



深圳市创科华科技有限公司

Shenzhen Chuangkehua Technology Co.Ltd

Project Name	D016	working frequency band	2400Mhz/5850Mhz
Antenna engineer	Xu	Structural engineer	Zhou
Date	2025-05-17	Antenna material	FPC



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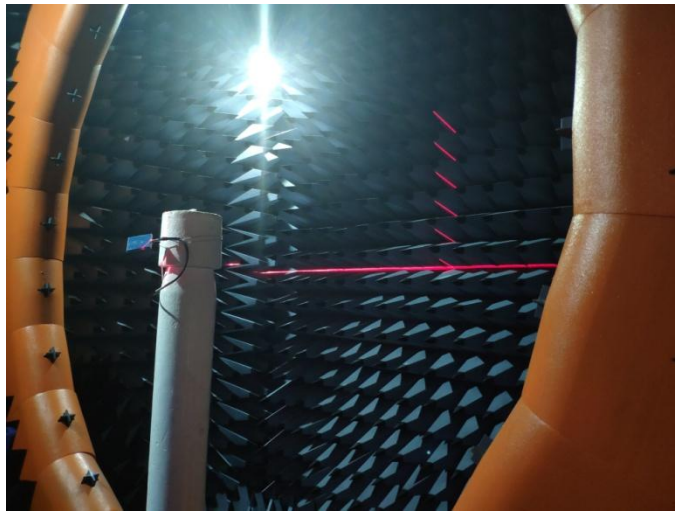
02 Match modification

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04 Mainboard of the whole machine

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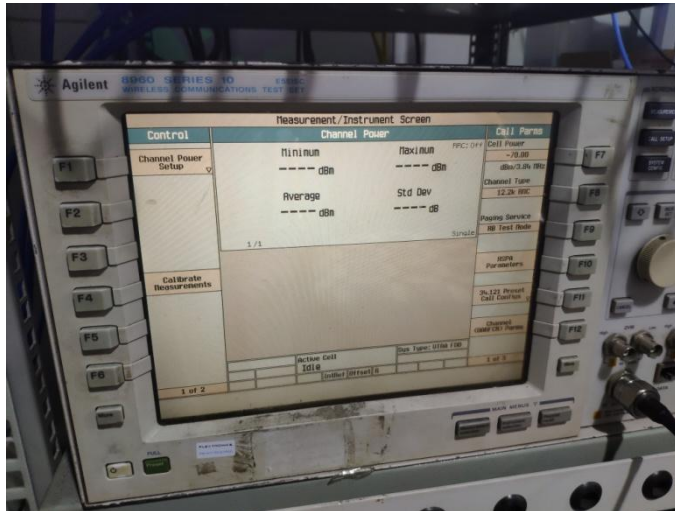
① R&D testing equipment



