

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: P130692

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130692  
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-DIMRF-LW  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LUMAWATT WIRELESS SENSOR.  
Light Source: (160) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8475.4 lumens  
Efficiency: N/A  
Efficacy: 110.1 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

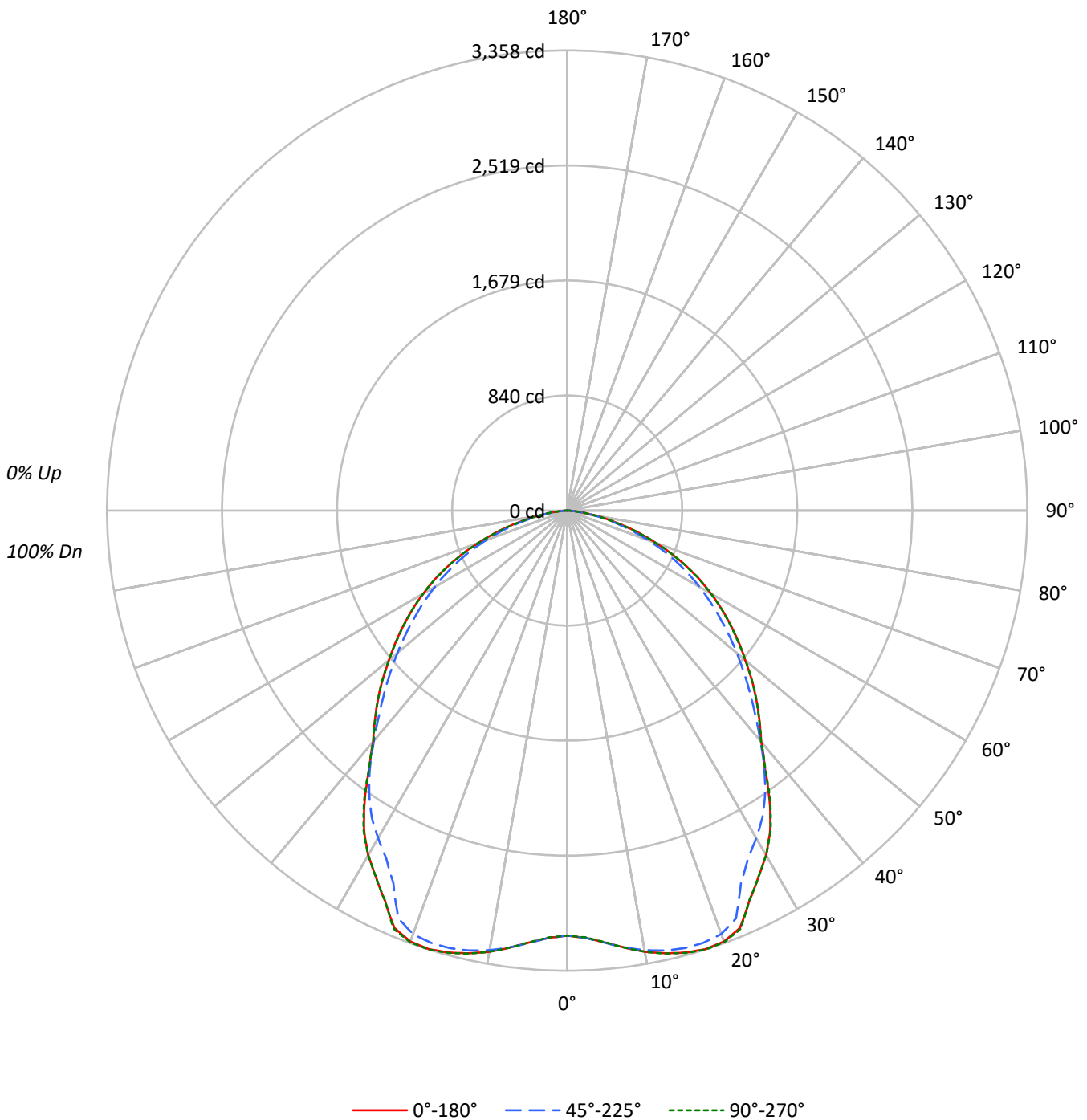
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	33587	33587	33587
5°	34388	34410	34366
10°	35953	35816	35942
15°	37429	37060	37464
20°	38557	37892	38617
25°	37577	35853	37552
30°	36296	34506	36310
35°	34043	33306	34151
40°	31158	31013	31114
45°	29921	28927	29921
50°	28575	27220	28609
55°	27490	25642	27411
60°	26290	24191	26290
65°	24554	22443	24554
70°	21795	19902	21795
75°	18066	16338	17807
80°	13046	11954	12790
85°	7815	7169	7554



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.3	3.6
10°-20°	940.3	11.1
20°-30°	1420.1	16.8
30°-40°	1550.4	18.3
40°-50°	1513.1	17.9
50°-60°	1299.9	15.3
60°-70°	918.8	10.8
70°-80°	444.5	5.2
80°-90°	82.9	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°	2665.7	31.5
0°-40°	4216.1	49.7
0°-60°	7029.1	82.9
0°-90°	8475.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8475.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3102	3102	3102	3102	3102	
5°	3164	3165	3166	3164	3162	305
15°	3339	3333	3306	3334	3342	944
25°	3145	3154	3001	3155	3143	1450
35°	2575	2442	2520	2436	2583	1602
45°	1954	1992	1889	1985	1954	1506
55°	1456	1473	1358	1469	1452	1302
65°	958	928	876	927	958	945
75°	432	411	390	410	426	462
85°	63	60	58	58	61	86
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°	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7
2.5°	3120.3	3119.2	3118.2	3119.2	3121.3	3121.3	3121.3	3120.3	3120.3	3121.3	3120.3
5°	3163.6	3161.5	3162.5	3161.5	3165.6	3164.6	3164.6	3165.6	3165.6	3165.6	3164.6
7.5°	3217.1	3215.1	3215.1	3215.1	3216.1	3216.1	3216.1	3216.1	3215.1	3215.1	3215.1
10°	3269.7	3266.6	3267.6	3266.6	3267.6	3265.6	3263.5	3261.4	3259.4	3257.3	3258.4
12.5°	3308.9	3307.8	3309.9	3309.9	3307.8	3304.7	3299.6	3294.4	3290.3	3288.2	3290.3
15°	3338.7	3340.8	3341.8	3340.8	3336.7	3328.4	3322.2	3314.0	3308.9	3305.8	3308.9
