

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: P402047

Luminaire Tested: **LA1MR152D010 EA1M152309035SB1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402047
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: LA1MR152D010 EA1M152309035SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

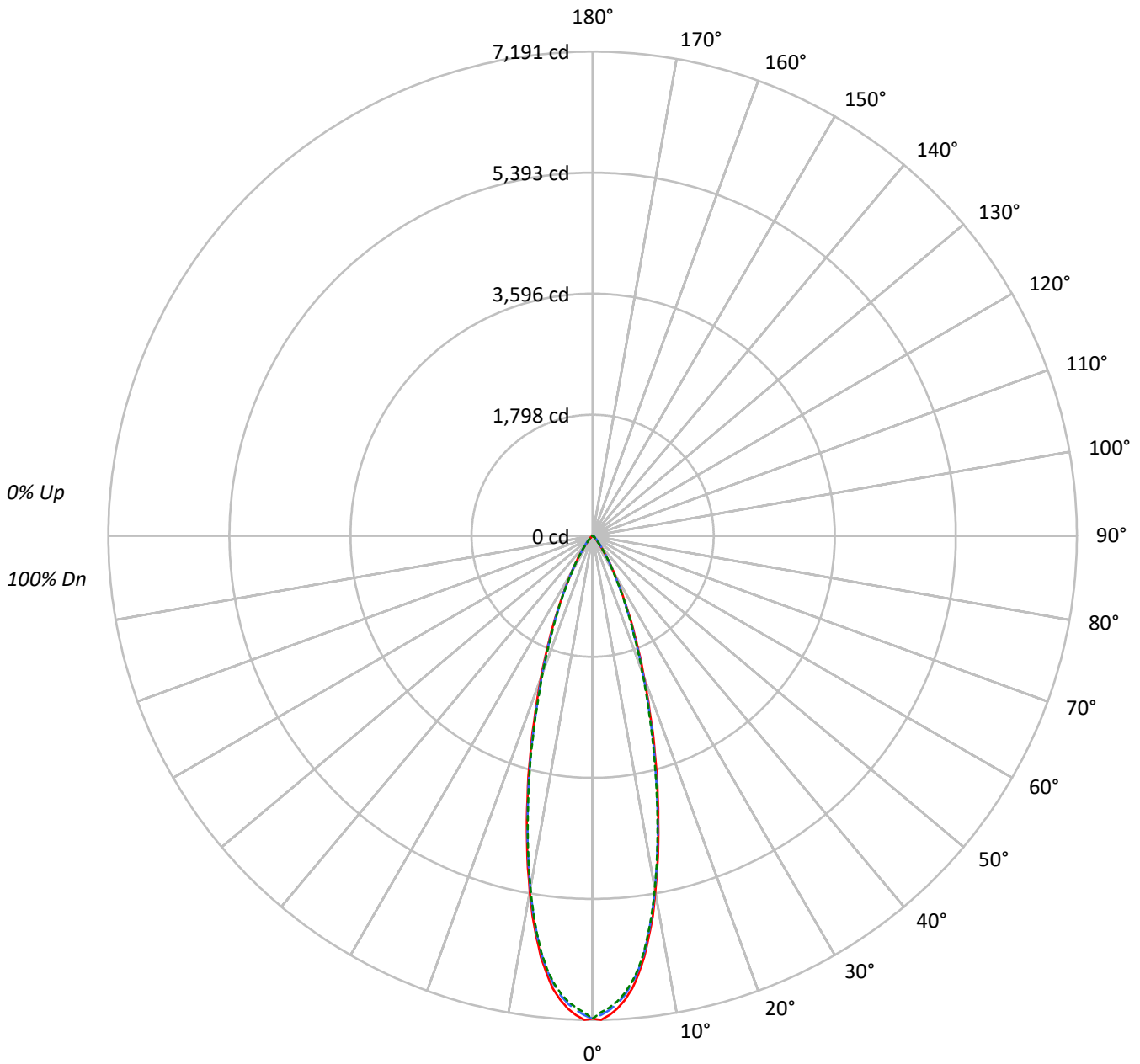
Lumens per Lamp: N/A
Luminaire Lumens: 2444.5 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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					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	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°	2223395	2223395	2223395
5°	2100598	2079189	2072374
10°	1689068	1676288	1674336
15°	1181499	1161440	1156434
20°	737155	718582	710334
25°	426501	413674	408338
30°	227089	220395	215885
35°	108802	112360	109975
40°	45526	61956	46781
45°	23280	38361	24682
50°	15095	22619	16590
55°	10161	15187	11836
60°	5828	9672	7750
65°	2274	6895	2274
70°	0	2810	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	595.6	24.4
10°-20°	994.1	40.7
20°-30°	571.9	23.4
30°-40°	199.0	8.1
40°-50°	56.4	2.3
50°-60°	21.6	0.9
60°-70°	5.9	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°	2161.5	88.4
0°-40°	2360.5	96.6
0°-60°	2438.6	99.8
0°-90°	2444.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2444.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7172	7172	7172	7172	7172	
5°	6750	6710	6682	6694	6660	600
15°	3681	3666	3619	3610	3603	1005
25°	1247	1231	1209	1203	1194	585
35°	288	300	297	297	291	194
45°	53	62	88	62	56	46
55°	19	22	28	22	22	18
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°	7172.2	7172.2	7172.2	7172.2	7172.2
