

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: P402292

Luminaire Tested: **LD1MR052D010 ED1M52309040SC1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402292  
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 ED1M52309040SC1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

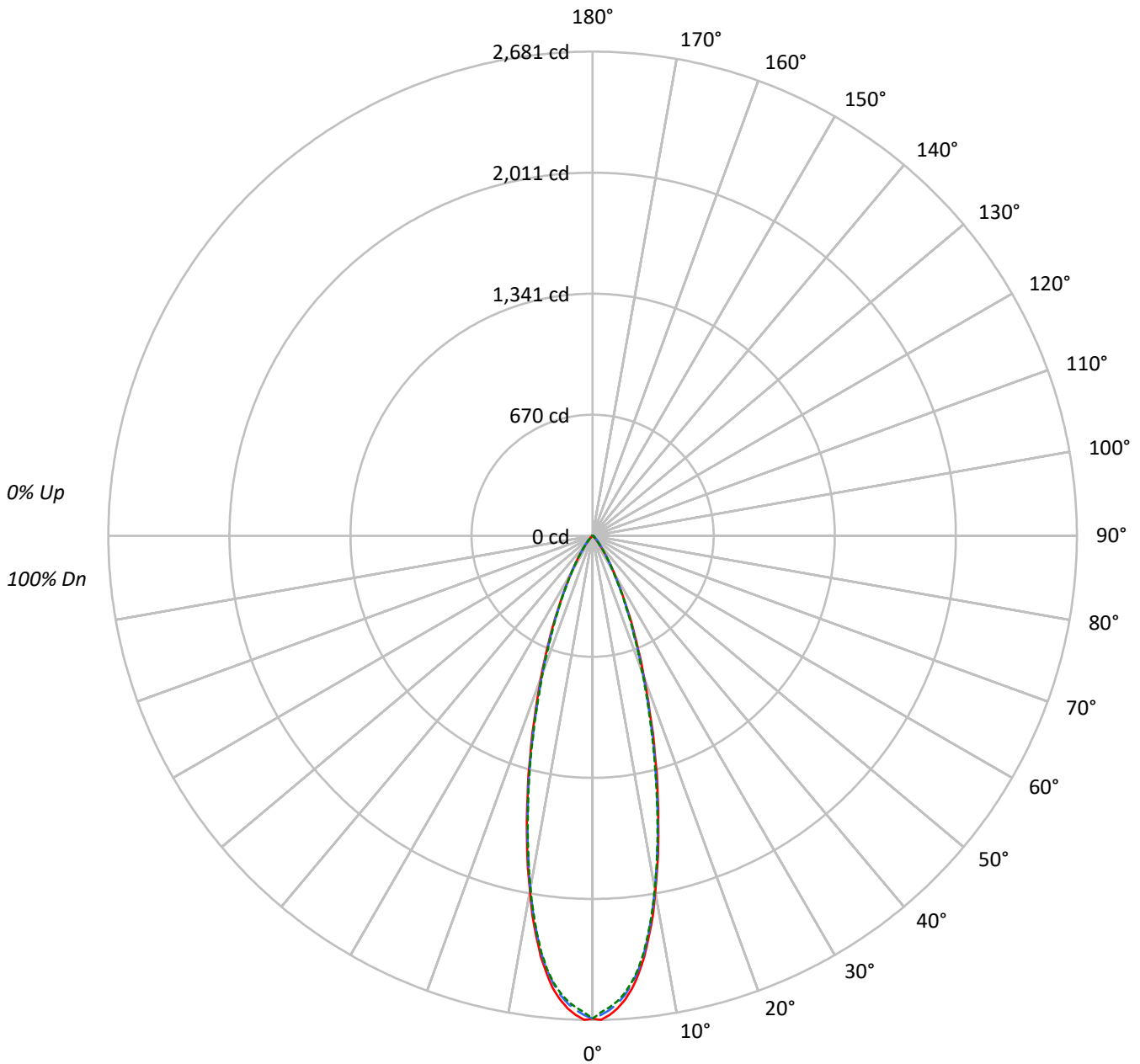
Lumens per Lamp: N/A  
Luminaire Lumens: 911.4 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot





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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	75	72	87	80	75	72	79	75	72	78	74	71	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°	828883	828883	828883
5°	783099	775133	772612
10°	629694	624941	624185
15°	440455	432977	431115
20°	274804	267909	264808
25°	159019	154230	152246
30°	84657	82152	80505
35°	40569	41894	41023
40°	16956	23107	17442
45°	8680	14292	9207
50°	5643	8440	6173
55°	3783	5675	4432
60°	2170	3596	2914
65°	880	2567	880
70°	0	1088	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.0	24.4
10°-20°	370.6	40.7
20°-30°	213.2	23.4
30°-40°	74.2	8.1
40°-50°	21.0	2.3
50°-60°	8.1	0.9
60°-70°	2.2	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°	805.8	88.4
0°-40°	880.0	96.6
0°-60°	909.1	99.8
0°-90°	911.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	911.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2674	2674	2674	2674	2674	
5°	2516	2501	2491	2496	2483	224
15°	1372	1367	1349	1346	1343	375
25°	465	459	451	449	445	218
35°	107	112	111	111	108	72
45°	20	23	33	23	21	17
55°	7	8	10	8	8	7
65°	1	2	4	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°	2673.8	2673.8	2673.8	2673.8	2673.8
1°	2680.8	2668.0	2654.0	2654.0	2640.0
2°	2655.2	2643.5	2628.4	2629.6	2614.4
3°	2621.4	2609.7	2594.6	2596.9	2583.0
4°	2574.8	2559.6	2549.2	2552.7	2539.8
5°	2516.5	2501.4	2490.9	2495.6	2482.8
6°	2437.3	2426.8	2417.5	2423.3	2411.7
7°	2348.8	2337.1	2330.1	2334.8	2325.5
8°	2240.4	2232.3	2224.1	2228.8	2219.5
9°	2129.7	2116.9	2108.8	2112.3	2105.3
10°	2000.4	1994.6	1985.3	1988.8	1982.9
11°	1875.8	1875.8	1858.3	1852.5	1855.9
12°	1747.6	1746.4	1730.1	1723.1	1725.5
13°	1618.3	1617.1	1600.8	1595.0	1596.1
14°	1490.1	1491.3	1473.8	1469.1	1468.0
15°	1372.4	1366.6	1349.1	1345.7	1343.3
16°	1249.0	1247.8	1230.3	1225.6	1223.3
17°	1138.3	1132.4	1115.0	1110.3	1106.8
18°	1022.9	1024.1	1006.6	1003.1	997.3
19°	925.1	922.7	906.4	902.9	897.1
20°	833.0	822.5	812.1	808.6	802.7
22.5°	628.0	622.1	608.2	604.7	603.5
25°	464.9	459.0	450.9	448.6	445.1
26°	406.6	407.8	397.3	395.0	392.6
27°	360.0	357.7	348.4	347.2	343.7
28°	309.9	312.2	301.8	300.6	298.3
29°	270.3	270.3	264.5	261.0	258.6
30°	236.5	235.3	229.5	227.2	224.9
32.5°	163.1	161.9	159.6	158.4	156.1
35°	107.2	111.8	110.7	110.7	108.4
37.5°	66.4	75.7	79.2	78.1	71.1
40°	41.9	48.9	57.1	52.4	43.1
42.5°	28.0	33.8	41.9	35.0	28.0
45°	19.8	23.3	32.6	23.3	21.0
47.5°	15.1	17.5	24.5	17.5	15.1
50°	11.7	14.0	17.5	14.0	12.8
52.5°	9.3	10.5	14.0	10.5	9.3
55°	7.0	8.2	10.5	8.2	8.2
57.5°	5.8	7.0	8.2	7.0	5.8
60°	3.5	4.7	5.8	4.7	4.7
62.5°	2.3	3.5	4.7	3.5	2.3
65°	1.2	2.3	3.5	2.3	1.2
67.5°	0.0	1.2	1.2	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	1.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)