

EXAMPLE ANTENNA USED IN TESTING 5G/4G Bands

Band Number	5GNR / FR1 / LTE / LTE-Advanced / WCDMA / HSPA / HSPA+ / TD-SCDMA							
	Uplink	Downlink	Peak Gain (dBi) Free space Straight	Peak Gain (dBi) Free space Bent	Peak Gain (dBi) 30x30cm 30x30cm GND edge Straight	Peak Gain (dBi) 30x30cm 30x30cm GND edge bent	Peak Gain (dBi) 30x30cm GND centre Straight	Peak Gain (dBi) 30x30cm GND centre bent
1	UL: 1920 to 1980	DL: 2110 to 2170	1.49	2.83	2.05	0.64	2.88	5.36
2	UL: 1850 to 1910	DL: 1930 to 1990	1.62	2.92	2.15	1.13	3	5.6
3	UL: 1710 to 1785	DL: 1805 to 1880	1.6	3.44	2.26	2.03	3.85	6.5
4	UL: 1710 to 1755	DL: 2110 to 2155	1.51	3.44	2.26	1.86	3.85	6.5
5	UL: 824 to 849	DL: 869 to 894	0.54	1.01	2.82	0.4	1.52	-0.1
7	UL: 2500 to 2570	DL: 2620 to 2690	2	2.2	1.49	0.97	2.38	3.57
8	UL: 880 to 915	DL: 925 to 960	0.46	1.39	3	1.67	3.13	0.78
9	UL: 1749.9 to 1784.9	DL: 1844.9 to 1879.9	1.6	3.37	2.19	2.03	3.68	6.42
11	UL: 1427.9 to 1447.9	DL: 1475.9 to 1495.9	-0.32	1.27	1.47	-0.32	0.89	4.09
12	UL: 699 to 716	DL: 729 to 746	-2.27	-1.17	0.03	-1.05	-5.81	-7.66
13	UL: 777 to 787	DL: 746 to 756	-2.34	-2.21	-0.29	-2.21	-5.43	-5.19
14	UL: 788 to 798	DL: 758 to 768	-1.94	-2.29	0.34	-2.12	-5.44	-4.71
17	UL: 704 to 716	DL: 734 to 746	-2.27	-1.17	-0.34	-1.15	-5.81	-7.66
18	UL: 815 to 830	DL: 860 to 875	0.63	0.73	2.78	-0.14	0.22	-0.84
19	UL: 830 to 845	DL: 875 to 890	0.42	0.91	2.79	0.29	1.25	-0.24
20	UL: 832 to 862	DL: 791 to 821	0.63	0.73	2.84	-0.18	-0.66	-1.2
21	UL: 1447.9 to 1462.9	DL: 1495.9 to 1510.9	-0.21	1.36	1.64	-0.17	1.63	4.76
22	UL: 3410 to 3490	DL: 3510 to 3590	1.98	2.04	-0.76	1.48	4.84	4.26
23	UL: 2000 to 2020	DL: 2180 to 2200	1.06	2.57	1.51	0.78	2.83	5.03
24	UL: 1625.5 to 1660.5	DL: 1525 to 1559	0.45	3	1.79	0.6	3.41	6.29
25	UL: 1850 to 1915	DL: 1930 to 1995	1.68	2.97	2.19	1.13	3.03	5.6
26	UL: 814 to 849	DL: 859 to 894	0.63	1.01	2.82	0.4	1.52	-0.1
27	UL: 807 to 824	DL: 852 to 869	0.63	0.73	2.84	-0.18	0.05	-0.85
28	UL: 703 to 748	DL: 758 to 803	-1.6	-1.12	0.34	-1.15	-5.29	-4.58
29	UL: -	DL: 717 to 728	-2.09	-1.12	-1.22	-1.44	-5.93	-8.12
30	UL: 2305 to 2315	DL: 2350 to 2360	1.25	2.14	1.84	0.88	2.01	4.14
31	UL: 452.5 to 457.5	DL: 462.5 to 467.5	×	×	×	×	×	×
32	UL: -	DL: 1452 – 1496	-0.21	1.36	1.64	-0.17	1.63	4.76
35	1850 to 1910		1.62	2.92	2.15	1.13	3	5.6
38	2570 to 2620		1.14	2.18	1.24	0.21	1.99	3.21
39	1880 to 1920		1.68	2.97	2.19	0.82	3.03	5.52
40	2300 to 2400		1.42	2.14	1.84	0.88	2.62	4.14
41	2496 to 2690		2	2.2	1.49	0.97	2.47	3.57
42	3400 to 3600		1.98	2.06	-0.76	1.48	4.84	4.26
43	3600 to 3800		2.61	2.51	-0.65	1.63	4.82	4.29
48	3550 to 3700		2.61	2.51	-0.65	1.43	4.82	4.29
66	UL: 1710-1780	DL: 2110-2200	3.44	2.26	2.03	3.85	6.5	6.5
71	617 to 698		1.68	1.72	2.1	1.99	×	×
74/75/76	1427 to 1518		-0.21	1.54	1.68	0.17	1.91	4.82
77	3300 to 4200		2.61	2.51	-0.65	1.63	4.84	4.29
78	3300 to 3800		2.61	2.51	-0.65	1.63	4.84	4.29
79	4400 to 5000		2.64	2.16	-0.14	1.74	2.79	5.06

NO ANTENNA IS SOLD WITH PRODUCT