

测试报告 (Test report)

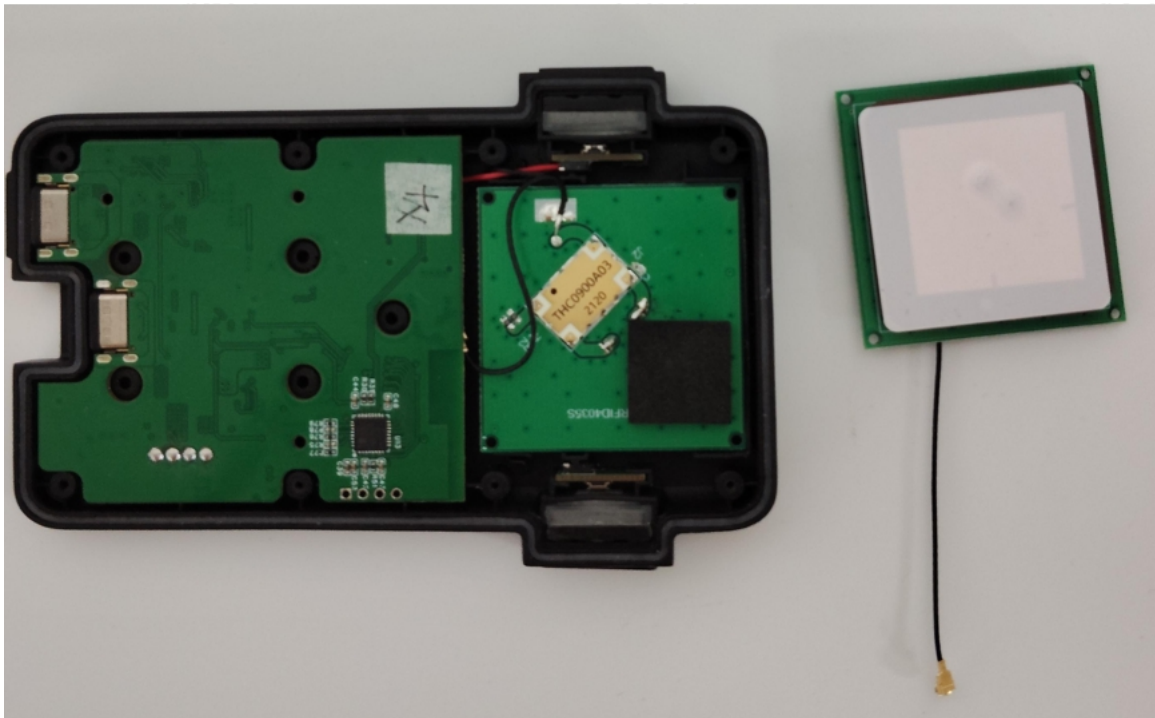
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一、报告版本提要 (Summary of the report version)

版本 Version number	日期 Date	内容概况 Content Overview
V1.0	2025/11/17	初始版本

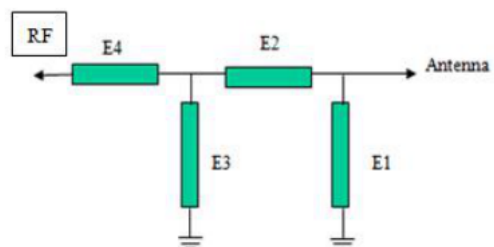
二、天线安装位置 (Antenna installation position)



