

深圳市千目通讯科技有限公司

Shenzhen Qianmu Communication Technology Co., Ltd.

Antenna Acknowledgement

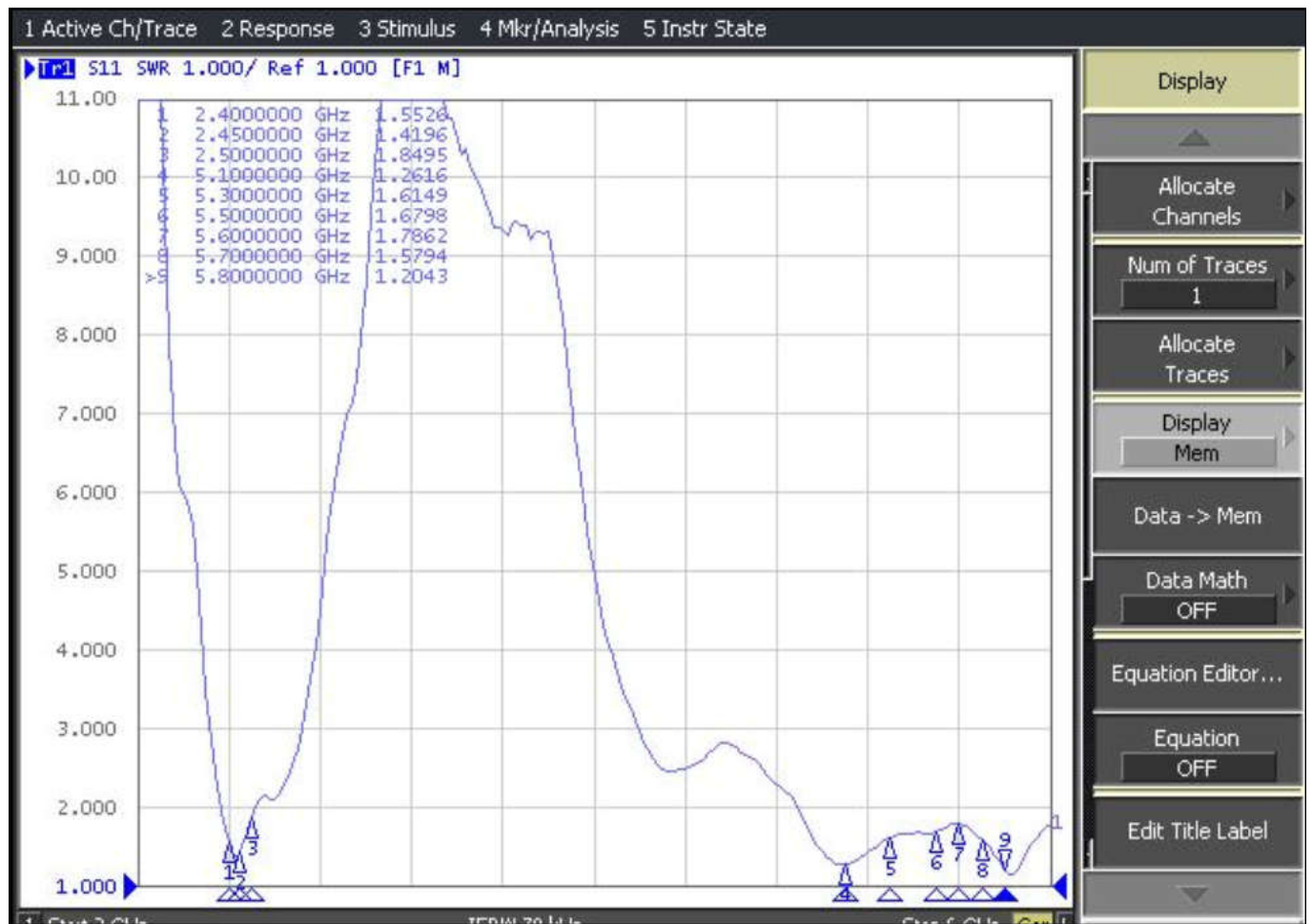
Applicable model	Q5X		
Customer	Shenzhen Shengxinke Electronics Co., Ltd.		
Specification description			
	Product content	Specifications	Customer material code
Specification description	WiFi antenna	FPC/black/character QM-Q5X-WIFI+ first-generation terminal 1.13*142mm	
Change resume			
Serial number	Date	Edition	Brief description of the change content
1	2024-07-08	V1.0	New project
2			
3			