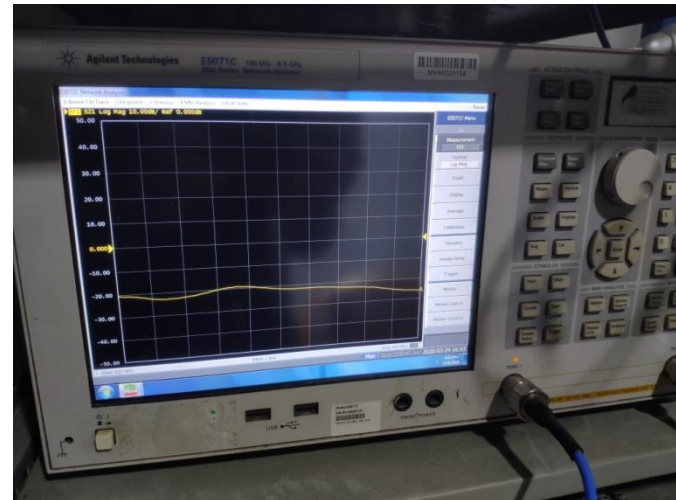
7*4*3M 3DMicrowave anechoic chamber



MT8820C



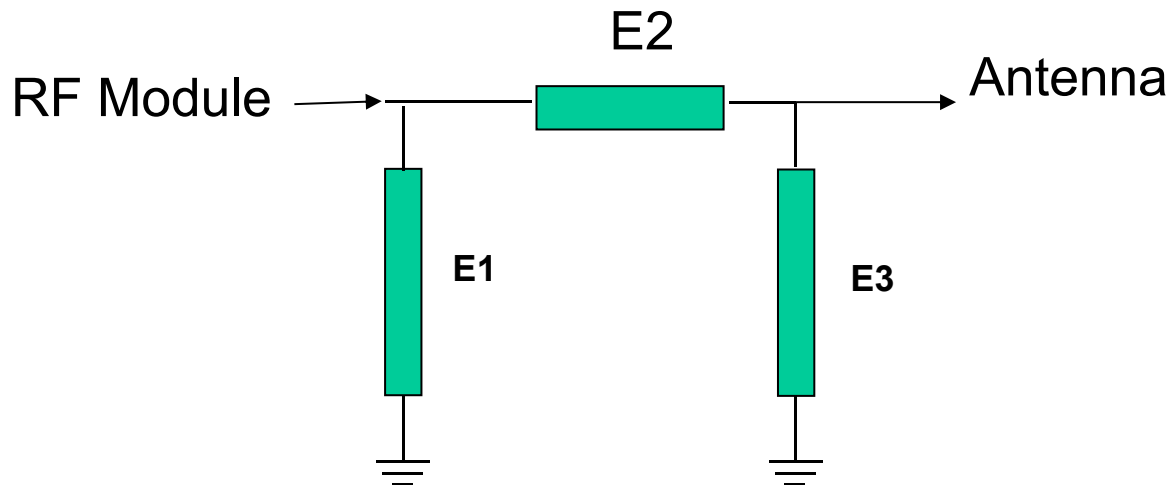
Agilent 8960



Agilent E5071C

match (Match unchanged)

