



Ref Certif No

SG-OF-05628M1

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product
Produit

Projectors
(DLP Projector)

Name and address of the applicant
Nom et adresse du demandeur

Delta Electronics, Inc.
No.3, Tung Yuan Rd., Chungli
Ind. Zone, Taoyuan Hsien, TAIWAN

Name and address of the manufacturer
Nom et adresse du fabricant

NEC Display Solution, Ltd., 686-1 NISHIOI, OI-MACHI,,
ASHIGARAKAMI-GUN, KANAGAWA,, 258-8533 JAPAN

Name and address of the factory
Nom et adresse de l'usine

Delta Video Display System (Wujiang) Limited, 1688, JiangXing E.Rd.,
WuJiang Economic, 215200 Development Zone, WuJiang City, JiangSu,,
PEOPLE'S REPUBLIC OF CHINA

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Rated input voltage : 200-240 Vac
Rated input current: 5.2 A
Rated frequency: 50/60 Hz
Protection class: I

Trade mark (if any)
Marque de fabrique (si elle existe)

NEC

Model/type Ref.
Ref. de type

NP-PX750yyyy, NP-PX800yyyy, NP-PX700yyyy
("y" can be any character or blank to denote the
different client ID)

Additional information (if necessary)
Information complémentaire (si nécessaire)

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la

IEC 60950-1/A1:2009

as shown in the Test Report Ref. No.
which form part of this certificate
comme indiqué dans le Rapport d'essais numéro
de référence qui constitue une partie de ce
certificat

TÜV SÜD PSB Pte Ltd
081-110315-100

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date, 2011-04-28
CBS 11 04 27738 322

Bill Lin
(Bill Lin)



TÜV SÜD PSB Pte Ltd · 1 Science Park Drive · Singapore 118221

PSB Singapore



Test Report issued under the responsibility of:

NCB TÜV SÜD PSB Pte Ltd
1 Science Park Drive,
Singapore 118221



PSB Singapore

TEST REPORT

IEC 60950-1: 2005 (2nd Edition) and/or EN 60950-1:2006 Information technology equipment – Safety – Part 1: General requirements

Report Reference No.: 081-110315-100

Date of issue: 2011-04-28

Total number of pages: 7

CB/CCA Testing Laboratory: TÜV SÜD Asia Ltd. Taiwan Branch

Address: 7F., No.37, Sec. 2, Zhongyang S., Rd., Beitou District, Taipei City, 11270, Taiwan.

Applicant's name: Delta Electronics, Inc.

Address: No. 3, Tung Yuan Rd., Chungli Ind. Zone, Taoyuan Hsien, Taiwan.

Manufacturer's name: See page 6 for details.

Address: See page 6 for details.

Factory's name: See page 6 for details.

Address: See page 6 for details.

Test specification:

Standard: ☒ IEC 60950-1:2005 (2nd Edition); Am 1:2009 and/or
☒ EN 60950-1:2006 + A11:2009 + A1:2010

Test procedure: CB / CCA

Non-standard test method: N/A

Test Report Form No.: IECEN60950_1C

Test Report Form(s) Originator: SGS Fimko Ltd

Master TRF: Dated 2007-06

Copyright © 2007 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

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.

If this Test Report Form is used by non-CCA members, the CIG logo and the reference to the CCA Procedure shall be removed.

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



PSB Singapore

Test item description : DLP Projector	
Trade Mark..... : NEC	
Manufacturer..... : See page 6 for details	
Model/Type reference : NP-PX700yyyy, NP-PX750yyyy, NP-PX800yyyy ("y" can be any character or blank)	
Ratings : 200-240 Vac, 50/60 Hz, 5.2 A	
Testing procedure and testing location:	
☒ CB/CCA Testing Laboratory:	TÜV SÜD Asia Ltd. Taiwan Branch
Testing location/ address	7F., No.37, Sec. 2, Zhongyang S., Rd., Beitou District, Taipei City, 11270, Taiwan.
☐ Associated CB Laboratory:	N/A
Testing location/ address	N/A
Tested by (name + signature)	Mr. Larry Lai
Approved by (+ signature)	Mr. Watson Yang
☐ Testing procedure: TMP	N/A
Tested by (name + signature)	
Approved by (+ signature)	
Testing location/ address	N/A
☐ Testing procedure: WMT	N/A
Tested by (name + signature)	
Witnessed by (+ signature)	
Approved by (+ signature)	
Testing location/ address	N/A
☐ Testing procedure: SMT	N/A
Tested by (name + signature)	
Approved by (+ signature)	
Supervised by (+ signature)	
Testing location/ address	N/A
☐ Testing procedure: RMT	N/A
Tested by (name + signature)	
Approved by (+ signature)	
Supervised by (+ signature)	
Testing location/ address	N/A



