



顺达成科技

深圳顺达成科技有限公司
SHUN DA CHENG TECHNOLOGY CO., LTD

Antenna Test Report



客户名称：昱科

项目名称：AL1461H

频段：WIFI（2.4G/5.8G）

版本：A

制作日期：2025-2-25



Content

- 1. Antenna Matching Network**
- 2. *S11 Parameter-VSWR***
- 3. 1 Gain & Efficiency**
- 3. 2 3D Pattern**
- 4. OTA Data**
- 5. Antenna Assembly & environmental processing**
- 6. conclusion**



深圳顺达成科技有限公司

顺达成科技

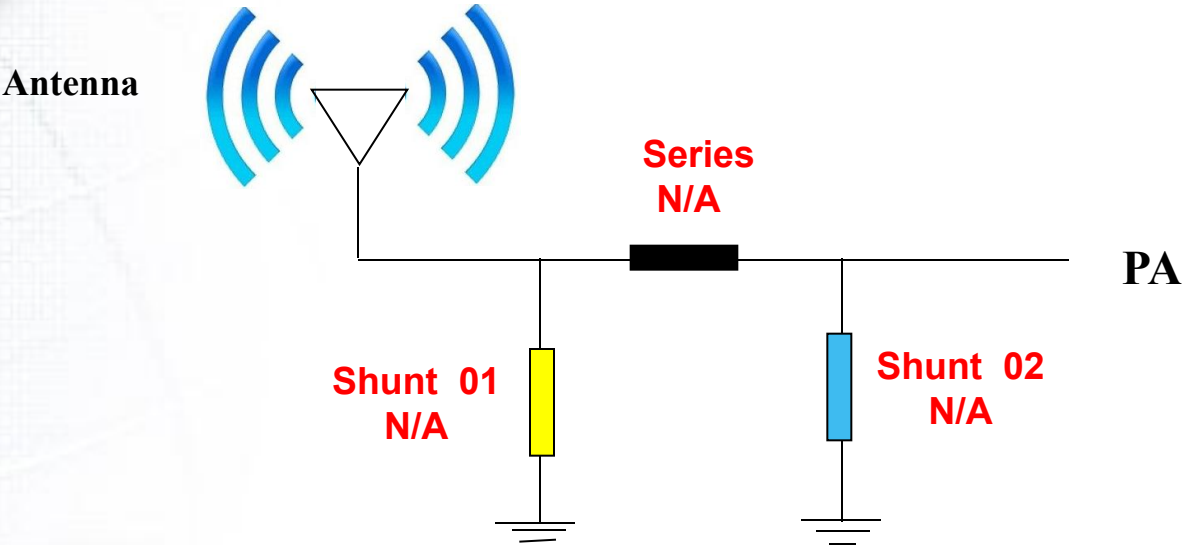
1. Test system

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW2 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C





