

In 2020 the FCC announced the allocation of a new frequency spectrum for Wi-Fi applications, extending the frequencies up to 7.125 MHz.

FlexPIFA 6E antennas support the full Wi-Fi spectrum of 2400-2500, 4900-5925, and 5925-7125 MHz frequency bands. This makes them an ideal solution for coverage of traditional Wi-Fi frequencies with the addition of futureproofing for newly emerging Wi-Fi 6E applications.

Designed for rapid integration into space-constrained devices and housings, the flexible, adhesive-backed antennas are available with MHF1 or MHF4L connectors, providing multiple installation solutions for IoT device manufacturers.

PIFA antenna technology provides consistent, stable performance across all three Wi-Fi bands, ensuring a solid and reliable connection at all times.

FEATURES AND BENEFITS

- **Full Coverage** – Operates over all three Wi-Fi bands
- **Performance** – Exceptional performance across all bands
- **Versatile** – Flexible, peel-and-stick adhesive-backed antenna for a variety of space-constrained IoT devices
- **Future-Proofed** – Coverage for emerging Wi-Fi 6E applications
- **Reliable** – PIFA technology is easy to integrate into IoT devices and less likely to detune in proximity of metal or a human body
- **Quality** – Designed and built to exacting specifications
- **Peace of Mind** – Backed by our five-year warranty

APPLICATIONS

- Smart metering and utilities
- Industrial IoT
- Agricultural and rural (Farm sense and control)
- Quick service restaurants
- Smart lockers
- Medical devices

ELECTRICAL SPECIFICATIONS

Laird Connectivity Part Number	EFB2471A3S-10MHF1		
Number of Ports	1		
Operating Frequency (MHz)	2400-2500	4900-5925	5925-7125
VSWR – Avg	1.4:1	1.9:1	1.6:1
VSWR – Max	<2.5:1	<3.0:1	<3.0:1
Peak Gain – (dBi) *	2.2	3.9	3.8
Efficiency – Avg (%)	59	60	60
Efficiency – Avg (dB)	-2.3	-2.2	-2.2
Nominal Impedance (ohms)	50		
Max Power - Ambient 25°C (W)	5		
Polarization	Linear		
Azimuth Beamwidth	360°, Omnidirectional		

Note: Measured on a 100 mm x 100 mm x 1.7 mm thick polycarbonate sheet.

* Actual peak gain values can be influenced by measurement variation and other uncertainties.

MECHANICAL SPECIFICATIONS

Dimensions – length x width x height – mm (inches)	16 x 36 x 2.5 (0.62 x 1.41 x .098)
Weight – g (oz.)	0.6
Adhesive	3M 467MP

