

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: P402111

Luminaire Tested: **LA1MR052D010 EA1M52309035SB1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P402111
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: LA1MR052D010 EA1M52309035SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

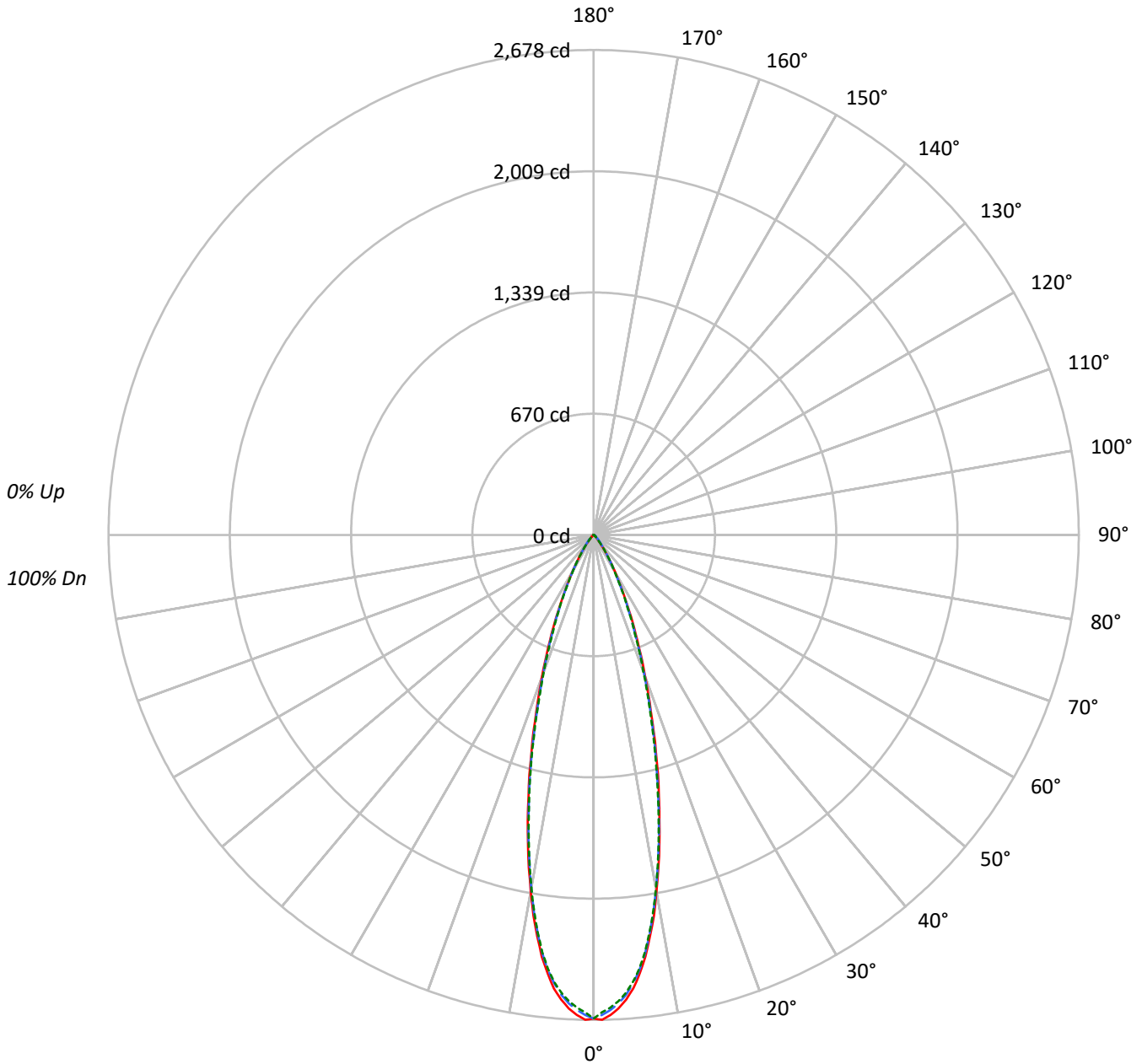
Lumens per Lamp: N/A
Luminaire Lumens: 910.4 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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									
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	75	72	87	80	75	72	79	75	72	78	74	71	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°	827984	827984	827984
5°	782259	774293	771772
10°	629033	624248	623524
15°	440005	432527	430666
20°	274507	267612	264544
25°	158848	154059	152075
30°	84586	82080	80398
35°	40531	41856	40947
40°	16956	23067	17442
45°	8680	14292	9163
50°	5594	8440	6173
55°	3783	5675	4378
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°	221.8	24.4
10°-20°	370.2	40.7
20°-30°	213.0	23.4
30°-40°	74.1	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°	805.0	88.4
0°-40°	879.1	96.6
0°-60°	908.1	99.8
0°-90°	910.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	910.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2671	2671	2671	2671	2671	
5°	2514	2499	2488	2493	2480	223
15°	1371	1365	1348	1344	1342	374
25°	464	458	450	448	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2670.9	2670.9	2670.9	2670.9	2670.9
1°	2677.9	2665.1	2651.1	2651.1	2637.2
2°	2652.3	2640.7	2625.5	2626.7	2611.6
3°	2618.6	2606.9	2591.8	2594.1	2580.2
4°	2572.0	2556.9	2546.4	2549.9	2537.1
5°	2513.8	2498.7	2488.2	2492.9	2480.1
6°	2434.7	2424.2	2414.9	2420.7	2409.1
7°	2346.2	2334.6	2327.6	2332.3	2323.0
8°	2238.0	2229.8	2221.7	2226.4	2217.0
9°	2127.4	2114.6	2106.5	2110.0	2103.0
10°	1998.3	1992.4	1983.1	1986.6	1980.8
11°	1873.7	1873.7	1856.3	1850.4	1853.9
12°	1745.7	1744.5	1728.2	1721.3	1723.6
13°	1616.5	1615.4	1599.1	1593.2	1594.4
14°	1488.5	1489.7	1472.2	1467.6	1466.4
15°	1371.0	1365.1	1347.7	1344.2	1341.9
16°	1247.6	1246.4	1229.0	1224.3	1222.0
17°	1137.0	1131.2	1113.8	1109.1	1105.6
18°	1021.8	1023.0	1005.5	1002.0	996.2
19°	924.1	921.7	905.4	901.9	896.1
20°	832.1	821.6	811.2	807.7	801.9
22.5°	627.3	621.5	607.5	604.0	602.9
25°	464.4	458.5	450.4	448.1	444.6
26°	406.2	407.3	396.9	394.5	392.2
27°	359.6	357.3	348.0	346.8	343.3
28°	309.6	311.9	301.4	300.3	297.9
29°	270.0	270.0	264.2	260.7	258.4
30°	236.3	235.1	229.3	226.9	224.6
32.5°	162.9	161.8	159.4	158.3	155.9
35°	107.1	111.7	110.6	110.6	108.2
37.5°	66.3	75.6	79.1	78.0	71.0
40°	41.9	48.9	57.0	52.4	43.1
42.5°	27.9	33.8	41.9	34.9	27.9
45°	19.8	23.3	32.6	23.3	20.9
47.5°	15.1	17.5	24.4	17.5	15.1
50°	11.6	14.0	17.5	14.0	12.8
52.5°	9.3	10.5	14.0	10.5	9.3
55°	7.0	8.1	10.5	8.1	8.1
57.5°	5.8	7.0	8.1	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)