

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: P#

Luminaire Tested: **4SNLED-LD5-54HL-SLN-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-54HL-SLN-UNV-L840-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

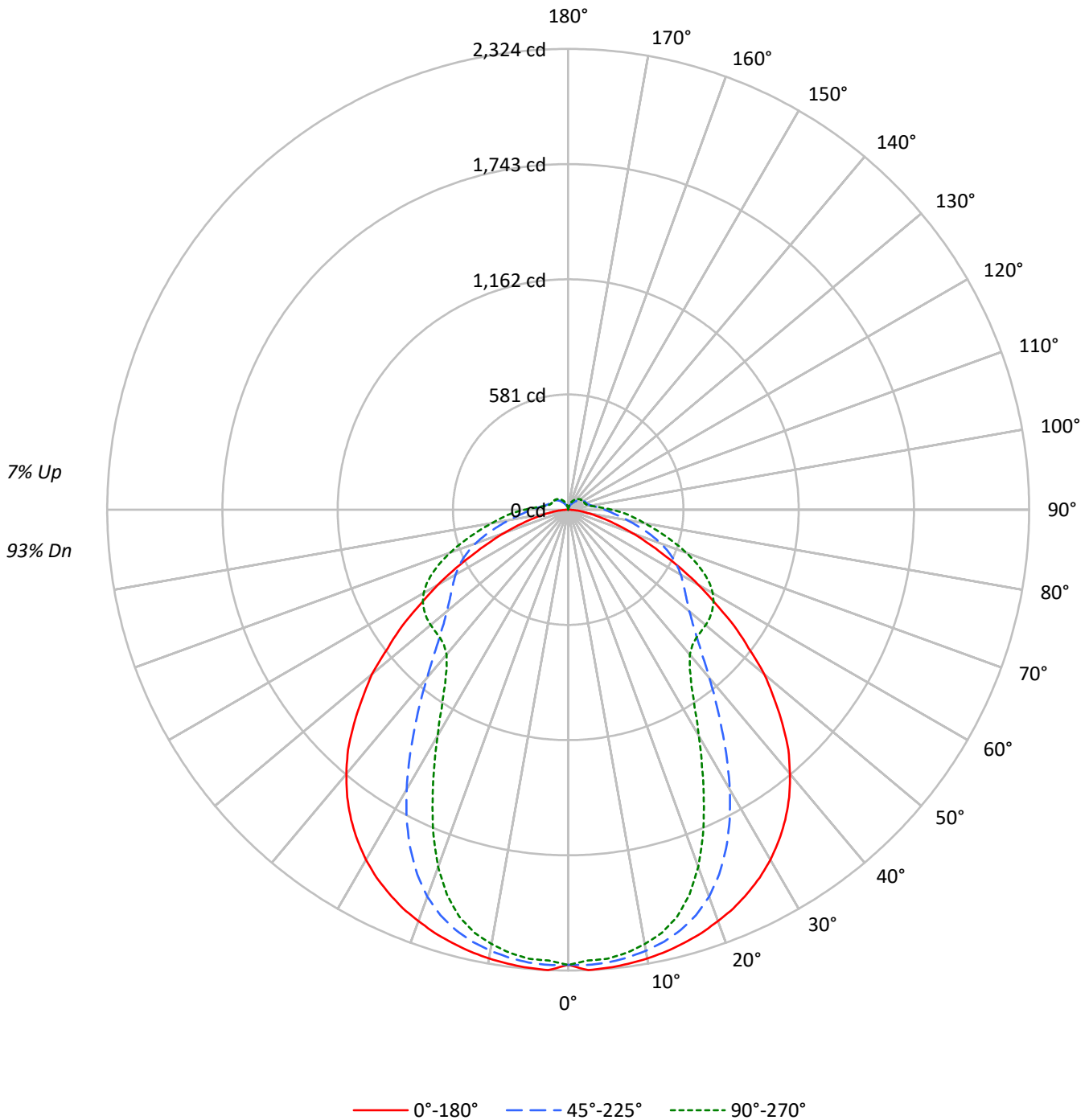
Lumens per Lamp: N/A
Luminaire Lumens: 5772.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 39
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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	93
1	107	102	97	93	103	99	94	91	93	90	87	88	85	83	83	81	79	79	79	79	76
2	97	89	82	76	94	86	80	75	81	76	72	77	73	69	73	70	66	66	66	66	64
3	89	78	70	64	86	76	69	63	72	66	61	68	63	59	65	61	57	57	57	57	54
4	82	70	61	55	79	68	60	54	65	58	52	61	55	51	58	53	49	49	49	49	47
5	75	63	54	47	73	61	53	47	58	51	46	55	49	44	53	48	43	43	43	43	41
6	70	57	48	42	67	55	47	41	53	46	40	51	44	39	48	43	39	39	39	39	36
7	65	52	43	37	63	51	42	37	48	41	36	46	40	35	44	39	35	35	35	35	32
8	61	47	39	33	59	46	39	33	44	37	32	43	36	32	41	35	31	31	31	31	29
9	57	44	36	30	55	43	35	30	41	34	29	40	33	29	38	33	28	28	28	28	27
10	53	40	33	28	52	40	32	27	38	32	27	37	31	27	35	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18548	18548	18548
5°	18761	18138	17854
10°	18755	17637	17120
15°	18761	17045	16143
20°	18769	16167	14497
25°	18777	14814	12277
30°	18687	13036	10098
35°	18421	11091	8463
40°	17882	9393	7650
45°	16934	8163	7592
50°	15644	7463	7858
55°	13776	7173	8134
60°	11623	7070	8246
65°	9349	6914	7989
70°	7509	6556	7367
75°	5662	5934	6537
80°	4178	5328	5815
85°	2794	5027	5349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.1	3.8
10°-20°	613.8	10.6
20°-30°	858.0	14.9
30°-40°	889.9	15.4
40°-50°	822.2	14.2
