

# Part No. X1005244-LWA3SX10A2

## GNSS (active) / LTE / WiFi 3-in-1 External Antenna

(1561 / 1575 / 1602) MHz + (698-960; 1710-2170; 2300-2690) MHz + (2400-2500; 5150-5850) MHz

Supports: Tracking, Smart Home, Agriculture, Automotive Aftermarket, Healthcare, Digital Signage, Logistics, Industrial Devices



KYOCERA AVX'd 3-in-1 GNSS (active), LTE and WiFi external antenna delivers on the key needs of device designers for higher functionality and performance.

### Electrical Specifications

Typical characteristics in free-space

#### GNSS (active) & LTE & WiFi External Antenna

(1561 / 1575 / 1602) MHz  
(698-960; 1710-2170; 2300-2690) MHz  
(2400-2500; 5150-5850) MHz

#### KEY BENEFITS

##### Reduced Costs and Time-to Market

Standard antennas eliminate design fees and cycle time associated with a custom solution, getting products to market faster.

##### High Performance

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

##### Reliability

Products are the latest

GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

## Electrical Specifications cont.

Typical characteristics in free-space

| Frequency (WiFi)   | 2400~2500 MHz | 5150~5850 MHz |
|--------------------|---------------|---------------|
| Peak Gain          | 4.5 dBi       | 3.4 dBi       |
| Average Efficiency | 61%           | 56%           |
| VSWR               | 2.5:1 max     | 2.0:1 max     |

## Mechanical Specifications

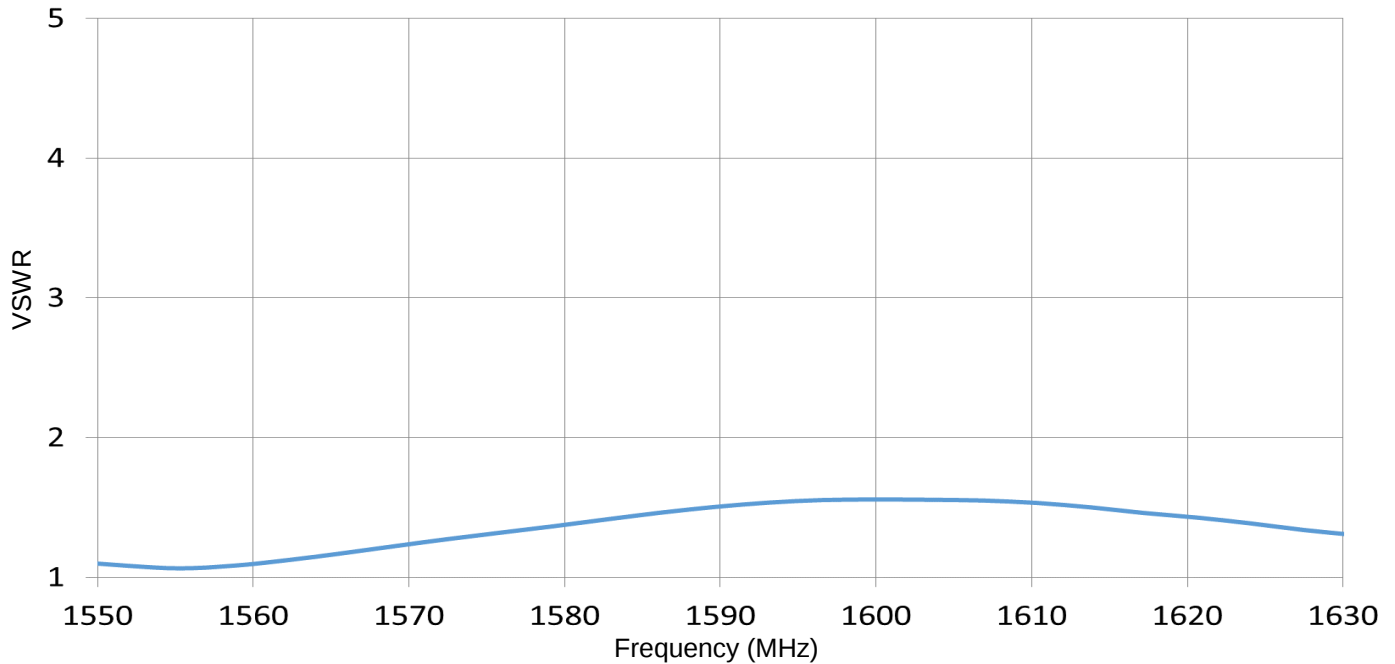
| Ordering Part #            | X1005244-LWA3SX10A2                                               |
|----------------------------|-------------------------------------------------------------------|
| Dimensions (mm)            | 136.2 x 72.4 x 12.7                                               |
| Mounting Type              | Foam Adhesive                                                     |
| Operating Temperature (°C) | -40 ~ +85                                                         |
| Weight (grams)             | PC+ABS (Black)                                                    |
| Housing Material & Color   | 189                                                               |
| Cable                      | Length: 1M<br>Type:<br>RG-174 GNSS<br>CFD-200 LTE<br>CFD-200 WiFi |
| Connector                  | SMA(M) GNSS<br>SMA(M) LTE<br>RP-SMA(M) WiFi                       |
| Waterproof                 | IPX7                                                              |

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## VSWR Plot (GNSS 1561 & 1575 & 1602 MHz)

