

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: P148386

Luminaire Tested: **TLM-F03-LED-E1-5XQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148386  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33676)  
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-E1-5XQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (21) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

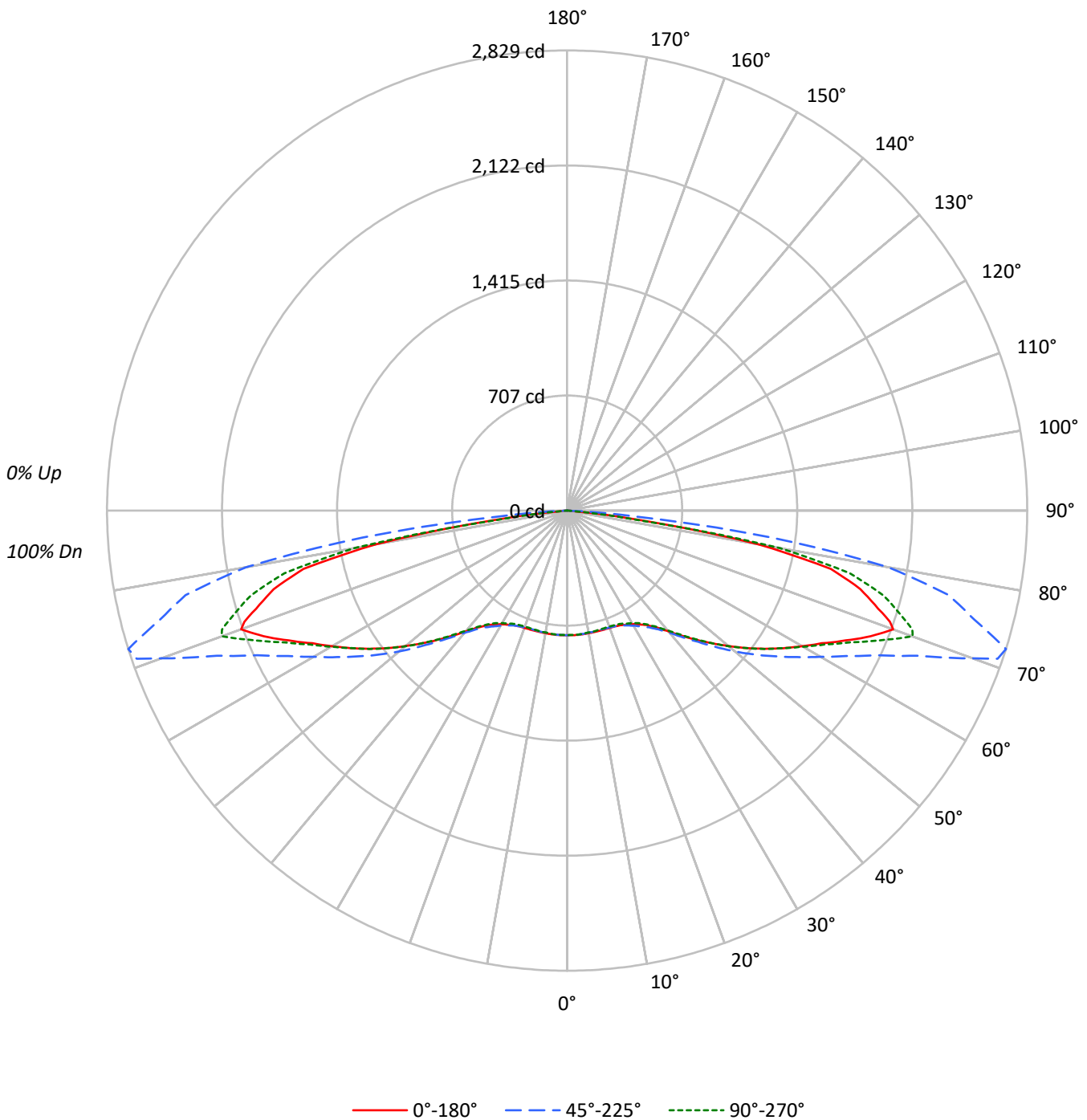
Lumens per Lamp: N/A  
Luminaire Lumens: 8082.1 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

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	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73	70
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52	49
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38	36
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30	27
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24	21
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19	17
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16	14
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14	12
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12	10
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9

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

	0°	45°	90°
0°	16486	16486	16486
5°	16575	16549	16538
10°	16729	16666	16638
15°	17068	16963	16916
20°	17581	17507	17388
25°	18461	18511	18238
30°	20046	20304	19857
35°	22596	23030	22452
40°	27245	27560	27018
45°	34171	34771	34040
50°	43334	45110	43432
55°	55560	58577	55668
60°	71774	77418	72049
65°	96244	107140	97650
70°	134258	167271	142252
75°	155325	215479	167402
80°	147814	248196	163980
85°	12029	100654	7855



