

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: P147329

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147329
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-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

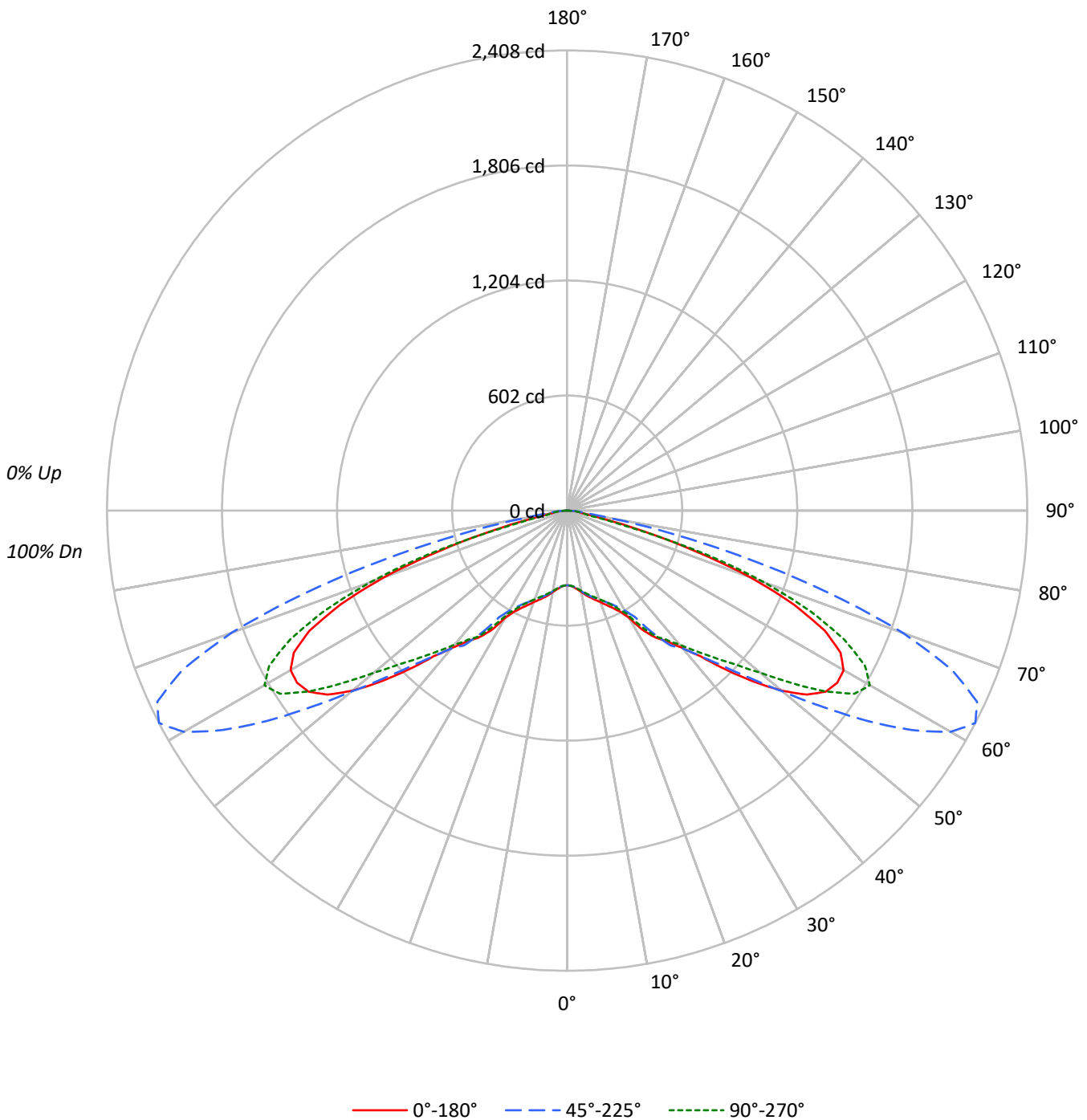
Lumens per Lamp: N/A
Luminaire Lumens: 5888.9 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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°	12750	12750	12750
5°	13179	13110	13077
10°	14341	14189	14116
15°	15912	15615	15463
20°	17689	17265	17120
25°	20194	19370	19525
30°	24391	22749	23529
35°	32381	31194	31979
40°	39927	40042	39020
45°	54395	52845	50193
50°	74386	74777	67018
55°	93957	109163	93837
60°	108976	151099	119284
65°	114760	182671	123597
70°	97352	178072	104638
75°	49377	125005	42899
80°	15666	43410	15778
85°	16991	22567	17328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.7
10°-20°	132.4	2.2
20°-30°	256.0	4.3
30°-40°	495.7	8.4
40°-50°	895.1	15.2
50°-60°	1556.5	26.4
60°-70°	1767.0	30.0
70°-80°	685.1	11.6
80°-90°	61.8	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°	427.6	7.3
0°-40°	923.4	15.7
0°-60°	3375.0	57.3
0°-90°	5888.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5888.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	402	402	400	400	399	39
15°	471	468	462	459	458	135
25°	561	550	538	539	542	264
35°	813	798	783	797	803	508
45°	1179	1152	1146	1101	1088	924
55°	1652	1732	1920	1708	1650	1455
65°	1487	1707	2367	1837	1601	1418
75°	392	548	992	519	340	475
85°	45	65	60	65	46	45
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°	390.9	390.9	390.9	390.9	390.9	390.9	390.9	390.9	390.9	390.9	390.9
2.5°	393.4	394.6	394.3	393.7	393.7	393.6	393.4	392.5	392.2	392.8	393.4
5°	402.5	402.5	402.5	402.5	401.9	401.9	401.3	400.6	401.0	400.4	400.0
7.5°	416.5	415.6	415.6	415.2	415.3	414.7	413.8	412.6	412.8	412.5	412.2
10°	433.0	433.2	432.3	433.2	431.8	431.4	430.2	429.6	429.2	428.4	428.4
12.5°	452.7	451.8	451.8	451.2	450.6	450.0	448.2	447.8	446.6	446.0	445.1
15°	471.2	471.0	469.8	468.6	468.2	467.6	465.5	464.3	464.0	462.4	461.2
17.5°	489.8	489.2	487.7	487.1	485.9	485.0	483.2	481.4	480.4	479.8	478.3
