Testing Report

Customer Name: SHENZHENSHIXINZHONGXIN TECHNOLOGY. CO. , LTD

Product Name: Antenna

Sample Model: RSR-XZX-2T-5.8G-TX

Reference Standard: *GB/T9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2024.04. 28

Engineer:	Date: 2024.04. 28
Auditor:	Date: 2024.04. 28
Approver:	Date: 2024.04. 28

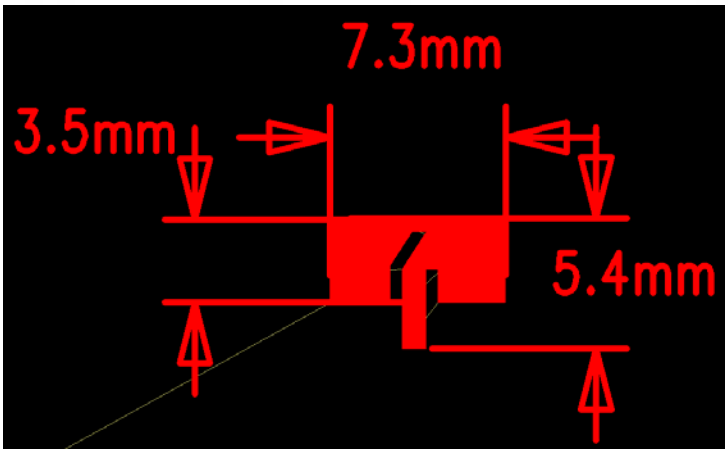
1. General Information

1.1 General Information of testing institutions

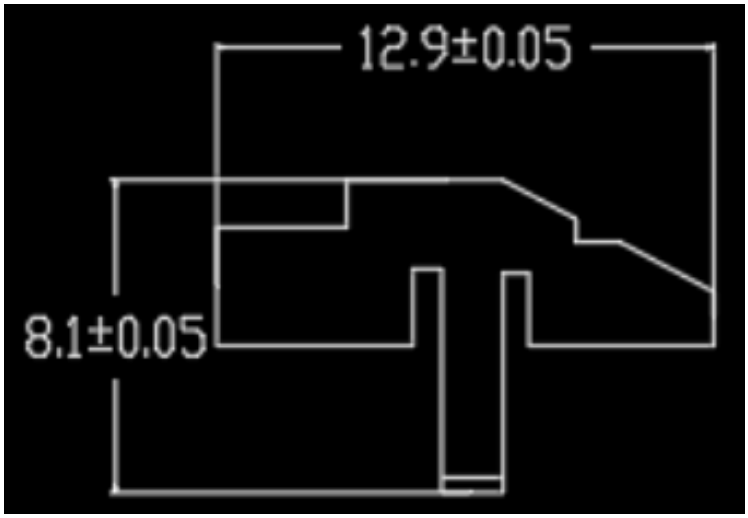
Name	Shenzhen Hetuo Technology Co. ,Ltd.
Addres s	Room 1202 B, Building C6, Hengfeng Industrial City, Xixiang, Ba oan District, Shenzhen
Tel	18665849001
E-mail	18665849001@163.com
Equipm ent	Agilent 5071C

1.2 Testing principle

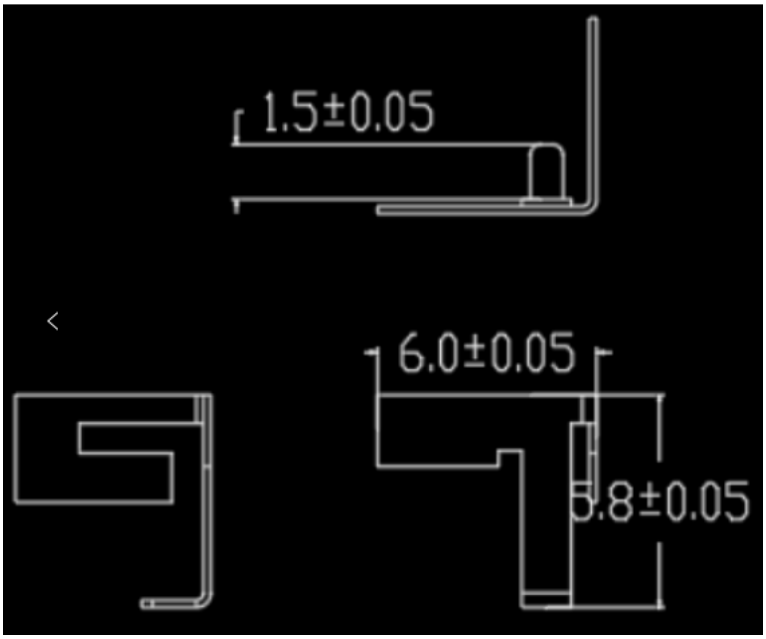
Antenna Photo & Lenght(mm)_ANT1: PCB antenna



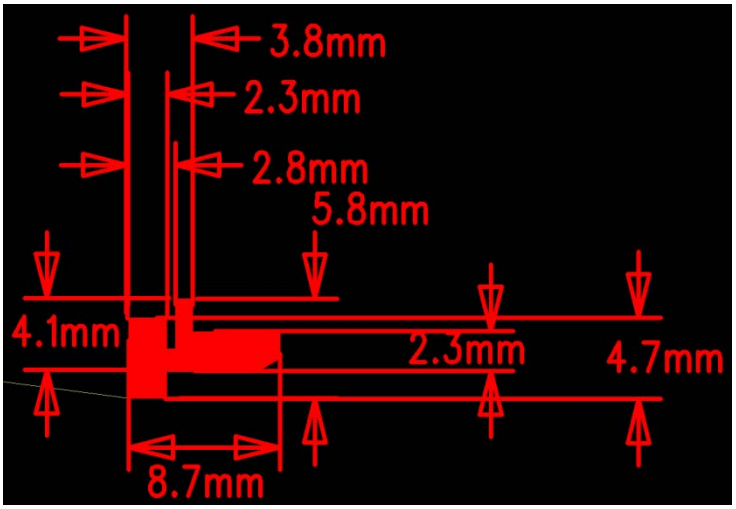
Antenna Photo & Lenght(mm)_ANT2: Stainless steel antenna



Antenna Photo & Lenght(mm)_ANT3: Stainless steel antenna



Antenna Photo & Lenght(mm)_ANT4: PCB antenna



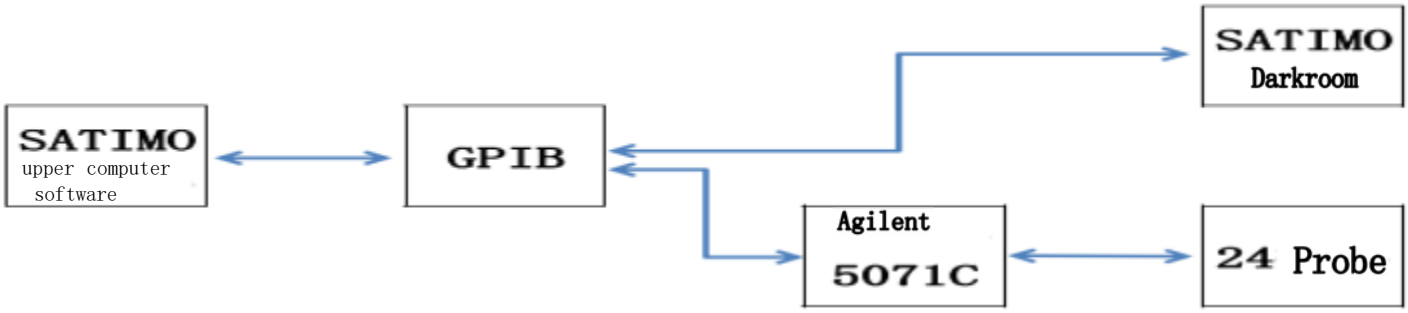
1.3 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
24 probe microwave chamber	4*3*3	NA	SATIMO	2024.03.29	2024.04.29
Network Analyzer	5071C	NA	Agilent	2024.03.29	2024.04.29

1.4 Test environment

Temperature	24C± 1.5C
Humidity	45%RH
Pressure	101kPa

1.5 Brief summary of Procedure



1. SATIMO turn on the Upper Computer Software, Name: VeryView99.exe, Version No.: V1.10;
2. VeryView99 via GPIB (General Purpose Interface Bus) to control the shielding room (darkroom)'s SATIMO;
3. Meanwhiel, GPIB control the Agilent 5071C to read the Antenna data by 24 Probe;
4. Agilent 5071C will analyse the data and generate the result;
5. Agilent 5071C will feedback to VeryView99 software to generate the test report.

2. Sample Information

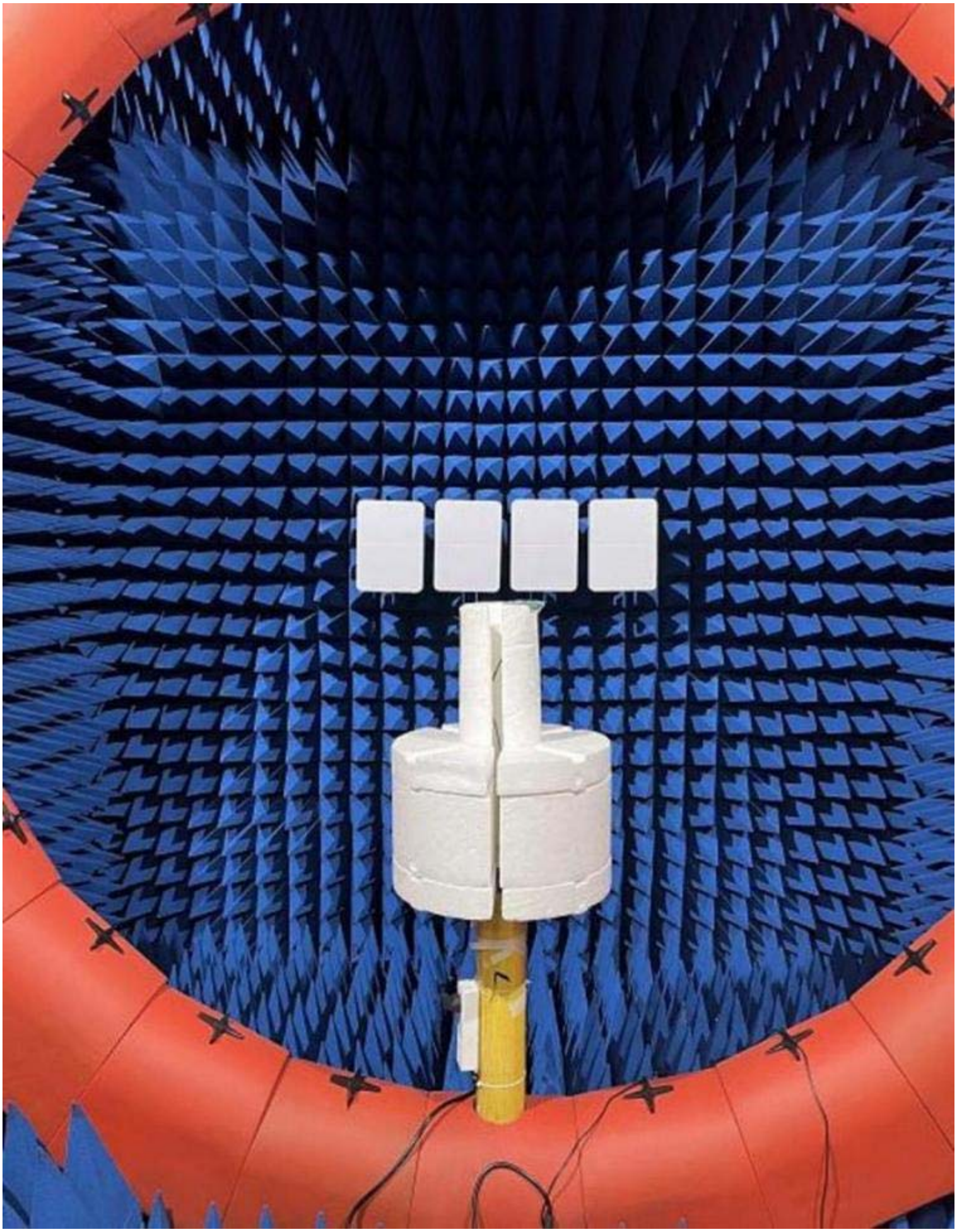
2.1 Client information

Name	SHENZHENSHIXINZHONGXIN TECHNOLOGY .CO .,LTD
Address	A1 , Shajing Donghuan Industrial Zone , Bao ' an District , Shenzhen
Contacts	Ma Chao
Tel	18218809918
E-mail	machao@ c- chip. com. cn

2.2 Description of EUT(S)

Product Name	5.2G/5.8G Antenna
Sample Model	RSR-XZX-2T-5.8G-TX
Antenna Size	ANT1:5.4*7.3mm
	ANT2:12.9*8.1mm
	ANT3:6.0*5.8mm
	ANT4:8.7*5.8mm
Antenna Type	PCB/ Stainless steel antenna
Serial No.	/
Test Item	Antenna Gain, Radiation pattern
Frequency Range	5155-5245MHz 5730-5848MHz
Received Date	2024.04.28
Test Date	2024.04. 28
Remark	The length of the RF cable is 50mm

