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

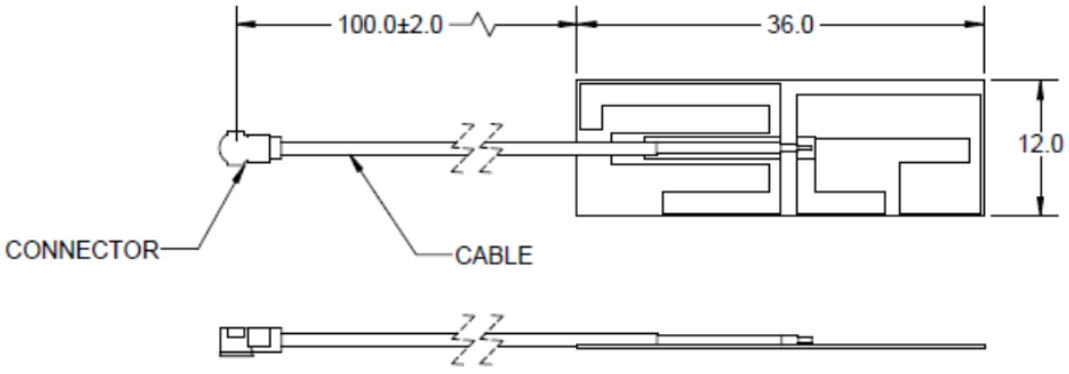
MECHANICAL SPECIFICATIONS	
Dimensions – diameter x height – mm (inches)	36 x 12 x 0.3 (1.42 x .47 x .12)
Radome Material	Flexible Printed Circuit Board (FPC)

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

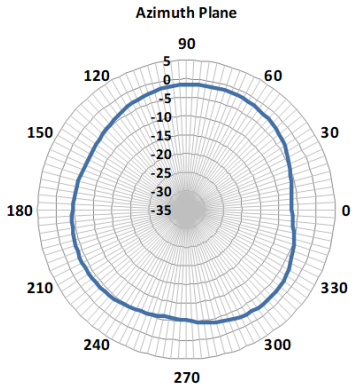
PART NUMBER	CABLE LENGTH	CONNECTOR
EMF2471A3S-10MHF1	100 mm	MHF1
EMF2471A3S-10MH4L	100 mm	MHF4L

