

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: P148385

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148385  
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  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (21) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7876.4 lumens  
Efficiency: N/A  
Efficacy: 100.6 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

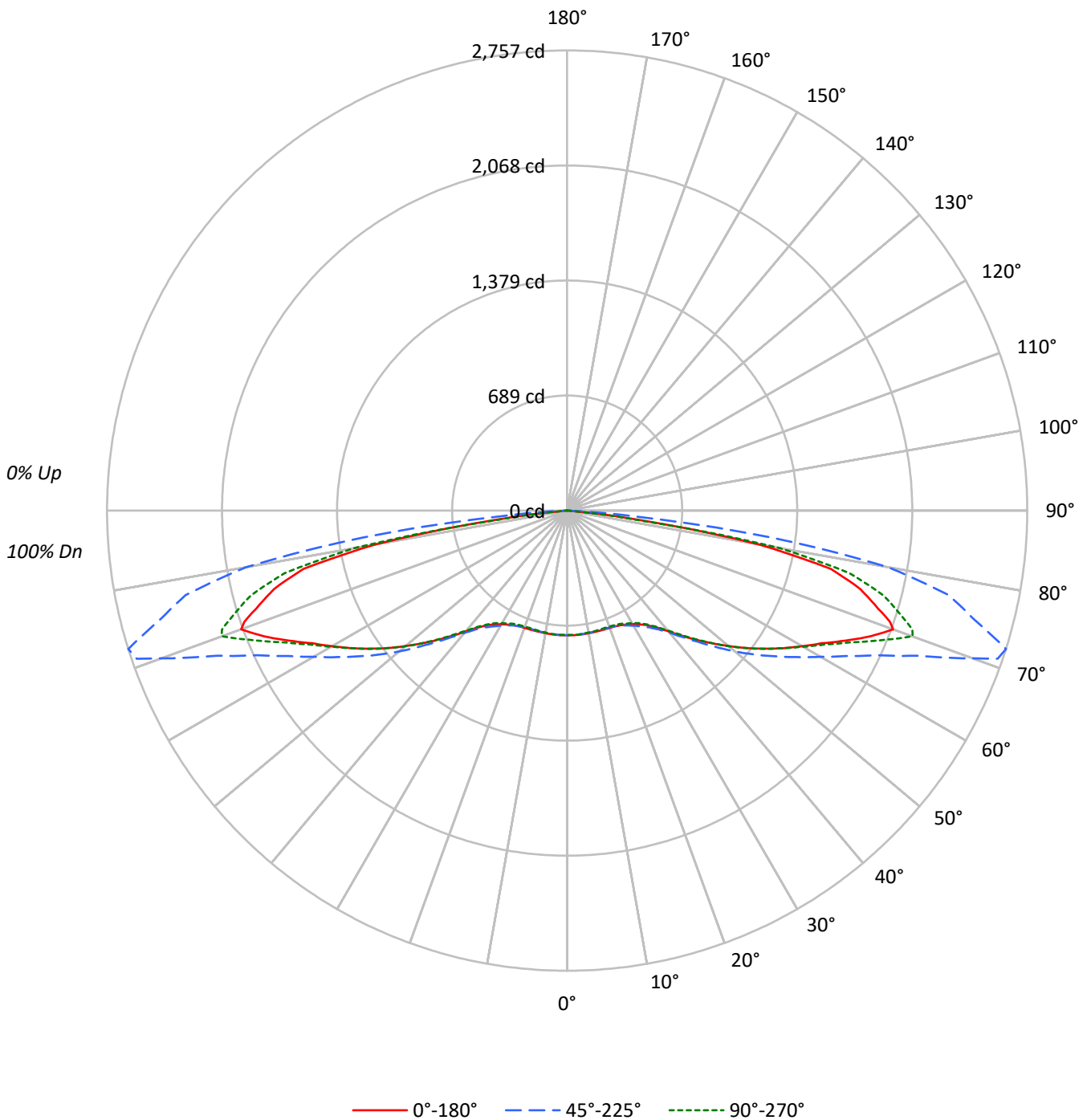
Input Watts (W): 78.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	16066	16066	16066
5°	16154	16128	16119
10°	16305	16242	16216
15°	16633	16530	16486
20°	17134	17063	16946
25°	17991	18041	17777
30°	19536	19787	19350
35°	22021	22444	21881
40°	26551	26860	26332
45°	33301	33885	33176
50°	42233	43961	42326
55°	54145	57087	54253
60°	69948	75451	70215
65°	93799	104415	95165
70°	130834	163010	138632
75°	151366	209989	163144
80°	144058	241898	159802
85°	11733	98085	7657



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	0.9
10°-20°	210.4	2.7
20°-30°	352.3	4.5
30°-40°	537.1	6.8
40°-50°	857.6	10.9
50°-60°	1318.6	16.7
60°-70°	1920.0	24.4
70°-80°	2162.8	27.5
80°-90°	446.5	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°	633.8	8.0
0°-40°	1170.9	14.9
0°-60°	3347.2	42.5
0°-90°	7876.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7876.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	748	747	746	746	746	71
15°	746	744	742	739	740	212
25°	757	759	760	752	748	353
35°	838	844	854	839	833	535
45°	1094	1093	1113	1095	1090	853
55°	1443	1447	1521	1453	1446	1298
65°	1841	1849	2050	1875	1868	1835
75°	1820	1935	2525	2095	1961	1854
85°	48	125	397	101	31	295
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°	746.3	746.3	746.3	746.3	746.3	746.3	746.3	746.3	746.3	746.3	746.3
2.5°	747.6	747.9	747.8	747.3	747.5	747.3	746.9	746.7	745.2	746.1	747.3
5°	747.5	747.1	746.9	746.7	746.7	747.3	746.7	746.1	745.8	746.3	745.7
7.5°	747.1	746.3	745.8	745.6	745.8	746.1	745.4	744.6	745.2	744.6	743.8
10°	745.9	745.2	745.4	744.6	744.8	744.6	743.8	743.2	743.6	743.0	741.9
12.5°	746.3	745.2	745.1	744.6	744.4	744.2	743.2	742.2	742.3	742.0	740.9
15°	746.3	745.7	745.4	744.6	744.4	744.0	742.8	742.3	742.4	741.7	740.5
17.5°	746.7	746.3	746.3	745.2	744.8	744.6	743.2	742.5	743.2	741.9	741.1
