



Content

NO.	Proect	Page NO.
1	Specification	4
2	WiFi Ant Test Information	5
3	Antenna Placement	6
4	Test Data	7~~10
5	Antenna Assembly	11
6	Notes	12
7	Inspection Standard	13
8	Sample Inspection Report	14
9	Bending Test Report	15
10	Adhesive Paper Peel Strength Test	16
11	I-pex Terminal Tension Test	17
12	Supplier Environmental Statement	18
13	Packing Specification	19



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Specification

1.1 Electrical Properties

Characteristics	Specifications
Working Band	2.4G WiFi/5G WiFi
Antenna From	PIFA
Impedance	50 Ω
Polarization	Linear
Peak Effi	48.82%@2.4G; 46.43%@5G
Peak Gain	2.43dBi@2.4G; 2.10dBi@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：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

Address: Room 610-614, Building C, Ma'an Shan Jin Sheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district, Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

WiFi Ant Test Information

Frequency

2.4G (2402~2483) Mhz

5G (5150~5850) Mhz

Module
information



Driver version
information

Realtek 8851BE Wireless LAN WiFi 6 PCI-E NIC #3 Properties

Events Resources Power Management
General Advanced Driver Details



Realtek 8851BE Wireless LAN WiFi 6 PCI-E NIC #3

Driver Provider: Realtek Semiconductor Corp.
Driver Date: 8/22/2025
Driver Version: 6101.19.133.0
Digital Signer: Microsoft Windows Hardware Compatibility Publisher

地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

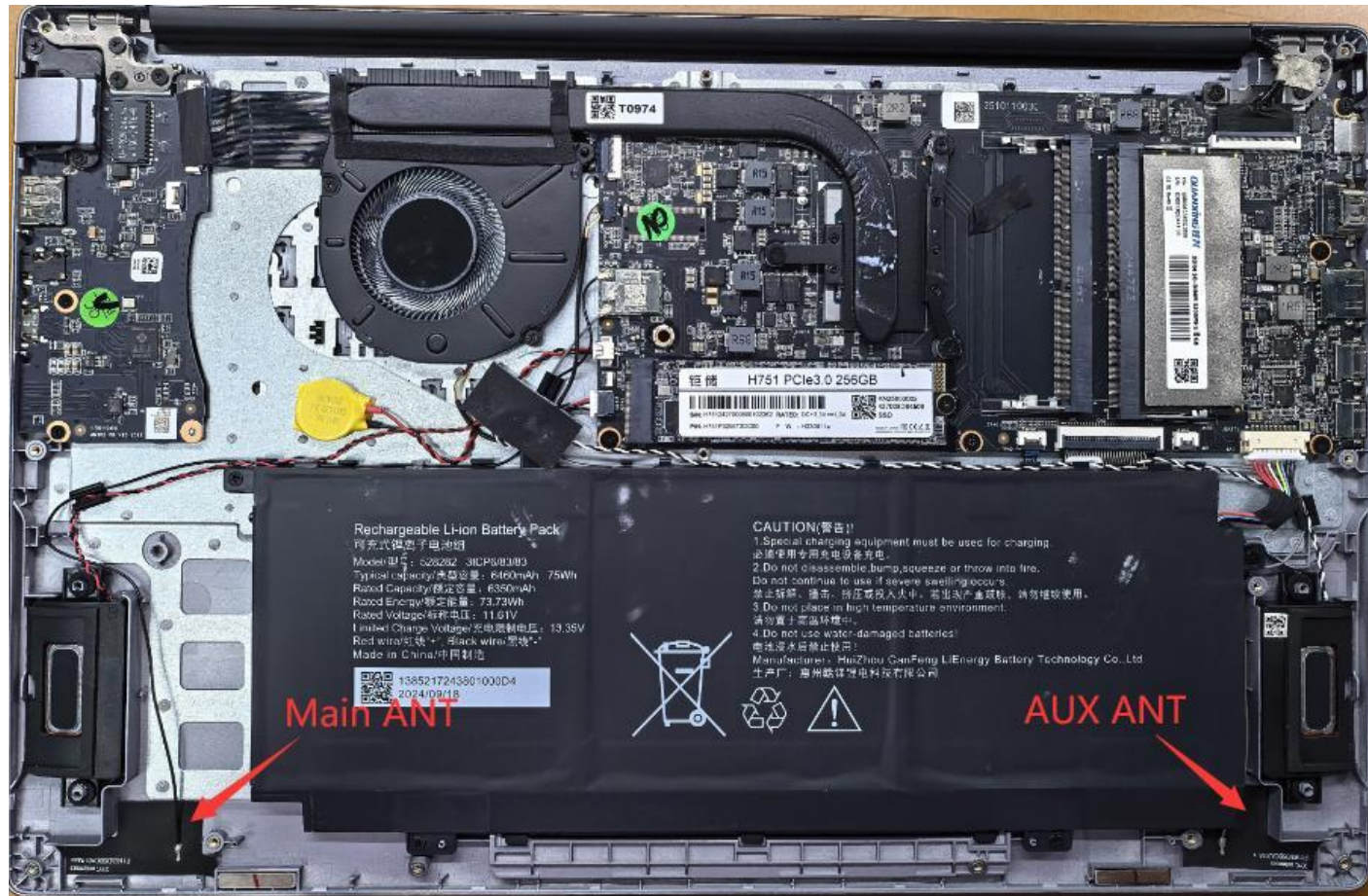
Address: Room 610-614, Building C, Ma'an Shan Jinsheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district,
Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Antenna Placement