Typical characteristics in free-space

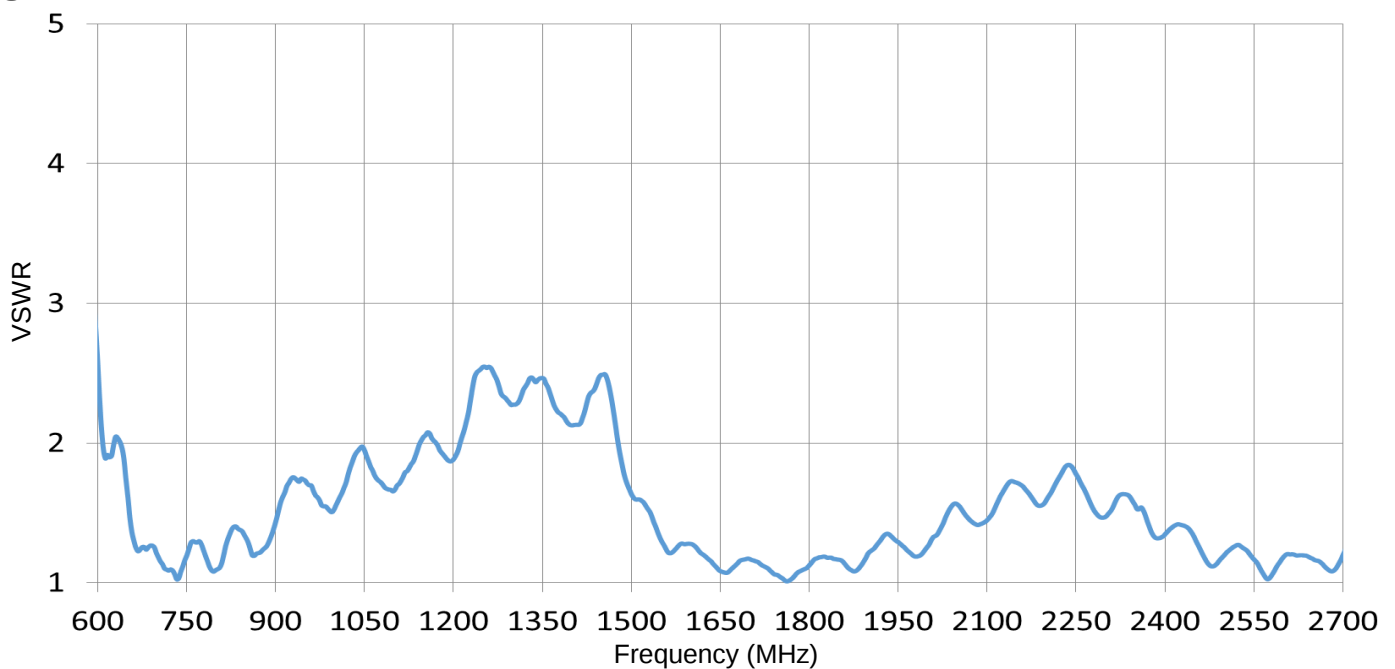
**VSWR:**



## VSWR Plots (LTE 698-2690 MHz)

Typical characteristics in free-space

**VSWR:**

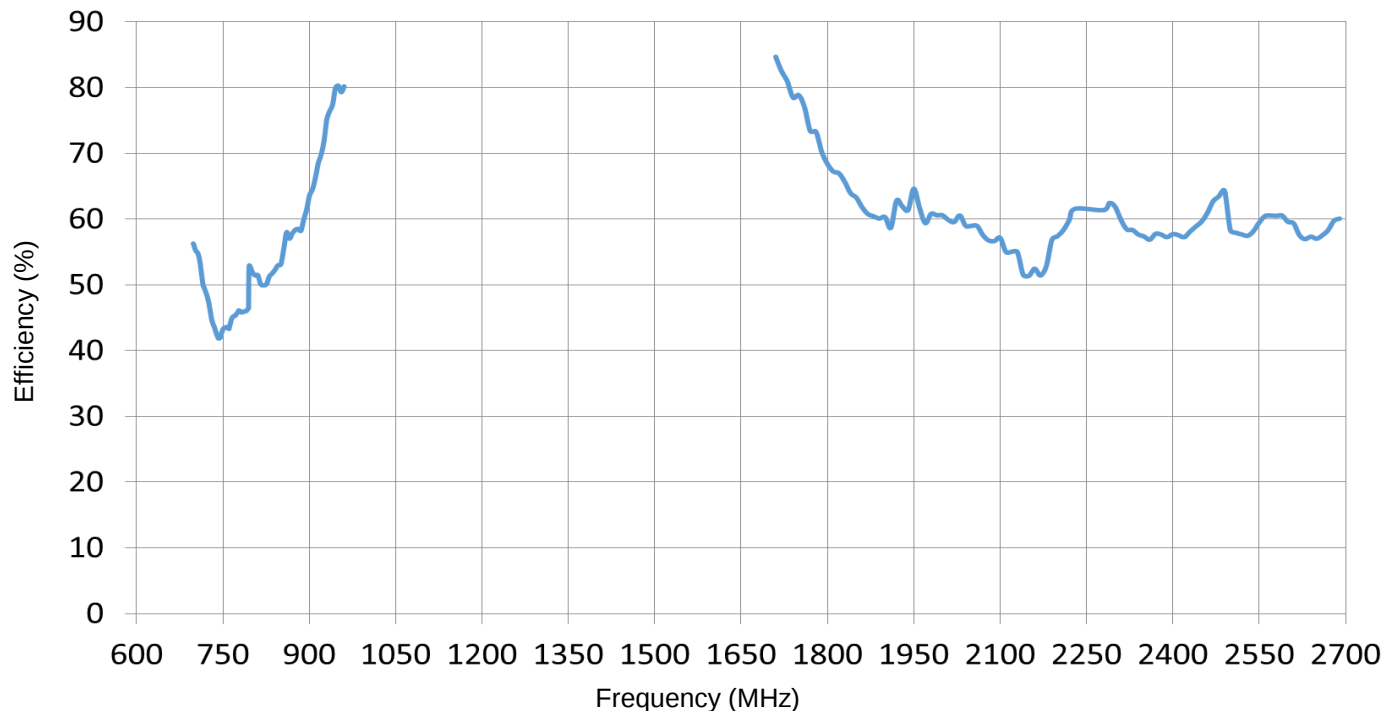


GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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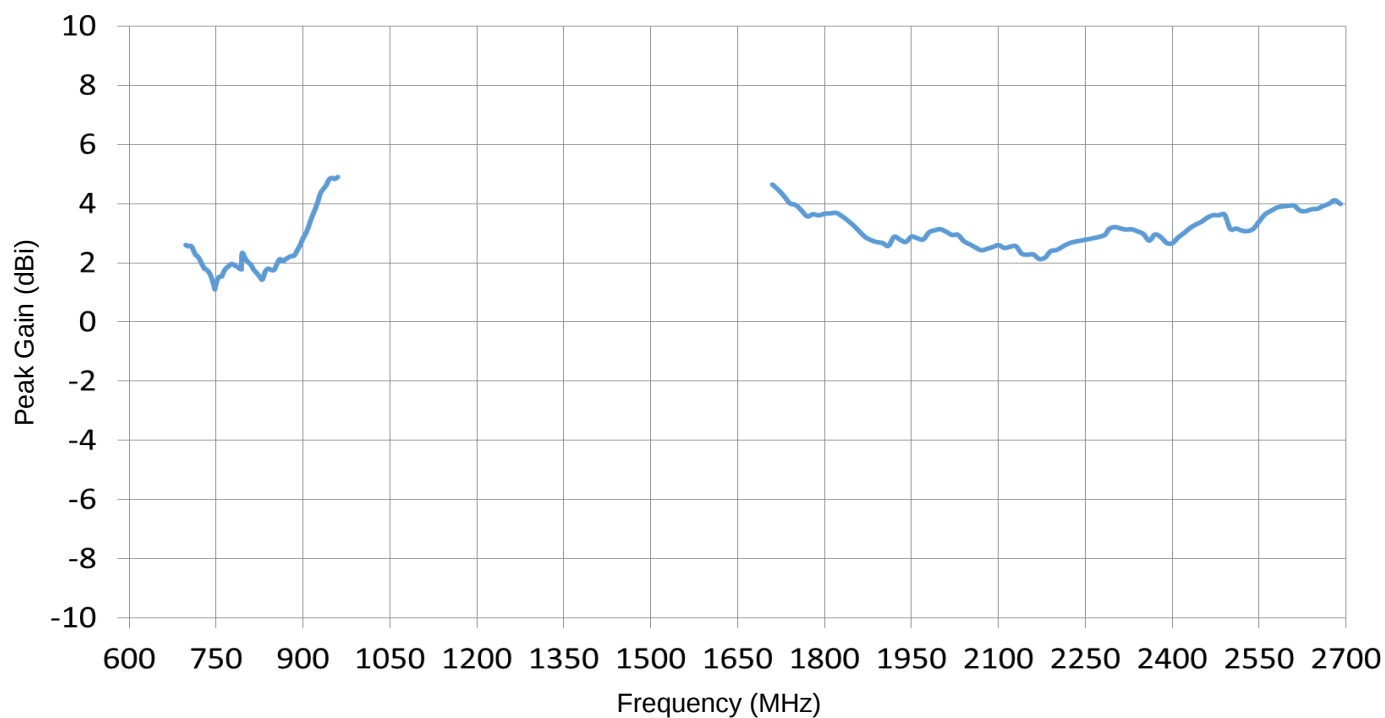
## Efficiency, Peak Gain Plots (LTE 698-2690 MHz)

