

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P284471

Luminaire Tested: **4SNLED-LD5-64SL-SLW-UNV-L830-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P284471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-64SL-SLW-UNV-L830-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6268.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

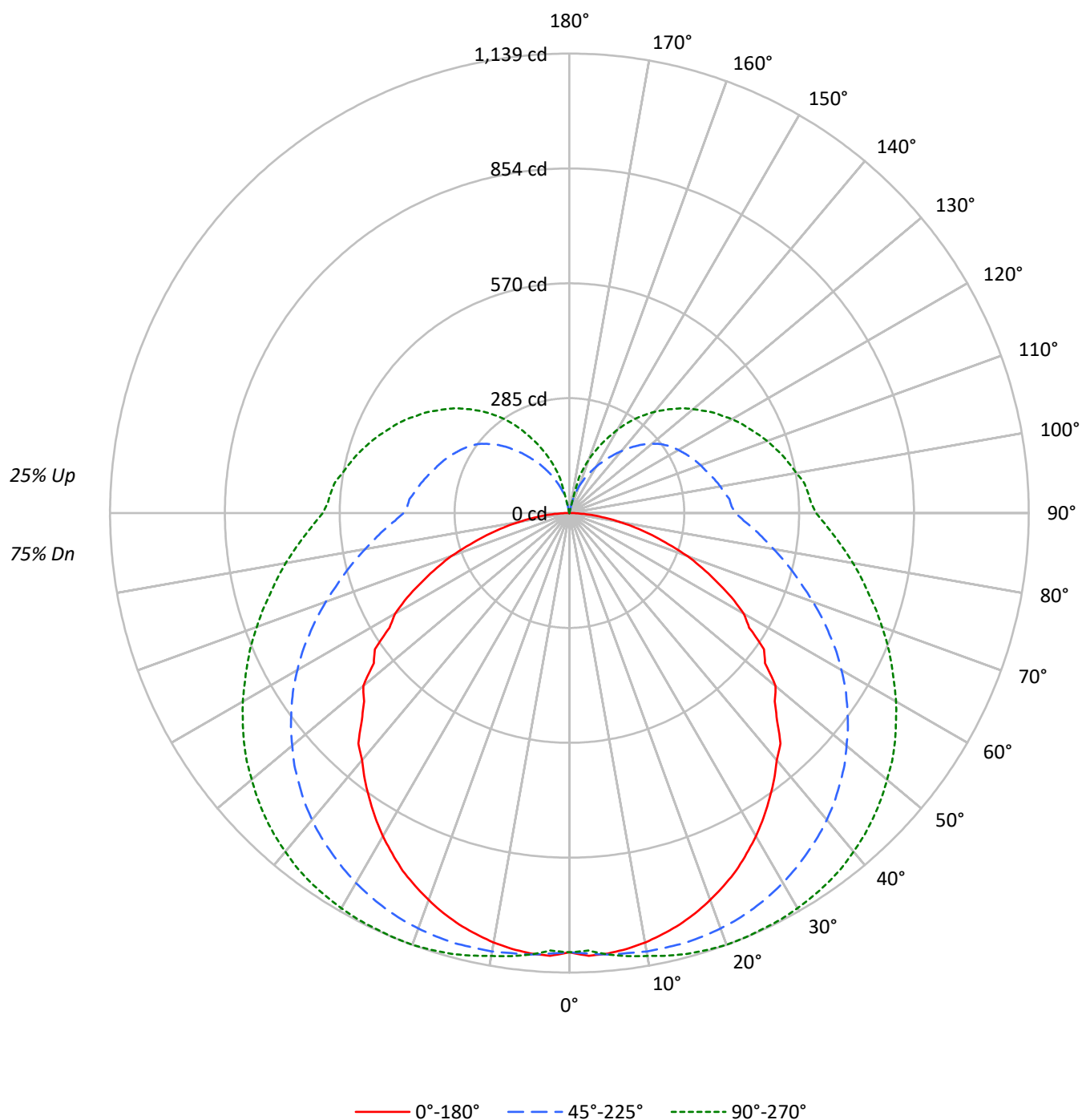
Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79			75
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60			56
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48			44
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39			36
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33			30
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28			25
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24			22
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21			19
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19			17
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17			15
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15			13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8797	8797	8797
5°	8865	8693	8628
10°	8823	8616	8581
15°	8761	8570	8599
20°	8679	8531	8615
25°	8596	8500	8629
30°	8477	8473	8675
35°	8346	8443	8734
40°	8220	8437	8791
45°	8064	8417	8861
50°	8088	8400	8931
55°	7944	8400	9037
60°	7654	8405	9160
65°	7229	8414	9331
70°	6763	8478	9592
75°	5933	8674	9981
80°	5013	9091	10623
85°	3723	9939	11563



