

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: P147336

Luminaire Tested: **TLM-F02-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147336
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-F02-LED-E1-5MQ-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5461.6 lumens
Efficiency: N/A
Efficacy: 99.3 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

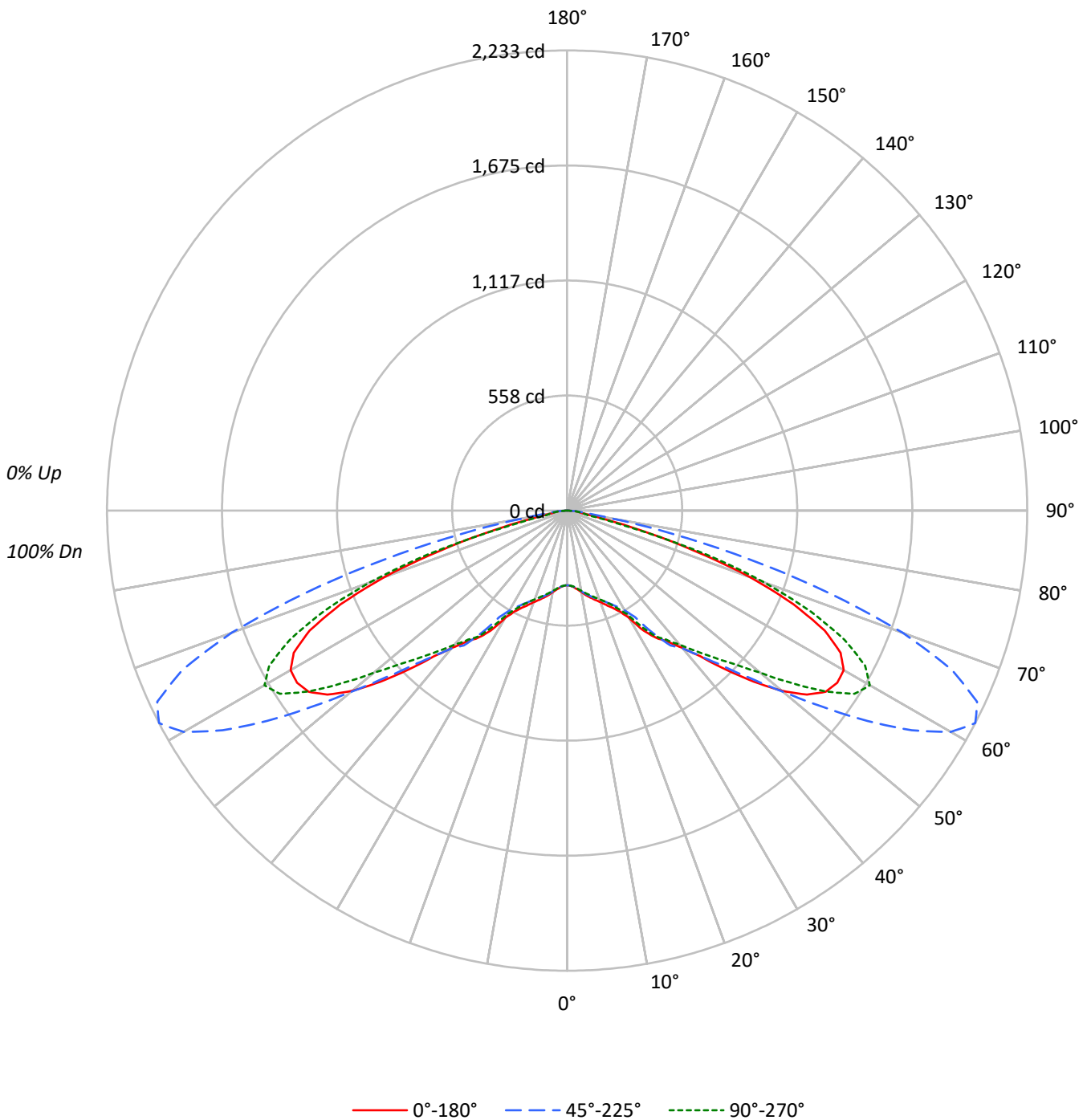
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11824	11824	11824
5°	12220	12157	12131
10°	13298	13156	13093
15°	14760	14487	14342
20°	16405	16016	15877
25°	18729	17966	18110
30°	22621	21099	21822
35°	30032	28929	29661
40°	37027	37138	36188
45°	50446	49012	46548
50°	68992	69347	62157
55°	87144	101236	87030
60°	101070	140140	110627
65°	106432	169411	114629
70°	90295	165159	97047
75°	45798	115931	39786
80°	14539	40254	14633
85°	15756	20921	16055



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	0.7
10°-20°	122.8	2.2
20°-30°	237.5	4.3
30°-40°	459.8	8.4
40°-50°	830.2	15.2
50°-60°	1443.5	26.4
60°-70°	1638.8	30.0
70°-80°	635.4	11.6
80°-90°	57.3	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°	396.6	7.3
0°-40°	856.4	15.7
0°-60°	3130.1	57.3
0°-90°	5461.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5461.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	373	373	371	371	370	37
15°	437	434	429	426	425	125
25°	520	510	499	500	503	245
35°	754	740	726	739	745	471
45°	1094	1068	1062	1021	1009	857
55°	1532	1606	1780	1584	1530	1349
65°	1379	1583	2195	1704	1485	1315
75°	363	508	920	481	316	440
85°	42	60	56	60	43	41
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°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	364.8	365.9	365.6	365.0	365.0	365.1	364.8	364.0	363.6	364.2	364.8
5°	373.2	373.2	373.2	373.2	372.7	372.7	372.2	371.6	371.9	371.3	371.0
7.5°	386.2	385.4	385.4	385.1	385.2	384.5	383.8	382.6	382.9	382.6	382.3
10°	401.5	401.8	401.0	401.8	400.4	400.1	399.0	398.4	398.1	397.2	397.2
12.5°	419.9	419.0	419.0	418.4	417.9	417.4	415.6	415.4	414.2	413.6	412.8
15°	437.1	436.8	435.7	434.6	434.3	433.7	431.7	430.6	430.3	429.0	427.8
