

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: P147364

Luminaire Tested: **TLM-F05-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147364  
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-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (35) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

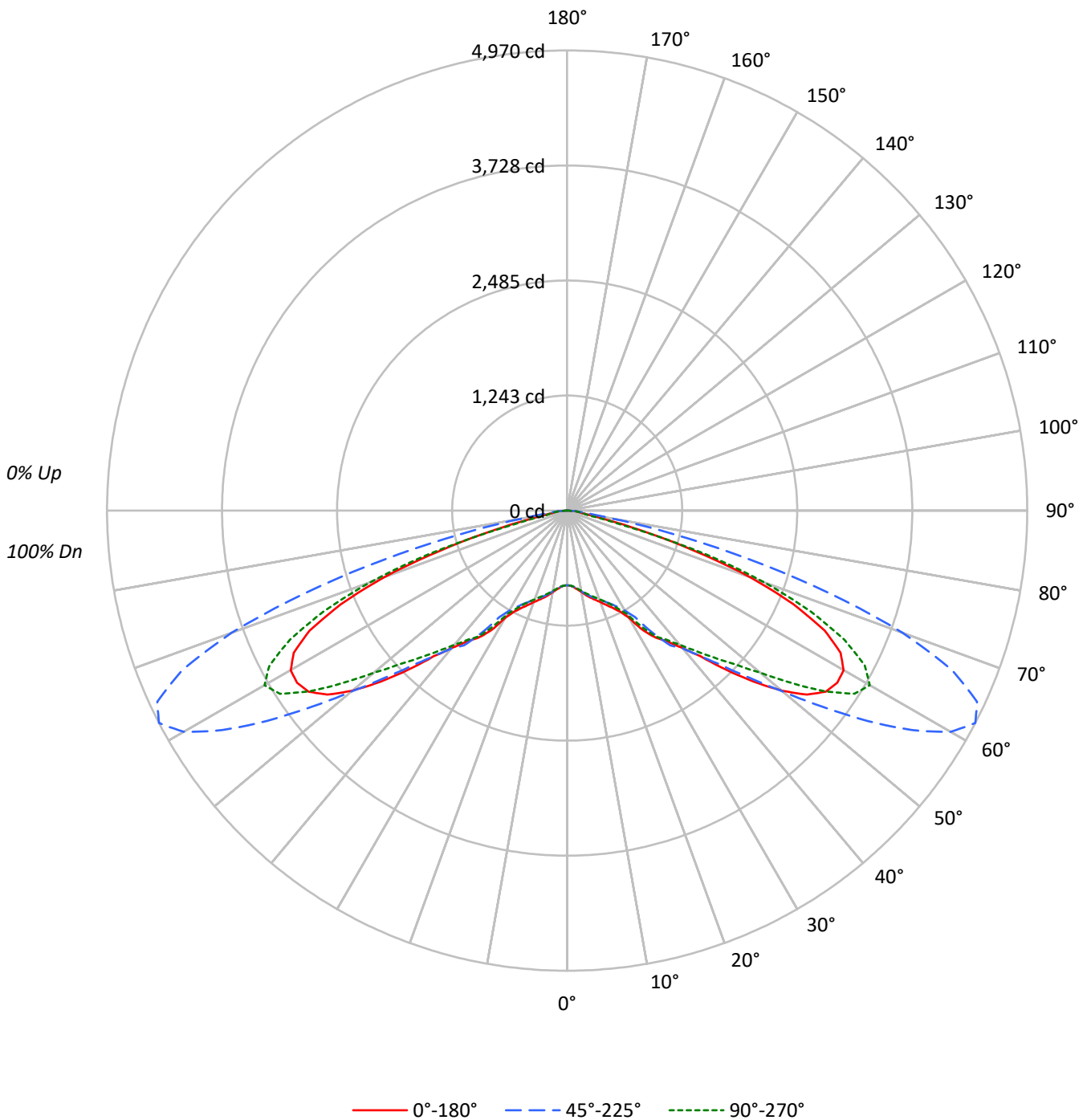
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12153.5 lumens  
Efficiency: N/A  
Efficacy: 91.2 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°	10463	10463	10463
5°	10813	10756	10732
10°	11766	11641	11584
15°	13058	12814	12688
20°	14516	14168	14048
25°	16570	15896	16022
30°	20012	18668	19307
35°	26569	25594	26241
40°	32762	32858	32018
45°	44633	43364	41185
50°	61039	61356	54992
55°	77100	89572	76998
60°	89421	123987	97879
65°	94170	149890	101418
70°	79885	146119	85864
75°	40521	102573	35200
80°	12860	35616	12950
85°	13927	18510	14210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	0.7
10°-20°	273.3	2.2
20°-30°	528.4	4.3
30°-40°	1023.1	8.4
40°-50°	1847.4	15.2
50°-60°	3212.3	26.4
60°-70°	3646.8	30.0
70°-80°	1413.8	11.6
80°-90°	127.5	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°	882.6	7.3
0°-40°	1905.7	15.7
0°-60°	6965.3	57.3
0°-90°	12153.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12153.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	831	829	826	826	824	81
15°	973	966	954	948	945	278
25°	1158	1134	1111	1112	1120	545
35°	1678	1646	1617	1645	1658	1049
45°	2434	2378	2364	2272	2246	1906
55°	3410	3574	3962	3526	3406	3002
65°	3069	3523	4885	3792	3305	2926
75°	809	1131	2047	1071	702	979
85°	94	134	124	134	96	92
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°	806.8	806.8	806.8	806.8	806.8	806.8	806.8	806.8	806.8	806.8	806.8
2.5°	811.8	814.3	813.7	812.4	812.4	812.4	811.8	809.9	809.2	810.6	811.8
5°	830.6	830.6	830.6	830.6	829.4	829.4	828.1	826.8	827.5	826.2	825.6
7.5°	859.6	857.7	857.6	857.0	857.0	855.8	853.8	851.4	852.0	851.4	850.8
10°	893.5	894.1	892.2	894.1	891.0	890.3	887.8	886.6	886.0	884.0	884.0
12.5°	934.4	932.4	932.4	931.2	930.0	928.6	924.9	924.2	921.8	920.5	918.6
15°	972.6	972.0	969.5	967.0	966.4	965.1	960.7	958.2	957.6	954.4	951.9
17.5°	1011.0	1009.8	1006.6	1005.4	1002.8	1000.9	997.2	993.4	991.5	990.2	987.1
