

Antenna Acknowledgment

Applicable model	AC2527		
Client			
Specifications			
	Product content	Specifications	Customer Material Code
Specifications	antenna	LDS (Laser Engraving + Chemical Plating)	
Change resume			
Order number	Date	Edition	Edit content summary
1	2025-10-18	V1.0	New project
2			
3			

Supplier sample confirmation					
Research and development	Structure	Examine and verify		Judge	
				PASS ☒ FAIL ☐	
Customer sample confirmation					
Electron	Structure	Project	Purchase	Character	Examine and verify
Reason for rejection or other notes:					

1. Main antenna electrical performance test report

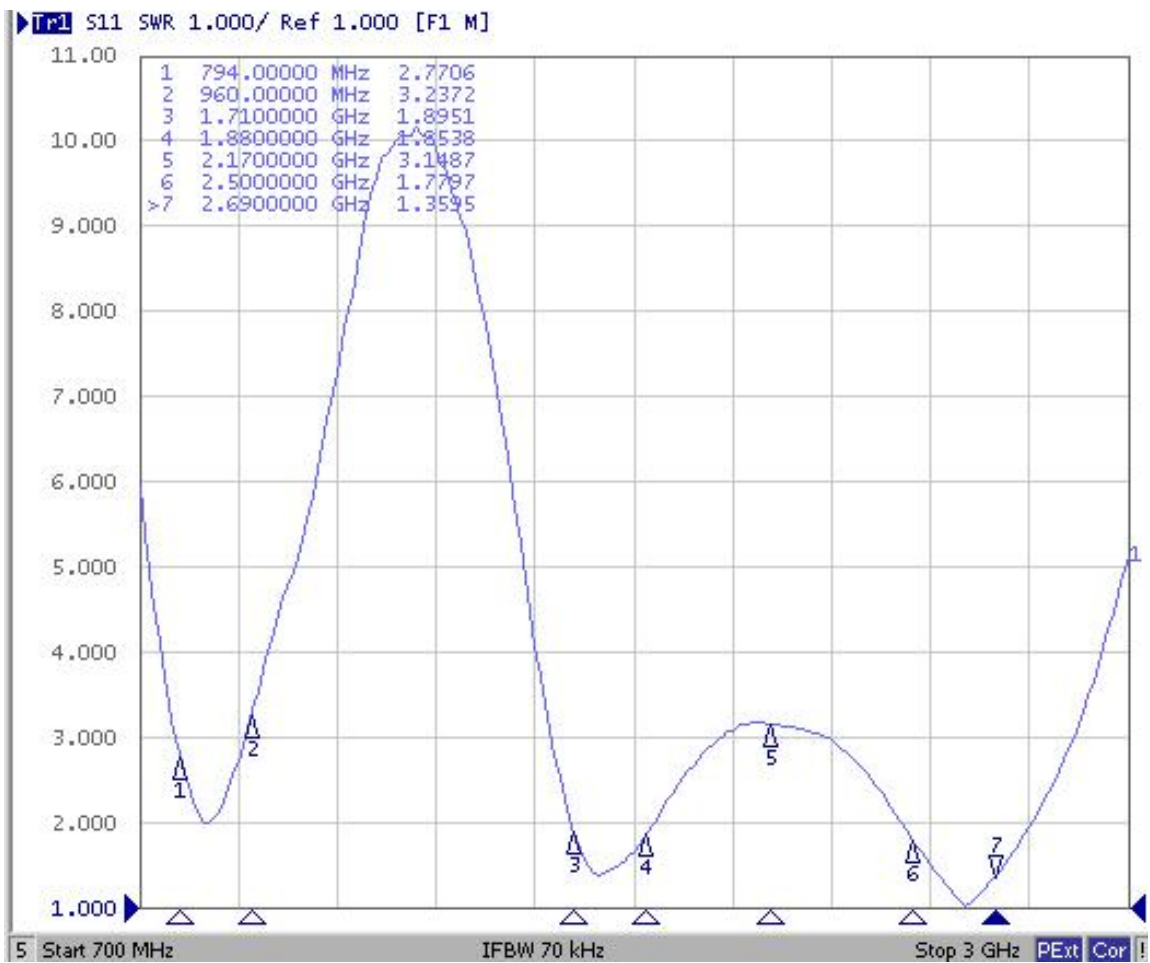
1.1 Test Items and Equipment

	test item	equipment
Passive test	①.VSWR parameter	Network Analyzer: HP8753D 3D Darkroom Antenna Test System (ETS Test System, Network Analyzer, Comprehensive Tester)
	②.Return loss parameter	
Active test	①. transmitting power	Integrated tester: Agilent E5515C 3D Darkroom Antenna Test System (ETS Test System, Integrated Test Instrument)
	②. incoming level	
	③. receiving sensitivity	

