

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) |

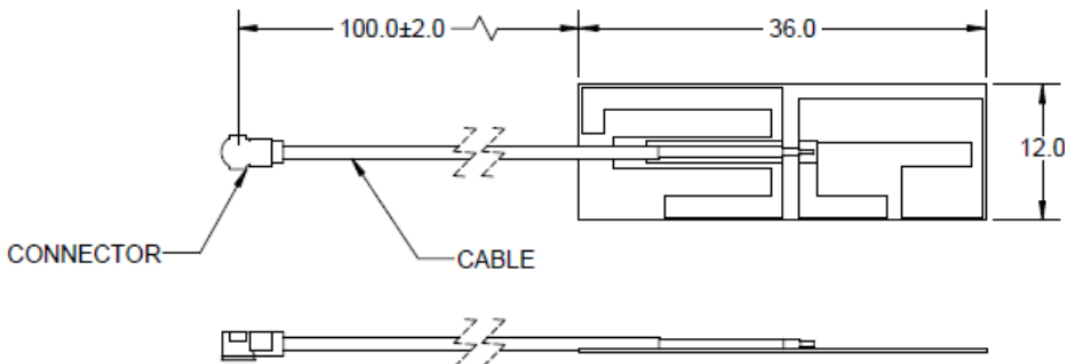
ENVIRONMENTAL SPECIFICATIONS

| | |
|---------------------------------|------------------------------|
| 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 |

