

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: P147363

Luminaire Tested: **TLM-F05-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147363
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-F05-LED-E1-5MQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

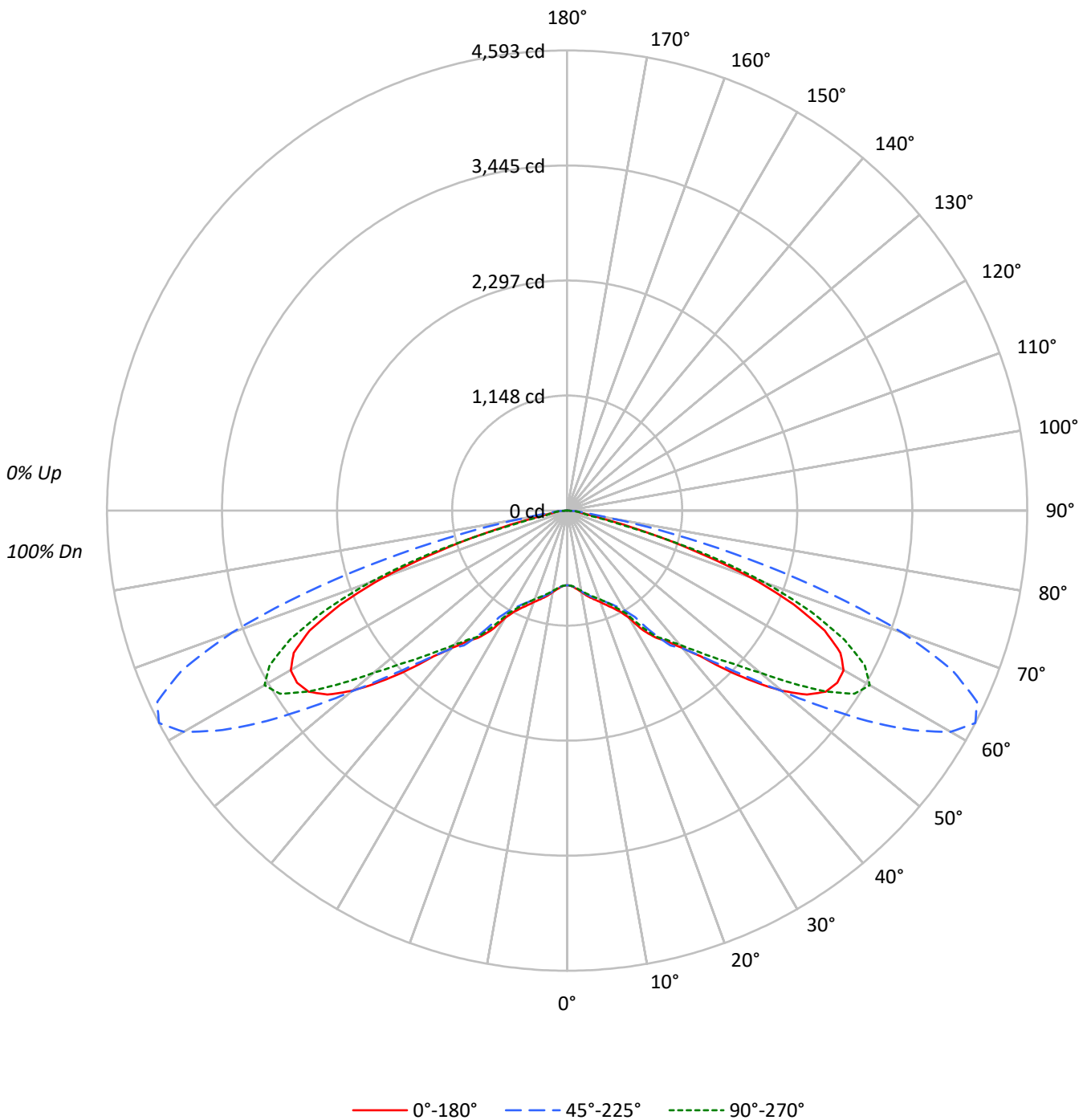
Lumens per Lamp: N/A
Luminaire Lumens: 11230.6 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 133.3
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	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°	9668	9668	9668
5°	9993	9939	9917
10°	10872	10757	10705
15°	12067	11842	11724
20°	13414	13093	12981
25°	15312	14688	14806
30°	18494	17249	17841
35°	24552	23651	24249
40°	30275	30363	29586
45°	41242	40070	38058
50°	56403	56697	50816
55°	71244	82771	71151
60°	82633	114572	90448
65°	87017	138505	93716
70°	73818	135021	79343
75°	37440	94782	32524
80°	11882	32913	11964
85°	12871	17112	13139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	0.7
10°-20°	252.5	2.2
20°-30°	488.3	4.3
30°-40°	945.4	8.4
40°-50°	1707.1	15.2
50°-60°	2968.4	26.4
60°-70°	3369.8	30.0
70°-80°	1306.5	11.6
80°-90°	117.9	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°	815.5	7.3
0°-40°	1761.0	15.7
0°-60°	6436.4	57.3
0°-90°	11230.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11230.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	768	766	764	763	762	75
15°	899	892	882	876	873	257
25°	1070	1048	1026	1027	1035	504
35°	1551	1521	1494	1520	1532	969
45°	2249	2197	2185	2099	2075	1761
55°	3151	3302	3661	3258	3147	2774
65°	2836	3256	4514	3504	3054	2703
75°	747	1045	1892	989	649	905
85°	86	124	115	124	88	85
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°	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5
2.5°	750.2	752.5	751.9	750.8	750.8	750.8	750.2	748.4	747.8	749.0	750.2
5°	767.6	767.6	767.6	767.6	766.4	766.4	765.2	764.1	764.7	763.5	763.0
7.5°	794.3	792.6	792.5	792.0	792.0	790.8	789.0	786.8	787.3	786.8	786.2
10°	825.6	826.2	824.4	826.2	823.3	822.7	820.4	819.2	818.6	816.9	816.9
12.5°	863.4	861.6	861.6	860.4	859.3	858.1	854.6	854.1	851.8	850.6	848.9
15°	898.8	898.2	895.8	893.6	893.0	891.8	887.8	885.4	884.8	882.0	879.6
17.5°	934.2	933.0	930.2	929.0	926.6	925.0	921.4	918.0	916.2	915.0	912.2