17.5°	3355.2	3355.2	3353.2	3347.0	3339.8	3332.6	3323.3	3315.0	3309.9	3306.8	3310.9
20°	3345.9	3344.9	3337.7	3328.4	3317.1	3307.8	3299.6	3292.4	3289.3	3288.2	3290.3
22.5°	3295.5	3297.5	3293.4	3287.2	3279.0	3265.6	3250.1	3235.7	3224.4	3220.2	3224.4
25°	3145.0	3144.0	3151.2	3163.6	3171.8	3135.7	3087.3	3040.9	3009.0	3000.7	3009.0
27.5°	3019.3	3018.3	3001.8	2965.7	2923.5	2890.5	2881.2	2876.1	2864.7	2859.6	2866.8
30°	2902.8	2892.5	2833.8	2758.6	2705.0	2691.6	2712.2	2740.0	2755.5	2759.6	2752.4
32.5°	2759.6	2731.8	2652.4	2586.5	2562.8	2552.5	2559.7	2595.8	2632.9	2653.5	2630.8
35°	2575.2	2551.5	2488.6	2452.5	2447.4	2436.0	2426.8	2448.4	2493.7	2519.5	2488.6
37.5°	2371.1	2382.5	2355.7	2337.1	2337.1	2325.8	2307.2	2314.4	2340.2	2364.9	2338.1
40°	2204.2	2224.8	2231.0	2225.8	2223.8	2209.3	2191.8	2187.7	2188.7	2193.9	2185.6
42.5°	2076.4	2079.5	2107.3	2116.6	2108.3	2092.9	2082.6	2076.4	2046.5	2033.1	2050.6
45°	1953.8	1955.8	1978.5	2005.3	2000.1	1983.7	1975.4	1955.8	1903.3	1888.9	1907.4
47.5°	1826.0	1837.3	1853.8	1881.6	1886.8	1870.3	1859.0	1825.0	1762.1	1749.7	1763.1
50°	1696.2	1717.8	1737.4	1750.8	1758.0	1743.6	1731.2	1691.0	1630.2	1615.8	1629.2
52.5°	1577.7	1597.2	1623.0	1618.9	1615.8	1612.7	1604.4	1563.2	1505.5	1485.9	1504.5
55°	1456.1	1475.6	1501.4	1483.9	1470.5	1475.6	1466.4	1432.4	1382.9	1358.2	1382.9
57.5°	1335.5	1351.0	1371.6	1349.9	1330.3	1336.5	1330.3	1306.6	1260.3	1236.6	1260.3
60°	1213.9	1223.2	1237.6	1214.9	1194.3	1198.4	1196.4	1171.6	1135.6	1117.0	1135.6
62.5°	1089.2	1094.4	1101.6	1079.9	1062.4	1061.4	1062.4	1037.7	1009.9	997.5	1010.9
65°	958.3	960.4	964.5	942.9	930.5	925.4	927.4	904.8	884.1	875.9	885.2
67.5°	824.4	826.4	827.5	806.9	798.6	791.4	792.4	775.9	757.4	752.2	759.5
70°	688.4	691.4	691.4	672.9	667.7	658.5	658.5	648.2	632.7	628.6	633.7
72.5°	560.6	558.5	558.5	543.1	538.9	529.7	528.6	525.5	511.1	507.0	512.1
75°	431.8	429.7	430.7	418.4	414.3	407.0	406.0	406.0	394.7	390.5	395.7
77.5°	312.2	314.3	313.3	304.0	299.9	296.8	299.9	299.9	289.6	285.4	290.6
80°	209.2	211.2	211.2	204.0	200.9	198.9	203.0	200.9	195.8	191.7	195.8
82.5°	126.7	126.7	126.7	124.7	120.6	120.6	123.7	123.7	118.5	115.4	118.5
85°	62.9	62.9	61.8	61.8	59.8	59.8	61.8	61.8	58.7	57.7	58.7
