

Antenna Test Report

Product name: Zigbee antenna

Antenna type: PCB antenna

Operating frequency: 2400-2500MHz

Antenna Gain: 4.36dBi (MAX)

Manufacturer: Shenzhen Multi IR Technology Co. Ltd

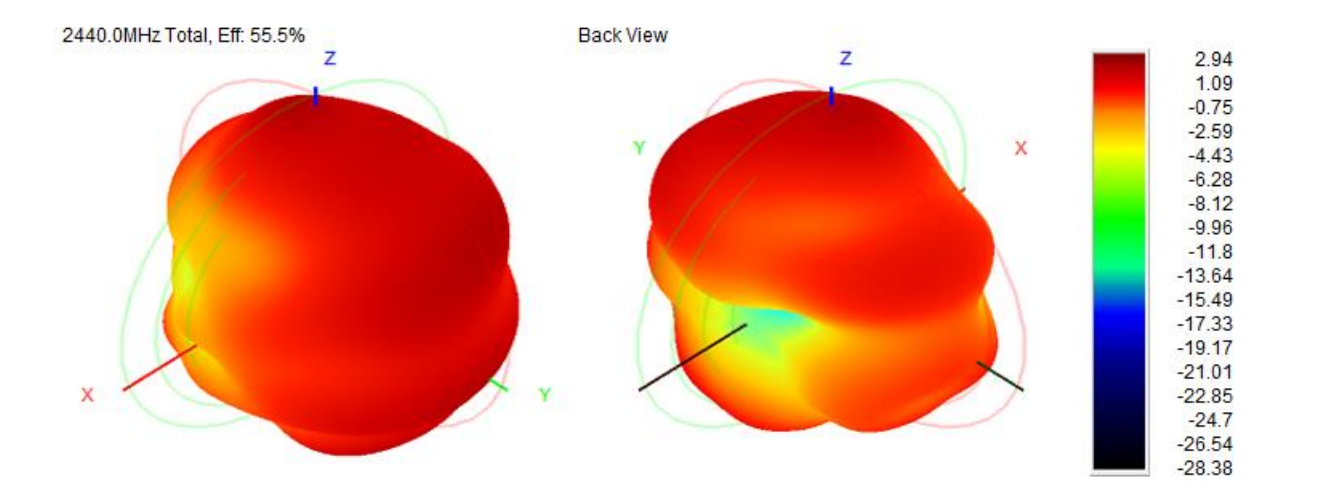
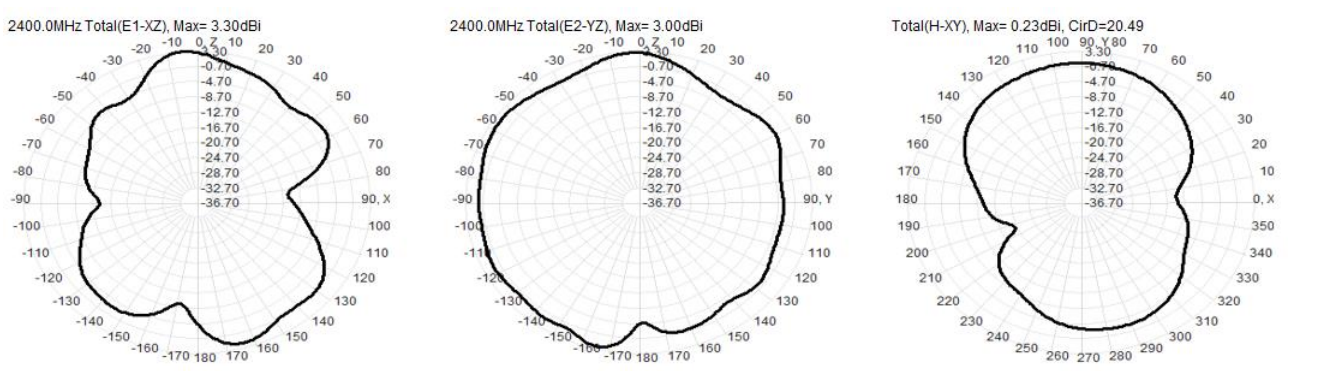
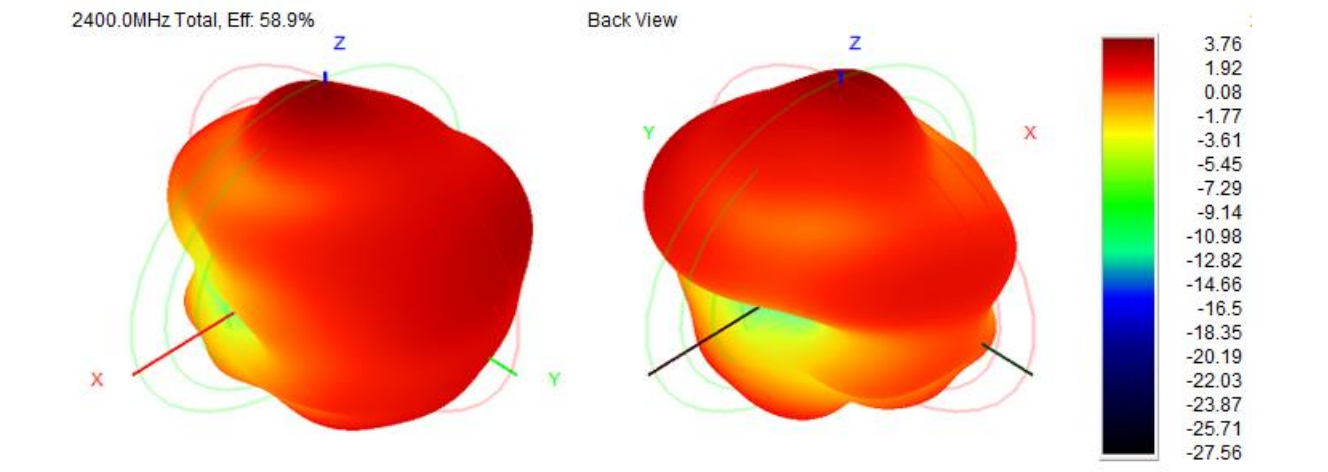
Address: 1st, 5th, 6th, 7th Floor, Building B, No. 8 North District, Shangxue

