

Part No. 1005595

Broadband 5G/4G External Antenna

600 / 700 / 750 / 850 / 900 / 1800 / 1900 / 2100 / 2700 MHz

Supports: 5G sub-6GHz, Broadband LTE, LTE Cat-M, NB-IoT



KYOCERA AVX 1005595 antenna is designed to offer the best performance across the 5G sub-6 GHz and LTE/4G frequency bands, regardless of the ground it is connected to. Its hinged connector and low-profile design allows for diverse integration and functionality. The antenna is also available in different colors and connectors upon request.

Broadband 5G/4G External Antenna

Low Band : 600-960 MHz

Mid Band: 1400-2400 MHz

High Band: 2400-5000 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 requirements

APPLICATIONS

- Industrial Gateways and Routers
- Home Automation
- Smart Metering
- Video Surveillance
- Medical

Electrical Specifications

Measured in Free space

Frequency (MHz)	600-960	1400-2400	2400-5000
Peak Gain	0.3 dBi	2.3 dBi	3.9 dBi
Average Efficiency	38%	64%	65%
VSWR Match	< 3.0:1		
Polarization	Linear		
Feed Point Impedance	50 Ω unbalanced		

Mechanical Specifications & Ordering Part Number

Ordering Part #	1005595-C003
Dimensions (mm)	221.0 x 24.0 x 13.2
Mounting Type	External
Connector Type	SMA (MALE) 90° Hinged
*Antenna Color	Black
Weight (grams)	34.0
Operating Temperature (°C)	-20 to + 60
Max Power Handling (W)	5

*Additional variations available in different colors and connectors

External LTE / Cellular KYOCERA AVX Embedded Antenna Specifications.
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

LTE Bands covered

Typical performance, measured in free space

LTE Band	Frequency Band (MHz)	Uplink (UL) (MHz)	Downlink (DL) (MHz)	Region	Covered
1	2100	1920 - 1980	2110 - 2170	Global	Yes
2	1900	1850 - 1910	1930 - 1990	NAM	
3	1800	1710 - 1785	1805 - 1880	Global	
4	1700	1710 - 1755	2110 - 2155	NAM	
5	850	824 - 849	869 - 894	NAM	
6	850	830 - 840	875 - 885	APAC	
7	2600	2500 - 2570	2620 - 2690	EMEA	
8	900	880 - 915	925 - 960	Global	
9	1800	1749.9 - 1784.9	1844.9 - 1879.9	APAC	
10	1700	1710 - 1770	2110 - 2170	NAM	
11	1500	1427.9 - 1447.9	1475.9 - 1495.9	Japan	
12	700	699 - 716	729 - 746	NAM	
13	700	777 - 787	746 - 756	NAM	
14	700	788 - 798	758 - 768	NAM	
17	700	704 - 716	734 - 746	NAM	
18	850	815 - 830	860 - 875	Japan	
19	850	830 - 845	875 - 890	Japan	
20	800	832 - 862	791 - 821	EMEA	
21	1500	1447.9 - 1462.9	1495.9 - 1510.9	Japan	
22	3500	3410 - 3490	3510 - 3590	EMEA	
23	2000	2000 - 2020	2180 - 2200	NAM	
24	1600	1626.5 - 1660.5	1525 - 1559	NAM	
25	1900	1850 - 1915	1930 - 1995	NAM	
26	850	814 - 849	859 - 894	NAM	
27	850	807 - 824	852 - 869	NAM	
28	700	703 - 748	758 - 803	APAC,EU	
29	700	N/A	717 - 728	NAM	
30	2300	2305 - 23151	2350 - 2360	NAM	
31	450	452.5 - 457.5	462.5 - 467.5	Global	
32	1500	N/A	1452 - 1496	EMEA	Yes
33	1900	1900 - 1920			
34	2000	2010 - 2025			
35	1850	1850 - 1910			
36	1900	1930 - 1990			
37	1900	1910 - 1930			
38	2600	2570 - 2620			
39	1900	1880 - 1920			
40	2300	2300 - 2400			
41	2500	2496 - 2690			
42	3500	3400 - 3600			
43	3700	3600 - 3800			

