

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: P130683

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130683
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-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8725.5 lumens
Efficiency: N/A
Efficacy: 113.3 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

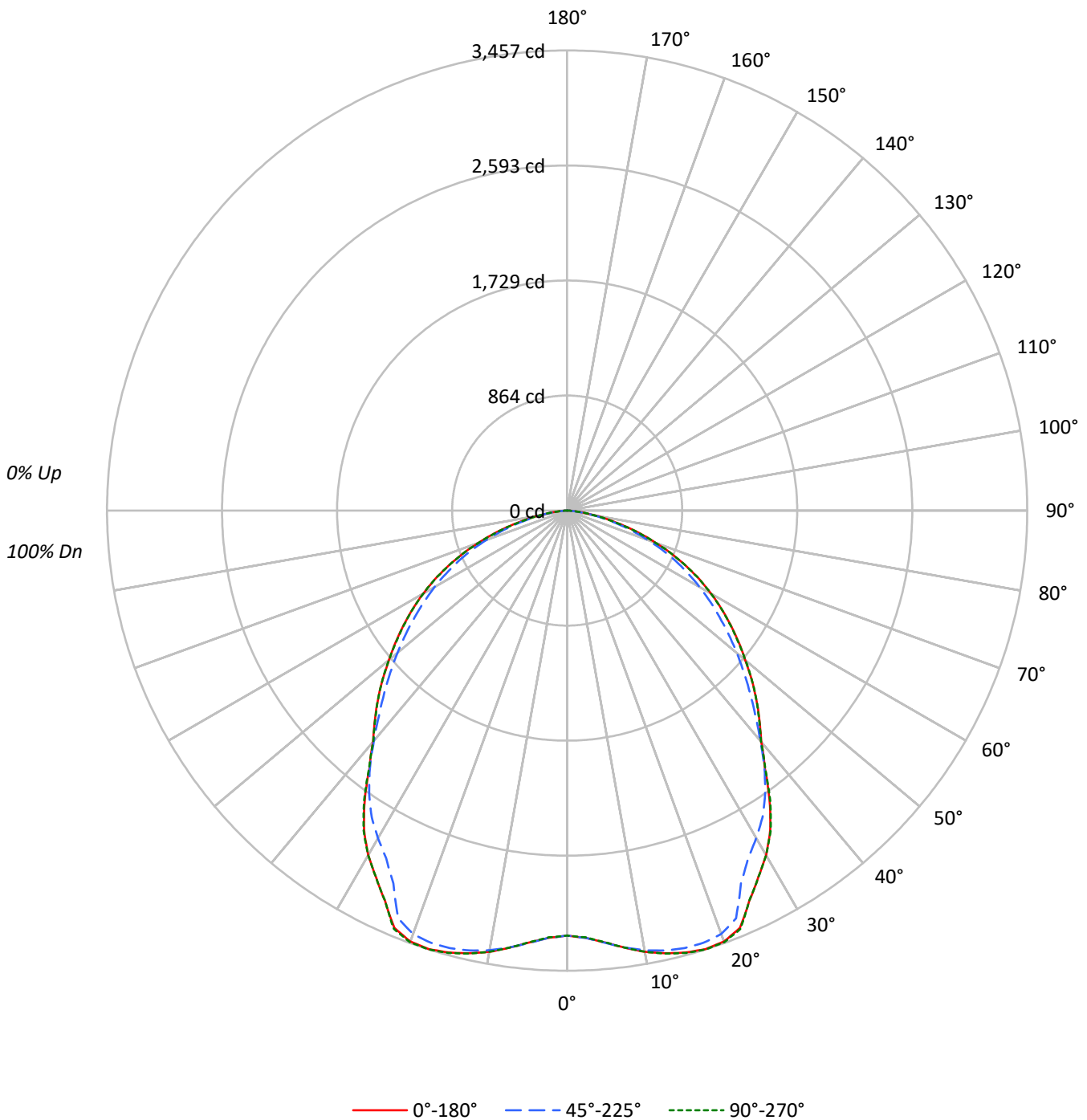
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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				85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72				72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	68	64	62				62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53				53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46				46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41				41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36				36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33				33
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29				29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34579	34579	34579
5°	35403	35425	35380
10°	37014	36874	37002
15°	38534	38153	38570
20°	39695	39011	39757
25°	38686	36911	38661
30°	37368	35525	37382
35°	35047	34290	35158
40°	32077	31927	32033
45°	30803	29780	30803
50°	29417	28024	29453
55°	28300	26397	28221
60°	27065	24906	27065
65°	25279	23107	25279
70°	22438	20488	22438
75°	18597	16823	18330
80°	13432	12304	13164
85°	8039	7380	7778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.3	3.6
10°-20°	968.1	11.1
20°-30°	1462.0	16.8
30°-40°	1596.1	18.3
40°-50°	1557.8	17.9
50°-60°	1338.2	15.3
60°-70°	946.0	10.8
70°-80°	457.6	5.2
80°-90°	85.4	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°	2744.4	31.5
0°-40°	4340.5	49.7
0°-60°	7236.5	82.9
0°-90°	8725.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8725.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3193	3193	3193	3193	3193	
5°	3257	3258	3259	3257	3255	314
15°	3437	3431	3403	3432	3440	972
25°	3238	3247	3089	3248	3236	1492
35°	2651	2514	2594	2508	2660	1650
45°	2011	2051	1945	2044	2011	1551
55°	1499	1517	1398	1513	1495	1341
65°	987	955	902	955	987	973
75°	444	423	402	422	438	475
85°	65	62	59	60	63	88
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°	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3
2.5°	3212.4	3211.3	3210.2	3211.3	3213.4	3213.4	3213.4	3212.4	3212.4	3213.4	3212.4
5°	3256.9	3254.8	3255.9	3254.8	3259.0	3258.0	3258.0	3259.0	3259.0	3259.0	3258.0
