



Test Report issued under the responsibility of:



TEST REPORT
IEC 60950-1
Information technology equipment – Safety –
Part 1: General requirements

Report Number..... : CB180712-01-A2
Date of issue..... : 2018-07-25
Total number of pages : 18
Applicant's name : INNOLUX CORP
Address..... : 160 KESYUE RD JHUNAN SCIENCE PARK MIAOLI HSIEN, 350
 TAIWAN

Test specification:
Standard : IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
Test procedure : CB Scheme
Non-standard test method : N/A

Test Report Form No. : IEC60950_1F
Test Report Form(s) Originator.... : SGS Fimko Ltd
Master TRF : Dated 2014-02

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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
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Test item description :	LCD Module
Trade Mark :	1)  2) 
Manufacturer :	Same as applicant
Model/Type reference :	1) G156BGE-LXX, G156HCE-LXX (X can be 0-9, A-Z or blank for marketing purpose and no impact safety related critical components and constructions) 2) AC156GA01

Ratings :

(Optional)

5.5Vdc max., 0.32A max. (For LCD Panel with control board);

13.2Vdc max., 1A max. (For DC/DC Converter board);

3.6Vdc max., 1.5A max. (For LCD Panel with DD Converter
circuit control board A, C)5.5Vdc max., 0.32A max. (For LCD Panel with DD Converter
circuit control board B)

Testing procedure and testing location:		
☒	CB Testing Laboratory:	
Testing location/ address.....:		Prodigy Technology Consultant Co., Ltd. / No.181, Sec. 2, Wunhua 1st Rd., Linkou District, New Taipei City 244, Taiwan CHINESE TAIPEI
☐	Associated CB Testing Laboratory:	
Testing location/ address.....:		
Tested by (name + signature)		Hank Ju / Project Handler 
Approved by (name + signature)		Yama Cheng / Reviewer 
☐	Testing procedure: TMP/CTF Stage 1:	
Testing location/ address.....:		
Tested by (name + signature)		
Approved by (name + signature)		
☐	Testing procedure: WMT/CTF Stage 2:	
Testing location/ address.....:		
Tested by (name + signature)		
Witnessed by (name + signature).....:		
Approved by (name + signature)		
☐	Testing procedure: SMT/CTF Stage 3 or 4:	
Testing location/ address.....:		
Tested by (name + signature)		
Witnessed by (name + signature).....:		
Approved by (name + signature)		
Supervised by (name + signature)		

List of Attachments (including a total number of pages in each attachment):

National Differences (166 pages)

Enclosures (9 pages)

Summary of testing:**Tests performed (name of test and test clause):**

Input Test: 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)

Testing location:Prodigy Technology Consultant Co., Ltd. /
No.181, Sec. 2, Wunhua 1st Rd., Linkou District,
New Taipei City 244, Taiwan CHINESE TAIPEI**Summary of compliance with National Differences:****List of countries addressed:**

For IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013

Australia (AU), Austria (AT), Denmark (DK), Group (EU), Italy (IT), Japan (JP), Sweden (SE), United Kingdom (GB), Turkey (TR), United States of America (US), Canada (CA), New Zealand (NZ)

For IEC 60950-1:2005 (Second Edition); Am 1:2009

National Differences for Argentina (AR), Australia (AU), Canada (CA), Germany (DE), Denmark (DK), Group (EU), Finland (FI), United Kingdom (GB), Israel (IL), Japan (JP), Korea (KR), Norway (NO), Sweden (SE), Slovenia (SI), United States of America (US) , New Zealand (NZ)

For IEC 60950-1:2005 (2nd Edition)

National Differences for Austria (AT), Australia (AU), Canada (CA), Switzerland (CH), China (CN), Germany (DE), Denmark (DK), Spain(ES) , Group (EU), Finland (FI), France (FR), United Kingdom (GB), Ireland (IE), Italy (IT), Israel (IL), Japan (JP), Korea (KR), The Netherlands (NL), Norway (NO), Poland (PL), Sweden (SE), Slovenia (SI), United States of America (US) , New Zealand (NZ) as listed in the CB Bulletin No. 112A (December 2006) are recorded.

