

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: P130662

Luminaire Tested: **TBLED-LD1-6-M-UNV-L850-CD1-CMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130662
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-LD1-6-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: 6153.3 lumens
Efficiency: N/A
Efficacy: 120.7 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

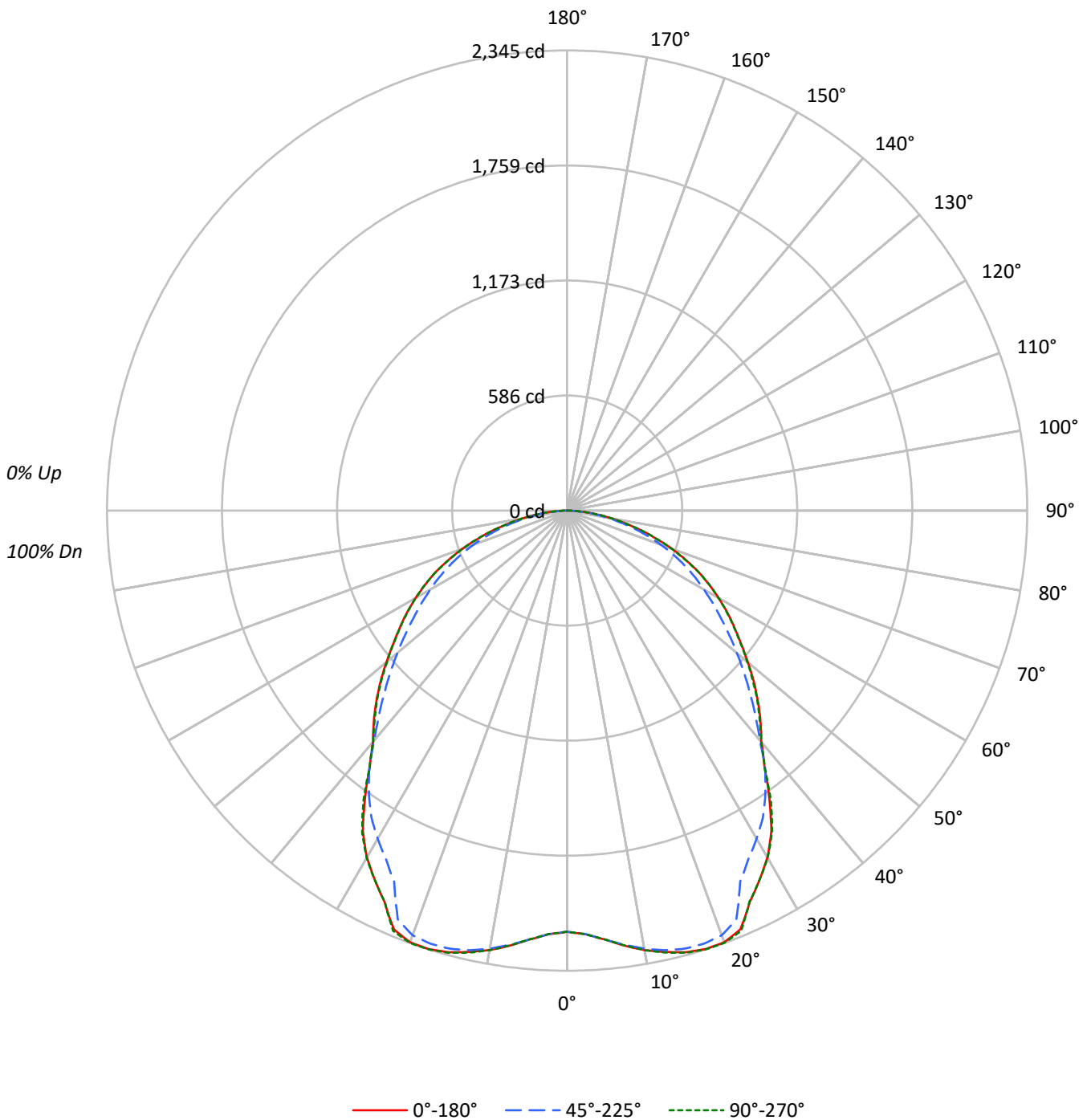
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	23244	23244	23244
5°	23851	23851	23842
10°	25009	24925	25009
15°	26116	25912	26150
20°	26976	26540	27011
25°	26306	24924	26280
30°	25524	24144	25553
35°	23764	23285	23935
40°	21765	21604	21732
45°	21064	20196	20996
50°	20253	19030	20177
55°	19655	18069	19612
60°	19303	17434	19303
65°	18902	16906	18843
70°	17942	16074	17917
75°	16334	14782	16397
80°	14299	12977	14343
85°	12412	10809	12412



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.9	3.4
10°-20°	656.9	10.7
20°-30°	993.5	16.1
30°-40°	1084.5	17.6
40°-50°	1064.6	17.3
50°-60°	932.0	15.1
60°-70°	700.3	11.4
70°-80°	400.4	6.5
80°-90°	109.2	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°	1862.3	30.3
0°-40°	2946.8	47.9
0°-60°	4943.4	80.3
0°-90°	6153.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6153.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2146	2146	2146	2146	2146	
5°	2194	2195	2194	2194	2193	212
15°	2330	2328	2311	2329	2333	659
25°	2202	2205	2086	2204	2200	1017
35°	1798	1710	1761	1703	1811	1121
45°	1376	1404	1319	1395	1371	1060
55°	1041	1057	957	1054	1039	934
65°	738	709	660	709	735	726
75°	390	375	353	376	392	414
85°	100	94	87	94	100	112
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°	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5
2.5°	2160.9	2159.4	2160.1	2159.4	2160.9	2160.9	2160.1	2160.9	2160.1	2160.1	2160.1
5°	2194.2	2192.6	2193.4	2191.9	2194.2	2194.9	2194.2	2194.9	2194.9	2194.2	2194.2
7.5°	2235.8	2232.7	2233.5	2232.0	2234.3	2234.3	2233.5	2233.5	2232.7	2232.0	2232.7
10°	2274.4	2272.8	2272.8	2272.1	2273.6	2272.8	2271.3	2270.6	2267.5	2266.8	2268.3
12.5°	2303.9	2305.4	2307.6	2307.6	2306.9	2306.1	2302.3	2300.1	2295.5	2294.8	2296.3
15°	2329.6	2330.3	2332.6	2331.9	2329.6	2325.8	2322.0	2317.5	2313.7	2311.4	2313.7
