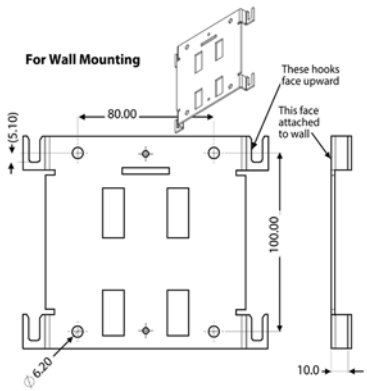
698-960 MHz/1710-2700 MHz

LTE Vertical Low PIM Directional Panel Antenna

PAV69278PI







LTE MUTLI-BAND LOW PIM DIRECTIONAL PANEL ANTENNA

The PAV69279PI is a multi-band, low PIM (Passive Intermodulation), high gain directional panel antenna with vertical polarization that covers the 698 – 960 MHz/1710 – 2700 MHz LTE700/Cellular/PCS/AWS/MDS and global GSM900/GSM1800 /UMTS /LTE2600 bands. The radiation patterns are uniform and symmetrical, providing high-level signal density into defined coverage zones. This antenna will greatly enhance the performance of LTE systems and is ideal for indoor applications. The antenna includes a wall mounting bracket, anchors and bolts.

FEATURES

RoHS

- Performance optimized using Laird proprietary RF optimization tools
- Mounts easily and directly to wall
- UV stable, aesthetically compact Radome with excellent flame rating
- Engineered for superior performance: high dBi gain & excellent VSWR
- Multiple connector and coax options available including fixed Type N(f) and integrated coax pigtail with Type N(f)
- Low PIM performance minimizes interference and improves in-building wireless network coverage and capacity
- Conformance to RoHS

APPLICATIONS

- In-building Wireless Networks
- Wireless Terminal, Point-of-Sale, and Machine-to-Machine
- Automatic meter reading
- Commercial, industrial and home security

SPECIFICATIONS

PARAMETER	SPECIFICATION MODEL PAV69279PI							
Frequency Bands, MHz	698-806	824-894	880-960	1710-1880	1850-1990	1910-2170	2300-2500	2500-2700
Peak Gain, dBi (Typ)	6.8	7.8	7.7	7.9	8.7	8.5	8.4	7.1
Peak Gain dBi (Max)	7.4	8.0	7.9	8.6	8.8	8.8	8.7	7.8
VSWR, Typ	<1.9	<1.5	<1.5	<2.0	<1.8	<1.7	<1.6	<1.6
VSWR, Max	2.0:1	2.0:1	2.0:1	2.0:1	2.0:1	2.0:1	2.0:1	2.0:1
PIM, 3rd Order, 2 x 20W (Typ)		<-150 dBc				<-155 dBc		
PIM, 3rd Order, 2 x 20W (Max)		<-150 dBc				<-150 dBc		
Frequency (MHz)	698-960 /1710-2700							
Antenna Type	Directional Panel Indoor							
VSWR Max	< 2.0:1							
Gain	8 dBi							
HP Beam Width Azimuth	75° / 63°							
HP Beam Width Elevation	64° / 51°							
Front to Back Ratio	10 dB / 25 dB							
PIM	< -150 dBc @ 2x20 watts							
Polarization	Vertical							

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Plenum Rated	No
Nominal Impedance	50 Ω
Power Watts	50 W
Enclosure	Material: ABS White
Dimensions	9.82 x 9.8 x 2.41 inches 249.4 x 248.6 x 61.3 mm
Mounting	Wall Mount
Antenna Weight kg (lbs.)	0.62 (1.35)
Operational Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Material Substance Compliance	RoHS

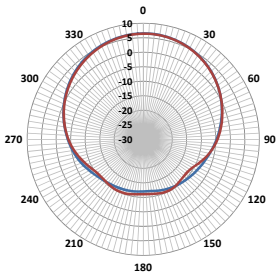
CONNECTORS

MODEL NUMBER	CABLE LENGTH*	CONNECTOR
PAV69278PI-FNF	NA (Direct Connect)	Type N-Female
PAV69278PI-30NF	30 cm (12”)	Type N-Female
PAV69278PI-30D41F	30 cm (12”)	4.1-9.5 Mini DIN Female