Supplier sample confirmation			
Research and develop	Organization	Check	Decide
			PASS <input checked="" type="checkbox"/> FAIL <input type="checkbox"/>

Customer sample confirmation					
Electron	Organization	Project	Purchase	Character	Check

Reasons for rejection or other precautions:

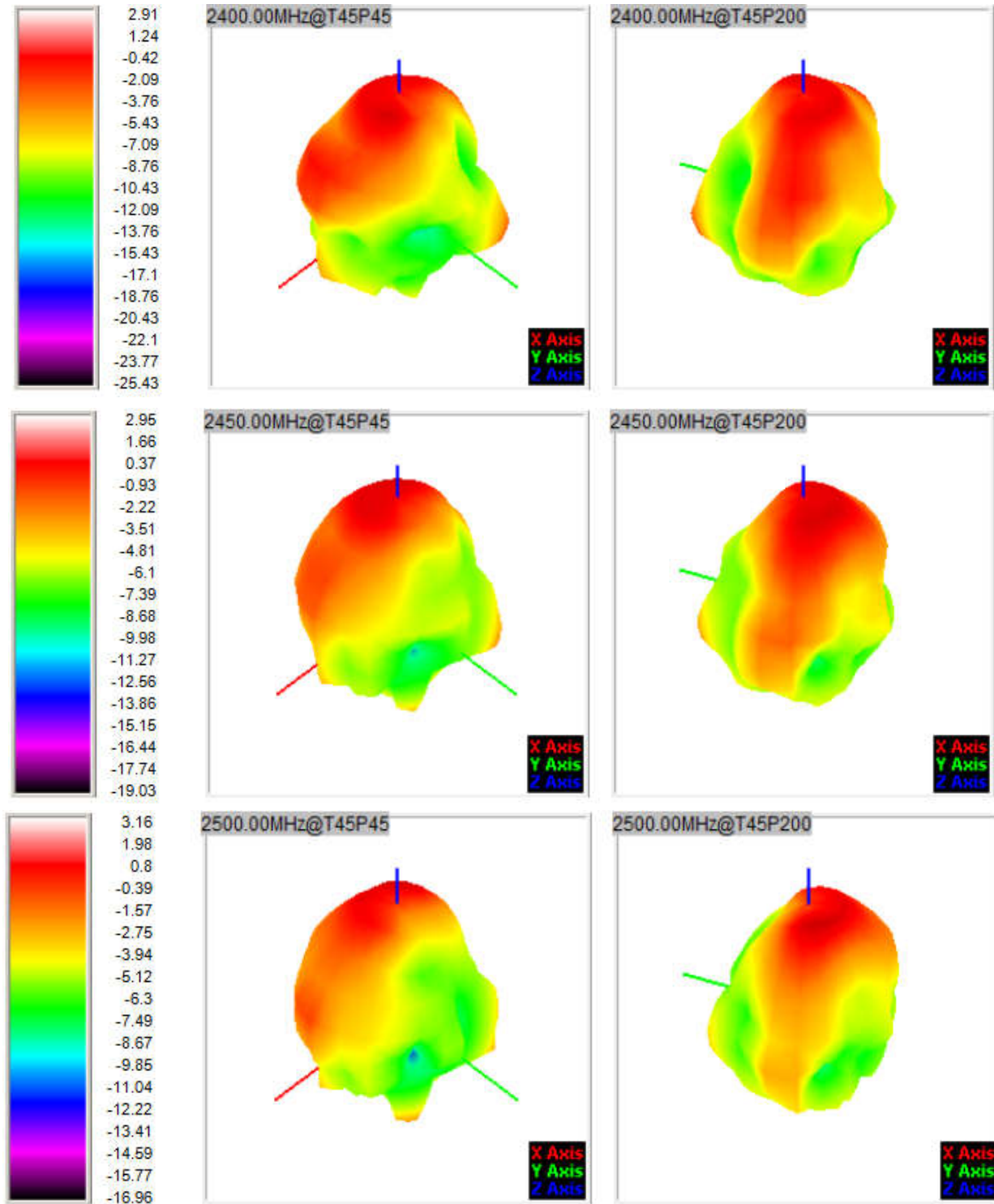
1. Antenna SWR Natural capacity

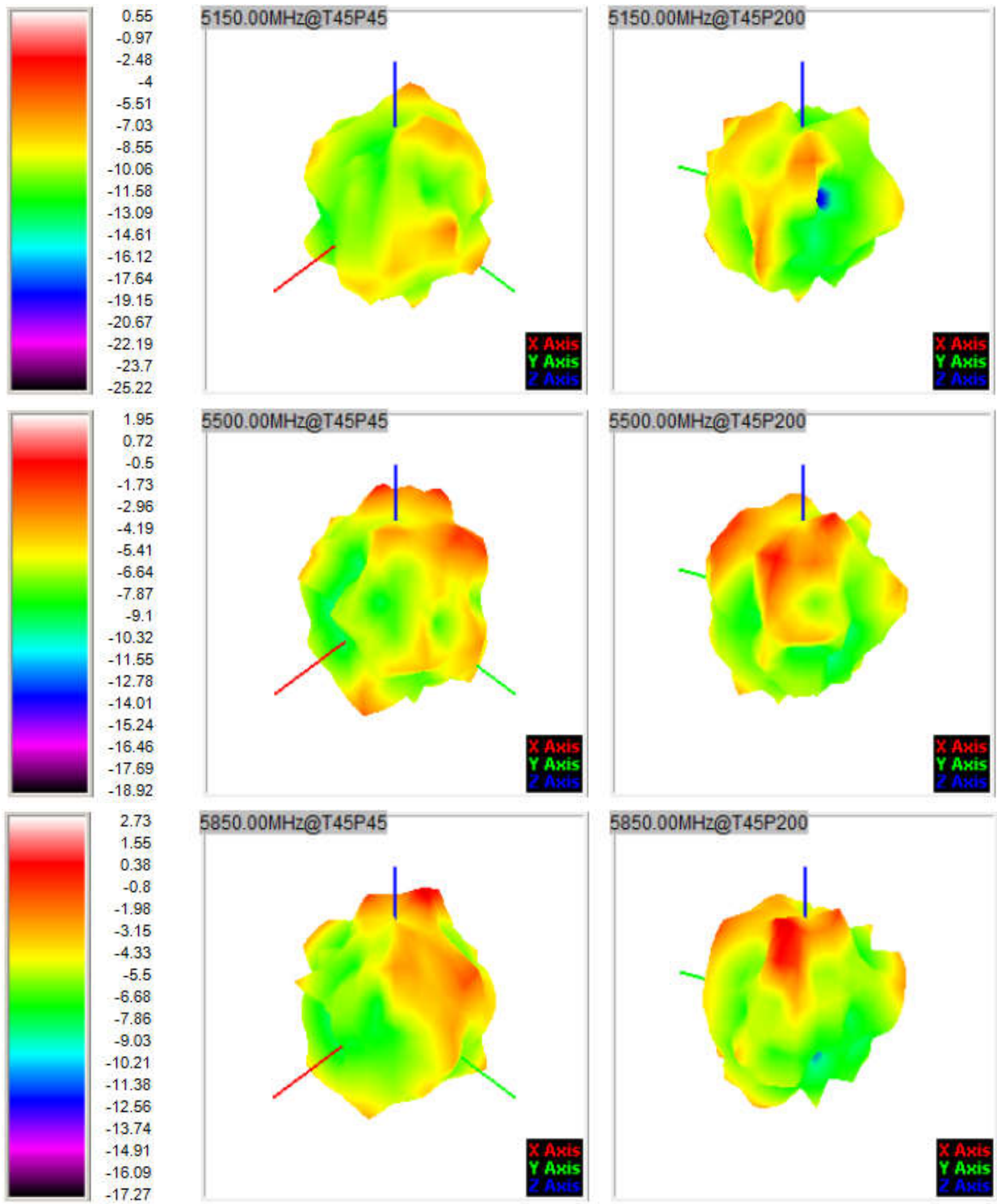


2、Antenna gain and efficiency

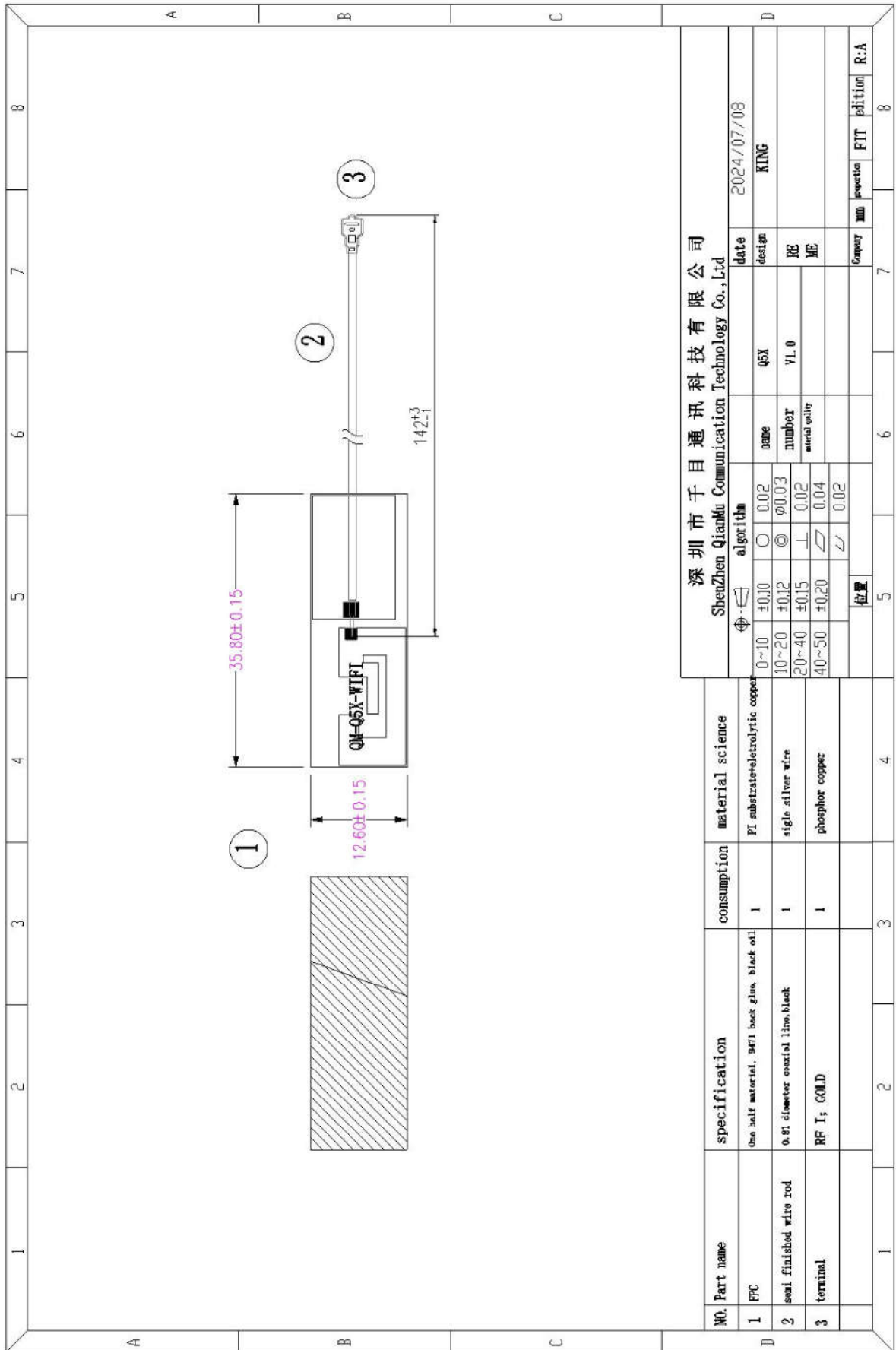
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	5150	5200
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-3.51	-3.45	-3.4	-3.41	-3.42	-3.38	-3.37	-3.48	-3.65	-3.71	-3.8	-4.9	-4.77
Peak EIRP (dBm)	2.91	2.92	2.9	2.94	2.91	2.95	2.96	2.89	2.96	3.12	3.16	0.55	0.84
Directivity (dBi)	6.42	6.37	6.31	6.35	6.34	6.33	6.33	6.38	6.61	6.83	6.97	5.44	5.61
Efficiency (dB)	-3.51	-3.45	-3.4	-3.41	-3.42	-3.38	-3.37	-3.48	-3.65	-3.71	-3.8	-4.9	-4.77
