

CERTIFICATE OF COMPLIANCE

Certificate Number 20140917-E204356
Report Reference E204356-A307-UL
Issue Date 2014-SEPTEMBER-17

Issued to: AU OPTRONICS CORP
1 LI-HSIN RD 2
HSINCHU SCIENCE PARK
HSINCHU, 300 TAIWAN

**This is to certify that
representative samples of**

COMPONENT - INFORMATION TECHNOLOGY
EQUIPMENT INCLUDING ELECTRICAL BUSINESS
EQUIPMENT

LCD Panel (LED Backlight)
G104STNZZZZ (Where Z may be any alphanumeric
character or a dot or blank)

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety:

See addendum page

Additional Information:

See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada:  and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.



William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus



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Certificate Number 20140917-E204356
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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Standard(s) for Safety:-UL 60950-1, Information Technology Equipment - Safety - Part 1: General Requirements
CSA C22.2 No. 60950-1-07, Information Technology Equipment - Safety - Part 1: General Requirements



William R. Carney, Director, North American Certification Programs
UL LLC

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UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Component Recognition
CCN:	NWGQ2, NWGQ8 (Information Technology Equipment Including Electrical Business Equipment)
Product:	LCD Panel (LED Backlight)
Model:	G104STNZZZZ (Where Z may be any alphanumeric character or a dot or blank)
Rating:	12 Vdc, 0.32 A max. (Optional)
Applicant Name and Address:	AU OPTRONICS CORP 1 LI-HSIN RD 2 HSINCHU SCIENCE PARK HSINCHU 300 TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

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Prepared by: Nate Hsu

Reviewed by: Allen Huang

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

(TFT) LCD Panel secured on metal chassis, and supplied by SELV. Boost with LED driver board.

Model Differences

All Models are identical except for model designation

Technical Considerations

- Equipment mobility : for building-in
- Connection to the mains : No direct connection
- Operating condition : continuous
- Access location : determined in end use
- Over voltage category (OVC) : OVC I
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class III (supplied by SELV)
- Considered current rating of protective device as part of the building installation (A) : N/A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : Up to 5000
- Altitude of test laboratory (m) : less than 2000 meters
- Mass of equipment (kg) : 0.365 kg
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50 degree C
- The product was investigated to the following additional standards: The equipment is operated up to, 5000 m (16404 feet) above sea level as declared by manufacturer. Clearance have been evaluated according to IEC 60664-1 table A.2 with a multiplication factor of 1.48 throughout this report.
- LEDs provided in the product are considered low power devices: Yes

Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following secondary output circuits are SELV: Output of LED Drive Board
- The power supply terminals and/or connectors are: Suitable for factory wiring only
- The investigated Pollution Degree is: 2
- The following end-product enclosures are required: Mechanical, Fire
- The component is evaluated for supplied by SELV circuits.
- Safety Instruction should be considered in end-product evaluation
- To be determined in end product. The Maximum temperature (Tmax) for Panel Surface should not exceed 95 degree C.
- Heating test shall be considered in end product.

Additional Information

N/A

Markings and instructions

Clause Title	Marking or Instruction Details
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
(Optional) Power rating - Ratings	Ratings (voltage, frequency/dc, current)

Special Instructions to UL Representative

N/A

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
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Earthing Continuity Test Exemptions - This test is not required for the following models:

All Models

Electric Strength Test Exemptions - This test is not required for the following models:

All Models

Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:

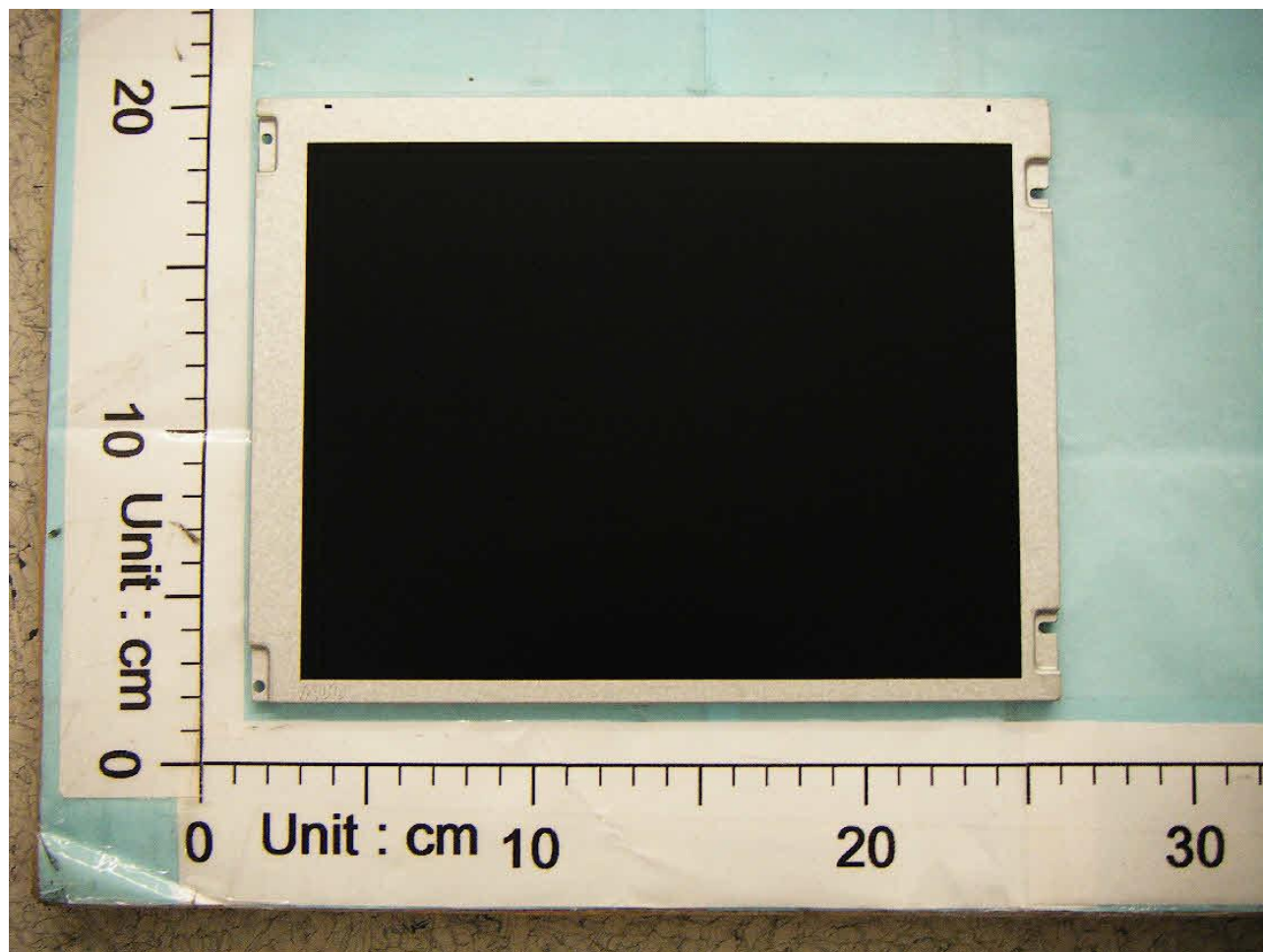
Sample and Test Specifics for Follow-Up Tests at UL

