DK118 Antenna Test Report

Antenna Design And Test Report

Date: 2026.6.29

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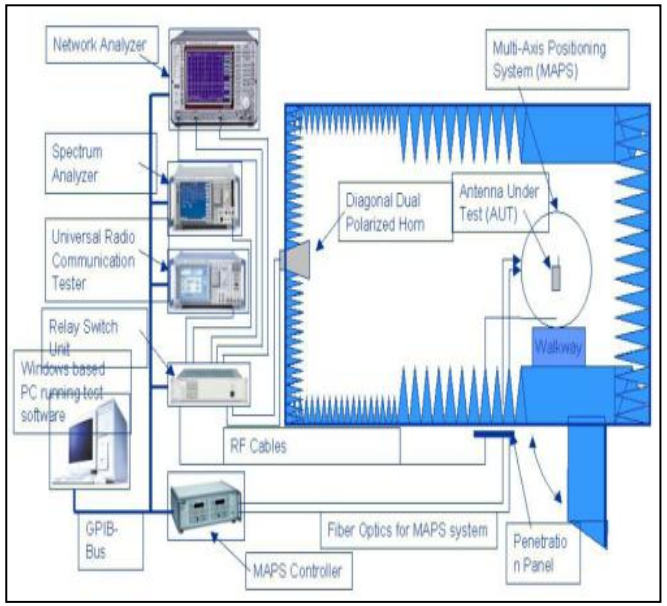
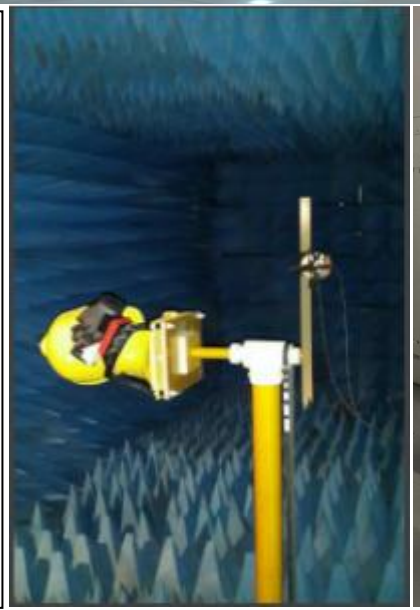
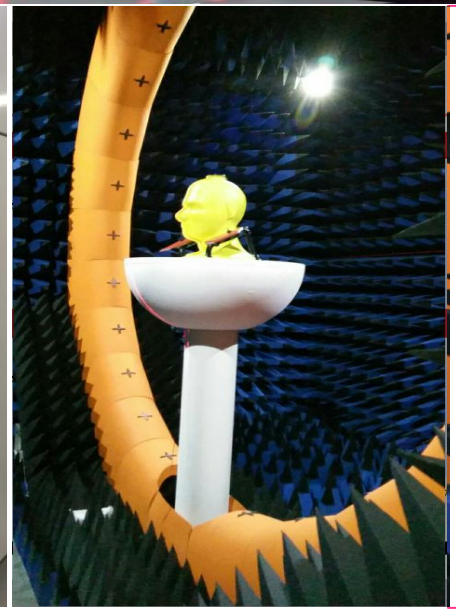
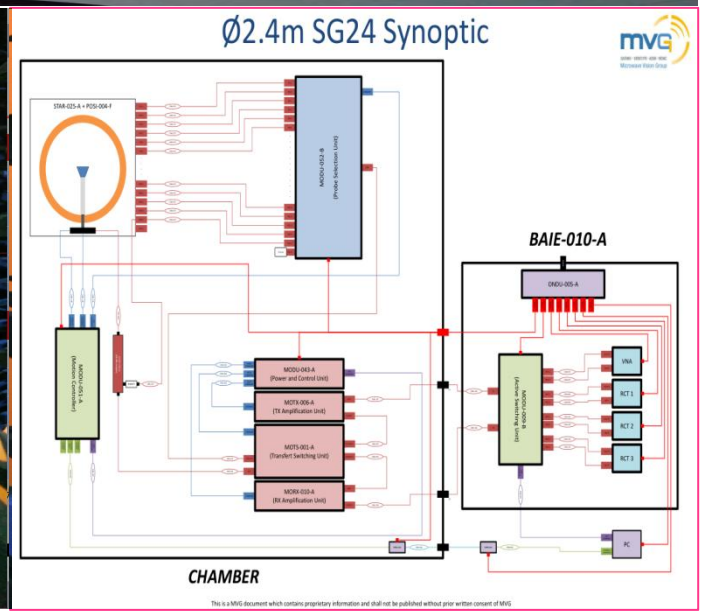
Test Environment









