

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-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-LD5-78SL-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: 8323.0 lumens  
Efficiency: N/A  
Efficacy: 97.9 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

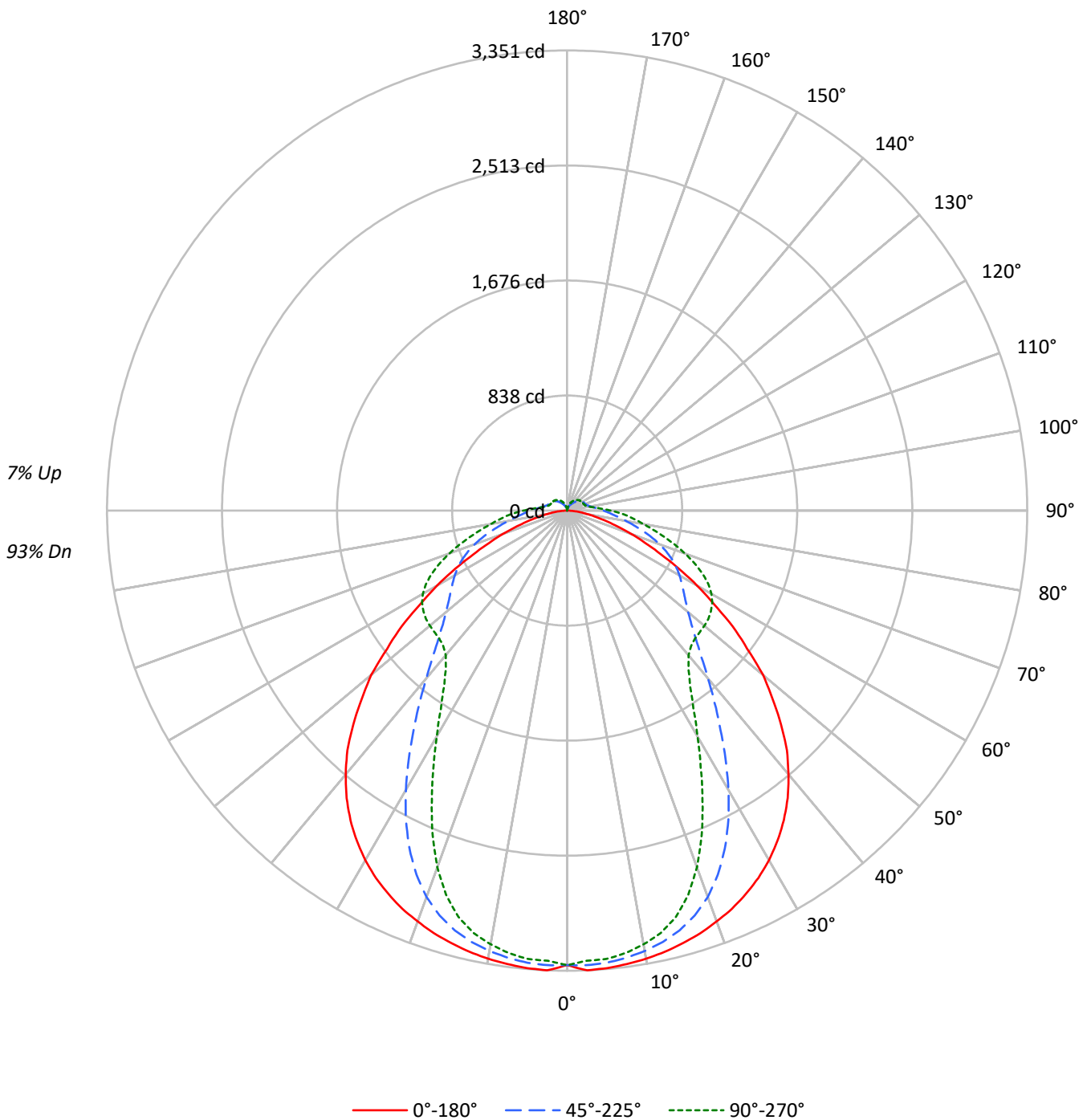
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	26745	26745	26745
5°	27053	26154	25744
10°	27044	25431	24685
15°	27053	24579	23277
20°	27065	23313	20905
25°	27076	21362	17702
30°	26946	18797	14561
35°	26563	15993	12202
40°	25785	13544	11031
45°	24419	11771	10947
50°	22559	10760	11331
55°	19864	10343	11728
60°	16760	10196	11889
65°	13480	9970	11519
70°	10830	9455	10623
75°	8165	8556	9427
80°	6028	7685	8386
85°	4031	7248	7713