地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

Address: Room 610-614, Building C, Ma'an Shan Jinsheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district,
Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stepdeng_Vis@126.com



Test Data

S11 Parameter-VSWR



Frequency (MHZ)	2400	2500	5150	5850
VSWR	2.21	1.82	1.68	1.34
Return Loss (DB)	-8.43	-10.71	-11.83	-16.61

WiFi Active Test Data

802.11b	Frequency	TRP		TIS (LDC ON)		TIS (LDC OFF)
	2412	CH1 11Mbps	9.33	CH1 11Mbps	-73.76	-81.71
	2437	CH6 11Mbps	9.17	CH6 11Mbps	-74.82	-81.31
	2467	CH11 11Mbps	9.87	CH11 11Mbps	-70	-80.16
802.11a		TRP		TIS		
	5180	CH36 6Mbps	9.9	CH36 54Mbps	-68.57	
	5300	CH60 6Mbps	10.53	CH60 54Mbps	-69.23	
	5805	CH161 6Mbps	9.33	CH161 54Mbps	-69.2	

地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

Address: Room 610-614, Building C, Ma'an Shan Jin Sheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district, Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Efficiency Table

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	45.35	-3.43	1.66	-0.49	26.409	18.945	1.66	-11.87	5.09	0	45.78	46.01
2410	42.51	-3.72	1.29	-0.86	24.759	17.746	1.29	-11.83	5	0	46.01	46.29
2420	46.79	-3.3	1.52	-0.63	27.055	19.731	1.52	-12.24	4.82	0	45.73	46
2430	46.42	-3.33	1.46	-0.69	27.062	19.355	1.46	-13.33	4.79	0	46.01	46.36
2440	44.91	-3.48	1.66	-0.49	26.693	18.222	1.66	-14.35	5.13	0	46.12	46.48
2450	44.41	-3.53	1.87	-0.28	26.896	17.512	1.87	-14.08	5.39	0	46.12	46.54
2460	47.67	-3.22	2.27	0.12	29.188	18.479	2.27	-14.78	5.49	0	46.14	46.52
2470	48.82	-3.11	2.43	0.28	30.11	18.708	2.43	-15.81	5.54	30	46.4	46.8
2480	47.48	-3.23	2.24	0.09	29.292	18.188	2.24	-17.23	5.48	30	46.26	46.64
2490	46.99	-3.28	2.06	-0.09	28.943	18.048	2.06	-18.2	5.34	30	46.51	46.91
2500	47.22	-3.26	2.11	-0.04	29.166	18.059	2.11	-18.78	5.36	30	46.47	46.86
Passive Test For WIFI5G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5150	29.49	-5.3	0.1	-2.05	16.293	13.197	0.1	-20.78	5.4	30	49.82	49.4
5170	31.37	-5.03	0.61	-1.54	17.355	14.018	0.61	-18.75	5.64	0	50.13	49.77
5190	32	-4.95	0.41	-1.74	17.791	14.209	0.41	-19	5.36	0	50.42	49.95
5210	37.26	-4.29	1.13	-1.02	20.984	16.275	1.13	-22.19	5.42	0	50.88	50.49
5230	35.89	-4.45	1.13	-1.02	20.402	15.489	1.13	-23.05	5.58	0	50.42	50.08
5250	39.62	-4.02	1.68	-0.47	22.582	17.039	1.68	-19.56	5.7	0	51.02	50.72
5270	41.1	-3.86	1.77	-0.38	23.383	17.718	1.77	-18.94	5.64	0	50.85	50.6