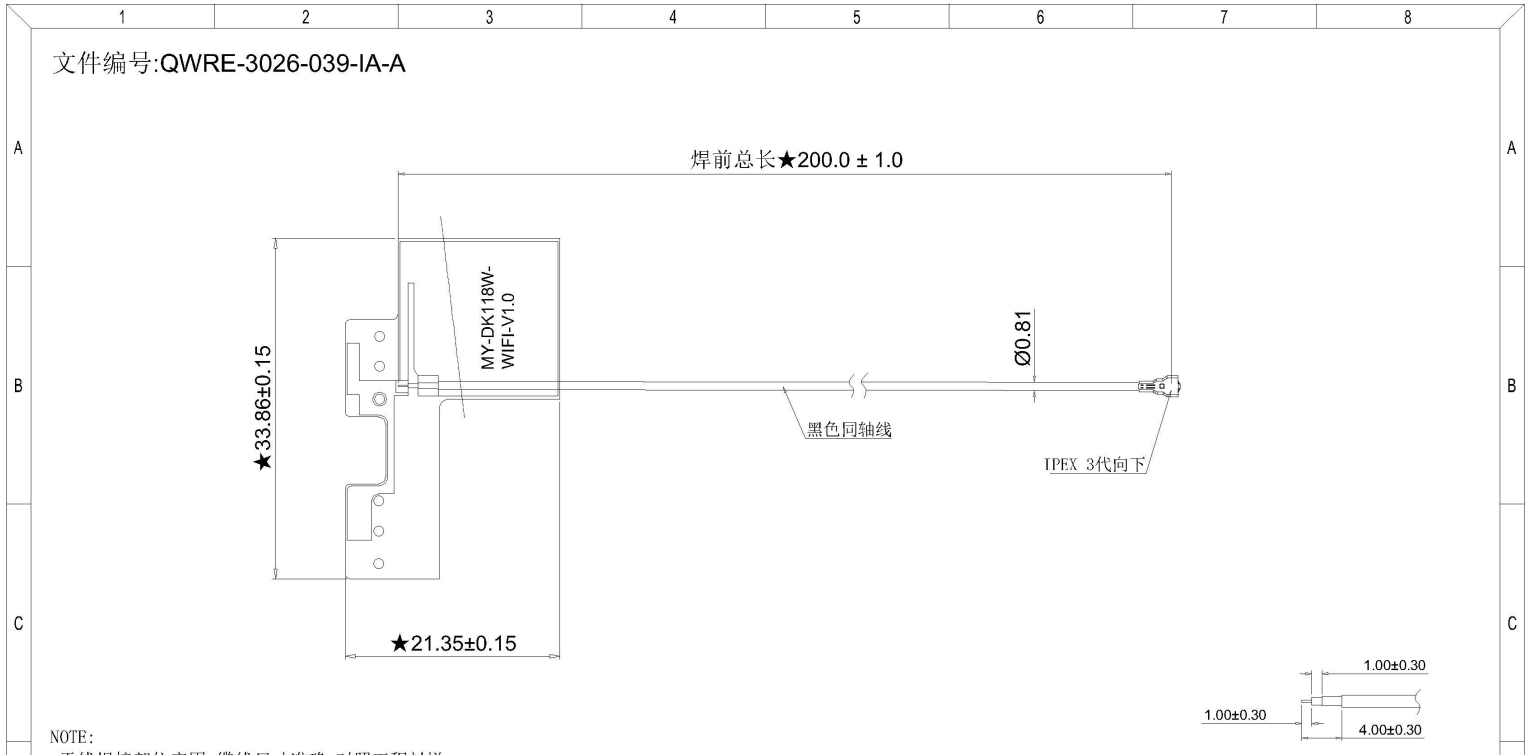
Darkroom system： MVG SG24LT（Satmio）

Project Overview

main antenna design spectrum	WIFI
Type of antenna	
Deputy antenna design spectrum	
Type of antenna	
Frequency diversity antenna	
Type of antenna	

