

In 2020 the FCC announced the allocation of a new frequency spectrum for Wi-Fi applications, extending the frequencies up to 7125 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

APPLICATIONS

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

ELECTRICAL SPECIFICATIONS

\Number of Ports	1		
	2400-2500	4900-5925	5925-7125
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

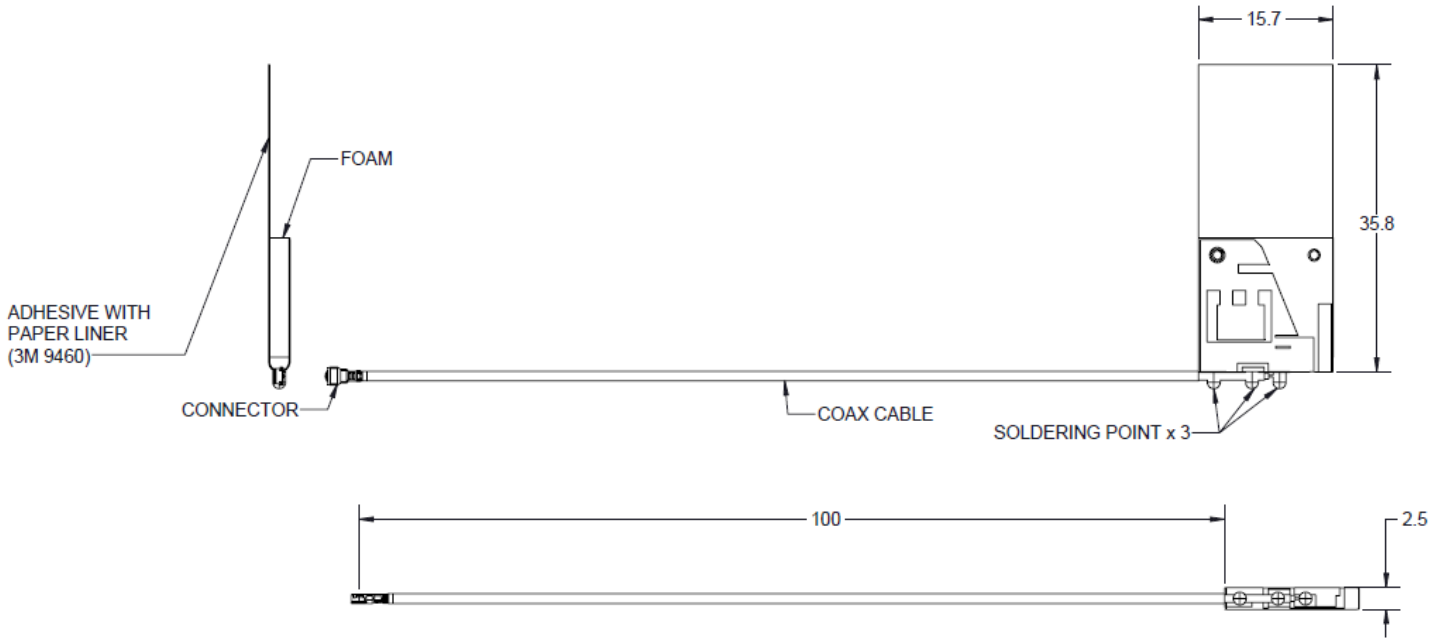
ENVIRONMENTAL SPECIFICATIONS

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

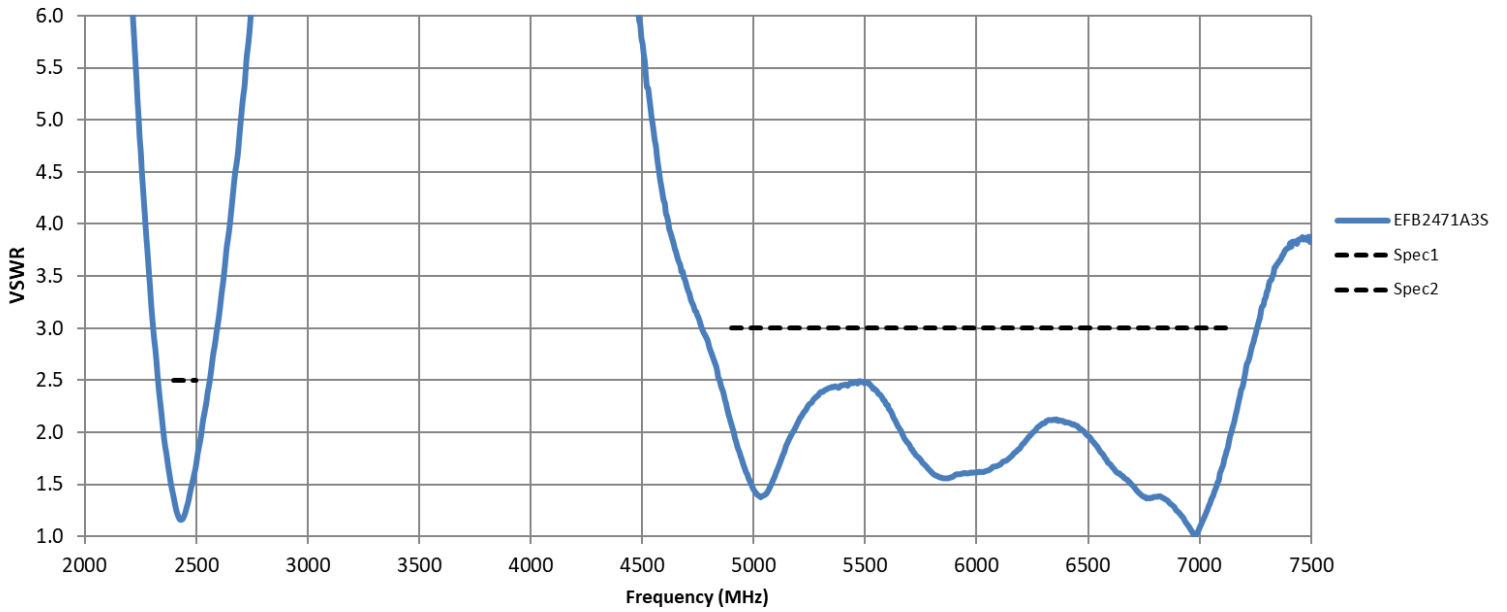
CONFIGURATION

PART NUMBER	EXPOSED CABLE LENGTH/DIAMETER	CONNECTOR
EFB2471A3S-10MHF1	100 mm/1.13 mm	MHF1
EFB2471A3S-10MH4L	100 mm/1.13 mm	MHF4L

