



# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Project No. G101603639

Date: April 14, 2014

#### REPORT NO. 101603639CRT-004

TEST OF ONE PORTABLE ELECTRIC LUMINAIRE WITH A SINGLE 8" NARROW SPOT SPREAD LENS

FIXTURE MODEL NO. SS-SPP-100 3K WHITE-18-0111 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 LIMI	TATION	: 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.
AUTHORIZATION:	The te	sting performed was authorized by signed quote number 500508985.
STANDARDS USED:		llowing American National Standards or Illuminating Engineering Society of America Test Guides were used in part or totally to test each specimen:
IESNA LM-79: 2008		ved Method for Electrical and Photometric Measurements of Solid-State g Products
ANSI ANSLG C38.377	: 2012 S	pecifications of the Chromaticity of Solid State Lighting Products
DESCRIPTION OF SA	<u>MPLE</u> :	The client submitted one production sample of model number SS-SPP- 100 3K WHITE-18-0111. 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-18-0111 Description: Portable Electric Luminaire With A Single 8" Narrow Spot Spread Lens

Criteria	Result
Total Lumen Output	5097 Lumens
Total Power	93.10 W
Luminaire Efficacy	54.75
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

	Base	Input Voltage	Input Current	Input Power	Input Power	Absolute Luminous Flux	Lumen Efficacy (Lumens
Intertek Sample No.	Orientation	(Vac)	(mA)	(Watts)	Factor	(Lumens)	Per Watt)
CRT1402131143-001	UP	120.0	1319	93.10	0.588	5097	54.75

Intensity (Candlepower) Summary at 25°C - Candelas

Angle	0	22.5	45	67.5	90	Polar Candela Distri
0	73231	73231	73231	73231	73231	74.000 180° 170°
5	49130	48491	48416	48754	49512	61.667
10	13526	13679	14847	16576	18169	49,333
15	2139	2294	3352	4896	5619	
20	522	557	907	1738	1743	37.000
25	268	272	330	500	463	24.667
30	182	182	187	203	203	12.333
35	119	123	123	124	129	CD: 0
40	83	82	86	86	87	
45	57	58	61	62	63	12.333
50	42	41	46	49	48	24.667
55	29	24	29	32	30	37.000
60	8	8	12	14	12	49.333
65	0	0	0	1	1	
70	0	0	0	0	0	61.667
75	0	0	0	0	0	74.000 VA: 0° 10°
80	0	0	0	0	0	- 0° H
85	0	0	0	0	0	📕 - 90° H
90	0	0	0	0	0	

ution 160° 150° 140°

130°

120° 110° 100° 90° 80° 70° 60°

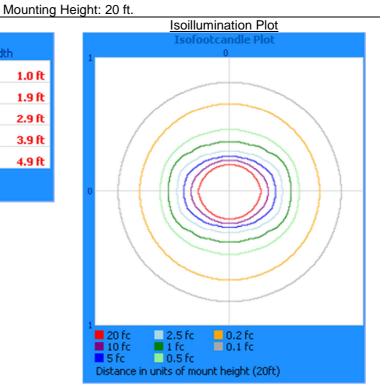
50°



# RESULTS OF TESTS (cont'd)

#### Illumination Plots

			WOUTUN			
	Illuminance - Cone of Light					
	Illuminance at a	a Distance				
	Center Beam fc	Beam Wid	th			
4.0ft -	4,577.0 fc	0.9 ft	1.0 ft			
8.0ft -	1,144.2 fc	1.8 ft	1.9 ft			
12.0ft	508.6 fc	2.7 ft	2.9 ft			
16.0R	286.1 fc	<b>3.6 ft</b>	3.9 ft			
20.0ft	183.1 fc	4.6 ft	4.9 ft			
	Vert. Spread: 13.0° Horiz. Spread: 13.8°					
	Tionzi opreddi 1510					



# Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
0-30	4942	97.0
0-40	5021	98.5
0-60	5094	99.9
60-90	2.6	0.1
0-90	5097	100.0
90-180	0.0	0.0
0-180	5097	100.0

## Zonal Lumens and Percentages at 25°C

Zone	Lumens	% Luminaire
0-10	3460	67.9
10-20	1278	25.1
20-30	203.7	4.0
30-40	79.4	1.6
40-50	47.9	0.9
50-60	25.4	0.5
60-70	2.6	0.1
70-80	0.0	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:

Report Reviewed By:

Milanie Brittain

Melanie Brittain Associate Engineer Lighting Division

Attachment: None

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Jeffrey Davis Engineering Manager Lighting Division