

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: P402075

Luminaire Tested: **LA1MR022D010 EA1M22309030SB1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402075  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2005-766-2)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 6/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LA1MR022D010 EA1M22309030SB1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

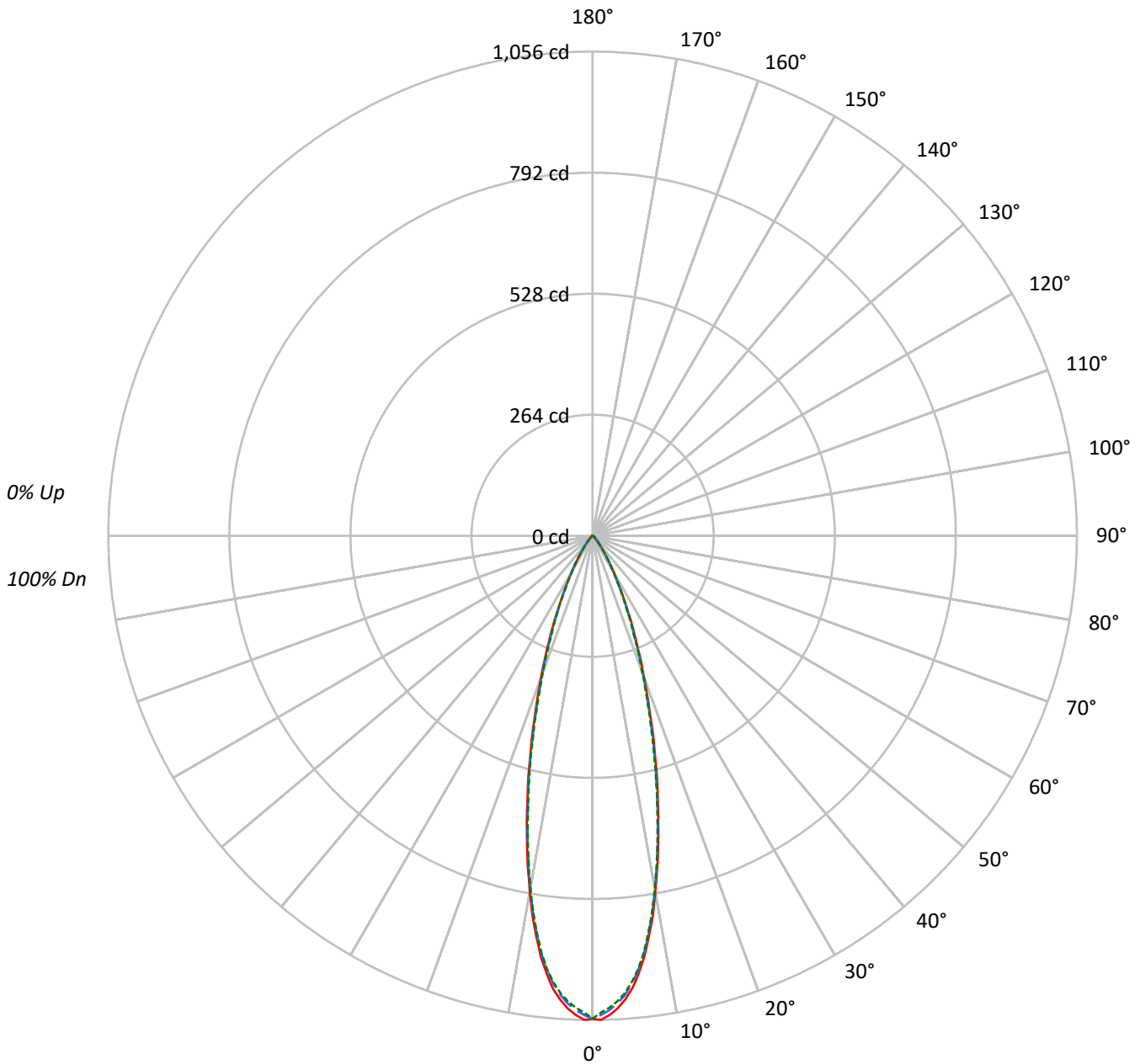
Lumens per Lamp: N/A  
Luminaire Lumens: 359.0 lumens  
Efficiency: N/A  
Efficacy: 63.0 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	326525	326525	326525
5°	308479	305336	304340
10°	248050	246161	245878
15°	173499	170578	169840
20°	108239	105534	104313
25°	62629	60748	59961
30°	33362	32360	31715
35°	15970	16500	16159
40°	6677	9105	6880
45°	3420	5655	3639
50°	2218	3328	2411
55°	1513	2216	1730
60°	868	1426	1116
65°	367	1027	367
70°	0	453	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	24.4
10°-20°	146.0	40.7
20°-30°	84.0	23.4
30°-40°	29.2	8.1
40°-50°	8.3	2.3
50°-60°	3.2	0.9
60°-70°	0.9	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°	317.4	88.4
0°-40°	346.7	96.6
0°-60°	358.1	99.8
0°-90°	359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	359.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	991	985	981	983	978	88
15°	541	538	532	530	529	148
25°	183	181	178	177	175	86
35°	42	44	44	44	43	29
45°	8	9	13	9	8	7
55°	3	3	4	3	3	3
65°	0	1	1	1	0	1
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°	1053.3	1053.3	1053.3	1053.3	1053.3
