

DECLARATION OF CONFORMITY

This is to certify that the following product

Digital Dimmer Pack Model NO.: Strand Lighting WallRack

is in compliance with the following standards or specifications according to EMC Directive 2004/108/EC.

EN55014-1,EN55014-2,EN61000-3-4,EN61000-3-5

is in compliance with the following standards or specifications according to Low Voltage Directive2006/95/EC.

EN60950, EN60439, IEC60529

This declaration is provided by the Manufacturer/Importer

NCW (Holdings) Limited

NCW (Holdings) Limited (Name) Unit C, 19/F, Roxy Industrial Centre, No. 41-49 Kwai Cheong Road, Kwai Chung, N.T., Hong Kong (Address)

This declaration is based on the tests which were conducted on the submitted sample(s) of the above mentioned product. Detailed result can be referred to test report No. CET. SL201056 & LVT. SL201056.

Manufacturer:

Date:

Signature:

Name:

Test by:

Date:

Signature:

Name:

NCW (Holdings) Limited

NCW (Holdings) Limited

Unit C, 19/F, Roxy Industrial Centre, No. 41-49 Kwai Cheong Road, Kwai Chung, N.T., Hong Kong Fax: (852) 2798-6545

Tel: (852) 2796-9786

E-mail: info@botex.com



EMC CERTIFICATE

Report No: CET.SL201056

Client: Philips Entertainment

Marssteden 152 7547 TD Enschede The Netherlands

Description of Sample: Two(2) samples stated to be **Digital Dimmer Pack**

of Model No. Strand Lighting WallRack

Date Received : Apr 23, 2010

Test Period : Apr 23, 2010 to May 22, 2010

Test Requested: Electromagnetic Compatibility (**EMC**) test.

Test Method : According to EN55014-1/EN55014-2 and

EN61000-3-4/EN61000-3-5

Test Result : See attached sheets

Conclusion: The submitted samples were found to comply with the

applicable EMC tests.

Authorized Signature

Date May 22, 2010

Dong guan Feng Gang Yan Tian Carex Lighting Equipment Factoy, Chang Tang Rd, Chang Tang Ind Estate Yan Tian District, Fung Kong, Dong guan, China.



TEST REPORT

ADDRESS OF THE TEST LABORATORY

■ NCW Carex Lighting Equipment Factory.

Chang Tang Rd, Chang Tang 1nd Estate Yan Tian District, Fung Kong, Dong Guan, China

ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Temperature : 15°C-35°C

Humidity : 30%RH-65%RH

Atmospheric Pressure : 86KPa-106KPa

POWER SUPPLY SYSTEM UTILIZED

Power supply system: ■ AC230V ~50/60Hz



TEST REPORT

Conducted Emission Test

Conducted emissions were measured from 150KHz to 30MHz with a bandwidth of 9KHz on the 230VAC power and return leads of the EUT according to the methods defined in EN55014-1.

The EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference plane and placed 0.4m from a vertical ground plane which is connected to the horizontal metal ground plane.

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- Test area -shielded room
- □ Anechoic chamber
- ☐ Full compact chamber

Used test instruments please see Attachment A.

Frequency Range (MHz)	Quasi-Peak limit (dΒμν)	Average limit (dBµv)
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 to 30	60	50

_	
Pass	□ Fail
1 000	I I all



TEST REPORT

Conducted Emissions Measurement

EUT	Strand Lighting WallRack
Limit apply to	EN 55014-1
Test Date	May 22, 2010
Power Supply Type	AC230 ~50/60Hz
Result	PASSED

Conducted Emission Test Data

The following table shows the highest levels of conducted emissions on polarization of hot line. Detector mode:CISPR Quasi-Peak mode (6dB Bandwidth:9KHz)

Notes:

- 1. All conditions were investigated and the worst-case emissions are reported.
- 2. If the reading quasi-peak value is below the average limit, do not test average mode.

Manut:

Test spec: EN55014-1

Type/Model: Strand Lighting WallRack

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PAGE 1

Scan Settings (2 Ranges)

|------ Frequencies ------||----- Receiver Settings -----|
Start Stop Step IF BW Detector M-Time Atten Preamp OpRge
150k 30M 5k 10k PK+AV 10ms AUTO LN OFF 60dB

