7826 East Evans Road
Scottsdale, AZ 85260
480-991-9260

Photometric Indoor Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

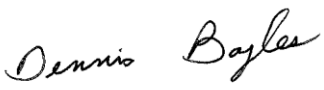
Prepared For
Environmental Lights
11235 W. Bernardo Court, Suite 102
San Diego, CA 92127

Catalog Number
nw3528-120-10-reel
Project Number
10345709
Test Number
33067

Test Date

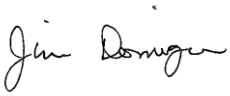
2014-06-19

Prepared By



Dennis Boyles, Technician

Approved By



Jim Domigan, Laboratory Team Leader

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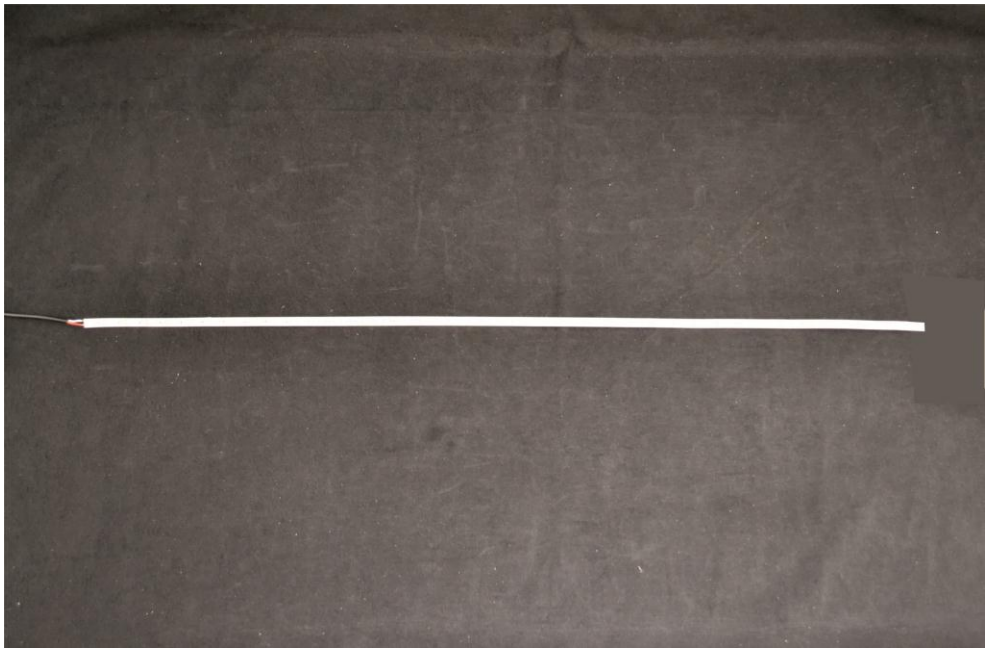
Luminaire Description:	LED Strip Light
Catalog Number:	nw3528-120-10-reel
Lamp:	LED Array
Ballast/Driver:	One Mean Well SP-240-12 Driver

Luminaire



Test Conditions

Test Temperature:	24.9 °C
Voltage:	12.0 VDC

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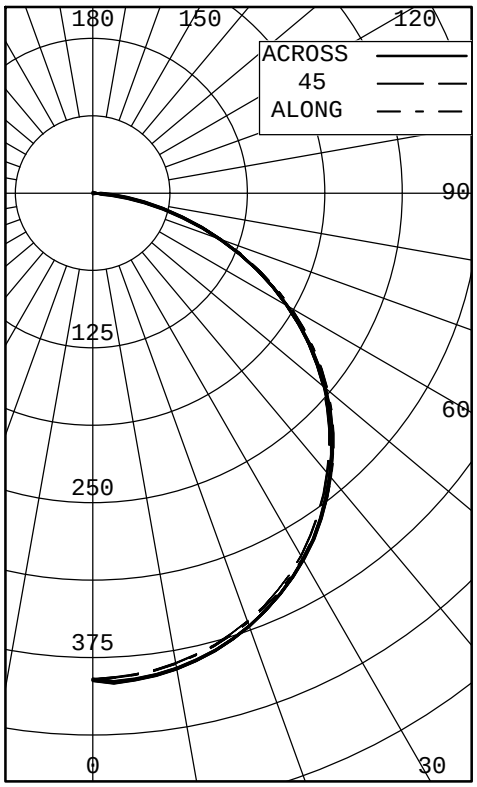

INTENSITY(CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	393	393	393	393	393	
5	390	388	390	394	394	38
10	386	384	386	389	390	
15	379	376	378	382	382	107
20	368	366	367	371	371	
25	356	353	354	357	358	163
30	340	337	337	340	341	
35	321	318	317	321	321	199
40	299	296	295	298	298	
45	275	271	270	273	273	209
50	248	244	243	245	245	
55	217	213	213	214	214	191
60	185	181	180	181	181	
65	150	146	146	147	146	145
70	113	110	110	110	110	
75	76	75	75	75	75	80
80	43	43	42	43	43	
85	17	17	16	16	16	20
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	308	26.75
0-40	507	44.06
0-60	908	78.81
0-90	1152	100.00
40-90	644	55.94
60-90	244	21.19
90-180	0	0.00
0-180	1152	100.00

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 39.370 INS
WIDTH: 0.125 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
SC: 1.3

ANGLE	ALONG	45	ACROSS
45	122357	120856	122153
55	119405	117271	117932
65	111752	109004	109298
75	92972	91196	91495
85	59629	57789	58043

TESTED IN ACCORDANCE WITH IES PROCEDURES.

