

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-L935-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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

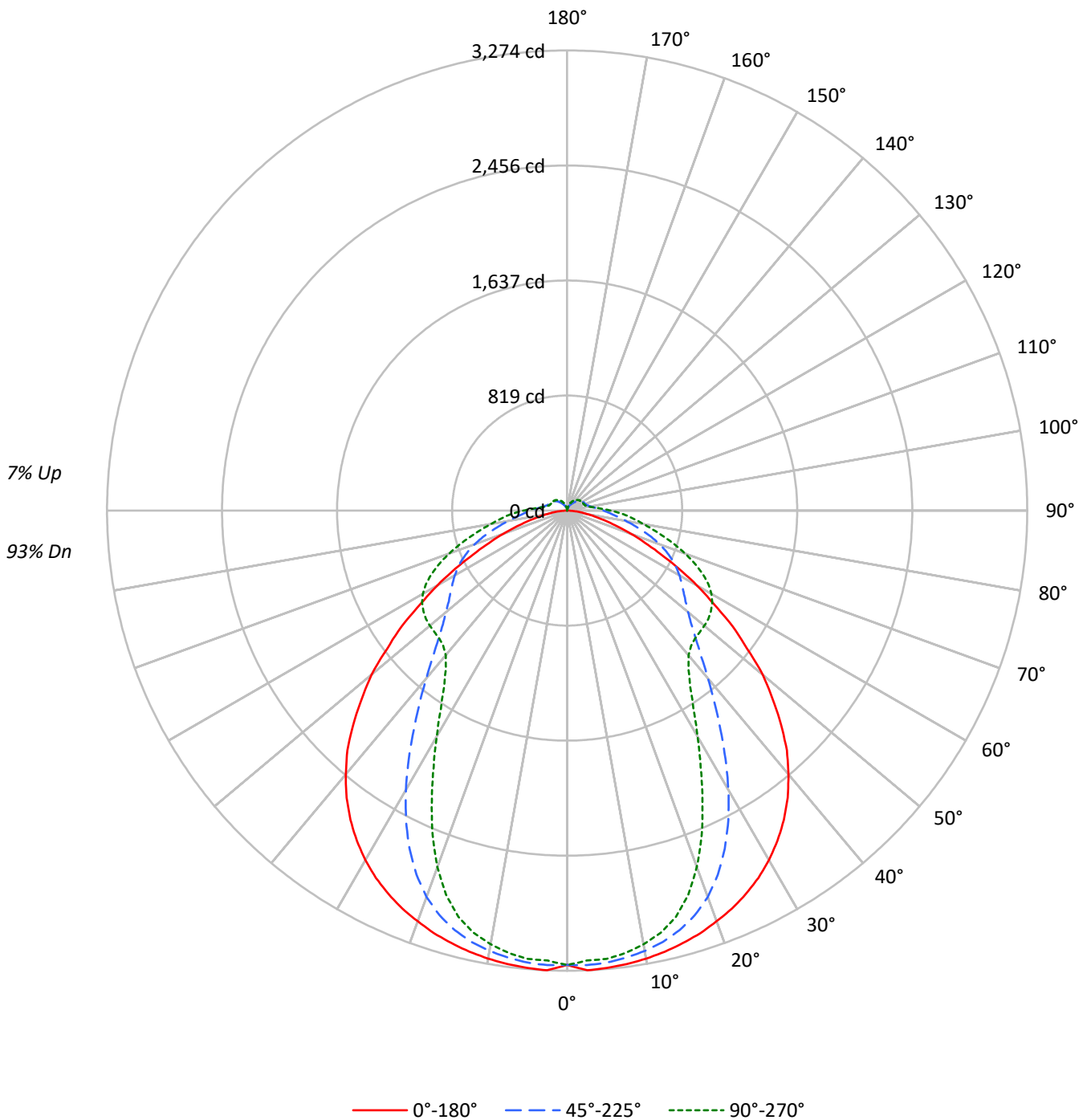
Lumens per Lamp: N/A
Luminaire Lumens: 8130.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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	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°	26124	26124	26124
5°	26425	25547	25148
10°	26416	24841	24113
15°	26425	24009	22738
20°	26437	22772	20420
25°	26448	20866	17292
30°	26321	18361	14222
35°	25947	15621	11919
40°	25188	13230	10775
45°	23853	11498	10693
50°	22035	10511	11069
55°	19404	10103	11456
60°	16372	9959	11614
65°	13168	9738	11251
70°	10577	9236	10376
75°	7975	8359	9208
80°	5886	7506	8191
85°	3935	7082	7534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.9	3.8
10°-20°	864.5	10.6
20°-30°	1208.5	14.9
30°-40°	1253.5	15.4
40°-50°	1158.0	14.2
50°-60°	1033.9	12.7
60°-70°	837.9	10.3
70°-80°	557.3	6.9
80°-90°	319.1	3.9
90°-100°	176.5	2.2
100°-110°	119.6	1.5
110°-120°	99.6	1.2
120°-130°	80.9	1.0
130°-140°	58.4	0.7
140°-150°	35.2	0.4
150°-160°	16.9	0.2
160°-170°	4.4	0.1
170°-180°	0.0	0.0
0°-30°	2378.8	29.3
0°-40°	3632.3	44.7
0°-60°	5824.2	71.6
0°-90°	7538.5	92.7
90°-120°	395.7	4.9
90°-150°	570.2	7.0
90°-180°	591.0	7.3
0°-180°	8130.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3233	3233	3233	3233	3233	
5°	3266	3212	3229	3206	3202	311
15°	3185	3118	3091	3021	2991	900
25°	3009	2876	2654	2376	2279	1387
35°	2688	2393	1902	1597	1526	1677
45°	2152	1706	1295	1249	1287	1655
55°	1439	1087	1012	1176	1249	1279
65°	735	658	823	1009	1062	743
75°	285	357	555	680	708	313
85°	58	166	327	419	430	66
90°	3	117	258	312	309	4
95°	3	98	205	219	212	2
105°	1	86	148	143	136	1
115°	1	77	131	129	125	1
125°	1	66	115	121	118	2
135°	3	49	91	107	107	2
145°	3	31	63	83	88	2
155°	3	20	39	52	63	1
165°	3	11	20	25	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°	3232.8	3232.8	3232.8	3232.8	3232.8
2.5°	3273.6	3220.2	3237.0	3223.0	3204.7
5°	3266.5	3211.7	3228.6	3206.1	3201.9
7.5°	3253.9	3199.1	3208.9	3182.2	3175.2
10°	3237.0	3179.4	3180.8	3142.9	3133.1
12.5°	3214.5	3151.3	3142.9	3090.9	3076.9
15°	3185.0	3117.6	3090.9	3020.7	2991.2
