Antena Test Report

客户名称：艾莱卡　　项目名称：

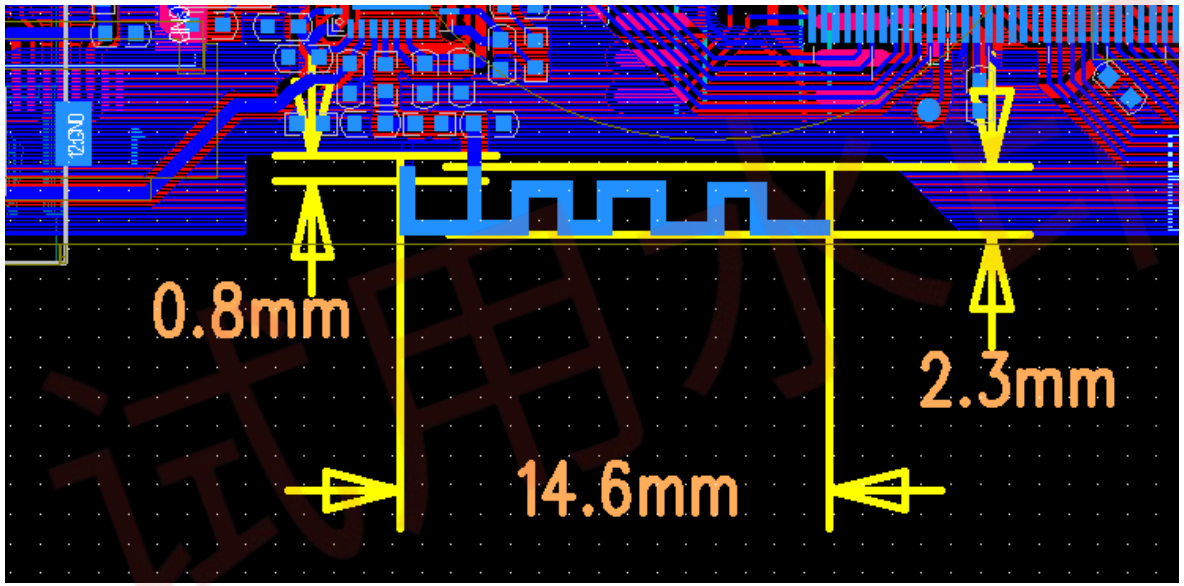
频段：WIFI2.4G

版本：A　　制作日期：

Test system

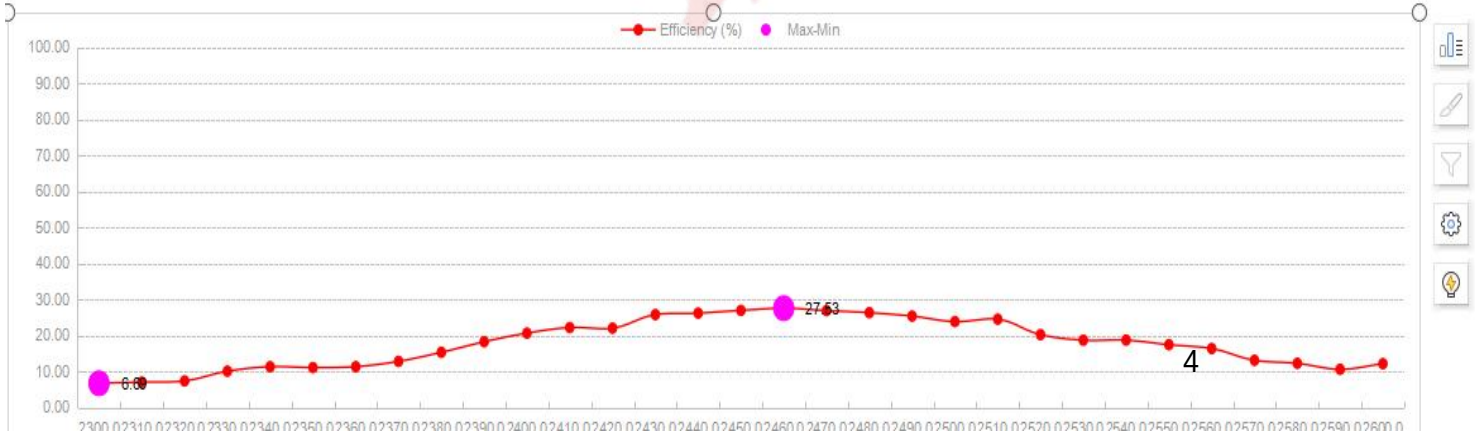
Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C

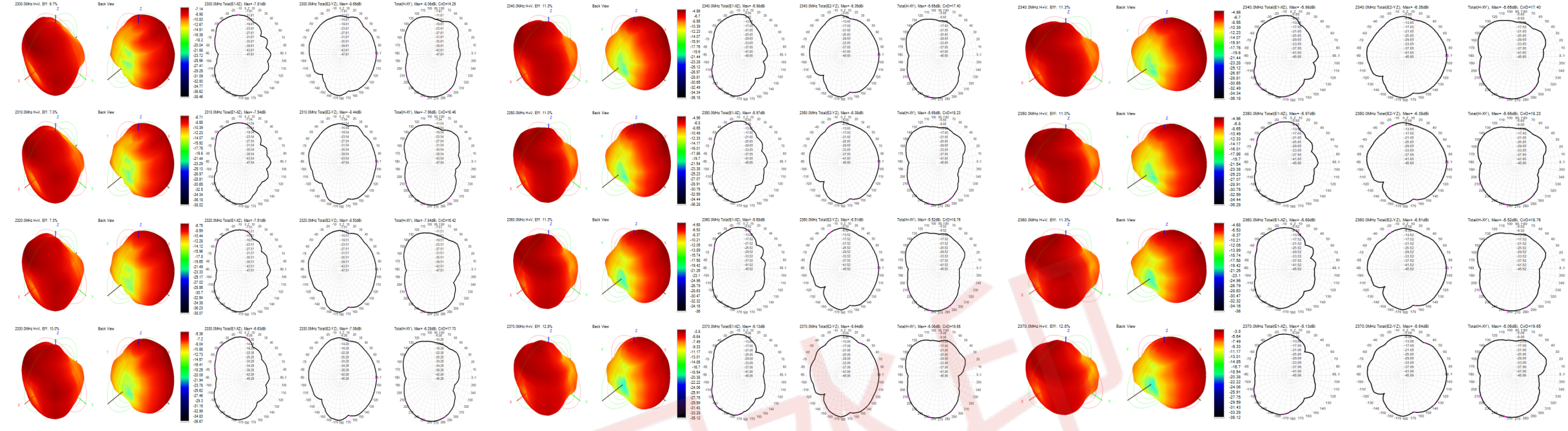
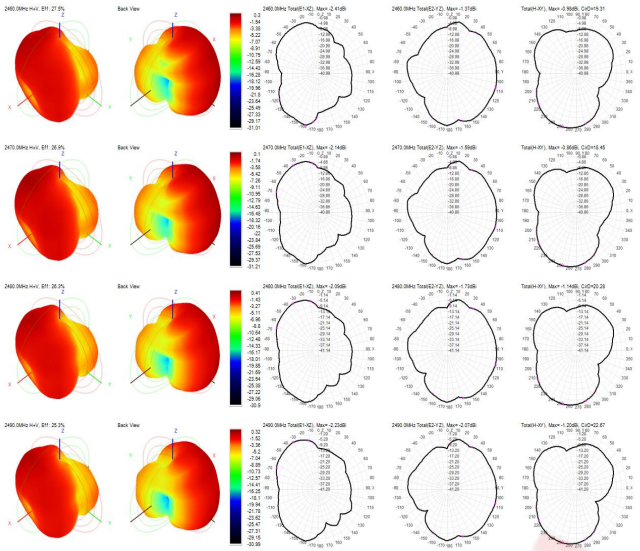
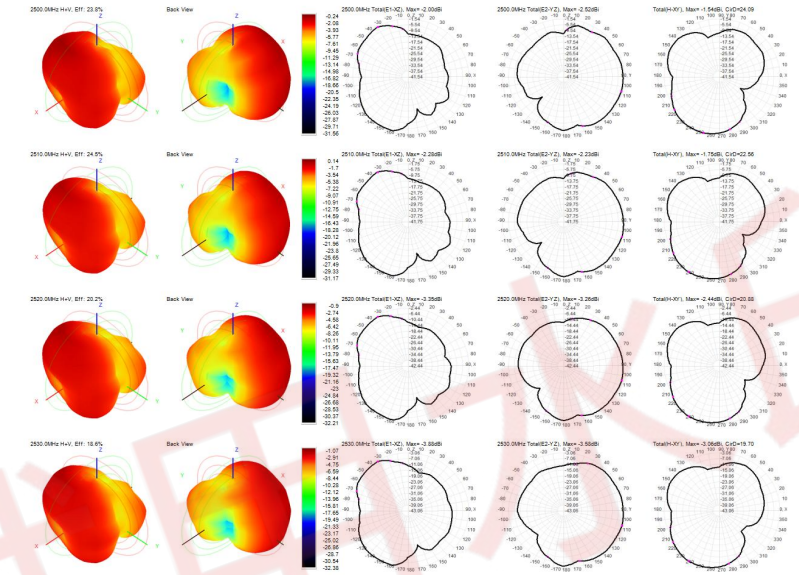
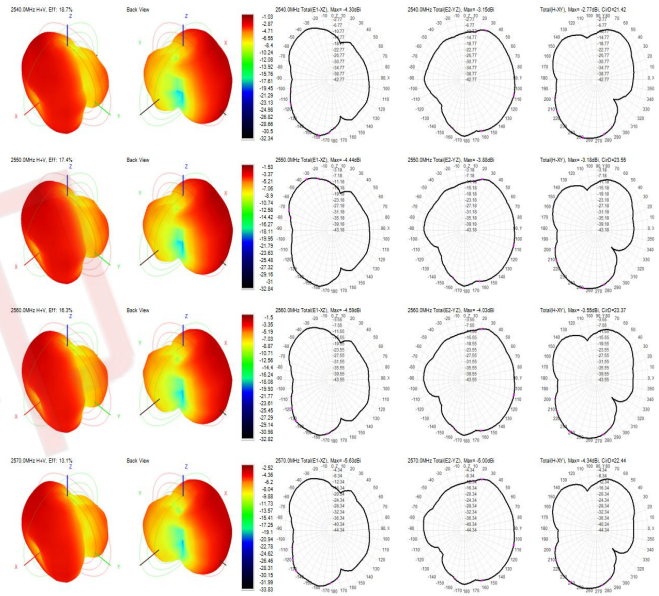
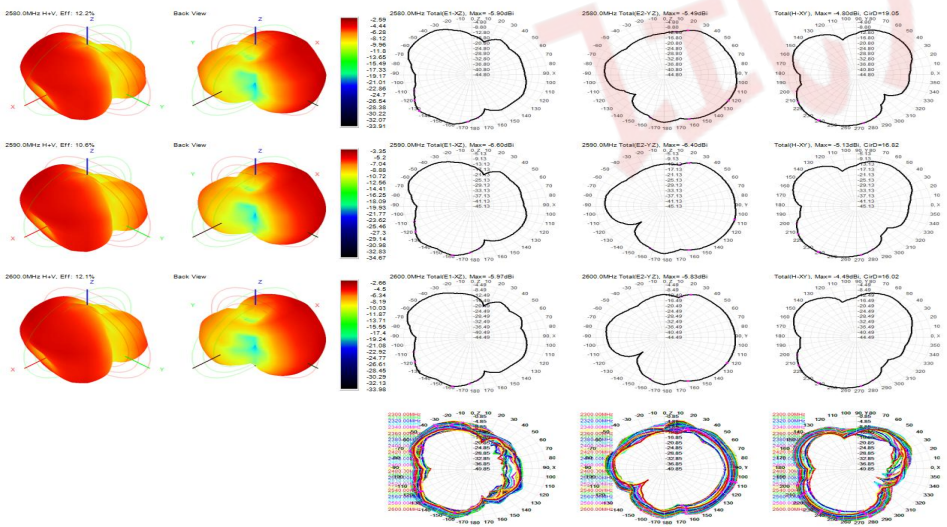
天线电路



效率&增益

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Frequency (MHz)	2300.0	2310.0	2320.0	2330.0	2340.0	2350.0	2360.0	2370.0	2380.0	2390.0	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	2510.0	2520.0	2530.0	2540.0	2550.0	2560.0	2570.0	2580.0	2590.0	2600.0
Efficiency (dBi)	-11.75	-11.55	-11.34	-9.98	-9.47	-9.57	-9.47	-8.94	-8.16	-7.40	-6.86	-6.55	-6.58	-5.89	-5.82	-5.70	-5.60	-5.71	-5.80	-5.96	-6.23	-6.11	-6.95	-7.29	-7.29	-7.60	-7.87	-8.84	-9.13	-9.76	-9.16
Gain (dBi)	-7.14	-6.71	-6.75	-5.36	-4.86	-4.96	-4.68	-3.80	-3.09	-2.18	-1.86	-1.52	-1.49	-0.76	-0.45	-0.23	0.30	0.10	0.41	0.32	-0.24	0.14	-0.90	-1.07	-1.03	-1.53	-1.50	-2.52	-2.59	-3.35	-2.66