2. Antenna Matching Network



Location	Description	Vendor
Shunt 01	N/A	N/A
Series	N/A	N/A
Shunt 02	N/A	N/A

未改动主板
匹配电路



S11 Parameter-SWR

WIFI主天线

顺达成科技



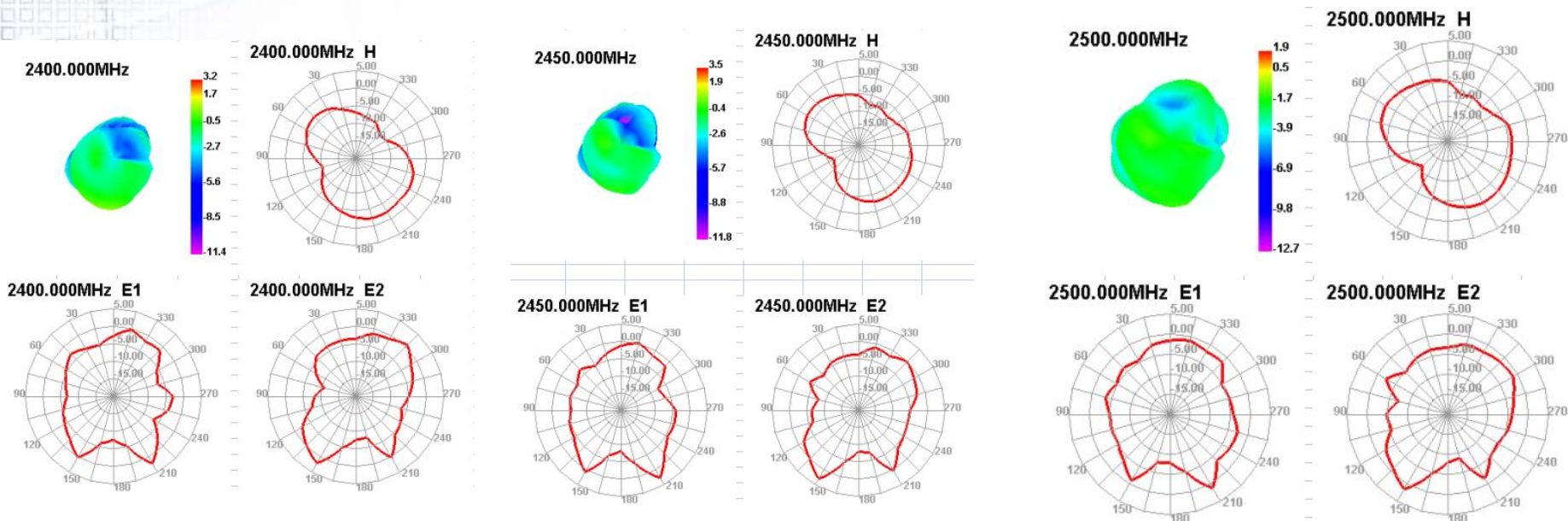


Gain & Efficiency

WIFI主天线

顺达成科技

Passive Test For 2.4G										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	46.9	-3.29	3.16	1.01	22.318	24.585	3.16	-11.43	49.25	48.85
2450	49.71	-3.04	3.46	1.31	22.77	26.939	3.46	-11.81	49.38	49.16
2500	46.11	-3.36	1.93	-0.22	23.105	23.007	1.93	-12.73	49.46	49.37



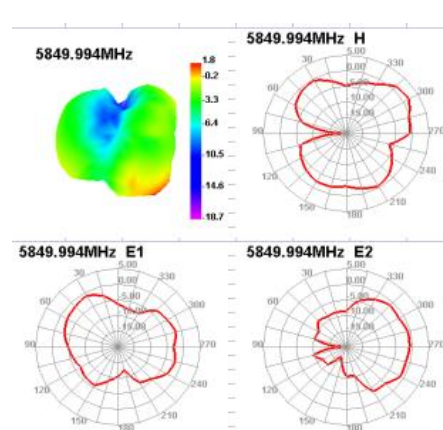
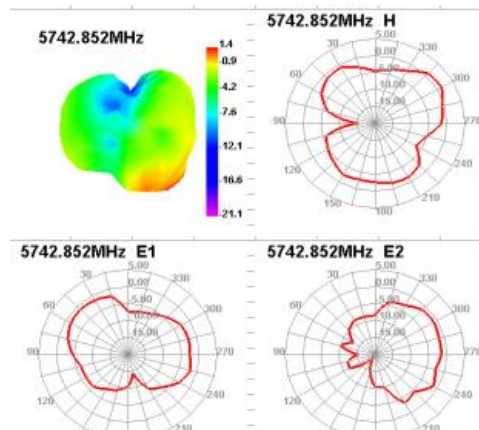
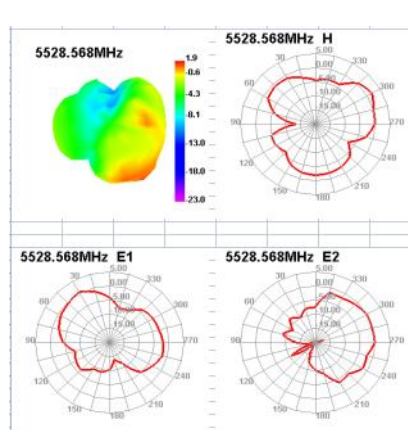
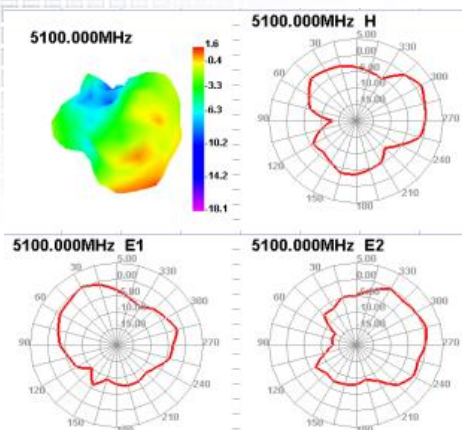


