

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: P402190

Luminaire Tested: **LD1MR012D010 ED1M12309035MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402190  
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: LD1MR012D010 ED1M12309035MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

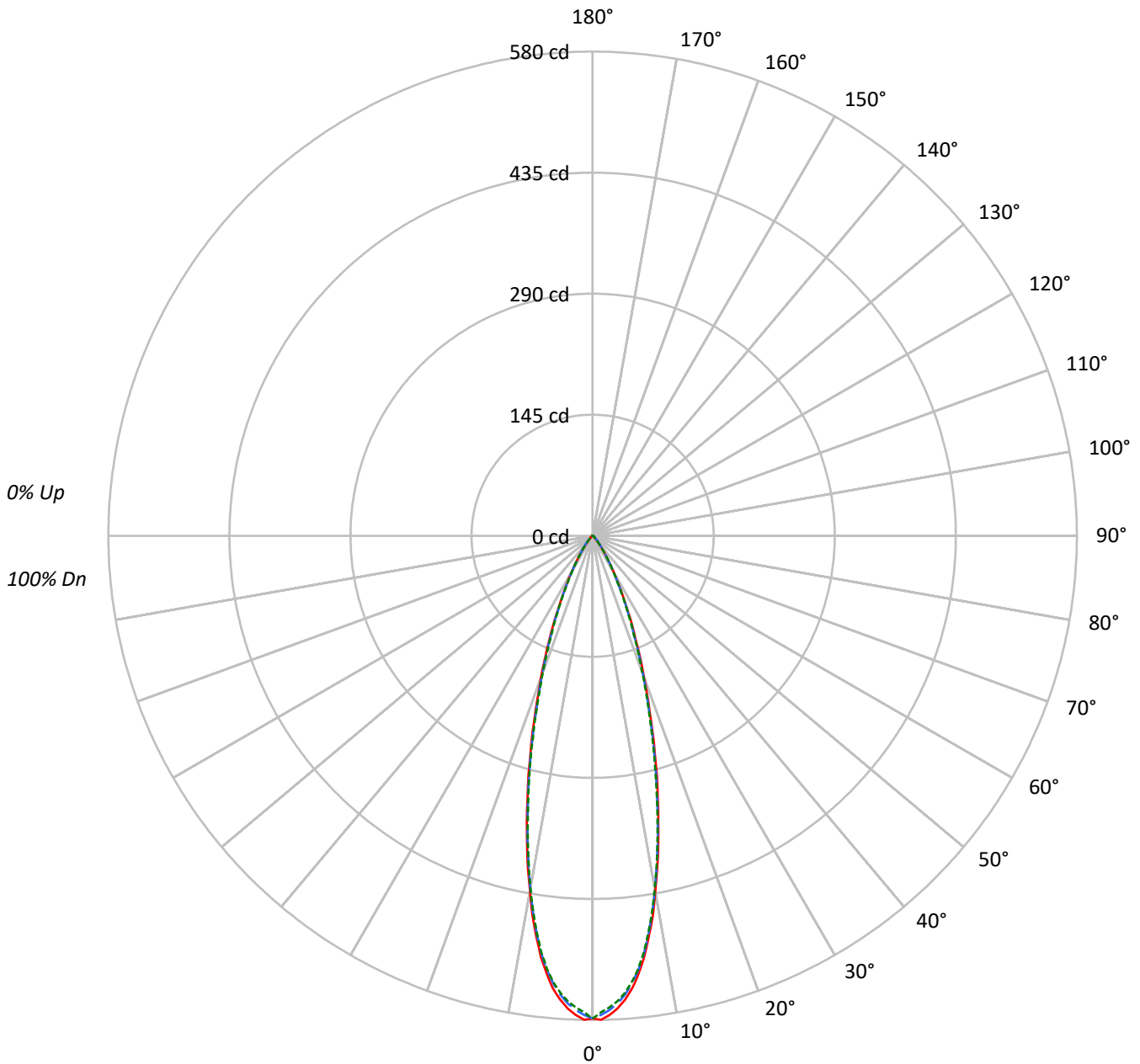
Lumens per Lamp: N/A  
Luminaire Lumens: 197.2 lumens  
Efficiency: N/A  
Efficacy: 54.8 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 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									
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	94	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	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70																			
9	85	77	72	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°	179305	179305	179305
5°	169410	167667	167138
10°	136207	135200	135042
15°	95286	93682	93264
20°	59447	57963	57270
25°	34410	33350	32939
30°	18328	17755	17397
35°	8780	9045	8856
40°	3683	4978	3764
45°	1885	3113	1973
50°	1206	1833	1350
55°	811	1243	973
60°	496	806	620
65°	220	587	220
70°	0	272	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.0	24.4
10°-20°	80.2	40.7
20°-30°	46.1	23.4
30°-40°	16.0	8.1
40°-50°	4.6	2.3
50°-60°	1.8	0.9
60°-70°	0.5	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°	174.3	88.4
0°-40°	190.4	96.5
0°-60°	196.7	99.7
0°-90°	197.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	197.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	544	541	539	540	537	48
15°	297	296	292	291	291	81
25°	101	99	98	97	96	47
35°	23	24	24	24	23	16
45°	4	5	7	5	4	4