17.5°	454.4	453.8	452.4	451.8	450.6	449.8	448.1	446.4	445.6	445.0	443.6
20°	472.6	472.1	470.7	469.6	468.2	467.0	464.5	463.1	462.2	461.4	460.2
22.5°	495.6	494.4	492.2	490.2	487.0	486.0	482.6	480.6	479.2	478.0	477.4
25°	520.4	520.7	517.6	515.0	511.4	508.2	504.0	501.8	500.4	499.2	498.9
27.5°	551.4	551.8	548.9	545.2	539.6	536.2	530.6	527.7	526.8	525.8	525.4
30°	600.6	598.0	593.2	587.3	582.2	574.9	566.7	563.8	561.0	560.2	560.2
32.5°	691.0	689.5	685.6	670.8	664.2	648.8	634.5	626.2	617.0	612.4	609.6
35°	754.2	753.6	750.5	745.4	741.2	738.0	729.6	728.2	726.5	726.5	728.8
37.5°	800.8	797.4	796.8	797.6	796.6	797.1	803.8	813.2	821.1	825.0	824.5
40°	869.6	864.8	867.7	865.8	863.2	862.6	864.8	868.6	872.2	872.2	871.4
42.5°	959.8	962.0	963.1	954.9	949.6	948.2	953.6	952.4	956.0	954.6	951.0
45°	1093.6	1092.2	1090.2	1080.3	1071.8	1065.1	1066.4	1064.5	1064.8	1062.5	1059.7
47.5°	1228.6	1233.4	1225.2	1220.4	1210.8	1206.0	1209.9	1206.5	1213.0	1201.2	1195.5
50°	1359.6	1363.0	1360.1	1353.4	1353.4	1360.2	1364.9	1371.2	1380.2	1366.6	1346.2
52.5°	1466.8	1469.7	1474.0	1479.6	1493.4	1507.8	1528.2	1549.8	1567.1	1564.6	1541.4
55°	1532.4	1535.8	1542.8	1562.3	1587.1	1625.0	1671.0	1721.6	1761.0	1780.2	1763.4
57.5°	1554.4	1556.9	1576.2	1599.6	1638.2	1694.4	1771.5	1858.8	1934.7	1983.0	1975.4
60°	1549.3	1549.3	1568.8	1600.9	1655.2	1729.7	1838.8	1959.6	2075.9	2148.2	2137.4
62.5°	1495.9	1498.8	1526.7	1565.4	1630.9	1720.1	1850.0	2004.4	2143.6	2233.4	2224.7
65°	1379.0	1381.0	1411.2	1457.2	1530.4	1635.9	1778.0	1949.1	2108.6	2195.0	2178.6
67.5°	1190.2	1192.1	1216.7	1268.6	1346.1	1456.4	1609.7	1798.0	1954.2	2022.5	1973.4
70°	946.8	952.4	968.2	1023.3	1082.0	1190.2	1331.3	1519.6	1667.0	1731.8	1677.4
72.5°	645.2	659.6	678.8	727.7	783.8	873.6	986.0	1144.7	1263.0	1337.8	1289.5
75°	363.4	383.8	389.6	426.6	473.0	543.8	626.0	739.8	859.2	919.9	861.8
77.5°	157.0	173.6	181.0	198.2	234.4	264.0	314.0	390.8	483.1	525.8	456.0
80°	77.4	81.3	84.4	89.8	100.0	109.6	133.3	166.9	204.7	214.3	170.6
82.5°	59.8	62.6	68.0	72.2	74.8	77.4	79.6	84.2	87.8	89.8	84.7
85°	42.1	45.8	51.6	56.4	59.3	61.3	63.2	64.6	61.2	55.9	58.8
