

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-L830-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-L830-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
SQUARE NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

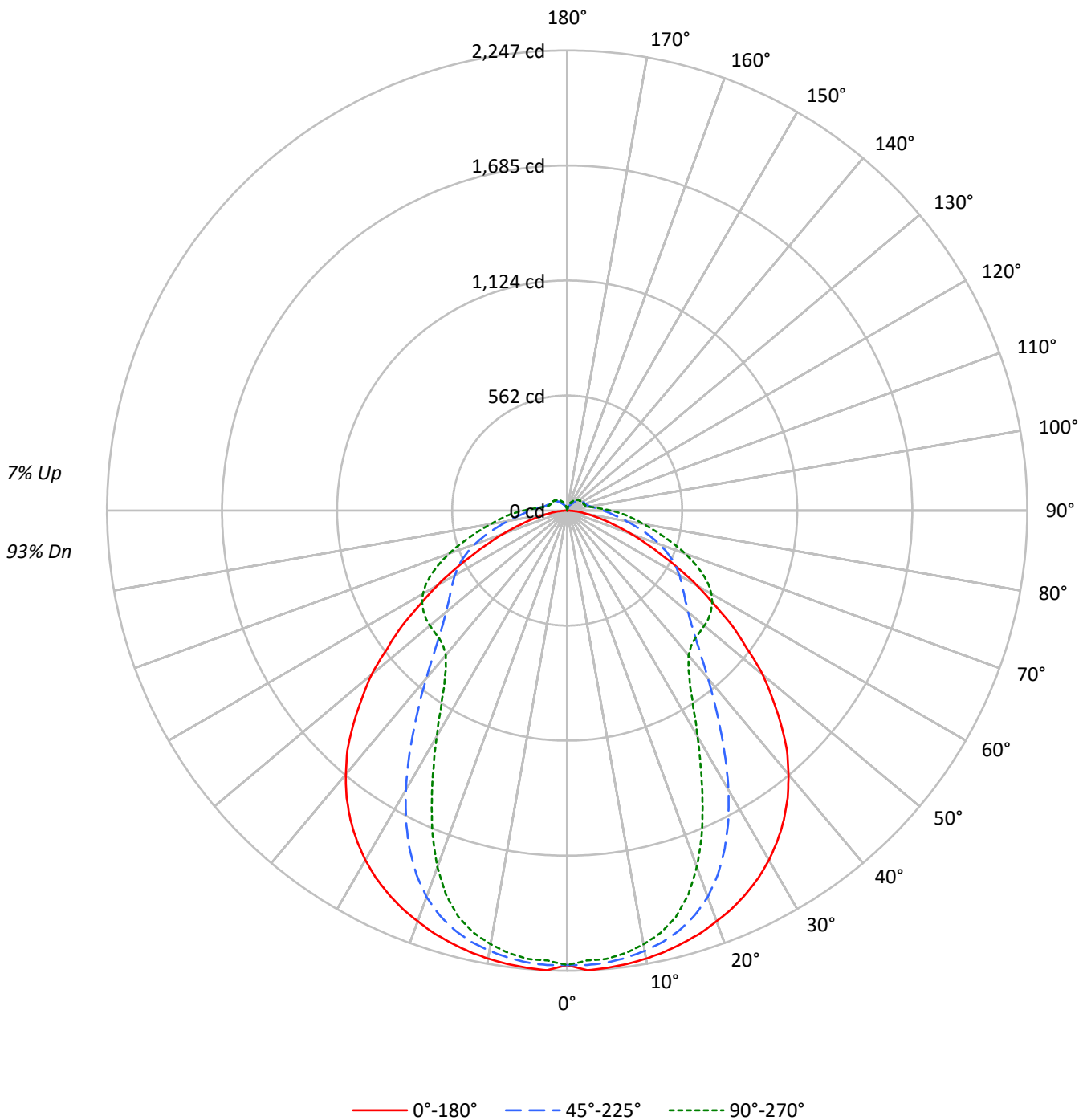
Lumens per Lamp: N/A  
Luminaire Lumens: 5580.0 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17930	17930	17930
5°	18137	17534	17260
10°	18131	17050	16550
15°	18136	16478	15606
20°	18145	15630	14015
25°	18152	14321	11869
30°	18066	12602	9762
35°	17808	10721	8181
40°	17287	9080	7396
45°	16371	7892	7340
50°	15124	7214	7597
55°	13317	6934	7863
60°	11237	6835	7971
65°	9037	6684	7723
70°	7259	6339	7122
75°	5475	5737	6320
80°	4040	5151	5622
85°	2699	4860	5172



