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

Photometric Indoor Test Report

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

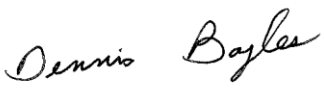
Prepared For
Environmental Lights
11235 W. Bernardo Court, Suite 102
San Diego, CA 92127

Catalog Number
2400K-CC5050-60x2-reel
Project Number
10345709
Test Number
33096

Test Date

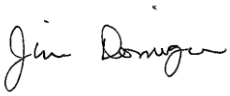
2014-06-17

Prepared By



Dennis Boyles, Technician

Approved By



Jim Domigan, Laboratory Team Leader

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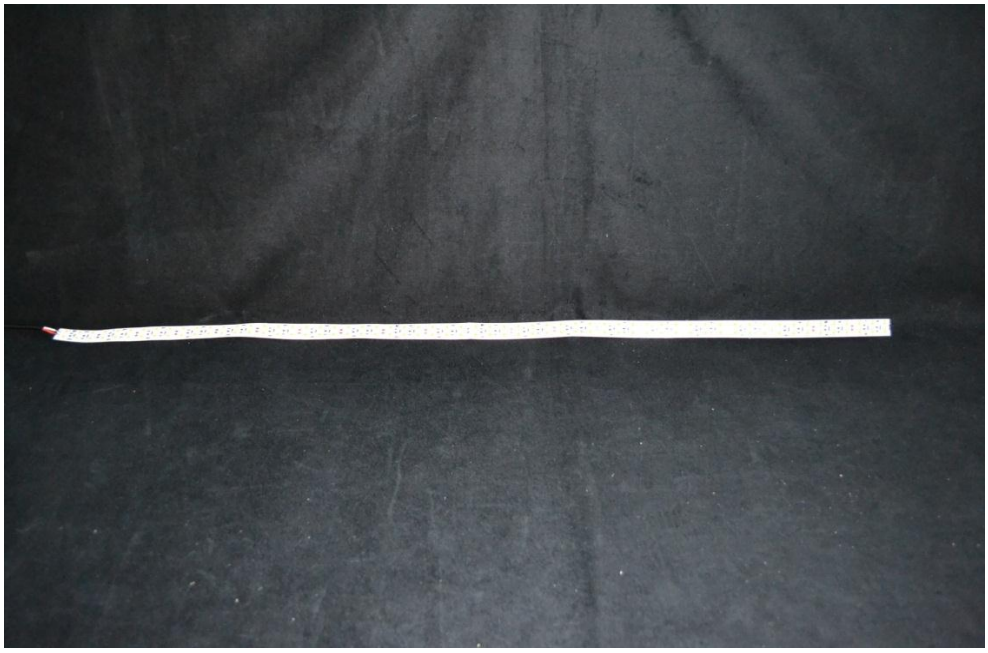
Luminaire Description:	LED Strip Light
Catalog Number:	2400K-CC5050-60x2-reel
Lamp:	LED Array
Ballast/Driver:	One Mean Well SP-320-24 Driver

Luminaire



Test Conditions

Test Temperature:	24.8 °C
Voltage:	24.0 VDC

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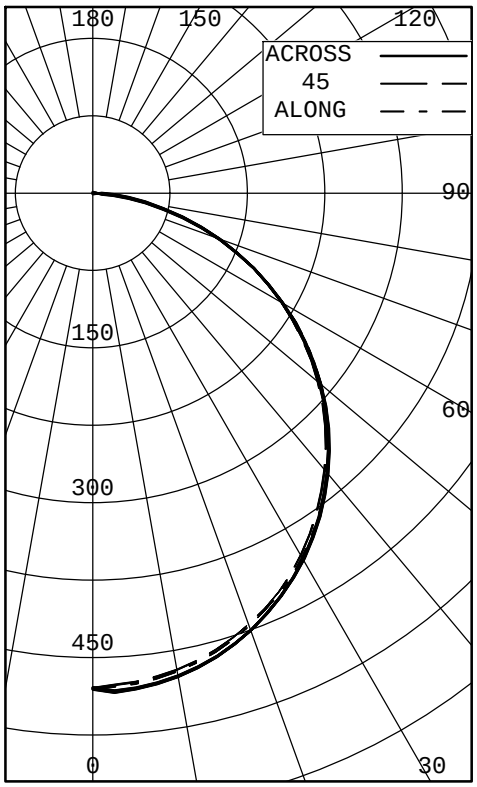

INTENSITY(CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	480	480	480	480	480	
5	477	473	476	481	482	46
10	471	467	469	474	476	
15	460	456	459	464	465	130
20	446	442	444	449	450	
25	428	425	426	431	431	197
30	407	404	404	408	409	
35	382	378	378	383	383	237
40	354	350	349	354	354	
45	323	319	319	322	322	247
50	289	285	285	288	288	
55	253	249	249	251	251	223
60	214	210	211	213	212	
65	173	170	171	172	172	169
70	132	129	130	131	131	
75	91	89	89	90	90	95
80	52	52	51	52	52	
85	20	20	20	20	21	24
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	373	27.22
0-40	610	44.58
0-60	1080	78.91
0-90	1368	100.00
40-90	758	55.42
60-90	289	21.09
90-180	0	0.00
0-180	1368	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	28738	28495	28830
55	27746	27433	27665
65	25845	25562	25757
75	22074	21784	22049
85	14672	14492	14873

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	480	480	480	480	480	480	
2.5	479	475	477	482	484	479	
5.0	477	473	476	481	482	477	46
7.5	475	470	473	478	479	474	
10.0	471	467	469	474	476	471	
12.5	466	462	464	470	471	466	
15.0	460	456	459	464	465	460	130
17.5	454	450	452	457	458	453	
20.0	446	442	444	449	450	446	
22.5	437	434	436	440	441	437	
25.0	428	425	426	431	431	428	197
27.5	418	415	416	420	421	417	
30.0	407	404	404	408	409	406	
32.5	395	392	391	396	396	394	
35.0	382	378	378	383	383	380	237
37.5	368	365	364	369	369	366	
40.0	354	350	349	354	354	352	
42.5	338	335	334	339	339	337	
45.0	323	319	319	322	322	321	247
47.5	306	302	302	306	305	304	
50.0	289	285	285	288	288	287	
52.5	271	267	267	270	270	269	
55.0	253	249	249	251	251	250	223
57.5	233	229	230	232	232	231	
60.0	214	210	211	213	212	211	
62.5	194	190	191	192	192	192	
65.0	173	170	171	172	172	171	169
67.5	153	150	151	152	152	151	
70.0	132	129	130	131	131	131	
72.5	111	109	110	111	111	110	
75.0	91	89	89	90	90	90	95
77.5	71	69	70	71	71	70	
80.0	52	52	51	52	52	52	
82.5	35	35	35	35	35	35	
85.0	20	20	20	20	21	20	24
87.5	9	9	9	9	9	9	
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	0.99	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	0.83	0.78	0.84	0.80	0.77	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	0.90	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	0.62	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	0.51	0.76	0.64	0.56	0.50	0.62	0.55	0.50	0.60	0.54	0.49	0.59	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	0.50	0.44	0.56	0.49	0.43	0.54	0.48	0.43	0.53	0.47	0.42	0.41
7	0.67	0.53	0.44	0.39	0.66	0.53	0.44	0.38	0.64	0.52	0.44	0.38	0.50	0.43	0.38	0.49	0.42	0.37	0.48	0.42	0.37	0.35
8	0.63	0.48	0.40	0.34	0.61	0.48	0.39	0.34	0.60	0.47	0.39	0.33	0.46	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	0.53	0.40	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	0.26	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.