Typical characteristics in free-space

### Efficiency:



### Peak Gain:

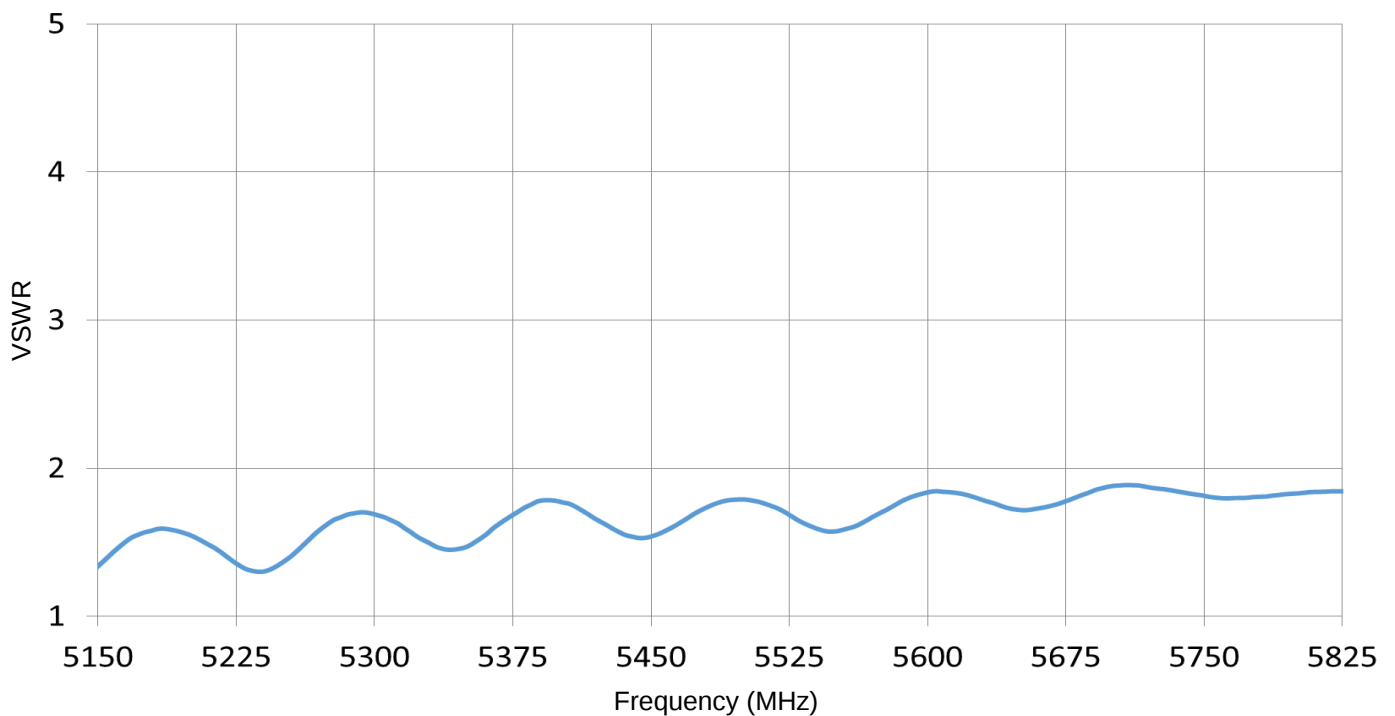
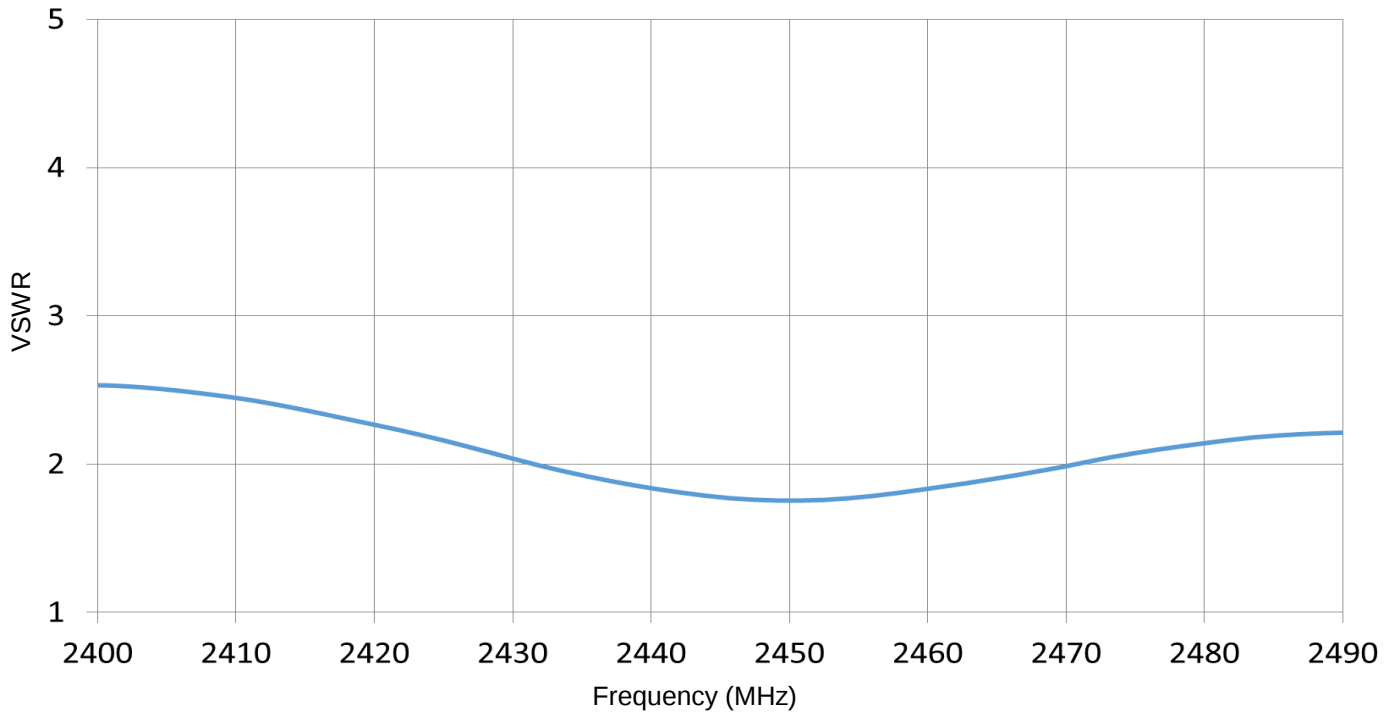


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## VSWR (WiFi 2400-2485, 5150-5825 MHz)