The test photos



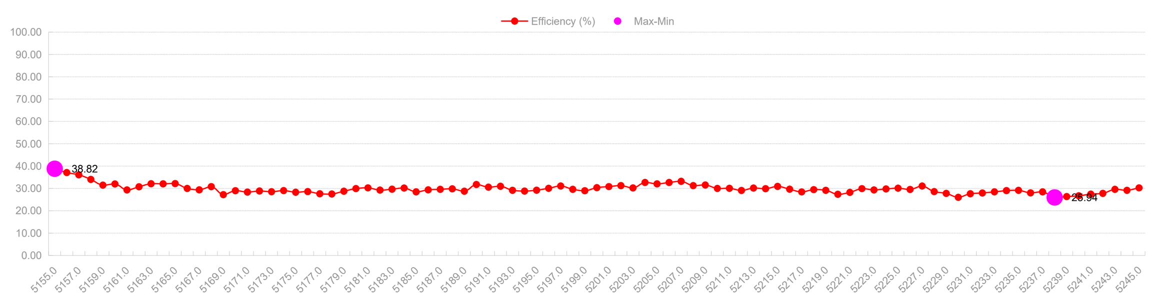
ANT1

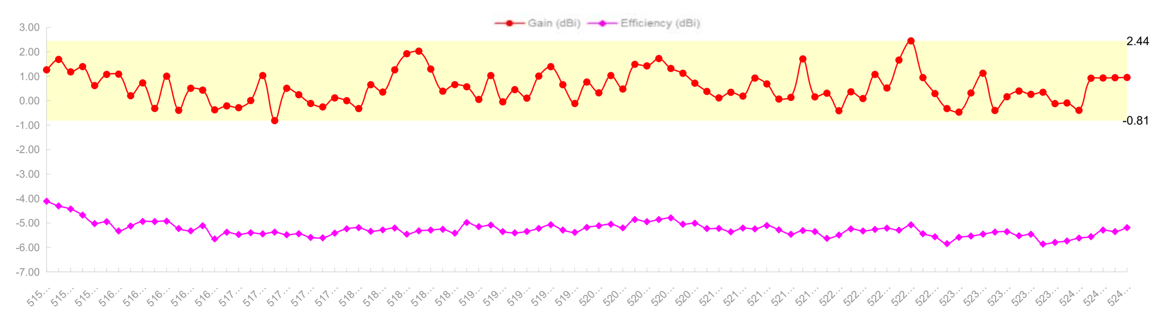
深圳市合拓科技有限公司

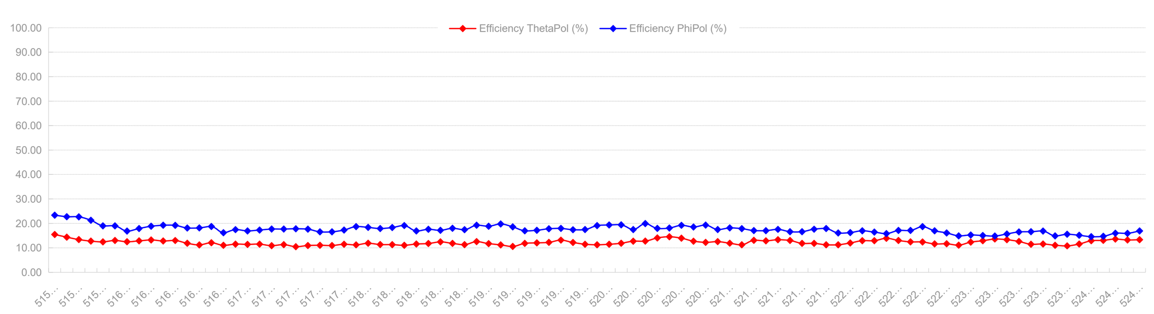
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Frequency (MHz)	5155.0	5156.0	5157.0	5158.0	5159.0	5160.0	5161.0	5162.0	5163.0	5164.0	5165.0	5166.0	5167.0	5168.0	5169.0	5170.0	5171.0	5172.0	5173.0	5174.0	5175.0	5176.0	5177.0	5178.0	5179.0	5180.0	5181.0	5182.0	5183.0	5184.0
Efficiency (dBi)	-4.11	-4.30	-4.43	-4.68	-5.02	-4.95	-5.33	-5.12	-4.94	-4.94	-4.92	-5.23	-5.32	-5.11	-5.65	-5.38	-5.47	-5.40	-5.44	-5.37	-5.48	-5.44	-5.59	-5.60	-5.41	-5.24	-5.19	-5.34	-5.28	-5.21
Gain (dBi)	1.26	1.69	1.18	1.40	0.62	1.08	1.09	0.20	0.73	-0.31	1.00	-0.39	0.51	0.43	-0.37	-0.21	-0.29	0.01	1.03	-0.81	0.51	0.24	-0.11	-0.25	0.12	0.00	-0.32	0.66	0.35	1.26
Efficiency (%)	38.82	37.12	36.09	34.05	31.45	32.01	29.34	30.75	32.09	32.05	32.18	30.00	29.36	30.82	27.22	28.99	28.36	28.84	28.54	29.01	28.30	28.57	27.61	27.51	28.75	29.92	30.25	29.25	29.64	30.16
Directivity (dB)	5.37	5.99	5.61	6.07	5.64	6.02	6.41	5.32	5.66	4.63	5.93	4.83	5.83	5.54	5.28	5.16	5.19	5.41	6.48	4.56	5.99	5.68	5.48	5.35	5.53	5.24	4.87	5.99	5.63	6.47
Peak Gain Position (Theta)	75.00	30.00	135.00	30.00	30.00	75.00	135.00	135.00	135.00	30.00	135.00	135.00	135.00	135.00	135.00	135.00	75.00	15.00	30.00	90.00	135.00	135.00	135.00	45.00	135.00	120.00	30.00	120.00	30.00	135.00
Peak Gain Position (Phi)	60.00	165.00	15.00	330.00	330.00	30.00	30.00	30.00	30.00	150.00	0.00	15.00	15.00	0.00	15.00	0.00	330.00	165.00	315.00	30.00	15.00	15.00	15.00	15.00	15.00	30.00	315.00	45.00	330.00	15.00
Efficiency ThetaPol (%)	15.46	14.37	13.40	12.76	12.44	13.02	12.49	12.85	13.24	12.82	13.00	11.87	11.20	12.09	11.03	11.53	11.43	11.54	10.87	11.33	10.48	10.94	11.05	10.96	11.48	11.23	11.88	11.36	11.32	11.04
Efficiency PhiPol (%)	23.36	22.74	22.69	21.29	19.01	18.99	16.84	17.90	18.85	19.23	19.19	18.13	18.15	18.72	16.20	17.46	16.93	17.30	17.67	17.68	17.82	17.64	16.55	16.55	17.27	18.69	18.37	17.89	18.32	19.12
Upper Hem. Efficiency (%)	22.28	21.29	20.36	18.66	17.03	18.69	15.74	17.07	18.01	18.20	17.60	16.46	16.39	17.21	14.72	16.53	15.85	16.74	16.43	16.83	15.36	15.70	15.24	15.18	16.45	16.27	17.51	16.32	15.72	15.88
Lower Hem. Efficiency (%)	16.55	15.83	15.73	15.39	14.42	13.32	13.60	13.68	14.08	13.86	14.58	13.54	12.97	13.61	12.50	12.46	12.52	12.10	12.12	12.18	12.94	12.87	12.36	12.34	12.30	13.66	12.74	12.92	13.92	14.28
Gain 15deg (dBi)																														
E1(XZ)波瓣宽度	48.00	136.00	40.00	38.00	44.00	39.00	49.00	27.00	50.00	54.00	40.00	46.00	35.00	38.00	49.00	47.00	43.00	50.00	50.00	41.00	45.00	41.00	33.00	43.00	22.00	72.00	64.00	37.00	36.00	46.00
E1(XZ)前后比	6.40	6.52	6.23	3.59	4.26	4.72	3.87	4.54	3.85	5.97	8.20	8.18	6.89	6.57	4.72	3.32	4.00	3.96	4.61	6.86	6.29	5.32	6.14	4.78	3.65	2.62	6.16	5.57	8.03	6.15
E2(YZ)波瓣宽度	184.00	75.00	20.00	36.00	145.00	40.00	61.00	74.00	30.00	99.00	45.00	68.00	26.00	24.00	84.00	47.00	82.00	23.00	25.00	28.00	20.00	51.00	38.00	72.00	25.00	22.00	21.00	25.00	75.00	51.00
E2(YZ)前后比	7.07	6.41	3.77	7.14	4.60	8.74	8.08	6.79	5.99	8.26	5.49	5.60	6.54	7.19	5.91	6.60	6.21	8.14	5.72	5.29	9.86	7.13	5.78	7.72	8.78	8.13	8.76	5.92	6.30	7.48
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
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
Hc(XY)波瓣宽度	23.00	35.00	29.00	47.00	24.00	32.00	48.00	65.00	63.00	49.00	110.00	40.00	48.00	90.00	21.00	43.00	92.00	86.00	91.00	25.00	79.00	25.00	37.00	19.00	76.00	42.00	38.00	25.00	64.00	46.00
Hc(XY)前后比	1.35	2.87	0.98	4.21	5.92	3.61	2.49	2.82	2.33	0.69	1.20	2.61	3.01	2.86	2.93	5.19	2.42	1.48	1.14	4.82	3.28	2.16	3.59	0.00	4.57	2.19	0.07	3.47	2.80	2.45
Empty																														

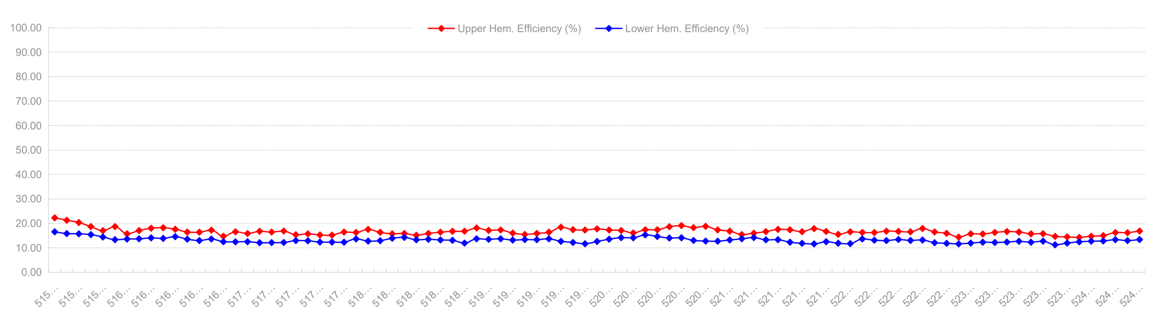
Frequency ID	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Frequency (MHz)	5185.0	5186.0	5187.0	5188.0	5189.0	5190.0	5191.0	5192.0	5193.0	5194.0	5195.0	5196.0	5197.0	5198.0	5199.0	5200.0	5201.0	5202.0	5203.0	5204.0	5205.0	5206.0	5207.0	5208.0	5209.0	5210.0	5211.0	5212.0	5213.0	5214.0	5215.0	5216.0
Efficiency (dBi)	-5.46	-5.32	-5.29	-5.26	-5.42	-4.98	-5.15	-5.09	-5.35	-5.40	-5.34	-5.22	-5.07	-5.29	-5.38	-5.18	-5.11	-5.05	-5.20	-4.86	-4.95	-4.86	-4.79	-5.05	-5.01	-5.23	-5.22	-5.36	-5.21	-5.24	-5.10	-5.28
Gain (dBi)	1.92	2.03	1.30	0.39	0.66	0.57	0.05	1.03	-0.05	0.45	0.10	1.01	1.39	0.66	-0.11	0.76	0.32	1.03	0.48	1.49	1.43	1.73	1.32	1.12	0.72	0.38	0.12	0.35	0.19	0.93	0.69	0.07
Efficiency (%)	28.46	29.36	29.59	29.81	28.74	31.76	30.56	30.98	29.16	28.82	29.21	30.06	31.10	29.60	28.95	30.34	30.82	31.27	30.21	32.67	32.02	32.65	33.16	31.26	31.56	30.00	30.05	29.09	30.16	29.89	30.88	29.65
Directivity (dB)	7.38	7.35	6.58	5.65	6.07	5.55	5.20	6.12	5.30	5.86	5.45	6.23	6.46	5.94	5.27	5.94	5.43	6.08	5.68	6.35	6.37	6.59	6.11	6.17	5.73	5.61	5.34	5.71	5.39	6.17	5.79	5.35
Peak Gain Position (Theta)	135.00	135.00	30.00	30.00	30.00	30.00	30.00	45.00	135.00	135.00	135.00	135.00	30.00	135.00	30.00	30.00	135.00	75.00	135.00	135.00	135.00	135.00	120.00	120.00	120.00	30.00	30.00	120.00	135.00	15.00	135.00	120.00
Peak Gain Position (Phi)	15.00	15.00	30.00	30.00	240.00	285.00	120.00	150.00	0.00	0.00	15.00	15.00	300.00	30.00	120.00	150.00	45.00	300.00	15.00	15.00	0.00	15.00	15.00	15.00	15.00	345.00	0.00	45.00	0.00	210.00	15.00	15.00
Efficiency ThetaPol (%)	11.56	11.77	12.43	11.82	11.31	12.53	11.71	11.22	10.58	11.83	12.03	12.24	13.15	12.19	11.48	11.24	11.45	11.88	12.71	12.76	14.05	14.54	13.94	12.73	12.24	12.53	11.90	11.25	13.07	12.85	13.32	13.04
Efficiency PhiPol (%)	16.90	17.59	17.15	17.99	17.43	19.23	18.86	19.76	18.58	16.99	17.18	17.82	17.95	17.41	17.47	19.10	19.37	19.39	17.49	19.90	17.98	18.11	19.22	18.53	19.32	17.46	18.14	17.84	17.09	17.04	17.56	16.62
Upper Hem. Efficiency (%)	15.16	15.85	16.38	16.75	16.80	18.10	17.11	17.30	16.01	15.46	15.87	16.38	18.43	17.41	17.27	17.76	17.29	17.09	16.10	17.39	17.38	18.63	19.08	18.24	18.78	17.32	16.82	15.42	15.96	16.62	17.54	17.37
Lower Hem. Efficiency (%)	13.29	13.50	13.21	13.06	11.94	13.67	13.46	13.68	13.15	13.36	13.34	13.68	12.67	12.19	11.68	12.58	13.53	14.18	14.11	15.28	14.64	14.02	14.09	13.02	12.78	12.68	13.23	13.67	14.20	13.27	13.34	12.28
Gain 15deg (dBi)																																
E1(XZ)波瓣宽度	38.00	40.00	46.00	46.00	116.00	53.00	40.00	27.00	28.00	34.00	35.00	46.00	55.00	37.00	36.00	33.00	25.00	21.00	25.00	35.00	30.00	39.00	48.00	22.00	160.00	44.00	63.00	21.00	42.00	34.00	26.00	39.00
E1(XZ)前后比	4.48	5.63	2.88	2.92	4.27	3.95	5.45	6.79	6.87	5.71	7.52	5.77	1.47	5.59	3.76	4.15	3.24	6.55	7.51	7.70	7.31	5.29	4.03	4.31	2.68	3.02	4.46	6.38	8.08	8.77	7.23	4.22
E2(YZ)波瓣宽度	129.00	29.00	26.00	80.00	52.00	22.00	41.00	23.00	36.00	24.00	30.00	26.00	32.00	48.00	73.00	20.00	38.00	36.00	36.00	32.00	35.00	24.00	22.00	46.00	46.00	43.00	36.00	32.00	48.00	54.00	46.00	44.00
E2(YZ)前后比	5.64	7.58	5.32	7.74	4.93	6.67	7.11	9.69	6.61	6.74	5.93	7.22	6.35	5.59	8.43	9.47	8.11	9.01	5.60	7.62	8.98	8.52	8.51	7.63	9.66	7.58	6.42	5.49	5.24	5.47	6.52	7.14
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	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	1.50
Hc(XY)波瓣宽度	66.00	40.00	57.00	57.00	116.00	151.00	44.00	48.00	41.00	37.00	54.00	37.00	39.00	50.00	70.00	84.00	108.00	27.00	69.00	46.00	37.00	48.00	44.00	55.00	58.00	106.00	50.00	51.00	43.00	58.00	33.00	53.00
Hc(XY)前后比	2.60	4.44	3.19	1.30	2.55	1.48	2.39	4.07	2.54	1.05	3.28	4.69	2.72	1.88	0.17	1.06	0.45	4.77	2.00	4.84	1.73	3.50	4.25	0.67	0.76	2.27	0.21	1.12	1.95	4.87	5.23	3.58
Empty																																

