

规格承认书
Approval Sheet

客户名称 Customer	攻氩	日期 Data	2024/12/24
产品名称 Product	WiFi/BT天线	客户机型 Models	AR06
料号 P/N	Main: F1287-14RB-064 Aux: F1286-14LG-207	客户料号 Customer P/N	
规格描述 Specifications	黑色FPC; Main: RF0.81四代端子黑色同轴线, 长度L=64mm, Aux: RF0.81四代端子灰色同轴线, 长度L=207mm		

地址: 深圳市宝安区福永镇福海街道塘尾股份商务大厦1506

Address: 1506, Tangwei Business Building, Fuhai Street, Fuyong Town, Baoan District, Shenzhen

Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



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Specification

1.1 Electrical Properties

Characteristics	Specifications
Working Band	2.4GWiFi/BT; 5GWiFi
Antenna From	PIFA
Impedance	50 Ω
Polarization	Linear
Peak Effi	34%@2.4G; 49%@5G
Peak Gain	

1.2 Physical Properties

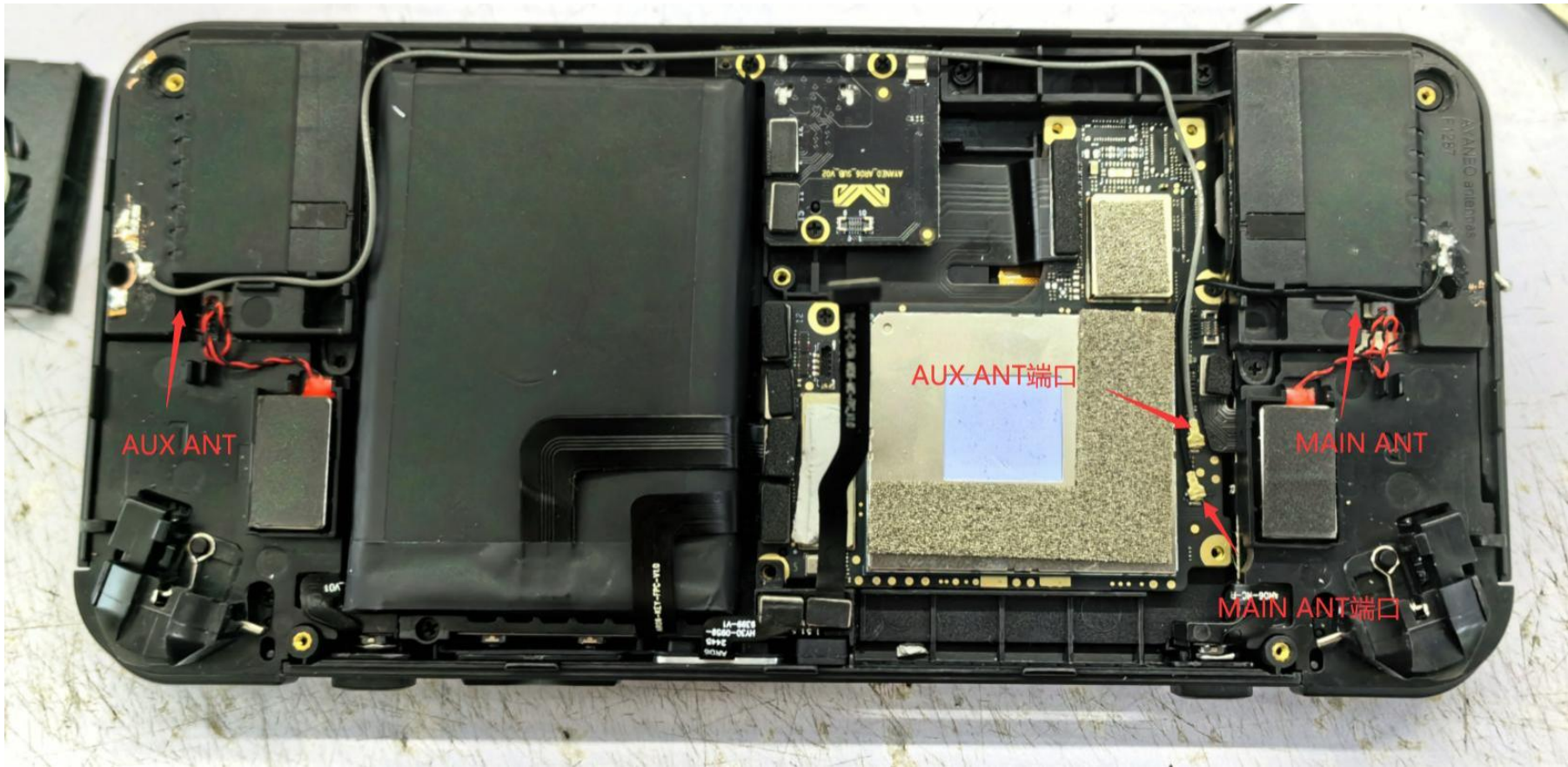
Characteristics	Specifications
Operating Temp	-10°C~+60°C
Storage Temp	-10°C~+70°C
Humidity	10~95%RH