55°	2	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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	578.4	578.4	578.4	578.4	578.4
1°	579.9	577.1	574.1	574.1	571.1
2°	574.4	571.9	568.6	568.8	565.6
3°	567.1	564.5	561.3	561.8	558.8
4°	557.0	553.7	551.4	552.2	549.4
5°	544.4	541.1	538.8	539.8	537.1
6°	527.2	525.0	523.0	524.2	521.7
7°	508.1	505.6	504.1	505.1	503.1
8°	484.7	482.9	481.1	482.1	480.1
9°	460.7	457.9	456.2	456.9	455.4
10°	432.7	431.5	429.5	430.2	429.0
11°	405.8	405.8	402.0	400.7	401.5
12°	378.0	377.8	374.3	372.8	373.3
13°	350.1	349.8	346.3	345.0	345.3
14°	322.3	322.6	318.8	317.8	317.6
15°	296.9	295.6	291.9	291.1	290.6
16°	270.2	269.9	266.1	265.1	264.6
17°	246.2	245.0	241.2	240.2	239.4
18°	221.3	221.5	217.8	217.0	215.7
19°	200.1	199.6	196.1	195.3	194.1
20°	180.2	177.9	175.7	174.9	173.6
22.5°	135.8	134.6	131.6	130.8	130.6
25°	100.6	99.3	97.5	97.0	96.3
26°	88.0	88.2	85.9	85.4	84.9
27°	77.9	77.4	75.4	75.1	74.3
28°	67.0	67.5	65.3	65.0	64.5
29°	58.5	58.5	57.2	56.5	56.0
30°	51.2	50.9	49.6	49.1	48.6
32.5°	35.3	35.0	34.5	34.3	33.8
35°	23.2	24.2	23.9	23.9	23.4
37.5°	14.4	16.4	17.1	16.9	15.4
40°	9.1	10.6	12.3	11.3	9.3
42.5°	6.0	7.3	9.1	7.6	6.0
45°	4.3	5.0	7.1	5.0	4.5
47.5°	3.3	3.8	5.3	3.8	3.3
50°	2.5	3.0	3.8	3.0	2.8
52.5°	2.0	2.3	3.0	2.3	2.0
55°	1.5	1.8	2.3	1.8	1.8
57.5°	1.3	1.5	1.8	1.5	1.3
60°	0.8	1.0	1.3	1.0	1.0
62.5°	0.5	0.8	1.0	0.8	0.5
65°	0.3	0.5	0.8	0.5	0.3
67.5°	0.0	0.3	0.3	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



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	0.0	0.3	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)