Gain & Efficiency

WIFI主天线

顺达成科技

Passive Test For 5.8G										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
5100	43.79	-3.59	1.57	-0.58	26.644	17.141	1.57	-18.08	61.56	60.95
5207.14	40.4	-4.04	0.87	-1.28	23.155	16.245	0.87	-20.26	60.8	60.51
5314.28	40.93	-4.33	0.52	-1.63	21.301	15.632	0.52	-17.83	60.49	59.93
5421.43	42.97	-3.67	1.36	-0.79	24.578	18.389	1.36	-21.39	61.44	60.95
5528.57	44.41	-3.53	1.87	-0.28	26.025	18.384	1.87	-22.99	63.27	62.62
5635.71	40.03	-4.31	0.72	-1.43	21.579	15.451	0.72	-21.86	63.73	63.15
5742.85	42.47	-3.72	1.37	-0.78	23.828	18.643	1.37	-21.09	64.06	63.48
5849.99	46.72	-3.3	1.82	-0.33	25.53	21.193	1.82	-18.71	64.26	64





S11 Parameter-SWR

WIFI副天线

顺达成科技





Gain & Efficiency

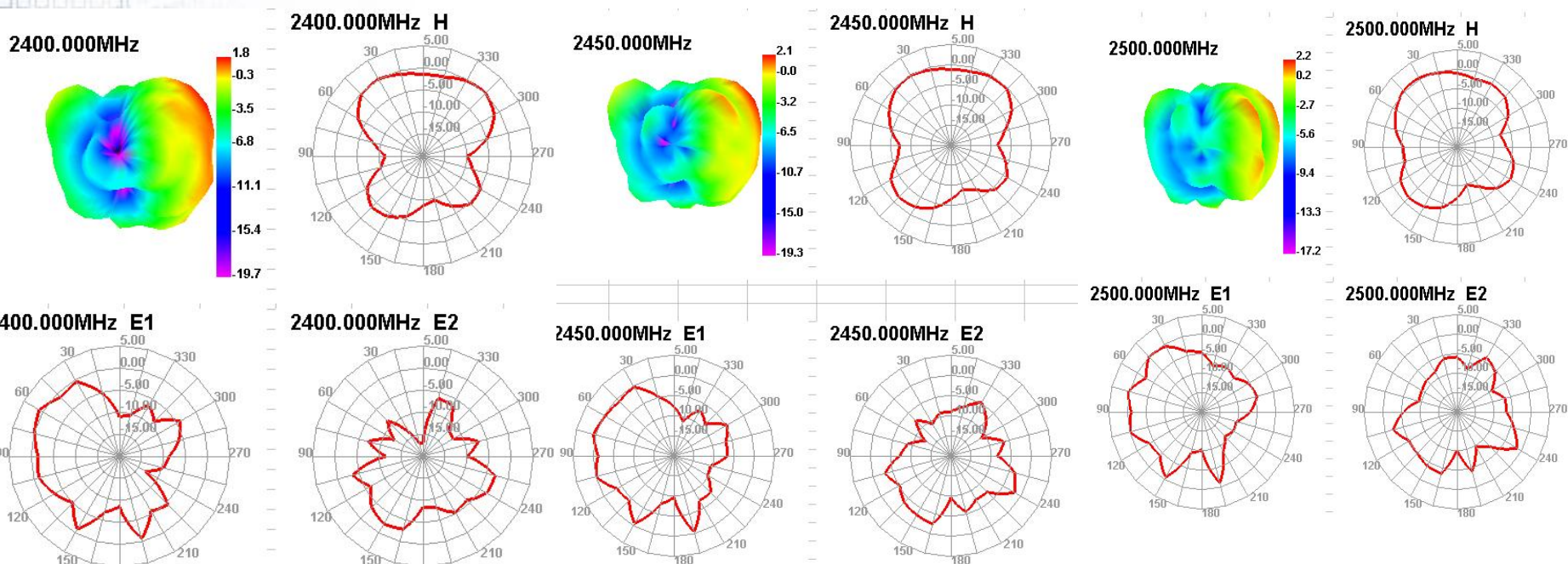
WIFI副天线

顺达成科技

Passive Test For 2.4G										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	43.91	-3.57	1.84	-0.31	22.401	21.511	1.84	-19.67	49.25	48.85
2450	44.86	-3.48	2.13	-0.02	22.886	21.973	2.13	-19.33	49.5	49.28
2500	45.49	-3.42	2.16	0.01	23.63	21.862	2.16	-17.15	49.61	49.52