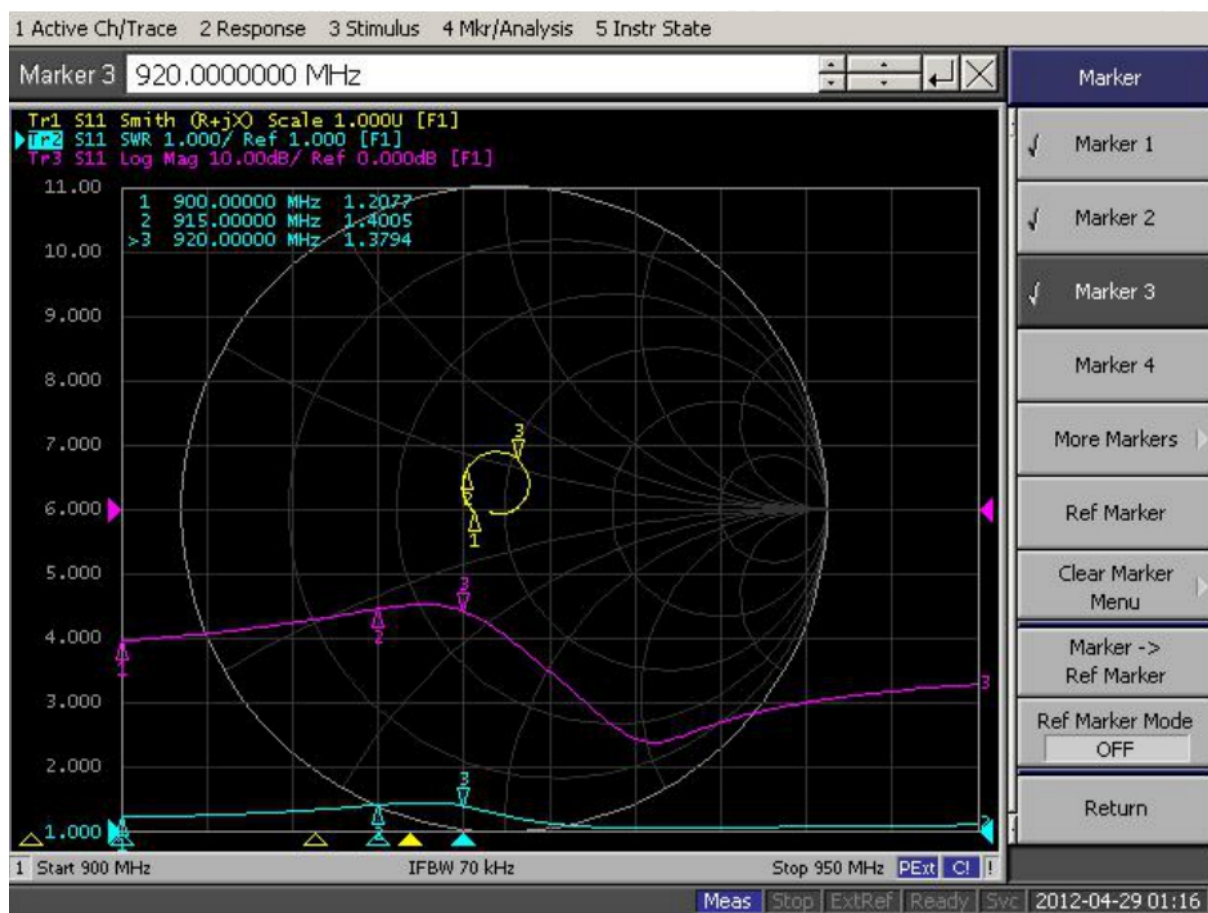
三、天线匹配电路 (Antenna matching circuit)

Element	E1	E2	E3	
Value	/	/	/	

我司未修改匹配电路！



四、 天线驻波比、回波损耗 (Standing wave ratio, return loss)



五、增益、效率、辐射方向图 (Gain, efficiency, radiation pattern)

