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

Photometric Indoor Test Report

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

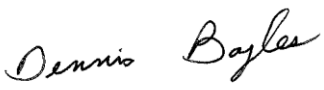
Prepared For
Environmental Lights
11235 W. Bernardo Court, Suite 102
San Diego, CA 92127

Catalog Number
dlrfEV3014-96-reel
Project Number
10345709
Test Number
33090

Test Date

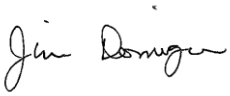
2014-06-23

Prepared By



Dennis Boyles, Technician

Approved By



Jim Domigan, Laboratory Team Leader

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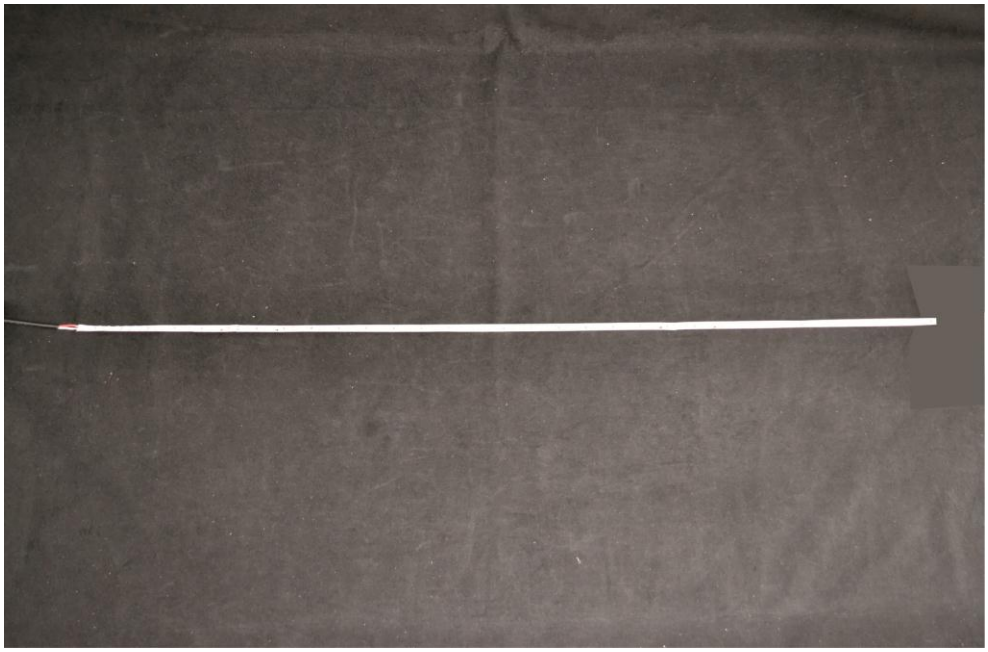
Luminaire Description:	LED Strip Light
Catalog Number:	dlrfEV3014-96-reel
Lamp:	LED Array
Ballast/Driver:	One Mean Well SP-240-12 Driver

Luminaire



Test Conditions

Test Temperature:	24.5 °C
Voltage:	12.0 VDC

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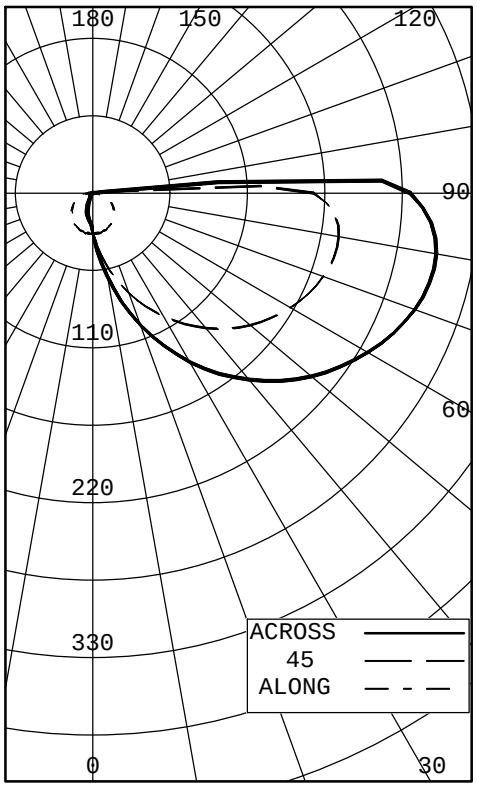

INTENSITY(CANDLEPOWER) SUMMARY

	BEAM SIDE				OUTPUT
ANGLE	ALONG	67.5	45	22.5	ACROSS	LUMENS
0	28	28	28	28	28	
5	29	33	38	40	42	2
15	28	44	63	75	80	9
25	27	56	89	112	120	19
35	25	67	114	146	157	33
45	22	77	136	176	189	48
55	18	86	155	200	215	63
65	14	102	169	219	236	76
75	9	97	177	230	248	83
85	4	77	172	224	242	80
90	1	69	157	208	226	
95	0	1	13	66	89	28
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

BOTH SIDES
ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	36	7.92
0-40	72	15.68
0-60	188	40.79
0-90	431	93.63
40-90	359	77.94
60-90	243	52.84
90-180	29	6.37
0-180	461	100.00

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 39.370 INS
WIDTH: 0.062 INS

LUMINANCE SUMMARY - CD./SQ.M.