7.5°	3312.1	3310.0	3310.0	3310.0	3311.0	3311.0	3311.0	3311.0	3310.0	3310.0	3310.0
10°	3366.2	3363.0	3364.1	3363.0	3364.1	3361.9	3359.8	3357.7	3355.6	3353.5	3354.5
12.5°	3406.5	3405.4	3407.6	3407.6	3405.4	3402.3	3397.0	3391.7	3387.4	3385.3	3387.4
15°	3437.3	3439.4	3440.5	3439.4	3435.2	3426.7	3420.3	3411.8	3406.5	3403.3	3406.5
17.5°	3454.2	3454.2	3452.1	3445.8	3438.3	3430.9	3421.4	3412.9	3407.6	3404.4	3408.6
20°	3444.7	3443.6	3436.2	3426.7	3415.0	3405.4	3397.0	3389.5	3386.4	3385.3	3387.4
22.5°	3392.7	3394.8	3390.6	3384.2	3375.7	3361.9	3346.0	3331.2	3319.5	3315.3	3319.5
25°	3237.8	3236.8	3244.2	3256.9	3265.4	3228.3	3178.4	3130.7	3097.8	3089.3	3097.8
27.5°	3108.4	3107.3	3090.4	3053.2	3009.7	2975.8	2966.2	2960.9	2949.3	2944.0	2951.4
30°	2988.5	2977.9	2917.4	2840.0	2784.8	2771.0	2792.3	2820.9	2836.8	2841.1	2833.6
32.5°	2841.1	2812.4	2730.7	2662.8	2638.4	2627.8	2635.2	2672.4	2710.6	2731.8	2708.4
35°	2651.2	2626.8	2562.0	2524.9	2519.6	2507.9	2498.4	2520.7	2567.3	2593.9	2562.0
37.5°	2441.1	2452.8	2425.2	2406.1	2406.1	2394.4	2375.3	2382.8	2409.3	2434.7	2407.2
40°	2269.2	2290.5	2296.8	2291.5	2289.4	2274.5	2256.5	2252.3	2253.3	2258.6	2250.1
42.5°	2137.7	2140.9	2169.5	2179.1	2170.6	2154.7	2144.1	2137.7	2106.9	2093.1	2111.2
45°	2011.4	2013.6	2036.9	2064.5	2059.2	2042.2	2033.7	2013.6	1959.5	1944.6	1963.7
47.5°	1879.9	1891.6	1908.5	1937.2	1942.5	1925.5	1913.8	1878.8	1814.1	1801.4	1815.2
50°	1746.2	1768.5	1788.7	1802.4	1809.9	1795.0	1782.3	1740.9	1678.3	1663.5	1677.3
52.5°	1624.2	1644.4	1670.9	1666.7	1663.5	1660.3	1651.8	1609.4	1550.0	1529.8	1548.9
55°	1499.0	1519.2	1545.7	1527.7	1513.9	1519.2	1509.6	1474.6	1423.7	1398.2	1423.7
57.5°	1374.9	1390.8	1412.0	1389.8	1369.6	1376.0	1369.6	1345.2	1297.5	1273.1	1297.5
60°	1249.7	1259.3	1274.1	1250.8	1229.6	1233.8	1231.7	1206.2	1169.1	1150.0	1169.1
62.5°	1121.4	1126.7	1134.1	1111.8	1093.8	1092.7	1093.8	1068.3	1039.7	1026.9	1040.7
65°	986.6	988.7	993.0	970.7	958.0	952.7	954.8	931.5	910.2	901.8	911.3
67.5°	848.7	850.8	851.9	830.7	822.2	814.8	815.8	798.8	779.8	774.4	781.9
70°	708.7	711.9	711.9	692.8	687.5	677.9	677.9	667.3	651.4	647.1	652.4
72.5°	577.1	575.0	575.0	559.1	554.8	545.3	544.2	541.1	526.2	522.0	527.3
75°	444.5	442.4	443.5	430.7	426.5	419.1	418.0	418.0	406.3	402.1	407.4
77.5°	321.4	323.6	322.5	313.0	308.7	305.5	308.7	308.7	298.1	293.9	299.2
80°	215.4	217.5	217.5	210.1	206.9	204.8	209.0	206.9	201.6	197.3	201.6
