



深圳星源创科技有限公司

Shen Zhen Xing Yuan Chuang Technology Co., Ltd

# 规格承认书 Approval Sheet

客户名称 Customer	TOPDON TECHNOLOGY Co., Ltd.	日期 Data	2023/09/23
产品名称 Product	WIFI antenna	客户机型 Models	PG1000
料号 P/N	F765-21LB-168	客户料号 Customer P/N	827-1000-00008
规格描述 Specifications	黑色FPC; MI-113一代端子黑色同轴线; L=168毫米; Black FPC; RF0.81 second generation terminal black coaxial line; L=55 mm		

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



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## Specification

### 1.1 Electrical Properties

Characteristics	Specifications
Working Band	2.4G WIFI/5G WIFI
Antenna From	FPC
Impedance	50 $\Omega$
Polarization	Linear
Peak Effi	50.93%@2.4G; 52.24%@5G
Peak Gain	1.28dBi@2.4G ; 2.5dBi @ 5150-5250 4.58dBi@5G 5725-5850

### 1.2 Physical Properties

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



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## Antenna Placement



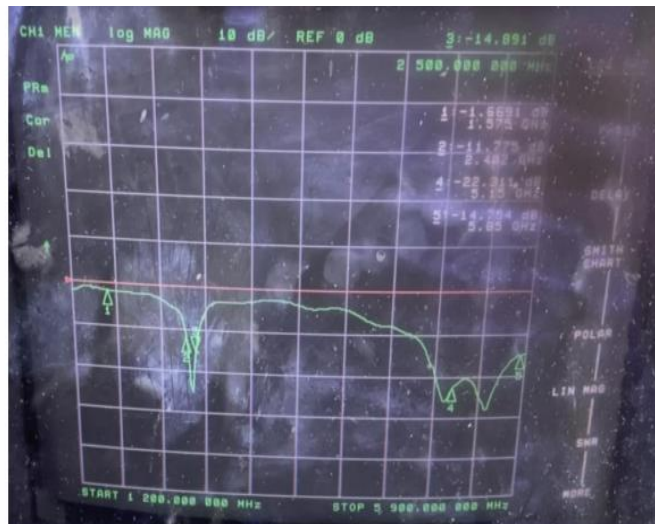
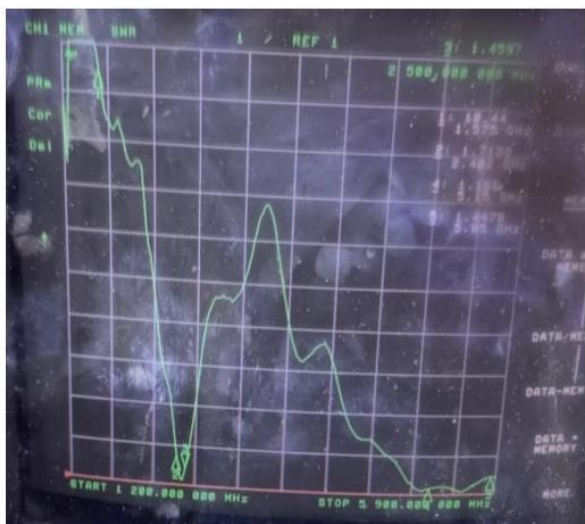
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### Test Data

#### S11 Parameter-VSWR(WIFI)



Frequency (MHZ)	2400	2450	2483	5150
VSWR	1.71	1.45	1.16	1.44
Return Loss (DB)	-11.77	-14.89	-22.31	-14.75

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#### WiFi Active Test Data

	Frequency	TRP		TIS	
		Channel	Value	Channel	Value
802.11b	2412	CH1 11Mbps	13.73	CH1 11Mbps	-74.5
	2437	CH6 11Mbps	15.01	CH6 11Mbps	-77.21
	2467	CH11 11Mbps	14.75	CH11 11Mbps	-77.14
802.11a		TRP		TIS	
	5180	CH36 6Mbps	13.21	CH36 54Mbps	-69.33
	5300	CH60 6Mbps	12.67	CH60 54Mbps	-72.62
	5805	CH161 6Mbps	13.44	CH161 54Mbps	-71.98

