



深圳星源创科技有限公司

Manufacturer: Shen Zhen Xing Yuan Chuang Technology Co., Ltd

规格承认书 Approval Sheet

客户名称 Customer	electron	日期 Data	2024/08/29
产品名称 Product	Three-in-one antenna	客户机型 Models	EM101T
料号 P/N	T734-13RB-207	客户料号 Customer P/N	
规格描述 Specifications	Black FPC; RF0.81 third generation terminal black coaxial line, L=207mm		

供应商承认签印 Vender Approved By	客户承认签印 Customer Approved By
	
Checked By:	Checked By:
Audit By:	Audit By:
Approval By:	Approval By:

文件修订履历表

版本 Version	修订内容 Revise The Content	修订人 Revused	核准 Approval	修订日期 Date	备注 Note

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



Content		
NO.	Proect	Page NO.
1	Specification	3
2	Antenna Placement	4
3	Test Data	5~~9
4	Antenna Assembly	10
5	Notes	11



Specification

1.1 Electrical Properties

Characteristics	Specifications
Working Band	GPS; 2.4G WiFi/BT; 5G WiFi
Antenna From	PIFA
Impedance	50 Ω
Polarization	Linear
Peak Effi	43%@GPS; 54%@2.4G; 52%@5G
Gain	0.2dBi@GPS; 1.74dBi@2.4G; 2.94dBi@5G

1.2 Physical Properties

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

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

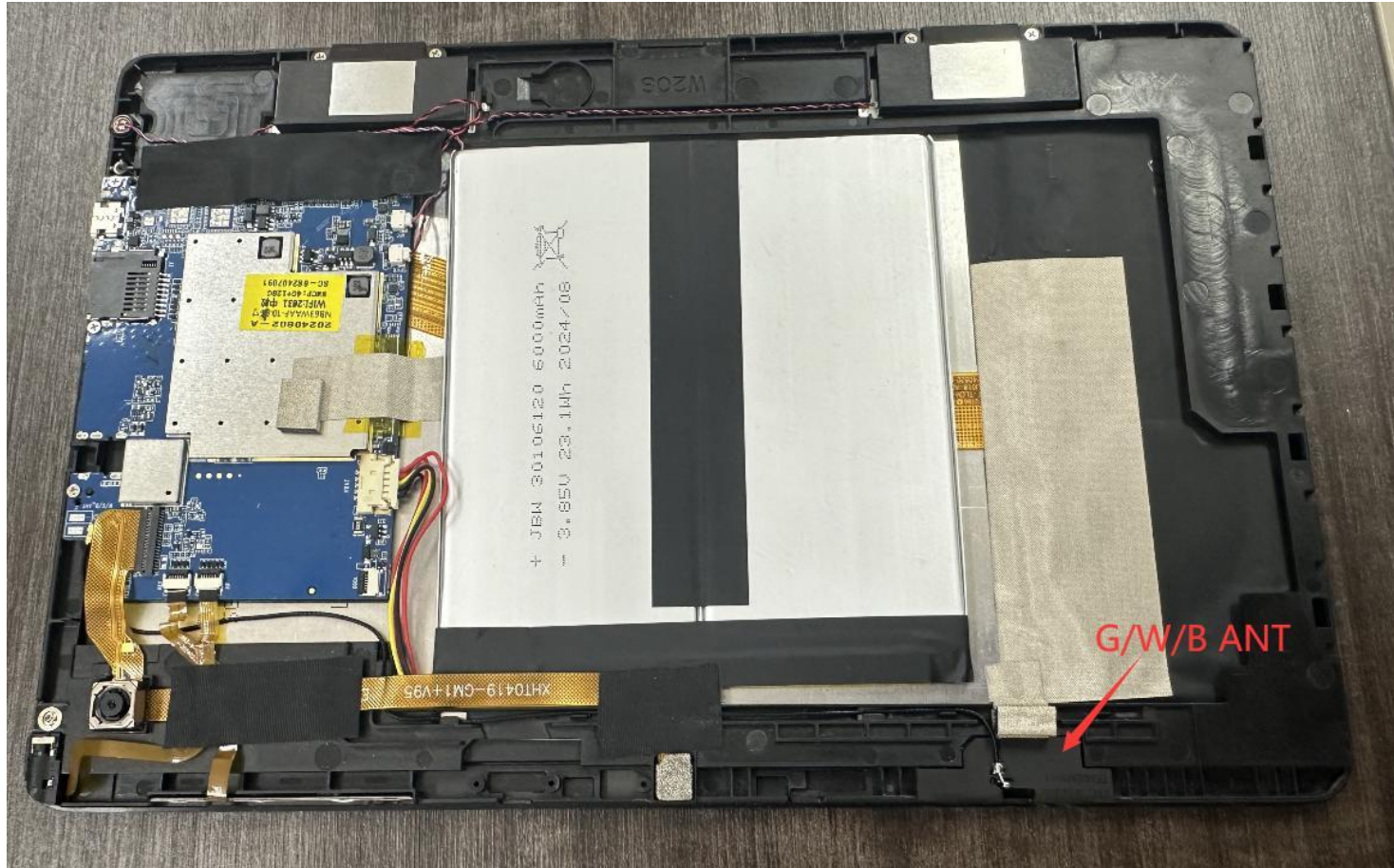
Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳星源创科技有限公司

