

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: P147348

Luminaire Tested: **TLM-E04-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147348
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)
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-E1-5MQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

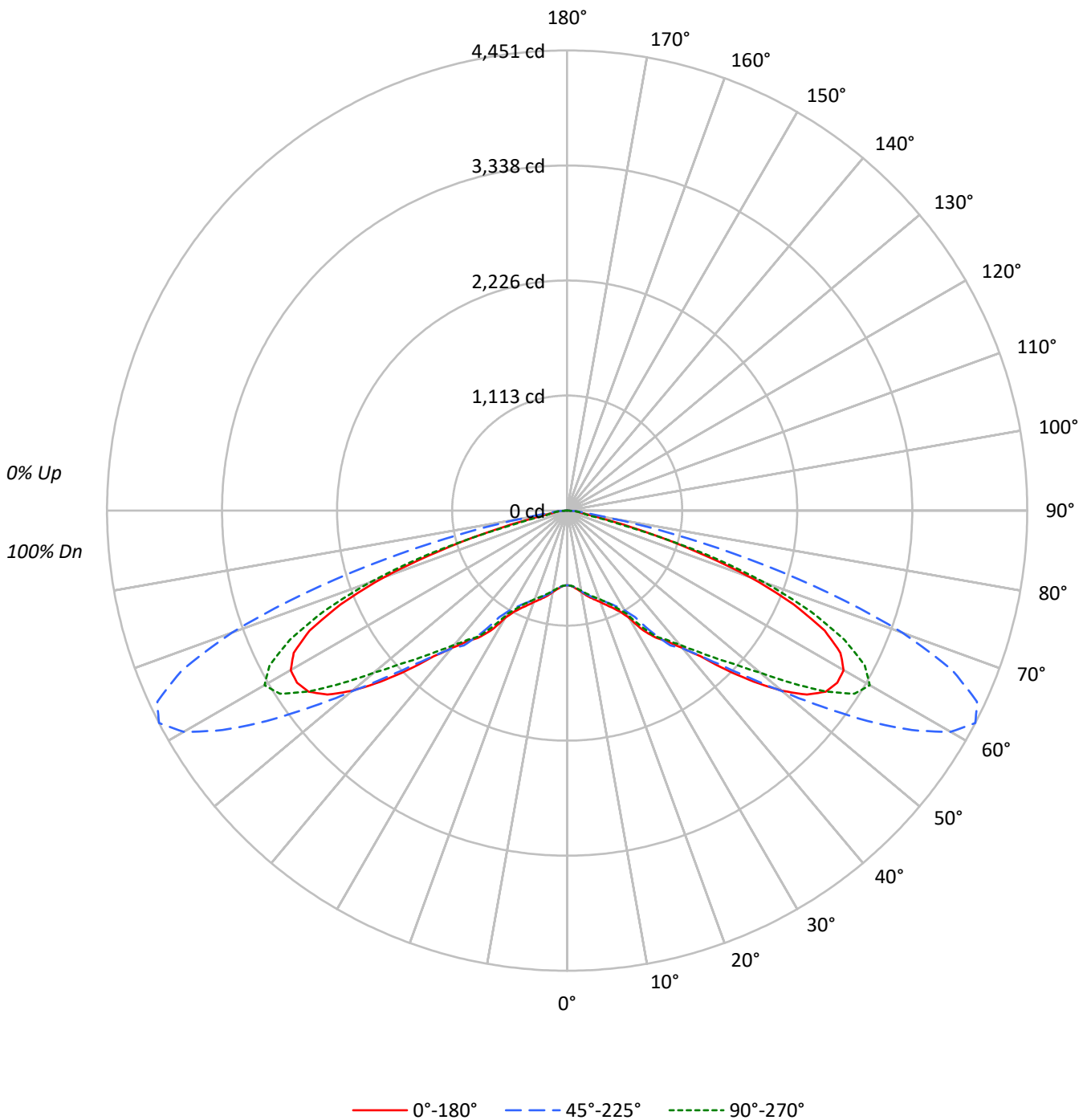
Lumens per Lamp: N/A
Luminaire Lumens: 10883.4 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

