



DK065wifi- Antenna Test Report

Date: 2023.08.16

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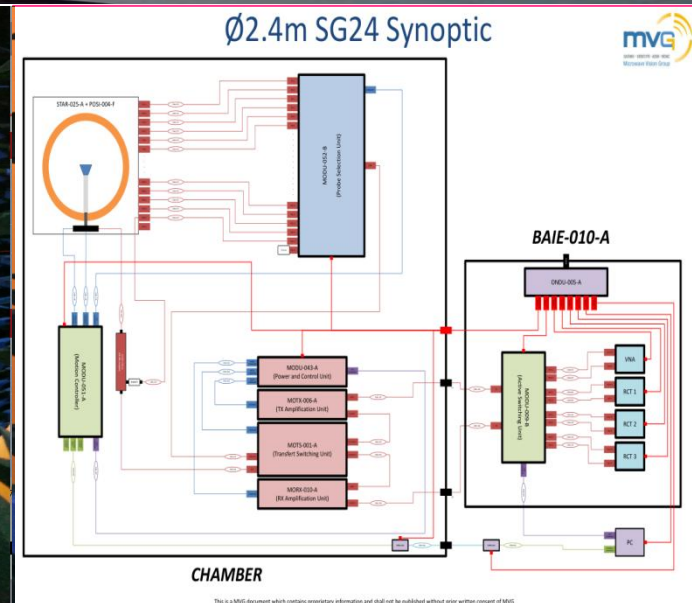
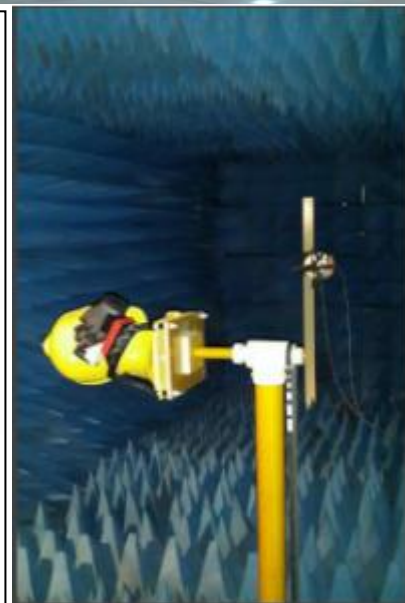
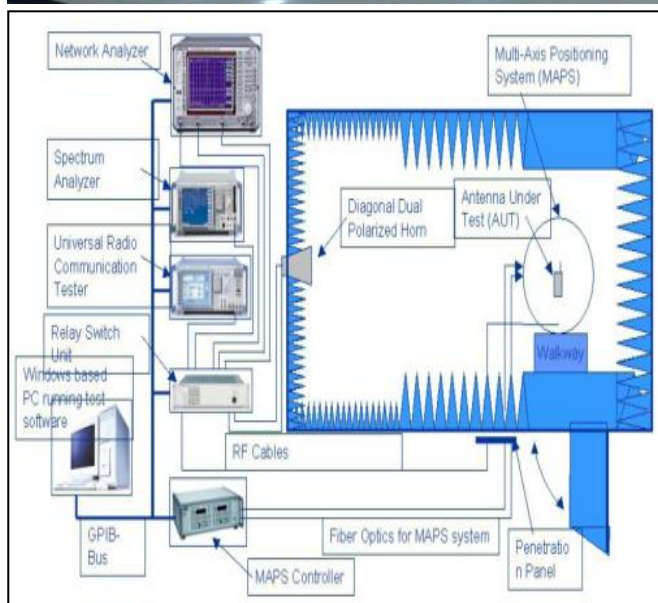
Conclusion





Main antenna design spectrum:	WIFI 2.4/5.8G	Repor version:	Date	Content
Type of antenna:	PIFA	V5.0	2023.08.16	Antenna test report

