



# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Project No. G101603639

Date: April 14, 2014

## REPORT NO. 101603639CRT-001

TEST OF ONE PORTABLE ELECTRIC LUMINAIRE WITH A SINGLE 8" WIDE FLOOD SPREAD LENS

FIXTURE MODEL NO. SS-SPP-100 3K WHITE-18-0113 LED MODEL NO. Philips Lumileds LX18-P130-3

#### **RENDERED TO**

#### ALTMAN STAGE LIGHTING INC 57 ALEXANDER STREET YONKERS, NY, 10701

TEST: Electrical and Photometric tests as required to the IESNA test standard.

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

- <u>AUTHORIZATION</u>: The testing performed was authorized by signed quote number 500508985.
- <u>STANDARDS USED</u>: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:
- IESNA LM-79: 2008 Approved Method for Electrical and Photometric Measurements of Solid-State Lighting Products

ANSI ANSLG C38.377: 2012 Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE: The client submitted one production sample of model number SS-SPP-100 3K WHITE-18-0113. The sample was received by Intertek on February 13, and April 9, 2014, in undamaged condition, and one sample was tested as received. The sample designation was CRT1402131143-001.

DATES OF TESTS: April 11, 2014.

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# **SUMMARY**

### Model No.: SS-SPP-100 3K WHITE-18-0113 Description: Portable Electric Luminaire With A Single 8" Wide Flood Spread Lens

Criteria	Result
Total Lumen Output	4210 Lumens
Total Power	93.12 W
Luminaire Efficacy	45.21
Power Factor	0.588

# EQUIPMENT LIST

			Last	
	Model	Control	Calibration	Calibration
Equipment Used	Number	Number	Date	Due Date
LSI High Speed Mirror Goniometer	6440		03/25/14	04/25/14
Elgar Power Supply	CW1251		VBU	VBU
Yokogawa Power Analyzer	WT210	E464	04/17/13	04/17/14
ExTech Hygro Thermometer	445703	T1357	11/25/13	11/25/14
Fisher Scientific	14-649-9	N1405	08/13/13	08/13/14
M-D Building Products	Smart Tool	L112	03/15/14	03/15/15

#### TEST METHODS

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IESNA LM-79.

#### Photometric and Electrical measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.



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# **RESULTS OF TESTS**

# Photometric and Electrical Measurements - Distribution Method

		Input	Input			Absolute Luminous	Lumen Efficacy
	Base	Voltage	Current	Input Power	Input Power	Flux	(Lumens
Intertek Sample No.	Orientation	(Vac)	(mA)	(Watts)	Factor	(Lumens)	Per Watt)
CRT1402131143-001	UP	120.1	1319	93.12	0.588	4210	45.21

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90
0	16947	16947	16947	16947	16947
5	15368	15236	15535	16015	16388
10	9949	9656	11119	13410	14807
15	4139	3958	5667	9336	12205
20	1260	1196	2136	5318	8821
25	388	370	646	2322	4821
30	171	169	250	808	1820
35	108	107	134	322	658
40	72	71	85	150	234
45	50	48	58	79	99
50	33	31	38	47	56
55	18	18	25	30	36
60	7	7	13	18	22
65	0	0	3	6	9
70	0	0	0	2	4
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0





# RESULTS OF TESTS (cont'd)

# Illumination Plots





# Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire	
0-30	3964	94.2	
0-40	4130	98.1	
0-60	4205	99.9	
60-90	4.8	0.1	
0-90	4210	100.0	
90-180	0.0	0.0	
0-180	4210	100.0	

# Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	1358	32.3
10-20	1874	44.5
20-30	731.8	17.4
30-40	165.5	3.9
40-50	52.7	1.3
50-60	22.8	0.5
60-70	4.7	0.1
70-80	0.1	0.0
80-90	0.0	0.0



Picture (not to scale)



### **CONCLUSION**

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

Melanie Brittain

Melanie Brittain Associate Engineer Lighting Division

Attachment: None

Report Reviewed By:

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Jeffrey Davis Engineering Manager Lighting Division