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Efficiency Table

Passive Test For WIFI2.4						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)
2400	47.7	-3.21	1.11	-1.04	30.368	17.334
2410	46.42	-3.33	0.89	-1.26	28.909	17.514
2420	49.45	-3.06	1.1	-1.05	30.181	19.27
2430	49.71	-3.04	1.1	-1.05	29.814	19.894
2440	50.25	-2.99	1.28	-0.87	29.58	20.673
2450	49.75	-3.03	1.03	-1.12	28.774	20.979
2460	48.18	-3.17	0.65	-1.5	27.351	20.828
2470	48.68	-3.13	0.71	-1.44	27.288	21.392
2480	50.93	-2.93	0.87	-1.28	27.831	23.098
2490	50.31	-2.98	0.94	-1.21	27.017	23.288
2500	43.22	-3.64	0.32	-1.83	22.918	20.306

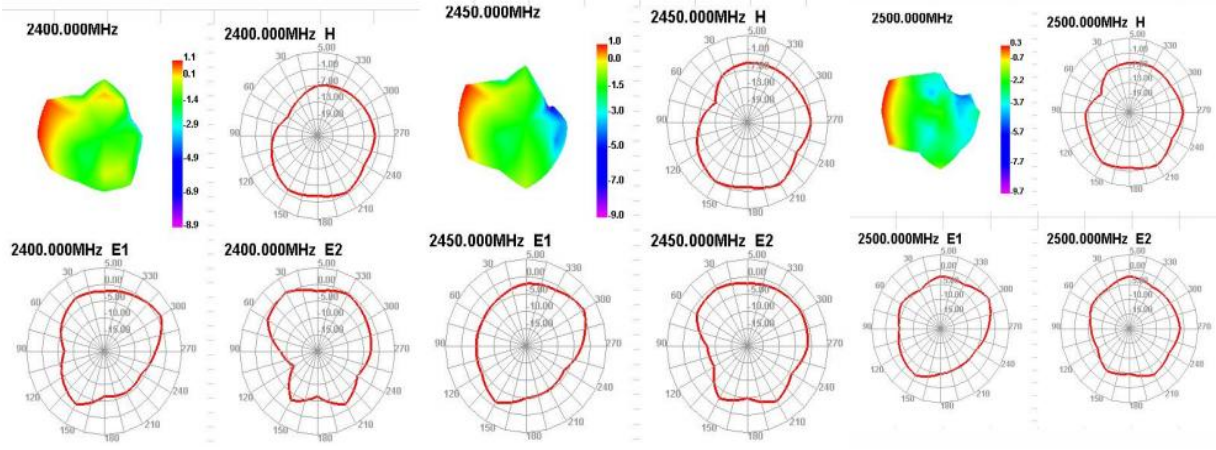
Passive Test For WIFI5G								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
5150	35.39	-4.51	1.18	-0.97	18.296	17.098	1.18	-17.19
5170	34.99	-4.56	1.03	-1.12	18.193	16.794	1.03	-17.6
5190	36.71	-4.35	1.43	-0.72	19.437	17.27	1.43	-16.11
5210	39.77	-4	2.1	-0.05	21.639	18.136	2.1	-16.28
5230	37.99	-4.2	2.29	0.14	21.175	16.816	2.29	-17.34
5250	41.69	-3.8	2.5	0.35	23.492	18.2	2.5	-16.89
5270	41.68	-3.8	2.23	0.08	23.785	17.898	2.23	-15.96
5290	44.99	-3.47	2.75	0.6	26.297	18.696	2.75	-15.87
5310	40.72	-3.9	2.47	0.32	24.334	16.382	2.47	-15.95
5330	42.94	-3.67	2.71	0.56	25.786	17.151	2.71	-16.43
5350	44.36	-3.53	2.74	0.59	26.511	17.85	2.74	-15.67
5370	45.79	-3.39	2.92	0.77	27.45	18.337	2.92	-16.06
5390	39.98	-3.98	2.53	0.38	24.314	15.663	2.53	-18.17
5410	49.26	-3.08	3.6	1.45	30.359	18.901	3.6	-16.37
5430	41.75	-3.79	2.69	0.54	25.826	15.922	2.69	-15.82
5450	47.63	-3.22	3.07	0.92	29.39	18.241	3.07	-17.52
5470	43.54	-3.61	2.8	0.65	27.1	16.437	2.8	-17.95
5490	46.37	-3.34	3.17	1.02	29.011	17.363	3.17	-17.71
5510	46.74	-3.3	3.3	1.15	29.491	17.253	3.3	-17.08
5530	49.55	-3.05	3.48	1.33	30.673	18.881	3.48	-17.03
5550	51.96	-2.84	3.82	1.67	31.863	20.098	3.82	-15.75
5570	49.08	-3.09	3.76	1.61	29.935	19.149	3.76	-14.09
5590	52.24	-2.82	4.19	2.04	32.05	20.186	4.19	-14.36
5610	49.26	-3.08	3.72	1.57	29.721	19.534	3.72	-15.16
5630	53.32	-2.73	4.12	1.97	31.615	21.701	4.12	-15.12
5650	50.58	-2.96	4.18	2.03	29.608	20.969	4.18	-14.98
5670	50.9	-2.93	4.58	2.43	30.294	20.609	4.58	-15.59
5690	50.88	-2.93	4.63	2.48	30.374	20.506	4.63	-16.29
5710	47.17	-3.26	4.13	1.98	27.775	19.397	4.13	-16.1
5730	51.91	-2.85	4.58	2.43	30.223	21.691	4.58	-14.68
5750	46.36	-3.34	4.05	1.9	27.137	19.223	4.05	-14.4
5770	46.79	-3.3	3.86	1.71	27.616	19.17	3.86	-14.43
5790	41.55	-3.81	2.74	0.59	24.144	17.408	2.74	-14.96
5810	42.07	-3.76	2.49	0.34	24.172	17.895	2.49	-16.55
5830	41.06	-3.87	2.15	0	23.509	17.551	2.15	-19.08
5850	41.03	-3.87	1.93	-0.22	23.465	17.569	1.93	-20.81

