

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: P130720

Luminaire Tested: **TBLED-LD1-11-W-UNV-L835-CD1-DOS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25252)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: TBLED-LD1-11-W-UNV-L835-CD1-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.
Light Source: (160) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9475.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.71
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

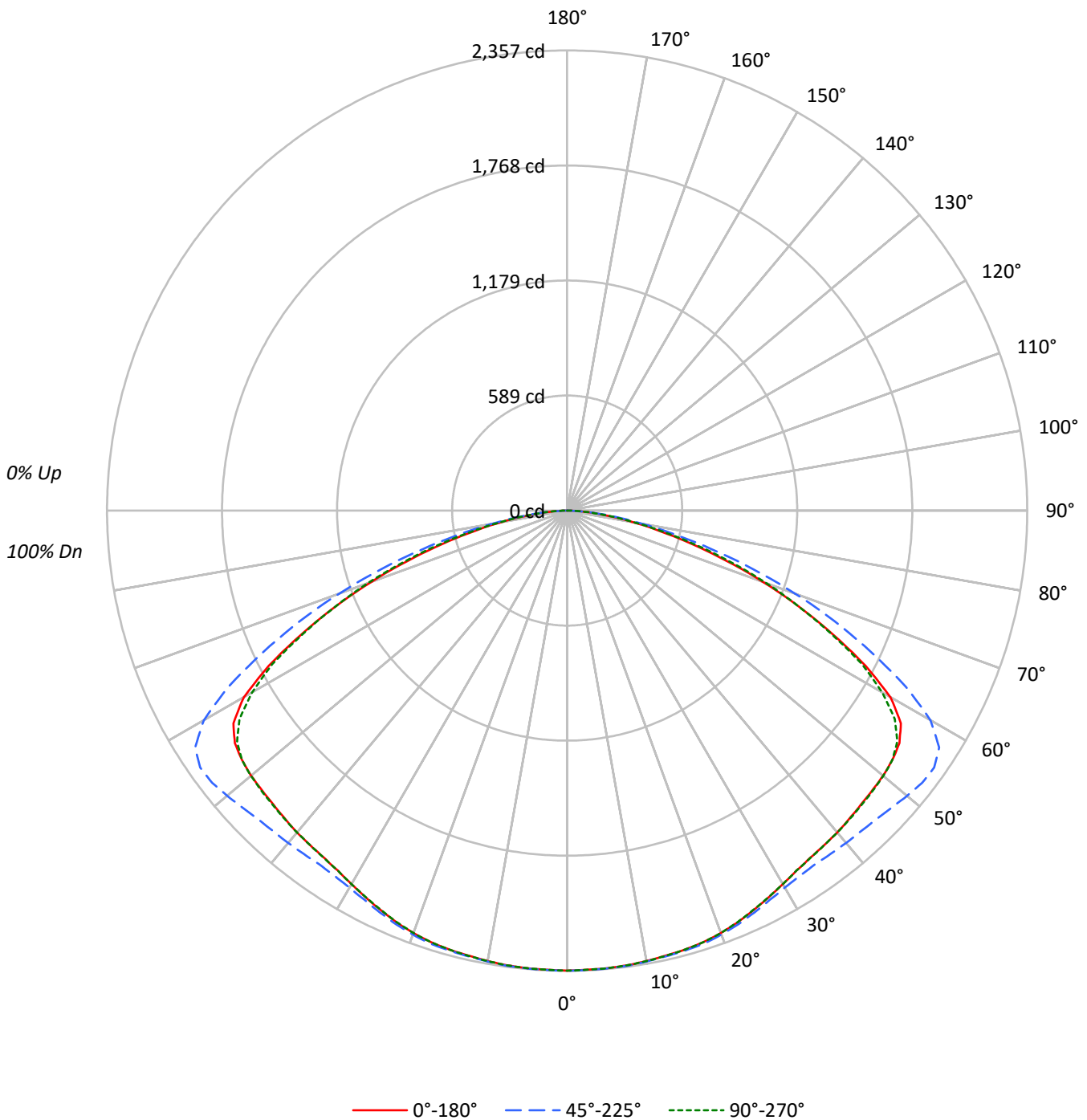
Input Watts (W): 108
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130720

