

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: P147331

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147331
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-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

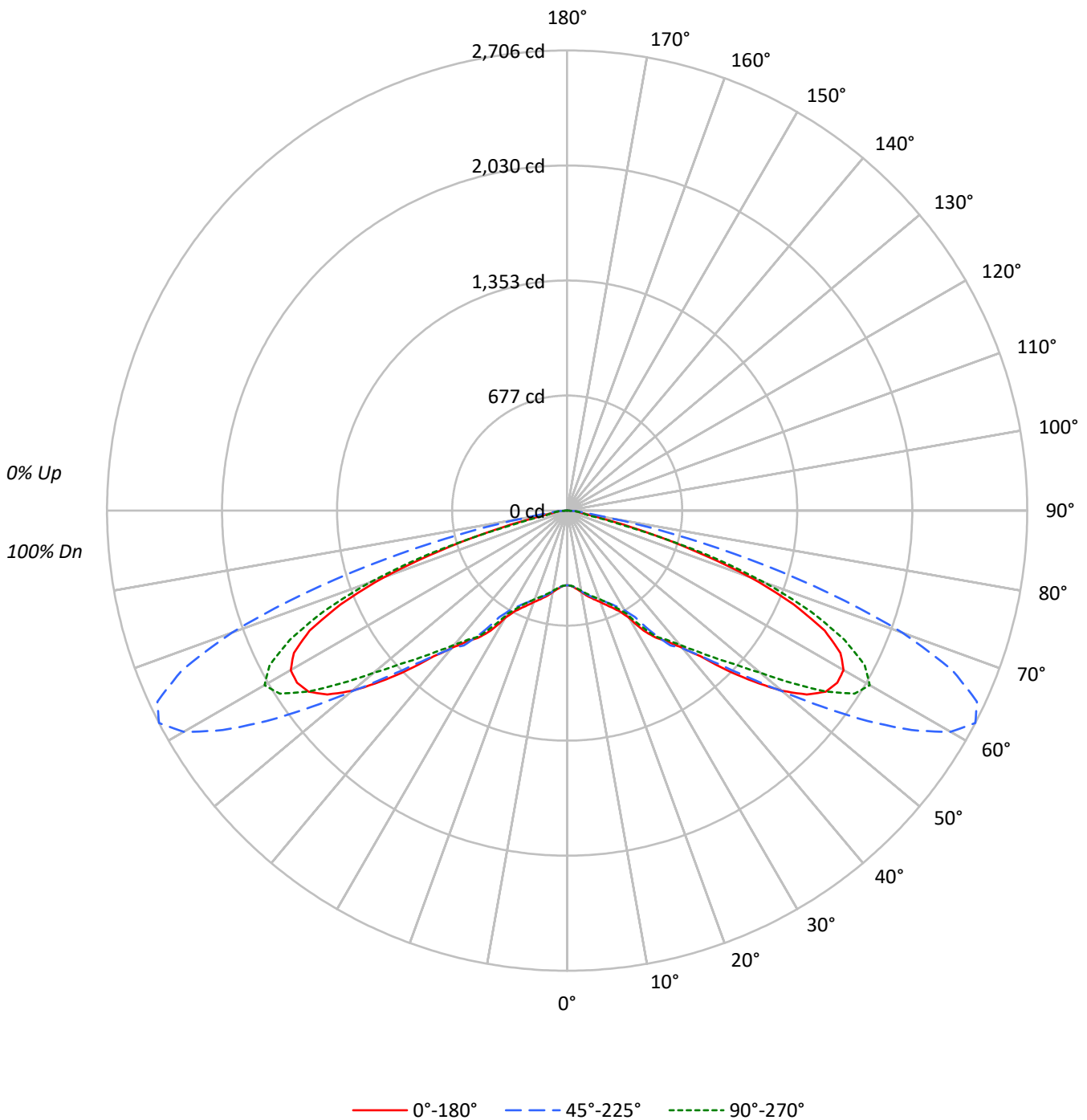
Lumens per Lamp: N/A
Luminaire Lumens: 6615.9 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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°	14326	14326	14326
5°	14806	14728	14695
10°	16110	15938	15858
15°	17880	17546	17371
20°	19876	19400	19234
25°	22688	21763	21936
30°	27401	25559	26436
35°	36379	35041	35929
40°	44853	44990	43836
45°	61107	59372	56388
50°	83571	84002	75290
55°	105558	122635	105421
60°	122435	169757	134014
65°	128930	205223	138856
70°	109369	200054	117561
75°	55477	140443	48192
80°	17619	48763	17732
85°	19087	25337	19461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	0.7
10°-20°	148.8	2.2
20°-30°	287.7	4.3
30°-40°	556.9	8.4
40°-50°	1005.6	15.2
50°-60°	1748.6	26.4
60°-70°	1985.2	30.0
70°-80°	769.6	11.6
80°-90°	69.4	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°	480.4	7.3
0°-40°	1037.4	15.7
0°-60°	3791.6	57.3
0°-90°	6615.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6615.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	439	439	439	439	439	
5°	452	451	450	449	449	44
15°	530	526	520	516	514	151
25°	630	618	605	605	610	297
35°	914	896	880	896	902	571
45°	1325	1294	1287	1237	1222	1038
55°	1856	1946	2156	1919	1854	1634
65°	1670	1918	2659	2064	1799	1593
75°	440	616	1114	583	382	533
85°	51	73	68	73	52	50
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°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2
2.5°	442.0	443.2	442.9	442.2	442.2	442.2	441.9	440.9	440.6	441.2	441.9
5°	452.2	452.2	452.2	452.2	451.5	451.4	450.8	450.1	450.5	449.8	449.4
7.5°	467.9	466.9	466.9	466.6	466.6	465.9	464.8	463.5	463.8	463.5	463.1
10°	486.4	486.7	485.6	486.7	485.0	484.6	483.3	482.6	482.2	481.2	481.2
12.5°	508.6	507.6	507.6	506.9	506.2	505.5	503.4	503.2	501.8	501.0	500.0
15°	529.5	529.2	527.8	526.4	526.0	525.3	523.0	521.6	521.3	519.6	518.2
17.5°	550.4	549.6	548.0	547.2	545.9	544.8	542.8	540.8	539.8	539.0	537.4