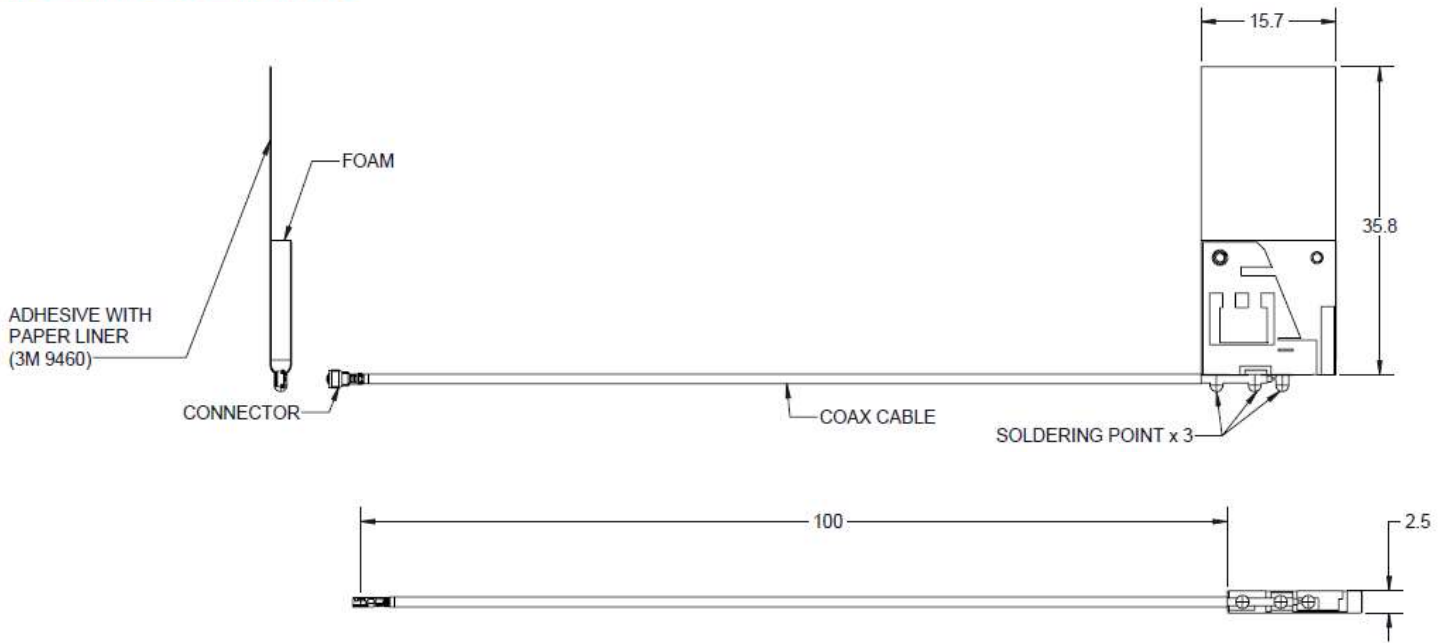
ENVIRONMENTAL SPECIFICATIONS

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

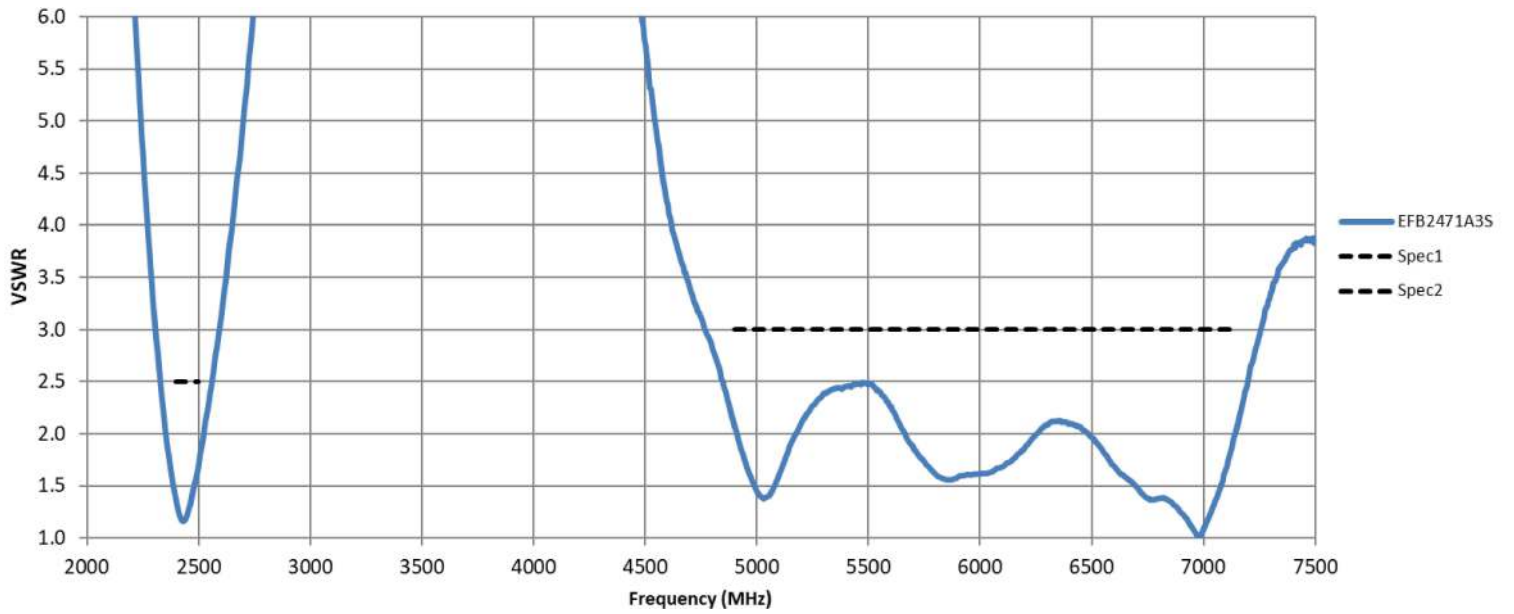
CONFIGURATION

PART NUMBER	EXPOSED CABLE LENGTH/DIAMETER	CONNECTOR
EFB2471A3S-10MHF1	100 mm/1.13 mm	MHF1

MECHANICAL DRAWING



