

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: P402049

Luminaire Tested: **LA1MR152D010 EA1M152309040MMS1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402049  
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 EA1M152309040MMS1MW  
Description: 1 INCH 30° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

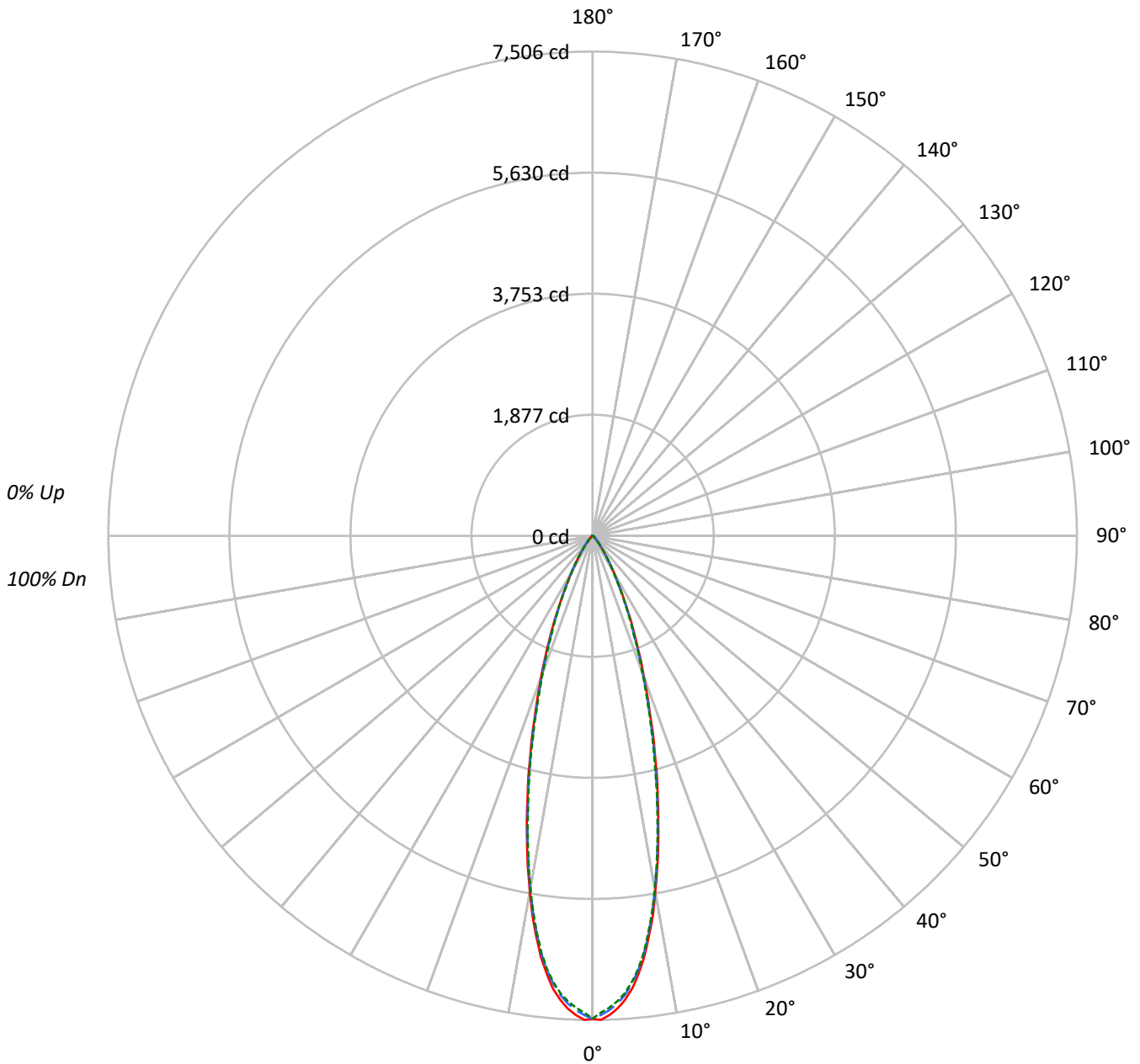
Lumens per Lamp: N/A  
Luminaire Lumens: 2551.7 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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°	2320921	2320921	2320921
5°	2192740	2170397	2163302
10°	1763168	1749821	1747775
15°	1233330	1212405	1207142
20°	769485	750120	741509
25°	445211	431837	426262
30°	237041	230060	225371
35°	113571	117279	114819
40°	47509	64668	48845
45°	24332	40027	25735
50°	15722	23583	17314
55°	10593	15890	12323
60°	6076	10106	8060
65°	2421	7189	2421
70°	0	2991	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	621.7	24.4
10°-20°	1037.7	40.7
20°-30°	597.0	23.4
30°-40°	207.7	8.1
40°-50°	58.9	2.3
50°-60°	22.5	0.9
60°-70°	6.1	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°	2256.4	88.4
0°-40°	2464.1	96.6
0°-60°	2545.5	99.8
0°-90°	2551.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2551.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7487	7487	7487	7487	7487	
5°	7046	7004	6975	6988	6952	626
15°	3843	3827	3778	3768	3761	1049
25°	1302	1285	1262	1256	1246	611
35°	300	313	310	310	303	203
45°	56	65	91	65	59	48
55°	20	23	29	23	23	18
65°	3	6	10	6	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°	7486.8	7486.8	7486.8	7486.8	7486.8