1.2 GSM Passive Test Report

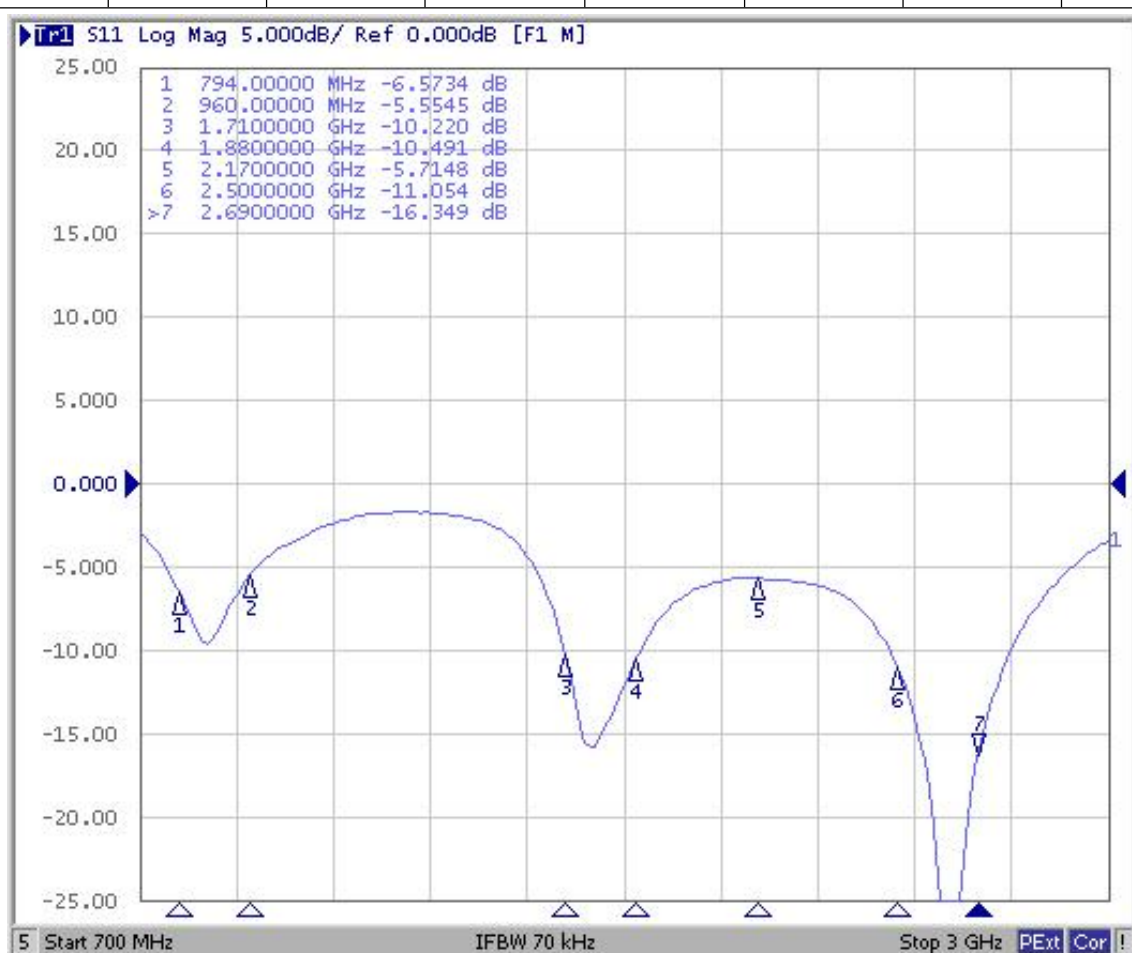
VSWR parameter value

Frequency (MHz)	794	960	1710	1880	2170	2500	2690
RL	2.7	3.2	1.8	1.8	3.1	1.7	1.3



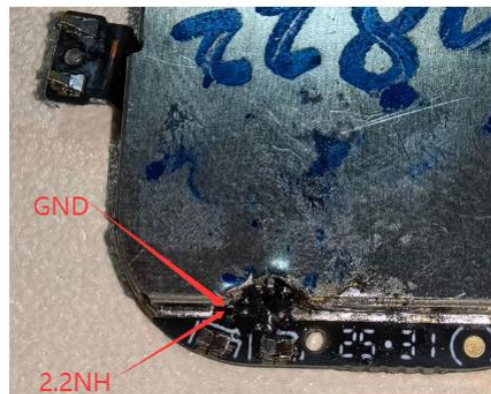
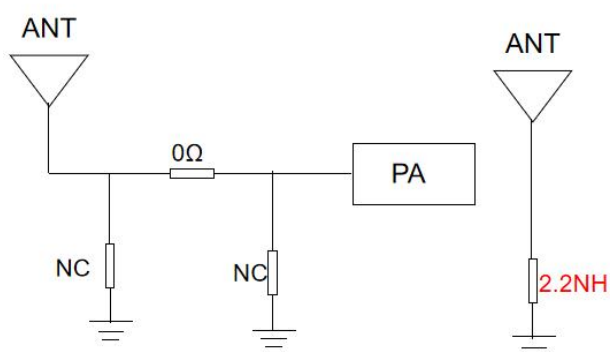
Return the parameter value

frequency (MHz)	794	960	1710	1880	2170	2500	2690
RL	-6.5	-5.5	-10.2	-10.4	-5.7	-11	-16.3



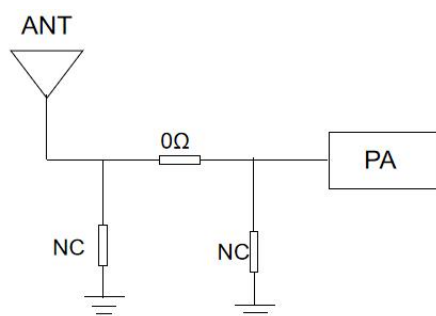
2. Matching Circuit-

LORA antenna



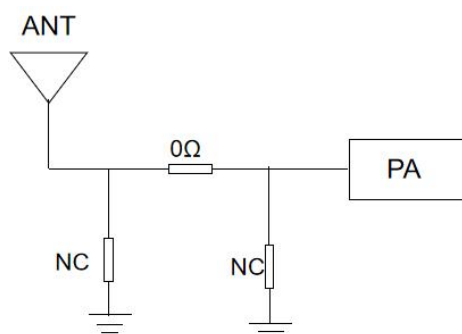
The original matching of your company's main board has not been changed

