

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P148389

Luminaire Tested: **TLM-E04-LED-E1-5XQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148389  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33676)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E04-LED-E1-5XQ-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (84) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

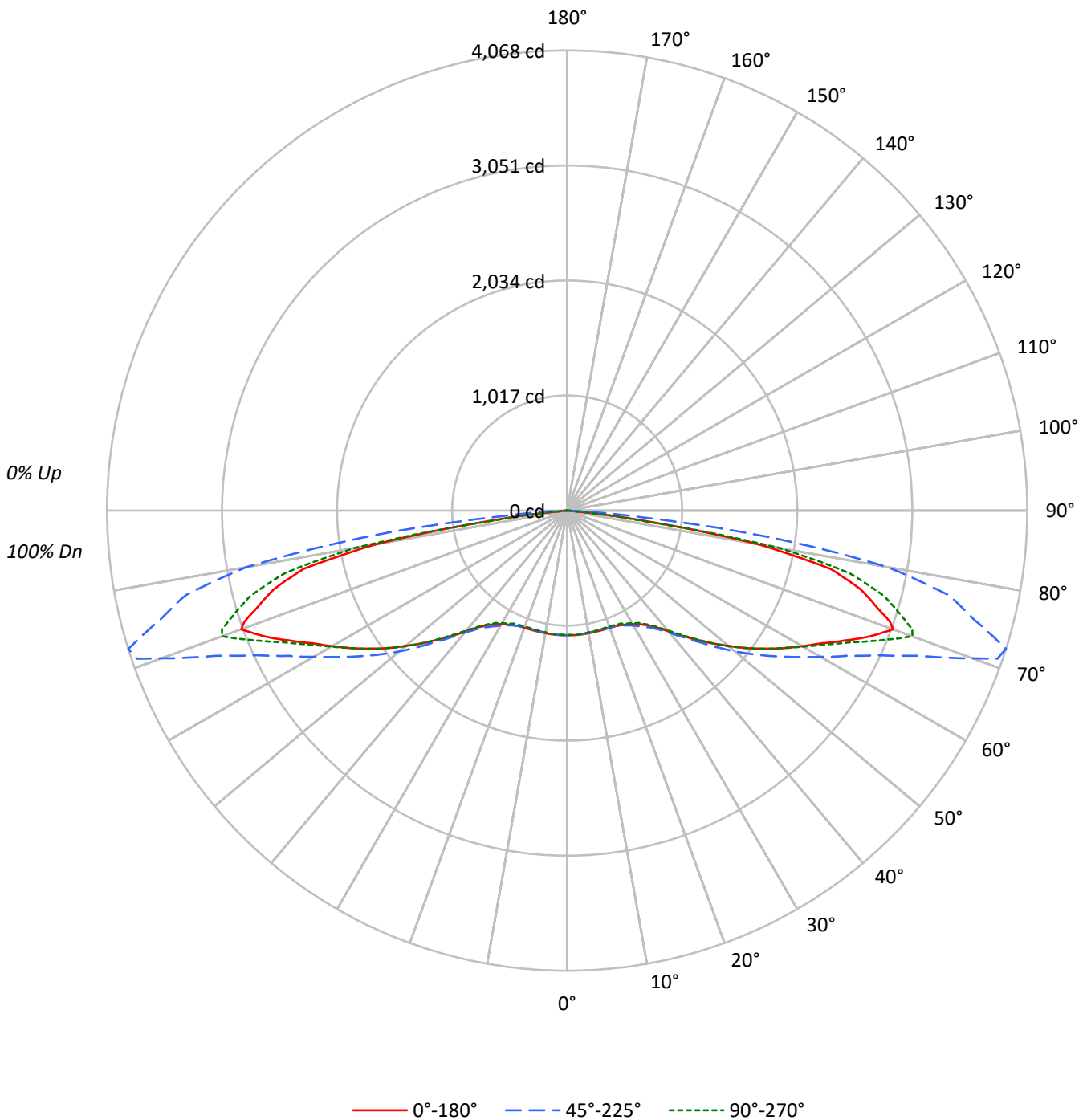
Lumens per Lamp: N/A  
Luminaire Lumens: 11619.2 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.2  
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: P148389  
CATALOG NUMBER: TLM-E04-LED-E1-5XQ-7030

