

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: P147851

Luminaire Tested: **TLM-E02-LED-E1-5WQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147851  
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-E02-LED-E1-5WQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

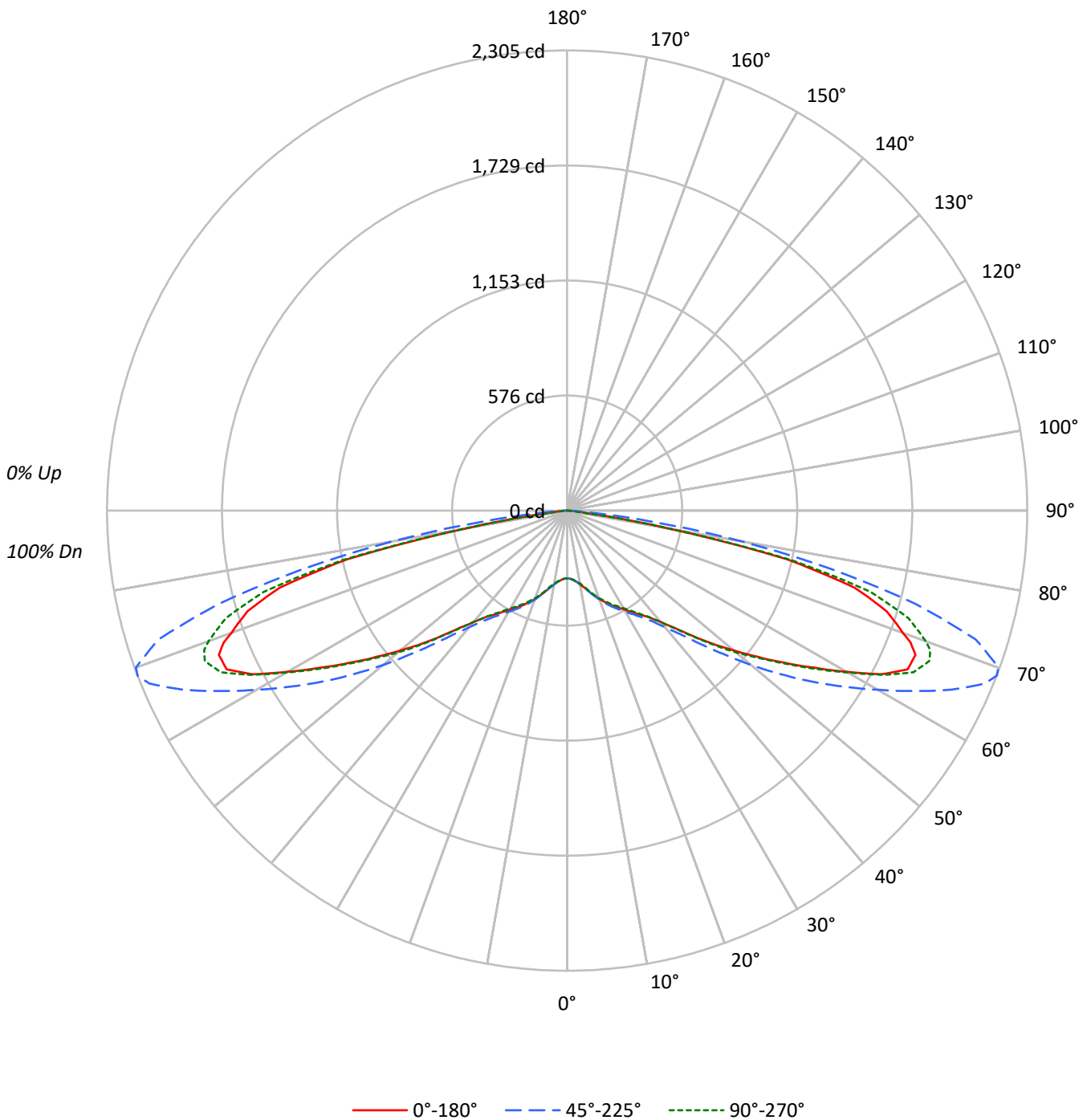
Lumens per Lamp: N/A  
Luminaire Lumens: 6533.8 lumens  
Efficiency: N/A  
Efficacy: 125.4 lumens/watt  
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 52.1  
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°	11067	11067	11067
5°	11424	11424	11378
10°	12440	12417	12304
15°	14115	14183	13977
20°	16335	16477	16193
25°	18808	19103	18538
30°	21540	22030	21280
35°	25333	26014	25114
40°	30964	32390	30964
45°	40898	43546	41055
50°	55296	61025	56063
55°	75583	84920	76015
60°	105317	117098	105721
65°	145246	163932	147778
70°	170662	219271	182278
75°	187766	227943	198201
80°	94953	166144	97789
85°	12275	45060	9468



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.1	0.5
10°-20°	120.3	1.8
20°-30°	243.6	3.7
30°-40°	408.4	6.3
40°-50°	720.4	11.0
50°-60°	1270.5	19.4
60°-70°	1939.6	29.7
70°-80°	1620.8	24.8
80°-90°	176.1	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°	398.0	6.1
0°-40°	806.4	12.3
0°-60°	2797.3	42.8
0°-90°	6533.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6533.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	339	339	339	339	339	
5°	349	350	349	348	348	34
15°	418	420	420	416	414	120
25°	523	525	531	522	515	243
35°	636	640	653	639	631	404
45°	887	907	944	915	890	697
55°	1329	1392	1493	1403	1337	1204
65°	1882	1984	2124	1999	1915	1801
75°	1490	1574	1809	1674	1573	1435
85°	33	55	120	48	25	108
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°	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3
2.5°	342.0	342.7	342.0	342.0	342.0	342.0	342.0	341.4	341.4	341.4	342.0
5°	348.9	349.6	348.9	349.6	349.6	349.6	349.6	348.9	348.9	348.9	348.9
7.5°	359.8	359.8	359.8	360.5	359.8	359.8	360.5	359.8	359.8	359.8	359.8
10°	375.6	374.9	374.9	374.9	374.9	374.9	375.6	375.6	375.6	374.9	374.9
12.5°	394.7	394.0	394.7	394.7	395.4	395.4	395.4	395.4	395.4	395.4	394.7
15°	418.0	418.0	418.0	418.7	420.0	420.0	419.3	420.0	420.0	420.0	420.0
