

CTS (NINGBO) TESTING SERVICE TECHNOLOGY INTERNATIONAL

**OPERATE ACCORDING TO ISO/IEC 17025** 

# **EMC TEST REPORT**

# TEST REPORT NUMBER : CNB3120316-00371-E



CE

CTS (Ningbo) Testing Service Technology Co., Ltd. GZ test site;Building F, Dachuang industrial park, No.379, Zhongshan Dadao, Guangzhou, China.

#### **CENTRE OF TESTING SERVICE**





	TEST REPORT EN 55015:2006+A1:2007+A2:20	000
	surements of radio disturbance char similar equipment. EN 61547:2009	acteristics of electrical lighting and
· · ·	general lighting purposes-EMC im	munity requirements.
Report Reference No		
Date of issue	22 March 2012	
•	CTS (Ningbo) Testing Service	
	GZ test site;Building F, Dachuar Zhongshan Dadao, Guangzhou, Full application of Harmonised s	, China. standards   ■
	Partial application of Harmonise Other standard testing method	
Applicant's name	CHINA-BASE NINGBO SHINES	
Address	666 TianTong Nan Road, YinZho	ou District, Ningbo China
Test specification:		
Standard	EN 55015: 2006+A1: 2007+A2:	2009, EN 61547: 2009
Test Report Form No	CTSEMC-1.0	
TRF Originator	CTS (Ningbo) Testing Service T	echnology Co., Ltd.
Master TRF	Dated 2009-01	
This publication may be repro CTS (Ningbo) Testing Service of the material. CTS (Ningbo)	Testing Service Technology Co., Lt es resulting from the reader's interp	
Test item description	LED Decoration light	
Trade Mark	1	NOF TESING S
Manufacturer	/	
Model/Type reference	CBNS	
Ratings	battery 3V	The state
Result	PASSED	ERNATIO
Compiled by:	Supervised by:	Approved by:

Compiled by:

olet

Violet Lee / File administrators

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Approved by:

Vincent yao / Manager

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# EMC -- TEST REPORT

# Test Report No. : CNB3120316-00371-E

22 March 2012 Date of issue

Decoration light NA-BASE NINGBO SHINES CO.,LTD TianTong Nan Road,YinZhou District,Ningbo China
TianTong Nan Road, YinZhou District, Ningbo China
-27860668
-27860669

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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## 1 TEST STANDARDS

The tests were performed according to following standards:

EN 55015:2006+A1:2007+A2:2009 Limits and methods of measurements of radio disturbance characteristics of electrical lighting and similar equipment.

EN 61547:2009 Equipment for general lighting purposes-EMC immunity requirements.

## 2 SUMMARY

#### 2.1 GENERAL REMARKS

Date of receipt of test sample	16 March 2012
Testing commenced on	20 March 2012
Testing concluded on	20 March 2012

#### 2.2 FINAL ASSESSMENT

The EMC requirements pertaining to the technical standards and tested operation modes are

- fulfilled.
- $\Box$  **not** fulfilled.

The equipment under test

■- fulfils the EMC requirements cited on page 3.

 $\Box$ - **does not** fulfil the EMC requirements cited on page 3.

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Report No.: CNB3120316-00367-E







## **3 EQUIPMENT UNDER TEST**

#### 3.1 Power supply system utilised

Power supply voltage: ■battery 3V

### 3.2 Short description of the Equipment under Test (EUT)

Number of tested samples: 1 Serial number: Prototype

#### 3.3 EUT operation mode

The equipment under test was operated during the measurement under the following conditions:

– Normal

Operating Mode:	Normal

Emissions tests.....: According to EN 55015,, searching for the highest disturbance. Immunity tests .....: According to EN 61547, searching for the highest susceptivity.

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#### 3.4 EUT configuration

(The CDF filled by the applicant can be viewed at the test laboratory.)

The following peripheral devices and interface cables were connected during the measurement:

Not Applicable

#### 3.5 Performance level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test, relative to a performance level defined by its manufacturer or the requestor of the test, or agreed between the manufacturer and the purchaser of the product.

