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

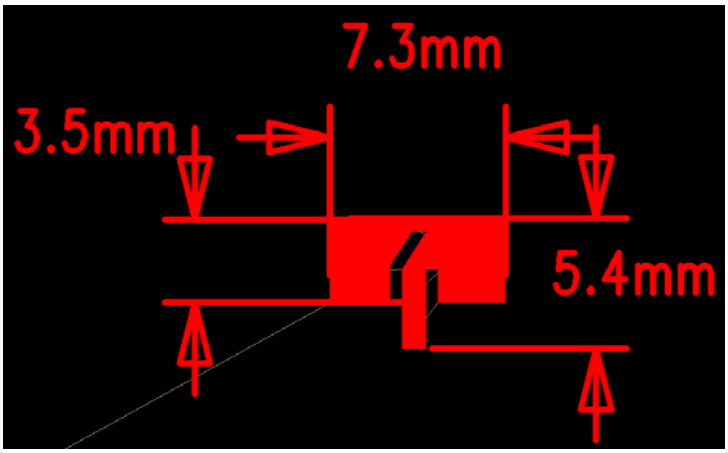
1. General Information

1.1 General Information of testing institutions

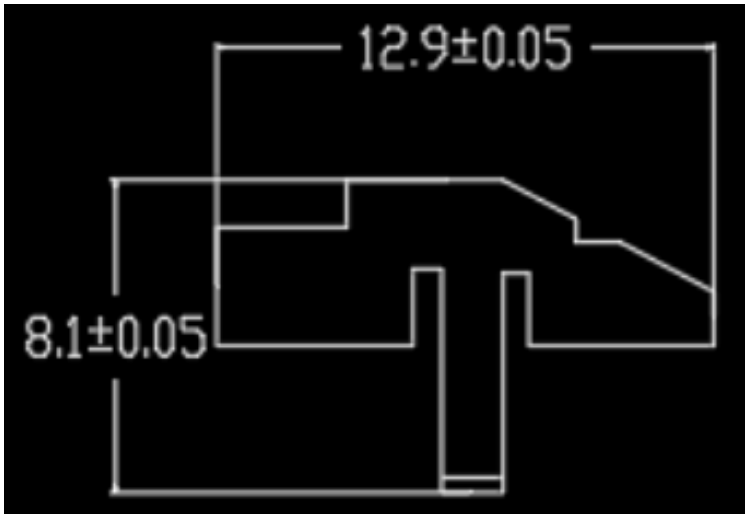
Name	Shenzhen Hetuo Technology Co. ,Ltd.
Addres s	Room 1202 B, Building C6, Hengfeng Industrial City, Xixiang, Ba oan District, Shenzhen
Tel	18665849001
E-mail	18665849001@163.com
Equipm ent	Agilent 5071C

1.2 Testing principle

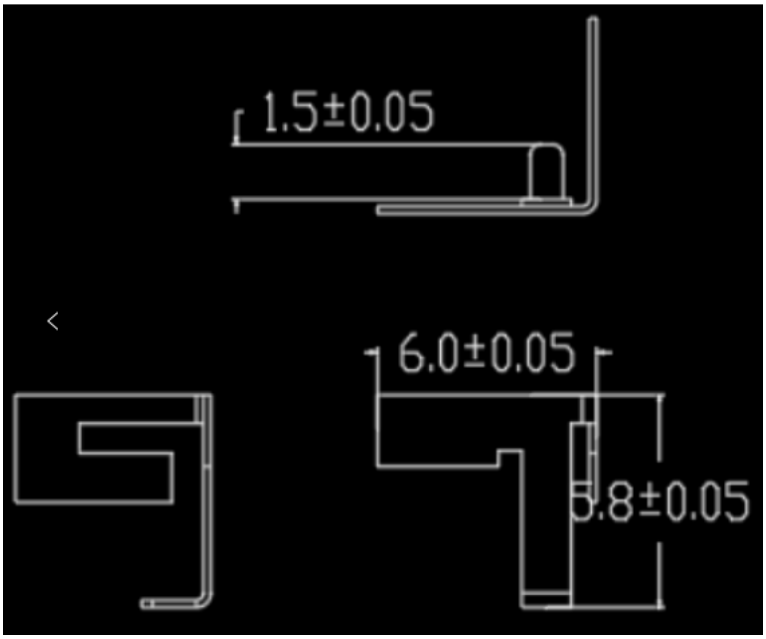
Antenna Photo & Lenght(mm)_ANT1: PCB antenna



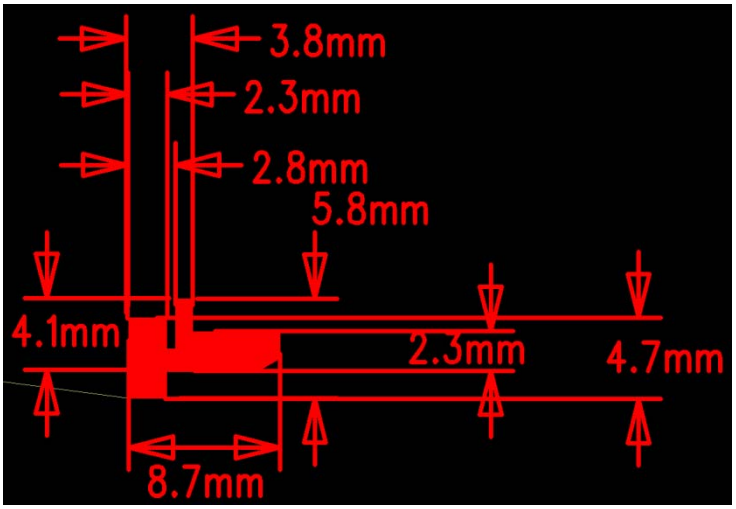
Antenna Photo & Lenght(mm)_ANT2: Stainless steel antenna



