

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: P147867

Luminaire Tested: **TLM-F03-LED-E1-5WQ-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147867  
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-F03-LED-E1-5WQ-7060  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (21) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

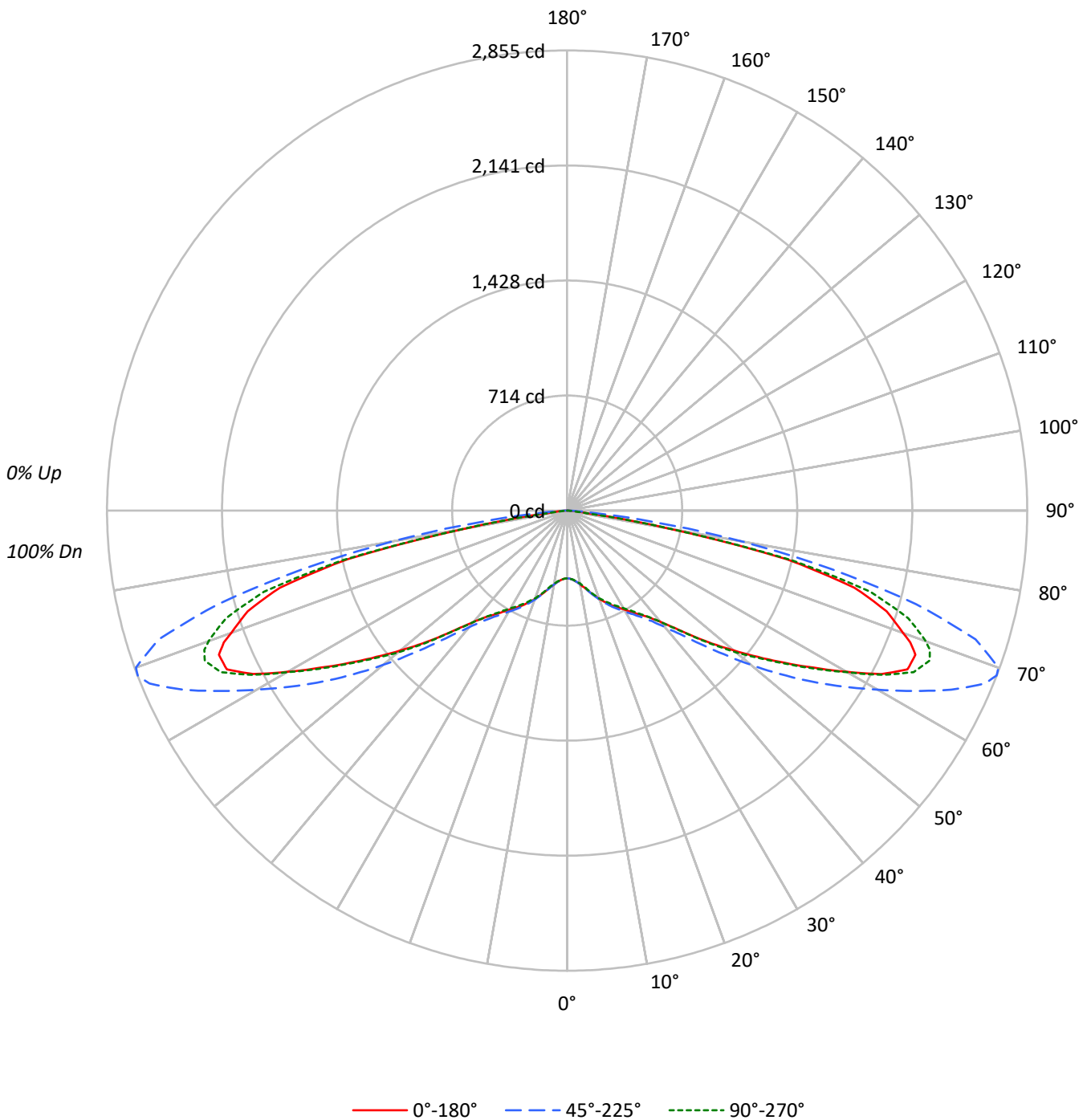
Lumens per Lamp: N/A  
Luminaire Lumens: 8090.7 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 78.3  
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°	9044	9044	9044
5°	9336	9336	9299
10°	10165	10147	10056
15°	11536	11592	11422
20°	13352	13468	13235
25°	15373	15613	15150
30°	17605	18002	17393
35°	20704	21261	20525
40°	25304	26470	25304
45°	33422	35590	33550
50°	45193	49875	45816
55°	61775	69405	62124
60°	86073	95700	86400
65°	118704	133980	120777
70°	139476	179199	148968
75°	153454	186292	161979
80°	77608	135789	79914
85°	10053	36828	7731



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	0.5
10°-20°	149.0	1.8
20°-30°	301.7	3.7
30°-40°	505.8	6.3
40°-50°	892.1	11.0
50°-60°	1573.2	19.4
60°-70°	2401.8	29.7
70°-80°	2007.0	24.8
80°-90°	218.1	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°	492.8	6.1
0°-40°	998.6	12.3
0°-60°	3463.9	42.8
0°-90°	8090.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8090.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	432	433	432	431	430	42
15°	518	520	520	515	512	149
25°	647	651	657	646	638	301
35°	788	793	809	792	781	500
45°	1098	1123	1169	1133	1102	863
55°	1646	1724	1849	1738	1655	1491
65°	2330	2456	2630	2476	2371	2231
75°	1845	1949	2240	2073	1947	1777
85°	41	68	149	59	31	134
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°	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1
2.5°	423.5	424.4	423.5	423.5	423.5	423.5	423.5	422.7	422.7	422.7	423.5
5°	432.0	432.9	432.0	432.9	432.9	432.9	432.9	432.0	432.0	432.0	432.0
7.5°	445.6	445.6	445.6	446.4	445.6	445.6	446.4	445.6	445.6	445.6	445.6
10°	465.0	464.2	464.2	464.2	464.2	464.2	465.0	465.0	465.0	464.2	464.2
12.5°	488.8	487.9	488.8	488.8	489.6	489.6	489.6	489.6	489.6	489.6	488.8
15°	517.6	517.6	517.6	518.4	520.1	520.1	519.3	520.1	520.1	520.1	520.1