20°	747.9	747.5	747.7	747.1	746.3	746.3	745.2	744.8	745.0	744.8	742.6
22.5°	750.4	750.4	750.8	750.6	750.4	750.6	749.8	749.8	750.0	750.0	748.1
25°	757.4	757.2	757.6	757.6	757.8	759.3	758.7	758.4	759.5	759.5	757.6
27.5°	770.6	770.2	770.7	771.1	772.1	773.9	773.5	774.1	775.8	775.4	773.7
30°	785.9	785.5	786.5	787.8	788.6	791.5	790.2	793.3	794.8	796.0	794.8
32.5°	808.2	808.2	810.0	810.9	812.8	815.6	816.1	818.5	820.4	822.4	821.0
35°	837.9	837.5	839.0	840.4	842.6	845.3	846.4	849.7	852.6	854.0	851.3
37.5°	883.3	881.0	883.7	884.6	886.4	887.0	889.9	894.0	897.1	896.8	894.9
40°	944.8	944.4	943.4	942.1	945.0	946.0	946.0	951.6	956.6	955.8	955.5
42.5°	1016.6	1014.8	1013.5	1013.5	1015.2	1015.6	1022.0	1026.1	1029.6	1030.4	1029.6
45°	1093.8	1091.9	1092.4	1091.6	1092.1	1094.8	1098.6	1106.2	1112.8	1113.0	1109.5
47.5°	1176.8	1171.0	1175.5	1169.2	1173.1	1175.2	1184.4	1195.6	1207.1	1209.2	1206.1
50°	1261.0	1260.4	1260.0	1258.7	1260.6	1265.1	1276.5	1294.0	1305.1	1312.6	1307.6
52.5°	1353.0	1349.9	1348.5	1346.4	1348.3	1357.2	1373.0	1388.4	1408.3	1416.8	1410.0
55°	1442.6	1441.6	1436.2	1436.0	1439.9	1453.7	1471.1	1489.9	1511.6	1521.0	1518.6
57.5°	1534.6	1528.6	1527.0	1524.5	1532.4	1545.4	1566.6	1600.5	1623.0	1633.7	1627.5
60°	1624.6	1620.1	1616.6	1615.8	1621.1	1639.3	1669.8	1710.5	1738.3	1752.4	1742.5
62.5°	1721.2	1718.3	1714.2	1709.4	1720.8	1744.1	1782.1	1827.1	1868.2	1885.5	1870.4
65°	1841.4	1835.3	1830.8	1824.8	1834.1	1863.4	1911.1	1974.4	2029.6	2049.8	2039.0
67.5°	1968.0	1962.5	1962.9	1959.2	1975.7	2016.4	2077.8	2163.9	2237.8	2272.2	2252.0
70°	2078.6	2081.8	2082.6	2097.6	2126.2	2188.0	2290.4	2425.2	2537.2	2589.8	2568.2
71°	2046.0	2052.9	2063.4	2079.1	2128.2	2201.5	2341.2	2504.4	2638.2	2727.3	2697.4
72.5°	1953.6	1957.7	1963.1	1987.0	2042.6	2139.5	2283.4	2470.0	2641.9	2757.3	2722.6
75°	1819.8	1823.8	1825.6	1842.4	1892.9	1977.6	2109.2	2274.7	2426.4	2524.6	2515.0
77.5°	1618.0	1618.6	1633.1	1658.9	1715.6	1812.4	1951.1	2122.8	2265.4	2341.8	2293.3
80°	1162.0	1154.1	1168.9	1202.1	1272.3	1383.4	1525.4	1721.4	1879.7	1951.2	1876.0
82.5°	442.1	466.0	503.8	558.6	582.4	705.9	838.3	953.5	1086.8	1235.8	1198.5
85°	47.5	53.4	67.0	83.2	105.0	145.3	200.8	274.1	337.8	397.1	352.5
