

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: P401961

Luminaire Tested: **LA1MR102D010 EA1M102309030MMS1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P401961  
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: LA1MR102D010 EA1M102309030MMS1MW  
Description: 1 INCH 30° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

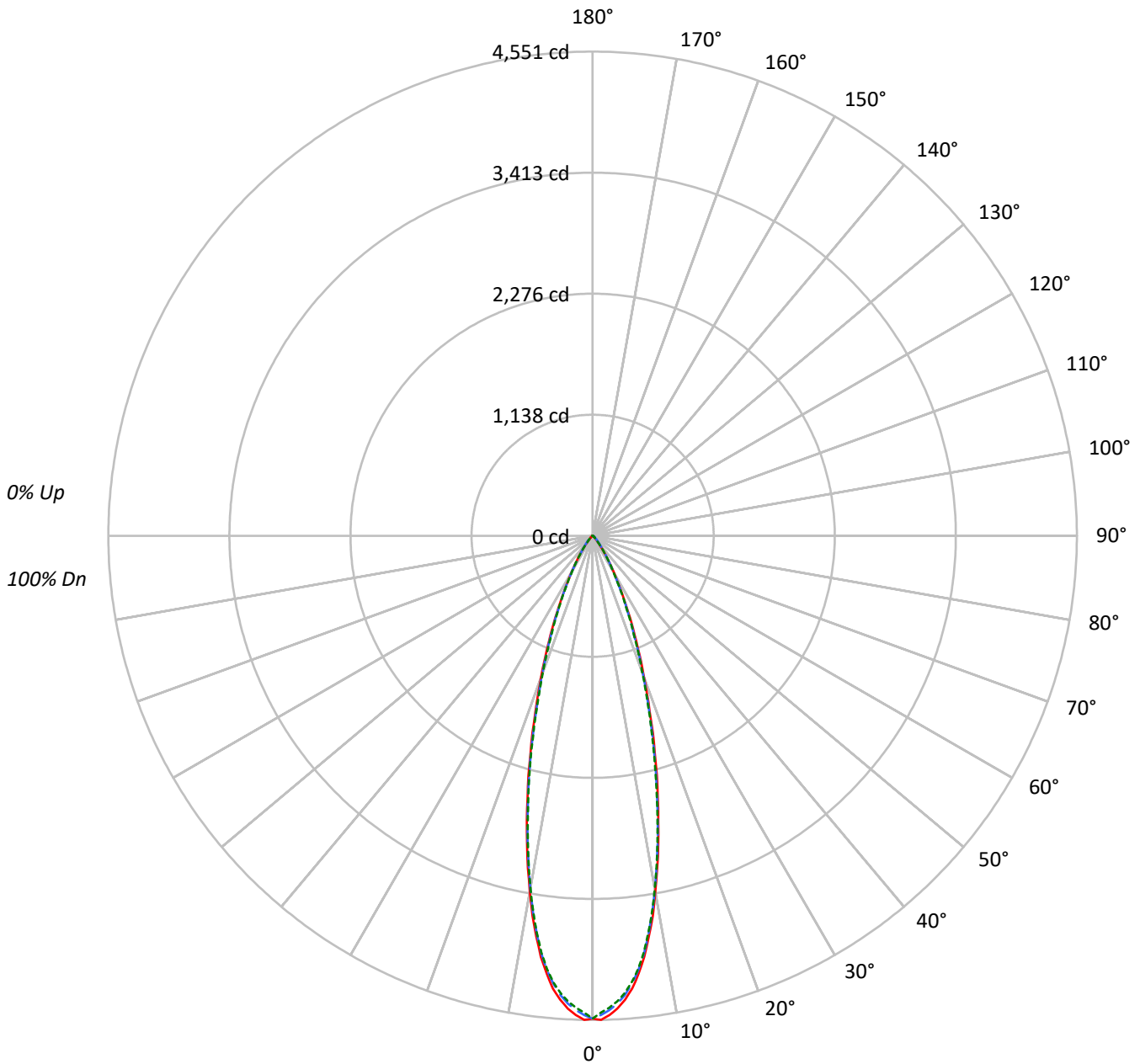
Lumens per Lamp: N/A  
Luminaire Lumens: 1547.1 lumens  
Efficiency: N/A  
Efficacy: 65.8 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 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																			
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°	1407160	1407160	1407160
5°	1329448	1315912	1311586
10°	1069007	1060917	1059657
15°	747752	735075	731898
20°	466540	454796	449584
25°	269945	261804	258418
30°	143721	139461	136633
35°	68876	71109	69596
40°	28813	39213	29622
45°	14731	24288	15607
50°	9549	14324	10514
55°	6432	9620	7459
60°	3658	6138	4898
65°	1467	4328	1467
70°	0	1813	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	376.9	24.4
10°-20°	629.1	40.7
20°-30°	361.9	23.4
30°-40°	125.9	8.1
40°-50°	35.7	2.3
50°-60°	13.7	0.9
60°-70°	3.7	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°	1368.0	88.4
0°-40°	1494.0	96.6
0°-60°	1543.3	99.8
0°-90°	1547.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1547.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4539	4539	4539	4539	4539	
5°	4272	4246	4229	4237	4215	379
15°	2330	2320	2290	2284	2280	636
25°	789	779	765	762	756	370
35°	182	190	188	188	184	123
45°	34	40	55	40	36	29
55°	12	14	18	14	14	11
65°	2	4	6	4	2	2