Efficiency (%)	6.69	7.00	7.34	10.04	11.29	11.05	11.30	12.77	15.29	18.21	20.61	22.15	22.00	25.75	26.16	26.92	27.53	26.86	26.29	25.33	23.81	24.48	20.20	18.64	18.67	17.39	16.34	13.06	12.23	10.57	12.13
Directivity (dB)	4.60	4.84	4.59	4.62	4.61	4.61	4.79	5.14	5.06	5.22	5.00	5.03	5.08	5.13	5.37	5.47	5.90	5.81	6.21	6.29	5.99	6.26	6.05	6.23	6.26	6.07	6.36	6.32	6.53	6.41	6.50
Peak Gain Position (Theta)	150.00	150.00	150.00	45.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	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)	315.00	315.00	315.00	330.00	315.00	315.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	315.00	315.00	315.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00
Efficiency ThetaPol (%)	2.24	2.34	2.42	3.25	3.58	3.46	3.50	3.97	4.66	5.51	6.13	6.58	6.47	7.50	7.37	7.40	7.39	7.18	6.97	6.78	6.46	6.60	5.51	5.12	5.07	4.81	4.49	3.59	3.33	2.85	3.31
Efficiency PhiPol (%)	4.45	4.66	4.92	6.80	7.70	7.59	7.79	8.81	10.62	12.69	14.48	15.58	15.52	18.25	18.80	19.52	20.14	19.68	19.32	18.55	17.36	17.88	14.68	13.53	13.60	12.58	11.85	9.48	8.90	7.72	8.81
Upper Hem. Efficiency (%)	3.24	3.39	3.55	4.95	5.52	5.55	5.70	6.31	7.70	8.96	10.15	10.88	10.79	12.57	12.85	13.45	13.47	13.62	12.81	12.24	11.82	11.60	9.64	8.87	8.57	8.24	7.57	6.06	5.71	4.99	5.69