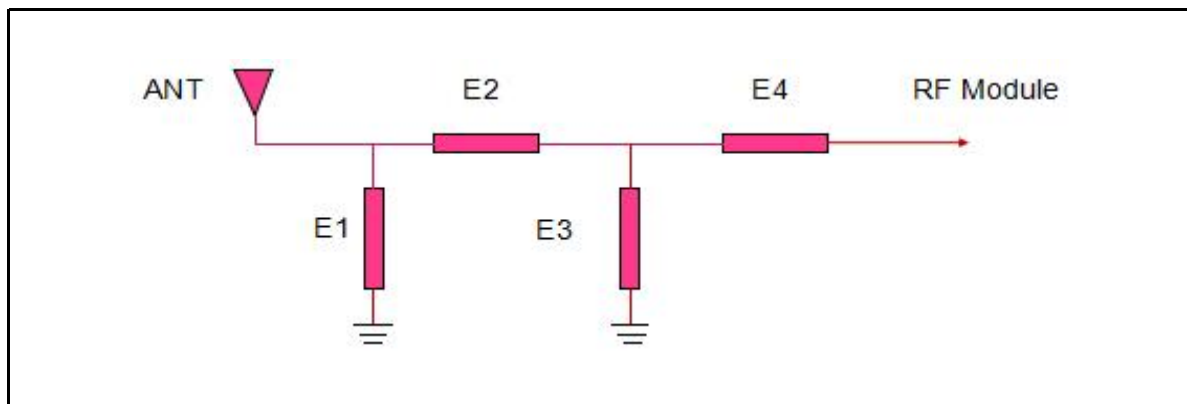
Test Environment



Darkroom system : MVG SG24LT (Satmio)