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5G Bands covered

Typical performance, measured in free space

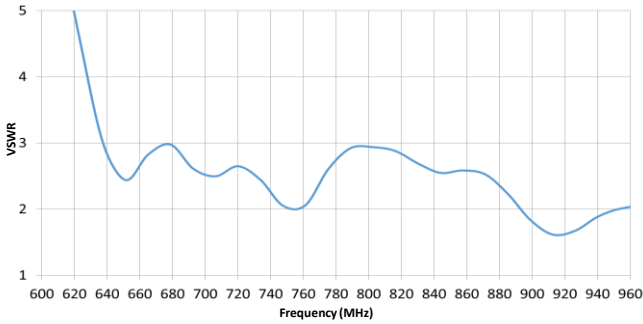
5G Band	Uplink (UL) (MHz)	Downlink (DL) (MHz)	Bandwidth (MHz)	Duplexing Mode	Covered
n1	1920 - 1980	2110 - 2170	60	FDD	Yes
n2	1850 - 1910	1930 - 1990	60	FDD	
n3	1710 - 1785	1805 - 1880	75	FDD	
n5	824 - 849	869 - 894	25	FDD	
n7	2500 - 2570	2620 - 2690	70	FDD	
n8	880 - 915	925 - 960	35	FDD	
n20	832 - 862	791 - 821	30	FDD	
n28	703 - 748	758 - 803	45	FDD	
n38		2570 - 2620	50	TDD	
n41		2496 - 2690	194	TDD	
n50		1432 - 1517	85	TDD	
n51		1427 - 1432	5	TDD	
n66	1710 - 1780	2110 - 2200	70/90	FDD	
n70	1695 - 1710	1995 - 2020	15/25	FDD	
n71	663 - 698	617 - 652	35	FDD	
n74	1427 - 1470	1475 - 1518	43	FDD	
n75	N/A	1432 - 1517	85	SDL	
n76	N/A	1427 - 1432	5	SDL	
n77		3300 - 4200	900	TDD	
n78		3300 - 3800	500	TDD	
n79		4400 - 5000	600	TDD	
n80	1710 - 1785	N/A	75	SUL	
n81	880 - 915	N/A	35	SUL	
n82	832 - 862	N/A	30	SUL	
n83	703 - 748	N/A	45	SUL	
n84	1920 - 1980	N/A	60	SUL	

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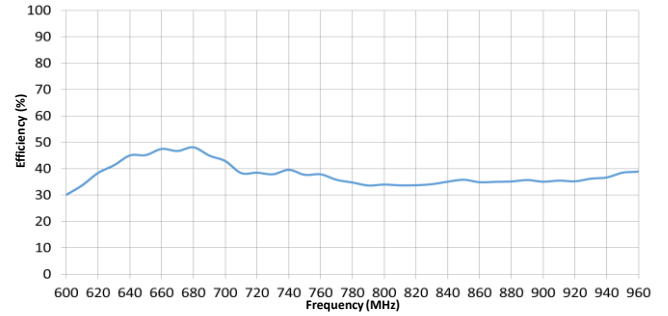
VSWR and Efficiency

