

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: P402010

Luminaire Tested: **LA1MR012D010 EA1M12309030MW1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402010  
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: LA1MR012D010 EA1M12309030MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

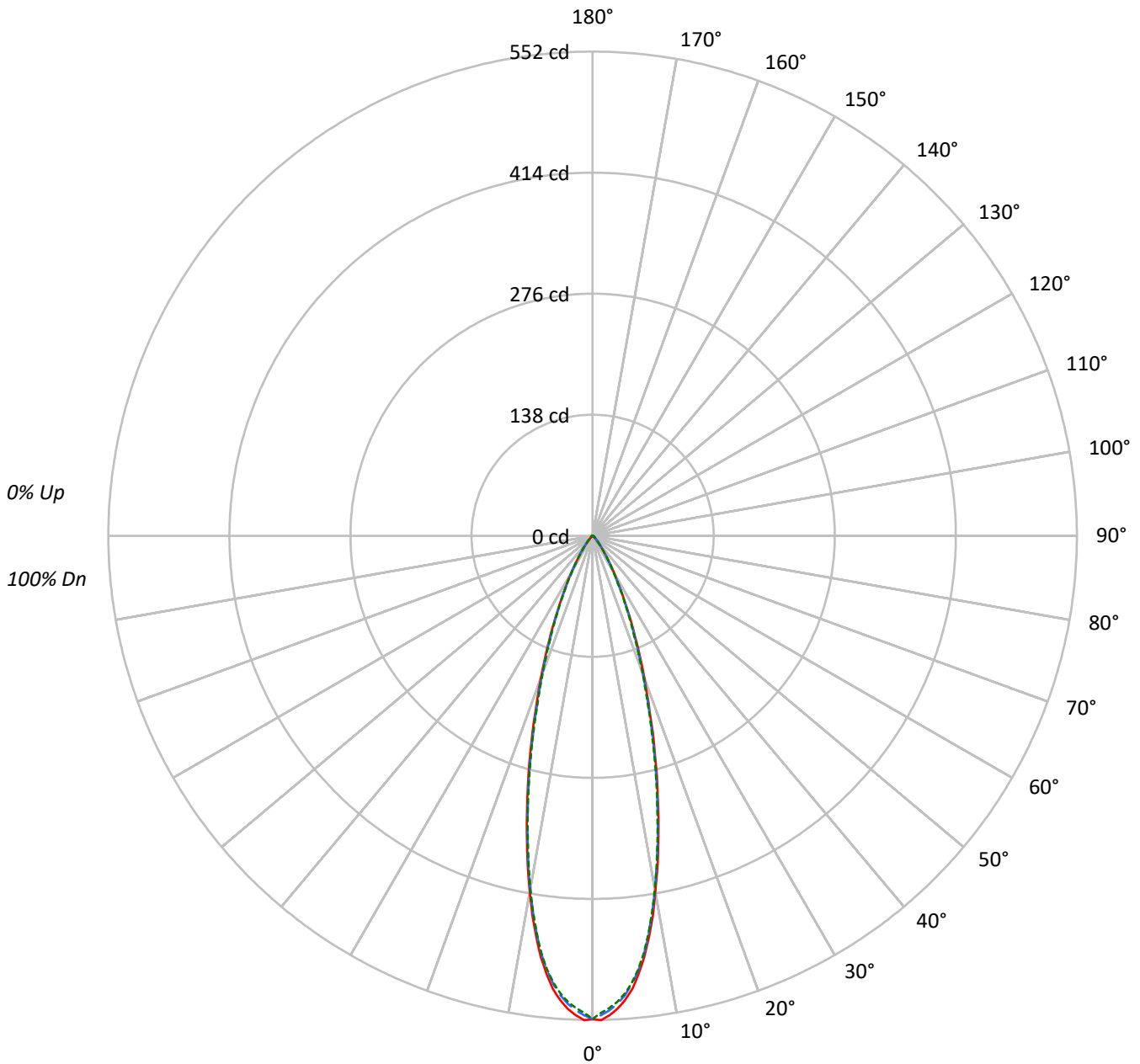
Lumens per Lamp: N/A  
Luminaire Lumens: 187.8 lumens  
Efficiency: N/A  
Efficacy: 52.2 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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