深圳星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Antenna Placement



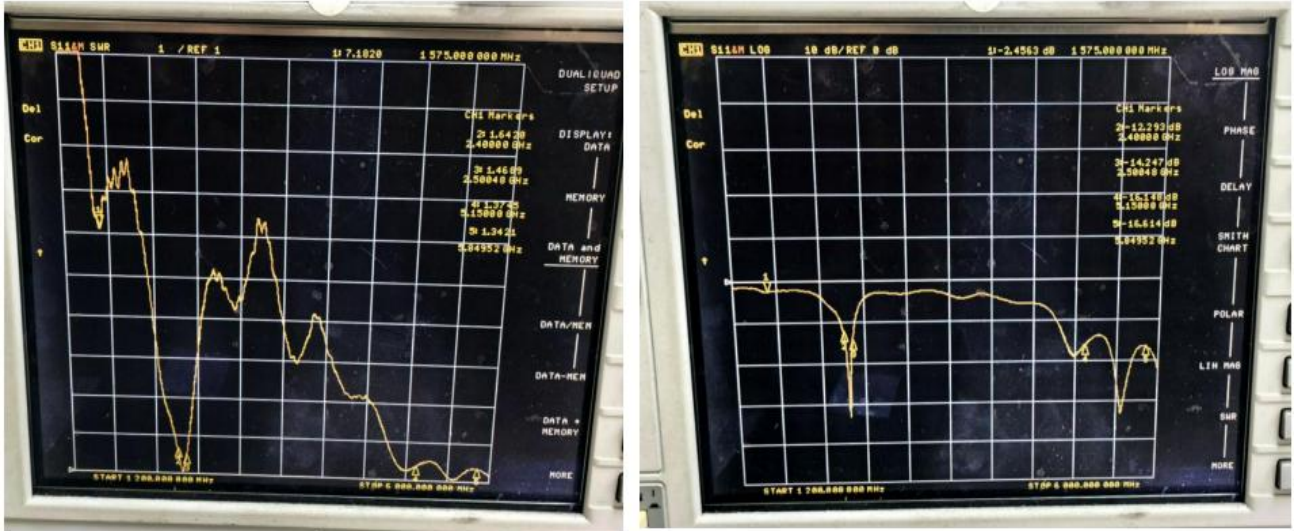
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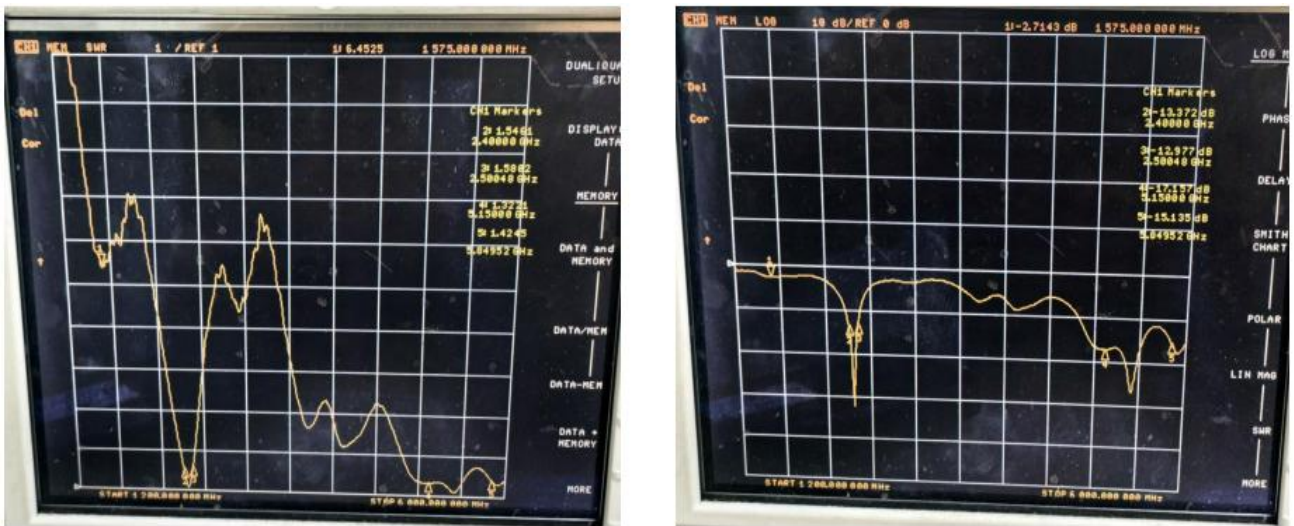
Test Data

S11 Parameter-VSWR(ANT1)



Frequency (MHZ)	2400	2500	5150	5850
VSWR	1.64	1.46	1.37	1.34
Return Loss (DB)	-12.29	-14.24	-16.14	-16.61

S11 Parameter-VSWR(ANT2)



