

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: P130711

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130711  
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  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE DISTRIBUTION.  
Light Source: (160) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9931.6 lumens  
Efficiency: N/A  
Efficacy: 92.0 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

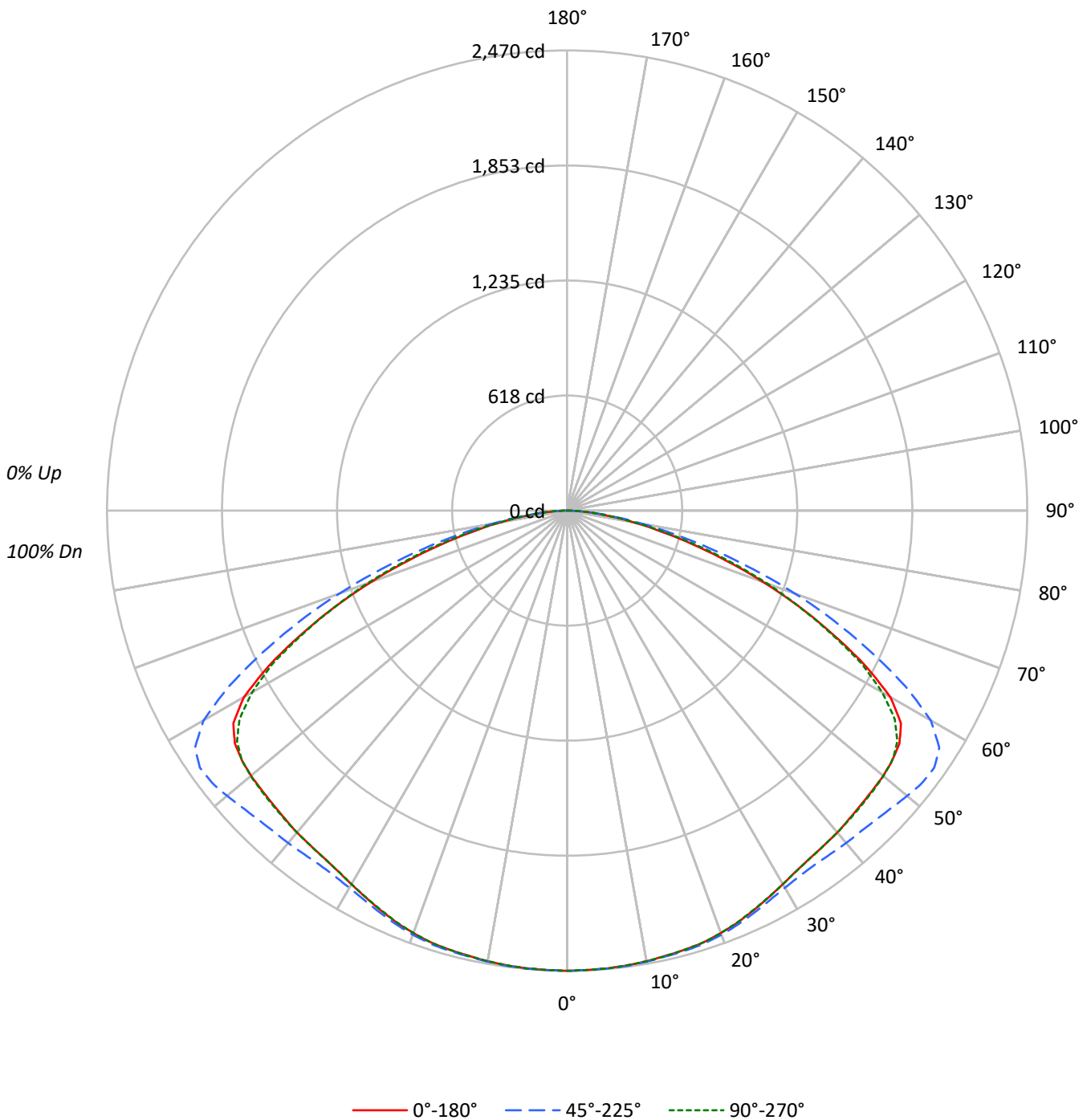
Input Watts (W): 108  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	26750	26750	26750
5°	26810	26824	26810
10°	27007	27035	27007
15°	27361	27419	27361
20°	27812	27916	27812
25°	28282	28437	28267
30°	28953	29227	28953
35°	30081	30660	30098
40°	31892	32932	31892
45°	34175	35913	34235
50°	37313	40138	37335
55°	41110	45420	40841
60°	43414	48807	42297
65°	40389	46242	40059
70°	35451	41210	36021
75°	28982	33676	30116
80°	22605	25661	23086
85°	16028	17792	16351



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.2	2.4
10°-20°	691.5	7.0
20°-30°	1097.6	11.1
30°-40°	1446.6	14.6
40°-50°	1776.0	17.9
50°-60°	2027.3	20.4
60°-70°	1667.8	16.8
70°-80°	818.4	8.2
80°-90°	171.3	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°	2024.3	20.4
0°-40°	3470.9	34.9
0°-60°	7274.1	73.2
0°-90°	9931.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9931.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2470	2470	2470	2470	2470	
5°	2466	2468	2468	2468	2466	235
15°	2441	2443	2446	2444	2441	691
25°	2367	2375	2380	2375	2366	1094
35°	2276	2299	2319	2299	2277	1431
45°	2232	2289	2345	2294	2236	1729
55°	2178	2300	2406	2293	2163	1930
65°	1576	1701	1805	1699	1563	1556
75°	693	760	805	769	720	749
85°	129	140	143	139	132	159
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°	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3
2.5°	2467.7	2467.7	2467.7	2467.7	2469.0	2469.0	2469.0	2469.0	2469.0	2469.0	2467.7
5°	2466.4	2466.4	2466.4	2466.4	2467.7	2467.7	2467.7	2467.7	2467.7	2467.7	2467.7
7.5°	2462.5	2462.5	2463.8	2463.8	2463.8	2463.8	2463.8	2465.1	2465.1	2465.1	2465.1
10°	2456.1	2456.1	2456.1	2456.1	2457.4	2457.4	2458.7	2458.7	2458.7	2458.7	2458.7
12.5°	2447.1	2447.1	2448.3	2448.3	2448.3	2449.6	2450.9	2450.9	2450.9	2450.9	2450.9
15°	2440.6	2440.6	2440.6	2441.9	2441.9	2443.2	2444.5	2444.5	2445.8	2445.8	2445.8