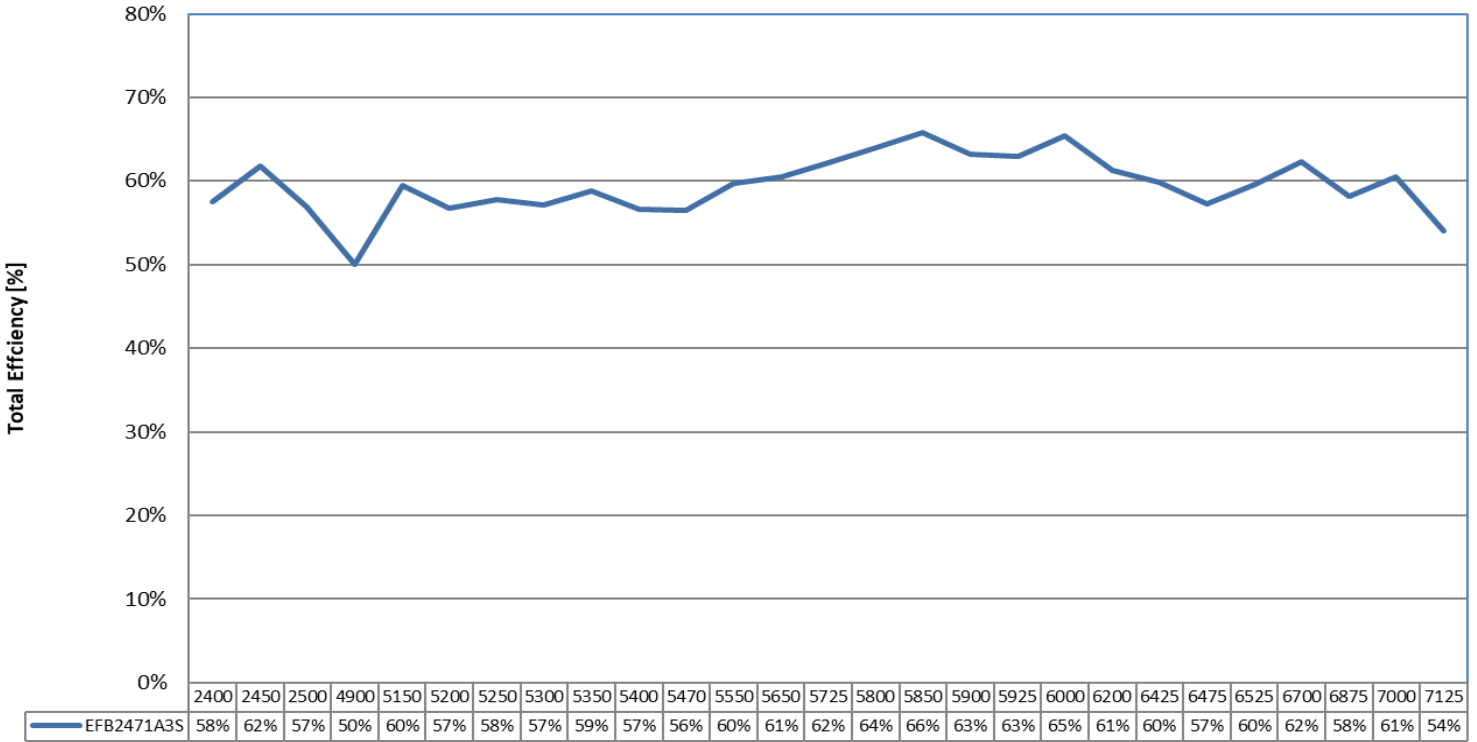
MECHANICAL DRAWING



VSWR

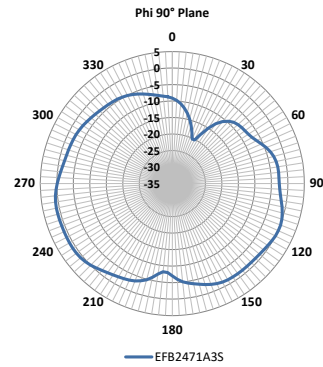
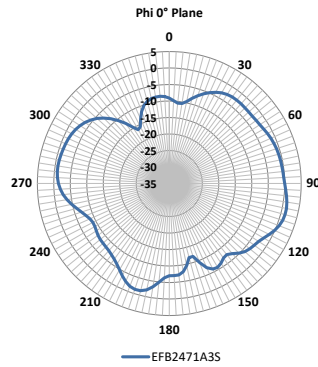
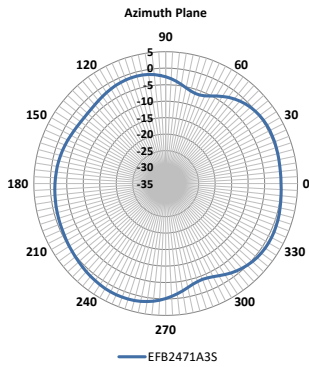


