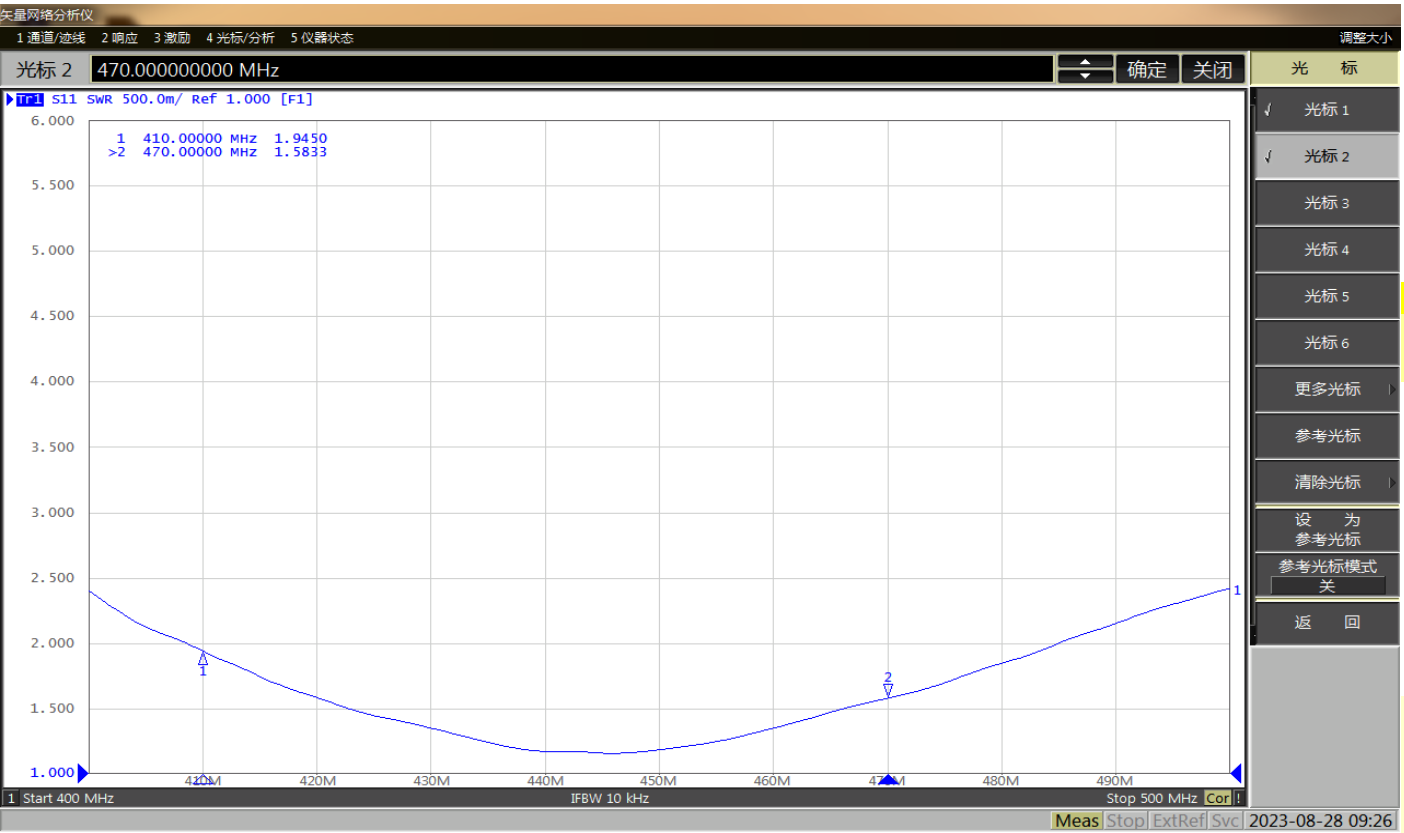




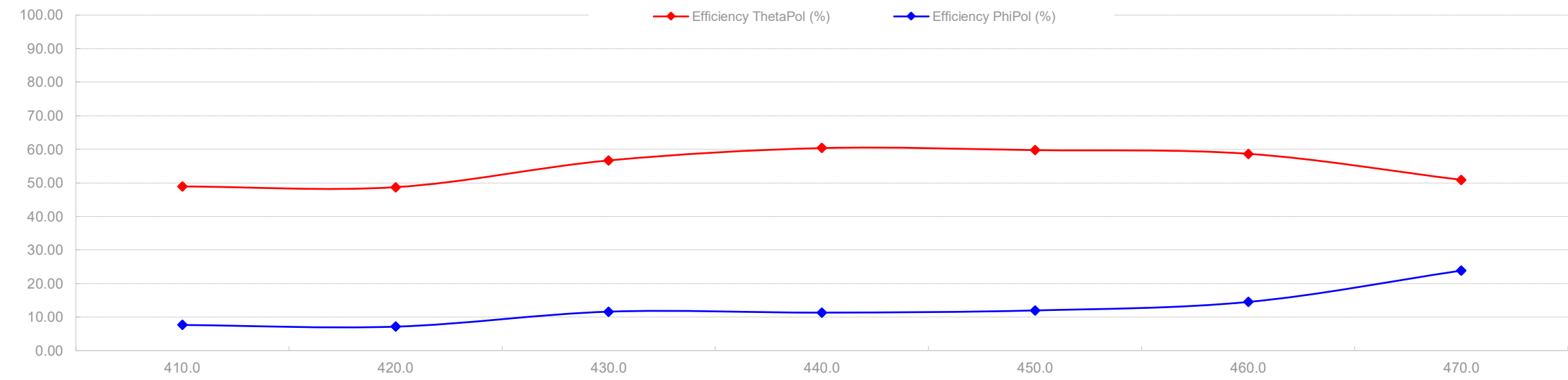