17.5°	2430.3	2431.6	2431.6	2431.6	2432.9	2434.2	2436.7	2436.7	2438.0	2438.0	2438.0
20°	2413.5	2413.5	2414.8	2416.1	2417.4	2418.7	2421.3	2422.5	2422.5	2422.5	2423.8
22.5°	2392.9	2392.9	2394.2	2395.5	2398.0	2399.3	2401.9	2403.2	2403.2	2403.2	2403.2
25°	2367.1	2368.4	2369.7	2370.9	2373.5	2376.1	2378.7	2381.3	2381.3	2380.0	2381.3
27.5°	2341.3	2342.6	2343.9	2346.4	2349.0	2351.6	2354.2	2356.8	2356.8	2356.8	2358.0
30°	2315.5	2316.8	2319.3	2321.9	2325.8	2328.4	2332.2	2336.1	2337.4	2337.4	2336.1
32.5°	2292.3	2293.5	2297.4	2301.3	2306.4	2311.6	2316.8	2320.6	2324.5	2324.5	2321.9
35°	2275.5	2276.8	2281.9	2288.4	2296.1	2302.6	2309.0	2314.2	2319.3	2319.3	2318.1
37.5°	2265.2	2266.5	2272.9	2280.6	2292.3	2301.3	2310.3	2316.8	2321.9	2323.2	2321.9
40°	2256.1	2257.4	2265.2	2275.5	2288.4	2301.3	2312.9	2321.9	2327.1	2329.7	2329.7
42.5°	2243.2	2245.8	2253.6	2267.7	2283.2	2298.7	2312.9	2325.8	2332.2	2334.8	2333.5
45°	2231.6	2234.2	2244.5	2261.3	2279.4	2298.7	2316.8	2332.2	2341.3	2345.1	2342.6
47.5°	2222.6	2226.5	2239.4	2258.7	2280.6	2305.2	2327.1	2345.1	2356.8	2361.9	2358.0
50°	2214.9	2220.0	2234.2	2257.4	2285.8	2316.8	2342.6	2363.2	2377.4	2382.6	2378.7
52.5°	2200.7	2209.7	2226.5	2254.8	2289.7	2324.5	2355.5	2380.0	2396.7	2401.9	2396.7
55°	2177.5	2186.5	2205.8	2238.1	2280.6	2319.3	2356.8	2383.8	2399.3	2405.8	2398.0
57.5°	2124.6	2133.6	2152.9	2190.4	2232.9	2276.8	2315.5	2345.1	2364.5	2368.4	2352.9
60°	2004.6	2011.0	2040.7	2078.1	2119.4	2162.0	2202.0	2235.5	2252.3	2253.6	2231.6
62.5°	1805.9	1816.3	1845.9	1885.9	1924.6	1959.4	1996.9	2031.7	2044.6	2049.7	2033.0
65°	1576.3	1590.5	1612.4	1648.6	1687.3	1715.6	1756.9	1786.6	1799.5	1804.7	1798.2
67.5°	1348.0	1360.9	1372.5	1407.3	1442.2	1469.3	1509.3	1536.3	1546.7	1554.4	1550.5
70°	1119.7	1131.3	1141.6	1170.0	1197.1	1231.9	1255.1	1280.9	1287.4	1301.6	1295.1
72.5°	897.8	906.8	917.2	944.3	961.0	998.4	1008.7	1030.7	1042.3	1046.2	1039.7
75°	692.7	699.2	710.8	732.7	745.6	774.0	777.8	797.2	804.9	804.9	802.4
77.5°	513.4	518.6	531.5	544.4	557.3	576.6	572.7	585.6	590.8	593.4	590.8
80°	362.5	368.9	371.5	381.8	393.4	401.2	398.6	405.0	406.3	411.5	410.2
82.5°	232.2	238.6	234.8	241.2	249.0	254.1	255.4	255.4	255.4	259.3	258.0
85°	129.0	134.2	131.6	134.2	138.0	141.9	139.3	140.6	141.9	143.2	141.9