GPS+Wi-Fi antenna



The original match on your main board has not been changed

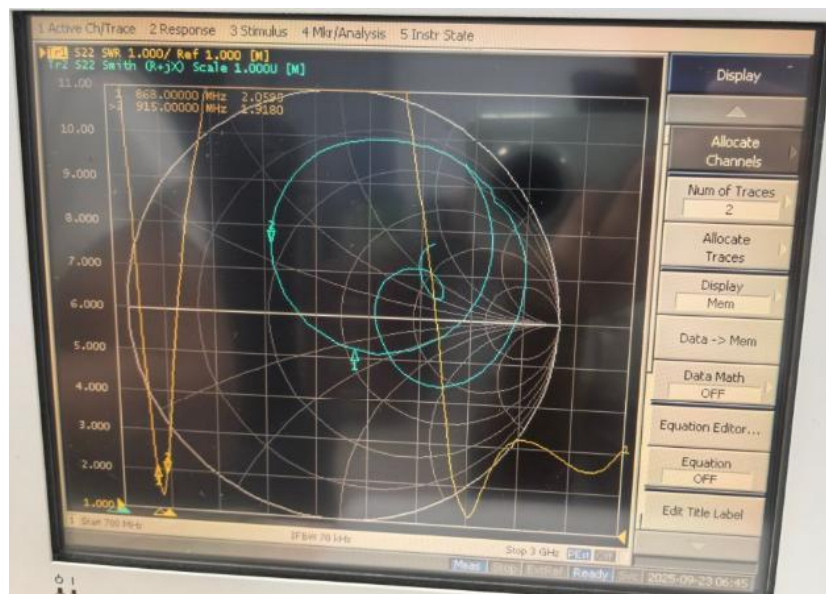
L5 antenna



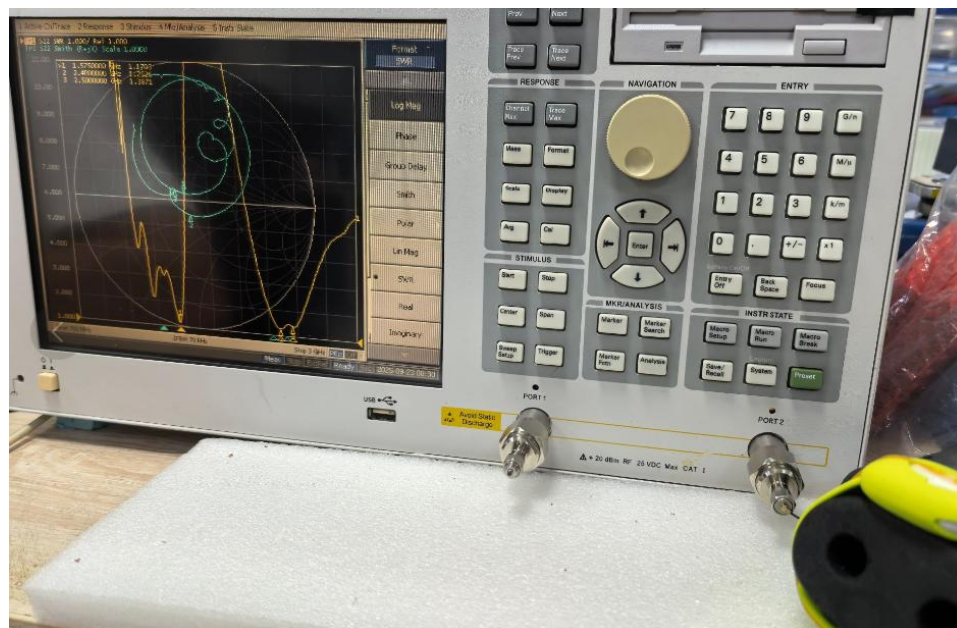
The original match on your main board has not been changed

