

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: P402219

Luminaire Tested: **LD1MR152D010 ED1M152309030SB1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402219  
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: LD1MR152D010 ED1M152309030SB1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

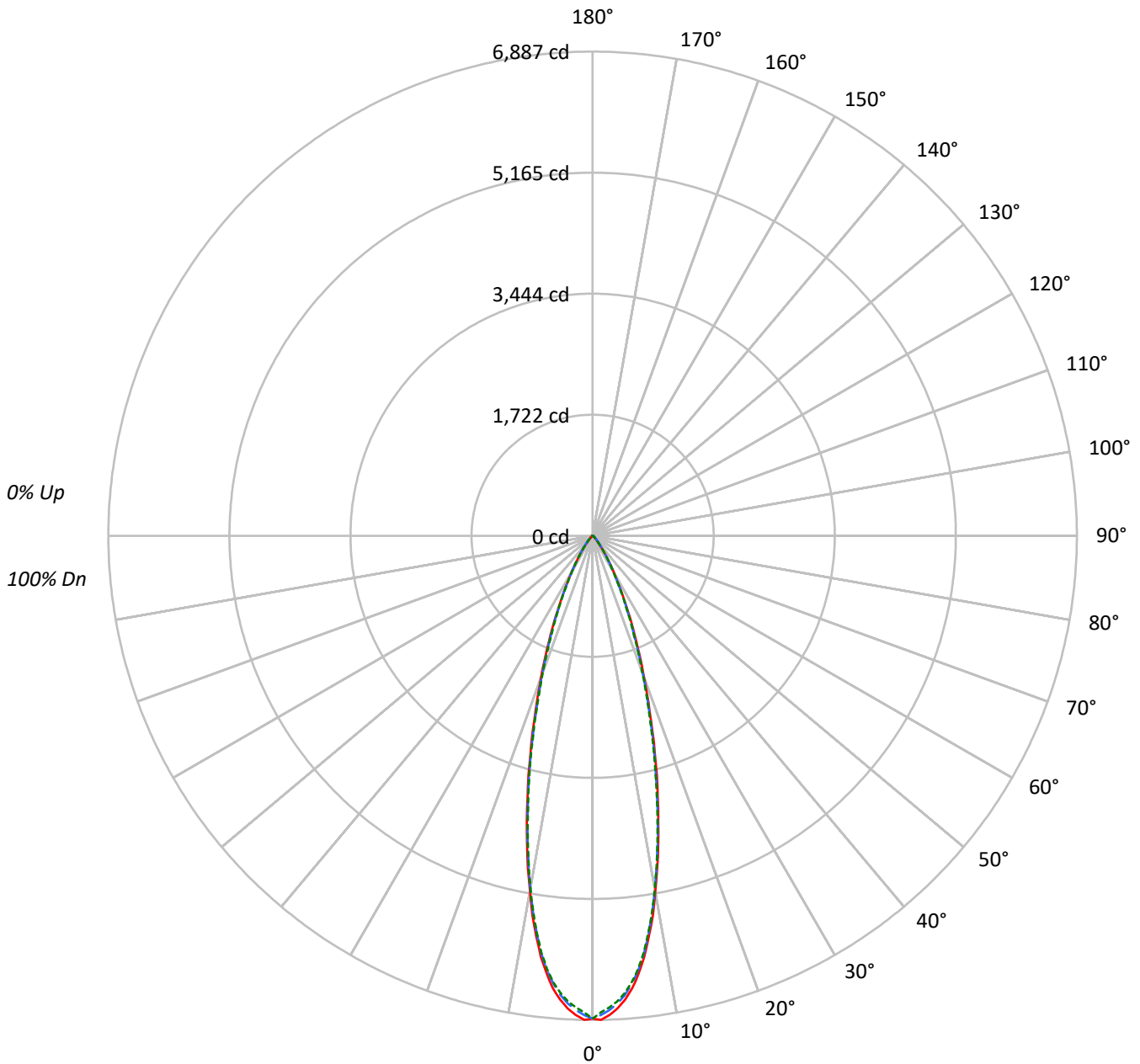
Lumens per Lamp: N/A  
Luminaire Lumens: 2341.1 lumens  
Efficiency: N/A  
Efficacy: 68.5 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.2  
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°	2129278	2129278	2129278
5°	2011692	1991185	1984681
10°	1617581	1605336	1603447
15°	1131497	1112273	1107491
20°	705947	688165	680281
25°	408475	396161	391065
30°	217496	211053	206757
35°	104185	107591	105320
40°	43584	59366	44798
45°	22315	36739	23630
50°	14420	21654	15867
55°	9728	14539	11350
60°	5580	9300	7440
65°	2201	6602	2201
70°	0	2719	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	570.4	24.4
10°-20°	952.0	40.7
20°-30°	547.7	23.4
30°-40°	190.5	8.1
40°-50°	54.0	2.3
50°-60°	20.7	0.9
60°-70°	5.6	0.2
70°-80°	0.1	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°	2070.1	88.4
0°-40°	2260.6	96.6
0°-60°	2335.4	99.8
0°-90°	2341.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2341.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6869	6869	6869	6869	6869	
5°	6465	6426	6399	6411	6378	574
15°	3526	3511	3466	3457	3451	962
25°	1194	1179	1158	1152	1143	560
35°	275	287	284	284	278	186
45°	51	60	84	60	54	44
55°	18	21	27	21	21	17
65°	3	6	9	6	3	3
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°	6868.6	6868.6	6868.6	6868.6	6868.6
