

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: P402282

Luminaire Tested: **LD1MR052D010 ED1M52309030MW1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402282  
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: LD1MR052D010 ED1M52309030MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

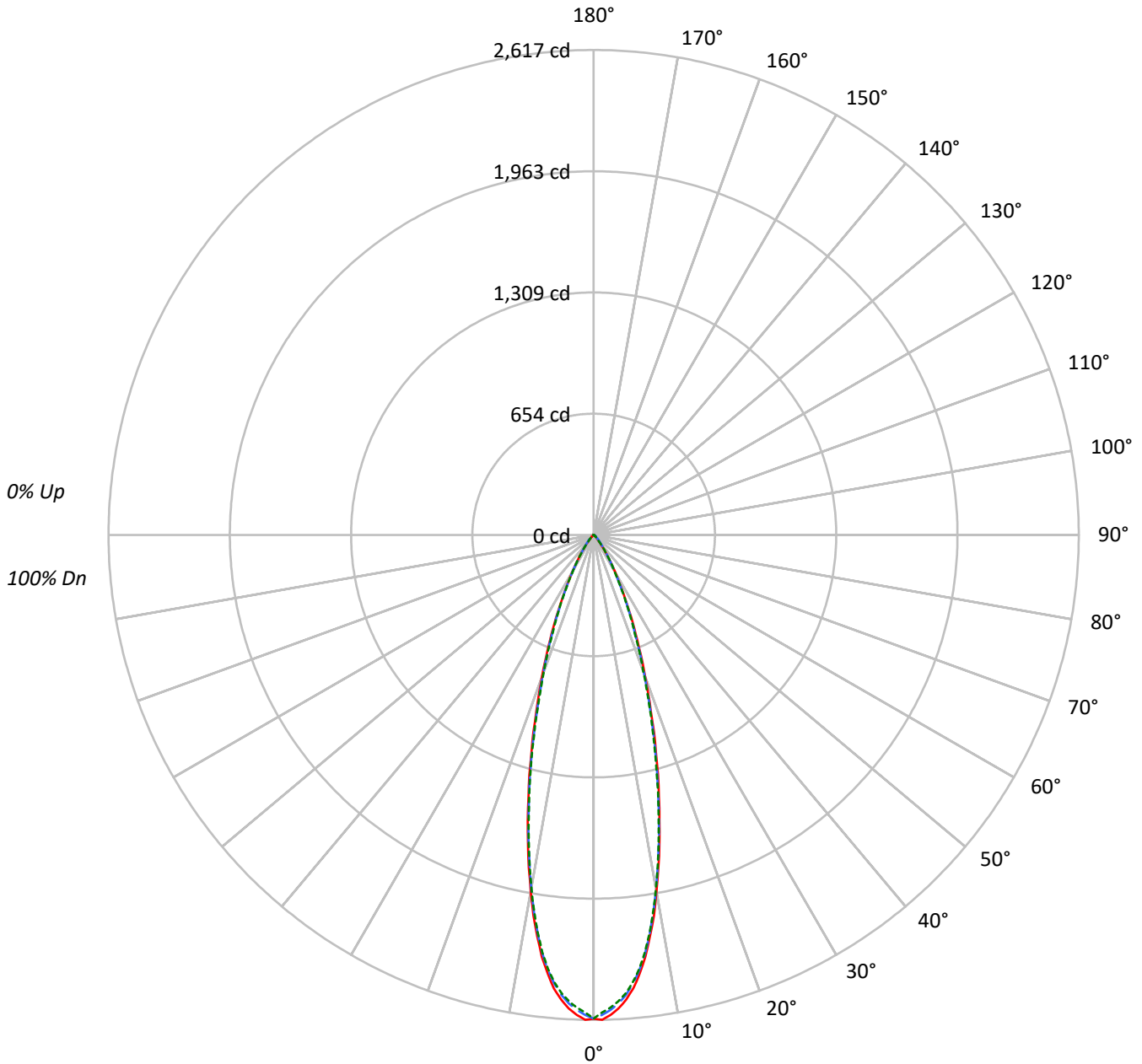
Lumens per Lamp: N/A  
Luminaire Lumens: 889.7 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.1  
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°	809229	809229	809229
5°	764522	756742	754252
10°	614742	610114	609390
15°	430024	422707	420877
20°	268305	261542	258540
25°	155222	150570	148620
30°	82653	80219	78572
35°	39585	40910	40039
40°	16551	22541	17037
45°	8461	13941	8987
50°	5498	8247	6028
55°	3675	5513	4324
60°	2108	3534	2790
65°	807	2494	807
70°	0	997	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.8	24.4
10°-20°	361.8	40.7
20°-30°	208.1	23.4
30°-40°	72.4	8.1
40°-50°	20.5	2.3
50°-60°	7.9	0.9
60°-70°	2.1	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°	786.7	88.4
0°-40°	859.1	96.6
0°-60°	887.5	99.8
0°-90°	889.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	889.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2610	2610	2610	2610	2610	
5°	2457	2442	2432	2436	2424	218
15°	1340	1334	1317	1314	1311	366
25°	454	448	440	438	434	213
35°	105	109	108	108	106	71
45°	19	23	32	23	20	17
55°	7	8	10	8	8	6
65°	1	2	3	2	1	1
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°	2610.4	2610.4	2610.4	2610.4	2610.4
