Mini NanoBlade Flex 6 GHz

3-Band Flexible Planar Antenna for Wi-Fi 6E
2400-2500 MHz/4900-6000 MHz/6000-7125 MHz

The Laird Connectivity Wi-Fi 6E Mini NanoBlade Flex 6 GHz is a flexible PCB antenna that supports 3 bands of WLAN applications, including the 6 to 7.125 GHz band enabling Wi-Fi 6E. These small flexible printed circuit antennas can be embedded in space-sensitive applications. They offer excellent efficiency over all 3 Wi-Fi bands. The antennas are specifically designed to be embedded inside various IoT devices for aesthetically pleasing integration.

FEATURES AND BENEFITS

- Three-band frequency coverage
- Support for Wi-Fi 6E
- Excellent Omni Gain Patterns
- High Efficiency

APPLICATIONS

- Medical Devices
- Home Automation Equipment
- Smart Grid Applications

ELECTRICAL SPECIFICATIONS			
Operating Frequency (MHz)	2400-2500	4900-6000	6000-7125
VSWR – Avg	1.7:1	1.5:1	1.4:1
VSWR – Max	<2.0:1		
Peak Gain – Avg (dBi)	2.0	3.5	4.6
Peak Gain – Max (dBi)	2.4	4.4	5.2
Efficiency – Avg (%)	68%	76%	74%
Efficiency – Avg (dB)	-1.7	-1.2	-1.3
Nominal Impedance (Ohms)	50		
Max Power - Ambient 25°C (W)	5		
Polarization	Linear, Vertical		
Number of Ports	1		
Horizontal Plane 3 dB Beamwidth	360˚, Omnidirectional		

Note: Electrical data measured on 1.7mm thick polycarbonate

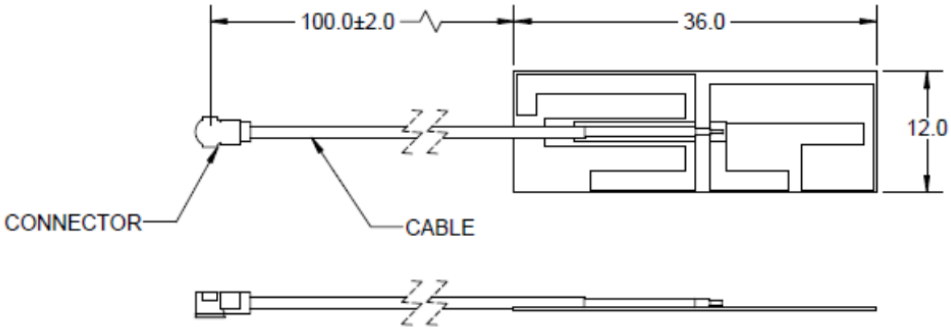
MECHANICAL SPECIFICATIONS	
Dimensions – diameter x height – mm (inches)	36 x 12 x 0.3 (1.42 x .47 x .012)
Radome Material	Flexible Printed Circuit Board (FPC)

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Material Substance Compliance	RoHS

CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR
EMF2471A3S-10MHF1	100 mm	MHF1
EMF2471A3S-10MH4L	100 mm	MHF4L

MECHANICAL DRAWING



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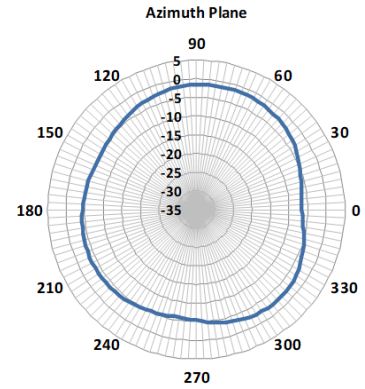
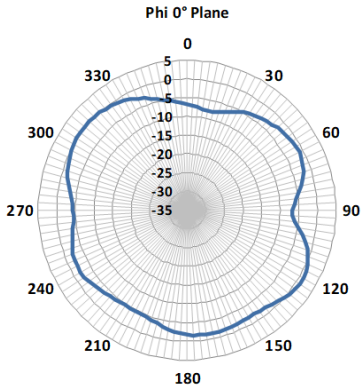
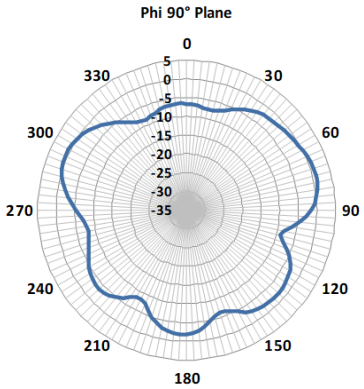
RADIATION PATTERNS