82.5°	130.5	130.5	130.5	128.4	124.1	124.1	127.3	127.3	122.0	118.8	122.0
85°	64.7	64.7	63.7	63.7	61.5	61.5	63.7	63.7	60.5	59.4	60.5
87.5°	22.3	21.2	21.2	21.2	20.2	21.2	21.2	21.2	20.2	20.2	20.2
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°	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3	3193.3
2.5°	3213.4	3213.4	3212.4	3212.4	3212.4	3211.3	3210.2	3209.2
5°	3260.1	3259.0	3256.9	3258.0	3256.9	3256.9	3255.9	3254.8
7.5°	3312.1	3313.1	3311.0	3313.1	3313.1	3313.1	3312.1	3311.0
10°	3357.7	3360.9	3361.9	3365.1	3366.2	3367.3	3366.2	3365.1
12.5°	3392.7	3398.0	3402.3	3407.6	3410.8	3411.8	3409.7	3408.6
15°	3412.9	3420.3	3427.7	3436.2	3441.5	3443.6	3442.6	3440.5
17.5°	3413.9	3422.4	3432.0	3439.4	3446.8	3452.1	3456.4	3457.4
20°	3390.6	3398.0	3406.5	3416.1	3427.7	3437.3	3446.8	3450.0
22.5°	3328.0	3346.0	3364.1	3373.6	3383.2	3389.5	3394.8	3402.3
25°	3123.3	3177.4	3235.7	3260.1	3255.9	3235.7	3232.5	3235.7
27.5°	2963.1	2969.4	2976.8	3005.5	3045.8	3082.9	3104.2	3108.4
30°	2819.8	2789.1	2765.7	2779.5	2832.6	2905.8	2971.5	2989.6
32.5°	2671.3	2631.0	2621.5	2631.0	2654.3	2714.8	2805.0	2846.4
35°	2513.2	2496.3	2503.7	2512.2	2517.5	2550.4	2617.2	2659.6
37.5°	2374.3	2372.1	2387.0	2397.6	2397.6	2410.3	2444.3	2445.3
40°	2243.8	2254.4	2266.1	2280.9	2284.1	2289.4	2280.9	2266.1
42.5°	2129.2	2140.9	2148.3	2163.1	2171.6	2160.0	2132.4	2134.5
45°	2009.3	2031.6	2035.8	2051.8	2058.1	2027.4	2006.1	2011.4
47.5°	1874.6	1911.7	1920.2	1937.2	1931.9	1902.2	1887.3	1881.0
50°	1735.6	1784.4	1791.8	1803.5	1797.1	1782.3	1763.2	1748.3
52.5°	1610.4	1649.7	1655.0	1659.2	1664.5	1667.7	1643.3	1620.0
55°	1476.8	1507.5	1514.9	1510.7	1525.6	1542.5	1518.1	1494.8
57.5°	1347.3	1368.5	1373.8	1366.4	1387.6	1409.9	1391.9	1373.8
60°	1209.4	1230.6	1231.7	1228.5	1249.7	1268.8	1261.4	1249.7
62.5°	1073.6	1092.7	1089.5	1092.7	1109.7	1134.1	1128.8	1121.4
65°	935.7	953.7	951.6	958.0	970.7	993.0	993.0	986.6
67.5°	804.2	814.8	813.7	822.2	831.7	853.0	855.1	848.7
70°	672.6	677.9	676.8	686.4	693.8	716.1	716.1	708.7
72.5°	545.3	548.5	544.2	557.0	560.1	579.2	579.2	570.8
75°	423.3	422.2	418.0	425.4	435.0	448.8	445.6	438.1
77.5°	309.8	306.6	302.4	310.8	316.1	326.8	323.6	316.1
80°	210.1	206.9	201.6	209.0	213.2	219.6	216.4	211.1
82.5°	128.4	125.2	120.9	126.2	128.4	132.6	130.5	126.2
85°	63.7	61.5	59.4	60.5	63.7	64.7	63.7	62.6
87.5°	21.2	20.2	19.1	20.2	20.2	21.2	21.2	20.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)