17.5°	2343.2	2343.2	2342.4	2340.2	2335.6	2331.1	2325.8	2321.3	2317.5	2314.5	2317.5
20°	2340.9	2340.9	2337.2	2332.6	2325.0	2318.2	2312.9	2308.4	2304.6	2303.1	2305.4
22.5°	2309.2	2311.4	2308.4	2307.6	2301.6	2292.5	2281.9	2270.6	2258.5	2254.7	2260.0
25°	2201.7	2200.2	2201.7	2216.1	2219.9	2189.6	2151.0	2115.5	2094.3	2086.0	2097.3
27.5°	2122.3	2120.8	2101.8	2071.6	2030.0	2010.3	2013.3	2010.3	2005.0	2001.2	2006.5
30°	2041.3	2030.0	1978.5	1923.3	1883.2	1877.1	1894.5	1916.5	1930.1	1930.9	1928.6
32.5°	1936.9	1914.2	1847.6	1805.3	1788.6	1785.6	1790.9	1813.6	1844.6	1856.7	1840.8
35°	1797.7	1784.8	1744.0	1716.7	1711.4	1707.7	1698.6	1709.9	1748.5	1761.4	1747.0
37.5°	1653.2	1665.3	1647.9	1638.1	1637.3	1629.7	1616.9	1618.4	1638.8	1657.0	1636.5
40°	1539.7	1551.8	1563.1	1562.4	1559.4	1548.0	1538.2	1532.9	1531.4	1528.3	1532.9
42.5°	1458.7	1454.2	1476.1	1488.2	1480.7	1473.1	1464.8	1461.0	1433.0	1420.1	1436.8
45°	1375.5	1374.0	1389.1	1414.9	1408.8	1398.2	1395.9	1380.8	1333.1	1318.8	1336.9
47.5°	1290.0	1296.1	1309.7	1330.9	1334.7	1325.6	1318.8	1287.7	1239.3	1221.9	1238.6
50°	1202.2	1215.9	1234.8	1243.1	1246.9	1241.6	1237.0	1196.9	1147.8	1129.6	1148.5
52.5°	1118.3	1137.2	1162.1	1155.3	1152.3	1154.6	1147.0	1110.7	1063.0	1041.1	1063.8
55°	1041.1	1059.2	1081.2	1067.6	1053.2	1061.5	1054.7	1026.0	984.3	957.1	982.8
57.5°	968.5	979.8	997.2	979.0	962.4	972.2	965.4	942.7	904.1	880.7	905.7
60°	891.3	900.4	910.2	892.8	875.4	880.7	877.7	857.2	825.5	805.0	823.9
62.5°	814.1	818.6	825.5	806.5	792.2	792.2	790.7	771.0	746.0	734.7	745.3
65°	737.7	736.9	739.2	720.3	709.7	708.2	705.2	687.0	667.3	659.8	668.1
67.5°	651.4	653.0	653.7	636.3	628.0	624.2	621.9	605.3	589.4	584.1	590.2
70°	566.7	567.5	567.5	551.6	545.5	539.5	537.2	524.3	511.5	507.7	513.0
72.5°	477.4	482.7	480.4	467.6	463.0	455.5	454.0	445.6	435.8	430.5	435.8
75°	390.4	398.0	395.7	384.4	379.1	371.5	372.2	367.7	357.1	353.3	358.6
77.5°	306.4	311.0	311.7	305.7	297.3	292.0	294.3	293.6	286.0	276.9	283.7
80°	229.3	234.5	235.3	230.0	223.2	218.7	221.7	221.7	215.6	208.1	214.1
82.5°	159.6	163.4	163.4	160.4	157.4	152.8	154.3	155.1	151.3	143.8	149.1
85°	99.9	100.6	99.1	96.8	94.6	93.1	93.1	94.6	91.5	87.0	90.8
87.5°	37.1	37.8	37.1	39.3	37.1	36.3	37.1	39.3	36.3	36.3	37.1
