

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: P402044

Luminaire Tested: **LA1MR152D010 EA1M152309030SC1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402044  
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: LA1MR152D010 EA1M152309030SC1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

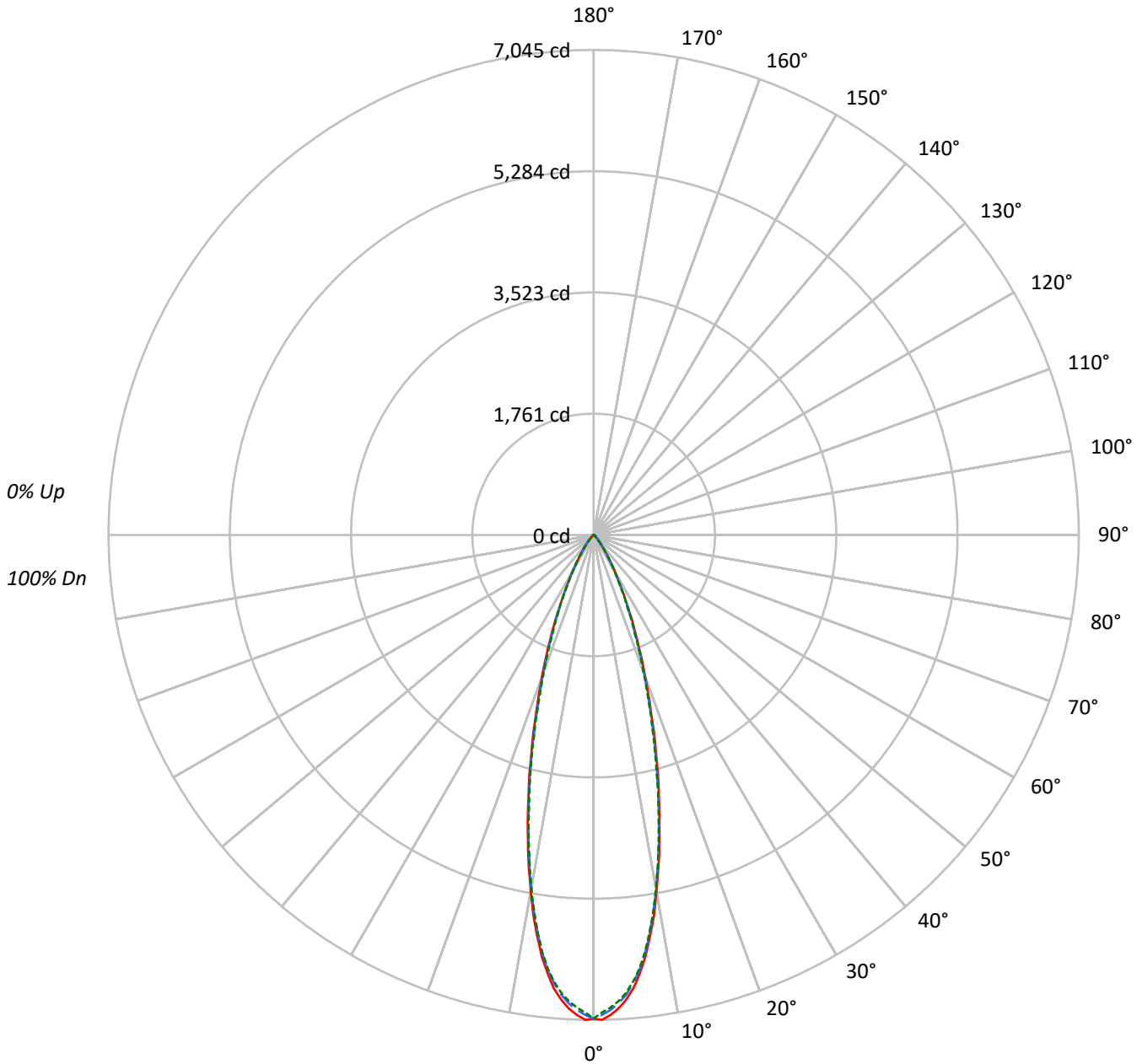
Lumens per Lamp: N/A  
Luminaire Lumens: 2395.0 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.2  
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	76	72	87	80	75	72	79	75	72	78	74	72	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°	2178382	2178382	2178382
5°	2058059	2037116	2030426
10°	1654883	1642354	1640434
15°	1157589	1137916	1133005
20°	722210	704033	695951
25°	417881	405294	400061
30°	222507	215921	211518
35°	106607	110089	107780
40°	44596	60702	45850
45°	22841	37572	24156
50°	14758	22137	16253
55°	9945	14917	11566
60°	5704	9486	7564
65°	2274	6748	2274
70°	0	2810	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	583.5	24.4
10°-20°	973.9	40.7
20°-30°	560.3	23.4
30°-40°	194.9	8.1
40°-50°	55.3	2.3
50°-60°	21.2	0.9
60°-70°	5.8	0.2
70°-80°	0.1	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°	2117.8	88.4
0°-40°	2312.7	96.6
0°-60°	2389.2	99.8
0°-90°	2395.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2395.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7027	7027	7027	7027	7027	
5°	6614	6574	6546	6558	6525	587
15°	3607	3592	3546	3536	3530	985
25°	1222	1206	1185	1179	1170	573
35°	282	294	291	291	285	190
45°	52	61	86	61	55	45
55°	18	21	28	21	21	17
65°	3	6	9	6	3	3
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°	7027.0	7027.0	7027.0	7027.0	7027.0
