

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-LD5-90HL-SLN-UNV-L940-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-LD5-90HL-SLN-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

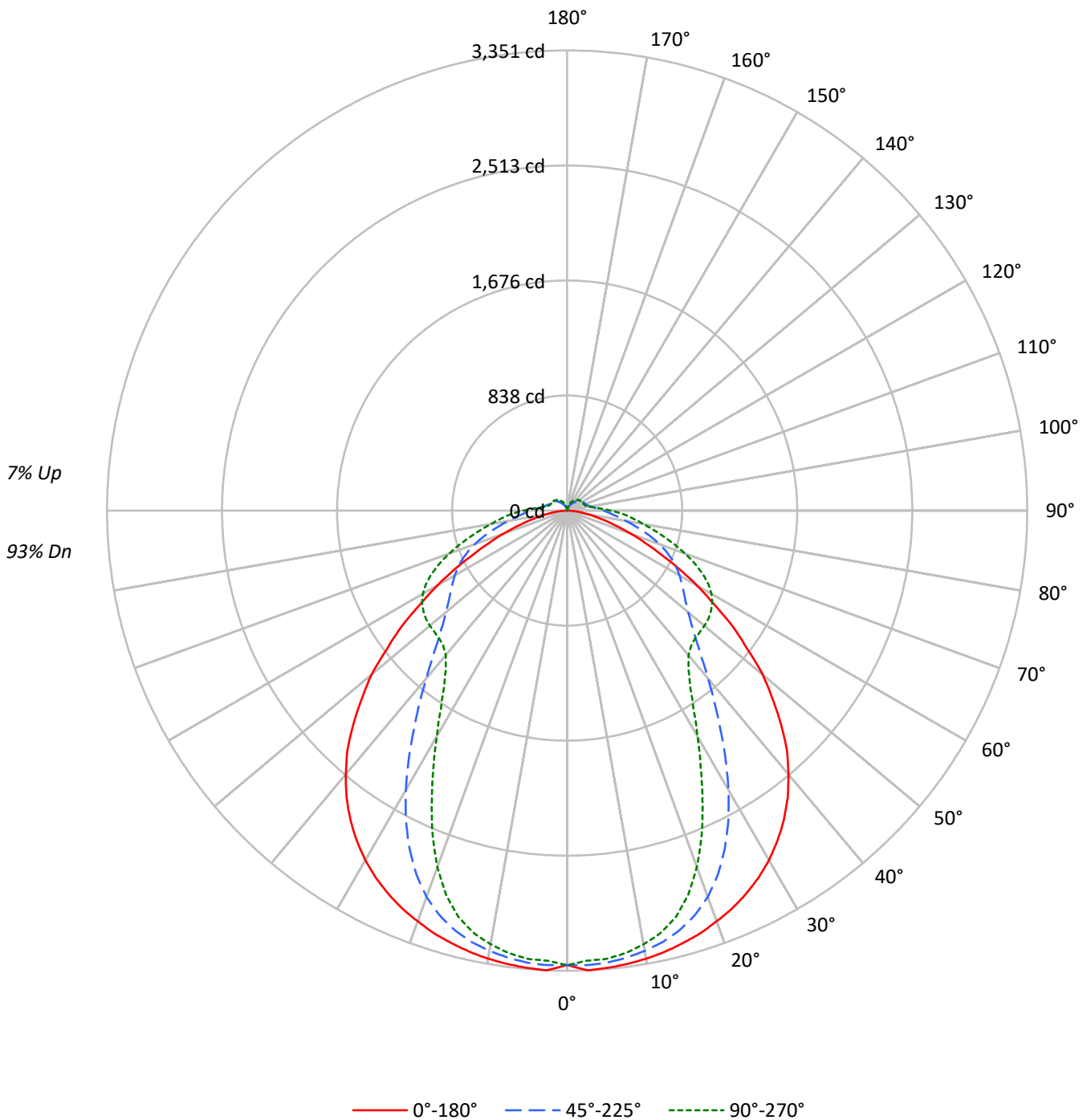
Lumens per Lamp: N/A
Luminaire Lumens: 8322.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 79
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°	26742	26742	26742
5°	27050	26150	25741
10°	27041	25428	24683
15°	27049	24576	23274
20°	27061	23310	20902
25°	27073	21359	17701
30°	26944	18794	14558
35°	26560	15990	12201
40°	25782	13543	11030
45°	24416	11770	10946
50°	22556	10759	11330
55°	19862	10342	11726
60°	16758	10195	11888
65°	13478	9969	11517
70°	10827	9454	10622
75°	8162	8556	9426
80°	6024	7683	8386
85°	4031	7248	7713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.1	3.8
10°-20°	884.9	10.6
20°-30°	1237.0	14.9
30°-40°	1283.1	15.4
40°-50°	1185.4	14.2
50°-60°	1058.3	12.7
60°-70°	857.7	10.3
70°-80°	570.5	6.9
80°-90°	326.7	3.9
90°-100°	180.7	2.2
100°-110°	122.4	1.5
110°-120°	101.9	1.2
120°-130°	82.8	1.0
130°-140°	59.7	0.7
140°-150°	36.0	0.4
150°-160°	17.3	0.2
160°-170°	4.5	0.1
170°-180°	0.0	0.0
0°-30°	2435.0	29.3
0°-40°	3718.1	44.7
0°-60°	5961.7	71.6
0°-90°	7716.6	92.7
90°-120°	405.0	4.9
90°-150°	583.6	7.0
90°-180°	605.0	7.3
0°-180°	8322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3309	3309	3309	3309	3309	
5°	3344	3288	3305	3282	3278	318
15°	3260	3191	3164	3092	3062	921
25°	3080	2944	2717	2432	2333	1419
35°	2751	2449	1947	1635	1562	1716
45°	2203	1746	1326	1278	1317	1694
55°	1473	1113	1036	1204	1278	1309
65°	752	673	843	1033	1087	760
75°	292	365	568	696	725	320
85°	59	170	335	429	440	68
90°	3	119	265	319	316	5
95°	3	101	210	224	217	2
105°	1	88	151	147	140	1
115°	1	79	134	132	128	1
125°	1	68	118	124	121	2
135°	3	50	94	109	109	2
145°	3	32	65	85	91	2
155°	3	20	40	53	65	1
165°	3	12	20	26	34	1
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°	3309.2	3309.2	3309.2	3309.2	3309.2
2.5°	3350.9	3296.2	3313.5	3299.1	3280.4
5°	3343.7	3287.6	3304.8	3281.8	3277.5
7.5°	3330.7	3274.6	3284.7	3257.4	3250.2
10°	3313.5	3254.5	3255.9	3217.1	3207.1
12.5°	3290.5	3225.7	3217.1	3163.9	3149.5
15°	3260.3	3191.2	3163.9	3092.0	3061.8
