

样品承认书

SPECIFICATION FOR APPROVAL

Manufacturer: Noda's Ark

产品名称: BT/2.4&5G WIFI ANT

PAPT NAME

产品型号: BT/2.4&5G WIFI ANT

PAPT MODEL

承认栏

供应商确认:

客户确认:

拟定	审核	批准

拟定	审核	批准

厂址: 深圳市宝安区松岗芙蓉路8号鑫伟润高新科技园A栋二楼

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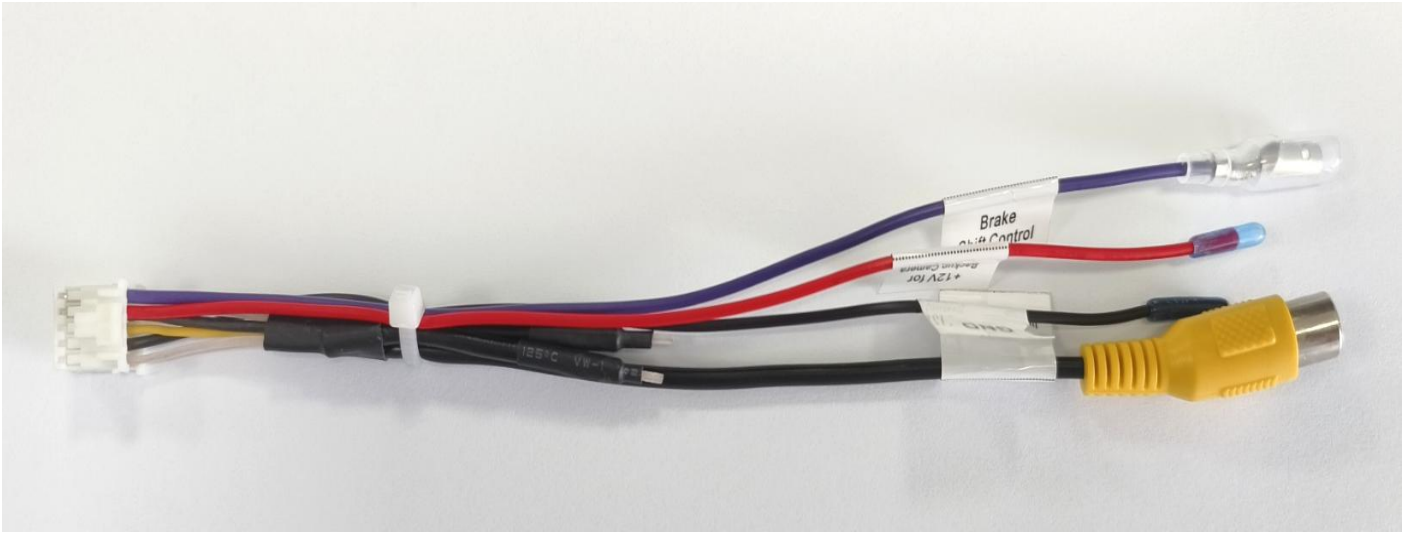
一、电气性能 Electrical factor

1. 频率范围 Frenquency range	2400~ 2500 MHz/5150~5800 MHZ
2. 输入阻抗 Impedance	50 Ω
3. 驻波比 VSWR	≥ 1.5
4. 增益 Gain	1-3dBi
5. 极化方式 Polarization	水平极化
6. 辐射方向 Radiation	全向
7. 功率容量 Maximun power Input-watts	50W

