

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: P147361

Luminaire Tested: **TLM-E05-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147361  
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-E05-LED-E1-5MQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (105) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

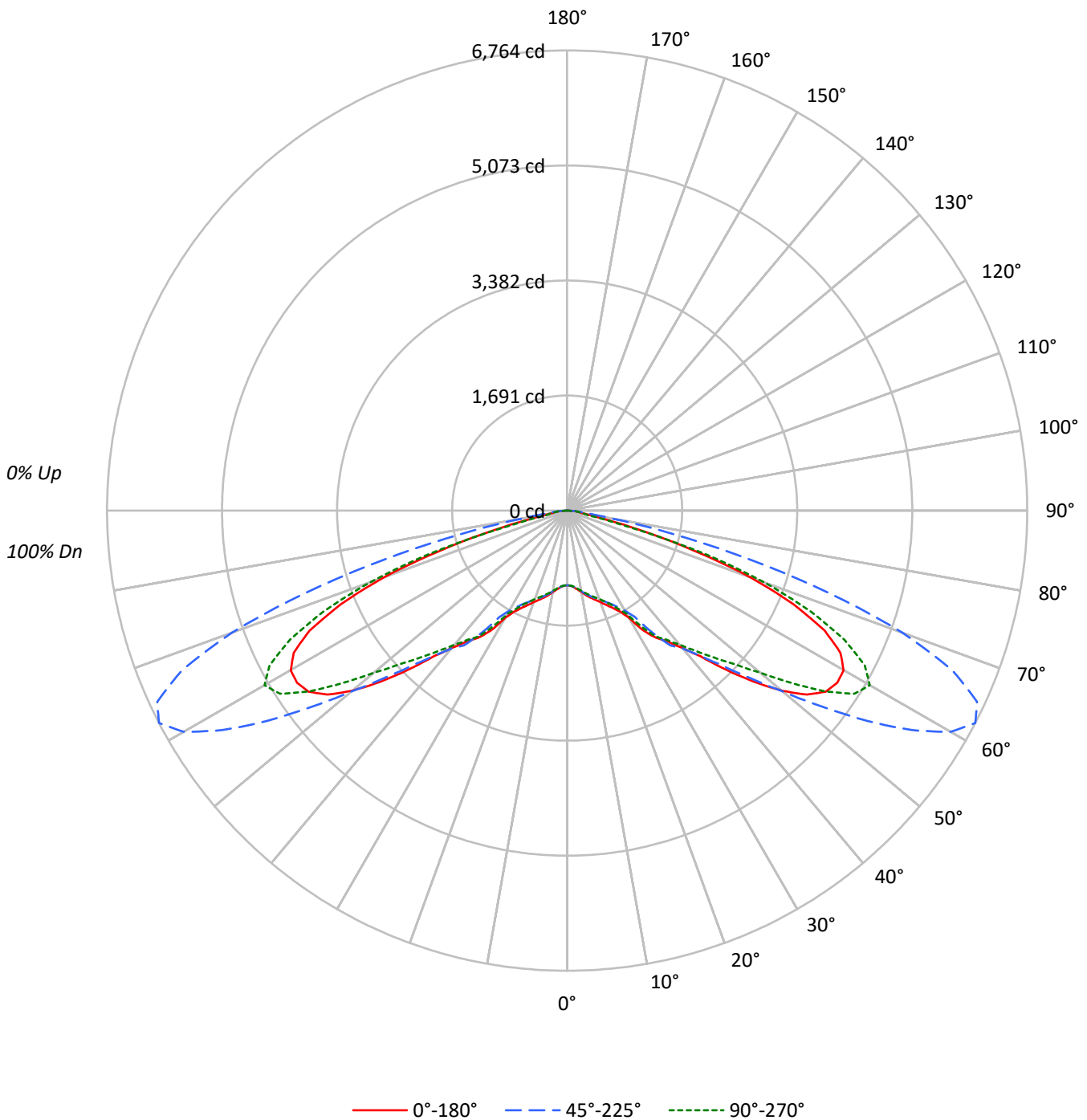
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16539.6 lumens  
Efficiency: N/A  
Efficacy: 129.9 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): 127.3  
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°	14238	14238	14238
5°	14716	14638	14605
10°	16012	15844	15764
15°	17772	17439	17267
20°	19755	19283	19117
25°	22551	21633	21804
30°	27236	25405	26275
35°	36160	34831	35712
40°	44585	44717	43573
45°	60740	59014	56050
50°	83067	83498	74839
55°	104924	121897	104788
60°	121692	168734	133205
65°	128152	203984	138021
70°	108713	198847	116851
75°	55142	139592	47902
80°	17498	48469	17625
85°	18957	25206	19344



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.0	0.7
10°-20°	371.9	2.2
20°-30°	719.1	4.3
30°-40°	1392.4	8.4
40°-50°	2514.1	15.2
50°-60°	4371.6	26.4
60°-70°	4962.9	30.0
70°-80°	1924.1	11.6
80°-90°	173.6	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°	1201.1	7.3
0°-40°	2593.4	15.7
0°-60°	9479.1	57.3
0°-90°	16539.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16539.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1130	1129	1124	1124	1122	111
15°	1324	1314	1299	1289	1286	378
25°	1576	1544	1512	1513	1524	742
35°	2284	2240	2200	2239	2256	1427
45°	3312	3236	3218	3092	3056	2594
55°	4641	4864	5391	4798	4635	4086
65°	4176	4794	6647	5160	4498	3981
75°	1100	1540	2786	1457	956	1333
85°	127	183	169	183	130	125
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°	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9
2.5°	1104.8	1108.2	1107.4	1105.6	1105.6	1105.6	1104.8	1102.2	1101.4	1103.1	1104.8
5°	1130.4	1130.4	1130.4	1130.4	1128.7	1128.8	1127.0	1125.3	1126.2	1124.4	1123.6
7.5°	1169.8	1167.2	1167.2	1166.4	1166.4	1164.6	1162.0	1158.6	1159.5	1158.6	1157.8
10°	1215.9	1216.8	1214.2	1216.8	1212.5	1211.6	1208.2	1206.5	1205.7	1203.2	1203.1
12.5°	1271.5	1268.9	1269.0	1267.2	1265.5	1263.8	1258.7	1257.8	1254.4	1252.7	1250.2
15°	1323.7	1322.8	1319.4	1315.9	1315.1	1313.4	1307.4	1304.0	1303.2	1298.9	1295.4
