

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: P130701

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130701
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-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8765.4 lumens
Efficiency: N/A
Efficacy: 113.8 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

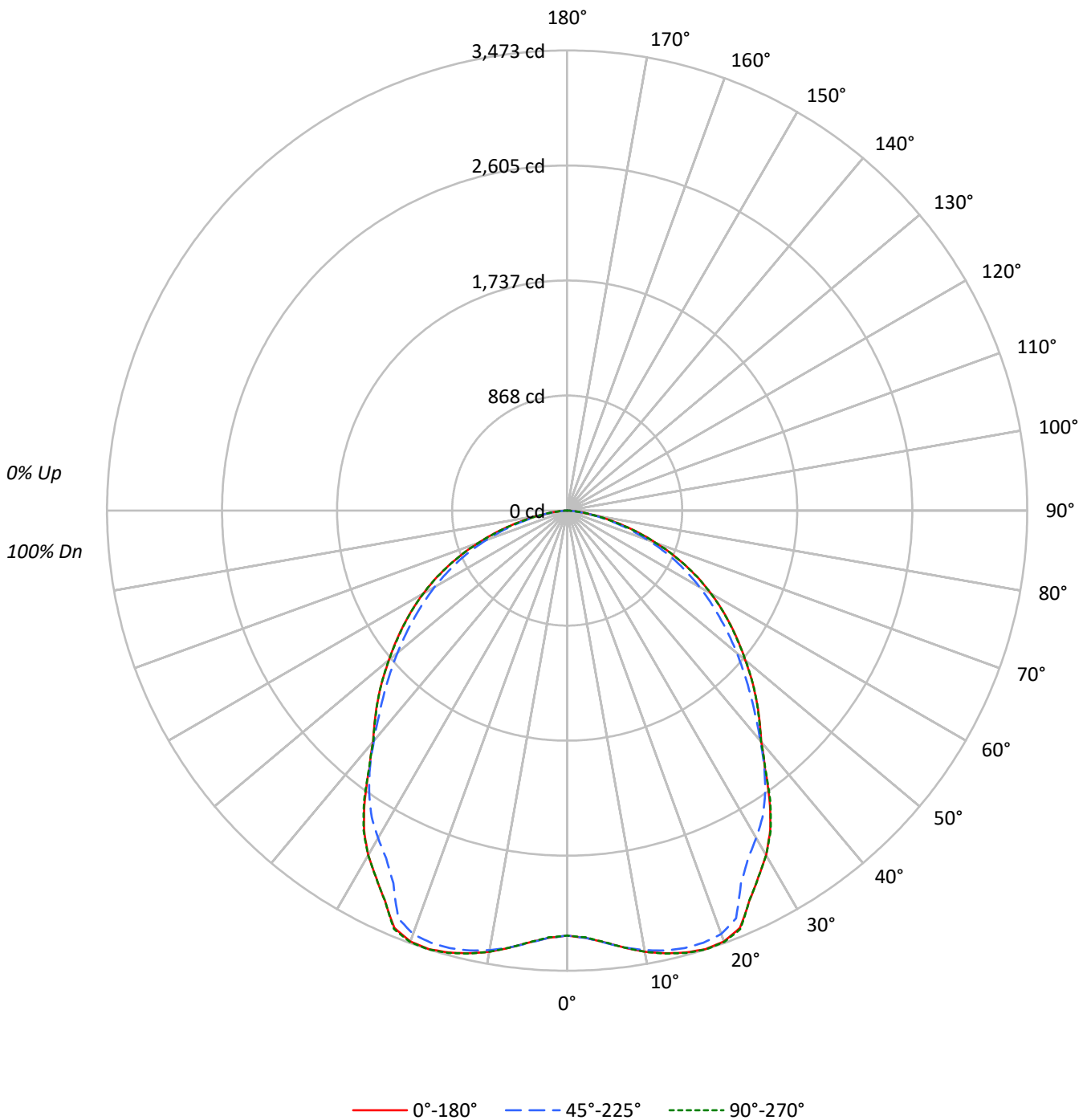
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	34737	34737	34737
5°	35565	35589	35542
10°	37183	37042	37171
15°	38710	38328	38746
20°	39878	39190	39939
25°	38862	37080	38837
30°	37539	35687	37553
35°	35207	34446	35320
40°	32224	32074	32179
45°	30944	29916	30944
50°	29552	28152	29587
55°	28430	26518	28349
60°	27189	25021	27189
65°	25395	23212	25395
70°	22539	20583	22539
75°	18681	16899	18417
80°	13488	12360	13227
85°	8076	7417	7815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.7	3.6
10°-20°	972.5	11.1
20°-30°	1468.7	16.8
30°-40°	1603.4	18.3
40°-50°	1564.9	17.9
50°-60°	1344.3	15.3
60°-70°	950.3	10.8
70°-80°	459.7	5.2
80°-90°	85.8	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°	2757.0	31.5
0°-40°	4360.4	49.7
0°-60°	7269.6	82.9
0°-90°	8765.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8765.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3208	3208	3208	3208	3208	
5°	3272	3273	3274	3272	3270	316
15°	3453	3447	3419	3448	3456	977
25°	3253	3262	3103	3263	3250	1499
35°	2663	2525	2606	2519	2672	1657
45°	2021	2060	1954	2053	2021	1558
55°	1506	1523	1405	1520	1502	1347
65°	991	960	906	959	991	978
75°	446	425	404	424	440	478
85°	65	62	60	60	63	89
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°	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9
2.5°	3227.1	3226.0	3224.9	3226.0	3228.1	3228.1	3228.1	3227.1	3227.1	3228.1	3227.1
5°	3271.8	3269.7	3270.8	3269.7	3274.0	3272.9	3272.9	3274.0	3274.0	3274.0	3272.9
7.5°	3327.2	3325.1	3325.1	3325.1	3326.2	3326.2	3326.2	3326.2	3325.1	3325.1	3325.1
10°	3381.6	3378.4	3379.5	3378.4	3379.5	3377.3	3375.2	3373.1	3370.9	3368.8	3369.9
12.5°	3422.1	3421.0	3423.2	3423.2	3421.0	3417.8	3412.5	3407.2	3402.9	3400.8	3402.9
15°	3453.0	3455.1	3456.2	3455.1	3450.9	3442.3	3435.9	3427.4	3422.1	3418.9	3422.1