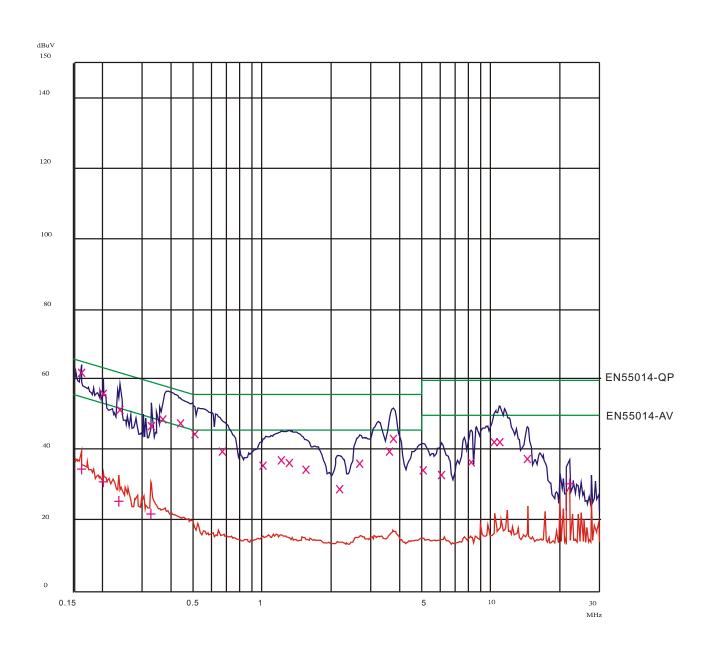
Final Measurement: x QP / + AV

Meas Time: 1s Subranges: 25 Acc Margin: 20dB

Transducer No. Start Stop Name

1 150k 30M LISN_ATT

11 150k 30M EMC_FAC1



PAGE 2

Scan Settings (2 Ranges)

```
|------ Frequencies ------| Start Stop Step IF BW Detector M-Time Atten Preamp OpRge  
150k 30M 5k 10k PK+AV 10ms AUTO LN OFF 60dB
```

Final Measurement Results:

```
Frequency QP Level QP Limit
           dBuV dBuV
   МНz
 0.16000
           62.5
                   65.5
 0.19980
           56.1
                   63.6
 0.23620
           51.6
                   62.2
 0.32420
           47.0
                   59.6
 0.36500
           49.0
                   58.6
 0.43620
0.50500
           47.7
                   57.2
           44.8
                   56.0
 0.66500
           39.8
                   56.0
 1.00500
           35.8
                   56.0
 1.20500
           37.2
                   56.0
 1.30500
                   56.0
           36.5
 1.55000
           34.6
                   56.0
 2.17500
2.66000
           29.1
                   56.0
           36.4
                   56.0
 3.60000
           39.7
                   56.0
 3.74500
           43.3
                   56.0
 5.05500
           34.5
                   56.0
 6.10500
           33.2
                   60.0
 8.21500
           36.8
                   60.0
 10.39000
           42.4
                   60.0
 10.98500
           42.4
                   60.0
 14.53000
           37.7
                   60.0
Frequency AV Level AV Limit
   MHz
           dBuV
                  dBuV
 0.16000
           34.8
                   55.5
 0.19980
           31.2
                   53.6
 0.23300
                   52.3
           25.8
 0.32300
           22.1
                   49.7
 22.26000 30.7
                   50.0
       * limit exceeded
```



TEST REPORT

Radiated Emission Test

Radiated emissions form 30MHz to 300MHz were measured with a bandwidth of 120KHz according to the methods defines in EN55014-1. The EUT was placed on a non-metallic stand in a shielded room, 0.8m above the ground plane. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

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■ Test area - Shielded room.

Testing was performed at a test distance of:

■ 3m

Used test instruments and test accessories please see Attachment A.

Frequency Range (Mhz)	Quasi-Peak limit (dBµv)
30 to 230	40
230 to 300	47

Pass	□ Fail
1 1 033	



TEST REPORT

Radiated Emissions Measurement

EUT	Strand Lighting WallRack
Limit apply to	EN 55014-1
Test Date	May 22, 2010
Power Supply Type	AC230 ~50/60Hz
Result	PASSED

Radiated Emission Test Data

The following table shows the highest levels of Radiated emissions on both polarizations of Horizontal and Vertical. Detector mode:CISPR Quasi-Peak mode (6 dB Bandwidth:9KHz)

NOTES:

- 1. *H:Horizontal polarization ,**V:Vertical polariztion
- 2. Margin value=Limit -Result
- The measurement was performed for the frequency range 30MHz~300MHz according to the EN 55014-1.

Radiated Emission Test

EUT Name: WallRack

Manufacturer:

Testing Spec: V

Tested By: YanJun Huang

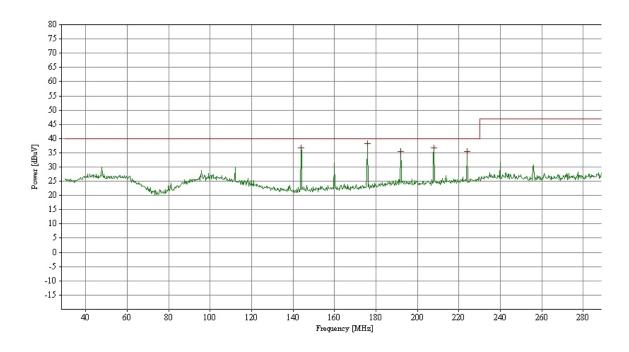
Comment:

Setting: ON 100%

START: 30MHz STOP: 300MHz Ref.Level: 80dBuV Attenuator: 0dB

RBW: 120 KHz VBW: Auto Pre amp: Auto

Chart:



Frequency(MHz)	Peak(dBuV)	Quasipeak(dBuV)	Bandwidth(KHz)	Polarity	Limit(dBuv)
143.83	36.78		120.00	V	40
175.92	38.18		120.00	V	40
191.84	35.49		120.00	V	40
208.02	36.62		120.00	V	40
223.94	35.36		120.00	V	40

Radiated Emission Test

EUT Name: WallRack

Manufacturer:

Testing Spec: H

Tested By: YanJun Huang

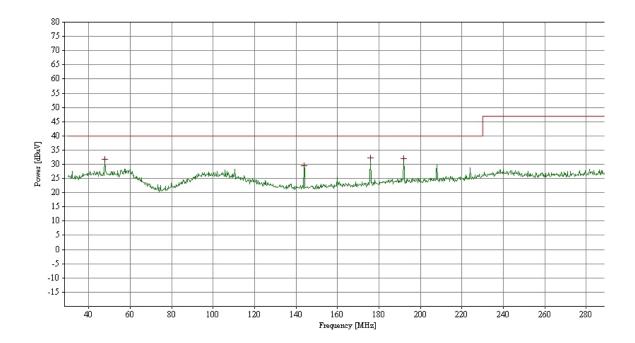
Comment:

Setting: ON 100%

START: 30MHz STOP: 300MHz Ref.Level: 80dBuV Attenuator: 0dB

RBW: 120 KHz VBW: Auto Pre amp: Auto

Chart:



Frequency(MHz)	Peak(dBuV)	Quasipeak(dBuV)	Bandwidth(KHz)	Polarity	Limit(dBuv)
47.8	31.7		120.00	Н	40
143.83	29.52		120.00	Н	40
175.92	32.17		120.00	Н	40
191.84	31.9		120.00	Н	40



TEST REPORT

Appendix A

EMISSION TEST EQUIPMENT

Description	Model Number	Manufacturer	Serial Number	Cal Due Date
EMI TEST Receiver	ESCI	R&S	101028	10.03.24
EMI TEST Receiver	ESHS30	R&S	847115/003	10.03.24
Bilog Antenna	VULB9163	Schwarzbeck	9163-414	10.03.24
Antenna Master	MF-7802	Max-Full	MF780208160	10.03.24
Turn-Table	MF	Max-Full		N/A



SAFETY CERTIFICATE

Report No: LVT.SL201056

Client: Philips Entertainment

Marssteden 152 7547 TD Enschede The Netherlands

Description of Sample: Two(2) samples stated to be **Digital Dimmer Pack**

of Model No. Strand Lighting WallRack

Date Received : Apr 23, 2010

Test Period : Apr 23, 2010 to May 22, 2010

Test Requested: Safety Requirements (<u>LVD</u>) 2006/95/EC

Test Method: According to EN 60950,EN60439 and IEC60529

Test Result : See the attached sheets

Conclusion : The submitted samples were found to comply with the

applicable LVD test..

Authorized Signature

Date May 22, 2010

Dong guan Feng Gang Yan Tian Carex Lighting Equipment Factoy, Chang Tang Rd, Chang Tang Ind Estate Yan Tian District, Fung Kong, Dong guan, China.



TEST REPORT

Report No: LVT.SL201056

Client : Philips Entertainment

Marssteden 152 7547 TD Enschede The Netherlands

The Following Information Was Moulded On The Sample:

Model No : Strand Lighting WallRack(24 x 2.5KW)

Power input : AC230 ~50/60Hz

Channel Output : Max rating 80A-3 phase,160A-single phase



TEST REPORT

Report No: LVT.SL201056

Client : Philips Entertainment

Marssteden 152 7547 TD Enschede The Netherlands

TEST RESULTS:

PLAUSE	TITLE/DESCRIPTION	RESULI
1	Definitions	
2	General Requirements	
3	General Notes On Tests	
4	Rating	Complied
5	Classification	
6	Information	
7	Protection Against Electric shock	Complied
8	Provision For Protective Earthing	Complied
9	Terminals and Termination	Complied
10	Constructional Requirements	Complied
11	Moisture and Dust Resistance	Complied
12	Electric Strength and Insulation Resistance	Complied
13	Heating	Complied
14	Manufacturing Deviation and Drift	
15	Environmental Stress	

Dong guan Feng Gang Yan Tian Carex Lighting Equipment Factoy, Chang Tang Rd, Chang Tang Ind Estate Yan Tian District, Fung Kong, Dong guan, China.



TEST REPORT

Report No: LVT.SL201056

Client : Philips Entertainment Marssteden 152

Marssteden 152 7547 TD Enschede The Netherlands

TEST RESULTS:

CLAUSE	TITLE/DESCRIPTION	RESULT
16	Endurance	
17	Mechanical Strength	Complied
18	Threaded Parts and Connections	Complied
19	Creepage Distances, Clearances and Distances	
	Through Insulation	Complied
20	Resistance To Heat , Fire and Tracking	Complied
21	Resistance To Corrosion	
22	Components	Complied
23	Normal Operation	Complied
24	Abnormal Operation	Complied
25	Guidance on The Use of Electronic Disconnection	Complied