20°	972.0	970.8	967.9	965.6	962.6	960.3	955.2	952.2	950.4	948.7	946.4
22.5°	1019.0	1016.6	1012.0	1008.0	1001.6	999.2	992.2	988.2	985.3	983.0	981.8
25°	1070.1	1070.6	1064.3	1059.0	1051.5	1045.1	1036.4	1031.8	1028.8	1026.5	1026.0
27.5°	1134.0	1134.5	1128.7	1121.2	1109.6	1102.6	1091.0	1085.2	1083.4	1081.1	1080.5
30°	1235.0	1229.7	1219.8	1207.7	1197.2	1182.2	1165.3	1159.5	1153.6	1151.9	1151.9
32.5°	1420.8	1417.8	1409.7	1379.6	1365.6	1334.2	1304.6	1287.8	1268.6	1259.4	1253.6
35°	1550.8	1549.6	1543.3	1532.8	1524.1	1517.8	1500.3	1497.4	1493.9	1493.9	1498.6
37.5°	1646.6	1639.6	1638.5	1640.2	1637.9	1639.0	1653.0	1672.2	1688.4	1696.6	1695.4
40°	1788.3	1778.4	1784.2	1780.2	1775.0	1773.8	1778.4	1786.0	1793.5	1793.5	1791.8
42.5°	1973.5	1978.2	1980.5	1963.6	1952.6	1949.7	1960.7	1958.4	1966.0	1963.0	1955.5
45°	2248.7	2245.8	2241.8	2221.4	2204.0	2190.1	2193.0	2188.9	2189.5	2184.8	2179.0
47.5°	2526.2	2536.2	2519.3	2509.4	2489.7	2479.8	2487.9	2481.0	2494.3	2469.9	2458.4
50°	2795.6	2802.6	2796.8	2782.8	2782.8	2796.8	2806.7	2819.4	2838.0	2810.2	2768.4
52.5°	3016.3	3022.1	3030.8	3042.4	3070.9	3100.5	3142.3	3187.0	3222.4	3217.2	3169.6
55°	3151.0	3158.0	3172.5	3212.6	3263.6	3341.4	3436.0	3540.0	3621.2	3660.8	3626.0
57.5°	3196.2	3201.5	3241.0	3289.2	3368.7	3484.2	3642.8	3822.2	3978.4	4077.6	4062.0
60°	3185.9	3185.9	3225.8	3292.0	3403.6	3556.8	3781.0	4029.4	4268.7	4417.3	4395.2
62.5°	3076.1	3081.9	3139.4	3218.9	3353.6	3537.0	3804.2	4121.8	4408.0	4592.6	4574.6
65°	2835.7	2839.8	2901.9	2996.5	3146.9	3364.1	3656.2	4008.0	4336.0	4513.6	4480.0
67.5°	2447.2	2451.4	2501.8	2608.7	2767.8	2994.8	3310.0	3697.4	4018.4	4159.0	4057.9
70°	1946.8	1958.4	1991.0	2104.2	2224.9	2447.3	2737.6	3124.9	3428.0	3560.9	3449.4
72.5°	1326.7	1356.3	1395.8	1496.2	1611.8	1796.4	2027.5	2353.8	2597.1	2751.0	2651.6
75°	747.2	789.0	801.2	877.3	972.6	1118.2	1287.2	1521.2	1766.8	1891.6	1772.0
77.5°	322.8	357.1	372.2	407.6	481.9	542.9	645.6	803.6	993.4	1081.1	937.7
80°	159.1	167.2	173.6	184.6	205.6	225.2	274.0	343.2	420.9	440.7	350.7
82.5°	123.1	128.9	140.0	148.6	153.8	159.0	163.8	173.0	180.6	184.6	174.2
85°	86.5	94.0	106.2	116.1	121.9	126.0	130.0	133.0	126.0	115.0	120.8