Efficiency (%)	44.5	45.2	45.7	45.6	45.5	45.9	46.1	44.8	43.1	42.6	41.7	32.4	33.4
Gain (dBi)	2.91	2.92	2.9	2.94	2.91	2.95	2.96	2.89	2.96	3.12	3.16	0.55	0.84
NHPRP $\pm\pi/4$ (dBm)	-5.98	-5.92	-5.9	-5.9	-5.91	-5.86	-5.85	-5.97	-6.11	-6.15	-6.24	-6.54	-6.44
NHPRP $\pm\pi/6$ (dBm)	-7.82	-7.77	-7.74	-7.74	-7.74	-7.68	-7.66	-7.77	-7.9	-7.94	-8.05	-8.03	-7.93
NHPRP $\pm\pi/8$ (dBm)	-9.05	-9.04	-9.04	-9.05	-9.06	-8.99	-8.97	-9.06	-9.18	-9.2	-9.29	-9.19	-9.11
Upper Hem. PRP (dBm)	-5.08	-5.02	-5	-5.02	-5.05	-5.03	-5.04	-5.18	-5.37	-5.44	-5.54	-7.4	-7.13
Lower Hem. PRP (dBm)	-8.69	-8.62	-8.54	-8.5	-8.47	-8.39	-8.33	-8.39	-8.52	-8.54	-8.62	-8.48	-8.54
Upper Hem. PRP (%)	31.01	31.48	31.66	31.46	31.26	31.43	31.35	30.34	29.07	28.57	27.91	18.2	19.37
Lower Hem. PRP (%)	13.52	13.73	14	14.14	14.21	14.5	14.7	14.49	14.06	14.01	13.75	14.19	14
