

# Part No. X1005800

## External Wi-Fi 6E/7 Antenna

2400 - 2480; 5150 – 5850; 5925 - 7125 MHz  
Supports: : Wi-Fi applications, Bluetooth, ZigBee, WLAN



KYOCERA AVX's X1005800 is a high-performing external outdoor Wi-Fi 6E/7 antenna. It is IPX7 waterproof.

### Global Operations & Design Support

KYOCERA AVX's global operations support an integrated network of design centers that can take projects from concept to production.

### Extensive RF Experience

KYOCERA AVX's antennas are supported by documentation, and when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

### Wi-Fi External Antenna

2400 – 2485 MHz  
5150 – 5850 MHz  
5925 – 7125 MHz

#### KEY BENEFITS

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

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

##### Greater Flexibility with Unique Form Factors

KYOCERA AVX's technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.

##### Environmental Compliance

Comply with latest RoHS and REACH requirements

#### APPLICATIONS

- Healthcare (FDA Class I) Applications
- Smart Home networking / Gateway
- M2M, Industrial devices
- IoT devices
- Tracking
- Remote Access Monitoring
- Sensing and Remote monitoring

### Electrical Specifications

Typical X1005800 performance

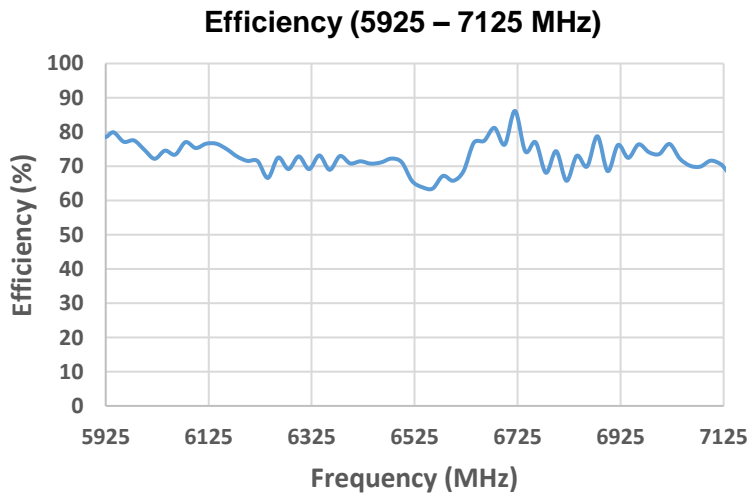
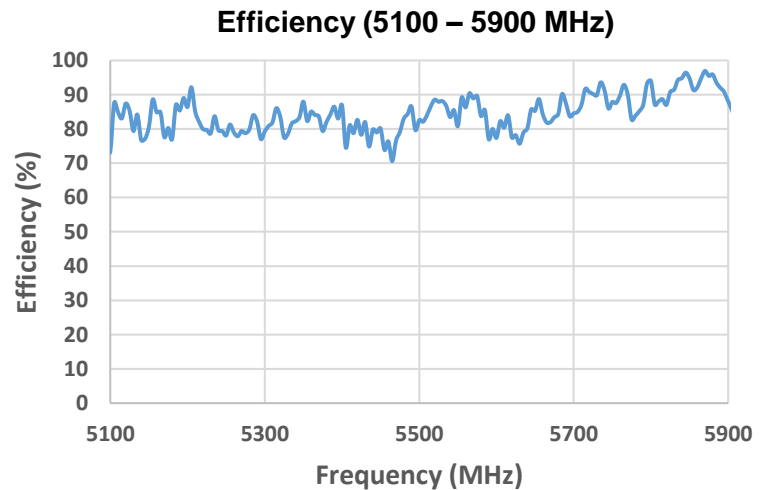
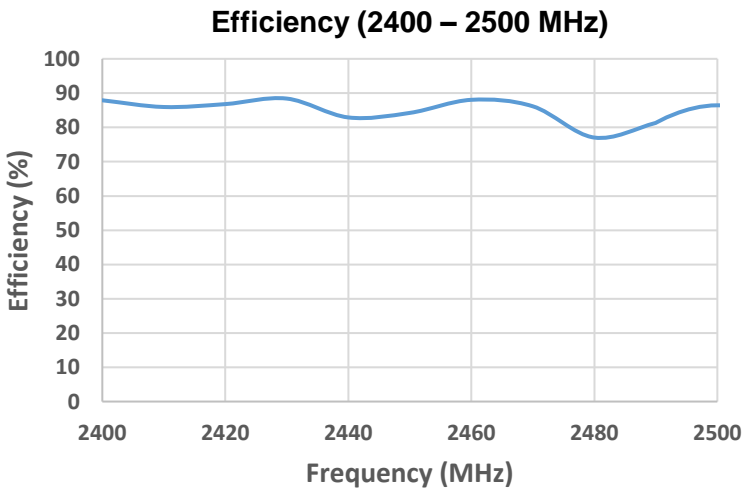
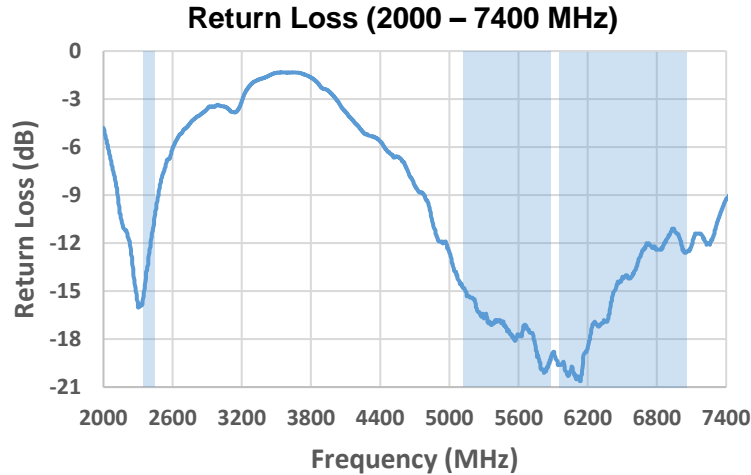
Frequency (MHz)	2400 - 2480	5150 - 5850	5925 - 7125
Peak Gain	4 dBi	5.3 dBi	5.6 dBi
Average Efficiency	85%	84%	73%
VSWR Match	2.1:1	1.4:1	1.7:1
Polarization	Linear		
Power Handling	2 Watt CW		
Feed Point Impedance	50 Ω unbalanced		