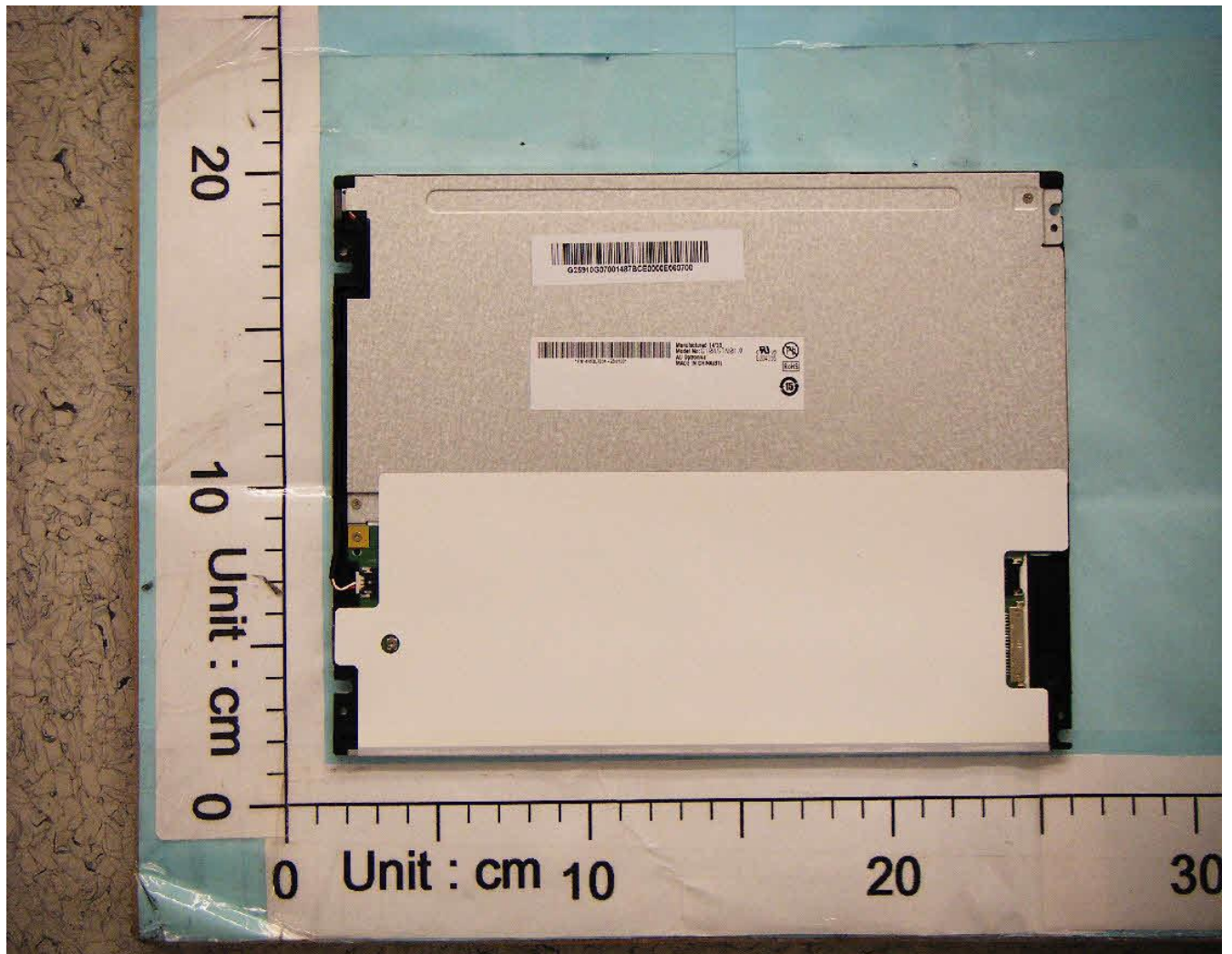
Model	Component	Material	Test	Sample(s)	Test Specifics
N/A					