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	1.7
10°-20°	310.1	4.9
20°-30°	492.8	7.9
30°-40°	632.5	10.1
40°-50°	714.2	11.4
50°-60°	728.8	11.6
60°-70°	675.2	10.8
70°-80°	571.6	9.1
80°-90°	456.3	7.3
90°-100°	387.5	6.2
100°-110°	345.2	5.5
110°-120°	294.0	4.7
120°-130°	233.5	3.7
130°-140°	165.7	2.6
140°-150°	98.9	1.6
150°-160°	46.1	0.7
160°-170°	11.0	0.2
170°-180°	0.0	0.0
0°-30°	907.5	14.5
0°-40°	1540.0	24.6
0°-60°	2983.0	47.6
0°-90°	4686.1	74.8
90°-120°	1026.7	16.4
90°-150°	1524.8	24.3
90°-180°	1582.0	25.2
0°-180°	6268.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1096	1087	1099	1099	1099	104
15°	1056	1065	1103	1124	1131	298
25°	978	1010	1081	1119	1137	450
35°	864	928	1028	1091	1118	541
45°	728	826	948	1031	1066	565
55°	589	688	841	944	985	517
65°	403	538	711	834	881	400
75°	212	376	576	717	768	226
85°	54	242	460	608	660	59
90°	3	198	411	560	611	4
95°	0	186	398	543	593	0
105°	0	171	362	499	548	0
115°	0	159	330	449	493	0
125°	0	137	293	396	434	0
135°	0	102	236	334	365	0
145°	0	66	165	250	286	1
155°	2	41	102	153	190	1
165°	2	22	46	63	90	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284471

CATALOG NUMBER: 4SNLED-LD5-64SL-SLW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.6	1088.6	1088.6	1088.6	1088.6
2.5°	1098.6	1087.0	1093.0	1091.4	1085.5
5°	1095.8	1087.0	1098.6	1098.6	1098.6
7.5°	1089.8	1083.9	1100.2	1106.1	1107.7
10°	1081.1	1081.1	1103.3	1112.1	1114.9
12.5°	1069.2	1073.5	1103.3	1116.5	1123.6
15°	1056.0	1064.8	1103.3	1123.6	1131.2
17.5°	1039.7	1054.5	1100.2	1125.2	1135.5
20°	1020.7	1042.9	1095.8	1125.2	1138.7
22.5°	1000.0	1028.2	1089.8	1122.4	1138.7
25°	978.1	1010.3	1081.1	1119.2	1137.1
27.5°	951.5	992.8	1070.7	1114.9	1135.5
30°	924.9	972.2	1058.8	1108.9	1131.2
32.5°	895.5	949.9	1044.1	1100.2	1125.2
35°	864.5	928.1	1028.2	1091.4	1118.0
37.5°	833.5	901.4	1011.9	1079.5	1108.9
40°	799.7	874.8	992.8	1064.8	1095.8
42.5°	774.6	847.0	972.2	1050.1	1082.7
45°	727.7	826.3	948.3	1031.0	1066.4
47.5°	690.8	786.6	924.9	1011.9	1048.5
50°	667.3	754.0	897.1	989.7	1028.2
52.5°	611.3	732.1	870.4	967.8	1008.7
55°	589.0	688.0	841.0	944.0	985.3
57.5°	528.6	657.0	811.6	917.7	960.3
60°	499.2	614.1	779.0	891.1	935.2
62.5°	453.5	577.5	746.8	861.7	907.4
65°	403.4	537.8	711.4	833.5	880.8
67.5°	356.5	498.0	677.7	804.1	854.1
70°	310.8	456.7	642.3	774.6	824.7
72.5°	257.6	415.3	608.1	746.8	796.9
75°	212.2	375.6	575.9	717.4	767.5
77.5°	167.7	337.4	544.9	690.8	740.9
80°	126.8	300.5	513.9	663.0	714.2
82.5°	88.2	269.5	486.1	636.3	686.4
85°	54.5	241.7	459.5	608.1	659.8
87.5°	25.0	216.6	432.8	581.9	634.7
90°	2.8	197.5	411.0	559.6	611.3
92.5°	1.6	191.6	402.2	549.3	599.4
95°	0.0	185.6	397.9	543.3	593.4
97.5°	0.0	179.7	387.5	534.6	586.2
100°	0.0	176.9	380.0	521.5	571.5
102.5°	0.0	172.5	371.2	509.5	559.6
105°	0.0	170.9	362.5	499.2	548.1
107.5°	0.0	167.7	353.3	486.1	534.6
110°	0.0	164.9	346.2	474.2	521.5



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CATALOG NUMBER: 4SNLED-LD5-64SL-SLW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	162.2	338.6	462.6	507.9
115°	0.0	159.0	329.9	449.1	493.2
117.5°	0.0	154.6	321.1	436.0	480.1
120°	0.0	148.6	312.4	424.1	465.4
122.5°	0.0	142.7	303.3	409.4	449.1
125°	0.0	137.1	292.9	396.3	434.4
127.5°	0.0	128.0	281.4	381.6	416.9
130°	0.0	119.2	266.7	366.9	400.6
132.5°	1.6	110.5	252.0	350.6	384.3
135°	0.0	101.7	235.7	334.3	365.3
137.5°	0.0	94.2	217.8	316.8	346.2
140°	0.0	85.5	200.3	296.1	327.1
142.5°	0.0	75.1	182.8	273.8	306.4
145°	0.0	66.4	164.9	250.4	285.8
147.5°	1.6	58.8	148.6	225.4	263.5
150°	1.6	52.9	132.8	200.3	238.5
152.5°	1.6	47.3	116.5	176.9	213.4
155°	1.6	41.3	101.7	153.0	190.0
157.5°	1.6	35.4	85.5	129.6	164.9
160°	1.6	31.0	70.7	108.9	141.5
162.5°	1.6	26.6	57.6	85.5	116.5
165°	1.6	22.3	45.7	63.2	89.8
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)