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



Antenna Photo & Lenght(mm)_ANT4: PCB antenna



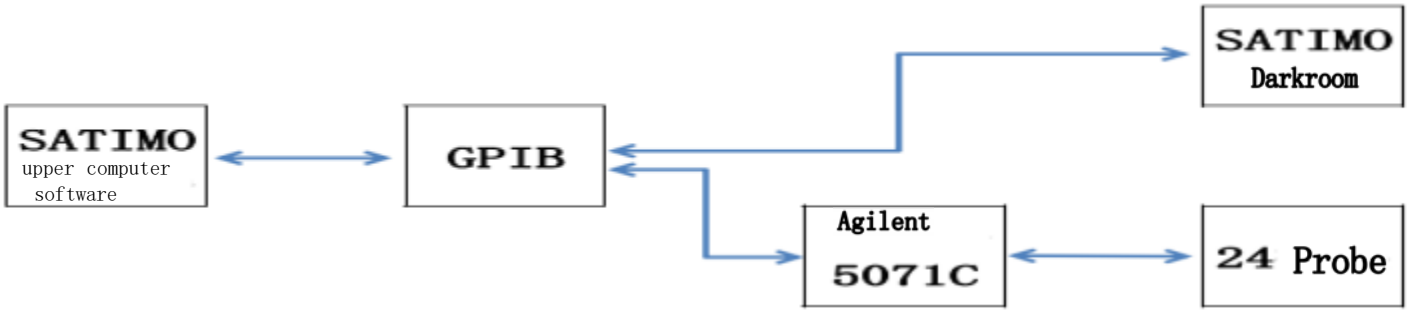
1.3 Test equipment

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

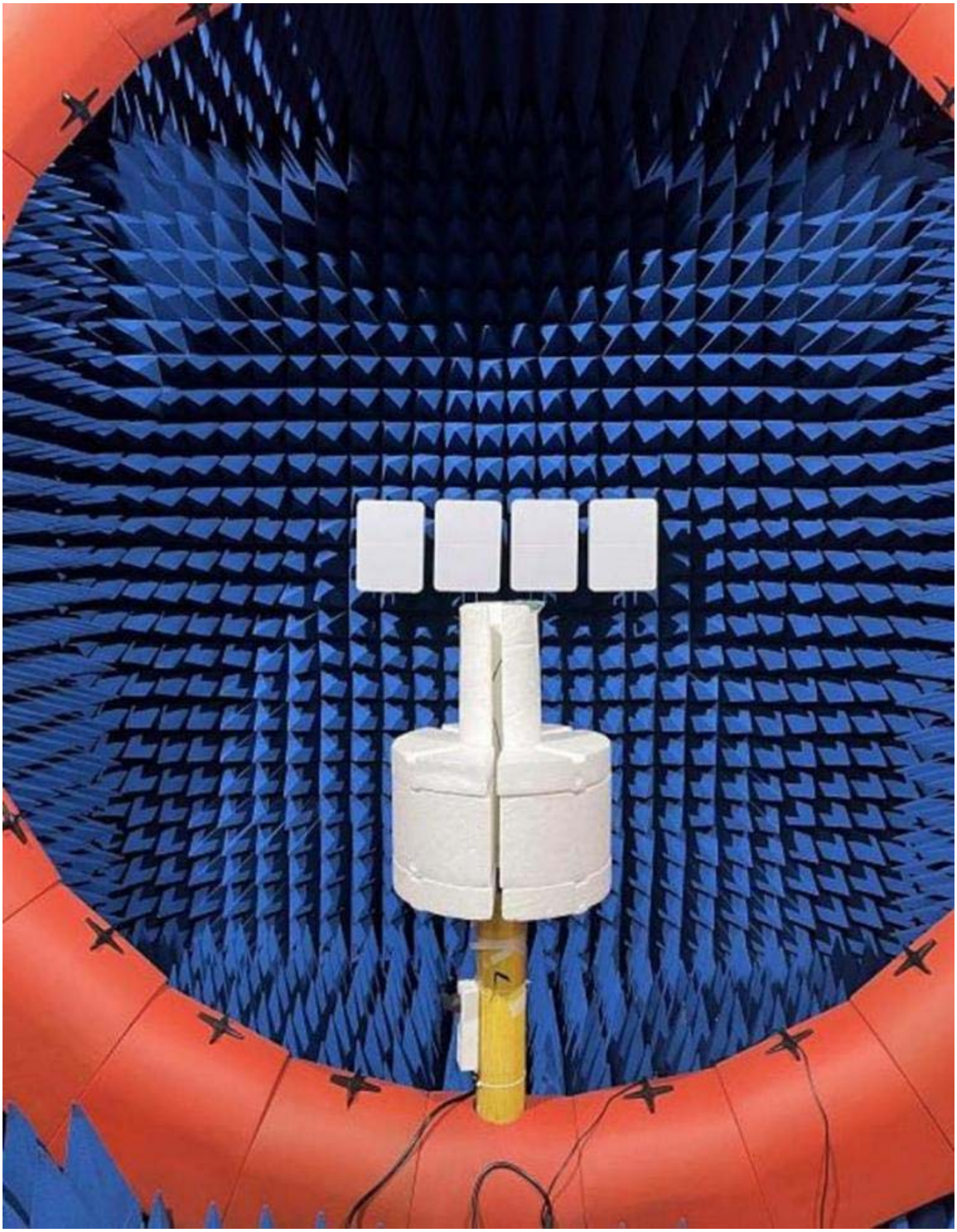
2.1 Client information

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



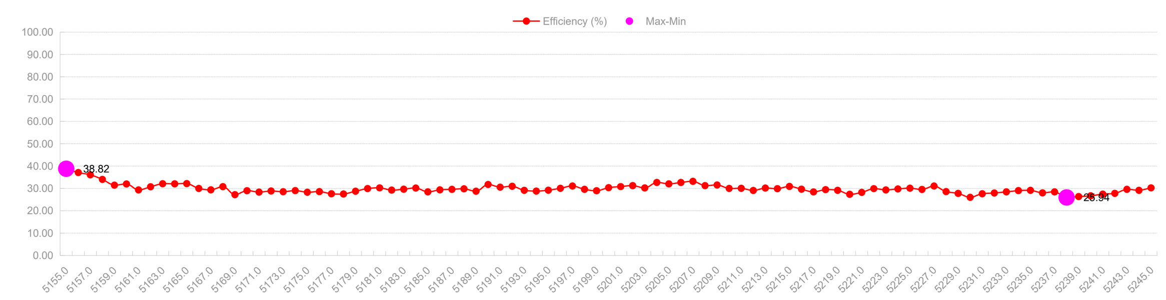
ANT1

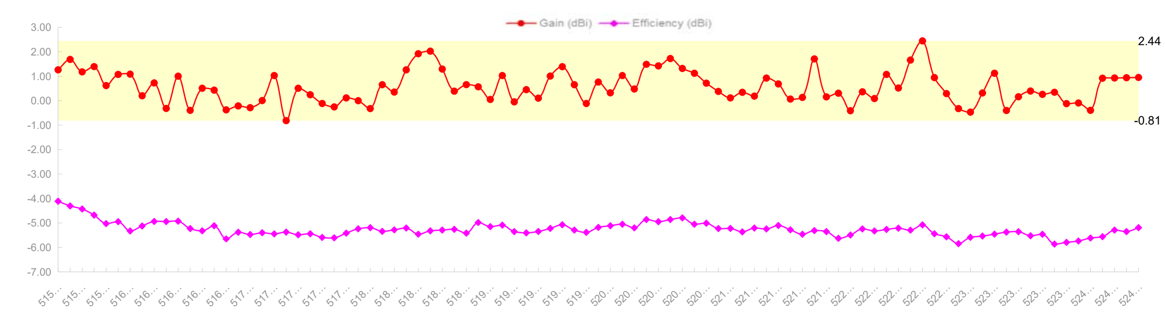
深圳市合拓科技有限公司

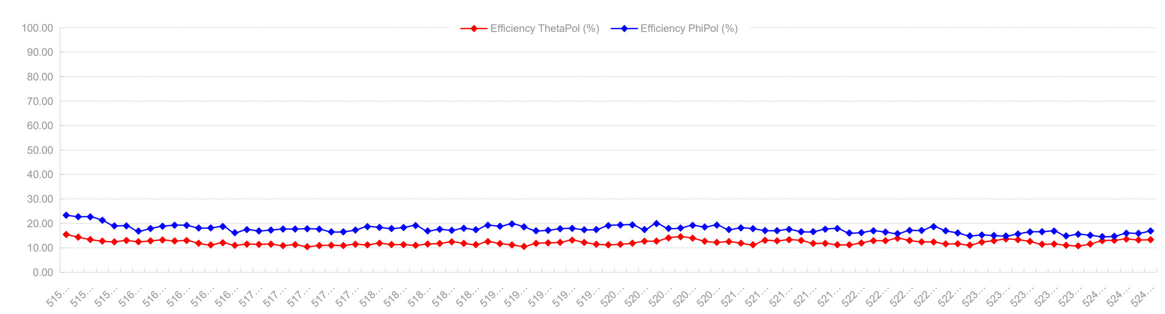
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Frequency (MHz)	5155.0	5156.0	5157.0	5158.0	5159.0	5160.0	5161.0	5162.0	5163.0	5164.0	5165.0	5166.0	5167.0	5168.0	5169.0	5170.0	5171.0	5172.0	5173.0	5174.0	5175.0	5176.0	5177.0	5178.0	5179.0	5180.0	5181.0	5182.0	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																														

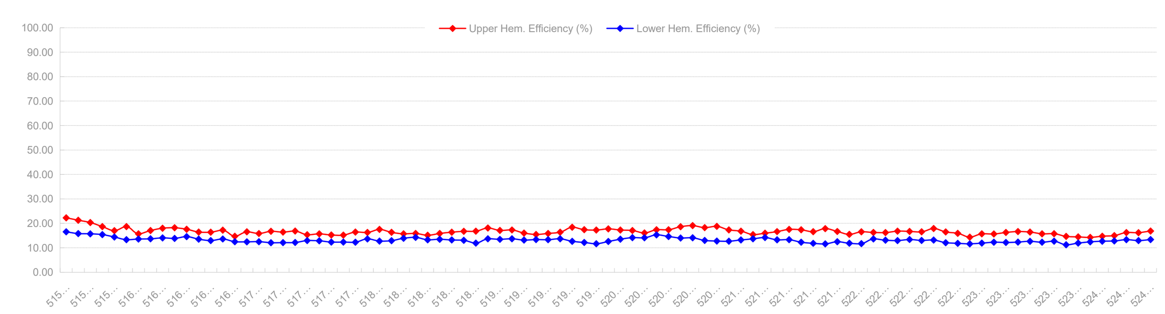
Frequency ID	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Frequency (MHz)	5185.0	5186.0	5187.0	5188.0	5189.0	5190.0	5191.0	5192.0	5193.0	5194.0	5195.0	5196.0	5197.0	5198.0	5199.0	5200.0	5201.0	5202.0	5203.0	5204.0	5205.0	5206.0	5207.0	5208.0	5209.0	5210.0	5211.0	5212.0	5213.0	5214.0
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
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
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
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
Peak Gain Position (Theta)	135.00	135.00	30.00	135.00	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
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
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
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
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
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
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
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
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
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
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	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
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
Empty																														

Frequency ID	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	87	88	89	90	91
Frequency (MHz)	5215.0	5216.0	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)	-5.10	-5.28	-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)	0.69	0.07	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 (%)	30.88	29.65	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)	5.79	5.35	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)	135.00	120.00	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)	15.00	15.00	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 (%)	13.32	13.04	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 (%)	17.56	16.62	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 (%)	17.54	17.37	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 (%)	13.34	12.28	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	26.00	39.00	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	7.23	4.22	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	46.00	44.00	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	6.52	7.14	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	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	33.00	53.00	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	5.23	3.58	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																															

