

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: P148369

Luminaire Tested: **TLM-E02-LED-E1-5XQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P148369  
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-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (42) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

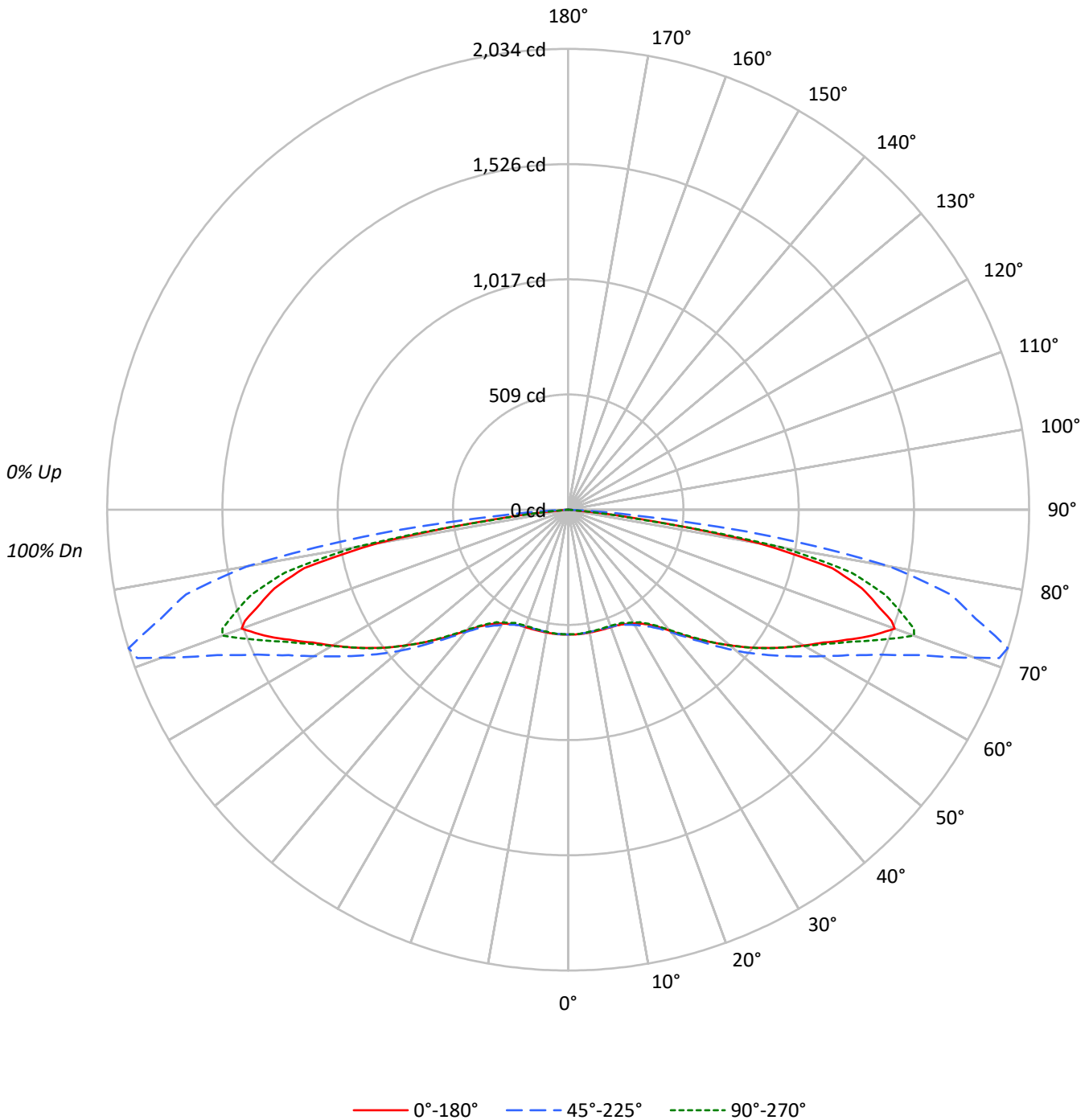
Lumens per Lamp: N/A  
Luminaire Lumens: 5809.6 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

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	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°	17953	17953	17953
5°	18054	18021	18015
10°	18223	18150	18121
15°	18586	18475	18424
20°	19147	19070	18938
25°	20108	20162	19866
30°	21834	22112	21627
35°	24608	25082	24449
40°	29674	30019	29427
45°	37217	37872	37078
50°	47197	49131	47304
55°	60507	63800	60632
60°	78172	84317	78466
65°	104827	116689	106347
70°	146219	182182	154936
75°	169165	234686	182334
80°	160978	270319	178597
85°	13099	109580	8533