1°	7045.3	7011.7	6974.9	6974.9	6938.2
2°	6978.0	6947.4	6907.6	6910.6	6870.8
3°	6889.2	6858.6	6818.8	6824.9	6788.1
4°	6766.7	6726.9	6699.3	6708.5	6674.8
5°	6613.6	6573.8	6546.3	6558.5	6524.8
6°	6405.4	6377.8	6353.4	6368.7	6338.0
7°	6172.7	6142.1	6123.7	6136.0	6111.5
8°	5888.0	5866.5	5845.1	5857.3	5832.8
9°	5597.1	5563.4	5542.0	5551.1	5532.8
10°	5257.2	5241.9	5217.4	5226.6	5211.3
11°	4929.6	4929.6	4883.7	4868.4	4877.5
12°	4592.8	4589.7	4546.9	4528.5	4534.6
13°	4252.9	4249.9	4207.0	4191.7	4194.7
14°	3916.1	3919.2	3873.2	3861.0	3857.9
15°	3606.9	3591.6	3545.6	3536.4	3530.3
16°	3282.3	3279.2	3233.3	3221.1	3215.0
17°	2991.4	2976.1	2930.2	2918.0	2908.8
18°	2688.3	2691.4	2645.4	2636.3	2621.0
19°	2431.1	2425.0	2382.1	2372.9	2357.6
20°	2189.2	2161.7	2134.1	2124.9	2109.6
22.5°	1650.3	1635.0	1598.3	1589.1	1586.0
25°	1221.7	1206.4	1184.9	1178.8	1169.6
26°	1068.6	1071.7	1044.1	1038.0	1031.8
27°	946.1	940.0	915.5	912.4	903.2
28°	814.5	820.6	793.0	790.0	783.8
29°	710.4	710.4	695.0	685.9	679.7
30°	621.6	618.5	603.2	597.1	590.9
32.5°	428.7	425.6	419.5	416.4	410.3
35°	281.7	293.9	290.9	290.9	284.8
37.5°	174.5	199.0	208.2	205.1	186.8
40°	110.2	128.6	150.0	137.8	113.3
42.5°	73.5	88.8	110.2	91.9	73.5
45°	52.1	61.2	85.7	61.2	55.1
47.5°	39.8	45.9	64.3	45.9	39.8
50°	30.6	36.7	45.9	36.7	33.7
52.5°	24.5	27.6	36.7	27.6	24.5
55°	18.4	21.4	27.6	21.4	21.4
57.5°	15.3	18.4	21.4	18.4	15.3
60°	9.2	12.2	15.3	12.2	12.2
62.5°	6.1	9.2	12.2	9.2	6.1
65°	3.1	6.1	9.2	6.1	3.1
67.5°	0.0	3.1	3.1	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	3.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)