

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: P147884

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147884  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33675)  
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-E1-5WQ-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (35) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

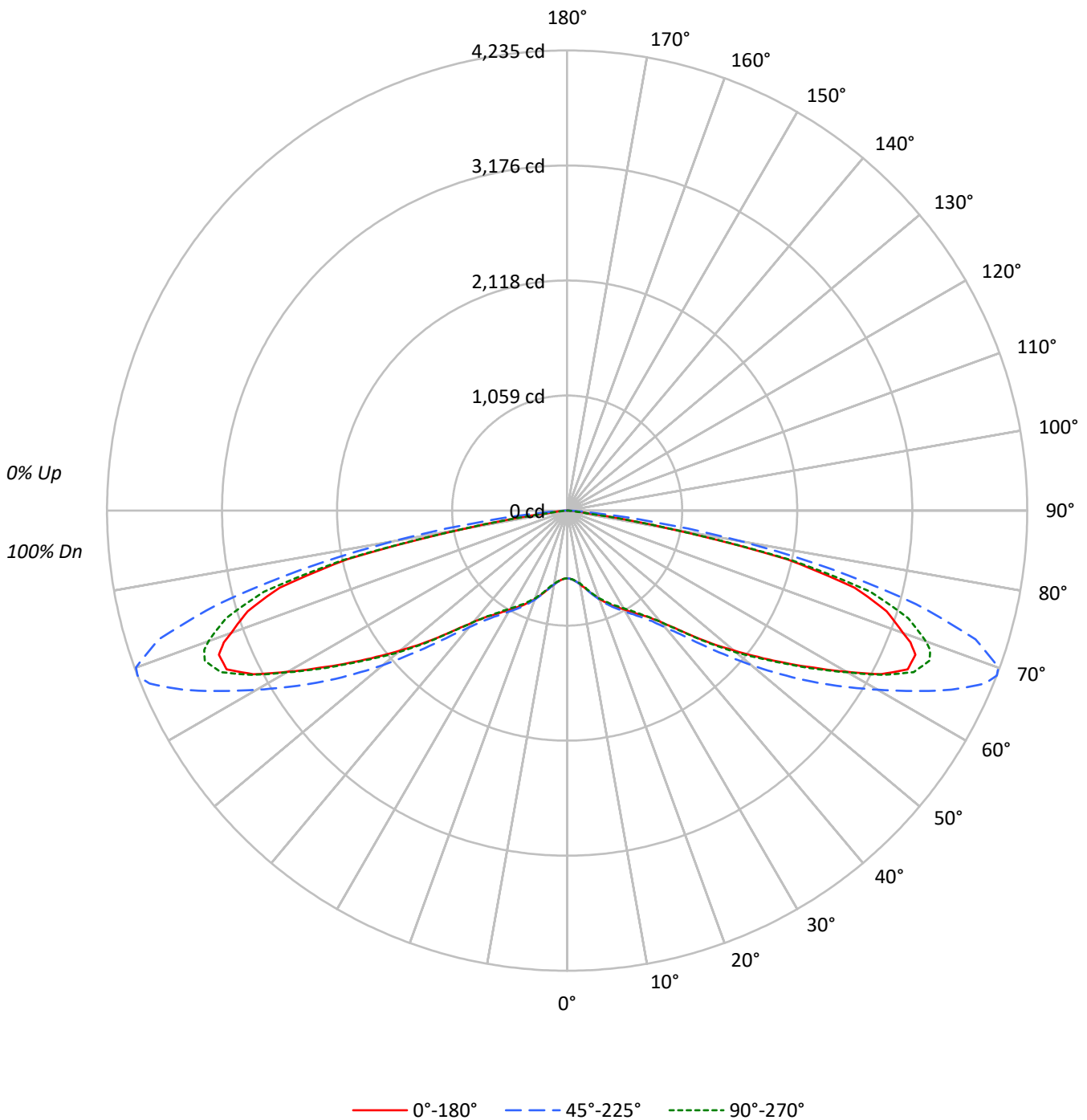
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12002.8 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98  
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	103	96	90	84	100	94	88	82	89	84	80	85	81	77	81	78	75	72
2	89	77	67	58	86	75	65	58	71	63	56	67	60	55	64	58	53	51
3	78	63	51	42	75	61	50	42	58	48	41	54	46	40	52	45	39	36
4	69	52	41	31	66	51	40	31	48	38	31	45	37	30	43	36	29	27
5	62	45	33	24	59	44	32	24	41	31	24	39	30	23	37	29	23	20
6	56	39	28	19	54	38	27	19	36	26	19	34	25	19	32	24	18	16
7	51	34	24	16	49	34	23	16	32	22	16	30	22	15	29	21	15	13
8	47	31	20	13	45	30	20	13	29	20	13	27	19	13	26	18	13	10
9	44	28	18	11	42	27	18	11	26	17	11	25	17	11	23	16	11	9
10	41	25	16	10	39	25	16	10	24	15	10	23	15	10	22	15	10	7