☒ **The product fulfils the requirements of EN 60950-1:2006+A11:2009+A1:2010+A12:2011 +A2:2013, IEC 60950-1:2005 + Am 1:2009 + Am 2:2013 and AS/NZS 60950.1:2015****Copy of marking plate:****The artwork below may be only a draft (See Enclosure/Marking Plate ID 13-01 for details). The use of certification marks on a product must be authorized by the respective NCBs that own these marks.**

Test item particulars	
Equipment mobility.....	☐ movable ☐ hand-held ☐ transportable ☐ stationary ☒ for building-in ☐ direct plug-in
Connection to the mains.....	☐ pluggable equipment ☐ type A ☐ type B ☐ permanent connection ☐ detachable power supply cord ☐ non-detachable power supply cord ☒ not directly connected to the mains
Operating condition.....	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☐ OVC II ☐ OVC III ☐ OVC IV ☒ other: evaluated at end product
Mains supply tolerance (%) or absolute mains supply values	No direct connection
Tested for IT power systems	☐ Yes ☒ No
IT testing, phase-phase voltage (V)	N/A
Class of equipment	☐ Class I ☐ Class II ☒ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IP X0
Altitude during operation (m)	Up to 2000 m
Altitude of test laboratory (m)	Up to 2000 m
Mass of equipment (kg)	1.19 kg max.

Possible test case verdicts:	
- test case does not apply to the test object	: N/A
- test object does meet the requirement	: P (Pass)
- test object does not meet the requirement	: F (Fail)
Testing	
Date of receipt of test item	: 2018-06-29
Date (s) of performance of tests	: 2018-07-17
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	☒ Yes ☐ Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)..... :	1) Innolux Corporation No.3 Sec. 1, Huanshi Rd., Southern Taiwan Science Park, Tainan Hsien, 74147 Taiwan. 2) Innolux Corporation No.12 Nanke 8th Rd., Southern Taiwan Science Park, Tainan Hsien, 74144 Taiwan. 3) Foshan Innolux Optoelectronics Ltd. Xingye North Road. Nanhai Science & Technology Industry Park, Shishan Township, Nanhai District, Foshan City, Guangdong Province, 528237 China. 4) Ningbo Innolux Optoelectronics Ltd. Ningbo Export Processing Zone, 16 Yangzi River North Rd., Ningbo Zhejiang, 315800 China. 5) Ningbo Innolux Optoelectronics Ltd. No.6 Yangzi River S Rd., Ningbo Export Processing Zone. Ningbo Zhejiang, 315800 China. 6) Ningbo Innolux Technology Ltd. 8 Caoe Rd., Bonded Southern District, Ningbo Zhejiang, 315000 China. 7) Ningbo Innolux Display Ltd. 8 Caoe Rd., Bonded Southern District, Ningbo Zhejiang, 315000 China.
General product information:	
Report Summary All applicable tests according to the referenced standard(s) have been carried out. - This test Report should be read in conjunction with the original report No. CB141002-02-A0, issued 2014-10-15 with CB certificate No. (DK-41490-UL, DK-41491-UL), issue 2014-10-20. CB170512-03-A1, issued 2017-06-07 with CB certificate No. (DK-41490-A1-UL, DK-41491-A1-UL), issue 2017-06-13. (Technical Amendment) This Test Report were deemed to amend, due to: 1) Add one model name: G156HCE-LXX 2) Add one control board (B) 3) Add one DD converter circuit control board C 4) Modify one rating from 3.6Vdc max, 0.49A max. (For LCD Panel with DD Converter circuit control board A) to 3.6Vdc max, 1.5A max. (For LCD Panel with DD Converter circuit control board A, C) 5) Add temperature (Tma): 85 degree C only for DD converter circuit control board C 6) Update National Difference 7) Revised Report Reference No. from "CB170512-03-A1" to "CB180712-01-A2"	

Product Description

Electronic components were mounted on PWB, incorporated with 15.6 inch wide TFT-LCD panel, and LED Backlight

Model Differences

All models are identical except for model designation.