TOTAL EFFICIENCY

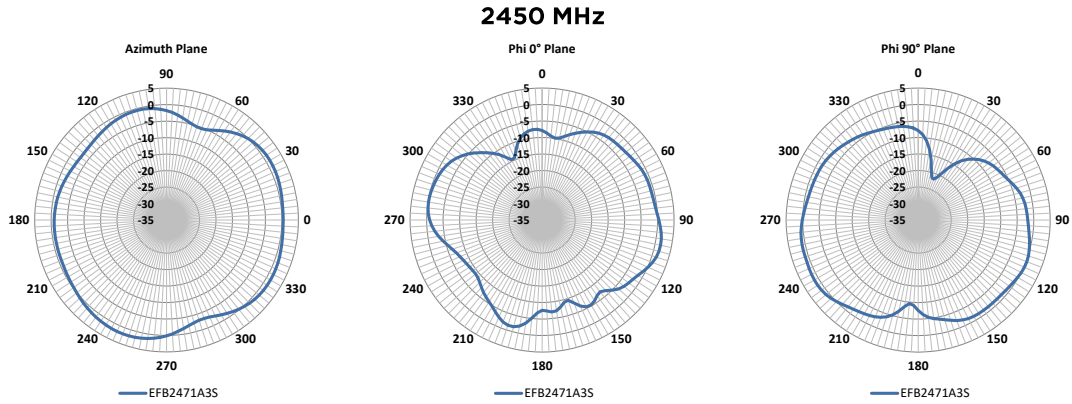


RADIATION PATTERNS

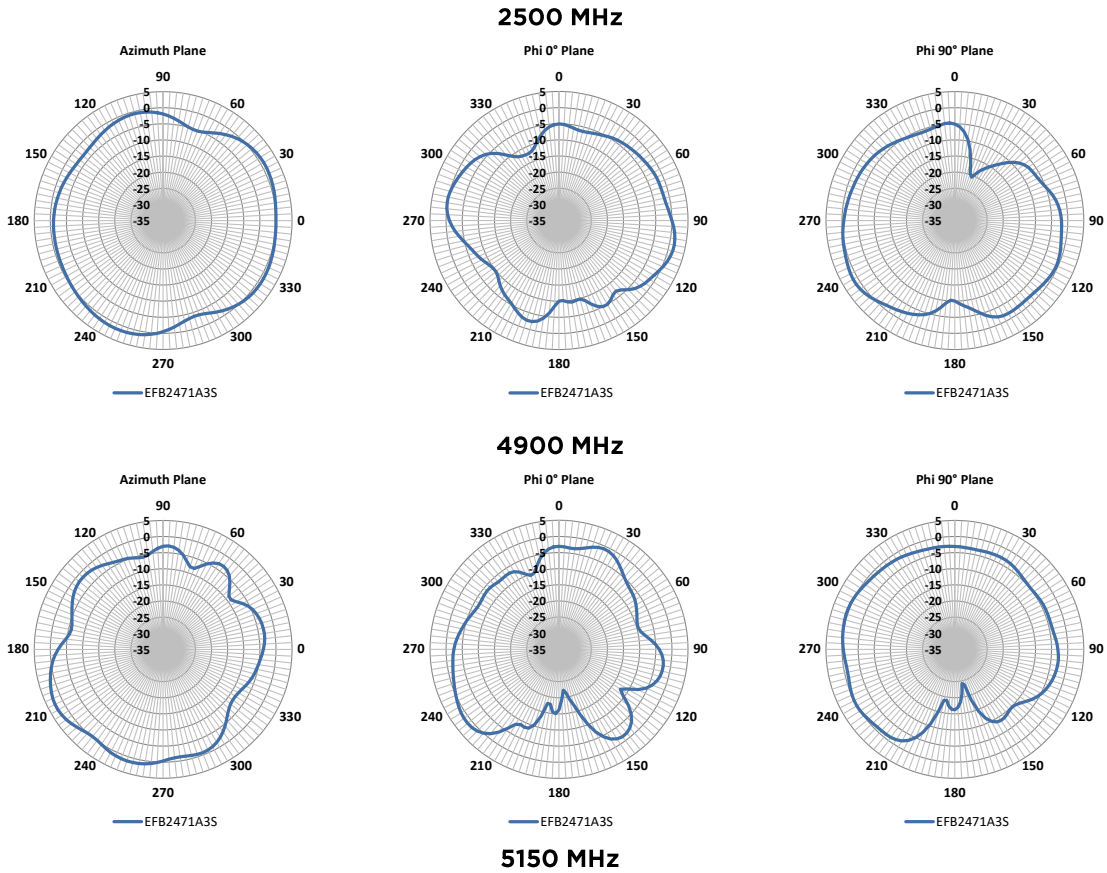
2400 MHz



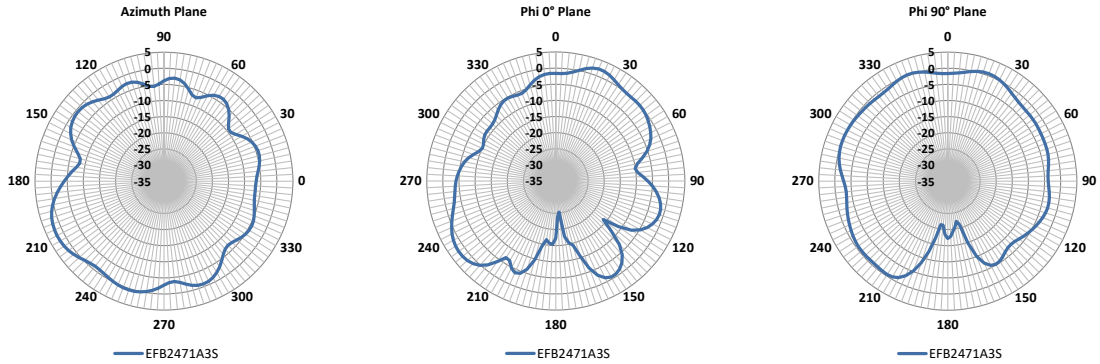
RADIATION PATTERNS



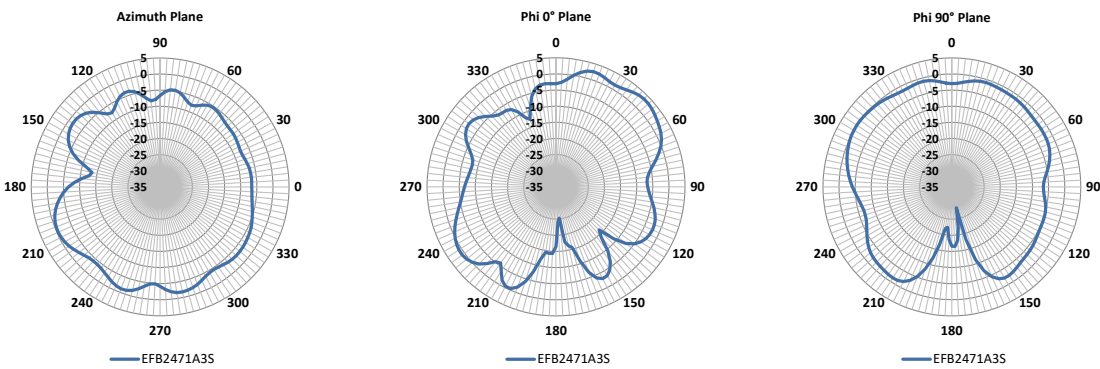
RADIATION PATTERNS



