

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: P147318

Luminaire Tested: **TLM-E01-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147318  
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-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (21) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

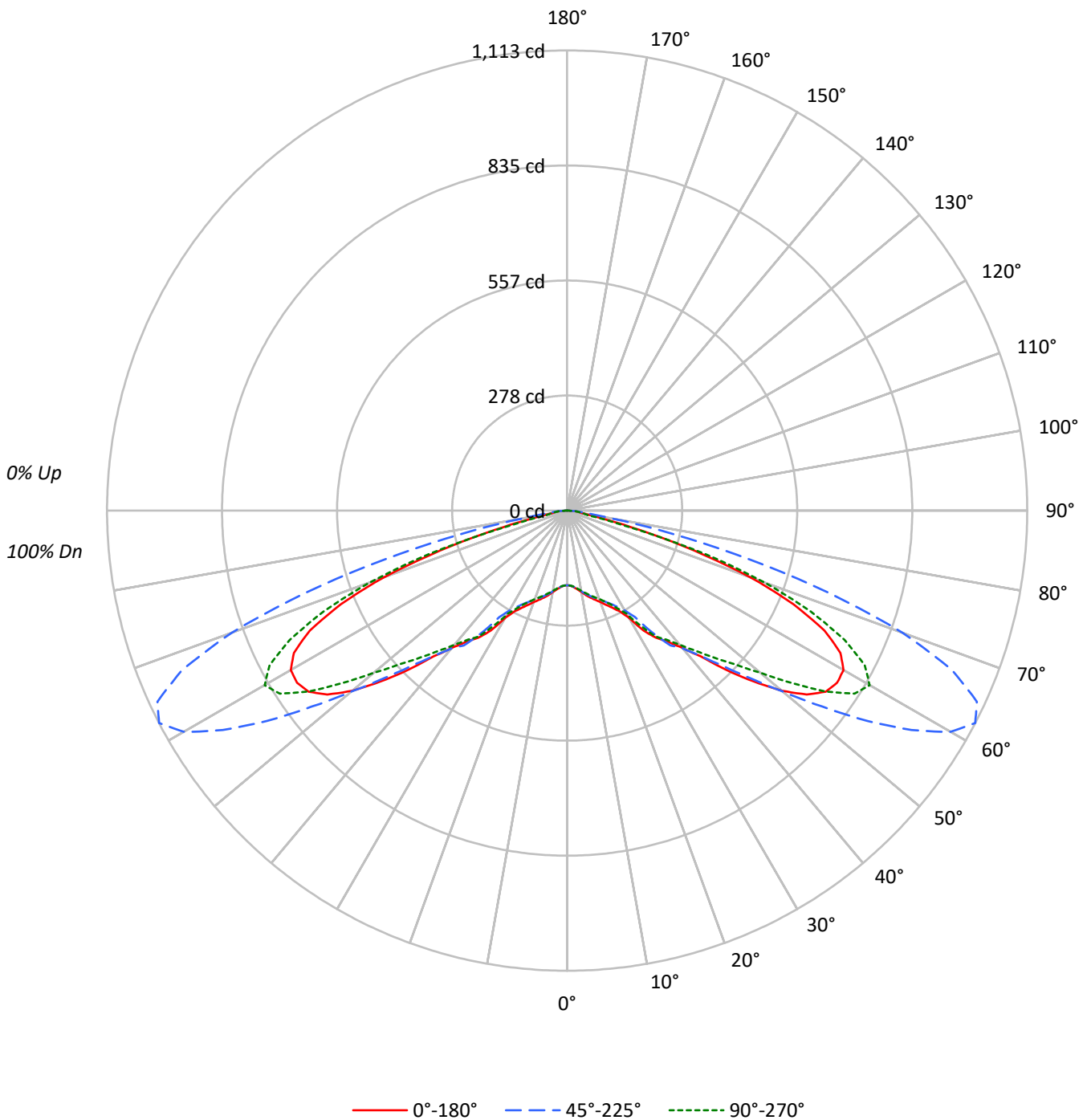
Lumens per Lamp: N/A  
Luminaire Lumens: 2720.8 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
CIE Type: Direct