20°	572.6	571.8	570.2	568.8	567.1	565.8	562.6	560.9	559.9	558.9	557.5
22.5°	600.3	598.9	596.2	593.8	590.0	588.6	584.6	582.2	580.4	579.0	578.4
25°	630.4	630.7	627.0	623.9	619.4	615.7	610.5	607.8	606.1	604.7	604.4
27.5°	668.0	668.3	665.0	660.4	653.7	649.5	642.7	639.3	638.2	636.9	636.6
30°	727.5	724.4	718.6	711.4	705.3	696.4	686.4	683.0	679.6	678.6	678.6
32.5°	837.0	835.2	830.4	812.6	804.5	786.0	768.6	758.6	747.4	741.9	738.4
35°	913.6	912.9	909.2	903.0	897.8	894.1	883.8	882.1	880.0	880.0	882.8
37.5°	970.0	965.9	965.2	966.2	964.9	965.6	973.8	985.0	994.6	999.4	998.8
40°	1053.4	1047.7	1051.0	1048.7	1045.6	1044.9	1047.7	1052.1	1056.6	1056.6	1055.6
42.5°	1162.6	1165.3	1166.7	1156.8	1150.3	1148.6	1155.0	1153.7	1158.1	1156.4	1152.0
45°	1324.7	1323.0	1320.6	1308.6	1298.4	1290.2	1291.8	1289.4	1289.8	1287.1	1283.6
47.5°	1488.2	1494.0	1484.1	1478.3	1466.6	1460.8	1465.6	1461.5	1469.4	1455.0	1448.2
50°	1646.9	1651.0	1647.6	1639.4	1639.4	1647.6	1653.4	1661.0	1671.8	1655.4	1630.8
52.5°	1776.8	1780.3	1785.4	1792.2	1809.0	1826.5	1851.1	1877.4	1898.3	1895.2	1867.2
55°	1856.2	1860.4	1868.9	1892.4	1922.6	1968.4	2024.2	2085.4	2133.3	2156.5	2136.0
57.5°	1882.9	1886.0	1909.2	1937.6	1984.5	2052.6	2145.9	2251.6	2343.6	2402.1	2392.9
60°	1876.8	1876.8	1900.4	1939.3	2005.0	2095.3	2227.3	2373.8	2514.6	2602.2	2589.2
62.5°	1812.1	1815.6	1849.4	1896.2	1975.6	2083.7	2241.0	2428.1	2596.8	2705.5	2694.9
65°	1670.5	1672.9	1709.5	1765.2	1853.8	1981.8	2153.8	2361.1	2554.3	2659.0	2639.2
67.5°	1441.7	1444.1	1473.9	1536.8	1630.4	1764.2	1950.0	2178.1	2367.2	2450.0	2390.5
70°	1146.8	1153.7	1172.8	1239.5	1310.7	1441.7	1612.7	1840.8	2019.4	2097.7	2032.0
72.5°	781.6	799.0	822.2	881.4	949.5	1058.2	1194.4	1386.6	1529.9	1620.6	1562.0
75°	440.2	464.8	472.0	516.8	572.9	658.8	758.3	896.2	1040.8	1114.4	1043.9
77.5°	190.2	210.4	219.2	240.1	283.9	319.8	380.3	473.4	585.2	636.8	552.4
80°	93.8	98.5	102.3	108.8	121.1	132.7	161.4	202.2	248.0	259.6	206.6
82.5°	72.6	76.0	82.4	87.6	90.6	93.7	96.4	102.0	106.4	108.8	102.6
85°	51.0	55.4	62.6	68.4	71.8	74.2	76.6	78.4	74.2	67.7	71.2
87.5°	13.4	17.4	24.3	26.4	29.8	31.4	30.8	31.8	28.8	20.8	23.2