Lower Hem. Efficiency (%)	3.45	3.62	3.79	5.09	5.76	5.49	5.60	6.46	7.59	9.25	10.46	11.28	11.21	13.18	13.31	13.46	14.06	13.24	13.48	13.09	11.99	12.88	10.55	9.78	10.10	9.15	8.76	7.00	6.52	5.57	6.44
T90(H)圆度	14.25	16.46	16.42	17.70	17.40	18.23	18.76	19.65	19.86	23.22	20.73	22.93	26.28	25.24	21.65	20.05	19.31	18.45	20.28	22.67	24.09	22.56	20.88	19.70	21.42	23.55	23.37	22.44	19.05	16.82	16.02
Gain 15deg (dBi)																															
E1(XZ)波瓣宽度	48.00	51.00	56.00	64.00	61.00	64.00	63.00	54.00	62.00	60.00	59.00	56.00	57.00	59.00	62.00	52.00	52.00	59.00	55.00	53.00	48.00	50.00	49.00	50.00	59.00	51.00	53.00	55.00	54.00	55.00	56.00
E1(XZ)前后比	0.65	0.57	0.59	0.25	0.55	0.85	1.23	1.07	1.48	0.71	0.24	0.33	0.63	0.46	0.25	0.00	0.00	0.24	0.45	0.58	1.12	0.94	0.55	0.31	0.00	0.07	0.56	0.12	0.25	0.00	0.00
E2(YZ)波瓣宽度	114.00	115.00	145.00	145.00	144.00	179.00	181.00	130.00	129.00	124.00	122.00	121.00	121.00	118.00	123.00	125.00	125.00	127.00	126.00	127.00	129.00	129.00	132.00	137.00	132.00	139.00	137.00	136.00	137.00	136.00	135.00
E2(YZ)前后比	1.00	0.95	0.37	0.50	0.72	0.85	0.38	0.51	0.18	0.45	0.26	0.51	0.49	0.89	0.82	0.86	0.86	0.94	1.05	0.90	1.01	0.94	1.02	1.09	1.66	1.28	1.53	1.73	1.73	1.52	1.44
