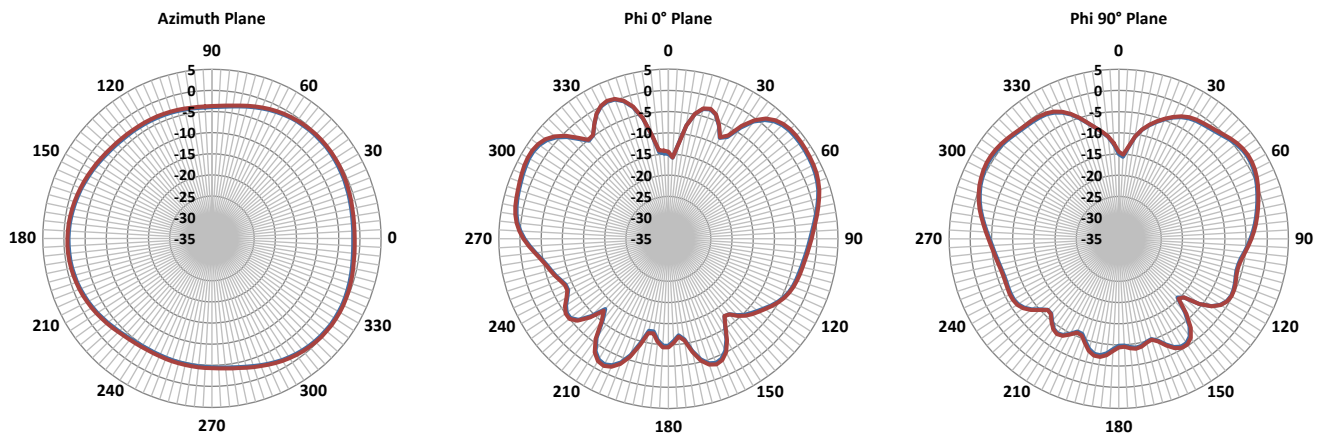
## Radiation Pattern at 740 MHz



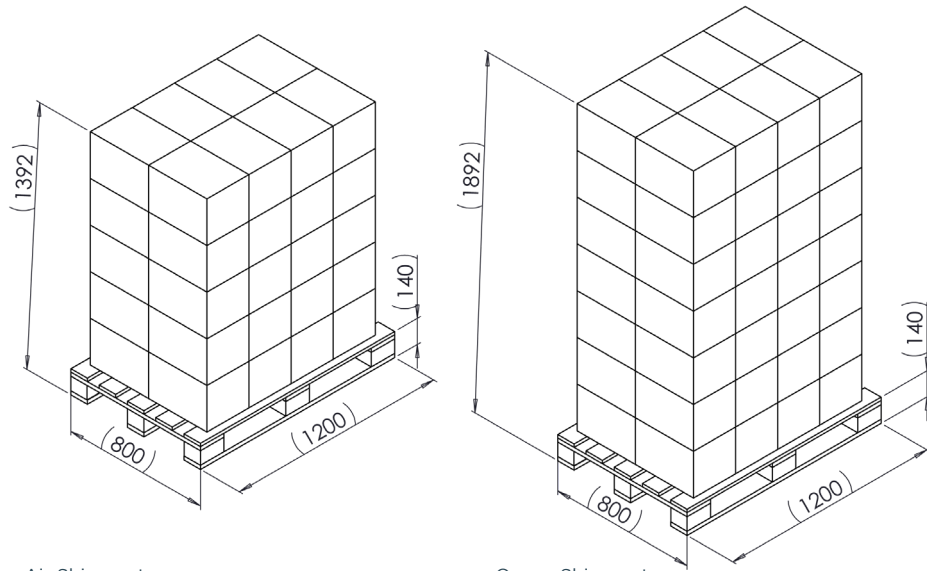
## Radiation Pattern at 850 MHz



## Radiation Pattern at 960 MHz



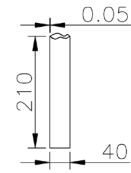
# PACKING INFORMATION



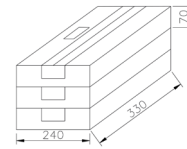
Air Shipment  
 Carton Total Per Pallet = 40  
 Stack Layer = 5

Ocean Shipment  
 Carton Total Per Pallet = 56  
 Stack Layer = 7

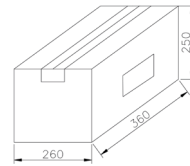
Single Unit Bag



Master Carton Inner  
 3x 100 Unit Cartons



Master Carton Outer  
 300 Units



PACKAGED DIMENSIONS	UNIT BAG	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	1	300	12,000	16,800
Height mm (in)	210 (8.27)	250 (9.84)	1392 (54.80)	1892 (74.49)
Length mm (in)	40 (1.58)	360 (14.17)	1200 (47.24)	1200 (47.24)
Width mm (in)	40 (1.58)	260 (10.24)	800 (31.50)	800 (31.50)
Est. Shipping Weight kg (lbs)	0.0105-0.016.5 (model weights vary)	7.5 - 9 (16.5 - 19.8) (model weights vary)	335-382 (738 - 842) (model weights vary)	456-520 (1005 - 1146) (model weights vary)

## TE TECHNICAL SUPPORT CENTER

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