



GLOBAL ETS

Your Component Testing Solutions


Laboratory Analysis Report

Report Number: 1000-19667
Date: 2019-07-05
Customer:
Customer PO Number: 20190704
Manufacturer: NLT TECHNOLOGIES, LTD
Manufacturer Part Number: NL8060BC21-11F
Quantity: 16
Date/Lot Code: 4 LOTS
Part Description: N/A



ISO 9001:2015 Certified


Global ETS China
86-0755-829-11501
Room 7F Hangdu Building
HuaFu Road No 1006
Futian District
Shenzhen
China
www.gets-china.com

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number:	NL8060BC21-11F	Lot/Date Code:	4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received:	16

1.0.0	Summary Of Inspection Results
-------	-------------------------------

	Test-Process Operation	Quantity Inspected	Pass	Fail	Date	N/A	Comments / Observations
1.1.0	Documentation and Packaging (SAE AS6081, 4.2.6.4.1) (Non-destructive)						
1.1.1	Condition Observed	16	16	0	2019-07-04		Total 16pcs was received in box format. 1pcs from the Lot No:A3920038 5pcs from the Lot No:A5620029 8pcs from the Lot No:B5921019 2pcs from the Lot No:B5921020
1.2.0	External Visual Inspection (SAE AS6081 and MIL-STD-883, Method 2009.9) (Non-destructive)						
1.2.1	Condition Observed	16	16	0	2019-07-04		No anomalies were found. LCD are in new condition. All 20 LCD passed visual inspection.
1.3.0	Package Inspection (SAE AS6081 and MIL-STD-883, Method 2009.9) (Non-destructive)						
1.3.1	Dimensions	4	4	0	2019-07-04		8.4 inch SVGA (800 X 600) LED 800 NIT LVDS Digital Landscape TFT LCD Module
1.4.0	Electrical Test (MIL-STD-883 and Manufacturer Specification)						
1.4.1	DC Function Test TA = 25C	16	16	0	2019-07-04		8.4 inch SVGA (800 X 600) LED 800 NIT LVDS Digital Landscape TFT LCD Module Tested 16 samples,passed 16 samples

Prepared by:	Disclaimer Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report. Global Electronics Testing Services Futian District, Shenzhen China 86-0755-82911501	Generated On:
Xu, Jay X.		Jul 5, 2019 12:11:06
Approved by:		Page:
Yan, Peter X.		Page 2 Of 18

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number:	NL8060BC21-11F	Lot/Date Code:	4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received:	16

2.0.0 Documentation and Packaging (SAE AS6081, 4.2.6.4.1) (Non-destructive)

Results Summary
 Total 16pcs was received in box format.
 1pcs from the Lot No:A3920038
 5pcs from the Lot No:A5620029
 8pcs from the Lot No:B5921019
 2pcs from the Lot No:B5921020

	Criteria	Acceptable	Suspect	Not Acceptable	N/A	Comments / Observations
2.1.0	Incoming Conditions					
2.1.1	ESD Protection				X	
2.1.2	Poor Syntax or Alterations				X	
2.1.3	Correct MSL Packaging				X	
2.1.4	Quantity Match Document	X				16pcs in box format
2.1.5	Box Damaged	X				
2.1.6	Type of Package	X				Box format

Images For Documentation and Packaging .



Figure 1. RECEIVED

Figure 2. LOT A5620029


Figure 3. LOT B5921019 & B5921020




Figure 4. RECEIVED 1

Figure 5. RECEIVED 2

Prepared by: Xu, Jay X. Approved by: Yan, Peter X.	Disclaimer Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report. Global Electronics Testing Services Futian District, Shenzhen China 86-0755-82911501	Generated On: Jul 5, 2019 12:11:06 Page: Page 3 Of 18
---	---	--

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number:	NL8060BC21-11F	Lot/Date Code:	4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received:	16

Prepared by:	Disclaimer	Generated On:
Xu, Jay X.	<p>Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.</p> <p>Global Electronics Testing Services Futian District, Shenzhen China 86-0755-82911501</p>	Jul 5, 2019 12:11:06
Approved by:		Page:
Yan, Peter X.		Page 4 Of 18