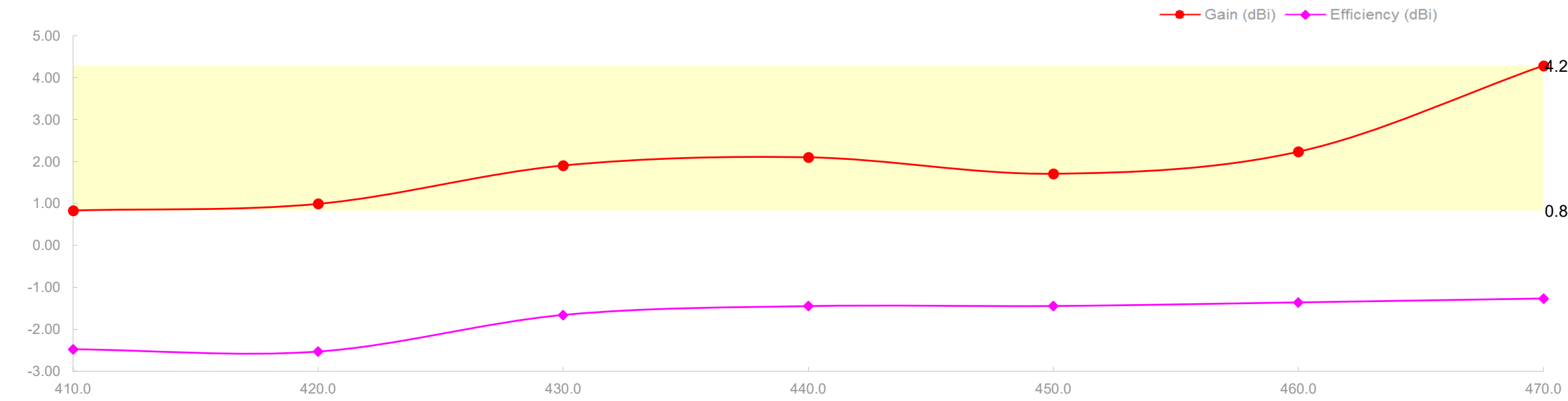
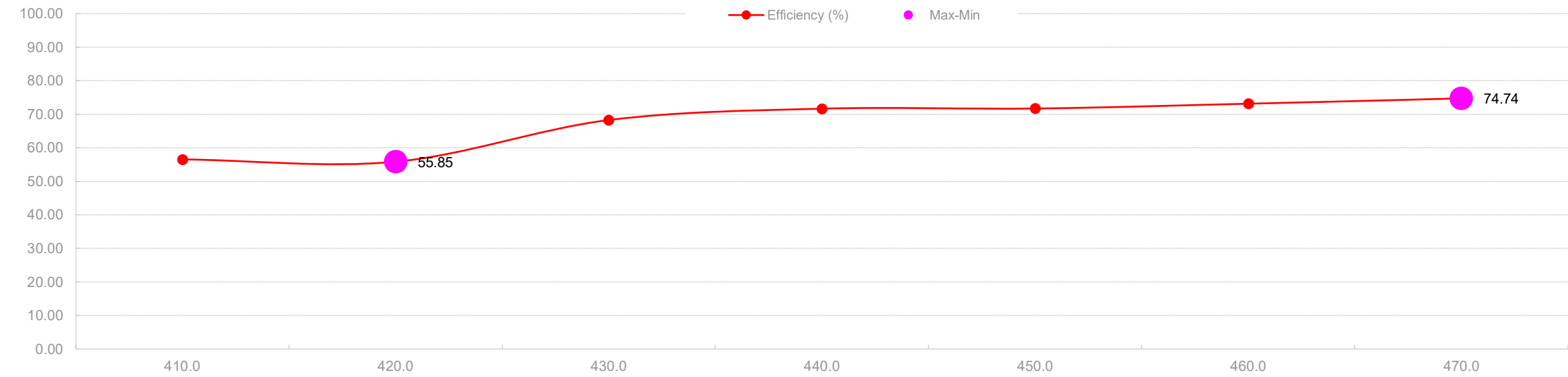
Dipole Communications LTD.