#### 3.6 Definition related to the performance level

■ based on the used product standard

□ based on the declaration of the manufacturer, requestor or purchaser

#### Criterion A:

Definition: normal performance within limits specified by the manufacturer, requestor or purchaser:

#### Criterion B:

Definition: temporary loss of function or degradation of performance which ceases after the disturbance ceases, and from which the equipment under test recovers its normal performance, without operator intervention:

#### Criterion C:

Definition: temporary loss of function or degradation of performance, the correction of which requires operator intervention:

#### Criterion D:

Definition: loss of function or degradation of performance, which is not recoverable, owing to damage to hardware or software, or loss of data:

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## 4 TEST ENVIRONMENT

#### 4.1 Address of the test laboratory

GZ test site; Building F, Dachuang industrial park, No.379, Zhongshan Dadao, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

#### 4.2 Test facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS-Lab Code: L3394

CTS (Ningbo) Testing Service Technology Co., Ltd. Has been assessed and proved to be in compliance with CNAS-CL01: 2006 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

#### **IC-Registration No.: 8374A**

The 3m Alternate Test Site of CTS (Ningbo) Testing Service Technology Co., Ltd. Has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 8374A on June 06, 2011.

#### FCC-Registration No.: 971995

CTS (Ningbo) Testing Service Technology Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration No.971995, July 21, 2009.

#### 4.3 Environmental conditions

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

Temperature:	15~35 ° C
Humidity:	25~75 %
Atmospheric pressure:	86~106 kPa

#### 4.4 Definitions of symbols used in this test report

- The black square indicates that the listed condition, standard or equipment is applicable for this report.
- The empty square indicates that the listed condition, standard or equipment is **not** applicable for this report.

## 4.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the CTS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

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## 4.6 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±1.22dB	(1)
Power disturbance	30MHz~300MHz	±1.38dB	(1)
Dediction emission (2m)	30MHz~300MHz	±3.14dB	(1)
Radiation emission (3m)	300MHz~1000MHz	±3.18dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

(2) The actual EUT tested items in this test report, only applies to this "measurement uncertainty" in part / all of the corresponding data.

#### **4.7 Test Description**

#### 4.7.1 Description of Standards and Results

		EMISSION			
Description of Test Item Standard				Limits	Results
Conducted disturbance	EN	I 55015: 2006+A1: 2007+A2:	2009		N/A
Radiated Disturbance (Magnetic)	EN	I 55015: 2006+A1: 2007+A2:	2009		PASS
Radiated Disturbance (Electric)	EN	I 55015: 2006+A1: 2007+A2:	2009		PASS
Harmonic current emissions	EN 6	31000-3-2: 2006+A1:2009+A	2:2009	Class C	N/A
Voltage fluctuations & flicker		EN 61000-3-3: 2008			N/A
IMI	MUNI	TY (EN 61547: 2009)			
Description of Test Item		Basic Standard		rmance iteria	Results
Electrostatic discharge (ESD)		IEC 61000-4-2: 2008		В	PASS
Radio-frequency, Continuous radiated disturbance		IEC 61000-4-3: 2010		A	PASS
Electrical fast transient (EFT)		IEC 61000-4-4: 2007		В	N/A
Surge		IEC 61000-4-5: 2009		В	N/A
Radio-frequency, Continuous conducted disturbance		IEC 61000-4-6: 2008		А	N/A
Power frequency magnetic field		IEC 61000-4-8: 2009		A	PASS
Voltage dips and interruptions		IEC 61000-4-11: 2010	В	8&C	N/A
N/A is an abbreviation for Not Applica	able.				

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## **5 TEST CONDITIONS AND RESULTS**

### 5.1 Radiated disturbance (magnetic field)

For test instruments and accessories used see section 6 part 6.2.