20°	509.6	509.0	507.5	506.3	504.8	503.6	500.8	499.3	498.4	497.4	496.2
22.5°	534.3	533.1	530.7	528.6	525.2	524.0	520.3	518.2	516.7	515.4	514.8
25°	561.1	561.4	558.0	555.3	551.4	548.0	543.4	541.0	539.5	538.2	538.0
27.5°	594.6	594.9	591.8	587.9	581.8	578.2	572.0	569.0	568.1	566.8	566.6
30°	647.6	644.8	639.6	633.2	627.8	619.8	611.0	608.0	605.0	604.0	604.0
32.5°	745.0	743.5	739.2	723.3	716.0	699.6	684.1	675.2	665.2	660.4	657.3
35°	813.2	812.6	809.2	803.8	799.2	795.8	786.7	785.2	783.4	783.4	785.8
37.5°	863.4	859.8	859.2	860.0	858.9	859.4	866.8	876.8	885.4	889.6	889.0
40°	937.7	932.6	935.6	933.4	930.7	930.1	932.6	936.5	940.4	940.4	939.6
42.5°	1034.8	1037.2	1038.5	1029.6	1023.9	1022.3	1028.1	1026.9	1030.8	1029.4	1025.4
45°	1179.2	1177.6	1175.5	1164.8	1155.7	1148.4	1149.9	1147.8	1148.1	1145.6	1142.6
47.5°	1324.6	1329.8	1321.0	1315.8	1305.4	1300.3	1304.6	1301.0	1307.9	1295.2	1289.0
50°	1465.9	1469.6	1466.6	1459.2	1459.2	1466.6	1471.8	1478.4	1488.2	1473.6	1451.6
52.5°	1581.6	1584.6	1589.2	1595.3	1610.2	1625.8	1647.7	1671.1	1689.7	1687.0	1662.0
55°	1652.2	1655.9	1663.5	1684.6	1711.4	1752.2	1801.8	1856.2	1898.8	1919.6	1901.3
57.5°	1676.0	1678.7	1699.4	1724.7	1766.4	1827.0	1910.2	2004.2	2086.1	2138.1	2129.9
60°	1670.5	1670.6	1691.5	1726.2	1784.7	1865.0	1982.6	2112.8	2238.3	2316.2	2304.7
62.5°	1613.0	1616.0	1646.2	1687.9	1758.5	1854.7	1994.8	2161.3	2311.4	2408.2	2398.8
65°	1486.9	1489.0	1521.6	1571.2	1650.2	1764.0	1917.1	2101.6	2273.6	2366.8	2349.1
67.5°	1283.2	1285.4	1311.8	1367.9	1451.4	1570.4	1735.6	1938.8	2107.1	2180.8	2127.8
70°	1020.8	1026.9	1044.0	1103.4	1166.6	1283.2	1435.5	1638.6	1797.5	1867.2	1808.8
72.5°	695.6	711.2	731.9	784.6	845.2	942.0	1063.2	1234.2	1361.8	1442.5	1390.4
75°	391.8	413.8	420.2	460.1	510.0	586.4	675.0	797.7	926.4	991.9	929.2
77.5°	169.3	187.2	195.2	213.7	252.7	284.6	338.6	421.4	520.9	566.9	491.7
80°	83.4	87.7	91.0	96.8	107.8	118.2	143.7	179.9	220.8	231.1	183.9
82.5°	64.6	67.6	73.4	78.0	80.6	83.4	85.8	90.7	94.7	96.8	91.3
85°	45.4	49.3	55.7	60.9	63.9	66.1	68.2	69.7	66.1	60.3	63.3
87.5°	11.9	15.5	21.6	23.4	26.5	28.0	27.4	28.4	25.6	18.6	20.7