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.5	0.9
10°-20°	155.2	2.7
20°-30°	259.9	4.5
30°-40°	396.2	6.8
40°-50°	632.6	10.9
50°-60°	972.6	16.7
60°-70°	1416.1	24.4
70°-80°	1595.3	27.5
80°-90°	329.3	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°	467.5	8.0
0°-40°	863.6	14.9
0°-60°	2468.8	42.5
0°-90°	5809.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5809.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	551	551	550	550	550	53
15°	550	549	547	545	546	156
25°	559	560	560	555	552	260
35°	618	623	630	619	614	395
45°	807	807	821	808	804	629
55°	1064	1067	1122	1072	1066	957
65°	1358	1364	1512	1383	1378	1353
75°	1342	1427	1862	1545	1447	1367
85°	35	92	293	74	23	218
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°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4
2.5°	551.4	551.6	551.5	551.2	551.4	551.2	550.9	550.8	549.7	550.3	551.2
5°	551.4	551.0	550.9	550.8	550.8	551.2	550.8	550.3	550.2	550.4	550.0
7.5°	551.0	550.4	550.2	550.0	550.2	550.3	549.8	549.2	549.7	549.2	548.6
10°	550.2	549.7	549.8	549.2	549.4	549.2	548.6	548.2	548.5	548.0	547.2
12.5°	550.4	549.7	549.6	549.2	549.1	548.9	548.2	547.4	547.6	547.2	546.5
15°	550.4	550.0	549.8	549.2	549.1	548.8	547.8	547.6	547.6	547.1	546.2
17.5°	550.8	550.4	550.4	549.7	549.4	549.2	548.2	547.7	548.1	547.2	546.6
20°	551.6	551.3	551.5	551.0	550.4	550.4	549.7	549.4	549.5	549.4	547.7
22.5°	553.5	553.5	553.8	553.6	553.5	553.6	553.0	553.0	553.2	553.2	551.8
25°	558.7	558.6	558.8	558.8	559.0	560.0	559.6	559.4	560.2	560.2	558.8
27.5°	568.4	568.1	568.4	568.7	569.5	570.9	570.6	571.0	572.2	571.9	570.7
30°	579.7	579.4	580.2	581.0	581.7	583.8	582.9	585.2	586.2	587.1	586.2
32.5°	596.1	596.1	597.5	598.1	599.4	601.6	601.9	603.7	605.1	606.6	605.6
35°	618.0	617.7	618.8	619.9	621.6	623.5	624.3	626.7	628.8	629.9	627.9
37.5°	651.6	649.8	651.8	652.4	653.8	654.2	656.4	659.4	661.7	661.4	660.0
40°	696.9	696.6	695.8	694.9	697.0	697.8	697.8	701.9	705.6	705.0	704.8
42.5°	749.8	748.5	747.6	747.6	748.8	749.1	753.8	756.9	759.4	760.1	759.4
45°	806.8	805.4	805.7	805.1	805.6	807.6	810.3	815.9	820.8	821.0	818.4
47.5°	868.0	863.7	867.1	862.4	865.2	866.8	873.6	881.8	890.4	891.9	889.6
50°	930.1	929.6	929.3	928.4	929.8	933.2	941.5	954.4	962.7	968.2	964.5
52.5°	998.0	995.7	994.6	993.1	994.5	1001.0	1012.8	1024.0	1038.8	1045.0	1040.0
55°	1064.0	1063.3	1059.4	1059.2	1062.1	1072.3	1085.0	1098.9	1114.9	1121.9	1120.1
57.5°	1132.0	1127.6	1126.3	1124.5	1130.2	1139.9	1155.6	1180.5	1197.1	1205.0	1200.4
60°	1198.3	1195.0	1192.4	1191.8	1195.7	1209.1	1231.6	1261.6	1282.2	1292.5	1285.2
62.5°	1269.6	1267.4	1264.4	1260.9	1269.2	1286.5	1314.4	1347.6	1377.9	1390.7	1379.6
65°	1358.2	1353.7	1350.4	1346.0	1352.8	1374.4	1409.6	1456.3	1497.0	1511.9	1504.0
67.5°	1451.6	1447.5	1447.8	1445.1	1457.2	1487.3	1532.6	1596.1	1650.6	1676.0	1661.1