Element	E1	E2	E3
Value	/	/	/

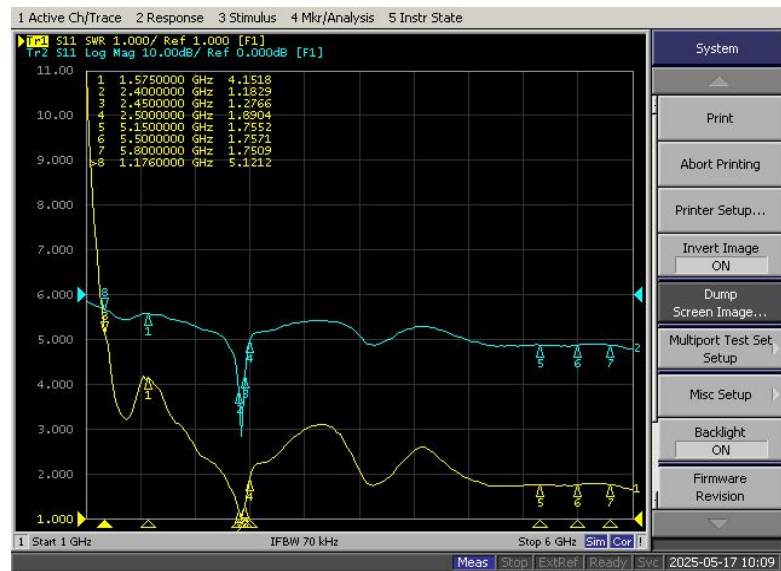




Product image

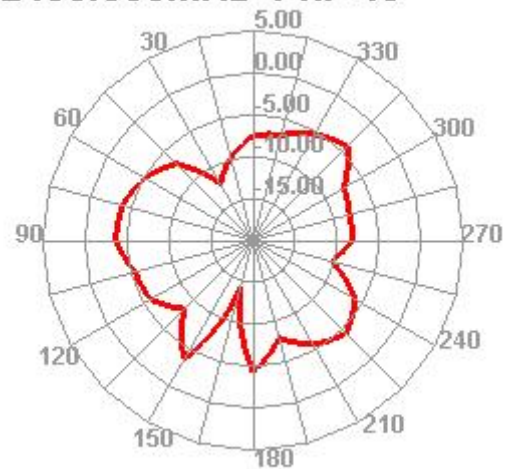
2.4/5.8standing wave pattern

2.4/5.8Standing wave reflection loss diagram

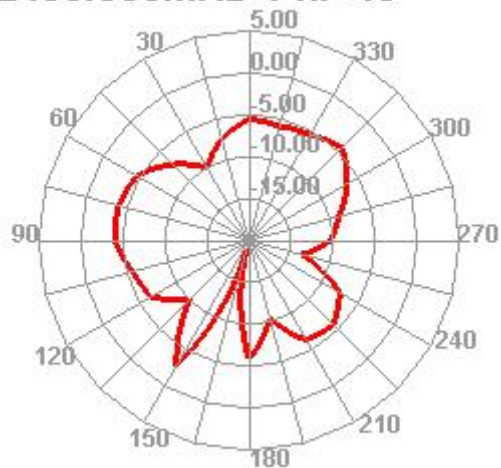


Passive Test For WIFI2.4										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)
2400	28.57	-6.1	-3.68	-5.83	12.483	12.091	-3.68	-14.17	2.42	0
2410	30.37	-6.13	-3.52	-5.67	12.554	11.813	-3.52	-14.72	2.61	0
2420	31.59	-6.09	-3.31	-5.46	13.104	11.482	-3.31	-15.42	2.78	0
2430	30.27	-6.33	-3.22	-5.37	12.562	10.709	-3.22	-16.74	3.12	0
2440	32.79	-6.24	-2.9	-5.05	13.139	10.646	-2.9	-17.91	3.34	0
2450	33.83	-6.41	-2.79	-4.94	12.7	10.134	-2.79	-19.07	3.62	0
2460	32.08	-6.56	-2.88	-5.03	12.549	9.532	-2.88	-20.2	3.68	0
2470	30.94	-6.79	-2.96	-5.11	12.002	8.936	-2.96	-21.23	3.83	0
2480	29.61	-6.86	-3.19	-5.34	12.133	8.476	-3.19	-20.89	3.67	0
2490	28.25	-7.16	-3.5	-5.65	11.476	7.771	-3.5	-19.47	3.66	0
2500	27.84	-8	-4.59	-6.74	9.637	6.206	-4.59	-18.89	3.41	0