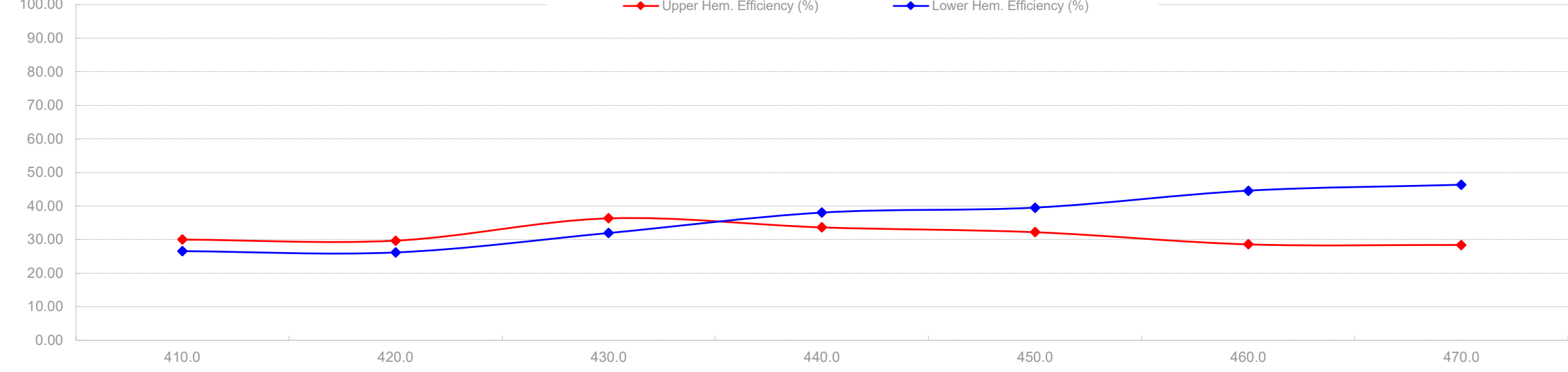
Frequency ID	1	2	3	4	5	6	7
Frequency (MHz)	410.0	420.0	430.0	440.0	450.0	460.0	470.0
Efficiency (dBi)	-2.48	-2.53	-1.66	-1.45	-1.44	-1.36	-1.26
Gain (dBi)	0.83	0.99	1.91	2.10	1.71	2.23	4.29
Efficiency (%)	56.55	55.85	68.28	71.67	71.72	73.15	74.74
Directivity (dB)	3.31	3.52	3.56	3.55	3.15	3.59	5.55
Peak Gain Position (Theta)	60.00	63.00	66.00	122.00	121.00	164.00	166.00
Peak Gain Position (Phi)	209.00	193.00	195.00	315.00	315.00	32.00	358.00