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.0	0.9
10°-20°	215.9	2.7
20°-30°	361.5	4.5
30°-40°	551.1	6.8
40°-50°	880.0	10.9
50°-60°	1353.1	16.7
60°-70°	1970.1	24.4
70°-80°	2219.3	27.5
80°-90°	458.1	5.7
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°	650.4	8.0
0°-40°	1201.5	14.9
0°-60°	3434.6	42.5
0°-90°	8082.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8082.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	766	766	766	766	766	
5°	767	766	766	765	765	73
15°	766	764	761	758	759	217
25°	777	778	779	772	768	362
35°	860	866	876	861	854	549
45°	1122	1122	1142	1124	1118	876
55°	1480	1485	1561	1491	1483	1332
65°	1889	1897	2103	1924	1917	1883
75°	1867	1986	2591	2149	2013	1902
85°	49	128	408	103	32	303
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°	765.8	765.8	765.8	765.8	765.8	765.8	765.8	765.8	765.8	765.8	765.8
2.5°	767.0	767.4	767.2	766.8	767.0	766.8	766.4	766.2	764.7	765.6	766.8
5°	767.0	766.6	766.4	766.2	766.2	766.8	766.2	765.6	765.3	765.8	765.1
7.5°	766.6	765.8	765.3	765.1	765.3	765.6	764.9	764.0	764.7	764.0	763.2
10°	765.3	764.7	764.9	764.0	764.3	764.0	763.2	762.6	763.0	762.4	761.3
12.5°	765.8	764.7	764.5	764.0	763.8	763.6	762.6	761.5	761.8	761.3	760.3
15°	765.8	765.1	764.9	764.0	763.8	763.4	762.2	761.7	761.8	761.1	759.8
17.5°	766.2	765.8	765.8	764.7	764.3	764.0	762.6	762.0	762.6	761.3	760.5
20°	767.4	767.0	767.2	766.6	765.8	765.8	764.7	764.2	764.5	764.2	762.0
22.5°	770.0	770.0	770.4	770.2	770.0	770.2	769.4	769.4	769.6	769.6	767.6
25°	777.2	777.0	777.4	777.4	777.6	779.1	778.4	778.2	779.3	779.3	777.4
27.5°	790.8	790.3	790.8	791.2	792.2	794.1	793.7	794.3	796.0	795.6	793.9
30°	806.4	806.0	807.0	808.3	809.2	812.2	810.8	814.0	815.6	816.8	815.6
32.5°	829.3	829.3	831.2	832.0	834.0	836.9	837.3	839.8	841.8	843.9	842.4
35°	859.8	859.4	860.9	862.3	864.6	867.4	868.5	871.8	874.8	876.3	873.6
37.5°	906.4	904.0	906.8	907.6	909.6	910.2	913.2	917.4	920.6	920.1	918.2
40°	969.5	969.0	968.0	966.7	969.7	970.8	970.8	976.5	981.5	980.7	980.5
42.5°	1043.2	1041.3	1040.0	1040.0	1041.7	1042.1	1048.7	1052.9	1056.6	1057.4	1056.5
45°	1122.4	1120.4	1120.9	1120.0	1120.7	1123.4	1127.2	1135.1	1141.8	1142.1	1138.4
47.5°	1207.5	1201.6	1206.2	1199.7	1203.7	1205.8	1215.4	1226.8	1238.6	1240.8	1237.6
50°	1293.9	1293.3	1292.8	1291.6	1293.5	1298.2	1309.8	1327.8	1339.2	1346.9	1341.8
52.5°	1388.4	1385.2	1383.7	1381.6	1383.5	1392.6	1408.9	1424.6	1445.1	1453.8	1446.8
55°	1480.3	1479.2	1473.7	1473.5	1477.5	1491.7	1509.5	1528.8	1551.0	1560.7	1558.2
57.5°	1574.8	1568.6	1566.9	1564.4	1572.4	1585.7	1607.6	1642.3	1665.4	1676.4	1670.0
60°	1667.0	1662.4	1658.8	1658.0	1663.4	1682.1	1713.4	1755.2	1783.7	1798.1	1788.0
62.5°	1766.2	1763.2	1759.0	1754.1	1765.7	1789.7	1828.6	1874.8	1917.0	1934.7	1919.2
65°	1889.4	1883.3	1878.6	1872.4	1882.0	1912.0	1961.0	2026.0	2082.6	2103.3	2092.3
67.5°	2019.4	2013.7	2014.1	2010.3	2027.2	2069.0	2132.1	2220.4	2296.2	2331.6	2310.8