3、 S11-

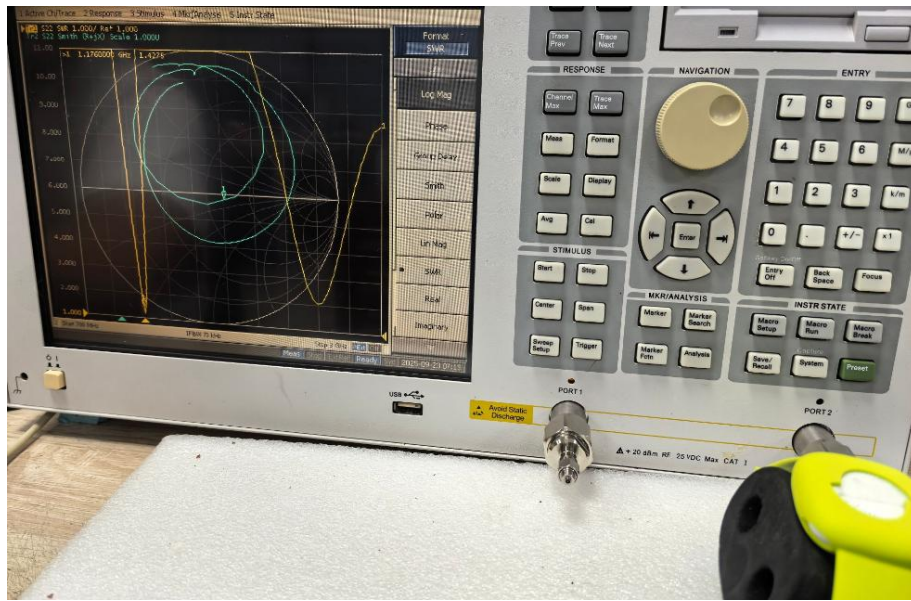
LORA passive parameters



GPS+WiFi passive parameters



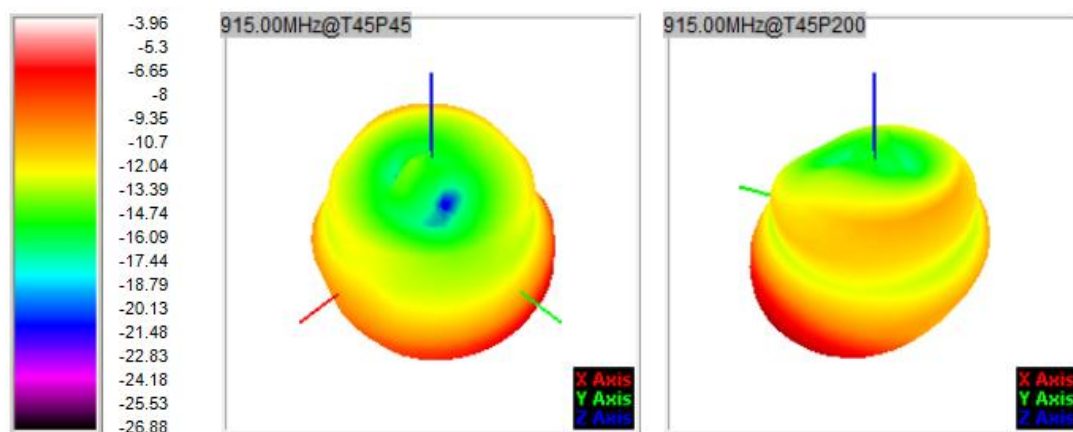
L5 Passive Parameters



4、Antenna efficiency and gain

LORA-915MHz

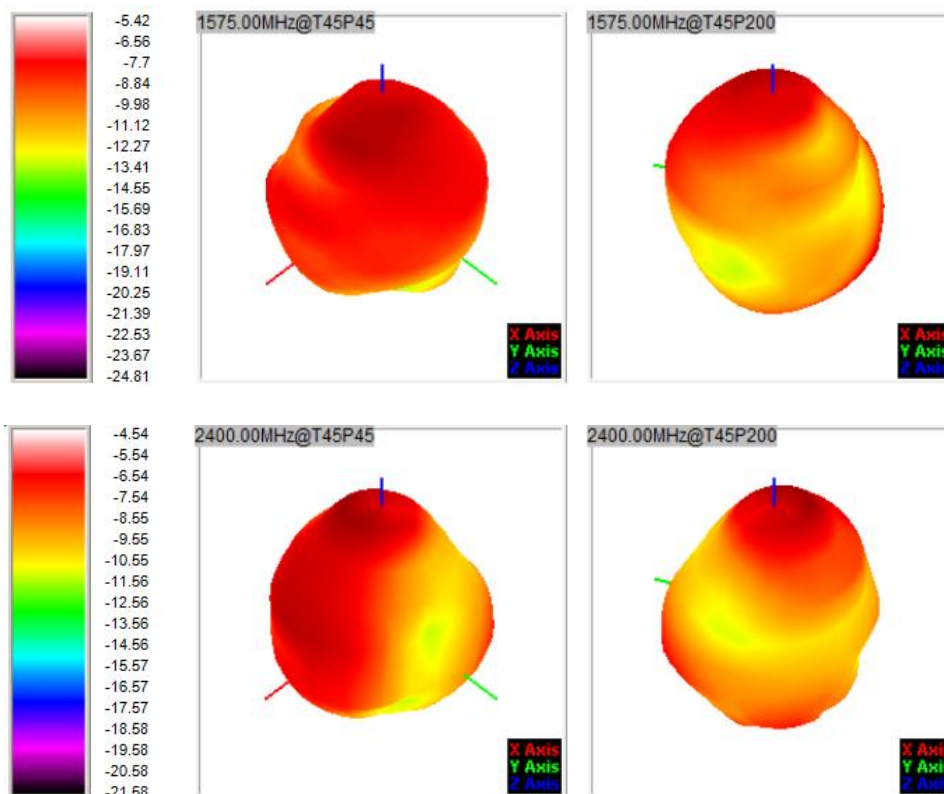
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Frequency (MHz)	860	865	870	875	880	885	890	895	900	905	910	915	920
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Tot. Rad Pwr. (dBm)	-10.22	-10.05	-9.89	-9.66	-9.44	-9.28	-9.15	-9.12	-9.11	-9.09	-9.13	-9.25	-9.42
Peak EIRP (dBm)	-5.42	-5.15	-4.88	-4.55	-4.23	-3.97	-3.84	-3.77	-3.71	-3.69	-3.78	-3.96	-4.13
Directivity (dBi)	4.8	4.9	5.01	5.11	5.22	5.31	5.31	5.35	5.4	5.39	5.35	5.3	5.29
Efficiency (dB)	-10.22	-10.05	-9.89	-9.66	-9.44	-9.28	-9.15	-9.12	-9.11	-9.09	-9.13	-9.25	-9.42
Efficiency (%)	9.5	9.9	10.3	10.8	11.4	11.8	12.1	12.3	12.3	12.3	12.2	11.9	11.4