Efficiency ThetaPol (%)	48.91	48.71	56.67	60.35	59.74	58.65	50.89
Efficiency PhiPol (%)	7.64	7.14	11.61	11.32	11.97	14.50	23.85
Upper Hem. Efficiency (%)	30.00	29.68	36.32	33.63	32.19	28.57	28.40
Lower Hem. Efficiency (%)	26.56	26.17	31.96	38.05	39.53	44.58	46.33

T90(H)Circularity	1.66	0.90	2.05	1.62	1.05	1.80	2.65
Gain 15deg (dBi)							
E1(XZ) Beamwidth	59.00	54.00	78.00	83.00	113.00	86.00	35.00
E1(XZ)Front-to-Back Ratio	3.74	4.91	5.96	3.34	0.00	0.00	0.00
E2(YZ)Beamwidth	96.00	88.00	83.00	82.00	89.00	97.00	47.00
E2(YZ)Front-to-Back Ratio	3.33	3.40	4.12	3.82	1.72	0.40	0.00
Axial Ratio at Maximum Gain (P)	11.97	29.89	12.40	25.12	17.72	8.94	4.26
Worst (Maximum) Axial Ratio at 10° Elevation (P)	58.91	58.26	22.88	33.28	80.52	68.33	59.49
Hc (XY) Beamwidth	360.00	360.00	360.00	360.00	360.00	360.00	360.00
Hc (XY) Front-to-Back Ratio	0.02	0.14	0.03	0.08	0.11	0.14	0.14
Left-Hand Circular Polarization Efficiency (%) / LHCP Efficiency (%)	31.01	26.44	40.32	39.83	32.40	31.34	34.49
