

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: PORTFOLIO

Report Number: P401983

Luminaire Tested: **LA1MR102D010 EA1M102509035SB1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P401983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-8)  
Test Lab: INNOVATION CENTER (G3)  
Issue Date: 6/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LA1MR102D010 EA1M102509035SB1MW  
Description: 1 INCH 50° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

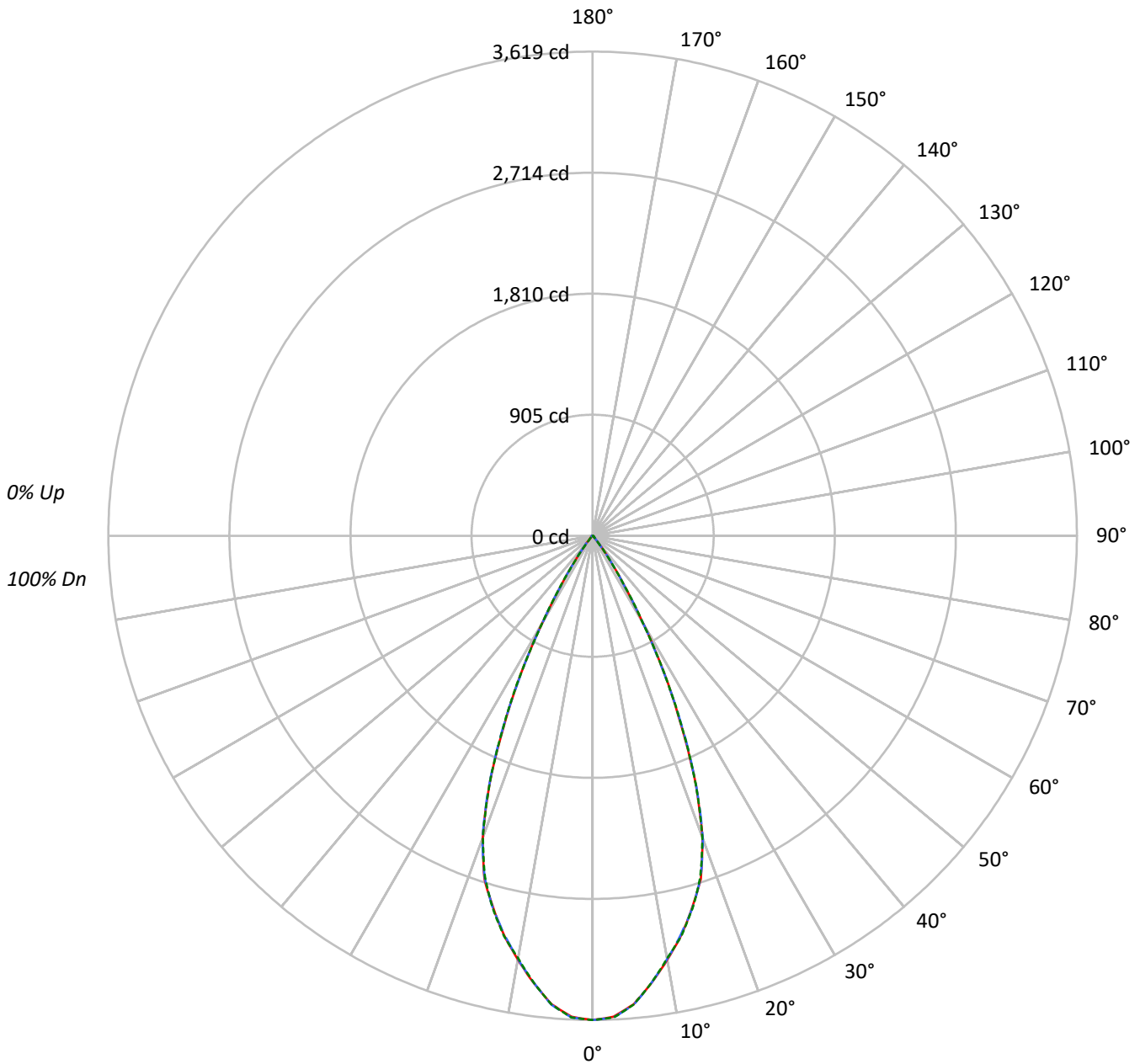
Lumens per Lamp: N/A  
Luminaire Lumens: 2043.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.5  
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	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				100															
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95				95															
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90				90															
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85				85															
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81				81															
5	97	89	84	81	95	89	84	80	87	83	80	85	82	79	84	81	78	77				77															
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73				73															
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70				70															
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67				67															
9	82	74	69	65	81	73	69	65	73	68	65	72	68	65	71	67	65	64				64															
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61				61															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	289552	289552	289552
5°	282234	282611	282451
10°	261330	260948	260518
15°	238196	238478	238809
20°	204322	204952	204152
25°	138496	140208	139979
30°	68608	69042	68792
35°	22921	23048	21681
40°	5232	5096	4397
45°	2048	2274	1889
50°	1668	1742	1493
55°	1492	1492	1311
60°	1184	1280	1072
65°	757	890	625
70°	0	164	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.8	15.9
10°-20°	798.7	39.1
20°-30°	711.1	34.8
30°-40°	177.5	8.7
40°-50°	16.9	0.8
50°-60°	9.3	0.5
60°-70°	3.7	0.2
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1835.6	89.8
0°-40°	2013.1	98.5
0°-60°	2039.3	99.8
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3619	3619	3619	3619	3619	
5°	3514	3527	3519	3516	3517	326
15°	2876	2891	2879	2874	2883	799
25°	1569	1586	1588	1599	1586	709
35°	235	243	236	233	222	177
45°	18	18	20	17	17	17
55°	11	11	11	10	9	9
65°	4	4	5	4	3	4
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3619.4	3619.4	3619.4	3619.4	3619.4
2.5°	3598.7	3614.8	3603.4	3604.1	3604.7
5°	3514.5	3527.2	3519.2	3516.5	3517.2
7.5°	3372.1	3383.4	3370.7	3375.4	3370.1
10°	3217.0	3228.3	3212.3	3212.3	3207.0
12.5°	3059.2	3071.2	3051.9	3049.8	3062.6
15°	2876.0	2890.7	2879.4	2874.0	2883.4
17.5°	2690.8	2688.8	2682.2	2678.8	2675.5
20°	2400.0	2412.1	2407.4	2387.3	2398.0
22.5°	2017.6	2018.3	2025.0	2028.3	2019.6
25°	1569.0	1586.4	1588.4	1599.1	1585.8
27.5°	1162.6	1165.9	1147.9	1149.2	1161.9
30°	742.7	752.8	747.4	752.8	744.7
32.5°	428.5	437.2	433.9	437.9	438.6
35°	234.7	243.3	236.0	232.6	222.0
37.5°	116.3	116.3	119.0	109.6	104.3
40°	50.1	51.5	48.8	46.1	42.1
42.5°	25.4	25.4	26.7	22.7	22.1
45°	18.1	18.1	20.1	17.4	16.7
47.5°	15.4	15.4	16.7	14.7	14.0
50°	13.4	13.4	14.0	12.7	12.0
52.5°	12.0	12.0	12.7	11.4	10.7
55°	10.7	10.7	10.7	10.0	9.4
57.5°	8.7	9.4	9.4	8.7	8.0
60°	7.4	7.4	8.0	7.4	6.7
62.5°	6.0	6.0	6.0	6.0	5.3
65°	4.0	4.0	4.7	4.0	3.3
67.5°	0.7	1.3	3.3	0.0	0.0
70°	0.0	0.0	0.7	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)