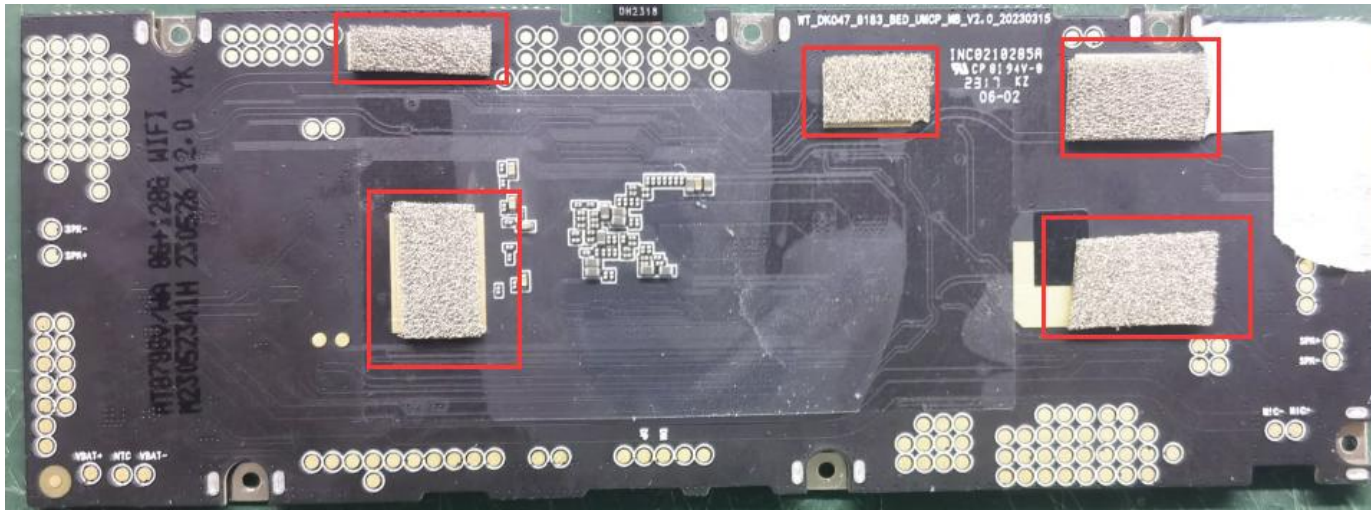
Matching Circuit

main antenna design	
Element	Value
E1(0201):	/
E2(0201):	/
E3(0201):	/



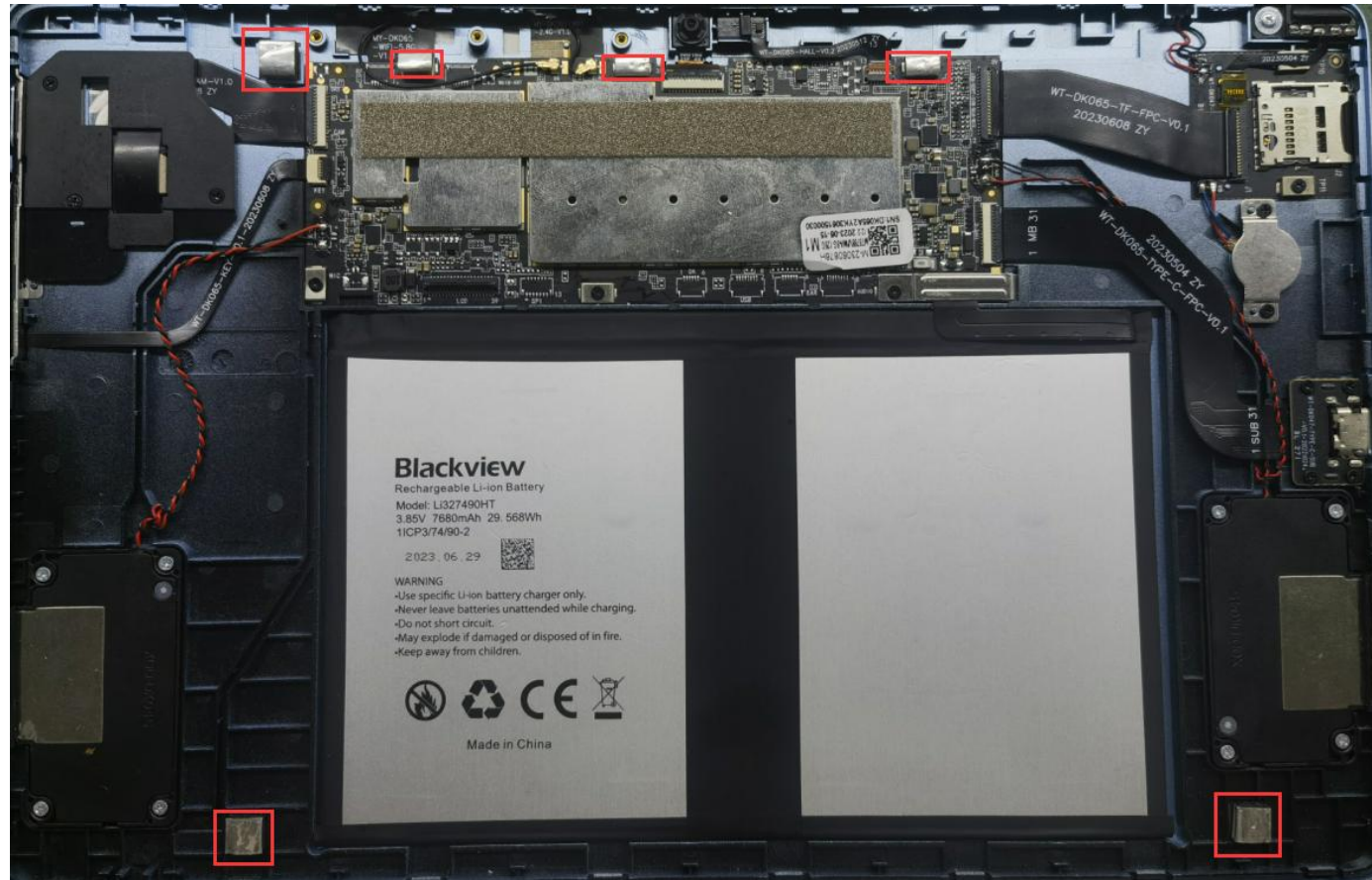
Note: The matching circuit has not changed.

Figure: The motherboard is grounded with a conductive sponge.



