

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: P130700

Luminaire Tested: **TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130700
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-L840-CD1-CG-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7882.8 lumens
Efficiency: N/A
Efficacy: 102.4 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

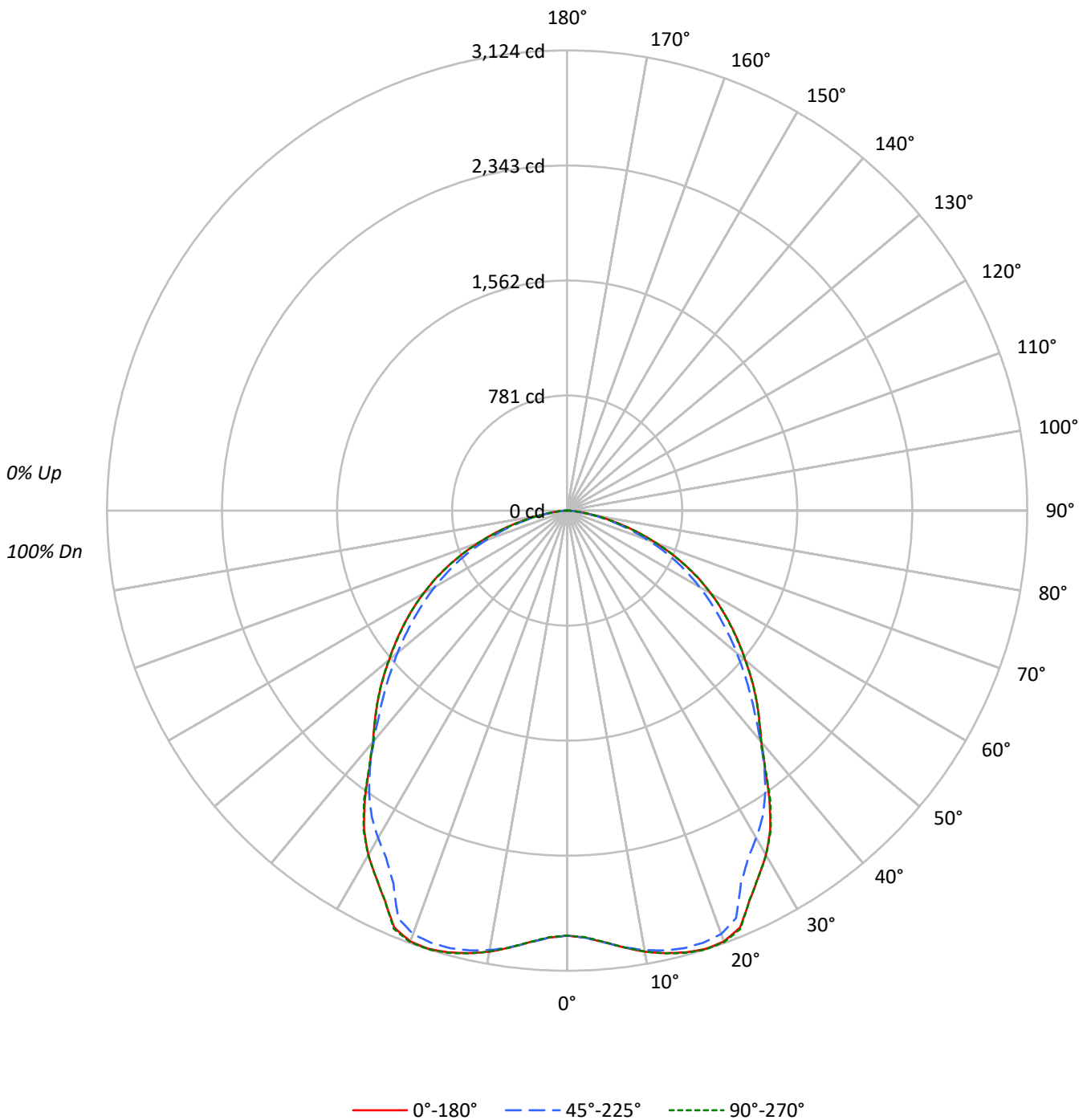
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130700

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS

Luminous Intensity Polar Plot





TEST NUMBER: P130700

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS

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	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°	31240	31240	31240
5°	31984	32005	31963
10°	33439	33313	33428
15°	34812	34468	34845
20°	35862	35243	35917
25°	34949	33346	34927
30°	33759	32094	33772
35°	31662	30978	31764
40°	28980	28844	28939
45°	27829	26904	27829
50°	26577	25317	26609
55°	25568	23848	25494
60°	24451	22500	24451
65°	22838	20875	22838
70°	20269	18509	20269
75°	16802	15196	16560
80°	12135	11119	11892
85°	7268	6672	7020