VSWR

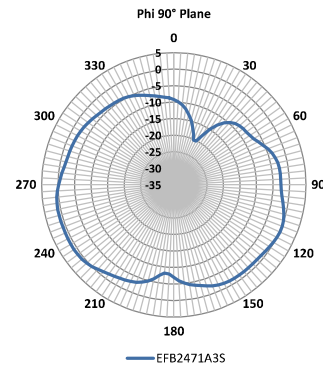
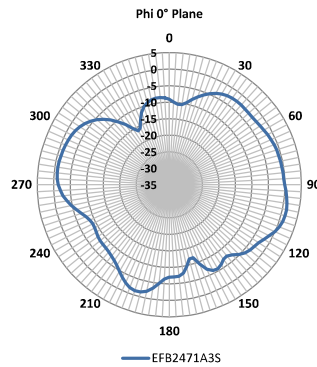
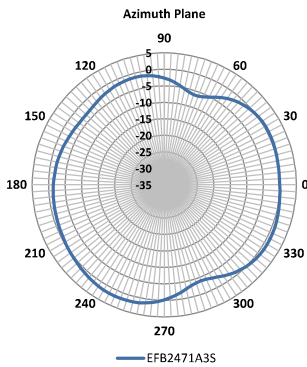


TOTAL EFFICIENCY

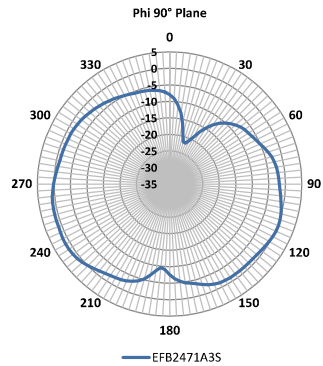
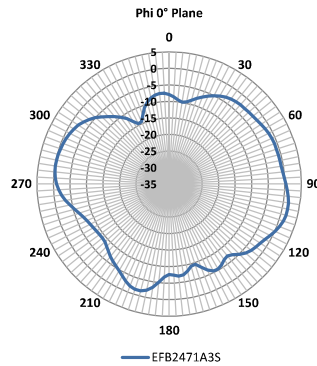
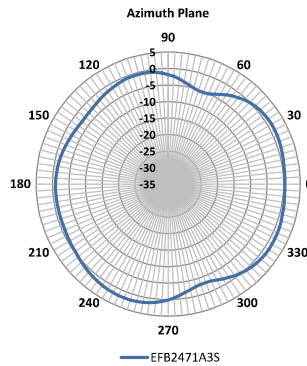