20°	1051.8	1050.6	1047.4	1044.9	1041.8	1039.2	1033.6	1030.5	1028.6	1026.6	1024.2
22.5°	1102.7	1100.2	1095.2	1090.8	1083.9	1081.4	1073.8	1069.4	1066.2	1063.8	1062.5
25°	1158.0	1158.6	1151.8	1146.0	1137.9	1131.0	1121.6	1116.6	1113.4	1110.9	1110.2
27.5°	1227.2	1227.8	1221.5	1213.3	1200.8	1193.2	1180.6	1174.4	1172.4	1170.0	1169.3
30°	1336.4	1330.8	1320.1	1306.9	1295.6	1279.2	1261.0	1254.8	1248.5	1246.6	1246.6
32.5°	1537.5	1534.4	1525.6	1492.9	1477.8	1443.9	1411.8	1393.6	1372.9	1362.8	1356.6
35°	1678.2	1677.0	1670.1	1658.8	1649.4	1642.4	1623.6	1620.4	1616.7	1616.6	1621.7
37.5°	1782.0	1774.4	1773.2	1775.0	1772.5	1773.8	1788.8	1809.6	1827.2	1836.0	1834.7
40°	1935.2	1924.6	1930.8	1926.4	1920.8	1919.6	1924.6	1932.8	1940.9	1940.9	1939.0
42.5°	2135.7	2140.7	2143.2	2125.0	2113.0	2109.9	2121.8	2119.4	2127.6	2124.4	2116.2
45°	2433.6	2430.4	2426.0	2404.0	2385.2	2370.0	2373.2	2368.8	2369.4	2364.4	2358.1
47.5°	2733.8	2744.6	2726.3	2715.6	2694.2	2683.6	2692.4	2684.9	2699.3	2672.9	2660.3
50°	3025.4	3033.0	3026.6	3011.6	3011.6	3026.6	3037.4	3051.1	3071.2	3041.1	2995.9
52.5°	3264.2	3270.5	3279.8	3292.4	3323.2	3355.2	3400.5	3448.9	3487.2	3481.6	3430.0
55°	3410.0	3417.5	3433.2	3476.6	3531.8	3616.0	3718.4	3830.9	3918.9	3961.6	3923.9
57.5°	3459.0	3464.6	3507.4	3559.4	3645.6	3770.6	3942.2	4136.3	4305.3	4412.7	4395.8
60°	3447.6	3447.6	3491.0	3562.6	3683.2	3849.2	4091.7	4360.6	4619.5	4780.3	4756.4
62.5°	3328.9	3335.2	3397.4	3483.4	3629.2	3827.8	4116.8	4460.5	4770.2	4970.0	4950.6
65°	3068.8	3073.2	3140.4	3242.8	3405.6	3640.5	3956.6	4337.4	4692.4	4884.6	4848.2
67.5°	2648.4	2652.8	2707.4	2823.1	2995.2	3240.9	3582.1	4001.2	4348.6	4500.7	4391.4
70°	2106.8	2119.4	2154.6	2277.0	2407.8	2648.4	2962.6	3381.6	3709.6	3853.6	3732.9
72.5°	1435.7	1467.8	1510.5	1619.2	1744.2	1944.0	2194.2	2547.2	2810.5	2977.0	2869.6
75°	808.7	853.9	867.1	949.4	1052.4	1210.2	1393.0	1646.2	1912.0	2047.1	1917.6
77.5°	349.4	386.4	402.8	441.1	521.5	587.5	698.7	869.6	1075.0	1169.9	1014.8
80°	172.2	181.0	187.9	199.8	222.4	243.8	296.6	371.4	455.6	476.9	379.5
82.5°	133.2	139.5	151.4	160.8	166.5	172.1	177.1	187.2	195.4	199.8	188.5
85°	93.6	101.8	115.0	125.7	132.0	136.4	140.8	143.9	136.4	124.4	130.6
