

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: P147886

Luminaire Tested: **TLM-F05-LED-E1-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147886  
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-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (35) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

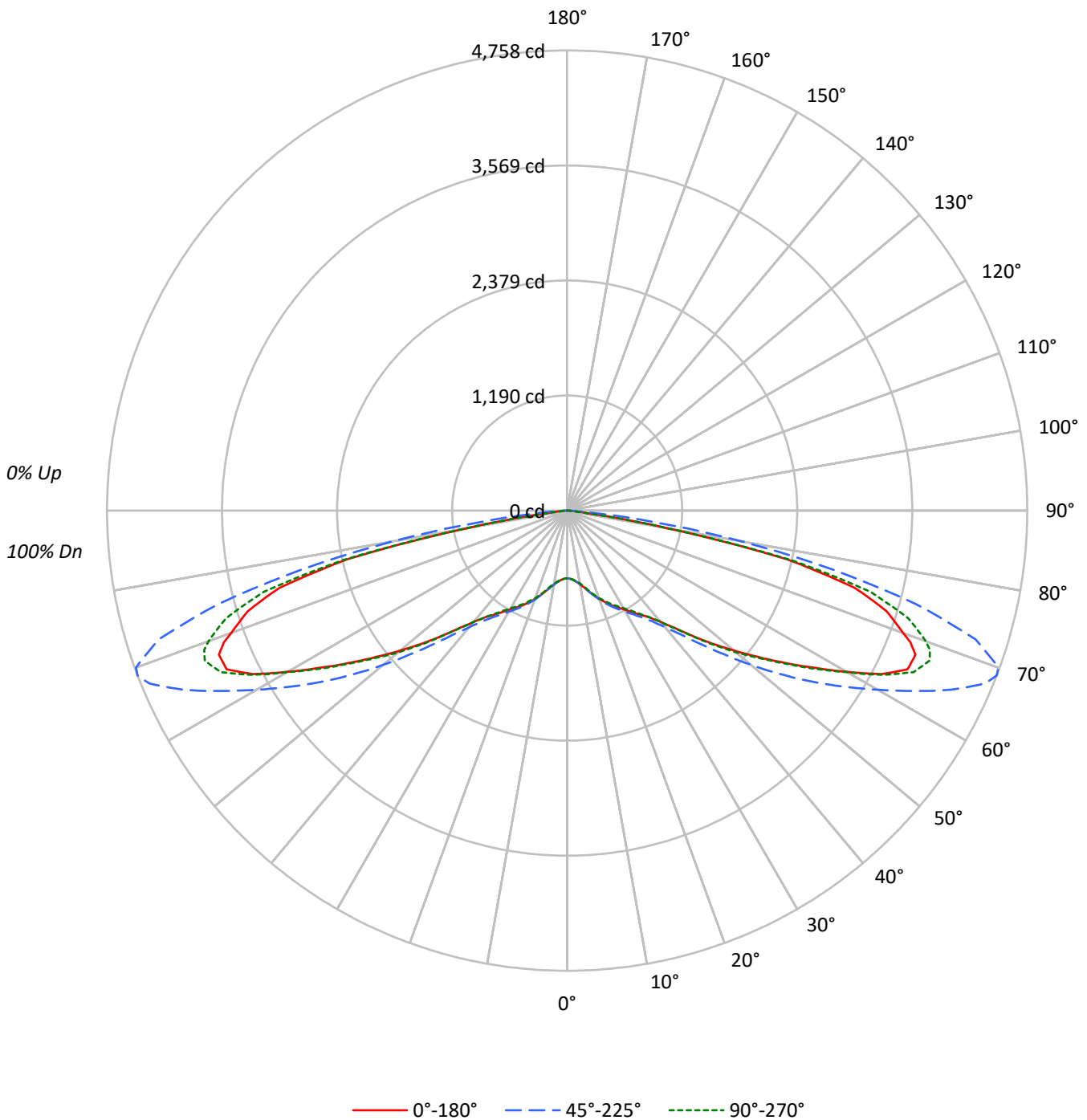
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13484.6 lumens  
Efficiency: N/A  
Efficacy: 101.2 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°	9081	9081	9081
5°	9373	9373	9337
10°	10207	10189	10095
15°	11581	11638	11467
20°	13405	13522	13287
25°	15434	15677	15212
30°	17675	18076	17462
35°	20787	21346	20608
40°	25406	26577	25406
45°	33557	35732	33686
50°	45375	50074	46000
55°	62022	69682	62372
60°	86417	96084	86747
65°	119179	134516	121260
70°	140037	179919	149566
75°	154073	187038	162631
80°	77917	136326	80239
85°	10088	36976	7767