Typical performance, measured in free space

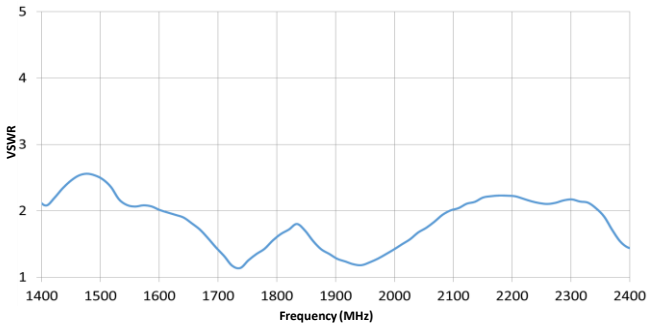
Low Band VSWR



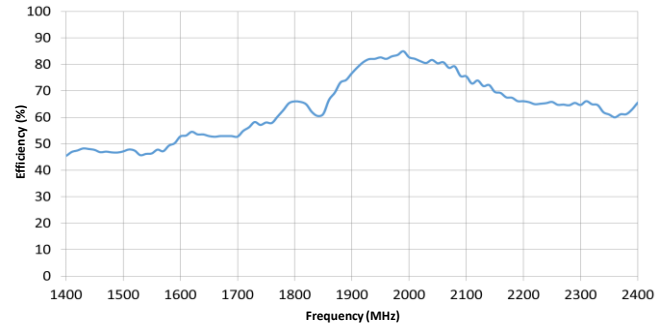
Low Band Efficiency



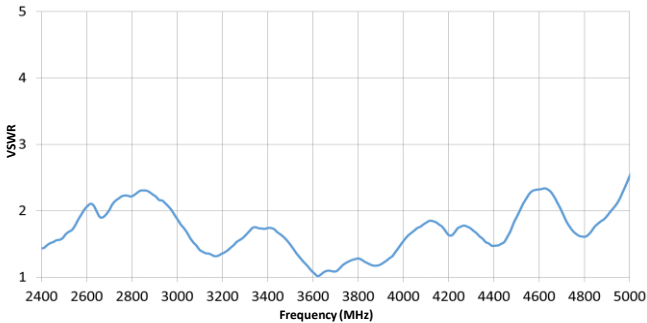
Mid Band VSWR



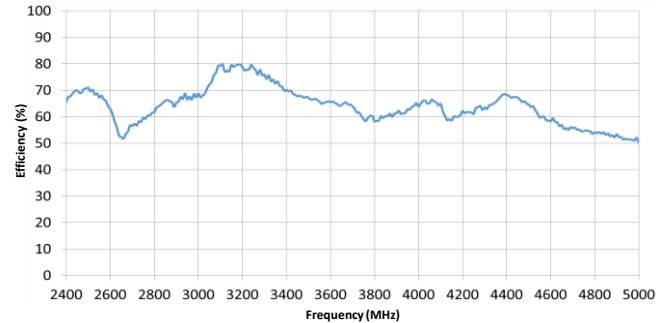
Mid Band Efficiency



High Band VSWR



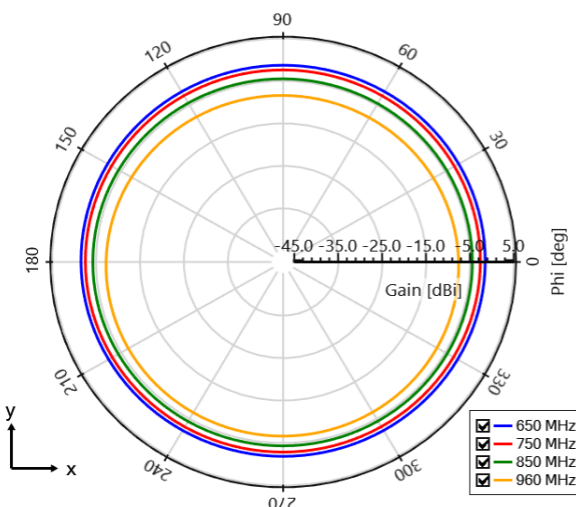
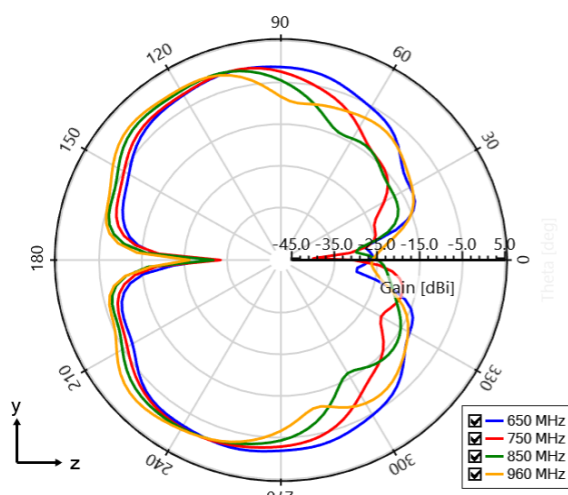
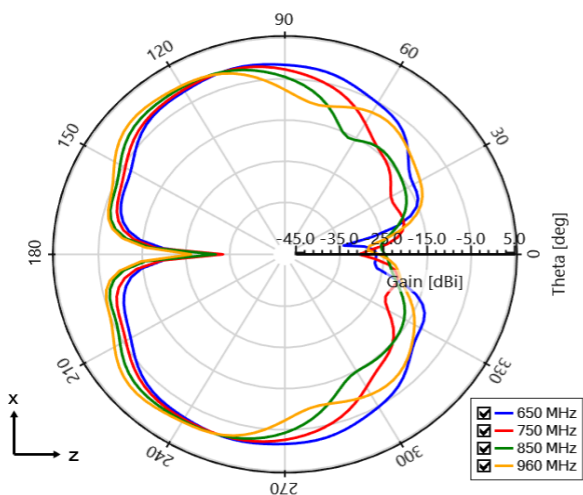
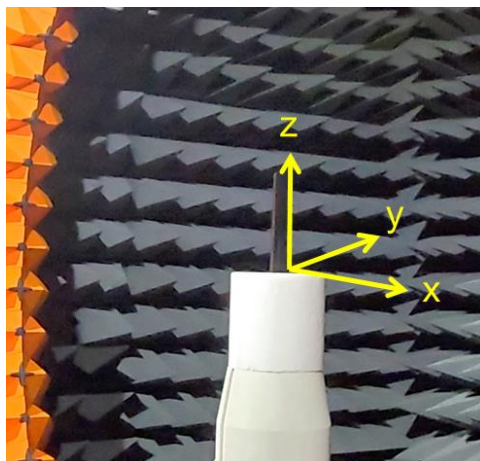
High Band Efficiency



