



深圳市千目通讯科技有限公司

Shenzhen Qianmu Communication Technology Co., Ltd.

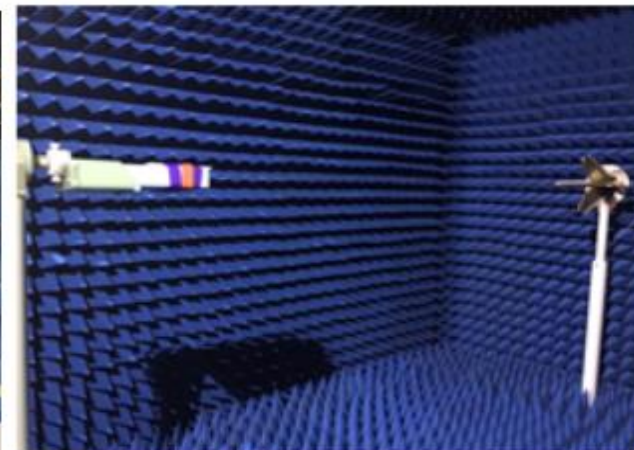
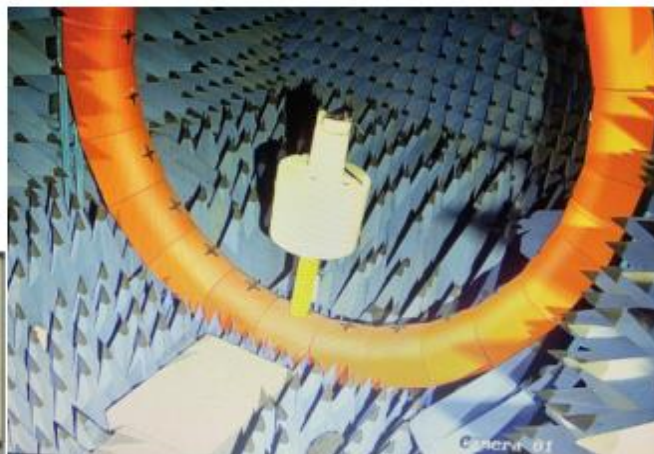
专注天线方案、设计与生产

客 户：海格森
项 目：
日 期：2024.11.15
射 频：XU JUN JIE



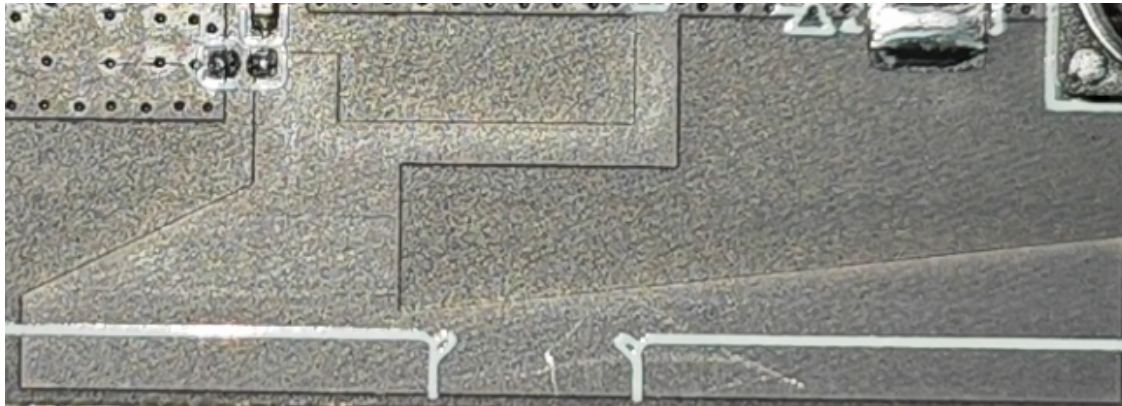
Test environment

	测试项目	设备
1. S参数 (S-parameter)	1. 回波损耗 (Log Mag) 2. 电压驻波比 (SWR)	网络分析仪: Agilent E5071B ×2 HP 8753D PROTEK A338
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS) 3. 频率误差 4. 屏灭、屏亮	1. 暗室: 飞图 7x4x3 m (24探头 3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 综合测试仪: Agilent 8960 ×2 CMW500 ×3/CMU200
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室: 飞图 7x4x3 m (24探头 3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 网络分析仪: Agilent E5071B



