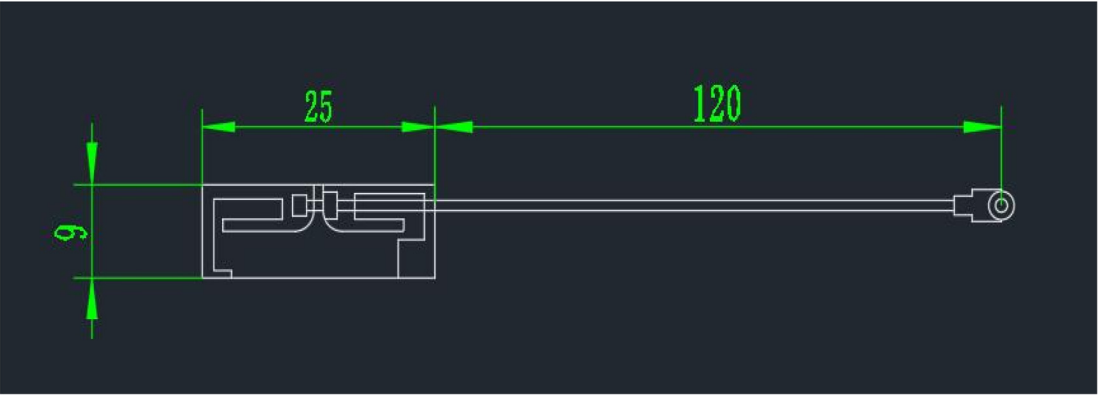


Antenna Data Sheet

Antenna manufacturer: Address	Shenzhen Kexin Wireless Technology Co., Ltd.: Building H, Hongyongli Industrial Zone, Shabeili, Longxin Community, Baolong Street, Longgang District, Shenzhen, Guangdong Province
Antenna model number	2.4G small size soft built-in
Axis ratio at maximum gain	1.5
Antenna structure data image	

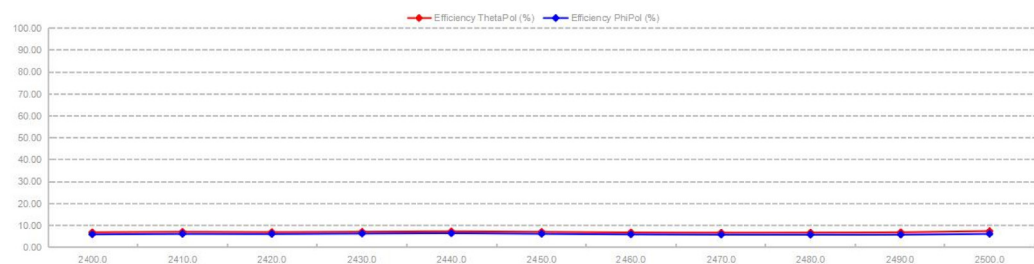
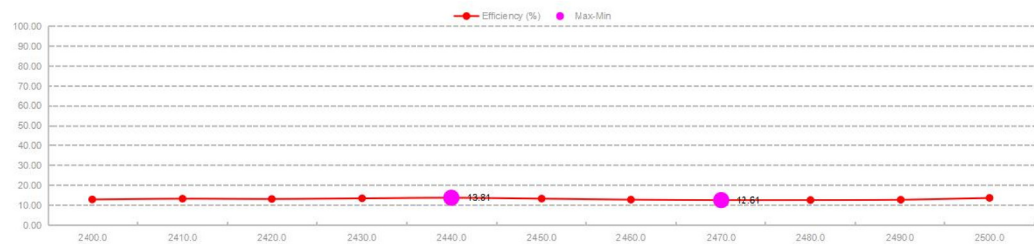


