

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: P148371

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148371  
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-E02-LED-E1-5XQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

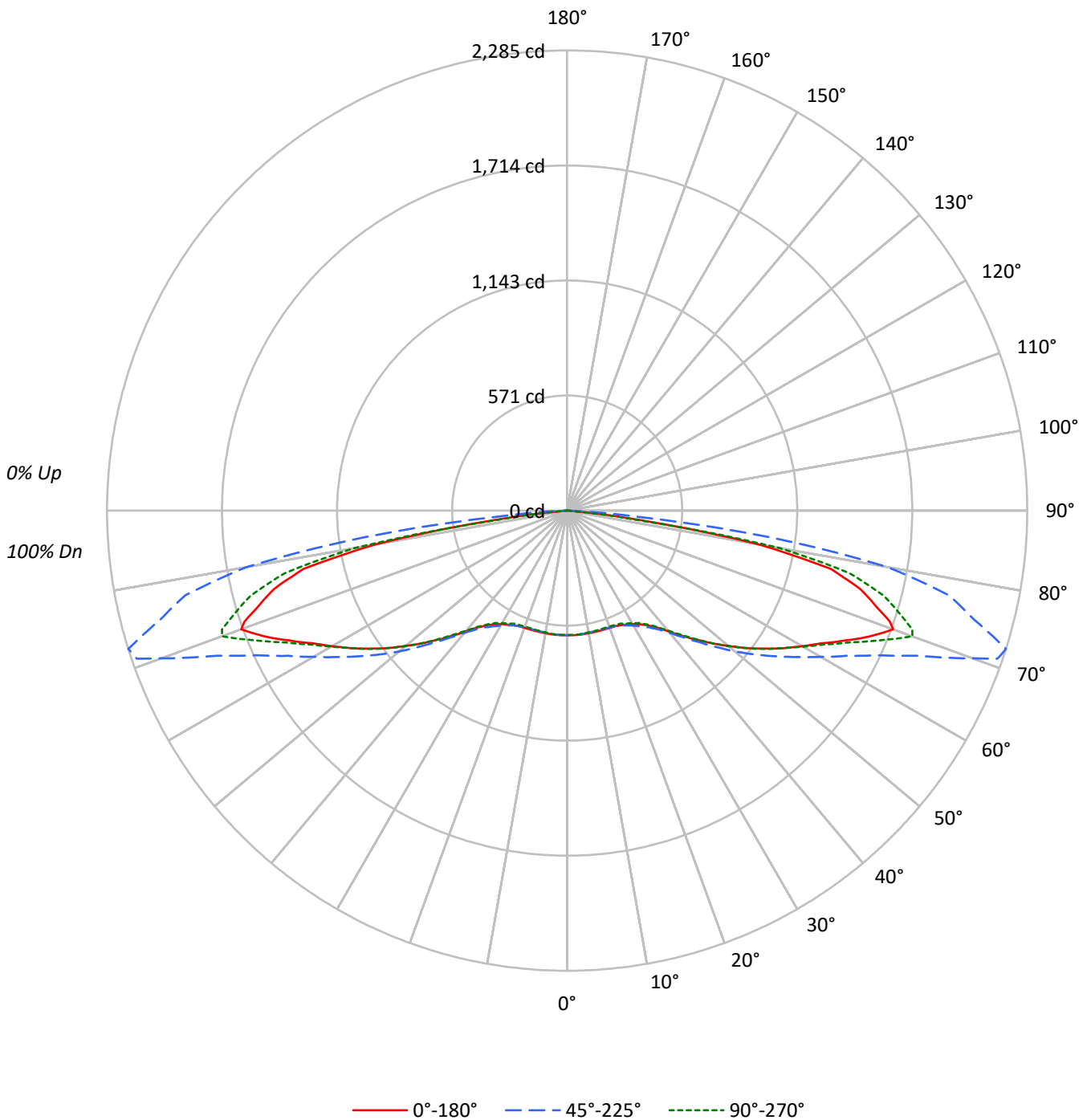
Lumens per Lamp: N/A  
Luminaire Lumens: 6526.8 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11

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

	0°	45°	90°
0°	20171	20171	20171
5°	20281	20248	20238
10°	20469	20393	20356
15°	20882	20754	20697
20°	21514	21424	21275
25°	22587	22648	22317
30°	24527	24843	24293
35°	27646	28180	27471
40°	33336	33723	33059
45°	41811	42545	41654
50°	53023	55190	53145
55°	67980	71676	68116
60°	87820	94729	88160
65°	117762	131099	119483
70°	164272	204670	174057
75°	190047	263646	204843
80°	180852	303698	200650
85°	14708	123128	9581