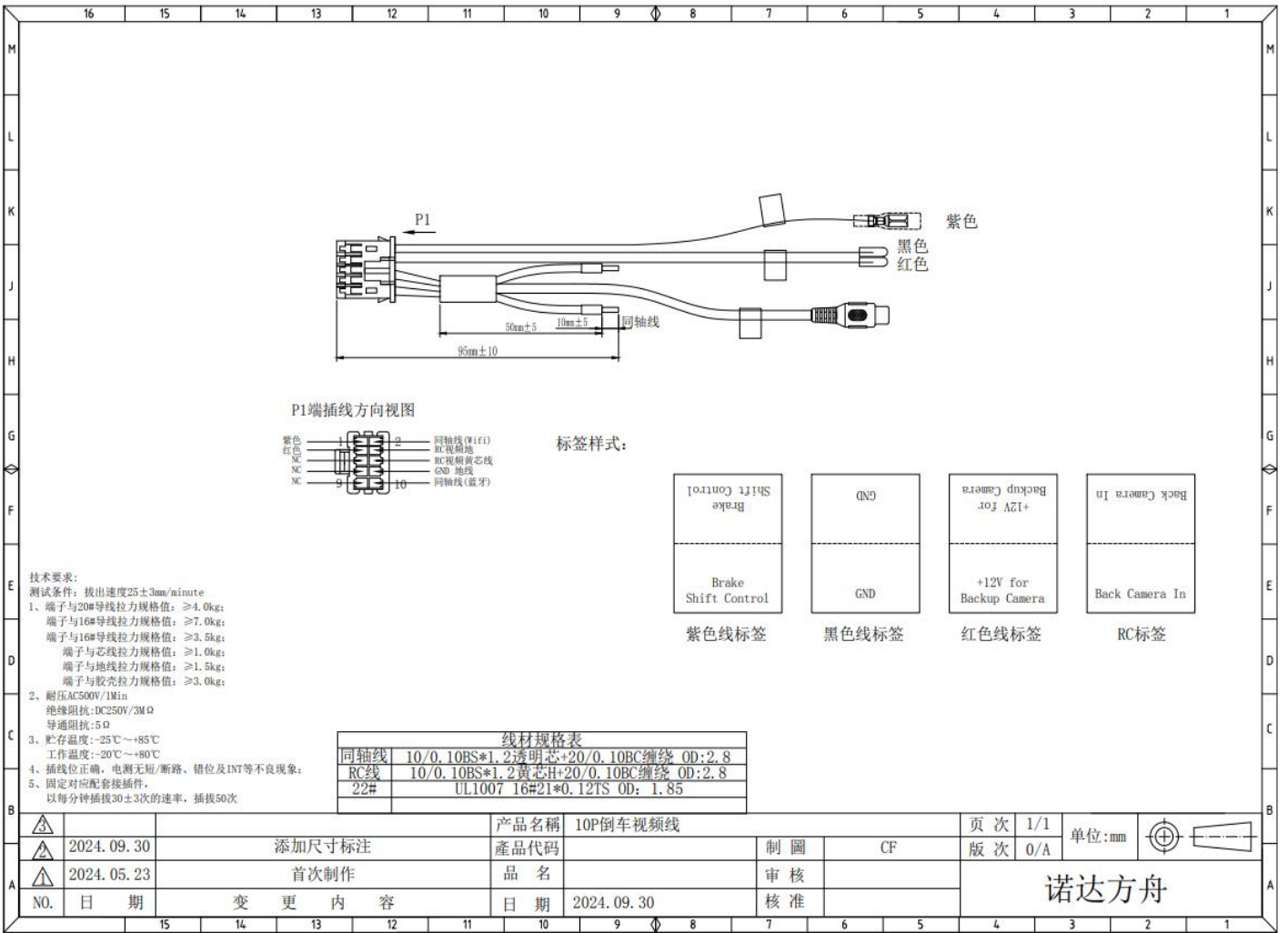
二、机械特性 Mechanical performance

1. 线长 Dimension	95 \pm 10mm
2. 接头 Connector	SPH2.0-10PIN
3. 材料 Radome material	同轴线
4. 外观颜色 Radome color	黑色+白色芯
5. 工作温度 Working temperature	-20~75度
6. 存放温度 Storage temperature	-40~85度