TEST NUMBER: P402010

CATALOG NUMBER: LA1MR012D010 EA1M12309030MW1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P402010

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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

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

	0°	45°	90°
0°	170811	170811	170811
5°	161381	159732	159203
10°	129754	128778	128621
15°	90761	89221	88835
20°	56643	55192	54565
25°	32768	31776	31366
30°	17433	16931	16574
35°	8364	8628	8439
40°	3480	4775	3602
45°	1797	2937	1885
50°	1157	1736	1254
55°	757	1189	919
60°	434	744	620
65°	147	513	147
70°	0	181	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402010

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.8	24.4
10°-20°	76.4	40.7
20°-30°	43.9	23.4
30°-40°	15.3	8.1
40°-50°	4.3	2.3
50°-60°	1.7	0.9
60°-70°	0.4	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°	166.1	88.4
0°-40°	181.3	96.6
0°-60°	187.3	99.8
0°-90°	187.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	187.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	519	516	513	514	512	46
15°	283	282	278	277	277	77
25°	96	95	93	92	92	45
35°	22	23	23	23	22	15
45°	4	5	7	5	4	4
55°	1	2	2	2	2	1
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P402010

CATALOG NUMBER: LA1MR012D010 EA1M12309030MW1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	551.0	551.0	551.0	551.0	551.0
1°	552.4	549.8	546.9	546.9	544.0
2°	547.2	544.8	541.6	541.9	538.7
3°	540.2	537.8	534.7	535.1	532.3
4°	530.6	527.5	525.3	526.0	523.4
5°	518.6	515.5	513.3	514.3	511.6
6°	502.3	500.1	498.2	499.4	497.0
7°	484.0	481.6	480.2	481.1	479.2
8°	461.7	460.0	458.3	459.3	457.4
9°	438.9	436.2	434.6	435.3	433.8
10°	412.2	411.0	409.1	409.8	408.6
11°	386.5	386.5	382.9	381.7	382.5
12°	360.1	359.9	356.5	355.1	355.6
13°	333.5	333.2	329.9	328.7	328.9
14°	307.1	307.3	303.7	302.7	302.5
15°	282.8	281.6	278.0	277.3	276.8
16°	257.4	257.1	253.5	252.6	252.1
17°	234.6	233.4	229.8	228.8	228.1
18°	210.8	211.0	207.4	206.7	205.5
19°	190.6	190.1	186.8	186.1	184.9
20°	171.7	169.5	167.3	166.6	165.4
22.5°	129.4	128.2	125.3	124.6	124.4
25°	95.8	94.6	92.9	92.4	91.7
26°	83.8	84.0	81.9	81.4	80.9
27°	74.2	73.7	71.8	71.5	70.8
28°	63.9	64.3	62.2	61.9	61.5
29°	55.7	55.7	54.5	53.8	53.3
30°	48.7	48.5	47.3	46.8	46.3
32.5°	33.6	33.4	32.9	32.7	32.2
35°	22.1	23.0	22.8	22.8	22.3
37.5°	13.7	15.6	16.3	16.1	14.6
40°	8.6	10.1	11.8	10.8	8.9
42.5°	5.8	7.0	8.6	7.2	5.8
45°	4.1	4.8	6.7	4.8	4.3
47.5°	3.1	3.6	5.0	3.6	3.1
50°	2.4	2.9	3.6	2.9	2.6
52.5°	1.9	2.2	2.9	2.2	1.9
55°	1.4	1.7	2.2	1.7	1.7
57.5°	1.2	1.4	1.7	1.4	1.2
60°	0.7	1.0	1.2	1.0	1.0
62.5°	0.5	0.7	1.0	0.7	0.5
65°	0.2	0.5	0.7	0.5	0.2
67.5°	0.0	0.2	0.2	0.0	0.0



TEST NUMBER: P402010

CATALOG NUMBER: LA1MR012D010 EA1M12309030MW1MW

**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	0.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)