

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: P147365

Luminaire Tested: **TLM-F05-LED-E1-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147365
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-F05-LED-E1-5MQ
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

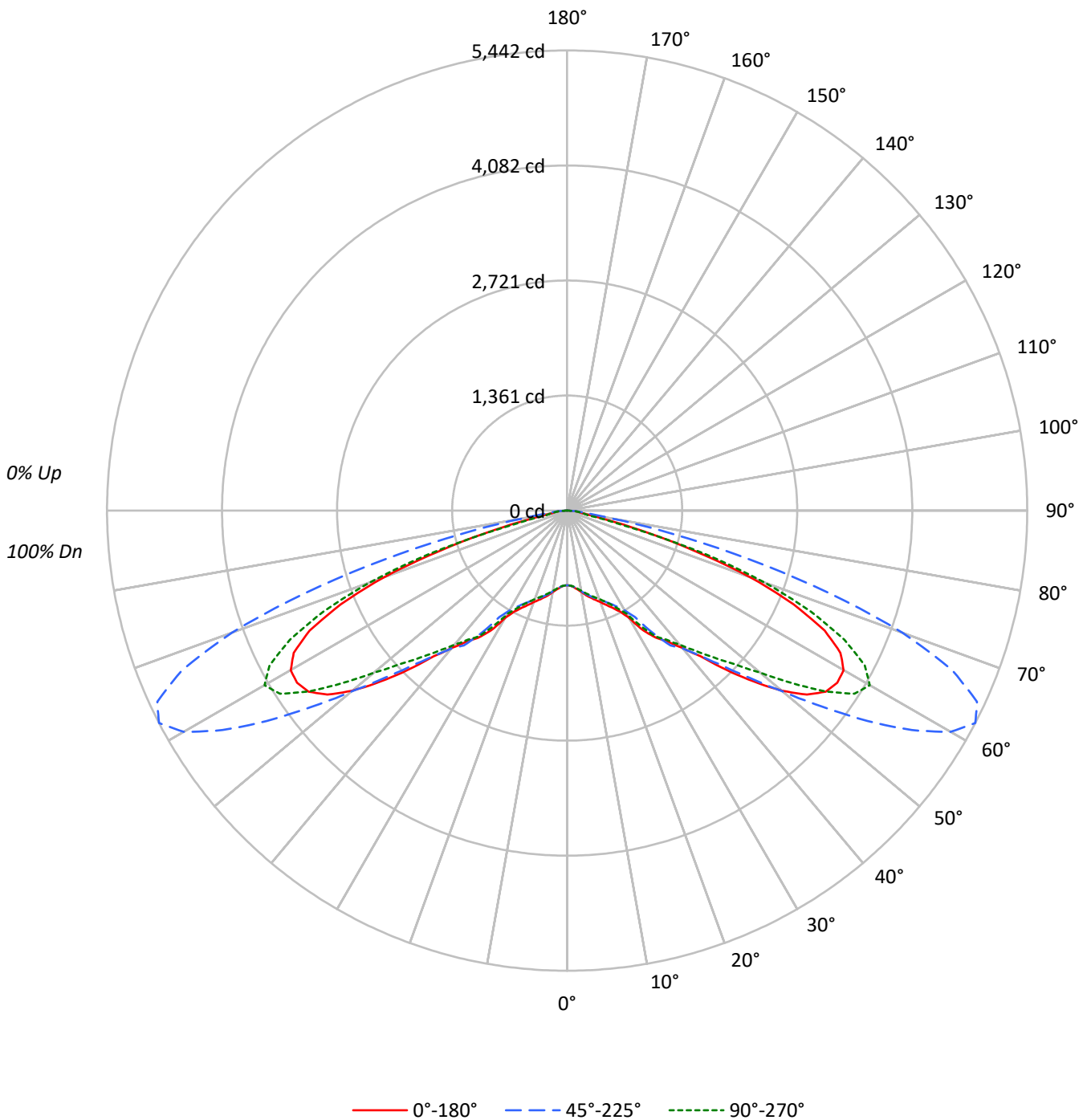
Lumens per Lamp: N/A
Luminaire Lumens: 13306.5 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 133.3
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°	11455	11455	11455
5°	11839	11776	11750
10°	12882	12747	12683
15°	14297	14030	13892
20°	15893	15514	15381
25°	18143	17403	17542
30°	21911	20438	21138
35°	29089	28022	28731
40°	35870	35975	35055
45°	48866	47478	45093
50°	66829	67176	60210
55°	84412	98069	84304
60°	97908	135750	107167
65°	103103	164110	111041
70°	87461	159982	94009
75°	44364	112304	38537
80°	14078	38992	14182
85°	15252	20266	15564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	0.7
10°-20°	299.2	2.2
20°-30°	578.6	4.3
30°-40°	1120.2	8.4
40°-50°	2022.6	15.2
50°-60°	3517.0	26.4
60°-70°	3992.7	30.0
70°-80°	1548.0	11.6
80°-90°	139.7	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°	966.3	7.3
0°-40°	2086.5	15.7
0°-60°	7626.2	57.3
0°-90°	13306.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13306.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	883	883	883	883	883	
5°	909	908	905	904	903	89
15°	1065	1057	1045	1037	1035	304
25°	1268	1242	1216	1217	1226	597
35°	1837	1802	1770	1801	1815	1148
45°	2664	2603	2589	2488	2459	2087
55°	3733	3913	4337	3860	3729	3287
65°	3360	3857	5348	4152	3619	3203
75°	885	1239	2241	1172	769	1072
85°	102	147	136	147	105	100
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°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3
2.5°	888.8	891.6	890.8	889.5	889.5	889.5	888.8	886.8	886.0	887.4	888.8
5°	909.4	909.4	909.4	909.4	908.0	908.0	906.7	905.4	906.0	904.6	904.0
7.5°	941.1	939.0	939.0	938.4	938.4	937.0	934.9	932.2	932.8	932.2	931.4
10°	978.2	978.9	976.8	979.0	975.5	974.8	972.1	970.7	970.0	968.0	968.0
12.5°	1023.0	1020.9	1020.9	1019.5	1018.2	1016.8	1012.6	1012.0	1009.2	1007.8	1005.8
15°	1064.9	1064.2	1061.5	1058.7	1058.0	1056.7	1051.8	1049.1	1048.4	1045.0	1042.2
17.5°	1106.9	1105.5	1102.1	1100.7	1098.0	1095.9	1091.8	1087.6	1085.6	1084.2	1080.8