ANTENNA Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Antenna Placement



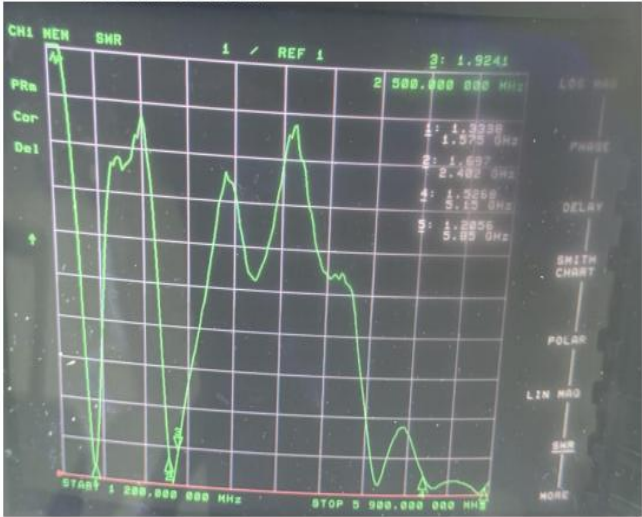
地址：深圳市宝安区福永镇福海街道塘尾股份商务大厦1506

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

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

Test Data

S11 Parameter-VSWR



Frequency (MHZ)	1575	2400	2500	5150	5850
VSWR	1.33	1.69	1.92	1.52	1.2
Return Loss (DB)	-16.89	-12.13	10.17	-13.63	-20.66

10

WiFi Active test data

	Frequency	TRP		TIS	
		Channel	Value	Channel	Value
802.11b	2412	CH1 11Mbps	15.26	CH1 11Mbps	-80.08
	2437	CH6 11Mbps	15.99	CH6 11Mbps	-77.9
	2467	CH11 11Mbps	15.98	CH11 11Mbps	-80.2
802.11a			TRP		TIS
	5180	CH36 6Mbps	10.65	CH36 54Mbps	-70.93
	5300	CH60 6Mbps	11.97	CH60 54Mbps	-70.87
	5805	CH161 6Mbps	11.11	CH161 54Mbps	-70.69

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



Efficiency Table(GPS)

Passive Test For GPS								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
1560	43.13	-3.65	0.04	-2.11	17.089	26.041	0.04	-15.5
1565	42.8	-3.69	0.02	-2.13	16.865	25.931	0.02	-15.34
1570	41.54	-3.81	-0.12	-2.27	16.402	25.142	-0.12	-15.01
1575	41.37	-3.83	-0.16	-2.31	16.324	25.047	-0.16	-14.9
1580	42.25	-3.74	-0.08	-2.23	16.64	25.612	-0.08	-14.64
1585	43.25	-3.64	0.07	-2.08	16.96	26.293	0.07	-14.15
1590	43.88	-3.58	0.21	-1.94	17.056	26.82	0.21	-13.71

Efficiency Table(2.4G)