	BEAM SIDE		
ANGLE	ALONG	45	ACROSS
45	19756	122958	170375
55	19927	172143	239044
65	21035	254976	355502
75	22081	435768	610047
85	29144	1259333	1766310

TESTED IN ACCORDANCE WITH IES PROCEDURES.

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BEAM SIDE
INTENSITY(CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT
	ALONG	67.5	45	22.5	ACROSS	AVERAGE	LUMENS
0	28	28	28	28	28	28	
5	29	33	38	40	42	37	2
10	29	38	50	57	60	47	
15	28	44	63	75	80	59	9
20	28	50	76	93	100	71	
25	27	56	89	112	120	82	19
30	26	62	101	129	139	94	
35	25	67	114	146	157	104	33
40	23	72	125	161	173	114	
45	22	77	136	176	189	124	48
50	20	82	146	189	203	132	
55	18	86	155	200	215	139	63
60	16	102	163	210	226	149	
65	14	102	169	219	236	154	76
70	11	101	174	226	243	157	
75	9	97	177	230	248	158	83
80	7	78	177	230	248	153	
85	4	77	172	224	242	149	80
90	1	69	157	208	226	137	
95	0	1	13	66	89	31	28
100	0	0	0	0	1	0	
105	0	0	0	0	0	0	0
110	0	0	0	0	0	0	
115	0	0	0	0	0	0	0
120	0	0	0	0	0	0	
125	0	0	0	0	0	0	0
130	0	0	0	0	0	0	
135	0	0	0	0	0	0	0
140	0	0	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	

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OPPOSITE SIDE TO BEAM
INTENSITY(CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT
	ALONG	112.5	135	157.5	ACROSS	AVERAGE	LUMENS
0	28	28	28	28	28	28	
5	29	25	23	22	21	23	1
10	29	22	20	19	18	21	
15	28	20	18	16	15	19	3
20	28	19	15	12	11	16	
25	27	17	12	8	7	13	3
30	26	15	9	5	4	11	
35	25	13	6	4	3	9	3
40	23	11	5	3	3	8	
45	22	9	4	3	3	7	3
50	20	8	3	3	2	6	
55	18	6	3	2	2	5	2
60	16	5	3	2	2	5	
65	14	4	2	2	1	4	2
70	11	3	2	1	1	3	
75	9	2	1	1	1	2	1
80	7	1	1	1	1	2	
85	4	1	1	0	0	1	1
90	1	0	0	0	0	0	
95	0	0	0	0	0	0	0
100	0	0	0	0	0	0	
105	0	0	0	0	0	0	0
110	0	0	0	0	0	0	
115	0	0	0	0	0	0	0
120	0	0	0	0	0	0	
125	0	0	0	0	0	0	0
130	0	0	0	0	0	0	
135	0	0	0	0	0	0	0
140	0	0	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	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	1.21	1.21	1.21	1.21	1.18	1.18	1.18	1.18	1.14	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	0.96	0.96	0.96	0.94
1	1.03	0.94	0.86	0.79	0.99	0.91	0.84	0.77	0.95	0.88	0.81	0.75	0.82	0.77	0.72	0.77	0.72	0.68	0.72	0.68	0.65	0.62
2	0.90	0.77	0.66	0.57	0.87	0.75	0.64	0.56	0.83	0.72	0.62	0.54	0.67	0.59	0.52	0.62	0.56	0.50	0.58	0.52	0.48	0.44
3	0.80	0.64	0.52	0.43	0.77	0.62	0.51	0.42	0.73	0.60	0.50	0.41	0.56	0.47	0.39	0.52	0.44	0.38	0.48	0.42	0.36	0.33
4	0.72	0.56	0.43	0.34	0.69	0.54	0.42	0.34	0.66	0.52	0.41	0.33	0.48	0.39	0.32	0.45	0.37	0.31	0.42	0.35	0.29	0.26
5	0.66	0.48	0.36	0.27	0.63	0.47	0.35	0.27	0.60	0.45	0.34	0.26	0.42	0.32	0.25	0.39	0.31	0.24	0.36	0.29	0.23	0.21
6	0.60	0.42	0.31	0.23	0.57	0.41	0.30	0.22	0.54	0.39	0.29	0.21	0.36	0.27	0.21	0.34	0.26	0.20	0.32	0.25	0.19	0.16
7	0.54	0.37	0.26	0.19	0.52	0.36	0.25	0.18	0.50	0.34	0.25	0.17	0.32	0.23	0.17	0.30	0.22	0.16	0.28	0.21	0.15	0.13
8	0.50	0.33	0.23	0.15	0.48	0.32	0.22	0.15	0.46	0.31	0.21	0.15	0.29	0.20	0.14	0.27	0.19	0.14	0.25	0.18	0.13	0.11
9	0.46	0.30	0.20	0.13	0.44	0.29	0.19	0.13	0.42	0.28	0.19	0.12	0.26	0.18	0.12	0.24	0.17	0.11	0.23	0.16	0.11	0.09
10	0.42	0.27	0.17	0.11	0.41	0.26	0.17	0.11	0.39	0.25	0.16	0.11	0.24	0.16	0.10	0.22	0.15	0.10	0.21	0.14	0.09	0.07

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.

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.