



FOR THE SCOPE OF
ACCREDITATION UNDER NVLAP LAB
CODE 100402-0.

REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Project No. G100403047

Original Issue Date: May 26, 2011

Revision Date: July 12, 2011

REPORT NO. 100403047CRT-003

TEST OF ONE LED WALL PACK LAMP

LED MODEL NO. WP30

RENDERED TO

INTENCITY LIGHTING, INC.
22922 NORTH HIGHWAY 7
DARDANELLE, AR 72834

Revision Note July 12, 2011: This report was revised to add off-state power results.

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

LABORATORY NOTE: The laboratory that conducted the testing detailed in this report has been Qualified, Verified, and Recognized for LM-79 Testing for ENERGY STAR for SSL by US DOE's CALiPER program.

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.

AUTHORIZATION: The testing performed was authorized by signed quote number 500299124.

STANDARDS USED: 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 NEMA ANSLG C78.377: 2008 Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE: The client submitted one sample of model number WP30. The sample was received by Intertek on April 15, 2011, in undamaged condition, and one sample was tested as received. The sample designation was I11390L-A.

DATES OF TESTS: May 19, 2011 through July 12, 2011

SUMMARY

Model No.: WP30
Description: LED Wall Pack Lamp

Criteria	Result
Total Lumen Output	2474 Lumens
Total Power	38.15 W
Luminaire Efficacy	64.85
Power Factor	0.988
Current ATHD	10.01%
Correlated Color Temperature (CCT)	5309 K
Color Rendering Index (CRI) - Ra	69.7
Color Rendering Index (CRI) - R9	-12.6
Duv	0.009
Chromaticity Coordinate (x)	0.338
Chromaticity Coordinate (y)	0.364
Chromaticity Coordinate (u')	0.202
Chromaticity Coordinate (v')	0.489
Off State Power	0.0 W

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Calibration Date	Calibration Due Date
Leeds & Northup Standard Resistor	Manganin	Y089	02/17/11	02/17/12
Data Precision Digital Voltmeter	3600	V124	02/17/11	02/17/12
Fluke Multimeter	45	M133	02/17/11	02/17/12
Fluke Temperature Meter	52	T801	06/11/10	06/11/11
Kikusui DC Power Supply	35-10L	E160	---	---
Sorenson DC Power Supply	DLM150-20E	--	---	---
NIST Spectral Flux Standard Source	RF1024	---	09/18/10	100 hours of use
Yokogawa Power Analyzer	WT1600	E462	06/11/10	06/11/11
ITS 3 Meter Sphere	W/ CDS 1100	N307	w/use	w/use
Fluke Temp Meter	53 II	T1318	02/25/11	02/25/12
Elgar AC Power Supply	CW1251	--	--	--
Yokogawa Power Meter	WT210	E464	04/19/11	04/19/12
LSI High Speed Mirror Goniometer	6440	--	w/ use	w/ use
Cole Parmer Hygro Thermometer	445703	T1357	10/12/10	10/12/11
Xitron Power Analyzer	2503AH	E235	04/20/11	04/20/12



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.

Photometric and Electrical Measurements – Integrating Sphere Method

A Labsphere Model DAS 1100 Diode Array Spectroradiometer and Two Meter or Ten Foot Sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit.

Ambient temperature was measured at a position inside the sphere. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation. Each SSL unit 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.

The calibration of the sphere photometer-spectroradiometer system is traceable to the National Institute of Standards and Technology.

Off-State Power

A power analyzer is used to record the electrical data during normal operation and again while the unit is switched off.