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number: NL8060BC21-11F		Lot/Date Code: 4 LOTS	
	Manufacturer: NLT TECHNOLOGIES, LTD		Devices Received: 16	

3.0.0 External Visual Inspection (SAE AS6081 and MIL-STD-883, Method 2009.9) (Non-destructive)

	Criteria	Acceptable	Suspect	Not Acceptable	N/A	Comments / Observations
3.1.0	External Conditions					
3.1.1	Markings - Top	X				Label marking are acceptable
3.1.2	Construction Quality	X				Acceptable
3.2.0	Lead / BGA Conditions					
3.2.1	Lead Alignment	X				Acceptable
3.2.2	Lead Formation / Scratches	X				Minor body scratches was observed
3.2.3	Lead Missing Pins	X				None observed
3.2.4	Lead Plating Composition	X				Acceptable
3.2.5	Lead Excessive or Uneven Plating	X				Acceptable
Test Specifications						
3.2.6	Lead Discoloration, Dirt or Residue	X				Acceptable
3.2.7	Lead Oxidation	X				Acceptable

Images For External Visual Inspection.

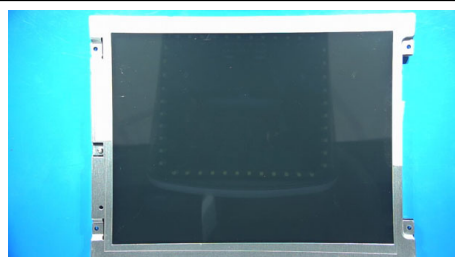


Figure 6. A3920038 TOP



Figure 7. A3920038 BOTTOM

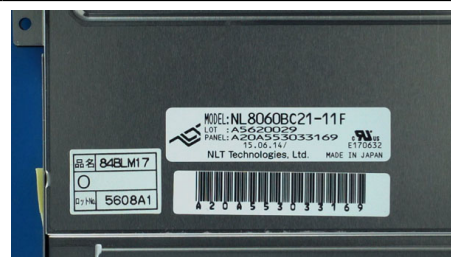


Figure 8. A3920038 LABEL



Figure 9. A3920038 CORNER

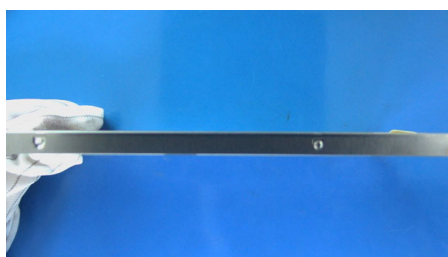


Figure 10. A3920038 SIDE



Figure 11. A3920038 BOTTOM SCRATCH

Prepared by: Xu, Jay X. Approved by: Yan, Peter X.	Disclaimer Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report. Global Electronics Testing Services Futian District, Shenzhen China 86-0755-82911501	Generated On: Jul 5, 2019 12:11:06 Page: Page 5 Of 18
---	---	--


	Analysis Report - 1000-19667		
	Customer Name:		Purchase Order:
	Part Number:	NL8060BC21-11F	Lot/Date Code: 4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received: 16



