



# DK065wifi- Antenna Test Report

Date: 2023.08.16

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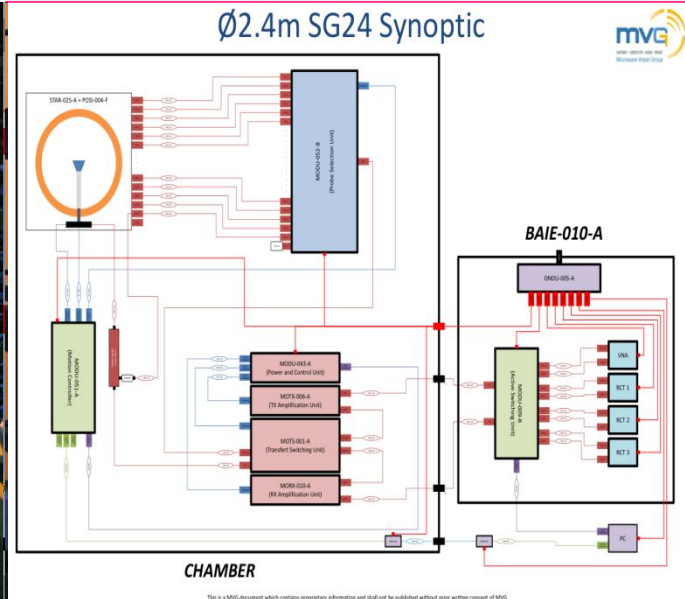
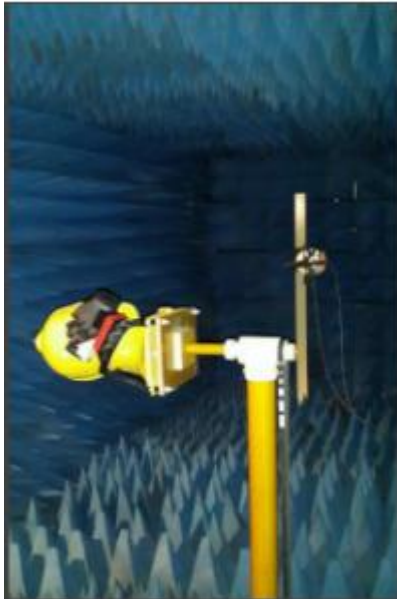
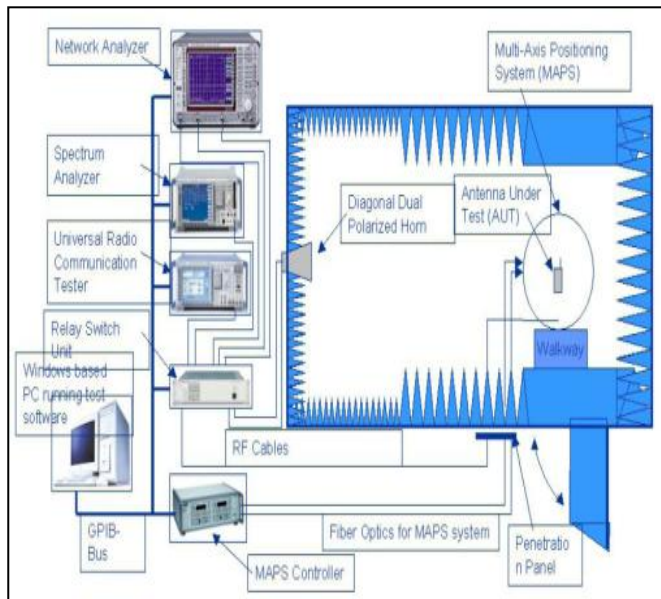
**07**

