

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: P147321

Luminaire Tested: **TLM-E01-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147321  
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-E01-LED-E1-5MQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (21) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

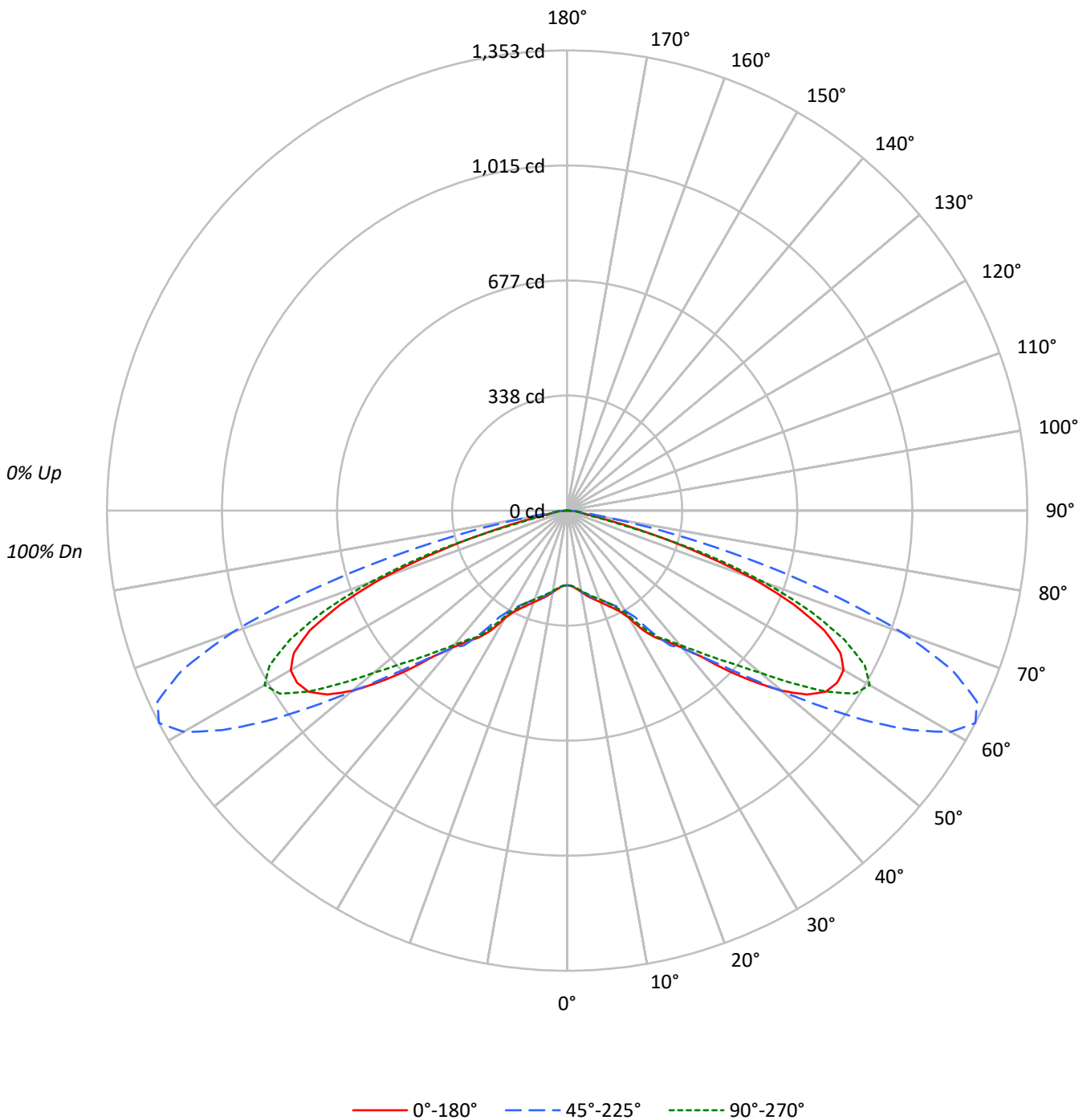
Lumens per Lamp: N/A  
Luminaire Lumens: 3307.9 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.7  
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°	13904	13904	13904
5°	14371	14294	14263
10°	15636	15469	15392
15°	17358	17030	16860
20°	19291	18826	18664
25°	22021	21126	21294
30°	26598	24807	25655
35°	35309	34010	34868
40°	43534	43666	42551
45°	59305	57630	54729
50°	81108	81532	73080
55°	102453	119034	102321
60°	118834	164764	130066
65°	125131	199187	134779
70°	106152	194161	114094
75°	53845	136313	46775
80°	17065	47329	17210
85°	18453	24555	18889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.0	0.7
10°-20°	74.4	2.2
20°-30°	143.8	4.3
30°-40°	278.5	8.4
40°-50°	502.8	15.2
50°-60°	874.3	26.4
60°-70°	992.6	30.0
70°-80°	384.8	11.6
80°-90°	34.7	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°	240.2	7.3
0°-40°	518.7	15.7
0°-60°	1895.8	57.3
0°-90°	3307.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3307.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	220	220	220	220	220	
5°	226	226	225	225	224	22
15°	265	263	260	258	257	76
25°	315	309	302	303	305	148
35°	457	448	440	448	451	285
45°	662	647	644	618	611	519
55°	928	973	1078	960	927	817
65°	835	959	1330	1032	900	796
75°	220	308	557	291	191	267
85°	25	36	34	36	26	25
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°	219.6	219.6	219.6	219.6	219.6	219.6	219.6	219.6	219.6	219.6	219.6
2.5°	221.0	221.6	221.5	221.2	221.2	221.2	221.0	220.4	220.2	220.6	221.0
5°	226.1	226.1	226.1	226.1	225.8	225.8	225.4	225.1	225.2	224.9	224.8
7.5°	234.0	233.4	233.4	233.3	233.2	233.0	232.4	231.8	231.9	231.7	231.6
10°	243.2	243.4	242.8	243.4	242.5	242.4	241.6	241.3	241.2	240.6	240.6
12.5°	254.3	253.8	253.8	253.4	253.1	252.8	251.8	251.6	250.8	250.6	250.0