最大增益处轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
顶点(Theta=0)处轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
仰角10度最差(大)轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY)波瓣宽度	77.00	79.00	77.00	75.00	75.00	74.00	73.00	72.00	70.00	72.00	74.00	71.00	70.00	68.00	67.00	66.00	65.00	64.00	66.00	64.00	63.00	66.00	66.00	64.00	64.00	65.00	63.00	64.00	62.00	60.00	59.00
Hc(XY)前后比	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Empty																															




2300.0MHz H+V, Eff: 6.7%
Back View
2300.0MHz Total(E1-XZ), Max= -7.81dBi
2300.0MHz Total(E2-YZ), Max= -8.65dBi
Total(H-XY), Max= -8.06dBi, CrD=14.25
2310.0MHz H+V, Eff: 7.0%
Back View
2310.0MHz Total(E1-XZ), Max= -7.54dBi
2310.0MHz Total(E2-YZ), Max= -8.44dBi
Total(H-XY), Max= -7.96dBi, CrD=14.46
2320.0MHz H+V, Eff: 7.3%
Back View
2320.0MHz Total(E1-XZ), Max= -7.51dBi
2320.0MHz Total(E2-YZ), Max= -8.53dBi
Total(H-XY), Max= -7.84dBi, CrD=14.42
2330.0MHz H+V, Eff: 10.0%
Back View
2330.0MHz Total(E1-XZ), Max= -6.93dBi
2330.0MHz Total(E2-YZ), Max= -7.06dBi
Total(H-XY), Max= -6.28dBi, CrD=17.70
2340.0MHz H+V, Eff: 11.3%
Back View
