

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: P130674

Luminaire Tested: **TBLED-LD1-8-M-UNV-L850-CD1-CG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25358)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: TBLED-LD1-8-M-UNV-L850-CD1-CG
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9145.9 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.33 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

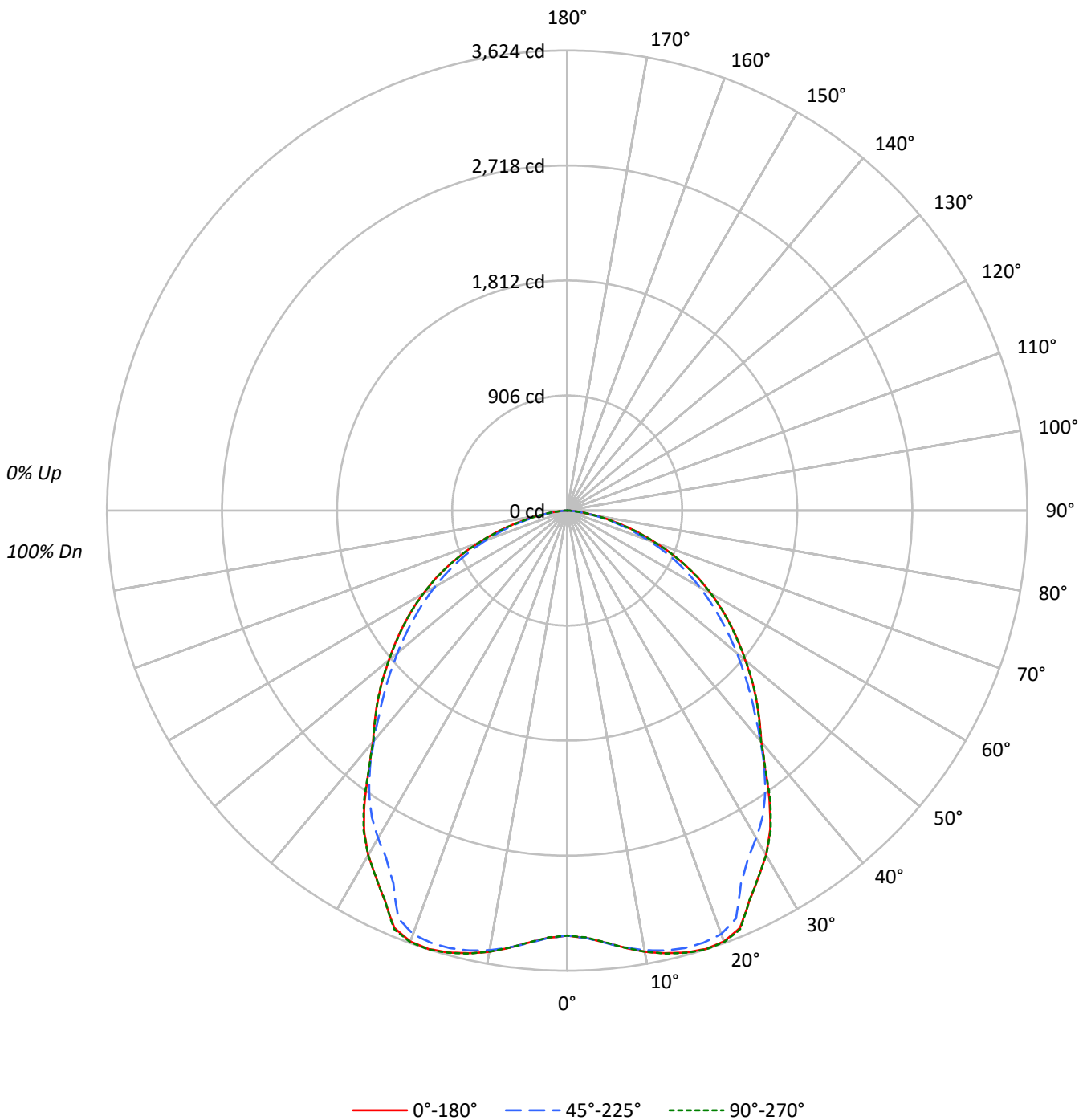
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88					85				
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	68	64					62				
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55					53				
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48					46				
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38					36				
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34					33				
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31					29				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28					27				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36245	36245	36245
5°	37109	37133	37084
10°	38797	38650	38785
15°	40391	39992	40428
20°	41608	40890	41672
25°	40550	38690	40523
30°	39168	37235	39182
35°	36735	35941	36853
40°	33623	33467	33575
45°	32288	31215	32288
50°	30836	29373	30873
55°	29665	27669	29580
60°	28369	26106	28369
65°	26499	24219	26499
70°	23518	21476	23518
75°	19493	17631	19217
80°	14075	12896	13800
85°	8424	7740	8150



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.5	3.6
10°-20°	1014.7	11.1
20°-30°	1532.5	16.8
30°-40°	1673.0	18.3
40°-50°	1632.8	17.9
50°-60°	1402.7	15.3
60°-70°	991.5	10.8
70°-80°	479.7	5.2
80°-90°	89.5	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2876.6	31.5
0°-40°	4549.7	49.7
0°-60°	7585.2	82.9
0°-90°	9145.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9145.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3347	3347	3347	3347	3347	
5°	3414	3416	3416	3414	3412	330
15°	3603	3596	3567	3597	3606	1019
25°	3394	3403	3238	3404	3392	1564
35°	2779	2635	2719	2629	2788	1729
45°	2108	2150	2038	2142	2108	1625
55°	1571	1590	1466	1586	1567	1405
65°	1034	1001	945	1001	1034	1020
75°	466	443	421	442	459	498
85°	68	64	62	63	66	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1
2.5°	3367.1	3366.0	3364.9	3366.0	3368.3	3368.3	3368.3	3367.1	3367.1	3368.3	3367.1
5°	3413.9	3411.6	3412.7	3411.6	3416.1	3415.0	3415.0	3416.1	3416.1	3416.1	3415.0