RADIATION PATTERNS

2400 MHz

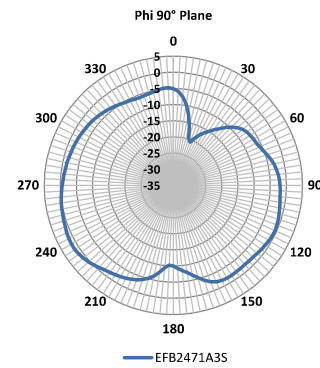
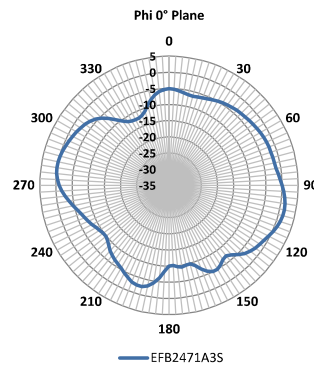
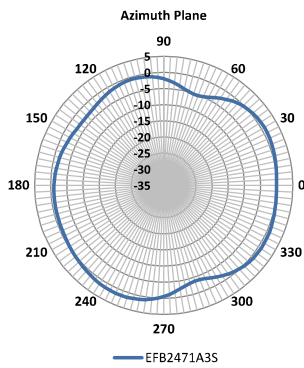


2450 MHz

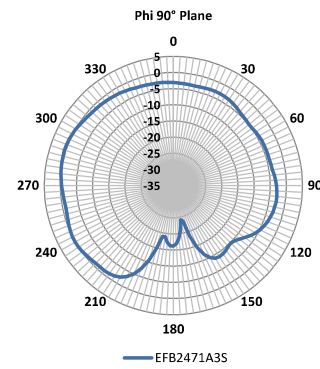
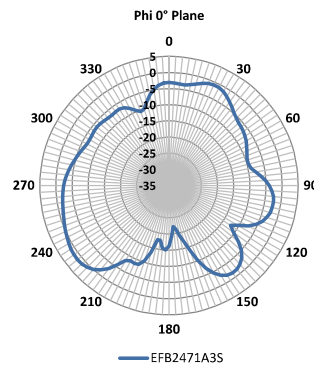
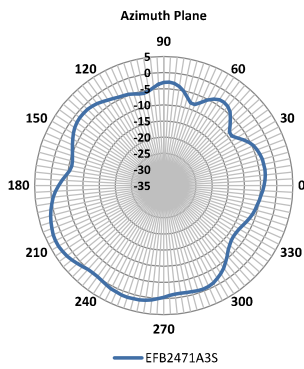


RADIATION PATTERNS

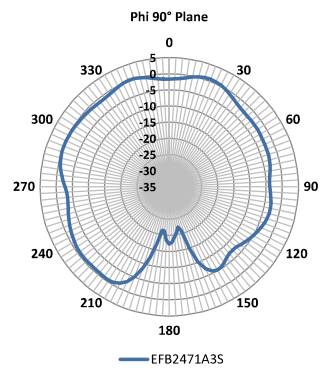
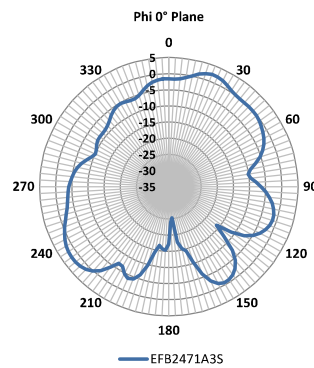
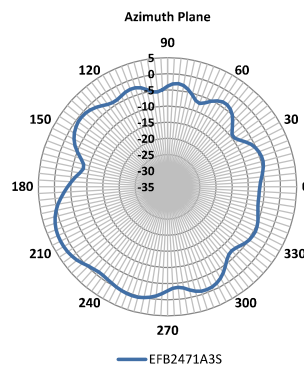
2500 MHz



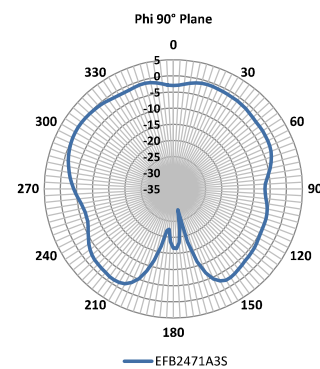
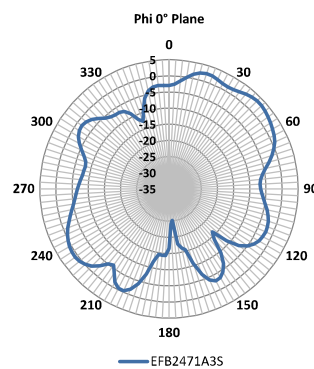
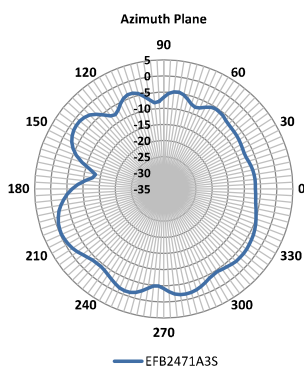
4900 MHz



