

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: P402183

Luminaire Tested: **LD1MR012D010 ED1M12309027SB1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402183  
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 ED1M12309027SB1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

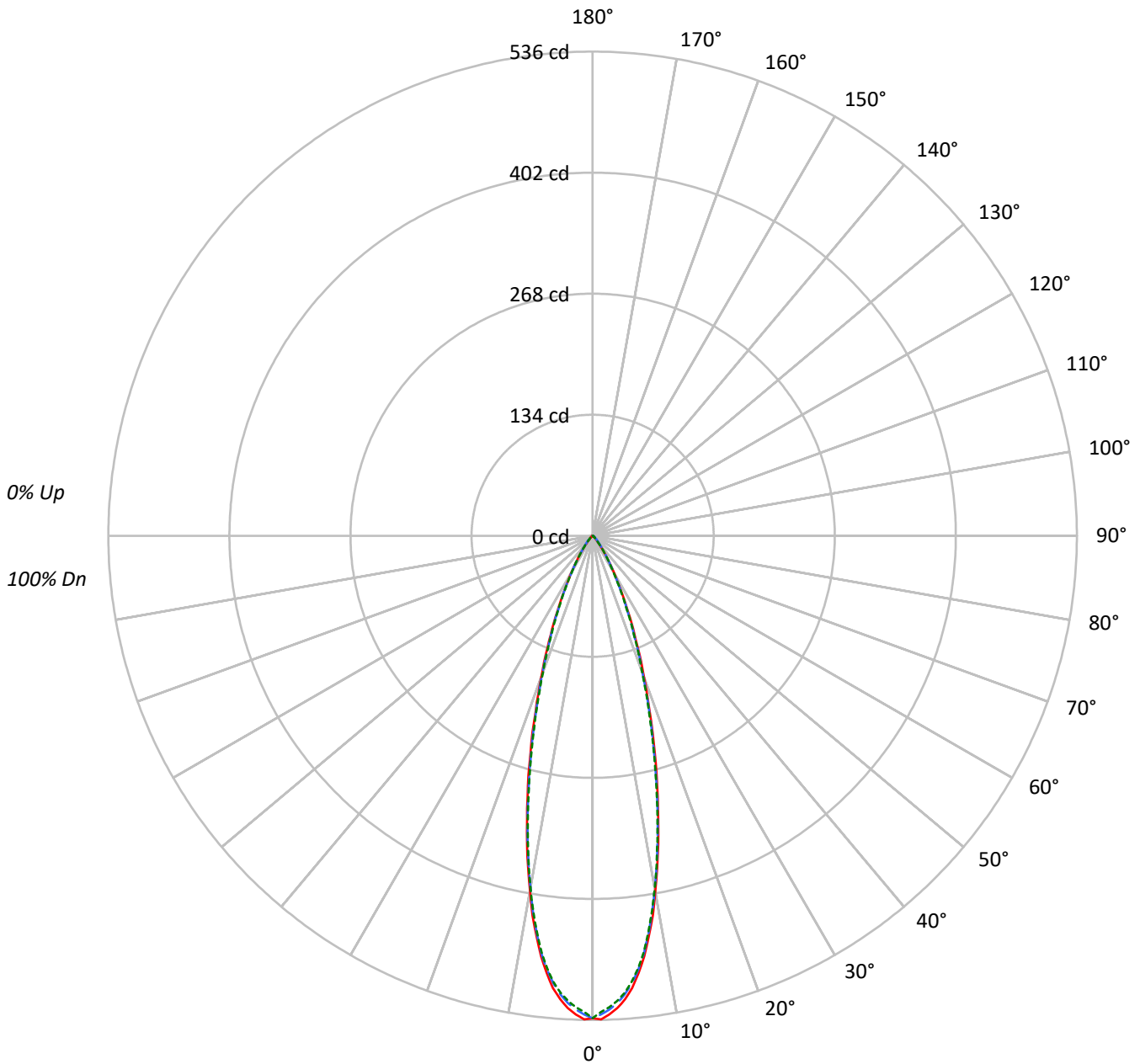
Lumens per Lamp: N/A  
Luminaire Lumens: 182.0 lumens  
Efficiency: N/A  
Efficacy: 50.6 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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	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°	165572	165572	165572
5°	156433	154815	154317
10°	125788	124812	124686
15°	87969	86493	86108
20°	54895	53509	52882
25°	31776	30819	30408
30°	16896	16395	16072
35°	8099	8364	8174
40°	3399	4613	3480
45°	1754	2850	1841
50°	1109	1688	1254
55°	757	1135	865
60°	434	744	558
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°	44.3	24.4
10°-20°	74.0	40.7
20°-30°	42.6	23.4
30°-40°	14.8	8.1
40°-50°	4.2	2.3
50°-60°	1.6	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°	161.0	88.4
0°-40°	175.8	96.6
0°-60°	181.6	99.8
0°-90°	182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	182.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	503	500	498	498	496	45
15°	274	273	270	269	268	75
25°	93	92	90	90	89	44
35°	21	22	22	22	22	14
45°	4	5	6	5	4	3
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°	534.1	534.1	534.1	534.1	534.1
1°	535.5	532.9	530.1	530.1	527.3
2°	530.3	528.0	525.0	525.2	522.2
3°	523.6	521.3	518.2	518.7	515.9
4°	514.3	511.3	509.2	509.9	507.3
5°	502.7	499.6	497.5	498.5	495.9
6°	486.8	484.7	482.9	484.0	481.7
7°	469.1	466.8	465.4	466.4	464.5
8°	447.5	445.9	444.2	445.2	443.3
9°	425.4	422.8	421.2	421.9	420.5
10°	399.6	398.4	396.5	397.2	396.1
11°	374.7	374.7	371.2	370.0	370.7
12°	349.1	348.8	345.6	344.2	344.6
13°	323.2	323.0	319.7	318.6	318.8
14°	297.6	297.9	294.4	293.4	293.2
15°	274.1	273.0	269.5	268.8	268.3
16°	249.5	249.2	245.7	244.8	244.3
17°	227.4	226.2	222.7	221.8	221.1
18°	204.3	204.6	201.1	200.4	199.2
19°	184.8	184.3	181.0	180.4	179.2
20°	166.4	164.3	162.2	161.5	160.3
22.5°	125.4	124.3	121.5	120.8	120.5
25°	92.9	91.7	90.1	89.6	88.9
26°	81.2	81.4	79.4	78.9	78.4
27°	71.9	71.4	69.6	69.3	68.6
28°	61.9	62.4	60.3	60.0	59.6
29°	54.0	54.0	52.8	52.1	51.7
30°	47.2	47.0	45.8	45.4	44.9
32.5°	32.6	32.3	31.9	31.6	31.2
35°	21.4	22.3	22.1	22.1	21.6
37.5°	13.3	15.1	15.8	15.6	14.2
40°	8.4	9.8	11.4	10.5	8.6
42.5°	5.6	6.7	8.4	7.0	5.6
45°	4.0	4.7	6.5	4.7	4.2
47.5°	3.0	3.5	4.9	3.5	3.0
50°	2.3	2.8	3.5	2.8	2.6
52.5°	1.9	2.1	2.8	2.1	1.9
55°	1.4	1.6	2.1	1.6	1.6
57.5°	1.2	1.4	1.6	1.4	1.2
60°	0.7	0.9	1.2	0.9	0.9
62.5°	0.5	0.7	0.9	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



Report Generated By E9808895 / USPTCWHP6082093







— 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)