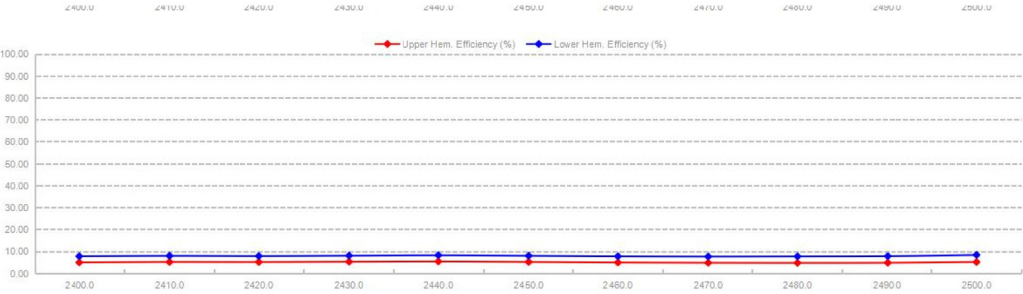


Kexin Wireless

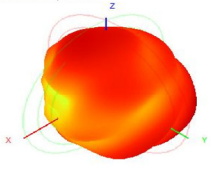
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-8.88	-8.76	-8.80	-8.69	-8.60	-8.75	-8.91	-8.99	-8.99	-8.93	-8.63
Gain (dBi)	-3.27	-3.18	-3.16	-2.95	-2.69	-2.60	-2.61	-2.55	-2.49	-2.48	-2.34
Efficiency (%)	12.93	13.32	13.18	13.51	13.81	13.35	12.84	12.61	12.62	12.79	13.70
Directivity (dB)	5.61	5.58	5.64	5.74	5.91	6.14	6.30	6.43	6.50	6.45	6.29
Peak Gain Position (Theta)	145.00	145.00	146.00	147.00	148.00	149.00	150.00	150.00	150.00	149.00	148.00
Peak Gain Position (Phi)	211.00	211.00	211.00	210.00	205.00	209.00	210.00	211.00	211.00	211.00	211.00
Efficiency ThetaPol (%)	6.94	7.12	7.03	7.17	7.34	7.11	6.87	6.75	6.80	6.94	7.48
Efficiency PhiPol (%)	5.99	6.19	6.15	6.34	6.47	6.23	5.97	5.85	5.82	5.85	6.22
Upper Hem. Efficiency (%)	5.06	5.26	5.23	5.38	5.49	5.27	5.02	4.89	4.84	4.89	5.25
Lower Hem. Efficiency (%)	7.87	8.06	7.95	8.13	8.32	8.08	7.82	7.72	7.79	7.90	8.46
T90(H) roundness	14.35	13.92	12.80	11.81	11.06	10.64	10.71	10.95	11.11	10.97	10.77
Gain 15deg (dBi)											
E1(XZ) lobe width	39.00	40.00	38.00	37.00	36.00	34.00	33.00	33.00	33.00	34.00	35.00
E1(XZ) front-to-back ratio	0.29	0.28	0.23	0.16	0.08	0.04	0.03	0.04	0.05	0.07	0.12
E2(YZ) lobe width	50.00	49.00	50.00	64.00	33.00	32.00	32.00	49.00	44.00	41.00	41.00
E2(YZ) front-to-back ratio	1.39	1.32	1.16	0.86	0.62	0.43	0.14	0.00	0.00	0.01	0.04
Axial ratio at maximum gain (P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Elevation angle of 10 degrees, worst (large) axial ratio (P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY) lobe width	127.00	127.00	125.00	124.00	121.00	119.00	114.00	99.00	94.00	90.00	88.00
Ratio of Hc(XY) before and after	4.15	4.41	4.74	5.08	5.43	5.49	5.49	5.46	5.41	5.43	5.28

Empty

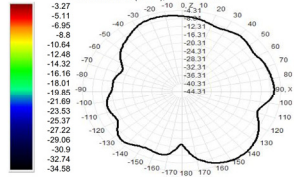
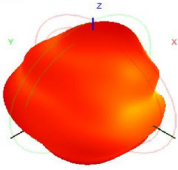




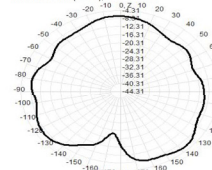
2400.0MHz H+V, ER: 12.9%



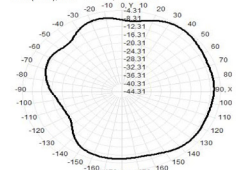
Back View



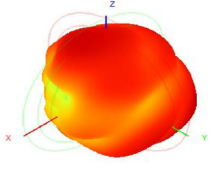
2400.0MHz Total(E2-YZ), Max=-6.33dBi



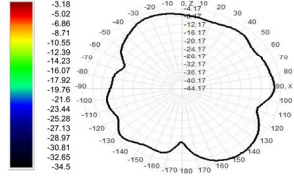
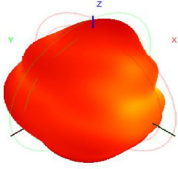
Total(H-XY), Max=-5.17dBi, CrD=14.35



