



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
4000K-CC5050-60-reel
Project Number
10345709
Test Number
33094

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

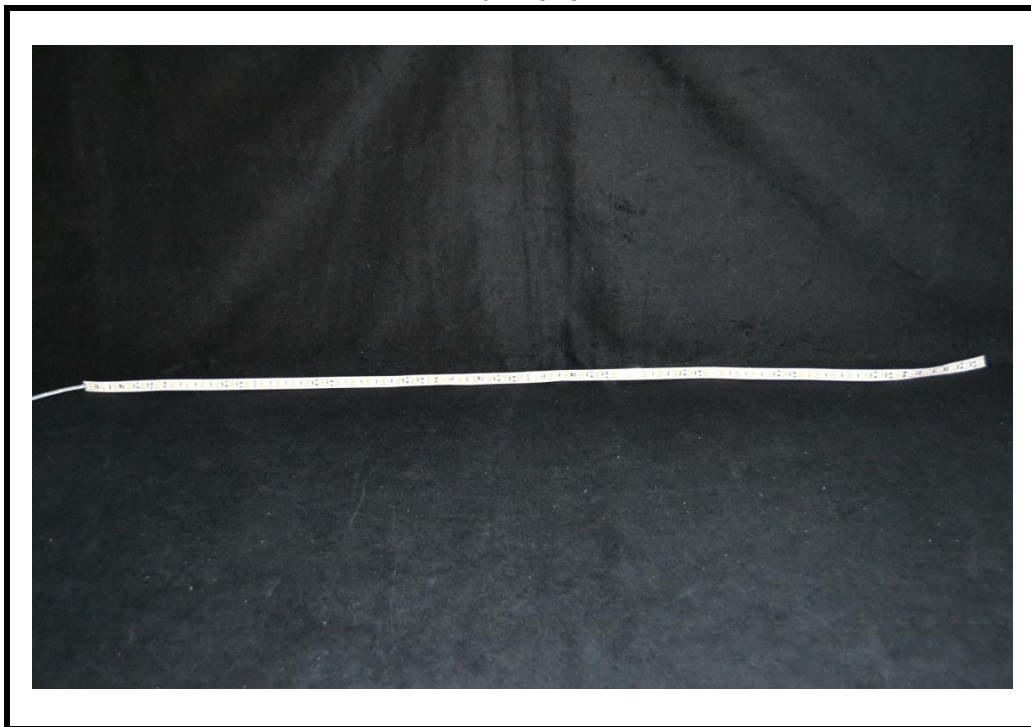
The results contained in this report pertain only to the tested sample.
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Luminaire Description: LED Strip Light
Catalog Number: 4000K-CC5050-60-reel
Lamp: LED Array
Ballast/Driver: One Mean Well SP-320-24 Driver

Luminaire



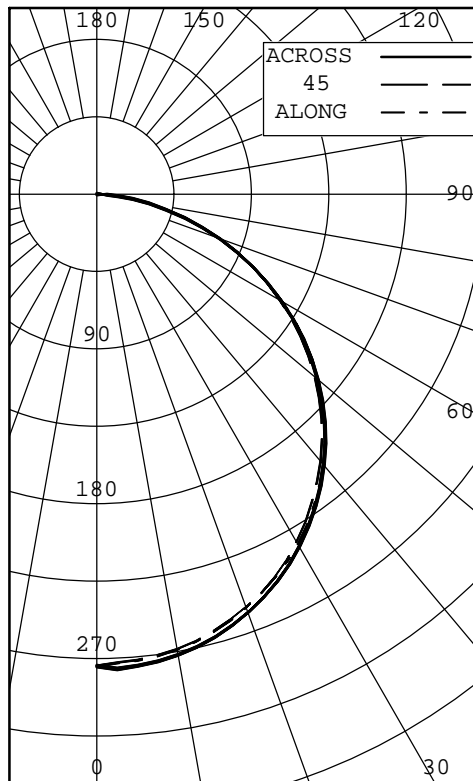
Test Conditions

Test Temperature: 24.5 °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	274	274	274	274	274	
5	272	271	272	275	275	26
10	269	267	269	272	272	
15	264	262	263	266	267	74
20	256	254	255	258	258	
25	246	245	245	248	248	113
30	234	233	233	235	236	
35	221	219	218	221	222	137
40	205	203	202	205	205	
45	187	185	185	187	188	143
50	168	166	166	168	168	
55	147	145	145	146	147	130
60	125	122	123	124	124	
65	101	99	99	100	100	99
70	77	76	76	76	77	
75	53	52	52	53	53	56
80	30	30	31	31	31	
85	12	12	13	13	13	15
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	214	26.97
0-40	351	44.27
0-60	624	78.69
0-90	793	100.00
40-90	442	55.73
60-90	169	21.31
90-180	0	0.00
0-180	793	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	27831	27550	27945
55	26989	26559	26926
65	25177	24767	25049
75	21296	21281	21723
85	14274	15337	15659

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	274	274	274	274	274	274	
2.5	273	272	273	276	276	274	
5.0	272	271	272	275	275	273	26
7.5	271	269	270	274	274	271	
10.0	269	267	269	272	272	270	
12.5	267	265	266	269	270	267	
15.0	264	262	263	266	267	264	74
17.5	260	258	259	262	263	260	
20.0	256	254	255	258	258	256	
22.5	251	250	250	253	254	251	
25.0	246	245	245	248	248	246	113
27.5	241	239	239	242	243	240	
30.0	234	233	233	235	236	234	
32.5	228	226	226	228	229	227	
35.0	221	219	218	221	222	220	137
37.5	213	211	210	213	214	212	
40.0	205	203	202	205	205	204	
42.5	196	194	194	196	197	195	
45.0	187	185	185	187	188	186	143
47.5	178	175	175	178	178	177	
50.0	168	166	166	168	168	167	
52.5	158	156	155	157	157	156	
55.0	147	145	145	146	147	146	130
57.5	136	134	134	135	135	135	
60.0	125	122	123	124	124	123	
62.5	113	111	111	112	112	112	
65.0	101	99	99	100	100	100	99
67.5	89	87	88	89	89	88	
70.0	77	76	76	76	77	76	
72.5	65	63	64	64	65	64	
75.0	53	52	52	53	53	52	56
77.5	41	41	41	41	41	41	
80.0	30	30	31	31	31	31	
82.5	20	20	21	21	21	21	
85.0	12	12	13	13	13	13	15
87.5	5	6	6	6	6	6	
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	.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	0.940	.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	0.72				
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	0.850	.730	.650	.58	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	0.750	.640	.560	.50	0.620	.550	.49	0.600	.540	.49	0.580	.530	.48	0.46				
6	0.740	.590	.500	.44	0.720	.580	.500	.44	0.700	.570	.490	.43	0.560	.480	.43	0.540	.470	.43	0.530	.470	.42	0.40				
7	0.670	.530	.440	.38	0.660	.520	.440	.38	0.640	.510	.430	.37	0.500	.420	.37	0.480	.420	.37	0.470	.410	.36	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	.300	.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.



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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.