三、实物样品 Sample



四、图纸 Drawings



五、性能测试 Performance test

1.1: BT/WiFi 2.4G antenna, standing wave diagram



BT/WiFi 2.4G standing wave map

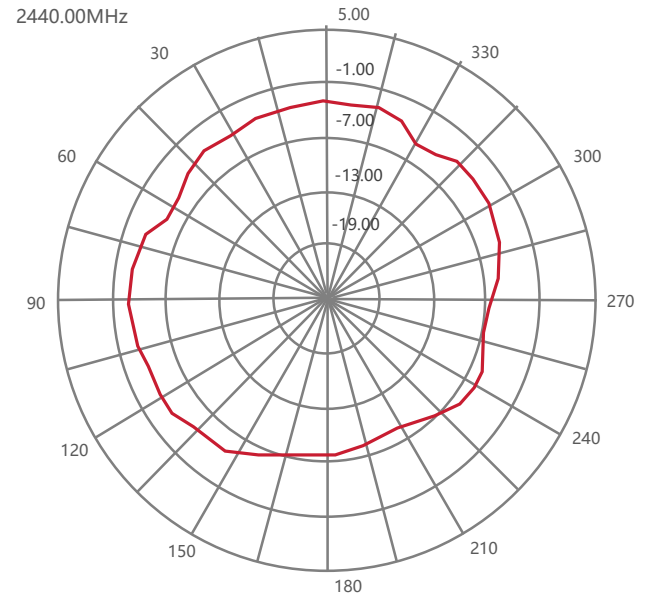
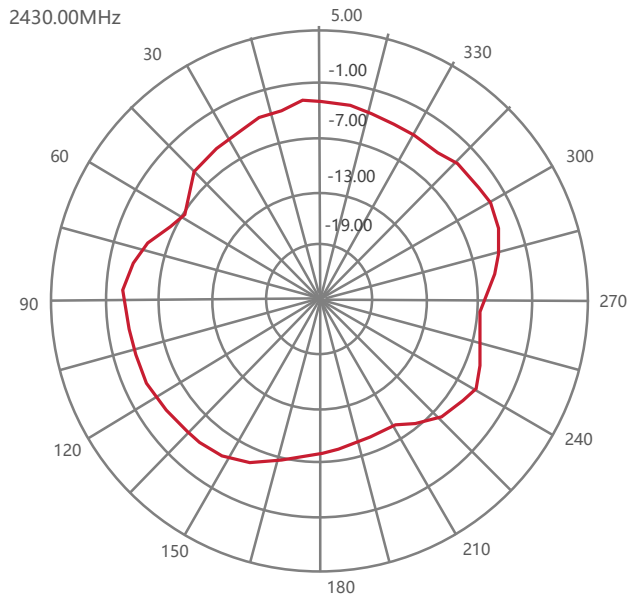
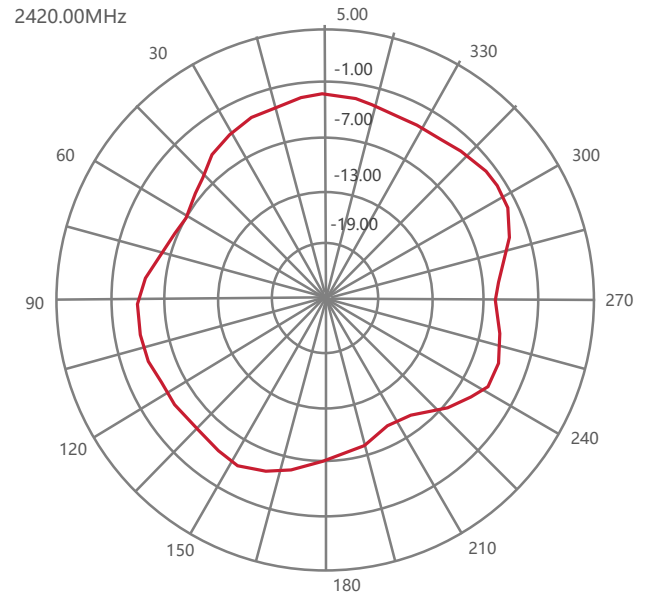
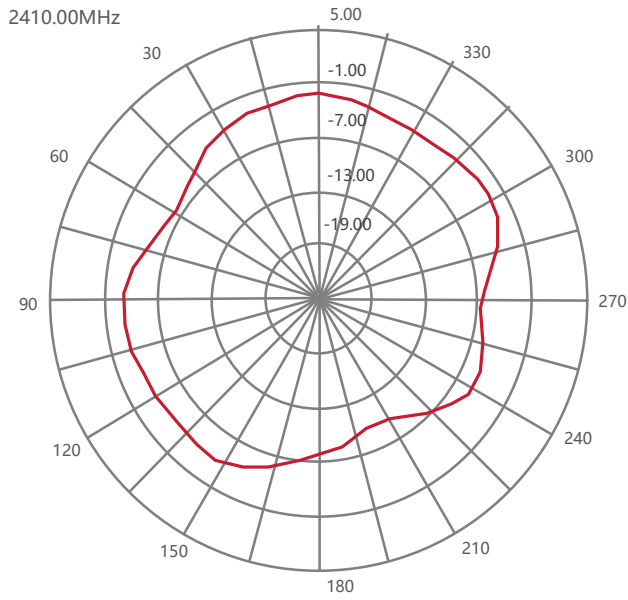
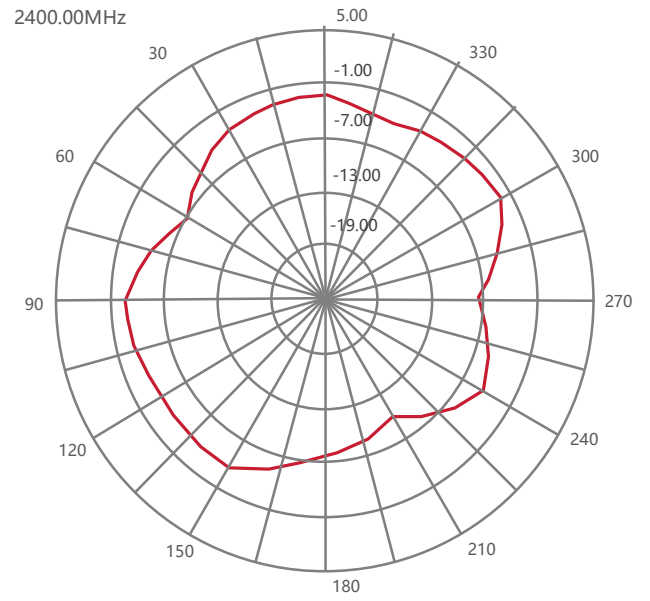
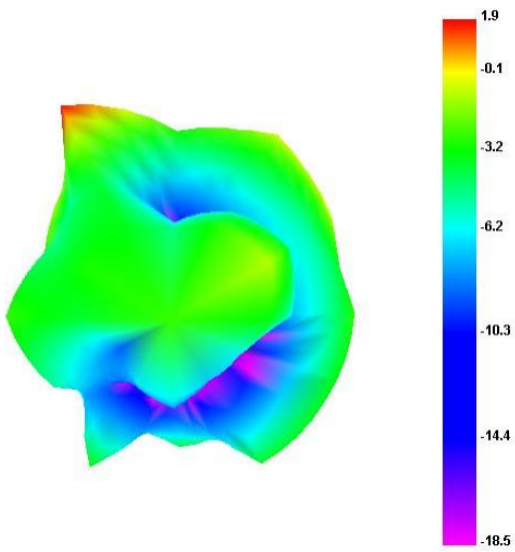