1°	7506.4	7470.5	7431.3	7431.3	7392.2
2°	7434.6	7402.0	7359.6	7362.8	7320.4
3°	7340.0	7307.4	7265.0	7271.5	7232.3
4°	7209.5	7167.1	7137.7	7147.5	7111.6
5°	7046.4	7004.0	6974.6	6987.7	6951.8
6°	6824.6	6795.2	6769.1	6785.4	6752.8
7°	6576.6	6544.0	6524.4	6537.5	6511.4
8°	6273.2	6250.4	6227.6	6240.6	6214.5
9°	5963.3	5927.5	5904.6	5914.4	5894.8
10°	5601.2	5584.9	5558.8	5568.6	5552.3
11°	5252.2	5252.2	5203.2	5186.9	5196.7
12°	4893.3	4890.1	4844.4	4824.8	4831.3
13°	4531.2	4528.0	4482.3	4466.0	4469.2
14°	4172.4	4175.6	4126.7	4113.7	4110.4
15°	3842.9	3826.6	3777.7	3767.9	3761.3
16°	3497.1	3493.8	3444.9	3431.9	3425.3
17°	3187.2	3170.9	3121.9	3108.9	3099.1
18°	2864.2	2867.5	2818.6	2808.8	2792.5
19°	2590.2	2583.7	2538.0	2528.2	2511.9
20°	2332.5	2303.1	2273.8	2264.0	2247.7
22.5°	1758.3	1742.0	1702.9	1693.1	1689.8
25°	1301.6	1285.3	1262.5	1256.0	1246.2
26°	1138.5	1141.8	1112.4	1105.9	1099.4
27°	1008.0	1001.5	975.4	972.1	962.4
28°	867.8	874.3	844.9	841.7	835.1
29°	756.8	756.8	740.5	730.7	724.2
30°	662.2	659.0	642.7	636.1	629.6
32.5°	456.7	453.4	446.9	443.7	437.1
35°	300.1	313.2	309.9	309.9	303.4
37.5°	185.9	212.0	221.8	218.6	199.0
40°	117.4	137.0	159.8	146.8	120.7
42.5°	78.3	94.6	117.4	97.9	78.3
45°	55.5	65.2	91.3	65.2	58.7
47.5°	42.4	48.9	68.5	48.9	42.4
50°	32.6	39.1	48.9	39.1	35.9
52.5°	26.1	29.4	39.1	29.4	26.1
55°	19.6	22.8	29.4	22.8	22.8
57.5°	16.3	19.6	22.8	19.6	16.3
60°	9.8	13.0	16.3	13.0	13.0
62.5°	6.5	9.8	13.0	9.8	6.5
65°	3.3	6.5	9.8	6.5	3.3
67.5°	0.0	3.3	3.3	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	3.3	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)