Technology Park, Xinxue Community, Bantian Street, Longgang District,

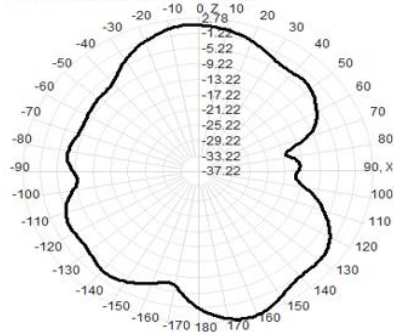
Shenzhen, Guangdong, China

Antenna gain& Efficiency

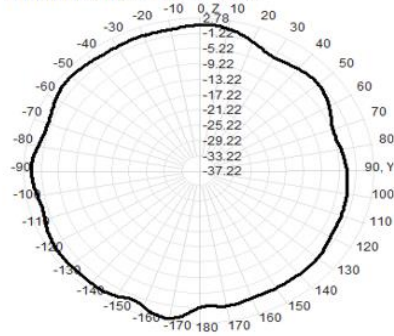
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Frequency (MHz)	2400.0	2405.0	2410.0	2415.0	2420.0	2425.0	2430.0	2435.0	2440.0	2445.0	2450.0	2455.0	2460.0	2465.0	2470.0	2475.0	2480.0	2485.0	2490.0	2495.0	2500.0
Efficiency (dBi)	-2.30	-2.27	-2.20	-2.19	-2.23	-2.28	-2.38	-2.48	-2.56	-2.58	-2.57	-2.60	-2.63	-2.55	-2.49	-2.49	-2.51	-2.54	-2.60	-2.72	-2.88
Gain (dBi)	3.76	3.44	3.39	3.15	3.07	2.89	2.92	2.93	2.94	3.31	3.33	3.71	3.71	3.99	4.24	4.19	4.36	4.05	4.19	3.69	3.81
Efficiency (%)	58.86	59.33	60.28	60.43	59.80	59.12	57.81	56.46	55.48	55.27	55.37	54.94	54.54	55.54	56.35	56.35	56.07	55.72	54.90	53.44	51.56
Directivity (dB)	6.06	5.71	5.58	5.34	5.30	5.17	5.30	5.42	5.49	5.88	5.90	6.31	6.35	6.55	6.73	6.68	6.87	6.59	6.80	6.41	6.69
Peak Gain Position (Theta)	158.00	164.00	156.00	166.00	154.00	165.00	154.00	163.00	158.00	163.00	163.00	163.00	165.00	163.00	166.00	163.00	166.00	164.00	166.00	164.00	166.00
Peak Gain Position (Phi)	123.00	120.00	123.00	117.00	122.00	122.00	122.00	130.00	127.00	132.00	133.00	134.00	166.00	139.00	167.00	167.00	169.00	169.00	171.00	172.00	173.00
Efficiency ThetaPol (%)	18.71	18.78	18.98	18.94	18.52	18.18	17.58	17.13	16.77	16.75	16.79	16.76	16.73	17.21	17.69	17.89	17.96	17.95	17.81	17.48	17.12
Efficiency PhiPol (%)	40.15	40.55	41.30	41.48	41.28	40.94	40.23	39.32	38.70	38.51	38.59	38.18	37.81	38.33	38.66	38.46	38.10	37.77	37.09	35.96	34.44
Upper Hem. Efficiency (%)	30.89	30.77	31.03	30.49	29.73	28.59	27.45	26.15	25.19	24.58	24.30	23.96	23.71	24.20	24.60	25.04	25.27	25.79	25.82	25.74	25.14
Lower Hem. Efficiency (%)	27.96	28.55	29.25	29.94	30.07	30.53	30.37	30.31	30.29	30.69	31.08	30.99	30.83	31.34	31.75	31.31	30.79	29.93	29.07	27.69	26.42