Report version	Date	Content
V4.0	2026.06.27	PVT Trial Production Unit Antenna Test Report

Antenna Size Drawing



NOTE:
. 天线焊接部位牢固.缆线尺寸准确,对照工程封样。
. 打★为重点尺寸,未注公差请以一般公差为准
. 成品须100%导通测试OK.成品须100%全检OK
. 接头拉力SMA 3KG, IPEX:1.2KG,焊点焊锡高度≤2.0
. 表面不能有氧化，缺口，脏点，油污等现象;线材整洁，外皮无损伤
. 采用环保制程

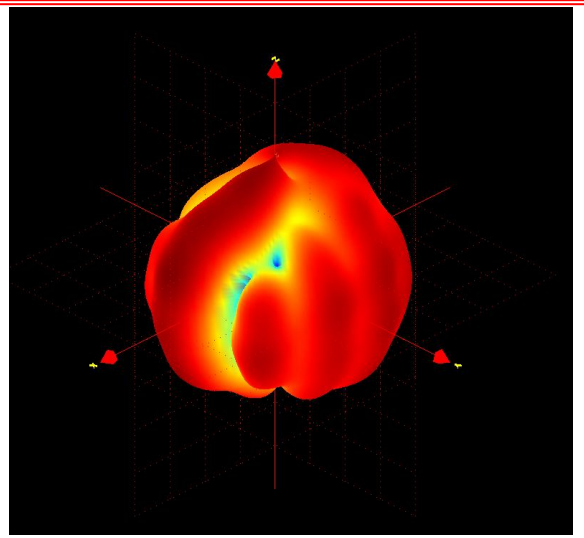
日 期	修 改 内 容	版 本	修 订

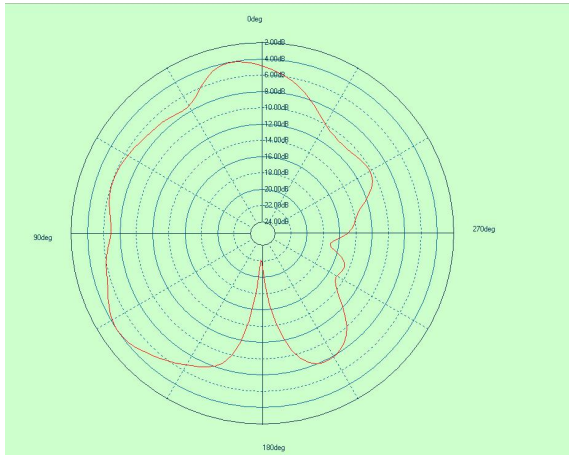
深 圳 市 玛 雅 通 讯 设 备 有 限 公 司
ShenZhen MaYa Communication Equipment Co.,Ltd.

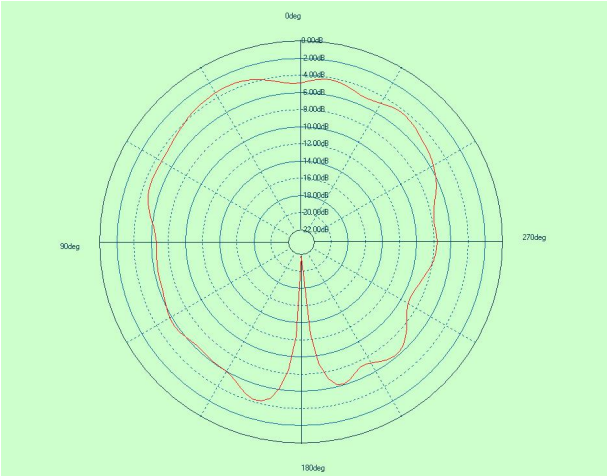
0~10	±0.06	第三视角		机 种	DK118W	日期	2026-05-15		
10~20	±0.10	○	0.02	品 名	内置天线(WIFI)	设计	Simon		
20~40	±0.12	◎	Ø0.03	料 号		审核	结构		
40~50	±0.15	⊥	0.02	材 质	FPC+同轴线		射频		
50~65	±0.20	▱	0.04	模面处理					
65-100	±0.22	⌓	0.02	外观处理		单位	mm	比例 FIT	版本 R:A