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°	11435	11435	11435
5°	11822	11758	11733
10°	12859	12724	12659
15°	14277	14008	13871
20°	15861	15484	15356
25°	18108	17375	17515
30°	21875	20406	21100
35°	29040	27981	28685
40°	35806	35922	34996
45°	48784	47405	45014
50°	66717	67062	60107
55°	84272	97905	84161
60°	97736	135524	106981
65°	102927	163829	110853
70°	87306	159709	93859
75°	44280	112093	38482
80°	14075	38942	14148
85°	15256	20196	15547



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.1	0.7
10°-20°	61.2	2.2
20°-30°	118.3	4.3
30°-40°	229.1	8.4
40°-50°	413.6	15.2
50°-60°	719.1	26.4
60°-70°	816.4	30.0
70°-80°	316.5	11.6
80°-90°	28.6	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°	197.6	7.3
0°-40°	426.6	15.7
0°-60°	1559.4	57.3
0°-90°	2720.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2720.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	181	181	181	181	181	
5°	186	186	185	185	185	18
15°	218	216	214	212	212	62
25°	259	254	249	249	251	122
35°	376	368	362	368	371	235
45°	545	532	529	509	503	427
55°	763	800	887	789	762	672
65°	687	789	1094	849	740	655
75°	181	253	458	240	157	219
85°	21	30	28	30	21	21
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°	180.6	180.6	180.6	180.6	180.6	180.6	180.6	180.6	180.6	180.6	180.6
2.5°	181.8	182.3	182.2	181.8	181.8	181.9	181.8	181.3	181.2	181.4	181.8
5°	186.0	186.0	186.0	186.0	185.7	185.6	185.4	185.1	185.2	185.0	184.8
7.5°	192.4	192.0	192.0	191.9	191.8	191.6	191.1	190.6	190.8	190.6	190.5
10°	200.0	200.1	199.8	200.2	199.4	199.3	198.8	198.5	198.4	197.9	197.9
12.5°	209.2	208.8	208.8	208.5	208.2	207.9	207.0	206.9	206.4	206.0	205.6
15°	217.8	217.6	217.0	216.5	216.3	216.0	215.0	214.5	214.4	213.7	213.1
17.5°	226.4	226.0	225.4	225.0	224.5	224.0	223.2	222.4	222.0	221.7	221.0
20°	235.4	235.2	234.5	233.9	233.2	232.6	231.4	230.7	230.2	229.8	229.3
22.5°	246.8	246.3	245.2	244.2	242.6	242.1	240.4	239.4	238.7	238.2	237.8
25°	259.2	259.4	257.8	256.6	254.8	253.2	251.0	250.0	249.2	248.7	248.6
27.5°	274.7	274.8	273.4	271.6	268.8	267.2	264.3	262.9	262.5	262.0	261.8
30°	299.2	297.9	295.5	292.6	290.0	286.4	282.3	280.9	279.5	279.1	279.1
32.5°	344.2	343.5	341.6	334.2	330.8	323.2	316.1	312.0	307.4	305.2	303.7
35°	375.7	375.4	373.8	371.4	369.2	367.7	363.5	362.8	362.0	362.0	363.0
37.5°	399.0	397.2	397.0	397.4	396.8	397.1	400.5	405.1	409.0	411.0	410.8
40°	433.2	430.8	432.2	431.3	430.0	429.8	430.8	432.6	434.5	434.6	434.1
42.5°	478.1	479.2	479.8	475.8	473.0	472.4	475.0	474.4	476.3	475.6	473.8
45°	544.8	544.1	543.2	538.2	534.0	530.6	531.2	530.3	530.4	529.4	528.0
47.5°	612.0	614.4	610.4	608.0	603.2	600.8	602.8	601.1	604.3	598.4	595.6
50°	677.3	679.0	677.6	674.2	674.2	677.6	680.0	683.1	687.6	680.8	670.7
52.5°	730.8	732.2	734.2	737.1	744.0	751.2	761.3	772.2	780.7	779.4	767.9
55°	763.4	765.1	768.6	778.3	790.7	809.5	832.4	857.6	877.4	886.9	878.4