50°-60°	734.0	12.7
60°-70°	594.9	10.3
70°-80°	395.7	6.9
80°-90°	226.6	3.9
90°-100°	125.3	2.2
100°-110°	84.9	1.5
110°-120°	70.7	1.2
120°-130°	57.5	1.0
130°-140°	41.4	0.7
140°-150°	25.0	0.4
150°-160°	12.0	0.2
160°-170°	3.1	0.1
170°-180°	0.0	0.0
0°-30°	1688.9	29.3
0°-40°	2578.8	44.7
0°-60°	4135.0	71.6
0°-90°	5352.1	92.7
90°-120°	280.9	4.9
90°-150°	404.8	7.0
90°-180°	420.0	7.3
0°-180°	5772.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2295	2295	2295	2295	2295	
5°	2319	2280	2292	2276	2273	221
15°	2261	2213	2194	2145	2124	639
25°	2137	2042	1884	1687	1618	985
35°	1908	1699	1351	1134	1083	1191
45°	1528	1211	920	887	914	1175
55°	1021	772	718	835	887	908
65°	522	467	584	716	754	527
75°	202	253	394	483	503	222
85°	41	118	232	297	305	47
90°	2	83	184	221	219	3
95°	2	70	146	156	151	1
105°	1	61	105	102	97	1
115°	1	55	93	92	89	1
125°	1	47	82	86	84	1
135°	2	35	65	76	76	1
145°	2	22	45	59	63	1
155°	2	14	28	37	45	1
165°	2	8	14	18	24	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2324.1	2286.2	2298.2	2288.2	2275.2
5°	2319.1	2280.2	2292.2	2276.2	2273.2
7.5°	2310.1	2271.2	2278.2	2259.3	2254.3
10°	2298.2	2257.3	2258.3	2231.3	2224.4
12.5°	2282.2	2237.3	2231.3	2194.4	2184.5
15°	2261.3	2213.4	2194.4	2144.6	2123.6
17.5°	2238.3	2182.5	2143.6	2066.8	2033.8
20°	2207.4	2144.6	2076.7	1960.0	1916.1
22.5°	2176.5	2098.7	1990.0	1834.3	1775.5
25°	2136.6	2041.8	1884.2	1686.7	1617.9
27.5°	2091.7	1975.0	1762.5	1535.1	1461.3
30°	2038.8	1894.2	1628.9	1386.5	1316.7
32.5°	1977.0	1803.4	1488.2	1252.8	1188.0
35°	1908.2	1698.7	1350.6	1134.1	1083.3
37.5°	1829.4	1584.0	1222.9	1038.4	1005.4
40°	1739.6	1459.3	1105.2	964.6	953.6
42.5°	1642.8	1337.6	1004.5	916.7	926.6
