

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-LD5-60HL-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-LD5-60HL-SLN-UNV-L830-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
SQUARE NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

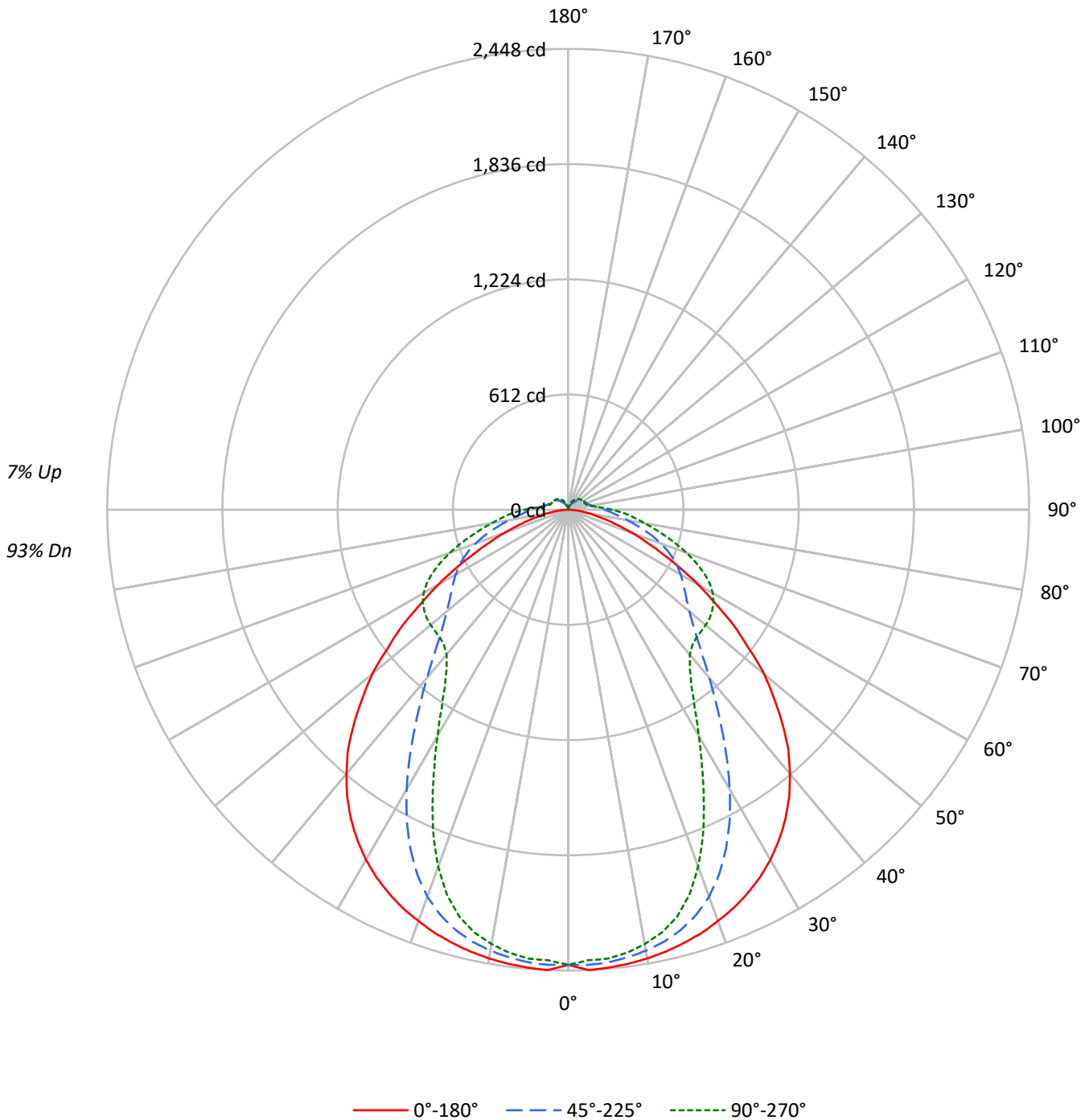
Lumens per Lamp: N/A  
Luminaire Lumens: 6079.0 lumens  
Efficiency: N/A  
Efficacy: 141.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 43  
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°	19534	19534	19534
5°	19759	19102	18803
10°	19752	18575	18030
15°	19758	17953	17002
20°	19768	17027	15269
25°	19776	15602	12929
30°	19682	13729	10635
35°	19401	11680	8913
40°	18833	9892	8057
45°	17835	8597	7996
50°	16477	7860	8276
55°	14508	7555	8566
60°	12241	7447	8684
65°	9845	7281	8413
70°	7909	6906	7759
75°	5964	6250	6886
80°	4404	5613	6125
85°	2944	5295	5634