17.5°	444.0	445.3	444.0	444.6	445.3	444.6	446.0	446.7	447.4	446.7	444.6
20°	470.6	471.3	471.3	471.3	471.3	472.7	473.4	473.4	475.4	474.7	474.1
22.5°	496.0	497.3	497.3	498.0	498.0	500.1	500.1	500.1	501.4	502.8	501.4
25°	522.6	521.9	521.9	523.3	524.0	526.7	526.7	528.1	530.2	530.8	529.5
27.5°	546.6	545.9	545.9	547.9	548.6	552.0	552.0	554.8	556.1	556.8	555.5
30°	571.9	571.9	571.2	573.3	575.3	578.0	579.4	582.1	584.2	584.9	583.5
32.5°	602.0	600.6	601.3	602.7	604.0	606.8	608.8	612.2	615.0	615.7	614.3
35°	636.2	634.1	634.8	636.2	638.2	642.3	645.8	647.8	651.9	653.3	650.6
37.5°	673.8	674.5	673.8	677.2	680.6	685.4	689.5	692.3	696.4	698.4	696.4
40°	727.2	725.1	727.2	730.6	736.1	742.2	750.4	752.5	756.6	760.7	755.9
42.5°	796.3	794.9	799.7	802.4	808.6	815.4	825.7	831.1	837.3	840.0	835.9
45°	886.6	886.6	892.0	892.7	902.3	911.2	925.5	932.4	944.0	944.0	944.0
47.5°	986.4	990.5	994.0	1000.8	1007.6	1024.1	1038.4	1053.5	1064.4	1065.8	1063.7
50°	1089.7	1093.8	1104.1	1113.7	1128.7	1149.2	1165.0	1184.8	1194.4	1202.6	1199.9
52.5°	1204.0	1204.6	1217.0	1229.3	1251.2	1273.7	1299.0	1319.6	1336.7	1344.2	1338.0
55°	1329.1	1330.5	1341.5	1354.5	1379.1	1405.1	1436.5	1457.8	1479.6	1493.3	1483.1
57.5°	1464.6	1465.3	1476.2	1492.0	1521.4	1547.4	1577.5	1607.6	1628.1	1640.4	1633.6
60°	1614.4	1617.8	1626.0	1645.9	1673.9	1701.3	1731.4	1758.1	1782.0	1795.0	1788.2
62.5°	1774.5	1777.9	1789.5	1805.3	1829.9	1860.0	1888.7	1922.9	1942.8	1957.1	1946.9
65°	1881.9	1888.0	1906.5	1927.7	1964.0	2003.0	2036.5	2083.0	2106.9	2124.0	2114.5
67.5°	1888.7	1892.1	1914.7	1946.9	1995.4	2054.3	2122.7	2195.2	2242.4	2265.0	2248.5
69°	1842.2	1847.0	1868.9	1905.1	1959.2	2027.6	2109.0	2199.3	2271.8	2305.3	2289.6
70°	1789.5	1799.8	1823.7	1863.4	1916.1	1987.9	2072.0	2168.5	2253.3	2299.2	2287.5
72.5°	1678.7	1681.4	1697.2	1728.6	1769.0	1828.5	1907.9	1998.9	2079.6	2145.2	2154.8
75°	1489.9	1498.8	1510.4	1531.6	1552.2	1595.3	1648.6	1710.9	1758.1	1808.7	1810.7
77.5°	1126.0	1152.7	1161.6	1166.3	1175.2	1209.4	1256.0	1310.0	1349.0	1357.2	1355.8
80°	505.5	541.1	549.3	588.3	612.2	669.0	740.2	822.9	878.3	884.5	869.5
82.5°	99.2	106.0	123.8	154.6	210.7	244.2	290.7	348.9	402.2	433.0	414.5
85°	32.8	34.9	40.4	44.5	51.3	58.1	70.5	87.6	108.8	120.4	107.4