Passive Test For WIFI2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	40.01	-3.98	0.32	-1.83	26.924	13.088	0.32	-17.82
2410	43.4	-3.63	0.61	-1.54	29.512	13.885	0.61	-16.62
2420	44.3	-3.54	0.62	-1.53	30.137	14.164	0.62	-15.3
2430	46.15	-3.36	0.78	-1.37	31.191	14.954	0.78	-14.4
2440	51.97	-2.84	1.43	-0.72	34.693	17.281	1.43	-14.06
2450	54.34	-2.65	1.67	-0.48	35.738	18.606	1.67	-14.97
2460	54.28	-2.65	1.73	-0.42	35.207	19.076	1.73	-16.61
2470	52.87	-2.77	1.7	-0.45	34.008	18.86	1.7	-18.28
2480	53.2	-2.74	1.72	-0.43	34.185	19.014	1.72	-18.52
2490	53.33	-2.73	1.74	-0.41	34.367	18.962	1.74	-16.71
2500	51.5	-2.88	1.61	-0.54	33.284	18.22	1.61	-15.37

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



Efficiency Table(5G)

Passive Test For WIFI5G

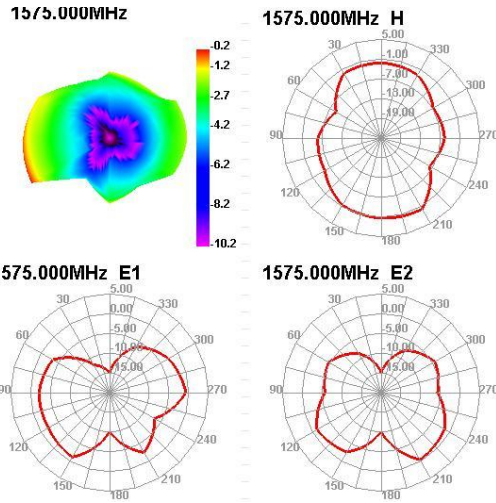
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)
5150	32.44	-4.89	0.68	-1.47	18.784	13.66	0.68	-15.37
5170	35.74	-4.47	0.81	-1.34	21.273	14.467	0.81	-13.12
5190	34.87	-4.58	1.08	-1.07	21.197	13.674	1.08	-13.97
5210	40.24	-3.95	2.23	0.08	25.078	15.158	2.23	-16.12
5230	37.07	-4.31	2.15	0	23.79	13.276	2.15	-16.43
5250	43.1	-3.66	2.72	0.57	28.384	14.715	2.72	-16.97
5270	42.79	-3.69	2.62	0.47	28.856	13.929	2.62	-17.88
5290	46.39	-3.34	2.74	0.59	31.603	14.79	2.74	-17.09
5310	42.32	-3.73	2.15	0	29.158	13.16	2.15	-17.92
5330	44.51	-3.52	2.26	0.11	30.927	13.583	2.26	-17.53
5350	44.65	-3.5	2.46	0.31	31.119	13.528	2.46	-15.45
5370	44.61	-3.51	2.69	0.54	31.188	13.423	2.69	-15.21
5390	38.17	-4.18	2.32	0.17	26.701	11.469	2.32	-17.65
5410	45.42	-3.43	3.28	1.13	31.84	13.583	3.28	-18.03
5430	38.27	-4.17	2.71	0.56	26.8	11.466	2.71	-17.13
5450	43.8	-3.58	3.44	1.29	30.623	13.182	3.44	-14.86
5470	39.1	-4.08	3.01	0.86	27.195	11.904	3.01	-16.71
5490	42	-3.77	3.46	1.31	28.859	13.141	3.46	-15.7
5510	42.6	-3.71	3.43	1.28	28.974	13.629	3.43	-17.72
5530	45.6	-3.41	3.58	1.43	30.89	14.705	3.58	-19.94
5550	47.68	-3.22	3.38	1.23	32.074	15.602	3.38	-21.4
5570	46.62	-3.31	2.93	0.78	31.112	15.513	2.93	-22.77
5590	51.18	-2.91	3.17	1.02	33.798	17.381	3.17	-20.63
5610	47.15	-3.27	2.67	0.52	31.063	16.088	2.67	-16.62
5630	52.48	-2.8	3.07	0.92	34.362	18.122	3.07	-13.52
5650	46.05	-3.37	2.43	0.28	29.635	16.413	2.43	-13.38
5670	50.7	-2.95	2.99	0.84	32.006	18.69	2.99	-11.87
5690	45.78	-3.39	2.36	0.21	28.727	17.049	2.36	-12.33
5710	46.93	-3.29	2.43	0.28	29.361	17.573	2.43	-13.24
5730	48.83	-3.11	2.54	0.39	30.235	18.598	2.54	-14.49
5750	42.91	-3.67	2.16	0.01	26.29	16.623	2.16	-14.99
5770	45.81	-3.39	2.56	0.41	28.063	17.744	2.56	-14.08
5790	41.06	-3.87	2.16	0.01	25.289	15.769	2.16	-15.03
5810	43.67	-3.6	2.6	0.45	26.983	16.687	2.6	-16.12
5830	42.35	-3.73	2.62	0.47	26.093	16.257	2.62	-17.1
5850	45.82	-3.39	2.94	0.79	28.131	17.687	2.94	-17.55