17.5°	3152.7	3074.1	3019.3	2911.1	2864.7
20°	3109.2	3020.7	2925.1	2760.7	2698.9
22.5°	3065.6	2956.0	2802.9	2583.7	2500.8
25°	3009.4	2876.0	2654.0	2375.8	2278.8
27.5°	2946.2	2781.8	2482.6	2162.2	2058.3
30°	2871.7	2668.0	2294.3	1952.9	1854.5
32.5°	2784.6	2540.2	2096.2	1764.6	1673.3
35°	2687.7	2392.6	1902.3	1597.4	1525.8
37.5°	2576.7	2231.1	1722.5	1462.6	1416.2
40°	2450.3	2055.5	1556.7	1358.6	1343.1
42.5°	2314.0	1884.1	1414.8	1291.2	1305.2
45°	2152.4	1705.6	1295.4	1249.0	1286.9
47.5°	1982.4	1531.4	1198.4	1225.1	1279.9
50°	1818.0	1369.8	1122.6	1209.7	1274.3
52.5°	1614.3	1225.1	1062.1	1195.6	1265.9
55°	1438.7	1087.4	1011.6	1176.0	1249.0
57.5°	1236.4	963.8	966.6	1150.7	1223.7
60°	1067.8	851.4	923.1	1115.5	1185.8
62.5°	896.4	750.2	875.3	1069.2	1132.4
65°	734.8	657.5	823.3	1008.8	1062.1
67.5°	599.9	573.2	764.3	935.7	980.7
70°	486.1	496.0	699.7	854.2	892.1
72.5°	373.7	424.3	629.4	767.1	799.4
75°	285.2	356.9	555.0	680.0	708.1
77.5°	210.7	297.9	487.5	601.3	625.2
80°	148.9	245.9	424.3	532.5	550.7
82.5°	99.8	202.3	372.3	470.7	487.5
85°	57.6	165.8	327.4	418.7	429.9
87.5°	23.9	137.7	290.8	365.3	370.9
90°	2.8	116.6	258.5	311.9	309.1
92.5°	2.8	105.4	230.4	261.3	254.3
95°	2.8	98.3	205.1	219.2	212.1
97.5°	2.8	94.1	182.6	188.3	181.2
100°	1.4	91.3	167.2	167.2	160.2
102.5°	1.4	88.5	156.0	151.7	146.1
105°	1.4	85.7	147.5	143.3	136.3
107.5°	1.4	84.3	141.9	137.7	130.7
110°	1.4	81.5	137.7	133.5	127.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	80.1	134.9	132.1	125.0
115°	1.4	77.3	130.7	129.3	125.0
117.5°	1.4	74.5	127.9	127.9	123.6
120°	1.4	71.7	123.6	126.4	122.2
122.5°	1.4	68.8	119.4	123.6	119.4
125°	1.4	66.0	115.2	120.8	118.0
127.5°	2.8	61.8	109.6	118.0	115.2
130°	1.4	57.6	104.0	115.2	113.8
132.5°	2.8	53.4	98.3	111.0	111.0
135°	2.8	49.2	91.3	106.8	106.8
137.5°	2.8	43.6	84.3	101.2	102.6
140°	2.8	39.3	77.3	95.5	98.3
142.5°	2.8	35.1	70.2	89.9	94.1
145°	2.8	30.9	63.2	82.9	88.5
147.5°	2.8	28.1	56.2	74.5	82.9
150°	2.8	23.9	50.6	67.4	75.9
152.5°	2.8	21.1	45.0	60.4	70.2
155°	2.8	19.7	39.3	52.0	63.2
157.5°	2.8	16.9	33.7	45.0	56.2
160°	2.8	14.0	28.1	39.3	47.8
162.5°	2.8	12.6	23.9	32.3	42.1
165°	2.8	11.2	19.7	25.3	33.7
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)