87.5°	13.0	13.0	15.0	16.4	17.8	17.8	17.8	16.4	15.7	13.0	11.6
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°	339.3	339.3	339.3	339.3	339.3	339.3	339.3	339.3
2.5°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4
5°	348.9	348.2	348.2	347.5	347.5	347.5	347.5	347.5
7.5°	359.1	358.5	357.8	358.5	357.8	357.8	357.8	357.8
10°	374.9	373.5	372.8	372.1	372.1	372.1	371.5	371.5
12.5°	393.3	393.3	392.7	392.0	390.6	391.3	390.6	389.2
15°	418.7	417.3	416.6	415.9	414.5	414.5	414.5	413.9
17.5°	444.0	442.6	442.6	440.5	439.9	439.9	439.9	440.5
20°	472.0	470.0	468.6	467.2	465.9	466.5	465.2	466.5
22.5°	500.1	497.3	496.0	493.9	491.8	491.8	491.2	489.8
25°	527.4	524.0	522.6	520.6	517.8	517.8	516.5	515.1
27.5°	553.4	550.0	548.6	544.5	541.8	541.1	539.7	539.0
30°	582.1	578.0	576.0	571.9	567.8	567.1	565.0	565.0
32.5°	612.2	608.1	606.8	600.6	597.2	597.2	595.8	594.5
35°	649.9	643.7	642.3	636.2	631.4	631.4	630.0	630.7
37.5°	694.3	689.5	684.8	680.0	674.5	673.8	672.4	671.1
40°	753.8	748.4	742.9	736.1	731.3	729.9	727.9	727.2
42.5°	833.2	827.7	816.8	811.3	806.5	802.4	801.7	801.0
45°	934.4	927.6	920.1	909.8	903.7	894.8	893.4	890.0
47.5°	1056.2	1043.2	1030.2	1021.3	1011.7	1001.5	999.4	994.0
50°	1185.5	1175.2	1153.3	1139.0	1123.9	1113.7	1106.8	1104.8
52.5°	1324.4	1305.2	1283.3	1264.2	1242.3	1228.6	1216.3	1212.9
55°	1469.4	1442.0	1414.7	1392.1	1370.2	1353.8	1342.1	1336.7
57.5°	1614.4	1584.3	1554.2	1529.6	1511.1	1489.9	1478.3	1475.5
60°	1765.6	1736.9	1706.1	1681.4	1658.9	1640.4	1633.6	1620.6
62.5°	1925.7	1895.6	1866.8	1842.9	1814.2	1801.2	1789.5	1782.0
65°	2083.0	2048.1	2011.9	1986.5	1957.8	1939.3	1925.0	1914.7
67.5°	2204.8	2152.1	2103.5	2061.1	2022.1	1993.4	1974.9	1965.3
69°	2239.0	2173.3	2111.0	2055.6	2009.8	1977.6	1957.1	1947.5
70°	2234.9	2162.3	2093.9	2033.1	1983.1	1948.9	1929.1	1911.3
72.5°	2108.3	2041.9	1966.0	1899.7	1854.5	1821.7	1801.8	1792.3
75°	1799.1	1754.6	1699.9	1648.6	1615.8	1596.6	1572.0	1572.7
77.5°	1310.0	1311.4	1274.4	1221.7	1184.8	1178.0	1167.0	1156.1
80°	812.7	747.7	705.3	648.5	606.8	570.5	554.8	520.6
82.5°	374.9	292.8	227.1	171.7	132.0	103.3	90.3	73.9
85°	83.5	63.6	52.7	42.4	36.3	33.5	27.4	25.3
87.5°	11.6	10.3	9.6	8.9	7.5	5.5	4.1	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)