5150 MHz

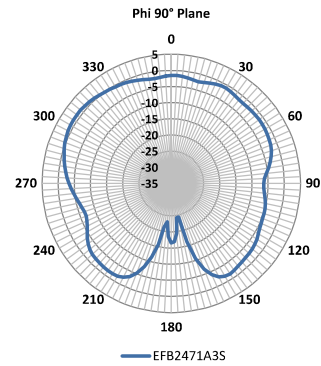
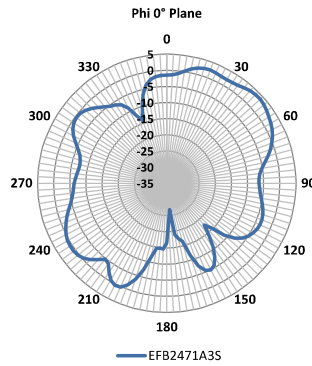
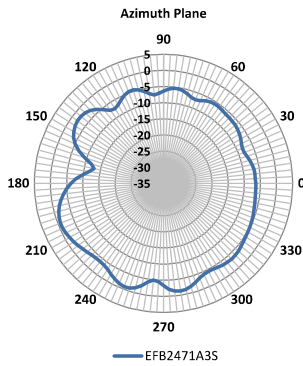


5470 MHz

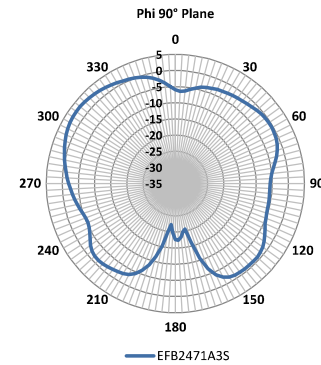
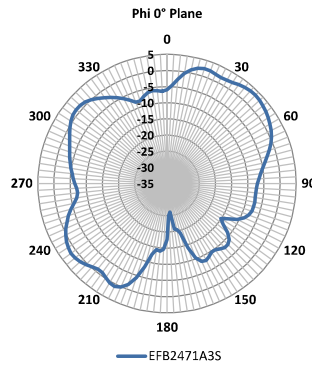
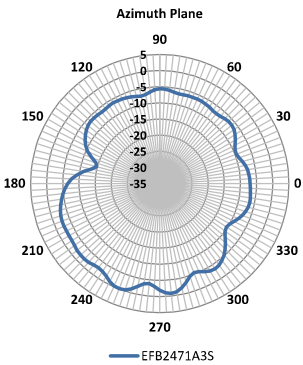


RADIATION PATTERNS

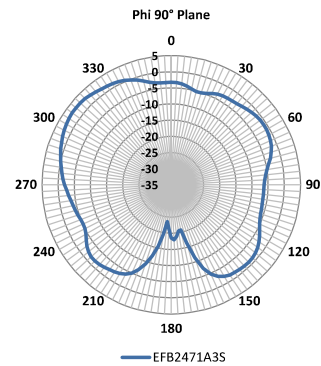
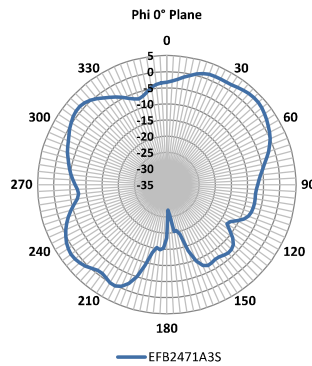
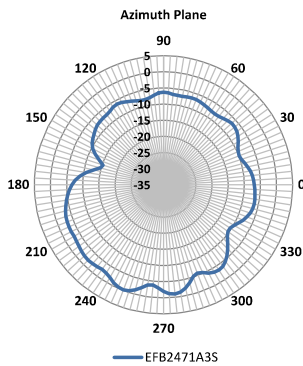
5500 MHz