87.5°	11.0	14.4	20.0	21.8	24.6	26.0	25.4	26.2	23.7	17.2	19.2
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°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	364.5	364.2	364.5	364.6	364.5	364.2	364.2	364.2
5°	371.0	371.0	371.3	370.8	370.8	371.0	370.8	370.5
7.5°	382.0	381.8	381.8	381.4	381.8	381.4	381.4	381.2
10°	396.8	396.2	396.4	395.6	395.6	395.3	395.3	395.3
12.5°	412.6	411.7	412.0	411.1	409.7	410.0	410.2	410.0
15°	427.8	427.0	426.1	425.6	424.7	425.0	425.0	424.7
17.5°	443.3	441.6	441.4	440.4	440.2	440.2	440.2	440.5
20°	459.4	458.2	458.0	457.2	456.8	457.7	458.0	457.4
22.5°	476.6	476.0	476.6	476.0	476.9	477.5	477.8	477.2
25°	498.4	497.8	498.6	500.6	501.8	502.4	503.8	503.2
27.5°	526.4	525.8	527.8	530.6	532.2	535.1	536.5	537.0
30°	562.4	565.0	566.1	571.8	572.9	577.4	577.4	579.4
32.5°	615.0	619.8	628.2	637.0	649.1	657.9	657.8	662.4
35°	730.2	732.2	738.6	740.1	742.6	745.4	742.6	744.9
37.5°	818.6	809.8	803.6	794.8	789.5	789.5	790.0	789.5
40°	863.8	860.4	857.5	850.2	849.0	848.8	848.8	849.9
42.5°	944.5	936.3	931.8	925.6	923.6	923.0	922.8	923.3
45°	1049.6	1036.2	1024.2	1017.9	1012.6	1007.4	1009.2	1009.1
47.5°	1171.8	1151.2	1131.4	1120.6	1111.4	1107.1	1104.3	1103.5
50°	1320.6	1291.8	1266.4	1246.4	1232.8	1232.5	1233.9	1224.9
52.5°	1503.0	1457.6	1425.9	1398.8	1386.1	1384.7	1380.2	1375.1
55°	1705.2	1651.2	1598.9	1569.9	1553.2	1544.2	1538.8	1530.4
57.5°	1913.6	1841.0	1765.9	1719.2	1690.0	1669.6	1658.8	1654.1
60°	2074.2	1975.1	1876.0	1801.2	1752.3	1722.1	1703.4	1695.8
62.5°	2137.4	2003.0	1876.0	1777.7	1707.2	1665.4	1640.2	1629.2
65°	2062.1	1902.8	1758.2	1649.8	1571.0	1524.4	1497.1	1485.2
67.5°	1851.4	1710.8	1553.6	1445.7	1364.6	1318.6	1289.0	1280.2
70°	1552.1	1408.4	1258.2	1161.9	1089.6	1052.1	1021.3	1017.6
72.5°	1166.4	1042.4	913.8	834.1	775.9	713.8	698.0	705.9
75°	747.7	631.7	517.0	445.3	392.2	332.9	310.0	315.7
77.5°	354.0	274.2	198.0	153.0	128.5	109.8	105.0	102.2
80°	131.3	106.4	94.0	89.2	85.8	82.8	80.4	77.9
82.5°	85.0	83.0	80.5	79.6	77.1	73.2	65.8	62.7
85°	63.5	63.5	60.2	60.4	58.4	53.4	46.6	42.9
87.5°	18.6	16.6	15.2	14.1	13.8	12.4	9.0	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)