



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
3000K-CC5050-60-reel
Project Number
10345709
Test Number
33093

Test Date

2014-06-17

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

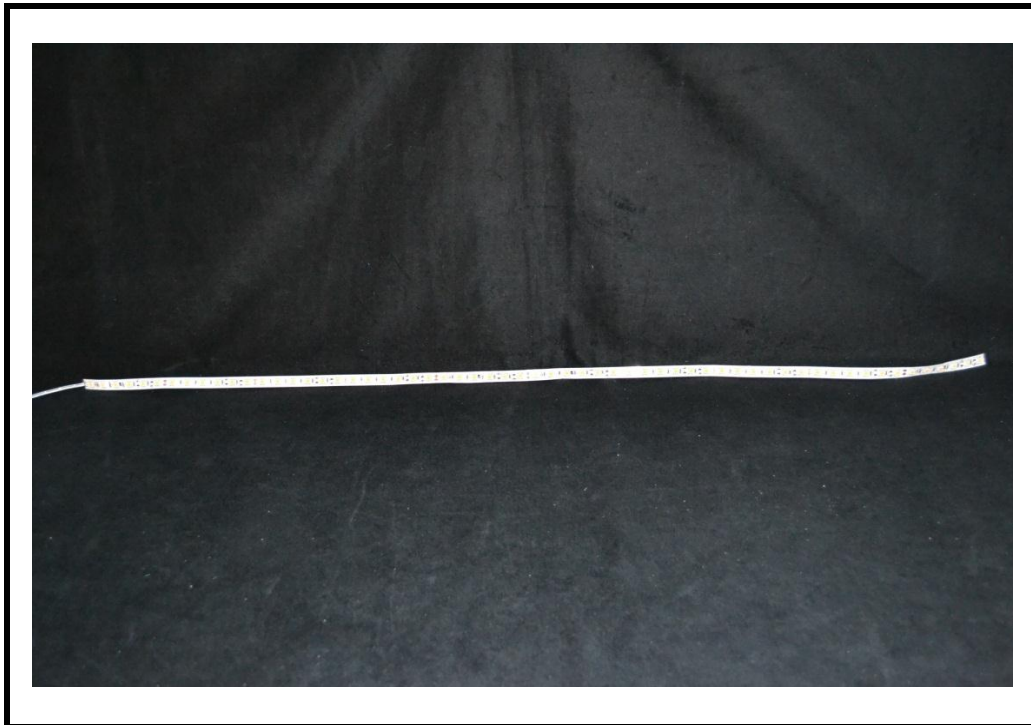
The results contained in this report pertain only to the tested sample.
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Luminaire Description: LED Strip Light
Catalog Number: 3000K-CC5050-60-reel
Lamp: LED Array
Ballast/Driver: One Mean Well SP-320-24 Driver