45°	1528.1	1210.9	919.7	886.8	913.7
47.5°	1407.4	1087.2	850.8	869.8	908.7
50°	1290.7	972.5	797.0	858.8	904.7
52.5°	1146.1	869.8	754.1	848.8	898.7
55°	1021.4	772.0	718.2	834.9	886.8
57.5°	877.8	684.3	686.3	816.9	868.8
60°	758.1	604.5	655.3	792.0	841.9
62.5°	636.4	532.6	621.4	759.1	804.0
65°	521.7	466.8	584.5	716.2	754.1
67.5°	425.9	407.0	542.6	664.3	696.2
70°	345.1	352.1	496.7	606.5	633.4
72.5°	265.3	301.2	446.9	544.6	567.6
75°	202.5	253.4	394.0	482.8	502.7
77.5°	149.6	211.5	346.1	426.9	443.9
80°	105.7	174.6	301.2	378.0	391.0
82.5°	70.8	143.6	264.3	334.2	346.1
85°	40.9	117.7	232.4	297.2	305.2
87.5°	17.0	97.8	206.5	259.3	263.3
90°	2.0	82.8	183.5	221.4	219.4
92.5°	2.0	74.8	163.6	185.5	180.5
95°	2.0	69.8	145.6	155.6	150.6
97.5°	2.0	66.8	129.7	133.7	128.7
100°	1.0	64.8	118.7	118.7	113.7
102.5°	1.0	62.8	110.7	107.7	103.7
105°	1.0	60.8	104.7	101.7	96.8
107.5°	1.0	59.8	100.7	97.8	92.8
110°	1.0	57.9	97.8	94.8	90.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	56.9	95.8	93.8	88.8
115°	1.0	54.9	92.8	91.8	88.8
117.5°	1.0	52.9	90.8	90.8	87.8
120°	1.0	50.9	87.8	89.8	86.8
122.5°	1.0	48.9	84.8	87.8	84.8
125°	1.0	46.9	81.8	85.8	83.8
127.5°	2.0	43.9	77.8	83.8	81.8
130°	1.0	40.9	73.8	81.8	80.8
132.5°	2.0	37.9	69.8	78.8	78.8
135°	2.0	34.9	64.8	75.8	75.8
137.5°	2.0	30.9	59.8	71.8	72.8
140°	2.0	27.9	54.9	67.8	69.8
142.5°	2.0	24.9	49.9	63.8	66.8
145°	2.0	21.9	44.9	58.9	62.8
147.5°	2.0	19.9	39.9	52.9	58.9
150°	2.0	17.0	35.9	47.9	53.9
152.5°	2.0	15.0	31.9	42.9	49.9
155°	2.0	14.0	27.9	36.9	44.9
157.5°	2.0	12.0	23.9	31.9	39.9
160°	2.0	10.0	19.9	27.9	33.9
162.5°	2.0	9.0	17.0	22.9	29.9
165°	2.0	8.0	14.0	18.0	23.9
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)