Frequency ID	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
Frequency (MHz)	5217.0	5218.0	5219.0	5220.0	5221.0	5222.0	5223.0	5224.0	5225.0	5226.0	5227.0	5228.0	5229.0	5230.0	5231.0	5232.0	5233.0	5234.0	5235.0	5236.0	5237.0	5238.0	5239.0	5240.0	5241.0	5242.0	5243.0	5244.0	5245.0
Efficiency (dBi)	-5.46	-5.31	-5.35	-5.63	-5.49	-5.24	-5.33	-5.26	-5.21	-5.29	-5.08	-5.44	-5.57	-5.85	-5.59	-5.54	-5.46	-5.38	-5.36	-5.52	-5.46	-5.86	-5.79	-5.74	-5.61	-5.56	-5.29	-5.35	-5.19
Gain (dBi)	0.13	1.71	0.16	0.31	-0.41	0.36	0.09	1.07	0.52	1.66	2.44	0.94	0.29	-0.32	-0.47	0.32	1.12	-0.40	0.16	0.40	0.26	0.35	-0.12	-0.09	-0.39	0.92	0.93	0.94	0.95
Efficiency (%)	28.43	29.46	29.16	27.36	28.24	29.91	29.34	29.77	30.11	29.56	31.07	28.58	27.76	26.02	27.63	27.95	28.46	29.01	29.14	28.03	28.45	25.94	26.36	26.68	27.45	27.80	29.59	29.17	30.25
Directivity (dB)	5.60	7.02	5.51	5.94	5.08	5.60	5.41	6.34	5.73	6.95	7.52	6.38	5.86	5.52	5.12	5.85	6.58	4.97	5.52	5.92	5.72	6.21	5.67	5.65	5.22	6.48	6.22	6.29	6.14
Peak Gain Position (Theta)	30.00	135.00	30.00	30.00	45.00	120.00	15.00	135.00	30.00	135.00	135.00	135.00	30.00	0.00	45.00	45.00	30.00	30.00	75.00	135.00	135.00	135.00	135.00	135.00	15.00	120.00	30.00	30.00	30.00
Peak Gain Position (Phi)	225.00	30.00	0.00	0.00	300.00	45.00	150.00	0.00	300.00	15.00	15.00	15.00	345.00	105.00	345.00	15.00	300.00	255.00	60.00	0.00	15.00	30.00	30.00	30.00	105.00	30.00	240.00	180.00	330.00
Efficiency ThetaPol (%)	11.82	11.84	11.26	11.28	12.00	12.92	12.91	13.93	13.00	12.45	12.40	11.60	11.66	11.11	12.36	12.91	13.62	13.33	12.63	11.44	11.59	11.06	10.81	11.54	12.89	13.09	13.59	13.22	13.34
Efficiency PhiPol (%)	16.61	17.62	17.89	16.08	16.24	16.99	16.43	15.84	17.11	17.12	18.67	16.98	16.10	14.91	15.28	15.04	14.84	15.68	16.51	16.59	16.86	14.88	15.54	15.14	14.56	14.71	16.00	15.95	16.91
Upper Hem. Efficiency (%)	16.59	17.87	16.68	15.51	16.53	16.29	16.22	16.81	16.71	16.53	17.90	16.48	15.93	14.39	15.70	15.66	16.27	16.67	16.46	15.73	15.76	14.68	14.45	14.26	14.75	15.00	16.25	16.20	16.87
Lower Hem. Efficiency (%)	11.85	11.59	12.48	11.85	11.71	13.62	13.12	12.96	13.40	13.04	13.17	12.10	11.83	11.63	11.93	12.29	12.19	12.33	12.68	12.30	12.69	11.26	11.91	12.42	12.71	12.79	13.33	12.97	13.38
Gain 15deg (dBi)																													
E1(XZ)波瓣宽度	41.00	28.00	25.00	22.00	27.00	47.00	26.00	30.00	35.00	34.00	23.00	148.00	59.00	40.00	21.00	22.00	36.00	30.00	34.00	35.00	75.00	72.00	34.00	39.00	25.00	27.00	42.00	21.00	25.00
E1(XZ)前后比	3.96	2.83	4.12	4.17	4.14	4.73	6.52	9.04	6.82	5.87	5.29	2.32	3.01	1.40	4.97	6.00	8.09	6.36	6.24	5.35	4.22	0.69	2.18	0.52	3.91	4.63	7.88	8.74	7.53
E2(YZ)波瓣宽度	56.00	63.00	26.00	47.00	35.00	73.00	68.00	31.00	27.00	20.00	37.00	20.00	37.00	35.00	36.00	63.00	72.00	29.00	23.00	32.00	67.00	33.00	41.00	36.00	22.00	60.00	44.00	34.00	19.00
E2(YZ)前后比	4.78	7.39	8.11	5.51	6.79	6.49	6.73	8.49	6.33	5.66	8.93	7.40	9.38	8.56	8.37	10.18	9.98	7.73	9.39	6.49	6.36	7.47	9.51	11.10	8.54	7.40	6.79	5.52	8.15
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
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
Hc(XY)波瓣宽度	41.00	29.00	41.00	96.00	35.00	33.00	36.00	39.00	36.00	42.00	54.00	40.00	53.00	86.00	54.00	26.00	40.00	51.00	53.00	31.00	25.00	32.00	42.00	37.00	40.00	35.00	37.00	46.00	50.00
Hc(XY)前后比	3.01	2.77	1.79	1.91	3.15	7.26	4.00	4.15	4.79	4.60	3.54	4.62	2.61	0.34	1.94	3.47	4.36	1.61	5.36	5.35	2.33	3.34	2.19	2.66	1.85	5.24	1.49	6.48	1.92
Empty																													