2340.0MHz Total(E1-XZ), Max= -5.98dBi
2340.0MHz Total(E2-YZ), Max= -6.35dBi
Total(H-XY), Max= -5.65dBi, CrD=17.40
2350.0MHz H+V, Eff: 11.0%
Back View
2350.0MHz Total(E1-XZ), Max= -5.97dBi
2350.0MHz Total(E2-YZ), Max= -6.36dBi
Total(H-XY), Max= -5.65dBi, CrD=18.23
2360.0MHz H+V, Eff: 11.3%
Back View
2360.0MHz Total(E1-XZ), Max= -5.68dBi
2360.0MHz Total(E2-YZ), Max= -6.51dBi
Total(H-XY), Max= -5.52dBi, CrD=18.76
2370.0MHz H+V, Eff: 12.8%
Back View
2370.0MHz Total(E1-XZ), Max= -5.13dBi
2370.0MHz Total(E2-YZ), Max= -5.64dBi
Total(H-XY), Max= -5.06dBi, CrD=19.65
2340.0MHz H+V, Eff: 11.3%
Back View
2340.0MHz Total(E1-XZ), Max= -5.98dBi
2340.0MHz Total(E2-YZ), Max= -6.35dBi
Total(H-XY), Max= -5.65dBi, CrD=17.40
2350.0MHz H+V, Eff: 11.0%
Back View
2350.0MHz Total(E1-XZ), Max= -5.97dBi
2350.0MHz Total(E2-YZ), Max= -6.36dBi
Total(H-XY), Max= -5.65dBi, CrD=18.23
2360.0MHz H+V, Eff: 11.3%
Back View
2360.0MHz Total(E1-XZ), Max= -5.68dBi
2360.0MHz Total(E2-YZ), Max= -6.51dBi
Total(H-XY), Max= -5.52dBi, CrD=18.76
2370.0MHz H+V, Eff: 12.8%
Back View
2370.0MHz Total(E1-XZ), Max= -5.13dBi
2370.0MHz Total(E2-YZ), Max= -5.64dBi
Total(H-XY), Max= -5.06dBi, CrD=19.65
2380.0MHz H+V, Eff: 15.3%