Figure 12. A5620029 TOP



Figure 13. A5620029 BOTTOM

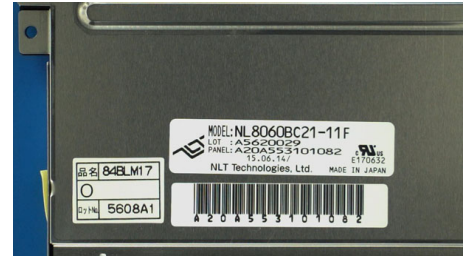


Figure 14. A5620029 LABEL

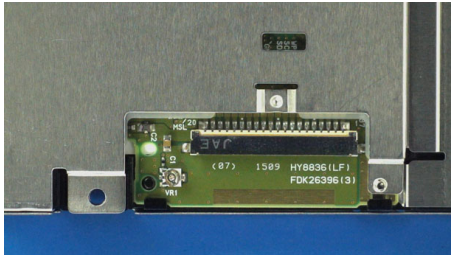


Figure 15. A5620029 CORNER

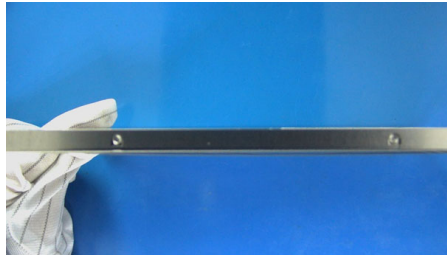


Figure 16. A5620029 SIDE



Figure 17. A5620029 BOTTOM SCRATCH



Figure 18. B59211019 TOP



Figure 19. B59211019 BOTTOM

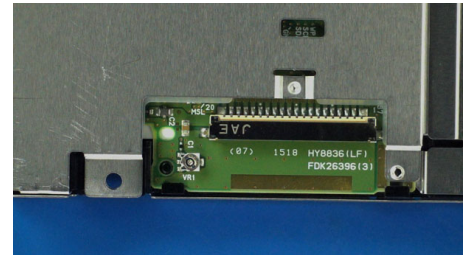


Figure 20. B59211019 CORNER

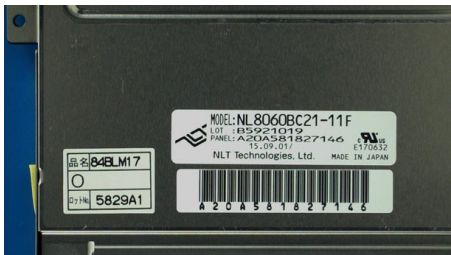


Figure 21. B59211019 LABEL



Figure 22. B59211019 SIDE

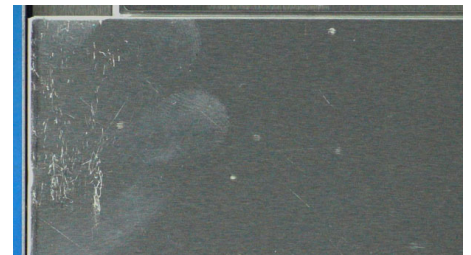


Figure 23. B59211019 BOTTOM SCRATCH

Prepared by:	Disclaimer	Generated On:
Xu, Jay X.	Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.	Jul 5, 2019 12:11:06
Approved by:		Page:
Yan, Peter X.		Page 6 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 24. B59211020 TOP



Figure 25. B59211020 BOTTOM



Figure 26. B59211020 LABEL

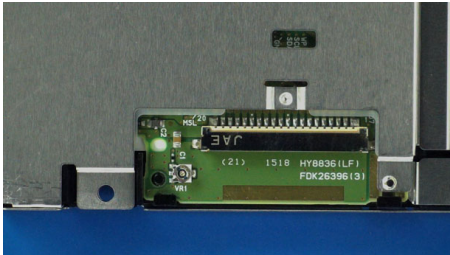


Figure 27. B59211020 CORNER

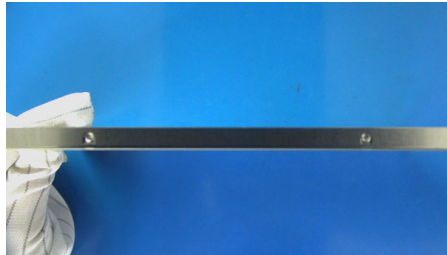


Figure 28. B59211020 SIDE



Figure 29. B59211020 BOTTOM SCRATCH

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.


Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 7 Of 18

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number:	NL8060BC21-11F	Lot/Date Code:	4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received:	16

4.0.0	Device Package
-------	----------------

Results Summary L = 200.00mm W = 150.00mm T = 8.29mm L = 200.00mm W = 150.00mm T = 8.29mm L = 200.00mm W = 150.00mm T = 8.28mm L = 200.00mm W = 150.00mm T = 8.28mm
--

	Criteria	Acceptable	Suspect	Not Acceptable	N/A	Comments / Observations
4.1.0	Package Dimensions					
4.1.1	Dimensions	X				

Images For Device Package.