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INTENSITY(CANDLEPOWER) DATA
IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	LUMENS
0.0	393	393	393	393	393	393	
2.5	392	389	392	395	396	392	
5.0	390	388	390	394	394	391	38
7.5	389	386	388	392	392	389	
10.0	386	384	386	389	390	387	
12.5	383	380	382	386	387	383	
15.0	379	376	378	382	382	379	107
17.5	374	371	373	377	377	374	
20.0	368	366	367	371	371	368	
22.5	362	360	361	365	365	362	
25.0	356	353	354	357	358	355	163
27.5	348	346	346	349	350	347	
30.0	340	337	337	340	341	339	
32.5	331	328	327	331	331	329	
35.0	321	318	317	321	321	319	199
37.5	310	307	306	310	310	308	
40.0	299	296	295	298	298	297	
42.5	287	284	283	286	286	285	
45.0	275	271	270	273	273	272	209
47.5	262	258	257	259	259	259	
50.0	248	244	243	245	245	244	
52.5	233	229	228	230	230	230	
55.0	217	213	213	214	214	214	191
57.5	202	197	197	198	198	198	
60.0	185	181	180	181	181	181	
62.5	168	164	163	164	164	164	
65.0	150	146	146	147	146	147	145
67.5	132	128	128	129	128	129	
70.0	113	110	110	110	110	111	
72.5	95	92	93	92	93	93	
75.0	76	75	75	75	75	75	80
77.5	59	58	58	58	58	58	
80.0	43	43	42	43	43	43	
82.5	29	29	28	28	28	28	
85.0	17	17	16	16	16	16	20
87.5	7	7	7	7	7	7	
90.0	0	0	0	0	0	0	

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COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50			30			10			0
RCR	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	1.22	1.22	1.22	1.22	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.12	1.07	1.03	0.99	1.10	1.05	1.01	0.97	1.07	1.03	0.99	0.96	0.98	0.96	0.93	0.95	0.92	0.90	0.91	0.89	0.87	0.85
2	1.03	0.95	0.88	0.82	1.00	0.93	0.87	0.81	0.98	0.91	0.85	0.80	0.87	0.82	0.78	0.84	0.80	0.76	0.81	0.78	0.75	0.73
3	0.94	0.83	0.75	0.69	0.92	0.82	0.74	0.68	0.89	0.80	0.73	0.67	0.77	0.71	0.66	0.75	0.70	0.65	0.72	0.68	0.64	0.62
4	0.87	0.74	0.65	0.59	0.85	0.73	0.65	0.59	0.82	0.72	0.64	0.58	0.69	0.63	0.57	0.67	0.61	0.57	0.65	0.60	0.56	0.54
5	0.80	0.67	0.57	0.50	0.78	0.65	0.57	0.50	0.75	0.64	0.56	0.50	0.62	0.55	0.49	0.60	0.54	0.49	0.58	0.53	0.48	0.46
6	0.74	0.59	0.50	0.44	0.72	0.58	0.50	0.44	0.70	0.57	0.49	0.43	0.56	0.48	0.43	0.54	0.47	0.43	0.53	0.47	0.42	0.40
7	0.67	0.53	0.44	0.38	0.66	0.52	0.44	0.38	0.64	0.51	0.43	0.37	0.50	0.42	0.37	0.48	0.42	0.37	0.47	0.41	0.36	0.35
8	0.62	0.48	0.39	0.33	0.61	0.47	0.39	0.33	0.59	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.37	0.32	0.43	0.37	0.32	0.30
9	0.58	0.44	0.35	0.29	0.56	0.43	0.35	0.29	0.55	0.42	0.35	0.29	0.41	0.34	0.29	0.40	0.33	0.29	0.39	0.33	0.28	0.27
10	0.53	0.40	0.31	0.26	0.52	0.39	0.31	0.26	0.51	0.39	0.31	0.26	0.38	0.30	0.26	0.37	0.30	0.25	0.36	0.30	0.25	0.23

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS
BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.
LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD
THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST
LUMINOUS OPENING OF LUMINAIRE.

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All testing was conducted in accordance with LM-79-08,
Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products as published by the Illuminating Engineering Society of North America (IESNA).

The condition of the item tested was new. Stabilization time before testing meets the stabilization requirements of LM-79-08.

The test results (luminous distribution and flux) were obtained by using a Lighting Sciences series 6000 Type C Moving Mirror Goniophotometer

- The photometric reference standard used is a set of three incandescent luminous intensity standard lamps calibrated and traceable to the U.S. National Institute of Standards and Technology.

Power measurements were obtained with a Xitron 2801 power analyzer.

Ambient temperature during testing was 25° C ± 1° C, measured using an Omega model DP460.

Calibration certificates are on file at the laboratory

The results in this report apply to the test sample(s) mentioned in this report at the time of the testing period only and are not to be used to indicate applicability to other similar products.