

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: P402006

Luminaire Tested: **LA1MR012D010 EA1M12309027MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402006  
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 EA1M12309027MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

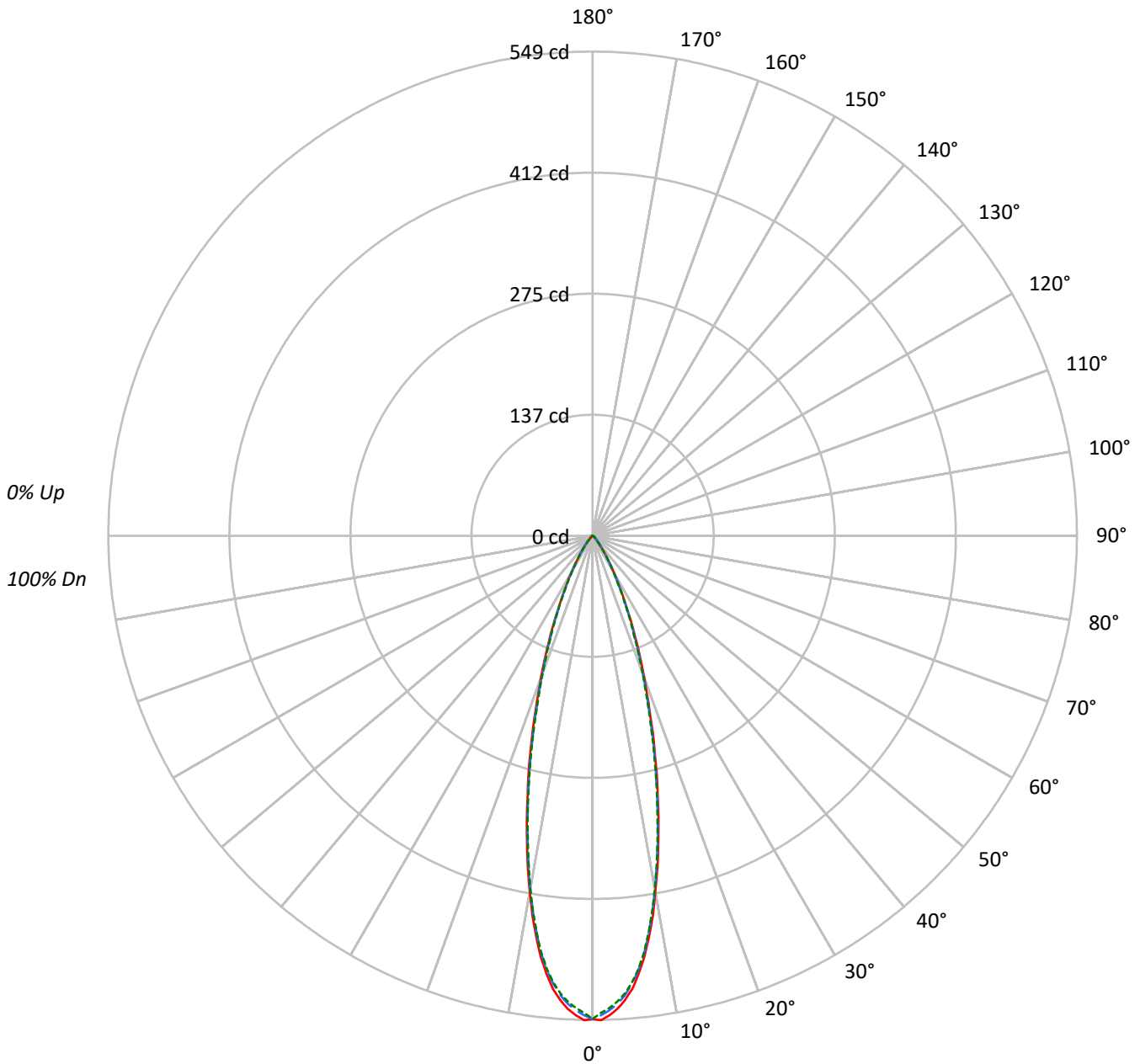
Lumens per Lamp: N/A  
Luminaire Lumens: 186.8 lumens  
Efficiency: N/A  
Efficacy: 51.9 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot





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

RF	20				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°	169850	169850	169850
5°	160479	158829	158331
10°	129030	128054	127928
15°	90248	88739	88354
20°	56313	54895	54268
25°	32597	31605	31195
30°	17361	16824	16502
35°	8326	8591	8401
40°	3480	4735	3561
45°	1797	2937	1885
50°	1157	1736	1254
55°	757	1135	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.5	24.4
10°-20°	75.9	40.7
20°-30°	43.7	23.4
30°-40°	15.2	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°	165.1	88.4
0°-40°	180.3	96.6
0°-60°	186.3	99.8
0°-90°	186.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	186.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	548	548	548	548	548	
5°	516	513	510	511	509	46
15°	281	280	276	276	275	77
25°	95	94	92	92	91	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	547.9	547.9	547.9	547.9	547.9
1°	549.4	546.7	543.9	543.9	541.0
2°	544.1	541.7	538.6	538.9	535.8
3°	537.2	534.8	531.7	532.2	529.3
4°	527.6	524.5	522.4	523.1	520.5
5°	515.7	512.6	510.4	511.4	508.8
6°	499.5	497.3	495.4	496.6	494.2
7°	481.3	478.9	477.5	478.5	476.5
8°	459.1	457.4	455.8	456.7	454.8
9°	436.4	433.8	432.1	432.9	431.4
10°	409.9	408.7	406.8	407.5	406.4
11°	384.4	384.4	380.8	379.6	380.3
12°	358.1	357.9	354.5	353.1	353.6
13°	331.6	331.4	328.0	326.8	327.1
14°	305.4	305.6	302.0	301.1	300.8
15°	281.2	280.1	276.5	275.8	275.3
16°	255.9	255.7	252.1	251.2	250.7
17°	233.3	232.1	228.5	227.5	226.8
18°	209.6	209.9	206.3	205.6	204.4
19°	189.6	189.1	185.7	185.0	183.8
20°	170.7	168.6	166.4	165.7	164.5
22.5°	128.7	127.5	124.6	123.9	123.7
25°	95.3	94.1	92.4	91.9	91.2
26°	83.3	83.6	81.4	80.9	80.5
27°	73.8	73.3	71.4	71.1	70.4
28°	63.5	64.0	61.8	61.6	61.1
29°	55.4	55.4	54.2	53.5	53.0
30°	48.5	48.2	47.0	46.6	46.1
32.5°	33.4	33.2	32.7	32.5	32.0
35°	22.0	22.9	22.7	22.7	22.2
37.5°	13.6	15.5	16.2	16.0	14.6
40°	8.6	10.0	11.7	10.7	8.8
42.5°	5.7	6.9	8.6	7.2	5.7
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	2.1	2.9	2.1	1.9
55°	1.4	1.7	2.1	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



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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	0.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)