

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: P147878

Luminaire Tested: **TLM-E05-LED-E1-5WQ-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147878  
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-E05-LED-E1-5WQ-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (105) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

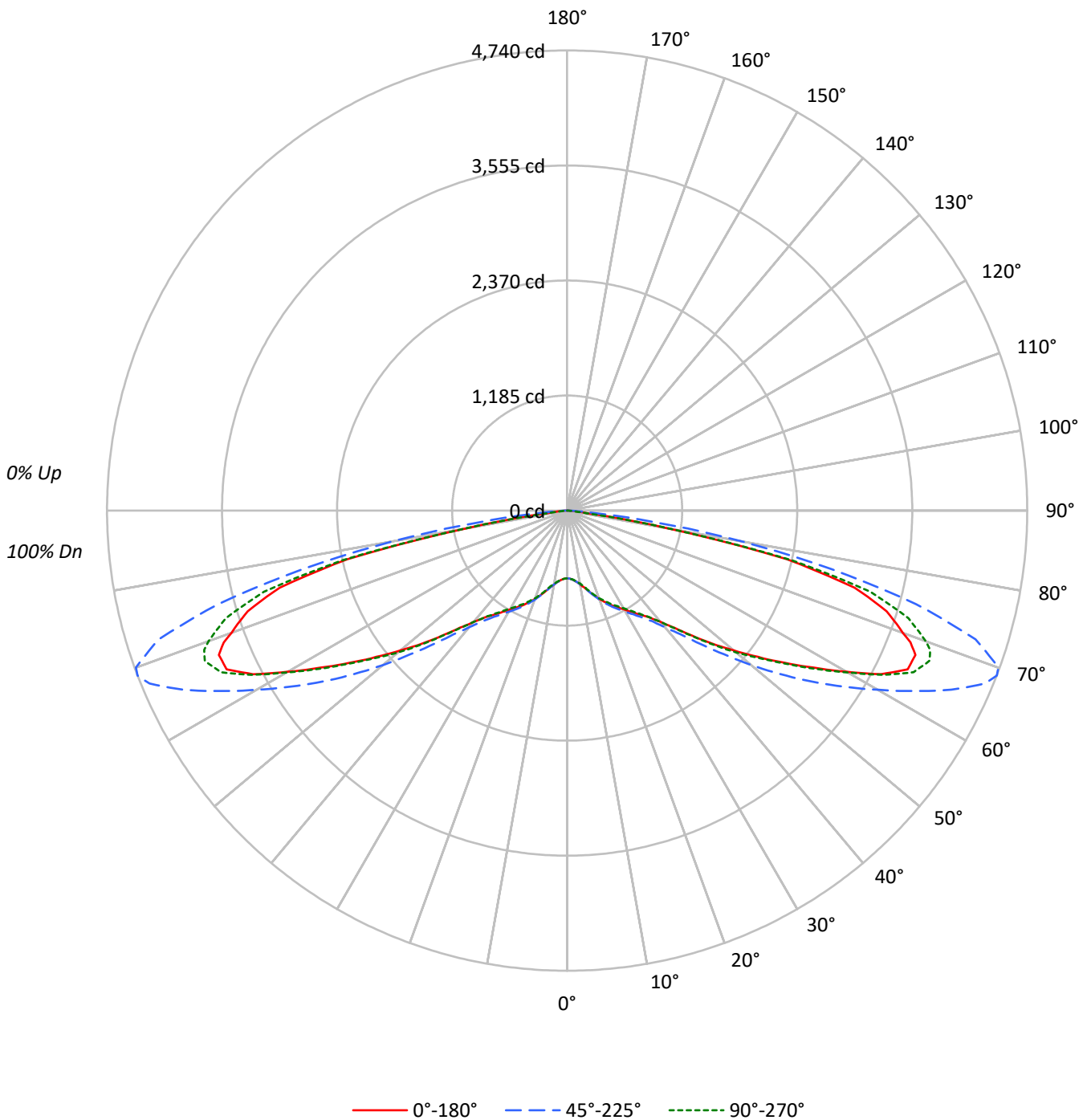
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13435.5 lumens  
Efficiency: N/A  
Efficacy: 105.5 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): 127.3  
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°	9048	9048	9048
5°	9339	9339	9303
10°	10170	10150	10058
15°	11540	11596	11426
20°	13356	13472	13239
25°	15378	15620	15156
30°	17610	18010	17399
35°	20711	21268	20532
40°	25314	26481	25314
45°	33434	35602	33565
50°	45209	49892	45833
55°	61795	69429	62146
60°	86104	95737	86433
65°	118747	134028	120818
70°	139529	179267	149024
75°	153512	186357	162040
80°	77633	135833	79948
85°	10044	36842	7737



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	0.5
10°-20°	247.4	1.8
20°-30°	500.9	3.7
30°-40°	839.9	6.3
40°-50°	1481.4	11.0
50°-60°	2612.4	19.4
60°-70°	3988.4	29.7
70°-80°	3332.8	24.8
80°-90°	362.1	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°	818.4	6.1
0°-40°	1658.2	12.3
0°-60°	5752.1	42.8
0°-90°	13435.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13435.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	717	719	717	715	715	70
15°	860	864	864	856	851	248
25°	1075	1080	1092	1073	1059	499
35°	1308	1317	1343	1314	1297	831
45°	1823	1865	1941	1881	1830	1432
55°	2733	2863	3071	2886	2749	2477
65°	3870	4079	4368	4111	3937	3704
75°	3064	3236	3719	3443	3234	2950
85°	68	113	248	98	52	222
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°	697.7	697.7	697.7	697.7	697.7	697.7	697.7	697.7	697.7	697.7	697.7
2.5°	703.3	704.7	703.3	703.3	703.3	703.3	703.3	701.9	701.9	701.9	703.3
5°	717.4	718.8	717.4	718.8	718.8	718.8	718.8	717.4	717.4	717.4	717.4
7.5°	739.9	739.9	739.9	741.3	739.9	739.9	741.3	739.9	739.9	739.9	739.9
10°	772.3	770.8	770.8	770.8	770.8	770.8	772.3	772.3	772.3	770.8	770.8
12.5°	811.6	810.2	811.6	811.6	813.0	813.0	813.0	813.0	813.0	813.0	811.6
15°	859.5	859.5	859.5	860.9	863.7	863.7	862.3	863.7	863.7	863.7	863.7
