



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	昱科	日期 Data	2024/05/30
产品名称 Product	WiFi主天线	客户机型 Models	E270
料号 P/N	F667E-14RB-400	客户料号 Customer P/N	31TX00E27040000
规格描述 Specifications	黑色FPC; RF0.81四代端子黑色同轴线; L=400mm		

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	WiFi Ant Test Information	4
3	Antenna Placement	5
4	Test Data	6~~8
5	Antenna Assembly	9



## Specification

### 1.1 Electrical Properties


Characteristics	Specifications
Working Band	2.4GWiFi; 5GWiFi
Antenna From	PIFA
Impedance	50 $\Omega$
Polarization	Linear
Peak Effi	45%@2.4G; 44%@5G
Peak Gain	2.4dBi@2.4G; 4.2dBi@5G

### 1.2 Physical Properties

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



## WiFi Ant Test Information

Frequency	2.4G (2402~2483)Mhz	5G (5150~5850) Mhz
Module information		
Driver version information		

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

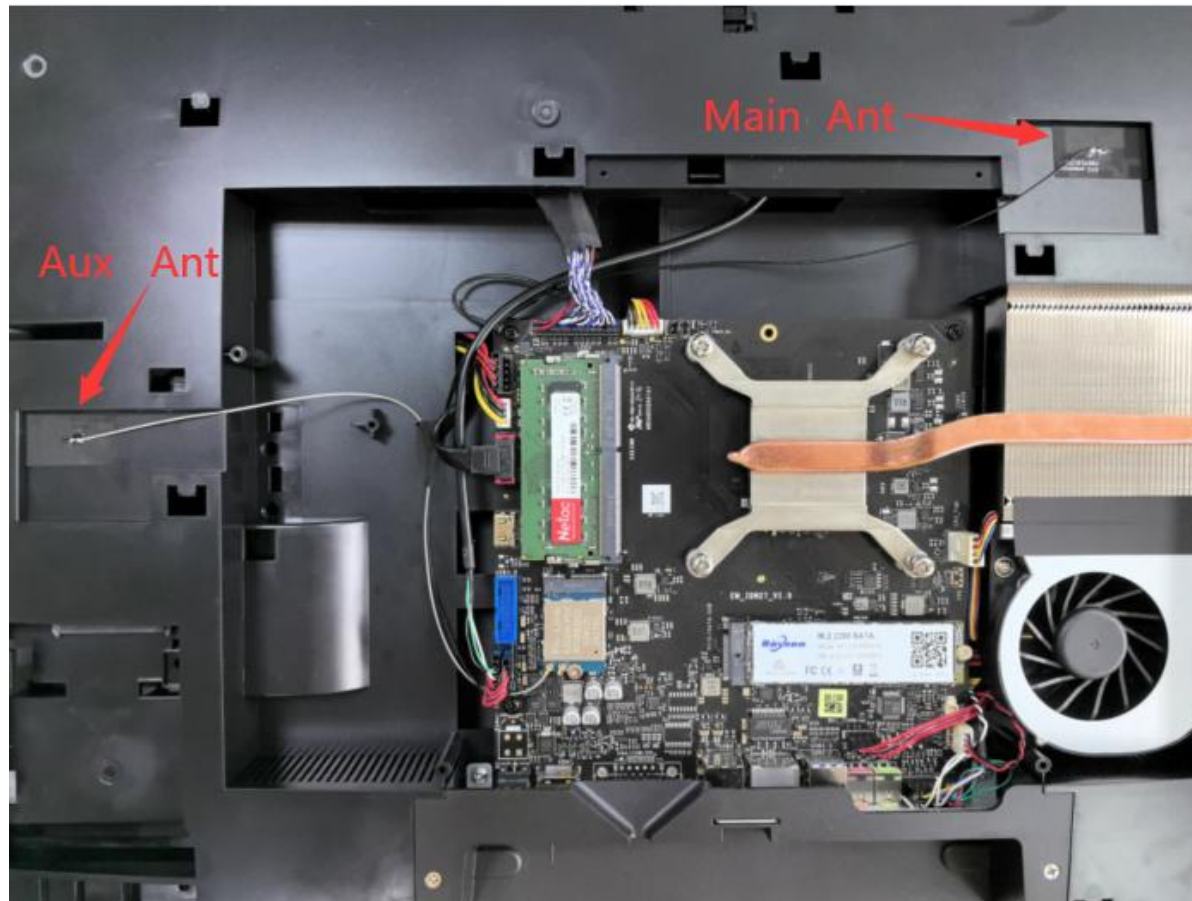
Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng\_Vis@126.com