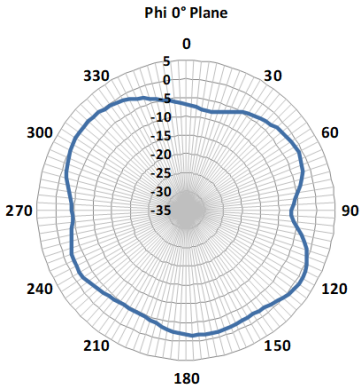
MECHANICAL DRAWING

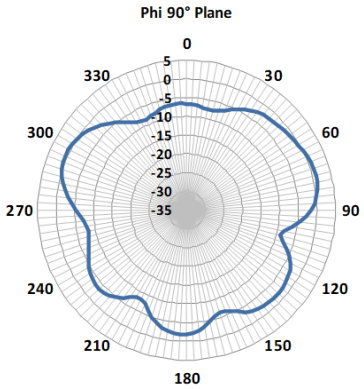


RADIATION PATTERNS

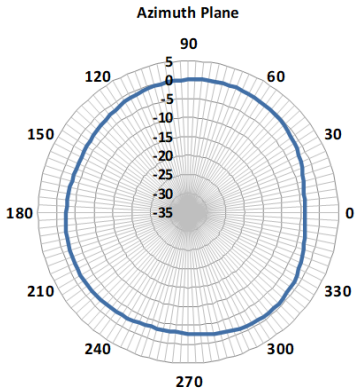
2400 MHz

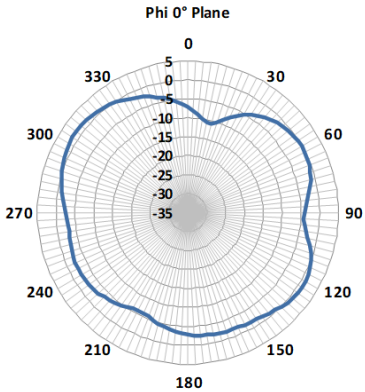


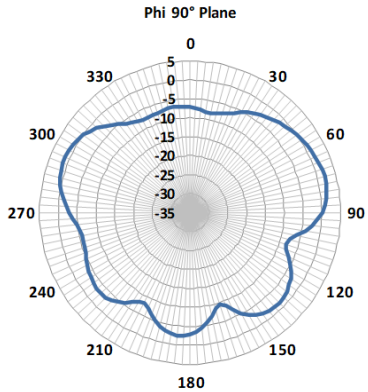




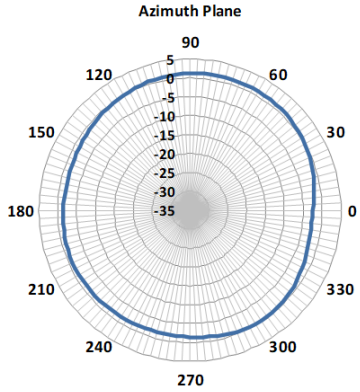
2450 MHz

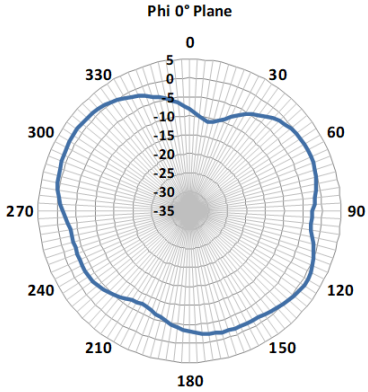


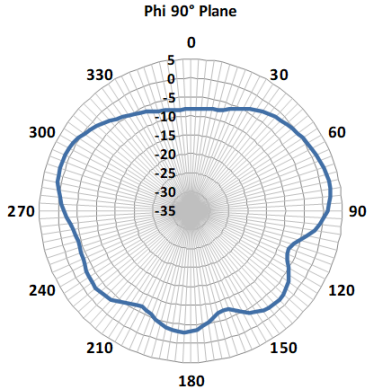




2500 MHz

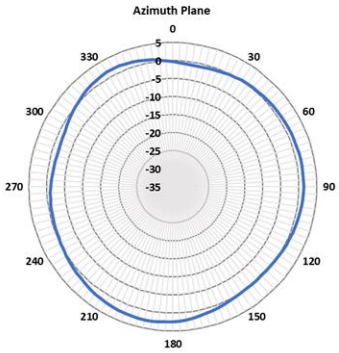


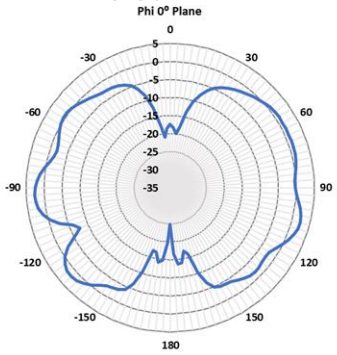


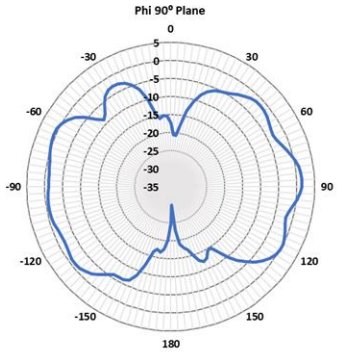


RADIATION PATTERNS (CONTINUED)