2400.00MHz - 2500.00MHz Gain

5.00





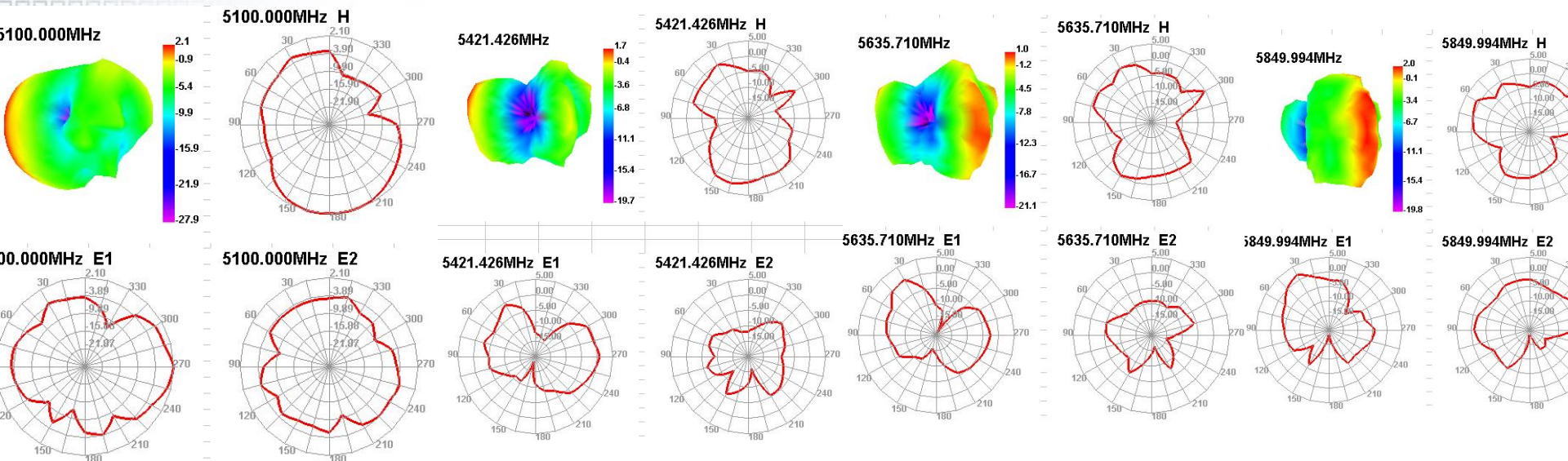
Gain & Efficiency

WIFI副天线

顺达成科技

Passive Test For 5.8G										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
5100	39.74	-4.01	2.1	-0.05	19.309	20.435	2.1	-27.87	64.41	63.8
5207.14	32.4	-4.9	0.91	-1.24	15.743	16.652	0.91	-24.89	61.01	60.71
5314.28	35.76	-4.47	1.73	-0.42	17.926	17.834	1.73	-18.84	60.15	59.59
5421.43	37.05	-4.31	1.73	-0.42	19.307	17.743	1.73	-19.66	60.88	60.38
5528.57	44.37	-3.53	2.03	-0.12	24.066	20.305	2.03	-27.5	63.75	63.1
5635.71	34.14	-4.67	1.05	-1.1	19.484	14.656	1.05	-21.15	63	62.42
5742.85	42.37	-3.73	2.27	0.12	26.477	15.897	2.27	-21.05	63.75	63.17
5849.99	41.95	-3.77	2.04	-0.11	27.682	14.265	2.04	-19.81	64.46	64.2