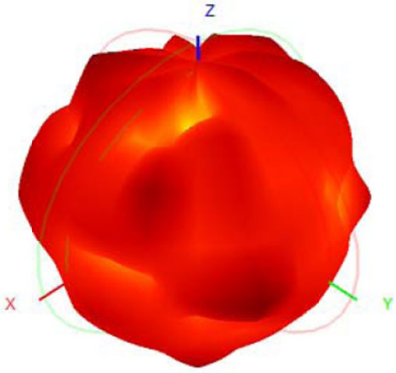




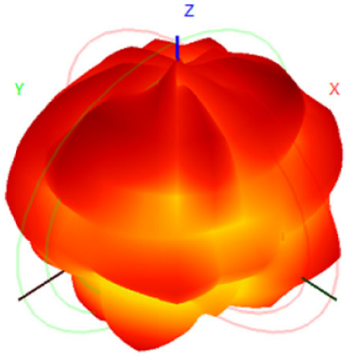




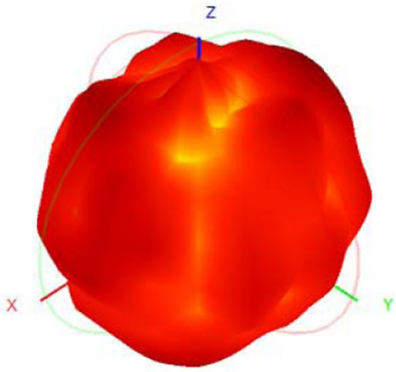
5155.0MHz H+V, Eff: 38.8%



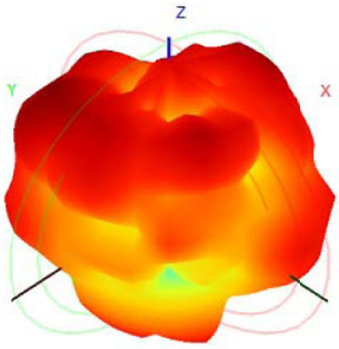
Back View



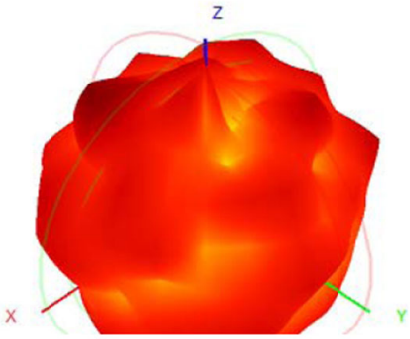
5200.0MHz H+V, Eff: 30.3%



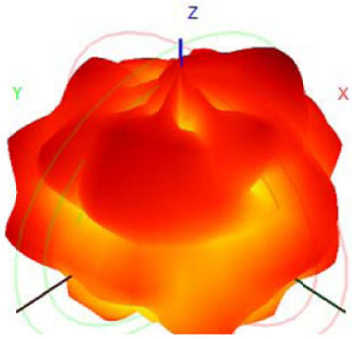
Back View



5245.0MHz H+V, Eff: 30.3%



Back View



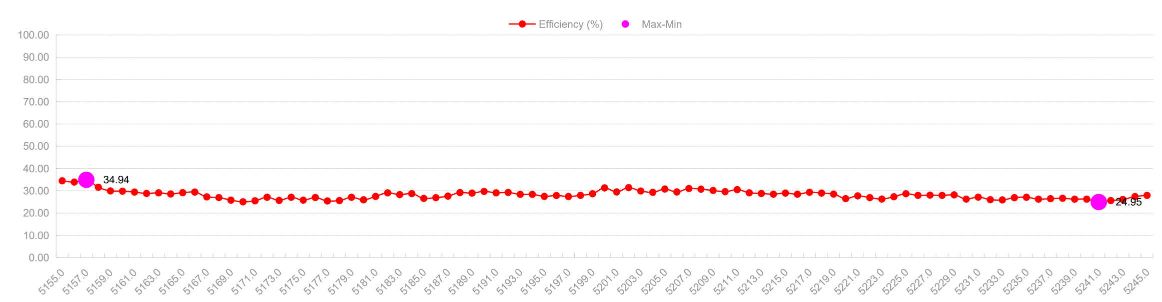
ANT2

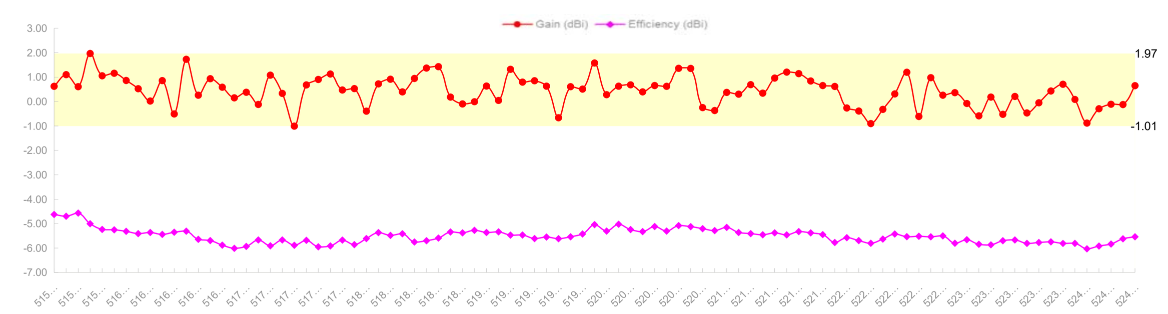
深圳市合拓科技有限公司

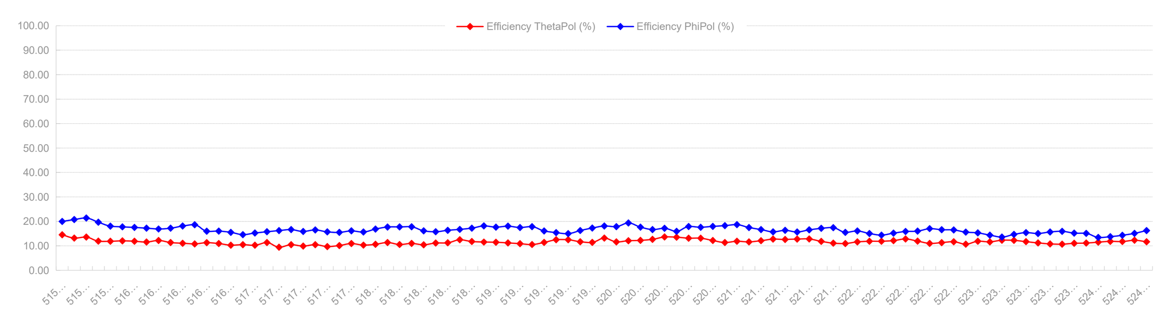
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Frequency (MHz)	5155.0	5156.0	5157.0	5158.0	5159.0	5160.0	5161.0	5162.0	5163.0	5164.0	5165.0	5166.0	5167.0	5168.0	5169.0	5170.0	5171.0	5172.0	5173.0	5174.0	5175.0	5176.0	5177.0	5178.0	5179.0	5180.0	5181.0	5182.0	5183.0	5184.0
Efficiency (dBi)	-4.62	-4.70	-4.57	-5.00	-5.24	-5.25	-5.32	-5.41	-5.36	-5.44	-5.35	-5.31	-5.64	-5.69	-5.88	-6.01	-5.93	-5.67	-5.91	-5.67	-5.89	-5.68	-5.95	-5.91	-5.68	-5.86	-5.61	-5.37	-5.48	-5.41
Gain (dBi)	0.63	1.10	0.61	1.97	1.05	1.16	0.86	0.53	0.02	0.86	-0.51	1.73	0.26	0.93	0.59	0.15	0.38	-0.12	1.08	0.33	-1.01	0.68	0.91	1.13	0.47	0.53	-0.39	0.72	0.91	0.39
Efficiency (%)	34.49	33.92	34.94	31.60	29.93	29.83	29.41	28.79	29.10	28.57	29.17	29.43	27.27	26.95	25.81	25.07	25.52	27.11	25.67	27.12	25.78	27.01	25.43	25.63	27.07	25.94	27.48	29.06	28.31	28.76
Directivity (dB)	5.25	5.80	5.18	6.97	6.29	6.41	6.18	5.93	5.38	6.30	4.84	7.04	5.90	6.63	6.47	6.16	6.31	5.55	6.98	6.00	4.88	6.36	6.85	7.04	6.15	6.39	5.22	6.09	6.39	5.81
Peak Gain Position (Theta)	135.00	30.00	30.00	135.00	135.00	45.00	135.00	30.00	135.00	135.00	135.00	30.00	135.00	45.00	135.00	135.00	135.00	120.00	135.00	30.00	120.00	135.00	90.00	135.00	120.00	135.00	135.00	90.00	135.00	135.00
Peak Gain Position (Phi)	345.00	105.00	330.00	15.00	15.00	330.00	30.00	315.00	345.00	15.00	15.00	345.00	15.00	345.00	30.00	15.00	30.00	30.00	30.00	345.00	15.00	15.00	30.00	15.00	30.00	30.00	30.00	30.00	15.00	30.00
Efficiency ThetaPol (%)	14.52	13.16	13.57	11.93	11.86	12.05	11.88	11.56	12.20	11.34	11.07	10.81	11.29	10.94	10.28	10.50	10.26	11.35	9.42	10.48	9.91	10.49	9.72	10.13	10.94	10.30	10.62	11.36	10.55	10.99
Efficiency PhiPol (%)	19.97	20.76	21.37	19.67	18.07	17.77	17.52	17.24	16.89	17.23	18.10	18.62	15.98	16.01	15.53	14.57	15.25	15.76	16.25	16.64	15.88	16.51	15.71	15.50	16.13	15.65	16.86	17.70	17.75	17.78
Upper Hem. Efficiency (%)	18.25	17.98	18.73	16.93	16.01	16.16	14.99	15.49	15.11	14.98	15.80	15.61	13.94	13.73	13.49	13.10	13.64	14.34	13.57	14.21	13.40	14.02	13.17	12.99	13.86	13.74	14.66	15.47	13.89	14.61
Lower Hem. Efficiency (%)	16.23	15.94	16.21	14.67	13.92	13.67	14.42	13.30	13.99	13.59	13.37	13.81	13.33	13.23	12.32	11.97	11.88	12.77	12.11	12.91	12.38	12.99	12.25	12.64	13.21	12.20	12.83	13.59	14.41	14.15
Gain 15deg (dBi)																														
E1(XZ)波瓣宽度	24.00	30.00	65.00	38.00	37.00	42.00	36.00	38.00	67.00	19.00	26.00	37.00	61.00	47.00	27.00	49.00	23.00	38.00	33.00	32.00	28.00	40.00	37.00	33.00	25.00	30.00	28.00	25.00	29.00	28.00
E1(XZ)前后比	4.98	2.41	3.81	1.85	2.27	2.58	3.91	1.62	1.33	4.02	3.58	2.47	3.31	2.14	4.46	3.72	4.16	3.32	2.05	2.56	2.98	1.34	1.88	0.66	3.41	1.97	2.59	4.03	2.61	2.67
E2(YZ)波瓣宽度	23.00	72.00	37.00	63.00	31.00	24.00	93.00	94.00	32.00	79.00	76.00	37.00	70.00	36.00	133.00	35.00	82.00	146.00	85.00	38.00	66.00	67.00	23.00	78.00	96.00	119.00	106.00	27.00	26.00	111.00
E2(YZ)前后比	6.91	8.25	4.48	3.01	4.28	5.53	4.90	5.15	6.89	5.92	4.26	7.18	4.53	5.73	3.53	7.03	3.86	3.58	6.25	3.72	2.28	6.27	5.87	6.23	3.99	3.94	6.35	5.90	6.15	4.32
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
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
Hc(XY)波瓣宽度	53.00	29.00	32.00	29.00	27.00	37.00	37.00	43.00	25.00	31.00	38.00	44.00	25.00	44.00	34.00	41.00	29.00	46.00	34.00	38.00	53.00	47.00	19.00	51.00	30.00	34.00	31.00	25.00	35.00	28.00
Hc(XY)前后比	0.95	4.59	4.65	5.33	5.83	2.98	4.28	1.90	2.81	2.39	1.16	1.28	6.20	5.81	7.46	4.74	4.15	0.70	3.23	2.51	3.83	1.57	7.02	1.72	5.12	1.09	1.98	6.69	3.02	5.00
Empty																														

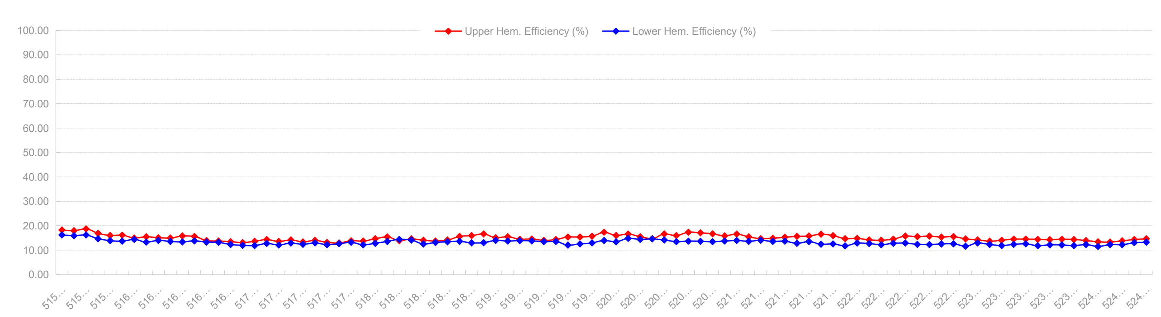
Frequency ID	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Frequency (MHz)	5185.0	5186.0	5187.0	5188.0	5189.0	5190.0	5191.0	5192.0	5193.0	5194.0	5195.0	5196.0	5197.0	5198.0	5199.0	5200.0	5201.0	5202.0	5203.0	5204.0	5205.0	5206.0	5207.0	5208.0	5209.0	5210.0	5211.0	5212.0	5213.0	5214.0	5215.0	5216.0
Efficiency (dBi)	-5.75	-5.70	-5.59	-5.34	-5.38	-5.27	-5.36	-5.34	-5.47	-5.47	-5.61	-5.55	-5.61	-5.54	-5.42	-5.04	-5.30	-5.02	-5.24	-5.33	-5.12	-5.31	-5.08	-5.12	-5.21	-5.29	-5.15	-5.36	-5.41	-5.46	-5.38	-5.46
Gain (dBi)	0.95	1.37	1.43	0.18	-0.10	-0.01	0.64	0.05	1.32	0.80	0.85	0.63	-0.66	0.61	0.51	1.58	0.28	0.63	0.68	0.40	0.66	0.62	1.36	1.36	-0.25	-0.37	0.38	0.30	0.69	0.35	0.96	1.21
Efficiency (%)	26.59	26.90	27.60	29.22	29.00	29.71	29.11	29.25	28.39	28.39	27.48	27.88	27.45	27.95	28.69	31.31	29.49	31.44	29.91	29.32	30.78	29.47	31.05	30.74	30.15	29.61	30.53	29.10	28.78	28.47	28.98	28.44
Directivity (dB)	6.70	7.07	7.02	5.53	5.28	5.26	6.00	5.38	6.79	6.26	6.46	6.18	4.95	6.15	5.93	6.62	5.58	5.65	5.93	5.73	5.77	5.93	6.44	6.48	4.96	4.92	5.53	5.67	6.10	5.80	6.34	6.67
Peak Gain Position (Theta)	45.00	135.00	135.00	120.00	30.00	30.00	60.00	45.00	135.00	135.00	135.00	30.00	60.00	30.00	135.00	30.00	45.00	135.00	135.00	135.00	135.00	135.00	30.00	30.00	120.00	45.00	45.00	45.00	45.00	45.00	135.00	135.00
Peak Gain Position (Phi)	345.00	15.00	30.00	30.00	315.00	345.00	15.00	330.00	15.00	15.00	15.00	300.00	300.00	300.00	45.00	345.00	315.00	15.00	15.00	0.00	15.00	15.00	315.00	300.00	30.00	315.00	300.00	330.00	345.00	0.00	15.00	15.00
Efficiency ThetaPol (%)	10.44	11.15	11.25	12.49	11.76	11.54	11.45	11.20	10.88	10.55	11.39	12.48	12.48	11.68	11.41	13.19	11.62	12.07	12.25	12.67	13.62	13.55	13.13	13.13	12.19	11.35	11.87	11.62	12.11	12.74	12.63	12.78
Efficiency PhiPol (%)	16.14	15.75	16.35	16.73	17.24	18.16	17.65	18.05	17.51	17.84	16.09	15.40	14.97	16.27	17.29	18.12	17.87	19.37	17.66	16.65	17.16	15.92	17.92	17.61	17.97	18.26	18.66	17.48	16.67	15.73	16.35	15.67
Upper Hem. Efficiency (%)	14.05	13.75	14.15	15.59	16.00	16.63	15.10	15.51	14.48	14.59	14.00	14.36	15.38	15.38	15.71	17.35	16.04	16.60	15.49	14.72	16.64	15.97	17.35	17.11	16.68	15.88	16.58	15.45	14.74	14.87	15.29	15.65
Lower Hem. Efficiency (%)	12.54	13.15	13.45	13.63	13.00	13.07	14.01	13.74	13.91	13.80	13.47	13.52	12.07	12.56	12.99	13.96	13.45	14.85	14.42	14.60	14.14	13.49	13.70	13.63	13.47	13.74	13.95	13.65	14.04	13.60	13.69	12.79
Gain 15deg (dBi)																																
E1(XZ)波瓣宽度	35.00	35.00	41.00	35.00	28.00	32.00	31.00	58.00	25.00	26.00	34.00	39.00	44.00	36.00	30.00	74.00	25.00	59.00	20.00	25.00	36.00	35.00	84.00	40.00	22.00	38.00	30.00	35.00	22.00	22.00	32.00	32.00
E1(XZ)前后比	1.80	1.71	1.60	1.42	2.51	2.02	1.39	3.49	4.41	5.30	4.11	1.07	0.00	0.80	1.43	0.98	3.62	1.81	4.44	5.48	2.94	1.82	1.49	0.67	2.09	1.65	2.00	3.36	4.12	5.27	3.97	3.01
E2(YZ)波瓣宽度	42.00	35.00	153.00	114.00	37.00	53.00	43.00	78.00	102.00	36.00	29.00	60.00	53.00	71.00	94.00	28.00	71.00	25.00	78.00	47.00	22.00	94.00	31.00	25.00	28.00	32.00	48.00	54.00	53.00	27.00	34.00	35.00
E2(YZ)前后比	4.31	3.62	5.19	4.81	4.89	7.51	5.63	6.10	3.75	6.02	4.32	4.58	3.16	4.87	4.68	5.96	5.73	7.19	5.55	4.98	3.55	2.98	4.75	4.48	8.11	7.50	7.70	6.22	5.72	4.85	5.72	3.00
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	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	1.50
Hc(XY)波瓣宽度	48.00	41.00	33.00	29.00	41.00	30.00	29.00	38.00	27.00	47.00	34.00	34.00	34.00	26.00	37.00	20.00	29.00	38.00	31.00	36.00	49.00	28.00	60.00	46.00	51.00	47.00	33.00	45.00	41.00	45.00	33.00	63.00
Hc(XY)前后比	3.98	4.88	3.51	5.05	0.00	1.56	3.57	4.13	5.86	5.64	7.76	4.59	4.04	0.00	1.81	0.00	2.84	3.61	4.59	6.17	5.35	6.32	1.85	0.79	2.22	0.00	2.97	4.14	2.66	5.31	7.82	4.03

Frequency ID	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
Frequency (MHz)	5217.0	5218.0	5219.0	5220.0	5221.0	5222.0	5223.0	5224.0	5225.0	5226.0	5227.0	5228.0	5229.0	5230.0	5231.0	5232.0	5233.0	5234.0	5235.0	5236.0	5237.0	5238.0	5239.0	5240.0	5241.0	5242.0	5243.0	5244.0	5245.0
Efficiency (dBi)	-5.33	-5.38	-5.45	-5.77	-5.57	-5.70	-5.80	-5.63	-5.43	-5.54	-5.52	-5.54	-5.50	-5.81	-5.66	-5.85	-5.87	-5.70	-5.67	-5.81	-5.77	-5.75	-5.81	-5.81	-6.03	-5.92	-5.84	-5.62	-5.54
Gain (dBi)	1.14	0.84	0.66	0.62	-0.26	-0.39	-0.90	-0.32	0.31	1.20	-0.61	0.98	0.26	0.36	-0.08	-0.58	0.18	-0.52	0.21	-0.47	-0.05	0.43	0.71	0.09	-0.88	-0.30	-0.11	-0.12	0.65
Efficiency (%)	29.34	28.98	28.52	26.47	27.71	26.94	26.28	27.33	28.67	27.96	28.06	27.93	28.17	26.27	27.17	26.02	25.89	26.91	27.11	26.25	26.46	26.63	26.23	26.26	24.95	25.61	26.09	27.42	27.94
Directivity (dB)	6.47	6.22	6.10	6.39	5.31	5.31	4.90	5.32	5.74	6.73	4.91	6.52	5.76	6.17	5.58	5.26	6.05	5.18	5.88	5.34	5.72	6.18	6.52	5.89	5.15	5.62	5.72	5.50	6.19
Peak Gain Position (Theta)	120.00	135.00	135.00	45.00	45.00	15.00	30.00	135.00	135.00	135.00	30.00	135.00	120.00	45.00	45.00	105.00	30.00	30.00	60.00	135.00	120.00	120.00	135.00	45.00	75.00	135.00	30.00	135.00	135.00
Peak Gain Position (Phi)	30.00	30.00	15.00	315.00	330.00	150.00	315.00	345.00	15.00	15.00	330.00	15.00	30.00	300.00	345.00	15.00	285.00	315.00	300.00	15.00	15.00	15.00	15.00	315.00	45.00	30.00	330.00	330.00	15.00
Efficiency ThetaPol (%)	12.81	11.83	11.10	10.96	11.62	11.89	11.89	12.14	12.81	11.93	11.01	11.32	11.69	10.67	11.87	11.64	12.29	12.24	11.70	11.20	10.77	10.69	11.03	11.15	11.51	11.85	11.75	12.31	11.69
Efficiency PhiPol (%)	16.53	17.15	17.42	15.50	16.09	15.05	14.40	15.18	15.86	16.03	17.04	16.60	16.48	15.60	15.30	14.38	13.60	14.67	15.41	15.06	15.69	15.95	15.20	15.11	13.44	13.76	14.34	15.11	16.26
Upper Hem. Efficiency (%)	15.80	16.55	15.97	14.71	14.82	14.22	14.07	14.51	15.76	15.57	15.76	15.37	15.56	14.64	14.21	13.67	14.03	14.54	14.53	14.44	14.29	14.49	14.37	13.97	13.44	13.31	13.83	14.35	14.68
Lower Hem. Efficiency (%)	13.54	12.43	12.55	11.76	12.89	12.72	12.21	12.82	12.91	12.39	12.29	12.56	12.61	11.63	12.96	12.35	11.86	12.37	12.58	11.82	12.17	12.15	11.86	12.29	11.51	12.30	12.26	13.07	13.26
Gain 15deg (dBi)																													
E1(XZ)波瓣宽度	41.00	26.00	64.00	32.00	33.00	32.00	24.00	25.00	31.00	30.00	35.00	42.00	62.00	48.00	23.00	64.00	22.00	27.00	26.00	30.00	61.00	71.00	52.00	18.00	25.00	25.00	31.00	24.00	20.00
E1(XZ)前后比	1.41	0.66	0.10	0.00	1.43	1.42	3.51	4.82	4.66	4.23	3.79	2.04	0.78	1.49	1.97	1.20	4.08	3.93	6.75	5.02	2.47	1.80	2.46	2.08	1.98	2.28	1.95	5.09	6.13
E2(YZ)波瓣宽度	58.00	59.00	26.00	26.00	56.00	24.00	23.00	54.00	24.00	36.00	92.00	36.00	81.00	23.00	41.00	28.00	24.00	22.00	37.00	61.00	104.00	28.00	19.00	25.00	38.00	59.00	47.00	34.00	32.00
E2(YZ)前后比	5.97	3.87	5.91	8.49	6.70	6.74	4.81	4.05	5.13	3.79	2.40	4.22	4.74	5.29	6.16	6.65	6.66	4.86	3.58	4.84	2.11	2.60	5.68	7.68	8.44	8.34	8.07	8.94	3.32
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
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
Hc(XY)波瓣宽度	33.00	57.00	36.00	55.00	53.00	41.00	40.00	33.00	42.00	45.00	60.00	41.00	37.00	26.00	49.00	38.00	39.00	41.00	25.00	57.00	49.00	30.00	60.00	29.00	35.00	37.00	38.00	38.00	32.00
Hc(XY)前后比	3.92	1.92	2.21	1.60	2.18	2.47	3.00	4.56	4.74	4.17	1.61	0.00	1.16	1.07	2.99	3.31	3.46	3.16	6.03	4.44	2.99	2.41	1.43	1.66	3.17	2.70	5.91	5.78	7.36