地址：深圳市宝安区福永镇福海街道塘尾股份商务大厦1506

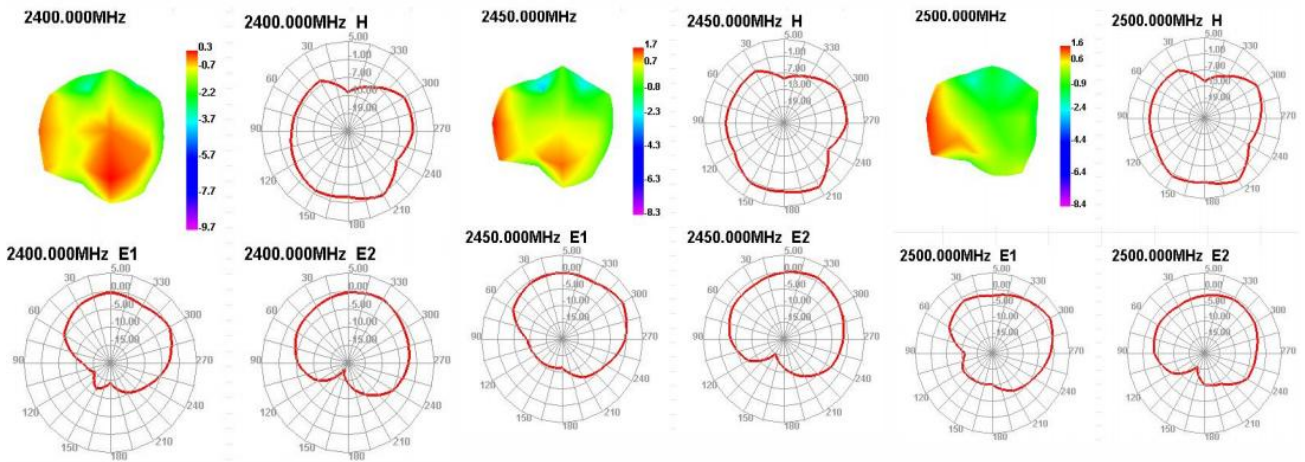
Address: 1506, Tangwei Business Building, Fuhai Street, Fuyong Town, Baoan District, Shenzhen

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

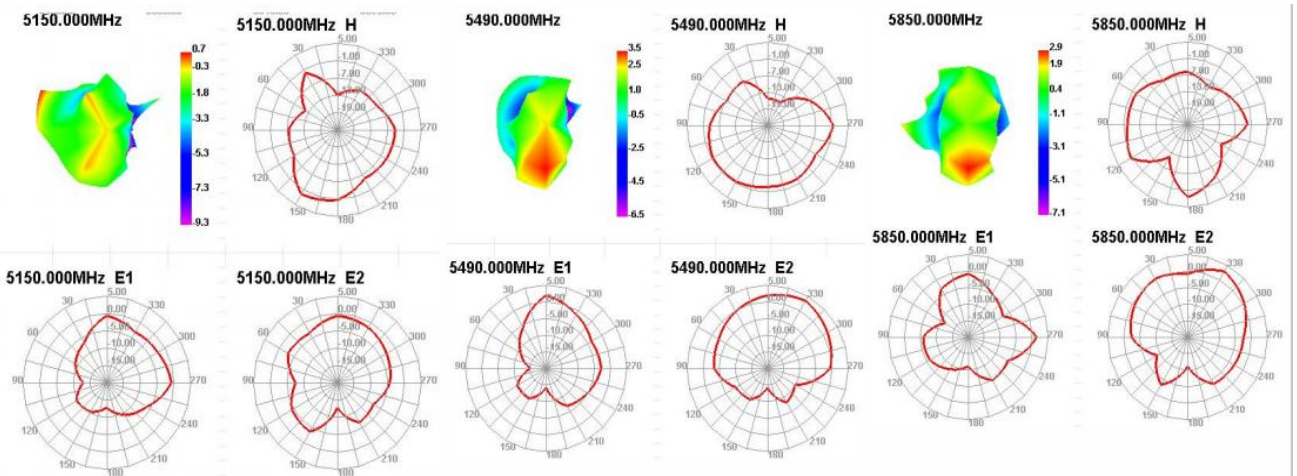
Radiation Pattern(GPS)