87.5°	22.6	29.6	41.2	44.7	50.5	53.4	52.2	54.0	48.8	35.4	39.5
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°	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5
2.5°	749.6	749.0	749.6	749.6	749.6	748.9	749.0	749.0
5°	763.0	762.9	763.5	762.4	762.4	762.9	762.4	761.8
7.5°	785.6	785.0	785.0	784.4	785.0	784.4	784.4	783.8
10°	815.8	814.6	815.2	813.4	813.4	812.8	812.8	812.9
12.5°	848.2	846.5	847.1	845.4	842.4	843.0	843.6	843.1
15°	879.6	877.8	876.2	875.0	873.2	873.8	873.8	873.2
17.5°	911.6	908.1	907.5	905.8	905.2	905.2	905.2	905.8
20°	944.7	942.4	941.8	940.0	939.4	941.2	941.8	940.6
22.5°	980.1	979.0	980.1	979.0	980.6	981.8	982.4	981.2
25°	1024.8	1023.6	1025.4	1029.4	1031.8	1032.9	1035.8	1034.7
27.5°	1082.3	1081.1	1085.2	1091.0	1094.4	1100.2	1103.2	1104.3
30°	1156.6	1161.8	1164.2	1175.7	1178.1	1187.4	1187.4	1191.4
32.5°	1264.6	1274.4	1291.8	1309.9	1334.8	1352.8	1352.8	1362.1
35°	1501.4	1505.6	1518.9	1521.8	1527.0	1532.8	1527.0	1531.7
37.5°	1683.2	1665.2	1652.4	1634.4	1623.4	1623.4	1624.6	1623.4
40°	1776.1	1769.1	1763.3	1748.2	1745.9	1745.3	1745.3	1747.6
42.5°	1942.2	1925.4	1916.0	1903.2	1899.2	1898.0	1897.4	1898.6
45°	2158.1	2130.8	2105.8	2093.1	2082.1	2071.6	2075.1	2075.1
47.5°	2409.6	2367.2	2326.5	2304.4	2285.3	2276.6	2270.8	2269.0
50°	2715.5	2656.3	2604.0	2562.8	2535.0	2534.4	2537.3	2518.7
52.5°	3090.6	2997.2	2932.1	2876.4	2850.2	2847.4	2838.0	2827.6
55°	3506.3	3395.4	3288.0	3228.2	3194.0	3175.4	3164.3	3146.9
57.5°	3934.8	3785.6	3631.2	3535.4	3475.0	3433.2	3411.1	3401.2
60°	4265.2	4061.4	3857.6	3703.7	3603.3	3541.2	3502.8	3487.2
62.5°	4395.2	4118.8	3857.6	3655.6	3510.4	3424.4	3372.8	3350.1
65°	4240.2	3912.8	3615.5	3392.5	3230.6	3134.7	3078.4	3054.0
67.5°	3807.1	3518.0	3194.5	2972.7	2806.1	2711.5	2650.5	2632.5
70°	3191.6	2896.1	2587.2	2389.2	2240.6	2163.4	2100.0	2092.5
72.5°	2398.5	2143.6	1878.9	1715.2	1595.5	1467.8	1435.3	1451.5
75°	1537.4	1298.8	1063.1	915.6	806.4	684.6	637.5	649.1
77.5°	728.1	563.8	407.0	314.6	264.2	225.8	216.0	210.2
80°	270.0	218.9	193.4	183.5	176.5	170.1	165.4	160.2
82.5°	174.8	170.7	165.5	163.8	158.5	150.4	135.2	128.9
85°	130.6	130.6	123.6	124.2	120.2	109.7	95.8	88.3
87.5°	38.3	34.2	31.4	29.0	28.4	25.6	18.6	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)