

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: P130665

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130665
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-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH MINI SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8667.4 lumens
Efficiency: N/A
Efficacy: 112.6 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

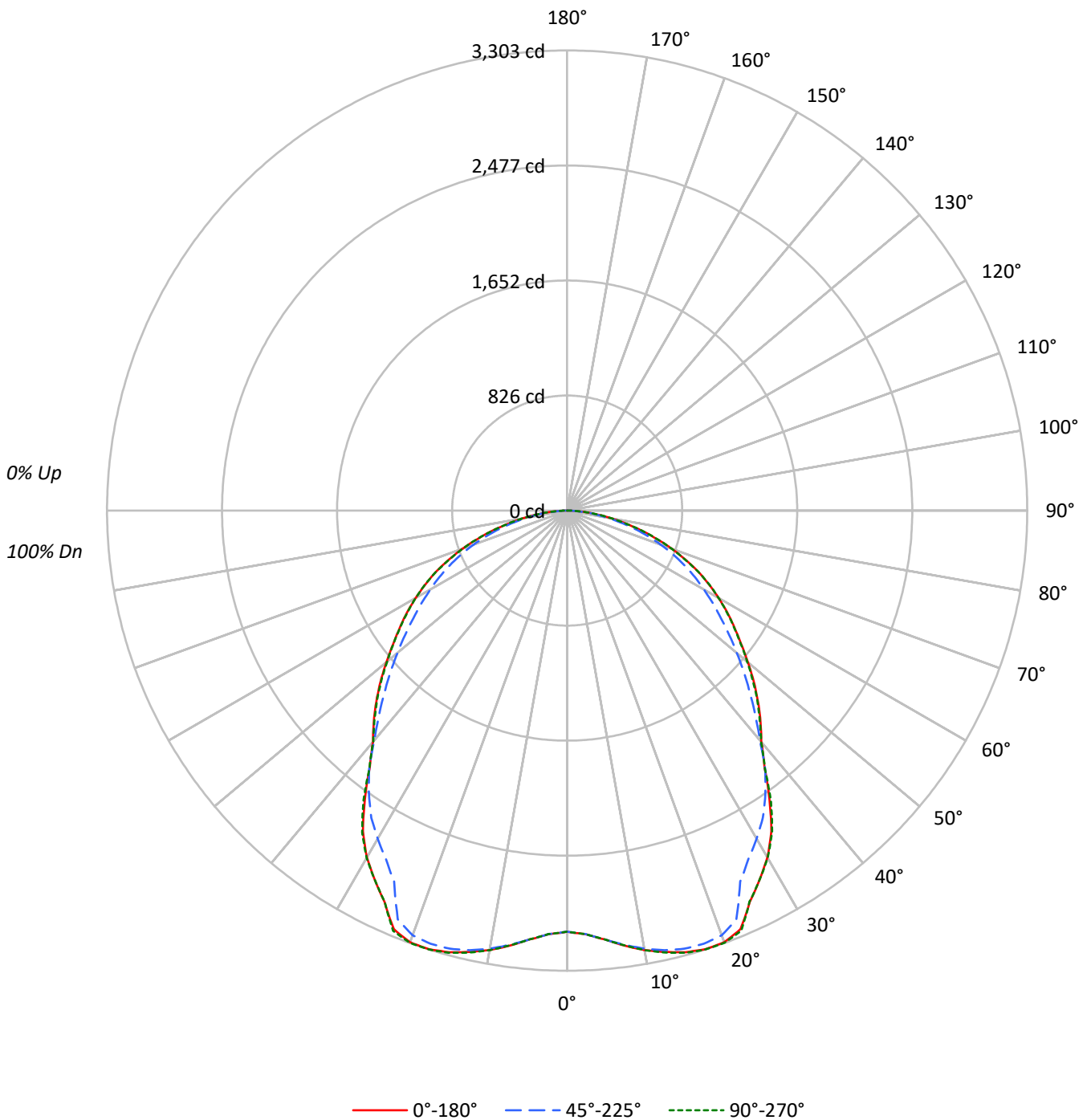
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32741	32741	32741
5°	33595	33595	33584
10°	35226	35108	35226
15°	36787	36500	36835
20°	37998	37384	38046
25°	37055	35106	37016
30°	35952	34008	35992
35°	33474	32797	33713
40°	30658	30432	30613
45°	29671	28447	29573
50°	28529	26804	28422
55°	27684	25453	27626
60°	27189	24557	27189
65°	26625	23811	26543
70°	25272	22641	25240
75°	23007	20823	23099
80°	20136	18278	20205
85°	17481	15232	17481



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.5	3.4
10°-20°	925.4	10.7
20°-30°	1399.4	16.1
30°-40°	1527.6	17.6
40°-50°	1499.6	17.3
50°-60°	1312.8	15.1
60°-70°	986.5	11.4
70°-80°	564.0	6.5
80°-90°	153.8	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°	2623.3	30.3
0°-40°	4150.8	47.9
0°-60°	6963.2	80.3
0°-90°	8667.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8667.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3024	3024	3024	3024	3024	
5°	3091	3091	3091	3091	3090	299
15°	3281	3279	3256	3280	3286	928
25°	3101	3106	2938	3105	3098	1432
35°	2532	2408	2481	2398	2550	1579
45°	1938	1977	1858	1965	1931	1494
55°	1466	1489	1348	1485	1463	1315
65°	1039	999	929	998	1036	1022
75°	550	529	498	529	552	584
85°	141	132	123	133	141	158
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°	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5
2.5°	3043.7	3041.6	3042.7	3041.6	3043.7	3043.7	3042.7	3043.7	3042.7	3042.7	3042.7
5°	3090.6	3088.5	3089.6	3087.4	3090.6	3091.7	3090.6	3091.7	3091.7	3090.6	3090.6
7.5°	3149.2	3145.0	3146.0	3143.9	3147.1	3147.1	3146.0	3146.0	3145.0	3143.9	3145.0
10°	3203.6	3201.5	3201.5	3200.4	3202.5	3201.5	3199.3	3198.3	3194.0	3192.9	3195.1
12.5°	3245.2	3247.3	3250.5	3250.5	3249.4	3248.4	3243.0	3239.8	3233.4	3232.4	3234.5
15°	3281.4	3282.5	3285.7	3284.6	3281.4	3276.1	3270.7	3264.3	3259.0	3255.8	3259.0