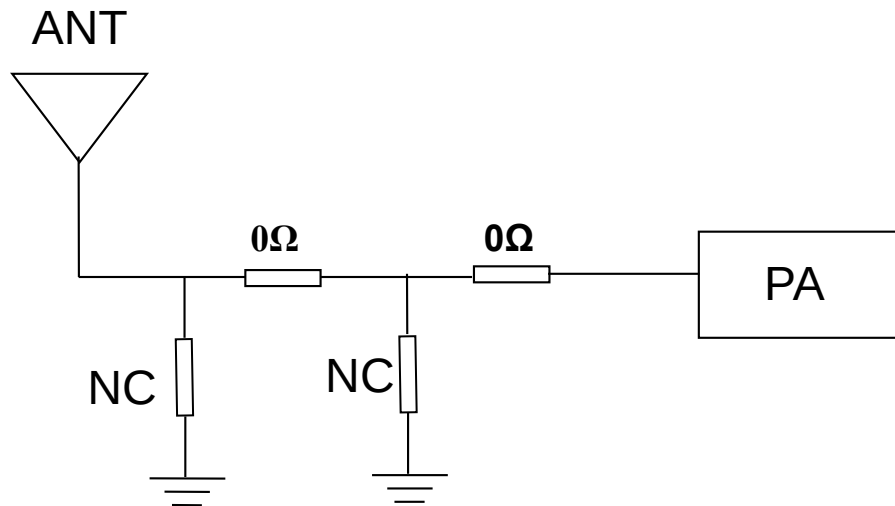


Antenna style





Matching circuit - antenna



The matching circuit has not been changed



无源-Efficiency/Gain

FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.99	-4.08	-4.14	-4.29	-4.37	-4.42	-4.45	-4.62	-4.81	-4.87	-4.95
Peak EIRP (dBm)	1.47	1.36	1.24	1.02	0.89	0.80	0.87	0.79	0.65	0.51	0.28
Directivity (dBi)	5.46	5.44	5.39	5.32	5.26	5.22	5.31	5.41	5.45	5.38	5.23
Efficiency (dB)	-3.99	-4.08	-4.14	-4.29	-4.37	-4.42	-4.45	-4.62	-4.81	-4.87	-4.95
Efficiency (%)	39.90	39.10	38.50	37.20	36.60	36.10	35.90	34.50	33.10	32.60	32.00
Gain (dBi)	1.47	1.36	1.24	1.02	0.89	0.80	0.87	0.79	0.65	0.51	0.28
NHPRP $\pm \pi/4$ (dBm)	-5.48	-5.58	-5.65	-5.81	-5.89	-5.93	-5.95	-6.13	-6.32	-6.38	-6.48
NHPRP $\pm \pi/6$ (dBm)	-7.01	-7.10	-7.17	-7.31	-7.38	-7.42	-7.44	-7.62	-7.81	-7.88	-7.99
NHPRP $\pm \pi/8$ (dBm)	-8.20	-8.29	-8.34	-8.47	-8.53	-8.56	-8.57	-8.74	-8.92	-8.99	-9.12
Upper Hem. PRP (dBm)	-5.88	-5.94	-6.01	-6.18	-6.28	-6.35	-6.38	-6.57	-6.75	-6.79	-6.84
Lower Hem. PRP (dBm)	-8.50	-8.64	-8.71	-8.82	-8.86	-8.88	-8.89	-9.05	-9.24	-9.32	-9.47
Upper Hem. PRP (%)	25.81	25.44	25.04	24.07	23.57	23.19	23.00	22.05	21.16	20.92	20.71
Lower Hem. PRP (%)	14.13	13.67	13.47	13.13	13.01	12.94	12.92	12.43	11.91	11.70	11.30