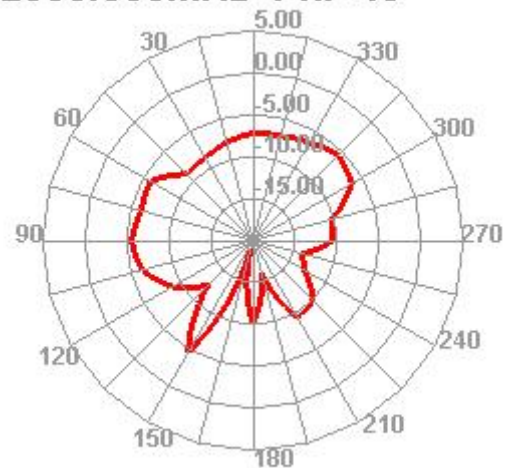
2400.000MHz Phi=45



2450.000MHz Phi=45

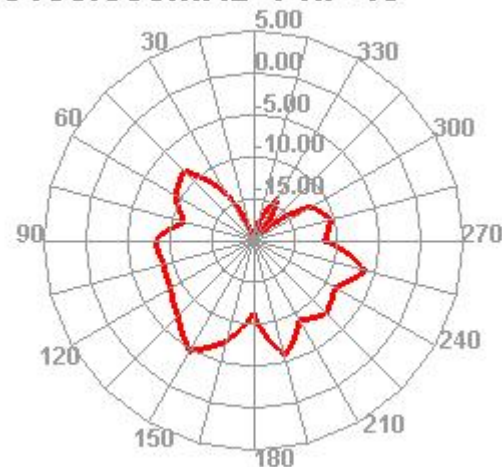


2500.000MHz Phi=45

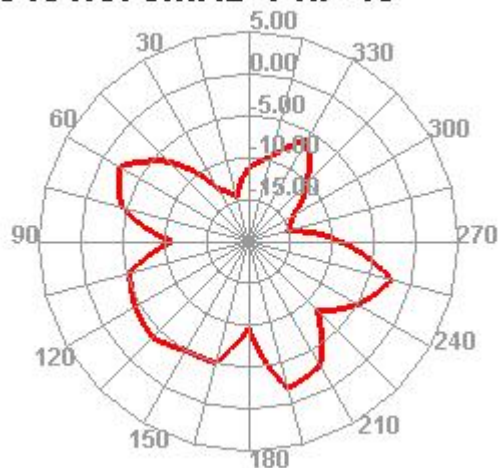


Passive Test For 5g										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)
5100	27.21	-6.13	-2.84	-3.99	8.776	15.435	-4.84	-23.53	4.29	30
5136.84	28.51	-5.38	-2.75	-3.9	9.061	14.454	-3.75	-20.97	4.63	30
5173.68	27.92	-5.01	-2.39	-3.54	10.063	15.861	-6.39	-20.68	4.62	30
5210.53	26.98	-5.56	-1.91	-4.06	9.79	15.192	-6.91	-19.03	4.65	15
5247.37	25.31	-4.75	-2.94	-3.09	11.404	16.904	-7.94	-18.97	4.81	0
5284.21	27.88	-5.63	-2.23	-4.38	10.779	18.098	-4.23	-15.42	5.41	0
5321.05	27	-6.55	-3.04	-3.19	11.014	14.991	-7.04	-18.06	4.51	0
5357.89	28.5	-5.7	-2.32	-3.47	10.627	15.877	-6.32	-20.65	4.38	15
5394.74	26.58	-5.8	-2.39	-2.54	10.536	11.049	-3.39	-17.61	4.41	15
5431.58	26.35	-5.79	-1.89	-4.04	10.484	16.866	-1.89	-15.24	3.9	15
5468.42	24.88	-6.04	-2.14	-4.29	15.13	15.75	-2.14	-17.18	3.9	15
5505.26	31.7	-4.99	-0.92	-3.07	12.212	19.486	-0.92	-15.51	4.07	15
5542.1	31.73	-4.99	-1.62	-3.77	12.152	19.579	-1.62	-15.13	3.37	15
5578.95	32.51	-4.88	-1.51	-3.66	12.705	19.804	-1.51	-14.86	3.37	30
5615.79	28.28	-5.48	-1.56	-3.71	11.51	16.774	-1.56	-13.7	3.93	30
5652.63	31.06	-5.08	-1.09	-3.24	12.623	18.435	-1.09	-13.48	3.99	30
5689.47	31.81	-6.61	-2.92	-5.07	9.199	12.606	-2.92	-16.19	3.7	30
5726.31	30.13	-6.17	-2.45	-4.6	10.221	13.912	-2.45	-15.66	3.72	30
5763.16	29.49	-6.48	-2.96	-5.11	9.494	12.995	-2.96	-18.3	3.52	30
5800	28.19	-6.35	-2.89	-5.04	9.926	13.26	-2.89	-17.94	3.46	30