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°	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5	2146.5
2.5°	2160.1	2160.9	2160.9	2160.1	2160.1	2160.1	2159.4	2160.1
5°	2194.2	2194.9	2194.9	2193.4	2194.2	2193.4	2192.6	2193.4
7.5°	2233.5	2235.0	2234.3	2235.0	2235.8	2234.3	2234.3	2234.3
10°	2269.8	2272.1	2273.6	2275.1	2275.9	2274.4	2275.1	2274.4
12.5°	2299.3	2303.9	2306.9	2308.4	2309.9	2309.9	2308.4	2306.9
15°	2317.5	2322.8	2326.6	2331.1	2334.1	2334.9	2333.4	2332.6
17.5°	2322.0	2326.6	2331.9	2336.4	2340.9	2344.0	2345.5	2344.7
20°	2309.2	2312.9	2319.0	2325.8	2331.9	2337.9	2342.4	2344.0
22.5°	2272.1	2282.7	2294.0	2302.3	2307.6	2310.7	2312.9	2318.2
25°	2120.0	2148.0	2188.9	2219.9	2214.6	2200.2	2194.9	2199.5
27.5°	2011.8	2008.8	2004.2	2028.5	2066.3	2099.6	2115.5	2123.0
30°	1915.0	1892.3	1871.1	1879.4	1918.0	1975.5	2023.9	2043.6
32.5°	1813.6	1782.6	1779.5	1784.8	1803.0	1841.6	1907.4	1944.5
35°	1706.9	1690.3	1699.3	1706.1	1712.2	1731.9	1777.3	1810.6
37.5°	1611.6	1608.5	1620.6	1629.0	1632.0	1641.8	1659.2	1654.7
40°	1527.6	1529.9	1540.4	1549.5	1555.6	1556.3	1545.7	1537.4
42.5°	1451.9	1461.8	1461.8	1473.1	1483.7	1469.3	1447.4	1453.4
45°	1374.8	1390.6	1389.9	1399.7	1409.6	1384.6	1366.4	1371.0
47.5°	1284.0	1314.2	1318.8	1329.4	1329.4	1303.6	1289.3	1284.0
50°	1191.7	1231.0	1236.3	1242.3	1239.3	1229.5	1210.6	1197.7
52.5°	1106.2	1143.2	1148.5	1146.3	1152.3	1156.8	1131.1	1115.2
55°	1022.2	1050.9	1057.7	1050.2	1064.5	1077.4	1053.2	1038.8
57.5°	938.9	960.9	966.9	960.9	976.8	991.2	975.3	965.4
60°	855.0	874.6	878.4	873.1	892.0	904.9	897.3	891.3
62.5°	772.5	786.1	789.9	792.2	803.5	818.6	817.1	816.4
65°	689.3	703.6	705.2	712.0	719.5	739.2	735.4	735.4
67.5°	608.3	618.1	620.4	631.0	634.0	653.0	650.7	647.7
70°	524.3	534.2	537.2	547.8	552.3	567.5	568.2	565.9
72.5°	447.2	450.9	454.0	463.8	467.6	482.0	482.0	478.9
75°	368.5	367.7	370.7	380.6	384.4	396.5	395.7	391.9
77.5°	294.3	290.5	292.8	299.6	304.2	313.2	310.2	307.2
80°	224.7	218.7	219.4	226.2	229.3	235.3	232.3	230.0
82.5°	158.9	153.6	152.1	157.4	161.9	162.7	161.9	160.4
85°	96.8	92.3	93.1	95.3	98.4	98.4	99.9	99.9
87.5°	37.8	35.6	35.6	37.8	37.8	38.6	37.8	36.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)