Right-Hand Circular Polarization Efficiency (%) / RHCP Efficiency (%)	25.54	29.42	27.96	31.84	39.32	41.81	40.25
Empty							

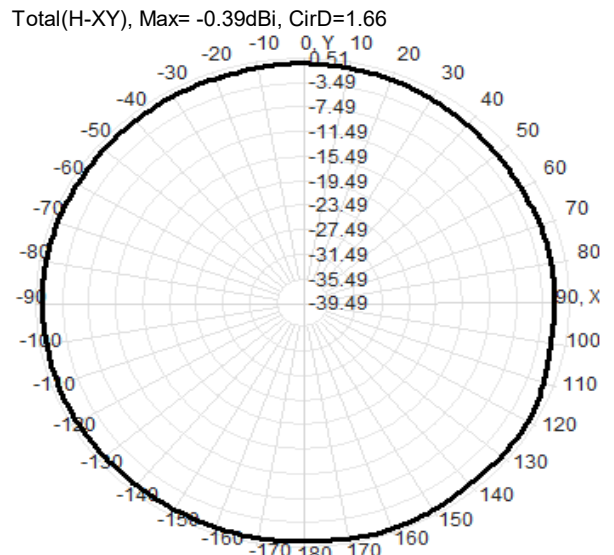
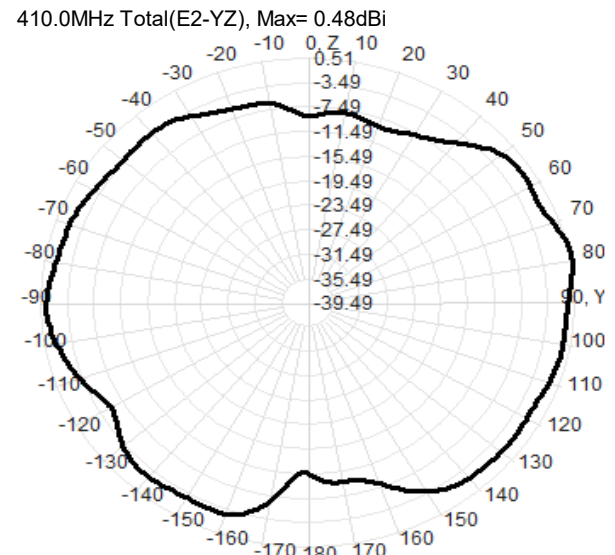
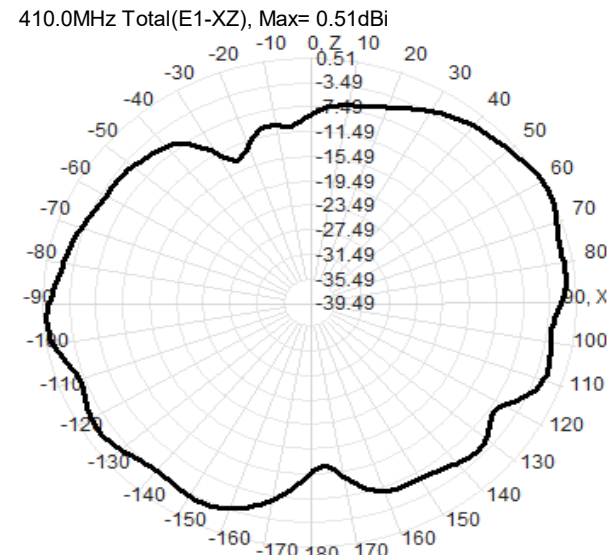
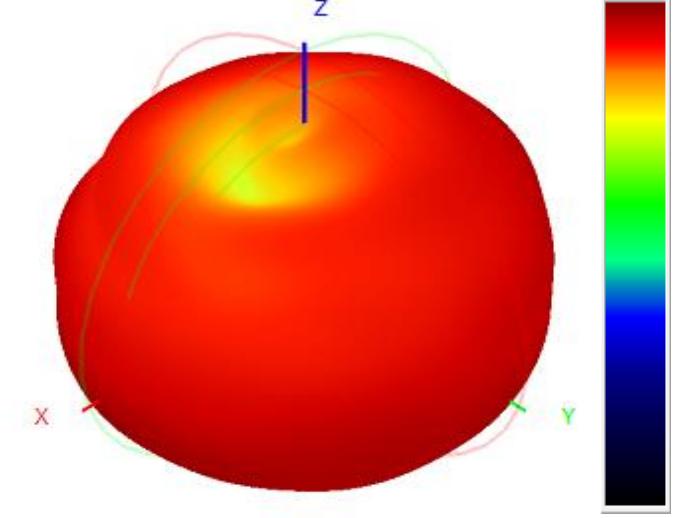


Antenna: Q1430E1A
Manufacturer: Dipole Communications LTD.
Address: New Light Industrial Base, Luocun,
Foshan, Guangdong China.

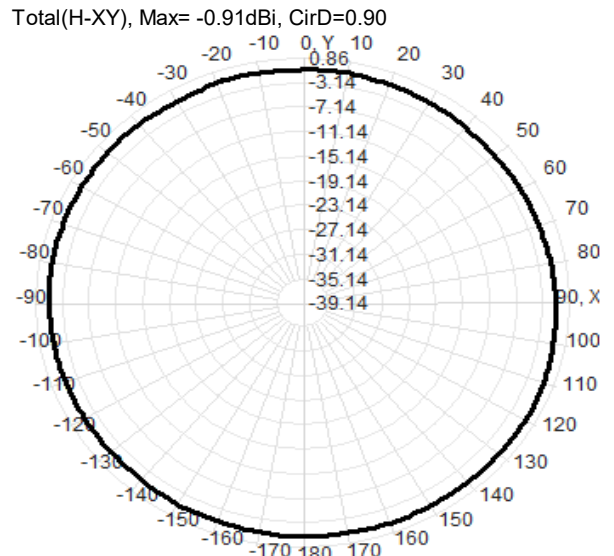