Additional Information

- The label is a draft of an artwork for marking plate pending approval by National Certification Bodies and it shall not be affixed to products prior to such an approval.
- Additional investigation in accordance with EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 and AS/NZS 60950.1:2015
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60 degree C (**excluding DD converter circuit control board C**), **85 degree C (only for DD converter circuit control board C)**.
- The Input and Heating Test shall be conducted in the end-use product.
- The following end-product enclosures are required: Mechanical, Fire, Electrical
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual.
- The following rating are for each converter circuit control board:
 13.2 Vdc max., 1.05 A max. (For DD converter circuit control board A)
 13.2 Vdc max., 1.2 A max. (For DD converter circuit control board B)
13.2 Vdc max., 1.2 A max. (For DD converter circuit control board C)

Abbreviations used in the report:

- normal conditions	N.C.	- single fault conditions	S.F.C
- functional insulation	OP	- basic insulation	BI
- double insulation	DI	- supplementary insulation	SI
- between parts of opposite polarity	BOP	- reinforced insulation	RI

Indicate used abbreviations (if any)

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1	GENERAL		Pass
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1.5	Components		Pass
1.5.1	General	See below.	Pass
	Comply with IEC 60950-1 or relevant component standard	(see appended table 1.5.1)	Pass
1.5.2	Evaluation and testing of components	Components certified to IEC harmonized standard and checked for correct application. Components, for which no relevant IEC-Standard exist, have been tested under the conditions occurring in the equipment, using applicable parts of IEC 60950-1. Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950-1 and the relevant component Standard.	Pass

1.6	Power interface		Pass
1.6.1	AC power distribution systems	Evaluated as a part of certified power supply.	N/A
1.6.2	Input current	The steady state input current of the equipment did not exceed the RATED CURRENT by more than 10% under normal load (See appended table 1.6.2 for details).	Pass
1.6.3	Voltage limit of hand-held equipment	This is not a hand-held equipment.	N/A
1.6.4	Neutral conductor	Evaluated as a part of certified power supply.	N/A

1.7	Marking and instructions		Pass
1.7.1	Power rating and identification markings	See below	Pass
1.7.1.1	Power rating marking	Unit not provided with means for connection to mains (Optional)	Pass
	Multiple mains supply connections.....:		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Rated voltage(s) or voltage range(s) (V)	(Optional) 5.5Vdc max. (For LCD Panel with control board); 13.2Vdc max. (For DC/DC Converter board); 3.6Vdc max. (For LCD Panel with DD Converter circuit control board A, C) 5.5Vdc max. (For LCD Panel with DD Converter circuit control board B)	Pass
	Symbol for nature of supply, for d.c. only	Optional ,  (60417-2-IEC-5031)	N/A
	Rated frequency or rated frequency range (Hz) ...		N/A
	Rated current (mA or A)	(Optional) 0.32A max. (For LCD Panel with control board); 1A max. (For DC/DC Converter board); 1.5A max. (For LCD Panel with DD Converter circuit control board A, C) 0.32A max. (For LCD Panel with DD Converter circuit control board B)	Pass
1.7.1.2	Identification markings		Pass
	Manufacturer's name or trade-mark or identification mark	1)  2) 	Pass
	Model identification or type reference	1) G156BGE-LXX, G156HCE-LXX (X can be 0-9, A-Z or blank for marketing purpose and no impact safety related critical components and constructions) 2) AC156GA01	Pass
	Symbol for Class II equipment only		N/A
	Other markings and symbols	Additional symbols may be provided when submitted for National Approval.	N/A

2	PROTECTION FROM HAZARDS	Pass
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2.2	SELV circuits		Pass
2.2.1	General requirements	The unit intended to be supplied by SELV.	Pass
2.2.2	Voltages under normal conditions (V):	All accessible voltages are less than 42.4 V peak or 60 V dc and are classified as SELV.	Pass
2.2.3	Voltages under fault conditions (V):		Pass

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
2.2.4	Connection of SELV circuits to other circuits :	SELV circuits are only connected to other SELV circuit.	Pass
4	PHYSICAL REQUIREMENTS		Pass
4.5	Thermal requirements		Pass
4.5.1	General	See appended table 4.5 for details.	Pass
4.5.2	Temperature tests	See appended table 4.5 for details.	Pass
	Normal load condition per Annex L :	See appended table 4.5 for details.	—
4.5.3	Temperature limits for materials	See appended table 4.5 for details.	Pass
4.5.4	Touch temperature limits	See appended table 4.5 for details.	Pass
4.5.5	Resistance to abnormal heat :		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.5.1	TABLE: List of critical components					Pass
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹⁾	
01. LCD Panel	INNOLUX / MITSUBISHI ELECTRIC	G156BGE- LXX, G156HCE-LXX (X can be 0- 9,A-Z or blank), AC156GA01	15.6 inch, TFT- LCD, LED backlight	--	--	
02. Printed Wiring Board (excluding DD converter circuit control board C)	Interchangeable	Interchangeable	V-1 minimum, 90 degree C minimum	UL 796	UL	
02a. Alternate Printed Wiring Board (Optional) (only for DD converter circuit control board C)	Interchangeable	Interchangeable	V-1 minimum, 105 degree C minimum	UL 796	UL	
03. DD Converter circuit Control board A (Optional)	INNOLUX / MITSUBISHI ELECTRIC	AC156GA01 / G156BGE-L02	13.2 Vdc max., 1.05A max.	--	--	
Supplementary information:						
¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.						