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

	0°	45°	90°
0°	8083	8083	8083
5°	8343	8343	8311
10°	9085	9068	8986
15°	10309	10360	10208
20°	11932	12036	11827
25°	13738	13954	13541
30°	15733	16089	15544
35°	18503	19000	18343
40°	22614	23657	22614
45°	29869	31806	29985
50°	40389	44572	40946
55°	55207	62026	55519
60°	76922	85528	77215
65°	106085	119735	107936
70°	124650	160149	133132
75°	137142	166485	144763
80°	69358	121352	71419
85°	8973	32914	6919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	0.5
10°-20°	221.0	1.8
20°-30°	447.5	3.7
30°-40°	750.3	6.3
40°-50°	1323.5	11.0
50°-60°	2333.9	19.4
60°-70°	3563.1	29.7
70°-80°	2977.4	24.8
80°-90°	323.5	2.7
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°	731.1	6.1
0°-40°	1481.4	12.3
0°-60°	5138.7	42.8
0°-90°	12002.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12002.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	641	642	641	639	638	63
15°	768	772	772	765	760	221
25°	960	965	975	958	946	446
35°	1169	1176	1200	1174	1159	742
45°	1629	1666	1734	1681	1635	1280
55°	2442	2557	2743	2578	2456	2212
65°	3457	3644	3902	3673	3517	3309
75°	2737	2891	3323	3076	2889	2636
85°	60	100	221	87	46	198
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°	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3
2.5°	628.3	629.6	628.3	628.3	628.3	628.3	628.3	627.1	627.1	627.1	628.3
5°	640.9	642.2	640.9	642.2	642.2	642.2	642.2	640.9	640.9	640.9	640.9
7.5°	661.0	661.0	661.0	662.3	661.0	661.0	662.3	661.0	661.0	661.0	661.0
10°	689.9	688.6	688.6	688.6	688.6	688.6	689.9	689.9	689.9	688.6	688.6
12.5°	725.1	723.8	725.1	725.1	726.3	726.3	726.3	726.3	726.3	726.3	725.1
15°	767.8	767.8	767.8	769.1	771.6	771.6	770.3	771.6	771.6	771.6	771.6
17.5°	815.6	818.1	815.6	816.8	818.1	816.8	819.3	820.6	821.9	820.6	816.8
20°	864.6	865.8	865.8	865.8	865.8	868.3	869.6	869.6	873.4	872.1	870.9
22.5°	911.1	913.6	913.6	914.8	914.8	918.6	918.6	918.6	921.1	923.6	921.1
25°	960.1	958.8	958.8	961.3	962.6	967.6	967.6	970.1	973.9	975.2	972.7
27.5°	1004.1	1002.8	1002.8	1006.6	1007.8	1014.1	1014.1	1019.1	1021.7	1022.9	1020.4
30°	1050.6	1050.6	1049.3	1053.1	1056.8	1061.9	1064.4	1069.4	1073.2	1074.4	1071.9
32.5°	1105.9	1103.3	1104.6	1107.1	1109.6	1114.7	1118.4	1124.7	1129.7	1131.0	1128.5
35°	1168.7	1164.9	1166.2	1168.7	1172.5	1180.0	1186.3	1190.1	1197.6	1200.1	1195.1
37.5°	1237.8	1239.1	1237.8	1244.1	1250.4	1259.2	1266.7	1271.7	1279.3	1283.0	1279.3
40°	1335.8	1332.1	1335.8	1342.1	1352.2	1363.5	1378.6	1382.3	1389.9	1397.4	1388.6
42.5°	1462.7	1460.2	1469.0	1474.1	1485.4	1497.9	1516.8	1526.8	1538.1	1543.2	1535.6
45°	1628.6	1628.6	1638.7	1639.9	1657.5	1673.9	1700.3	1712.8	1734.2	1734.2	1734.2
47.5°	1812.1	1819.6	1825.9	1838.5	1851.1	1881.2	1907.6	1935.2	1955.4	1957.9	1954.1
50°	2001.9	2009.4	2028.2	2045.8	2073.5	2111.2	2140.1	2176.5	2194.1	2209.2	2204.2
52.5°	2211.7	2213.0	2235.6	2258.2	2298.4	2339.9	2386.4	2424.1	2455.5	2469.3	2458.0
55°	2441.7	2444.2	2464.3	2488.2	2533.4	2581.2	2639.0	2677.9	2718.1	2743.3	2724.4
57.5°	2690.5	2691.8	2711.9	2740.8	2794.8	2842.6	2897.8	2953.1	2990.8	3013.5	3000.9
60°	2965.7	2972.0	2987.1	3023.5	3075.0	3125.3	3180.6	3229.6	3273.6	3297.5	3284.9
