

# LOW TEMPERATURE STORAGE TEST REPORT

Company : Paragon Semiconductor Lighting Technology Co., Ltd

Address : 3F., No.369, Sec. 2, Wenhua 2nd Rd., Linkou Dist.New Taipei City  
24458, Taiwan (R.O.C.)

Model Name : Please see page 2

Date Received : OCT 18, 2012

Date Tested : OCT 23, 2012

**TESTING LABORATORY IS ACCREDITED BY:**

IEC/IECQ 17025 certificate of independent test laboratory approval

Certificate No. : 1.72.0031

ISO 17025 accredited in respect of laboratory is approved by TAF

Certificate No. : L0835-120910

ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

**WE HEREBY CERTIFY THAT:**

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

	Name	Signature	Date
Test Engineer	Bobby Hsieh	<i>Bobby Hsieh</i>	Oct 25, 2012
Manager	Bruce Liu	<i>Bruce Liu</i>	Oct 25, 2012

**Note :**

1. This report will be invalid if reproduced in part or altered in any way.
2. This report refers only to the specimen(s) submitted to test, and is invalid if used otherwise.
3. This report is ONLY valid with the examination seal and signature of this institute.
4. The tested specimen(s) will only be preserved for thirty days from the date issued, if not collected by the applicant.





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## 1. GENERAL INFORMATION

### 1.1 DESCRIPTION OF UNIT

Manufacturer : Paragon Semiconductor Lighting Technology Co., Ltd

Model name and sample quantity :

Test item	Model name	Sample quantity
CBAC-08-36135-110V-XX CBAC-37-5028-110V-XX CBAC-74-5028-110V-XX CBHV-88-8028-120V-XX	Low temperature storage test- condition 1 and 2	4 pcs
CBAC-08-36135-220V-XX CBAC-78-5028-220V-XX CBAC-78-5028-220V-XX CBHV-80-8028-220V-XX		4 pcs
CBAC-08-36135-110V-XX CBAC-37-5028-110V-XX CBAC-74-5028-110V-XX CBHV-88-8028-120V-XX CBAC-08-36135-220V-XX CBAC-78-5028-220V-XX-BXX CBAC-78-5028-220V-XX-CXX CBHV-80-8028-220V-XX	Low temperature storage test- condition 3	8 pcs

## 2. LOW TEMPERATURE STORAGE TEST

### 2.1 TEST EQUIPMENT

Model	Serial Number	Calibration Date
ESPEC MC-810T	111008159	MAR 07, 2012

### 2.2 LABORATORY AMBIENCE CONDITION

Temperature :  $25\pm 5^{\circ}\text{C}$

Relative humidity :  $55\%\pm 20\%$  (RH)

### 2.3 REFERENCE DOCUMENT

The test specification is based on customer's request.

### 2.4 TEST CONDITION

#### 2.4.1 TEST CONDITION 1

Units are non-operating.

Temperature :  $-60^{\circ}\text{C}$

Test time : 24 hours

#### 2.4.2 TEST CONDITION 2

Units are operating

Input Voltage : 110V

Temperature :  $-60^{\circ}\text{C}$

Test time : 24 hours

#### 2.4.3 TEST CONDITION 3

Units are operating

Input Voltage : 220V

Temperature :  $-60^{\circ}\text{C}$

Test time : 24 hours

## 2.5 SUMMARY OF TEST

Visual inspection of sample surfaces showed there are cracks on the plastic holder, but no abnormality on the the LED.

Test data as below.

			Before				After			
			Voltage	I (A)	P	PF	Voltage	I (A)	P	PF
Storage	110V	6W	109.7	0.048	4.6	0.89	109.7	0.048	4.7	0.87
		11W	109.7	0.104	10.3	0.90	109.7	0.105	10.4	0.90
		22W	109.6	0.210	21.1	0.91	109.7	0.211	21.1	0.91
		33W	109.6	0.220	21.1	0.89	109.8	0.218	21.3	0.89
	220V	6W	219.9	0.033	6.5	0.89	220.0	0.033	6.5	0.89
		11W	220.0	0.050	9.8	0.90	220.0	0.050	9.9	0.90
		22W	219.8	0.102	20.4	0.90	219.9	0.101	20.0	0.90
		33W	220.0	0.014	28.4	0.96	220.0	0.084	16.9	0.93
Operation	110V	6W	109.7	0.050	4.8	0.89	109.7	0.050	4.9	0.87
		11W	109.7	0.105	10.4	0.91	109.7	0.104	10.4	0.91
		22W	109.6	0.213	21.2	0.91	109.7	0.215	21.5	0.91
		33W	109.7	0.218	21.0	0.89	109.8	0.222	22.6	0.90
	220V	6W	220.0	0.032	6.3	0.90	220.0	0.032	6.3	0.89
		11W	220.0	0.048	9.7	0.91	219.9	0.048	9.7	0.91
		22W	219.8	0.098	19.3	0.90	219.9	0.098	19.3	0.88
		33W	220.0	0.014	28.8	0.96	220.0	0.066	12.9	0.92

**Attachment 1 : Photo of units**



## Attachment 2 : Photo of measurement setup





**Attachment 3 : Photo of test setup**