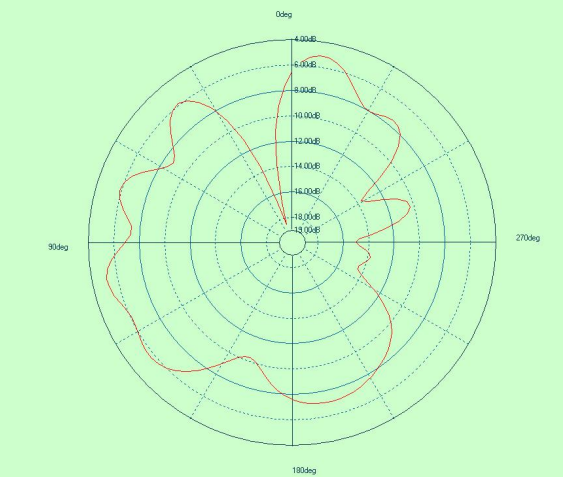
2.4G Passive pattern

Gain
2.4G：-1.41 dbi







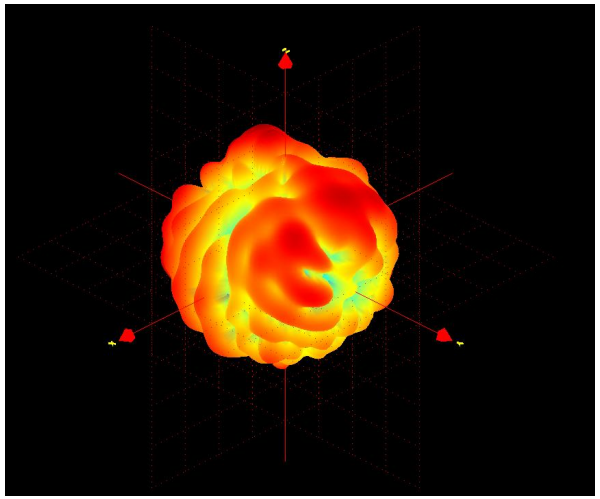


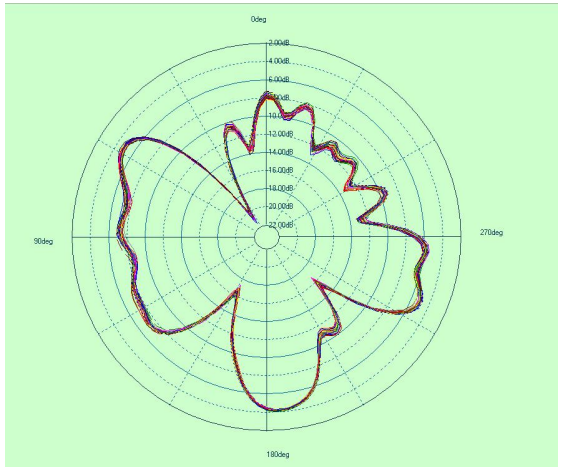
Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