Frequency (MHZ)	2400	2500	5150	5850
VSWR	1.54	1.58	1.32	1.42
Return Loss (DB)	-13.37	-12.97	-17.15	-15.13

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Efficiency Table (ANT1 2.4G) MAIN

Passive Test For WIFI2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	29.71	-5.27	-0.26	-2.41	17.389	12.322	-0.26	-14.57
2410	28.7	-5.42	-0.27	-2.42	16.747	11.953	-0.27	-13.68
2420	30.09	-5.22	-0.02	-2.17	17.37	12.721	-0.02	-12.44
2430	28.32	-5.48	-0.29	-2.44	16.192	12.129	-0.29	-13.86
2440	28.66	-5.43	-0.3	-2.45	16.287	12.371	-0.3	-13.27
2450	29.99	-5.23	-0.3	-2.45	16.954	13.032	-0.3	-12.96
2460	31.4	-5.03	0.07	-2.08	17.656	13.745	0.07	-12.91
2470	31.26	-5.05	0.25	-1.9	17.597	13.665	0.25	-13.09
2480	32.29	-4.91	0.35	-1.8	18.221	14.069	0.35	-13.82
2490	34.97	-4.56	0.64	-1.51	19.681	15.293	0.64	-13.33
2500	31.67	-4.99	0.29	-1.86	17.675	13.991	0.29	-14.39

Efficiency Table (ANT2 2.4G) AUX

Passive Test For WIFI2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	24.87	-6.04	-2.07	-4.22	14.577	10.294	-2.07	-14.33
2410	23.25	-6.34	-1.98	-4.13	13.594	9.66	-1.98	-15.62
2420	25.67	-5.91	-1.6	-3.75	14.937	10.731	-1.6	-17.9
2430	24.79	-6.06	-1.71	-3.86	14.442	10.352	-1.71	-21.94
2440	24.64	-6.08	-1.81	-3.96	14.357	10.282	-1.81	-23.05
2450	25.15	-6	-1.63	-3.78	14.666	10.479	-1.63	-18.56
2460	26.97	-5.69	-1.11	-3.26	15.716	11.257	-1.11	-15.98
2470	27.6	-5.59	-1.17	-3.32	16.015	11.583	-1.17	-16.16
2480	29.02	-5.37	-0.84	-2.99	16.723	12.299	-0.84	-17.17
2490	32.54	-4.88	-0.23	-2.38	18.548	13.997	-0.23	-17.58
2500	31.03	-5.08	-0.09	-2.24	17.735	13.298	-0.09	-18.71

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Efficiency Table (ANT1 5G) MAIN

Passive Test For WIFI5G								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
5150	29.27	-5.34	0.23	-1.92	15.187	14.079	0.23	-16.41
5170	28.15	-5.51	0.14	-2.01	14.354	13.792	0.14	-16.36
5190	31.45	-5.02	0.85	-1.3	16.047	15.402	0.85	-16.08
5210	31.53	-5.01	1.24	-0.91	16.079	15.454	1.24	-15.23
5230	31.16	-5.06	1.28	-0.87	15.556	15.603	1.28	-17.23
5250	36.23	-4.41	1.85	-0.3	17.944	18.285	1.85	-18.62
5270	36.15	-4.42	1.95	-0.2	17.808	18.342	1.95	-16.67
5290	41.35	-3.83	2.72	0.57	20.362	20.99	2.72	-16.92
5310	35.9	-4.45	2.19	0.04	17.262	18.638	2.19	-18.42
5330	36.96	-4.32	2.24	0.09	17.506	19.457	2.24	-18.86
5350	38.54	-4.14	2.5	0.35	18.005	20.534	2.5	-17.7
5370	37.46	-4.26	2.65	0.5	17.333	20.131	2.65	-18.02
5390	35.61	-4.48	2.54	0.39	16.117	19.488	2.54	-18.27
5410	42.37	-3.73	3.22	1.07	18.764	23.603	3.22	-20.78
5430	41.09	-3.86	3.12	0.97	18.178	22.917	3.12	-17.51
5450	44.14	-3.55	3.51	1.36	19.73	24.413	3.51	-14.87
5470	42.29	-3.74	3.26	1.11	18.852	23.438	3.26	-15.72
5490	42.55	-3.71	3.14	0.99	18.782	23.77	3.14	-16.57
5510	46.3	-3.34	3.22	1.07	20.455	25.842	3.22	-15.45
5530	45.67	-3.4	2.89	0.74	20.299	25.374	2.89	-13.07
5550	49.89	-3.02	3.08	0.93	22.077	27.814	3.08	-11.5
5570	45.81	-3.39	2.71	0.56	19.915	25.899	2.71	-11.68
5590	47.52	-3.23	3.09	0.94	20.443	27.075	3.09	-12.07
5610	42.24	-3.74	2.79	0.64	18.117	24.125	2.79	-13
5630	41.87	-3.78	2.98	0.83	18.019	23.851	2.98	-13.03
5650	39.35	-4.05	2.82	0.67	16.973	22.379	2.82	-13.34
5670	43.35	-3.63	3.31	1.16	18.721	24.624	3.31	-13.22
5690	37.59	-4.25	2.56	0.41	16.405	21.183	2.56	-13.93
5710	37.87	-4.22	2.56	0.41	16.569	21.297	2.56	-14.31
5730	37.47	-4.26	2.67	0.52	16.343	21.127	2.67	-13.77
5750	31.57	-5.01	1.92	-0.23	13.741	17.829	1.92	-15.49
5770	35.22	-4.53	2.28	0.13	15.304	19.912	2.28	-16.24
5790	29.85	-5.25	1.54	-0.61	13.012	16.833	1.54	-16.21
5810	32.66	-4.86	2.1	-0.05	14.01	18.647	2.1	-14.77
5830	31.57	-5.01	2.14	-0.01	13.262	18.312	2.14	-15.96
5850	37.24	-4.29	2.79	0.64	15.597	21.638	2.79	-16.92

