



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
sw3528-240-10-reel
Project Number
10345709
Test Number
33071

Test Date

2014-06-11

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

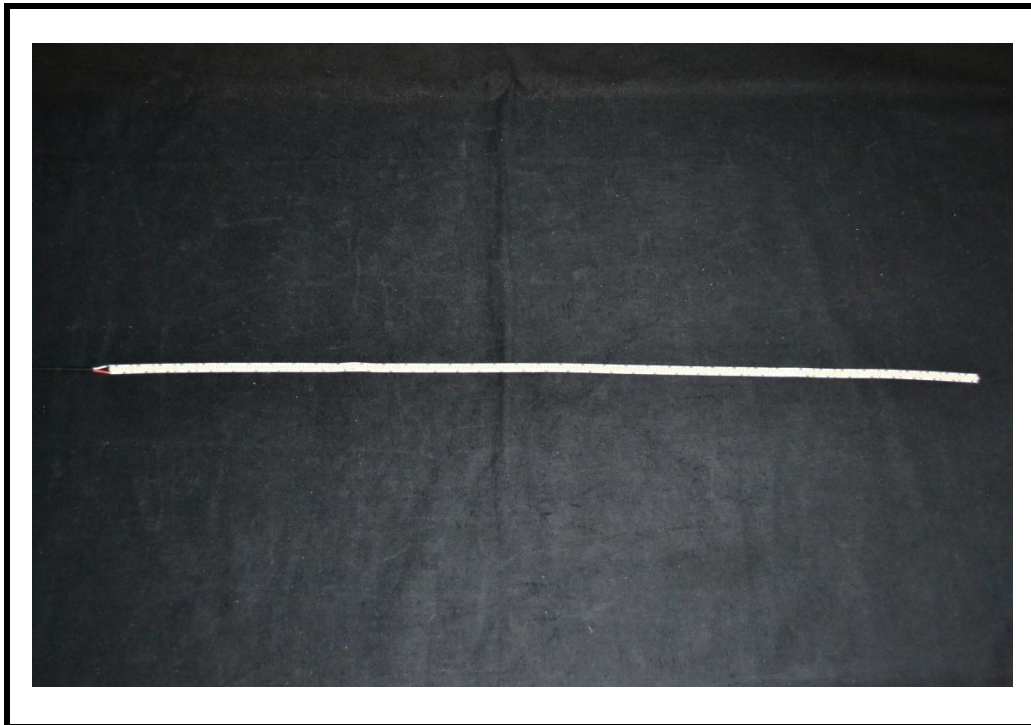
The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



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

Luminaire Description: LED Strip Light
Catalog Number: sw3528-240-10-reel
Lamp: LED Array
Ballast/Driver: One Mean Well SP-320-24 Driver

