

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: P402090

Luminaire Tested: **LA1MR022D010 EA1M22509030MW1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402090  
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: LA1MR022D010 EA1M22509030MW1MW  
Description: 1 INCH 50° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

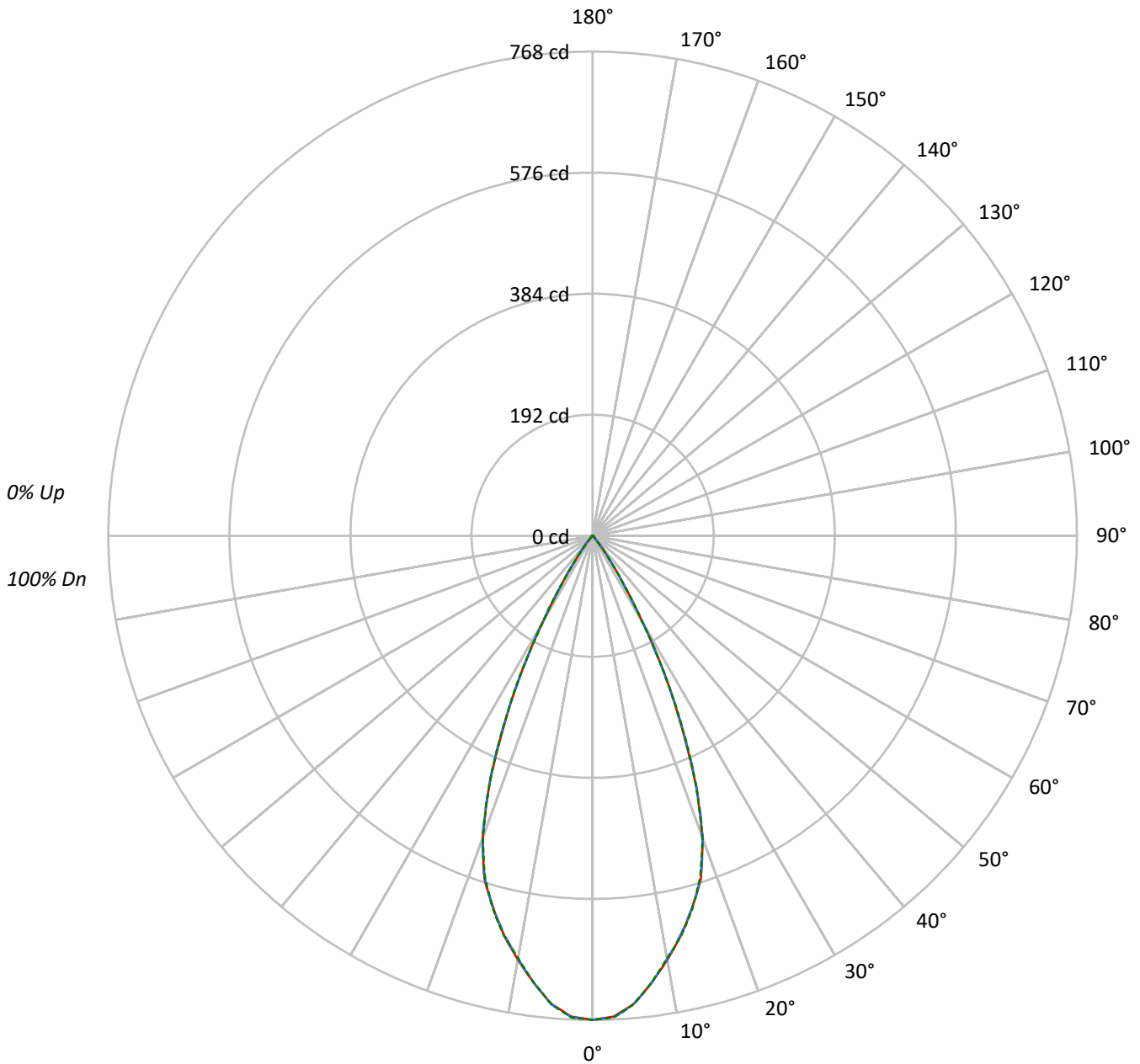
Lumens per Lamp: N/A  
Luminaire Lumens: 433.4 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 5.7  
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				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	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	100	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90	90	90	90
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85	85	85	85
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81	81	81	81
5	97	89	84	81	95	89	84	80	87	83	80	85	82	79	84	81	78	77	77	77	77
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73	73	73	73
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70	70	70	70
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67	67	67	67
9	82	74	69	65	81	73	69	65	73	68	65	72	68	65	71	67	65	64	64	64	64
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61	61	61	61

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

	0°	45°	90°
0°	61424	61424	61424
5°	59876	59956	59916
10°	55442	55361	55264
15°	50530	50588	50662
20°	43350	43478	43308
25°	29385	29747	29694
30°	14558	14651	14595
35°	4864	4893	4600
40°	1107	1086	929
45°	430	486	396
50°	348	373	324
55°	321	321	279
60°	256	272	224
65°	170	189	133
70°	0	23	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	15.9
10°-20°	169.4	39.1
20°-30°	150.9	34.8
30°-40°	37.7	8.7
40°-50°	3.6	0.8
50°-60°	2.0	0.5
60°-70°	0.8	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°	389.4	89.8
0°-40°	427.1	98.5
0°-60°	432.6	99.8
0°-90°	433.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	433.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	746	748	747	746	746	69
15°	610	613	611	610	612	170
25°	333	337	337	339	336	150
35°	50	52	50	49	47	37
45°	4	4	4	4	4	4
55°	2	2	2	2	2	2
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	767.8	767.8	767.8	767.8	767.8
2.5°	763.4	766.9	764.4	764.6	764.7
5°	745.6	748.3	746.6	746.0	746.1
7.5°	715.4	717.8	715.1	716.1	714.9
10°	682.5	684.9	681.5	681.5	680.3
12.5°	649.0	651.5	647.4	647.0	649.7
15°	610.1	613.3	610.8	609.7	611.7
17.5°	570.8	570.4	569.0	568.3	567.6
20°	509.2	511.7	510.7	506.5	508.7
22.5°	428.0	428.2	429.6	430.3	428.5
25°	332.9	336.6	337.0	339.2	336.4
27.5°	246.6	247.3	243.5	243.8	246.5
30°	157.6	159.7	158.6	159.7	158.0
32.5°	90.9	92.8	92.0	92.9	93.0
35°	49.8	51.6	50.1	49.4	47.1
37.5°	24.7	24.7	25.2	23.3	22.1
40°	10.6	10.9	10.4	9.8	8.9
42.5°	5.4	5.4	5.7	4.8	4.7
45°	3.8	3.8	4.3	3.7	3.5
47.5°	3.3	3.3	3.5	3.1	3.0
50°	2.8	2.8	3.0	2.7	2.6
52.5°	2.6	2.6	2.7	2.4	2.3
55°	2.3	2.3	2.3	2.1	2.0
57.5°	1.8	2.0	2.0	1.8	1.7
60°	1.6	1.6	1.7	1.6	1.4
62.5°	1.3	1.3	1.3	1.3	1.1
65°	0.9	0.9	1.0	0.9	0.7
67.5°	0.1	0.3	0.7	0.0	0.0
70°	0.0	0.0	0.1	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)