深圳星源创科技有限公司

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

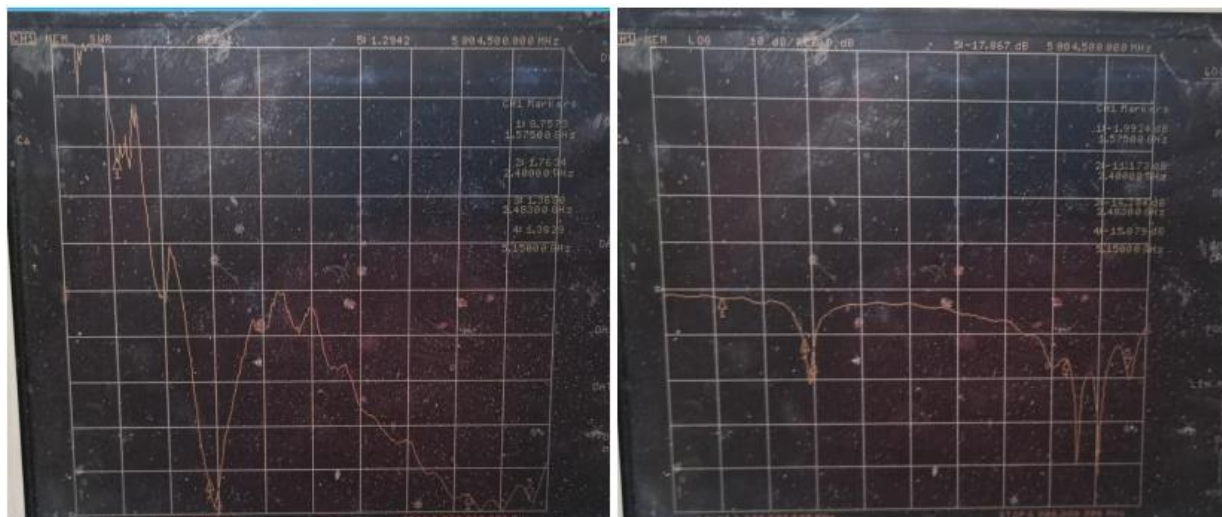
Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng\_Vis@126.com





Test Data

S11 Parameter-VSWR



Frequency (MHZ)	2400		2483	5150	5500	5850
VSWR	1.76		1.36	1.39		1.29
Return Loss (DB)	-11.17		-16.20	-15.07		-17.36

Efficiency Table(2.4G)

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	40.42	-3.52	1.14	-1.01	16.57	23.853	1.14	-20.67	4.66	0	45.78	46.01
2410	39.89	-3.58	1.45	-0.7	16.09	23.804	1.45	-17.02	5.02	0	46.01	46.29
2420	43.16	-3.26	1.88	-0.27	17.06	26.096	1.88	-15.92	5.14	0	45.73	46
2430	43.93	-3.19	2.02	-0.13	17.292	26.638	2.02	-15.33	5.21	0	46.01	46.36
2440	45.13	-3.09	2.31	0.16	17.716	27.409	2.31	-14.85	5.4	0	46.12	46.48
2450	45.04	-3.09	2.39	0.24	17.776	27.263	2.39	-14.51	5.48	0	46.12	46.54
2460	42.9	-3.29	2.2	0.05	17.208	25.687	2.2	-14.99	5.49	0	46.14	46.52
2470	44.72	-3.12	2.34	0.19	18.062	26.66	2.34	-15.52	5.47	0	46.4	46.8
2480	45.04	-3.09	2.44	0.29	18.357	26.68	2.44	-18.54	5.53	0	46.26	46.64
2490	41.41	-3.43	2.14	-0.01	16.891	24.52	2.14	-24.01	5.57	0	46.51	46.91
2500	36.23	-3.95	1.76	-0.39	14.988	21.239	1.76	-18.19	5.72	0	46.47	46.86