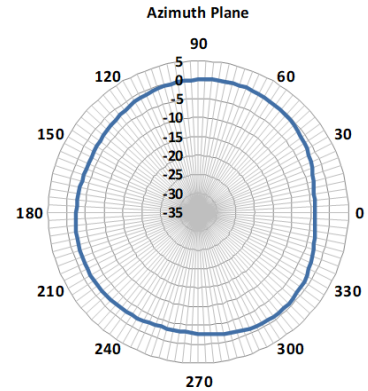
2400 MHz

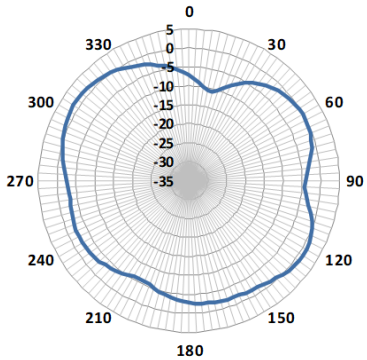


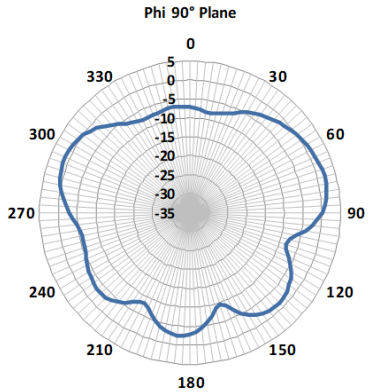




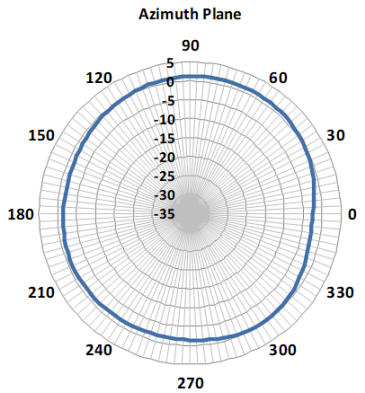
2450 MHz

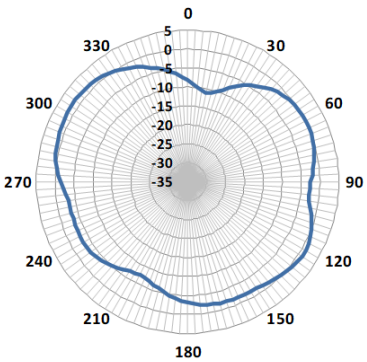


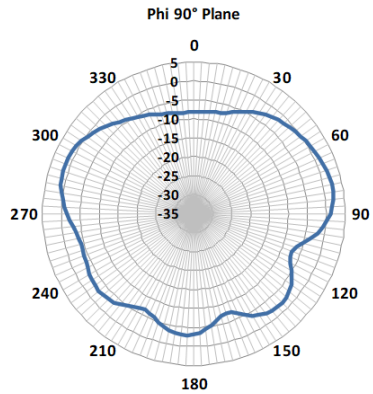




2500 MHz







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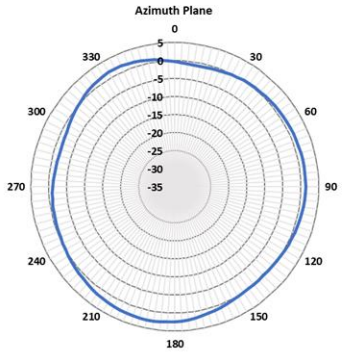
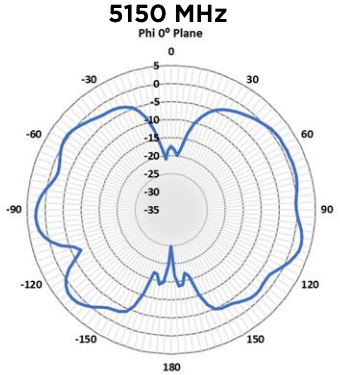
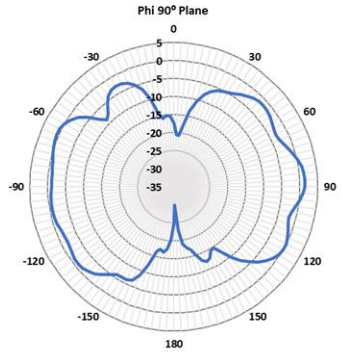
RADIATION PATTERNS (CONTINUED)