TEST NUMBER: P130700

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.0	3.6
10°-20°	874.6	11.1
20°-30°	1320.8	16.8
30°-40°	1442.0	18.3
40°-50°	1407.3	17.9
50°-60°	1209.0	15.3
60°-70°	854.6	10.8
70°-80°	413.4	5.2
80°-90°	77.1	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°	2479.4	31.5
0°-40°	3921.3	49.7
0°-60°	6537.7	82.9
0°-90°	7882.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7882.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2885	2885	2885	2885	2885	
5°	2942	2944	2944	2943	2940	284
15°	3105	3100	3075	3101	3108	878
25°	2925	2933	2791	2934	2923	1348
35°	2395	2271	2343	2266	2403	1490
45°	1817	1853	1757	1846	1817	1401
55°	1354	1370	1263	1367	1350	1211
65°	891	863	815	863	891	879
75°	402	382	363	381	396	430
85°	58	56	54	54	56	80
90°	0	0	0	0	0	



TEST NUMBER: P130700

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9
2.5°	2902.1	2901.2	2900.2	2901.2	2903.1	2903.1	2903.1	2902.1	2902.1	2903.1	2902.1
5°	2942.4	2940.5	2941.4	2940.5	2944.3	2943.3	2943.3	2944.3	2944.3	2944.3	2943.3
7.5°	2992.2	2990.3	2990.3	2990.3	2991.3	2991.3	2991.3	2991.3	2990.3	2990.3	2990.3
10°	3041.1	3038.2	3039.2	3038.2	3039.2	3037.3	3035.3	3033.4	3031.5	3029.6	3030.6
12.5°	3077.5	3076.6	3078.5	3078.5	3076.6	3073.7	3068.9	3064.1	3060.3	3058.3	3060.3
15°	3105.3	3107.2	3108.2	3107.2	3103.4	3095.7	3090.0	3082.3	3077.5	3074.6	3077.5
17.5°	3120.6	3120.6	3118.7	3113.0	3106.3	3099.6	3090.9	3083.3	3078.5	3075.6	3079.4
20°	3112.0	3111.1	3104.4	3095.7	3085.2	3076.6	3068.9	3062.2	3059.3	3058.3	3060.3
22.5°	3065.1	3067.0	3063.1	3057.4	3049.7	3037.3	3022.9	3009.5	2998.9	2995.1	2998.9
25°	2925.1	2924.2	2930.9	2942.4	2950.0	2916.5	2871.5	2828.3	2798.6	2790.9	2798.6
27.5°	2808.2	2807.2	2791.9	2758.4	2719.1	2688.4	2679.8	2675.0	2664.4	2659.6	2666.3
30°	2699.9	2690.3	2635.7	2565.7	2515.9	2503.4	2522.6	2548.5	2562.8	2566.7	2560.0
32.5°	2566.7	2540.8	2467.0	2405.7	2383.6	2374.0	2380.7	2414.3	2448.8	2468.0	2446.9
35°	2395.1	2373.1	2314.6	2281.1	2276.3	2265.7	2257.1	2277.2	2319.4	2343.4	2314.6
37.5°	2205.3	2215.9	2191.0	2173.7	2173.7	2163.2	2145.9	2152.6	2176.6	2199.6	2174.7
40°	2050.1	2069.2	2075.0	2070.2	2068.3	2054.9	2038.6	2034.7	2035.7	2040.5	2032.8
42.5°	1931.2	1934.1	1960.0	1968.6	1960.9	1946.6	1937.0	1931.2	1903.4	1891.0	1907.3
45°	1817.2	1819.1	1840.2	1865.1	1860.3	1845.0	1837.3	1819.1	1770.2	1756.8	1774.1
47.5°	1698.3	1708.9	1724.2	1750.1	1754.9	1739.5	1729.0	1697.4	1638.9	1627.4	1639.9
50°	1577.6	1597.7	1615.9	1628.4	1635.1	1621.7	1610.2	1572.8	1516.2	1502.8	1515.3
52.5°	1467.4	1485.6	1509.5	1505.7	1502.8	1499.9	1492.3	1453.9	1400.3	1382.1	1399.3
55°	1354.3	1372.5	1396.4	1380.1	1367.7	1372.5	1363.8	1332.2	1286.2	1263.2	1286.2
57.5°	1242.1	1256.5	1275.7	1255.5	1237.3	1243.1	1237.3	1215.3	1172.2	1150.1	1172.2
60°	1129.0	1137.7	1151.1	1130.0	1110.8	1114.7	1112.7	1089.7	1056.2	1038.9	1056.2
62.5°	1013.1	1017.9	1024.6	1004.4	988.1	987.2	988.1	965.1	939.3	927.8	940.2
65°	891.3	893.3	897.1	877.0	865.5	860.7	862.6	841.5	822.3	814.7	823.3
67.5°	766.7	768.7	769.6	750.4	742.8	736.1	737.0	721.7	704.4	699.7	706.4
70°	640.2	643.1	643.1	625.9	621.1	612.4	612.4	602.9	588.5	584.6	589.4
72.5°	521.4	519.5	519.5	505.1	501.3	492.6	491.7	488.8	475.4	471.5	476.3
75°	401.6	399.7	400.6	389.1	385.3	378.6	377.6	377.6	367.1	363.2	368.0
77.5°	290.4	292.3	291.4	282.7	278.9	276.0	278.9	278.9	269.3	265.5	270.3
80°	194.6	196.5	196.5	189.8	186.9	185.0	188.8	186.9	182.1	178.3	182.1
82.5°	117.9	117.9	117.9	116.0	112.1	112.1	115.0	115.0	110.2	107.3	110.2
85°	58.5	58.5	57.5	57.5	55.6	55.6	57.5	57.5	54.6	53.7	54.6
87.5°	20.1	19.2	19.2	19.2	18.2	19.2	19.2	19.2	18.2	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P130700