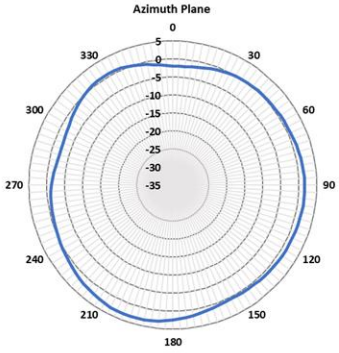
5150 MHz

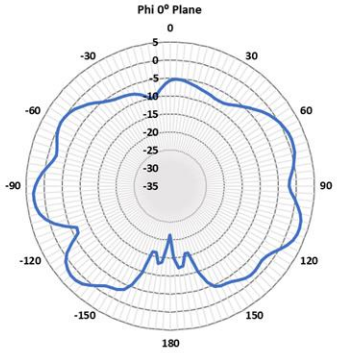


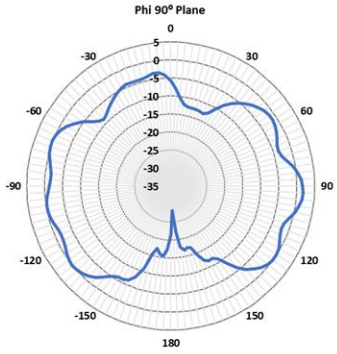




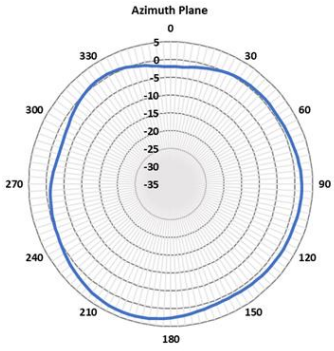
5470 MHz

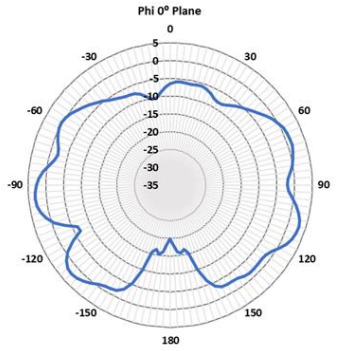


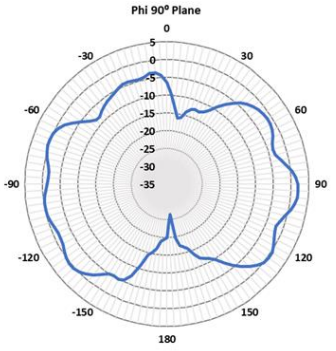




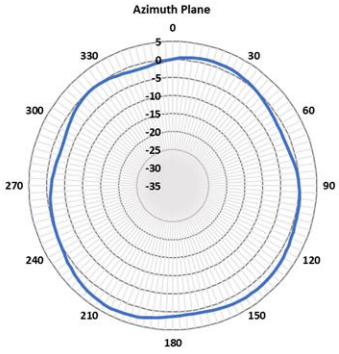
5500 MHz

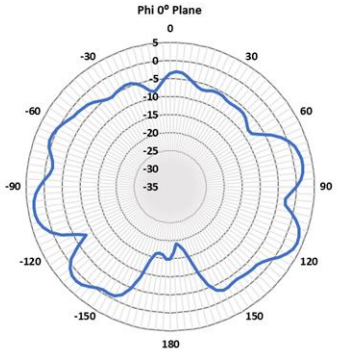


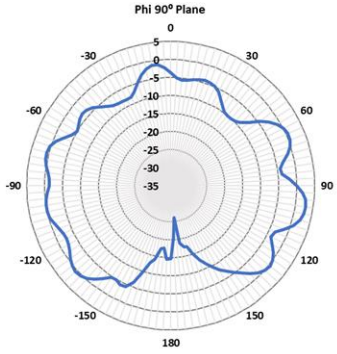




5850 MHz

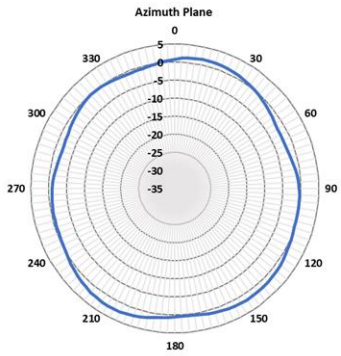


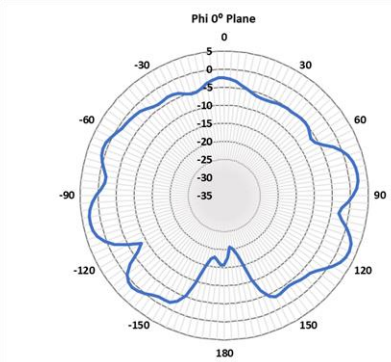


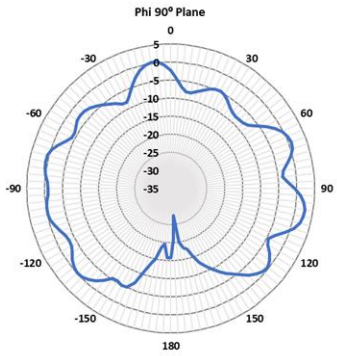


RADIATION PATTERNS (CONTINUED)

