

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: P147366

Luminaire Tested: **TLM-F05-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147366
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-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (35) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13653.9 lumens
Efficiency: N/A
Efficacy: 102.4 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

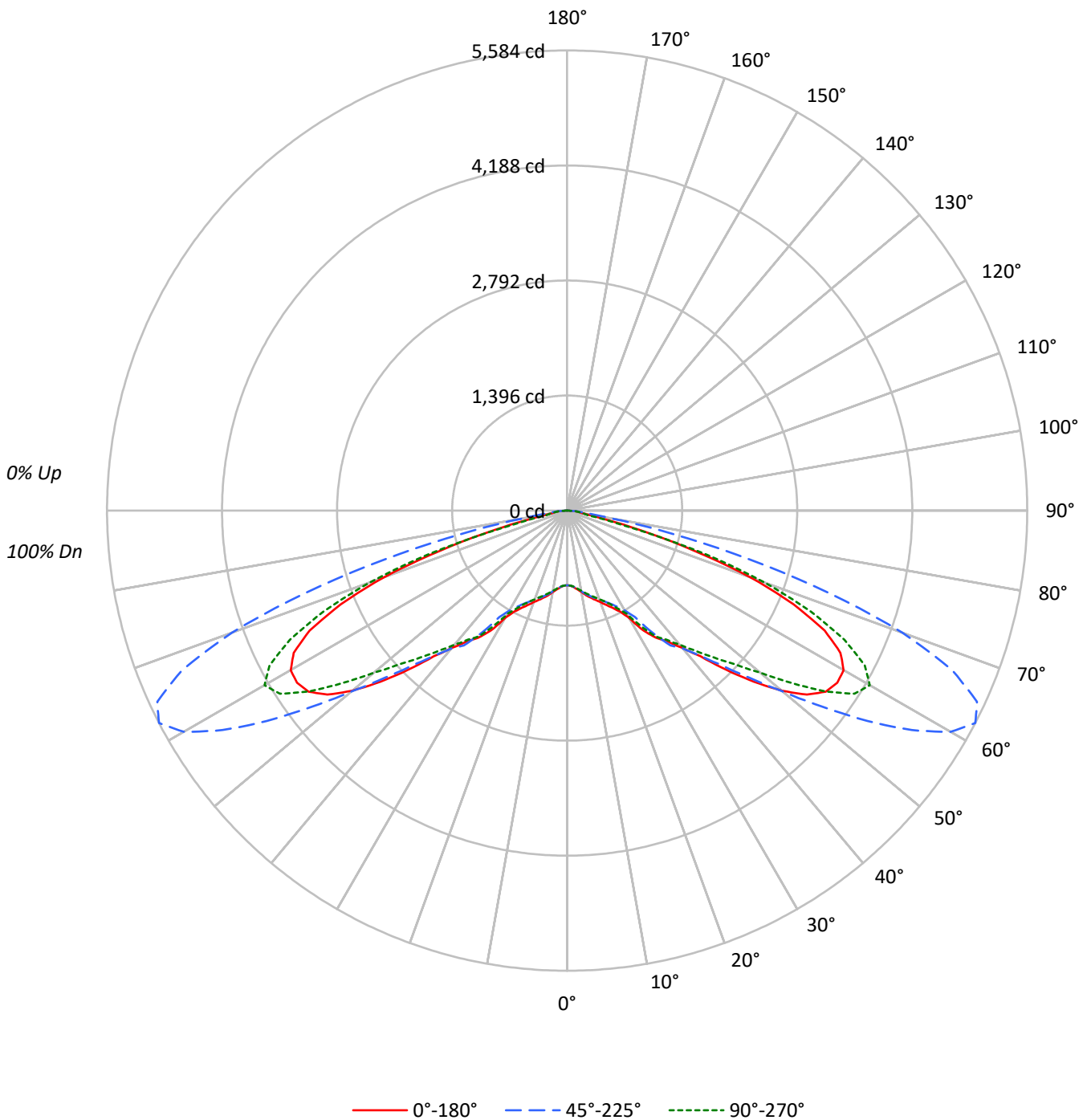
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11755	11755	11755
5°	12149	12083	12056
10°	13219	13079	13015
15°	14671	14395	14254
20°	16308	15918	15783
25°	18616	17858	18000
30°	22483	20972	21691
35°	29849	28755	29482
40°	36806	36914	35970
45°	50141	48717	46271
50°	68575	68932	61781
55°	86617	100630	86506
60°	100460	139295	109963
65°	105794	168394	113938
70°	89743	164153	96466
75°	45522	115235	39544
80°	14444	40015	14548
85°	15654	20802	15966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	0.7
10°-20°	307.0	2.2
20°-30°	593.7	4.3
30°-40°	1149.4	8.4
40°-50°	2075.4	15.2
50°-60°	3608.9	26.4
60°-70°	4097.0	30.0
70°-80°	1588.4	11.6
80°-90°	143.3	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°	991.5	7.3
0°-40°	2141.0	15.7
0°-60°	7825.2	57.3
0°-90°	13653.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13653.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	933	932	928	928	926	91
15°	1093	1085	1072	1064	1062	312
25°	1301	1274	1248	1249	1258	613
35°	1885	1849	1816	1848	1862	1178
45°	2734	2671	2656	2552	2523	2141
55°	3831	4015	4451	3961	3826	3373
65°	3448	3958	5488	4260	3713	3287
75°	908	1271	2300	1203	789	1100
85°	105	151	140	151	107	103
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°	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4
2.5°	912.0	914.8	914.2	912.8	912.8	912.8	912.0	909.9	909.2	910.6	912.0
5°	933.2	933.2	933.2	933.2	931.8	931.8	930.4	929.0	929.6	928.2	927.6
7.5°	965.6	963.6	963.6	962.8	962.8	961.4	959.3	956.5	957.2	956.5	955.8
10°	1003.8	1004.5	1002.4	1004.5	1001.0	1000.2	997.4	996.0	995.3	993.2	993.2
12.5°	1049.6	1047.6	1047.6	1046.2	1044.7	1043.3	1039.0	1038.4	1035.6	1034.2	1032.0
15°	1092.7	1092.0	1089.2	1086.4	1085.6	1084.2	1079.3	1076.5	1075.8	1072.2	1069.4
17.5°	1135.8	1134.4	1130.8	1129.4	1126.6	1124.5	1120.2	1116.0	1113.9	1112.5	1108.9