#### 5.1.2Description of the test location

Test location : Shielded room

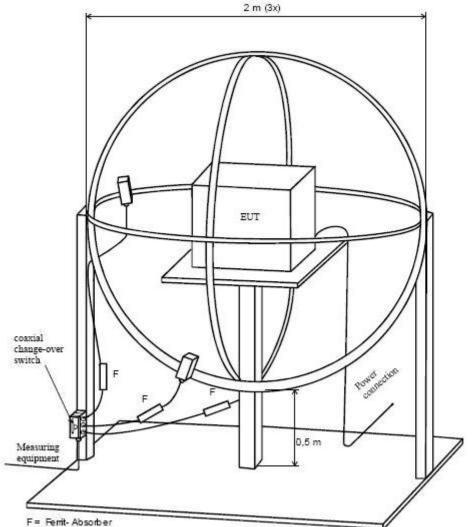
Test disturbance: 2 Meter

#### 5.1.2 Description of the test set-up

5.1.2.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

5.1.2.2 Block Diagram of Test Setup



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#### 5.1.3 Limits of disturbance

Frequency			Limits for loop diameter (dBµA)
'	requei	icy	2m
9kHz	~	70kHz	88
70kHz	~	150kHz	88 ~ 58*
150kHz	~	3.0MHz	58 ~ 22*
3.0MHz	~	30MHz	22

Note: (1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

#### 5.1.4 Test result

The requirements are	Fulfilled
Band width	9kHz
Frequency range	9kHz – 30 MHz
Min. Limit margin MHz	>14.63 dB at 9kHz- 30MHz

**Remarks:** The limits are kept. For detailed results, please see the following page(s).

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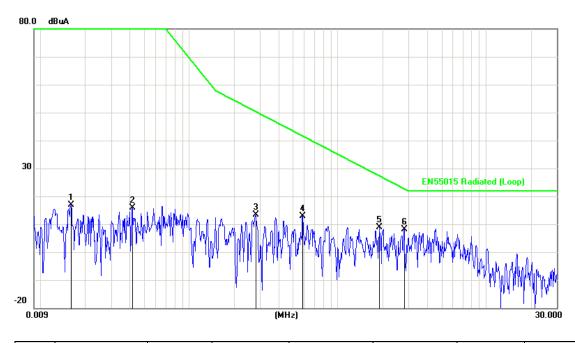
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#### 5.1.5 Test protocol

Operation mode Remarks:	Normal		□ – not passed
Test point:	Х	Result:	– passed

EUT	LED Decoration light
Operating Condition	battery 3V
Test Condition	Ambient Temperature: 24°C Humidity: 56%
Operator	Alan
MODEL NO.	CBNS



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0160	54.83	-37.89	16.94	88.00	-71.06	peak
2	0.0413	55.35	-39.52	15.83	88.00	-72.17	peak
3	0.2805	55.76	-42.49	13.27	50.47	-37.20	peak
4	0.5821	55.17	-42.39	12.78	41.70	-28.92	peak
5	1.9026	54.57	-45.73	8.84	27.47	-18.63	peak
6	2.8083	54.52	-46.36	8.16	22.79	-14.63	peak

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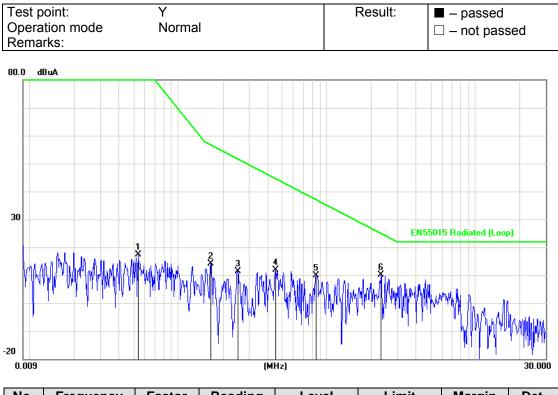
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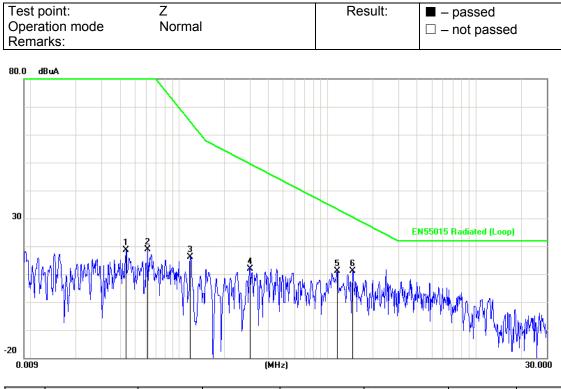
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0541	56.46	-39.19	17.27	88.00	-70.73	peak
2	0.1656	56.20	-42.18	14.02	56.81	-42.79	peak
3	0.2504	56.05	-44.62	11.43	51.84	-40.41	peak
4	0.4527	55.95	-44.03	11.92	44.73	-32.81	peak
5	0.8454	55.10	-45.11	9.99	37.22	-27.23	peak
6	2.3303	53.60	-43.45	10.15	25.04	-14.89	peak