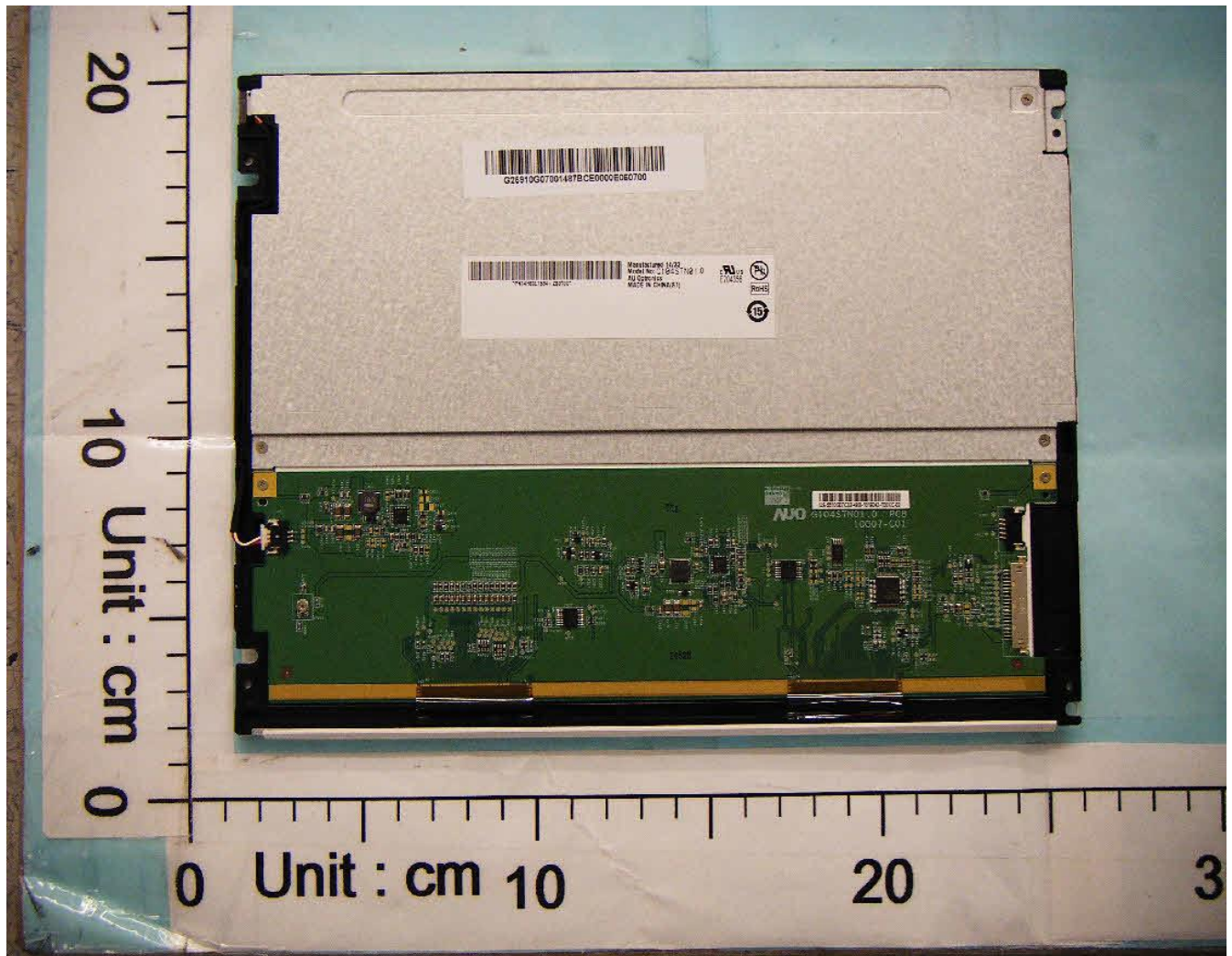
1.5.1	TABLE: list of critical components					Pass
Object/part or Description	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	Supplement ID
01. Panel	Interchangeable	Interchangeable	TFT-LCD Type, 10.4 inches.	--	--	
02. Enclosure / Chassis	Interchangeable	Interchangeable	Steel Metal or Aluminum	--	--	
03. PWB	Interchangeable	Interchangeable	Minimum V-1 or better, 105 degree C min.	ZPMV2	UL	
04. Internal Wirings	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; minimum 30 V, 105 degree C min.	AVLV2	UL	
05. Connectors and Receptacles (Secondary/ SELV circuits)	Interchangeable	Interchangeable	--	ECBT2, RTRT2	UL	
05a. Connectors and Receptacles (Secondary/ SELV circuits) (Alternate)	Interchangeable	Metal / Plastic	Copper alloy pins housed in bodies of plastic rated V-2 or VTM-2 min.	QMFZ2	UL	
06. Flexible PWBs	Interchangeable	Interchangeable	Min V-1 or VTM-1, 80 degree C for component mounted. Min V-2 or VTM-2, 80 degree C for no component mounted.	ZPXK2 or ZPMV2 or QMFZ2 or QMTS2	UL	
07. Cover film for driver board	Interchangeable	Interchangeable	Minimum V-2 or VTM-2, 80 degree C.	QMFZ2	UL	
07a. Cover film for driver board (Alternate)	Interchangeable	Interchangeable	Flame retardant. Min 105 degree C.	OANZ2	UL	
07b. Cover film for driver board (Alternate)	Interchangeable	Interchangeable	Minimum V-2 or VTM-2.	OCDT2	UL	
08. Label	Interchangeable	Interchangeable	Rated minimum 60 degree C if maximum surface temperature not specified.	PGDQ2 or PGJI2	UL	
09. LED Driver Board	AU Optronics Corp.	10G07-C01	I/P: 12Vdc, 0.32A max.	--	--	