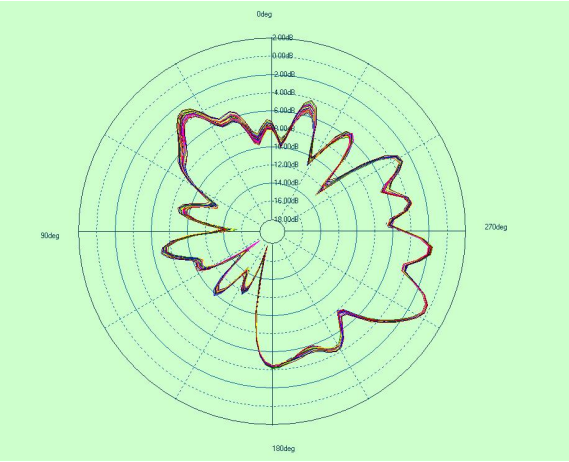
5.8G Passive pattern

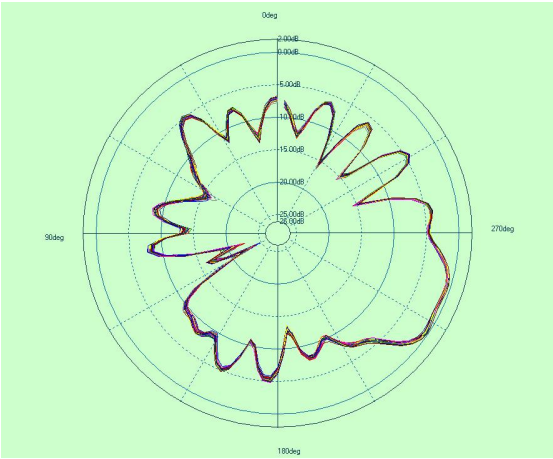
Gain

5.8G：1.91 dbi









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

Active Report

Standard	BAND	WiFi_11b			WiFi_11G		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	14.5	14.6	14.4	12.3	12.2	12.4
	TIS	--	--	-85.4	--	--	-73.2
	TIS(Front Cam)			-81.3			-72.3
	TIS(Rear Cam)			-80.6			-68.3
Standard	**BAND**	**WiFi_11N**					
WIFI	CHANNAL	L	M	H			
	TRP	12.4	12.3	13.4			
	TIS	--	--	-69.3			
	TIS(Front Cam)			-67.3			
	TIS(Rear Cam)			-65.6			

Active Report

Standard	BAND	WiFi_11A			WiFi_11ac		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	12.4	11.2	10.5	12.1	11.3	10.6
	TIS	--	--	-70.8	--	--	-65.2
	TIS(Front Cam)			-70.3			-64.3
	TIS(Rear Cam)			-70.1			-64.1

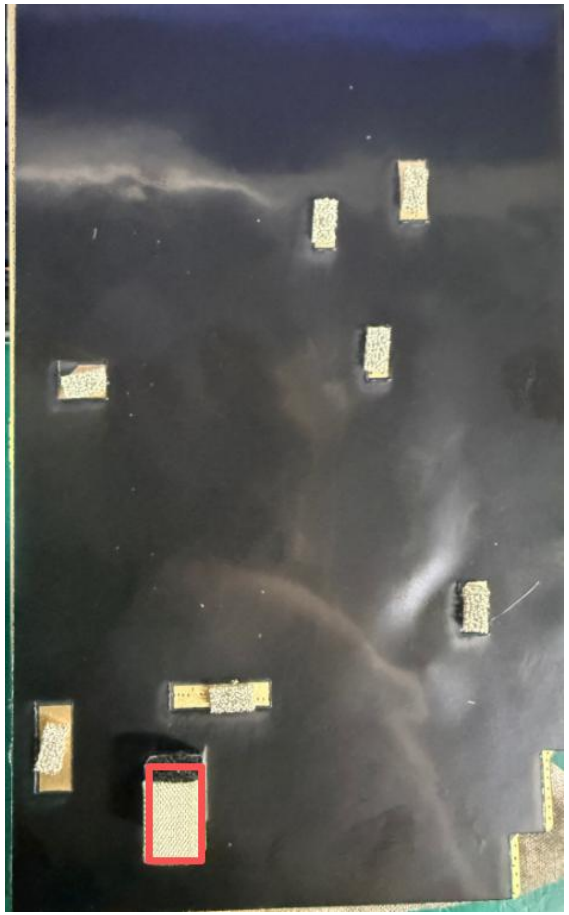
Active Report

Standard	BAND	WiFi_11b			WiFi_11G		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	14.1	14.3	14.3	12.5	12.6	12.2
	TIS	--	--	-84.2	--	--	-72.3
	TIS(Front Cam)			-81.3			-70.4
	TIS(Rear Cam)			-79.3			-67.2
Standard	**BAND**	**WiFi_11N**					
WIFI	CHANNAL	L	M	H			
	TRP	12.5	12.6	13.6			
	TIS	--	--	-68.7			
	TIS(Front Cam)			-66.5			
	TIS(Rear Cam)			-64.3			