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Frequency (MHz)	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918
Efficiency (dBi)	-3.90	-3.89	-3.86	-3.79	-3.70	-3.58	-3.48	-3.38	-3.29	-3.23	-3.20	-3.05	-2.95	-2.88	-2.86	-2.89	-2.84	-2.81	-2.77
Gain (dBi)	1.48	1.55	1.60	1.72	1.78	1.94	1.92	1.98	2.10	2.17	2.22	2.25	2.27	2.29	2.30	2.33	2.46	2.55	2.58
Efficiency (%)	40.69	40.82	41.15	41.76	42.70	43.89	44.90	45.97	46.88	47.54	47.86	49.49	50.70	51.48	51.71	51.40	52.00	52.40	52.89
Directivity (dB)	4.15	4.14	4.09	4.15	4.10	4.04	4.03	4.07	4.06	4.09	4.11	4.11	4.03	4.09	4.15	4.13	4.17	4.18	4.19
Peak Gain Position (Theta)	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00
Peak Gain Position (Phi)	180.00	180.00	180.00	165.00	165.00	165.00	180.00	180.00	180.00	165.00	165.00	165.00	165.00	180.00	180.00	165.00	165.00	165.00	165.00
Efficiency ThetaPol (%)	27.68	27.68	27.83	28.16	28.73	29.48	30.10	30.80	31.41	31.89	32.17	33.37	34.24	34.86	35.12	34.97	35.43	35.77	36.14
Efficiency PhiPol (%)	13.01	13.13	13.33	13.60	13.97	14.41	14.80	15.17	15.46	15.65	15.69	16.13	16.46	16.62	16.59	16.43	16.57	16.63	16.75
Upper Hem. Efficiency (%)	18.16	18.17	18.32	18.55	18.93	19.39	19.77	20.21	20.56	20.82	20.92	21.57	22.02	22.28	22.33	22.14	22.37	22.51	22.65
Lower Hem. Efficiency (%)	22.53	22.65	22.84	23.21	23.77	24.49	25.13	25.75	26.32	26.72	26.94	27.93	28.68	29.20	29.39	29.26	29.62	29.89	30.23
T90(H)圆度	10.73	10.61	10.66	10.61	10.50	10.34	10.32	10.35	10.26	10.25	10.22	10.12	10.07	10.11	10.10	10.06	10.04	10.09	10.04
Gain 15deg (dBi)																			
E1(XZ)波瓣宽度	70.00	70.00	70.00	72.00	71.00	72.00	72.00	70.00	71.00	71.00	71.00	72.00	72.00	71.00	71.00	71.00	71.00	72.00	71.00
E1(XZ)前后比	4.93	4.93	4.97	4.93	4.93	4.97	5.06	5.13	5.13	5.14	5.11	5.13	5.20	5.30	5.34	5.34	5.28	5.31	5.33
E2(YZ)波瓣宽度	86.00	86.00	86.00	84.00	84.00	84.00	84.00	83.00	83.00	83.00	83.00	83.00	82.00	81.00	81.00	81.00	81.00	81.00	81.00
E2(YZ)前后比	3.29	3.22	3.32	3.46	3.62	3.59	3.61	3.52	3.51	3.59	3.71	3.79	3.81	3.72	3.63	3.61	3.69	3.77	3.83
最大增益处轴比(P)	17.24	17.16	17.01	14.44	14.67	14.47	16.88	17.05	16.94	14.43	14.54	14.79	14.59	17.17	17.26	14.47	14.86	14.98	15.25
顶点(Theta=0)处轴比(P)	7.30	7.22	7.20	7.12	7.02	7.06	6.97	6.96	7.01	7.10	7.13	7.06	7.18	7.22	7.34	7.36	7.28	7.33	7.32
仰角10度最差(大)轴比(P)	84.35	63.10	58.16	75.06	60.81	62.05	61.36	59.71	72.30	68.68	56.86	83.83	67.09	72.21	124.55	68.03	63.20	67.21	76.49
Hc(XY)波瓣宽度	174.00	174.00	176.00	177.00	180.00	182.00	183.00	183.00	181.00	181.00	182.00	184.00	187.00	186.00	183.00	184.00	184.00	184.00	186.00
Hc(XY)前后比	1.66	1.69	1.74	1.85	1.83	1.70	1.68	1.71	1.75	1.81	1.88	1.88	1.72	1.72	1.79	1.80	1.90	1.90	1.89
左旋圆极化效率(%)	22.57	22.64	22.83	23.19	23.73	24.39	24.96	25.54	26.01	26.38	26.53	27.44	28.10	28.60	28.69	28.52	28.86	29.09	29.36
右旋圆极化效率(%)	18.12	18.18	18.32	18.56	18.97	19.50	19.94	20.43	20.87	21.16	21.33	22.05	22.60	22.88	23.02	22.89	23.14	23.31	23.53