7.5°	3471.7	3469.5	3469.5	3469.5	3470.6	3470.6	3470.6	3470.6	3469.5	3469.5	3469.5
10°	3528.4	3525.1	3526.2	3525.1	3526.2	3523.9	3521.7	3519.5	3517.3	3515.0	3516.2
12.5°	3570.6	3569.5	3571.8	3571.8	3569.5	3566.2	3560.6	3555.1	3550.6	3548.4	3550.6
15°	3602.9	3605.1	3606.2	3605.1	3600.7	3591.8	3585.1	3576.2	3570.6	3567.3	3570.6
17.5°	3620.7	3620.7	3618.5	3611.8	3604.0	3596.2	3586.2	3577.3	3571.8	3568.4	3572.9
20°	3610.7	3609.6	3601.8	3591.8	3579.5	3569.5	3560.6	3552.9	3549.5	3548.4	3550.6
22.5°	3556.2	3558.4	3554.0	3547.3	3538.4	3523.9	3507.3	3491.7	3479.5	3475.0	3479.5
25°	3393.8	3392.7	3400.5	3413.9	3422.7	3383.8	3331.6	3281.5	3247.0	3238.2	3247.0
27.5°	3258.2	3257.1	3239.3	3200.3	3154.8	3119.2	3109.2	3103.6	3091.4	3085.8	3093.6
30°	3132.5	3121.4	3058.0	2976.8	2919.0	2904.6	2926.8	2956.8	2973.5	2977.9	2970.2
32.5°	2977.9	2947.9	2862.3	2791.1	2765.6	2754.4	2762.2	2801.1	2841.2	2863.4	2838.9
35°	2778.9	2753.3	2685.5	2646.6	2641.0	2628.8	2618.8	2642.1	2691.0	2718.8	2685.5
37.5°	2558.7	2571.0	2542.0	2522.0	2522.0	2509.8	2489.8	2497.6	2525.4	2552.0	2523.1
40°	2378.6	2400.8	2407.5	2401.9	2399.7	2384.1	2365.2	2360.8	2361.9	2367.5	2358.6
42.5°	2240.7	2244.0	2274.0	2284.1	2275.2	2258.5	2247.4	2240.7	2208.4	2194.0	2212.9
45°	2108.4	2110.6	2135.0	2164.0	2158.4	2140.6	2131.7	2110.6	2053.9	2038.3	2058.3
47.5°	1970.5	1982.7	2000.5	2030.5	2036.1	2018.3	2006.1	1969.4	1901.5	1888.2	1902.6
50°	1830.4	1853.7	1874.8	1889.3	1897.1	1881.5	1868.2	1824.8	1759.2	1743.6	1758.1
52.5°	1702.5	1723.6	1751.4	1747.0	1743.6	1740.3	1731.4	1686.9	1624.6	1603.5	1623.5
55°	1571.3	1592.4	1620.2	1601.3	1586.8	1592.4	1582.4	1545.7	1492.3	1465.6	1492.3
57.5°	1441.2	1457.8	1480.1	1456.7	1435.6	1442.3	1435.6	1410.0	1360.0	1334.4	1360.0
60°	1309.9	1319.9	1335.5	1311.1	1288.8	1293.3	1291.0	1264.3	1225.4	1205.4	1225.4
62.5°	1175.4	1180.9	1188.7	1165.4	1146.5	1145.4	1146.5	1119.8	1089.8	1076.4	1090.9
65°	1034.2	1036.4	1040.8	1017.5	1004.1	998.6	1000.8	976.3	954.1	945.2	955.2
67.5°	889.6	891.8	892.9	870.7	861.8	854.0	855.1	837.3	817.3	811.8	819.5
70°	742.8	746.2	746.2	726.1	720.6	710.6	710.6	699.5	682.8	678.3	683.9
72.5°	604.9	602.7	602.7	586.0	581.6	571.6	570.5	567.1	551.6	547.1	552.7
75°	465.9	463.7	464.8	451.5	447.0	439.2	438.1	438.1	425.9	421.4	427.0
77.5°	336.9	339.2	338.0	328.0	323.6	320.3	323.6	323.6	312.5	308.0	313.6