17.5°	3300.6	3300.6	3299.5	3296.3	3289.9	3283.5	3276.1	3269.7	3264.3	3260.1	3264.3
20°	3297.4	3297.4	3292.1	3285.7	3275.0	3265.4	3257.9	3251.6	3246.2	3244.1	3247.3
22.5°	3252.6	3255.8	3251.6	3250.5	3242.0	3229.2	3214.3	3198.3	3181.2	3175.9	3183.3
25°	3101.3	3099.2	3101.3	3121.5	3126.9	3084.2	3029.9	2979.8	2950.0	2938.2	2954.2
27.5°	2989.4	2987.3	2960.6	2918.0	2859.4	2831.7	2835.9	2831.7	2824.2	2818.9	2826.3
30°	2875.3	2859.4	2786.9	2709.1	2652.6	2644.1	2668.6	2699.5	2718.7	2719.8	2716.6
32.5°	2728.3	2696.3	2602.5	2542.8	2519.4	2515.1	2522.6	2554.6	2598.3	2615.3	2592.9
35°	2532.2	2514.1	2456.5	2418.1	2410.7	2405.4	2392.6	2408.6	2462.9	2481.0	2460.8
37.5°	2328.6	2345.7	2321.2	2307.3	2306.2	2295.6	2277.5	2279.6	2308.4	2334.0	2305.2
40°	2168.8	2185.8	2201.8	2200.7	2196.5	2180.5	2166.6	2159.2	2157.0	2152.8	2159.2
42.5°	2054.7	2048.3	2079.2	2096.3	2085.6	2075.0	2063.3	2057.9	2018.5	2000.4	2023.8
45°	1937.5	1935.4	1956.7	1992.9	1984.4	1969.5	1966.3	1945.0	1877.8	1857.6	1883.2
47.5°	1817.1	1825.6	1844.8	1874.6	1880.0	1867.2	1857.6	1813.9	1745.7	1721.2	1744.6
50°	1693.5	1712.6	1739.3	1751.0	1756.3	1748.9	1742.5	1686.0	1616.7	1591.1	1617.8
52.5°	1575.2	1601.8	1637.0	1627.4	1623.1	1626.3	1615.7	1564.5	1497.4	1466.4	1498.4
55°	1466.4	1492.0	1522.9	1503.8	1483.5	1495.2	1485.6	1445.1	1386.5	1348.2	1384.4
57.5°	1364.1	1380.1	1404.6	1379.1	1355.6	1369.5	1359.9	1327.9	1273.6	1240.5	1275.7
60°	1255.4	1268.2	1282.1	1257.6	1233.1	1240.5	1236.3	1207.5	1162.7	1133.9	1160.6
62.5°	1146.7	1153.1	1162.7	1136.1	1115.8	1115.8	1113.7	1086.0	1050.8	1034.8	1049.7
65°	1039.1	1038.0	1041.2	1014.6	999.7	997.5	993.3	967.7	940.0	929.3	941.0
67.5°	917.6	919.7	920.8	896.3	884.6	879.2	876.0	852.6	830.2	822.7	831.3
70°	798.2	799.3	799.3	776.9	768.4	759.9	756.7	738.6	720.4	715.1	722.6
72.5°	672.5	679.9	676.7	658.6	652.2	641.6	639.4	627.7	613.9	606.4	613.9
75°	549.9	560.6	557.4	541.4	533.9	523.3	524.3	517.9	503.0	497.7	505.2
77.5°	431.6	438.0	439.1	430.6	418.8	411.4	414.6	413.5	402.8	390.1	399.7
80°	322.9	330.4	331.4	324.0	314.4	308.0	312.3	312.3	303.7	293.1	301.6
82.5°	224.9	230.2	230.2	225.9	221.7	215.3	217.4	218.5	213.1	202.5	209.9
85°	140.7	141.7	139.6	136.4	133.2	131.1	131.1	133.2	129.0	122.6	127.9
87.5°	52.2	53.3	52.2	55.4	52.2	51.2	52.2	55.4	51.2	51.2	52.2