RADIATION PATTERNS

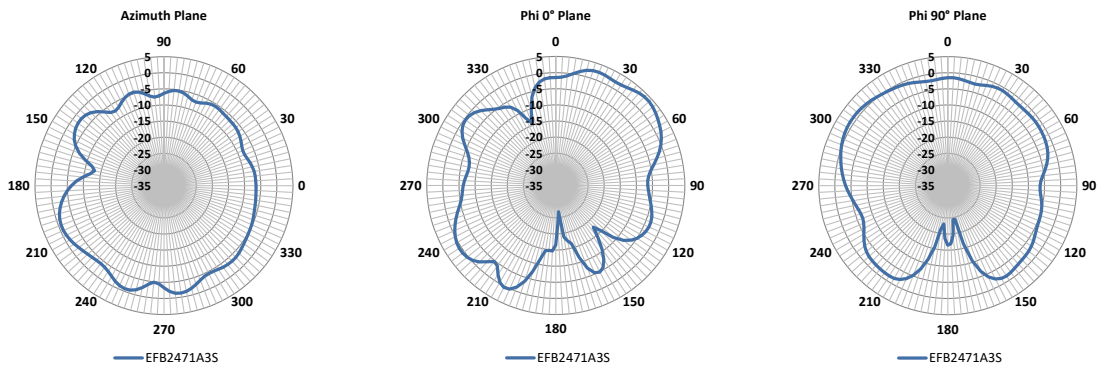


5470 MHz



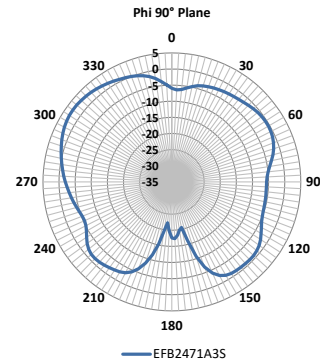
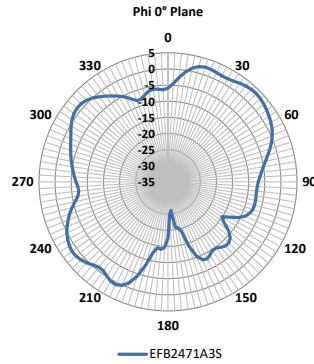
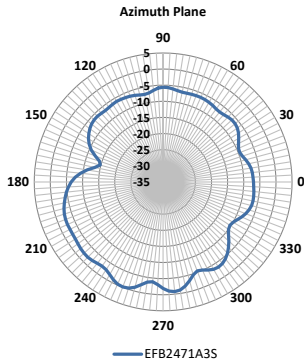
RADIATION PATTERNS

5500 MHz

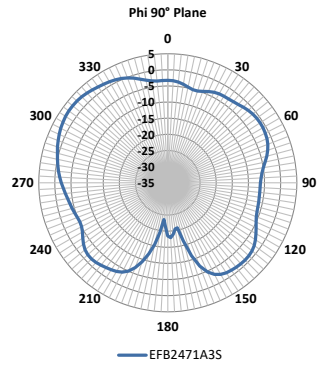