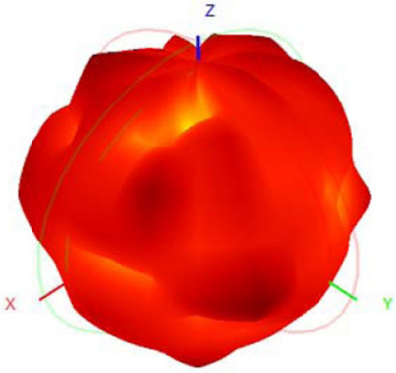




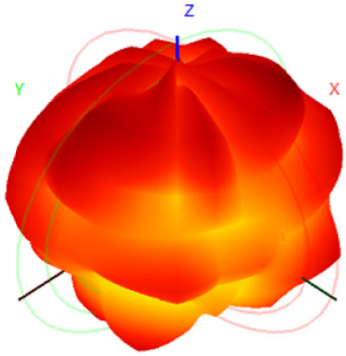




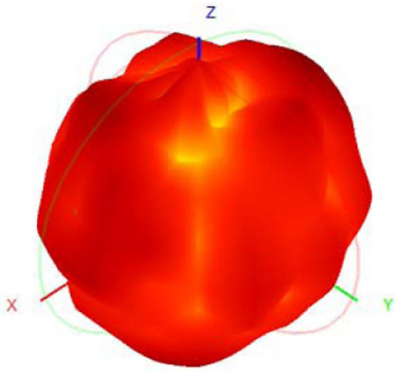
5155.0MHz H+V, Eff: 38.8%



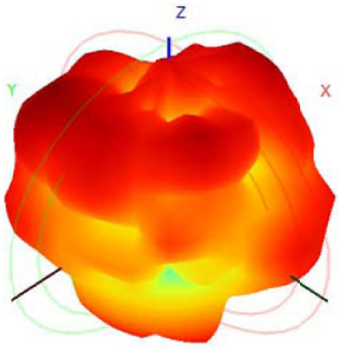
Back View



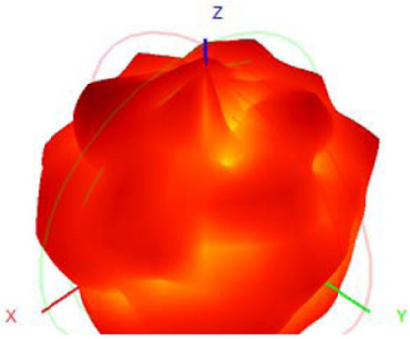
5200.0MHz H+V, Eff: 30.3%



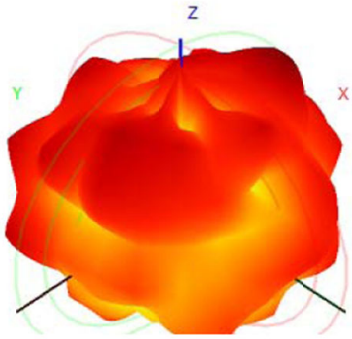
Back View



5245.0MHz H+V, Eff: 30.3%



Back View



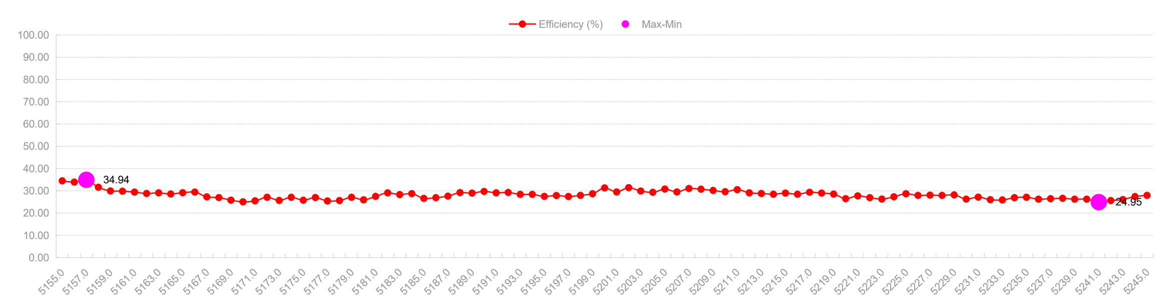
ANT2

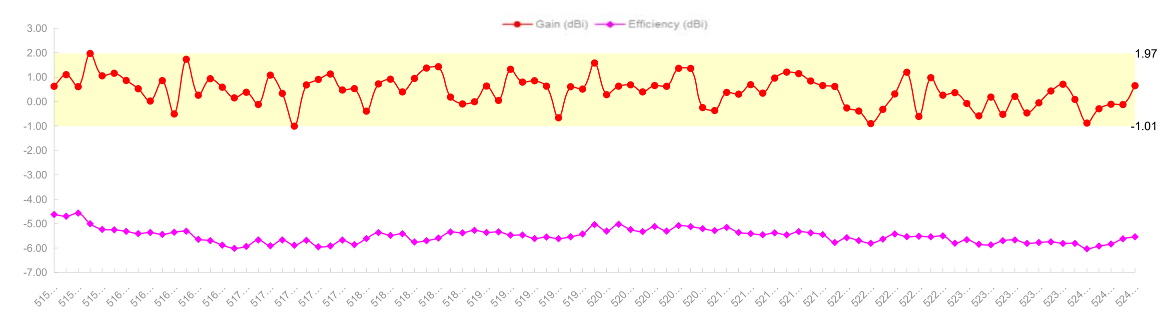
深圳市合拓科技有限公司

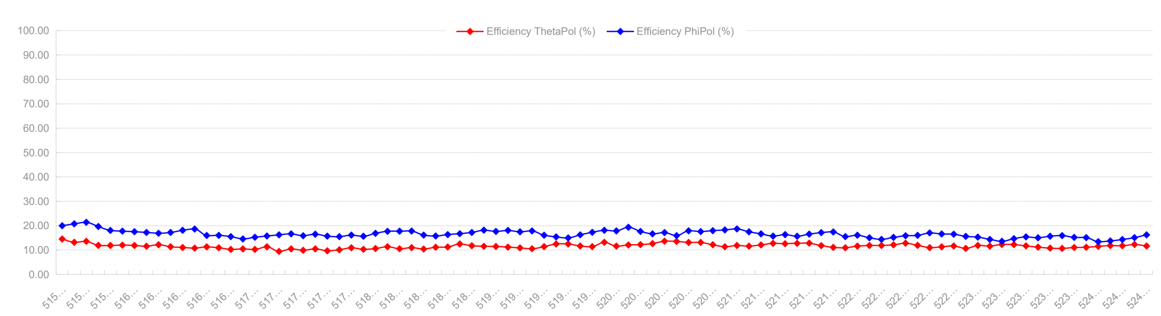
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Frequency (MHz)	5155.0	5156.0	5157.0	5158.0	5159.0	5160.0	5161.0	5162.0	5163.0	5164.0	5165.0	5166.0	5167.0	5168.0	5169.0	5170.0	5171.0	5172.0	5173.0	5174.0	5175.0	5176.0	5177.0	5178.0	5179.0	5180.0	5181.0	5182.0	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																														

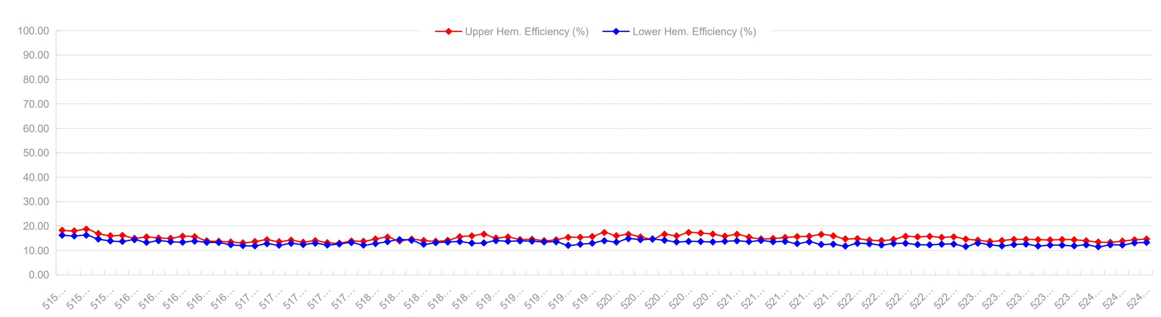
Frequency ID	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Frequency (MHz)	5185.0	5186.0	5187.0	5188.0	5189.0	5190.0	5191.0	5192.0	5193.0	5194.0	5195.0	5196.0	5197.0	5198.0	5199.0	5200.0	5201.0	5202.0	5203.0	5204.0	5205.0	5206.0	5207.0	5208.0	5209.0	5210.0	5211.0	5212.0	5213.0	5214.0
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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	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
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
Empty																														