87.5°	21.6	20.6	20.6	20.6	19.6	20.6	20.6	20.6	19.6	19.6	19.6
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°	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7	3101.7
2.5°	3121.3	3121.3	3120.3	3120.3	3120.3	3119.2	3118.2	3117.2
5°	3166.6	3165.6	3163.6	3164.6	3163.6	3163.6	3162.5	3161.5
7.5°	3217.1	3218.2	3216.1	3218.2	3218.2	3218.2	3217.1	3216.1
10°	3261.4	3264.5	3265.6	3268.7	3269.7	3270.7	3269.7	3268.7
12.5°	3295.5	3300.6	3304.7	3309.9	3313.0	3314.0	3311.9	3310.9
15°	3315.0	3322.2	3329.5	3337.7	3342.9	3344.9	3343.9	3341.8
17.5°	3316.1	3324.3	3333.6	3340.8	3348.0	3353.2	3357.3	3358.3
20°	3293.4	3300.6	3308.9	3318.1	3329.5	3338.7	3348.0	3351.1
22.5°	3232.6	3250.1	3267.6	3276.9	3286.2	3292.4	3297.5	3304.7
25°	3033.7	3086.3	3142.9	3166.6	3162.5	3142.9	3139.9	3142.9
27.5°	2878.1	2884.3	2891.5	2919.3	2958.5	2994.6	3015.2	3019.3
30°	2739.0	2709.1	2686.4	2699.8	2751.4	2822.5	2886.4	2903.9
32.5°	2594.7	2555.6	2546.3	2555.6	2578.2	2637.0	2724.6	2764.8
35°	2441.2	2424.7	2431.9	2440.2	2445.3	2477.3	2542.2	2583.4
37.5°	2306.2	2304.1	2318.6	2328.9	2328.9	2341.2	2374.2	2375.2
40°	2179.5	2189.8	2201.1	2215.5	2218.6	2223.8	2215.5	2201.1
42.5°	2068.2	2079.5	2086.7	2101.1	2109.4	2098.0	2071.3	2073.3
45°	1951.7	1973.4	1977.5	1992.9	1999.1	1969.2	1948.6	1953.8
47.5°	1820.8	1856.9	1865.2	1881.6	1876.5	1847.6	1833.2	1827.0
50°	1685.9	1733.3	1740.5	1751.8	1745.6	1731.2	1712.6	1698.2
52.5°	1564.3	1602.4	1607.5	1611.7	1616.8	1619.9	1596.2	1573.5
55°	1434.4	1464.3	1471.5	1467.4	1481.8	1498.3	1474.6	1451.9
57.5°	1308.7	1329.3	1334.5	1327.2	1347.9	1369.5	1352.0	1334.5
60°	1174.7	1195.3	1196.4	1193.3	1213.9	1232.4	1225.2	1213.9
62.5°	1042.8	1061.4	1058.3	1061.4	1077.9	1101.6	1096.4	1089.2
65°	908.9	926.4	924.3	930.5	942.9	964.5	964.5	958.3
67.5°	781.1	791.4	790.4	798.6	807.9	828.5	830.6	824.4
70°	653.3	658.5	657.4	666.7	673.9	695.6	695.6	688.4
72.5°	529.7	532.8	528.6	541.0	544.1	562.6	562.6	554.4
75°	411.2	410.1	406.0	413.2	422.5	435.9	432.8	425.6
77.5°	300.9	297.8	293.7	301.9	307.1	317.4	314.3	307.1
80°	204.0	200.9	195.8	203.0	207.1	213.3	210.2	205.1
82.5°	124.7	121.6	117.5	122.6	124.7	128.8	126.7	122.6
85°	61.8	59.8	57.7	58.7	61.8	62.9	61.8	60.8
87.5°	20.6	19.6	18.5	19.6	19.6	20.6	20.6	19.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)