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: P147348
CATALOG NUMBER: TLM-E04-LED-E1-5MQ-8030

Luminous Intensity Polar Plot





TEST NUMBER: P147348

CATALOG NUMBER: TLM-E04-LED-E1-5MQ-8030

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	106	100	94	90	103	97	93	88	93	89	85		89	86	83		85	83	80	78
2	93	82	73	66	90	80	72	65	76	70	64		73	67	62		70	65	61	58
3	82	68	58	50	79	67	57	49	63	55	48		60	53	47		57	51	46	44
4	73	57	46	38	70	56	46	38	53	44	37		51	43	36		48	41	36	33
5	65	49	38	30	63	48	37	30	46	36	29		43	35	29		41	34	28	26
6	59	43	32	24	57	42	31	24	40	30	23		38	29	23		36	29	23	20
7	54	37	27	20	52	37	27	19	35	26	19		33	25	19		32	24	19	16
8	49	33	23	16	47	33	23	16	31	22	16		30	22	16		28	21	16	13
9	46	30	20	14	44	29	20	14	28	20	14		27	19	14		26	19	13	11
10	42	27	18	12	41	27	18	12	25	17	12		24	17	12		23	17	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11607	11607	11607
5°	11995	11932	11905
10°	13052	12914	12850
15°	14487	14214	14074
20°	16103	15719	15584
25°	18382	17634	17774
30°	22202	20710	21419
35°	29474	28395	29111
40°	36345	36449	35518
45°	49512	48105	45688
50°	67713	68062	61004
55°	85530	99366	85418
60°	99198	137544	108581
65°	104463	166282	112507
70°	88618	162093	95251
75°	44947	113791	39050
80°	14266	39514	14368
85°	15447	20535	15760



TEST NUMBER: P147348

CATALOG NUMBER: TLM-E04-LED-E1-5MQ-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	0.7
10°-20°	244.7	2.2
20°-30°	473.2	4.3
30°-40°	916.2	8.4
40°-50°	1654.3	15.2
50°-60°	2876.6	26.4
60°-70°	3265.7	30.0
70°-80°	1266.1	11.6
80°-90°	114.2	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°	790.3	7.3
0°-40°	1706.5	15.7
0°-60°	6237.4	57.3
0°-90°	10883.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10883.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	744	743	740	739	738	73
15°	871	865	855	848	846	249
25°	1037	1016	995	996	1003	488
35°	1503	1474	1448	1473	1484	939
45°	2179	2129	2117	2035	2011	1707
55°	3054	3200	3548	3157	3050	2688
65°	2748	3155	4374	3396	2960	2620
75°	724	1013	1833	959	629	877
85°	84	120	111	120	86	82
90°	0	0	0	0	0	