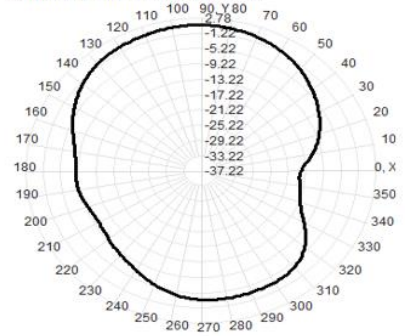
2440.0MHz Total(E1-XZ), Max= 2.78dBi



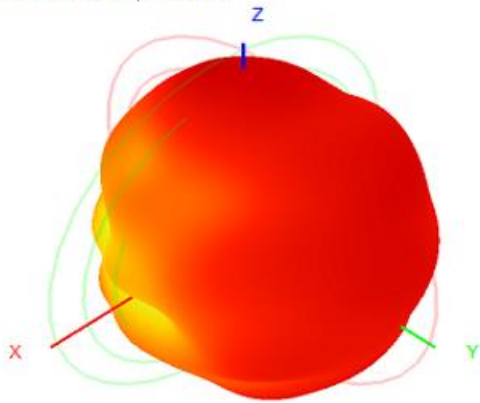
2440.0MHz Total(E2-YZ), Max= 1.85dBi



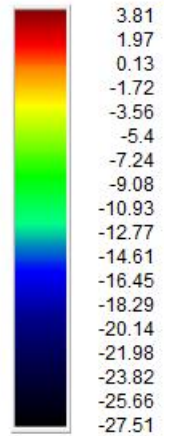
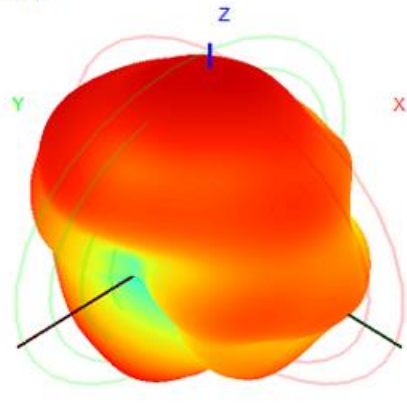
Total(H-XY), Max= 0.98dBi, CirD=15.83



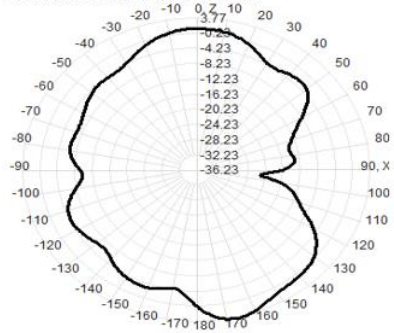
2500.0MHz Total, Eff: 51.6%



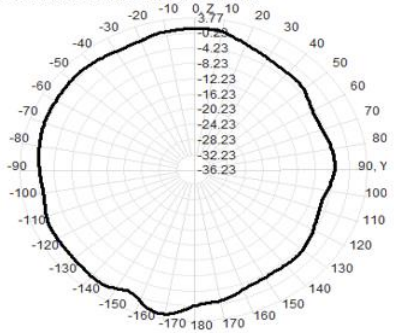
Back View



2500.0MHz Total(E1-XZ), Max= 3.77dBi



2500.0MHz Total(E2-YZ), Max= 2.25dBi



Total(H-XY), Max= -0.72dBi, CirD=19.40

