

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: P147330

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147330
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)
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-E1-5MQ
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

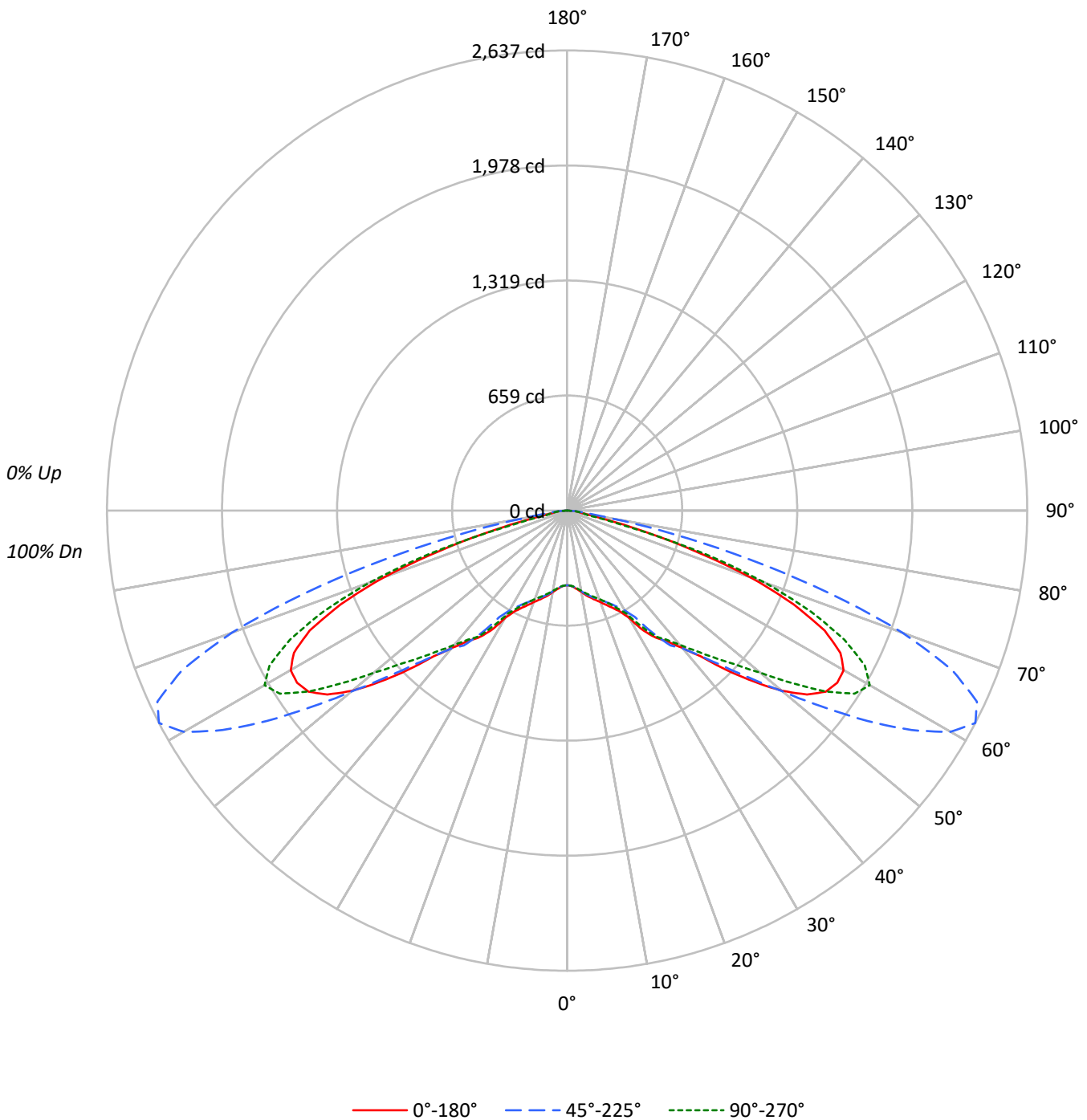
Lumens per Lamp: N/A
Luminaire Lumens: 6447.6 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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	106	100	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	78
2	93	82	73	66	90	80	72	65	76	70	64	73	67	62	70	65	61	58
3	82	68	58	50	79	67	57	49	63	55	48	60	53	47	57	51	46	44
4	73	57	46	38	70	56	46	38	53	44	37	51	43	36	48	41	36	33
5	65	49	38	30	63	48	37	30	46	36	29	43	35	29	41	34	28	26
6	59	43	32	24	57	42	31	24	40	30	23	38	29	23	36	29	23	20
7	54	37	27	20	52	37	27	19	35	26	19	33	25	19	32	24	19	16
8	49	33	23	16	47	33	23	16	31	22	16	30	22	16	28	21	16	13
9	46	30	20	14	44	29	20	14	28	20	14	27	19	14	26	19	13	11
10	42	27	18	12	41	27	18	12	25	17	12	24	17	12	23	17	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13960	13960	13960
5°	14426	14354	14318
10°	15699	15534	15458
15°	17425	17100	16928
20°	19369	18904	18744
25°	22109	21209	21378
30°	26704	24907	25762
35°	35455	34149	35013
40°	43717	43844	42720
45°	59552	57864	54953
50°	81445	81871	73377
55°	102874	119519	102743
60°	119316	165438	130602
65°	125650	199998	135321
70°	106584	194971	114566
75°	54065	136864	46970
80°	17168	47523	17281
85°	18600	24700	18974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.7
10°-20°	145.0	2.2
20°-30°	280.3	4.3
30°-40°	542.8	8.4
40°-50°	980.0	15.2
50°-60°	1704.2	26.4
60°-70°	1934.7	30.0
70°-80°	750.1	11.6
80°-90°	67.7	1.0
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°	468.2	7.3
0°-40°	1011.0	15.7
0°-60°	3695.2	57.3
0°-90°	6447.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6447.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	441	440	438	438	437	43
15°	516	512	506	503	501	147
25°	614	602	589	590	594	289
35°	890	873	858	873	879	556
45°	1291	1261	1254	1205	1191	1011
55°	1809	1896	2102	1870	1807	1593
65°	1628	1869	2591	2012	1753	1552
75°	429	600	1086	568	373	520
85°	50	71	66	71	51	49
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°	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0
