

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: P130647

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25346)
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-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8627.9 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

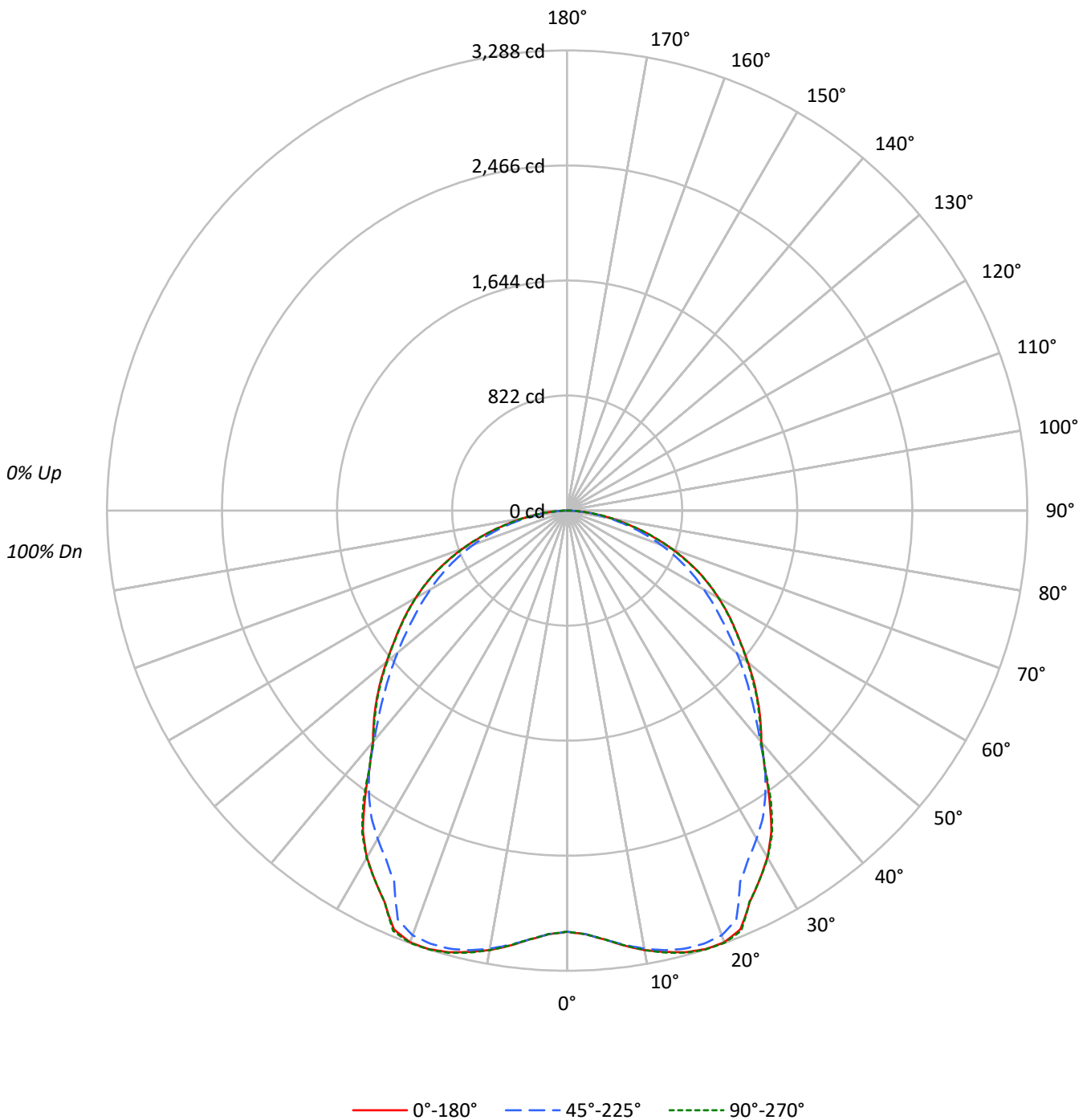
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60					60			
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52					52			
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32591	32591	32591
5°	33442	33442	33431
10°	35065	34949	35065
15°	36619	36334	36667
20°	37825	37213	37874
25°	36886	34946	36848
30°	35790	33853	35829
35°	33321	32648	33560
40°	30518	30293	30473
45°	29536	28317	29438
50°	28398	26683	28292
55°	27560	25336	27499
60°	27065	24447	27065
65°	26504	23704	26422
70°	25158	22536	25123
75°	22903	20727	22990
80°	20042	18190	20111
85°	17394	15158	17394



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.2	3.4
10°-20°	921.1	10.7
20°-30°	1393.0	16.1
30°-40°	1520.6	17.6
40°-50°	1492.7	17.3
50°-60°	1306.8	15.1
60°-70°	982.0	11.4
70°-80°	561.4	6.5
80°-90°	153.1	1.8
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°	2611.3	30.3
0°-40°	4131.9	47.9
0°-60°	6931.4	80.3
0°-90°	8627.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8627.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3010	3010	3010	3010	3010	
5°	3076	3077	3076	3077	3076	297
15°	3266	3264	3241	3265	3271	924
25°	3087	3091	2925	3091	3084	1426
35°	2521	2397	2470	2388	2539	1572
45°	1929	1968	1849	1956	1922	1487
55°	1460	1483	1342	1478	1457	1309
65°	1034	994	925	994	1031	1017
75°	547	526	495	527	550	581
85°	140	132	122	132	140	157
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°	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7
2.5°	3029.9	3027.7	3028.8	3027.7	3029.9	3029.9	3028.8	3029.9	3028.8	3028.8	3028.8
5°	3076.5	3074.4	3075.5	3073.4	3076.5	3077.6	3076.5	3077.6	3077.6	3076.5	3076.5
7.5°	3134.9	3130.7	3131.7	3129.6	3132.8	3132.8	3131.7	3131.7	3130.7	3129.6	3130.7
10°	3189.0	3186.9	3186.9	3185.8	3187.9	3186.9	3184.8	3183.7	3179.5	3178.4	3180.5
12.5°	3230.4	3232.5	3235.7	3235.7	3234.6	3233.6	3228.3	3225.1	3218.7	3217.6	3219.8
15°	3266.4	3267.5	3270.7	3269.6	3266.4	3261.1	3255.8	3249.5	3244.2	3241.0	3244.2