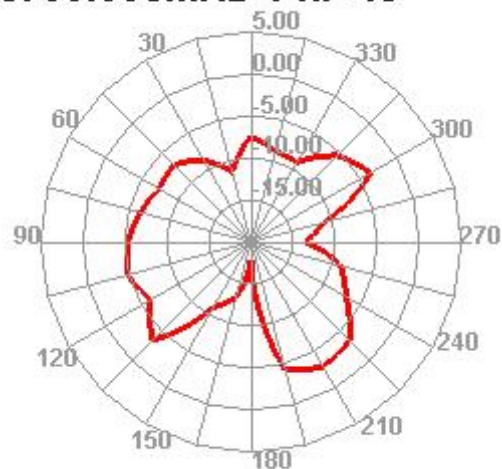
5100.000MHz Phi=45



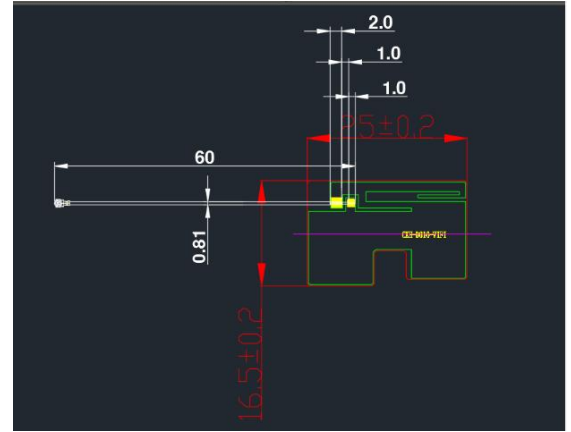
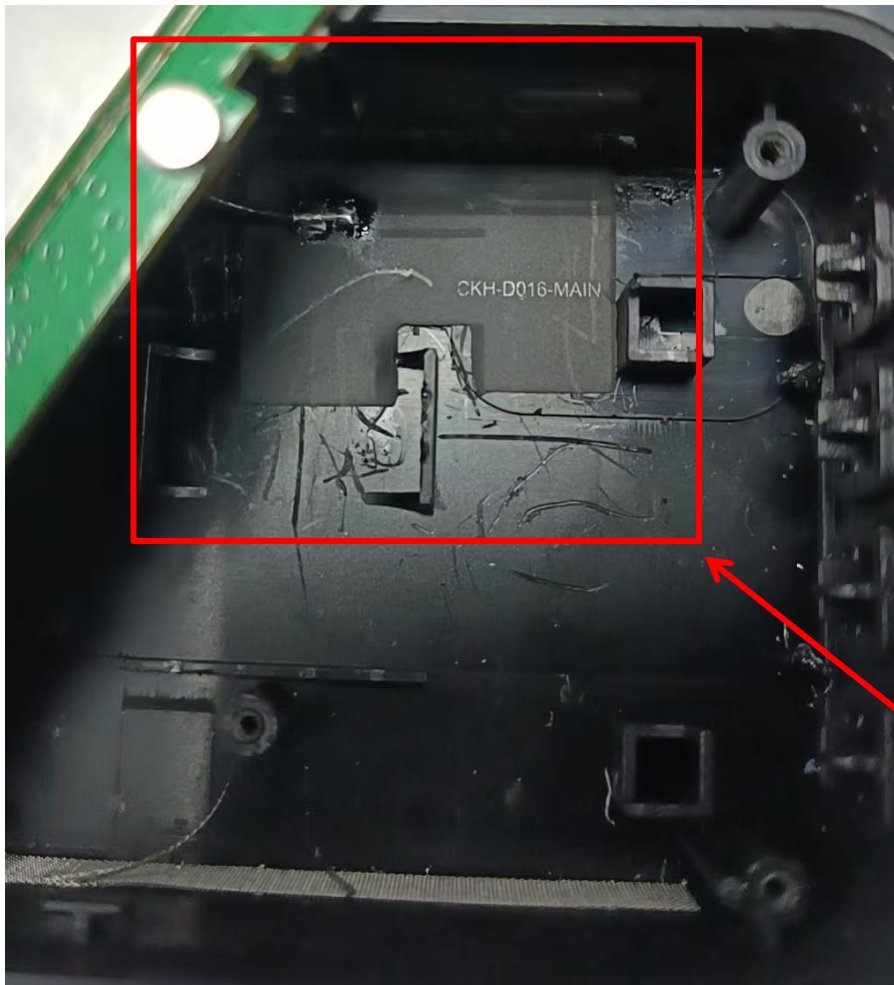
5431.578MHz Phi=45



5799.998MHz Phi=45



④ Mainboard of the whole machine



As shown in the figure: antenna position diagram

⑤ 总结说明

1. The above data only represents the performance parameters of the debugging machine. If your company needs to trial production/mass production, you need to arrange the trial production/ production machine to our company for testing and verification;
2. The above-mentioned matching modification and overall environmental treatment, please confirm whether it is feasible. If there are any objections, please communicate at any time;
3. If there are any changes to your machine, please arrange for it to be tested at our company to verify its performance, so as to ensure normal production in the;



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cooperation!

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