1.5.1	TABLE: Opto Electronic Devices	N/A
Manufacturer :		
Type :		
Separately tested :		
Bridging insulation..... :		
External creepage distance..... :		
Internal creepage distance..... :		
Distance through insulation..... :		
Tested under the following conditions..... :		
Input :		
Output..... :		
supplementary information		
--		

1.6.2	TABLE: Electrical data (in normal conditions)					Pass
U (V)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
5.5Vdc	0.21	0.32	1.16	--	--	Maximum Normal Load

IEC 60950-1						
Clause	Requirement + Test				Result - Remark	Verdict

						(For LCD Panel with Control board A)
13.2Vdc	0.69	1	9.11	--	--	Maximum Normal Load (For DC/DC Converter board)
3.6Vdc	0.332	0.49	1.20	--	--	Maximum normal load (For LCD Panel with DD Converter circuit Control board A)
13.2Vdc	0.765	1.05	10.10	--	--	Maximum normal load (For DD Converter circuit Control board A)
5.5Vdc	0.23	0.32	1.27	--	--	Maximum Normal Load (For LCD Panel with DD Converter circuit Control board B)
13.2Vdc	0.75	1.2	9.9	--	--	Maximum normal load (For DD Converter circuit Control board B)
5.5Vdc	0.228	0.32	1.16	--	--	Maximum Normal Load (For LCD Panel with Control board B)
3.6Vdc	0.908	1.5	3.27	--	--	Maximum Normal Load (For LCD Panel with DD Converter circuit Control board C)
13.2Vdc	0.762	1.2	10.06	--	--	Maximum normal load (For DD Converter circuit Control board C)

Supplementary information:

"Maximum normal load" was defined as follows:

- Unit was maximum brightness and contrast with vertical stripe pattern and operation continuously.
(For DC/DC Converter board and for DD Converter circuit Control board B **and for LCD Panel with Control board B**)
- Unit was maximum brightness and contrast with horizontal stripe pattern and operation continuously.
(For DD Converter circuit Control board A)
- **Unit was maximum brightness and contrast with white pattern and operation continuously.**
(For DD Converter circuit Control board C)

2.1.1.5 c) 1)	TABLE: max. V, A, VA test				N/A
Voltage (rated) (V)	Current (rated) (A)	Voltage (max.) (V)	Current (max.) (A)	VA (max.) (VA)	
--	--	--	--	--	
supplementary information:					
--					

2.1.1.5 c) 2)	TABLE: stored energy				N/A
Capacitance C (μF)	Voltage U (V)		Energy E (J)		

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
--	--	--	
supplementary information:			
--			

2.2	TABLE: evaluation of voltage limiting components in SELV circuits			Pass
Component (measured between)		max. voltage (V) (normal operation)		Voltage Limiting Components
		V peak	V d.c.	
For DC/DC Converter		--	--	--
After L1 pin2– GND		32.8	--	--
After D1 pin2 – GND		--	29.6	--
For DD Converter circuit Control board A		--	--	--
After L4 (VLED2)		44.8	--	--
After D11 (VLED2)		--	31.6	D11
For DD Converter circuit Control board B		--	--	--
After L3– GND		41.6	--	--
For DD Converter circuit Control board C		--	--	--
After L4 to RTN		31.2	--	--
Fault test performed on voltage limiting components		Voltage measured (V) in SELV circuits (V peak or V d.c.)		
For DD Converter circuit Control board A		--		
D11 Pin1 – 2 short		14.0Vdc		
supplementary information:				
If the voltage exceeded 42.4 V pk or 60 V dc, the measurement was taken again after the next component in series with the secondary until the voltage measured was less than 42.4 V pk or 60 V dc. Each voltage measured and each component located in series directly before the measurement was noted. The following terminals were connected to earth GND : C128 Pin- Secondary return (for DD Converter circuit Control board C)				