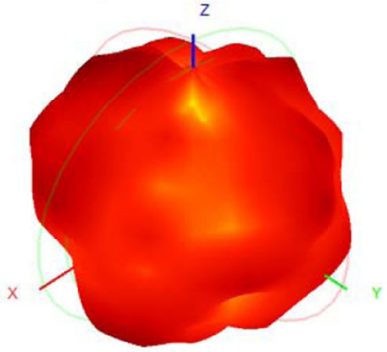




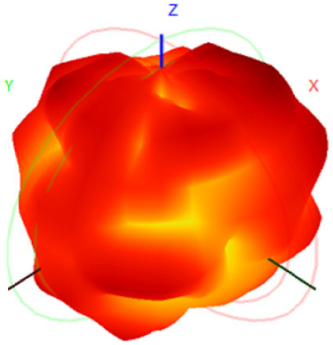




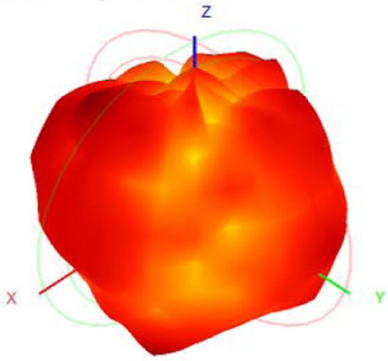
5155.0MHz H+V, Eff: 34.5%



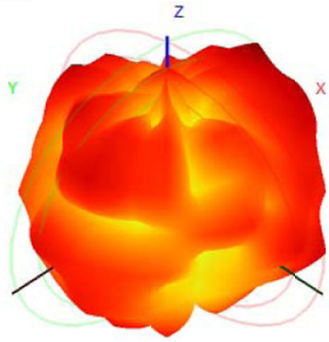
Back View



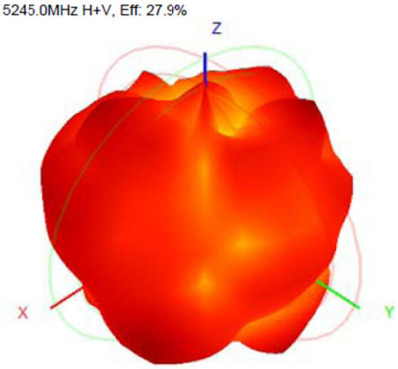
5200.0MHz H+V, Eff: 31.3%



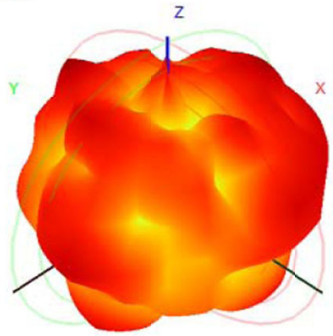
Back View



5245.0MHz H+V, Eff: 27.9%



Back View



ANT3

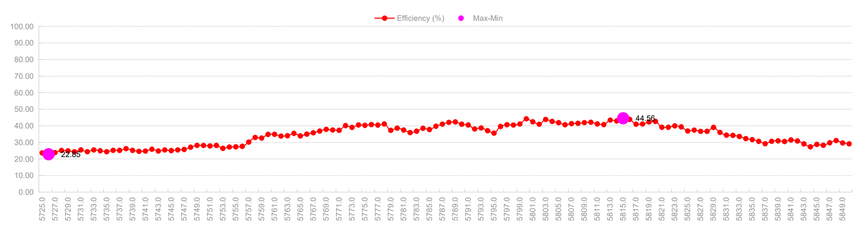
深圳市合拓科技有限公司

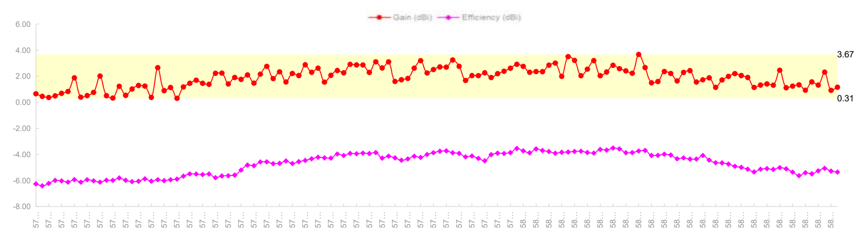
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Frequency (MHz)						5730.0	5731.0	5732.0	5733.0	5734.0	5735.0	5736.0	5737.0	5738.0	5739.0	5740.0	5741.0	5742.0	5743.0	5744.0	5745.0	5746.0	5747.0	5748.0	5749.0	5750.0	5751.0	5752.0	5753.0	5754.0	5755.0	5756.0	5757.0	5758.0	5759.0	5760.0	5761.0	5762.0	5763.0	5764.0	5765.0	5766.0
Efficiency (dBi)						-6.13	-5.94	-6.13	-5.94	-6.03	-6.13	-5.98	-5.99	-5.81	-5.99	-6.09	-6.06	-5.87	-6.06	-5.94	-6.02	-5.94	-5.89	-5.67	-5.50	-5.51	-5.55	-5.50	-5.78	-5.65	-5.63	-5.59	-5.20	-4.82	-4.87	-4.58	-4.57	-4.71	-4.68	-4.51	-4.70	-4.56
Gain (dBi)						0.83	1.88	0.39	0.51	0.76	2.01	0.50	0.32	1.23	0.53	1.02	1.29	1.24	0.37	2.66	0.89	1.13	0.31	1.18	1.46	1.69	1.46	1.38	2.22	2.24	1.41	1.90	1.76	2.10	1.47	2.16	2.76	1.82	2.34	1.56	2.21	2.05
Efficiency (%)						24.38	25.49	24.38	25.47	24.95	24.38	25.23	25.18	26.23	25.20	24.62	24.77	25.87	24.80	25.45	25.03	25.47	25.74	27.09	28.21	28.15	27.87	28.17	26.40	27.20	27.33	27.62	30.19	32.96	32.61	34.83	34.90	33.80	34.01	35.44	33.91	35.01
Directivity (dB)						6.96	7.81	6.52	6.45	6.79	8.14	6.48	6.31	7.04	6.52	7.11	7.35	7.11	6.43	8.60	6.91	7.07	6.20	6.85	6.95	7.20	7.00	6.88	8.01	7.89	7.04	7.49	6.96	6.92	6.34	6.74	7.33	6.53	7.02	6.07	6.91	6.61
Peak Gain Position (Theta)						135.00	135.00	135.00	135.00	75.00	135.00	60.00	150.00	75.00	120.00	135.00	135.00	120.00	150.00	75.00	75.00	150.00	150.00	120.00	150.00	150.00	75.00	75.00	135.00	75.00	150.00	150.00	120.00	90.00	135.00	135.00	135.00	150.00	150.00	150.00	150.00	150.00
Peak Gain Position (Phi)						225.00	240.00	195.00	225.00	240.00	240.00	225.00	255.00	240.00	210.00	255.00	240.00	195.00	255.00	225.00	195.00	240.00	255.00	210.00	255.00	255.00	255.00	195.00	210.00	240.00	255.00	270.00	225.00	195.00	240.00	195.00	225.00	270.00	255.00	270.00	240.00	255.00
Efficiency ThetaPol (%)						10.51	10.89	11.04	11.14	10.45	10.92	11.43	10.92	11.65	11.45	10.57	11.02	11.34	11.41	12.07	11.35	11.26	12.37	11.85	13.53	13.31	12.61	12.76	12.22	13.04	12.61	12.93	14.23	14.79	15.20	16.69	16.73	16.78	17.17	17.16	16.74	16.68
Efficiency PhiPol (%)						13.88	14.59	13.34	14.33	14.50	13.46	13.80	14.26	14.57	13.75	14.05	13.75	14.53	13.39	13.38	13.68	14.21	13.37	15.24	14.68	14.84	15.26	15.41	14.18	14.16	14.72	14.69	15.96	18.17	17.41	18.15	18.17	17.03	16.84	18.27	17.17	18.33
Upper Hem. Efficiency (%)						10.84	11.44	10.29	11.44	11.56	10.47	11.21	11.08	12.03	10.96	10.52	9.97	10.82	10.60	11.53	11.54	10.58	11.54	12.46	12.62	12.64	12.84	12.82	11.39	12.49	12.32	12.69	14.04	15.06	15.08	16.78	16.47	16.05	16.26	16.65	15.46	17.37
Lower Hem. Efficiency (%)						13.55	14.05	14.09	14.03	13.38	13.91	14.02	14.10	14.19	14.24	14.10	14.80	15.05	14.20	13.92	13.49	14.89	14.20	14.63	15.59	15.51	15.03	15.35	15.01	14.71	15.01	14.93	16.15	17.90	17.53	18.05	18.43	17.75	17.74	18.78	18.45	17.64
Gain 15deg (dBi)																																										
E1(XZ)波瓣宽度						80.00	42.00	85.00	60.00	68.00	61.00	39.00	49.00	33.00	50.00	50.00	62.00	38.00	49.00	67.00	50.00	48.00	25.00	36.00	24.00	55.00	84.00	50.00	77.00	84.00	87.00	26.00	41.00	21.00	20.00	63.00	35.00	44.00	74.00	19.00	32.00	20.00
E1(XZ)前后比						5.36	6.46	4.71	7.13	9.25	10.02	6.67	6.55	7.27	6.72	6.78	7.22	6.93	6.50	6.42	4.55	6.46	4.14	8.26	5.83	7.17	7.37	5.34	4.84	7.42	5.93	7.01	5.98	8.55	7.46	6.51	7.93	9.57	7.55	8.08	6.67	6.21
E2(YZ)波瓣宽度						31.00	24.00	35.00	26.00	22.00	24.00	20.00	18.00	32.00	28.00	25.00	34.00	32.00	23.00	31.00	23.00	35.00	32.00	33.00	29.00	40.00	49.00	24.00	20.00	21.00	30.00	21.00	35.00	35.00	34.00	39.00	26.00	22.00	26.00	21.00	29.00	26.00
E2(YZ)前后比						0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.50	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	0.14	0.00	0.00	0.00	0.00	0.00	0.00
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	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	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY)波瓣宽度						42.00	67.00	65.00	95.00	98.00	99.00	71.00	63.00	64.00	53.00	42.00	95.00	70.00	115.00	99.00	36.00	74.00	59.00	29.00	58.00	85.00	94.00	80.00	36.00	29.00	57.00	74.00	50.00	37.00	77.00	36.00	32.00	33.00	96.00	48.00	67.00	48.00
Hc(XY)前后比						5.35	3.09	2.96	0.85	0.54	0.00	2.11	1.78	0.00	3.27	3.49	1.42	2.68	0.00	0.63	2.01	0.06	2.37	4.11	3.78	1.20	1.14	0.00	0.72	0.00	2.57	0.42	4.56	5.77	2.26	0.90	0.00	0.00	1.78	0.00	1.22	4.63