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°	390.9	390.9	390.9	390.9	390.9	390.9	390.9	390.9
2.5°	393.0	392.7	393.0	393.0	393.0	392.8	392.8	392.7
5°	400.0	400.0	400.4	399.8	399.7	400.0	399.8	399.4
7.5°	412.0	411.6	411.6	411.4	411.6	411.3	411.4	411.0
10°	427.8	427.2	427.4	426.6	426.6	426.2	426.2	426.2
12.5°	444.8	443.8	444.2	443.2	441.8	442.1	442.4	442.1
15°	461.2	460.4	459.4	458.8	457.9	458.2	458.2	457.9
17.5°	478.0	476.2	475.8	475.0	474.6	474.6	474.6	474.9
20°	495.4	494.2	493.8	492.9	492.6	493.5	493.8	493.2
22.5°	514.0	513.3	513.9	513.3	514.2	514.8	515.2	514.5
25°	537.4	536.8	537.6	539.8	541.0	541.6	543.2	542.5
27.5°	567.5	566.9	569.0	572.1	573.9	576.9	578.4	579.1
30°	606.4	609.2	610.4	616.6	617.8	622.6	622.6	624.7
32.5°	663.1	668.2	677.4	686.8	700.0	709.4	709.4	714.2
35°	787.3	789.4	796.4	798.0	800.7	803.8	800.7	803.1
37.5°	882.6	873.2	866.4	857.0	851.2	851.2	851.8	851.2
40°	931.3	927.6	924.6	916.7	915.5	915.2	915.2	916.4
42.5°	1018.4	1009.6	1004.6	998.0	995.8	995.2	995.0	995.6
45°	1131.6	1117.3	1104.2	1097.6	1091.8	1086.3	1088.2	1088.1
47.5°	1263.4	1241.2	1220.0	1208.4	1198.3	1193.8	1190.7	1189.8
50°	1424.0	1392.9	1365.5	1343.8	1329.2	1329.0	1330.4	1320.7
52.5°	1620.6	1571.6	1537.5	1508.2	1494.6	1493.1	1488.2	1482.7
55°	1838.6	1780.4	1724.1	1692.7	1674.8	1665.0	1659.2	1650.1
57.5°	2063.3	1985.0	1904.0	1853.8	1822.2	1800.2	1788.6	1783.5
60°	2236.4	2129.6	2022.8	1942.1	1889.4	1856.8	1836.8	1828.5
62.5°	2304.7	2159.8	2022.8	1916.8	1840.7	1795.6	1768.6	1756.7
65°	2223.4	2051.7	1895.8	1778.9	1694.0	1643.7	1614.2	1601.4
67.5°	1996.2	1844.6	1675.0	1558.8	1471.4	1421.8	1389.8	1380.4
70°	1673.6	1518.6	1356.6	1252.8	1174.8	1134.4	1101.2	1097.2
72.5°	1257.7	1124.0	985.2	899.4	836.6	769.7	752.6	761.1
75°	806.2	681.0	557.4	480.1	422.8	359.0	334.3	340.4
77.5°	381.8	295.6	213.4	165.0	138.6	118.4	113.2	110.2
80°	141.6	114.8	101.4	96.2	92.6	89.2	86.8	84.0
82.5°	91.6	89.5	86.8	85.8	83.1	78.8	71.0	67.6
85°	68.5	68.5	64.8	65.2	63.0	57.6	50.2	46.3
87.5°	20.1	18.0	16.4	15.2	15.0	13.4	9.7	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)