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Efficiency Table (ANT2 5G) AUX

Passive Test For WIFI5G								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
5150	27.84	-5.55	1.23	-0.92	15.565	12.278	1.23	-17.93
5170	27.3	-5.64	1.28	-0.87	14.905	12.398	1.28	-19.64
5190	30.51	-5.16	1.9	-0.25	16.457	14.052	1.9	-20.65
5210	32.06	-4.94	2.33	0.18	17.167	14.897	2.33	-19.67
5230	28.99	-5.38	2.09	-0.06	15.408	13.585	2.09	-20.04
5250	36.47	-4.38	3.17	1.02	19.115	17.35	3.17	-20.48
5270	35.02	-4.56	3.2	1.05	18.005	17.011	3.2	-19.21
5290	42.24	-3.74	3.91	1.76	21.307	20.932	3.91	-18.22
5310	34.02	-4.68	2.82	0.67	16.814	17.21	2.82	-20.9
5330	36.79	-4.34	3.06	0.91	17.836	18.956	3.06	-21.18
5350	37.07	-4.31	2.8	0.65	17.592	19.474	2.8	-18.06
5370	39.11	-4.08	2.72	0.57	18.127	20.979	2.72	-17.03
5390	34.57	-4.61	1.69	-0.46	15.671	18.895	1.69	-18.75
5410	41.6	-3.81	2.19	0.04	18.748	22.847	2.19	-17.51
5430	36.48	-4.38	1.76	-0.39	16.297	20.186	1.76	-16.29
5450	41.14	-3.86	2.04	-0.11	17.93	23.213	2.04	-14.85
5470	37.7	-4.24	1.42	-0.73	16.235	21.462	1.42	-15.08
5490	37.97	-4.21	1.5	-0.65	16.39	21.584	1.5	-15.98
5510	38.57	-4.14	1.61	-0.54	16.63	21.941	1.61	-16.65
5530	40.19	-3.96	1.74	-0.41	17.013	23.181	1.74	-15.95
5550	42.34	-3.73	2.24	0.09	17.803	24.54	2.24	-15.47
5570	42.12	-3.76	2.48	0.33	17.899	24.217	2.48	-16.53
5590	42.45	-3.72	2.8	0.65	18.316	24.13	2.8	-17.02
5610	40.54	-3.92	2.94	0.79	17.568	22.975	2.94	-15.66
5630	39.47	-4.04	2.71	0.56	17.337	22.136	2.71	-16.17
5650	39	-4.09	2.7	0.55	17.592	21.407	2.7	-18.12
5670	41.99	-3.77	3.2	1.05	19.252	22.735	3.2	-16.99
5690	39.74	-4.01	3.01	0.86	18.387	21.349	3.01	-15.47
5710	42.17	-3.75	3.46	1.31	19.459	22.711	3.46	-14.97
5730	43.1	-3.66	3.43	1.28	20.183	22.918	3.43	-15.63
5750	39.26	-4.06	3.08	0.93	18.493	20.769	3.08	-15.95
5770	41.88	-3.78	3.53	1.38	19.628	22.25	3.53	-17.4
5790	37.64	-4.24	3	0.85	17.664	19.975	3	-17.46
5810	39.11	-4.08	3.17	1.02	18.276	20.83	3.17	-16.58
5830	37.31	-4.28	3.05	0.9	17.158	20.151	3.05	-17.38
5850	39.45	-4.04	3.55	1.4	17.771	21.682	3.55	-18.53