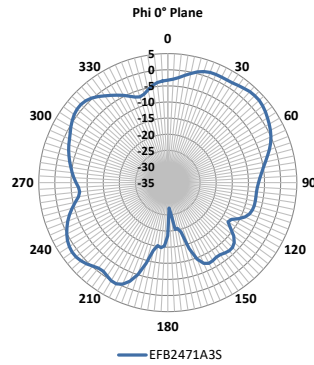
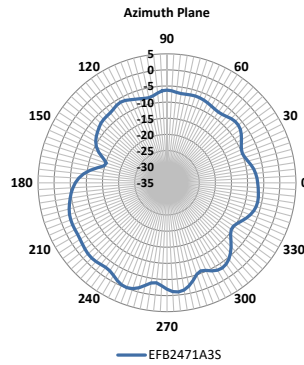


RADIATION PATTERNS

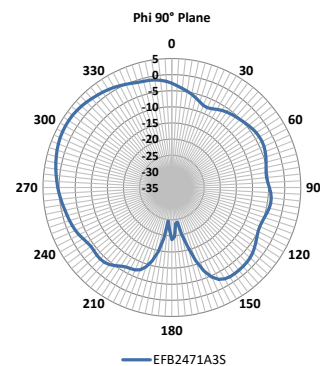
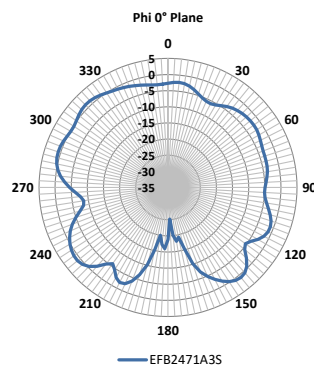
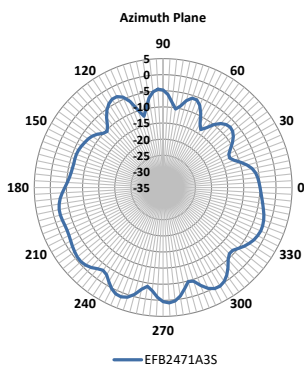
5850 MHz