Active Report

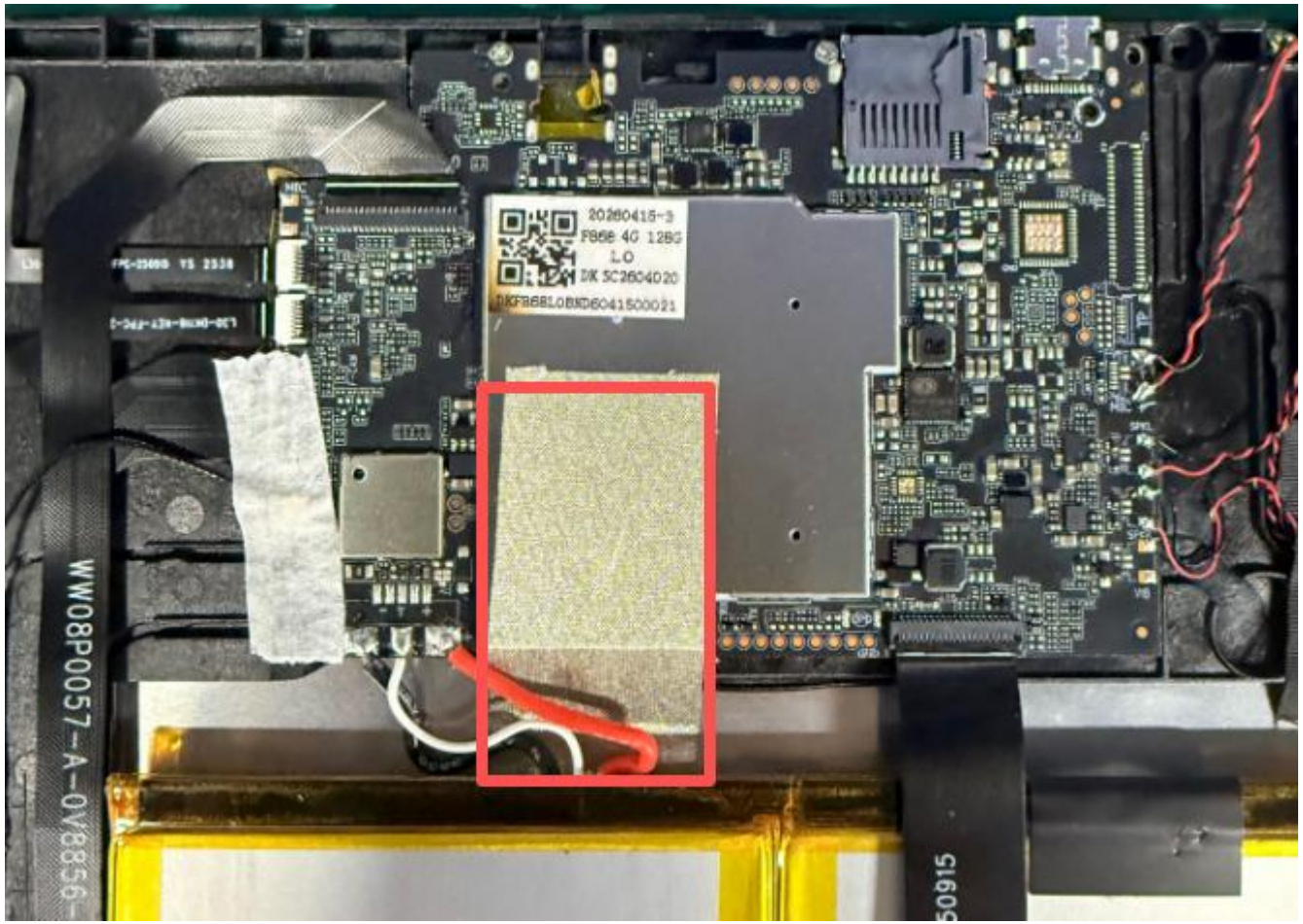
Standard	BAND	WiFi_11A			WiFi_11ac		
WIFI	CHANNAL	L	M	H	L	M	H
	TRP	12.2	11.4	10.6	12.1	11.3	10.5
	TIS	--	--	-70.7	--	--	-64.6
	TIS(Front Cam)			-70.2			-64.2
	TIS(Rear Cam)			-69.8			-64.1

Environmental Conditioning



Add foam to the copper-exposed areas on the mainboard to achieve sufficient grounding of the mainboard; ensure full grounding especially at the red boxed positions.

Environmental Conditioning



Run conductive fabric from mainboard to screen for grounding

总结

1. The above contents constitute the test report for PVT trial production units.

2. Antenna tests were conducted with the device unopened.

3. Please feel free to contact us by phone if you have any questions. Thank you.

THANK YOU

If you have any questions, please contact us
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