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

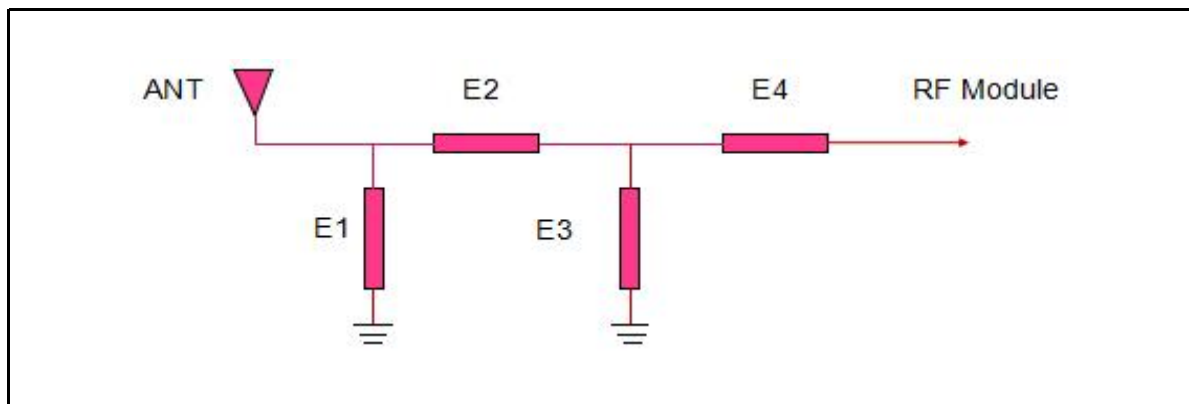
# Test Environment



Darkroom system : MVG SG24LT (Satmio)

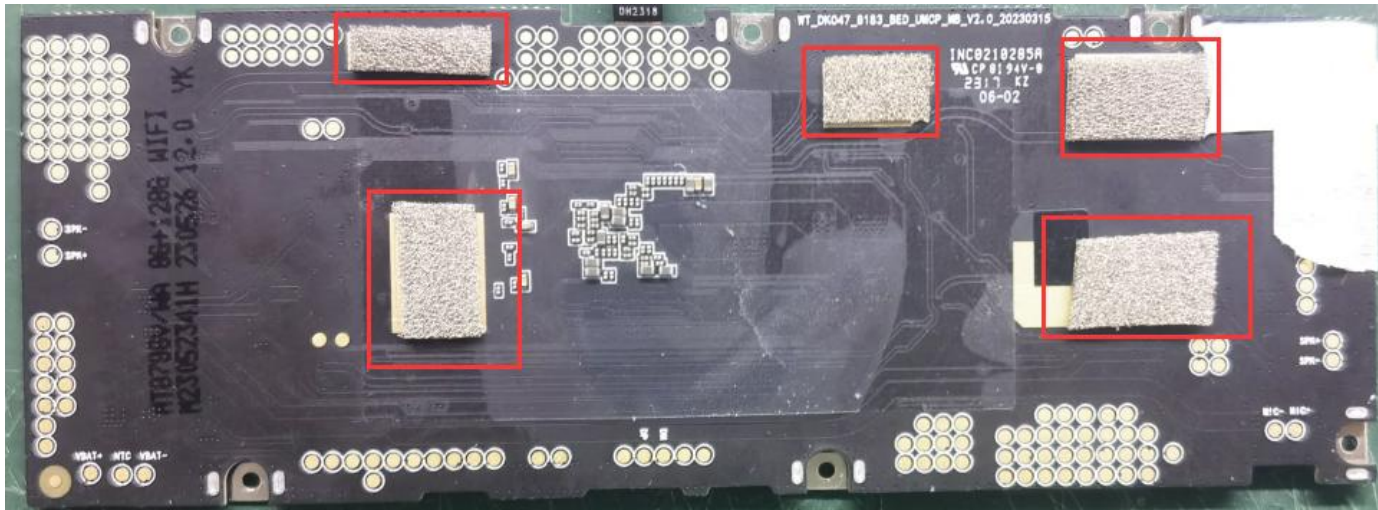
# Matching Circuit

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



Note: The matching circuit has not changed.