2.5°	430.6	432.0	431.7	431.0	431.0	431.0	430.6	429.6	429.3	430.0	430.6
5°	440.6	440.6	440.6	440.6	440.0	440.0	439.4	438.6	439.0	438.4	438.0
7.5°	456.0	455.0	455.0	454.7	454.6	454.0	453.0	451.7	452.0	451.7	451.4
10°	474.0	474.4	473.4	474.3	472.7	472.3	471.0	470.4	470.0	469.0	469.0
12.5°	495.6	494.6	494.6	494.0	493.4	492.6	490.6	490.4	489.0	488.3	487.3
15°	516.0	515.6	514.4	513.0	512.7	512.0	509.6	508.4	508.0	506.4	505.0
17.5°	536.3	535.6	534.0	533.4	532.0	531.0	529.0	527.0	526.0	525.4	523.6
20°	558.0	557.3	555.7	554.3	552.6	551.4	548.3	546.6	545.6	544.6	543.4
22.5°	585.0	583.7	581.0	578.6	575.0	573.7	569.6	567.4	565.7	564.4	563.6
25°	614.3	614.6	611.0	608.0	603.7	600.0	595.0	592.4	590.6	589.3	589.0
27.5°	651.0	651.3	648.0	643.6	637.0	633.0	626.4	623.0	622.0	620.7	620.3
30°	709.0	706.0	700.4	693.4	687.3	678.7	669.0	665.7	662.3	661.3	661.4
32.5°	815.7	814.0	809.3	792.0	784.0	766.0	749.0	739.3	728.3	723.0	719.7
35°	890.4	889.7	886.0	880.0	875.0	871.4	861.4	859.6	857.6	857.6	860.4
37.5°	945.3	941.4	940.7	941.7	940.3	941.0	949.0	960.0	969.3	974.0	973.4
40°	1026.7	1021.0	1024.3	1022.0	1019.0	1018.4	1021.0	1025.4	1029.6	1029.7	1028.7
42.5°	1133.0	1135.7	1137.0	1127.3	1121.0	1119.4	1125.6	1124.4	1128.6	1127.0	1122.7
45°	1291.0	1289.3	1287.0	1275.4	1265.4	1257.3	1259.0	1256.6	1257.0	1254.4	1251.0
47.5°	1450.4	1456.0	1446.3	1440.6	1429.3	1423.6	1428.3	1424.3	1432.0	1418.0	1411.4
50°	1605.0	1609.0	1605.7	1597.7	1597.7	1605.7	1611.4	1618.7	1629.4	1613.4	1589.4
52.5°	1731.6	1735.0	1740.0	1746.6	1763.0	1780.0	1804.0	1829.6	1850.0	1847.0	1819.7
55°	1809.0	1813.0	1821.4	1844.4	1873.6	1918.4	1972.7	2032.3	2079.0	2101.7	2081.7
57.5°	1835.0	1838.0	1860.6	1888.4	1934.0	2000.4	2091.4	2194.4	2284.0	2341.0	2332.0
60°	1829.0	1829.0	1852.0	1890.0	1954.0	2042.0	2170.7	2313.4	2450.6	2536.0	2523.3
62.5°	1766.0	1769.4	1802.3	1848.0	1925.4	2030.6	2184.0	2366.3	2530.7	2636.6	2626.3
65°	1628.0	1630.4	1666.0	1720.4	1806.7	1931.4	2099.0	2301.0	2489.4	2591.3	2572.0
67.5°	1405.0	1407.3	1436.4	1497.7	1589.0	1719.4	1900.3	2122.6	2307.0	2387.7	2329.6
70°	1117.6	1124.4	1143.0	1208.0	1277.4	1405.0	1571.7	1794.0	1968.0	2044.4	1980.4
72.5°	761.7	778.7	801.3	859.0	925.4	1031.3	1164.0	1351.3	1491.0	1579.4	1522.4
75°	429.0	453.0	460.0	503.6	558.3	642.0	739.0	873.4	1014.4	1086.0	1017.4
77.5°	185.4	205.0	213.7	234.0	276.6	311.6	370.7	461.4	570.3	620.7	538.4
