



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  
**dlrf3528-240-reel**  
Project Number  
**10345709**  
Test Number  
**33076**

Test Date

2014-06-13

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

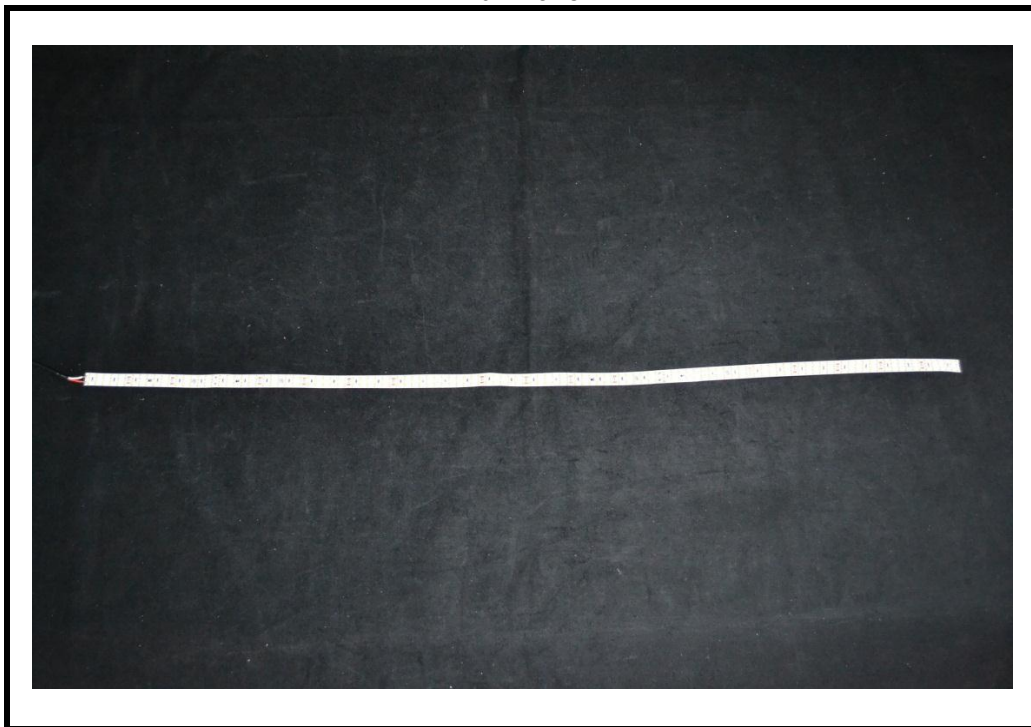
The results contained in this report pertain only to the tested sample.  
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Luminaire Description: LED Strip Light  
Catalog Number: dlrf3528-240-reel  
Lamp: LED Array  
Ballast/Driver: One Mean Well SP-320-24 Driver