15°	264.8	264.6	263.9	263.2	263.0	262.6	261.4	260.8	260.6	259.8	259.0
17.5°	275.2	274.8	274.0	273.6	273.0	272.4	271.4	270.4	269.8	269.6	268.7
20°	286.3	286.0	285.1	284.4	283.6	282.8	281.4	280.5	280.0	279.4	278.8
22.5°	300.1	299.4	298.1	296.9	295.0	294.3	292.2	291.1	290.2	289.5	289.2
25°	315.2	315.4	313.4	312.0	309.8	307.8	305.3	303.9	303.0	302.4	302.2
27.5°	334.0	334.2	332.4	330.2	326.8	324.8	321.3	319.6	319.2	318.4	318.2
30°	363.8	362.2	359.3	355.8	352.6	348.2	343.2	341.6	339.8	339.3	339.3
32.5°	418.4	417.6	415.2	406.4	402.2	393.0	384.3	379.3	373.7	370.9	369.2
35°	456.8	456.4	454.6	451.5	448.9	447.0	441.9	441.0	440.0	440.0	441.4
37.5°	485.0	483.0	482.6	483.1	482.4	482.8	486.9	492.5	497.4	499.7	499.4
40°	526.7	523.8	525.6	524.3	522.8	522.4	523.8	526.0	528.3	528.3	527.8
42.5°	581.3	582.6	583.3	578.4	575.2	574.3	577.5	576.8	579.1	578.2	576.0
45°	662.3	661.5	660.3	654.4	649.2	645.1	646.0	644.8	645.0	643.6	641.8
47.5°	744.1	747.0	742.0	739.1	733.3	730.4	732.8	730.8	734.7	727.5	724.1
50°	823.4	825.5	823.8	819.7	819.7	823.8	826.7	830.4	836.0	827.7	815.4
52.5°	888.4	890.2	892.7	896.2	904.6	913.2	925.6	938.7	949.2	947.6	933.6
55°	928.1	930.2	934.4	946.2	961.3	984.2	1012.1	1042.7	1066.6	1078.3	1068.0
57.5°	941.4	943.0	954.6	968.8	992.2	1026.2	1073.0	1125.8	1171.8	1201.0	1196.4
60°	938.4	938.4	950.2	969.6	1002.5	1047.6	1113.6	1186.8	1257.3	1301.1	1294.6
62.5°	906.0	907.8	924.7	948.1	987.8	1041.8	1120.5	1214.0	1298.4	1352.8	1347.4
65°	835.2	836.4	854.8	882.6	927.0	990.9	1076.9	1180.6	1277.2	1329.5	1319.6
67.5°	720.8	722.0	736.9	768.4	815.2	882.1	975.0	1089.0	1183.6	1225.0	1195.2
70°	573.4	576.8	586.4	619.8	655.3	720.8	806.4	920.4	1009.6	1048.8	1016.0
72.5°	390.8	399.5	411.2	440.7	474.8	529.1	597.2	693.3	765.0	810.2	781.1
75°	220.1	232.4	236.0	258.4	286.4	329.4	379.2	448.1	520.4	557.2	522.0
77.5°	95.1	105.2	109.6	120.1	141.9	159.9	190.1	236.7	292.6	318.4	276.2
80°	46.8	49.2	51.1	54.4	60.6	66.4	80.7	101.1	124.0	129.8	103.3
82.5°	36.2	38.0	41.2	43.8	45.3	46.8	48.2	51.0	53.2	54.4	51.3
85°	25.4	27.7	31.2	34.2	35.9	37.1	38.3	39.2	37.1	33.8	35.6