17.5°	549.8	551.4	549.8	550.6	551.4	550.6	552.3	553.1	554.0	553.1	550.6
20°	582.8	583.6	583.6	583.6	583.6	585.3	586.2	586.2	588.7	587.9	587.0
22.5°	614.1	615.8	615.8	616.7	616.7	619.2	619.2	619.2	620.9	622.6	620.9
25°	647.2	646.3	646.3	648.0	648.9	652.2	652.2	653.9	656.5	657.3	655.6
27.5°	676.8	676.0	676.0	678.5	679.4	683.6	683.6	687.0	688.7	689.5	687.8
30°	708.2	708.2	707.3	709.8	712.4	715.8	717.5	720.9	723.4	724.2	722.6
32.5°	745.4	743.7	744.6	746.3	748.0	751.4	753.9	758.1	761.5	762.4	760.7
35°	787.8	785.2	786.1	787.8	790.3	795.4	799.6	802.2	807.3	809.0	805.6
37.5°	834.4	835.2	834.4	838.6	842.8	848.8	853.9	857.2	862.3	864.9	862.3
40°	900.4	897.9	900.4	904.7	911.5	919.1	929.2	931.8	936.9	941.9	936.0
42.5°	986.0	984.3	990.2	993.6	1001.2	1009.7	1022.4	1029.2	1036.8	1040.2	1035.1
45°	1097.8	1097.8	1104.6	1105.4	1117.3	1128.3	1146.1	1154.6	1169.0	1169.0	1169.0
47.5°	1221.5	1226.6	1230.8	1239.3	1247.7	1268.1	1285.9	1304.5	1318.0	1319.7	1317.2
50°	1349.4	1354.5	1367.2	1379.0	1397.7	1423.1	1442.6	1467.1	1479.0	1489.2	1485.8
52.5°	1490.9	1491.7	1506.9	1522.2	1549.3	1577.3	1608.6	1634.0	1655.2	1664.5	1656.9
55°	1645.9	1647.6	1661.1	1677.2	1707.7	1739.9	1778.9	1805.1	1832.2	1849.2	1836.5
57.5°	1813.6	1814.4	1828.0	1847.5	1883.9	1916.1	1953.4	1990.6	2016.0	2031.3	2022.8
60°	1999.1	2003.3	2013.5	2038.1	2072.8	2106.7	2143.9	2177.0	2206.6	2222.7	2214.3
62.5°	2197.3	2201.5	2215.9	2235.4	2265.9	2303.2	2338.8	2381.1	2405.7	2423.5	2410.8
65°	2330.3	2337.9	2360.8	2387.1	2432.0	2480.2	2521.7	2579.3	2609.0	2630.2	2618.3
67.5°	2338.8	2343.0	2371.0	2410.8	2470.9	2543.8	2628.5	2718.3	2776.7	2804.7	2784.3
69°	2281.2	2287.1	2314.2	2359.1	2426.0	2510.7	2611.5	2723.3	2813.1	2854.6	2835.2
70°	2215.9	2228.7	2258.3	2307.4	2372.7	2461.6	2565.8	2685.2	2790.3	2847.0	2832.6
72.5°	2078.7	2082.1	2101.6	2140.6	2190.5	2264.2	2362.5	2475.2	2575.1	2656.4	2668.3
75°	1844.9	1855.9	1870.3	1896.6	1922.0	1975.4	2041.5	2118.5	2177.0	2239.7	2242.2
77.5°	1394.3	1427.3	1438.3	1444.3	1455.3	1497.6	1555.2	1622.1	1670.4	1680.6	1678.9
80°	626.0	670.0	680.2	728.5	758.1	828.4	916.5	1019.0	1087.6	1095.3	1076.6
82.5°	122.8	131.3	153.3	191.4	260.9	302.4	360.0	432.0	498.1	536.2	513.3
85°	40.7	43.2	50.0	55.1	63.5	72.0	87.2	108.4	134.7	149.1	133.0