5100.00MHz - 5850.00MHz Gain





WIFI OTA Data

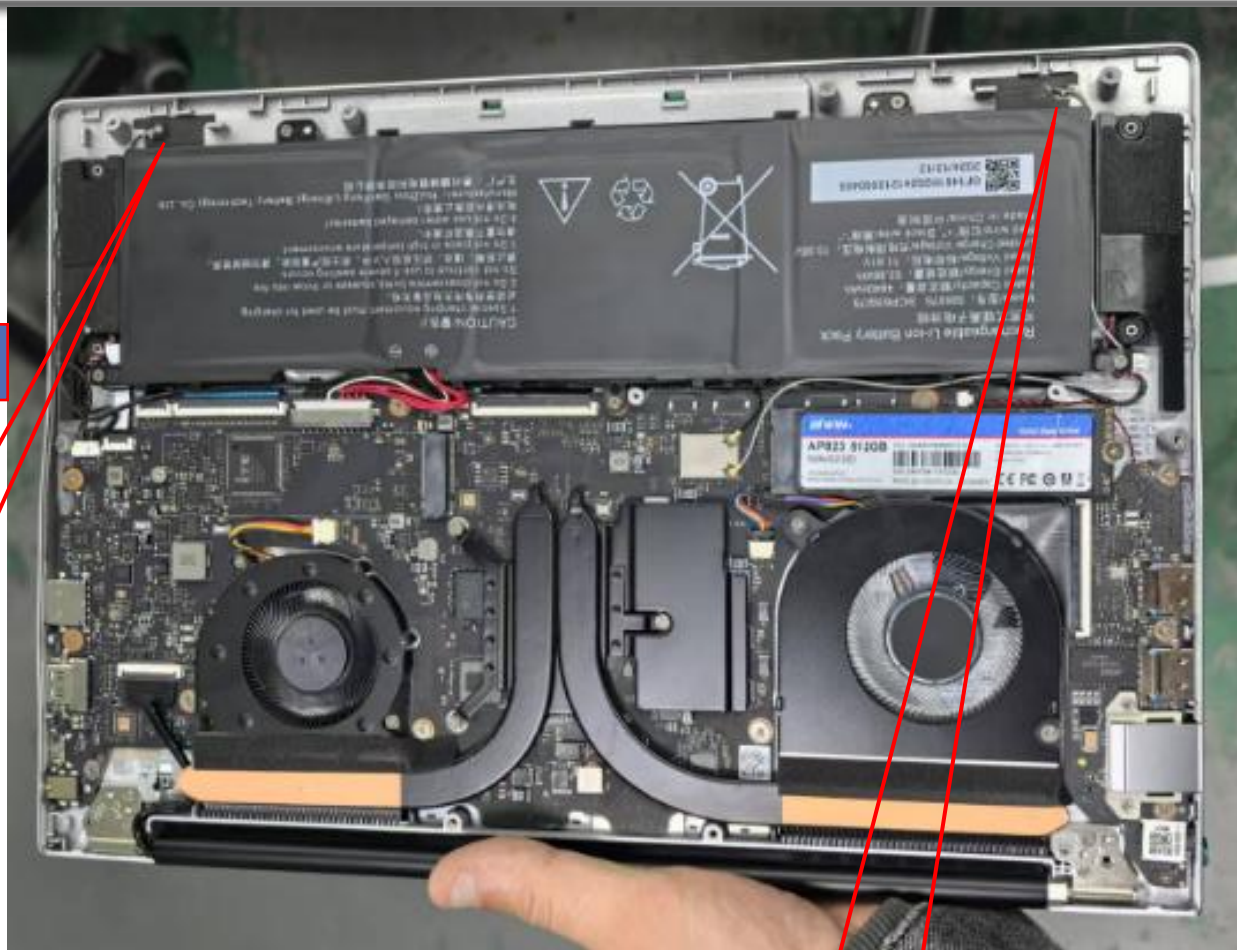
2.4G	802.11b, (2.4G) 11M		
Channel	CH1	CH6	CH11
TRP	12.92	12.07	12.14
TIS	-77.17	-77.52	-78.63
5.8G	802.11a, (5.8G) 54M		
Channel	CH36	CH60	CH161
TRP	11.09	10.43	11.87
TIS	-68.28	-68.34	-68.8



顺达成科技

Antenna Assembly & environmental processing

天线安装位置请参考右图



WIFI主天线

WIFI副天线

[illegible]

[illegible]



顺达成科技

深圳顺达成科技有限公司

顺达成感谢您的支持

公司地址：深圳市宝安区福永镇重庆路新福工业园B5栋4楼