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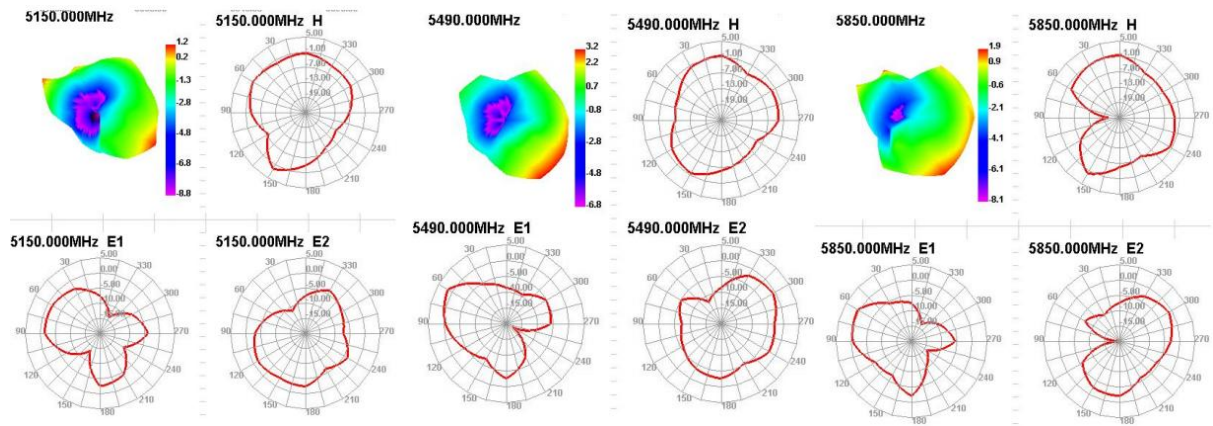
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### Radiation Pattern (2.4G)