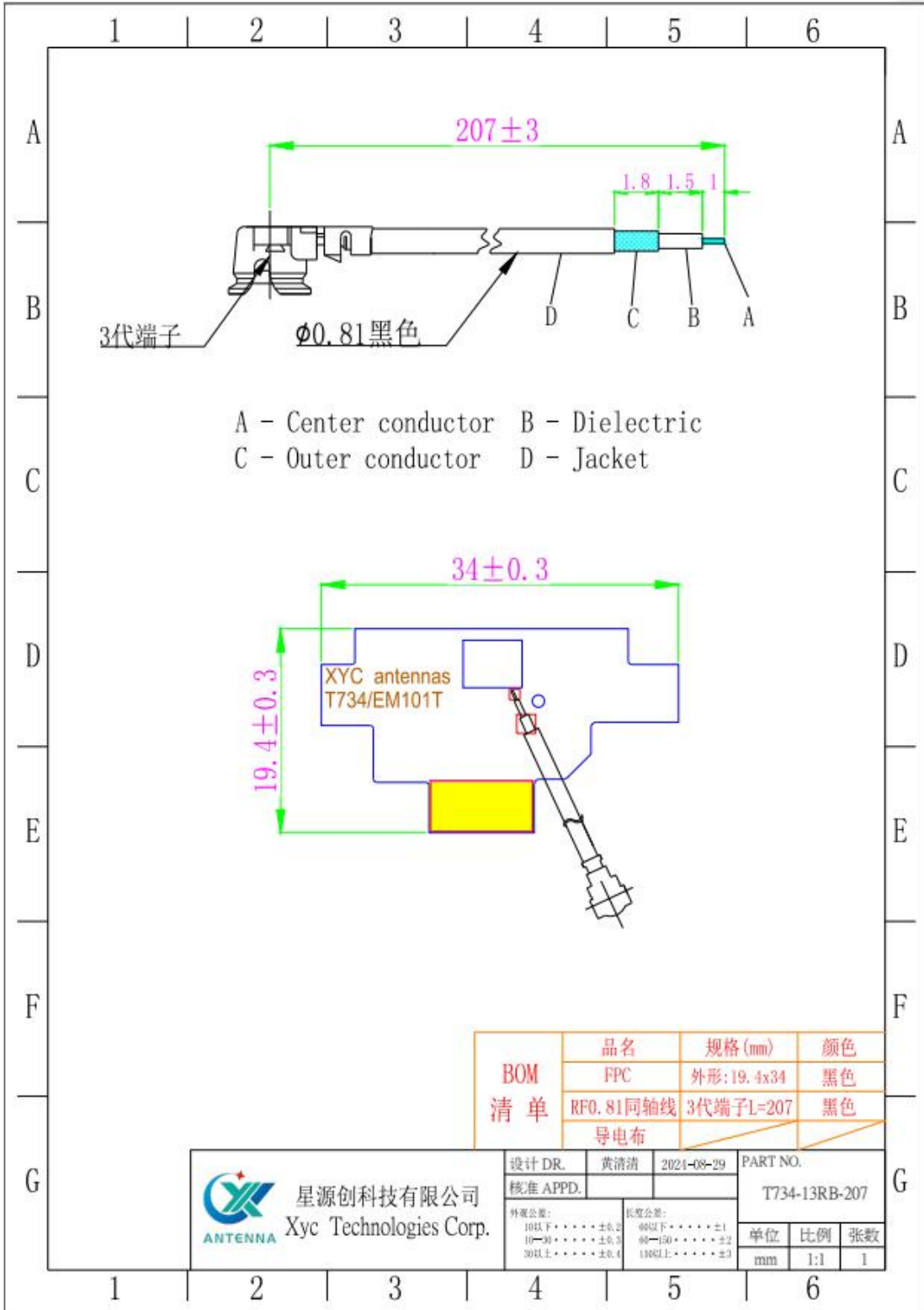
Radiation Pattern(2.4G)



Radiation Pattern(5G)



Antenna Assembly



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



Notes

FPC ANT EUT PHOTO