5925 MHz

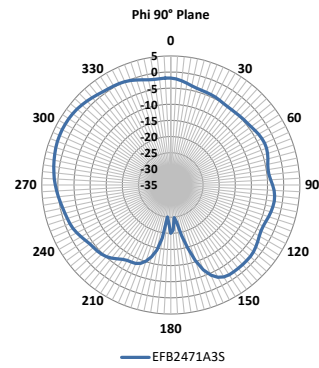
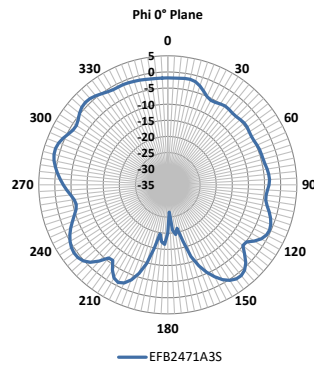
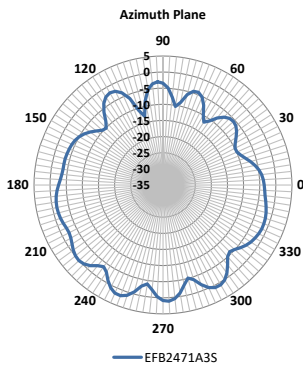


6425 MHz

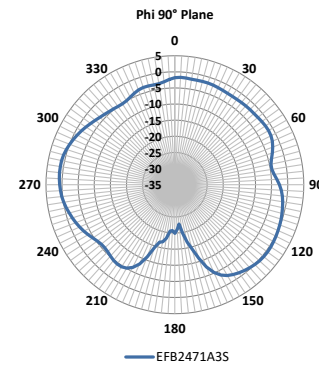
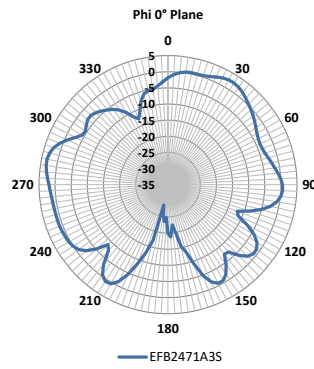
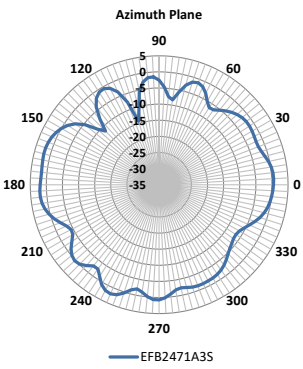


RADIATION PATTERNS

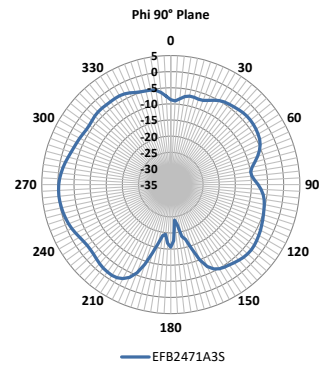
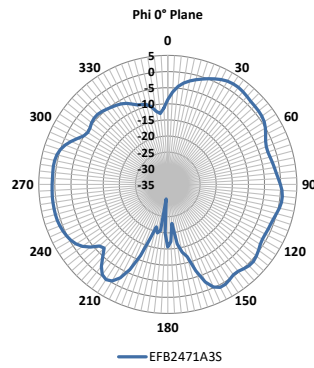
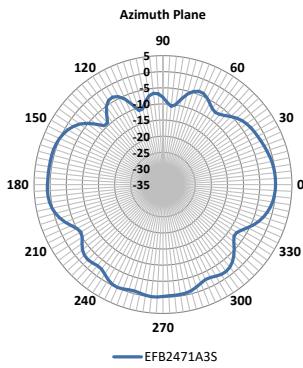
6525 MHz