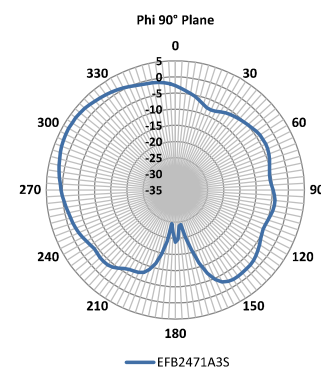
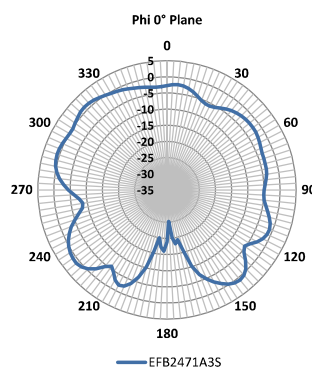
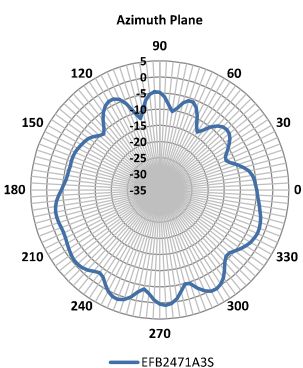
5850 MHz



5925 MHz

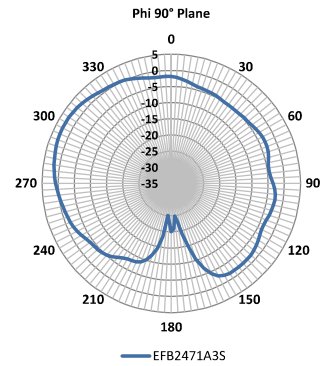
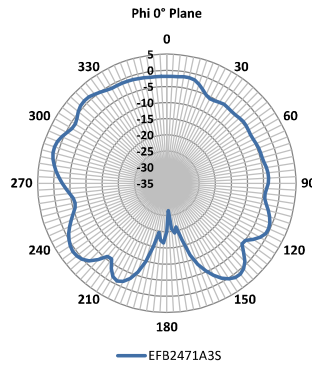
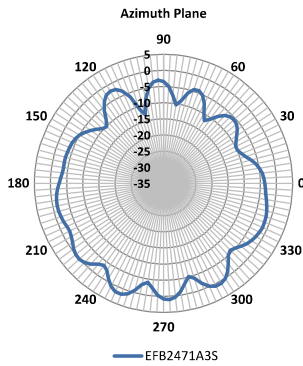


6425 MHz

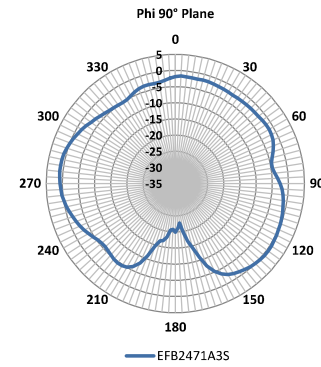
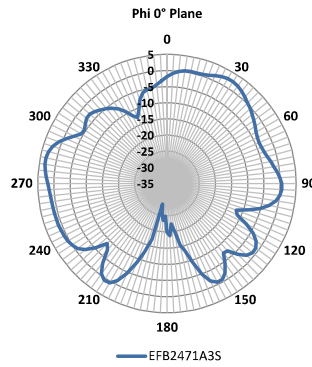
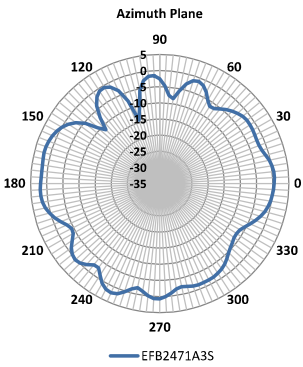


RADIATION PATTERNS

6525 MHz



6875 MHz



7125 MHz