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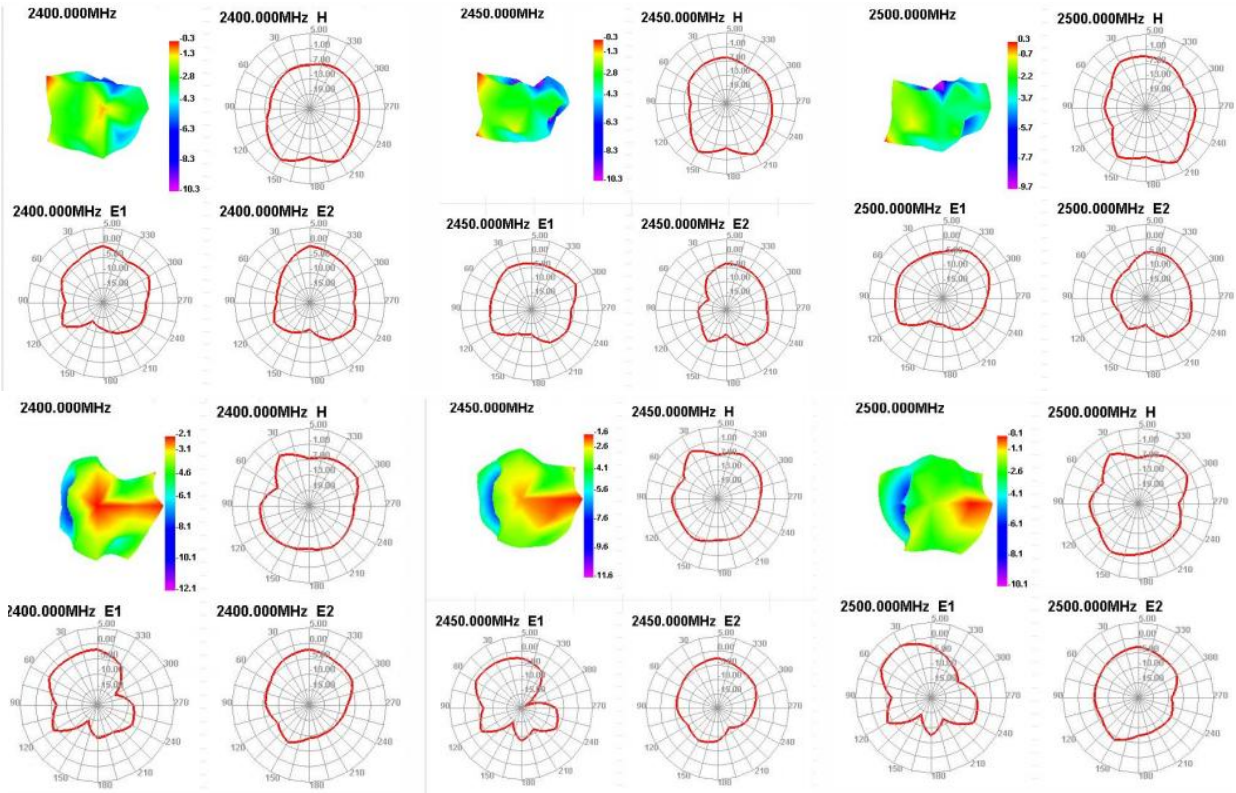
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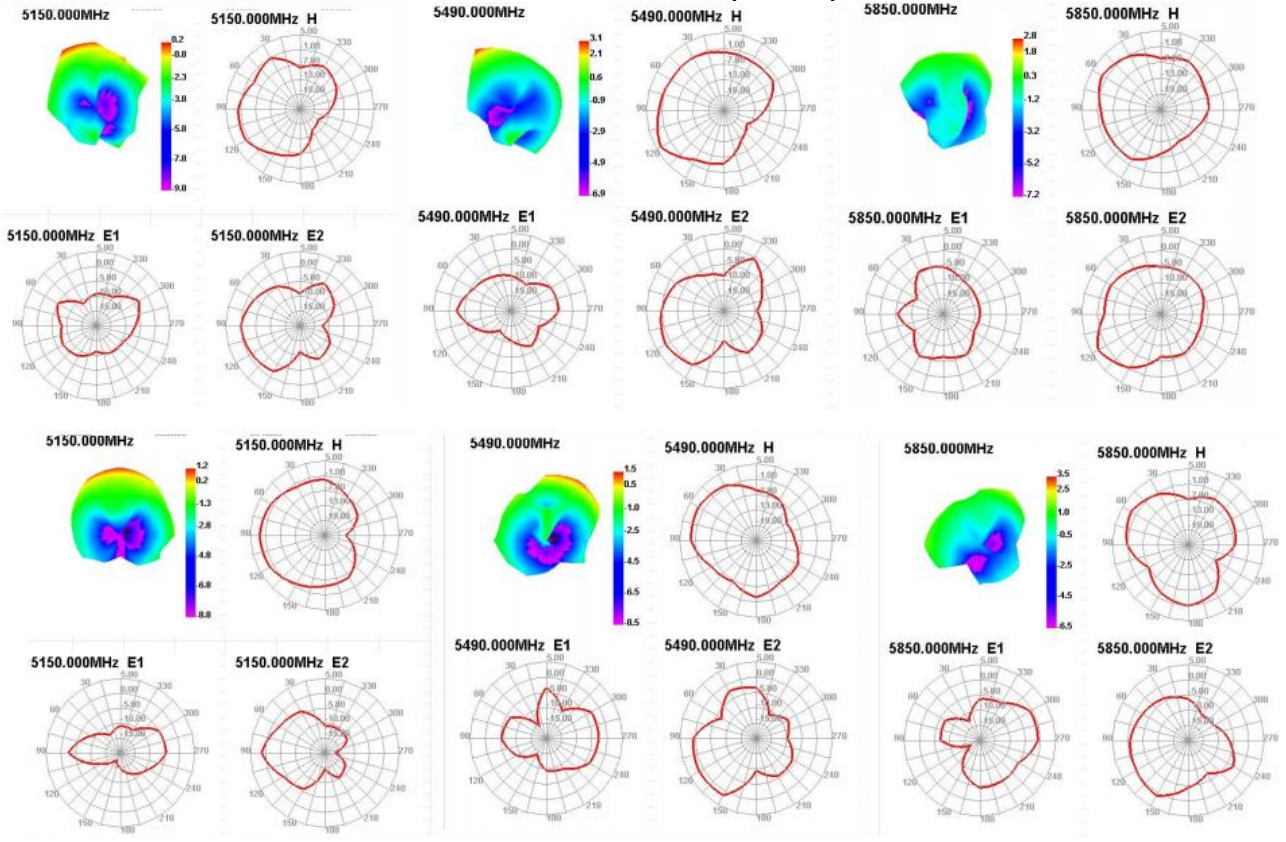
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Radiation Pattern(ANT1)



