

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: P148370

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148370
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6360.8 lumens
Efficiency: N/A
Efficacy: 122.1 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

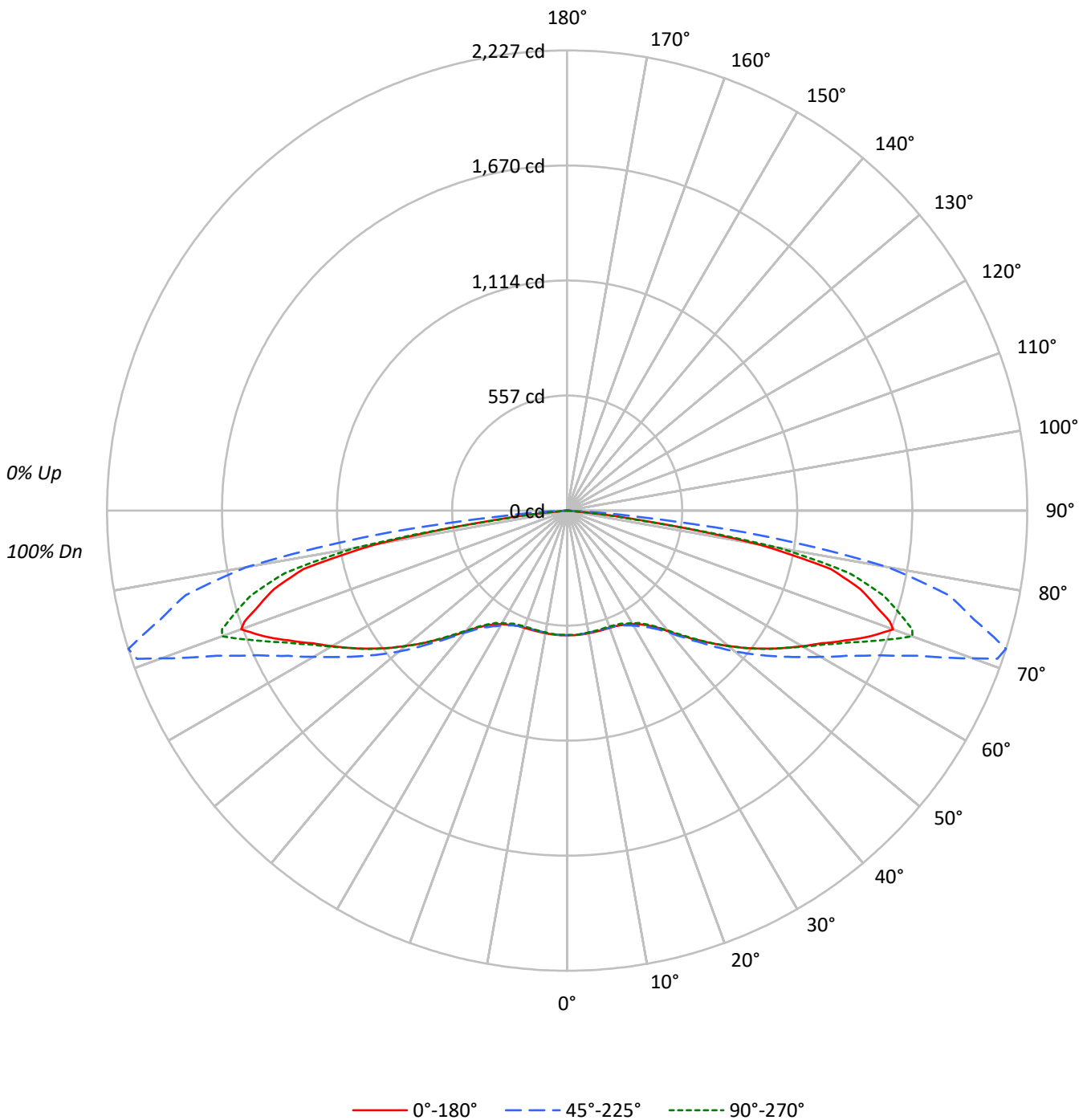
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	19659	19659	19659
5°	19767	19734	19724
10°	19949	19873	19840
15°	20349	20227	20173
20°	20966	20879	20737
25°	22015	22076	21752
30°	23902	24210	23676
35°	26942	27463	26774
40°	32488	32863	32220
45°	40750	41460	40593
50°	51678	53789	51790
55°	66251	69850	66387
60°	85589	92322	85916
65°	114768	127757	116442
70°	160095	199463	169632
75°	185208	256942	199625
80°	176268	295978	195541
85°	14371	119984	9356



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	0.9
10°-20°	169.9	2.7
20°-30°	284.5	4.5
30°-40°	433.7	6.8
40°-50°	692.6	10.9
50°-60°	1064.9	16.7
60°-70°	1550.5	24.4
70°-80°	1746.6	27.5
80°-90°	360.6	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°	511.9	8.0
0°-40°	945.6	14.9
0°-60°	2703.1	42.5
0°-90°	6360.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6360.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	604	603	603	602	602	58
15°	603	601	599	597	597	171
25°	612	613	613	607	604	285
35°	677	682	690	678	672	432
45°	883	883	899	884	880	689
55°	1165	1168	1228	1174	1167	1048
65°	1487	1493	1655	1515	1509	1482
75°	1470	1563	2039	1692	1584	1497
85°	38	101	321	81	25	239
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°	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7
2.5°	603.6	604.0	603.8	603.5	603.7	603.5	603.2	603.0	601.8	602.5	603.5
5°	603.7	603.3	603.2	603.0	603.0	603.5	603.0	602.5	602.4	602.7	602.2
7.5°	603.4	602.6	602.3	602.2	602.3	602.5	602.0	601.4	601.8	601.4	600.7
10°	602.3	601.8	602.0	601.4	601.5	601.4	600.7	600.2	600.5	600.0	599.2
12.5°	602.6	601.8	601.6	601.4	601.2	601.0	600.2	599.3	599.5	599.2	598.3
15°	602.6	602.2	602.0	601.3	601.2	600.8	599.8	599.5	599.5	599.0	598.0
17.5°	603.0	602.7	602.7	601.8	601.5	601.3	600.2	599.7	600.2	599.2	598.5
20°	604.0	603.7	603.8	603.4	602.7	602.6	601.8	601.5	601.7	601.5	599.7