Frequency ID	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	87	88	89	90	91
Frequency (MHz)	5215.0	5216.0	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)	-5.38	-5.46	-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)	0.96	1.21	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 (%)	28.98	28.44	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)	6.34	6.67	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)	135.00	135.00	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)	15.00	15.00	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 (%)	12.63	12.78	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 (%)	16.35	15.67	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 (%)	15.29	15.65	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 (%)	13.69	12.79	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	32.00	32.00	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	3.97	3.01	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	34.00	35.00	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	5.72	3.00	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	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	33.00	63.00	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	7.82	4.03	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
Empty																															

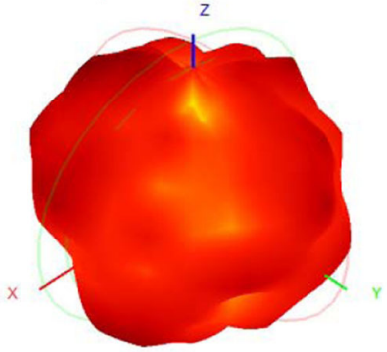




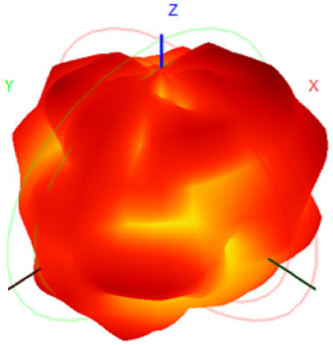




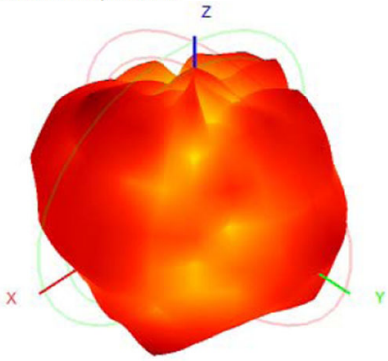
5155.0MHz H+V, Eff: 34.5%



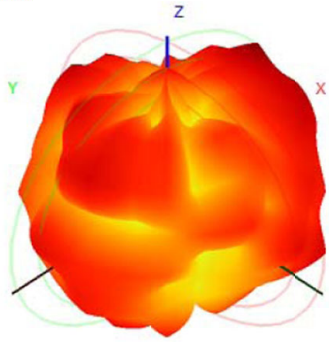
Back View



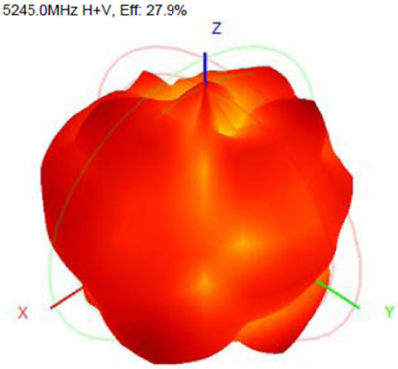
5200.0MHz H+V, Eff: 31.3%



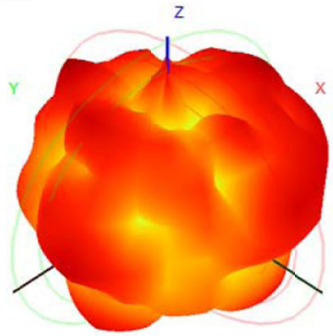
Back View



5245.0MHz H+V, Eff: 27.9%



Back View



ANT3

深圳市合拓科技有限公司

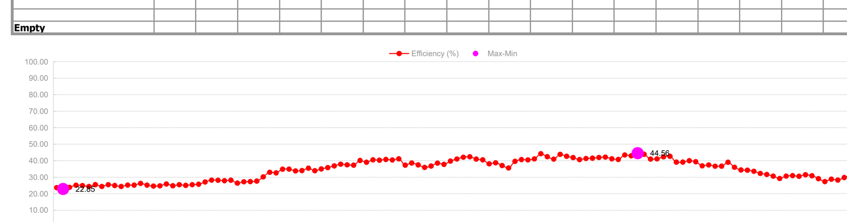
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Frequency (MHz)						5730.0	5731.0	5732.0	5733.0	5734.0	5735.0	5736.0	5737.0	5738.0	5739.0	5740.0	5741.0	5742.0	5743.0	5744.0	5745.0	5746.0	5747.0	5748.0	5749.0
Efficiency (dBi)						-6.13	-5.94	-6.13	-5.94	-6.03	-6.13	-5.98	-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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Empty																									

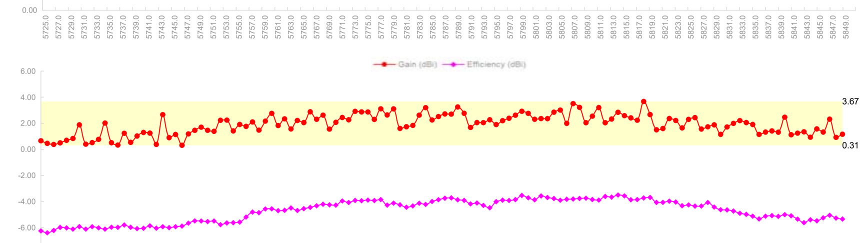
Frequency ID	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Frequency (MHz)	5750.0	5751.0	5752.0	5753.0	5754.0	5755.0	5756.0	5757.0	5758.0	5759.0	5760.0	5761.0	5762.0	5763.0	5764.0	5765.0	5766.0	5767.0	5768.0	5769.0	5770.0	5771.0	5772.0	5773.0	5774.0
Efficiency (dBi)	-5.51	-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	-4.46	-4.34	-4.22	-4.26	-4.28	-3.97	-4.08	-3.92
Gain (dBi)	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	2.87	2.30	2.62	1.55	2.07	2.44	2.26	2.91
Efficiency (%)	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	35.80	36.85	37.86	37.47	37.28	40.13	39.04	40.51
Directivity (dB)	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	7.33	6.64	6.84	5.81	6.36	6.40	6.35	6.83
Peak Gain Position (Theta)	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	135.00	75.00	75.00	135.00	135.00	60.00	150.00	150.00
Peak Gain Position (Phi)	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	240.00	225.00	210.00	195.00	225.00	225.00	240.00	255.00
Efficiency ThetaPol (%)	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	16.87	16.84	17.82	18.86	18.57	18.84	18.91	19.35
Efficiency PhiPol (%)	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	18.93	20.01	20.05	18.61	18.71	21.29	20.13	21.16
Upper Hem. Efficiency (%)	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	16.77	18.31	18.40	18.29	17.60	19.21	19.10	20.45
Lower Hem. Efficiency (%)	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	19.03	18.54	19.46	19.18	19.68	20.92	19.94	20.07
Gain 15deg (dBi)																									
E1(XZ)波瓣宽度	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	22.00	22.00	60.00	75.00	74.00	22.00	37.00	32.00
E1(XZ)前后比	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	6.54	4.91	7.48	4.73	6.13	8.97	8.41	8.67
E2(YZ)波瓣宽度	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	33.00	31.00	47.00	22.00	24.00	41.00	22.00	23.00
E2(YZ)前后比	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	0.55	0.00	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
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
Hc(XY)波瓣宽度	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	42.00	42.00	53.00	45.00	36.00	44.00	100.00	62.00
Hc(XY)前后比	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	4.66	3.63	2.64	0.47	1.25	0.00	0.00	0.48
Empty																									