Typical characteristics in free-space

**VSWR:**

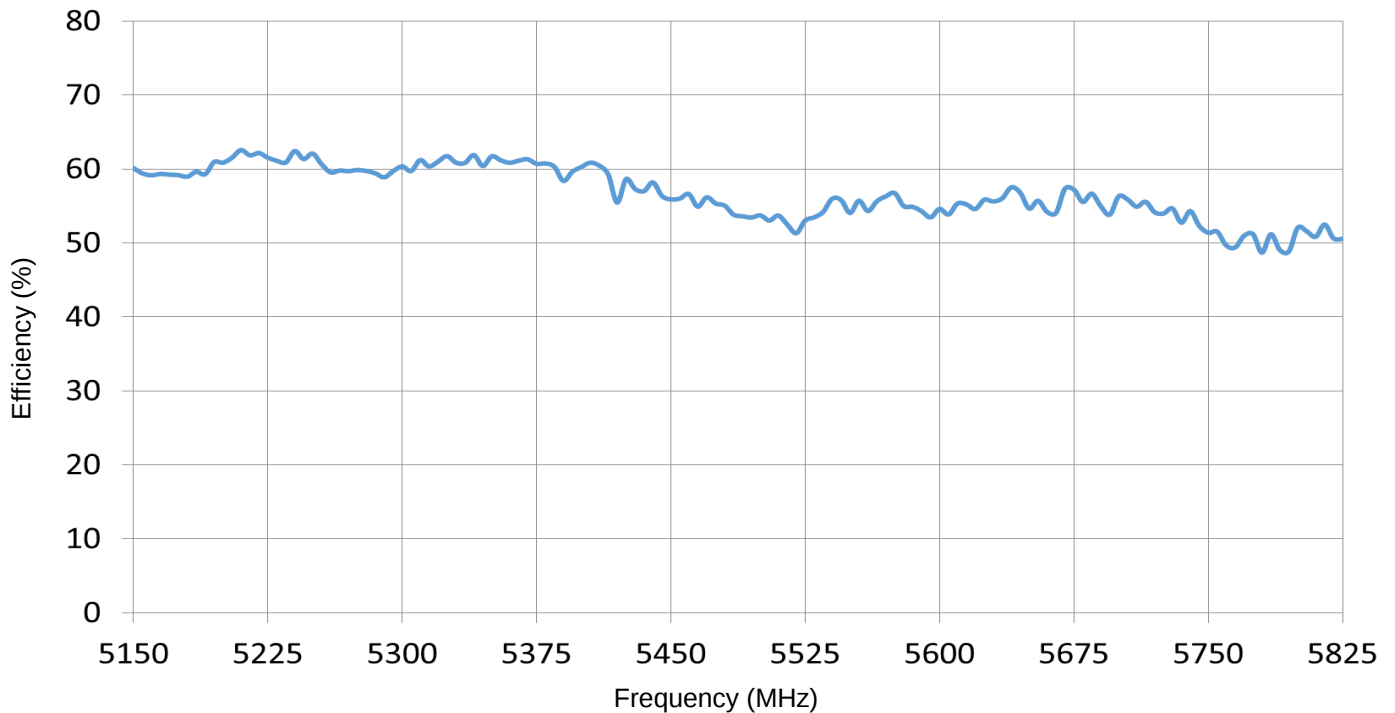
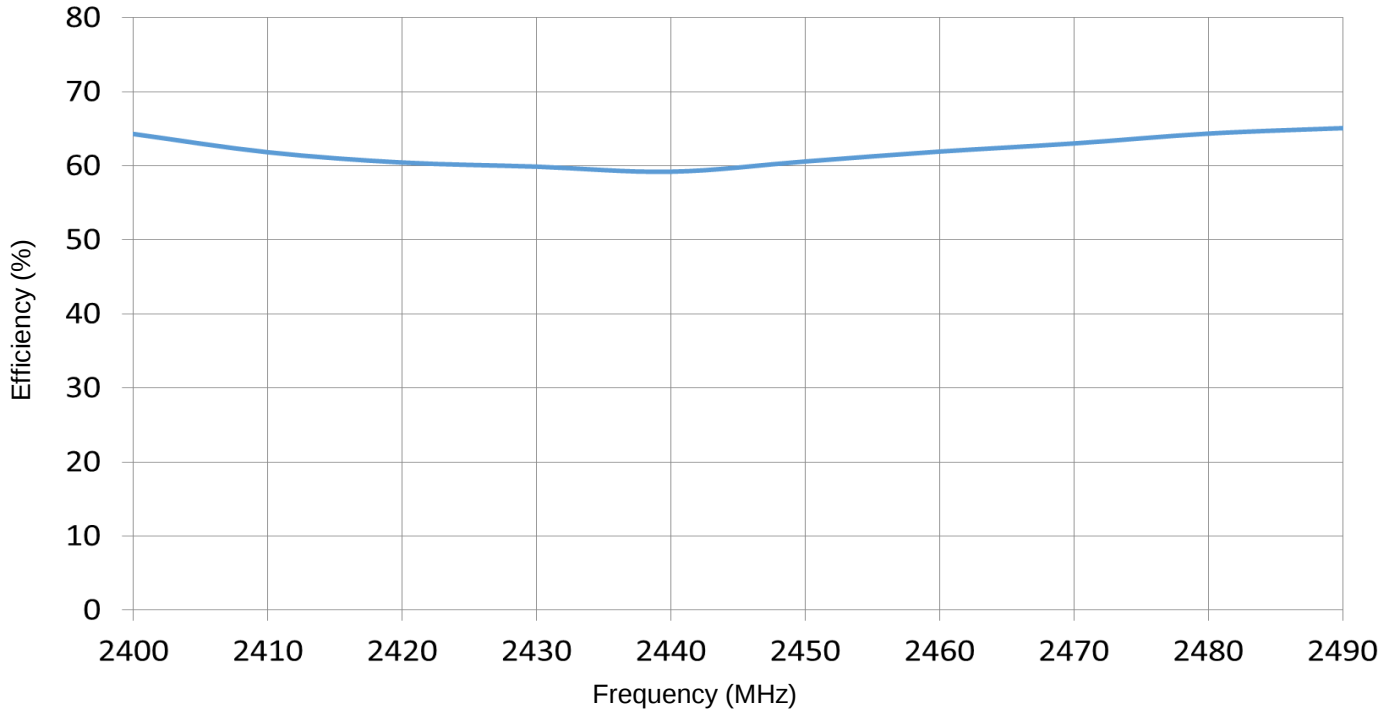


GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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## Efficiency (WiFi 2400-2485, 5150-5825 MHz)