Frequency ID	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-4.65	-4.24	-4.33	-4.35	-4.09	-4.28	-4.26	-4.14	-4.56	-4.69	-4.45	-4.56	-4.52
Peak EIRP (dBm)	0.7	2.05	3.06	3.34	2.32	1.95	2.2	1.64	1.28	1.07	1.58	2.24	2.73
Directivity (dBi)	5.34	6.29	7.39	7.68	6.41	6.23	6.46	5.78	5.83	5.75	6.03	6.8	7.25
Efficiency (dB)	-4.65	-4.24	-4.33	-4.35	-4.09	-4.28	-4.26	-4.14	-4.56	-4.69	-4.45	-4.56	-4.52
Efficiency (%)	34.3	37.7	36.9	36.8	39	37.3	37.5	38.6	35	34	35.9	35	35.3
Gain (dBi)	0.7	2.05	3.06	3.34	2.32	1.95	2.2	1.64	1.28	1.07	1.58	2.24	2.73
NHPRP $\pm\pi/4$ (dBm)	-6.4	-5.94	-6.12	-6.34	-6	-6.26	-6.28	-6.06	-6.55	-6.68	-6.44	-6.62	-6.55
NHPRP $\pm\pi/6$ (dBm)	-7.97	-7.5	-7.73	-8.04	-7.55	-7.77	-7.8	-7.52	-8.08	-8.21	-8	-8.29	-8.23
NHPRP $\pm\pi/8$ (dBm)	-9.19	-8.74	-8.98	-9.29	-8.65	-8.82	-8.84	-8.53	-9.2	-9.34	-9.16	-9.59	-9.54