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Antenna Radiation Patterns – Low Band

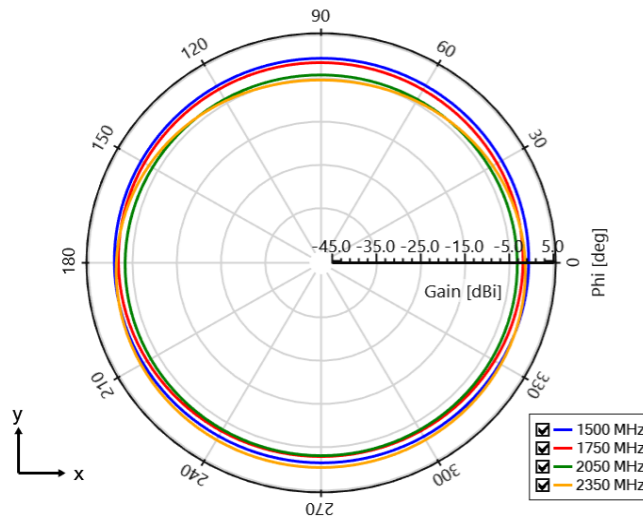
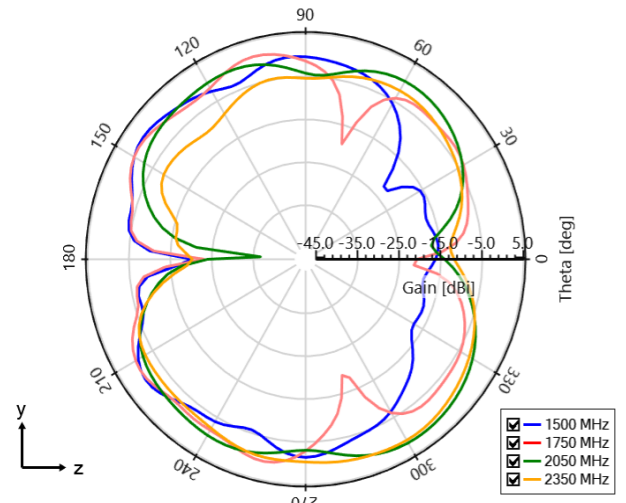
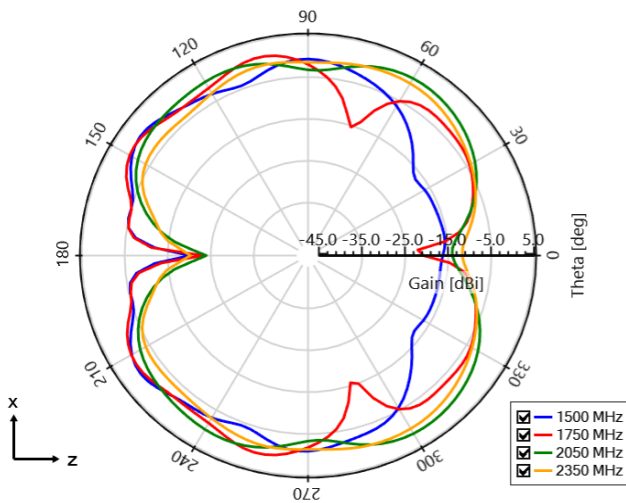
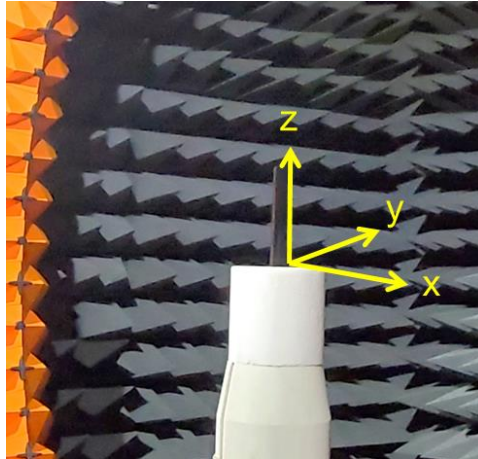
Typical performance, measured in free space