17.5°	3285.5	3285.5	3284.5	3281.3	3274.9	3268.6	3261.1	3254.8	3249.5	3245.2	3249.5
20°	3282.4	3282.4	3277.1	3270.7	3260.1	3250.5	3243.1	3236.7	3231.4	3229.3	3232.5
22.5°	3237.8	3241.0	3236.7	3235.7	3227.2	3214.5	3199.6	3183.7	3166.7	3161.4	3168.8
25°	3087.2	3085.0	3087.2	3107.3	3112.6	3070.2	3016.1	2966.2	2936.5	2924.8	2940.8
27.5°	2975.8	2973.6	2947.1	2904.7	2846.3	2818.8	2823.0	2818.8	2811.3	2806.0	2813.5
30°	2862.3	2846.3	2774.2	2696.8	2640.5	2632.0	2656.4	2687.2	2706.3	2707.4	2704.2
32.5°	2715.9	2684.0	2590.7	2531.3	2507.9	2503.7	2511.1	2542.9	2586.4	2603.4	2581.1
35°	2520.6	2502.6	2445.3	2407.1	2399.7	2394.4	2381.7	2397.6	2451.7	2469.7	2449.6
37.5°	2318.0	2335.0	2310.6	2296.8	2295.7	2285.1	2267.1	2269.2	2297.9	2323.3	2294.7
40°	2158.9	2175.9	2191.8	2190.7	2186.5	2170.6	2156.8	2149.3	2147.2	2143.0	2149.3
42.5°	2045.4	2039.0	2069.8	2086.7	2076.1	2065.5	2053.9	2048.6	2009.3	1991.3	2014.6
45°	1928.7	1926.6	1947.8	1983.8	1975.4	1960.5	1957.3	1936.1	1869.3	1849.1	1874.6
47.5°	1808.8	1817.3	1836.4	1866.1	1871.4	1858.7	1849.1	1805.6	1737.7	1713.3	1736.7
50°	1685.7	1704.8	1731.4	1743.0	1748.3	1740.9	1734.5	1678.3	1609.4	1583.9	1610.4
52.5°	1568.0	1594.5	1629.5	1620.0	1615.7	1618.9	1608.3	1557.4	1490.5	1459.8	1491.6
55°	1459.8	1485.2	1516.0	1496.9	1476.7	1488.4	1478.9	1438.6	1380.2	1342.0	1378.1
57.5°	1357.9	1373.8	1398.2	1372.8	1349.4	1363.2	1353.7	1321.9	1267.8	1234.9	1269.9
60°	1249.7	1262.4	1276.2	1251.8	1227.4	1234.9	1230.6	1202.0	1157.4	1128.8	1155.3
62.5°	1141.5	1147.9	1157.4	1130.9	1110.7	1110.7	1108.6	1081.0	1046.0	1030.1	1045.0
65°	1034.4	1033.3	1036.5	1010.0	995.1	993.0	988.7	963.3	935.7	925.1	936.8
67.5°	913.4	915.5	916.6	892.2	880.5	875.2	872.0	848.7	826.4	819.0	827.5
70°	794.6	795.7	795.7	773.4	764.9	756.4	753.2	735.2	717.2	711.8	719.3
72.5°	669.4	676.8	673.7	655.6	649.3	638.6	636.5	624.9	611.1	603.6	611.1
75°	547.4	558.0	554.8	538.9	531.5	520.9	522.0	515.6	500.7	495.4	502.9
77.5°	429.7	436.0	437.1	428.6	416.9	409.5	412.7	411.6	401.0	388.3	397.8
80°	321.4	328.9	329.9	322.5	313.0	306.6	310.8	310.8	302.4	291.7	300.2
82.5°	223.8	229.1	229.1	224.9	220.7	214.3	216.4	217.5	212.2	201.6	209.0
85°	140.0	141.1	139.0	135.8	132.6	130.5	130.5	132.6	128.4	122.0	127.3