TEST NUMBER: P147348

CATALOG NUMBER: TLM-E04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	722.5	722.5	722.5	722.5	722.5	722.5	722.5	722.5	722.5	722.5	722.5
2.5°	727.0	729.2	728.6	727.5	727.5	727.6	727.0	725.3	724.7	725.8	727.0
5°	743.8	743.8	743.8	743.8	742.7	742.7	741.6	740.4	741.0	739.9	739.4
7.5°	769.8	768.0	768.1	767.5	767.5	766.4	764.7	762.4	762.9	762.4	761.8
10°	800.1	800.7	798.9	800.7	797.8	797.3	795.0	793.9	793.4	791.6	791.6
12.5°	836.7	835.0	835.0	833.8	832.8	831.6	828.2	827.7	825.4	824.3	822.6
15°	871.0	870.4	868.2	865.9	865.4	864.2	860.3	858.1	857.5	854.6	852.4
17.5°	905.3	904.2	901.4	900.2	898.0	896.3	893.0	889.6	887.8	886.8	884.0
20°	941.9	940.8	938.0	935.7	932.9	930.6	925.6	922.8	921.0	919.4	917.2
22.5°	987.4	985.2	980.7	976.8	970.6	968.4	961.6	957.6	954.8	952.6	951.4
25°	1037.0	1037.5	1031.4	1026.3	1019.0	1012.8	1004.4	999.8	997.0	994.8	994.2
27.5°	1098.9	1099.4	1093.8	1086.5	1075.2	1068.5	1057.2	1051.6	1050.0	1047.7	1047.1
30°	1196.8	1191.8	1182.2	1170.3	1160.2	1145.6	1129.2	1123.6	1118.0	1116.4	1116.3
32.5°	1376.8	1374.0	1366.2	1336.9	1323.4	1293.0	1264.3	1248.0	1229.4	1220.4	1214.8
35°	1502.8	1501.8	1495.6	1485.4	1477.0	1470.8	1453.9	1451.1	1447.8	1447.8	1452.2
37.5°	1595.7	1588.9	1587.8	1589.5	1587.2	1588.4	1601.8	1620.5	1636.2	1644.1	1643.0
40°	1733.0	1723.4	1729.0	1725.1	1720.0	1719.0	1723.4	1730.8	1738.0	1738.0	1736.4
42.5°	1912.4	1917.0	1919.2	1902.9	1892.2	1889.4	1900.1	1897.9	1905.2	1902.4	1895.0
45°	2179.2	2176.4	2172.4	2152.8	2135.9	2122.4	2125.2	2121.2	2121.8	2117.3	2111.6
47.5°	2448.2	2457.7	2441.4	2431.8	2412.7	2403.1	2411.0	2404.2	2417.2	2393.6	2382.3
50°	2709.2	2716.0	2710.4	2696.8	2696.8	2710.3	2719.9	2732.3	2750.3	2723.2	2682.8
52.5°	2923.0	2928.6	2937.1	2948.4	2975.9	3004.6	3045.1	3088.5	3122.8	3117.8	3071.6
55°	3053.6	3060.3	3074.4	3113.2	3162.8	3238.1	3329.8	3430.6	3509.3	3547.6	3513.8
57.5°	3097.5	3102.5	3140.8	3187.5	3264.6	3376.6	3530.1	3704.0	3855.4	3951.6	3936.4
60°	3087.3	3087.3	3126.2	3190.3	3298.3	3446.8	3664.0	3904.8	4136.7	4280.7	4259.3
62.5°	2981.0	2986.6	3042.4	3119.4	3250.0	3427.8	3686.6	3994.4	4271.7	4450.6	4433.2
65°	2748.0	2752.0	2812.2	2903.9	3049.6	3260.1	3543.0	3884.0	4202.0	4374.2	4341.4
67.5°	2371.6	2375.6	2424.5	2528.0	2682.2	2902.2	3207.8	3583.0	3894.2	4030.3	3932.4
70°	1886.6	1897.8	1929.4	2039.1	2156.1	2371.6	2653.0	3028.2	3322.0	3450.8	3342.8
72.5°	1285.7	1314.4	1352.6	1449.9	1562.0	1740.9	1964.8	2281.0	2516.8	2665.9	2569.6
75°	724.1	764.7	776.4	850.2	942.4	1083.7	1247.4	1474.2	1712.2	1833.2	1717.2
77.5°	312.8	346.0	360.7	395.0	467.0	526.1	625.7	778.8	962.7	1047.6	908.7
80°	154.2	162.0	168.2	178.9	199.2	218.3	265.6	332.6	408.0	427.1	339.8
82.5°	119.3	125.0	135.6	144.0	149.1	154.2	158.6	167.7	175.0	178.9	168.8
85°	83.8	91.2	103.0	112.5	118.2	122.1	126.0	128.9	122.1	111.4	117.0
87.5°	21.9	28.7	40.0	43.4	48.9	51.8	50.6	52.4	47.2	34.3	38.2
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: P147348