80°	91.4	96.0	99.6	106.0	118.0	129.4	157.3	197.0	241.6	253.0	201.3
82.5°	70.6	74.0	80.4	85.3	88.4	91.3	94.0	99.4	103.7	106.0	100.0
85°	49.7	54.0	61.0	66.7	70.0	72.3	74.7	76.4	72.4	66.0	69.4
87.5°	13.0	17.0	23.7	25.6	29.0	30.6	30.0	31.0	28.0	20.3	22.6
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°	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0
2.5°	430.4	430.0	430.4	430.3	430.4	430.0	430.0	430.0
5°	438.0	438.0	438.3	437.6	437.7	438.0	437.6	437.3
7.5°	451.0	450.6	450.7	450.4	450.6	450.4	450.3	450.0
10°	468.4	467.7	468.0	467.0	467.0	466.6	466.6	466.7
12.5°	487.0	486.0	486.4	485.4	483.6	484.0	484.3	484.0
15°	505.0	504.0	503.0	502.4	501.4	501.6	501.7	501.3
17.5°	523.4	521.4	521.0	520.0	519.7	519.6	519.6	520.0
20°	542.3	541.0	540.6	539.6	539.4	540.3	540.6	540.0
22.5°	562.6	562.0	562.6	562.0	563.0	563.6	564.0	563.3
25°	588.4	587.6	588.6	591.0	592.3	593.0	594.6	594.0
27.5°	621.4	620.6	623.0	626.4	628.4	631.6	633.3	634.0
30°	664.0	667.0	668.3	675.0	676.3	681.7	681.6	684.0
32.5°	726.0	731.7	741.7	752.0	766.3	776.6	776.7	782.0
35°	862.0	864.4	872.0	873.6	876.6	880.0	876.6	879.3
37.5°	966.4	956.0	948.6	938.4	932.0	932.0	932.6	932.0
40°	1019.6	1015.6	1012.3	1003.6	1002.4	1002.0	1002.0	1003.3
42.5°	1115.0	1105.3	1100.0	1092.7	1090.4	1089.7	1089.4	1090.0
45°	1239.0	1223.3	1209.0	1201.6	1195.3	1189.4	1191.4	1191.3
47.5°	1383.4	1359.0	1335.6	1323.0	1312.0	1307.0	1303.7	1302.7
50°	1559.0	1525.0	1495.0	1471.3	1455.4	1455.0	1456.6	1446.0
52.5°	1774.4	1720.6	1683.4	1651.4	1636.4	1634.6	1629.4	1623.3
55°	2013.0	1949.4	1887.6	1853.4	1833.6	1823.0	1816.6	1806.7
57.5°	2259.0	2173.4	2084.6	2029.6	1995.0	1971.0	1958.3	1952.7
60°	2448.6	2331.6	2214.6	2126.4	2068.7	2033.0	2011.0	2002.0
62.5°	2523.4	2364.7	2214.6	2098.7	2015.4	1966.0	1936.4	1923.3
65°	2434.4	2246.4	2075.7	1947.7	1854.6	1799.6	1767.4	1753.3
67.5°	2185.6	2019.6	1834.0	1706.6	1611.0	1556.6	1521.6	1511.3
70°	1832.3	1662.7	1485.4	1371.7	1286.3	1242.0	1205.6	1201.3
72.5°	1377.0	1230.7	1078.6	984.6	916.0	842.7	824.0	833.3
75°	882.7	745.7	610.3	525.6	463.0	393.0	366.0	372.7
77.5°	418.0	323.6	233.6	180.7	151.7	129.6	124.0	120.7
80°	155.0	125.6	111.0	105.4	101.3	97.7	95.0	92.0
82.5°	100.4	98.0	95.0	94.0	91.0	86.4	77.7	74.0
85°	75.0	75.0	71.0	71.3	69.0	63.0	55.0	50.7
87.5°	22.0	19.6	18.0	16.7	16.3	14.6	10.7	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)