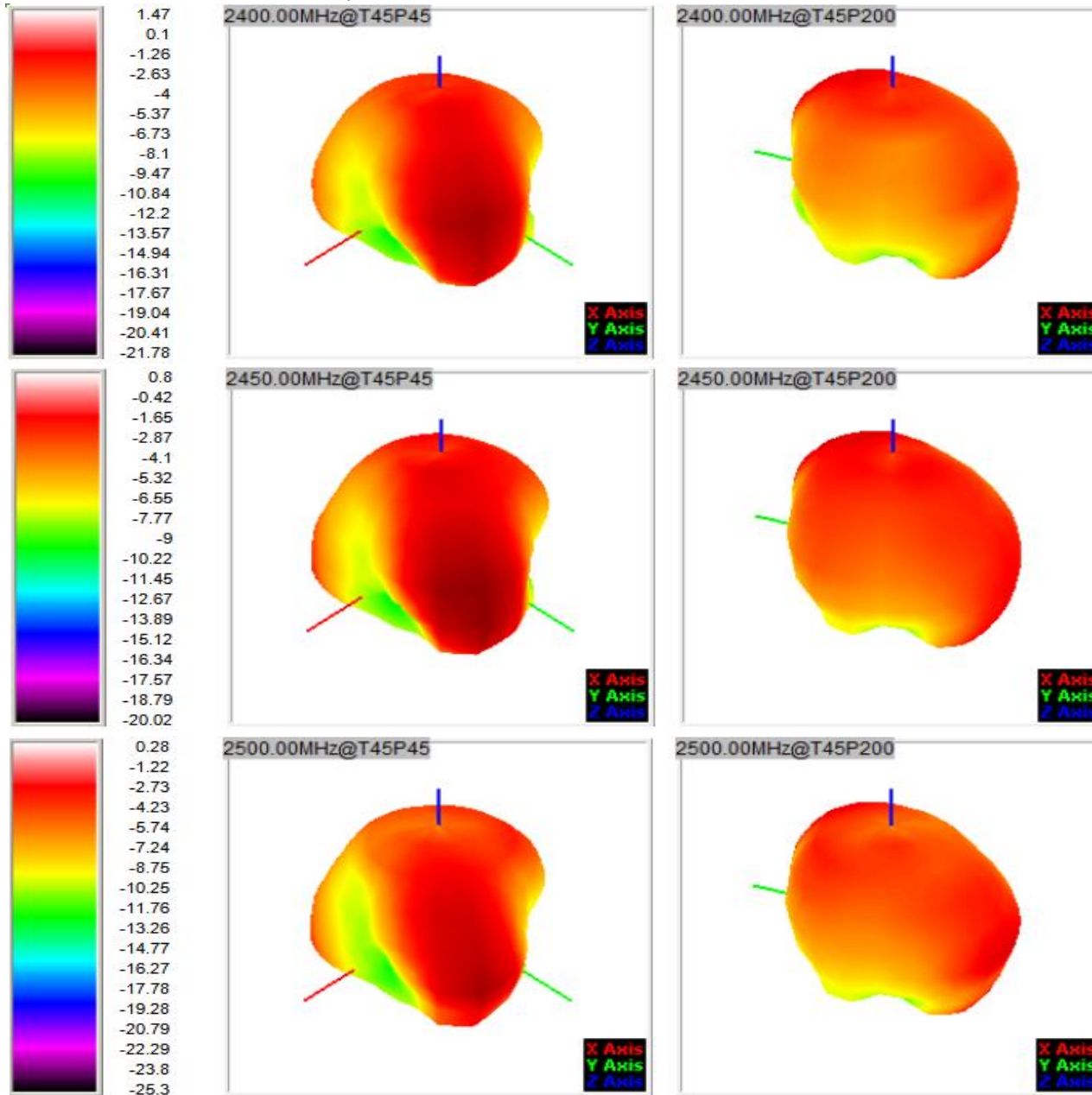


无源-Efficiency/Gain

FEITUKEJI															
Frequency ID	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Point Values															
Ant. Port Input Pwr. (dBm)	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
Tot. Rad. Pwr. (dBm)	-3.66	-3.38	-3.34	-3.00	-3.32	-3.72	-3.25	-3.66	-4.02	-4.03	-4.46	-4.66	-4.75	-5.28	-5.03
Peak EIRP (dBm)	0.56	1.15	1.31	1.82	1.77	1.48	1.93	1.19	0.48	0.34	0.46	0.30	-0.33	-0.72	-0.60
Directivity (dBi)	4.22	4.52	4.65	4.81	5.09	5.20	5.18	4.85	4.49	4.37	4.93	4.96	4.43	4.55	4.43
Efficiency (dB)	-3.66	-3.38	-3.34	-3.00	-3.32	-3.72	-3.25	-3.66	-4.02	-4.03	-4.46	-4.66	-4.75	-5.28	-5.03
Efficiency (%)	43.00	46.00	46.30	50.20	46.50	42.40	47.30	43.10	39.60	39.60	35.80	34.20	33.50	29.70	31.40
Gain (dBi)	0.56	1.15	1.31	1.82	1.77	1.48	1.93	1.19	0.48	0.34	0.46	0.30	-0.33	-0.72	-0.60
NHPRP $\pm\pi/4$ (dBm)	-5.29	-5.10	-5.09	-4.62	-5.01	-5.53	-4.99	-5.42	-5.73	-5.63	-6.08	-6.29	-6.36	-6.82	-6.54
NHPRP $\pm\pi/6$ (dBm)	-6.89	-6.77	-6.78	-6.24	-6.75	-7.36	-6.64	-7.12	-7.41	-7.23	-7.70	-7.89	-7.94	-8.39	-8.13
NHPRP $\pm\pi/8$ (dBm)	-8.16	-8.11	-8.11	-7.50	-8.17	-8.82	-7.95	-8.50	-8.78	-8.51	-9.01	-9.15	-9.20	-9.69	-9.43
Upper Hem. PRP (dBm)	-5.97	-5.52	-5.51	-5.35	-5.47	-5.86	-5.57	-5.92	-6.47	-6.62	-7.04	-7.35	-7.58	-8.10	-8.00
Lower Hem. PRP (dBm)	-7.51	-7.47	-7.39	-6.78	-7.41	-7.83	-7.08	-7.57	-7.68	-7.50	-7.96	-8.02	-7.96	-8.48	-8.08
Upper Hem. PRP (%)	25.32	28.07	28.11	29.15	28.39	25.94	27.71	25.57	22.57	21.77	19.77	18.43	17.46	15.48	15.84
Lower Hem. PRP (%)	17.73	17.91	18.24	21.00	18.14	16.49	19.60	17.49	17.07	17.79	16.01	15.78	16.01	14.19	15.56



无源-3D Pattern





无源-3D Pattern