1°	6886.6	6853.6	6817.7	6817.7	6781.8
2°	6820.7	6790.8	6751.9	6754.9	6716.0
3°	6733.9	6704.0	6665.1	6671.1	6635.2
4°	6614.2	6575.3	6548.4	6557.4	6524.4
5°	6464.6	6425.7	6398.7	6410.7	6377.8
6°	6261.1	6234.1	6210.2	6225.1	6195.2
7°	6033.6	6003.7	5985.7	5997.7	5973.7
8°	5755.3	5734.3	5713.4	5725.3	5701.4
9°	5470.9	5438.0	5417.1	5426.1	5408.1
10°	5138.7	5123.8	5099.8	5108.8	5093.8
11°	4818.5	4818.5	4773.6	4758.6	4767.6
12°	4489.3	4486.3	4444.4	4426.4	4432.4
13°	4157.1	4154.1	4112.2	4097.2	4100.2
14°	3827.9	3830.9	3786.0	3774.0	3771.0
15°	3525.6	3510.6	3465.7	3456.8	3450.8
16°	3208.3	3205.4	3160.5	3148.5	3142.5
17°	2924.0	2909.1	2864.2	2852.2	2843.2
18°	2627.7	2630.7	2585.8	2576.9	2561.9
19°	2376.3	2370.3	2328.4	2319.5	2304.5
20°	2139.9	2113.0	2086.0	2077.0	2062.1
22.5°	1613.2	1598.2	1562.3	1553.3	1550.3
25°	1194.2	1179.2	1158.2	1152.3	1143.3
26°	1044.5	1047.5	1020.6	1014.6	1008.6
27°	924.8	918.8	894.9	891.9	882.9
28°	796.1	802.1	775.2	772.2	766.2
29°	694.3	694.3	679.4	670.4	664.4
30°	607.6	604.6	589.6	583.6	577.6
32.5°	419.0	416.0	410.0	407.0	401.0
35°	275.3	287.3	284.3	284.3	278.3
37.5°	170.6	194.5	203.5	200.5	182.6
40°	107.7	125.7	146.7	134.7	110.7
42.5°	71.8	86.8	107.7	89.8	71.8
45°	50.9	59.9	83.8	59.9	53.9
47.5°	38.9	44.9	62.9	44.9	38.9
50°	29.9	35.9	44.9	35.9	32.9
52.5°	23.9	26.9	35.9	26.9	23.9
55°	18.0	21.0	26.9	21.0	21.0
57.5°	15.0	18.0	21.0	18.0	15.0
60°	9.0	12.0	15.0	12.0	12.0
62.5°	6.0	9.0	12.0	9.0	6.0
65°	3.0	6.0	9.0	6.0	3.0
67.5°	0.0	3.0	3.0	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	3.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)