Upper Hem. PRP (dBm)	-6.97	-6.59	-6.46	-6.42	-6.39	-6.63	-6.7	-6.76	-7.13	-7.35	-7.15	-6.97	-6.93
Lower Hem. PRP (dBm)	-8.47	-8.03	-8.44	-8.54	-7.96	-8.08	-7.93	-7.58	-8.06	-8.07	-7.8	-8.27	-8.23
Upper Hem. PRP (%)	20.1	21.94	22.58	22.78	22.97	21.74	21.36	21.1	19.36	18.42	19.29	20.11	20.27
Lower Hem. PRP (%)	14.21	15.76	14.31	13.98	16	15.57	16.12	17.45	15.65	15.58	16.59	14.9	15.05

3、Antenna direction chart





4. Antenna engineering drawings



NO. Part name		specification	consumption	material science	Shenzhen Qianmu Communication Technology Co., Ltd			
1	PFC	One half material, 9471 back glue, black oil	1	PI substrate+electrolytic copper	name	Q5X	date	2024/07/08
2	semi finished wire rod	0.81 diameter coaxial line, black	1	single silver wire	number	V1.0	design	KING
3	terminal	RF I; GOLD	1	phosphor copper	serial order		RE	
							ME	
							Company	
							number	
							position	
							FIT	edition
							R.A	