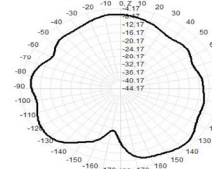
2410.0MHz H+V, ER: 13.3%



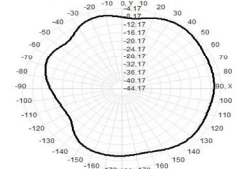
Back View



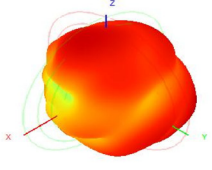
2410.0MHz Total(E2-YZ), Max=-6.30dBi



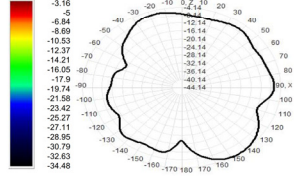
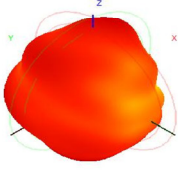
Total(H-XY), Max=-5.01dBi, CrD=13.92



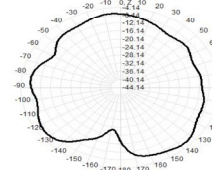
2420.0MHz H+V, ER: 13.2%



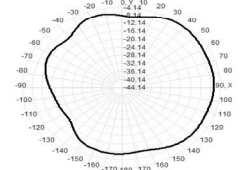
Back View



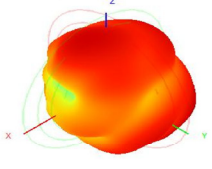
2420.0MHz Total(E2-YZ), Max=-6.43dBi



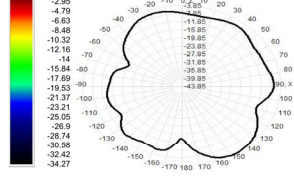
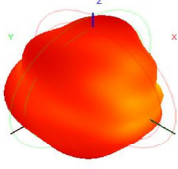
Total(H-XY), Max=-5.10dBi, CrD=12.80



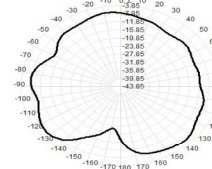
2430.0MHz H+V, ER: 13.5%



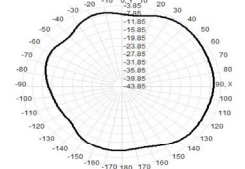
Back View



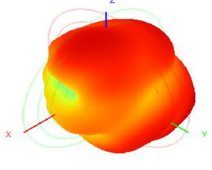
2430.0MHz Total(E2-YZ), Max=-6.48dBi



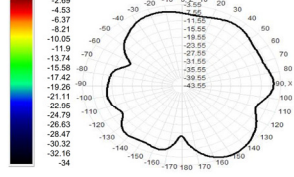
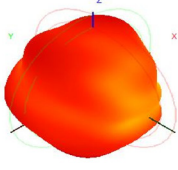
Total(H-XY), Max=-5.06dBi, CrD=11.81



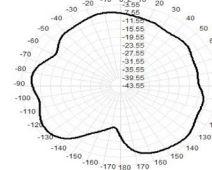
2440.0MHz H+V, ER: 13.8%



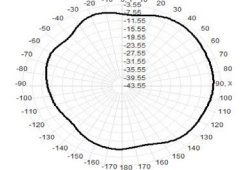
Back View



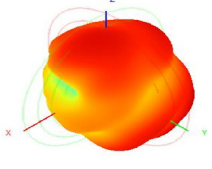
2440.0MHz Total(E2-YZ), Max=-6.44dBi



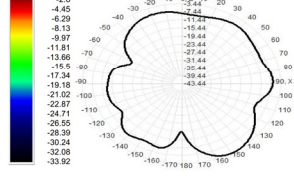
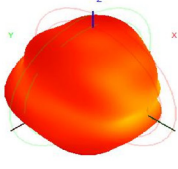
Total(H-XY), Max=-5.12dBi, CrD=11.06



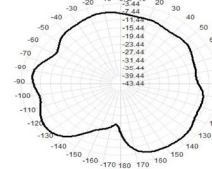
2450.0MHz H+V, ER: 13.3%



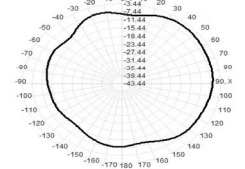
Back View



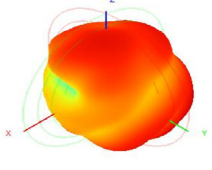
2450.0MHz Total(E2-YZ), Max=-6.54dBi



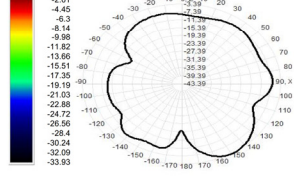
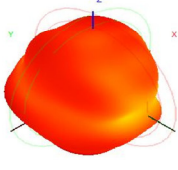
Total(H-XY), Max=-5.32dBi, CrD=10.64