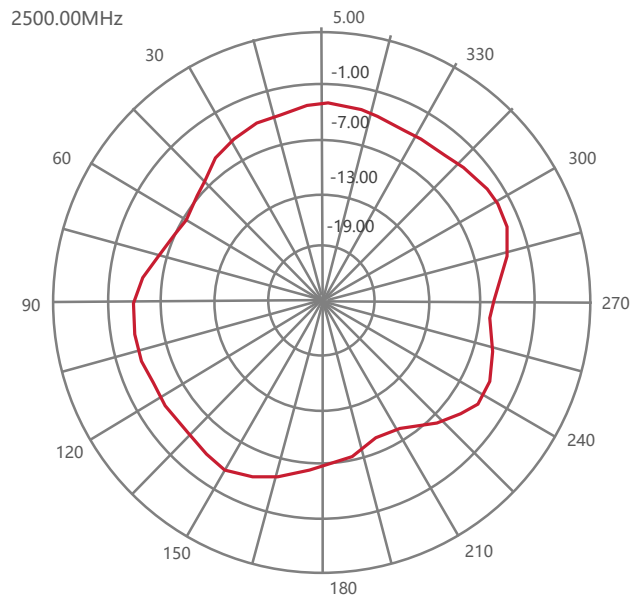
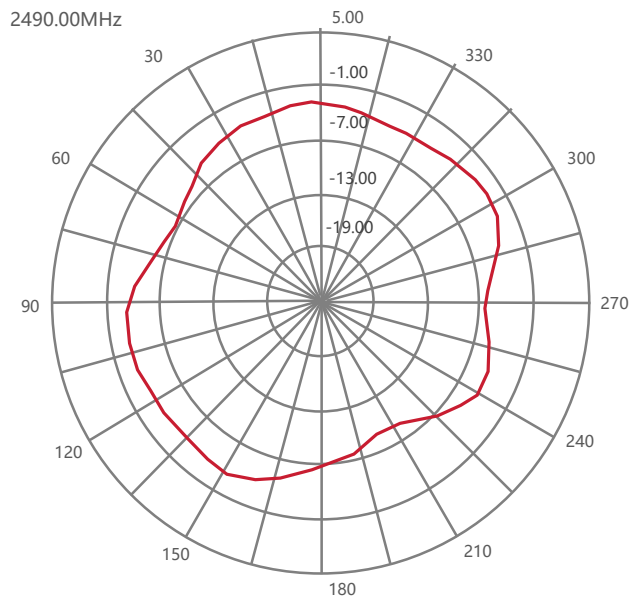
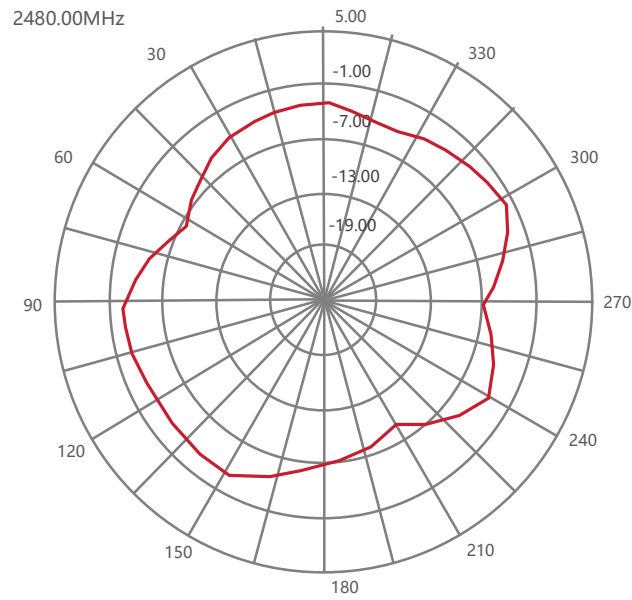