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.9	0.9
10°-20°	174.3	2.7
20°-30°	291.9	4.5
30°-40°	445.1	6.8
40°-50°	710.7	10.9
50°-60°	1092.7	16.7
60°-70°	1591.0	24.4
70°-80°	1792.2	27.5
80°-90°	370.0	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°	525.2	8.0
0°-40°	970.3	14.9
0°-60°	2773.6	42.5
0°-90°	6526.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6526.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	619	619	618	618	618	59
15°	618	617	615	612	613	175
25°	628	629	629	623	620	292
35°	694	699	708	695	690	443
45°	906	906	922	908	903	707
55°	1195	1199	1260	1204	1198	1076
65°	1526	1532	1699	1554	1548	1520
75°	1508	1604	2092	1736	1625	1536
85°	39	104	329	83	26	245
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°	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4
2.5°	619.4	619.8	619.6	619.2	619.4	619.2	618.9	618.8	617.5	618.2	619.3
5°	619.4	619.1	618.9	618.8	618.8	619.2	618.8	618.2	618.0	618.4	617.9
7.5°	619.1	618.4	618.0	617.9	618.1	618.2	617.7	617.0	617.6	617.0	616.4
10°	618.0	617.5	617.7	617.0	617.2	617.0	616.3	615.8	616.2	615.7	614.8
12.5°	618.4	617.5	617.4	617.0	616.8	616.7	615.8	615.0	615.2	614.8	614.0
15°	618.4	617.9	617.7	617.0	616.8	616.5	615.5	615.2	615.2	614.6	613.6
17.5°	618.8	618.4	618.4	617.6	617.2	617.0	615.8	615.3	615.8	614.8	614.2
20°	619.8	619.4	619.6	619.1	618.4	618.4	617.6	617.2	617.4	617.2	615.3
22.5°	621.8	621.8	622.1	622.0	621.8	622.0	621.3	621.3	621.5	621.5	620.0
25°	627.6	627.4	627.8	627.8	628.0	629.2	628.7	628.5	629.4	629.3	627.8
27.5°	638.6	638.2	638.6	638.9	639.8	641.3	641.0	641.5	642.8	642.5	641.1
30°	651.2	650.9	651.8	652.8	653.4	655.9	654.8	657.4	658.6	659.6	658.6
32.5°	669.7	669.7	671.2	671.9	673.5	675.8	676.2	678.3	679.8	681.5	680.3
35°	694.3	694.0	695.2	696.4	698.3	700.5	701.4	704.1	706.5	707.7	705.4
37.5°	732.0	730.1	732.3	733.0	734.6	735.0	737.4	740.8	743.4	743.0	741.5
40°	782.9	782.6	781.7	780.7	783.1	783.9	784.0	788.6	792.7	792.0	791.8
42.5°	842.4	840.9	839.8	839.9	841.2	841.6	846.9	850.3	853.2	853.9	853.2
45°	906.4	904.8	905.2	904.5	905.0	907.2	910.4	916.7	922.1	922.3	919.4
47.5°	975.2	970.4	974.1	968.8	972.0	973.8	981.4	990.7	1000.3	1002.0	999.4
50°	1044.9	1044.4	1044.1	1043.0	1044.6	1048.4	1057.8	1072.3	1081.5	1087.6	1083.6
52.5°	1121.2	1118.6	1117.4	1115.7	1117.2	1124.6	1137.8	1150.4	1167.0	1174.0	1168.4
55°	1195.4	1194.6	1190.1	1189.9	1193.2	1204.6	1219.0	1234.6	1252.5	1260.4	1258.4
57.5°	1271.7	1266.7	1265.3	1263.3	1269.8	1280.6	1298.2	1326.2	1344.9	1353.8	1348.6
60°	1346.2	1342.5	1339.6	1338.9	1343.4	1358.4	1383.7	1417.4	1440.5	1452.1	1443.9
62.5°	1426.3	1423.9	1420.4	1416.5	1426.0	1445.3	1476.8	1514.0	1548.0	1562.4	1549.9
65°	1525.8	1520.8	1517.1	1512.1	1519.8	1544.1	1583.6	1636.1	1681.8	1698.6	1689.6
67.5°	1630.8	1626.2	1626.6	1623.5	1637.1	1670.8	1721.8	1793.1	1854.4	1882.9	1866.1