Environmental treatment

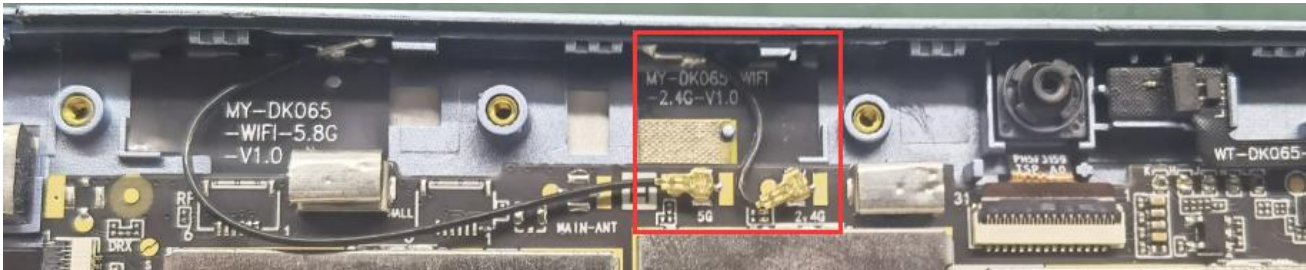
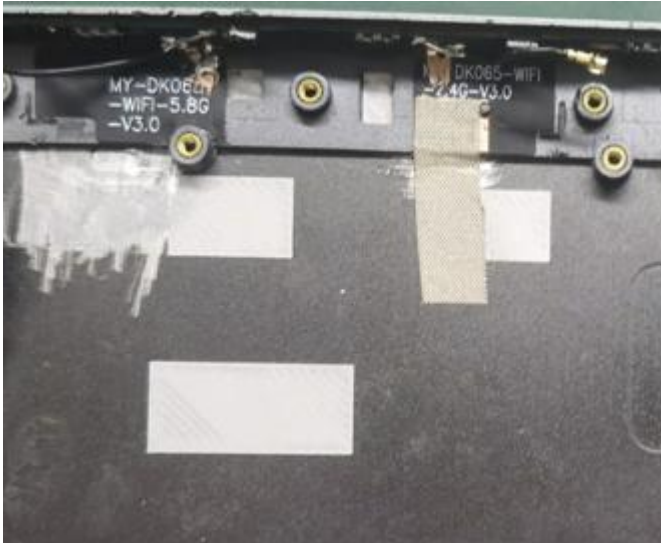
As shown, the red box position paste conductive foam, the motherboard shield cover paste, conductive sponge so that the screen to ground



Environmental treatment



As shown, the 2.4 G antenna is grounded by a conductive cloth, and the 2.4 g coaxial line is arranged as shown



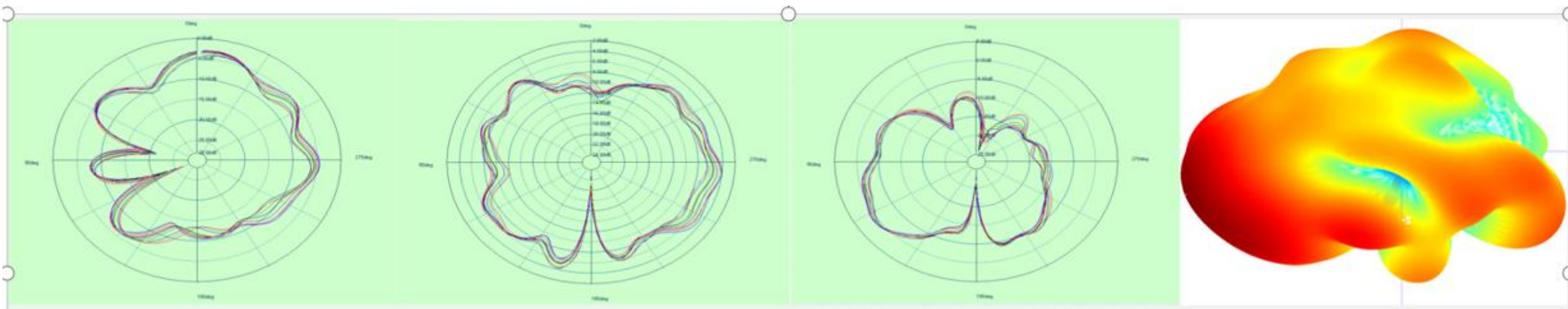
WIFI passive Efficiency, Gain

Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
2.4E+09	32.12%	-4.3764	2.4E+09	0.809862
2.41E+09	33.52%	-4.1321	2.41E+09	0.708958
2.42E+09	35.95%	-4.4847	2.42E+09	0.662287
2.43E+09	36.23%	-4.3484	2.43E+09	0.785715
2.44E+09	38.29%	-4.0414	2.44E+09	1.029426
2.45E+09	38.09%	-4.0625	2.45E+09	0.845125
2.46E+09	36.99%	-4.2687	2.46E+09	0.694919
2.47E+09	34.38%	-4.2273	2.47E+09	0.547837
2.48E+09	32.10%	-4.8551	2.48E+09	0.679743
2.49E+09	31.99%	-4.9663	2.49E+09	0.452286
2.5E+09	30.77%	-5.2882	2.5E+09	0.368302

