



Shenzhen hetuo technology co., ltd

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)	-2.55	-2.38	-2.32	-2.19	-2.14	-2.04	-2.08	-2.27	-2.38	-2.45	-2.42
Gain (dBi)	3.69	3.76	4.31	4.13	4.29	4.07	4.52	4.29	4.53	4.43	4.61
Efficiency (%)	55.65	57.77	58.57	60.34	61.12	62.59	61.89	59.33	57.85	56.89	57.22
Directivity (dB)	6.24	6.14	6.64	6.33	6.43	6.10	6.60	6.55	6.90	6.87	7.03
Peak Gain Position (Theta)	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00
Peak Gain Position (Phi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Efficiency ThetaPol (%)	16.56	16.80	16.45	16.39	16.45	16.89	17.11	17.02	17.50	17.53	17.66
Efficiency PhiPol (%)	39.09	40.97	42.12	43.96	44.67	45.70	44.78	42.31	40.36	39.36	39.56
Upper Hem. Efficiency (%)	26.54	27.09	27.52	27.80	28.28	28.99	28.47	27.16	26.60	25.80	25.30
Lower Hem. Efficiency (%)	29.11	30.69	31.04	32.54	32.84	33.59	33.42	32.16	31.26	31.10	31.92
T90(H)Circular degree	11.91	12.74	16.29	15.19	15.46	15.77	19.54	17.48	15.76	14.84	13.29
Gain 15deg (dBi)											
E1(XZ)beamwidth	64.52	64.73	62.44	64.97	66.50	71.27	68.18	72.03	72.04	64.01	58.31
E1(XZ)Front-rear ratio	7.07	6.13	6.89	6.27	7.62	7.58	7.74	7.75	7.75	7.85	8.53
E2(YZ)beamwidth	48.27	22.75	51.71	51.98	80.83	85.02	91.28	40.35	41.80	38.58	139.45
E2(YZ)Front-rear ratio	5.46	3.95	5.20	4.70	3.69	4.55	4.14	3.13	3.99	3.20	2.22
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
Axial ratio at vertex (Theta=0) (P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Worst (largest) axis ratio with elevation of 10 degrees. (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)beamwidth	68.51	66.77	59.24	59.96	62.82	54.20	52.53	50.27	54.37	54.39	55.35
Hc(XY)Front-rear ratio	4.35	5.30	6.27	6.62	6.64	7.46	7.42	7.58	7.36	8.30	8.37
Pole-crossing ratio at maximum gain (+/-45 polarization)	13.06	13.60	14.48	14.86	14.24	16.45	15.79	15.25	13.15	13.28	14.09
Cross-pole ratio at maximum gain (horizontal vertical polarization)	13.06	13.60	14.48	14.86	14.24	16.45	15.79	15.25	13.15	13.28	14.09
T60 Phi Worst Crossing Pole Ratio (+/-45 Polarization)	0.04	0.01	0.01	0.01	0.01	0.00	0.04	0.02	0.00	0.02	0.00
T60 Phi Worst Cross Pole Ratio (horizontal vertical polarization)	0.04	0.01	0.01	0.01	0.01	0.00	0.04	0.02	0.00	0.02	0.00
T90 degree (H)Phi worst pole-crossing ratio (+/-45 polarization)	0.18	0.04	0.03	0.13	0.34	0.49	0.11	0.21	0.03	0.02	0.01
T90 degree (H)Phi Worst Polarization Ratio (horizontal vertical polarization)	0.18	0.04	0.03	0.13	0.34	0.49	0.11	0.21	0.03	0.02	0.01
Down dip Angle of Axisymmetric Antenna Main Lobe (average)	63.38	52.00	52.25	47.58	29.50	2.29	0.63	0.92	0.17	-10.33	-21.25
Axial (2x) horizontal vertical polarisation isolation	7.17	6.51	7.76	8.74	6.91	8.58	8.94	7.02	10.03	11.32	7.76
Theta85.0—Maximum weekly gain	1.33	1.54	1.90	2.27	2.34	2.84	2.79	2.65	2.33	1.84	1.59
Theta85.0—Roundness (the difference between the maximum and minimum gain values. not the value of +/-)	11.91	12.16	12.53	14.67	14.34	15.08	16.80	15.05	13.91	14.14	11.50
Empty											