17.5°	3470.1	3470.1	3467.9	3461.5	3454.1	3446.6	3437.0	3428.5	3423.2	3420.0	3424.2
20°	3460.5	3459.4	3451.9	3442.3	3430.6	3421.0	3412.5	3405.0	3401.8	3400.8	3402.9
22.5°	3408.2	3410.4	3406.1	3399.7	3391.2	3377.3	3361.3	3346.4	3334.7	3330.4	3334.7
25°	3252.6	3251.6	3259.0	3271.8	3280.4	3243.1	3193.0	3145.0	3112.0	3103.4	3112.0
27.5°	3122.6	3121.6	3104.5	3067.2	3023.5	2989.4	2979.8	2974.5	2962.8	2957.4	2964.9
30°	3002.2	2991.5	2930.8	2853.0	2797.6	2783.7	2805.0	2833.8	2849.8	2854.1	2846.6
32.5°	2854.1	2825.3	2743.2	2675.0	2650.5	2639.8	2647.3	2684.6	2723.0	2744.3	2720.8
35°	2663.3	2638.8	2573.8	2536.5	2531.1	2519.4	2509.8	2532.2	2579.1	2605.7	2573.8
37.5°	2452.3	2464.0	2436.3	2417.1	2417.1	2405.4	2386.2	2393.7	2420.3	2445.9	2418.2
40°	2279.6	2300.9	2307.3	2302.0	2299.9	2284.9	2266.8	2262.6	2263.6	2269.0	2260.4
42.5°	2147.5	2150.7	2179.4	2189.0	2180.5	2164.5	2153.9	2147.5	2116.6	2102.7	2120.8
45°	2020.6	2022.8	2046.2	2073.9	2068.6	2051.6	2043.0	2022.8	1968.4	1953.5	1972.7
47.5°	1888.5	1900.2	1917.3	1946.0	1951.4	1934.3	1922.6	1887.4	1822.4	1809.6	1823.5
50°	1754.2	1776.6	1796.8	1810.7	1818.2	1803.2	1790.4	1748.9	1686.0	1671.1	1684.9
52.5°	1631.6	1651.9	1678.5	1674.3	1671.1	1667.9	1659.4	1616.7	1557.0	1536.8	1556.0
55°	1505.9	1526.1	1552.8	1534.7	1520.8	1526.1	1516.5	1481.4	1430.2	1404.6	1430.2
57.5°	1381.2	1397.2	1418.5	1396.1	1375.9	1382.3	1375.9	1351.4	1303.4	1278.9	1303.4
60°	1255.4	1265.0	1280.0	1256.5	1235.2	1239.5	1237.3	1211.7	1174.4	1155.3	1174.4
62.5°	1126.5	1131.8	1139.3	1116.9	1098.8	1097.7	1098.8	1073.2	1044.4	1031.6	1045.5
65°	991.1	993.3	997.5	975.2	962.4	957.0	959.2	935.7	914.4	905.9	915.5
67.5°	852.6	854.7	855.8	834.5	825.9	818.5	819.6	802.5	783.3	778.0	785.5
70°	711.9	715.1	715.1	695.9	690.6	681.0	681.0	670.4	654.4	650.1	655.4
72.5°	579.8	577.6	577.6	561.6	557.4	547.8	546.7	543.5	528.6	524.3	529.7
75°	446.5	444.4	445.5	432.7	428.4	421.0	419.9	419.9	408.2	403.9	409.2
77.5°	322.9	325.1	324.0	314.4	310.1	306.9	310.1	310.1	299.5	295.2	300.5
80°	216.3	218.5	218.5	211.0	207.8	205.7	210.0	207.8	202.5	198.2	202.5
82.5°	131.1	131.1	131.1	129.0	124.7	124.7	127.9	127.9	122.6	119.4	122.6
85°	65.0	65.0	63.9	63.9	61.8	61.8	63.9	63.9	60.7	59.7	60.7