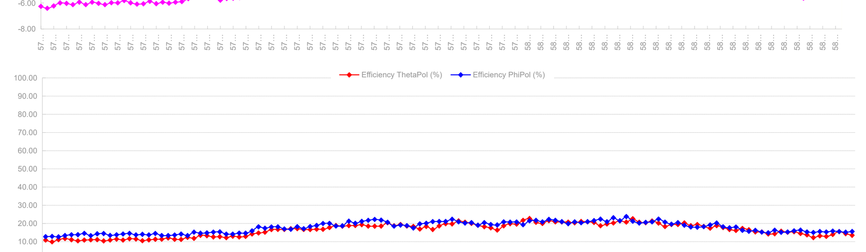
Frequency ID	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Frequency (MHz)	5775.0	5776.0	5777.0	5778.0	5779.0	5780.0	5781.0	5782.0	5783.0	5784.0	5785.0	5786.0	5787.0	5788.0	5789.0	5790.0	5791.0	5792.0	5793.0	5794.0	5795.0	5796.0	5797.0	5798.0	5799.0
Efficiency (dBi)	-3.95	-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
Gain (dBi)	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
Efficiency (%)	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
Directivity (dB)	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
Peak Gain Position (Theta)	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
Peak Gain Position (Phi)	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
Efficiency ThetaPol (%)	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
Efficiency PhiPol (%)	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
Upper Hem. Efficiency (%)	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
Lower Hem. Efficiency (%)	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
Gain 15deg (dBi)																									
E1(XZ)波瓣宽度	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
E1(XZ)前后比	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
E2(YZ)波瓣宽度	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
E2(YZ)前后比	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
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
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
Hc(XY)波瓣宽度	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
Hc(XY)前后比	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
Empty																									

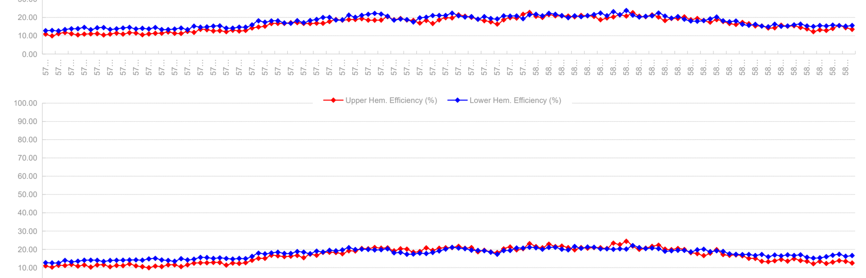
Frequency ID	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Frequency (MHz)	5800.0	5801.0	5802.0	5803.0	5804.0	5805.0	5806.0	5807.0	5808.0	5809.0	5810.0	5811.0	5812.0	5813.0	5814.0	5815.0	5816.0	5817.0	5818.0	5819.0	5820.0	5821.0	5822.0	5823.0	5824.0
Efficiency (dBi)	-3.54	-3.73	-3.88	-3.58	-3.70	-3.78	-3.91	-3.84	-3.82	-3.78	-3.75	-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
Gain (dBi)	2.92	2.75	2.30	2.36	2.35	2.85	3.01	1.99	3.50	3.21	2.04	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
Efficiency (%)	44.22	42.41	40.95	43.85	42.64	41.89	40.66	41.33	41.52	41.93	42.16	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
Directivity (dB)	6.46	6.48	6.18	5.94	6.05	6.63	6.92	5.83	7.32	6.99	5.79	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
Peak Gain Position (Theta)	135.00	135.00	135.00	150.00	150.00	150.00	150.00	135.00	135.00	135.00	135.00	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
Peak Gain Position (Phi)	315.00	180.00	210.00	270.00	240.00	255.00	255.00	240.00	240.00	300.00	315.00	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
Efficiency ThetaPol (%)	22.74	20.65	20.04	21.59	20.91	20.88	20.75	20.41	21.08	20.92	20.57	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
Efficiency PhiPol (%)	21.48	21.76	20.92	22.26	21.73	21.00	19.91	20.92	20.43	21.01	21.59	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
Upper Hem. Efficiency (%)	23.09	21.53	20.89	22.82	21.54	21.80	20.93	19.76	20.95	20.66	20.99	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
Lower Hem. Efficiency (%)	21.13	20.88	20.06	21.03	21.10	20.08	19.73	21.57	20.57	21.27	21.17	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
Gain 15deg (dBi)																									
E1(XZ)波瓣宽度	79.00	32.00	38.00	31.00	36.00	31.00	68.00	53.00	43.00	44.00	74.00	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
E1(XZ)前后比	4.86	10.63	7.90	9.86	7.24	6.89	5.33	6.59	7.48	4.90	6.89	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
E2(YZ)波瓣宽度	20.00	19.00	40.00	20.00	26.00	25.00	22.00	32.00	35.00	61.00	44.00	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
E2(YZ)前后比	0.95	0.96	0.38	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.70	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
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
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
Hc(XY)波瓣宽度	43.00	27.00	32.00	45.00	48.00	44.00	47.00	39.00	39.00	40.00	29.00	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
Hc(XY)前后比	0.00	0.00	0.00	3.40	1.30	5.78	3.56	1.78	2.27	0.03	0.00	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
Empty																									

Frequency ID	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)	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)	-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)	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 (%)	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)	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)	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)	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 (%)	18.78	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 (%)	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 (%)	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 (%)	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	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	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	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	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		
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		
Hc(XY)波瓣宽度	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	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																										