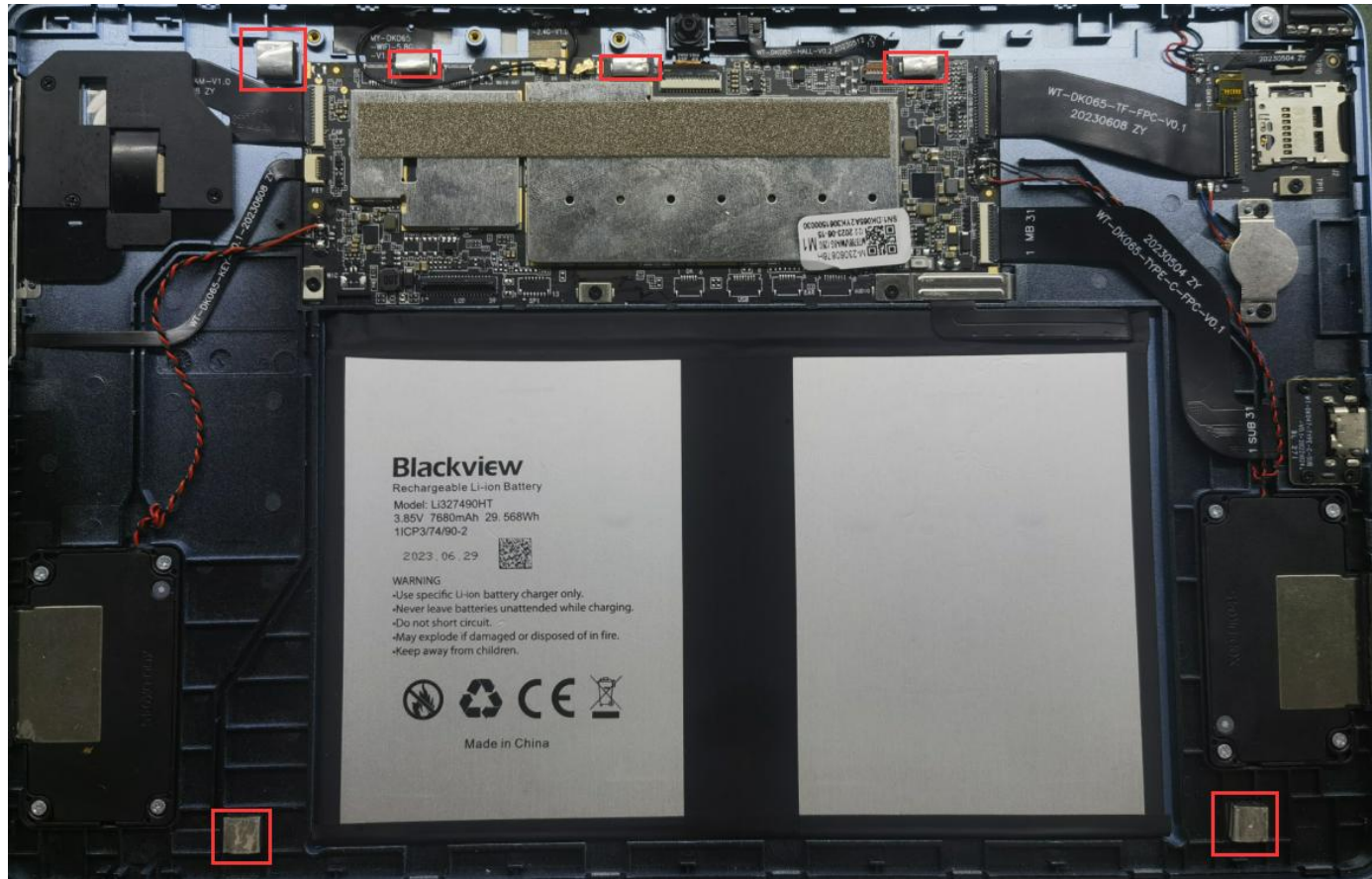
Figure: The motherboard is grounded with a conductive sponge.