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Antenna Radiation Patterns – Mid Band

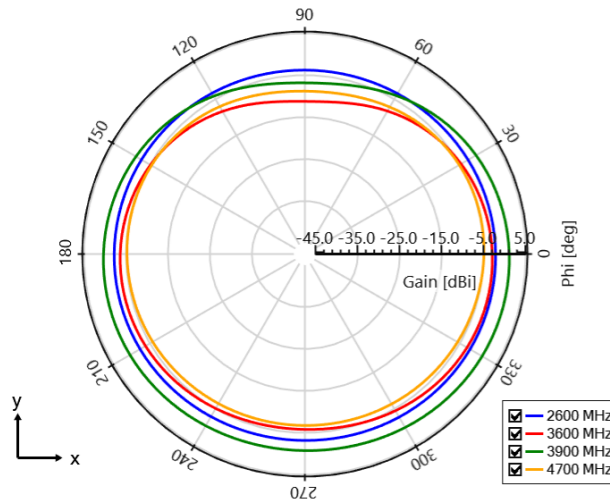
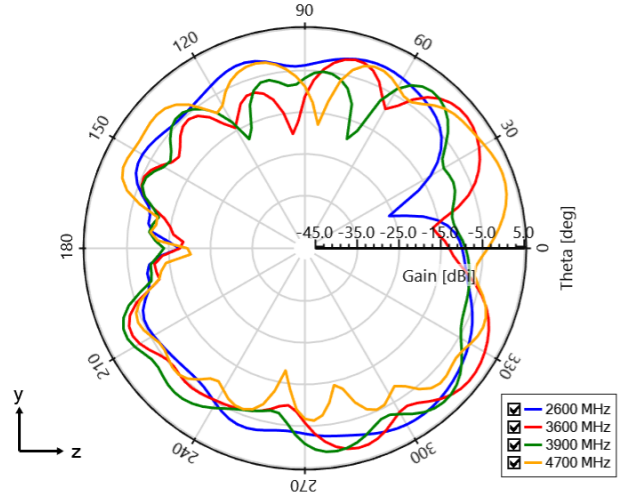
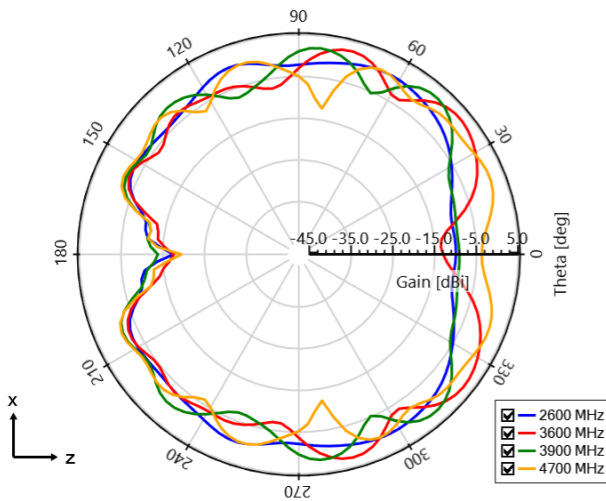
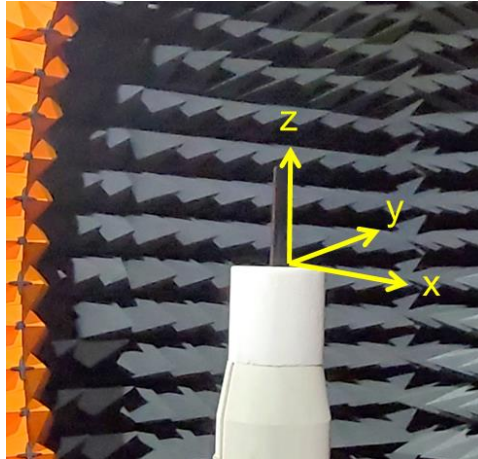
Typical performance, measured in free space



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Antenna Radiation Patterns – High Band

Typical performance, measured in free space



External LTE / Cellular KYOCERA AVX Embedded Antenna Specifications.
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Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A	B	C	D	E	F	G	Connector
1005595-C003	221.0 ± 3.0	24.0 ± 1.0	13.2 ± 0.5	13.0 ± 0.2	5.72 ± 0.5	(198.0)	(44.6)	SMA (Male)