70°	1722.5	1725.0	1725.7	1738.2	1761.8	1813.2	1898.0	2009.6	2102.5	2146.1	2128.1
71°	1695.5	1701.1	1709.8	1722.8	1763.5	1824.3	1940.0	2075.3	2186.1	2260.0	2235.2
72.5°	1618.8	1622.3	1626.7	1646.6	1692.6	1773.0	1892.2	2046.7	2189.2	2284.8	2256.1
75°	1508.0	1511.3	1512.8	1526.6	1568.6	1638.7	1747.8	1885.0	2010.6	2092.0	2084.0
77.5°	1340.8	1341.3	1353.3	1374.6	1421.6	1501.9	1616.8	1759.1	1877.3	1940.6	1900.3
80°	962.8	956.3	968.6	996.2	1054.3	1146.3	1264.0	1426.5	1557.6	1616.8	1554.6
82.5°	366.4	386.2	417.4	463.0	482.6	584.9	694.7	790.1	900.6	1024.0	993.1
85°	39.3	44.3	55.6	69.0	87.1	120.4	166.4	227.1	280.0	329.0	292.1
87.5°	14.7	15.0	16.8	19.3	19.7	20.5	21.9	25.5	23.8	20.5	16.6
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°	618.4	618.4	618.4	618.4	618.4	618.4	618.4	618.4
2.5°	618.4	618.6	618.4	618.6	618.6	617.9	618.0	617.7
5°	618.2	617.7	617.9	618.1	617.9	618.2	617.8	618.1
7.5°	617.4	616.3	616.7	616.7	616.4	616.8	616.5	616.4
10°	615.6	614.3	615.0	614.6	614.5	614.6	614.6	614.6
12.5°	614.1	613.2	613.4	613.2	613.1	613.6	613.4	613.6
15°	613.8	612.4	612.2	611.9	612.1	612.4	612.4	612.9
17.5°	613.4	611.7	611.6	611.2	611.4	612.0	612.2	611.9
20°	614.5	613.1	612.8	612.4	612.2	613.1	612.9	612.9
22.5°	619.2	617.5	617.4	616.0	615.5	616.0	615.6	615.7
25°	627.0	624.9	624.2	622.4	621.0	621.0	620.4	620.1
27.5°	640.8	637.7	637.0	635.5	633.6	633.9	632.9	632.8
30°	656.9	654.2	651.8	649.5	647.3	646.4	645.2	645.0
32.5°	677.9	674.8	671.9	669.2	666.1	664.9	662.8	661.8
35°	703.8	699.6	696.2	694.3	691.2	689.7	688.4	689.9
37.5°	739.8	734.8	733.1	731.0	728.9	726.5	727.0	726.5
40°	789.8	785.3	783.6	779.6	779.2	776.4	778.1	776.4
42.5°	851.5	843.3	842.1	839.0	838.0	836.5	837.2	835.9
45°	918.7	911.4	910.0	905.0	905.2	901.6	903.0	903.0
47.5°	994.3	986.6	980.2	976.6	975.3	973.1	974.3	974.2
50°	1072.3	1061.8	1054.8	1047.8	1044.8	1045.6	1043.2	1047.3
52.5°	1156.1	1140.5	1130.6	1123.9	1118.1	1119.3	1119.6	1120.8
55°	1242.8	1223.0	1208.6	1199.9	1194.6	1194.9	1196.4	1197.8
57.5°	1330.0	1305.2	1285.7	1272.7	1269.3	1270.8	1270.8	1270.6
60°	1420.5	1390.7	1365.6	1350.9	1347.8	1346.9	1353.6	1351.4
62.5°	1517.6	1481.9	1455.8	1437.1	1432.6	1435.7	1441.7	1440.3
65°	1646.4	1597.0	1563.4	1544.8	1537.3	1540.4	1548.4	1548.1
67.5°	1812.4	1743.4	1699.1	1675.1	1669.6	1673.4	1677.8	1682.2
70°	2060.8	1962.1	1898.8	1847.0	1824.8	1820.5	1824.9	1825.1
71°	2148.2	2034.8	1934.0	1870.8	1834.4	1818.9	1820.2	1812.4
72.5°	2144.6	2004.8	1887.0	1820.8	1770.2	1757.9	1751.9	1742.6
75°	2000.0	1874.2	1771.9	1699.7	1651.0	1636.4	1625.9	1625.4
77.5°	1813.8	1721.0	1608.2	1531.8	1472.4	1448.4	1437.6	1437.2
80°	1458.1	1319.1	1236.6	1190.6	1119.0	1098.2	1076.4	1068.2
82.5°	881.8	689.0	560.2	497.8	463.3	381.6	342.4	323.9
85°	205.4	145.9	100.6	66.0	47.5	37.8	29.1	25.6
87.5°	13.8	11.0	9.8	7.9	6.0	5.8	3.6	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)