20°	1181.7	1180.2	1176.8	1173.9	1170.4	1167.6	1161.2	1157.6	1155.6	1153.4	1150.6
22.5°	1238.8	1236.1	1230.4	1225.4	1217.7	1214.8	1206.4	1201.4	1197.9	1195.1	1193.7
25°	1301.0	1301.6	1293.9	1287.6	1278.4	1270.6	1260.0	1254.4	1250.8	1248.0	1247.4
27.5°	1378.6	1379.4	1372.2	1363.1	1349.0	1340.5	1326.4	1319.3	1317.2	1314.4	1313.7
30°	1501.4	1495.1	1483.1	1468.3	1455.6	1437.2	1416.8	1409.6	1402.6	1400.5	1400.5
32.5°	1727.3	1723.8	1713.9	1677.2	1660.3	1622.2	1586.2	1565.6	1542.4	1531.1	1524.0
35°	1885.4	1884.0	1876.3	1863.6	1853.0	1845.2	1824.0	1820.6	1816.3	1816.3	1822.0
37.5°	2002.0	1993.4	1992.0	1994.2	1991.3	1992.8	2009.7	2033.0	2052.8	2062.6	2061.2
40°	2174.1	2162.2	2169.2	2164.3	2158.0	2156.6	2162.2	2171.3	2180.5	2180.5	2178.4
42.5°	2399.4	2405.0	2407.8	2387.4	2374.0	2370.4	2383.8	2381.0	2390.2	2386.6	2377.4
45°	2733.9	2730.4	2725.4	2700.8	2679.6	2662.6	2666.2	2661.2	2662.0	2656.3	2649.2
47.5°	3071.4	3083.4	3062.9	3050.8	3026.8	3014.9	3024.8	3016.3	3032.5	3002.9	2988.8
50°	3398.9	3407.4	3400.4	3383.4	3383.4	3400.3	3412.3	3427.8	3450.4	3416.6	3365.7
52.5°	3667.1	3674.2	3684.8	3698.9	3733.4	3769.5	3820.3	3874.6	3917.7	3911.4	3853.5
55°	3830.9	3839.4	3857.0	3905.8	3967.8	4062.4	4177.5	4303.8	4402.7	4450.7	4408.3
57.5°	3886.0	3892.3	3940.3	3999.0	4095.6	4236.1	4428.8	4647.0	4836.8	4957.5	4938.5
60°	3873.2	3873.2	3922.0	4002.4	4138.0	4324.3	4596.8	4899.0	5189.8	5370.5	5343.6
62.5°	3739.8	3746.9	3816.8	3913.5	4077.2	4300.3	4625.0	5011.2	5359.2	5583.6	5561.8
65°	3447.6	3452.6	3528.1	3643.2	3826.0	4090.0	4445.0	4872.8	5271.6	5487.6	5446.7
67.5°	2975.4	2980.3	3041.7	3171.6	3365.0	3641.0	4024.3	4495.2	4885.5	5056.3	4933.5
70°	2366.8	2381.0	2420.5	2558.2	2705.0	2975.4	3328.3	3799.1	4167.6	4329.2	4193.7
72.5°	1613.0	1649.0	1697.0	1819.1	1959.6	2184.0	2465.0	2861.7	3157.4	3344.5	3223.8
75°	908.5	959.3	974.1	1066.6	1182.4	1359.6	1564.9	1849.4	2148.0	2299.8	2154.4
77.5°	392.4	434.2	452.4	495.6	585.9	660.0	785.0	977.0	1207.8	1314.4	1140.0
80°	193.4	203.3	211.1	224.4	249.9	273.9	333.2	417.2	511.8	535.8	426.4
82.5°	149.6	156.8	170.1	180.7	187.1	193.4	199.0	210.4	219.5	224.4	211.8
85°	105.2	114.4	129.2	141.2	148.2	153.2	158.1	161.6	153.2	139.8	146.8
87.5°	27.6	36.0	50.1	54.4	61.4	65.0	63.6	65.6	59.3	43.0	48.0