Gain (dBi)	-5.42	-5.15	-4.88	-4.55	-4.23	-3.97	-3.84	-3.77	-3.71	-3.69	-3.78	-3.96	-4.13
NHPRP $\pm\pi/4$ (dBm)	-11.26	-11.09	-10.91	-10.68	-10.46	-10.28	-10.14	-10.08	-10.06	-10.02	-10.05	-10.17	-10.35
NHPRP $\pm\pi/6$ (dBm)	-12.59	-12.42	-12.24	-12.01	-11.78	-11.61	-11.48	-11.43	-11.41	-11.4	-11.44	-11.57	-11.75
NHPRP $\pm\pi/8$ (dBm)	-13.52	-13.34	-13.14	-12.9	-12.67	-12.49	-12.4	-12.39	-12.41	-12.44	-12.52	-12.69	-12.91
Upper Hem. PRP (dBm)	-15.09	-14.95	-14.81	-14.63	-14.45	-14.32	-14.26	-14.27	-14.33	-14.38	-14.45	-14.56	-14.72
Lower Hem. PRP (dBm)	-11.93	-11.75	-11.57	-11.32	-11.09	-10.91	-10.76	-10.7	-10.67	-10.61	-10.64	-10.77	-10.94
Upper Hem. PRP (%)	3.1	3.2	3.3	3.44	3.59	3.7	3.75	3.74	3.69	3.65	3.59	3.5	3.37
Lower Hem. PRP (%)	6.41	6.68	6.96	7.37	7.78	8.11	8.4	8.52	8.58	8.69	8.64	8.38	8.05