87.5°	6.7	8.7	12.2	13.2	14.9	15.8	15.4	15.9	14.4	10.4	11.6
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°	219.6	219.6	219.6	219.6	219.6	219.6	219.6	219.6
2.5°	220.8	220.6	220.8	220.8	220.8	220.6	220.6	220.6
5°	224.7	224.8	224.8	224.6	224.6	224.8	224.5	224.4
7.5°	231.4	231.2	231.2	231.0	231.2	231.0	231.0	230.9
10°	240.3	240.0	240.1	239.6	239.6	239.4	239.4	239.4
12.5°	249.8	249.4	249.6	249.0	248.2	248.3	248.4	248.3
15°	259.1	258.6	258.1	257.8	257.2	257.4	257.4	257.2
17.5°	268.5	267.5	267.3	266.8	266.6	266.6	266.6	266.8
20°	278.2	277.6	277.4	276.9	276.8	277.2	277.4	277.0
22.5°	288.7	288.4	288.6	288.3	288.8	289.2	289.4	289.0
25°	301.8	301.5	302.0	303.2	303.9	304.2	305.1	304.8
27.5°	318.8	318.5	319.6	321.4	322.4	324.0	325.0	325.3
30°	340.7	342.2	342.9	346.4	347.0	349.7	349.7	350.9
32.5°	372.5	375.4	380.6	385.8	393.2	398.4	398.5	401.2
35°	442.2	443.4	447.4	448.2	449.8	451.4	449.8	451.1
37.5°	495.8	490.5	486.8	481.4	478.2	478.2	478.5	478.2
40°	523.1	521.0	519.4	515.0	514.2	514.0	514.1	514.8
42.5°	572.0	567.1	564.3	560.6	559.4	559.0	558.8	559.2
45°	635.7	627.6	620.3	616.5	613.2	610.2	611.2	611.2
47.5°	709.8	697.2	685.2	678.8	673.1	670.6	668.8	668.3
50°	799.8	782.4	767.0	754.9	746.7	746.5	747.4	741.9
52.5°	910.4	882.8	863.6	847.2	839.5	838.6	836.0	832.9
55°	1032.8	1000.1	968.4	950.8	940.8	935.3	932.0	926.9
57.5°	1159.0	1115.0	1069.6	1041.4	1023.6	1011.2	1004.7	1001.8
60°	1256.3	1196.2	1136.2	1090.9	1061.4	1043.0	1031.8	1027.1
62.5°	1294.6	1213.2	1136.2	1076.7	1034.0	1008.6	993.4	986.8
65°	1248.9	1152.5	1064.9	999.2	951.5	923.4	906.7	899.6
67.5°	1121.4	1036.2	941.0	875.6	826.6	798.6	780.7	775.4
70°	940.1	853.0	762.1	703.8	660.0	637.2	618.6	616.3
72.5°	706.4	631.4	553.4	505.2	470.0	432.4	422.8	427.5
75°	452.8	382.5	313.2	269.6	237.5	201.6	187.8	191.2
77.5°	214.4	166.0	119.8	92.7	77.8	66.6	63.6	61.9
80°	79.6	64.4	57.0	54.0	52.0	50.1	48.7	47.2
82.5°	51.5	50.2	48.8	48.2	46.7	44.3	39.8	38.0
85°	38.4	38.4	36.4	36.6	35.4	32.4	28.2	26.0
87.5°	11.2	10.0	9.2	8.6	8.4	7.5	5.5	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)