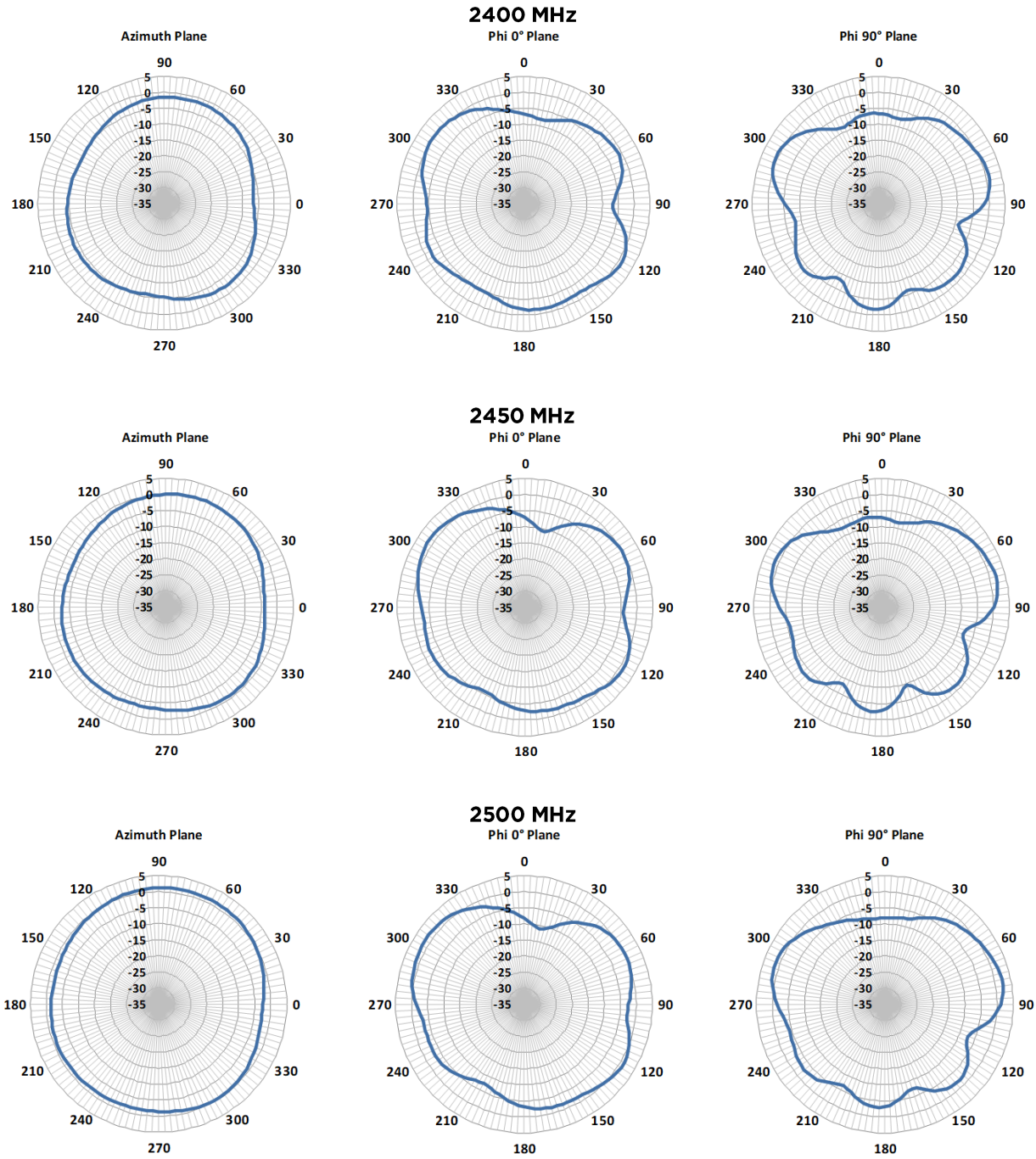
CONFIGURATION

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

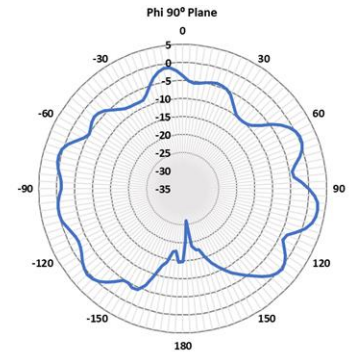
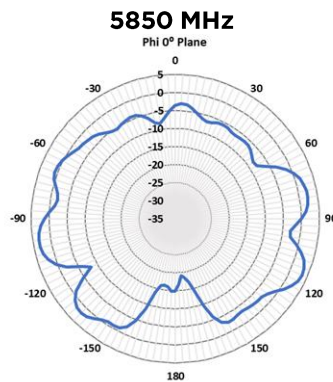
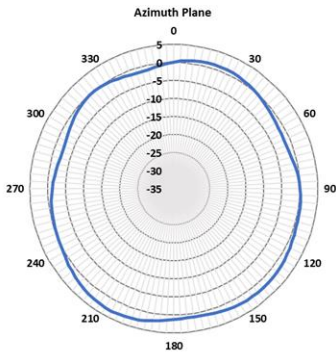
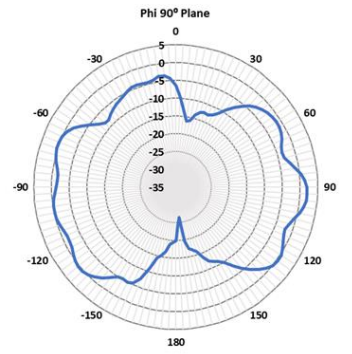
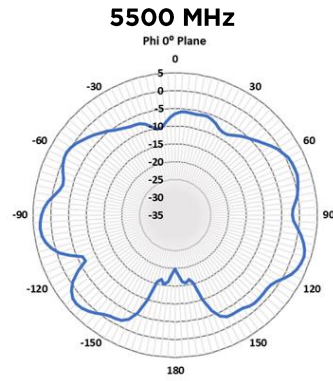
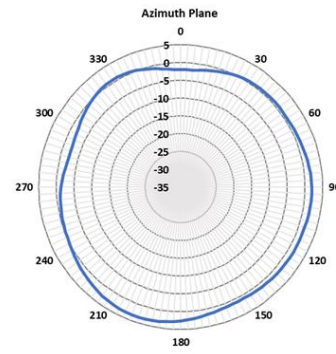
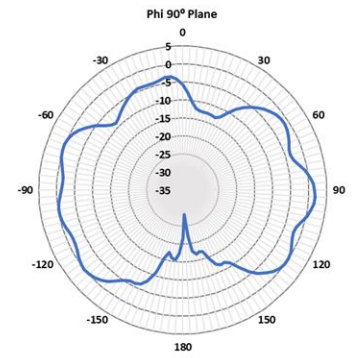
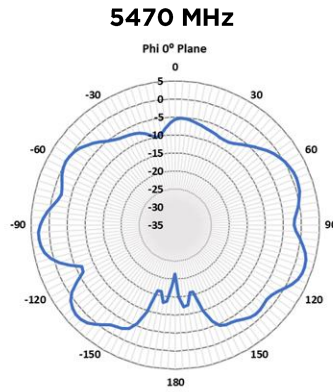
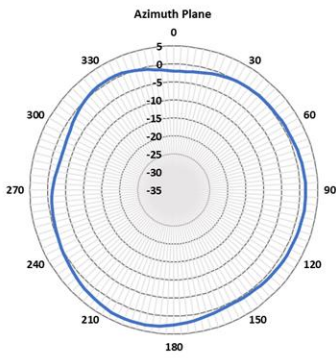
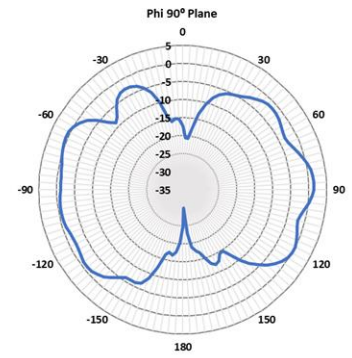
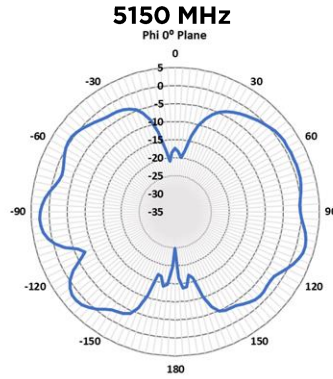
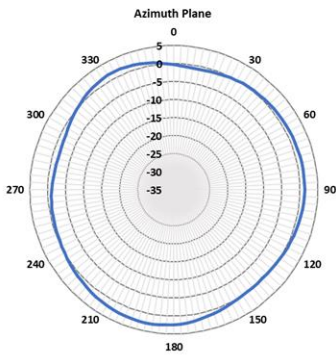
MECHANICAL DRAWING