87.5°	17.8	18.2	20.2	23.3	23.8	24.8	26.4	30.8	28.7	24.8	20.0
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°	746.3	746.3	746.3	746.3	746.3	746.3	746.3	746.3
2.5°	746.3	746.5	746.3	746.5	746.5	745.7	745.9	745.4
5°	746.1	745.4	745.6	745.9	745.6	746.1	745.5	745.9
7.5°	745.0	743.8	744.2	744.2	743.8	744.4	744.0	743.8
10°	743.0	741.3	742.2	741.7	741.5	741.7	741.7	741.8
12.5°	741.1	740.1	740.2	740.1	739.8	740.5	740.3	740.5
15°	740.7	739.0	738.8	738.4	738.6	739.0	739.0	739.7
17.5°	740.3	738.2	738.0	737.6	737.8	738.6	738.8	738.4
20°	741.5	739.8	739.5	739.0	738.8	739.8	739.6	739.7
22.5°	747.3	745.2	745.0	743.4	742.8	743.3	743.0	743.0
25°	756.6	754.1	753.3	751.0	749.4	749.4	748.8	748.4
27.5°	773.3	769.6	768.8	766.9	764.7	765.1	763.8	763.6
30°	792.7	789.4	786.5	783.8	781.2	780.1	778.7	778.4
32.5°	818.1	814.4	810.9	807.6	803.8	802.4	799.9	798.7
35°	849.2	844.3	840.2	837.9	834.2	832.3	830.7	832.6
37.5°	892.8	886.8	884.8	882.0	879.6	876.7	877.3	876.7
40°	953.1	947.7	945.6	940.9	940.3	937.0	939.0	937.0
42.5°	1027.6	1017.7	1016.2	1012.5	1011.3	1009.4	1010.2	1008.8
45°	1108.7	1099.8	1098.2	1092.2	1092.4	1088.0	1089.7	1089.7
47.5°	1199.9	1190.6	1183.0	1178.6	1177.0	1174.3	1175.8	1175.6
50°	1294.0	1281.4	1273.0	1264.5	1260.8	1261.8	1258.9	1263.8
52.5°	1395.1	1376.4	1364.4	1356.4	1349.4	1350.8	1351.2	1352.6
55°	1499.8	1475.8	1458.5	1448.0	1441.6	1442.0	1443.9	1445.5
57.5°	1605.0	1575.1	1551.6	1535.9	1531.8	1533.6	1533.6	1533.4
60°	1714.2	1678.3	1648.0	1630.2	1626.5	1625.5	1633.5	1630.8
62.5°	1831.4	1788.3	1756.9	1734.2	1728.8	1732.6	1739.8	1738.1
65°	1986.8	1927.2	1886.7	1864.2	1855.2	1858.9	1868.6	1868.2
67.5°	2187.2	2103.8	2050.4	2021.5	2014.9	2019.4	2024.8	2030.0
70°	2486.9	2367.8	2291.4	2228.9	2202.1	2196.9	2202.3	2202.5
71°	2592.3	2455.5	2334.0	2257.6	2213.7	2195.1	2196.5	2187.2
72.5°	2588.0	2419.4	2277.2	2197.4	2136.3	2121.4	2114.2	2103.0
75°	2413.6	2261.7	2138.4	2051.2	1992.4	1974.9	1962.1	1961.4
77.5°	2188.9	2076.8	1940.8	1848.6	1776.9	1747.8	1734.8	1734.4
80°	1759.6	1591.8	1492.3	1436.8	1350.4	1325.4	1299.0	1289.0
82.5°	1064.1	831.5	676.1	600.8	559.1	460.4	413.2	390.9
85°	247.8	176.1	121.4	79.7	57.4	45.6	35.1	31.0
87.5°	16.7	13.2	11.8	9.5	7.2	7.0	4.4	3.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)