87.5°	22.4	21.3	21.3	21.3	20.2	21.3	21.3	21.3	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°	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9	3207.9
2.5°	3228.1	3228.1	3227.1	3227.1	3227.1	3226.0	3224.9	3223.9
5°	3275.0	3274.0	3271.8	3272.9	3271.8	3271.8	3270.8	3269.7
7.5°	3327.2	3328.3	3326.2	3328.3	3328.3	3328.3	3327.2	3326.2
10°	3373.1	3376.3	3377.3	3380.5	3381.6	3382.7	3381.6	3380.5
12.5°	3408.2	3413.6	3417.8	3423.2	3426.4	3427.4	3425.3	3424.2
15°	3428.5	3435.9	3443.4	3451.9	3457.3	3459.4	3458.3	3456.2
17.5°	3429.6	3438.1	3447.7	3455.1	3462.6	3467.9	3472.2	3473.3
20°	3406.1	3413.6	3422.1	3431.7	3443.4	3453.0	3462.6	3465.8
22.5°	3343.2	3361.3	3379.5	3389.1	3398.6	3405.0	3410.4	3417.8
25°	3137.5	3191.9	3250.5	3275.0	3270.8	3250.5	3247.3	3250.5
27.5°	2976.6	2983.0	2990.5	3019.2	3059.7	3097.0	3118.4	3122.6
30°	2832.7	2801.8	2778.4	2792.2	2845.5	2919.1	2985.1	3003.3
32.5°	2683.5	2643.0	2633.4	2643.0	2666.5	2727.2	2817.8	2859.4
35°	2524.7	2507.7	2515.1	2523.7	2529.0	2562.0	2629.2	2671.8
37.5°	2385.1	2383.0	2397.9	2408.6	2408.6	2421.4	2455.5	2456.5
40°	2254.0	2264.7	2276.4	2291.3	2294.5	2299.9	2291.3	2276.4
42.5°	2138.9	2150.7	2158.1	2173.0	2181.6	2169.8	2142.1	2144.3
45°	2018.5	2040.9	2045.2	2061.1	2067.5	2036.6	2015.3	2020.6
47.5°	1883.2	1920.5	1929.0	1946.0	1940.7	1910.9	1896.0	1889.6
50°	1743.6	1792.6	1800.0	1811.8	1805.4	1790.4	1771.3	1756.3
52.5°	1617.8	1657.2	1662.6	1666.8	1672.1	1675.3	1650.8	1627.4
55°	1483.5	1514.4	1521.9	1517.6	1532.5	1549.6	1525.1	1501.6
57.5°	1353.5	1374.8	1380.1	1372.7	1394.0	1416.4	1398.3	1380.1
60°	1214.9	1236.3	1237.3	1234.1	1255.4	1274.6	1267.2	1255.4
62.5°	1078.5	1097.7	1094.5	1097.7	1114.8	1139.3	1133.9	1126.5
65°	940.0	958.1	956.0	962.4	975.2	997.5	997.5	991.1
67.5°	807.8	818.5	817.4	825.9	835.5	856.9	859.0	852.6
70°	675.7	681.0	679.9	689.5	697.0	719.4	719.4	711.9
72.5°	547.8	551.0	546.7	559.5	562.7	581.9	581.9	573.4
75°	425.2	424.2	419.9	427.4	437.0	450.8	447.6	440.2
77.5°	311.2	308.0	303.7	312.3	317.6	328.2	325.1	317.6
80°	211.0	207.8	202.5	210.0	214.2	220.6	217.4	212.1
82.5°	129.0	125.8	121.5	126.8	129.0	133.2	131.1	126.8
85°	63.9	61.8	59.7	60.7	63.9	65.0	63.9	62.9
87.5°	21.3	20.2	19.2	20.2	20.2	21.3	21.3	20.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)