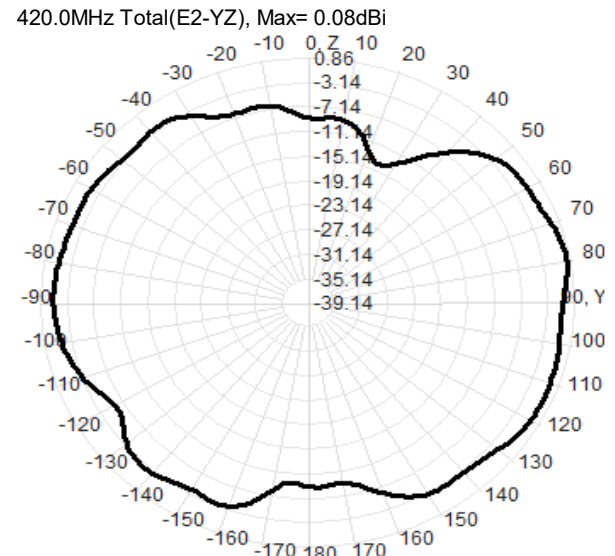
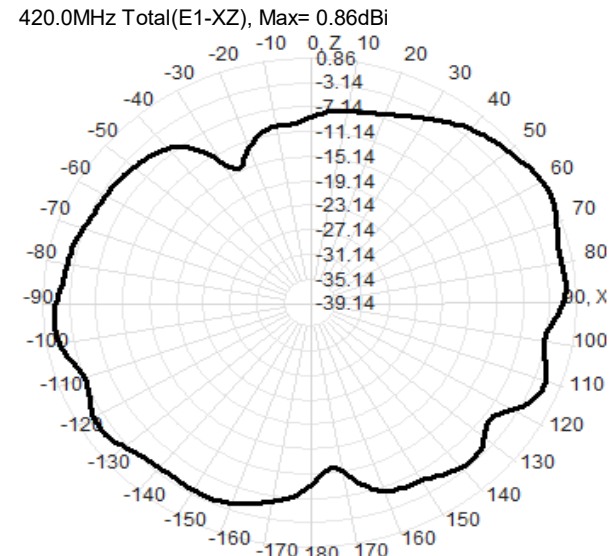
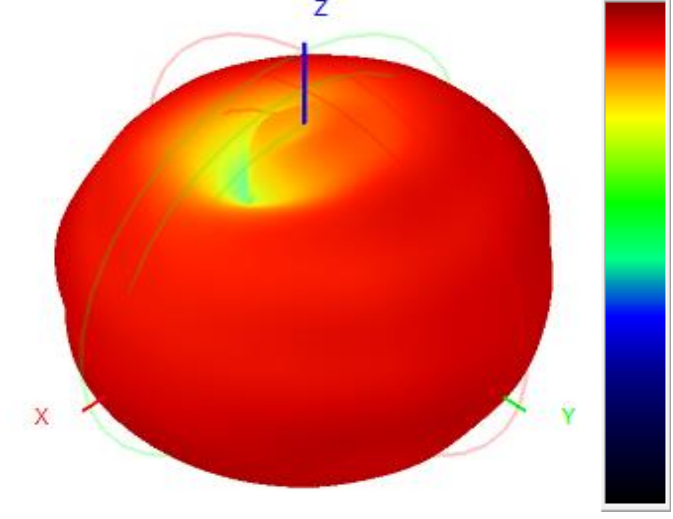




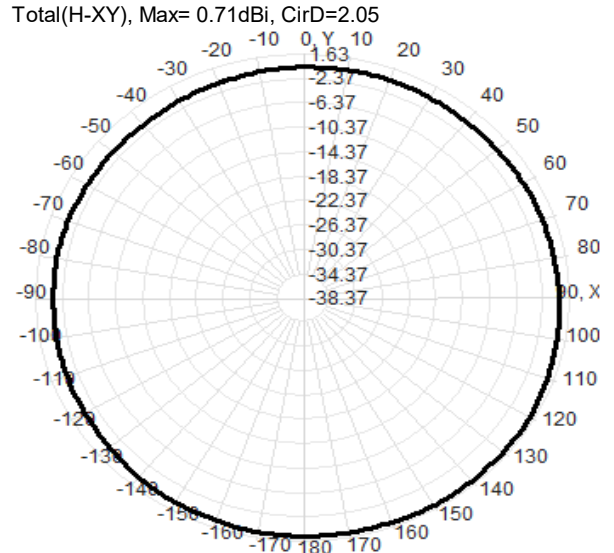
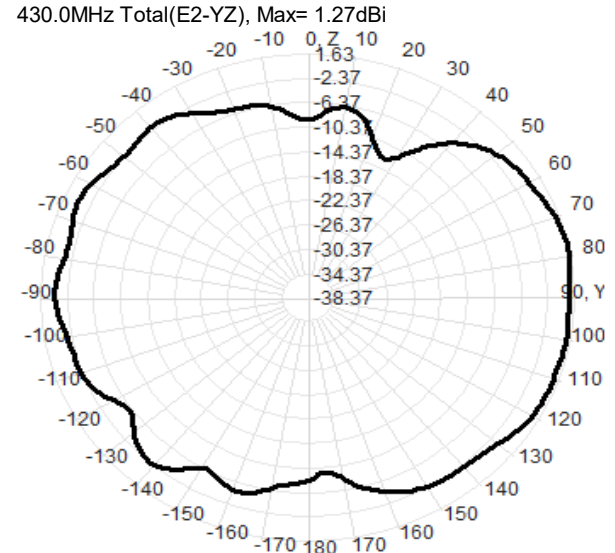
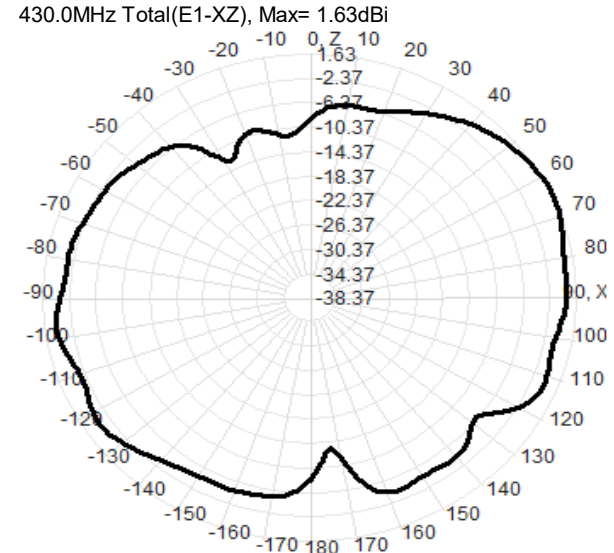
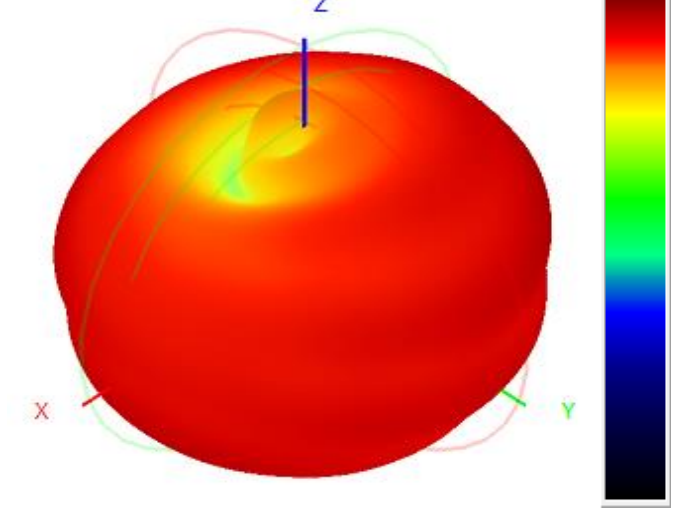
410.0MHz H+V, Eff: 56.6%



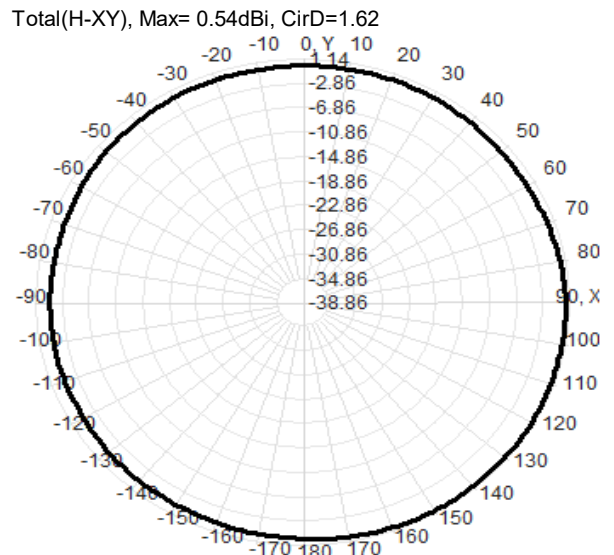
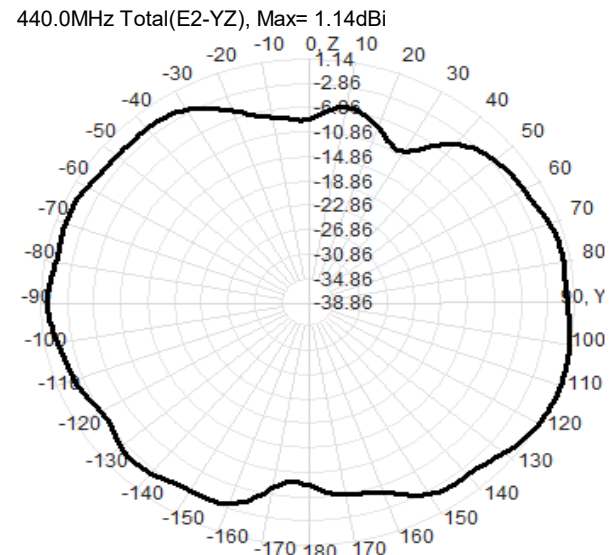
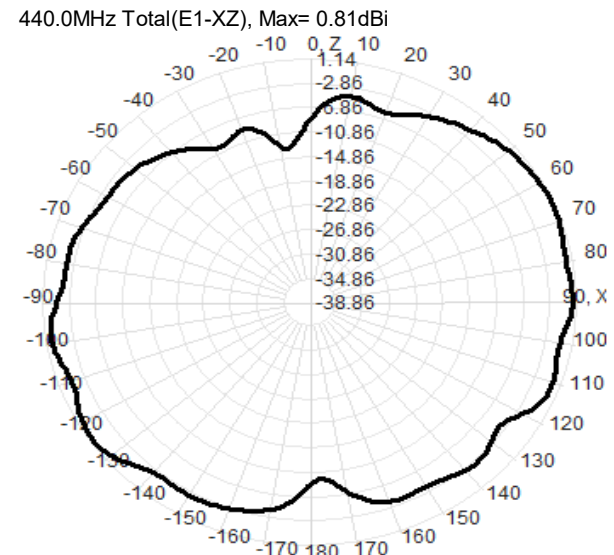
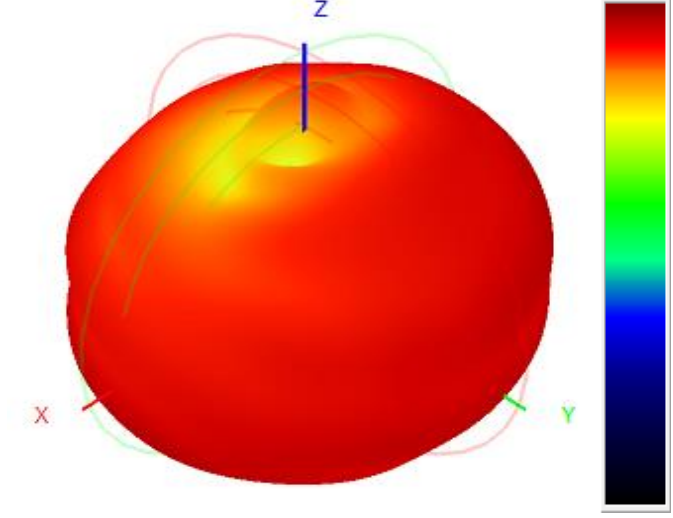