17.5°	1375.8	1374.2	1369.8	1368.2	1364.8	1362.2	1357.1	1351.9	1349.4	1347.6	1343.4
20°	1431.4	1429.7	1425.4	1422.0	1417.8	1414.3	1406.6	1402.4	1399.8	1397.2	1393.8
22.5°	1500.6	1497.2	1490.4	1484.4	1475.0	1471.6	1461.4	1455.4	1451.1	1447.6	1446.0
25°	1576.0	1576.8	1567.4	1559.7	1548.6	1539.2	1526.3	1519.5	1515.2	1511.8	1511.0
27.5°	1670.0	1670.8	1662.3	1651.2	1634.1	1623.9	1606.7	1598.1	1595.6	1592.2	1591.4
30°	1818.8	1811.0	1796.6	1778.6	1763.2	1741.0	1716.2	1707.6	1699.0	1696.5	1696.4
32.5°	2092.4	2088.1	2076.2	2031.7	2011.2	1965.0	1921.4	1896.6	1868.4	1854.7	1846.2
35°	2284.0	2282.2	2272.8	2257.4	2244.6	2235.2	2209.6	2205.2	2200.2	2200.1	2207.0
37.5°	2425.0	2414.8	2413.0	2415.6	2412.2	2413.9	2434.4	2462.6	2486.6	2498.6	2496.8
40°	2633.6	2619.1	2627.6	2621.7	2614.0	2612.3	2619.2	2630.2	2641.4	2641.4	2638.8
42.5°	2906.4	2913.3	2916.7	2892.0	2875.6	2871.4	2887.6	2884.2	2895.4	2891.0	2880.0
45°	3311.8	3307.5	3301.5	3271.6	3245.9	3225.4	3229.7	3223.7	3224.6	3217.7	3209.1
47.5°	3720.5	3735.0	3710.2	3695.7	3666.6	3652.0	3664.0	3653.8	3673.4	3637.6	3620.4
50°	4117.2	4127.5	4119.0	4098.4	4098.5	4119.0	4133.5	4152.3	4179.7	4138.6	4077.0
52.5°	4442.2	4450.8	4463.5	4480.6	4522.6	4566.2	4627.8	4693.6	4745.7	4738.0	4668.0
55°	4640.6	4650.8	4672.2	4731.2	4806.5	4921.0	5060.4	5213.4	5333.2	5391.3	5340.0
57.5°	4707.2	4715.0	4773.1	4844.1	4961.2	5131.4	5364.8	5629.0	5859.0	6005.3	5982.2
60°	4691.8	4691.8	4750.9	4848.4	5012.6	5238.2	5568.4	5934.4	6286.6	6505.5	6473.0
62.5°	4530.2	4538.8	4623.5	4740.6	4939.0	5209.2	5602.5	6070.2	6491.8	6763.8	6737.2
65°	4176.2	4182.2	4273.8	4413.1	4634.6	4954.4	5384.5	5902.6	6385.8	6647.4	6597.8
67.5°	3604.2	3610.2	3684.6	3841.9	4076.2	4410.5	4874.8	5445.2	5918.1	6125.0	5976.2
70°	2867.1	2884.2	2932.1	3098.8	3276.7	3604.2	4031.8	4602.1	5048.4	5244.2	5080.1
72.5°	1953.9	1997.5	2055.6	2203.6	2373.7	2645.6	2986.0	3466.5	3824.8	4051.4	3905.2
75°	1100.5	1162.0	1180.1	1292.1	1432.2	1646.9	1895.8	2240.3	2602.0	2785.9	2609.8
77.5°	475.4	525.9	548.1	600.3	709.7	799.5	950.8	1183.4	1463.0	1592.2	1381.0
80°	234.3	246.2	255.7	271.9	302.7	331.8	403.6	505.4	620.0	649.0	516.4
82.5°	181.3	189.8	206.0	218.9	226.6	234.3	241.1	254.8	265.9	271.9	256.6
85°	127.4	138.5	156.4	171.0	179.6	185.6	191.6	195.8	185.5	169.4	177.9