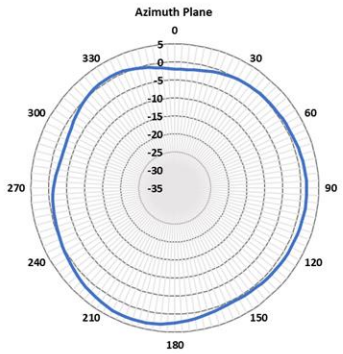
5150 MHz

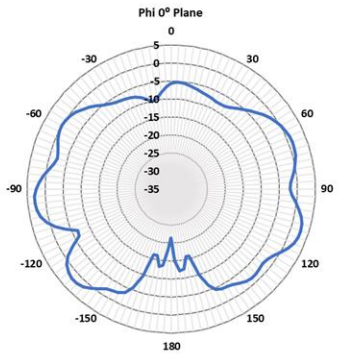


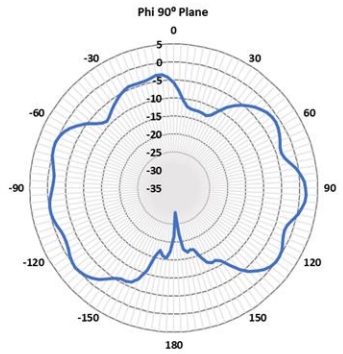




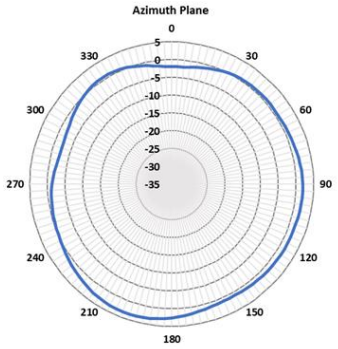
5470 MHz

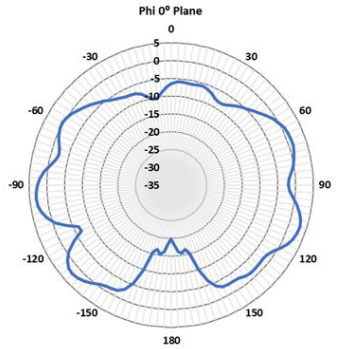


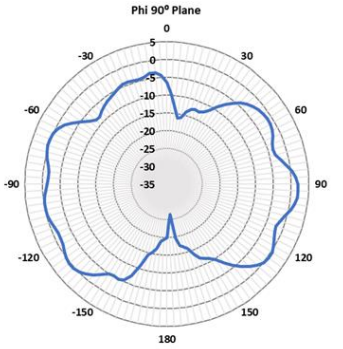




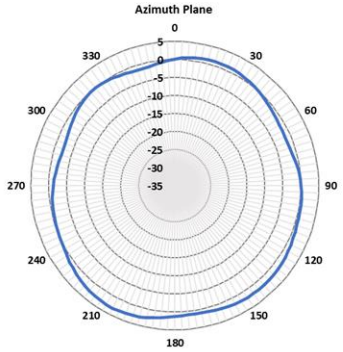
5500 MHz

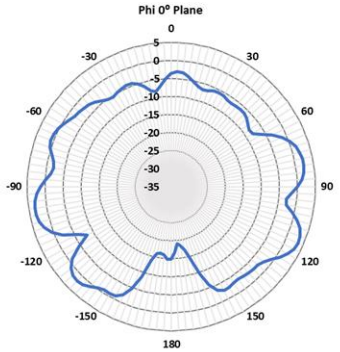


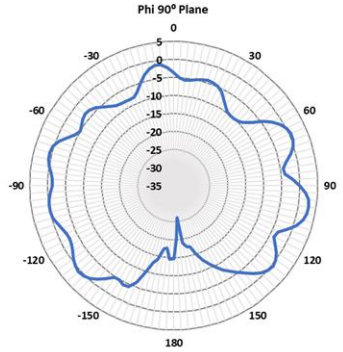




5850 MHz







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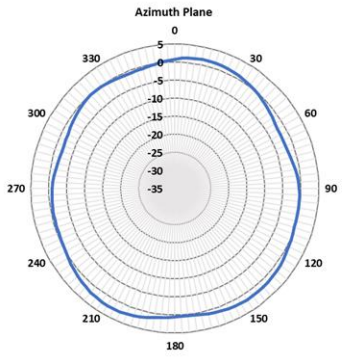
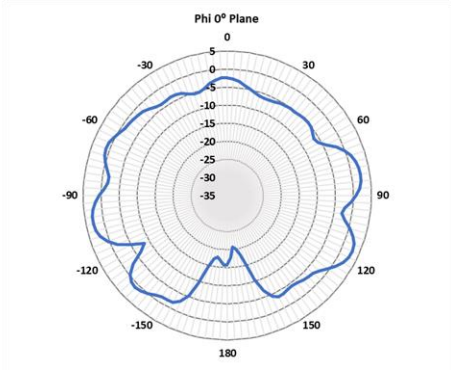
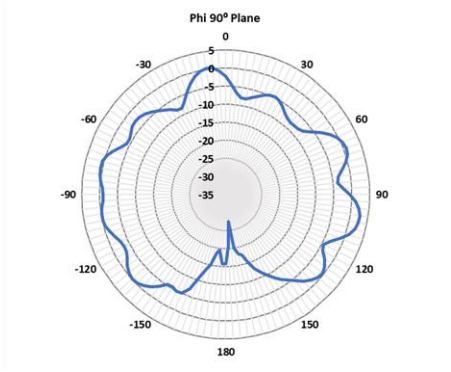
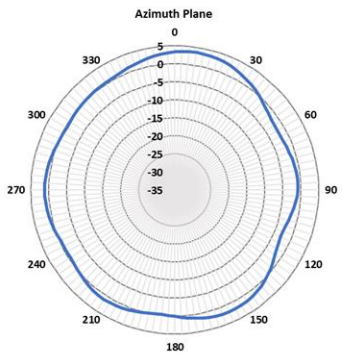
5925 MHz