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.7	3.8
10°-20°	646.4	10.6
20°-30°	903.6	14.9
30°-40°	937.3	15.4
40°-50°	865.9	14.2
50°-60°	773.1	12.7
60°-70°	626.5	10.3
70°-80°	416.7	6.9
80°-90°	238.6	3.9
90°-100°	132.0	2.2
100°-110°	89.4	1.5
110°-120°	74.4	1.2
120°-130°	60.5	1.0
130°-140°	43.6	0.7
140°-150°	26.3	0.4
150°-160°	12.6	0.2
160°-170°	3.3	0.1
170°-180°	0.0	0.0
0°-30°	1778.7	29.3
0°-40°	2715.9	44.7
0°-60°	4354.9	71.6
0°-90°	5636.8	92.7
90°-120°	295.9	4.9
90°-150°	426.3	7.0
90°-180°	442.0	7.3
0°-180°	6079.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2417	2417	2417	2417	2417	
5°	2442	2402	2414	2397	2394	232
15°	2382	2331	2311	2259	2237	673
25°	2250	2150	1984	1776	1704	1037
35°	2010	1789	1422	1194	1141	1254
45°	1609	1275	969	934	962	1237
55°	1076	813	756	879	934	957
65°	549	492	616	754	794	555
75°	213	267	415	508	530	234
85°	43	124	245	313	322	50
90°	2	87	193	233	231	3
95°	2	74	153	164	159	2
105°	1	64	110	107	102	1
115°	1	58	98	97	94	1
125°	1	49	86	90	88	1
135°	2	37	68	80	80	2
145°	2	23	47	62	66	1
155°	2	15	29	39	47	1
165°	2	8	15	19	25	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2417.3	2417.3	2417.3	2417.3	2417.3
2.5°	2447.7	2407.8	2420.4	2409.9	2396.2
5°	2442.5	2401.5	2414.1	2397.3	2394.1
7.5°	2433.0	2392.0	2399.4	2379.4	2374.2
10°	2420.4	2377.3	2378.4	2350.0	2342.7
12.5°	2403.6	2356.3	2350.0	2311.2	2300.6
15°	2381.5	2331.1	2311.2	2258.6	2236.6
17.5°	2357.4	2298.5	2257.6	2176.7	2142.0
20°	2324.8	2258.6	2187.2	2064.3	2018.1
22.5°	2292.2	2210.3	2095.8	1931.9	1869.9
25°	2250.2	2150.4	1984.4	1776.4	1703.9
27.5°	2202.9	2080.0	1856.3	1616.8	1539.0
30°	2147.3	1994.9	1715.5	1460.2	1386.7
32.5°	2082.1	1899.3	1567.4	1319.5	1251.2
35°	2009.7	1789.0	1422.4	1194.4	1140.9
37.5°	1926.7	1668.2	1287.9	1093.6	1058.9
40°	1832.1	1536.9	1164.0	1015.9	1004.3
42.5°	1730.2	1408.8	1057.9	965.4	975.9
45°	1609.4	1275.3	968.6	933.9	962.3
47.5°	1482.3	1145.1	896.1	916.1	957.0
50°	1359.4	1024.3	839.4	904.5	952.8
52.5°	1207.1	916.1	794.2	894.0	946.5
55°	1075.7	813.1	756.4	879.3	933.9
57.5°	924.5	720.7	722.8	860.4	915.0
60°	798.4	636.6	690.2	834.1	886.6
62.5°	670.2	561.0	654.5	799.4	846.7
65°	549.4	491.6	615.6	754.3	794.2
67.5°	448.6	428.6	571.5	699.6	733.3
70°	363.5	370.8	523.2	638.7	667.1
72.5°	279.4	317.3	470.6	573.6	597.7
75°	213.3	266.8	415.0	508.5	529.5
77.5°	157.6	222.7	364.5	449.6	467.5
80°	111.4	183.8	317.3	398.1	411.8
82.5°	74.6	151.3	278.4	351.9	364.5
85°	43.1	124.0	244.8	313.1	321.5
87.5°	17.9	103.0	217.5	273.1	277.3
90°	2.1	87.2	193.3	233.2	231.1
92.5°	2.1	78.8	172.3	195.4	190.1
95°	2.1	73.5	153.4	163.9	158.6
97.5°	2.1	70.4	136.6	140.8	135.5
100°	1.1	68.3	125.0	125.0	119.8
102.5°	1.1	66.2	116.6	113.5	109.3
105°	1.1	64.1	110.3	107.2	101.9
107.5°	1.1	63.0	106.1	103.0	97.7
110°	1.1	60.9	103.0	99.8	95.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	59.9	100.9	98.7	93.5
115°	1.1	57.8	97.7	96.6	93.5
117.5°	1.1	55.7	95.6	95.6	92.4
120°	1.1	53.6	92.4	94.5	91.4
122.5°	1.1	51.5	89.3	92.4	89.3
125°	1.1	49.4	86.1	90.3	88.2
127.5°	2.1	46.2	81.9	88.2	86.1
130°	1.1	43.1	77.7	86.1	85.1
132.5°	2.1	39.9	73.5	83.0	83.0
135°	2.1	36.8	68.3	79.8	79.8
137.5°	2.1	32.6	63.0	75.6	76.7
140°	2.1	29.4	57.8	71.4	73.5
142.5°	2.1	26.3	52.5	67.2	70.4
145°	2.1	23.1	47.3	62.0	66.2
147.5°	2.1	21.0	42.0	55.7	62.0
150°	2.1	17.9	37.8	50.4	56.7
152.5°	2.1	15.8	33.6	45.2	52.5
155°	2.1	14.7	29.4	38.9	47.3
157.5°	2.1	12.6	25.2	33.6	42.0
160°	2.1	10.5	21.0	29.4	35.7
162.5°	2.1	9.5	17.9	24.2	31.5
165°	2.1	8.4	14.7	18.9	25.2
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)