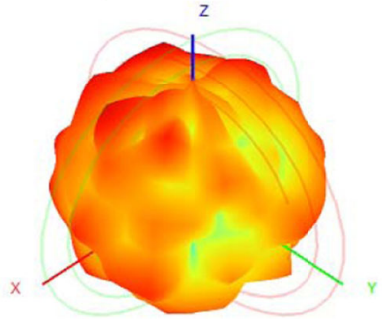




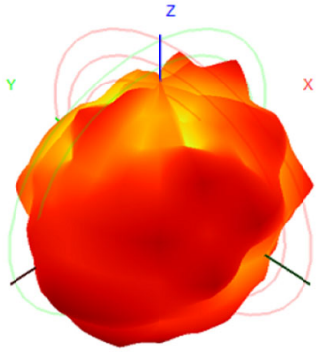




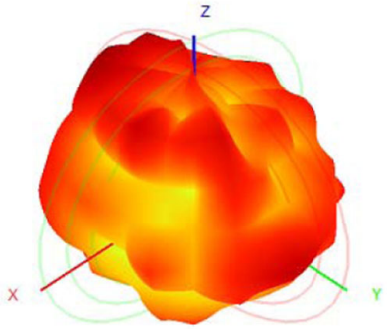
5730.0MHz H+V, Eff: 24.4%



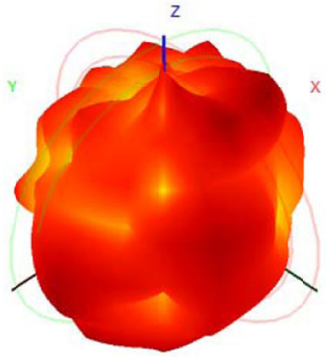
Back View



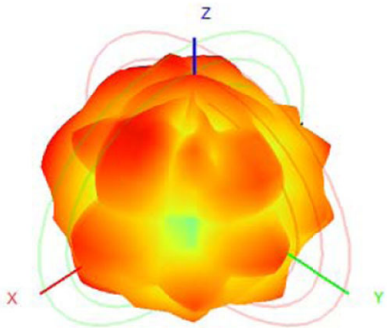
5789.0MHz H+V, Eff: 42.4%



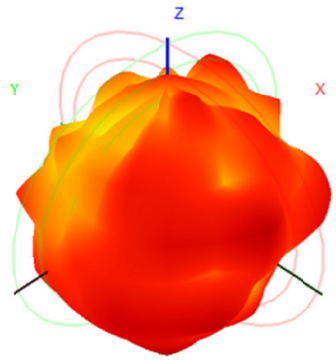
Back View



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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Empty																				

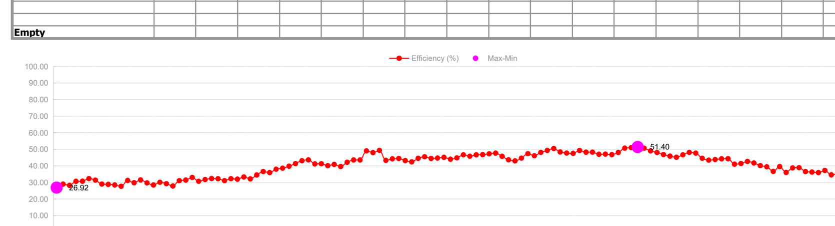
Frequency ID	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Frequency (MHz)	5745.0	5746.0	5747.0	5748.0	5749.0	5750.0	5751.0	5752.0	5753.0	5754.0	5755.0	5756.0	5757.0	5758.0	5759.0	5760.0	5761.0	5762.0	5763.0	5764.0
Efficiency (dBi)	-5.02	-4.81	-5.12	-4.98	-4.90	-4.91	-5.07	-4.91	-4.95	-4.77	-4.92	-4.62	-4.36	-4.44	-4.20	-4.13	-4.00	-3.83	-3.65	-3.60
Gain (dBi)	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
Efficiency (%)	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
Directivity (dB)	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
Peak Gain Position (Theta)	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
Peak Gain Position (Phi)	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
Efficiency ThetaPol (%)	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
Efficiency PhiPol (%)	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
Upper Hem. Efficiency (%)	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
Lower Hem. Efficiency (%)	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
Gain 15deg (dBi)																				
E1(XZ)波瓣宽度	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
E1(XZ)前后比	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
E2(YZ)波瓣宽度	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
E2(YZ)前后比	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
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
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
Hc(XY)波瓣宽度	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
Hc(XY)前后比	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
Empty																				

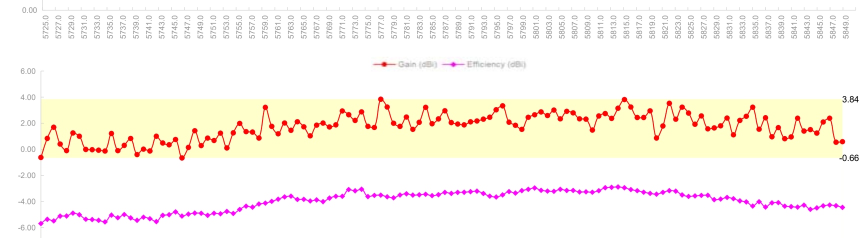
Frequency ID	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Frequency (MHz)	5765.0	5766.0	5767.0	5768.0	5769.0	5770.0	5771.0	5772.0	5773.0	5774.0	5775.0	5776.0	5777.0	5778.0	5779.0	5780.0	5781.0	5782.0	5783.0	5784.0
Efficiency (dBi)	-3.85	-3.84	-3.97	-3.89	-4.02	-3.75	-3.61	-3.61	-3.09	-3.19	-3.07	-3.63	-3.54	-3.52	-3.65	-3.72	-3.51	-3.42	-3.51	-3.50
Gain (dBi)	2.11	1.72	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
Efficiency (%)	41.21	41.32	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
Directivity (dB)	5.96	5.56	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
Peak Gain Position (Theta)	135.00	120.00	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
Peak Gain Position (Phi)	120.00	30.00	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
Efficiency ThetaPol (%)	15.04	14.70	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
Efficiency PhiPol (%)	26.17	26.61	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
Upper Hem. Efficiency (%)	21.71	20.78	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
Lower Hem. Efficiency (%)	19.51	20.54	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
Gain 15deg (dBi)																				
E1(XZ)波瓣宽度	24.00	23.00	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
E1(XZ)前后比	0.00	0.00	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
E2(YZ)波瓣宽度	30.00	31.00	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
E2(YZ)前后比	4.07	5.81	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
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
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
Hc(XY)波瓣宽度	40.00	44.00	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
Hc(XY)前后比	2.58	2.40	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
Empty																				