17.5°	912.9	915.7	912.9	914.3	915.7	914.3	917.1	918.5	920.0	918.5	914.3
20°	967.8	969.2	969.2	969.2	969.2	972.0	973.4	973.4	977.6	976.2	974.8
22.5°	1019.8	1022.6	1022.6	1024.0	1024.0	1028.3	1028.3	1028.3	1031.1	1033.9	1031.1
25°	1074.7	1073.3	1073.3	1076.1	1077.5	1083.1	1083.1	1085.9	1090.2	1091.6	1088.7
27.5°	1123.9	1122.5	1122.5	1126.7	1128.1	1135.2	1135.2	1140.8	1143.6	1145.0	1142.2
30°	1176.0	1176.0	1174.6	1178.8	1183.0	1188.6	1191.4	1197.1	1201.3	1202.7	1199.9
32.5°	1237.9	1235.0	1236.4	1239.3	1242.1	1247.7	1251.9	1259.0	1264.6	1266.0	1263.2
35°	1308.2	1304.0	1305.4	1308.2	1312.4	1320.8	1327.9	1332.1	1340.5	1343.4	1337.7
37.5°	1385.6	1387.0	1385.6	1392.6	1399.6	1409.5	1417.9	1423.5	1432.0	1436.2	1432.0
40°	1495.3	1491.1	1495.3	1502.3	1513.6	1526.2	1543.1	1547.3	1555.8	1564.2	1554.3
42.5°	1637.3	1634.5	1644.4	1650.0	1662.7	1676.7	1697.8	1709.1	1721.7	1727.4	1718.9
45°	1823.0	1823.0	1834.3	1835.7	1855.4	1873.7	1903.2	1917.3	1941.2	1941.2	1941.2
47.5°	2028.4	2036.8	2043.9	2057.9	2072.0	2105.8	2135.3	2166.2	2188.7	2191.6	2187.3
50°	2240.8	2249.2	2270.3	2290.0	2321.0	2363.2	2395.5	2436.3	2456.0	2472.9	2467.3
52.5°	2475.7	2477.1	2502.4	2527.8	2572.8	2619.2	2671.2	2713.4	2748.6	2764.1	2751.4
55°	2733.1	2735.9	2758.4	2785.2	2835.8	2889.3	2954.0	2997.6	3042.6	3070.7	3049.6
57.5°	3011.6	3013.0	3035.6	3067.9	3128.4	3181.8	3243.7	3305.6	3347.8	3373.2	3359.1
60°	3319.7	3326.7	3343.6	3384.4	3442.1	3498.3	3560.2	3615.1	3664.3	3691.1	3677.0
62.5°	3648.9	3655.9	3679.8	3712.2	3762.8	3824.7	3883.8	3954.1	3994.9	4024.4	4003.3
65°	3869.7	3882.4	3920.3	3963.9	4038.5	4118.7	4187.6	4283.3	4332.5	4367.7	4348.0
67.5°	3883.8	3890.8	3937.2	4003.3	4103.2	4224.2	4364.8	4513.9	4611.0	4657.4	4623.7
69°	3788.1	3798.0	3843.0	3917.5	4028.7	4169.3	4336.7	4522.4	4671.5	4740.4	4708.1
70°	3679.8	3700.9	3750.1	3831.7	3940.0	4087.7	4260.7	4459.1	4633.5	4727.8	4703.8
72.5°	3451.9	3457.5	3489.9	3554.6	3637.6	3760.0	3923.2	4110.2	4276.2	4411.3	4431.0
75°	3063.7	3082.0	3105.9	3149.5	3191.7	3280.3	3390.0	3518.0	3615.1	3719.2	3723.4
77.5°	2315.3	2370.2	2388.5	2398.3	2416.6	2487.0	2582.6	2693.7	2773.9	2790.8	2788.0
80°	1039.5	1112.7	1129.5	1209.7	1259.0	1375.7	1522.0	1692.2	1806.1	1818.8	1787.9
82.5°	204.0	218.0	254.6	317.9	433.2	502.2	597.8	717.4	827.1	890.4	852.4
85°	67.5	71.7	83.0	91.4	105.5	119.6	144.9	180.1	223.7	247.6	220.8