### Mechanical Specifications & Ordering Part Number

Ordering Part #	X1005800-W5DRMB
Dimensions (mm)	163.7 x 32.7 x 22.5
Mounting Type	Connector
Housing Material	PC
Storage Temperature/ Humidity (Sealed shipping package)	55°C 95%
Operating Temperature	-20°C to +85°C
Weight (grams)	25.5
Connector / Cable Length	RP-SMA Plug
IP Rating	IPX7

X1005800 External Wi-Fi 6E/7 KYOCERA AVX Embedded Antenna Specifications.  
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

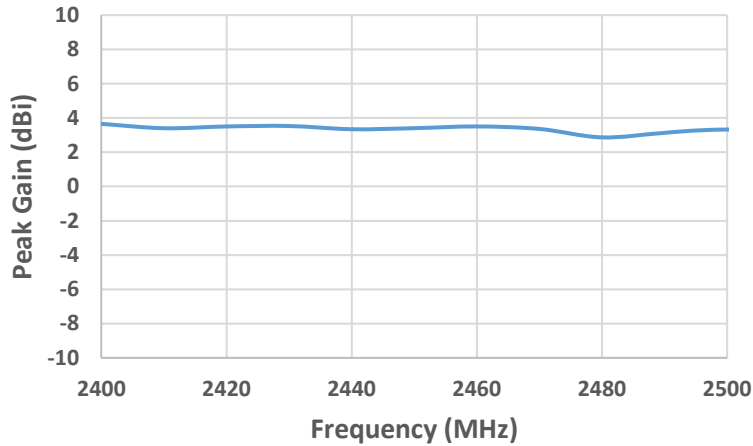
Return Loss and Efficiency



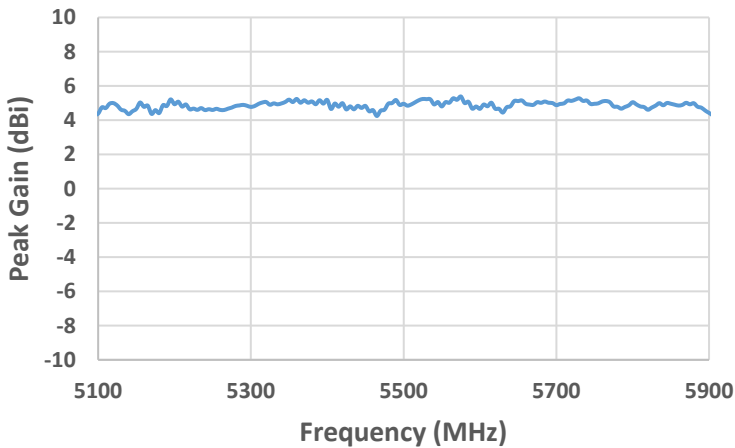
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**Peak Gain**

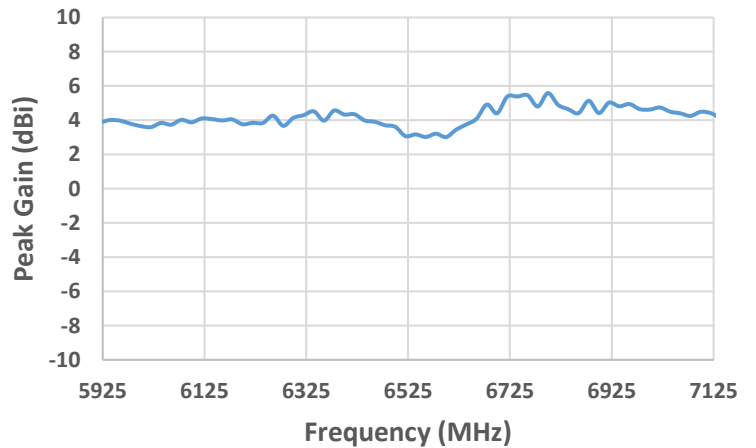
**Peak Gain (2400 – 2500 MHz)**



**Peak Gain (5100 – 5900 MHz)**



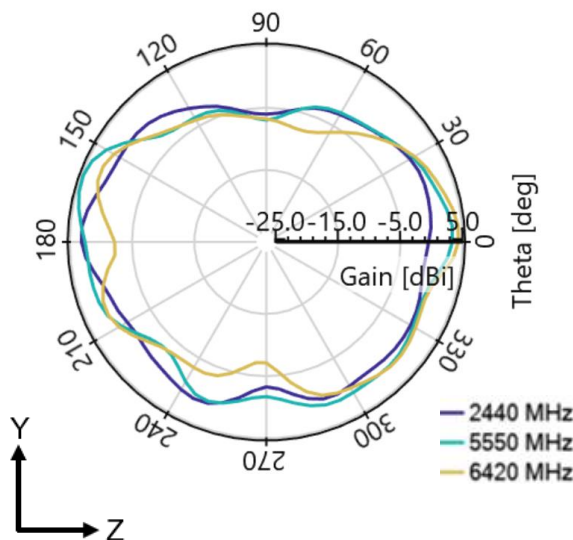
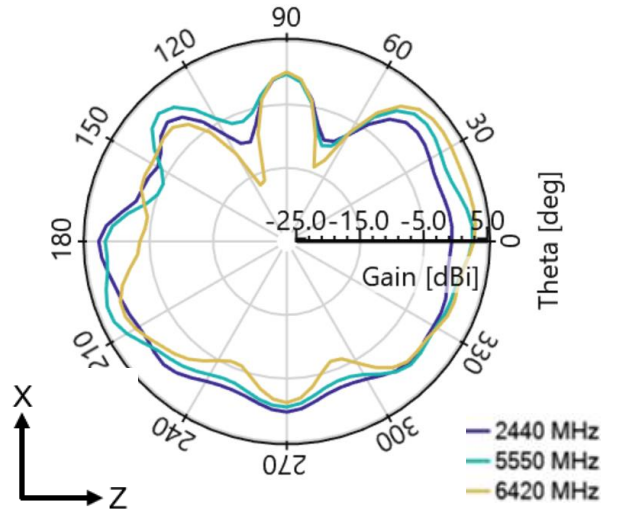
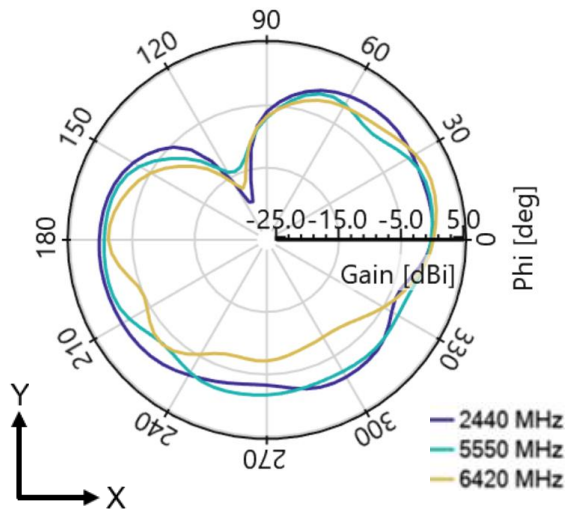
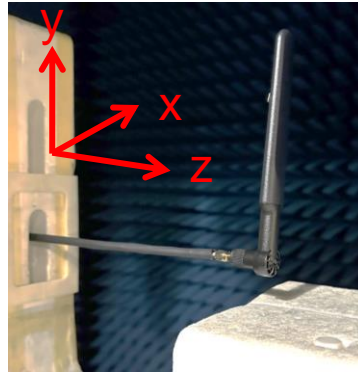
**Peak Gain (5925 – 7125 MHz)**