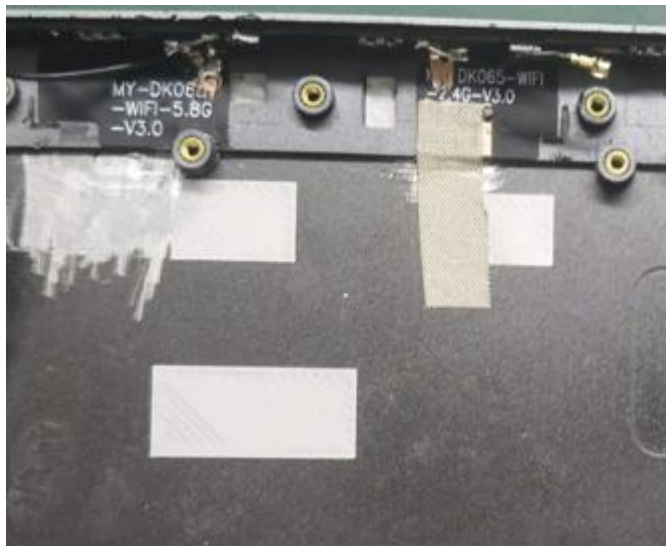
# Environmental treatment

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





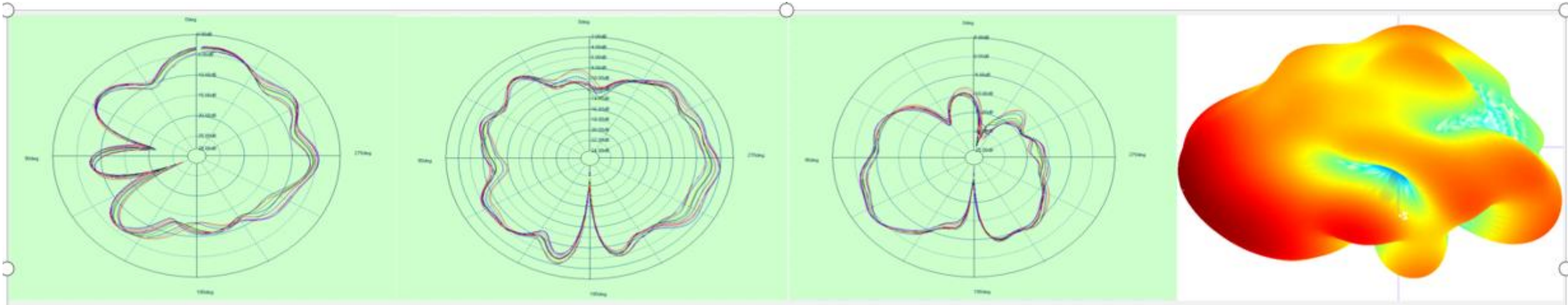
## WiFi passive Efficiency, Gain

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

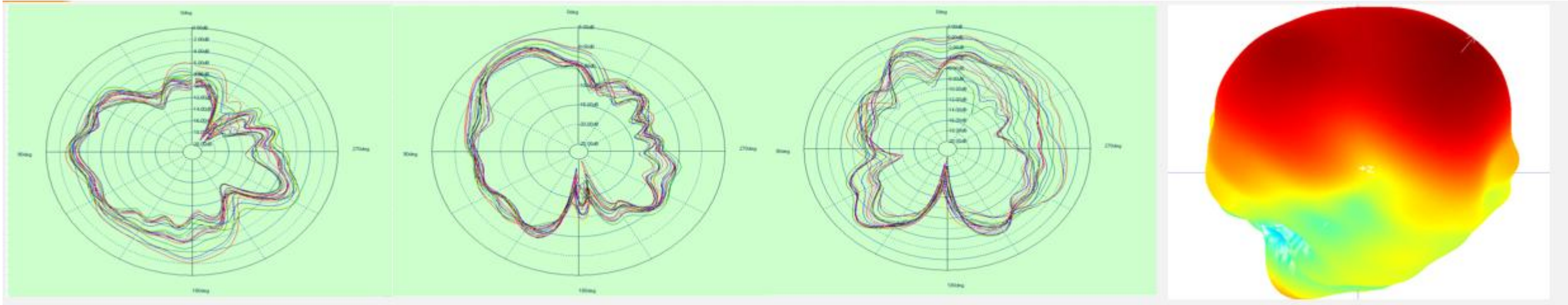
Measuring instrument : Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system : MVG SG24LT (Satmio)

## 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			

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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