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 (dBa)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5150	38.29	-5.48	3.21	1.06	16.022	22.265	3.21	-21.73	8.7	0	49.82	49.4
5170	39.51	-5.3	3.43	1.28	16.619	22.893	3.43	-23.24	8.73	0	50.13	49.77
5190	32.56	-4.87	3.66	1.51	13.015	19.541	3.66	-20.03	8.54	0	50.42	49.95
5210	34.43	-4.63	3.79	1.64	13.821	20.613	3.79	-17.72	8.42	0	50.88	50.49
5230	37.57	-4.25	4.01	1.86	15.25	22.323	4.01	-18.97	8.26	0	50.42	50.08
5250	37.36	-4.28	3.67	1.52	15.394	21.966	3.67	-19.19	7.95	0	51.02	50.72
5270	42.72	-3.69	4.29	2.14	17.808	24.911	4.29	-16.86	7.98	0	50.85	50.6
5290	39.99	-3.98	3.94	1.79	16.814	23.179	3.94	-14.57	7.92	0	51.34	51.12
5310	40.6	-3.91	3.68	1.53	17.055	23.543	3.68	-17.48	7.59	0	50.44	50.36
5330	40.87	-3.89	3.39	1.24	17.083	23.791	3.39	-19.49	7.27	0	51.08	51.01
5350	45.6	-3.41	3.62	1.47	19.305	26.294	3.62	-16.28	7.03	0	51.02	51.01
5370	42.1	-3.76	3	0.85	18.138	23.961	3	-16.55	6.76	0	50.91	50.95
5390	39.67	-4.02	2.33	0.18	17.137	22.529	2.33	-20.01	6.35	0	50.46	50.43
5410	44.21	-3.54	2.62	0.47	19.144	25.066	2.62	-20.66	6.16	0	51.18	51.09
5430	43.9	-3.58	2.79	0.64	19.006	24.892	2.79	-18.74	6.37	0	50.69	50.7
5450	43.06	-3.66	2.83	0.68	18.726	24.335	2.83	-18.18	6.49	0	50.71	50.85
5470	41.2	-3.85	2.35	0.2	17.986	23.216	2.35	-15.56	6.21	0	50.93	50.83
5490	37.75	-4.23	2.3	0.15	16.253	21.494	2.3	-14.37	6.53	0	50.92	50.79
5510	40.65	-3.91	2.59	0.44	17.318	23.332	2.59	-13.8	6.5	0	51.18	51.16
5530	38.12	-4.19	2.27	0.12	15.941	22.181	2.27	-15.73	6.46	0	51.44	51.3
5550	41.51	-3.82	2.74	0.59	16.955	24.558	2.74	-13.57	6.56	0	51.89	51.76
5570	33.73	-4.72	1.7	-0.45	13.571	20.157	1.7	-17.27	6.42	30	51.42	51.33
5590	38.14	-4.19	1.65	-0.5	15.102	23.036	1.65	-15.48	5.84	30	51.71	51.76
5610	32.95	-4.82	1.06	-1.09	13.062	19.889	1.06	-16.66	5.88	30	51.17	51.22
5630	41.37	-3.83	1.62	-0.53	16.385	24.983	1.62	-15.01	5.46	30	51.78	51.77
5650	32.55	-4.87	0.75	-1.4	12.886	19.666	0.75	-15.46	5.62	30	51.47	51.55
5670	41.04	-3.87	2.52	0.37	16.234	24.81	2.52	-16.3	6.39	30	52.12	52.28
5690	33.38	-4.77	1.88	-0.27	13.241	20.137	1.88	-19.06	6.65	30	52.12	52.25
5710	40.05	-3.97	2.61	0.46	15.927	24.124	2.61	-18.72	6.59	30	51.95	52.05
5730	39.02	-4.09	2.63	0.48	15.345	23.674	2.63	-19.78	6.72	0	51.59	51.69
5750	38.46	-4.15	2.9	0.75	14.803	23.656	2.9	-19.36	7.05	0	51.12	51.15
5770	39.27	-4.06	2.86	0.71	15.034	24.237	2.86	-20.31	6.92	0	51.02	51.06
5790	37.8	-4.23	1.99	-0.16	14.555	23.242	1.99	-19.25	6.22	0	51.08	51.16
5810	36.65	-4.36	1.51	-0.64	14.104	22.546	1.51	-17.43	5.87	30	51.36	51.43
5830	35.76	-4.47	1.59	-0.56	13.491	22.266	1.59	-17.46	6.06	0	51.65	51.66
5850	33.44	-4.76	1.41	-0.74	12.507	20.932	1.41	-18.2	6.17	0	51.88	52.05

