

Produkte Products

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Test Report No.:

Dongguan HUAQIANG SANYO Electronics Co., Ltd. Auftraggeber:

Client:

Hong Ye Industry Area, Tangxia Town, Dongguan 523710, P.R. China

Gegenstand der Prüfung: Multimedia Projector

Test item:

Bezeichnung: Identification:

PLC-XW60

Serien-Nr.: Serial No.:

n.a.

Wareneingangs-Nr.:

163042056

Eingangsdatum:

2008-09-22

Receipt No.:

Date of receipt:

Prüfort: Testing location: Center Testing International (Shenzhen) Company Limited

Building C, Hongwei Industrial Zone, Baoan 70 District, Shenzhen,

Guangdong 518101, P.R. China FCC Registration No.: 614926

Prüfgrundlage: Test specification: FCC Part 15 Subpart B

(ANSI C63.4: 2003)

Prüfergebnis:

Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).

Test Result:

The test item passed the test specification(s).

Prüflaboratorium:

TÜV Rheinland (Shenzhen) Co., Ltd.

Testing Laboratory: geprüft/ tested by:

kontrolliert/ reviewed by:

2008-10-30

Owen Tan/Project Engineer

2008-(0/7)

Shawn Peng/Senior Project Manager

Datum Date

Name/Stellung Name/Position

Unterschrift Signature

Datum Date

Name/Stellung Name/Position

Unterschrift Signature

Sonstiges/ Other Aspects:

Abkürzungen:

entspricht Prüfgrundlage

Abbreviations:

P(ass) passed

F(ail) N/A

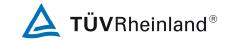
F(ail)

failed not applicable

entspricht nicht Prüfgrundlage nicht anwendbar nicht getestet

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report relates to the a.m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.



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TEST SUMMARY

5.1.1 CONDUCTED EMISSION FOR FCC PART15 SUBPART B SECTION 15.107(A)

RESULT: Passed

6.1.1 RADIATED EMISSION FOR FCC PART15 SUBPART B SECTION 15.109(A)

RESULT: Passed

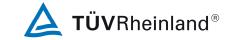


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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

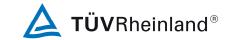
Appendix 1: Test result

2. Test Sites

2.1 Test Facilities

Center Testing International (Shenzhen) Company Limited Building C, Hongwei Industrial Zone, Baoan 70 District, Shenzhen, Guangdong 518101, P.R. China

The tests at the test site have been conducted under the supervision of a TÜV engineer.



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2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Туре	S/N	Calibrated until		
Conducted Emission						
Receiver	R&S	ESCI	1004 35	2009-01-18		
Receiver	R&S	ESCI	1325/2007	2009-08-23		
LISN	ETS	3850	00051952	2009-09-07		
LISN	ETS	3816	00060336	2009-09-07		
Radiated Emission						
3M Chamber &	ETS-LINDGREN	FACT-3	3510	2009-05-12		
Accessory Equipments	210 21110 011211	17.01.0				
Spectrum Analyzer	Agilent	E4443A	MY45300910	2009-09-07		
Biconilog Antenna	ETS-LINDGREN	3142C	920250	2009-01-18		
Horn Antenna	ETS-LINDGREN	3117	00057407	2009-06-27		
Loop Antenna	ETS-LINDGREN	6502	00071730	2009-06-27		
Multi device Controller	ETS-LINDGREN	2090	00057230	N/A		
Microwave Preamplifier	Agilent	8449B	3008A02425	2009-11-16		

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions measurements is ± 3 dB.



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2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

Center Testing International (Shenzhen) Company Limited, test facility located Building C, Hongwei Industrial Zone, Baoan 70 District, Shenzhen, Guangdong 518101, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.



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3. General Product Information

3.1 Product Function and Intended Use

The EUT is a multimedia projector, which is designed with the most advanced technology for portability, durability, and ease of use. This projector utilizes built-in multimedia features, a palette of 16.77 million colors, and matrix liquid crystal display (LCD) technology. For more information refer to the Instruction Manual.