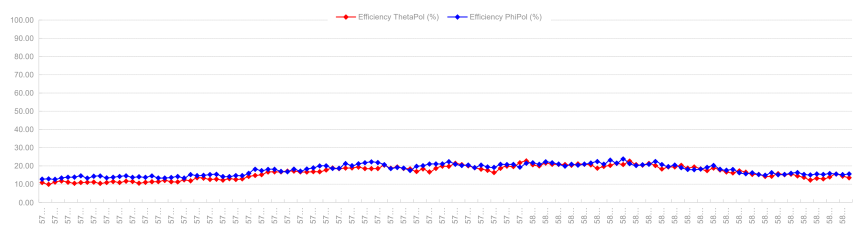
Frequency ID	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
Frequency (MHz)	5767.0	5768.0	5769.0	5770.0	5771.0	5772.0	5773.0	5774.0	5775.0	5776.0	5777.0	5778.0	5779.0	5780.0	5781.0	5782.0	5783.0	5784.0	5785.0	5786.0	5787.0	5788.0	5789.0	5790.0	5791.0	5792.0	5793.0	5794.0	5795.0	5796.0	5797.0	5798.0	5799.0	5800.0	5801.0	5802.0	5803.0	5804.0	5805.0	5806.0	5807.0	5808.0	5809.0	5810.0
Efficiency (dBi)	-4.46	-4.34	-4.22	-4.26	-4.28	-3.97	-4.08	-3.92	-3.95	-3.90	-3.93	-3.86	-4.28	-4.13	-4.27	-4.45	-4.35	-4.14	-4.23	-4.01	-3.87	-3.76	-3.73	-3.88	-3.92	-4.19	-4.12	-4.31	-4.49	-4.02	-3.91	-3.93	-3.86	-3.54	-3.73	-3.88	-3.58	-3.70	-3.78	-3.91	-3.84	-3.82	-3.78	-3.75
Gain (dBi)	2.87	2.30	2.62	1.55	2.07	2.44	2.26	2.91	2.87	2.86	2.29	3.10	2.63	3.10	1.60	1.73	1.83	2.62	3.19	2.25	2.51	2.71	2.70	3.25	2.76	1.67	2.05	2.05	2.26	1.90	2.19	2.38	2.61	2.92	2.75	2.30	2.36	2.35	2.85	3.01	1.99	3.50	3.21	2.04
Efficiency (%)	35.80	36.85	37.86	37.47	37.28	40.13	39.04	40.51	40.30	40.75	40.45	41.11	37.29	38.60	37.45	35.92	36.76	38.53	37.76	39.76	41.03	42.10	42.37	40.97	40.53	38.10	38.71	37.07	35.58	39.61	40.69	40.47	41.09	44.22	42.41	40.95	43.85	42.64	41.89	40.66	41.33	41.52	41.93	42.16
Directivity (dB)	7.33	6.64	6.84	5.81	6.36	6.40	6.35	6.83	6.82	6.76	6.22	6.96	6.92	7.23	5.86	6.18	6.18	6.76	7.42	6.25	6.38	6.47	6.43	7.12	6.68	5.87	6.17	6.36	6.75	5.92	6.10	6.31	6.47	6.46	6.48	6.18	5.94	6.05	6.63	6.92	5.83	7.32	6.99	5.79
Peak Gain Position (Theta)	135.00	75.00	75.00	135.00	135.00	60.00	150.00	150.00	150.00	75.00	75.00	75.00	135.00	75.00	30.00	135.00	150.00	75.00	90.00	45.00	75.00	135.00	135.00	135.00	135.00	45.00	150.00	150.00	150.00	150.00	75.00	75.00	135.00	135.00	135.00	135.00	150.00	150.00	150.00	150.00	135.00	135.00	135.00	135.00
Peak Gain Position (Phi)	240.00	225.00	210.00	195.00	225.00	225.00	240.00	255.00	240.00	225.00	225.00	210.00	300.00	210.00	30.00	165.00	270.00	240.00	225.00	225.00	225.00	240.00	225.00	315.00	315.00	240.00	255.00	255.00	255.00	255.00	210.00	195.00	240.00	315.00	180.00	210.00	270.00	240.00	255.00	255.00	240.00	240.00	300.00	315.00
Efficiency ThetaPol (%)	16.87	16.84	17.82	18.86	18.57	18.84	18.91	19.35	18.55	18.52	18.59	20.42	18.75	19.45	18.63	18.37	16.97	18.39	16.71	18.67	19.89	19.77	21.43	20.71	20.06	19.03	18.26	17.62	16.38	18.74	19.92	19.65	21.75	22.74	20.65	20.04	21.59	20.91	20.88	20.75	20.41	21.08	20.92	20.57
Efficiency PhiPol (%)	18.93	20.01	20.05	18.61	18.71	21.29	20.13	21.16	21.76	22.23	21.86	20.69	18.55	19.15	18.82	17.55	19.79	20.14	21.05	21.09	21.13	22.33	20.94	20.25	20.46	19.07	20.46	19.45	19.19	20.87	20.77	20.81	19.33	21.48	21.76	20.92	22.26	21.73	21.00	19.91	20.92	20.43	21.01	21.59
Upper Hem. Efficiency (%)	16.77	18.31	18.40	18.29	17.60	19.21	19.10	20.45	20.36	21.06	20.66	20.81	19.19	20.30	20.13	18.46	18.83	20.81	19.45	20.63	20.87	21.00	21.67	20.59	20.97	18.71	19.47	18.62	18.25	20.28	21.28	19.73	20.39	23.09	21.53	20.89	22.82	21.54	21.80	20.93	19.76	20.95	20.66	20.99
Lower Hem. Efficiency (%)	19.03	18.54	19.46	19.18	19.68	20.92	19.94	20.07	19.95	19.69	19.79	20.30	18.11	18.30	17.33	17.45	17.93	17.72	18.31	19.13	20.15	21.10	20.70	20.38	19.56	19.39	19.24	18.45	17.33	19.33	19.40	20.74	20.69	21.13	20.88	20.06	21.03	21.10	20.08	19.73	21.57	20.57	21.27	21.17
Gain 15deg (dBi)																																												
E1(XZ)波瓣宽度	22.00	22.00	60.00	75.00	74.00	22.00	37.00	32.00	69.00	46.00	89.00	34.00	41.00	81.00	40.00	74.00	28.00	20.00	31.00	28.00	21.00	20.00	52.00	70.00	79.00	58.00	37.00	36.00	20.00	19.00	124.00	41.00	38.00	79.00	32.00	38.00	31.00	36.00	31.00	68.00	53.00	43.00	44.00	74.00
E1(XZ)前后比	6.54	4.91	7.48	4.73	6.13	8.97	8.41	8.67	4.16	3.56	5.60	7.14	7.62	7.55	7.69	5.76	12.06	7.92	7.30	5.53	4.82	5.73	4.85	4.34	7.33	8.73	8.66	7.79	6.68	8.60	3.49	5.57	7.47	4.86	10.63	7.90	9.86	7.24	6.89	5.33	6.59	7.48	4.90	6.89
E2(YZ)波瓣宽度	33.00	31.00	47.00	22.00	24.00	41.00	22.00	23.00	21.00	28.00	29.00	30.00	36.00	23.00	44.00	23.00	20.00	18.00	19.00	19.00	29.00	42.00	24.00	35.00	17.00	39.00	22.00	21.00	20.00	31.00	42.00	33.00	41.00	20.00	19.00	40.00	20.00	26.00	25.00	22.00	32.00	35.00	61.00	44.00
E2(YZ)前后比	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.55	0.54	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.95	0.96	0.38	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.70
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	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	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	42.00	42.00	53.00	45.00	36.00	44.00	100.00	62.00	66.00	49.00	62.00	46.00	46.00	51.00	27.00	26.00	49.00	51.00	30.00	62.00	33.00	39.00	27.00	39.00	36.00	45.00	67.00	47.00	58.00	46.00	41.00	41.00	39.00	43.00	27.00	32.00	45.00	48.00	44.00	47.00	39.00	39.00	40.00	29.00
Hc(XY)前后比	4.66	3.63	2.64	0.47	1.25	0.00	0.00	0.48	1.37	4.32	4.71	1.65	1.30	0.98	0.51	0.00	0.00	2.66	5.36	1.25	3.73	2.85	1.85	0.00	0.00	0.00	0.00	2.91	1.64	5.59	5.45	2.06	0.96	0.00	0.00	0.00	3.40	1.30	5.78	3.56	1.78	2.27	0.03	0.00

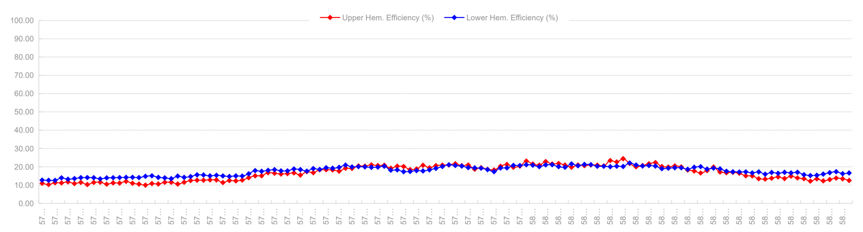
Frequency ID	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Frequency (MHz)	5811.0	5812.0	5813.0	5814.0	5815.0	5816.0	5817.0	5818.0	5819.0	5820.0	5821.0	5822.0	5823.0	5824.0	5825.0	5826.0	5827.0	5828.0	5829.0	5830.0	5831.0	5832.0	5833.0	5834.0	5835.0	5836.0	5837.0	5838.0	5839.0	5840.0	5841.0	5842.0	5843.0	5844.0	5845.0	5846.0	5847.0	5848.0		
Efficiency (dBi)	-3.86	-3.90	-3.62	-3.67	-3.51	-3.58	-3.87	-3.86	-3.74	-3.70	-4.08	-4.08	-3.98	-4.05	-4.33	-4.27	-4.36	-4.36	-4.08	-4.43	-4.64	-4.65	-4.74	-4.91	-4.99	-5.14	-5.34	-5.14	-5.09	-5.15	-5.02	-5.10	-5.36	-5.63	-5.41	-5.49	-5.26	-5.07		
Gain (dBi)	2.54	3.20	2.04	2.32	2.84	2.58	2.41	2.23	3.67	2.66	1.50	1.59	2.36	2.21	1.64	2.29	2.43	1.55	1.73	1.88	1.15	1.71	1.99	2.20	2.05	1.90	1.14	1.32	1.41	1.31	2.46	1.12	1.24	1.34	0.93	1.56	1.32	2.31		
Efficiency (%)	41.15	40.75	43.45	42.95	44.56	43.89	40.98	41.11	42.30	42.67	39.11	39.11	39.98	39.36	36.88	37.43	36.65	36.66	39.05	36.02	34.37	34.25	33.59	32.27	31.67	30.65	29.21	30.65	30.95	30.55	31.49	30.87	29.11	27.33	28.77	28.26	29.78	31.13		
Directivity (dB)	6.40	7.09	5.66	5.99	6.35	6.15	6.28	6.09	7.40	6.36	5.57	5.67	6.34	6.26	5.97	6.56	6.79	5.91	5.81	6.31	5.79	6.37	6.72	7.11	7.04	7.04	6.48	6.45	6.50	6.46	7.48	6.22	6.60	6.97	6.34	7.05	6.58	7.38		
Peak Gain Position (Theta)	135.00	135.00	150.00	150.00	75.00	150.00	150.00	135.00	135.00	75.00	75.00	150.00	75.00	150.00	150.00	150.00	150.00	135.00	135.00	135.00	135.00	135.00	150.00	150.00	150.00	150.00	150.00	150.00	135.00	150.00	135.00	150.00	75.00	150.00	150.00	150.00	150.00	135.00		
Peak Gain Position (Phi)	225.00	210.00	255.00	255.00	195.00	270.00	240.00	255.00	225.00	240.00	240.00	270.00	225.00	270.00	255.00	255.00	240.00	285.00	225.00	330.00	330.00	210.00	270.00	255.00	270.00	240.00	255.00	270.00	240.00	270.00	225.00	270.00	225.00	270.00	270.00	270.00	255.00	225.00		
Efficiency ThetaPol (%)	18.74	19.75	20.29	21.44	20.76	22.63	20.72	20.48	21.35	20.23	18.35	19.44	19.49	20.33	18.78	19.45	18.38	17.44	18.81	17.83	16.72	16.18	17.30	16.56	15.40	15.36	14.27	14.35	15.76	15.21	15.50	14.51	13.74	12.27	13.19	12.92	13.96	15.57		
Efficiency PhiPol (%)	22.40	21.00	23.16	21.51	23.80	21.26	20.26	20.63	20.95	22.44	20.76	19.67	20.49	19.02	18.10	17.98	18.27	19.22	20.24	18.19	17.65	18.07	16.29	15.71	16.27	15.28	14.94	16.30	15.19	15.34	15.99	16.36	15.37	15.06	15.59	15.34	15.82	15.56		
Upper Hem. Efficiency (%)	20.88	20.47	23.40	22.63	24.41	21.79	20.00	20.66	21.62	22.28	20.14	19.87	20.49	19.92	18.24	17.68	16.60	17.93	19.82	17.16	16.78	16.98	16.44	15.08	15.03	13.45	13.27	13.75	14.48	13.57	14.86	13.88	13.45	12.14	13.40	12.27	13.00	13.82		
Lower Hem. Efficiency (%)	20.27	20.28	20.05	20.32	20.16	22.10	20.99	20.45	20.68	20.38	18.97	19.25	19.49	19.44	18.64	19.75	20.06	18.73	19.24	18.86	17.58	17.27	17.15	17.19	16.64	17.19	15.94	16.90	16.47	16.97	16.63	16.99	15.66	15.20	15.37	15.99	16.78	17.31		
Gain 15deg (dBi)																																								
E1(XZ)波瓣宽度	23.00	36.00	33.00	36.00	28.00	24.00	46.00	41.00	52.00	85.00	24.00	44.00	34.00	34.00	43.00	159.00	55.00	44.00	45.00	19.00	54.00	35.00	43.00	19.00	21.00	38.00	69.00	51.00	20.00	42.00	22.00	23.00	32.00	19.00	79.00	23.00	69.00	20.00		
E1(XZ)前后比	10.20	6.75	9.81	7.23	8.78	5.43	4.98	7.73	5.70	5.85	8.15	7.53	8.54	9.06	5.57	2.53	5.32	6.18	5.51	7.67	7.38	8.26	7.15	8.90	6.88	4.37	3.17	4.38	5.41	4.92	8.19	7.64	6.70	7.52	3.35	4.94	3.83	6.96		
E2(YZ)波瓣宽度	46.00	21.00	21.00	19.00	26.00	20.00	27.00	33.00	32.00	50.00	42.00	20.00	20.00	23.00	21.00	25.00	33.00	35.00	42.00	44.00	41.00	27.00	22.00	25.00	19.00	21.00	31.00	20.00	32.00	29.00	56.00	21.00	28.00	23.00	24.00	30.00	32.00	35.00		
E2(YZ)前后比	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	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	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.07		
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	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	1.50	1.50	1.50	1.50	1.50	1.50	1.50		
Hc(XY)波瓣宽度	48.00	32.00	45.00	47.00	56.00	43.00	40.00	33.00	25.00	42.00	47.00	53.00	54.00	51.00	47.00	43.00	80.00	49.00	108.00	22.00	34.00	43.00	26.00	43.00	46.00	70.00	52.00	31.00	92.00	34.00	27.00	37.00	59.00	50.00	76.00	23.00	50.00	55.00		
Hc(XY)前后比	1.03	2.97	2.24	4.26	2.80	3.62	4.44	2.44	3.09	0.00	0.00	0.00	2.99	2.79	4.10	5.46	2.68	1.43	0.00	1.59	0.10	3.96	4.06	5.51	4.87	3.34	3.42	1.68	0.00	2.14	3.07	3.04	2.38	1.73	0.31	2.18	4.38	0.00		