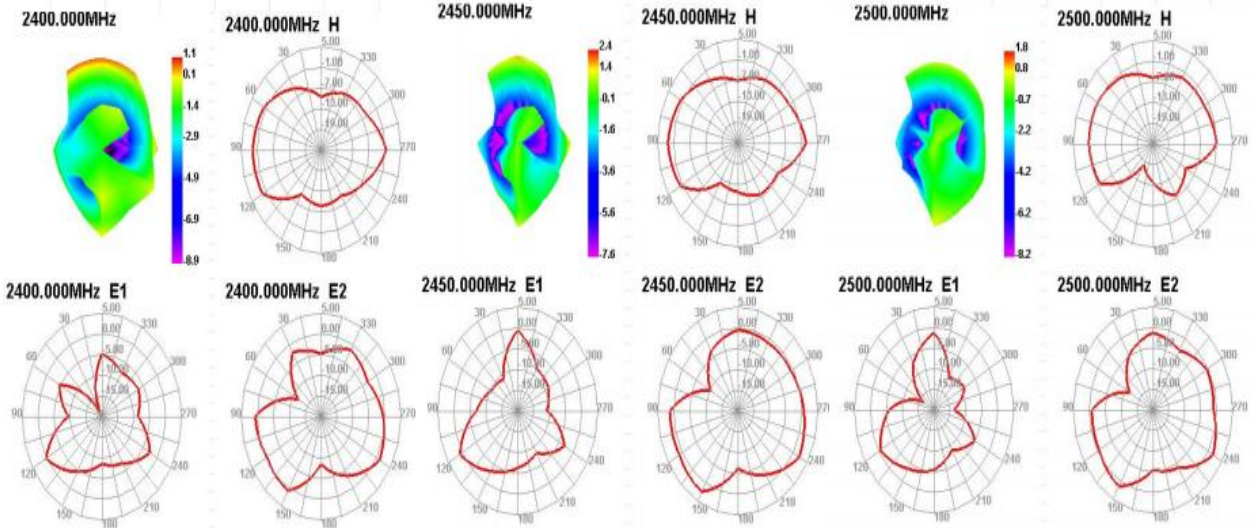
地址：深圳市宝安区福永镇福海街道塘尾股份商务大厦1506

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

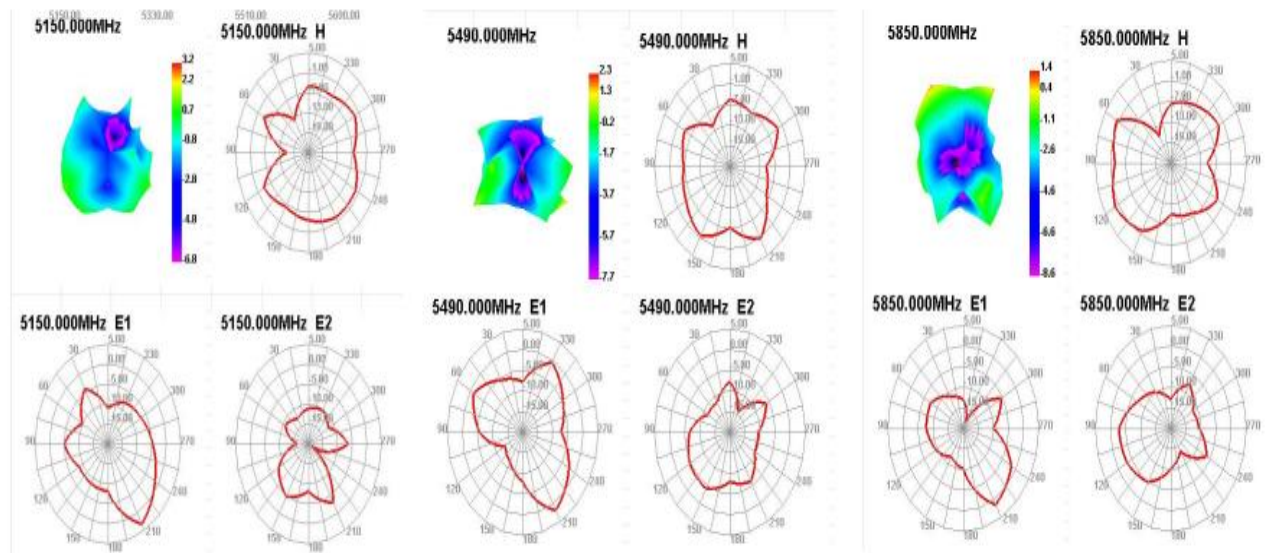
Tel: 0755-82103639 QQ: 487580356 Email: Stephdeng\_Vis@126.com