87.5°	26.7	26.7	30.9	33.8	36.6	36.6	36.6	33.8	32.4	26.7	23.9
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°	697.7	697.7	697.7	697.7	697.7	697.7	697.7	697.7
2.5°	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9
5°	717.4	716.0	716.0	714.6	714.6	714.6	714.6	714.6
7.5°	738.5	737.1	735.7	737.1	735.7	735.7	735.7	735.7
10°	770.8	768.0	766.6	765.2	765.2	765.2	763.8	763.8
12.5°	808.8	808.8	807.4	806.0	803.2	804.6	803.2	800.4
15°	860.9	858.1	856.7	855.2	852.4	852.4	852.4	851.0
17.5°	912.9	910.1	910.1	905.9	904.5	904.5	904.5	905.9
20°	970.6	966.4	963.6	960.7	957.9	959.3	956.5	959.3
22.5°	1028.3	1022.6	1019.8	1015.6	1011.4	1011.4	1010.0	1007.2
25°	1084.5	1077.5	1074.7	1070.5	1064.8	1064.8	1062.0	1059.2
27.5°	1138.0	1130.9	1128.1	1119.7	1114.1	1112.7	1109.8	1108.4
30°	1197.1	1188.6	1184.4	1176.0	1167.5	1166.1	1161.9	1161.9
32.5°	1259.0	1250.5	1247.7	1235.0	1228.0	1228.0	1225.2	1222.4
35°	1336.3	1323.7	1320.8	1308.2	1298.3	1298.3	1295.5	1296.9
37.5°	1427.8	1417.9	1408.1	1398.2	1387.0	1385.6	1382.7	1379.9
40°	1550.1	1538.9	1527.6	1513.6	1503.7	1500.9	1496.7	1495.3
42.5°	1713.3	1702.0	1679.5	1668.3	1658.4	1650.0	1648.6	1647.2
45°	1921.5	1907.4	1891.9	1870.8	1858.2	1839.9	1837.1	1830.1
47.5°	2171.9	2145.1	2118.4	2100.1	2080.4	2059.3	2055.1	2043.9
50°	2437.7	2416.6	2371.6	2342.1	2311.1	2290.0	2276.0	2271.7
52.5°	2723.3	2683.9	2638.9	2599.5	2554.5	2526.3	2501.0	2494.0
55°	3021.5	2965.2	2909.0	2862.5	2817.5	2783.8	2759.9	2748.6
57.5°	3319.7	3257.8	3195.9	3145.3	3107.3	3063.7	3039.8	3034.1
60°	3630.6	3571.5	3508.2	3457.5	3411.1	3373.2	3359.1	3332.4
62.5°	3959.7	3897.8	3838.8	3789.5	3730.4	3703.7	3679.8	3664.3
65°	4283.3	4211.5	4137.0	4084.9	4025.8	3987.9	3958.3	3937.2
67.5°	4533.6	4425.3	4325.5	4238.2	4158.1	4099.0	4061.0	4041.3
69°	4604.0	4468.9	4340.9	4227.0	4132.7	4066.6	4024.4	4004.7
70°	4595.5	4446.4	4305.8	4180.6	4077.9	4007.6	3966.8	3930.2
72.5°	4335.3	4198.9	4042.7	3906.3	3813.4	3745.9	3705.1	3685.4
75°	3699.5	3608.1	3495.5	3390.0	3322.5	3283.1	3232.5	3233.9
77.5°	2693.7	2696.6	2620.6	2512.3	2436.3	2422.3	2399.7	2377.2
80°	1671.1	1537.5	1450.3	1333.5	1247.7	1173.1	1140.8	1070.5
82.5°	770.8	602.0	467.0	353.1	271.5	212.4	185.7	151.9
85°	171.6	130.8	108.3	87.2	74.6	68.9	56.3	52.0
87.5°	23.9	21.1	19.7	18.3	15.5	11.3	8.4	7.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)