420.0MHz H+V, Eff: 55.9%



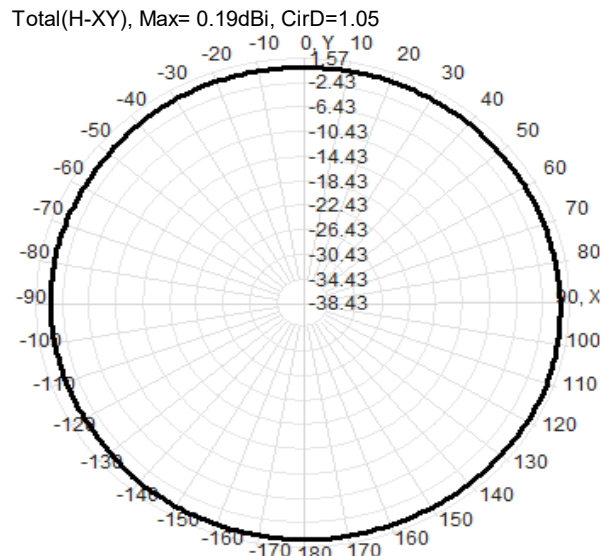
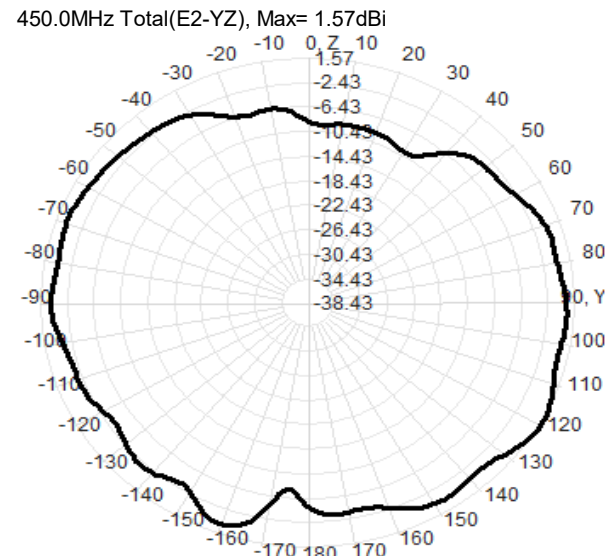
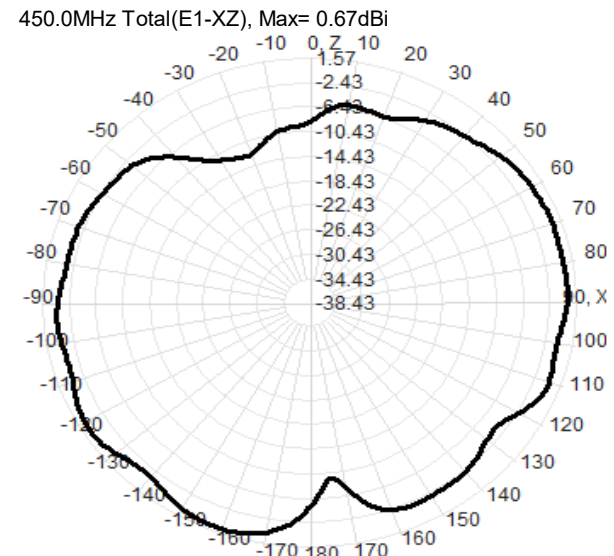
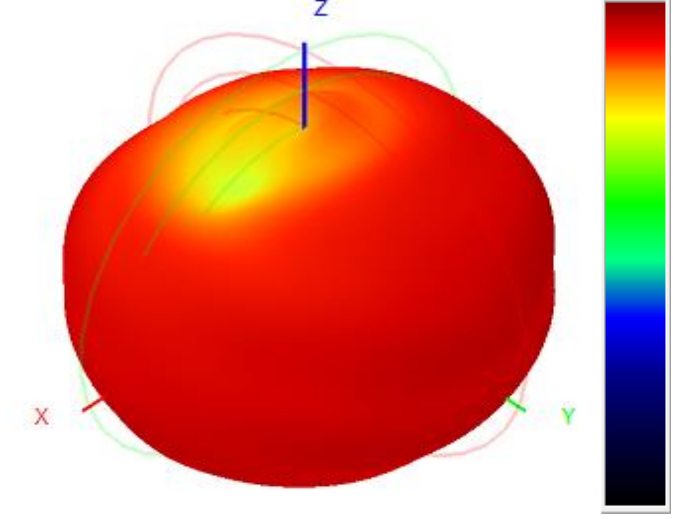
430.0MHz H+V, Eff: 68.3%



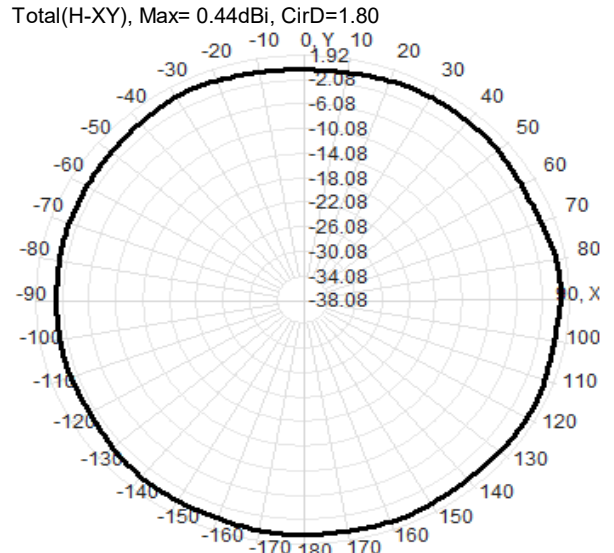
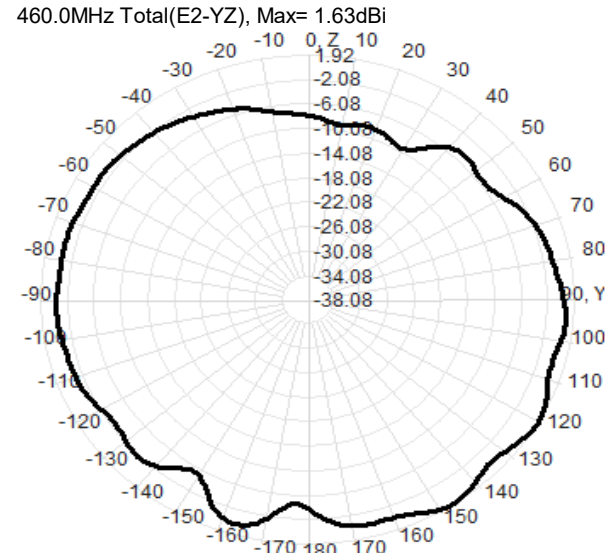
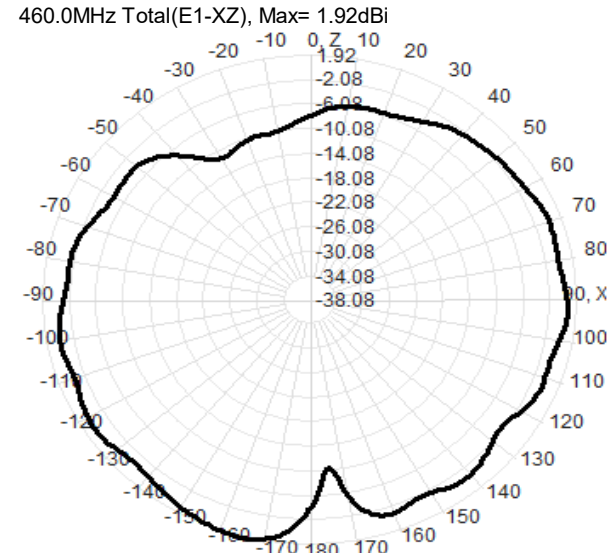
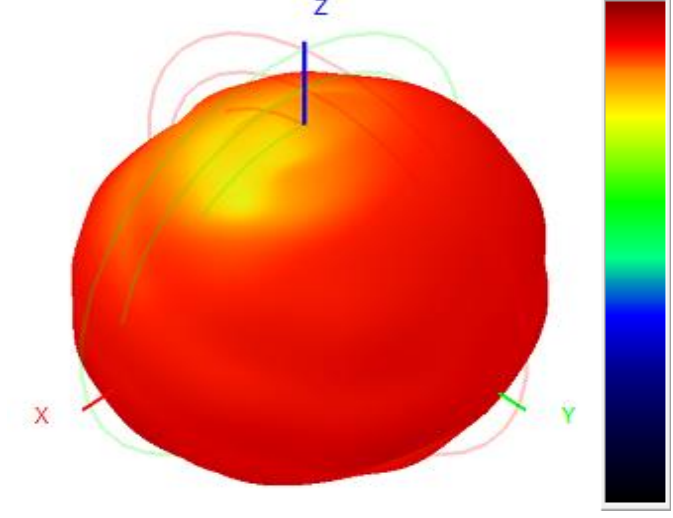
440.0MHz H+V, Eff: 71.7%



450.0MHz H+V, Eff: 71.7%



460.0MHz H+V, Eff: 73.2%



470.0MHz H+V, Eff: 74.7%