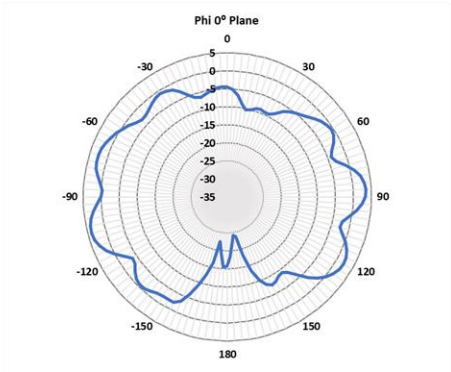


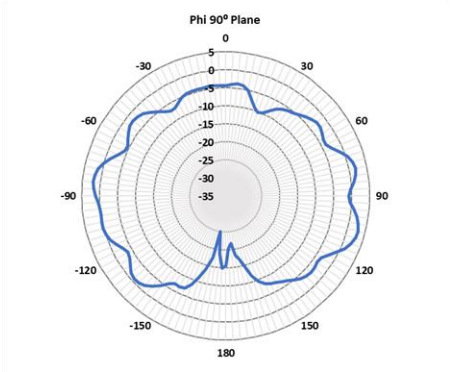




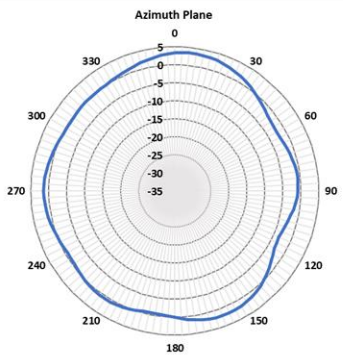
6425 MHz

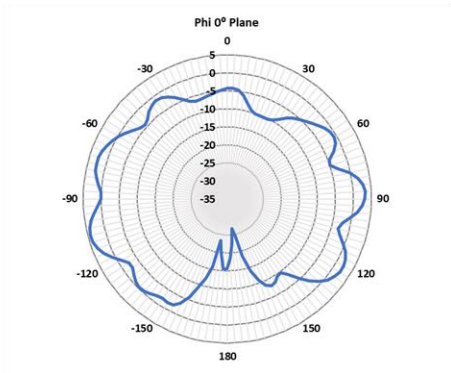


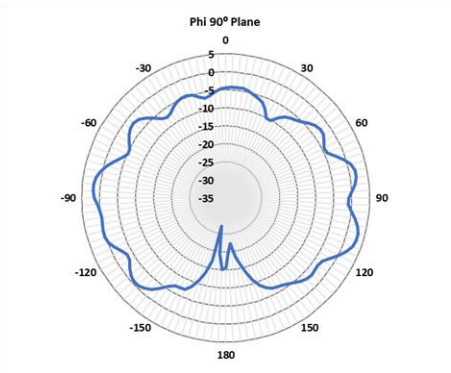




6525 MHz







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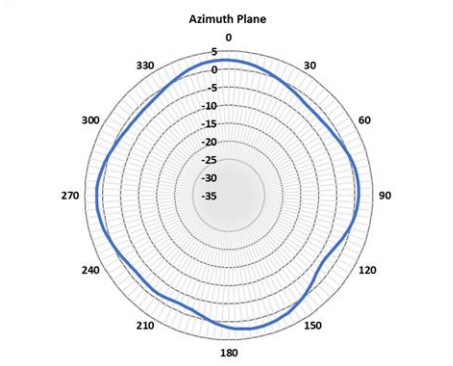
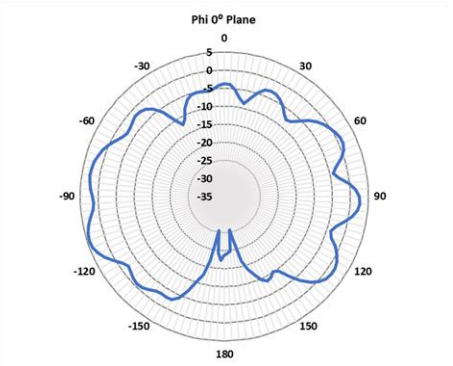