Prepared by: Xu, Jay X. Approved by: Yan, Peter X.	Disclaimer Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report. Global Electronics Testing Services Futian District, Shenzhen China 86-0755-82911501	Generated On: Jul 5, 2019 12:11:06 Page: Page 8 Of 18
---	---	--



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 30. A3920038 LENGTH



Figure 31. A3920038 WIDTH



Figure 32. A3920038 THICKNESS

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 9 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 33. A5620029 LENGTH



Figure 34. A5620029 WIDTH



Figure 35. A5620029 THICKNESS

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 10 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 36. B59211019 LENGTH



Figure 37. B59211019 WIDTH



Figure 38. B59211019 THICKNESS

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 11 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 39. B59211020 LENGTH



Figure 40. B59211020 WIDTH



Figure 41. B59211020 THICKNESS

Images For Device Package. (Continued From Previous Page)

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 12 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16

Brand	NLT	Luminance in cd/sq.m	800
Part Number	NL8060BC2111F	Contrast	800:1
Description	8.4", SVGA, TN (ColorXcell), High Brightness, Long Lifetime LED, Replaceable Backlight	Viewing angle in °	80,80,80,80
Family	Industrial	Response time (rise+fall) in msec.	18
Size in inch	8.4"	Color gamut	40%
Resolution in Pixel (H x V)	800x600	Portrait	
Graphic mode	SVGA	Display type	TN (ColorXcell)
Replacement backlight	84LHS17	LED lifetime in Khours	70
LED driver	104PW03F	Operating temperature in °C.	30~80
Panel technology	TN	Storage temperature in °C.	30~80
Touch/PCAP		Touch (PCAP)	
Remarks	ColorXcell	Weight in g	260
Surface	Clear	Outline dimension (Width x Height x Thickness) in mm	200.0 x 152.0 x 8.2
Interface	LVDS 6/3b	Active area	

Figure 42. DIMEWNSION

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.


Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 13 Of 18

	Analysis Report - 1000-19667			
	Customer Name:		Purchase Order:	
	Part Number:	NL8060BC21-11F	Lot/Date Code:	4 LOTS
	Manufacturer:	NLT TECHNOLOGIES, LTD	Devices Received:	16

5.0.0	Electrical Test (MIL-STD-883 and Manufacturer Specification)
-------	---

Results Summary 8.4 inch SVGA (800 X 600) LED 800 NIT LVDS Digital Landscape TFT LCD Module Tested 16 samples, passed 16 samples

	Test-Process Operation	Quantity Inspected	Pass	Fail	Date	N/A	Comments / Observations
5.1.0	Electrical Test (MIL-STD-883 and Manufacturer Specification)						
5.1.1	DC Function Test TA = 25C	16	16	0	2019-07-04		

Images For Electrical Test.

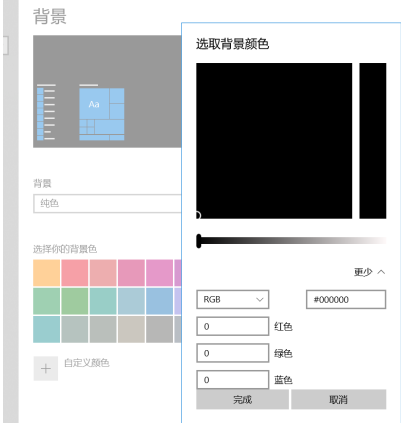


Figure 43. SET COLOR 1 = BLACK




Figure 44. CORRECT RESULT OBSERVED (DISPLAY COLOR = BLACK)


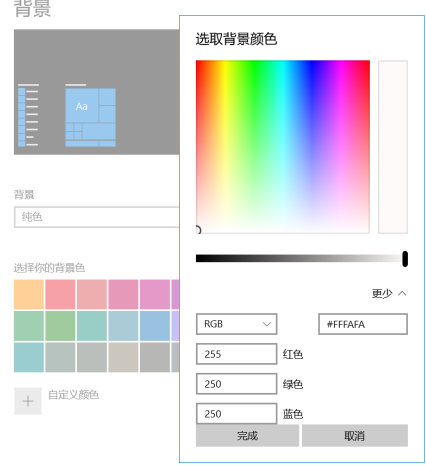
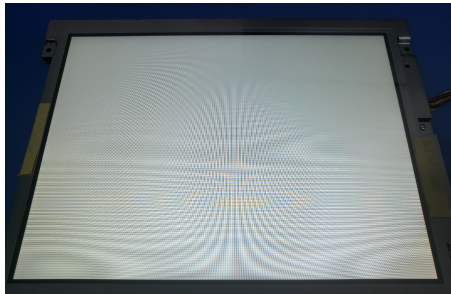