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°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2
2.5°	441.6	441.2	441.6	441.6	441.6	441.2	441.2	441.2
5°	449.4	449.4	449.8	449.0	449.1	449.4	449.1	448.8
7.5°	462.8	462.4	462.4	462.1	462.4	462.1	462.1	461.7
10°	480.6	479.9	480.2	479.2	479.2	478.8	478.8	478.8
12.5°	499.7	498.6	499.0	498.0	496.3	496.6	497.0	496.6
15°	518.2	517.2	516.1	515.4	514.4	514.8	514.8	514.4
17.5°	537.0	535.0	534.6	533.6	533.2	533.2	533.2	533.6
20°	556.5	555.2	554.8	553.8	553.4	554.4	554.8	554.1
22.5°	577.4	576.7	577.4	576.7	577.7	578.4	578.8	578.0
25°	603.7	603.0	604.0	606.4	607.8	608.5	610.2	609.5
27.5°	637.6	636.9	639.2	642.7	644.8	648.2	649.8	650.6
30°	681.3	684.4	685.8	692.6	694.0	699.4	699.4	701.9
32.5°	744.9	750.8	761.0	771.7	786.3	797.0	797.0	802.4
35°	884.5	886.9	894.8	896.4	899.6	903.0	899.6	902.3
37.5°	991.6	981.0	973.4	962.8	956.3	956.4	957.0	956.3
40°	1046.3	1042.2	1038.8	1029.8	1028.5	1028.2	1028.2	1029.5
42.5°	1144.2	1134.2	1128.7	1121.2	1118.8	1118.2	1117.8	1118.5
45°	1271.4	1255.3	1240.6	1233.0	1226.6	1220.4	1222.4	1222.4
47.5°	1419.4	1394.5	1370.6	1357.6	1346.2	1341.1	1337.7	1336.7
50°	1599.7	1564.8	1534.0	1509.8	1493.3	1493.0	1494.7	1483.7
52.5°	1820.6	1765.6	1727.2	1694.4	1679.0	1677.4	1671.8	1665.7
55°	2065.6	2000.2	1936.9	1901.8	1881.5	1870.6	1864.1	1853.8
57.5°	2318.0	2230.1	2139.1	2082.6	2047.0	2022.4	2009.4	2003.6
60°	2512.6	2392.6	2272.5	2181.9	2122.6	2086.0	2063.5	2054.3
62.5°	2589.2	2426.4	2272.5	2153.4	2068.0	2017.3	1986.9	1973.5
65°	2497.9	2305.0	2129.8	1998.5	1903.1	1846.6	1813.4	1799.1
67.5°	2242.7	2072.4	1881.8	1751.2	1653.0	1597.3	1561.4	1550.8
70°	1880.2	1706.1	1524.2	1407.5	1319.9	1274.4	1237.2	1232.7
72.5°	1412.9	1262.8	1106.8	1010.4	939.9	864.7	845.6	855.1
75°	905.7	765.1	626.3	539.4	475.1	403.2	375.5	382.4
77.5°	428.9	332.1	239.8	185.4	155.6	133.0	127.2	123.8
80°	159.0	129.0	113.9	108.0	104.0	100.2	97.5	94.4
82.5°	103.0	100.6	97.5	96.4	93.4	88.6	79.7	75.9
85°	77.0	77.0	72.8	73.2	70.8	64.6	56.4	52.0
87.5°	22.6	20.2	18.4	17.1	16.8	15.0	10.9	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)