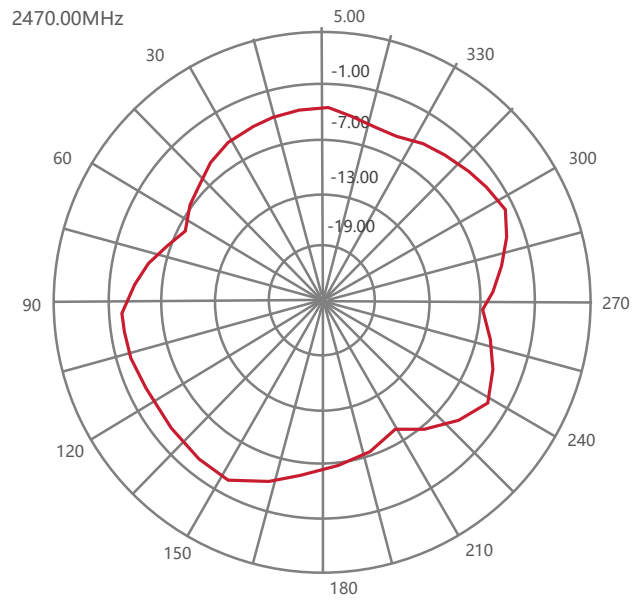
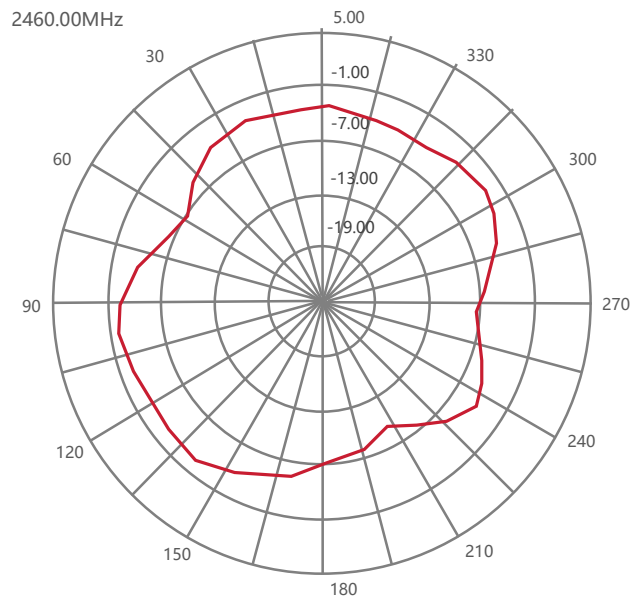
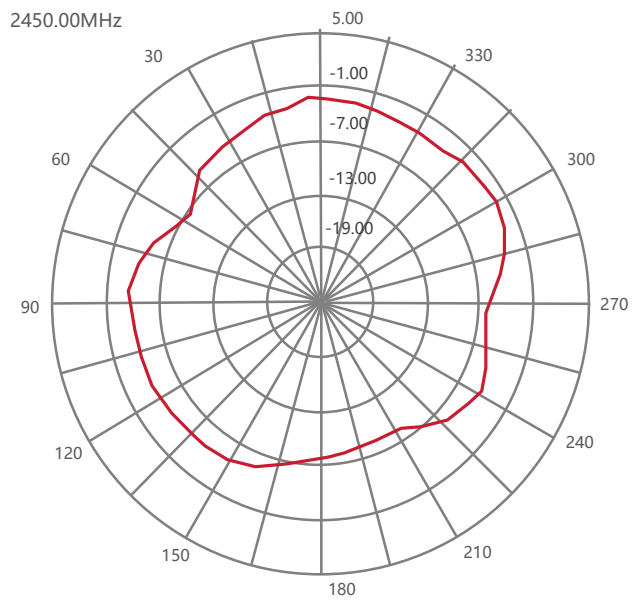
BT/WiFi 2.4G standing wave loss diagram