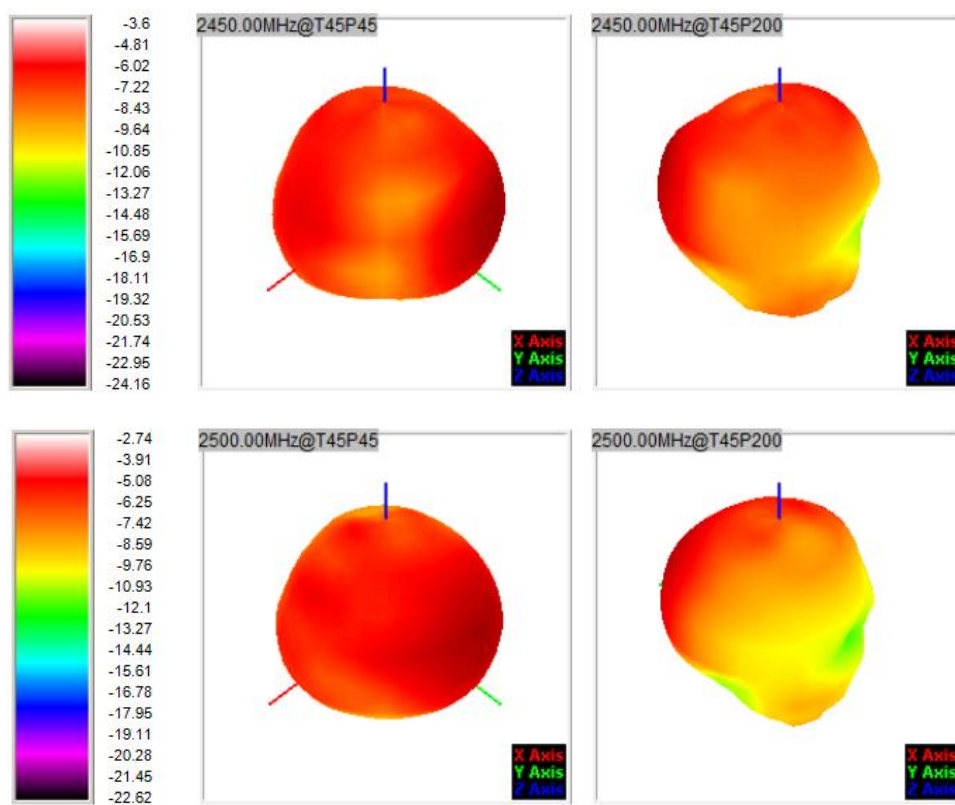


GPS+WIFI

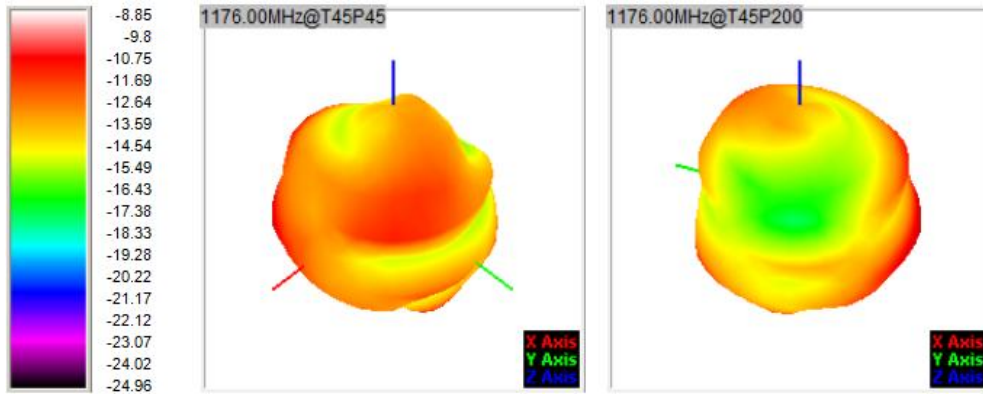
Frequency ID	1	2	3	4	5	6	7
Frequency (MHz)	1572	1573	1574	1575	1576	1577	1578
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-9.63	-9.65	-9.67	-9.71	-9.73	-9.76	-9.78
Peak EIRP (dBm)	-5.42	-5.41	-5.41	-5.42	-5.44	-5.45	-5.45
Directivity (dBi)	4.21	4.24	4.26	4.28	4.3	4.31	4.33
Efficiency (dB)	-9.63	-9.65	-9.67	-9.71	-9.73	-9.76	-9.78
Efficiency (%)	10.9	10.8	10.8	10.7	10.6	10.6	10.5
Gain (dBi)	-5.42	-5.41	-5.41	-5.42	-5.44	-5.45	-5.45
NHPRP $\pm \pi/4$ (dBm)	-11.3	-11.32	-11.34	-11.37	-11.39	-11.42	-11.44
NHPRP $\pm \pi/6$ (dBm)	-12.9	-12.92	-12.94	-12.96	-12.99	-13.01	-13.02
NHPRP $\pm \pi/8$ (dBm)	-14.19	-14.21	-14.23	-14.25	-14.28	-14.3	-14.31
Upper Hem. PRP (dBm)	-12.06	-12.07	-12.1	-12.13	-12.15	-12.18	-12.19
Lower Hem. PRP (dBm)	-13.31	-13.34	-13.37	-13.39	-13.43	-13.46	-13.49
Upper Hem. PRP (%)	6.22	6.2	6.17	6.12	6.09	6.06	6.04
Lower Hem. PRP (%)	4.67	4.64	4.61	4.58	4.54	4.5	4.48

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-9.14	-9.01	-8.81	-8.58	-8.35	-8.19	-8.08	-7.99	-7.89	-7.88	-7.9