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-CMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9
2.5°	2903.1	2903.1	2902.1	2902.1	2902.1	2901.2	2900.2	2899.2
5°	2945.3	2944.3	2942.4	2943.3	2942.4	2942.4	2941.4	2940.5
7.5°	2992.2	2993.2	2991.3	2993.2	2993.2	2993.2	2992.2	2991.3
10°	3033.4	3036.3	3037.3	3040.1	3041.1	3042.1	3041.1	3040.1
12.5°	3065.1	3069.8	3073.7	3078.5	3081.3	3082.3	3080.4	3079.4
15°	3083.3	3090.0	3096.7	3104.4	3109.1	3111.1	3110.1	3108.2
17.5°	3084.2	3091.9	3100.5	3107.2	3113.9	3118.7	3122.6	3123.5
20°	3063.1	3069.8	3077.5	3086.1	3096.7	3105.3	3113.9	3116.8
22.5°	3006.6	3022.9	3039.2	3047.8	3056.4	3062.2	3067.0	3073.7
25°	2821.6	2870.5	2923.2	2945.3	2941.4	2923.2	2920.3	2923.2
27.5°	2676.9	2682.6	2689.4	2715.2	2751.6	2785.2	2804.4	2808.2
30°	2547.5	2519.7	2498.6	2511.1	2559.0	2625.1	2684.6	2700.9
32.5°	2413.3	2376.9	2368.3	2376.9	2398.0	2452.6	2534.1	2571.5
35°	2270.5	2255.2	2261.9	2269.6	2274.4	2304.1	2364.4	2402.8
37.5°	2145.0	2143.0	2156.5	2166.0	2166.0	2177.6	2208.2	2209.2
40°	2027.1	2036.7	2047.2	2060.6	2063.5	2068.3	2060.6	2047.2
42.5°	1923.6	1934.1	1940.8	1954.2	1961.9	1951.4	1926.4	1928.4
45°	1815.3	1835.4	1839.2	1853.6	1859.4	1831.6	1812.4	1817.2
47.5°	1693.5	1727.1	1734.8	1750.1	1745.3	1718.5	1705.0	1699.3
50°	1568.0	1612.1	1618.8	1629.3	1623.6	1610.2	1592.9	1579.5
52.5°	1454.9	1490.4	1495.1	1499.0	1503.8	1506.6	1484.6	1463.5
55°	1334.1	1361.9	1368.6	1364.8	1378.2	1393.6	1371.5	1350.4
57.5°	1217.2	1236.4	1241.2	1234.5	1253.6	1273.8	1257.5	1241.2
60°	1092.6	1111.8	1112.7	1109.9	1129.0	1146.3	1139.6	1129.0
62.5°	969.9	987.2	984.3	987.2	1002.5	1024.6	1019.8	1013.1
65°	845.3	861.6	859.7	865.5	877.0	897.1	897.1	891.3
67.5°	726.5	736.1	735.1	742.8	751.4	770.6	772.5	766.7
70°	607.6	612.4	611.5	620.1	626.8	646.9	646.9	640.2
72.5°	492.6	495.5	491.7	503.2	506.1	523.3	523.3	515.6
75°	382.4	381.5	377.6	384.3	393.0	405.4	402.5	395.8
77.5°	279.9	277.0	273.2	280.8	285.6	295.2	292.3	285.6
80°	189.8	186.9	182.1	188.8	192.6	198.4	195.5	190.7
82.5°	116.0	113.1	109.3	114.1	116.0	119.8	117.9	114.1
85°	57.5	55.6	53.7	54.6	57.5	58.5	57.5	56.5
87.5°	19.2	18.2	17.3	18.2	18.2	19.2	19.2	18.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)