Luminaire



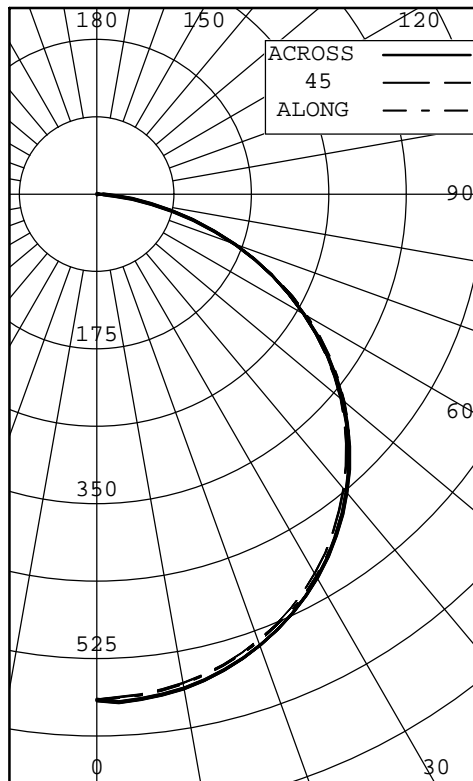
Test Conditions

Test Temperature: 24.3 °C  
Voltage: 24.0 VDC



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INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	572	572	572	572	572	
5	568	565	568	573	573	55
10	562	559	561	567	568	
15	552	549	551	557	557	156
20	538	535	536	542	542	
25	520	517	518	523	523	239
30	497	495	494	499	500	
35	470	467	466	471	471	293
40	439	436	434	439	440	
45	404	400	399	403	403	309
50	366	361	360	363	363	
55	322	317	316	319	319	283
60	275	269	269	271	270	
65	223	219	219	219	220	217
70	170	166	166	167	167	
75	115	113	113	113	113	120
80	63	63	63	63	63	
85	22	22	22	22	22	28
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	450	26.48
0-40	743	43.71
0-60	1335	78.57
0-90	1699	100.00
40-90	957	56.29
60-90	364	21.43
90-180	0	0.00
0-180	1699	100.00

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINOUS LENGTH: 39.370 INS  
 WIDTH: 0.500 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3  
 SC: 1.3

ANGLE	ALONG	45	ACROSS
45	44998	44605	45081
55	44183	43573	43897
65	41613	40900	41052
75	34956	34343	34494
85	19695	19564	19634

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	572	572	572	572	572	572	
2.5	570	567	569	575	575	571	
5.0	568	565	568	573	573	569	55
7.5	566	563	565	571	571	567	
10.0	562	559	561	567	568	563	
12.5	558	554	557	563	563	559	
15.0	552	549	551	557	557	553	156
17.5	546	542	544	550	550	546	
20.0	538	535	536	542	542	538	
22.5	529	526	528	533	533	529	
25.0	520	517	518	523	523	520	239
27.5	509	507	506	512	512	509	
30.0	497	495	494	499	500	497	
32.5	484	481	481	486	486	483	
35.0	470	467	466	471	471	469	293
37.5	455	452	450	456	456	453	
40.0	439	436	434	439	440	437	
42.5	422	419	417	422	422	420	
45.0	404	400	399	403	403	402	309
47.5	385	381	380	384	383	382	
50.0	366	361	360	363	363	362	
52.5	344	339	339	341	341	340	
55.0	322	317	316	319	319	318	283
57.5	299	294	293	295	295	295	
60.0	275	269	269	271	270	270	
62.5	250	244	244	245	245	245	
65.0	223	219	219	219	220	220	217
67.5	197	193	193	193	194	193	
70.0	170	166	166	167	167	167	
72.5	142	140	139	140	140	140	
75.0	115	113	113	113	113	113	120
77.5	88	87	87	87	87	87	
80.0	63	63	63	63	63	63	
82.5	41	41	40	40	41	41	
85.0	22	22	22	22	22	22	28
87.5	8	9	8	8	8	8	
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	
	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	.061	.06	1.021	.021	.021	.02	1.00
	1	1.121	.071	.030	.99	1.091	.051	.010	.97	1.071	.030	.990	.96	0.980	.960	.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	.68	0.920	.820	.740	.68	0.890	.800	.730	.67	0.770	.710	.66	0.750	.690	.65	0.720	.680	.64	0.62			
	4	0.870	.740	.650	.59	0.840	.730	.650	.58	0.820	.720	.640	.58	0.690	.620	.57	0.670	.610	.56	0.650	.600	.56	0.54			
	5	0.800	.660	.570	.50	0.780	.650	.560	.50	0.750	.640	.560	.50	0.620	.550	.49	0.600	.540	.49	0.580	.530	.48	0.46			
	6	0.730	.590	.500	.44	0.710	.580	.500	.43	0.690	.570	.490	.43	0.550	.480	.43	0.540	.470	.42	0.520	.460	.42	0.40			
	7	0.670	.530	.440	.38	0.650	.520	.430	.38	0.640	.510	.430	.37	0.500	.420	.37	0.480	.410	.36	0.470	.410	.36	0.34			
	8	0.620	.480	.390	.33	0.610	.470	.390	.33	0.590	.460	.380	.33	0.450	.380	.33	0.440	.370	.32	0.430	.370	.32	0.30			
	9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.340	.29	0.410	.340	.29	0.400	.330	.28	0.390	.330	.28	0.26			
	10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.380	.310	.25	0.370	.300	.25	0.360	.300	.25	0.360	.290	.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  $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ , 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.