87.5°	33.4	43.6	60.7	65.9	74.4	78.7	77.0	79.5	71.8	52.2	58.2
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°	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9	1097.9
2.5°	1103.9	1103.1	1104.0	1103.9	1103.9	1103.1	1103.0	1103.1
5°	1123.6	1123.6	1124.4	1122.8	1122.8	1123.6	1122.7	1121.9
7.5°	1157.0	1156.0	1156.1	1155.2	1156.0	1155.2	1155.2	1154.4
10°	1201.4	1199.6	1200.6	1197.9	1198.0	1197.1	1197.2	1197.1
12.5°	1249.3	1246.7	1247.6	1245.0	1240.7	1241.6	1242.4	1241.6
15°	1295.4	1292.9	1290.3	1288.6	1286.0	1287.0	1286.9	1286.1
17.5°	1342.5	1337.4	1336.5	1334.0	1333.1	1333.0	1333.1	1333.9
20°	1391.2	1387.8	1386.9	1384.4	1383.6	1386.1	1387.0	1385.2
22.5°	1443.4	1441.7	1443.4	1441.7	1444.2	1446.0	1446.8	1445.1
25°	1509.2	1507.6	1510.0	1516.1	1519.5	1521.2	1525.4	1523.8
27.5°	1593.9	1592.2	1598.2	1606.7	1611.8	1620.4	1624.6	1626.4
30°	1703.4	1711.0	1714.5	1731.6	1735.0	1748.6	1748.6	1754.6
32.5°	1862.4	1876.9	1902.6	1929.1	1965.8	1992.4	1992.4	2006.0
35°	2211.2	2217.2	2236.9	2241.2	2248.9	2257.4	2248.9	2255.7
37.5°	2478.9	2452.4	2433.6	2407.0	2390.9	2390.8	2392.6	2390.8
40°	2615.7	2605.4	2596.9	2574.7	2571.2	2570.4	2570.4	2573.8
42.5°	2860.3	2835.4	2821.8	2803.0	2797.0	2795.2	2794.4	2796.1
45°	3178.4	3138.2	3101.4	3082.6	3066.4	3051.0	3056.1	3056.1
47.5°	3548.6	3486.2	3426.4	3393.8	3365.6	3352.8	3344.2	3341.7
50°	3999.2	3912.0	3835.0	3774.4	3733.3	3732.4	3736.8	3709.4
52.5°	4551.6	4414.0	4318.2	4236.1	4197.6	4193.4	4179.7	4164.3
55°	5163.9	5000.5	4842.4	4754.3	4703.8	4676.5	4660.2	4634.6
57.5°	5794.9	5575.2	5347.8	5206.6	5117.7	5056.2	5023.6	5009.1
60°	6281.5	5981.4	5681.2	5454.6	5306.7	5215.2	5158.8	5135.7
62.5°	6473.0	6066.0	5681.2	5383.6	5169.9	5043.3	4967.2	4933.9
65°	6244.7	5762.5	5324.6	4996.3	4757.7	4616.6	4533.6	4497.8
67.5°	5606.8	5181.0	4704.7	4378.0	4132.6	3993.2	3903.5	3877.0
70°	4700.5	4265.2	3810.2	3518.7	3299.8	3186.0	3092.9	3081.7
72.5°	3532.4	3157.0	2767.0	2526.0	2349.8	2161.6	2113.8	2137.7
75°	2264.3	1912.8	1565.7	1348.4	1187.7	1008.2	938.9	956.0
77.5°	1072.2	830.3	599.4	463.4	389.0	332.6	318.1	309.5
80°	397.6	322.4	284.8	270.2	260.0	250.6	243.7	236.0
82.5°	257.4	251.4	243.7	241.2	233.4	221.5	199.2	189.8
85°	192.4	192.4	182.1	183.0	177.0	161.6	141.1	130.0
87.5°	56.4	50.4	46.2	42.8	41.9	37.6	27.4	23.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)