Typical characteristics in free-space

### Efficiency:

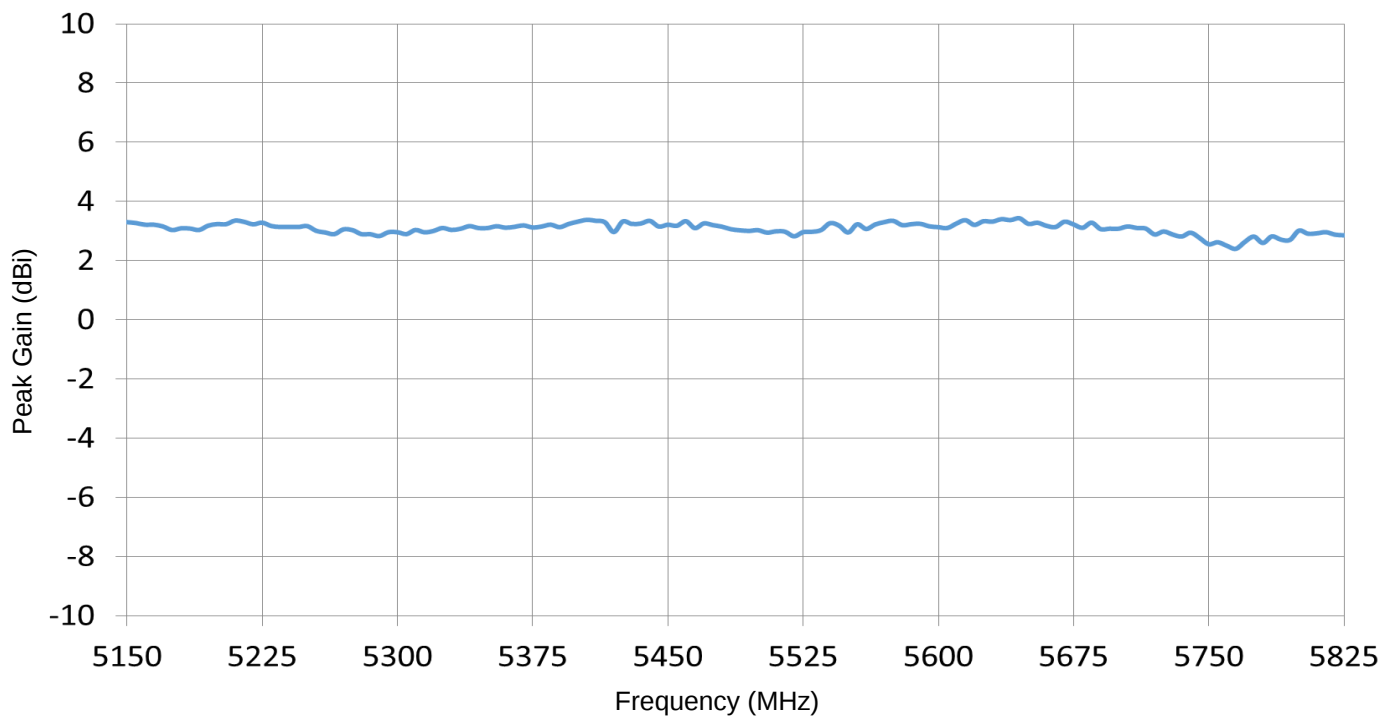
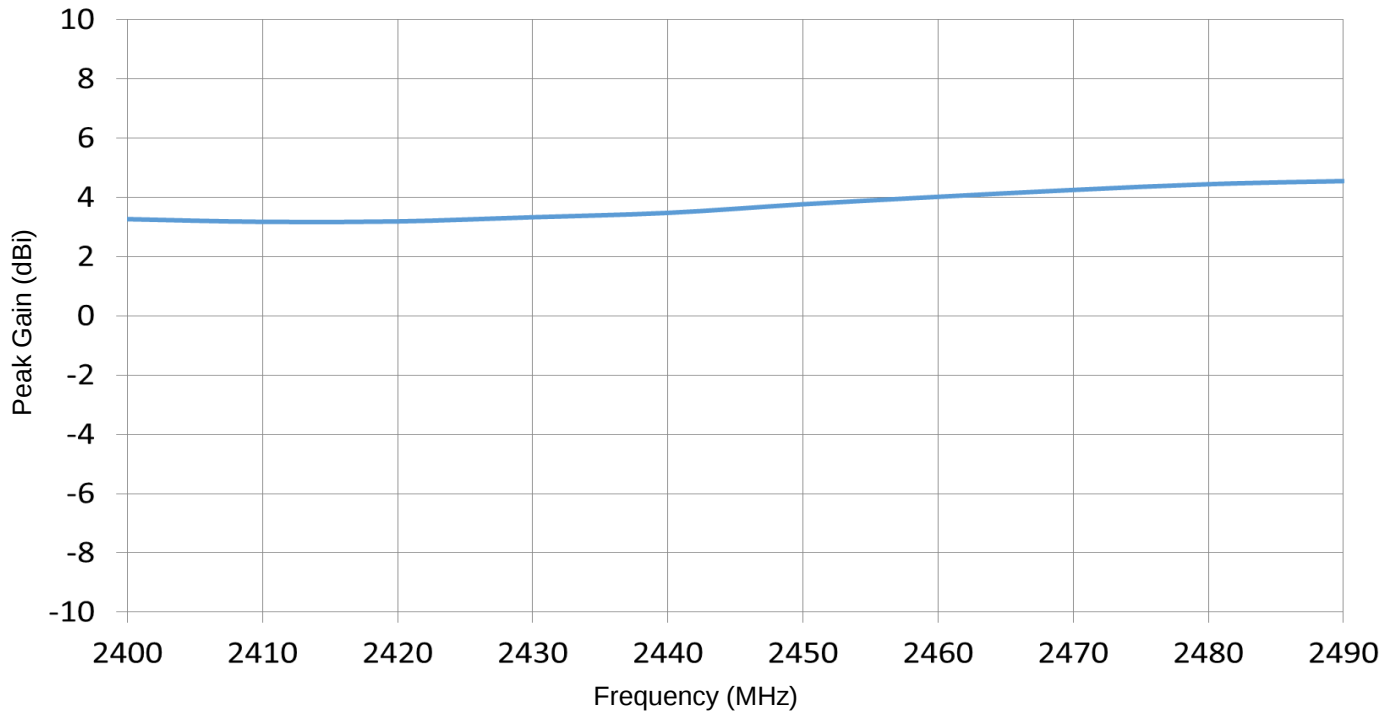


GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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## Peak Gain (WiFi 2400-2485, 5150-5825 MHz)

