



Verification Services

Project No: 4787016661-45

Report No: 4787016661-45b

Report Issued Date: 2015-11-02



Test Report

Applicant Company & Address:			
SHENZHEN SNOWBALL LIGHTING LIMITED ADD: NO.82 CENTER VILLAGE, MISSION HILLS SONGYUANXIA, GUANLAN TOWN, LONGHUA DISTRICT, SHENZHEN, GUANGDONG PROVINCE, CHINA 518110			
Contact Person:	Judy Briggs (judy@snowball-co.com)		
Telephone:	86-755-29078625	Fax:	--

Manufacturer Name:	SHENZHEN SNOWBALL LIGHTING LIMITED		
Country of Origin:	China		
Country of Export:	USA, Canada		
Product Description:	Lamp Type: High-Bay Luminaires for Commercial and Industrial Buildings Total amount of light source: 30 pcs Manufacturer Of Light Source: Cree Inc. Model Number Of Light Source: MHB		
Model Number:	SB-HB/H/100W/3D/SCW		
Electrical Specification:	120-277V AC, 50/60Hz, 100W (5700K)		

Test Laboratory & Address:			
UL Verification Services (Guangzhou) Co., Ltd. ADD: Building A1, 1F & 2F, Nansha Science and Technology Innovation Center, No. 25, South Huanshi Avenue, Nansha District, Guangzhou 511458, China			
Telephone:	+86 20 28667188	Fax:	+86 20 83486605

Receipt of Test Samples:	2015-09-24	Test Period:	2015-09-25
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Tested By	Approved By
 / Fabio Fu	 / Sam Tse
Tester Signature / Print Name	Approver Signature / Print Name

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.



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Statement of Results

Test Flow	Test Method	Sample ID (Lab)	Sample Serial No.	Pass/Fail/NA
1. Integrating Sphere Test	LM-79-08	2236969-S001	N/A	Evaluate by customer

Deviation from Test Method (if any)

N/A

Remark (if any)

1. This report shall not be used by the client to claim product endorsement by NVLAP, NIST or any agency of the US government.
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Test Report

Test No.1: Integrating Sphere Test

Environmental Conditions

Temperature:	25.1°C
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Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Calibration Due Date
GVS-LE-PE003	Integrating Sphere	Before Use	Before Use
GVS-LE-FS009	Measurement Standard Lamp	2015-08-20	2016-08-19

Test Sample

2236969-S001

Test Method

<p>1. The sample was tested according to the IES LM-79-2008.</p> <p>2. Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25°C ± 1°C.</p> <p>3. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>4. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.</p>

Test Result

Test Type	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Orientation	Operate time (Min.)	Stabilization time (Min.)
Input	120.18	60	0.8526	101.99	0.995	Face Down	58	50

Test Type	CCT (K)	Luminous Flux (lm)	Color Rendering Index Ra	Luminous Efficacy (lm/W)
Output	5668	11274.94	80.6	110.52



Test Report

Test Condition

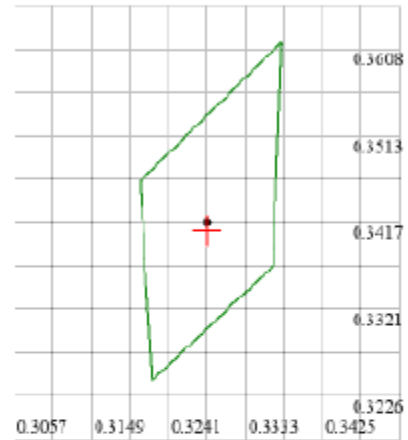
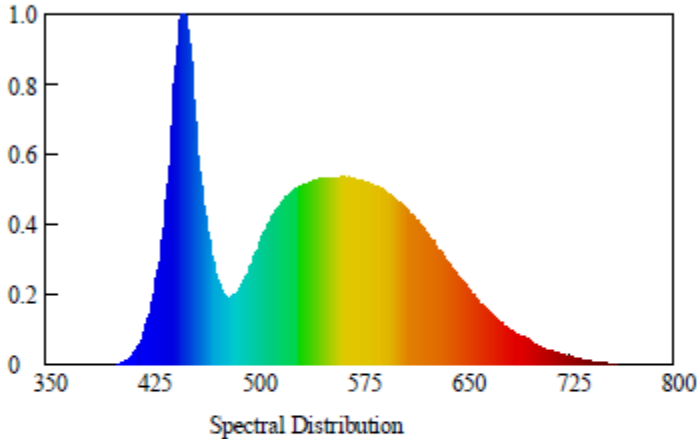
Temperature: 25.1°C

RH: ----%

Spectrum Range: 380-780 nm

Scan Step: 1 nm

Spectroradiometric Parameters



Nominal CCT: LED_5700K
 $x_0=0.3287$ $y_0=0.3408$

Chromaticity Coordinates: $x=0.3287$ $y=0.3408$ $u'=0.2044$ $v'=0.4769$

Correlated Color Temperature: 5668 K

Dominant Wavelength: 515.0 nm(E)

Luminous Flux: 11271.940 lm

Purity: 0.0157

Chromaticity Difference: +0.00157Duv

Peak Wavelength: 450.4 nm

Color Ratio: $K_r=31.7\%$ $K_g=57.4\%$ $K_b=10.9\%$

Bandwidth: 22.1nm

Radiant Flux: 35.518 W

Rendering Index: $R_a=80.6$

R1=80 R2=84 R3=86 R4=81 R5=80 R6=77 R7=87 R8=69

R9=7 R10=61 R11=80 R12=55 R13=81 R14=92 R15=76



Test Report

Photos of sample



*******END OF TEST REPORT*******