RADIATION PATTERNS

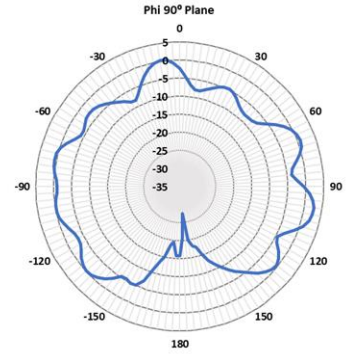
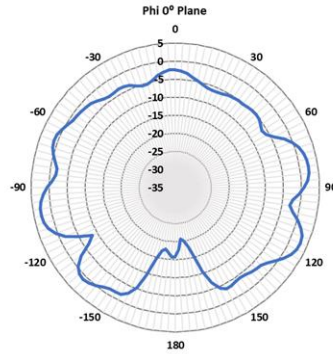
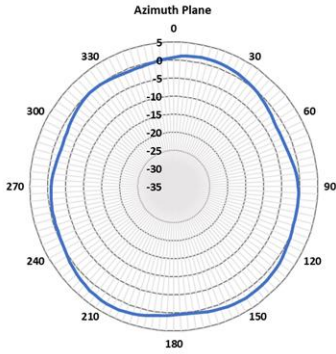


RADIATION PATTERNS (CONTINUED)

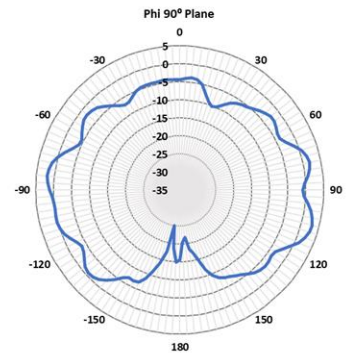
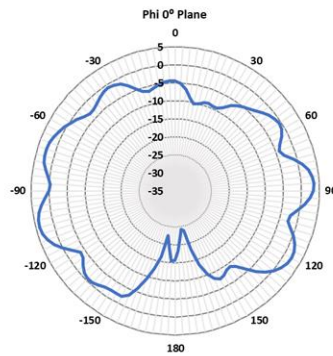
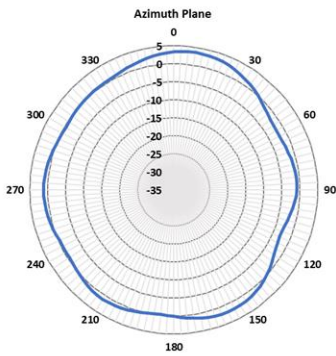