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°	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5	3023.5
2.5°	3042.7	3043.7	3043.7	3042.7	3042.7	3042.7	3041.6	3042.7
5°	3090.6	3091.7	3091.7	3089.6	3090.6	3089.6	3088.5	3089.6
7.5°	3146.0	3148.2	3147.1	3148.2	3149.2	3147.1	3147.1	3147.1
10°	3197.2	3200.4	3202.5	3204.7	3205.7	3203.6	3204.7	3203.6
12.5°	3238.8	3245.2	3249.4	3251.6	3253.7	3253.7	3251.6	3249.4
15°	3264.3	3271.8	3277.1	3283.5	3287.8	3288.9	3286.7	3285.7
17.5°	3270.7	3277.1	3284.6	3291.0	3297.4	3301.6	3303.8	3302.7
20°	3252.6	3257.9	3266.5	3276.1	3284.6	3293.1	3299.5	3301.6
22.5°	3200.4	3215.3	3231.3	3243.0	3250.5	3254.8	3257.9	3265.4
25°	2986.2	3025.6	3083.2	3126.9	3119.4	3099.2	3091.7	3098.1
27.5°	2833.8	2829.5	2823.1	2857.2	2910.5	2957.4	2979.8	2990.4
30°	2697.4	2665.4	2635.6	2647.3	2701.6	2782.6	2850.8	2878.5
32.5°	2554.6	2510.9	2506.6	2514.1	2539.6	2594.0	2686.7	2738.9
35°	2404.3	2380.8	2393.6	2403.2	2411.8	2439.5	2503.4	2550.3
37.5°	2270.0	2265.7	2282.8	2294.5	2298.8	2312.6	2337.2	2330.8
40°	2151.7	2154.9	2169.8	2182.6	2191.1	2192.2	2177.3	2165.6
42.5°	2045.1	2059.0	2059.0	2075.0	2089.9	2069.7	2038.7	2047.3
45°	1936.4	1958.8	1957.8	1971.6	1985.5	1950.3	1924.7	1931.1
47.5°	1808.5	1851.2	1857.6	1872.5	1872.5	1836.3	1816.0	1808.5
50°	1678.5	1733.9	1741.4	1749.9	1745.7	1731.8	1705.2	1687.1
52.5°	1558.1	1610.3	1617.8	1614.6	1623.1	1629.5	1593.3	1570.9
55°	1439.8	1480.3	1489.9	1479.2	1499.5	1517.6	1483.5	1463.3
57.5°	1322.6	1353.5	1362.0	1353.5	1375.9	1396.1	1373.7	1359.9
60°	1204.3	1232.0	1237.3	1229.9	1256.5	1274.6	1264.0	1255.4
62.5°	1088.1	1107.3	1112.6	1115.8	1131.8	1153.1	1151.0	1149.9
65°	970.9	991.1	993.3	1002.9	1013.5	1041.2	1035.9	1035.9
67.5°	856.8	870.7	873.9	888.8	893.1	919.7	916.5	912.3
70°	738.6	752.4	756.7	771.6	778.0	799.3	800.4	797.2
72.5°	629.8	635.2	639.4	653.3	658.6	678.9	678.9	674.6
75°	519.0	517.9	522.2	536.1	541.4	558.4	557.4	552.1
77.5°	414.6	409.2	412.4	422.0	428.4	441.2	437.0	432.7
80°	316.5	308.0	309.1	318.7	322.9	331.4	327.2	324.0
82.5°	223.8	216.3	214.2	221.7	228.1	229.1	228.1	225.9
85°	136.4	130.0	131.1	134.3	138.5	138.5	140.7	140.7
87.5°	53.3	50.1	50.1	53.3	53.3	54.4	53.3	51.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)