1.2: BT/WiFi 2.4G antenna test data

Passive Test											
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver	
2400	39.56	-4.03	1.93	-0.22	15.453	24.104	1.93	-18.49	47.51	47.63	
2410	37.2	-4.29	1.69	-0.46	14.231	22.972	1.69	-15.91	47.34	47.64	
2420	31.04	-5.08	0.96	-1.19	11.746	19.291	0.96	-15.21	47.27	47.45	
2430	26.87	-5.71	0.24	-1.91	10.278	16.592	0.24	-15.23	47.09	47.44	
2440	26.63	-5.75	0.2	-1.95	10.314	16.315	0.2	-16.7	47.25	47.56	
2450	28.69	-5.42	0.33	-1.82	11.239	17.452	0.33	-16.71	47.42	47.77	
2460	35.43	-4.51	1.12	-1.03	14.206	21.224	1.12	-15.17	47.67	47.91	
2470	42.21	-3.75	1.77	-0.38	17.644	24.57	1.77	-13.53	47.7	48.04	
2480	50.38	-2.98	2.41	0.26	21.548	28.83	2.41	-11.51	47.89	48.23	
2490	53.03	-2.76	2.38	0.23	23.235	29.791	2.38	-11.35	48.1	48.34	
2500	48.71	-3.12	1.94	-0.21	21.36	27.353	1.94	-12.35	47.94	48.19	

1.3: BT/WiFi antenna (dBi)