87.5°	42.6	47.7	43.9	45.1	47.7	50.3	51.6	47.7	50.3	50.3	50.3
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°	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3	2470.3
2.5°	2467.7	2467.7	2467.7	2467.7	2467.7	2467.7	2467.7	2467.7
5°	2467.7	2467.7	2467.7	2467.7	2466.4	2466.4	2466.4	2466.4
7.5°	2463.8	2463.8	2463.8	2463.8	2462.5	2462.5	2462.5	2462.5
10°	2457.4	2457.4	2457.4	2456.1	2456.1	2456.1	2456.1	2456.1
12.5°	2450.9	2449.6	2449.6	2449.6	2449.6	2448.3	2448.3	2448.3
15°	2445.8	2444.5	2444.5	2443.2	2441.9	2441.9	2440.6	2440.6
17.5°	2436.7	2436.7	2435.4	2434.2	2432.9	2431.6	2431.6	2430.3
20°	2422.5	2421.3	2418.7	2417.4	2417.4	2416.1	2414.8	2413.5
22.5°	2401.9	2400.6	2399.3	2396.7	2395.5	2394.2	2392.9	2391.6
25°	2378.7	2377.4	2376.1	2373.5	2372.2	2369.7	2368.4	2365.8
27.5°	2355.5	2355.5	2351.6	2349.0	2346.4	2343.9	2342.6	2340.0
30°	2334.8	2333.5	2331.0	2325.8	2323.2	2319.3	2316.8	2315.5
32.5°	2319.3	2318.1	2312.9	2306.4	2301.3	2296.1	2294.8	2292.3
35°	2315.5	2310.3	2302.6	2294.8	2288.4	2281.9	2278.1	2276.8
37.5°	2319.3	2310.3	2301.3	2291.0	2281.9	2272.9	2267.7	2265.2
40°	2323.2	2314.2	2303.9	2289.7	2276.8	2266.5	2260.0	2256.1
42.5°	2325.8	2315.5	2302.6	2285.8	2270.3	2257.4	2249.7	2245.8
45°	2332.2	2320.6	2303.9	2283.2	2263.9	2249.7	2240.7	2235.5
47.5°	2346.4	2329.7	2309.0	2284.5	2261.3	2241.9	2231.6	2226.5
50°	2364.5	2343.9	2318.1	2288.4	2260.0	2235.5	2222.6	2216.2
52.5°	2381.3	2356.8	2325.8	2291.0	2254.8	2226.5	2207.1	2200.7
55°	2381.3	2351.6	2312.9	2272.9	2231.6	2198.1	2172.3	2163.3
57.5°	2331.0	2298.7	2251.0	2207.1	2162.0	2122.0	2094.9	2085.9
60°	2202.0	2173.6	2118.1	2075.5	2025.2	1981.4	1960.7	1953.0
62.5°	2004.6	1984.0	1933.6	1896.2	1842.1	1807.2	1782.7	1784.0
65°	1775.0	1756.9	1715.6	1682.1	1633.1	1606.0	1581.5	1563.4
67.5°	1533.8	1513.1	1479.6	1449.9	1409.9	1390.6	1363.5	1346.7
70°	1280.9	1265.5	1234.5	1213.9	1180.3	1163.5	1137.7	1137.7
72.5°	1028.1	1020.4	998.4	980.4	954.6	939.1	918.5	922.3
75°	793.3	797.2	775.3	762.4	741.7	728.8	713.3	719.8
77.5°	594.7	589.5	574.0	566.3	548.2	543.1	527.6	532.8
80°	411.5	410.2	397.3	392.1	381.8	379.2	366.3	370.2
82.5°	259.3	259.3	254.1	249.0	245.1	242.5	233.5	236.1
85°	143.2	141.9	140.6	136.7	134.2	135.4	129.0	131.6
87.5°	50.3	49.0	49.0	46.4	43.9	47.7	42.6	43.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)