Estimated Total Operating Time

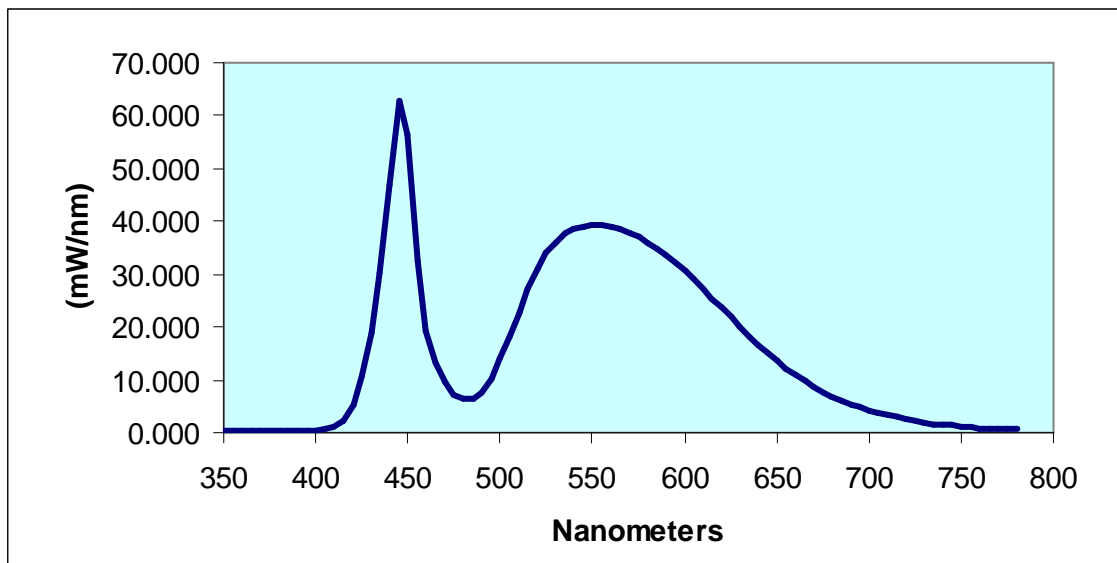
<u>Model No.</u>	<u>Total Hours</u>
WP30	6

RESULTS OF TESTS

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
WP30							
350	0.412	460	19.164	570	37.803	680	6.850
355	0.352	465	13.428	575	37.042	685	6.051
360	0.328	470	9.337	580	36.088	690	5.391
365	0.327	475	7.036	585	34.960	695	4.764
370	0.305	480	6.383	590	33.718	700	4.210
375	0.297	485	6.510	595	32.247	705	3.705
380	0.262	490	7.605	600	30.719	710	3.267
385	0.323	495	10.098	605	29.040	715	2.887
390	0.338	500	13.812	610	27.137	720	2.527
395	0.392	505	18.207	615	25.378	725	2.232
400	0.456	510	22.884	620	23.651	730	1.952
405	0.676	515	27.211	625	21.849	735	1.702
410	1.189	520	30.954	630	20.097	740	1.501
415	2.436	525	33.931	635	18.262	745	1.332
420	5.141	530	36.121	640	16.617	750	1.167
425	10.496	535	37.651	645	15.125	755	1.031
430	19.016	540	38.589	650	13.645	760	0.915
435	30.451	545	39.099	655	12.250	765	0.804
440	46.753	550	39.276	660	10.941	770	0.721
445	62.844	555	39.291	665	9.770	775	0.638
450	56.255	560	39.022	670	8.690	780	0.569
455	32.621	565	38.522	675	7.727		

**IntenCity Lighting Inc.
Sample No. I11390L-A
Model No. WP30
Spectral Data Over Visible Wavelengths**



RESULTS OF TESTS (cont'd)

Photometric Measurements at 25°C – Integrating Sphere Method

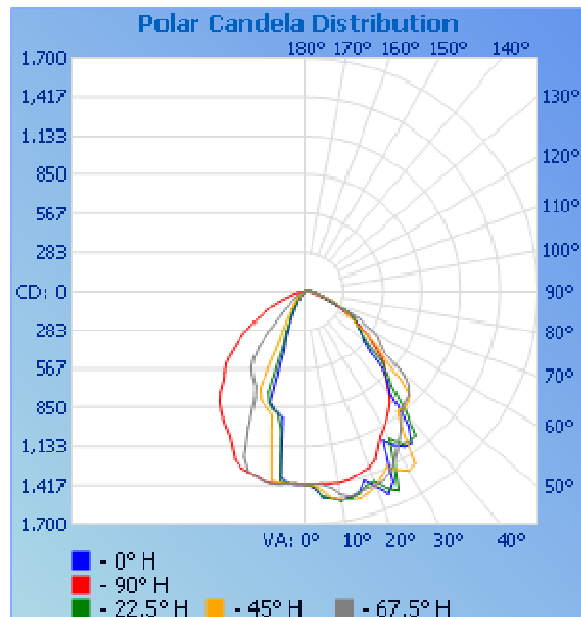
Intertek Sample No.	Correlated Color		CRI -Ra	CRI -R9	Duv	Current ATHD (%)	CIE 31' Chromaticity Coordinate	CIE 31' Chromaticity Coordinate	CIE 76' Chromaticity Coordinate	CIE 76' Chromaticity Coordinate
	Temperature (K)						(x)	(y)	(u')	(v')
WP30										
I11390L-A	5309	69.7	-12.6	0.009	10.01	0.338	0.364	0.202	0.489	

Photometric and Electrical Measurements – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
WP30							
I11390L-A	UP	120.0	321.7	38.15	0.988	2474	64.85