1°	1056.0	1051.0	1045.5	1045.5	1040.0
2°	1045.9	1041.3	1035.4	1035.8	1029.9
3°	1032.6	1028.0	1022.1	1023.0	1017.5
4°	1014.3	1008.3	1004.2	1005.5	1000.5
5°	991.3	985.4	981.2	983.1	978.0
6°	960.1	956.0	952.3	954.6	950.0
7°	925.2	920.6	917.9	919.7	916.1
8°	882.5	879.3	876.1	878.0	874.3
9°	838.9	833.9	830.7	832.1	829.3
10°	788.0	785.7	782.0	783.4	781.1
11°	738.9	738.9	732.0	729.7	731.1
12°	688.4	688.0	681.5	678.8	679.7
13°	637.5	637.0	630.6	628.3	628.8
14°	587.0	587.4	580.6	578.7	578.3
15°	540.6	538.3	531.5	530.1	529.2
16°	492.0	491.5	484.6	482.8	481.9
17°	448.4	446.1	439.2	437.4	436.0
18°	403.0	403.4	396.5	395.2	392.9
19°	364.4	363.5	357.1	355.7	353.4
20°	328.1	324.0	319.9	318.5	316.2
22.5°	247.4	245.1	239.6	238.2	237.7
25°	183.1	180.8	177.6	176.7	175.3
26°	160.2	160.6	156.5	155.6	154.7
27°	141.8	140.9	137.2	136.8	135.4
28°	122.1	123.0	118.9	118.4	117.5
29°	106.5	106.5	104.2	102.8	101.9
30°	93.2	92.7	90.4	89.5	88.6
32.5°	64.3	63.8	62.9	62.4	61.5
35°	42.2	44.1	43.6	43.6	42.7
37.5°	26.2	29.8	31.2	30.7	28.0
40°	16.5	19.3	22.5	20.7	17.0
42.5°	11.0	13.3	16.5	13.8	11.0
45°	7.8	9.2	12.9	9.2	8.3
47.5°	6.0	6.9	9.6	6.9	6.0
50°	4.6	5.5	6.9	5.5	5.0
52.5°	3.7	4.1	5.5	4.1	3.7
55°	2.8	3.2	4.1	3.2	3.2
57.5°	2.3	2.8	3.2	2.8	2.3
60°	1.4	1.8	2.3	1.8	1.8
62.5°	0.9	1.4	1.8	1.4	0.9
65°	0.5	0.9	1.4	0.9	0.5
67.5°	0.0	0.5	0.5	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
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°







70°	0.0	0.0	0.5	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)