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°	4539.2	4539.2	4539.2	4539.2	4539.2
1°	4551.1	4529.3	4505.6	4505.6	4481.8
2°	4507.6	4487.8	4462.1	4464.0	4438.3
3°	4450.2	4430.4	4404.7	4408.7	4384.9
4°	4371.1	4345.4	4327.6	4333.5	4311.7
5°	4272.2	4246.5	4228.7	4236.6	4214.8
6°	4137.7	4119.9	4104.1	4114.0	4094.2
7°	3987.4	3967.6	3955.7	3963.6	3947.8
8°	3803.4	3789.6	3775.7	3783.7	3767.8
9°	3615.5	3593.8	3579.9	3585.9	3574.0
10°	3396.0	3386.1	3370.3	3376.2	3366.3
11°	3184.4	3184.4	3154.7	3144.8	3150.7
12°	2966.8	2964.8	2937.1	2925.3	2929.2
13°	2747.3	2745.3	2717.6	2707.7	2709.7
14°	2529.7	2531.7	2502.0	2494.1	2492.1
15°	2329.9	2320.0	2290.4	2284.4	2280.5
16°	2120.3	2118.3	2088.6	2080.7	2076.8
17°	1932.4	1922.5	1892.8	1884.9	1879.0
18°	1736.6	1738.5	1708.9	1702.9	1693.1
19°	1570.4	1566.5	1538.8	1532.8	1523.0
20°	1414.2	1396.4	1378.6	1372.6	1362.8
22.5°	1066.1	1056.2	1032.4	1026.5	1024.5
25°	789.2	779.3	765.4	761.5	755.5
26°	690.3	692.3	674.5	670.5	666.5
27°	611.2	607.2	591.4	589.4	583.5
28°	526.1	530.1	512.3	510.3	506.3
29°	458.9	458.9	449.0	443.0	439.1
30°	401.5	399.5	389.6	385.7	381.7
32.5°	276.9	274.9	271.0	269.0	265.0
35°	182.0	189.9	187.9	187.9	183.9
37.5°	112.7	128.6	134.5	132.5	120.6
40°	71.2	83.1	96.9	89.0	73.2
42.5°	47.5	57.4	71.2	59.3	47.5
45°	33.6	39.6	55.4	39.6	35.6
47.5°	25.7	29.7	41.5	29.7	25.7
50°	19.8	23.7	29.7	23.7	21.8
52.5°	15.8	17.8	23.7	17.8	15.8
55°	11.9	13.8	17.8	13.8	13.8
57.5°	9.9	11.9	13.8	11.9	9.9
60°	5.9	7.9	9.9	7.9	7.9
62.5°	4.0	5.9	7.9	5.9	4.0
65°	2.0	4.0	5.9	4.0	2.0
67.5°	0.0	2.0	2.0	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	2.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)