22.5°	606.0	606.0	606.3	606.2	606.0	606.2	605.5	605.5	605.7	605.6	604.2
25°	611.7	611.5	611.8	611.8	612.0	613.2	612.6	612.5	613.3	613.4	611.8
27.5°	622.4	622.0	622.3	622.7	623.5	625.0	624.7	625.2	626.5	626.2	624.8
30°	634.6	634.3	635.2	636.2	636.8	639.2	638.2	640.7	641.8	642.8	641.8
32.5°	652.6	652.7	654.2	654.8	656.3	658.7	659.0	661.0	662.5	664.2	663.0
35°	676.6	676.4	677.5	678.6	680.5	682.6	683.5	686.2	688.5	689.7	687.5
37.5°	713.4	711.5	713.6	714.3	715.8	716.3	718.6	722.0	724.5	724.2	722.7
40°	763.0	762.7	761.8	760.8	763.2	764.0	764.0	768.5	772.5	771.8	771.7
42.5°	821.0	819.5	818.5	818.5	819.8	820.2	825.4	828.7	831.5	832.2	831.5
45°	883.4	881.8	882.2	881.5	882.0	884.2	887.2	893.3	898.7	898.8	896.0
47.5°	950.4	945.7	949.4	944.2	947.3	949.0	956.5	965.5	974.8	976.5	974.0
50°	1018.4	1017.8	1017.5	1016.5	1018.0	1021.7	1030.8	1045.0	1054.0	1060.0	1056.0
52.5°	1092.6	1090.2	1089.0	1087.3	1088.8	1096.0	1108.8	1121.2	1137.4	1144.2	1138.7
55°	1165.0	1164.2	1159.8	1159.7	1162.8	1174.0	1188.0	1203.2	1220.6	1228.3	1226.4
57.5°	1239.3	1234.5	1233.2	1231.2	1237.5	1248.0	1265.1	1292.5	1310.7	1319.3	1314.4
60°	1312.0	1308.4	1305.5	1304.8	1309.2	1323.8	1348.5	1381.4	1403.8	1415.2	1407.2
62.5°	1390.0	1387.6	1384.4	1380.5	1389.6	1408.5	1439.2	1475.5	1508.7	1522.6	1510.5
65°	1487.0	1482.2	1478.5	1473.7	1481.2	1504.8	1543.4	1594.5	1639.0	1655.3	1646.6
67.5°	1589.3	1584.8	1585.2	1582.2	1595.5	1628.3	1678.0	1747.5	1807.2	1835.0	1818.7
70°	1678.7	1681.2	1681.8	1694.0	1717.0	1767.0	1849.7	1958.5	2049.0	2091.5	2074.0
71°	1652.3	1657.8	1666.3	1679.0	1718.6	1777.8	1890.6	2022.5	2130.5	2202.5	2178.4
72.5°	1577.7	1581.0	1585.3	1604.6	1649.5	1727.8	1844.0	1994.7	2133.5	2226.7	2198.7
75°	1469.6	1472.8	1474.4	1487.8	1528.7	1597.0	1703.3	1837.0	1959.5	2038.8	2031.0
77.5°	1306.6	1307.2	1318.8	1339.6	1385.5	1463.7	1575.7	1714.3	1829.5	1891.2	1852.0
80°	938.4	932.0	944.0	970.8	1027.5	1117.2	1231.8	1390.2	1518.0	1575.7	1515.0
82.5°	357.0	376.3	406.8	451.2	470.3	570.0	677.0	770.0	877.7	998.0	967.8
85°	38.4	43.2	54.2	67.2	84.8	117.3	162.1	221.3	272.8	320.6	284.7
87.5°	14.4	14.7	16.3	18.8	19.2	20.0	21.3	24.8	23.2	20.0	16.2
