



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  
ww3528-120-10-reel  
Project Number  
10345709  
Test Number  
33065

Test Date

2014-06-19

Prepared By

Handwritten signature of Dennis Boyles in black ink.

Dennis Boyles, Technician

Approved By

Handwritten signature of Jim Domigan in black ink.

Jim Domigan, Laboratory Team Leader

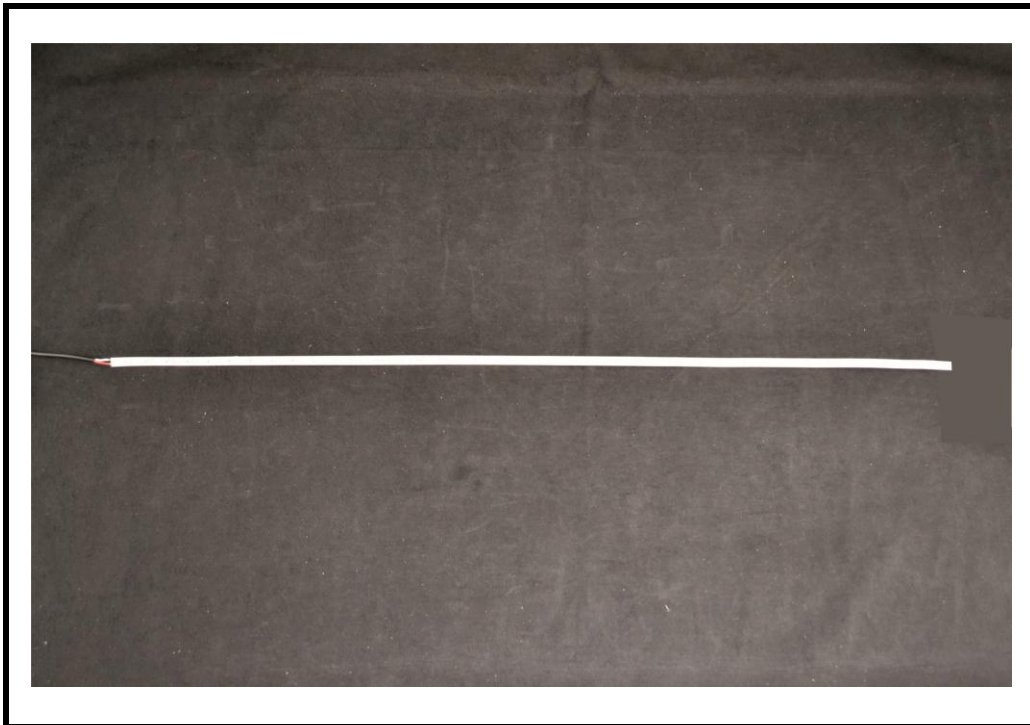
The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



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

Luminaire Description: LED Strip Light  
Catalog Number: ww3528-120-10-reel  
Lamp: LED Array  
Ballast/Driver: One Mean Well SP-240-12 Driver