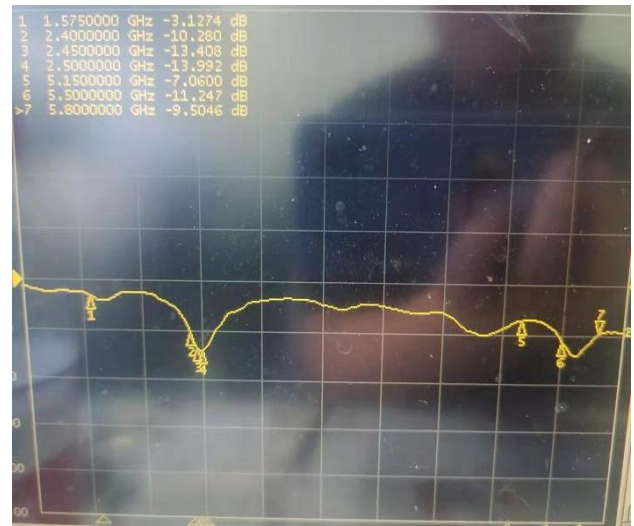




3.1: 5G WIFI antenna, standing wave diagram



5G WIFI standing wave map



5G WIFI standing wave loss diagram

3.2: 5G WIFI antenna test data

Passive Test For WIFI5.8											
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver	
5150	24.99	-6.02	-0.02	-2.17	15.542	9.448	-0.02	-26.14	56.04	56.11	
5160	22.09	-6.56	-0.7	-2.85	13.7	8.394	-0.7	-26.71	55.94	55.86	
5170	22.65	-6.45	-0.72	-2.87	14.179	8.473	-0.72	-27.14	55.74	55.67	
5180	21.36	-6.7	-1.11	-3.26	13.379	7.984	-1.11	-28.08	56.03	55.65	
5190	19.12	-7.19	-1.79	-3.94	11.903	7.215	-1.79	-30.57	55.68	55.83	
5200	17.92	-7.47	-2.08	-4.23	11.328	6.592	-2.08	-28.39	55.87	55.81	
5210	15.11	-8.21	-2.86	-5.01	9.585	5.526	-2.86	-26.54	55.94	55.96	
5220	15.36	-8.14	-2.77	-4.92	9.783	5.573	-2.77	-26.28	55.86	55.79	
5230	13.09	-8.83	-3.21	-5.36	8.498	4.596	-3.21	-26.38	55.99	55.84	
5240	15.12	-8.21	-2.21	-4.36	9.802	5.315	-2.21	-24.38	56.05	55.72	
5250	16.99	-7.7	-1.45	-3.6	10.833	6.159	-1.45	-25.37	55.81	55.6	
5260	18.98	-7.22	-1.37	-3.52	12.089	6.891	-1.37	-24.42	55.61	55.43	
5270	21.64	-6.65	-0.72	-2.87	13.861	7.779	-0.72	-23.28	55.78	55.36	
5280	22.08	-6.56	-0.66	-2.81	14.055	8.023	-0.66	-26.12	55.63	55.51	
5290	19.95	-7	-1.31	-3.46	12.711	7.239	-1.31	-26.12	55.97	55.74	
5300	19.67	-7.06	-1.47	-3.62	12.494	7.178	-1.47	-28.15	55.77	55.91	
5310	18.05	-7.44	-1.7	-3.85	11.5	6.548	-1.7	-40.05	56.17	56.1	
5320	18.53	-7.32	-1.48	-3.63	12.092	6.438	-1.48	-33.44	56.2	56.14	
5330	18.15	-7.41	-1.43	-3.58	11.789	6.361	-1.43	-33.41	56.64	56.39	
5340	20.29	-6.93	-0.78	-2.93	13.39	6.898	-0.78	-33.38	56.47	56.34	
5350	25.73	-5.9	0.11	-2.04	16.957	8.774	0.11	-27.5	56.43	56.64	
5360	27.23	-5.65	0.64	-1.51	17.979	9.251	0.64	-24.19	56.34	56.36	
5370	28.43	-5.46	0.96	-1.19	18.77	9.655	0.96	-22.13	56.12	56.43	
5380	26.75	-5.73	0.67	-1.48	17.859	8.888	0.67	-23.31	55.97	56.11	
5390	23.87	-6.22	0.26	-1.89	16.081	7.79	0.26	-23.58	55.88	56.4	
5400	28.47	-5.46	1.4	-0.75	19.366	9.104	1.4	-22.18	56.99	57.12	
5410	25.63	-5.91	0.91	-1.24	17.476	8.155	0.91	-22.6	56.78	57.1	
5420	20.98	-6.78	-0.04	-2.19	14.374	6.606	-0.04	-22.48	56.82	57.07	
5430	22.35	-6.51	0.3	-1.85	15.393	6.955	0.3	-23	56.67	56.92	
5440	19.95	-7	-0.22	-2.37	13.843	6.109	-0.22	-24.08	56.4	57.01	
5450	23.8	-6.23	0.68	-1.47	16.521	7.279	0.68	-24.46	56.77	57.2	
5460	24.91	-6.04	0.79	-1.36	16.981	7.933	0.79	-23.6	56.77	57.86	
5470	27.85	-5.55	1.2	-0.95	18.998	8.849	1.2	-23.83	56.93	57.46	
5480	30.03	-5.22	1.46	-0.69	20.168	9.861	1.46	-23.54	57.18	58.28	
5490	28.3	-5.48	1.36	-0.79	19.405	8.89	1.36	-22.88	57.75	58.05	
5500	32.31	-4.91	1.96	-0.19	22.064	10.247	1.96	-21.78	57.51	58.66	