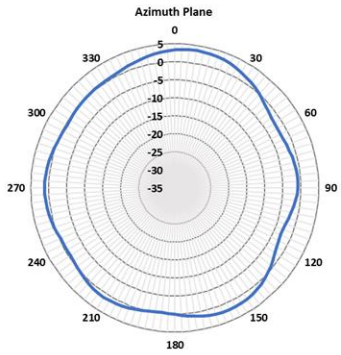
5925 MHz

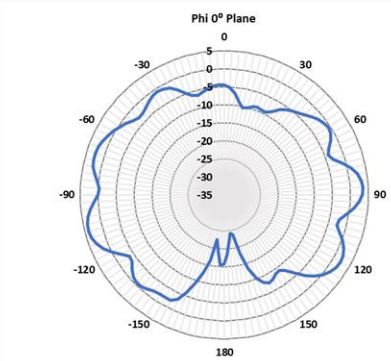


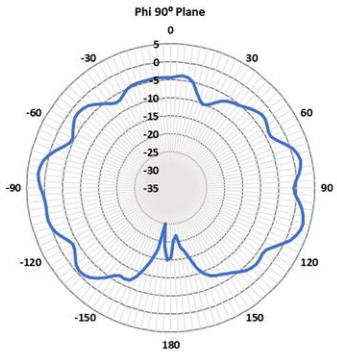




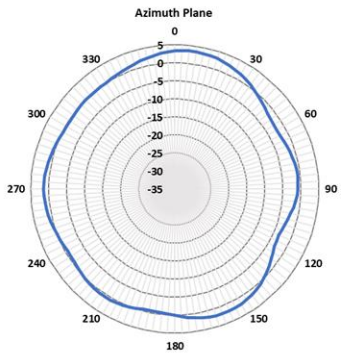
6425 MHz

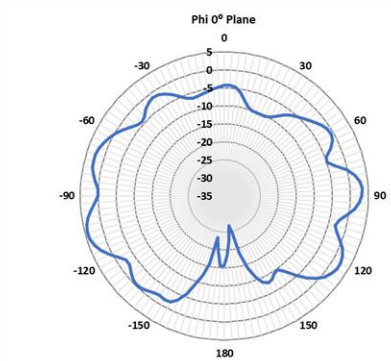


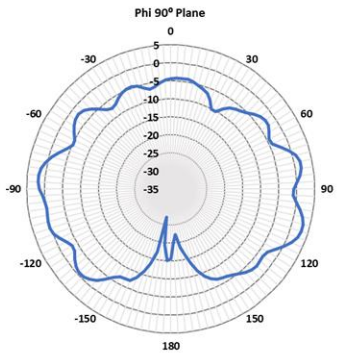




6525 MHz

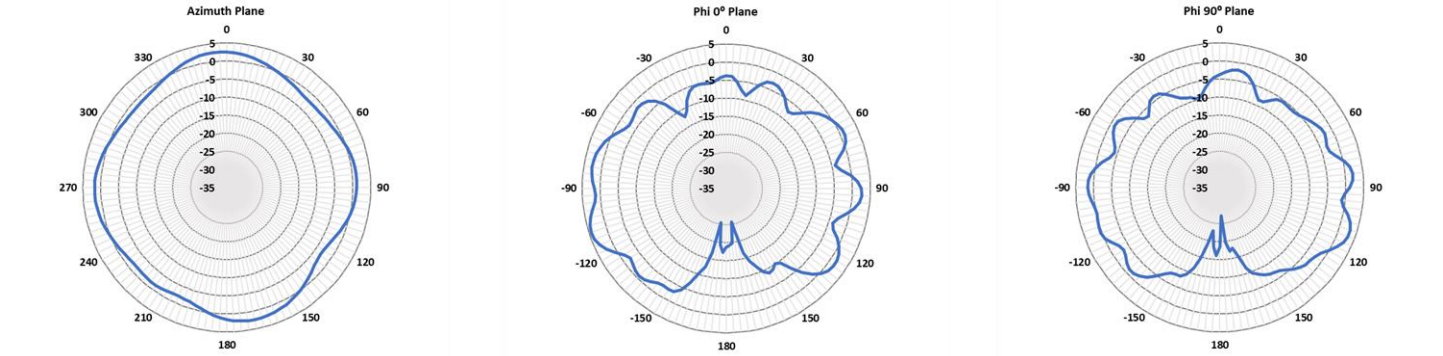




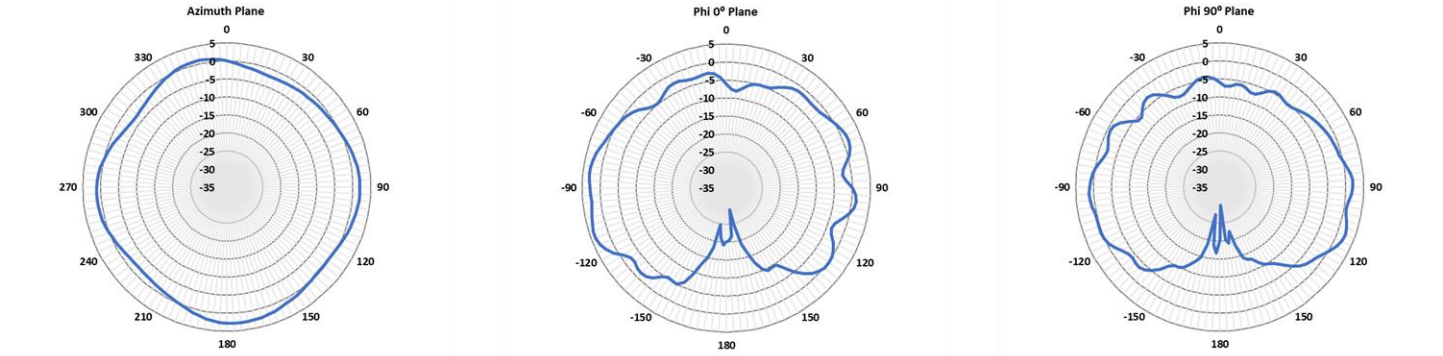


RADIATION PATTERNS (CONTINUED)

6875 MHz



7125 MHz



RoHS

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