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°	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7
2.5°	602.7	602.8	602.7	602.8	602.8	602.2	602.4	602.0
5°	602.5	602.0	602.2	602.4	602.2	602.5	602.0	602.4
7.5°	601.7	600.7	601.0	601.0	600.7	601.2	600.8	600.6
10°	600.0	598.6	599.3	599.0	598.8	599.0	599.0	599.0
12.5°	598.5	597.7	597.8	597.6	597.5	598.0	597.8	598.0
15°	598.2	596.8	596.7	596.4	596.5	596.8	596.8	597.4
17.5°	597.8	596.2	596.0	595.7	595.8	596.5	596.7	596.4
20°	598.8	597.5	597.2	596.8	596.7	597.5	597.3	597.4
22.5°	603.5	601.8	601.7	600.4	599.8	600.4	600.0	600.0
25°	611.0	609.0	608.3	606.5	605.2	605.2	604.7	604.4
27.5°	624.5	621.5	620.8	619.3	617.5	617.8	616.8	616.6
30°	640.2	637.5	635.2	633.0	630.8	630.0	628.8	628.6
32.5°	660.7	657.7	654.8	652.2	649.2	648.0	646.0	645.0
35°	685.8	681.8	678.5	676.6	673.7	672.2	670.8	672.4
37.5°	721.0	716.2	714.5	712.3	710.3	708.0	708.5	708.0
40°	769.7	765.3	763.7	759.8	759.3	756.7	758.3	756.7
42.5°	829.8	821.8	820.6	817.6	816.7	815.2	815.8	814.7
45°	895.4	888.2	886.8	882.0	882.2	878.6	880.0	880.0
47.5°	969.0	961.5	955.3	951.8	950.5	948.3	949.5	949.4
50°	1045.0	1034.8	1028.0	1021.2	1018.2	1019.0	1016.7	1020.6
52.5°	1126.7	1111.5	1101.8	1095.3	1089.7	1090.8	1091.2	1092.4
55°	1211.2	1191.8	1177.8	1169.3	1164.2	1164.5	1166.0	1167.4
57.5°	1296.2	1272.0	1253.0	1240.3	1237.0	1238.5	1238.5	1238.4
60°	1384.3	1355.3	1330.8	1316.5	1313.5	1312.7	1319.2	1317.0
62.5°	1479.0	1444.2	1418.8	1400.5	1396.2	1399.2	1405.0	1403.7
65°	1604.5	1556.3	1523.7	1505.5	1498.2	1501.2	1509.0	1508.7
67.5°	1766.4	1699.0	1655.8	1632.5	1627.2	1630.8	1635.2	1639.4
70°	2008.4	1912.2	1850.5	1800.0	1778.3	1774.2	1778.5	1778.7
71°	2093.5	1983.0	1884.8	1823.2	1787.7	1772.7	1773.8	1766.4
72.5°	2090.0	1953.8	1839.0	1774.5	1725.2	1713.2	1707.4	1698.3
75°	1949.2	1826.5	1726.8	1656.5	1609.0	1594.8	1584.5	1584.0
77.5°	1767.6	1677.2	1567.3	1492.8	1435.0	1411.5	1401.0	1400.6
80°	1421.0	1285.5	1205.2	1160.4	1090.5	1070.3	1049.0	1041.0
82.5°	859.3	671.5	546.0	485.2	451.5	371.8	333.7	315.6
85°	200.2	142.2	98.0	64.3	46.3	36.8	28.3	25.0
87.5°	13.5	10.7	9.5	7.6	5.8	5.7	3.5	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)