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.1	3.8
10°-20°	885.0	10.6
20°-30°	1237.2	14.9
30°-40°	1283.2	15.4
40°-50°	1185.5	14.2
50°-60°	1058.4	12.7
60°-70°	857.8	10.3
70°-80°	570.5	6.9
80°-90°	326.7	3.9
90°-100°	180.8	2.2
100°-110°	122.4	1.5
110°-120°	101.9	1.2
120°-130°	82.9	1.0
130°-140°	59.8	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°	2435.3	29.3
0°-40°	3718.5	44.7
0°-60°	5962.5	71.6
0°-90°	7717.5	92.7
90°-120°	405.1	4.9
90°-150°	583.7	7.0
90°-180°	606.0	7.3
0°-180°	8323.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3310	3310	3310	3310	3310	
5°	3344	3288	3305	3282	3278	318
15°	3261	3192	3164	3092	3062	921
25°	3081	2944	2717	2432	2333	1420
35°	2752	2449	1948	1635	1562	1717
45°	2204	1746	1326	1279	1318	1694
55°	1473	1113	1036	1204	1279	1310
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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3309.6	3309.6	3309.6	3309.6	3309.6
2.5°	3351.3	3296.6	3313.9	3299.5	3280.8
5°	3344.1	3288.0	3305.2	3282.2	3277.9
7.5°	3331.1	3275.0	3285.1	3257.8	3250.6
10°	3313.9	3254.9	3256.3	3217.5	3207.4
12.5°	3290.9	3226.1	3217.5	3164.3	3149.9
15°	3260.7	3191.6	3164.3	3092.4	3062.2
17.5°	3227.6	3147.0	3090.9	2980.2	2932.7
20°	3183.0	3092.4	2994.6	2826.3	2763.0
22.5°	3138.4	3026.2	2869.4	2645.1	2560.2
25°	3080.9	2944.2	2717.0	2432.2	2332.9
27.5°	3016.1	2847.9	2541.5	2213.6	2107.1
30°	2939.9	2731.4	2348.8	1999.3	1898.6
32.5°	2850.7	2600.5	2146.0	1806.5	1713.0
35°	2751.5	2449.4	1947.5	1635.4	1562.0
37.5°	2637.9	2284.0	1763.4	1497.3	1449.8
40°	2508.4	2104.3	1593.7	1390.8	1375.0
42.5°	2368.9	1928.8	1448.4	1321.8	1336.2
45°	2203.5	1746.1	1326.1	1278.7	1317.5
47.5°	2029.5	1567.8	1226.9	1254.2	1310.3
50°	1861.2	1402.4	1149.2	1238.4	1304.5
52.5°	1652.6	1254.2	1087.4	1224.0	1295.9
55°	1472.8	1113.3	1035.6	1203.9	1278.7
57.5°	1265.7	986.7	989.6	1178.0	1252.8
60°	1093.1	871.6	945.0	1142.0	1213.9
62.5°	917.6	768.1	896.1	1094.6	1159.3
65°	752.2	673.1	842.9	1032.7	1087.4
67.5°	614.2	586.8	782.4	957.9	1003.9
70°	497.7	507.7	716.3	874.5	913.3
72.5°	382.6	434.4	644.4	785.3	818.4
75°	292.0	365.3	568.1	696.1	724.9
77.5°	215.7	304.9	499.1	615.6	640.0
80°	152.5	251.7	434.4	545.1	563.8
82.5°	102.1	207.1	381.2	481.8	499.1
85°	59.0	169.7	335.1	428.6	440.1
87.5°	24.5	141.0	297.7	374.0	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	224.4	217.2
97.5°	2.9	96.4	187.0	192.7	185.5
100°	1.4	93.5	171.2	171.2	164.0
102.5°	1.4	90.6	159.7	155.3	149.6
105°	1.4	87.7	151.0	146.7	139.5
107.5°	1.4	86.3	145.3	141.0	133.8
110°	1.4	83.4	141.0	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	133.8	132.3	128.0
117.5°	1.4	76.2	130.9	130.9	126.6
120°	1.4	73.4	126.6	129.4	125.1
122.5°	1.4	70.5	122.3	126.6	122.3
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	54.7	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	103.6	105.0
140°	2.9	40.3	79.1	97.8	100.7
142.5°	2.9	36.0	71.9	92.1	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	24.5	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	24.5	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)