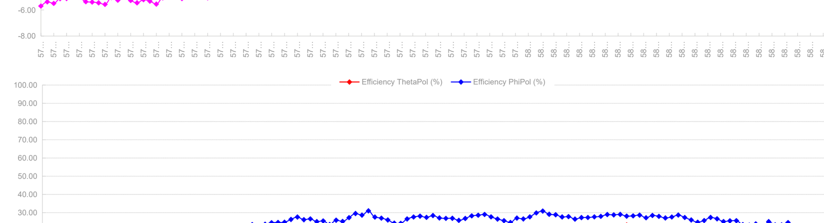
Frequency ID	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Frequency (MHz)	5785.0	5786.0	5787.0	5788.0	5789.0	5790.0	5791.0	5792.0	5793.0	5794.0	5795.0	5796.0	5797.0	5798.0	5799.0	5800.0	5801.0	5802.0	5803.0	5804.0
Efficiency (dBi)	-3.45	-3.56	-3.48	-3.31	-3.39	-3.31	-3.30	-3.25	-3.21	-3.39	-3.60	-3.66	-3.50	-3.25	-3.36	-3.17	-3.07	-2.97	-3.15	-3.21
Gain (dBi)	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
Efficiency (%)	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
Directivity (dB)	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
Peak Gain Position (Theta)	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
Peak Gain Position (Phi)	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
Efficiency ThetaPol (%)	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
Efficiency PhiPol (%)	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
Upper Hem. Efficiency (%)	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
Lower Hem. Efficiency (%)	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
Gain 15deg (dBi)																				
E1(XZ)波瓣宽度	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
E1(XZ)前后比	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
E2(YZ)波瓣宽度	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
E2(YZ)前后比	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
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
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
Hc(XY)波瓣宽度	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
Hc(XY)前后比	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
Empty																				

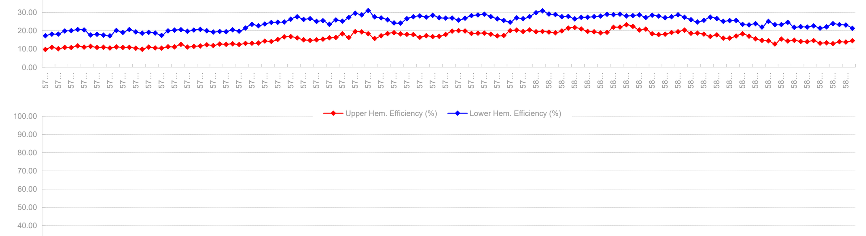
Frequency ID	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Frequency (MHz)	5805.0	5806.0	5807.0	5808.0	5809.0	5810.0	5811.0	5812.0	5813.0	5814.0	5815.0	5816.0	5817.0	5818.0	5819.0	5820.0	5821.0	5822.0	5823.0	5824.0
Efficiency (dBi)	-3.23	-3.07	-3.16	-3.16	-3.28	-3.27	-3.30	-3.18	-2.95	-2.92	-2.89	-2.95	-3.09	-3.18	-3.29	-3.39	-3.45	-3.31	-3.17	-3.21
Gain (dBi)	3.01	2.34	2.91	2.79	2.34	2.31	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
Efficiency (%)	47.54	49.29	48.26	48.30	47.01	47.12	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
Directivity (dB)	6.24	5.41	6.08	5.95	5.62	5.58	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
Peak Gain Position (Theta)	135.00	135.00	45.00	75.00	120.00	75.00	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
Peak Gain Position (Phi)	30.00	45.00	225.00	225.00	30.00	105.00	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
Efficiency ThetaPol (%)	19.87	21.43	21.76	20.97	19.62	19.41	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
Efficiency PhiPol (%)	27.67	27.86	26.50	27.33	27.39	27.72	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
Upper Hem. Efficiency (%)	24.12	26.06	26.08	27.02	26.25	27.35	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
Lower Hem. Efficiency (%)	23.42	23.22	22.18	21.28	20.76	19.78	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
Gain 15deg (dBi)																				
E1(XZ)波瓣宽度	59.00	125.00	19.00	47.00	18.00	37.00	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
E1(XZ)前后比	2.07	0.60	2.45	1.66	1.25	1.23	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
E2(YZ)波瓣宽度	18.00	64.00	22.00	18.00	24.00	21.00	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
E2(YZ)前后比	3.35	3.13	4.42	6.63	6.37	6.35	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
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
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
Hc(XY)波瓣宽度	39.00	49.00	34.00	38.00	33.00	38.00	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
Hc(XY)前后比	0.69	2.19	0.29	0.00	0.00	1.01	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
Empty																				

Frequency ID	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)	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)	-3.51	-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)	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 (%)	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)	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)	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)	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 (%)	18.59	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 (%)	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 (%)	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 (%)	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	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	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	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	4.65	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		
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		
Hc(XY)波瓣宽度	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	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		
Empty																										

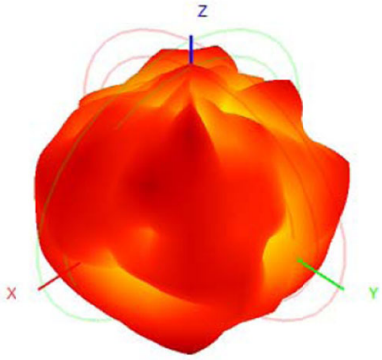




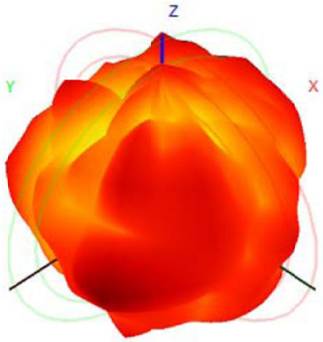




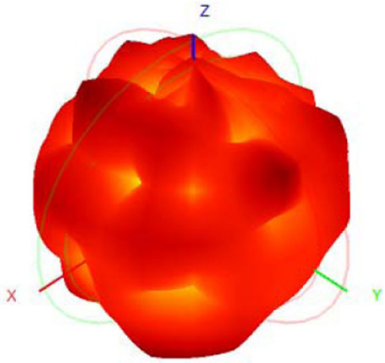
5730.0MHz H+V, Eff: 32.3%



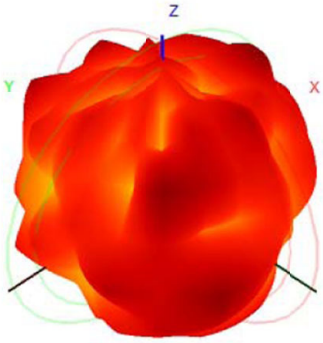
Back View



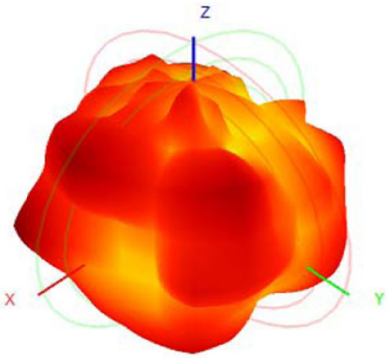
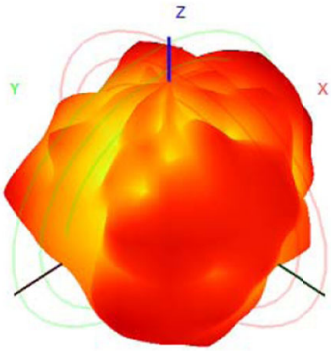
5789.0MHz H+V, Eff: 45.8%



Back View



5848.0MHz H+V, Eff: 37.3%



Back View