Frequency	Efficiency	Efficiency . dB	Frequency	Gain . dB
5.2E+09	35.72%	-4.4948	5.2E+09	0.44992
5.23E+09	35.89%	-4.483	5.23E+09	0.41211
5.26E+09	34.12%	-4.55318	5.26E+09	0.44479
5.29E+09	35.63%	-4.5059	5.29E+09	0.51524
5.32E+09	37.19%	-4.39518	5.32E+09	0.73952
5.35E+09	32.82%	-4.83873	5.35E+09	0.45127
5.38E+09	31.85%	-4.96842	5.38E+09	0.28467
5.41E+09	34.86%	-4.57641	5.41E+09	0.42037
5.44E+09	38.56%	-4.13833	5.44E+09	1.00153
5.47E+09	36.08%	-4.22728	5.47E+09	0.73851
5.5E+09	34.63%	-4.31941	5.5E+09	0.59482
5.53E+09	35.82%	-4.59123	5.53E+09	0.61732
5.56E+09	34.59%	-4.3239	5.56E+09	0.58165
5.59E+09	32.99%	-4.55999	5.59E+09	0.30548
5.62E+09	31.39%	-5.03145	5.62E+09	0.31015
5.65E+09	29.16%	-5.35233	5.65E+09	0.2552
5.68E+09	27.95%	-5.53629	5.68E+09	0.31096
5.71E+09	26.52%	-5.76448	5.71E+09	0.2381
5.74E+09	26.36%	-5.78977	5.74E+09	0.299
5.77E+09	28.00%	-5.52817	5.77E+09	0.32358
5.8E+09	26.20%	-5.81706	5.8E+09	0.10879

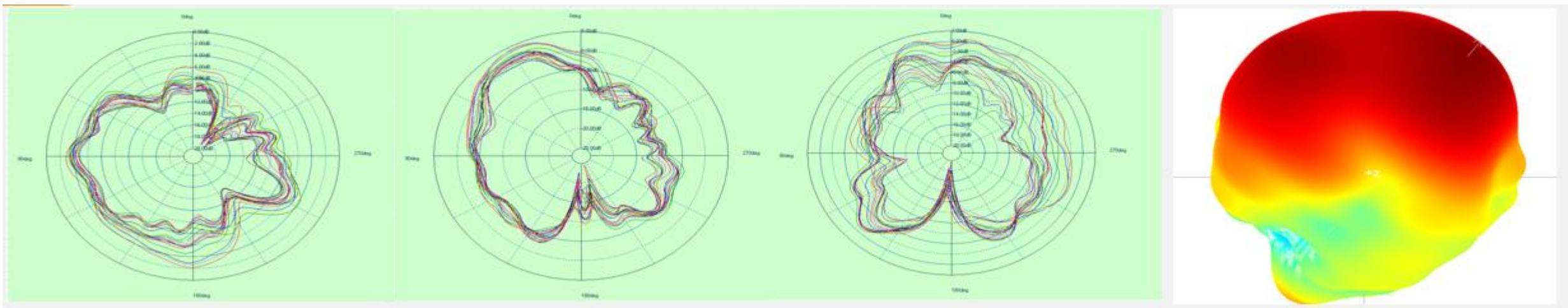
Measuring instrument : Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system : MVG SG24LT (Satmio)

2.4G Passive pattern



Measuring instrument : Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system : MVG SG24LT (Satmio)

5.8G Passive pattern



Measuring instrument : Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system : MVG SG24LT (Satmio)

	BAND	WiFi_11b_CCK_11M			WiFi_11g_OFDM_54M		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	10.89	11.12	11.54	9.28	9.44	10.33
	TIS	--	--	-81.45	--	--	-69.25
	BAND	WiFi_11n_20M_MCS7			WiFi 5.8_11a_54M		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	7.87	8.23	8.49	11.2	11.33	11.08
	TIS	--	--	-65.12	--	--	-71.44
	BAND	WiFi 5.8_11ac					
WIFI	CHANNAL	L	M	H			
	TRP	10.45	10.66	10.34			
	TIS	--	--	-65.14			



Conclusion



1. This report is the sample antenna test results .
2. If you have any questions, please call.

THANK YOU



If you have any questions, please contact us
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