Figure 45. DISPLAY BLACK COLOR









Analysis Report - 1000-19667

Customer Name:**Purchase Order:****Part Number:**

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16

Figure 46. SET COLOR 2 = WHITE**Figure 47.****Figure 48.**

背景



背景

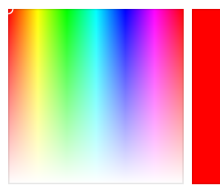
纯色

选择你的背景色



自定义颜色

选取背景颜色



更少 ^

RGB

#FF0000

255

红色

0

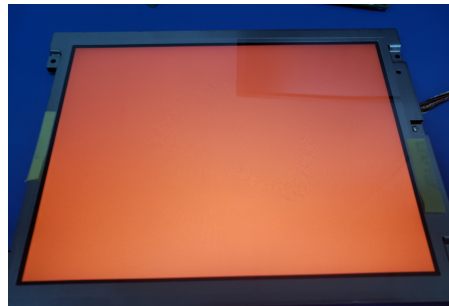
绿色

0

蓝色

完成

取消

Figure 49. SET COLOR 3= RED**Figure 50. CORRECT RESULT OBSERVED**

Display color = Red

**Figure 51. DISPLAY RED COLOR**

背景



背景

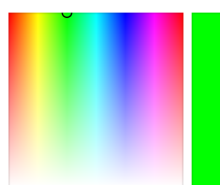
纯色

选择你的背景色



自定义颜色

选取背景颜色



更少 ^

RGB

#00FF00

0

红色

255

绿色

0

蓝色

完成

取消

Figure 52. SET COLOR 4 = GREEN**Figure 53. CORRECT RESULT OBSERVED**

Display color = Green

**Figure 54. DISPLAY GREEN COLOR****Prepared by:**

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501**Generated On:**

Jul 5, 2019 12:11:06

Page:

Page 15 Of 18



Analysis Report - 1000-19667

Customer Name:**Purchase Order:****Part Number:**

NL8060BC21-11F

Lot/Date Code:

4 LOTS

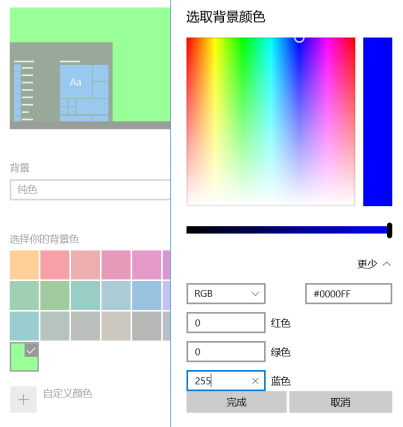
Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16

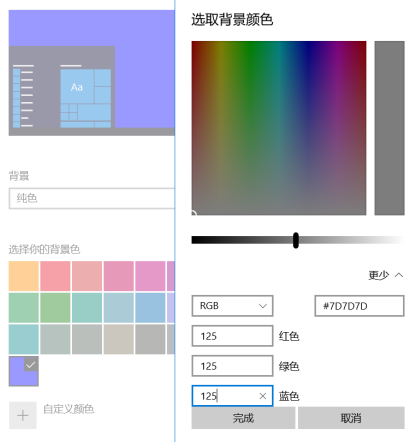
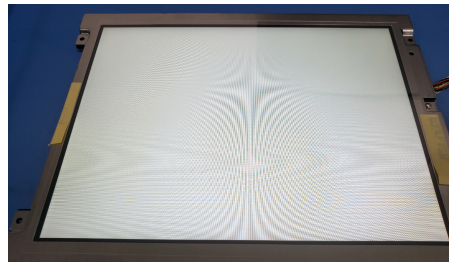
背景