RADIATION PATTERNS (CONTINUED)

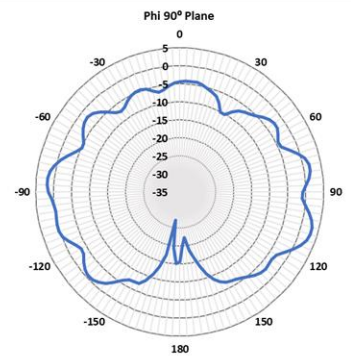
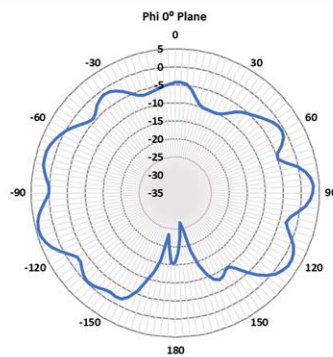
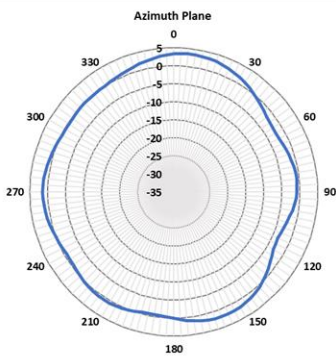
5925 MHz



6425 MHz

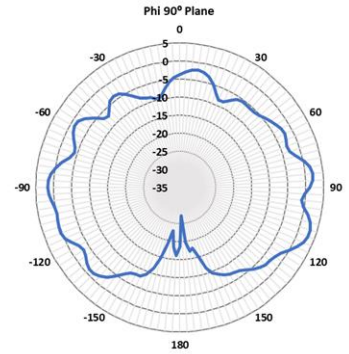
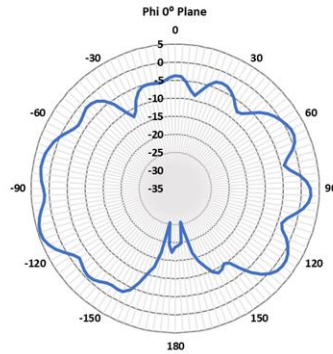
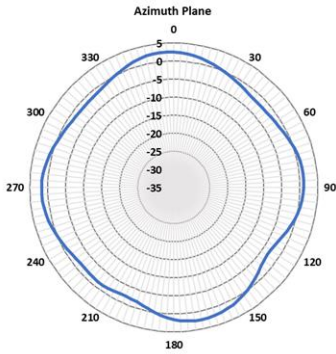


6525 MHz

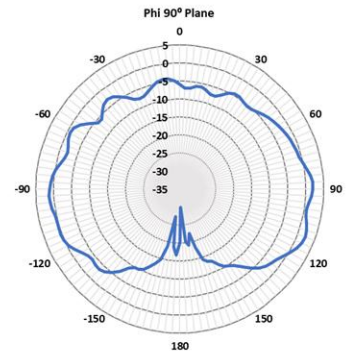
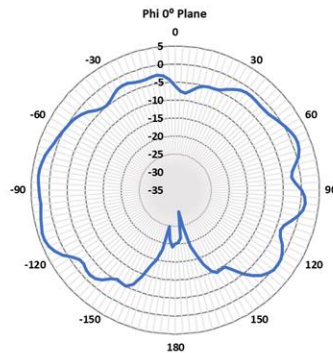
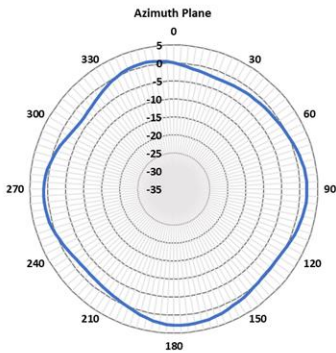


RADIATION PATTERNS (CONTINUED)

6875 MHz



7125 MHz



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