Radiation Pattern(ANT2)



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WiFi Active Test Data

Frequency	TRP		TIS	
	802.11b	2412	CH1 11Mbps 14.06	CH1 11Mbps -80.66
	2437	CH6 11Mbps 13.12	CH6 11Mbps -80.58	
	2467	CH11 11Mbps 13.41	CH11 11Mbps -80.56	
802.11a		TRP	TIS	
	5180	CH36 6Mbps 12.56	CH36 54Mbps -70.89	
	5300	CH60 6Mbps 12.15	CH60 54Mbps -70.24	
	5805	CH161 6Mbps 12.23	CH161 54Mbps -70.74	

BT Test


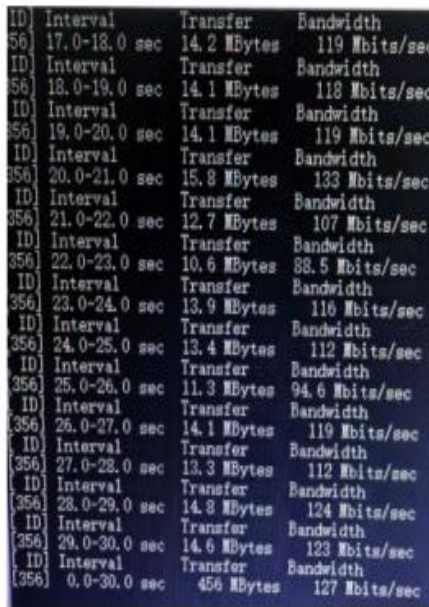
测试环境：开放空间(通道)

测试工具：蓝牙音响


测试距离：10/m

结果：播放音乐流畅，无杂音。

Throughput Test (2.4G)

上行	93.2M	下行	127M
图片		图片	

Throughput Test (5G)