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	0.5
10°-20°	248.3	1.8
20°-30°	502.8	3.7
30°-40°	842.9	6.3
40°-50°	1486.8	11.0
50°-60°	2622.0	19.4
60°-70°	4003.0	29.7
70°-80°	3345.0	24.8
80°-90°	363.5	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°	821.4	6.1
0°-40°	1664.3	12.3
0°-60°	5773.1	42.8
0°-90°	13484.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13484.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	720	721	720	718	717	70
15°	863	867	867	859	854	249
25°	1079	1084	1096	1076	1063	501
35°	1313	1321	1348	1319	1302	834
45°	1830	1871	1948	1888	1837	1438
55°	2743	2873	3082	2896	2759	2486
65°	3884	4094	4384	4126	3952	3718
75°	3075	3248	3733	3455	3246	2961
85°	68	113	248	98	52	223
90°	0	0	0	0	0	



TEST NUMBER: P147886

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	700.2	700.2	700.2	700.2	700.2	700.2	700.2	700.2	700.2	700.2	700.2
2.5°	705.9	707.3	705.9	705.9	705.9	705.9	705.9	704.5	704.5	704.5	705.9
5°	720.0	721.4	720.0	721.4	721.4	721.4	721.4	720.0	720.0	720.0	720.0
7.5°	742.6	742.6	742.6	744.0	742.6	742.6	744.0	742.6	742.6	742.6	742.6
10°	775.1	773.7	773.7	773.7	773.7	773.7	775.1	775.1	775.1	773.7	773.7
12.5°	814.6	813.2	814.6	814.6	816.0	816.0	816.0	816.0	816.0	816.0	814.6
15°	862.6	862.6	862.6	864.0	866.8	866.8	865.4	866.8	866.8	866.8	866.8
17.5°	916.3	919.1	916.3	917.7	919.1	917.7	920.5	921.9	923.3	921.9	917.7
20°	971.3	972.7	972.7	972.7	972.7	975.5	977.0	977.0	981.2	979.8	978.4
22.5°	1023.5	1026.4	1026.4	1027.8	1027.8	1032.0	1032.0	1032.0	1034.8	1037.7	1034.8
25°	1078.6	1077.2	1077.2	1080.0	1081.4	1087.1	1087.1	1089.9	1094.1	1095.6	1092.7
27.5°	1128.0	1126.6	1126.6	1130.8	1132.3	1139.3	1139.3	1145.0	1147.8	1149.2	1146.4
30°	1180.3	1180.3	1178.8	1183.1	1187.3	1193.0	1195.8	1201.4	1205.7	1207.1	1204.3
32.5°	1242.4	1239.6	1241.0	1243.8	1246.6	1252.3	1256.5	1263.6	1269.2	1270.6	1267.8
35°	1313.0	1308.7	1310.1	1313.0	1317.2	1325.7	1332.7	1337.0	1345.4	1348.3	1342.6
37.5°	1390.6	1392.0	1390.6	1397.7	1404.7	1414.6	1423.1	1428.7	1437.2	1441.4	1437.2
40°	1500.7	1496.5	1500.7	1507.8	1519.1	1531.8	1548.7	1553.0	1561.4	1569.9	1560.0
42.5°	1643.3	1640.5	1650.4	1656.0	1668.7	1682.9	1704.0	1715.3	1728.0	1733.7	1725.2
45°	1829.7	1829.7	1841.0	1842.4	1862.2	1880.5	1910.2	1924.3	1948.3	1948.3	1948.3
47.5°	2035.8	2044.3	2051.3	2065.5	2079.6	2113.5	2143.1	2174.2	2196.7	2199.6	2195.3
50°	2249.0	2257.5	2278.6	2298.4	2329.5	2371.8	2404.3	2445.2	2465.0	2481.9	2476.3
52.5°	2484.8	2486.2	2511.6	2537.0	2582.2	2628.8	2681.0	2723.3	2758.6	2774.2	2761.5
55°	2743.1	2745.9	2768.5	2795.3	2846.2	2899.8	2964.8	3008.5	3053.7	3081.9	3060.8
57.5°	3022.6	3024.1	3046.6	3079.1	3139.8	3193.5	3255.6	3317.7	3360.1	3385.5	3371.4
60°	3331.8	3338.9	3355.8	3396.8	3454.7	3511.1	3573.2	3628.3	3677.7	3704.5	3690.4
62.5°	3662.2	3669.2	3693.2	3725.7	3776.5	3838.7	3898.0	3968.5	4009.5	4039.1	4018.0
65°	3883.8	3896.5	3934.7	3978.4	4053.3	4133.7	4202.9	4298.9	4348.3	4383.6	4363.9
67.5°	3898.0	3905.0	3951.6	4018.0	4118.2	4239.6	4380.8	4530.4	4627.9	4674.4	4640.6