2.5	TABLE: Limited power sources					N/A
Circuit output tested:						
Note: Measured Uoc (V) with all load circuits disconnected:						
Components	Test condition (Single fault)	Uoc (V)	I _{sc} (A)		VA	
			Meas.	Limit	Meas.	Limit
--	--	--	--	--	--	--
supplementary information:						
Sc=Short circuit, Oc=Open circuit						

2.10.2	Table: working voltage measurement			N/A
Location		RMS voltage (V)	Peak voltage (V)	Comments
--		--	--	--
supplementary information:				
--				

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.10.3 and 2.10.4	TABLE: Clearance and creepage distance measurements						Pass
Clearance (cl) and creepage distance (cr) at/of/between:	U peak (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)	
Functional:							
--	--	--	--	--	--	--	
Basic/supplementary:							
--	--	--	--	--	--	--	
Reinforced:							
--	--	--	--	--	--	--	
Supplementary information: -This components is Class III (supplies by SELV) and merely functional insulation required.							

2.10.5	TABLE: Distance through insulation measurements						N/A
Distance through insulation (DTI) at/of:	U peak (V)	U rms (V)	Test voltage (V)	Required DTI (mm)	DTI (mm)		
--	--	--	--	--	--	--	
Supplementary information:--							

4.3.8	TABLE: Batteries								N/A
The tests of 4.3.8 are applicable only when appropriate battery data is not available					--			N/A	
Is it possible to install the battery in a reverse polarity position?					--			N/A	
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition	--	--	--	--	--	--	--	--	--
Max. current during fault condition	--	--	--	--	--	--	--	--	--

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

Test results:	--	Verdict
- Chemical leaks	--	N/A
- Explosion of the battery	--	N/A
- Emission of flame or expulsion of molten metal	--	N/A
- Electric strength tests of equipment after completion of tests	--	N/A
Supplementary information: --		

4.3.8	TABLE: Batteries	N/A
Battery category		
Manufacturer.....		
Type / model		
Voltage.....		
Capacity.....		
Tested and Certified by (incl. Ref. No.)		
Circuit protection diagram:		
--		

MARKINGS AND INSTRUCTIONS (1.7.13)	
Location of replaceable battery	--
Language(s)	--
Close to the battery	--
In the servicing instructions	--
In the operating instructions	--

4.5	TABLE: Thermal requirements						Pass
	Supply voltage (V)	See below	See below	--	--	--	—
	Ambient T_{min} (°C)	--	--	--	--	--	—
	Ambient T_{max} (°C)	--	--	--	--	--	—
	Maximum measured temperature T of part/at.....	T (°C)					Allowed T_{max} (°C)
	For LCD Panel with Control board and DC/DC Converter board	Maxim un normal load at 5.5Vdc/ 13.2Vdc	Maxim un normal load at 5.5Vdc/ 13.2Vdc (Shift to Tma 60°C)	--	--	--	--
	01.Ambient	24.1	60.0	--	--	--	--
	For control board	--	--	--	--	--	--
	02.PWB under U2	33.9	69.8	--	--	--	90
	03.L1 coil	34.9	70.8	--	--	--	105