### Luminous Intensity Polar Plot





TEST NUMBER: P148389

CATALOG NUMBER: TLM-E04-LED-E1-5XQ-7030

**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	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73	70
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52	49
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38	36
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30	27
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24	21
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19	17
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16	14
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14	12
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12	10
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9

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

	0°	45°	90°
0°	17687	17687	17687
5°	17783	17754	17743
10°	17948	17879	17850
15°	18309	18199	18147
20°	18864	18786	18654
25°	19806	19861	19568
30°	21508	21784	21304
35°	24243	24708	24088
40°	29231	29569	28988
45°	36661	37304	36523
50°	46493	48395	46600
55°	59607	62848	59727
60°	77005	83062	77301
65°	103258	114948	104764
70°	144037	179463	152618
75°	166640	231177	179601
80°	158575	266294	175932
85°	12903	107981	8406



TEST NUMBER: P148389

CATALOG NUMBER: TLM-E04-LED-E1-5XQ-7030

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.9	0.9
10°-20°	310.4	2.7
20°-30°	519.7	4.5
30°-40°	792.3	6.8
40°-50°	1265.1	10.9
50°-60°	1945.2	16.7
60°-70°	2832.3	24.4
70°-80°	3190.6	27.5
80°-90°	658.6	5.7
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°	935.0	8.0
0°-40°	1727.3	14.9
0°-60°	4937.7	42.5
0°-90°	11619.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11619.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1101	1101	1101	1101	1101	
5°	1103	1102	1101	1100	1100	105
15°	1101	1098	1094	1090	1091	312
25°	1117	1119	1120	1110	1104	521
35°	1236	1245	1260	1238	1228	789
45°	1614	1613	1642	1616	1608	1259
55°	2128	2134	2244	2144	2132	1915
65°	2716	2727	3024	2767	2756	2707
75°	2685	2855	3724	3090	2893	2734
85°	70	185	586	148	46	436
90°	0	0	0	0	0	