CATALOG NUMBER: TBLED-LD1-11-W-UNV-L835-CD1-DOS

Luminous Intensity Polar Plot





TEST NUMBER: P130720

CATALOG NUMBER: TBLED-LD1-11-W-UNV-L835-CD1-DOS

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	108	103	98	94	105	100	96	92	96	93	89		92	89	87		88	86	84	82
2	97	88	81	74	94	86	79	73	82	77	72		79	74	70		76	72	68	66
3	87	76	67	60	85	74	66	59	71	64	58		68	62	57		66	61	56	54
4	79	66	57	49	77	65	56	49	62	55	48		60	53	48		58	52	47	45
5	72	58	49	42	70	57	48	41	55	47	41		53	46	40		51	45	40	38
6	66	52	42	36	64	51	42	35	49	41	35		47	40	35		46	39	34	32
7	61	47	37	31	59	46	37	31	44	36	30		43	36	30		41	35	30	28
8	57	42	33	27	55	42	33	27	40	32	27		39	32	27		38	31	26	24
9	53	39	30	24	51	38	30	24	37	29	24		36	29	24		35	28	23	22
10	49	35	27	22	48	35	27	21	34	26	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25520	25520	25520
5°	25577	25591	25577
10°	25765	25792	25765
15°	26103	26158	26103
20°	26534	26633	26534
25°	26982	27129	26967
30°	27621	27884	27621
35°	28698	29251	28714
40°	30426	31418	30426
45°	32604	34262	32660
50°	35597	38292	35618
55°	39220	43332	38963
60°	41418	46563	40352
65°	38534	44115	38219
70°	33820	39313	34365
75°	27651	32128	28731
80°	21564	24482	22026
85°	15295	16972	15593



TEST NUMBER: P130720

CATALOG NUMBER: TBLED-LD1-11-W-UNV-L835-CD1-DOS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.4	2.4
10°-20°	659.7	7.0
20°-30°	1047.1	11.1
30°-40°	1380.1	14.6
40°-50°	1694.3	17.9
50°-60°	1934.1	20.4
60°-70°	1591.1	16.8
70°-80°	780.7	8.2
80°-90°	163.4	1.7
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°	1931.2	20.4
0°-40°	3311.3	34.9
0°-60°	6939.7	73.2
0°-90°	9475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9475.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2357	2357	2357	2357	2357	
5°	2353	2354	2354	2354	2353	224
15°	2328	2330	2333	2332	2328	659
25°	2258	2266	2271	2266	2257	1044
35°	2171	2194	2213	2193	2172	1366
45°	2129	2184	2237	2188	2133	1650
55°	2077	2194	2295	2188	2064	1841
65°	1504	1623	1722	1621	1492	1484
75°	661	725	768	733	687	715
85°	123	134	137	132	126	152
90°	0	0	0	0	0	