5290	42.31	-3.74	1.89	-0.26	24.293	18.02	1.89	-18.87	5.62	0	51.34	51.12
5310	40.3	-3.95	1.78	-0.37	23.35	16.952	1.78	-25.34	5.72	0	50.44	50.36
5330	40.94	-3.88	1.73	-0.42	23.729	17.212	1.73	-19.79	5.61	0	51.08	51.01
5350	43.58	-3.61	1.96	-0.19	25.292	18.289	1.96	-17.02	5.57	0	51.02	51.01
5370	42.04	-3.76	1.85	-0.3	24.537	17.5	1.85	-19.2	5.61	0	50.91	50.95
5390	38.1	-4.19	1.42	-0.73	22.421	15.676	1.42	-21.31	5.61	0	50.46	50.43
5410	43.44	-3.62	1.86	-0.29	25.661	17.782	1.86	-17.33	5.49	0	51.18	51.09
5430	40.32	-3.94	1.36	-0.79	23.635	16.69	1.36	-18.46	5.3	0	50.69	50.7
5450	43.1	-3.65	1.64	-0.51	25.086	18.016	1.64	-20.56	5.3	0	50.71	50.85
5470	41.1	-3.86	1.39	-0.76	23.851	17.252	1.39	-19.65	5.25	0	50.93	50.83
5490	41.05	-3.87	1.52	-0.63	23.815	17.234	1.52	-18.42	5.39	0	50.92	50.79
5510	42.3	-3.74	1.82	-0.33	24.152	18.144	1.82	-17.93	5.55	0	51.18	51.16
5530	43.53	-3.61	1.95	-0.2	24.383	19.147	1.95	-18.26	5.56	0	51.44	51.3
5550	46.43	-3.33	2.1	-0.05	25.824	20.602	2.1	-17.95	5.43	0	51.89	51.76
5570	44.01	-3.56	1.87	-0.28	24.518	19.493	1.87	-17.7	5.43	0	51.42	51.33
5590	44.83	-3.48	1.9	-0.25	24.793	20.042	1.9	-17.44	5.38	0	51.71	51.76
5610	42.54	-3.71	1.6	-0.55	23.352	19.189	1.6	-17.75	5.32	0	51.17	51.22
5630	44.09	-3.56	1.45	-0.7	24.486	19.599	1.45	-17.41	5.01	0	51.78	51.77
5650	41.61	-3.81	1.22	-0.93	23.434	18.175	1.22	-16.71	5.03	30	51.47	51.55
5670	39.23	-4.06	0.95	-1.2	22.311	16.915	0.95	-15.23	5.02	30	52.12	52.28
5690	40.5	-3.93	0.99	-1.16	23.329	17.169	0.99	-16.16	4.92	30	52.12	52.25
5710	35.65	-4.48	0.72	-1.43	20.882	14.769	0.72	-16.91	5.19	30	51.95	52.05
5730	41.65	-3.8	1.49	-0.66	24.786	16.866	1.49	-14.15	5.29	30	51.59	51.69
5750	33.78	-4.71	0.4	-1.75	20.216	13.565	0.4	-14.81	5.12	30	51.12	51.15
5770	37.75	-4.23	0.9	-1.25	22.79	14.958	0.9	-16.46	5.13	30	51.02	51.06
5790	32.46	-4.89	0.29	-1.86	19.913	12.546	0.29	-18.54	5.18	30	51.08	51.16
5810	36.36	-4.39	0.91	-1.24	22.686	13.672	0.91	-15.6	5.31	30	51.36	51.43
5830	34.13	-4.67	0.94	-1.21	21.605	12.529	0.94	-17.73	5.61	30	51.65	51.66
5850	39.03	-4.09	1.62	-0.53	24.767	14.259	1.62	-18.09	5.71	30	51.88	52.05

地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

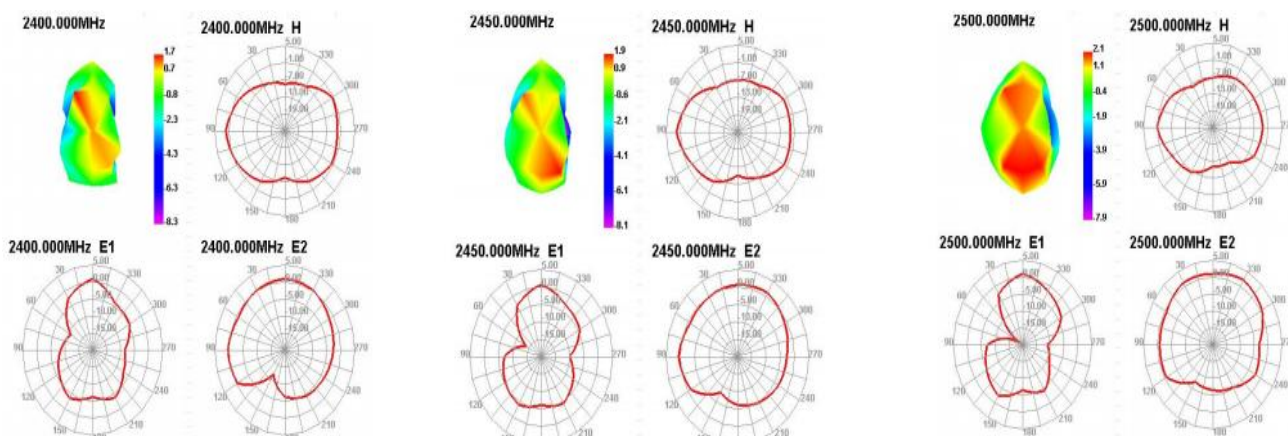
Address: Room 610-614, Building C, Ma 'anshan Jinsheng Fortune Plaza, Ma 'anshan Community, Shajing Sub-district, Bao 'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