69°	3802.0	3811.8	3857.0	3931.8	4043.4	4184.6	4352.6	4538.9	4688.6	4757.7	4725.3
70°	3693.2	3714.4	3763.8	3845.7	3954.4	4102.7	4276.3	4475.4	4650.4	4745.0	4721.0
72.5°	3464.5	3470.2	3502.7	3567.6	3650.9	3773.7	3937.5	4125.3	4291.8	4427.4	4447.1
75°	3074.9	3093.2	3117.2	3161.0	3203.4	3292.3	3402.4	3530.9	3628.3	3732.8	3737.0
77.5°	2323.8	2378.9	2397.2	2407.1	2425.5	2496.0	2592.1	2703.6	2784.1	2801.0	2798.2
80°	1043.3	1116.7	1133.7	1214.1	1263.6	1380.7	1527.6	1698.4	1812.7	1825.4	1794.4
82.5°	204.7	218.8	255.5	319.1	434.8	504.0	600.0	720.0	830.1	893.7	855.5
85°	67.8	72.0	83.3	91.8	105.9	120.0	145.4	180.7	224.5	248.5	221.7
87.5°	26.8	26.8	31.1	33.9	36.7	36.7	36.7	33.9	32.5	26.8	24.0
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°	700.2	700.2	700.2	700.2	700.2	700.2	700.2	700.2
2.5°	704.5	704.5	704.5	704.5	704.5	704.5	704.5	704.5
5°	720.0	718.6	718.6	717.2	717.2	717.2	717.2	717.2
7.5°	741.2	739.8	738.4	739.8	738.4	738.4	738.4	738.4
10°	773.7	770.8	769.4	768.0	768.0	768.0	766.6	766.6
12.5°	811.8	811.8	810.4	809.0	806.1	807.5	806.1	803.3
15°	864.0	861.2	859.8	858.4	855.5	855.5	855.5	854.1
17.5°	916.3	913.4	913.4	909.2	907.8	907.8	907.8	909.2
20°	974.1	969.9	967.1	964.3	961.4	962.8	960.0	962.8
22.5°	1032.0	1026.4	1023.5	1019.3	1015.1	1015.1	1013.7	1010.8
25°	1088.5	1081.4	1078.6	1074.4	1068.7	1068.7	1065.9	1063.1
27.5°	1142.1	1135.1	1132.3	1123.8	1118.1	1116.7	1113.9	1112.5
30°	1201.4	1193.0	1188.7	1180.3	1171.8	1170.4	1166.1	1166.1
32.5°	1263.6	1255.1	1252.3	1239.6	1232.5	1232.5	1229.7	1226.8
35°	1341.2	1328.5	1325.7	1313.0	1303.1	1303.1	1300.3	1301.7
37.5°	1433.0	1423.1	1413.2	1403.3	1392.0	1390.6	1387.8	1385.0
40°	1555.8	1544.5	1533.2	1519.1	1509.2	1506.4	1502.1	1500.7
42.5°	1719.6	1708.3	1685.7	1674.4	1664.5	1656.0	1654.6	1653.2
45°	1928.5	1914.4	1898.9	1877.7	1865.0	1846.6	1843.8	1836.7
47.5°	2179.8	2153.0	2126.2	2107.8	2088.0	2066.9	2062.6	2051.3
50°	2446.6	2425.5	2380.3	2350.6	2319.6	2298.4	2284.3	2280.0
52.5°	2733.2	2693.7	2648.5	2609.0	2563.8	2535.6	2510.2	2503.1
55°	3032.5	2976.1	2919.6	2873.0	2827.8	2793.9	2769.9	2758.6
57.5°	3331.8	3269.7	3207.6	3156.8	3118.7	3074.9	3050.9	3045.2
60°	3643.8	3584.5	3521.0	3470.2	3423.6	3385.5	3371.4	3344.5
62.5°	3974.2	3912.1	3852.8	3803.4	3744.1	3717.3	3693.2	3677.7
65°	4298.9	4226.9	4152.1	4099.8	4040.6	4002.4	3972.8	3951.6
67.5°	4550.2	4441.5	4341.3	4253.7	4173.3	4114.0	4075.8	4056.1
69°	4620.8	4485.3	4356.8	4242.4	4147.8	4081.5	4039.1	4019.4
70°	4612.3	4462.7	4321.5	4195.8	4092.8	4022.2	3981.3	3944.5
72.5°	4351.1	4214.2	4057.5	3920.5	3827.4	3759.6	3718.7	3698.9
75°	3713.0	3621.2	3508.3	3402.4	3334.7	3295.1	3244.3	3245.7
77.5°	2703.6	2706.4	2630.2	2521.5	2445.2	2431.1	2408.5	2385.9
80°	1677.2	1543.1	1455.6	1338.4	1252.3	1177.4	1145.0	1074.4
82.5°	773.7	604.2	468.7	354.4	272.5	213.2	186.4	152.5
85°	172.2	131.3	108.7	87.5	74.8	69.2	56.5	52.2
87.5°	24.0	21.2	19.8	18.4	15.5	11.3	8.5	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)