62.5°	3259.8	3266.0	3287.4	3316.3	3361.6	3416.8	3469.6	3532.5	3568.9	3595.3	3576.4
65°	3457.1	3468.4	3502.3	3541.3	3607.9	3679.5	3741.1	3826.5	3870.5	3901.9	3884.3
67.5°	3469.6	3475.9	3517.4	3576.4	3665.7	3773.7	3899.4	4032.6	4119.3	4160.8	4130.6
69°	3384.2	3393.0	3433.2	3499.8	3599.1	3724.7	3874.3	4040.1	4173.4	4234.9	4206.0
70°	3287.4	3306.3	3350.2	3423.1	3519.9	3651.8	3806.4	3983.6	4139.4	4223.6	4202.3
72.5°	3083.8	3088.9	3117.8	3175.6	3249.7	3359.0	3504.8	3671.9	3820.2	3940.9	3958.5
75°	2737.0	2753.3	2774.7	2813.7	2851.4	2930.5	3028.5	3142.9	3229.6	3322.6	3326.4
77.5°	2068.5	2117.5	2133.8	2142.6	2158.9	2221.8	2307.2	2406.5	2478.1	2493.2	2490.7
80°	928.7	994.0	1009.1	1080.7	1124.7	1229.0	1359.7	1511.8	1613.5	1624.9	1597.2
82.5°	182.2	194.8	227.5	284.0	387.0	448.6	534.1	640.9	738.9	795.5	761.5
85°	60.3	64.1	74.1	81.7	94.2	106.8	129.4	160.9	199.8	221.2	197.3
87.5°	23.9	23.9	27.6	30.2	32.7	32.7	32.7	30.2	28.9	23.9	21.4
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°	623.3	623.3	623.3	623.3	623.3	623.3	623.3	623.3
2.5°	627.1	627.1	627.1	627.1	627.1	627.1	627.1	627.1
5°	640.9	639.6	639.6	638.4	638.4	638.4	638.4	638.4
7.5°	659.7	658.5	657.2	658.5	657.2	657.2	657.2	657.2
10°	688.6	686.1	684.9	683.6	683.6	683.6	682.4	682.4
12.5°	722.6	722.6	721.3	720.1	717.6	718.8	717.6	715.0
15°	769.1	766.6	765.3	764.0	761.5	761.5	761.5	760.3
17.5°	815.6	813.1	813.1	809.3	808.0	808.0	808.0	809.3
20°	867.1	863.3	860.8	858.3	855.8	857.0	854.5	857.0
22.5°	918.6	913.6	911.1	907.3	903.5	903.5	902.3	899.8
25°	968.9	962.6	960.1	956.3	951.3	951.3	948.8	946.3
27.5°	1016.6	1010.4	1007.8	1000.3	995.3	994.0	991.5	990.2
30°	1069.4	1061.9	1058.1	1050.6	1043.0	1041.8	1038.0	1038.0
32.5°	1124.7	1117.2	1114.7	1103.3	1097.1	1097.1	1094.5	1092.0
35°	1193.8	1182.5	1180.0	1168.7	1159.9	1159.9	1157.4	1158.6
37.5°	1275.5	1266.7	1257.9	1249.1	1239.1	1237.8	1235.3	1232.8
40°	1384.8	1374.8	1364.7	1352.2	1343.4	1340.9	1337.1	1335.8
42.5°	1530.6	1520.6	1500.4	1490.4	1481.6	1474.1	1472.8	1471.5
45°	1716.6	1704.0	1690.2	1671.4	1660.0	1643.7	1641.2	1634.9
47.5°	1940.3	1916.4	1892.5	1876.2	1858.6	1839.7	1836.0	1825.9
50°	2177.8	2158.9	2118.7	2092.3	2064.7	2045.8	2033.3	2029.5
52.5°	2432.9	2397.7	2357.5	2322.3	2282.1	2257.0	2234.3	2228.1
55°	2699.3	2649.0	2598.8	2557.3	2517.1	2486.9	2465.6	2455.5
57.5°	2965.7	2910.4	2855.1	2809.9	2776.0	2737.0	2715.6	2710.6
60°	3243.4	3190.6	3134.1	3088.9	3047.4	3013.5	3000.9	2977.0
62.5°	3537.5	3482.2	3429.4	3385.4	3332.7	3308.8	3287.4	3273.6
65°	3826.5	3762.4	3695.8	3649.3	3596.5	3562.6	3536.2	3517.4
67.5°	4050.2	3953.4	3864.2	3786.3	3714.7	3661.9	3628.0	3610.4
69°	4113.0	3992.4	3878.0	3776.3	3692.1	3633.0	3595.3	3577.7
70°	4105.5	3972.3	3846.6	3734.8	3643.0	3580.2	3543.8	3511.1
72.5°	3873.0	3751.1	3611.6	3489.7	3406.8	3346.5	3310.0	3292.4
75°	3305.0	3223.3	3122.8	3028.5	2968.2	2933.0	2887.8	2889.1
77.5°	2406.5	2409.0	2341.1	2244.4	2176.5	2164.0	2143.9	2123.7
80°	1492.9	1373.5	1295.6	1191.3	1114.7	1048.1	1019.1	956.3
82.5°	688.6	537.8	417.2	315.4	242.5	189.8	165.9	135.7
85°	153.3	116.9	96.8	77.9	66.6	61.6	50.3	46.5
87.5°	21.4	18.8	17.6	16.3	13.8	10.1	7.5	6.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)