1°	2617.2	2604.7	2591.0	2591.0	2577.4
2°	2592.2	2580.8	2566.0	2567.1	2552.4
3°	2559.2	2547.8	2533.0	2535.3	2521.6
4°	2513.7	2498.9	2488.7	2492.1	2479.6
5°	2456.8	2442.0	2431.8	2436.3	2423.8
6°	2379.5	2369.2	2360.1	2365.8	2354.4
7°	2293.0	2281.7	2274.8	2279.4	2270.3
8°	2187.2	2179.3	2171.3	2175.9	2166.8
9°	2079.2	2066.7	2058.7	2062.1	2055.3
10°	1952.9	1947.3	1938.2	1941.6	1935.9
11°	1831.2	1831.2	1814.2	1808.5	1811.9
12°	1706.1	1705.0	1689.1	1682.2	1684.5
13°	1579.9	1578.7	1562.8	1557.1	1558.3
14°	1454.8	1455.9	1438.8	1434.3	1433.1
15°	1339.9	1334.2	1317.1	1313.7	1311.4
16°	1219.3	1218.2	1201.1	1196.6	1194.3
17°	1111.3	1105.6	1088.5	1084.0	1080.5
18°	998.6	999.8	982.7	979.3	973.6
19°	903.1	900.8	884.9	881.5	875.8
20°	813.3	803.0	792.8	789.4	783.7
22.5°	613.1	607.4	593.7	590.3	589.2
25°	453.8	448.1	440.2	437.9	434.5
26°	397.0	398.1	387.9	385.6	383.3
27°	351.5	349.2	340.1	338.9	335.5
28°	302.6	304.8	294.6	293.5	291.2
29°	263.9	263.9	258.2	254.8	252.5
30°	230.9	229.8	224.1	221.8	219.5
32.5°	159.2	158.1	155.8	154.7	152.4
35°	104.6	109.2	108.1	108.1	105.8
37.5°	64.8	73.9	77.3	76.2	69.4
40°	40.9	47.8	55.7	51.2	42.1
42.5°	27.3	33.0	40.9	34.1	27.3
45°	19.3	22.7	31.8	22.7	20.5
47.5°	14.8	17.1	23.9	17.1	14.8
50°	11.4	13.6	17.1	13.6	12.5
52.5°	9.1	10.2	13.6	10.2	9.1
55°	6.8	8.0	10.2	8.0	8.0
57.5°	5.7	6.8	8.0	6.8	5.7
60°	3.4	4.5	5.7	4.5	4.5
62.5°	2.3	3.4	4.5	3.4	2.3
65°	1.1	2.3	3.4	2.3	1.1
67.5°	0.0	1.1	1.1	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	1.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)