TEST NUMBER: P130720

CATALOG NUMBER: TBLED-LD1-11-W-UNV-L835-CD1-DOS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7
2.5°	2354.3	2354.3	2354.3	2354.3	2355.5	2355.5	2355.5	2355.5	2355.5	2355.5	2354.3
5°	2353.0	2353.0	2353.0	2353.0	2354.3	2354.3	2354.3	2354.3	2354.3	2354.3	2354.3
7.5°	2349.3	2349.3	2350.6	2350.6	2350.6	2350.6	2350.6	2351.8	2351.8	2351.8	2351.8
10°	2343.2	2343.2	2343.2	2343.2	2344.4	2344.4	2345.6	2345.6	2345.6	2345.6	2345.6
12.5°	2334.6	2334.6	2335.8	2335.8	2335.8	2337.0	2338.3	2338.3	2338.3	2338.3	2338.3
15°	2328.4	2328.4	2328.4	2329.6	2329.6	2330.9	2332.1	2332.1	2333.3	2333.3	2333.3
17.5°	2318.6	2319.8	2319.8	2319.8	2321.0	2322.3	2324.7	2324.7	2326.0	2326.0	2326.0
20°	2302.6	2302.6	2303.8	2305.0	2306.3	2307.5	2310.0	2311.2	2311.2	2311.2	2312.4
22.5°	2282.9	2282.9	2284.1	2285.3	2287.8	2289.0	2291.5	2292.7	2292.7	2292.7	2292.7
25°	2258.3	2259.5	2260.7	2262.0	2264.4	2266.9	2269.3	2271.8	2271.8	2270.6	2271.8
27.5°	2233.7	2234.9	2236.1	2238.6	2241.0	2243.5	2246.0	2248.4	2248.4	2248.4	2249.7
30°	2209.0	2210.3	2212.7	2215.2	2218.9	2221.3	2225.0	2228.7	2230.0	2230.0	2228.7
32.5°	2186.9	2188.1	2191.8	2195.5	2200.4	2205.3	2210.3	2214.0	2217.7	2217.7	2215.2
35°	2170.9	2172.1	2177.0	2183.2	2190.6	2196.7	2202.9	2207.8	2212.7	2212.7	2211.5
37.5°	2161.0	2162.3	2168.4	2175.8	2186.9	2195.5	2204.1	2210.3	2215.2	2216.4	2215.2
40°	2152.4	2153.7	2161.0	2170.9	2183.2	2195.5	2206.6	2215.2	2220.1	2222.6	2222.6
42.5°	2140.1	2142.6	2150.0	2163.5	2178.3	2193.0	2206.6	2218.9	2225.0	2227.5	2226.3
45°	2129.0	2131.5	2141.4	2157.4	2174.6	2193.0	2210.3	2225.0	2233.7	2237.3	2234.9
47.5°	2120.4	2124.1	2136.4	2154.9	2175.8	2199.2	2220.1	2237.3	2248.4	2253.3	2249.7
50°	2113.0	2118.0	2131.5	2153.7	2180.7	2210.3	2234.9	2254.6	2268.1	2273.0	2269.3
52.5°	2099.5	2108.1	2124.1	2151.2	2184.4	2217.7	2247.2	2270.6	2286.6	2291.5	2286.6
55°	2077.4	2086.0	2104.4	2135.2	2175.8	2212.7	2248.4	2274.3	2289.0	2295.2	2287.8
57.5°	2026.9	2035.5	2054.0	2089.7	2130.3	2172.1	2209.0	2237.3	2255.8	2259.5	2244.7
60°	1912.4	1918.6	1946.9	1982.6	2022.0	2062.6	2100.7	2132.7	2148.7	2150.0	2129.0
62.5°	1722.9	1732.8	1761.1	1799.2	1836.1	1869.4	1905.1	1938.3	1950.6	1955.5	1939.5
65°	1503.9	1517.4	1538.3	1572.8	1609.7	1636.8	1676.2	1704.5	1716.8	1721.7	1715.5
67.5°	1286.0	1298.3	1309.4	1342.7	1375.9	1401.7	1439.9	1465.7	1475.6	1482.9	1479.3
70°	1068.2	1079.3	1089.1	1116.2	1142.1	1175.3	1197.4	1222.0	1228.2	1241.7	1235.6
72.5°	856.5	865.2	875.0	900.8	916.8	952.5	962.4	983.3	994.4	998.1	991.9
75°	660.9	667.0	678.1	699.0	711.3	738.4	742.1	760.5	767.9	767.9	765.5
77.5°	489.8	494.7	507.0	519.3	531.6	550.1	546.4	558.7	563.6	566.1	563.6
80°	345.8	352.0	354.4	364.3	375.4	382.7	380.3	386.4	387.7	392.6	391.4
82.5°	221.5	227.7	224.0	230.1	237.5	242.4	243.7	243.7	243.7	247.4	246.1
85°	123.1	128.0	125.5	128.0	131.7	135.4	132.9	134.1	135.4	136.6	135.4
87.5°	40.6	45.5	41.8	43.1	45.5	48.0	49.2	45.5	48.0	48.0	48.0
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: P130720