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.9	3.8
10°-20°	593.3	10.6
20°-30°	829.4	14.9
30°-40°	860.3	15.4
40°-50°	794.8	14.2
50°-60°	709.6	12.7
60°-70°	575.1	10.3
70°-80°	382.5	6.9
80°-90°	219.0	3.9
90°-100°	121.2	2.2
100°-110°	82.1	1.5
110°-120°	68.3	1.2
120°-130°	55.6	1.0
130°-140°	40.1	0.7
140°-150°	24.2	0.4
150°-160°	11.6	0.2
160°-170°	3.0	0.1
170°-180°	0.0	0.0
0°-30°	1632.7	29.3
0°-40°	2493.0	44.7
0°-60°	3997.4	71.6
0°-90°	5174.1	92.7
90°-120°	271.6	4.9
90°-150°	391.4	7.0
90°-180°	406.0	7.3
0°-180°	5580.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2242	2204	2216	2200	2198	213
15°	2186	2140	2121	2073	2053	618
25°	2066	1974	1822	1631	1564	952
35°	1845	1642	1306	1096	1047	1151
45°	1477	1171	889	857	883	1136
55°	987	746	694	807	857	878
65°	504	451	565	692	729	510
75°	196	245	381	467	486	215
85°	40	114	225	287	295	45
90°	2	80	177	214	212	3
95°	2	68	141	150	146	1
105°	1	59	101	98	94	1
115°	1	53	90	89	86	1
125°	1	45	79	83	81	1
135°	2	34	63	73	73	1
145°	2	21	43	57	61	1
155°	2	14	27	36	43	1
165°	2	8	14	17	23	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°	2218.8	2218.8	2218.8	2218.8	2218.8
2.5°	2246.8	2210.2	2221.7	2212.1	2199.5
5°	2242.0	2204.4	2215.9	2200.5	2197.6
7.5°	2233.3	2195.7	2202.4	2184.1	2179.3
10°	2221.7	2182.2	2183.2	2157.1	2150.4
12.5°	2206.3	2162.9	2157.1	2121.4	2111.8
15°	2186.0	2139.8	2121.4	2073.2	2053.0
17.5°	2163.9	2109.9	2072.3	1998.0	1966.2
20°	2134.0	2073.2	2007.7	1894.8	1852.4
22.5°	2104.1	2028.9	1923.8	1773.3	1716.4
25°	2065.5	1973.9	1821.5	1630.6	1564.1
27.5°	2022.1	1909.3	1703.9	1484.0	1412.7
30°	1971.0	1831.2	1574.7	1340.4	1272.9
32.5°	1911.2	1743.4	1438.7	1211.1	1148.5
35°	1844.7	1642.2	1305.6	1096.4	1047.2
37.5°	1768.5	1531.3	1182.2	1003.8	972.0
40°	1681.7	1410.8	1068.4	932.5	921.9
42.5°	1588.2	1293.1	971.0	886.2	895.8
45°	1477.3	1170.6	889.1	857.3	883.3
47.5°	1360.6	1051.1	822.5	840.9	878.5
50°	1247.8	940.2	770.5	830.3	874.6
52.5°	1108.0	840.9	729.0	820.6	868.8
55°	987.4	746.4	694.3	807.1	857.3
57.5°	848.6	661.5	663.4	789.8	839.9
60°	732.9	584.4	633.5	765.6	813.9
62.5°	615.2	514.9	600.8	733.8	777.2
65°	504.3	451.3	565.1	692.4	729.0
67.5°	411.8	393.4	524.6	642.2	673.1
70°	333.6	340.4	480.2	586.3	612.3
72.5°	256.5	291.2	432.0	526.5	548.7
75°	195.8	244.9	380.9	466.7	486.0
77.5°	144.6	204.4	334.6	412.7	429.1
80°	102.2	168.8	291.2	365.5	378.0
82.5°	68.5	138.9	255.5	323.0	334.6
85°	39.5	113.8	224.7	287.4	295.1
87.5°	16.4	94.5	199.6	250.7	254.6
90°	1.9	80.0	177.4	214.1	212.1
92.5°	1.9	72.3	158.1	179.4	174.5
95°	1.9	67.5	140.8	150.4	145.6
97.5°	1.9	64.6	125.4	129.2	124.4
100°	1.0	62.7	114.8	114.8	109.9
102.5°	1.0	60.8	107.0	104.1	100.3
105°	1.0	58.8	101.3	98.4	93.5
107.5°	1.0	57.9	97.4	94.5	89.7
110°	1.0	55.9	94.5	91.6	87.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	55.0	92.6	90.6	85.8
115°	1.0	53.0	89.7	88.7	85.8
117.5°	1.0	51.1	87.8	87.8	84.9
120°	1.0	49.2	84.9	86.8	83.9
122.5°	1.0	47.3	82.0	84.9	82.0
125°	1.0	45.3	79.1	82.9	81.0
127.5°	1.9	42.4	75.2	81.0	79.1
130°	1.0	39.5	71.4	79.1	78.1
132.5°	1.9	36.6	67.5	76.2	76.2
135°	1.9	33.8	62.7	73.3	73.3
137.5°	1.9	29.9	57.9	69.4	70.4
140°	1.9	27.0	53.0	65.6	67.5
142.5°	1.9	24.1	48.2	61.7	64.6
145°	1.9	21.2	43.4	56.9	60.8
147.5°	1.9	19.3	38.6	51.1	56.9
150°	1.9	16.4	34.7	46.3	52.1
152.5°	1.9	14.5	30.9	41.5	48.2
155°	1.9	13.5	27.0	35.7	43.4
157.5°	1.9	11.6	23.1	30.9	38.6
160°	1.9	9.6	19.3	27.0	32.8
162.5°	1.9	8.7	16.4	22.2	28.9
165°	1.9	7.7	13.5	17.4	23.1
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)