Back View
2380.0MHz Total(E1-XZ), Max= -4.19dBi
2380.0MHz Total(E2-YZ), Max= -4.90dBi
Total(H-XY), Max= -4.12dBi, CrD=19.96
2390.0MHz H+V, Eff: 18.2%
Back View
2390.0MHz Total(E1-XZ), Max= -3.72dBi
2390.0MHz Total(E2-YZ), Max= -3.88dBi
Total(H-XY), Max= -3.39dBi, CrD=23.22
2400.0MHz H+V, Eff: 20.6%
Back View
2400.0MHz Total(E1-XZ), Max= -3.39dBi
2400.0MHz Total(E2-YZ), Max= -3.35dBi
Total(H-XY), Max= -2.76dBi, CrD=20.73
2410.0MHz H+V, Eff: 22.2%
Back View
2410.0MHz Total(E1-XZ), Max= -3.06dBi
2410.0MHz Total(E2-YZ), Max= -2.98dBi
Total(H-XY), Max= -2.31dBi, CrD=22.93
2420.0MHz H+V, Eff: 22.0%
Back View
2420.0MHz Total(E1-XZ), Max= -3.11dBi
2420.0MHz Total(E2-YZ), Max= -2.89dBi
Total(H-XY), Max= -2.25dBi, CrD=26.28
2430.0MHz H+V, Eff: 25.8%
Back View
2430.0MHz Total(E1-XZ), Max= -2.66dBi
2430.0MHz Total(E2-YZ), Max= -1.82dBi
Total(H-XY), Max= -1.32dBi, CrD=25.24
2440.0MHz H+V, Eff: 26.2%
Back View
2440.0MHz Total(E1-XZ), Max= -2.82dBi
2440.0MHz Total(E2-YZ), Max= -1.79dBi
Total(H-XY), Max= -1.26dBi, CrD=21.65
2450.0MHz H+V, Eff: 26.9%
Back View
2450.0MHz Total(E1-XZ), Max= -2.21dBi
2450.0MHz Total(E2-YZ), Max= -1.57dBi
Total(H-XY), Max= -0.95dBi, CrD=20.05