Peak EIRP (dBm)	-4.54	-4.9	-5.33	-5.2	-4.17	-3.6	-3.22	-3.05	-2.82	-2.67	-2.74
Directivity (dBi)	4.61	4.11	3.48	3.38	4.18	4.59	4.85	4.95	5.07	5.22	5.15
Efficiency (dB)	-9.14	-9.01	-8.81	-8.58	-8.35	-8.19	-8.08	-7.99	-7.89	-7.88	-7.9
Efficiency (%)	12.2	12.6	13.1	13.9	14.6	15.2	15.6	15.9	16.2	16.3	16.2
Gain (dBi)	-4.54	-4.9	-5.33	-5.2	-4.17	-3.6	-3.22	-3.05	-2.82	-2.67	-2.74
NHPRP $\pm \pi/4$ (dBm)	-10.79	-10.58	-10.33	-10.07	-9.81	-9.62	-9.48	-9.39	-9.29	-9.28	-9.32
NHPRP $\pm \pi/6$ (dBm)	-12.14	-11.94	-11.68	-11.43	-11.18	-10.98	-10.84	-10.74	-10.65	-10.65	-10.7
NHPRP $\pm \pi/8$ (dBm)	-13.15	-12.96	-12.71	-12.47	-12.24	-12.05	-11.9	-11.8	-11.69	-11.69	-11.72
Upper Hem. PRP (dBm)	-11.36	-11.15	-10.9	-10.6	-10.27	-10.03	-9.85	-9.7	-9.53	-9.46	-9.43
Lower Hem. PRP (dBm)	-13.12	-13.11	-13	-12.89	-12.82	-12.8	-12.82	-12.88	-12.92	-13.04	-13.16
Upper Hem. PRP (%)	7.31	7.67	8.13	8.71	9.39	9.93	10.35	10.72	11.15	11.32	11.41
Lower Hem. PRP (%)	4.87	4.89	5.01	5.14	5.23	5.25	5.22	5.16	5.1	4.97	4.83