Typical characteristics in free-space

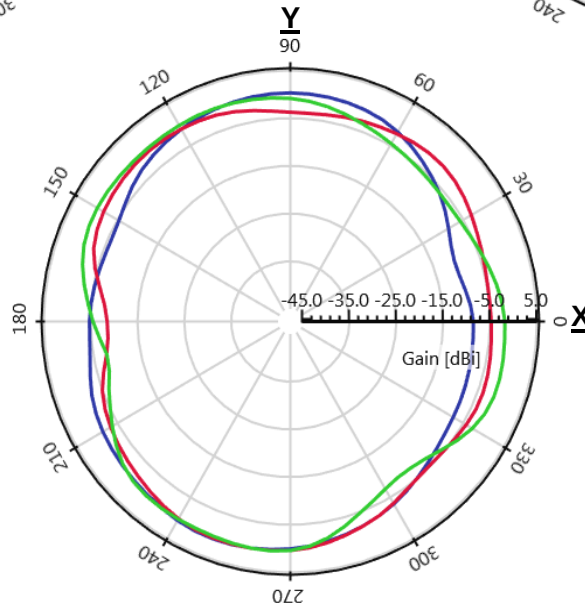
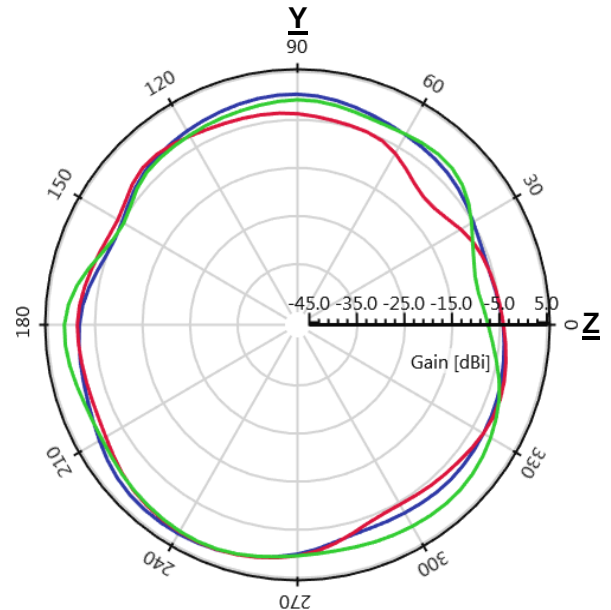
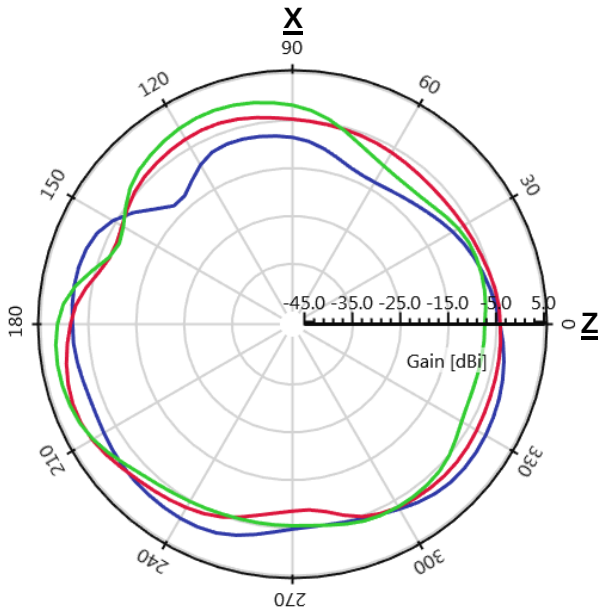
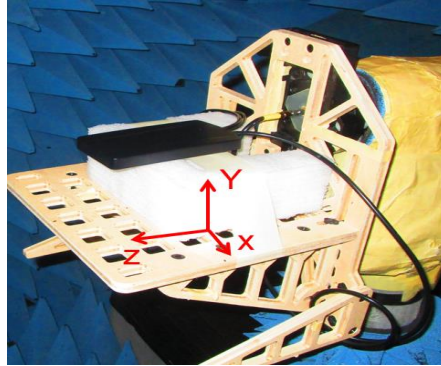
### Peak Gain:



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## 2D Radiation Patterns (LTE 698-960 MHz)

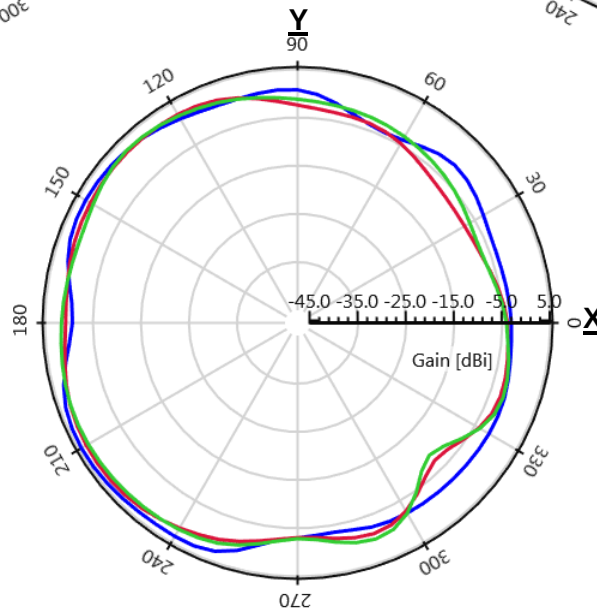
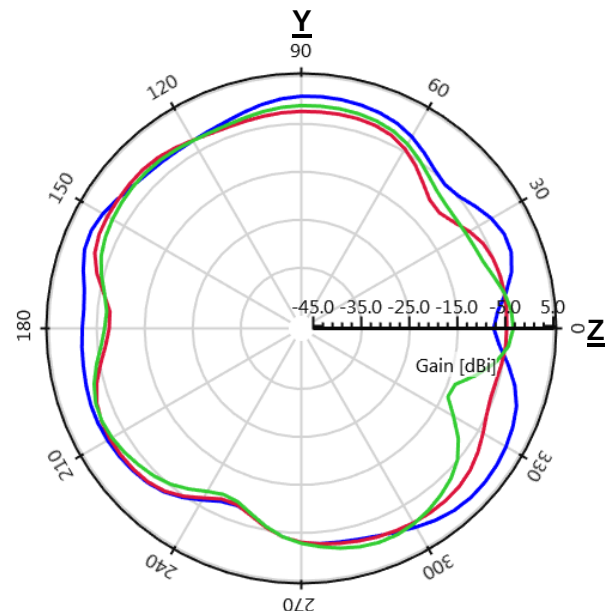
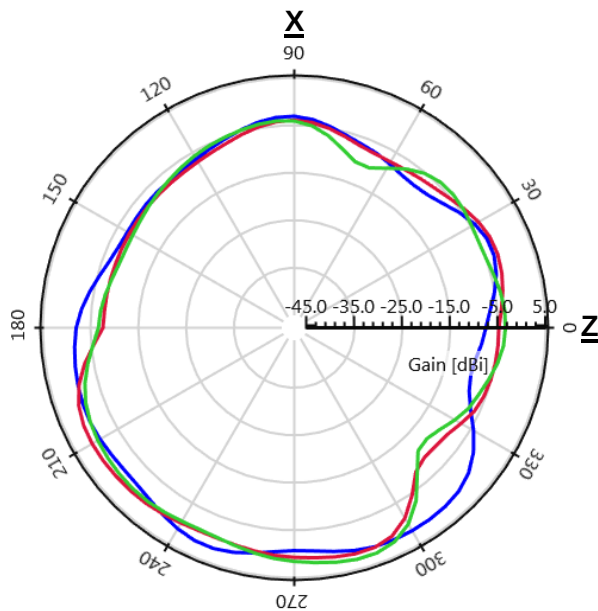
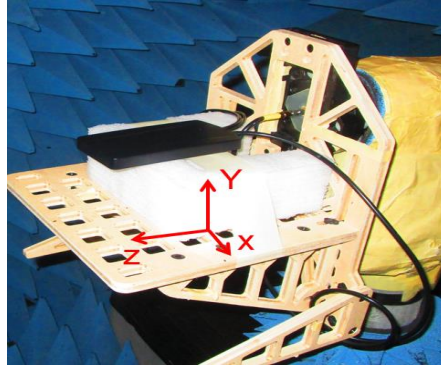
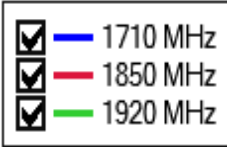
Typical characteristics in free-space



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## 2D Radiation Patterns (LTE 1710-2170 MHz)