87.5°	52.0	53.0	52.0	55.2	52.0	50.9	52.0	55.2	50.9	50.9	52.0
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°	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7	3009.7
2.5°	3028.8	3029.9	3029.9	3028.8	3028.8	3028.8	3027.7	3028.8
5°	3076.5	3077.6	3077.6	3075.5	3076.5	3075.5	3074.4	3075.5
7.5°	3131.7	3133.8	3132.8	3133.8	3134.9	3132.8	3132.8	3132.8
10°	3182.6	3185.8	3187.9	3190.1	3191.1	3189.0	3190.1	3189.0
12.5°	3224.0	3230.4	3234.6	3236.7	3238.9	3238.9	3236.7	3234.6
15°	3249.5	3256.9	3262.2	3268.6	3272.8	3273.9	3271.8	3270.7
17.5°	3255.8	3262.2	3269.6	3276.0	3282.4	3286.6	3288.7	3287.7
20°	3237.8	3243.1	3251.6	3261.1	3269.6	3278.1	3284.5	3286.6
22.5°	3185.8	3200.7	3216.6	3228.3	3235.7	3239.9	3243.1	3250.5
25°	2972.6	3011.8	3069.1	3112.6	3105.2	3085.0	3077.6	3084.0
27.5°	2820.9	2816.6	2810.3	2844.2	2897.3	2943.9	2966.2	2976.8
30°	2685.1	2653.3	2623.6	2635.2	2689.3	2770.0	2837.9	2865.4
32.5°	2542.9	2499.4	2495.2	2502.6	2528.1	2582.2	2674.5	2726.5
35°	2393.3	2370.0	2382.7	2392.3	2400.8	2428.4	2492.0	2538.7
37.5°	2259.7	2255.4	2272.4	2284.1	2288.3	2302.1	2326.5	2320.1
40°	2141.9	2145.1	2159.9	2172.7	2181.2	2182.2	2167.4	2155.7
42.5°	2035.8	2049.6	2049.6	2065.5	2080.4	2060.2	2029.5	2037.9
45°	1927.6	1949.9	1948.8	1962.6	1976.4	1941.4	1915.9	1922.3
47.5°	1800.3	1842.7	1849.1	1864.0	1864.0	1827.9	1807.7	1800.3
50°	1670.9	1726.1	1733.5	1742.0	1737.7	1723.9	1697.4	1679.4
52.5°	1551.0	1603.0	1610.4	1607.2	1615.7	1622.1	1586.0	1563.7
55°	1433.2	1473.6	1483.1	1472.5	1492.7	1510.7	1476.7	1456.6
57.5°	1316.6	1347.3	1355.8	1347.3	1369.6	1389.8	1367.5	1353.7
60°	1198.8	1226.4	1231.7	1224.3	1250.8	1268.8	1258.2	1249.7
62.5°	1083.2	1102.3	1107.6	1110.7	1126.7	1147.9	1145.7	1144.7
65°	966.5	986.6	988.7	998.3	1008.9	1036.5	1031.2	1031.2
67.5°	852.9	866.7	869.9	884.8	889.0	915.5	912.4	908.1
70°	735.2	749.0	753.2	768.1	774.4	795.7	796.7	793.5
72.5°	627.0	632.3	636.5	650.3	655.6	675.8	675.8	671.5
75°	516.6	515.6	519.8	533.6	538.9	555.9	554.8	549.5
77.5°	412.7	407.4	410.6	420.1	426.5	439.2	435.0	430.7
80°	315.1	306.6	307.7	317.2	321.4	329.9	325.7	322.5
82.5°	222.8	215.4	213.2	220.7	227.0	228.1	227.0	224.9
85°	135.8	129.4	130.5	133.7	137.9	137.9	140.0	140.0
87.5°	53.0	49.9	49.9	53.0	53.0	54.1	53.0	50.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)