5510	31.05	-5.08	1.98	-0.17	21.709	9.341	1.98	-23.33	58.01	58.63
5520	33.68	-4.73	2.21	0.06	23.378	10.305	2.21	-20.26	58.12	59.28
5530	32.55	-4.87	2.27	0.12	22.699	9.848	2.27	-20.04	58.14	59.07
5540	30.88	-5.1	1.88	-0.27	21.18	9.702	1.88	-18.81	58.38	59.54
5550	35.16	-4.54	2.15	0	24.178	10.984	2.15	-20.57	58.62	59.51
5560	37.11	-4.31	2.63	0.48	25.865	11.243	2.63	-22.01	58.45	59.46
5570	41.4	-3.83	3.21	1.06	28.291	13.112	3.21	-19.99	58.46	59.67
5580	40.61	-3.91	3.19	1.04	27.617	12.993	3.19	-17.38	58.81	59.4
5590	39.28	-4.06	2.9	0.75	26.95	12.327	2.9	-19.56	58.36	59.49
5600	33.62	-4.73	2.32	0.17	23.662	9.963	2.32	-20.23	58.64	59.51
5610	38.09	-4.19	3.07	0.92	26.93	11.158	3.07	-21.54	58.68	59.72
5620	39.86	-4	3.32	1.17	28.16	11.696	3.32	-19.3	58.86	59.73
5630	40.35	-3.94	3.23	1.08	28.191	12.159	3.23	-18.81	58.61	60.11
5640	38.25	-4.17	2.86	0.71	26.575	11.679	2.86	-18.93	59.03	59.48
5650	38.23	-4.18	2.83	0.68	26.726	11.506	2.83	-19.11	58.72	59.67
5660	42.9	-3.68	3.34	1.19	29.795	13.102	3.34	-19.7	58.75	59.52
5670	46.15	-3.36	3.74	1.59	31.876	14.277	3.74	-20.95	58.69	59.35
5680	44.48	-3.52	3.66	1.51	30.533	13.947	3.66	-19.49	58.38	59.25
5690	42.12	-3.75	3.34	1.19	28.799	13.326	3.34	-18.24	58.39	59.33
5700	37.99	-4.2	2.95	0.8	26.628	11.367	2.95	-19.61	58.69	59.26
5710	39	-4.09	3.2	1.05	27.637	11.365	3.2	-20.66	58.69	59.44
5720	43.03	-3.66	3.58	1.43	29.959	13.066	3.58	-20.36	58.79	59.84
5730	41.47	-3.82	3.57	1.42	28.819	12.646	3.57	-19.16	58.98	59.61
5740	42.2	-3.75	3.52	1.37	29.387	12.809	3.52	-17.62	59.16	59.57
5750	40.91	-3.88	2.99	0.84	27.978	12.936	2.99	-17.93	58.87	59.81
5760	44.9	-3.48	3.48	1.33	30.623	14.279	3.48	-17.92	59.25	59.37
5770	47.48	-3.23	3.68	1.53	32.117	15.367	3.68	-16.95	58.49	59.49
5780	46.43	-3.33	3.55	1.4	31.51	14.916	3.55	-17.25	58.71	59.37
5790	39.74	-4.01	2.78	0.63	27.028	12.715	2.78	-18.71	58.45	59.66
5800	34.09	-4.67	2.42	0.27	23.903	10.187	2.42	-19.33	58.86	59.22
5810	29.59	-5.29	1.59	-0.56	20.114	9.475	1.59	-20.05	58.41	59.69
5820	28.1	-5.51	1.56	-0.59	19.87	8.232	1.56	-19.67	59.04	59.38
5830	27.17	-5.66	1.21	-0.94	18.7	8.474	1.21	-21.31	58.69	59.65
5840	32.12	-4.93	1.84	-0.31	21.696	10.427	1.84	-19.67	58.84	59.65
5850	35.75	-4.47	2.01	-0.14	23.593	12.153	2.01	-18.35	58.91	60.12

3.3: 5G WIFI antenna (dBi)