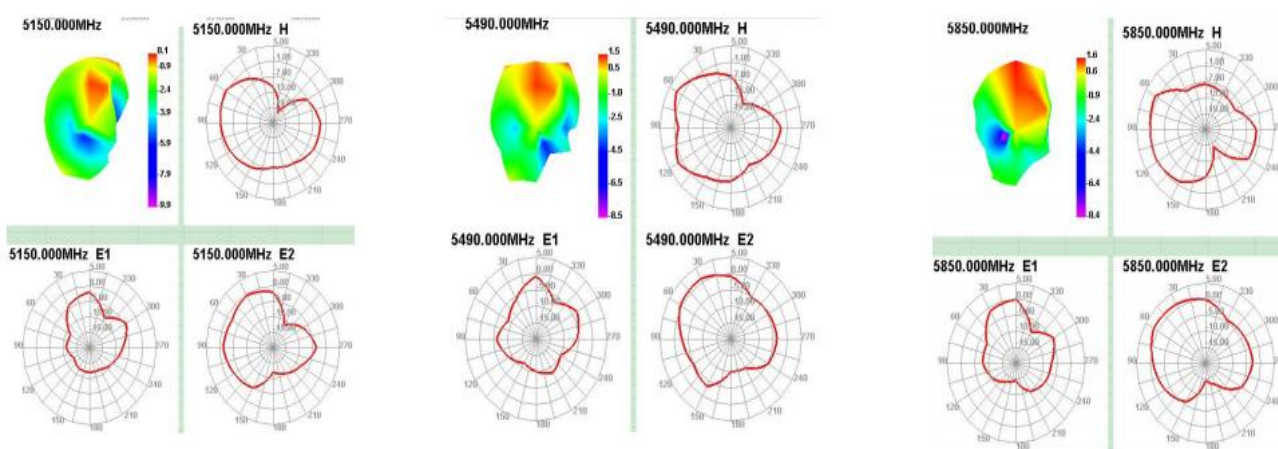
深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Radiation Pattern (2.4G)



Radiation Pattern (5G)



BT Test

测试环境：走廊通道

测试工具：蓝牙音箱

测试距离：10+M（播放音乐流畅无卡顿）

地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

Address: Room 610-614, Building C, Ma'an Shan Jin Sheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district, Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Throughput test

RVR测试系统(2G-AX-40M-1-CH6)

TX

RX

WiFi RvR 测试数据(2G_ax_40M_CH6I_TX)

WiFi RvR 测试数据(2G_ax_40M_CH6I_RX)

图片

角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	239	237	225	226	160
90.0°	239	240	226	238	158
180.0°	239	239	225	239	170
270.0°	239	239	239	211	126
平均	239.00	238.80	228.80	228.50	153.50
方差	0.00	1.30	6.80	13.10	19.10

图片

角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	245	240	236	181	86
90.0°	240	239	237	188	118
180.0°	239	240	237	194	127
270.0°	239	239	239	144	67
平均	240.80	239.50	237.30	176.80	99.50
方差	2.90	0.60	1.30	22.50	27.90

RVR测试系统(5G-AX-80M-1-CH60)

TX

RX

WiFi RvR 测试数据(5G_ax_80M_CH60_TX)

WiFi RvR 测试数据(5G_ax_80M_CH60_RX)

图片

角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	508	511	379	278	102
90.0°	507	509	506	364	237
180.0°	510	461	396	275	104
270.0°	509	509	499	403	234
平均	508.50	497.50	445.00	330.00	169.30
方差	1.30	24.40	66.80	63.80	76.50