Luminaire



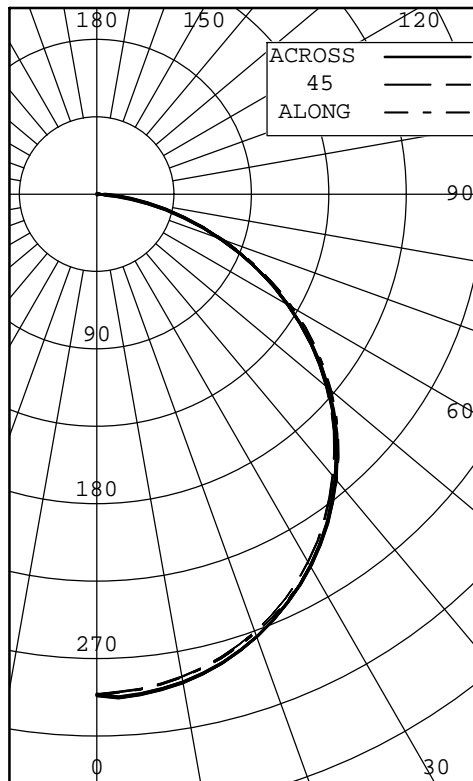
Test Conditions

Test Temperature: 24.6 °C  
Voltage: 12.0 VDC



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

INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	291	291	291	291	291	
5	289	287	289	292	292	28
10	285	284	285	288	288	
15	280	278	279	282	282	79
20	271	269	270	273	273	
25	261	259	260	262	262	120
30	249	247	246	249	249	
35	234	231	231	233	234	145
40	217	214	214	216	216	
45	198	196	195	197	197	151
50	178	175	174	176	176	
55	156	152	152	153	153	136
60	131	128	128	129	128	
65	106	103	103	104	103	102
70	80	78	78	78	77	
75	54	53	53	53	53	57
80	31	31	31	31	30	
85	12	12	12	12	12	15
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	227	27.23
0-40	372	44.66
0-60	659	79.17
0-90	832	100.00
40-90	461	55.34
60-90	173	20.83
90-180	0	0.00
0-180	832	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	88304	87211	88038
55	85415	83674	84060
65	79146	77144	77130
75	66078	65061	64499
85	44089	44564	42444

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA  
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0.0	291	291	291	291	291	291	
2.5	290	288	290	292	293	290	
5.0	289	287	289	292	292	290	28
7.5	288	286	287	290	290	288	
10.0	285	284	285	288	288	286	
12.5	283	281	282	285	286	283	
15.0	280	278	279	282	282	280	79
17.5	276	274	275	278	278	276	
20.0	271	269	270	273	273	271	
22.5	266	264	265	268	268	266	
25.0	261	259	260	262	262	261	120
27.5	255	253	253	256	256	254	
30.0	249	247	246	249	249	248	
32.5	242	239	239	241	242	240	
35.0	234	231	231	233	234	232	145
37.5	226	223	222	225	225	224	
40.0	217	214	214	216	216	215	
42.5	208	205	205	207	207	206	
45.0	198	196	195	197	197	196	151
47.5	188	185	185	187	187	186	
50.0	178	175	174	176	176	175	
52.5	167	164	163	165	164	164	
55.0	156	152	152	153	153	153	136
57.5	144	140	140	141	140	141	
60.0	131	128	128	129	128	129	
62.5	119	116	116	116	116	116	
65.0	106	103	103	104	103	104	102
67.5	93	90	90	91	90	91	
70.0	80	78	78	78	77	78	
72.5	67	65	66	65	65	66	
75.0	54	53	53	53	53	53	57
77.5	42	42	42	42	41	42	
80.0	31	31	31	31	30	31	
82.5	21	21	21	20	20	21	
85.0	12	12	12	12	12	12	15
87.5	5	5	5	5	5	5	
90.0	0	0	0	0	0	0	



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

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																									
0	1.221	.221	.221	.22	1.191	.191	.191	.19	1.161	.161	.161	.16	1.111	.111	.11	1.061	.061	.06	1.021	.021	.02	1.00			
1	1.121	.071	.030	.99	1.101	.051	.010	.98	1.071	.030	.990	.96	0.990	.960	.93	0.950	.920	.90	0.910	.890	.87	0.85			
2	1.030	.950	.880	.82	1.000	.930	.870	.81	0.980	.910	.850	.80	0.870	.830	.78	0.840	.800	.77	0.810	.780	.75	0.73			
3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.900	.800	.730	.68	0.780	.720	.67	0.750	.700	.65	0.720	.680	.64	0.62			
4	0.870	.750	.660	.59	0.850	.740	.650	.59	0.830	.720	.650	.58	0.700	.630	.58	0.670	.620	.57	0.650	.600	.56	0.54			
5	0.800	.670	.580	.51	0.780	.660	.570	.51	0.760	.650	.560	.50	0.620	.550	.50	0.600	.540	.49	0.590	.530	.49	0.47			
6	0.740	.600	.510	.45	0.720	.590	.500	.44	0.700	.580	.500	.44	0.560	.490	.43	0.540	.480	.43	0.530	.470	.43	0.41			
7	0.670	.530	.450	.39	0.660	.530	.440	.38	0.640	.520	.440	.38	0.500	.430	.38	0.490	.420	.37	0.480	.420	.37	0.35			
8	0.630	.480	.400	.34	0.610	.480	.390	.34	0.600	.470	.390	.33	0.460	.380	.33	0.450	.380	.33	0.430	.370	.33	0.31			
9	0.580	.440	.350	.30	0.570	.440	.350	.30	0.550	.430	.350	.30	0.420	.340	.29	0.400	.340	.29	0.390	.330	.29	0.27			
10	0.540	.400	.310	.26	0.530	.400	.310	.26	0.510	.390	.310	.26	0.380	.310	.26	0.370	.300	.26	0.360	.300	.26	0.24			

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.



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

**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  $25^{\circ} \text{C} \pm 1^{\circ} \text{C}$ , 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.