Luminaire



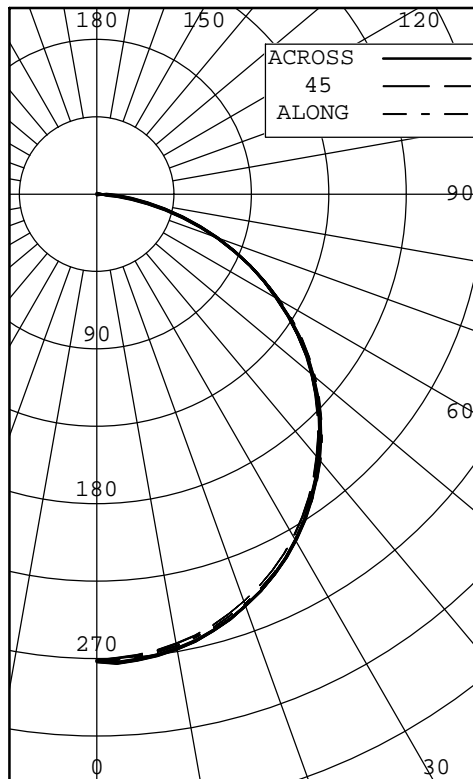
Test Conditions

Test Temperature: 24.4 °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	271	271	271	271	271	
5	270	268	269	272	272	26
10	267	264	265	269	269	
15	261	259	260	263	263	73
20	253	251	252	254	254	
25	243	241	242	244	244	112
30	232	230	229	232	232	
35	218	216	215	217	217	135
40	202	200	199	201	201	
45	184	182	182	183	183	141
50	166	163	163	164	164	
55	145	142	142	143	143	127
60	123	120	120	121	121	
65	100	97	98	98	99	97
70	75	74	75	75	75	
75	51	51	52	52	52	55
80	30	30	30	30	30	
85	12	12	12	12	12	14
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	211	27.07
0-40	346	44.38
0-60	614	78.75
0-90	780	100.00
40-90	434	55.62
60-90	166	21.25
90-180	0	0.00
0-180	780	100.00

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 39.370 INS
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
 SC: 1.3

ANGLE	ALONG	45	ACROSS
45	27378	27095	27319
55	26531	26164	26320
65	24717	24381	24562
75	20849	20915	21133
85	14154	14613	14994

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	271	271	271	271	271	271	
2.5	271	269	270	273	273	271	
5.0	270	268	269	272	272	270	26
7.5	269	266	268	271	270	269	
10.0	267	264	265	269	269	267	
12.5	264	262	263	266	266	264	
15.0	261	259	260	263	263	261	73
17.5	257	255	256	259	259	257	
20.0	253	251	252	254	254	253	
22.5	248	246	247	250	250	248	
25.0	243	241	242	244	244	243	112
27.5	238	236	236	238	238	237	
30.0	232	230	229	232	232	231	
32.5	225	223	222	225	225	224	
35.0	218	216	215	217	217	216	135
37.5	210	208	207	209	209	209	
40.0	202	200	199	201	201	200	
42.5	193	191	191	193	192	192	
45.0	184	182	182	183	183	183	141
47.5	175	173	173	174	174	173	
50.0	166	163	163	164	164	164	
52.5	155	153	153	154	154	154	
55.0	145	142	142	143	143	143	127
57.5	134	131	132	132	132	132	
60.0	123	120	120	121	121	121	
62.5	111	109	109	110	110	110	
65.0	100	97	98	98	99	98	97
67.5	88	86	86	87	87	87	
70.0	75	74	75	75	75	75	
72.5	63	63	63	63	63	63	
75.0	51	51	52	52	52	52	55
77.5	40	40	40	41	41	40	
80.0	30	30	30	30	30	30	
82.5	20	20	21	20	21	20	
85.0	12	12	12	12	12	12	14
87.5	5	5	5	6	6	5	
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	.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	.660	.59	0.850	.730	.650	.59	0.830	.720	.640	.58	0.700	.630	.57	0.670	.610	.57	0.650	.600	.56	0.54			
5	0.800	.670	.570	.51	0.780	.660	.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	.510	.44	0.720	.590	.500	.44	0.700	.580	.490	.43	0.560	.490	.43	0.540	.480	.43	0.530	.470	.42	0.40			
7	0.670	.530	.440	.39	0.660	.520	.440	.38	0.640	.520	.430	.38	0.500	.430	.37	0.490	.420	.37	0.470	.410	.37	0.35			
8	0.620	.480	.400	.34	0.610	.470	.390	.33	0.600	.470	.390	.33	0.450	.380	.33	0.440	.380	.33	0.430	.370	.33	0.31			
9	0.580	.440	.350	.29	0.570	.430	.350	.29	0.550	.430	.350	.29	0.410	.340	.29	0.400	.340	.29	0.390	.330	.29	0.27			
10	0.540	.400	.310	.26	0.520	.390	.310	.26	0.510	.390	.310	.26	0.380	.310	.26	0.370	.300	.26	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.



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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.