PSB Singapore

Summary of testing:	
Tests performed (name of test and test clause): All test results were found satisfactory in accordance with IEC 60950-1:2005 (2 nd Edition) + A1: 2009 and / EN 60950-1:2006 + A11:2009 + A1:2010	Testing location: All tests as described in Test Case and Measurement Sections were performed at the laboratory described on page 2.
Summary of compliance with National Differences: <u>For IEC 60950-1:2005 (2nd Edition) and EN 60950-1/A1:2010</u> National Differences for Austria (AT), Canada (CA), Germany (DE), Denmark (DK), Finland (FI), France (FR), United Kingdom (GB), Italy (IT), Japan (JP), Korea (KR), The Netherlands (NL), Norway (NO), Poland (PL), Sweden (SE), Slovenia (SI), United States of America (US). Group Differences as listed in the CB Bulletin No. 112A, (December 2006) are recorded at the end of this report. (Attachment No. 1) <u>For IEC 60950-1:2001 (1st Edition) and EN 60950-1:2001+A11:2004</u> CB members countries listed in CB Bulletin No. 112A, (December 2006); EU Group difference, EU Special National Conditions, EU A-Deviation, Argentina (AR), Austria (AT), Australia (AU), Belgium (BE), Canada (CA), Switzerland (CH), China (CN), Czech Republic (CZ), Germany (DE), Denmark (DK), Finland (FI), France (FR), United Kingdom (GB), Greece (GR), Hungary (HU), Israel (IL), India (IN), Italy (IT), Kenya (KE), Korea (KR), (MY) Malaysia, Netherlands (NL), Norway (NO), Poland (PL), Sweden (SE), Singapore (SG), Slovenia (SI), Slovakia (SK), United States of America (US). (Attachment No. 2)	
Copy of marking plate See attachment No. 3 of Test Report Ref. No.: 081-110315-000.	



PSB Singapore

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:
Mains supply tolerance (%) or absolute mains supply values	+10%, -10%
Tested for IT power systems	☒ Yes ☐ No
IT testing, phase-phase voltage (V)	230V (for Norway)
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	16A or 20A for US
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	Ordinary
Altitude during operation (m)	Up to 3,000
Altitude of test laboratory (m)	below 2,000
Mass of equipment (kg)	Approx. <u>21</u>
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	N/A
Date(s) of performance of tests	N/A



PSB Singapore

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Note: This TRF includes EN Group Differences together with National Differences and Special National Conditions, if any. All Differences are located in the Appendix to the main body of this TRF.

Throughout this report a point is used as the decimal separator.

Attachments:

Original Test Report No. 081-110315-000 99 pages + 86 pages attachments

Attachment No. 1 Photo 1 page

Report No. < 081-110315-100 >

The modification report is to:

1. Revise the capacity of Y-Capacitors (CY103, CY104) from 2200pF to 1000pF.
2. Add alternative Y-Capacitors (CY105, CY106), see table 1.5.1 for details.

For the above described modification the following Clause/Testing was considered to be necessary:

S/N	Clause/Testing	Remark/Comments	Verdict
1	Table 1.5.1	List of critical components	P

Manufacturer's Declaration per sub-clause 6.2.5 of IECCE 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) :

Delta Video Display System (Wujiang) Limited (ID No.: 45855)
1688, JiangXing E.Rd., WuJiang Economic, 215200 Development Zone, WuJiang City,
JiangSu, People's Republic of China

Manufacturer:

NEC Display Solutions, Ltd. (ID No.: 76924)
686-1 NISHIOI, OI-MACHI, ASHIGARAKAMI-GUN, KANAGAWA, 258-8533 Japan

General product information:

The equipment is a DLP (Digital Light Processing) Projector of Information Technology Equipment.

In models NP-PX700yyyy, NP-PX750yyyy and NP-PX800yyyy, "y" can be any character or blank to denote the different selling area for marking purpose.

All models are identical except for model name.

The maximum ambient temperature as specified by manufacturer is 40°C.

The manufacturer specified that the equipment could be operated up to an altitude of 3,000m (10,000 feet). The requirements according to IEC 60664-1 for clearances are considered as the altitude correction factor (1.15) specified in Table A.2.

Tests were performed on model NP-PX700yyyy to be representative.

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)



PSB Singapore

1.5.1	TABLE: List of critical components				P
Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity ¹⁾
Revised Component					
Y-Capacitors (CY101, CY102) (Optional)	Murata MFG Co Ltd	KX, KH	Min. 250 V ac, max. 2200 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
	MATSUSHITA ELECTRIC INDUSTRIAL CO LTD PANASONIC CORP OF NORTH AMERICA	NS-A	Min. 250 V ac, max. 2200 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
	TDK CORP	CD or CS	Min. 250 V ac, max. 2200 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
Alternate Component					
Y-Capacitors (CY103, CY104, CY105, CY106) (Optional)	Murata MFG Co Ltd	KX, KH	Min. 250 V ac, max.1000 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
	MATSUSHITA ELECTRIC INDUSTRIAL CO LTD PANASONIC CORP OF NORTH AMERICA	NS-A	Min. 250 V ac, max. 1000 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
	TDK CORP	CD or CS	Min. 250 V ac, max. 1000 pF, subclass Y1 or Y2. , min. 85 °C	IEC 60384-14	VDE
¹⁾ an asterisk indicates a mark which assures the agreed level of surveillance					
Supplementary information:					

Attachment No. 1

Page 1 of 1



PSB Singapore

Type Designation: NP-PX750yyyy, NP-PX800yyyy, NP-PX700yyyy

Report Number: 081-110315-100

Alternate filter board-add CY105, CY106

