

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:	NWQQ2, NWQQ8 (Information Technology Equipment Including Electrical Business Equipment)
Complementary CCN:	AZSQ2, AZSQ8 (Audio/Video Apparatus)
Product:	LCD Panel (LED backlight)
Model:	M190EGZZ, M190ETNZZZZ (Z may be 0-9, A-Z or blank)
Rating:	N/A
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.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Allen Huang

Reviewed by: Alfred Lee

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 Panel is secured in metal chassis and supplied by SELV.

Model Differences

All models are identical.

Technical Considerations

- Equipment mobility : for building-in
- Connection to the mains : determine in end-product
- Operating condition : continuous
- Access location : N/A
- Over voltage category (OVC) : OVC I
- Mains supply tolerance (%) or absolute mains supply values : N/A
- 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 2000
- Altitude of test laboratory (m) : Less than 2000
- Mass of equipment (kg) : < 18
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50 °C
- The product was investigated to the following additional standards: UL 60065, Seventh Edition, Dated June 30, 2003, contains revisions through and including December 11, 2007, and CAN/CSA-C22.2 No. 60065-03, 1st Edition, 2006-04 + A1:2006.

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 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 equipment is evaluated to be supplied by SELV circuit only.
- Safety Instructions shall be considered in the end-product evaluation.
- The heating test shall be evaluated/ considered and suitable for the end product use.

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

Issue Date: 2011-08-26
2012-08-31

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Report Reference #

E204356-A224-UL

Power rating - Model	Model Number
Date of Manufacture	Date Code Format: "Manufactured Year/Week" (ex: Manufactured 08/19=2008/nineteenth week). Location: Label.
Factory ID	Refer to Authorization Page.
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	AU Optronics Corp.	M190EGZZ, M190ETNZZZZ, (Z may be any alphanumeric character or blank)	TFT Type, 19 inch	--	--	3-01
02. Chassis	--	--	Steel metal or Aluminum	--	--	
03. PWB	Various	Various	Min. V-1, min. 105 degree C.	ZPMV2	UL	
04. Connectors (Secondary/ SELV circuits)	Various	Various	--	ECBT2/8, RTRT2/8	UL	
04a. Connectors (Secondary/ SELV circuits) (Alternate)	Various	Metal/ Plastic	Copper alloy pins housed in bodies of plastic rated min. V-2.	QMFZ2	UL	
05. Flexible PWBs (Optional)	Various	Various	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	
06. Label	Various	Various	Rated minimum 60 degree C if maximum surface temperature not specified.	PGDQ2 or PGJ12	UL	
07. Metal Cover for control board (Optional)	Various	Various	Steel metal or Aluminum	--	--	3-02

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Enclosures

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	Front View
Photographs	3-02	Rear View
Photographs	3-03	Control Board - Top View
Photographs	3-04	Control Board - Bottom View
Photographs	3-05	Alternate - Front View
Photographs	3-06	Alternate - Rear View
Photographs	3-07	Alternate - Rear View - 1
Diagrams		
Schematics + PWB		
Manuals		
Miscellaneous		