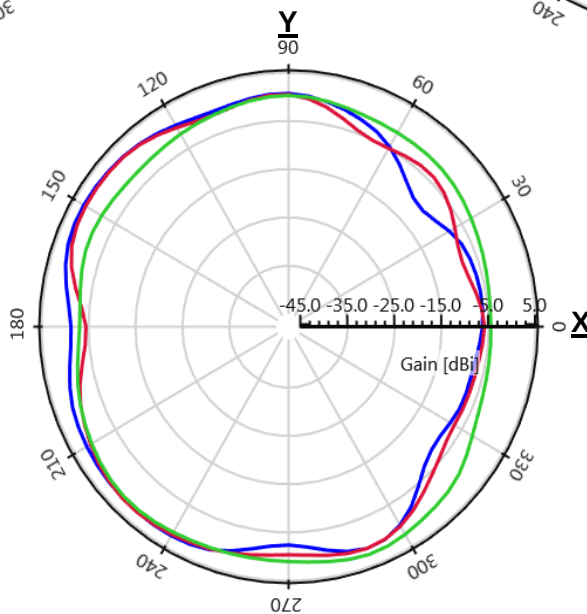
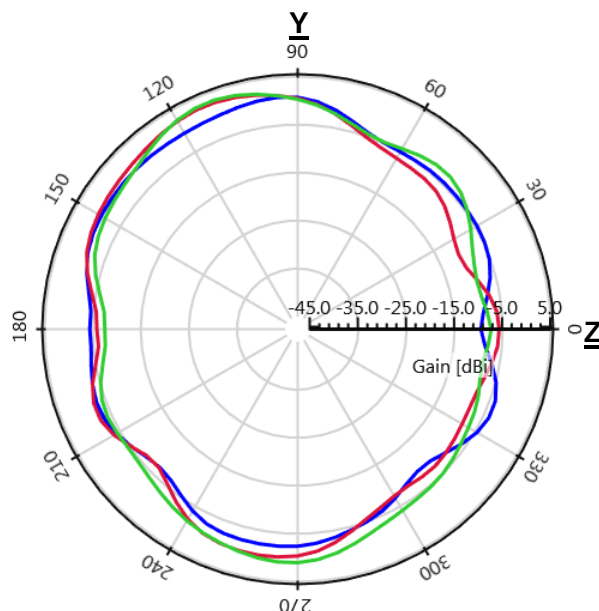
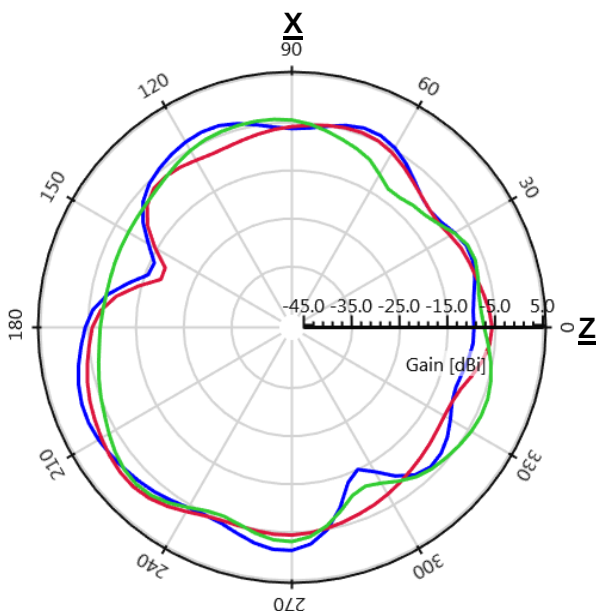
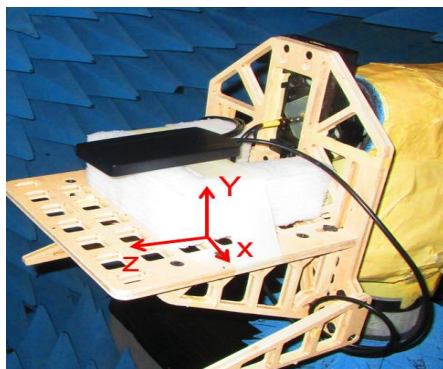
Typical characteristics in free-space



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## 2D Radiation Patterns (LTE 2300-2690 MHz)

Typical characteristics in free-space

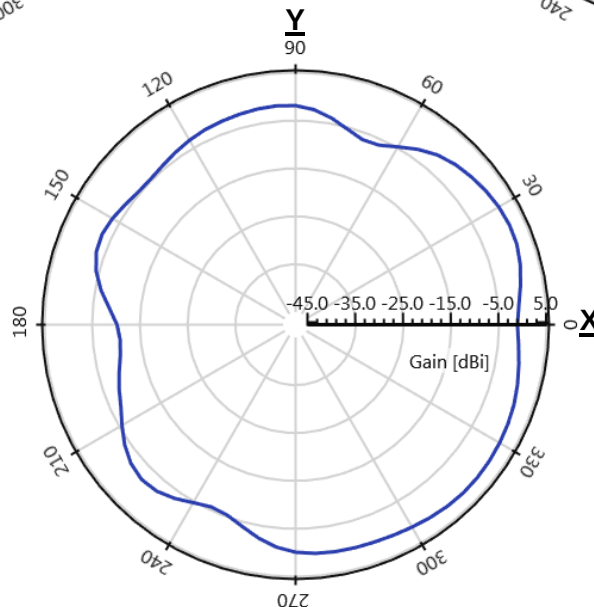
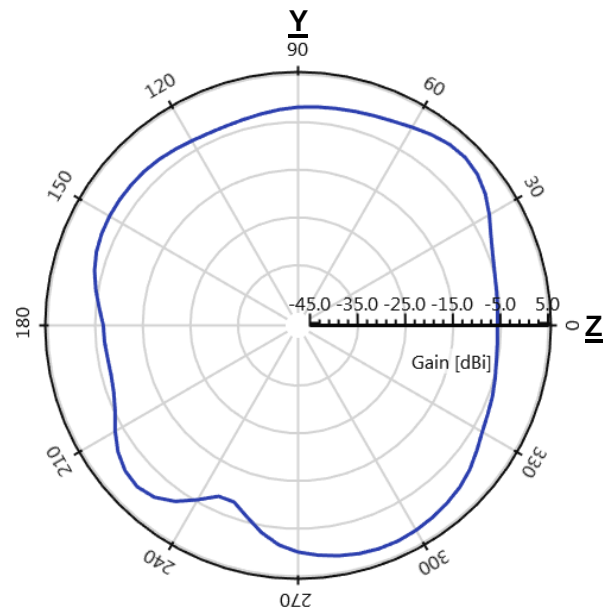
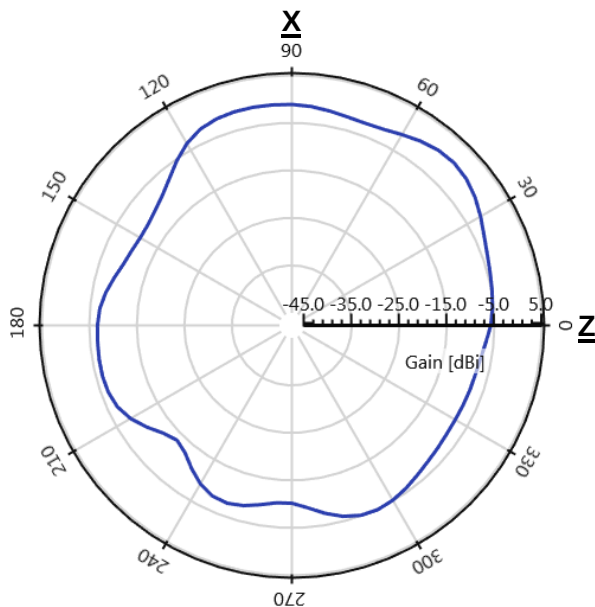
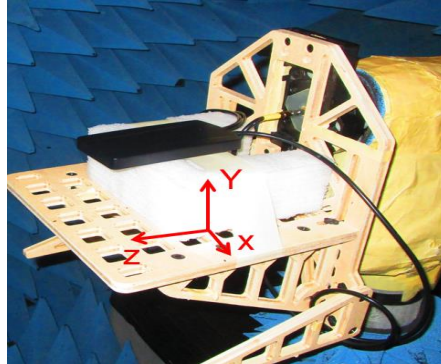


GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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## 2D Radiation Patterns (WiFi 2400-2485 MHz)

Typical characteristics in free-space

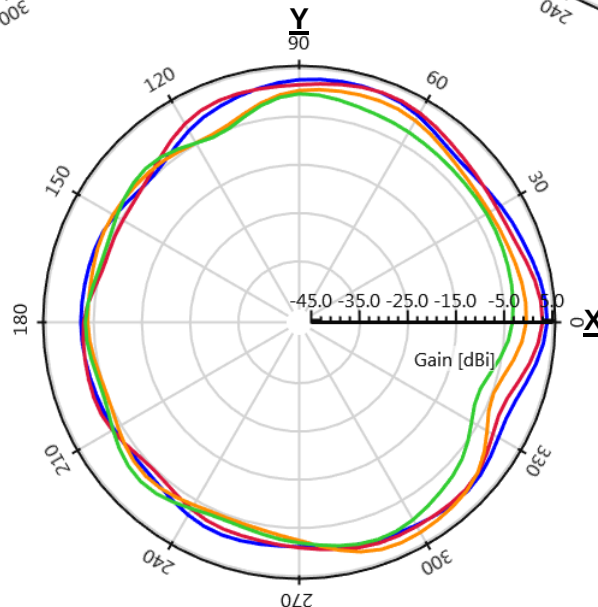
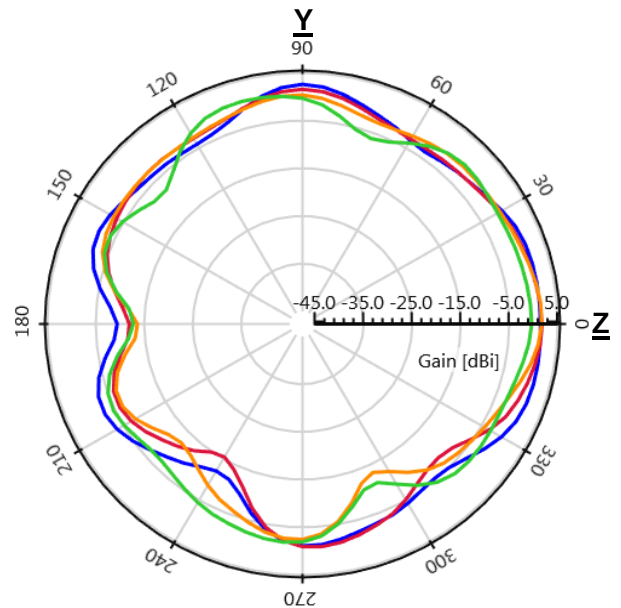
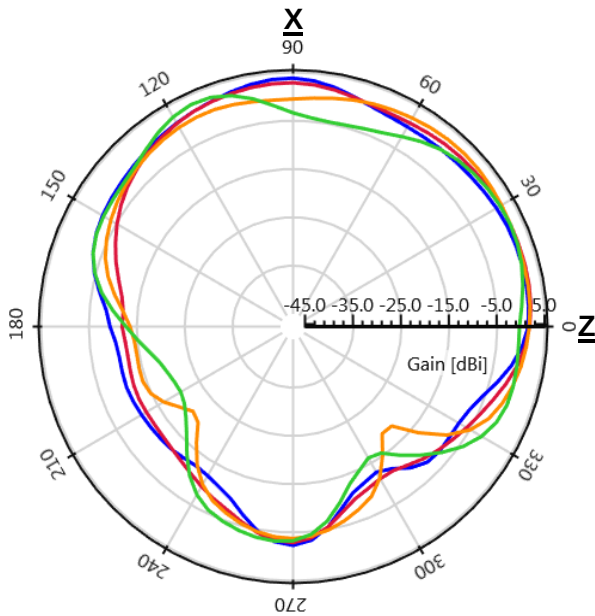
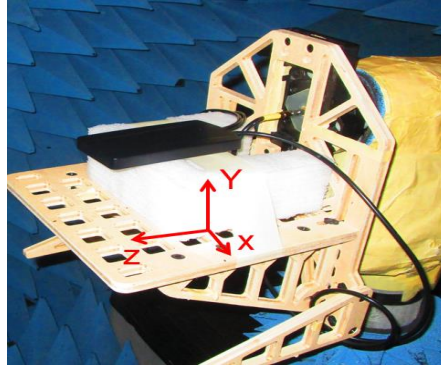
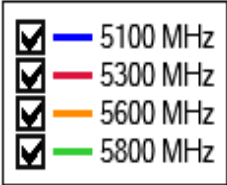
☒ — 2400 MHz



GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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## 2D Radiation Patterns (WiFi 5150-5850 MHz)

Typical characteristics in free-space



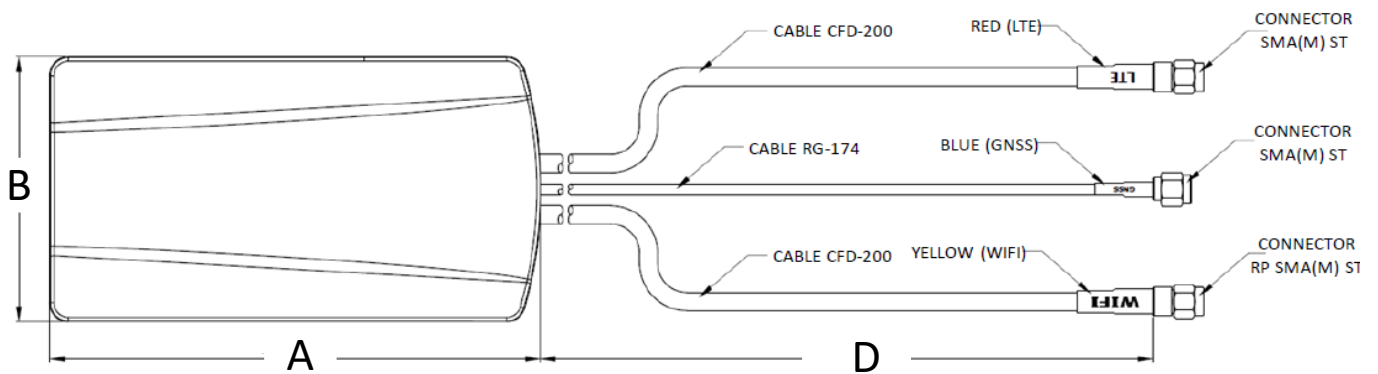
GNSS (active) / LTE / WiFi 3-in-1 External Antenna Specifications.  
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## Mechanical Dimensions

Typical antenna dimensions (mm)

| Part Number         | A (mm)      | B (mm)     | C (mm)     | D (mm)      |
|---------------------|-------------|------------|------------|-------------|
| X1005244-LWA3SX10A2 | 136.2 ± 3.0 | 72.4 ± 1.5 | 12.7 ± 1.0 | 1000 ± 40.0 |

Top View



Side View