70°	2133.0	2136.1	2137.0	2152.4	2181.6	2245.2	2350.2	2488.5	2603.5	2657.5	2635.2
71°	2099.5	2106.4	2117.2	2133.4	2183.8	2258.9	2402.3	2569.8	2707.0	2798.5	2767.8
72.5°	2004.6	2008.8	2014.3	2038.9	2095.9	2195.4	2343.0	2534.4	2710.9	2829.2	2793.6
75°	1867.4	1871.4	1873.3	1890.5	1942.4	2029.2	2164.3	2334.1	2489.8	2590.6	2580.6
77.5°	1660.3	1660.9	1675.7	1702.2	1760.4	1859.8	2002.1	2178.2	2324.6	2402.9	2353.2
80°	1192.3	1184.2	1199.4	1233.6	1305.6	1419.5	1565.2	1766.4	1928.8	2002.0	1925.0
82.5°	453.6	478.2	517.0	573.2	597.6	724.2	860.2	978.4	1115.2	1268.1	1229.8
85°	48.7	54.8	68.8	85.3	107.8	149.1	206.1	281.2	346.7	407.5	361.7
87.5°	18.2	18.6	20.8	23.9	24.4	25.4	27.1	31.6	29.4	25.4	20.6
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°	765.8	765.8	765.8	765.8	765.8	765.8	765.8	765.8
2.5°	765.8	766.0	765.8	766.0	765.9	765.1	765.3	764.9
5°	765.6	764.9	765.2	765.3	765.2	765.6	764.9	765.3
7.5°	764.5	763.2	763.7	763.6	763.2	763.8	763.4	763.2
10°	762.4	760.7	761.5	761.1	760.9	761.1	761.1	761.1
12.5°	760.5	759.4	759.6	759.4	759.2	759.8	759.6	759.8
15°	760.0	758.3	758.2	757.7	758.0	758.4	758.4	759.0
17.5°	759.6	757.5	757.3	756.9	757.1	757.9	758.2	757.8
20°	760.9	759.2	758.8	758.3	758.2	759.2	759.0	759.0
22.5°	766.8	764.7	764.5	762.8	762.2	762.8	762.4	762.4
25°	776.4	773.8	773.0	770.7	768.9	769.0	768.3	767.8
27.5°	793.5	789.7	788.8	786.9	784.6	785.0	783.8	783.6
30°	813.4	810.0	807.0	804.3	801.5	800.5	799.0	798.8
32.5°	839.4	835.6	832.0	828.6	824.8	823.4	820.8	819.6
35°	871.4	866.4	862.1	859.8	856.0	854.1	852.4	854.3
37.5°	916.1	910.0	907.9	905.1	902.6	899.6	900.2	899.6
40°	978.0	972.4	970.3	965.5	964.8	961.4	963.6	961.4
42.5°	1054.4	1044.2	1042.8	1038.9	1037.6	1035.8	1036.6	1035.1
45°	1137.6	1128.5	1126.8	1120.6	1120.9	1116.4	1118.1	1118.1
47.5°	1231.2	1221.7	1213.8	1209.4	1207.7	1204.9	1206.4	1206.2
50°	1327.8	1314.9	1306.2	1297.5	1293.7	1294.8	1291.8	1296.8
52.5°	1431.6	1412.3	1400.0	1391.8	1384.6	1386.0	1386.4	1387.9
55°	1538.9	1514.4	1496.6	1485.8	1479.2	1479.6	1481.5	1483.2
57.5°	1646.9	1616.2	1592.1	1576.0	1571.8	1573.6	1573.6	1573.4
60°	1759.0	1722.1	1691.0	1672.7	1669.0	1667.9	1676.2	1673.4
62.5°	1879.2	1835.0	1802.8	1779.5	1774.0	1777.8	1785.2	1783.5
65°	2038.7	1977.5	1936.0	1912.9	1903.6	1907.4	1917.4	1917.0
67.5°	2244.3	2158.8	2103.9	2074.3	2067.5	2072.1	2077.7	2083.0
70°	2551.8	2429.6	2351.2	2287.1	2259.6	2254.3	2259.8	2260.0
71°	2660.0	2519.6	2394.9	2316.6	2271.4	2252.4	2253.8	2244.4
72.5°	2655.6	2482.6	2336.6	2254.7	2192.0	2176.8	2169.4	2157.9
75°	2476.6	2320.8	2194.1	2104.7	2044.4	2026.4	2013.3	2012.6
77.5°	2246.0	2131.0	1991.5	1896.8	1823.3	1793.4	1780.1	1779.8
80°	1805.6	1633.4	1531.3	1474.3	1385.6	1360.0	1332.9	1322.7
82.5°	1091.9	853.2	693.8	616.4	573.7	472.5	424.0	401.1
85°	254.3	180.6	124.5	81.8	58.8	46.8	36.0	31.8
87.5°	17.2	13.5	12.1	9.7	7.4	7.2	4.4	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)