17.5°	3227.2	3146.7	3090.6	2979.8	2932.4
20°	3182.6	3092.0	2994.2	2825.9	2762.7
22.5°	3138.0	3025.8	2869.1	2644.7	2559.9
25°	3080.5	2943.9	2716.6	2431.9	2332.7
27.5°	3015.8	2847.5	2541.2	2213.3	2106.9
30°	2939.6	2731.0	2348.5	1999.0	1898.3
32.5°	2850.4	2600.2	2145.7	1806.3	1712.8
35°	2751.2	2449.2	1947.2	1635.2	1561.8
37.5°	2637.5	2283.8	1763.2	1497.1	1449.6
40°	2508.1	2104.0	1593.5	1390.7	1374.9
42.5°	2368.6	1928.5	1448.2	1321.7	1336.0
45°	2203.2	1745.9	1326.0	1278.5	1317.3
47.5°	2029.2	1567.6	1226.7	1254.1	1310.1
50°	1861.0	1402.2	1149.1	1238.2	1304.4
52.5°	1652.4	1254.1	1087.2	1223.9	1295.8
55°	1472.7	1113.1	1035.5	1203.7	1278.5
57.5°	1265.6	986.6	989.4	1177.8	1252.6
60°	1093.0	871.5	944.9	1141.9	1213.8
62.5°	917.5	768.0	896.0	1094.4	1159.1
65°	752.1	673.0	842.8	1032.6	1087.2
67.5°	614.1	586.8	782.3	957.8	1003.8
70°	497.6	507.7	716.2	874.4	913.2
72.5°	382.5	434.3	644.3	785.2	818.3
75°	291.9	365.3	568.1	696.1	724.8
77.5°	215.7	304.9	499.0	615.5	640.0
80°	152.4	251.7	434.3	545.1	563.8
82.5°	102.1	207.1	381.1	481.8	499.0
85°	59.0	169.7	335.1	428.6	440.1
87.5°	24.4	140.9	297.7	373.9	379.7
90°	2.9	119.4	264.6	319.3	316.4
92.5°	2.9	107.9	235.9	267.5	260.3
95°	2.9	100.7	210.0	224.3	217.2
97.5°	2.9	96.4	187.0	192.7	185.5
100°	1.4	93.5	171.1	171.1	163.9
102.5°	1.4	90.6	159.6	155.3	149.6
105°	1.4	87.7	151.0	146.7	139.5
107.5°	1.4	86.3	145.3	140.9	133.7
110°	1.4	83.4	140.9	136.6	130.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	82.0	138.1	135.2	128.0
115°	1.4	79.1	133.7	132.3	128.0
117.5°	1.4	76.2	130.9	130.9	126.6
120°	1.4	73.3	126.6	129.4	125.1
122.5°	1.4	70.5	122.2	126.6	122.2
125°	1.4	67.6	117.9	123.7	120.8
127.5°	2.9	63.3	112.2	120.8	117.9
130°	1.4	59.0	106.4	117.9	116.5
132.5°	2.9	54.6	100.7	113.6	113.6
135°	2.9	50.3	93.5	109.3	109.3
137.5°	2.9	44.6	86.3	103.5	105.0
140°	2.9	40.3	79.1	97.8	100.7
142.5°	2.9	36.0	71.9	92.0	96.4
145°	2.9	31.6	64.7	84.9	90.6
147.5°	2.9	28.8	57.5	76.2	84.9
150°	2.9	24.4	51.8	69.0	77.7
152.5°	2.9	21.6	46.0	61.8	71.9
155°	2.9	20.1	40.3	53.2	64.7
157.5°	2.9	17.3	34.5	46.0	57.5
160°	2.9	14.4	28.8	40.3	48.9
162.5°	2.9	12.9	24.4	33.1	43.1
165°	2.9	11.5	20.1	25.9	34.5
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)