57.5°	774.4	775.6	785.2	796.8	816.2	844.2	882.5	926.0	963.8	987.8	984.1
60°	771.8	771.8	781.6	797.6	824.6	861.7	916.0	976.2	1034.2	1070.2	1064.8
62.5°	745.2	746.6	760.6	779.8	812.5	856.9	921.6	998.6	1068.0	1112.7	1108.3
65°	687.0	688.0	703.0	726.0	762.4	815.0	885.8	971.0	1050.5	1093.5	1085.4
67.5°	592.9	593.9	606.1	632.0	670.6	725.6	801.9	895.8	973.6	1007.6	983.1
70°	471.6	474.4	482.3	509.8	539.0	592.9	663.2	757.1	830.5	862.7	835.6
72.5°	321.4	328.5	338.2	362.5	390.5	435.2	491.2	570.2	629.2	666.4	642.4
75°	181.0	191.2	194.1	212.6	235.6	270.9	311.8	368.5	428.0	458.2	429.3
77.5°	78.2	86.5	90.2	98.8	116.8	131.5	156.4	194.6	240.7	262.0	227.2
80°	38.6	40.5	42.1	44.7	49.8	54.6	66.4	83.1	102.0	106.8	84.9
82.5°	29.8	31.2	33.9	36.0	37.2	38.5	39.6	41.9	43.8	44.8	42.2
85°	21.0	22.8	25.8	28.1	29.5	30.6	31.6	32.2	30.5	27.8	29.2
87.5°	5.4	7.2	10.0	10.9	12.2	13.0	12.7	13.0	11.8	8.6	9.6
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°	180.6	180.6	180.6	180.6	180.6	180.6	180.6	180.6
2.5°	181.6	181.5	181.6	181.6	181.6	181.5	181.4	181.5
5°	184.8	184.8	185.0	184.7	184.6	184.8	184.7	184.6
7.5°	190.3	190.2	190.2	190.0	190.2	190.0	190.0	189.9
10°	197.6	197.4	197.5	197.1	197.0	196.9	197.0	196.9
12.5°	205.6	205.1	205.2	204.8	204.1	204.2	204.4	204.2
15°	213.1	212.7	212.2	212.0	211.6	211.7	211.7	211.6
17.5°	220.8	220.0	219.8	219.4	219.3	219.3	219.3	219.4
20°	228.8	228.3	228.2	227.8	227.6	228.0	228.2	227.9
22.5°	237.4	237.2	237.4	237.2	237.6	237.9	238.0	237.7
25°	248.2	248.0	248.4	249.4	250.0	250.2	251.0	250.7
27.5°	262.2	261.9	262.9	264.3	265.2	266.6	267.2	267.5
30°	280.2	281.4	282.0	284.8	285.4	287.7	287.6	288.6
32.5°	306.4	308.8	313.0	317.4	323.4	327.8	327.8	330.0
35°	363.8	364.8	368.0	368.7	370.0	371.4	370.0	371.1
37.5°	407.8	403.4	400.4	396.0	393.3	393.3	393.6	393.3
40°	430.3	428.6	427.2	423.5	423.0	422.8	422.8	423.4
42.5°	470.5	466.4	464.2	461.1	460.2	459.8	459.7	460.0
45°	522.8	516.2	510.2	507.1	504.4	501.8	502.8	502.7
47.5°	583.8	573.4	563.6	558.3	553.7	551.6	550.2	549.7
50°	657.9	643.6	630.9	620.9	614.2	614.0	614.7	610.2
52.5°	748.8	726.1	710.4	696.8	690.6	689.8	687.6	685.0
55°	849.4	822.6	796.6	782.0	773.8	769.3	766.6	762.4
57.5°	953.3	917.2	879.8	856.5	841.9	831.8	826.4	824.0
60°	1033.3	984.0	934.6	897.3	873.0	857.9	848.6	844.8
62.5°	1064.8	997.8	934.6	885.6	850.4	829.6	817.2	811.6
65°	1027.2	948.0	875.9	822.0	782.7	759.4	745.8	739.9
67.5°	922.4	852.3	773.9	720.2	679.8	656.9	642.2	637.8
70°	773.2	701.6	626.8	578.8	542.8	524.1	508.8	507.0
72.5°	581.1	519.3	455.2	415.5	386.6	355.6	347.8	351.7
75°	372.5	314.6	257.6	221.8	195.4	165.9	154.4	157.3
77.5°	176.4	136.6	98.6	76.2	64.0	54.7	52.3	50.9
80°	65.4	53.0	46.8	44.4	42.8	41.2	40.1	38.8
82.5°	42.3	41.3	40.1	39.6	38.4	36.4	32.8	31.2
85°	31.6	31.6	30.0	30.1	29.1	26.6	23.2	21.4
87.5°	9.3	8.3	7.6	7.0	6.9	6.2	4.5	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)