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**Radiation Pattern**

Typical performance X1005800 performance in Free Space  
 Measured at 2.44 GHz, 5.55 GHz, 6.42 GHz

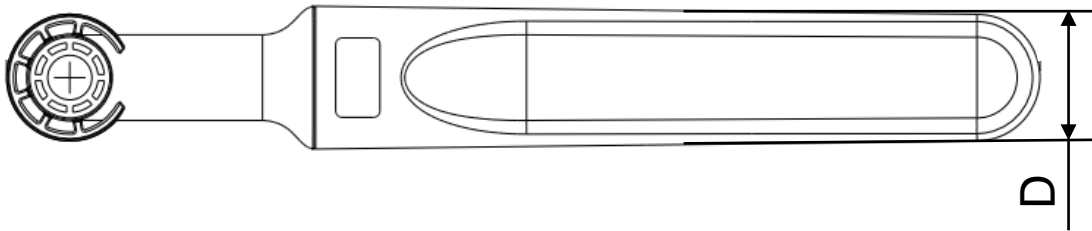


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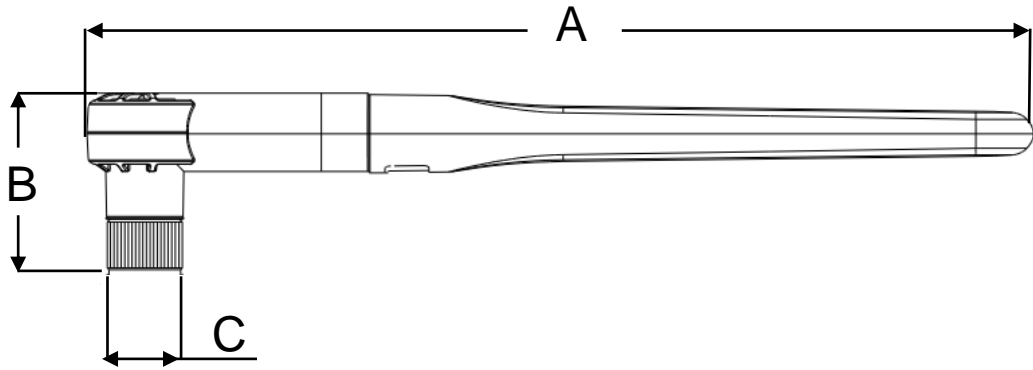
**Mechanical Dimensions - X1005800**

Typical antenna dimensions (mm)

Part Number	A	B	C	D
X1005800-W5DRMB	163.40 ± 0.30	32.80 ± 0.30	13.10 ± 0.30	22.5 ± 0.30



**Front View (Straight)**



**Side View (90°)**