3.2 Ratings and System Details

Rated voltage: AC 100-120V Frequency: 50/60Hz Input current: 2.4A Protection class: I

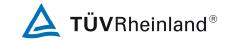
3.3 Independent Operation Modes

The basic operation modes are:

- A. On
 - 1. Computer1 input with audio input
 - a. With monitor output
 - i. With audio output
 - ii. Without audio output
 - b. Without monitor output
 - i. With audio output
 - ii. Without audio output
 - 2. Computer2 input with audio input
 - a. With audio output
 - b. Without audio output
 - 3. Video input with audio input
 - a. With audio output
 - b. Without audio output
- B. Stand by
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.



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3.5 Submitted Documents

Bill of MaterialInstruction ManualPCB Layout

- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

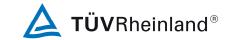
Device Type	Manufacturer	Model	Series No.	Signal Cable	Powerl Cable
Notebook	Acer	4730Z	N/A	N/A	N/A
Monitor	IBM	9205-AB6	V6-KZ133	1.2m	0.8m
DVD	Philips	DVP5965K/93	KX1A0650422576	N/A	N/A

The EUT was tested with following cables:

Interface(s)/Port(s):	Max. cable length, shielding	Cable classification
AC Mains input	3 cores, non-shielded port, 3m	AC Power Input
Computer1/S-video input	RGB port, 15 pins, non-shielded port, 3m	Video Input
Computer2 input/Monitor output	RGB port, 15 pins, non-shielded port, 3m	Video Input/Output
Video input	2 cores, non-shielded port, 3m	Video Input
Audio input L	2 cores, non-shielded port, 3m	Audio Input
Audio input R	2 cores, non-shielded port, 3m	Audio Input
Computer audio input	2 cores, non-shielded port, 3m	Audio Input
Audio output	2 cores, non-shielded port, 3m	Audio Output
Service port	8 cores, 8 pins, non-shielded port, 3m	Used by manufacture



employed to achieve compliance.



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4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were



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4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

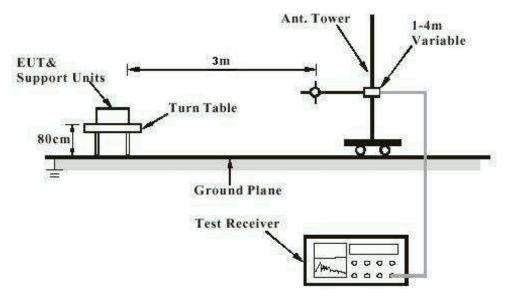
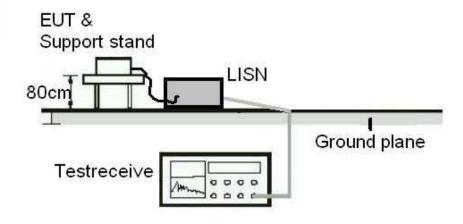


Diagram of Measurement Equipment Configuration for Conduction Measurement





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5. Test Results EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Conducted Emission for FCC Part15 Subpart B Section 15.107(a)

RESULT: Passed

FCC Part15 Subpart B Section 15.107(a)

Date of testing : 2008-10-09
Test specification : FCC Part15 St
Frequency range : 0.15 - 30MHz
Classification : Class B
Test procedure : ANSI C63.4: 20
Deviations from standard : None

ANSI C63.4: 2003

test procedure

Kind of test site Shielded room

Test setup

AC 120V, 60Hz Input Voltage

Operation mode

Artificial hand Not applied Earthing Connected

Refer to attached Appendix 1.



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6. Emission in the Frequency Range above 30 MHz

6.1.1 Radiated Emission for FCC Part15 Subpart B Section 15.109(a)

RESULT: Passed

Date of testing 2008-10-09

FCC Part15 Subpart B Section 15.109(a)

None

Frequency range : Classification : Test procedure 30 - 1000MHz Class B

ANSI C63.4: 2003

Deviation from standard test :

procedure

Kind of test site 3m Semi-Anechoic Chamber

Test setup

Input Voltage AC 120V, 60Hz

Operation mode

Earthing Connected

Refer to attached Appendix 1.



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7. Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Disturbance





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Photograph 2: Set-up for Radiated Emission







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