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°	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4
2.5°	911.4	910.6	911.3	911.3	911.3	910.6	910.6	910.6
5°	927.6	927.6	928.2	926.8	926.8	927.6	926.8	926.1
7.5°	955.0	954.4	954.4	953.7	954.4	953.7	953.6	953.0
10°	991.8	990.4	991.0	989.0	989.0	988.2	988.2	988.3
12.5°	1031.3	1029.2	1029.9	1027.8	1024.2	1024.9	1025.6	1025.0
15°	1069.4	1067.3	1065.2	1063.8	1061.6	1062.4	1062.4	1061.7
17.5°	1108.2	1104.0	1103.4	1101.2	1100.5	1100.5	1100.5	1101.2
20°	1148.5	1145.7	1145.0	1142.8	1142.2	1144.2	1144.9	1143.6
22.5°	1191.6	1190.2	1191.6	1190.2	1192.2	1193.7	1194.4	1193.0
25°	1245.9	1244.5	1246.6	1251.6	1254.4	1255.8	1259.4	1257.9
27.5°	1315.8	1314.4	1319.4	1326.4	1330.6	1337.6	1341.2	1342.6
30°	1406.2	1412.5	1415.3	1429.4	1432.2	1443.6	1443.6	1448.5
32.5°	1537.4	1549.4	1570.6	1592.5	1622.8	1644.8	1644.8	1656.0
35°	1825.4	1830.4	1846.6	1850.2	1856.5	1863.6	1856.5	1862.2
37.5°	2046.4	2024.5	2009.0	1987.1	1973.7	1973.6	1975.1	1973.7
40°	2159.4	2150.8	2143.8	2125.5	2122.6	2122.0	2121.9	2124.7
42.5°	2361.2	2340.8	2329.4	2314.0	2309.0	2307.6	2306.9	2308.3
45°	2623.9	2590.6	2560.2	2544.8	2531.4	2518.6	2522.9	2522.9
47.5°	2929.4	2878.0	2828.5	2801.7	2778.4	2767.8	2760.8	2758.6
50°	3301.5	3229.4	3166.0	3115.8	3082.0	3081.2	3084.8	3062.2
52.5°	3757.4	3643.8	3564.8	3497.0	3465.2	3461.7	3450.4	3437.7
55°	4262.9	4128.0	3997.5	3924.8	3883.1	3860.6	3847.2	3826.0
57.5°	4783.8	4602.4	4414.7	4298.2	4224.8	4174.0	4147.2	4135.1
60°	5185.5	4937.8	4690.0	4502.9	4380.8	4305.3	4258.6	4239.6
62.5°	5343.6	5007.6	4690.0	4444.3	4267.8	4163.4	4100.6	4073.0
65°	5155.2	4757.0	4395.6	4124.6	3927.6	3811.1	3742.7	3713.0
67.5°	4628.6	4277.0	3883.8	3614.2	3411.6	3296.6	3222.4	3200.5
70°	3880.3	3521.0	3145.5	2904.8	2724.0	2630.2	2553.2	2544.1
72.5°	2916.0	2606.2	2284.3	2085.2	1939.8	1784.5	1745.0	1764.7
75°	1869.2	1579.1	1292.4	1113.2	980.5	832.2	775.0	789.2
77.5°	885.2	685.4	494.8	382.6	321.2	274.6	262.6	255.5
80°	328.2	266.1	235.0	223.1	214.6	206.8	201.1	194.8
82.5°	212.5	207.6	201.2	199.0	192.7	182.9	164.5	156.7
85°	158.8	158.8	150.4	151.0	146.1	133.4	116.5	107.3
87.5°	46.6	41.6	38.2	35.3	34.6	31.0	22.6	19.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)