图片

角度\衰减	0dB	10dB	20dB	30dB	40dB
0.0°	503	503	470	330	164
90.0°	499	497	499	419	272
180.0°	496	468	488	316	158
270.0°	500	500	499	436	272
平均	499.50	492.00	489.00	375.30	216.50
方差	2.90	16.20	13.70	61.00	64.10

地址：深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

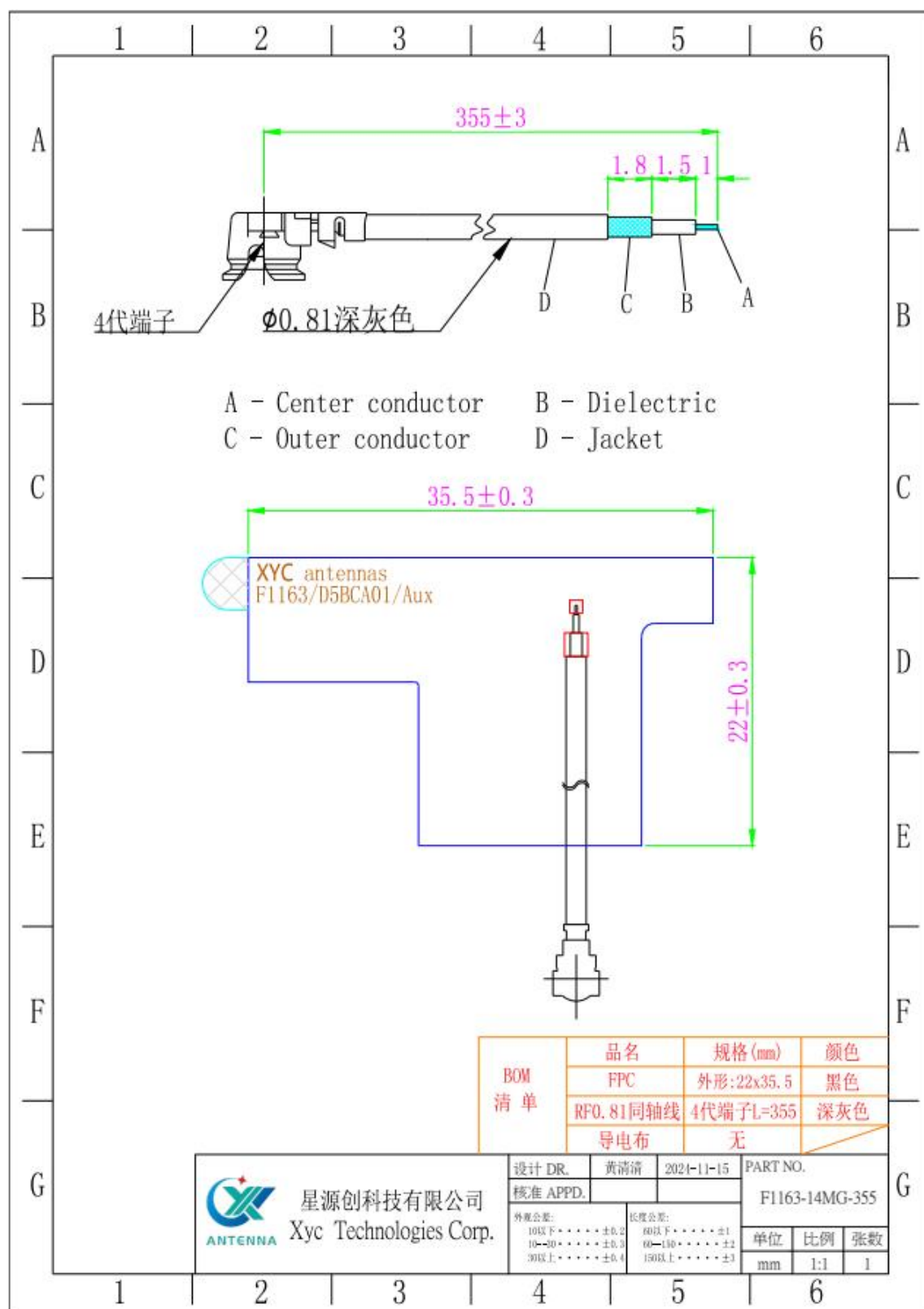
Address: Room 610-614, Building C, Ma'an Shan Jin Sheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district, Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com



深圳市星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

Antenna Assembly



地址: 深圳市宝安区沙井街道马安山社区马安山锦胜财富广场C栋610-614

Address: Room 610-614, Building C, Ma'an Shan Jinsheng Fortune Plaza, Ma'an Shan Community, Shajing Sub-district, Bao'an District, Shenzhen City Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng_Vis@126.com