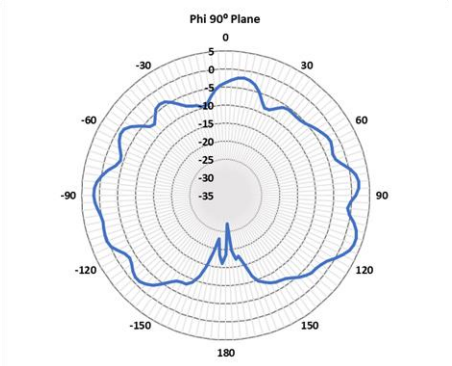
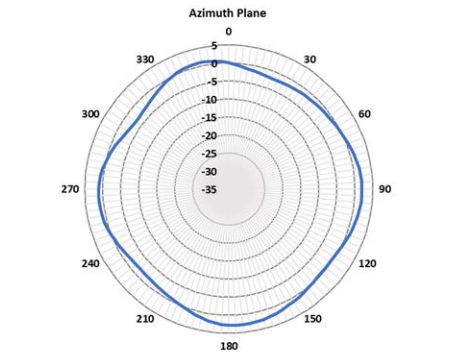
6875 MHz

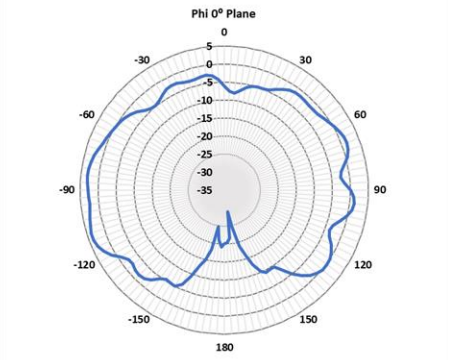


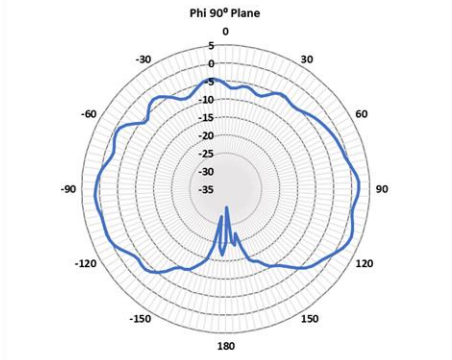




7125 MHz







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Web	https://www.lairdconnect.com/internal-antennas	
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