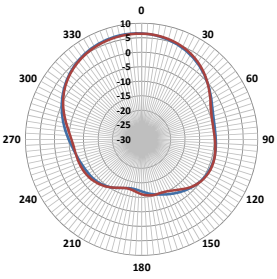
S1 fixed
S5 Pigtail

Radiation Pattern at 698 MHz

Azimuth Plane

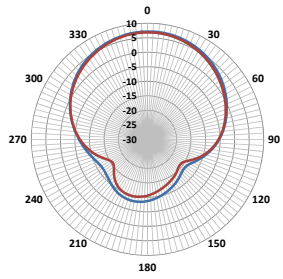


Phi 0° Plane

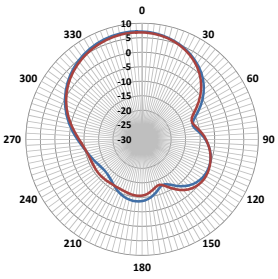


Radiation Pattern at 824 MHz

Azimuth Plane



Phi 0° Plane



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698-960 MHz/1710-2700 MHz

LTE Vertical Low PIM Directional Panel Antenna

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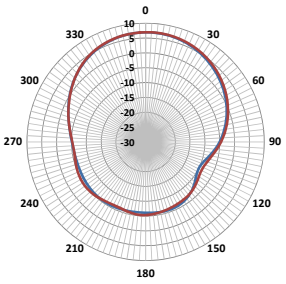
S1 fixed

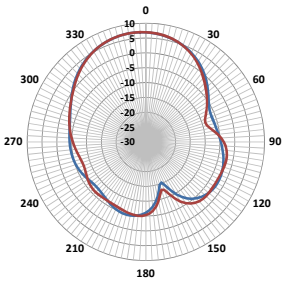
S5 Pigtail

Radiation Pattern at 960 MHz

Azimuth Plane

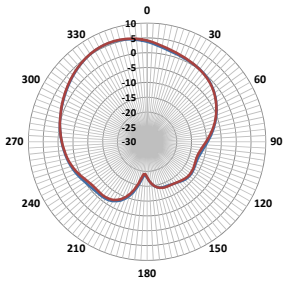


Phi 0° Plane

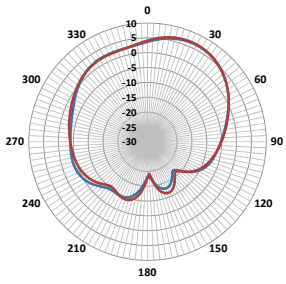


Radiation Pattern at 1710 MHz

Azimuth Plane

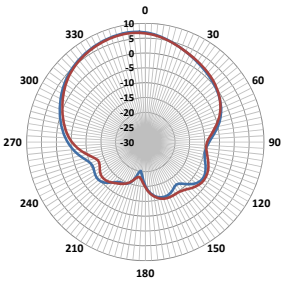


Phi 0° Plane

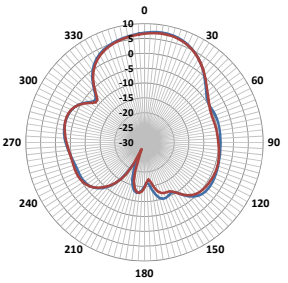


Radiation Pattern at 2305 MHz

Azimuth Plane

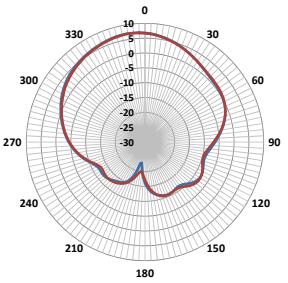


Phi 0° Plane

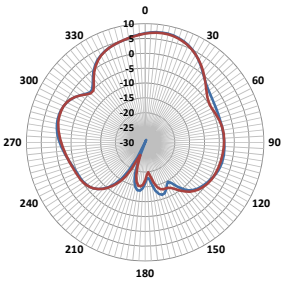


Radiation Pattern at 2412 MHz

Azimuth Plane

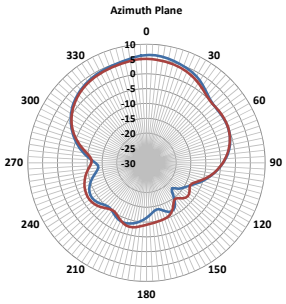


Phi 0° Plane

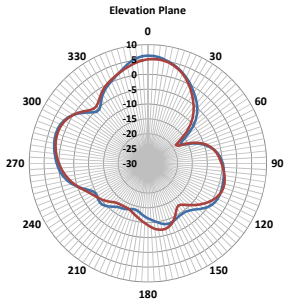


Radiation Pattern at 2700 MHz

Azimuth Plane



Phi 0° Plane



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