Luminaire



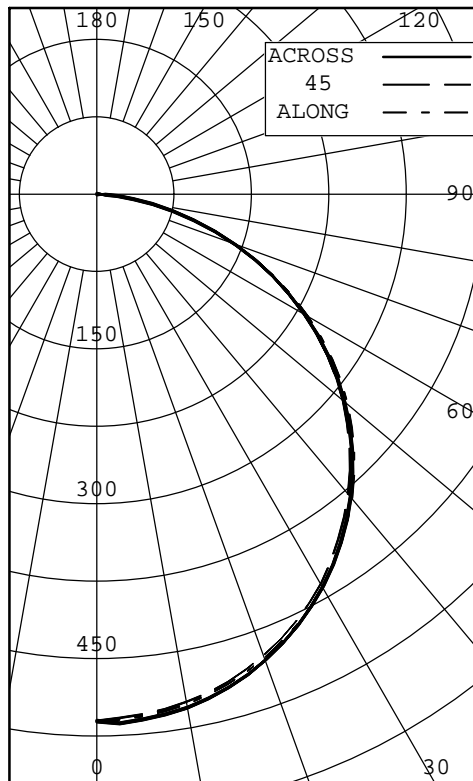
Test Conditions

Test Temperature: 24.2 °C
Voltage: 24.0 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	511	511	511	511	511	
5	508	504	506	511	511	49
10	502	498	500	505	505	
15	492	488	489	495	495	138
20	477	474	475	480	480	
25	460	457	457	461	461	211
30	439	435	435	439	439	
35	413	409	408	412	412	256
40	384	380	379	383	382	
45	352	348	347	350	350	268
50	317	312	311	314	313	
55	279	273	273	274	274	244
60	236	231	231	232	232	
65	192	188	188	188	188	186
70	145	143	143	143	143	
75	98	97	98	98	97	103
80	54	53	54	55	55	
85	19	18	19	20	21	24
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	399	26.91
0-40	655	44.23
0-60	1168	78.85
0-90	1481	100.00
40-90	826	55.77
60-90	313	21.15
90-180	0	0.00
0-180	1481	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	156988	154927	156425
55	152956	150233	151060
65	142903	140416	140831
75	119319	118914	118920
85	67037	70288	74549

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	511	511	511	511	511	511	
2.5	510	506	508	513	513	510	
5.0	508	504	506	511	511	508	49
7.5	505	502	504	509	509	505	
10.0	502	498	500	505	505	502	
12.5	497	493	495	501	501	497	
15.0	492	488	489	495	495	491	138
17.5	485	481	483	488	488	484	
20.0	477	474	475	480	480	477	
22.5	469	466	467	471	471	468	
25.0	460	457	457	461	461	459	211
27.5	450	447	447	451	451	448	
30.0	439	435	435	439	439	437	
32.5	426	423	422	426	426	424	
35.0	413	409	408	412	412	411	256
37.5	399	395	394	398	398	396	
40.0	384	380	379	383	382	381	
42.5	369	364	363	367	367	365	
45.0	352	348	347	350	350	349	268
47.5	335	330	329	332	332	331	
50.0	317	312	311	314	313	313	
52.5	298	293	292	294	294	294	
55.0	279	273	273	274	274	274	244
57.5	258	253	252	254	254	253	
60.0	236	231	231	232	232	232	
62.5	214	210	210	211	210	211	
65.0	192	188	188	188	188	188	186
67.5	169	165	165	166	166	166	
70.0	145	143	143	143	143	143	
72.5	122	120	120	120	120	120	
75.0	98	97	98	98	97	98	103
77.5	75	75	76	76	75	75	
80.0	54	53	54	55	55	54	
82.5	35	34	35	36	36	35	
85.0	19	18	19	20	21	19	24
87.5	6	6	8	8	9	7	
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	.111	.11	1.061	.061	.06	1.021	.021	.02	1.00		
1	1.121	.071	.030	.99	1.091	.051	.010	.97	1.071	.030	.990	.96	0.980	.950	.93	0.950	.920	.90	0.910	.890	.87	0.85			
2	1.030	.950	.880	.82	1.000	.930	.860	.81	0.980	.910	.850	.80	0.870	.820	.78	0.840	.800	.76	0.810	.780	.75	0.73			
3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.890	.800	.730	.67	0.770	.710	.66	0.750	.700	.65	0.720	.680	.64	0.62			
4	0.870	.750	.650	.59	0.850	.730	.650	.59	0.820	.720	.640	.58	0.690	.630	.57	0.670	.610	.57	0.650	.600	.56	0.54			
5	0.800	.670	.570	.50	0.780	.650	.570	.50	0.760	.640	.560	.50	0.620	.550	.50	0.600	.540	.49	0.580	.530	.48	0.46			
6	0.740	.600	.500	.44	0.720	.590	.500	.44	0.700	.580	.490	.43	0.560	.480	.43	0.540	.480	.43	0.530	.470	.42	0.40			
7	0.670	.530	.440	.38	0.660	.520	.440	.38	0.640	.520	.430	.37	0.500	.420	.37	0.480	.420	.37	0.470	.410	.37	0.35			
8	0.620	.480	.400	.33	0.610	.470	.390	.33	0.590	.470	.390	.33	0.450	.380	.33	0.440	.370	.33	0.430	.370	.32	0.30			
9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.350	.29	0.410	.340	.29	0.400	.330	.29	0.390	.330	.28	0.27			
10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.390	.310	.26	0.380	.310	.26	0.370	.300	.25	0.360	.300	.25	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.