TEST NUMBER: P148389

CATALOG NUMBER: TLM-E04-LED-E1-5XQ-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9
2.5°	1102.7	1103.3	1103.0	1102.4	1102.7	1102.4	1101.8	1101.5	1099.4	1100.6	1102.4
5°	1102.7	1102.1	1101.8	1101.5	1101.5	1102.4	1101.5	1100.6	1100.3	1100.9	1100.0
7.5°	1102.1	1100.9	1100.3	1100.0	1100.3	1100.6	1099.7	1098.4	1099.4	1098.4	1097.2
10°	1100.2	1099.4	1099.7	1098.5	1098.8	1098.4	1097.2	1096.4	1096.9	1096.0	1094.5
12.5°	1100.8	1099.4	1099.1	1098.4	1098.2	1097.8	1096.3	1094.8	1095.1	1094.5	1093.0
15°	1100.8	1100.0	1099.7	1098.4	1098.2	1097.6	1095.7	1095.1	1095.1	1094.2	1092.4
17.5°	1101.5	1100.9	1100.9	1099.4	1098.8	1098.5	1096.4	1095.4	1096.3	1094.5	1093.3
20°	1103.4	1102.7	1103.0	1102.1	1100.9	1100.9	1099.4	1098.8	1099.1	1098.8	1095.4
22.5°	1107.0	1107.0	1107.6	1107.3	1107.0	1107.3	1106.1	1106.0	1106.4	1106.4	1103.6
25°	1117.3	1117.0	1117.6	1117.6	1117.9	1120.0	1119.2	1118.8	1120.4	1120.4	1117.6
27.5°	1136.8	1136.2	1136.8	1137.4	1138.9	1141.7	1141.1	1142.0	1144.4	1143.8	1141.4
30°	1159.4	1158.8	1160.2	1162.1	1163.3	1167.6	1165.8	1170.3	1172.4	1174.3	1172.4
32.5°	1192.2	1192.2	1195.0	1196.2	1198.9	1203.2	1203.8	1207.4	1210.2	1213.2	1211.1
35°	1236.1	1235.5	1237.6	1239.7	1243.0	1247.0	1248.6	1253.4	1257.7	1259.8	1255.8
37.5°	1303.1	1299.7	1303.6	1304.9	1307.6	1308.6	1312.8	1318.9	1323.4	1322.8	1320.1
40°	1393.8	1393.2	1391.6	1389.8	1394.1	1395.6	1395.6	1403.8	1411.1	1409.9	1409.6
42.5°	1499.8	1497.0	1495.1	1495.2	1497.6	1498.2	1507.6	1513.7	1518.9	1520.1	1518.9
45°	1613.6	1610.8	1611.4	1610.2	1611.1	1615.1	1620.6	1631.9	1641.6	1641.9	1636.7
47.5°	1736.0	1727.4	1734.2	1724.7	1730.5	1733.5	1747.2	1763.7	1780.7	1783.8	1779.2
50°	1860.2	1859.3	1858.7	1856.8	1859.6	1866.3	1883.0	1908.9	1925.4	1936.3	1929.0
52.5°	1996.0	1991.4	1989.2	1986.2	1989.0	2002.0	2025.5	2048.0	2077.6	2090.0	2080.0
55°	2128.1	2126.6	2118.7	2118.4	2124.1	2144.5	2170.1	2197.8	2229.8	2243.8	2240.2
57.5°	2263.9	2255.0	2252.6	2249.0	2260.5	2279.7	2311.1	2361.0	2394.2	2410.0	2400.9
60°	2396.6	2389.9	2384.8	2383.6	2391.4	2418.2	2463.3	2523.2	2564.4	2585.1	2570.5
62.5°	2539.1	2534.8	2528.8	2521.8	2538.5	2572.9	2628.9	2695.3	2755.9	2781.4	2759.2
65°	2716.3	2707.5	2700.8	2692.0	2705.6	2748.9	2819.2	2912.6	2994.0	3023.8	3008.0
67.5°	2903.2	2895.0	2895.6	2890.2	2914.5	2974.5	3065.2	3192.2	3301.2	3352.0	3322.1
70°	3066.4	3071.0	3072.2	3094.4	3136.4	3227.8	3378.8	3577.6	3742.9	3820.6	3788.6
71°	3018.3	3028.4	3043.9	3067.0	3139.5	3247.6	3453.7	3694.5	3891.8	4023.3	3979.2
72.5°	2881.9	2888.0	2896.0	2931.2	3013.1	3156.2	3368.4	3643.6	3897.3	4067.5	4016.3
75°	2684.6	2690.4	2693.2	2717.8	2792.4	2917.2	3111.4	3355.6	3579.4	3724.3	3710.0
77.5°	2386.9	2387.8	2409.1	2447.2	2530.9	2673.7	2878.3	3131.6	3342.0	3454.6	3383.1
80°	1714.0	1702.5	1724.4	1773.4	1876.9	2040.8	2250.2	2539.4	2772.9	2878.3	2767.4
82.5°	652.2	687.4	743.2	824.2	859.2	1041.2	1236.7	1406.6	1603.2	1823.0	1767.9
85°	70.0	78.8	98.9	122.7	155.0	214.3	296.2	404.3	498.4	585.8	520.0
87.5°	26.2	26.8	29.8	34.4	35.0	36.5	39.0	45.4	42.3	36.5	29.5
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: P148389