### Radiation Pattern (5G)

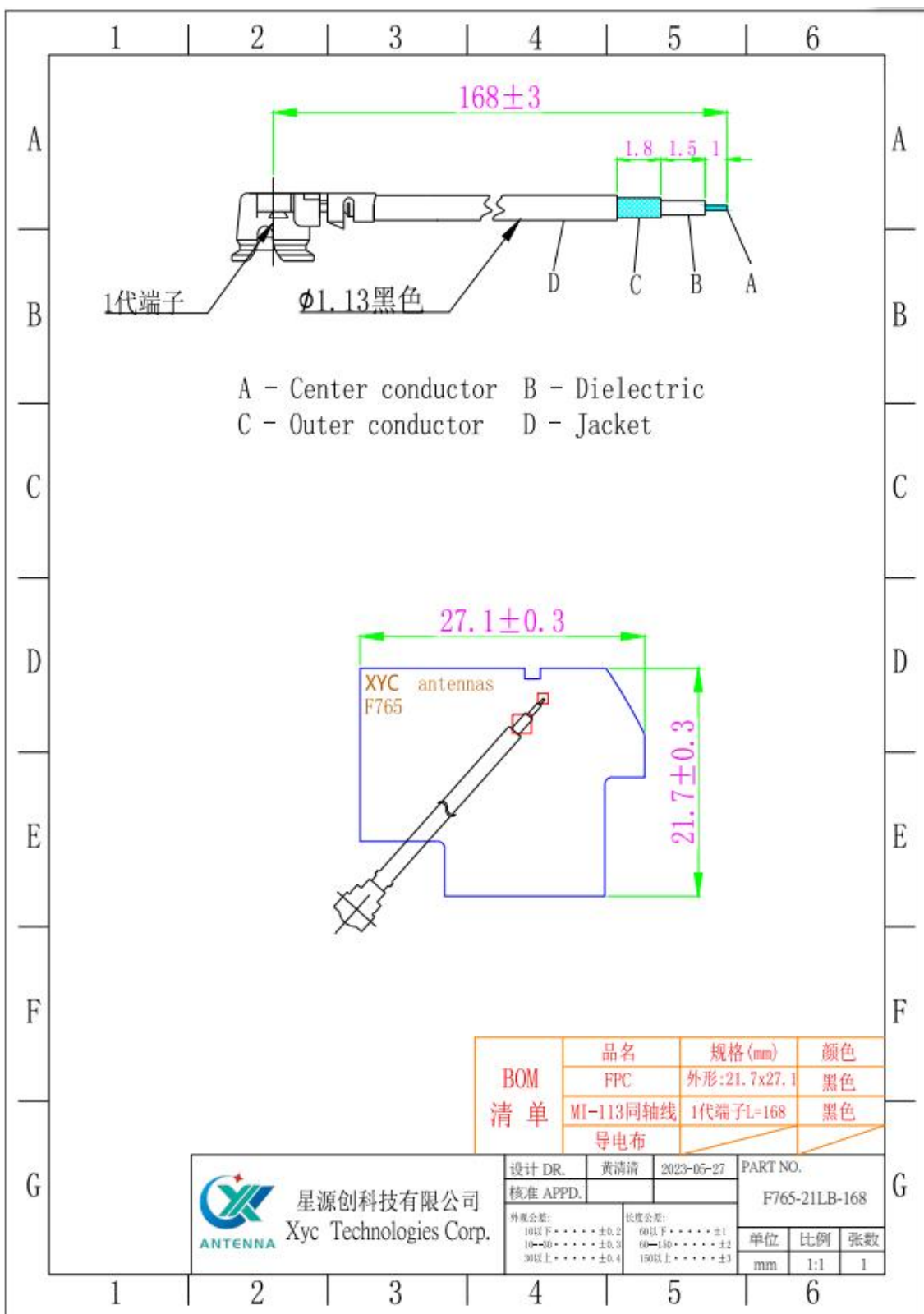


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### Antenna Assembly



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### Notes