Empty

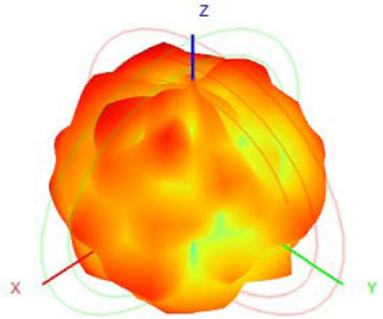




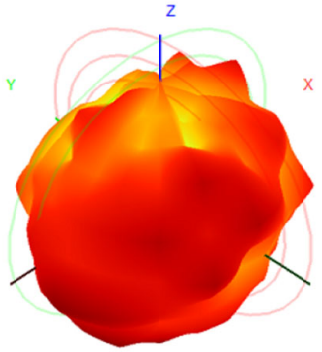




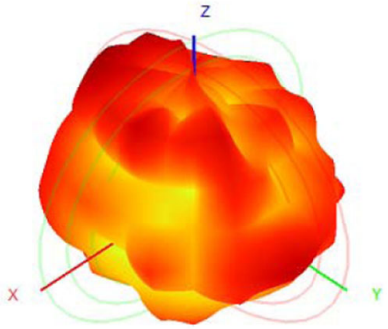
5730.0MHz H+V, Eff: 24.4%



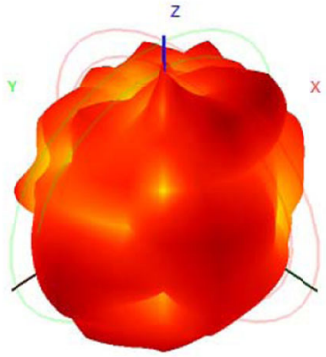
Back View



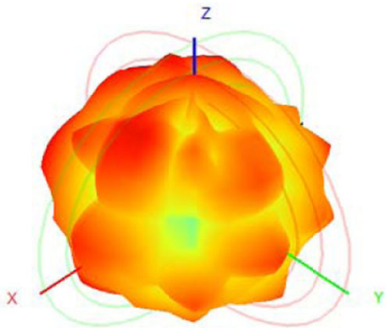
5789.0MHz H+V, Eff: 42.4%



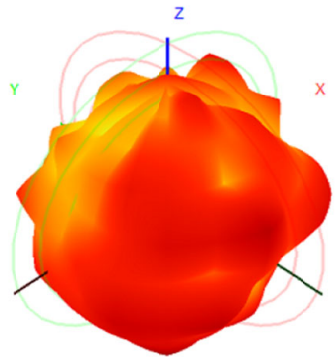
Back View



5848.0MHz H+V, Eff: 31.1%



Back View



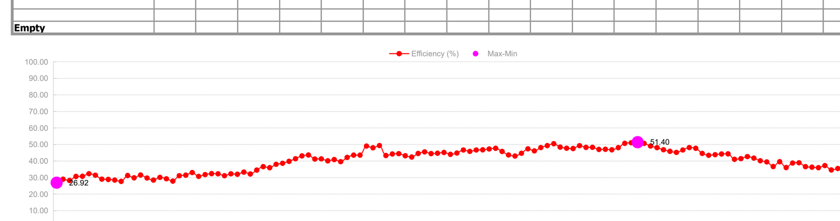
ANT4

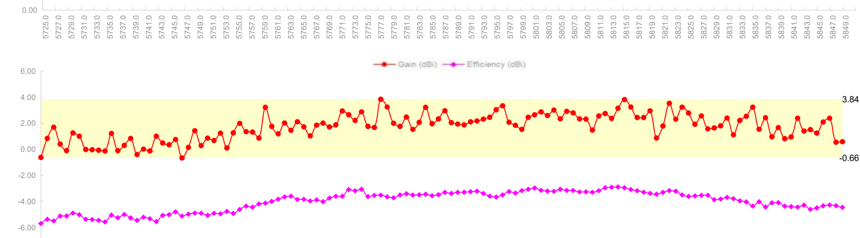
深圳市合拓科技有限公司

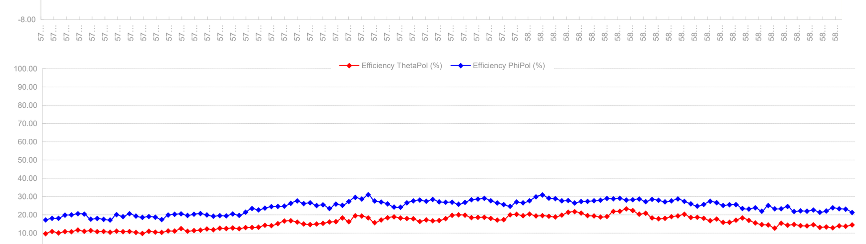
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Frequency (MHz)						5730.0	5731.0	5732.0	5733.0	5734.0	5735.0	5736.0	5737.0	5738.0	5739.0	5740.0	5741.0	5742.0	5743.0	5744.0	5745.0	5746.0	5747.0	5748.0	5749.0	5750.0	5751.0	5752.0	5753.0	5754.0	5755.0	5756.0	5757.0	5758.0	5759.0	5760.0	5761.0	5762.0	5763.0	5764.0	5765.0	5766.0
Efficiency (dBi)						-4.90	-5.02	-5.37	-5.39	-5.45	-5.57	-5.05	-5.25	-5.01	-5.27	-5.45	-5.21	-5.33	-5.55	-5.07	-5.02	-4.81	-5.12	-4.98	-4.90	-4.91	-5.07	-4.91	-4.95	-4.77	-4.92	-4.62	-4.36	-4.44	-4.20	-4.13	-4.00	-3.83	-3.65	-3.60	-3.85	-3.84
Gain (dBi)						1.25	1.00	-0.01	-0.03	-0.07	-0.13	1.21	-0.10	0.30	0.83	-0.41	0.01	-0.13	1.00	0.48	0.34	0.75	-0.66	0.14	1.42	0.28	0.86	0.67	1.24	0.10	1.26	1.98	1.35	1.32	0.86	3.21	1.76	1.19	2.02	1.46	2.11	1.72
Efficiency (%)						32.34	31.44	29.06	28.88	28.50	27.70	31.23	29.86	31.55	29.74	28.49	30.11	29.30	27.87	31.12	31.46	33.06	30.73	31.80	32.39	32.27	31.11	32.28	32.00	33.33	32.18	34.53	36.60	35.97	38.03	38.62	39.83	41.40	43.11	43.67	41.21	41.32
Directivity (dB)						6.16	6.02	5.35	5.36	5.38	5.44	6.27	5.14	5.31	6.10	5.05	5.22	5.20	6.55	5.55	5.37	5.56	4.46	5.12	6.32	5.20	5.93	5.59	6.19	4.88	6.19	6.60	5.72	5.76	5.06	7.35	5.76	5.02	5.67	5.06	5.96	5.56
Peak Gain Position (Theta)						75.00	75.00	0.00	135.00	135.00	135.00	135.00	135.00	135.00	120.00	135.00	120.00	75.00	135.00	135.00	135.00	135.00	120.00	120.00	90.00	75.00	135.00	135.00	45.00	90.00	135.00	75.00	75.00	120.00	60.00	30.00	90.00	30.00	135.00	135.00	135.00	120.00
Peak Gain Position (Phi)						210.00	345.00	15.00	345.00	30.00	15.00	30.00	30.00	30.00	30.00	345.00	30.00	60.00	15.00	45.00	30.00	30.00	45.00	60.00	345.00	45.00	30.00	15.00	225.00	330.00	30.00	330.00	330.00	30.00	240.00	15.00	225.00	0.00	30.00	30.00	120.00	30.00
Efficiency ThetaPol (%)						11.70	11.00	11.42	10.83	10.94	10.53	11.10	10.82	10.92	10.40	9.85	11.01	10.56	10.43	11.21	11.14	12.50	11.04	11.43	11.65	12.30	11.85	12.68	12.54	12.83	12.43	13.05	13.13	13.24	14.33	14.09	15.20	16.63	16.79	16.04	15.04	14.70
Efficiency PhiPol (%)						20.64	20.44	17.64	18.05	17.56	17.18	20.13	19.03	20.63	19.33	18.65	19.11	18.74	17.44	19.91	20.32	20.56	19.69	20.37	20.73	19.97	19.26	19.60	19.46	20.49	19.74	21.48	23.47	22.73	23.71	24.53	24.63	24.77	26.32	27.63	26.17	26.61
Upper Hem. Efficiency (%)						16.30	16.50	14.70	14.64	14.62	13.53	15.67	15.50	15.95	14.10	14.69	14.74	14.22	13.42	15.13	15.35	16.61	14.20	16.11	16.02	16.21	15.82	16.37	16.27	16.83	15.23	18.12	18.79	19.47	19.10	20.86	20.29	22.22	23.12	23.44	21.71	20.78
Lower Hem. Efficiency (%)						16.04	14.94	14.37	14.23	13.87	14.17	15.56	14.35	15.61	15.63	13.81	15.38	15.08	14.46	15.99	16.11	16.45	16.53	15.69	16.36	16.06	15.29	15.91	15.73	16.50	16.94	16.41	17.81	16.50	18.93	17.76	19.55	19.18	20.00	20.23	19.51	20.54
Gain 15deg (dBi)																																										
E1(XZ)波瓣宽度						24.00	38.00	48.00	36.00	56.00	50.00	45.00	39.00	25.00	34.00	34.00	33.00	26.00	20.00	54.00	21.00	54.00	24.00	29.00	27.00	26.00	36.00	44.00	32.00	55.00	26.00	24.00	20.00	37.00	46.00	33.00	21.00	46.00	56.00	50.00	24.00	23.00
E1(XZ)前后比						0.00	0.20	0.00	1.60	0.00	3.07	1.15	1.46	0.93	1.00	1.09	2.87	2.46	2.30	0.65	0.00	0.00	1.10	1.82	1.11	0.88	2.72	2.35	2.43	0.13	0.99	1.75	2.42	1.02	1.02	3.30	5.05	5.10	3.99	1.41	0.00	0.00
E2(YZ)波瓣宽度						46.00	47.00	25.00	24.00	39.00	40.00	27.00	27.00	30.00	75.00	24.00	18.00	33.00	32.00	44.00	26.00	32.00	48.00	46.00	62.00	25.00	36.00	39.00	19.00	23.00	26.00	42.00	26.00	19.00	19.00	62.00	28.00	36.00	23.00	82.00	30.00	31.00
E2(YZ)前后比						7.36	5.25	6.81	7.21	5.37	3.91	6.58	3.51	2.95	1.99	4.05	2.71	4.92	4.47	4.66	4.13	5.21	5.35	5.27	4.46	4.90	4.45	5.26	4.82	3.79	5.10	4.68	1.95	5.83	8.66	3.52	7.91	6.36	6.07	4.68	4.07	5.81
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	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	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY)波瓣宽度						34.00	33.00	36.00	33.00	63.00	56.00	25.00	32.00	26.00	30.00	37.00	53.00	32.00	35.00	36.00	30.00	29.00	24.00	35.00	23.00	34.00	34.00	67.00	43.00	26.00	27.00	37.00	37.00	31.00	24.00	36.00	30.00	35.00	25.00	29.00	40.00	44.00
Hc(XY)前后比						0.94	3.43	3.25	3.78	1.60	1.91	6.70	2.20	4.73	4.05	0.88	2.62	2.68	4.18	2.42	2.25	4.66	6.36	3.78	6.35	3.04	4.80	1.80	2.69	4.19	6.47	1.21	3.50	1.52	4.46	0.96	5.51	4.15	2.71	4.76	2.58	2.40
Empty																																										