**Figure 55. SET COLOR 5 = BLUE****Figure 56. CORRECT RESULT OBSERVED**

Display color = Blue

**Figure 57. DISPLAY BLUE COLOR**

背景

**Figure 58. SET COLOR 6 = GRAY****Figure 59. CORRECT RESULT OBSERVED**

Display color = Gray

**Figure 60. DISPLAY GRAY COLOR****Prepared by:**

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 16 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16

背景



背景

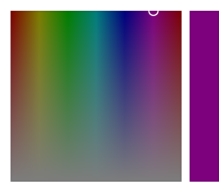
纯色

选择你的背景色



自定义颜色

选取背景颜色



更少 ^

RGB

#7D007D

125

红色

0

绿色

125

蓝色

完成

取消

Figure 61. SET COLOR 7 = PURPLE



Figure 62. CORRECT RESULT OBSERVED

Display color = Purple



Figure 63. DISPLAY PURPLE COLOR

背景



背景

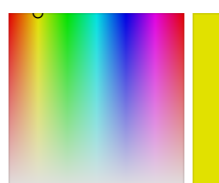
纯色

选择你的背景色



自定义颜色

选取背景颜色



更少 ^

RGB

#E1E100

225

红色

225

绿色

0

蓝色

完成

取消

Figure 64. SET COLOR 8 = YELLOW



Figure 65. CORRECT RESULT OBSERVED

Display color = Yellow



Figure 66. DISPLAY YELLOW COLOR

Images For Electrical Test. (Continued From Previous Page)

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 17 Of 18



Analysis Report - 1000-19667

Customer Name:

Purchase Order:

Part Number:

NL8060BC21-11F

Lot/Date Code:

4 LOTS

Manufacturer:

NLT TECHNOLOGIES, LTD

Devices Received:

16



Figure 67. DISPLAY STATIC PICTURE

Flower

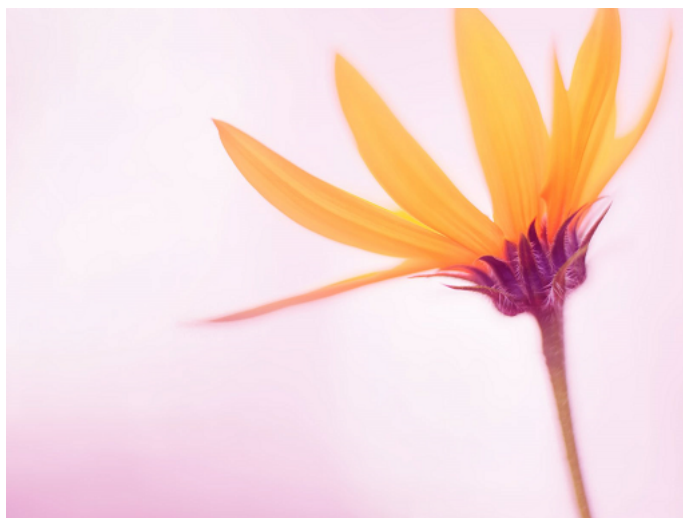


Figure 68. DISPLAY CORRECT FLOWER OBSERVED



Figure 69. DISPLAY MOVING PICTURE

Capture picture 1



Figure 70. DISPLAY MOVING PICTURE

Capture picture 2

Prepared by:

Xu, Jay X.

Approved by:

Yan, Peter X.

Disclaimer

Global Electronics Testing Services, LLC China is dedicated to ensuring the highest standard of product testing in the industry and extend every effort to report reliable data and an accurate interpretation. However in no event shall Global Electronics Testing Services, LLC China be liable any special, indirect or consequential damages or any damages whatsoever resulting from loss of any kind including profits, in any action arising out of or in connection with the test report or data associated with the report.

Global Electronics Testing Services | Futian District, Shenzhen China | 86-0755-82911501

Generated On:

Jul 5, 2019 12:11:06

Page:

Page 18 Of 18