

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: P402277

Luminaire Tested: **LD1MR052D010 ED1M52309027MMS1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402277  
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 ED1M52309027MMS1MW  
Description: 1 INCH 30° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

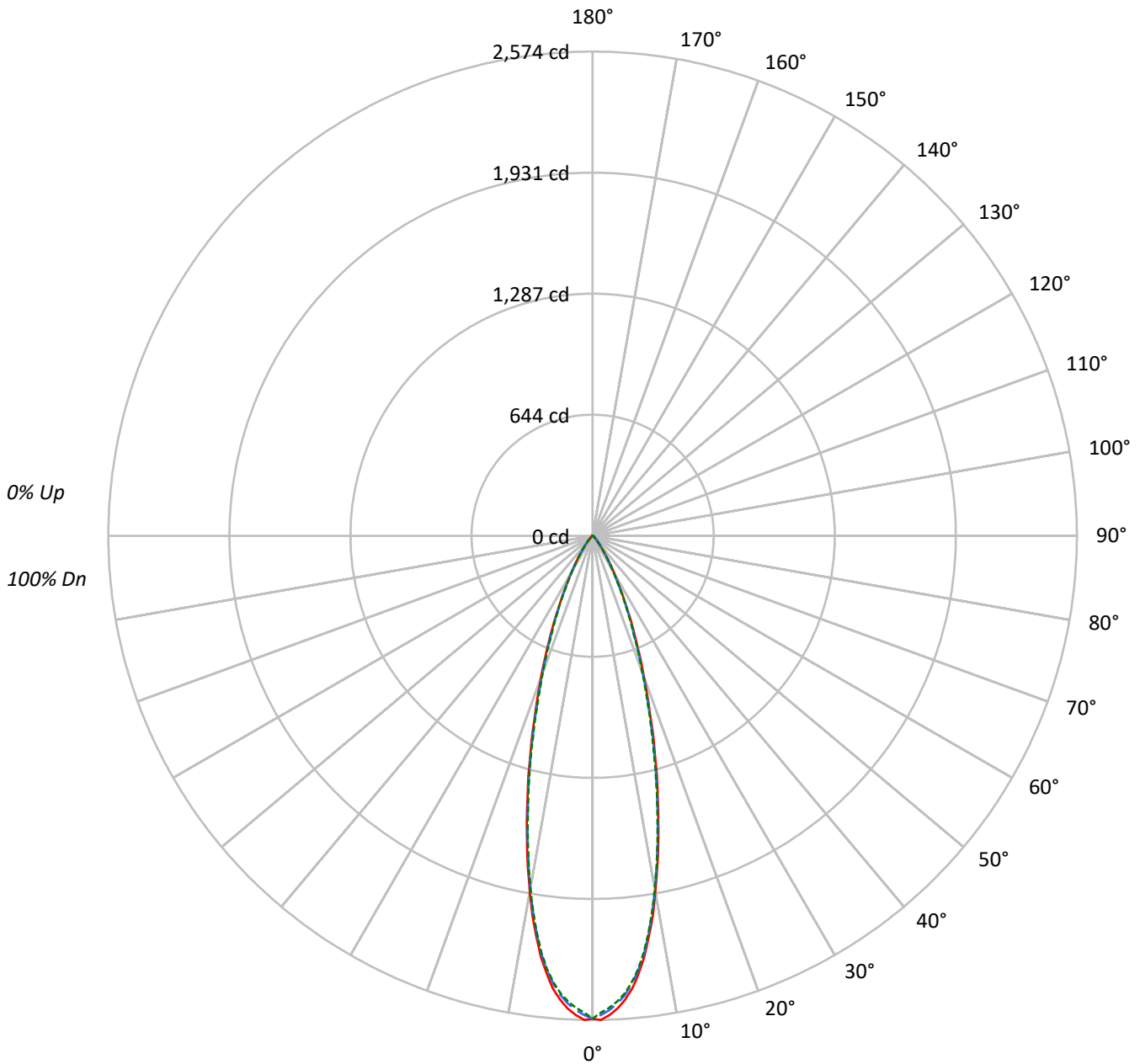
Lumens per Lamp: N/A  
Luminaire Lumens: 875.1 lumens  
Efficiency: N/A  
Efficacy: 72.3 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P402277

CATALOG NUMBER: LD1MR052D010 ED1M52309027MMS1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P402277