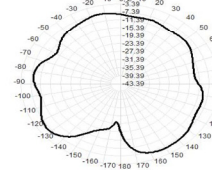
2460.0MHz H+V, ER: 12.8%



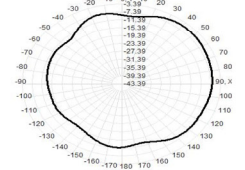
Back View



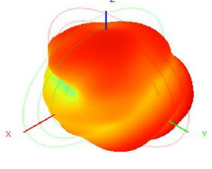
2460.0MHz Total(E2-YZ), Max=-6.70dBi



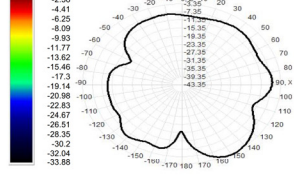
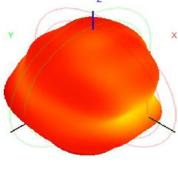
Total(H-XY), Max=-5.42dBi, CrD=10.71



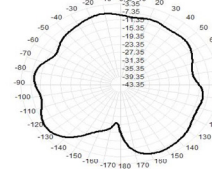
2470.0MHz H+V, ER: 12.6%



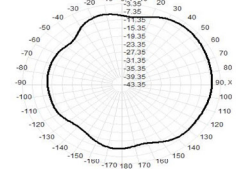
Back View



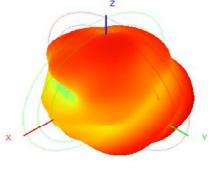
2470.0MHz Total(E2-YZ), Max=-6.56dBi



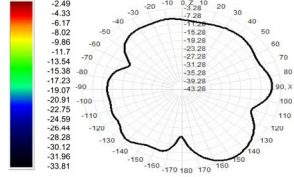
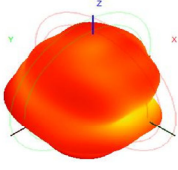
Total(H-XY), Max=-5.35dBi, CrD=10.96



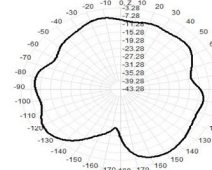
2480.0MHz H+V, ER: 12.6%



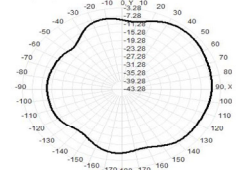
Back View



2480.0MHz Total(E2-YZ), Max=-6.26dBi



Total(H-XY), Max=-5.10dBi, CrD=11.11



2490.0MHz H+V, ER: 12.8%



Back View

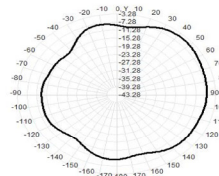
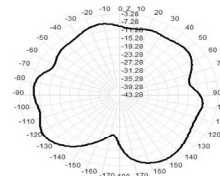
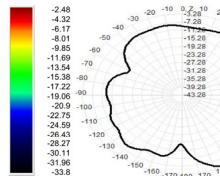
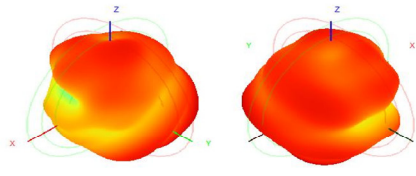


2490.0MHz Total(E2-YZ), Max=-6.00dBi



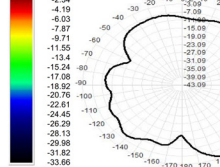
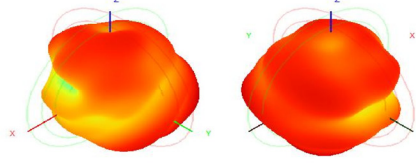
Total(H-XY), Max=-4.88dBi, CrD=10.97



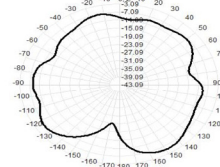


2500.0MHz H+V, ER: 13.7%

Back View



2500.0MHz Total(E2+YZ), Max=-5.65dBi



Total(H+XY), Max=-4.55dBi, ChD=10.77