6875 MHz



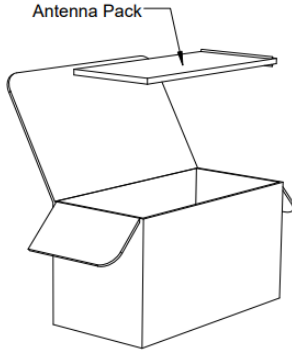
7125 MHz



PACKAGING INFORMATION

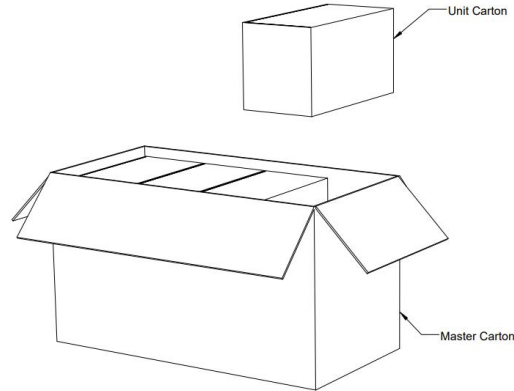
Carton Layout

Unit Carton



- Dimensions: 245 mm x 120 mm x 135 mm
- Weight: 0.22 kg
- Zipper bag 152 mm x 229 mm (10 antennas per bag)
- 20x zipper bags per carton (200 antennas total)

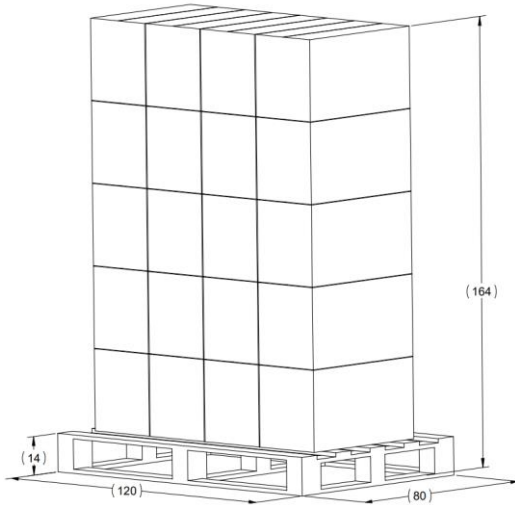
Master Carton



- Dimensions: 520 mm x 260 mm x 295 mm
- Weight: 2.4 kg
- Total of 8-unit cartons per master carton
- Total of 1600 antennas per master carton

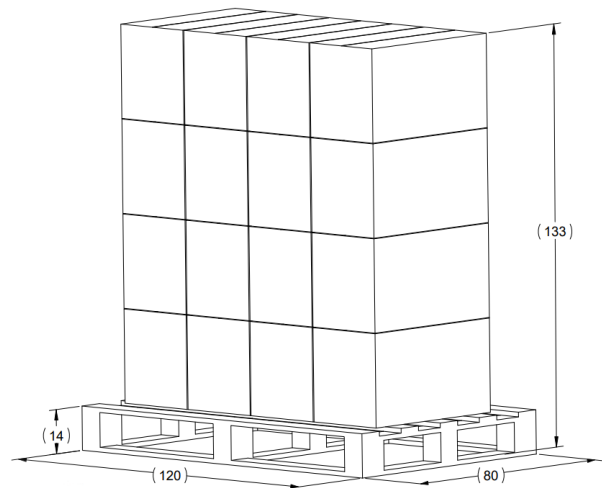
Pallet Layout

Ocean Shipping Pallet



- Pallet base dimensions: 120 cm x 80 cm x 14 cm
- Full loaded dimensions: 120 cm x 80 cm x 164 cm
- 20 master cartons (4 x 5 layout), 60 kg total
- 32000 antennas per pallet

Air Shipping Pallet



- Pallet base dimensions: 120 cm x 80 cm x 14 cm
- Full loaded dimensions: 120 cm x 80 cm x 133 cm
- 16 master cartons (4 x 4 layout), 50.4 kg total
- 25600 antennas per pallet

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