20°	1151.6	1150.2	1146.8	1144.0	1140.6	1137.8	1131.7	1128.2	1126.2	1124.1	1121.4
22.5°	1207.3	1204.6	1199.1	1194.2	1186.7	1184.0	1175.7	1170.8	1167.4	1164.7	1163.3
25°	1267.9	1268.6	1261.0	1254.8	1245.8	1238.2	1228.0	1222.4	1219.0	1216.2	1215.6
27.5°	1343.6	1344.2	1337.4	1328.4	1314.6	1306.4	1292.6	1285.8	1283.7	1280.9	1280.2
30°	1463.2	1457.0	1445.4	1431.0	1418.6	1400.6	1380.7	1373.8	1367.0	1364.8	1364.8
32.5°	1683.4	1680.0	1670.3	1634.6	1618.0	1580.9	1545.8	1525.8	1503.2	1492.2	1485.2
35°	1837.4	1836.1	1828.6	1816.2	1805.8	1798.3	1777.6	1774.2	1770.0	1770.0	1775.6
37.5°	1951.0	1942.7	1941.4	1943.4	1940.7	1942.0	1958.6	1981.2	2000.6	2010.2	2008.8
40°	2118.8	2107.2	2114.0	2109.2	2103.0	2101.6	2107.2	2116.1	2125.0	2125.0	2123.0
42.5°	2338.3	2343.8	2346.6	2326.6	2313.6	2310.1	2323.2	2320.4	2329.4	2326.0	2317.0
45°	2664.4	2660.9	2656.1	2632.0	2611.4	2594.9	2598.4	2593.6	2594.2	2588.7	2581.9
47.5°	2993.2	3004.9	2985.0	2973.3	2949.9	2938.2	2947.9	2939.5	2955.4	2926.5	2912.8
50°	3312.4	3320.7	3313.8	3297.3	3297.3	3313.8	3325.5	3340.6	3362.6	3329.6	3280.1
52.5°	3573.8	3580.8	3591.0	3604.8	3638.5	3673.6	3723.1	3776.1	3818.0	3811.8	3755.4
55°	3733.4	3741.7	3758.9	3806.4	3866.9	3959.1	4071.2	4194.4	4290.6	4337.4	4296.2
57.5°	3787.1	3793.2	3840.0	3897.2	3991.4	4128.3	4316.1	4528.7	4713.8	4831.4	4812.8
60°	3774.8	3774.7	3822.2	3900.6	4032.7	4214.3	4479.8	4774.3	5057.8	5233.8	5207.7
62.5°	3644.7	3651.6	3719.6	3813.9	3973.6	4190.9	4507.4	4883.7	5222.8	5441.6	5420.3
65°	3359.9	3364.7	3438.3	3550.4	3728.6	3985.9	4331.9	4748.8	5137.5	5348.0	5308.1
67.5°	2899.6	2904.4	2964.4	3090.9	3279.4	3548.4	3922.0	4380.8	4761.2	4927.7	4808.0
70°	2306.6	2320.4	2358.9	2493.1	2636.2	2899.7	3243.6	3702.5	4061.6	4219.2	4087.0
72.5°	1571.9	1607.0	1653.8	1772.8	1909.7	2128.5	2402.2	2788.9	3077.1	3259.4	3141.8
75°	885.4	934.9	949.4	1039.5	1152.3	1325.0	1525.2	1802.4	2093.4	2241.3	2099.6
77.5°	382.5	423.1	441.0	483.0	571.0	643.2	765.0	952.1	1177.0	1281.0	1111.0
80°	188.5	198.2	205.7	218.8	243.6	266.9	324.8	406.6	498.8	522.1	415.6
82.5°	145.8	152.7	165.8	176.2	182.3	188.4	194.0	205.0	214.0	218.8	206.4
85°	102.5	111.4	125.9	137.6	144.5	149.2	154.1	157.6	149.2	136.2	143.1
87.5°	26.8	35.1	48.8	53.0	59.8	63.3	61.9	64.0	57.8	42.0	46.8