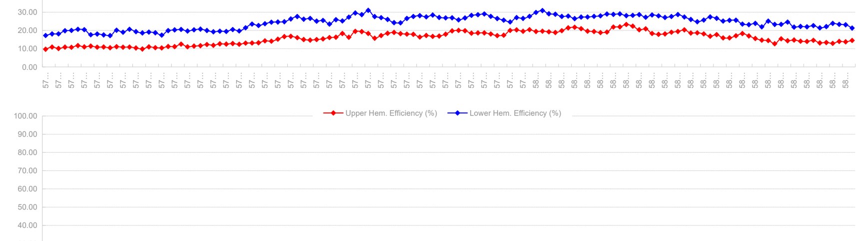
Frequency ID	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
Frequency (MHz)	5767.0	5768.0	5769.0	5770.0	5771.0	5772.0	5773.0	5774.0	5775.0	5776.0	5777.0	5778.0	5779.0	5780.0	5781.0	5782.0	5783.0	5784.0	5785.0	5786.0	5787.0	5788.0	5789.0	5790.0	5791.0	5792.0	5793.0	5794.0	5795.0	5796.0	5797.0	5798.0	5799.0	5800.0	5801.0	5802.0	5803.0	5804.0	5805.0	5806.0	5807.0	5808.0	5809.0	5810.0
Efficiency (dBi)	-3.97	-3.89	-4.02	-3.75	-3.61	-3.61	-3.09	-3.19	-3.07	-3.63	-3.54	-3.52	-3.65	-3.72	-3.51	-3.42	-3.51	-3.50	-3.45	-3.56	-3.48	-3.31	-3.39	-3.31	-3.30	-3.25	-3.21	-3.39	-3.60	-3.66	-3.50	-3.25	-3.36	-3.17	-3.07	-2.97	-3.15	-3.21	-3.23	-3.07	-3.16	-3.16	-3.28	-3.27
Gain (dBi)	1.03	1.85	2.01	1.71	1.88	2.94	2.65	2.21	2.87	1.76	1.67	3.84	3.24	2.00	1.76	2.47	1.53	2.07	3.22	1.96	2.33	2.96	2.05	1.94	1.87	2.11	2.17	2.31	2.46	3.03	3.33	2.08	1.84	1.53	2.45	2.65	2.87	2.59	3.01	2.34	2.91	2.79	2.34	2.31
Efficiency (%)	40.13	40.88	39.63	42.20	43.56	43.59	49.05	48.02	49.35	43.34	44.25	44.46	43.19	42.43	44.57	45.54	44.51	44.72	45.18	44.05	44.83	46.68	45.85	46.68	46.78	47.29	47.71	45.79	43.68	43.03	44.68	47.37	46.13	48.15	49.31	50.49	48.39	47.76	47.54	49.29	48.26	48.30	47.01	47.12
Directivity (dB)	5.00	5.74	6.03	5.46	5.49	6.55	5.75	5.40	5.94	5.39	5.21	7.36	6.89	5.72	5.27	5.89	5.05	5.57	6.67	5.52	5.82	6.26	5.43	5.24	5.17	5.36	5.39	5.70	6.05	6.69	6.83	5.32	5.20	4.70	5.52	5.62	6.02	5.80	6.24	5.41	6.08	5.95	5.62	5.58
Peak Gain Position (Theta)	135.00	120.00	120.00	30.00	135.00	30.00	135.00	135.00	135.00	75.00	30.00	75.00	30.00	30.00	30.00	75.00	75.00	135.00	135.00	120.00	30.00	30.00	135.00	30.00	60.00	75.00	135.00	75.00	135.00	135.00	135.00	30.00	45.00	135.00	75.00	75.00	75.00	135.00	135.00	135.00	45.00	75.00	120.00	75.00
Peak Gain Position (Phi)	45.00	45.00	45.00	345.00	345.00	30.00	30.00	45.00	30.00	45.00	300.00	60.00	330.00	330.00	45.00	210.00	210.00	30.00	30.00	15.00	315.00	15.00	45.00	15.00	345.00	330.00	30.00	330.00	30.00	30.00	30.00	270.00	210.00	330.00	210.00	105.00	345.00	15.00	30.00	45.00	225.00	225.00	30.00	105.00
Efficiency ThetaPol (%)	15.01	15.37	16.11	16.31	18.33	16.28	19.49	19.36	18.34	15.74	17.21	18.43	18.92	18.26	17.99	17.89	16.41	17.26	16.73	16.92	17.95	19.76	20.04	19.84	18.50	18.65	18.66	18.06	17.17	17.39	20.01	20.32	19.55	20.42	19.42	19.60	19.26	18.87	19.87	21.43	21.76	20.97	19.62	19.41
Efficiency PhiPol (%)	25.12	25.51	23.51	25.89	25.24	27.32	29.56	28.66	31.02	27.60	27.04	26.03	24.27	24.17	26.59	27.66	28.11	27.46	28.45	27.13	26.89	26.93	25.81	26.84	28.28	28.63	29.06	27.73	26.51	25.64	24.67	27.05	26.58	27.74	29.89	30.89	29.13	28.89	27.67	27.86	26.50	27.33	27.39	27.72
Upper Hem. Efficiency (%)	19.92	20.63	20.66	21.82	24.69	23.87	26.57	25.05	25.93	22.33	23.15	23.61	24.76	24.40	25.40	25.68	24.38	24.44	23.29	22.47	23.72	25.52	25.35	26.55	27.23	26.48	26.46	24.80	23.06	22.58	24.10	27.43	26.33	27.87	28.26	28.21	26.33	24.22	24.12	26.06	26.08	27.02	26.25	27.35
Lower Hem. Efficiency (%)	20.21	20.25	18.97	20.38	18.88	19.72	22.48	22.97	23.42	21.02	21.10	20.85	18.44	18.03	19.18	19.87	20.14	20.28	21.88	21.58	21.11	21.17	20.50	20.13	19.56	20.80	21.25	20.99	20.62	20.45	20.58	19.94	19.80	20.29	21.05	22.28	22.06	23.54	23.42	23.22	22.18	21.28	20.76	19.78
Gain 15deg (dBi)																																												
E1(XZ)波瓣宽度	39.00	38.00	24.00	23.00	26.00	40.00	51.00	27.00	33.00	23.00	30.00	25.00	21.00	44.00	28.00	27.00	26.00	20.00	25.00	31.00	29.00	47.00	26.00	24.00	53.00	22.00	38.00	25.00	21.00	52.00	30.00	22.00	47.00	20.00	34.00	26.00	43.00	63.00	59.00	125.00	19.00	47.00	18.00	37.00
E1(XZ)前后比	0.17	1.61	0.69	1.67	5.16	3.14	2.25	1.97	1.82	1.46	0.70	1.77	3.73	3.19	3.63	4.80	4.63	4.56	5.01	4.57	3.02	1.07	0.43	1.95	4.71	4.58	4.70	3.57	4.95	2.62	3.27	1.80	1.19	2.41	5.30	4.35	4.57	3.78	2.07	0.60	2.45	1.66	1.25	1.23
E2(YZ)波瓣宽度	59.00	22.00	58.00	23.00	25.00	24.00	39.00	23.00	46.00	18.00	32.00	23.00	19.00	21.00	24.00	19.00	24.00	62.00	23.00	28.00	36.00	25.00	35.00	20.00	41.00	19.00	66.00	24.00	21.00	24.00	39.00	19.00	21.00	62.00	56.00	43.00	20.00	23.00	18.00	64.00	22.00	18.00	24.00	21.00
E2(YZ)前后比	3.87	3.62	2.98	4.08	8.13	6.25	6.80	5.48	2.69	4.58	3.57	2.99	6.33	6.82	8.48	7.95	5.11	5.70	6.99	4.11	3.87	2.89	3.25	4.37	6.52	9.43	5.67	8.03	5.07	4.14	2.28	7.72	4.50	5.93	7.79	6.93	8.98	5.71	3.35	3.13	4.42	6.63	6.37	6.35
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	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	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	37.00	55.00	40.00	33.00	57.00	27.00	40.00	30.00	23.00	41.00	23.00	42.00	60.00	30.00	47.00	48.00	25.00	51.00	30.00	39.00	43.00	27.00	46.00	40.00	37.00	39.00	35.00	34.00	40.00	27.00	33.00	64.00	37.00	25.00	41.00	33.00	41.00	39.00	39.00	49.00	34.00	38.00	33.00	38.00
Hc(XY)前后比	2.72	0.74	1.83	0.84	2.04	4.52	3.27	5.08	2.55	2.52	3.48	1.89	0.66	1.92	1.53	5.06	2.20	2.32	4.93	3.00	1.58	1.76	0.00	1.37	1.37	2.42	1.22	2.85	3.55	4.40	1.62	0.00	0.35	1.01	3.00	1.84	3.32	2.54	0.69	2.19	0.29	0.00	0.00	1.01

Frequency ID	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Frequency (MHz)	5811.0	5812.0	5813.0	5814.0	5815.0	5816.0	5817.0	5818.0	5819.0	5820.0	5821.0	5822.0	5823.0	5824.0	5825.0	5826.0	5827.0	5828.0	5829.0	5830.0	5831.0	5832.0	5833.0	5834.0	5835.0	5836.0	5837.0	5838.0	5839.0	5840.0	5841.0	5842.0	5843.0	5844.0	5845.0	5846.0	5847.0	5848.0		
Efficiency (dBi)	-3.30	-3.18	-2.95	-2.92	-2.89	-2.95	-3.09	-3.18	-3.29	-3.39	-3.45	-3.31	-3.17	-3.21	-3.51	-3.62	-3.58	-3.54	-3.53	-3.87	-3.82	-3.70	-3.79	-3.96	-4.04	-4.36	-4.02	-4.43	-4.11	-4.09	-4.37	-4.40	-4.44	-4.29	-4.61	-4.50	-4.34	-4.28		
Gain (dBi)	1.48	2.56	2.74	2.37	3.15	3.82	3.24	2.44	2.44	2.95	0.86	1.79	3.53	2.31	3.23	2.78	1.92	2.56	1.57	1.64	1.80	2.39	1.11	2.22	2.53	3.23	1.54	2.42	0.96	1.66	0.81	0.95	2.38	1.40	1.51	1.24	2.09	2.38		
Efficiency (%)	46.81	48.11	50.69	51.05	51.40	50.66	49.07	48.10	46.84	45.87	45.23	46.69	48.14	47.71	44.62	43.48	43.86	44.25	44.36	41.05	41.46	42.70	41.76	40.17	39.46	36.68	39.60	36.06	38.78	38.95	36.60	36.29	35.98	37.25	34.61	35.49	36.80	37.34		
Directivity (dB)	4.77	5.73	5.69	5.29	6.04	6.77	6.33	5.61	5.73	6.34	4.31	5.09	6.70	5.52	6.74	6.40	5.50	6.10	5.10	5.51	5.63	6.09	4.90	6.18	6.57	7.58	5.56	6.85	5.07	5.76	5.18	5.35	6.82	5.69	6.12	5.74	6.44	6.66		
Peak Gain Position (Theta)	75.00	45.00	135.00	90.00	135.00	135.00	135.00	75.00	75.00	75.00	45.00	45.00	75.00	135.00	135.00	135.00	135.00	135.00	120.00	120.00	75.00	30.00	135.00	135.00	135.00	135.00	135.00	75.00	75.00	75.00	135.00	30.00	135.00	75.00	75.00	135.00	135.00	75.00		
Peak Gain Position (Phi)	45.00	345.00	30.00	345.00	30.00	45.00	45.00	210.00	210.00	105.00	0.00	0.00	345.00	120.00	15.00	45.00	30.00	45.00	30.00	45.00	345.00	330.00	15.00	30.00	30.00	30.00	45.00	210.00	210.00	60.00	330.00	345.00	30.00	240.00	105.00	45.00	45.00	345.00		
Efficiency ThetaPol (%)	18.82	19.11	21.88	21.98	23.28	22.39	20.39	20.88	18.34	17.88	18.11	19.02	19.43	20.34	18.59	18.71	18.14	16.84	17.71	15.91	15.93	17.08	18.29	17.00	15.59	14.69	14.48	12.74	15.44	14.36	14.76	14.09	13.98	14.59	13.18	13.38	12.93	13.99		
Efficiency PhiPol (%)	27.99	29.00	28.81	29.07	28.12	28.28	28.68	27.22	28.50	27.99	27.12	27.67	28.72	27.36	26.02	24.77	25.72	27.41	26.66	25.14	25.54	25.62	23.47	23.17	23.87	22.00	25.11	23.32	23.35	24.59	21.84	22.20	22.01	22.65	21.43	22.11	23.88	23.34		
Upper Hem. Efficiency (%)	27.07	26.94	26.61	27.28	27.30	26.59	26.21	27.13	26.71	25.88	25.70	25.14	25.32	24.76	22.92	22.78	23.53	24.53	24.36	22.09	22.11	22.22	21.80	20.77	20.31	18.98	21.24	18.90	19.97	19.74	19.68	17.42	19.07	19.87	17.82	18.21	18.99	19.25		
Lower Hem. Efficiency (%)	19.75	21.17	24.08	23.76	24.10	24.08	22.86	20.97	20.13	19.99	19.52	21.55	22.82	22.95	21.69	20.69	20.33	19.72	20.01	18.96	19.35	20.48	19.96	19.40	19.15	17.70	18.36	17.16	18.81	19.22	16.92	18.87	16.91	17.38	16.79	17.28	17.82	18.09		
Gain 15deg (dBi)																																								
E1(XZ)波瓣宽度	21.00	57.00	30.00	43.00	37.00	56.00	22.00	22.00	23.00	29.00	44.00	23.00	26.00	42.00	22.00	47.00	24.00	19.00	51.00	25.00	28.00	23.00	52.00	43.00	23.00	23.00	25.00	64.00	37.00	39.00	44.00	39.00	39.00	40.00	52.00	70.00	46.00	24.00		
E1(XZ)前后比	4.95	4.17	5.39	3.01	4.96	1.87	0.20	0.00	0.34	3.05	3.02	4.50	7.10	5.58	7.41	1.82	3.03	0.34	0.00	3.36	3.96	3.72	3.62	4.28	5.44	1.28	0.96	1.10	1.65	2.41	5.92	1.57	2.97	1.70	1.48	1.56	2.33	3.51		
E2(YZ)波瓣宽度	53.00	30.00	47.00	26.00	60.00	24.00	20.00	29.00	29.00	22.00	38.00	22.00	20.00	37.00	31.00	39.00	27.00	32.00	47.00	47.00	27.00	56.00	23.00	37.00	39.00	51.00	19.00	23.00	26.00	20.00	24.00	20.00	26.00	47.00	25.00	41.00	21.00	39.00		
E2(YZ)前后比	4.86	7.23	3.95	6.93	4.22	3.52	2.99	3.10	4.65	3.91	7.86	10.70	12.15	5.79	4.65	4.41	3.34	2.99	4.41	6.02	9.49	4.37	7.77	4.82	4.46	3.06	1.31	2.65	4.76	5.88	3.96	4.13	4.30	2.05	4.22	6.70	3.61	3.54		
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	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	1.50	1.50	1.50	1.50	1.50	1.50	1.50		
Hc(XY)波瓣宽度	48.00	39.00	40.00	38.00	38.00	38.00	38.00	45.00	48.00	27.00	50.00	37.00	42.00	35.00	40.00	42.00	31.00	48.00	50.00	55.00	34.00	44.00	64.00	29.00	56.00	32.00	27.00	26.00	32.00	23.00	38.00	62.00	37.00	31.00	38.00	32.00	33.00	49.00		
Hc(XY)前后比	1.45	1.12	2.15	1.82	1.36	1.79	0.37	0.00	1.24	3.03	1.56	1.91	1.02	3.15	2.12	0.00	0.79	0.00	1.30	1.76	3.29	2.92	1.27	4.22	2.16	0.63	3.54	0.60	4.19	0.00	2.68	2.70	3.55	2.49	0.98	1.09	3.52	1.42		

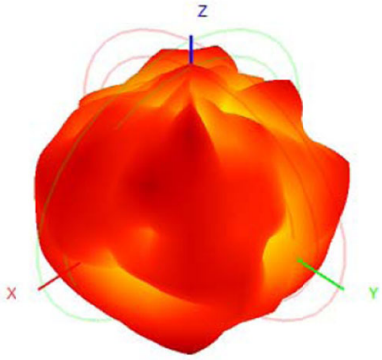




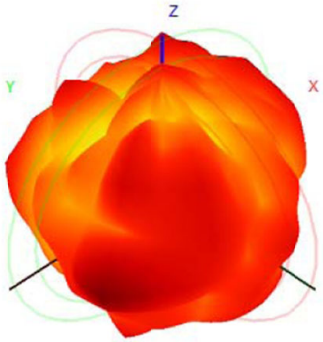




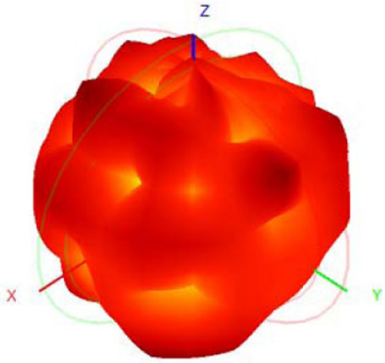
5730.0MHz H+V, Eff: 32.3%



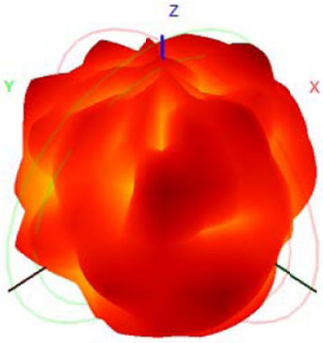
Back View



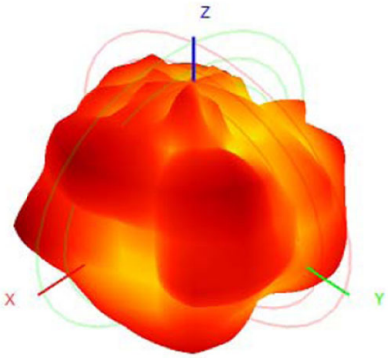
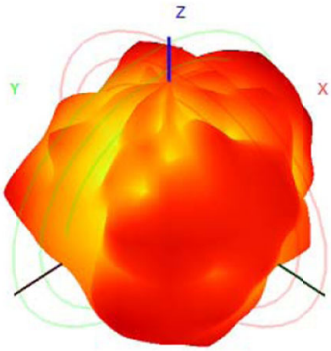
5789.0MHz H+V, Eff: 45.8%



Back View



5848.0MHz H+V, Eff: 37.3%



Back View