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

Photometric Indoor Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

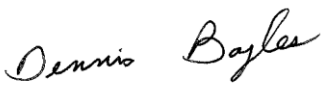
Prepared For
Environmental Lights
11235 W. Bernardo Court, Suite 102
San Diego, CA 92127

Catalog Number
4000K-CC5050-60x2-reel
Project Number
10345709
Test Number
33099

Test Date

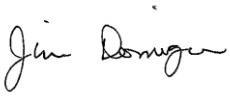
2014-06-17

Prepared By



Dennis Boyles, Technician

Approved By



Jim Domigan, Laboratory Team Leader

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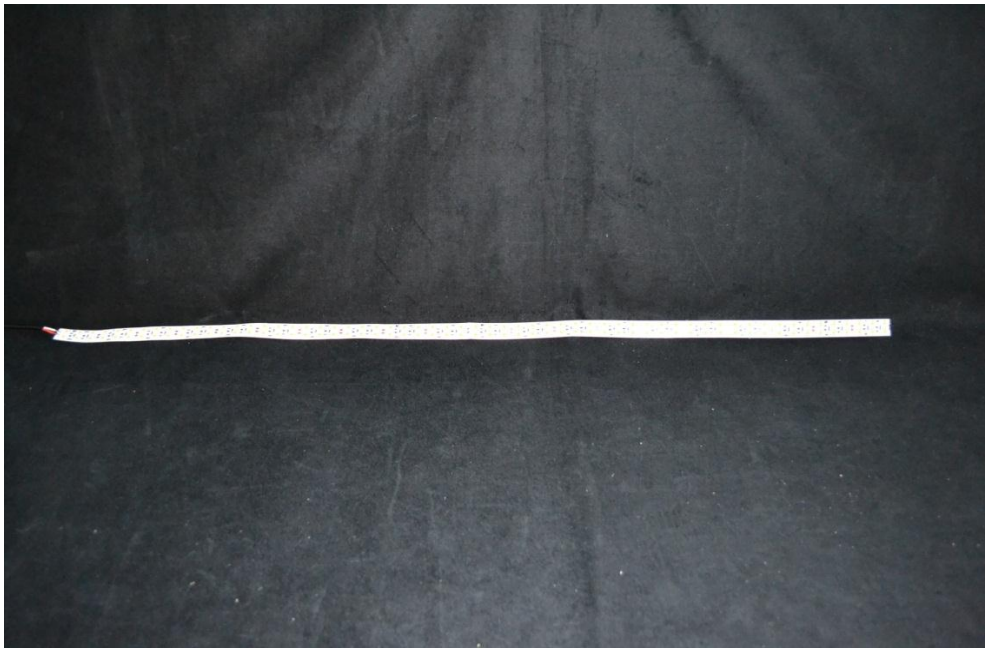
Luminaire Description:	LED Strip Light
Catalog Number:	4000K-CC5050-60x2-reel
Lamp:	LED Array
Ballast/Driver:	One Mean Well SP-320-24 Driver

Luminaire



Test Conditions

Test Temperature:	24.7 °C
Voltage:	24.0 VDC

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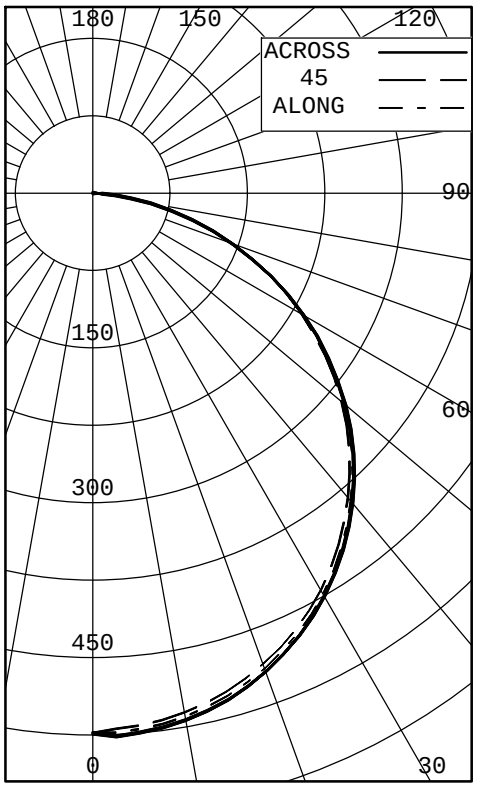