80°	225.7	228.0	228.0	220.2	216.8	214.6	219.1	216.8	211.3	206.8	211.3
82.5°	136.8	136.8	136.8	134.6	130.1	130.1	133.4	133.4	127.9	124.5	127.9
85°	67.8	67.8	66.7	66.7	64.5	64.5	66.7	66.7	63.4	62.3	63.4
87.5°	23.4	22.2	22.2	22.2	21.1	22.2	22.2	22.2	21.1	21.1	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1	3347.1
2.5°	3368.3	3368.3	3367.1	3367.1	3367.1	3366.0	3364.9	3363.8
5°	3417.2	3416.1	3413.9	3415.0	3413.9	3413.9	3412.7	3411.6
7.5°	3471.7	3472.8	3470.6	3472.8	3472.8	3472.8	3471.7	3470.6
10°	3519.5	3522.8	3523.9	3527.3	3528.4	3529.5	3528.4	3527.3
12.5°	3556.2	3561.7	3566.2	3571.8	3575.1	3576.2	3574.0	3572.9
15°	3577.3	3585.1	3592.9	3601.8	3607.3	3609.6	3608.5	3606.2
17.5°	3578.4	3587.3	3597.3	3605.1	3612.9	3618.5	3622.9	3624.0
20°	3554.0	3561.7	3570.6	3580.7	3592.9	3602.9	3612.9	3616.2
22.5°	3488.4	3507.3	3526.2	3536.2	3546.2	3552.9	3558.4	3566.2
25°	3273.7	3330.5	3391.6	3417.2	3412.7	3391.6	3388.3	3391.6
27.5°	3105.8	3112.5	3120.3	3150.3	3192.6	3231.5	3253.7	3258.2
30°	2955.7	2923.5	2899.0	2913.4	2969.0	3045.8	3114.7	3133.6
32.5°	2800.0	2757.8	2747.8	2757.8	2782.2	2845.6	2940.1	2983.5
35°	2634.3	2616.5	2624.3	2633.2	2638.8	2673.3	2743.3	2787.8
37.5°	2488.7	2486.4	2502.0	2513.1	2513.1	2526.5	2562.1	2563.2
40°	2351.9	2363.0	2375.2	2390.8	2394.1	2399.7	2390.8	2375.2
42.5°	2231.8	2244.0	2251.8	2267.4	2276.3	2264.0	2235.1	2237.4
45°	2106.1	2129.5	2133.9	2150.6	2157.3	2125.0	2102.8	2108.4
47.5°	1964.9	2003.8	2012.7	2030.5	2025.0	1993.8	1978.3	1971.6
50°	1819.2	1870.4	1878.2	1890.4	1883.7	1868.2	1848.1	1832.6
52.5°	1688.0	1729.2	1734.7	1739.2	1744.7	1748.1	1722.5	1698.0
55°	1547.9	1580.2	1587.9	1583.5	1599.1	1616.9	1591.3	1566.8
57.5°	1412.2	1434.5	1440.0	1432.3	1454.5	1477.9	1458.9	1440.0
60°	1267.7	1289.9	1291.0	1287.7	1309.9	1330.0	1322.2	1309.9
62.5°	1125.3	1145.4	1142.0	1145.4	1163.2	1188.7	1183.2	1175.4
65°	980.8	999.7	997.5	1004.1	1017.5	1040.8	1040.8	1034.2
67.5°	842.9	854.0	852.9	861.8	871.8	894.1	896.3	889.6
70°	705.0	710.6	709.5	719.5	727.3	750.6	750.6	742.8
72.5°	571.6	574.9	570.5	583.8	587.1	607.2	607.2	598.3
75°	443.7	442.6	438.1	445.9	455.9	470.4	467.0	459.3
77.5°	324.7	321.4	316.9	325.8	331.4	342.5	339.2	331.4
80°	220.2	216.8	211.3	219.1	223.5	230.2	226.8	221.3
82.5°	134.6	131.2	126.8	132.3	134.6	139.0	136.8	132.3
85°	66.7	64.5	62.3	63.4	66.7	67.8	66.7	65.6
87.5°	22.2	21.1	20.0	21.1	21.1	22.2	22.2	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)