

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-LD5-78SL-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-LD5-78SL-SLN-UNV-L840-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

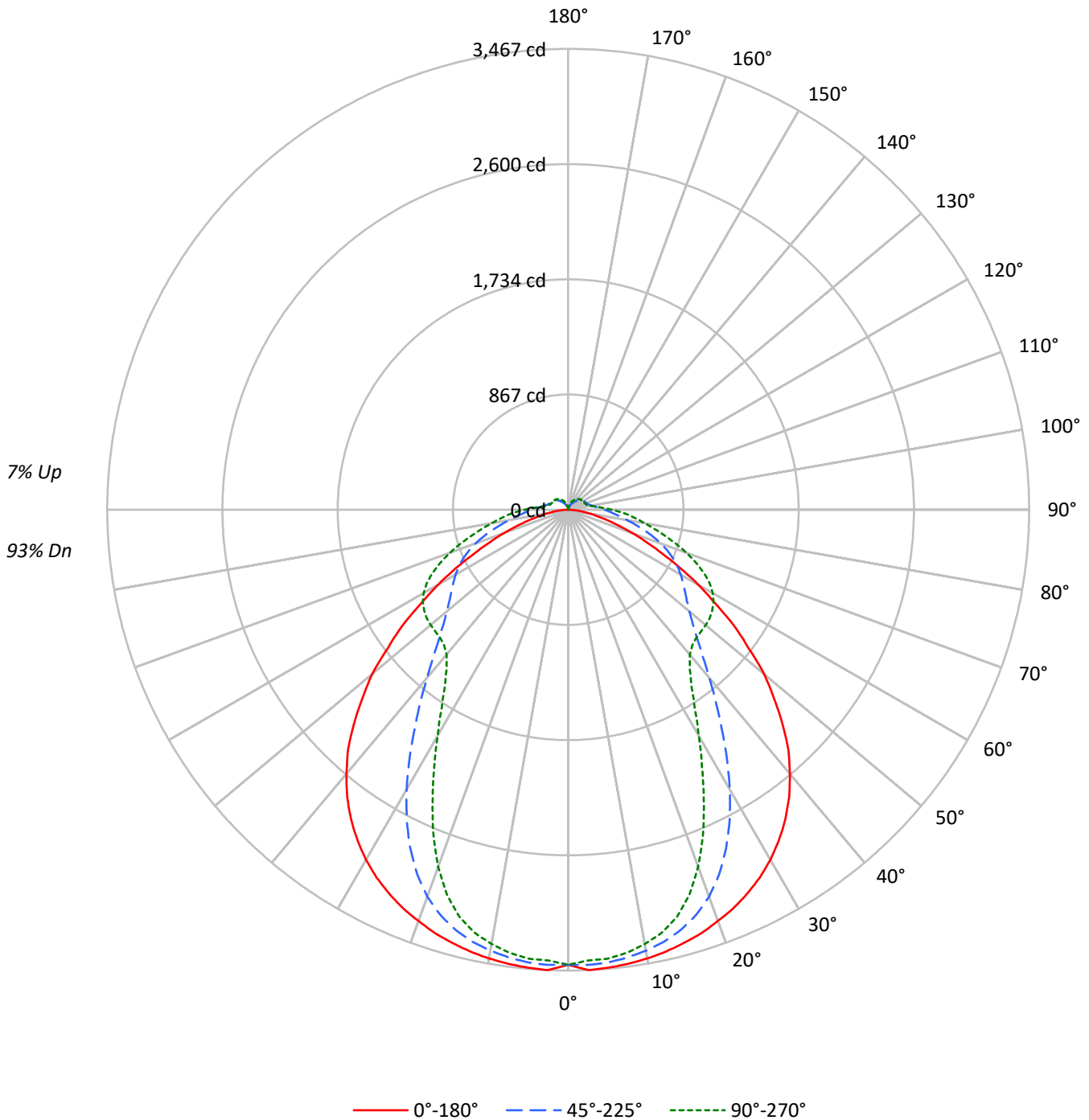
Lumens per Lamp: N/A
Luminaire Lumens: 8610.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 85
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°	27667	27667	27667
5°	27986	27056	26632
10°	27976	26308	25536
15°	27985	25427	24080
20°	27998	24116	21626
25°	28009	22098	18313
30°	27876	19445	15062
35°	27479	16544	12623
40°	26674	14011	11411
45°	25261	12177	11325
50°	23337	11131	11722
55°	20549	10700	12133
60°	17338	10547	12300
65°	13946	10313	11917
70°	11202	9781	10989
75°	8444	8851	9752
80°	6234	7948	8676
85°	4167	7499	7979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.9	3.8
10°-20°	915.5	10.6
20°-30°	1279.8	14.9
30°-40°	1327.5	15.4
40°-50°	1226.4	14.2
50°-60°	1094.9	12.7
60°-70°	887.4	10.3
70°-80°	590.2	6.9
80°-90°	338.0	3.9
90°-100°	187.0	2.2
100°-110°	126.6	1.5
110°-120°	105.4	1.2
120°-130°	85.7	1.0
130°-140°	61.8	0.7
140°-150°	37.3	0.4
150°-160°	17.9	0.2
160°-170°	4.6	0.1
170°-180°	0.0	0.0
0°-30°	2519.2	29.3
0°-40°	3846.7	44.7
0°-60°	6168.1	71.6
0°-90°	7983.6	92.7
90°-120°	419.1	4.9
90°-150°	603.9	7.0
90°-180°	626.0	7.3
0°-180°	8610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3424	3424	3424	3424	3424	
5°	3459	3401	3419	3395	3391	329
15°	3373	3302	3273	3199	3168	953
25°	3187	3046	2811	2516	2413	1469
35°	2846	2534	2015	1692	1616	1776
45°	2280	1806	1372	1323	1363	1753
55°	1524	1152	1071	1245	1323	1355
65°	778	696	872	1068	1125	787
75°	302	378	588	720	750	331
85°	61	176	347	443	455	70
90°	3	124	274	330	327	5
95°	3	104	217	232	225	2
105°	2	91	156	152	144	2
115°	2	82	138	137	132	1
125°	2	70	122	128	125	2
135°	3	52	97	113	113	2
145°	3	33	67	88	94	2
155°	3	21	42	55	67	1
165°	3	12	21	27	36	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3423.7	3423.7	3423.7	3423.7	3423.7
2.5°	3466.8	3410.3	3428.1	3413.3	3393.9
5°	3459.4	3401.4	3419.2	3395.4	3390.9
7.5°	3446.0	3388.0	3398.4	3370.1	3362.7
10°	3428.1	3367.1	3368.6	3328.5	3318.0
12.5°	3404.3	3337.4	3328.5	3273.4	3258.5
15°	3373.1	3301.7	3273.4	3199.0	3167.8