CATALOG NUMBER: TBLED-LD1-11-W-UNV-L835-CD1-DOS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7	2356.7
2.5°	2354.3	2354.3	2354.3	2354.3	2354.3	2354.3	2354.3	2354.3
5°	2354.3	2354.3	2354.3	2354.3	2353.0	2353.0	2353.0	2353.0
7.5°	2350.6	2350.6	2350.6	2350.6	2349.3	2349.3	2349.3	2349.3
10°	2344.4	2344.4	2344.4	2343.2	2343.2	2343.2	2343.2	2343.2
12.5°	2338.3	2337.0	2337.0	2337.0	2337.0	2335.8	2335.8	2335.8
15°	2333.3	2332.1	2332.1	2330.9	2329.6	2329.6	2328.4	2328.4
17.5°	2324.7	2324.7	2323.5	2322.3	2321.0	2319.8	2319.8	2318.6
20°	2311.2	2310.0	2307.5	2306.3	2306.3	2305.0	2303.8	2302.6
22.5°	2291.5	2290.3	2289.0	2286.6	2285.3	2284.1	2282.9	2281.6
25°	2269.3	2268.1	2266.9	2264.4	2263.2	2260.7	2259.5	2257.0
27.5°	2247.2	2247.2	2243.5	2241.0	2238.6	2236.1	2234.9	2232.4
30°	2227.5	2226.3	2223.8	2218.9	2216.4	2212.7	2210.3	2209.0
32.5°	2212.7	2211.5	2206.6	2200.4	2195.5	2190.6	2189.3	2186.9
35°	2209.0	2204.1	2196.7	2189.3	2183.2	2177.0	2173.3	2172.1
37.5°	2212.7	2204.1	2195.5	2185.7	2177.0	2168.4	2163.5	2161.0
40°	2216.4	2207.8	2198.0	2184.4	2172.1	2162.3	2156.1	2152.4
42.5°	2218.9	2209.0	2196.7	2180.7	2166.0	2153.7	2146.3	2142.6
45°	2225.0	2214.0	2198.0	2178.3	2159.8	2146.3	2137.7	2132.7
47.5°	2238.6	2222.6	2202.9	2179.5	2157.4	2138.9	2129.0	2124.1
50°	2255.8	2236.1	2211.5	2183.2	2156.1	2132.7	2120.4	2114.3
52.5°	2271.8	2248.4	2218.9	2185.7	2151.2	2124.1	2105.7	2099.5
55°	2271.8	2243.5	2206.6	2168.4	2129.0	2097.0	2072.4	2063.8
57.5°	2223.8	2193.0	2147.5	2105.7	2062.6	2024.4	1998.6	1990.0
60°	2100.7	2073.7	2020.7	1980.1	1932.1	1890.3	1870.6	1863.2
62.5°	1912.4	1892.8	1844.8	1809.1	1757.4	1724.2	1700.8	1702.0
65°	1693.4	1676.2	1636.8	1604.8	1558.0	1532.2	1508.8	1491.6
67.5°	1463.3	1443.6	1411.6	1383.3	1345.1	1326.7	1300.8	1284.8
70°	1222.0	1207.3	1177.7	1158.1	1126.1	1110.1	1085.4	1085.4
72.5°	980.8	973.5	952.5	935.3	910.7	895.9	876.2	879.9
75°	756.9	760.5	739.6	727.3	707.6	695.3	680.6	686.7
77.5°	567.3	562.4	547.6	540.3	523.0	518.1	503.3	508.3
80°	392.6	391.4	379.0	374.1	364.3	361.8	349.5	353.2
82.5°	247.4	247.4	242.4	237.5	233.8	231.4	222.7	225.2
85°	136.6	135.4	134.1	130.5	128.0	129.2	123.1	125.5
87.5°	48.0	46.8	46.8	44.3	41.8	45.5	40.6	41.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)