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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				
1	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	95				95				
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91				91				
3	106	101	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87				87				
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83				83				
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79				79				
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76				76				
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	77	74	73				73				
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70				70				
9	85	77	73	69	84	77	72	69	76	72	69	75	71	69	74	71	69	67				67				
10	82	74	70	67	81	74	70	67	73	69	66	73	69	66	72	69	66	65				65				

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

	0°	45°	90°
0°	795960	795960	795960
5°	751981	744326	741898
10°	604669	600104	599380
15°	422963	415774	413977
20°	263885	257254	254285
25°	152691	148107	146192
30°	81293	78894	77283
35°	38942	40228	39358
40°	16309	22176	16754
45°	8330	13722	8812
50°	5402	8102	5932
55°	3621	5459	4216
60°	2108	3472	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°	213.2	24.4
10°-20°	355.9	40.7
20°-30°	204.7	23.4
30°-40°	71.2	8.1
40°-50°	20.2	2.3
50°-60°	7.7	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°	773.8	88.4
0°-40°	845.0	96.6
0°-60°	873.0	99.8
0°-90°	875.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2568	2568	2568	2568	2568	
5°	2416	2402	2392	2396	2384	215
15°	1318	1312	1296	1292	1290	360
25°	446	441	433	431	427	209
35°	103	107	106	106	104	69
45°	19	22	31	22	20	16
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



TEST NUMBER: P402277

CATALOG NUMBER: LD1MR052D010 ED1M52309027MMS1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2567.6	2567.6	2567.6	2567.6	2567.6
1°	2574.3	2562.0	2548.5	2548.5	2535.1
2°	2549.6	2538.5	2523.9	2525.0	2510.5
3°	2517.2	2506.0	2491.5	2493.7	2480.3
4°	2472.5	2457.9	2447.8	2451.2	2438.9
5°	2416.5	2402.0	2391.9	2396.4	2384.1
6°	2340.4	2330.4	2321.4	2327.0	2315.8
7°	2255.4	2244.2	2237.5	2242.0	2233.0
8°	2151.4	2143.5	2135.7	2140.2	2131.2
9°	2045.1	2032.8	2025.0	2028.3	2021.6
10°	1920.9	1915.3	1906.4	1909.7	1904.1
11°	1801.2	1801.2	1784.4	1778.8	1782.2
12°	1678.1	1677.0	1661.4	1654.6	1656.9
13°	1554.0	1552.8	1537.2	1531.6	1532.7
14°	1430.9	1432.0	1415.2	1410.8	1409.6
15°	1317.9	1312.3	1295.5	1292.2	1289.9
16°	1199.3	1198.2	1181.4	1176.9	1174.7
17°	1093.0	1087.4	1070.7	1066.2	1062.8
18°	982.3	983.4	966.6	963.3	957.7
19°	888.3	886.1	870.4	867.0	861.4
20°	799.9	789.8	779.8	776.4	770.8
22.5°	603.0	597.4	584.0	580.6	579.5
25°	446.4	440.8	433.0	430.7	427.4
26°	390.4	391.6	381.5	379.3	377.0
27°	345.7	343.5	334.5	333.4	330.0
28°	297.6	299.8	289.8	288.6	286.4
29°	259.6	259.6	254.0	250.6	248.4
30°	227.1	226.0	220.4	218.2	215.9
32.5°	156.6	155.5	153.3	152.2	149.9
35°	102.9	107.4	106.3	106.3	104.0
37.5°	63.8	72.7	76.1	75.0	68.2
40°	40.3	47.0	54.8	50.3	41.4
42.5°	26.9	32.4	40.3	33.6	26.9
45°	19.0	22.4	31.3	22.4	20.1
47.5°	14.5	16.8	23.5	16.8	14.5
50°	11.2	13.4	16.8	13.4	12.3
52.5°	9.0	10.1	13.4	10.1	9.0
55°	6.7	7.8	10.1	7.8	7.8
57.5°	5.6	6.7	7.8	6.7	5.6
60°	3.4	4.5	5.6	4.5	4.5
62.5°	2.2	3.4	4.5	3.4	2.2
65°	1.1	2.2	3.4	2.2	1.1
67.5°	0.0	1.1	1.1	0.0	0.0



TEST NUMBER: P402277

CATALOG NUMBER: LD1MR052D010 ED1M52309027MMS1MW

**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	1.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)