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No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0437	56.40	-37.87	18.53	88.00	-69.47	peak
2	0.0615	57.17	-38.35	18.82	88.00	-69.18	peak
3	0.1187	56.44	-40.30	16.14	67.19	-51.05	peak
4	0.3017	56.60	-44.77	11.83	49.60	-37.77	peak
5	1.1600	56.10	-44.85	11.25	33.42	-22.17	peak
6	1.4796	55.91	-44.90	11.01	30.49	-19.48	peak

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#### 5.2 Radiated disturbance (Electric field)

For test instruments and accessories used see section 6 part 6.3.

#### 5.2.1 Description of the test location

Test location : Semi-Anechoic chamber

Test disturbance: 3 Meter

#### 5.2.2 Description of the test set-up

5.2.2.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

5.2.2.2 Block Diagram of Test Setup

#### 5.2.3 Limits of disturbance

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dB $\mu$ V/m)
30 ~ 230	3	40
230 ~ 300	3	47

Note: (1) The tighter limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

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#### 5.2.4 Test result

The requirements are	Fulfilled
Band width	120kHz
Frequency range	30 MHz – 300 MHz
Min. limit margin	>3.36 dB at 30 – 300 MHz

**Remarks:** The limits are kept. For detailed results, please see the following page(s).

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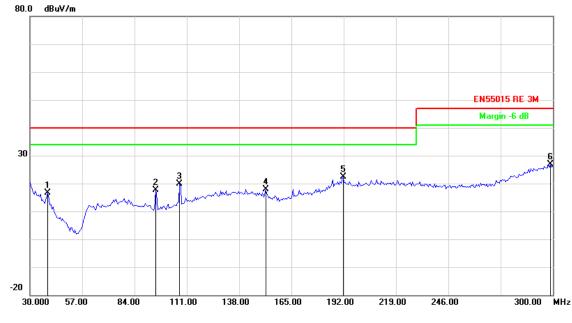
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#### 5.2.5 Test protocol

Test point: Operation mode Remarks:	Horizontal Normal	Result:	<ul> <li>passed</li> <li>not passed</li> </ul>
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EUT	LED Decoration light
Operating Condition	battery 3V
Test Condition	Ambient Temperature: 24°C Humidity: 56%
Operator	Alan
MODEL NO.	CBNS



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	39.1984	-40.90	57.49	16.59	40.00	-23.41	QP
2	94.9299	-40.56	58.14	17.58	40.00	-22.42	QP
3	107.3747	-38.95	58.74	19.79	40.00	-20.21	QP
4	151.7434	-36.07	53.89	17.82	40.00	-22.18	QP
5	191.7836	-31.39	53.71	22.32	40.00	-17.68	QP
6	298.9178	-25.60	52.57	26.97	47.00	-20.03	QP