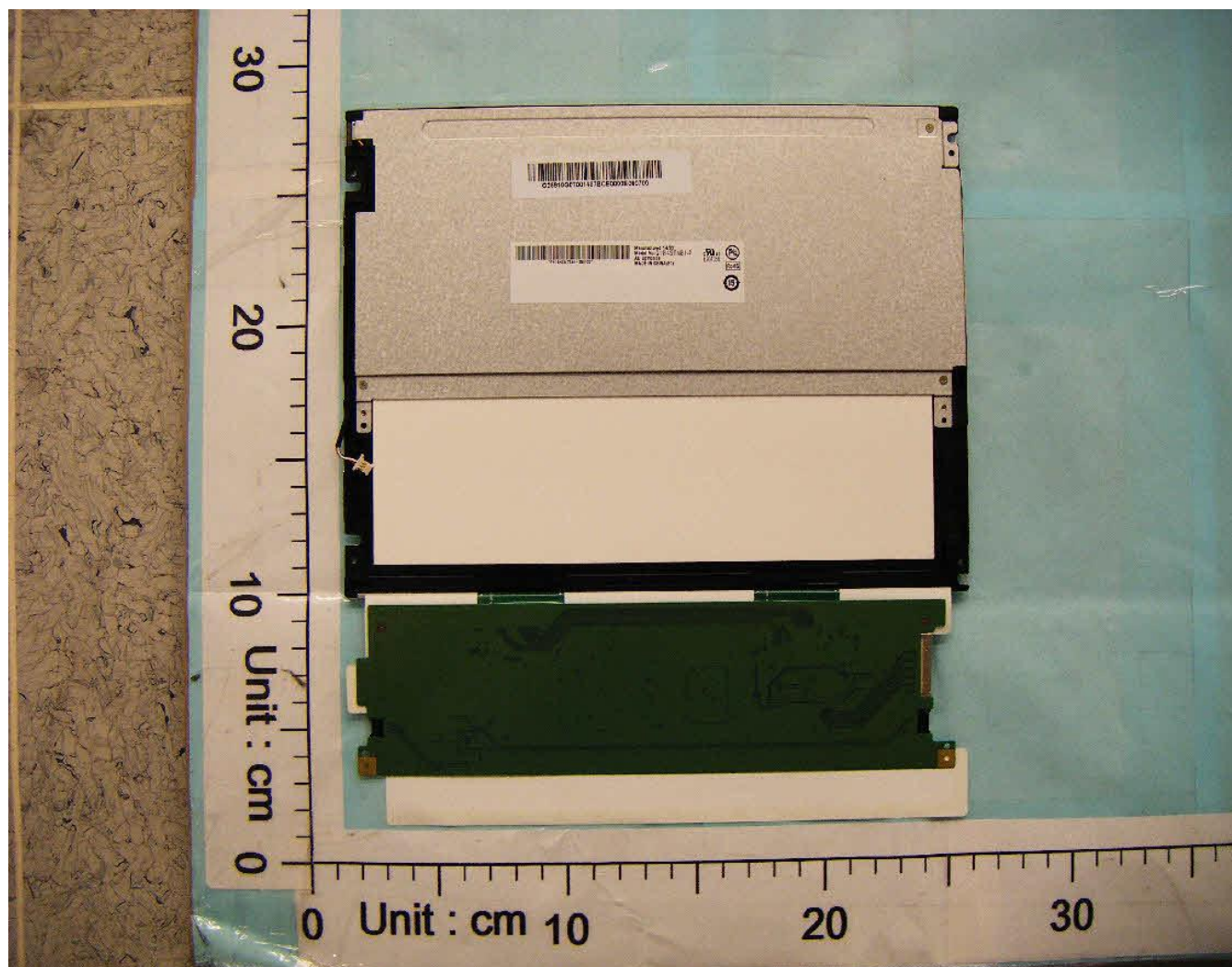
Enclosures

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	Front View
Photographs	3-02	Rear View - 1
Photographs	3-03	Rear View - 2
Photographs	3-04	Rear View - 3









Test Record

Test Record No. 1

- The manufacturer submitted a sample representing product of LCD Panel (LED Backlight), Model(s) G104STNZZZZ (Where Z may be any alphanumeric character or a dot or blank) for investigation.

- Tests were conducted by AU OPTRONICS CORP./ No. 23, Li-Hsin Road, Hsinchu Science Park, Hsinchu 300, Taiwan and witnessed by a member of the UL staff under WTDP Program.

- Tests performed on Model G104STN01.0 were considered to be representative of Models G104STNZZZZ (Where Z may be any alphanumeric character or a dot or blank).

The following tests were conducted:

Test	Testing Location/Comments
End Product Reference Page	
General Guidelines	
Input: Single-Phase (1.6.2)	
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4, Part 22 6.1)	
Heating (4.5.1, 1.4.12, 1.4.13)	
Component Failure (5.3.1, 5.3.4, 5.3.7)	

Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following supplements are provided as a part of this Test Record. NOTE: These supplements are only available to the Applicant via the CDA system.

Type	Supplement Id	Description
Attachment	2-01	CRD
Datasheet	2-02	Datasheet