### Radiation Pattern(2.4G)

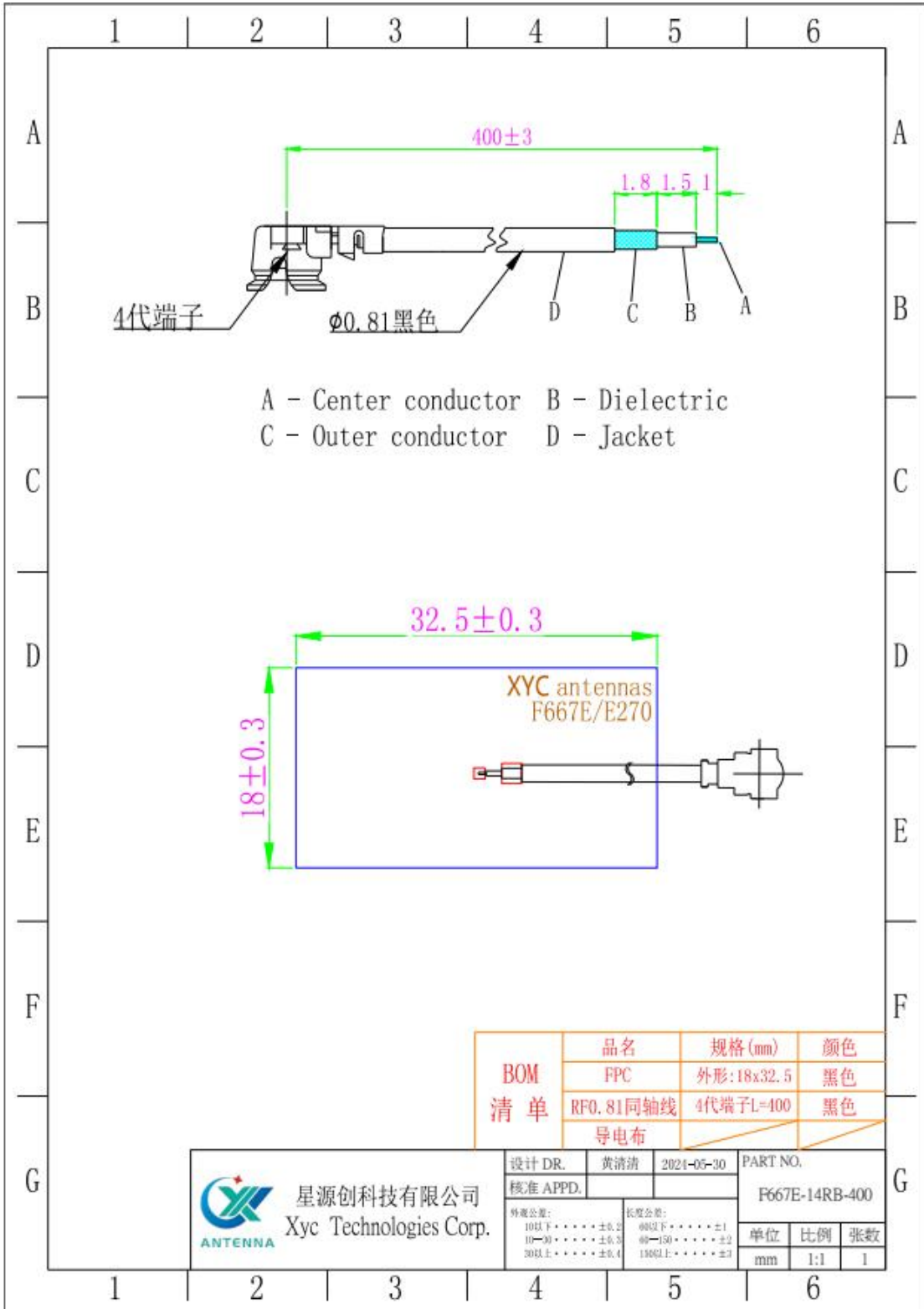


### Radiation Pattern(5G)





### 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