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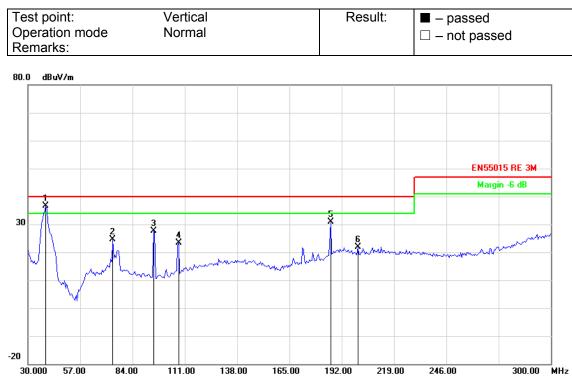
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No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	39.1984	-40.90	77.54	36.64	40.00	-3.36	QP
2	73.8277	-38.65	63.21	24.56	40.00	-15.44	QP
3	94.9299	-40.56	68.09	27.53	40.00	-12.47	QP
4	107.9158	-38.84	62.10	23.26	40.00	-16.74	QP
5	186.3727	-32.46	63.23	30.77	40.00	-9.23	QP
6	200.4409	-32.06	54.03	21.97	40.00	-18.03	QP

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#### 5.3 Electrostatic discharge

For test instruments and accessories used see section 6 part 6.6.

#### 5.3.1 Description of the test location

Test location :	Test location no. 2
Power supply:	battery 3V
Test condition:	Ambient Temperature: 24°C, Humidity:56%
Date of test :	20 March 2012
Operator :	Alan

#### 5.3.2 Severity of levels electrostatic discharge

5.3.2.1 Severity level: Contact discharge at  $\pm$ 4KV air discharge at  $\pm$ 8KV

Level	Test Voltage Contact Discharge (kV)	Test Voltage Air Discharge (kV)
1	2	2
2	4	4
3	6	8
4	8	15
X	Special	Special

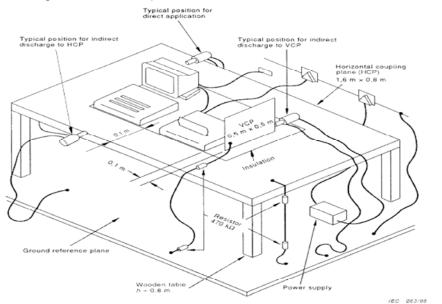
5.3.2.2 Performance criterion: B

#### 5.3.3 Description of the test set-up

5.3.3.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

5.3.3.2 Block Diagram of Test Setup



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 Tel: +86-20-85543113 (32 lines)
 Fax: +86-20-38780406

 Complaint line: +86-20-85533471
 E-mail: cts@cts-lab.com.cn



#### 5.3.4 Test specification:

Contact discharge voltage:	■ 2 kV ■ 4 kV
Air discharge voltage:	■ 2 kV ■ 4 kV ■ 8 kV
Discharge impedance:	■ 330 Ω / 150 pF
Discharge factor:	■ ≥ 1 sec.
Number of discharges:	■ ≥ 10
Type of discharge:	Direct discharge Air discharge
	■ Contact discharge         Indirect discharge         ■ Contact discharge
Polarity:	■ Positive ■ Negative
Discharge location:	■see photo documentation of the test set-up
	■all external locations accessible by hand
	■horizontal plate (HCP)
	■vertical coupling plate (VCP)

#### 5.3.5 Test result

The requirements are Fulfilled

Performance Criterion: B

**Remarks:** During the test no deviation was detected to the selected operation mode(s).

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#### 5.4 Radiated, radio-frequency, electromagnetic field

For test instruments and accessories used see section 6 part 6.7.

#### 5.4.1 Description of the test location

Test location :	GTEM chamber
Power supply:	battery 3V
Test condition:	Ambient Temperature: 24°C, Humidity:56%
Date of test :	20 March 2012
Operator :	Alan

#### 5.4.2 Severity levels of radiated, Radio-frequency, electromagnetic field

5.4.2.1	Severity	level:	3V/m
---------	----------	--------	------

Level	Field strenght(V/m)
1	1
2	3
3	10
X	Special

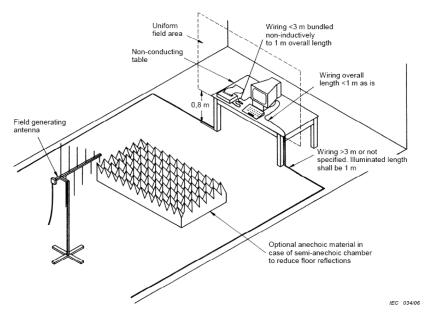
5.4.2.2 Performance criterion: A

#### 5.4.3 Description of the test set-up

5.4.3.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

5.4.3.2 Block Diagram of Test Setup



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#### 5.4.4 Test specification:

Frequency range:	80 MHz to 1000 MHz			
Field strength:	■ 3 V/m			
EUT – antenna separation:	■ 3 m			
Modulation:	<ul><li>AM: 80 %</li><li>sinusoidal 1000Hz</li></ul>			
Frequency step:	1 % with 3 s dwell time			
Antenna polarisation:	■ horizontal			

#### 5.4.5 Test result

The requirements are **Fulfilled** Performance Criterion: **A** 

**Remarks:** During the test no deviation was detected to the selected operation mode(s).

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### 5.5 Power frequency magnetic field

For test instruments and accessories used see section 6 part 6.11.

#### 5.5.1 Description of the test location

Test location :	Test location no. 2
Power supply:	battery 3V
Test condition:	Ambient Temperature: 24°C, Humidity:56%
Date of test :	20 March 2012
Operator :	Alan

#### 5.5.2 Severity levels of magnetic field immunity

5.5.2.1 Severity Level: 3A/m

Level	Magnetic Field Strength (A/m)
1	1
2	3
3	10
4	30
5	100
X	Special

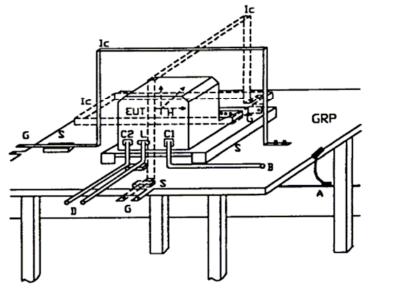
5.5.2.2 Performance Criterion: A

#### 5.5.3 Description of the test set-up

5.5.3.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

5.5.3.2 Block Diagram of Test Setup



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#### 5.5.4 Test specification:

Test frequency:	■ 50 Hz	
Continuous field:	■ 3 A/m	
Duration (Continuous field):	■ 60 s each Axis	
Short duration (1-3s):	■ 300 A/m	
Axis:	■ x-axis ■ y-axis ■ z-axis	

#### 5.5.5 Test result

The requirements are **Fulfilled** 

Performance Criterion: A

**Remarks:** During the test no deviation was detected to the selected operation mode(s).

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## **6 USED TEST EQUIPMENT**

6.1
-----

Condu	ucted Disturbance				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESHS10	842884/012	2011/12
2	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/025	2011/12
3	Pulse Limiter	ROHDE & SCHWARZ	ESHSZ2	100301	2011/12
4	EMI Test Software	ROHDE & SCHWARZ	ESK1	N/A	2011/12

#### 6.2

Radia	Radiated Disturbance (Magnetic field)					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	EMI Test Receiver	ROHDE & SCHWARZ	ESHS10	842884/012	2011/12	
2	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/025	2011/12	
3	Triple-loop antenna	ROHDE & SCHWARZ	HM020	100015	2011/12	
4	Pulse Limiter	ROHDE & SCHWARZ	ESHSZ2	100301	2011/12	
5	EMI Test Software	ROHDE & SCHWARZ	ESK1	N/A	2011/12	

6.3

Radia	Radiated Emission(Electric field)					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100868	2011/12	
2	Biconical Antenna	ROHDE & SCHWARZ	HK116	100221	2011/12	
3	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2011/12	
4	Log per Antenna	ROHDE & SCHWARZ	HL050	100186	2011/12	
5	EMI Test Software	ROHDE & SCHWARZ	ESK1	N/A	2011/12	

6.4

Harm	Harmonic Current						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	Harmonic And Flicker Analyzer	EMC Partner	HAR1H01B	HAR1000-48	2011/12		

6.5

Voltage fluctuation and Flicker						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	Harmonic And Flicker Analyzer	EMC Partner	HAR1H01B	HAR1000-48	2011/12	

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Electrostatic Discharge						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	ESD Simulator	Schlöder	SESD 200	302016	2011/12	