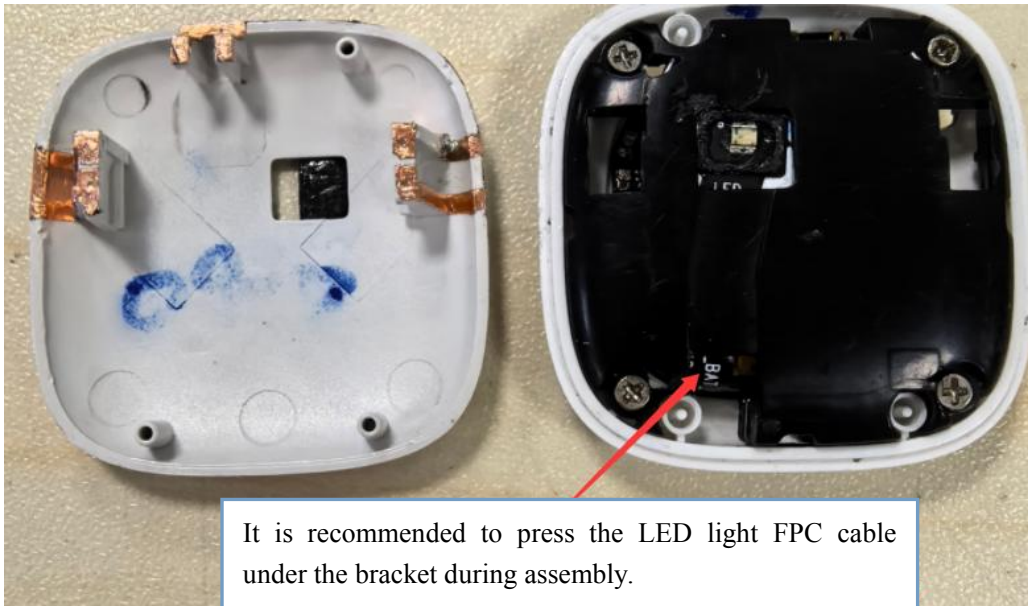




Frequency ID	1	2	3	4	5	6
Frequency (MHz)	1170	1172	1174	1176	1178	1180
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-13.65	-13.65	-13.68	-13.7	-13.73	-13.8
Peak EIRP (dBm)	-9.31	-9.16	-9.03	-8.85	-8.71	-8.61
Directivity (dBi)	4.34	4.49	4.65	4.85	5.03	5.2
Efficiency (dB)	-13.65	-13.65	-13.68	-13.7	-13.73	-13.8
Efficiency (%)	4.3	4.3	4.3	4.3	4.2	4.2
Gain (dBi)	-9.31	-9.16	-9.03	-8.85	-8.71	-8.61
NHPRP $\pm \pi/4$ (dBm)	-15.05	-15.09	-15.14	-15.19	-15.25	-15.35
NHPRP $\pm \pi/6$ (dBm)	-16.35	-16.38	-16.43	-16.49	-16.55	-16.66
NHPRP $\pm \pi/8$ (dBm)	-17.28	-17.31	-17.36	-17.42	-17.49	-17.6
Upper Hem. PRP (dBm)	-17.21	-17.24	-17.24	-17.23	-17.25	-17.32
Lower Hem. PRP (dBm)	-16.17	-16.16	-16.2	-16.24	-16.29	-16.36
Upper Hem. PRP (%)	1.9	1.89	1.89	1.89	1.88	1.85
Lower Hem. PRP (%)	2.42	2.42	2.4	2.37	2.35	2.31



5、 Environmental Treatment Description



6、Schedule drawing