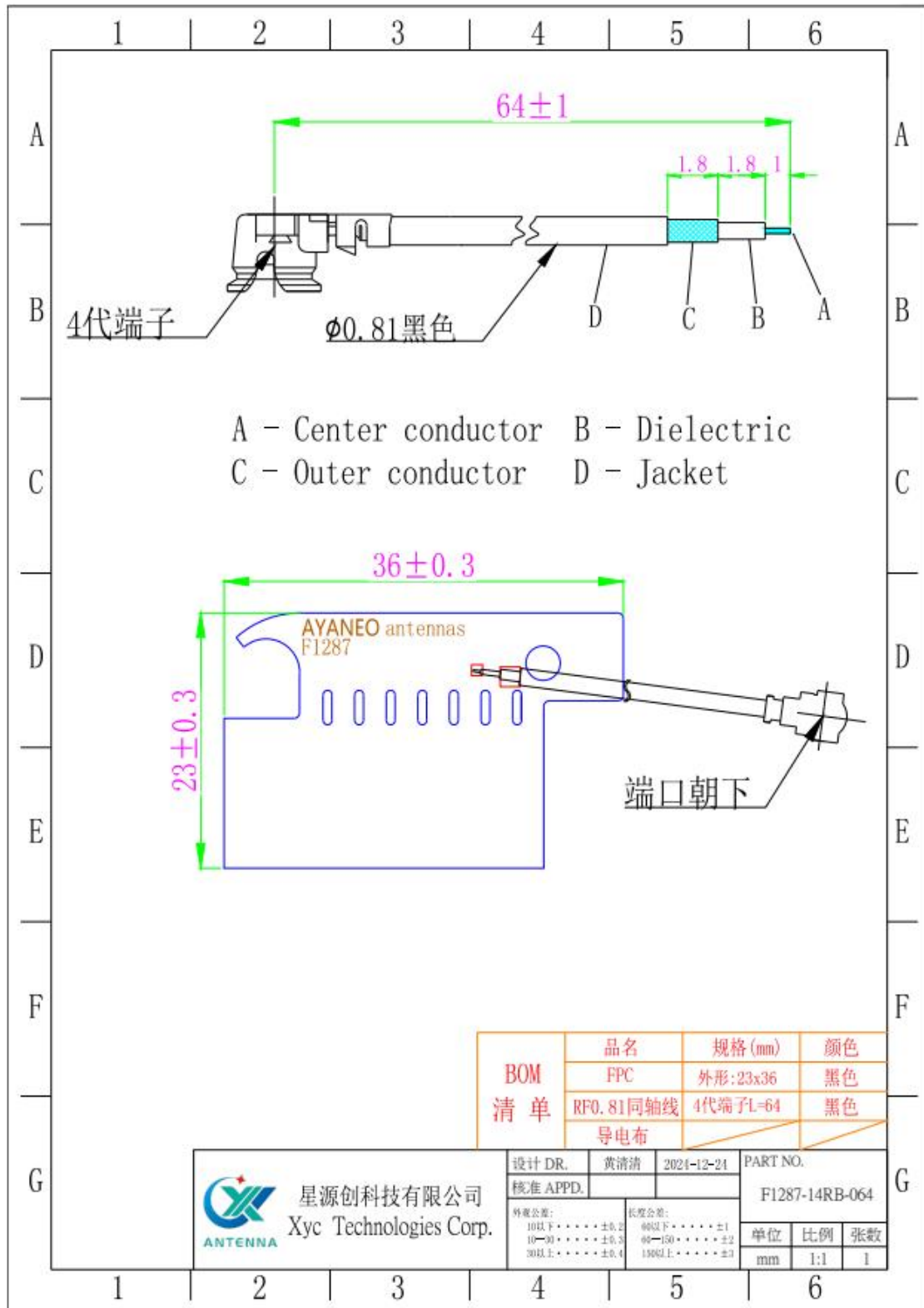
上行	872M	下行	707M
图片		图片	

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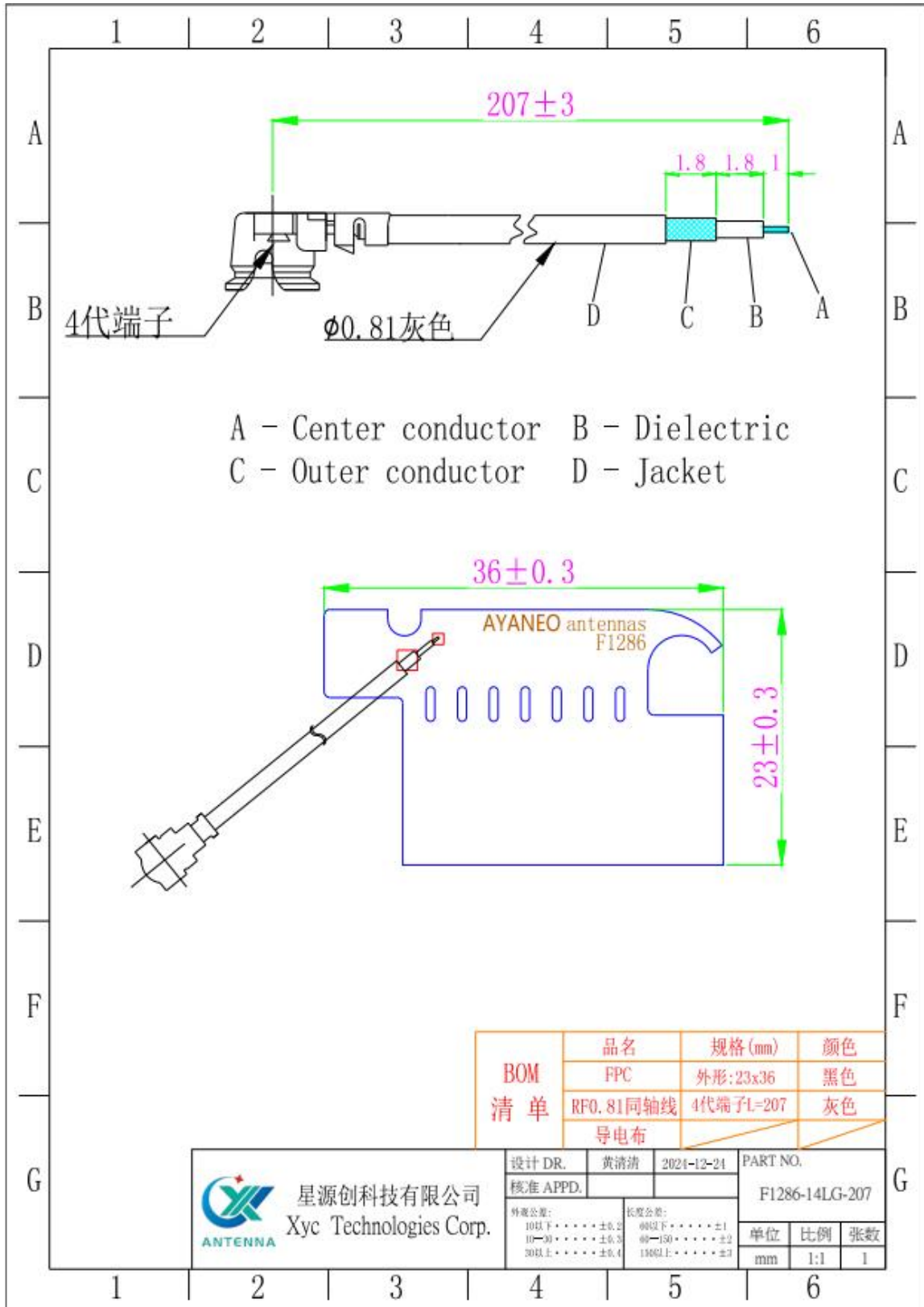
Antenna Assembly