6.7

RF Field Strength Susceptibility							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	SIGNAL GENERATOR	ROHDE & SCHWARZ	SMY 01	843215/014	2011/12		
2	AMPLIFIER	KALMUS	713FC	Jan-85	2011/12		
3	EMS Test Software	ROHDE & SCHWARZ	ESK1	N/A	2011/12		

Electrical Fast Transient/Burst						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	EMC test system Transient-1000	EMC Partner	TRA1H01B	HAR1000-78	2011/12	
2	Coupling Clamp	EMC Partner	SFT 410	302015	2011/12	

6.8

#### 6.9

Surge							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	EMC test system Transient-1000	EMC Partner	TRA1H01B	HAR1000-78	2011/12		

#### 6.10

Conducted Susceptibility						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	
1	RF generator / amplifier	Schlöder	CDG 6000	HU906007	2011/12	
2	CDN	Schlöder	CDN M3	A3003008	2011/12	
3	CDN	Schlöde	CDN T2	A3010005	2011/12	
4	EM injection clamp	Liithi	EM101	35670	2011/12	
5	EMS Test Software	ROHDE & SCHWARZ	ESK1	N/A	2011/12	

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# CTS

Power Frequency Magnetic Field Susceptibility					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Power frequency mag-field generator System	EM TEST	EMS61000-8K	409001	2011/12

#### 6.12

Volta	Voltage Dips						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	EMC test system Transient-1000	EMC Partner	TRA1H01B	HAR1000-78	2011/12		

6.13

Voltag	Voltage Short Interruptions						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.		
1	EMC test system Transient-1000	EMC Partner	TRA1H01B	HAR1000-78	2011/12		

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Report No.: CNB3120316-00367-E



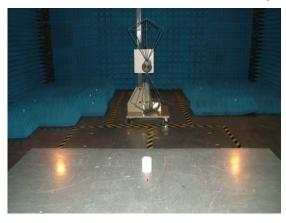


## 7 TEST PHOTOGRAPHS

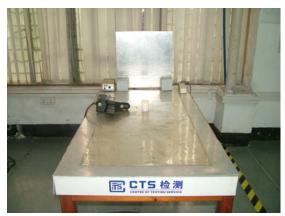
7.1. Photos of radiated emission measurement (Magnetic field)



7.2. Photos of radiated emission measurement (Electric field)



7.3. Photo of electrostatic discharge Immunity measurement



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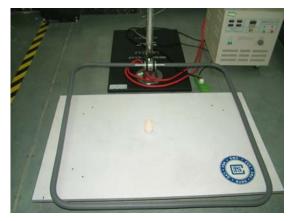
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7.4. Photo of RF field strength Immunity measurement



7.5. Photo of PFM field immunity measurement



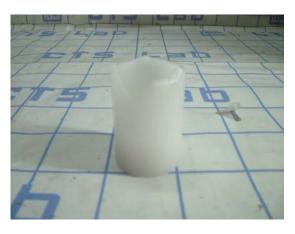
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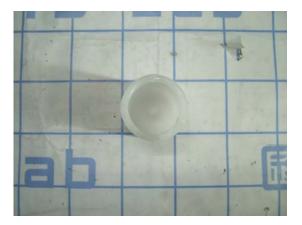
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## 8 EXTERNAL AND INTERNAL PHOTOS OF THE EUT



#### **External view-front**



External view-side1



#### External view-side2

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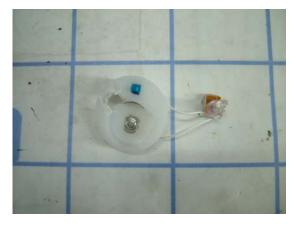
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Internal view1



Internal view2



External view1

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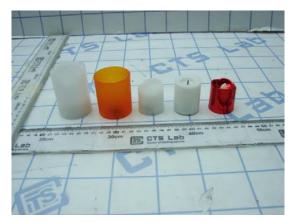
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**External view2** 



**External view3** 



**External view4** 

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**External view5** 



**External view6** 



#### External view7

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## 9 Manufacturer/ Approval holder Declaration

The following identical model(s):

N/A

Belong to the tested device:

Product description: LED Decoration light Model name: CBNS

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