Frequency ID	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Frequency (MHz)	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935
Efficiency (dBi)	-2.71	-2.63	-2.64	-2.62	-2.56	-2.47	-2.34	-2.32	-2.28	-2.21	-2.14	-2.08	-2.34	-2.12	-2.28	-2.25	-2.18
Gain (dBi)	2.61	2.64	2.65	2.60	2.62	2.69	2.79	2.71	2.65	2.57	2.52	2.49	2.33	2.14	1.98	1.91	1.96
Efficiency (%)	53.55	54.52	54.47	54.69	53.44	54.05	54.86	54.21	54.03	54.49	54.58	53.74	51.48	51.71	51.80	52.00	52.36
Directivity (dB)	4.12	4.16	4.19	4.22	5.35	5.46	5.50	5.42	5.34	5.31	5.35	5.47	4.28	4.24	4.26	4.32	4.32
Peak Gain Position (Theta)	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00
Peak Gain Position (Phi)	165.00	165.00	180.00	165.00	165.00	165.00	165.00	180.00	165.00	180.00	180.00	165.00	165.00	180.00	165.00	180.00	180.00
Efficiency ThetaPol (%)	36.57	37.22	37.19	37.33	37.81	38.57	39.78	40.00	40.42	41.07	41.77	42.49	42.78	43.00	43.18	43.27	43.47
Efficiency PhiPol (%)	16.98	17.29	17.28	17.37	17.60	18.00	18.52	18.63	18.80	19.03	19.27	19.51	19.52	19.63	19.80	19.83	19.97
Upper Hem. Efficiency (%)	22.89	23.24	23.21	23.28	23.55	24.03	24.71	24.80	25.00	25.33	25.70	26.06	25.71	24.80	24.90	25.38	25.80
Lower Hem. Efficiency (%)	30.65	31.28	31.26	31.42	31.86	32.54	33.60	33.82	34.22	34.77	35.34	35.93	36.13	36.38	36.72	37.70	37.91
T90(H)圆度	9.90	9.99	10.02	10.01	10.01	10.05	10.01	10.01	10.00	10.03	10.01	10.08	10.07	10.01	10.05	10.03	10.01
Gain 15deg (dBi)																	
E1(XZ)波瓣宽度	71.00	70.00	70.00	70.00	70.00	69.00	69.00	69.00	68.00	68.00	68.00	68.00	69.00	70.00	68.00	68.00	68.00
E1(XZ)前后比	5.37	5.43	5.51	5.52	5.50	5.49	5.49	5.51	5.49	5.58	5.52	5.49	5.49	5.51	5.49	5.58	5.52
E2(YZ)波瓣宽度	80.00	80.00	81.00	81.00	81.00	80.00	81.00	80.00	80.00	80.00	81.00	80.00	81.00	80.00	80.00	80.00	81.00
E2(YZ)前后比	3.83	3.75	3.64	3.58	3.64	3.71	3.68	3.68	3.51	3.47	3.35	3.37	3.58	3.68	3.69	3.77	3.83
最大增益处轴比(P)	15.09	14.83	17.80	14.75	15.05	15.19	15.58	17.84	15.13	18.23	18.40	15.42	15.58	16.84	17.13	16.23	18.40
顶点(Theta=0)处轴比(P)	7.29	7.28	7.25	7.26	7.29	7.19	7.25	7.31	7.41	7.37	7.59	7.40	7.35	7.31	7.50	7.37	7.69
仰角10度最差(大)轴比(P)	77.96	73.44	51.74	48.54	55.06	51.13	65.28	70.34	59.32	47.77	49.49	53.98	65.28	70.34	59.32	49.77	53.49
Hc(XY)波瓣宽度	189.00	188.00	187.00	187.00	186.00	188.00	189.00	191.00	191.00	190.00	191.00	192.00	193.00	194.00	192.00	194.00	195.00
Hc(XY)前后比	1.73	1.74	1.76	1.84	1.90	1.85	1.82	1.73	1.68	1.77	1.75	1.83	1.82	1.73	1.68	1.77	1.75
左旋圆极化效率(%)	29.69	30.20	30.18	30.29	30.71	31.34	32.27	32.40	32.69	33.15	33.59	33.97	32.27	32.40	32.69	33.15	33.59
右旋圆极化效率(%)	23.85	24.31	24.30	24.40	24.69	25.23	26.03	26.23	26.53	26.95	27.45	28.02	28.33	28.63	29.05	29.35	29.85

915.0MHz H-V, Eff: 51.4%

Back View