IEC 60950-1						
Clause	Requirement + Test		Result - Remark			Verdict
For converter board	--	--	--	--	--	--
04.PWB under U1	38.8	74.7	--	--	--	90
05.L1 coil	47.1	83.0	--	--	--	105
06.Panel body	30.6	66.5	--	--	--	95
07.Panel body (Rear)	35.6	71.5	--	--	--	--
Test duration:	1.9hrs	1.9hrs	--	--	--	--
For LCD Panel with DD Converter circuit Control board A	Maximum Normal Load at 3.6/13.2Vdc	Maximum Normal Load at 3.6/13.2Vdc, Shift to Tma 60	--	--	--	--
01.Ambient	23.5	60.0	--	--	--	--
02.L2 coil	29.5	66.0	--	--	--	105
03.PWB near U2	31.6	68.1	--	--	--	90
04.L4 coil	43.0	79.5	--	--	--	105
05.Panel body	30.3	66.8	--	--	--	95
06.Panel body rear	36.9	73.4	--	--	--	--
Test duration:	3.1hr	3.1hr	--	--	--	--
For LCD Panel with DD Converter circuit Control board B	Maximum Normal Load at 5.5/13.2Vdc	Maximum Normal Load at 5.5/13.2Vdc, Shift to Tma 60	--	--	--	--
01. Ambient	24.7	60.0	--	--	--	--
02. L2 coil	34.3	69.6	--	--	--	105
03. PWB near U5	34.5	69.8	--	--	--	90
04. L4 coil	41.5	76.8	--	--	--	105
05. PWB near U9	38.7	74.0	--	--	--	90
06. Panel body	32.4	67.7	--	--	--	95
07. Panel body (Rear)	36.8	72.1	--	--	--	--
Test duration :	1.4hrs	1.4hrs	--	--	--	--
For LCD Panel with DD Converter circuit Control board C	Maximum Normal Load at 3.6/13.2Vdc	Maximum Normal Load at 3.6/13.2Vdc, Shift to Tma 85	--	--	--	--
01. Ambient	23.3	85.0	--	--	--	--
02. L5 coil	45.9	107.6	--	--	--	125
03. PWB near U12	43.3	105	--	--	--	105
04. PWB near U5	40.3	102	--	--	--	105
05. L1 coil	34.1	95.8	--	--	--	105
06. PWB near U6	39.4	101.1	--	--	--	105
08. Mylar near Converter board	34.5	96.2	--	--	--	--
09. Panel body (Rear, on the label)	33.5	95.2	--	--	--	--
10. Panel body	32.8	94.5	--	--	--	95
Test duration:	2.2hrs	2.2hrs	--	--	--	--

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Comments:

The temperatures were measured under worst case normal mode defined in 1.2.2.1 and as described in 1.6.1 at voltages as described in 1.6.5.

With a specified ambient temperature of **60 degree C (excluding DD converter circuit control board C), 85 degree C (only for DD converter circuit control board C)**, the max. temperature is calculated as follows:

Components with:

- max. absolute temp. of **105 degree C (for other board) or 125 degree C (only for LCD Panel with DD Converter circuit Control board C)** (Choke)
- max. absolute temp. of **90 degree C (for other board) or 105 degree C (only for LCD Panel with DD Converter circuit Control board C)** (PCB)

User Accessible Area:

- material is plastic 95 degree C

4.5.5	TABLE: Ball pressure test of thermoplastic parts			N/A
	Allowed impression diameter (mm)	≤ 2 mm		—
Part		Test temperature (°C)	Impression diameter (mm)	
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Supplementary information:--				

4.7	TABLE: Resistance to fire					N/A
Part	Manufacturer of material	Type of material	Thickness (mm)	Flammability class	Evidence	
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Supplementary information: To be evaluated in the end product.						

5.1	TABLE: touch current measurement			N/A
Measured between:	Measured (mA)	Limit (mA)	Comments/conditions	
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supplementary information:				
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.2	TABLE: Electric strength tests, impulse tests and voltage surge tests			N/A
Test voltage applied between:		Voltage shape (AC, DC, impulse, surge)	Test voltage (V)	Breakdown Yes / No
Functional:				
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Basic/supplementary:				
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Reinforced:				
--		--	--	--
Supplementary information: --				

5.3	TABLE: Fault condition tests					N/A
	Ambient temperature (°C)		--			---
	Power source for EUT: Manufacturer, model/type, output rating		--			---
Component No.	Fault	Supply voltage (V)	Test time	Fuse #	Fuse current (A)	Observation
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Supplementary information: --						

C.2	TABLE: transformers							N/A
Loc.	Tested insulation	Working voltage peak / V (2.10.2)	Working voltage rms / V (2.10.2)	Required electric strength (5.2)	Required clearance / mm (2.10.3)	Required creepage distance / mm (2.10.4)	Required distance thr. insul. (2.10.5)	
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Loc.	Tested insulation			Test voltage/ V	Measured clearance / mm	Measured creepage dist./ mm	Measured distance thr. insul. / mm; number of layers	
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supplementary information:								
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C.2	TABLE: transformers	N/A
Transformer		
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