1°	7190.9	7156.5	7119.0	7119.0	7081.5
2°	7122.2	7090.9	7050.3	7053.4	7012.8
3°	7031.5	7000.3	6959.7	6965.9	6928.4
4°	6906.5	6865.9	6837.8	6847.2	6812.8
5°	6750.3	6709.6	6681.5	6694.0	6659.6
6°	6537.8	6509.6	6484.6	6500.3	6469.0
7°	6300.3	6269.0	6250.3	6262.8	6237.8
8°	6009.6	5987.7	5965.9	5978.4	5953.4
9°	5712.7	5678.4	5656.5	5665.9	5647.1
10°	5365.8	5350.2	5325.2	5334.6	5319.0
11°	5031.5	5031.5	4984.6	4969.0	4978.3
12°	4687.7	4684.6	4640.8	4622.1	4628.3
13°	4340.8	4337.7	4293.9	4278.3	4281.4
14°	3997.0	4000.2	3953.3	3940.8	3937.7
15°	3681.4	3665.8	3618.9	3609.5	3603.3
16°	3350.1	3347.0	3300.1	3287.6	3281.4
17°	3053.3	3037.6	2990.7	2978.2	2968.9
18°	2743.9	2747.0	2700.1	2690.7	2675.1
19°	2481.4	2475.1	2431.3	2422.0	2406.3
20°	2234.5	2206.3	2178.2	2168.8	2153.2
22.5°	1684.4	1668.8	1631.3	1621.9	1618.8
25°	1246.9	1231.3	1209.4	1203.2	1193.8
26°	1090.7	1093.8	1065.7	1059.4	1053.2
27°	965.7	959.4	934.4	931.3	921.9
28°	831.3	837.5	809.4	806.3	800.0
29°	725.0	725.0	709.4	700.0	693.8
30°	634.4	631.3	615.7	609.4	603.1
32.5°	437.5	434.4	428.1	425.0	418.8
35°	287.5	300.0	296.9	296.9	290.6
37.5°	178.1	203.1	212.5	209.4	190.6
40°	112.5	131.3	153.1	140.6	115.6
42.5°	75.0	90.6	112.5	93.8	75.0
45°	53.1	62.5	87.5	62.5	56.3
47.5°	40.6	46.9	65.6	46.9	40.6
50°	31.3	37.5	46.9	37.5	34.4
52.5°	25.0	28.1	37.5	28.1	25.0
55°	18.8	21.9	28.1	21.9	21.9
57.5°	15.6	18.8	21.9	18.8	15.6
60°	9.4	12.5	15.6	12.5	12.5
62.5°	6.3	9.4	12.5	9.4	6.3
65°	3.1	6.3	9.4	6.3	3.1
67.5°	0.0	3.1	3.1	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	3.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)