70°	1533.2	1535.5	1536.1	1547.2	1568.2	1613.9	1689.4	1788.8	1871.5	1910.3	1894.3
71°	1509.2	1514.2	1521.9	1533.5	1569.7	1623.8	1726.8	1847.3	1945.9	2011.6	1989.6
72.5°	1441.0	1444.0	1448.0	1465.6	1506.6	1578.1	1684.2	1821.8	1948.6	2033.7	2008.2
75°	1342.3	1345.2	1346.6	1358.9	1396.2	1458.6	1555.7	1677.8	1789.7	1862.2	1855.0
77.5°	1193.4	1193.9	1204.6	1223.6	1265.5	1336.8	1439.1	1565.8	1671.0	1727.3	1691.5
80°	857.0	851.2	862.2	886.7	938.5	1020.4	1125.1	1269.7	1386.5	1439.1	1383.7
82.5°	326.0	343.7	371.6	412.1	429.6	520.6	618.4	703.3	801.6	911.5	884.0
85°	35.0	39.4	49.5	61.4	77.5	107.2	148.1	202.2	249.2	292.8	260.0
87.5°	13.1	13.4	14.9	17.2	17.5	18.3	19.5	22.7	21.1	18.3	14.8
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°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4
2.5°	550.4	550.6	550.4	550.6	550.6	550.0	550.2	549.8
5°	550.3	549.8	550.0	550.2	550.0	550.3	549.8	550.2
7.5°	549.6	548.6	549.0	549.0	548.7	549.1	548.8	548.6
10°	548.0	546.8	547.4	547.1	546.9	547.1	547.1	547.1
12.5°	546.6	545.8	546.0	545.8	545.7	546.2	546.0	546.2
15°	546.4	545.1	544.9	544.6	544.8	545.1	545.1	545.6
17.5°	546.0	544.5	544.4	544.1	544.2	544.8	545.0	544.6
20°	547.0	545.8	545.4	545.1	545.0	545.7	545.6	545.6
22.5°	551.2	549.6	549.5	548.3	547.8	548.3	548.0	548.0
25°	558.0	556.2	555.6	554.0	552.7	552.7	552.3	552.0
27.5°	570.4	567.7	567.1	565.6	564.0	564.3	563.4	563.2
30°	584.7	582.2	580.1	578.2	576.2	575.4	574.4	574.2
32.5°	603.4	600.7	598.1	595.6	592.9	591.8	590.0	589.1
35°	626.4	622.7	619.7	618.0	615.3	613.9	612.7	614.0
37.5°	658.5	654.1	652.6	650.6	648.8	646.6	647.1	646.6
40°	703.0	699.0	697.5	694.0	693.5	691.1	692.6	691.1
42.5°	757.9	750.6	749.6	746.8	745.9	744.5	745.1	744.1
45°	817.8	811.2	810.0	805.6	805.7	802.6	803.8	803.8
47.5°	885.0	878.2	872.6	869.4	868.2	866.2	867.2	867.0
50°	954.4	945.2	938.9	932.7	929.9	930.7	928.6	932.2
52.5°	1029.0	1015.2	1006.4	1000.4	995.2	996.3	996.6	997.7
55°	1106.2	1088.6	1075.8	1068.0	1063.3	1063.6	1065.0	1066.2
57.5°	1183.9	1161.8	1144.4	1132.8	1129.8	1131.2	1131.2	1131.0
60°	1264.4	1237.9	1215.5	1202.4	1199.7	1198.9	1204.9	1202.8
62.5°	1350.8	1319.0	1295.9	1279.2	1275.2	1277.9	1283.2	1282.0
65°	1465.5	1421.5	1391.6	1375.0	1368.3	1371.1	1378.2	1377.9
67.5°	1613.3	1551.8	1512.4	1491.1	1486.2	1489.5	1493.5	1497.3
70°	1834.3	1746.5	1690.2	1644.0	1624.2	1620.4	1624.4	1624.6
71°	1912.1	1811.2	1721.5	1665.2	1632.8	1619.1	1620.1	1613.3
72.5°	1908.9	1784.6	1679.6	1620.8	1575.7	1564.7	1559.4	1551.2
75°	1780.3	1668.2	1577.2	1513.0	1469.6	1456.6	1447.2	1446.8
77.5°	1614.5	1531.8	1431.5	1363.5	1310.6	1289.2	1279.6	1279.3
80°	1297.9	1174.1	1100.7	1059.8	996.0	977.6	958.1	950.8
82.5°	784.9	613.3	498.7	443.1	412.4	339.6	304.8	288.3
85°	182.8	129.8	89.5	58.8	42.3	33.6	25.9	22.8
87.5°	12.3	9.8	8.7	7.0	5.3	5.2	3.2	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)