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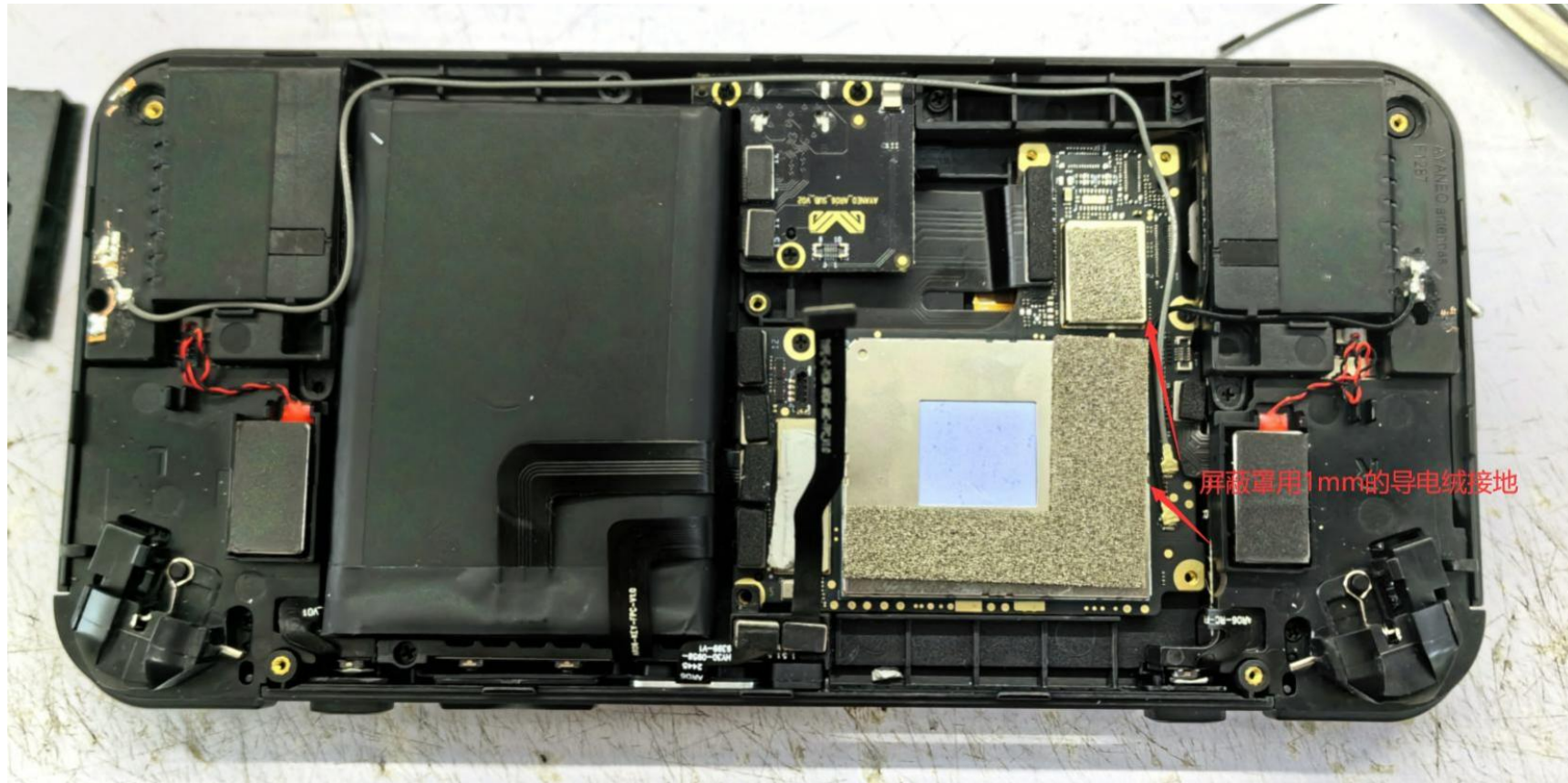
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