CATALOG NUMBER: TLM-E04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	722.5	722.5	722.5	722.5	722.5	722.5	722.5	722.5
2.5°	726.4	725.8	726.4	726.4	726.4	725.8	725.8	725.8
5°	739.4	739.3	739.9	738.8	738.8	739.3	738.8	738.2
7.5°	761.3	760.8	760.7	760.2	760.8	760.2	760.2	759.6
10°	790.6	789.4	790.0	788.2	788.2	787.8	787.7	787.7
12.5°	822.0	820.4	821.0	819.2	816.4	817.0	817.6	817.0
15°	852.4	850.8	849.0	847.9	846.2	846.8	846.8	846.2
17.5°	883.4	880.0	879.4	877.8	877.2	877.2	877.2	877.8
20°	915.4	913.2	912.6	911.0	910.4	912.0	912.6	911.5
22.5°	949.8	948.6	949.8	948.6	950.4	951.4	952.0	950.9
25°	993.1	992.0	993.6	997.6	999.8	1001.0	1003.8	1002.7
27.5°	1048.8	1047.6	1051.6	1057.2	1060.6	1066.2	1069.1	1070.2
30°	1120.8	1125.8	1128.2	1139.4	1141.6	1150.6	1150.6	1154.6
32.5°	1225.4	1235.0	1252.0	1269.4	1293.6	1311.0	1311.0	1320.0
35°	1455.0	1459.0	1471.9	1474.8	1479.8	1485.4	1479.8	1484.3
37.5°	1631.2	1613.7	1601.3	1583.9	1573.2	1573.2	1574.4	1573.2
40°	1721.2	1714.4	1708.8	1694.2	1692.0	1691.4	1691.4	1693.6
42.5°	1882.1	1865.8	1856.8	1844.4	1840.4	1839.3	1838.8	1839.9
45°	2091.4	2065.0	2040.8	2028.4	2017.7	2007.6	2011.0	2010.9
47.5°	2335.0	2294.0	2254.6	2233.2	2214.6	2206.2	2200.6	2198.9
50°	2631.6	2574.1	2523.6	2483.6	2456.6	2456.0	2458.8	2440.8
52.5°	2995.0	2904.5	2841.4	2787.4	2762.1	2759.3	2750.3	2740.2
55°	3397.9	3290.4	3186.4	3128.4	3095.2	3077.2	3066.5	3049.6
57.5°	3813.2	3668.6	3518.9	3426.0	3367.5	3327.0	3305.6	3296.1
60°	4133.3	3935.8	3738.3	3589.2	3491.8	3431.6	3394.6	3379.3
62.5°	4259.4	3991.6	3738.3	3542.5	3401.8	3318.6	3268.5	3246.6
65°	4109.2	3791.8	3503.7	3287.6	3130.6	3037.8	2983.2	2959.6
67.5°	3689.4	3409.2	3095.8	2880.8	2719.4	2627.6	2568.6	2551.1
70°	3093.0	2806.6	2507.2	2315.4	2171.3	2096.4	2035.2	2027.8
72.5°	2324.4	2077.4	1820.8	1662.1	1546.2	1422.4	1390.9	1406.7
75°	1489.9	1258.6	1030.2	887.3	781.5	663.4	617.8	629.1
77.5°	705.6	546.3	394.4	305.0	256.0	218.9	209.4	203.7
80°	261.6	212.2	187.4	177.8	171.0	164.9	160.4	155.3
82.5°	169.4	165.4	160.4	158.7	153.6	145.7	131.1	124.9
85°	126.6	126.6	119.8	120.4	116.4	106.4	92.8	85.5
87.5°	37.2	33.2	30.4	28.2	27.6	24.8	18.0	15.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)