17.5°	3338.9	3255.5	3197.5	3082.9	3033.8
20°	3292.7	3199.0	3097.8	2923.7	2858.3
22.5°	3246.6	3130.6	2968.4	2736.3	2648.5
25°	3187.1	3045.8	2810.7	2516.1	2413.4
27.5°	3120.1	2946.1	2629.1	2289.9	2179.8
30°	3041.3	2825.5	2429.8	2068.2	1964.0
32.5°	2949.0	2690.1	2220.0	1868.8	1772.1
35°	2846.4	2533.9	2014.6	1691.8	1615.9
37.5°	2728.8	2362.8	1824.2	1548.9	1499.8
40°	2594.9	2176.8	1648.6	1438.8	1422.4
42.5°	2450.6	1995.3	1498.3	1367.4	1382.3
45°	2279.5	1806.3	1371.9	1322.8	1362.9
47.5°	2099.4	1621.8	1269.2	1297.5	1355.5
50°	1925.4	1450.7	1188.8	1281.1	1349.5
52.5°	1709.6	1297.5	1124.9	1266.2	1340.6
55°	1523.6	1151.6	1071.3	1245.4	1322.8
57.5°	1309.4	1020.7	1023.7	1218.6	1296.0
60°	1130.8	901.7	977.6	1181.4	1255.8
62.5°	949.3	794.5	927.0	1132.3	1199.3
65°	778.2	696.3	871.9	1068.3	1124.9
67.5°	635.3	607.1	809.4	990.9	1038.6
70°	514.8	525.2	741.0	904.6	944.8
72.5°	395.8	449.3	666.6	812.4	846.6
75°	302.0	377.9	587.7	720.1	749.9
77.5°	223.2	315.4	516.3	636.8	662.1
80°	157.7	260.4	449.3	563.9	583.3
82.5°	105.6	214.3	394.3	498.4	516.3
85°	61.0	175.6	346.7	443.4	455.3
87.5°	25.3	145.8	308.0	386.9	392.8
90°	3.0	123.5	273.8	330.3	327.3
92.5°	3.0	111.6	244.0	276.8	269.3
95°	3.0	104.2	217.2	232.1	224.7
97.5°	3.0	99.7	193.4	199.4	191.9
100°	1.5	96.7	177.1	177.1	169.6
102.5°	1.5	93.7	165.2	160.7	154.7
105°	1.5	90.8	156.2	151.8	144.3
107.5°	1.5	89.3	150.3	145.8	138.4
110°	1.5	86.3	145.8	141.4	135.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	84.8	142.8	139.9	132.4
115°	1.5	81.8	138.4	136.9	132.4
117.5°	1.5	78.9	135.4	135.4	130.9
120°	1.5	75.9	130.9	133.9	129.4
122.5°	1.5	72.9	126.5	130.9	126.5
125°	1.5	69.9	122.0	128.0	125.0
127.5°	3.0	65.5	116.1	125.0	122.0
130°	1.5	61.0	110.1	122.0	120.5
132.5°	3.0	56.5	104.2	117.5	117.5
135°	3.0	52.1	96.7	113.1	113.1
137.5°	3.0	46.1	89.3	107.1	108.6
140°	3.0	41.7	81.8	101.2	104.2
142.5°	3.0	37.2	74.4	95.2	99.7
145°	3.0	32.7	67.0	87.8	93.7
147.5°	3.0	29.8	59.5	78.9	87.8
150°	3.0	25.3	53.6	71.4	80.3
152.5°	3.0	22.3	47.6	64.0	74.4
155°	3.0	20.8	41.7	55.1	67.0
157.5°	3.0	17.9	35.7	47.6	59.5
160°	3.0	14.9	29.8	41.7	50.6
162.5°	3.0	13.4	25.3	34.2	44.6
165°	3.0	11.9	20.8	26.8	35.7
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)