87.5°	24.5	32.0	44.6	48.3	54.6	57.8	56.6	58.4	52.8	38.4	42.7
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°	806.8	806.8	806.8	806.8	806.8	806.8	806.8	806.8
2.5°	811.2	810.6	811.2	811.2	811.2	810.6	810.6	810.5
5°	825.6	825.6	826.2	825.0	825.0	825.6	825.0	824.4
7.5°	850.1	849.5	849.5	848.9	849.5	848.8	848.8	848.2
10°	882.8	881.6	882.2	880.3	880.3	879.6	879.6	879.7
12.5°	918.0	916.1	916.8	914.8	911.7	912.4	913.0	912.3
15°	951.9	950.0	948.2	946.8	945.0	945.6	945.6	945.0
17.5°	986.4	982.7	982.1	980.2	979.6	979.6	979.6	980.2
20°	1022.3	1019.8	1019.2	1017.3	1016.6	1018.5	1019.2	1017.9
22.5°	1060.6	1059.4	1060.6	1059.4	1061.2	1062.5	1063.2	1061.9
25°	1109.0	1107.8	1109.6	1114.0	1116.6	1117.8	1121.0	1119.7
27.5°	1171.2	1170.0	1174.4	1180.6	1184.4	1190.6	1193.8	1195.1
30°	1251.6	1257.2	1259.8	1272.4	1274.9	1285.0	1284.9	1289.3
32.5°	1368.5	1379.2	1398.0	1417.5	1444.5	1464.0	1464.0	1474.1
35°	1624.8	1629.2	1643.8	1646.8	1652.5	1658.8	1652.5	1657.5
37.5°	1821.5	1802.0	1788.2	1768.8	1756.8	1756.8	1758.0	1756.8
40°	1922.0	1914.6	1908.2	1891.9	1889.4	1888.8	1888.8	1891.3
42.5°	2101.8	2083.6	2073.5	2059.6	2055.2	2054.0	2053.4	2054.6
45°	2335.4	2306.0	2279.0	2265.2	2253.2	2241.9	2245.6	2245.6
47.5°	2607.6	2561.7	2517.7	2493.8	2473.1	2463.7	2457.4	2455.5
50°	2938.7	2874.6	2818.0	2773.4	2743.3	2742.6	2745.8	2725.7
52.5°	3344.6	3243.4	3173.0	3112.8	3084.5	3081.3	3071.2	3060.0
55°	3794.5	3674.5	3558.2	3493.5	3456.4	3436.4	3424.4	3405.5
57.5°	4258.2	4096.7	3929.6	3825.9	3760.6	3715.3	3691.4	3680.7
60°	4615.6	4395.2	4174.6	4008.1	3899.4	3832.2	3790.7	3773.7
62.5°	4756.4	4457.4	4174.6	3956.0	3798.8	3705.8	3650.0	3625.5
65°	4588.7	4234.3	3912.6	3671.4	3496.0	3392.3	3331.4	3305.0
67.5°	4120.0	3807.0	3457.0	3217.0	3036.7	2934.3	2868.3	2848.8
70°	3453.9	3134.1	2799.8	2585.6	2424.7	2341.2	2272.6	2264.5
72.5°	2595.6	2319.8	2033.2	1856.1	1726.6	1588.4	1553.2	1570.8
75°	1663.8	1405.6	1150.5	990.8	872.8	740.8	689.9	702.5
77.5°	788.0	610.1	440.4	340.6	285.9	244.4	233.8	227.5
80°	292.2	236.9	209.2	198.5	191.0	184.1	179.1	173.4
82.5°	189.1	184.8	179.1	177.1	171.5	162.8	146.4	139.5
85°	141.4	141.4	133.9	134.4	130.0	118.8	103.7	95.5
87.5°	41.4	37.0	34.0	31.4	30.8	27.6	20.1	17.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)