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°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3
2.5°	888.1	887.4	888.1	888.1	888.2	887.4	887.4	887.4
5°	904.0	904.0	904.6	903.3	903.2	904.0	903.2	902.6
7.5°	930.8	930.1	930.1	929.4	930.1	929.4	929.4	928.7
10°	966.6	965.2	965.8	963.8	963.8	963.2	963.1	963.1
12.5°	1005.1	1003.0	1003.7	1001.6	998.2	998.8	999.6	998.9
15°	1042.2	1040.2	1038.1	1036.8	1034.6	1035.4	1035.4	1034.7
17.5°	1080.1	1076.0	1075.2	1073.2	1072.5	1072.5	1072.5	1073.2
20°	1119.3	1116.6	1115.8	1113.8	1113.1	1115.2	1115.8	1114.5
22.5°	1161.2	1159.8	1161.2	1159.8	1162.0	1163.3	1164.0	1162.6
25°	1214.2	1212.8	1214.9	1219.7	1222.5	1223.8	1227.3	1225.9
27.5°	1282.3	1280.9	1285.8	1292.6	1296.8	1303.6	1307.1	1308.5
30°	1370.4	1376.6	1379.3	1393.1	1395.8	1406.8	1406.8	1411.6
32.5°	1498.3	1510.0	1530.6	1551.9	1581.6	1602.8	1602.9	1613.9
35°	1779.0	1783.8	1799.6	1803.1	1809.3	1816.2	1809.2	1814.8
37.5°	1994.4	1973.0	1957.8	1936.6	1923.5	1923.4	1924.8	1923.5
40°	2104.4	2096.2	2089.2	2071.4	2068.6	2067.9	2068.0	2070.7
42.5°	2301.2	2281.2	2270.2	2255.0	2250.2	2248.9	2248.2	2249.6
45°	2557.0	2524.8	2495.1	2480.0	2467.0	2454.6	2458.7	2458.7
47.5°	2855.0	2804.7	2756.6	2730.4	2707.8	2697.4	2690.5	2688.5
50°	3217.5	3147.3	3085.4	3036.5	3003.6	3002.8	3006.2	2984.3
52.5°	3661.9	3551.1	3474.1	3408.0	3377.1	3373.6	3362.6	3350.3
55°	4154.4	4023.0	3895.8	3825.0	3784.4	3762.4	3749.3	3728.6
57.5°	4662.2	4485.4	4302.4	4188.8	4117.4	4067.8	4041.6	4029.9
60°	5053.6	4812.1	4570.7	4388.4	4269.4	4195.8	4150.4	4131.8
62.5°	5207.7	4880.2	4570.6	4331.2	4159.2	4057.4	3996.2	3969.4
65°	5024.0	4636.0	4283.8	4019.6	3827.7	3714.2	3647.4	3618.6
67.5°	4510.8	4168.2	3785.0	3522.2	3324.8	3212.6	3140.4	3119.1
70°	3781.6	3431.4	3065.4	2830.8	2654.8	2563.2	2488.2	2479.3
72.5°	2841.8	2539.9	2226.2	2032.2	1890.4	1739.1	1700.6	1719.8
75°	1821.6	1538.9	1259.6	1084.8	955.6	811.1	755.4	769.1
77.5°	862.7	668.0	482.2	372.8	313.0	267.6	256.0	249.0
80°	319.9	259.4	229.0	217.4	209.1	201.6	196.0	189.9
82.5°	207.1	202.2	196.0	194.0	187.8	178.1	160.3	152.7
85°	154.8	154.8	146.6	147.2	142.4	130.0	113.5	104.6
87.5°	45.4	40.6	37.2	34.4	33.7	30.2	22.0	19.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)