CATALOG NUMBER: TLM-E04-LED-E1-5XQ-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9	1100.9
2.5°	1100.9	1101.2	1100.9	1101.2	1101.2	1099.9	1100.2	1099.6
5°	1100.6	1099.7	1100.0	1100.3	1100.0	1100.6	1099.6	1100.2
7.5°	1099.0	1097.2	1097.8	1097.8	1097.2	1098.1	1097.6	1097.2
10°	1096.0	1093.6	1094.8	1094.2	1093.9	1094.2	1094.2	1094.2
12.5°	1093.3	1091.8	1092.1	1091.8	1091.4	1092.4	1092.1	1092.4
15°	1092.6	1090.2	1089.9	1089.3	1089.6	1090.2	1090.2	1091.1
17.5°	1092.1	1089.0	1088.7	1088.1	1088.4	1089.6	1089.9	1089.3
20°	1093.9	1091.4	1090.8	1090.2	1089.9	1091.5	1091.1	1091.1
22.5°	1102.4	1099.4	1099.1	1096.6	1095.7	1096.6	1096.0	1096.0
25°	1116.1	1112.5	1111.2	1107.9	1105.5	1105.5	1104.6	1103.9
27.5°	1140.8	1135.3	1134.1	1131.3	1128.0	1128.6	1126.8	1126.4
30°	1169.4	1164.5	1160.2	1156.3	1152.4	1150.8	1148.7	1148.4
32.5°	1206.9	1201.4	1196.2	1191.3	1185.8	1183.7	1180.1	1178.2
35°	1252.8	1245.5	1239.4	1236.1	1230.6	1227.8	1225.4	1228.2
37.5°	1317.0	1308.2	1305.2	1301.2	1297.6	1293.3	1294.2	1293.3
40°	1405.9	1398.0	1395.0	1388.0	1387.1	1382.2	1385.3	1382.2
42.5°	1515.9	1501.2	1499.1	1493.6	1491.8	1489.1	1490.3	1488.2
45°	1635.5	1622.4	1620.0	1611.2	1611.4	1605.0	1607.5	1607.5
47.5°	1770.0	1756.4	1745.1	1738.7	1736.3	1732.4	1734.4	1734.1
50°	1908.9	1890.4	1877.9	1865.4	1859.9	1861.4	1857.2	1864.5
52.5°	2058.1	2030.4	2012.7	2000.9	1990.5	1992.6	1993.2	1995.4
55°	2212.4	2177.1	2151.6	2136.0	2126.6	2127.2	2129.9	2132.4
57.5°	2367.7	2323.6	2288.9	2265.7	2259.6	2262.4	2262.4	2262.0
60°	2528.8	2475.8	2431.0	2404.9	2399.4	2397.8	2409.7	2405.8
62.5°	2701.7	2638.1	2591.8	2558.3	2550.4	2555.8	2566.6	2564.0
65°	2930.9	2842.9	2783.3	2750.1	2736.7	2742.2	2756.5	2755.9
67.5°	3226.6	3103.6	3024.7	2982.1	2972.4	2979.0	2987.0	2994.6
70°	3668.6	3493.0	3380.3	3288.0	3248.5	3240.9	3248.8	3249.1
71°	3824.2	3622.3	3443.0	3330.4	3265.6	3238.2	3240.2	3226.5
72.5°	<b>3817.8</b>	<b>3569.1</b>	<b>3359.3</b>	<b>3241.5</b>	<b>3151.4</b>	<b>3129.4</b>	<b>3118.8</b>	<b>3102.4</b>
75°	3560.6	3336.5	3154.4	3026.0	2939.2	2913.3	2894.4	2893.4
77.5°	3229.0	3063.7	2863.0	2726.9	2621.3	2578.4	2559.2	2558.6
80°	2595.8	2348.2	2201.5	2119.6	1992.0	1955.2	1916.2	1901.6
82.5°	1569.7	1226.6	997.4	886.2	824.8	679.2	609.5	576.7
85°	365.6	259.7	179.0	117.5	84.6	67.3	51.8	45.6
87.5°	24.6	19.5	17.4	14.0	10.6	10.4	6.4	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)