Intensity (Candlepower) Summary at 25°C - Candelas

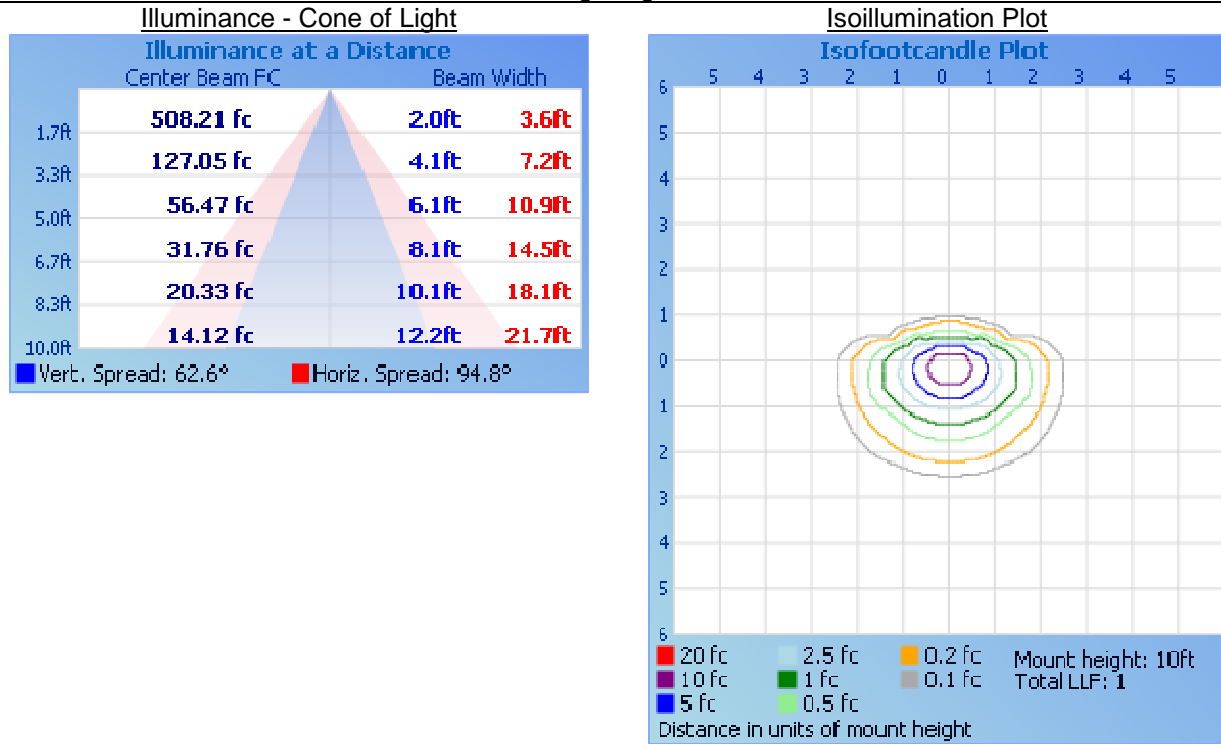
Angle	0	22.5	45	67.5	90
WP30					
0	1412	1412	1412	1412	1412
5	1507	1505	1460	1415	1406
10	1552	1554	1538	1504	1420
15	1514	1525	1560	1516	1393
20	1517	1473	1511	1506	1367
25	1532	1604	1413	1462	1254
30	1295	1240	1508	1340	1150
35	1353	1330	1224	1213	1067
40	966	1125	1122	1104	960
45	792	858	1075	1065	830
50	563	605	739	926	705
55	482	482	563	665	558
60	412	405	375	558	390
65	292	318	300	303	268
70	166	170	213	188	135
75	113	112	105	107	51
80	79	75	63	51	12
85	55	51	38	21	0
90	34	30	20	6	0
95	19	17	9	0	0
100	9	7	1	0	0
105	2	0	0	0	0



RESULTS OF TESTS (cont'd)

Illumination Plots

Model No.: WP30
Mounting Height: 10 ft.



Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
	WP30	
0-30	987.7	39.9
0-40	1493	60.3
0-60	2220	89.7
60-90	248.3	10.0
0-90	2469	99.8
90-180	5.6	0.2
0-180	2474	100.0

Off State Power

Sample No.	Input Power in Off State (Watts)
	WP30
111390L-A	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:

A handwritten signature in black ink, appearing to read "Kenda Branch".

Kenda Branch
Engineer
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read "David Ellis".

FOR:
Jeffery Davis
Senior Associate Engineer
Lighting Division