INTENSITY(CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	523	523	523	523	523	
5	522	517	518	524	525	50
10	515	510	511	518	519	
15	504	499	500	507	508	142
20	489	484	485	491	493	
25	470	466	466	472	473	216
30	447	443	443	448	450	
35	420	416	415	421	422	261
40	389	386	385	389	391	
45	355	352	352	356	357	272
50	319	315	315	318	319	
55	279	275	275	278	279	247
60	236	233	233	235	236	
65	191	188	189	190	191	187
70	145	143	144	145	145	
75	99	99	99	100	100	105
80	56	56	56	57	57	
85	22	22	22	22	22	27
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	408	27.06
0-40	669	44.40
0-60	1188	78.85
0-90	1506	100.00
40-90	838	55.60
60-90	319	21.15
90-180	0	0.00
0-180	1506	100.00

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 39.370 INS
WIDTH: 0.625 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
SC: 1.3

ANGLE	ALONG	45	ACROSS
45	31664	31432	31937
55	30596	30305	30713
65	28491	28292	28547
75	24168	24050	24419
85	15828	15941	16252

TESTED IN ACCORDANCE WITH IES PROCEDURES.

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INTENSITY(CANDLEPOWER) DATA
IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	LUMENS
0.0	523	523	523	523	523	523	
2.5	523	518	520	526	527	522	
5.0	522	517	518	524	525	520	50
7.5	519	514	515	521	523	518	
10.0	515	510	511	518	519	514	
12.5	510	505	506	513	514	509	
15.0	504	499	500	507	508	503	142
17.5	497	492	493	499	501	496	
20.0	489	484	485	491	493	488	
22.5	480	475	476	482	483	479	
25.0	470	466	466	472	473	469	216
27.5	459	455	455	461	462	458	
30.0	447	443	443	448	450	446	
32.5	434	430	430	435	437	432	
35.0	420	416	415	421	422	418	261
37.5	405	401	400	405	407	403	
40.0	389	386	385	389	391	387	
42.5	373	369	368	373	375	371	
45.0	355	352	352	356	357	354	272
47.5	337	334	334	338	339	336	
50.0	319	315	315	318	319	317	
52.5	299	296	295	298	299	297	
55.0	279	275	275	278	279	277	247
57.5	257	254	254	257	257	256	
60.0	236	233	233	235	236	234	
62.5	214	211	211	213	213	212	
65.0	191	188	189	190	191	190	187
67.5	168	166	166	167	168	167	
70.0	145	143	144	145	145	144	
72.5	122	121	121	122	122	121	
75.0	99	99	99	100	100	99	105
77.5	77	77	77	78	78	77	
80.0	56	56	56	57	57	57	
82.5	38	38	38	38	38	38	
85.0	22	22	22	22	22	22	27
87.5	10	10	10	10	10	10	
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
RCR	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	1.22	1.22	1.22	1.22	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.12	1.07	1.03	0.99	1.10	1.05	1.01	0.97	1.07	1.03	0.99	0.96	0.98	0.96	0.93	0.95	0.92	0.90	0.91	0.89	0.87	0.85
2	1.03	0.95	0.88	0.82	1.00	0.93	0.87	0.81	0.98	0.91	0.85	0.80	0.87	0.82	0.78	0.84	0.80	0.76	0.81	0.78	0.75	0.73
3	0.94	0.83	0.75	0.69	0.92	0.82	0.74	0.68	0.89	0.80	0.73	0.68	0.78	0.71	0.66	0.75	0.70	0.65	0.72	0.68	0.64	0.62
4	0.87	0.75	0.66	0.59	0.85	0.73	0.65	0.59	0.83	0.72	0.65	0.58	0.70	0.63	0.58	0.67	0.61	0.57	0.65	0.60	0.56	0.54
5	0.80	0.67	0.58	0.51	0.78	0.66	0.57	0.50	0.76	0.64	0.56	0.50	0.62	0.55	0.50	0.60	0.54	0.49	0.58	0.53	0.49	0.47
6	0.74	0.60	0.51	0.44	0.72	0.59	0.50	0.44	0.70	0.58	0.49	0.43	0.56	0.49	0.43	0.54	0.48	0.43	0.53	0.47	0.42	0.40
7	0.67	0.53	0.44	0.39	0.66	0.52	0.44	0.38	0.64	0.52	0.44	0.38	0.50	0.43	0.37	0.49	0.42	0.37	0.47	0.41	0.37	0.35
8	0.63	0.48	0.40	0.34	0.61	0.48	0.39	0.33	0.60	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.38	0.33	0.43	0.37	0.33	0.31
9	0.58	0.44	0.35	0.29	0.57	0.43	0.35	0.29	0.55	0.43	0.35	0.29	0.41	0.34	0.29	0.40	0.34	0.29	0.39	0.33	0.29	0.27
10	0.54	0.40	0.31	0.26	0.52	0.39	0.31	0.26	0.51	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.25	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° C ± 1° 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.