87.5°	16.1	16.1	18.6	20.3	22.0	22.0	22.0	20.3	19.5	16.1	14.4
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°	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1
2.5°	422.7	422.7	422.7	422.7	422.7	422.7	422.7	422.7
5°	432.0	431.2	431.2	430.3	430.3	430.3	430.3	430.3
7.5°	444.7	443.9	443.0	443.9	443.0	443.0	443.0	443.0
10°	464.2	462.5	461.7	460.8	460.8	460.8	460.0	460.0
12.5°	487.1	487.1	486.2	485.4	483.7	484.5	483.7	482.0
15°	518.4	516.7	515.9	515.0	513.3	513.3	513.3	512.5
17.5°	549.8	548.1	548.1	545.5	544.7	544.7	544.7	545.5
20°	584.5	581.9	580.2	578.6	576.9	577.7	576.0	577.7
22.5°	619.2	615.8	614.1	611.6	609.0	609.0	608.2	606.5
25°	653.1	648.9	647.2	644.6	641.2	641.2	639.5	637.8
27.5°	685.3	681.0	679.4	674.3	670.9	670.0	668.3	667.5
30°	720.9	715.8	713.2	708.2	703.1	702.2	699.7	699.7
32.5°	758.1	753.1	751.4	743.7	739.5	739.5	737.8	736.1
35°	804.7	797.1	795.4	787.8	781.9	781.9	780.2	781.0
37.5°	859.8	853.9	847.9	842.0	835.2	834.4	832.7	831.0
40°	933.5	926.7	919.9	911.5	905.5	903.8	901.3	900.4
42.5°	1031.7	1025.0	1011.4	1004.6	998.7	993.6	992.8	991.9
45°	1157.1	1148.6	1139.3	1126.6	1119.0	1108.0	1106.3	1102.0
47.5°	1307.9	1291.8	1275.7	1264.7	1252.8	1240.1	1237.6	1230.8
50°	1468.0	1455.3	1428.2	1410.4	1391.7	1379.0	1370.6	1368.0
52.5°	1639.9	1616.2	1589.1	1565.4	1538.3	1521.3	1506.1	1501.9
55°	1819.5	1785.6	1751.8	1723.8	1696.7	1676.4	1662.0	1655.2
57.5°	1999.1	1961.8	1924.6	1894.1	1871.2	1844.9	1830.5	1827.1
60°	2186.3	2150.7	2112.6	2082.1	2054.2	2031.3	2022.8	2006.7
62.5°	2384.5	2347.2	2311.7	2282.0	2246.4	2230.4	2215.9	2206.6
65°	2579.3	2536.1	2491.2	2459.9	2424.3	2401.5	2383.7	2371.0
67.5°	2730.1	2664.9	2604.8	2552.2	2504.0	2468.4	2445.5	2433.6
69°	2772.5	2691.2	2614.1	2545.5	2488.7	2448.9	2423.5	2411.6
70°	2767.4	2677.6	2592.9	2517.5	2455.7	2413.3	2388.8	2366.7
72.5°	2610.7	2528.5	2434.5	2352.3	2296.4	2255.8	2231.2	2219.3
75°	2227.8	2172.7	2105.0	2041.5	2000.8	1977.1	1946.6	1947.4
77.5°	1622.1	1623.8	1578.1	1512.9	1467.1	1458.7	1445.1	1431.6
80°	1006.3	925.9	873.3	803.0	751.4	706.5	687.0	644.6
82.5°	464.2	362.5	281.2	212.6	163.5	127.9	111.8	91.5
85°	103.3	78.8	65.2	52.5	44.9	41.5	33.9	31.3
87.5°	14.4	12.7	11.9	11.0	9.3	6.8	5.1	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)