

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: P402103

Luminaire Tested: **LA1MR052D010 EA1M52309027SB1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402103
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 EA1M52309027SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

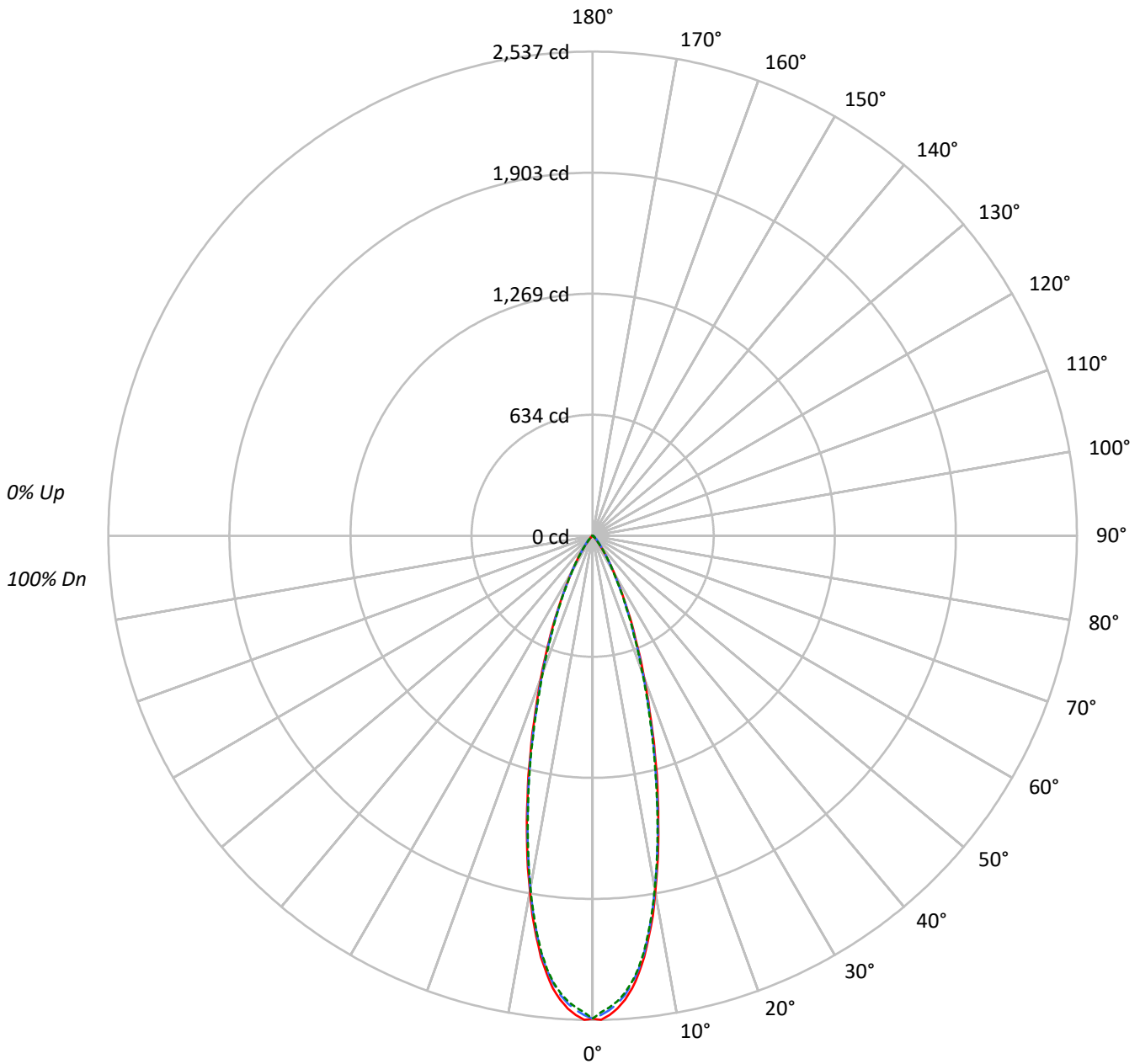
Lumens per Lamp: N/A
Luminaire Lumens: 862.3 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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	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°	784366	784366	784366
5°	741058	733496	731100
10°	595886	591353	590661
15°	416801	409741	407976
20°	260058	253493	250590
25°	150467	145952	144037
30°	80111	77749	76174
35°	38374	39623	38790
40°	16066	21853	16511
45°	8198	13547	8680
50°	5305	7958	5836
55°	3567	5351	4162
60°	2046	3410	2728
65°	807	2421	807
70°	0	997	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.1	24.4
10°-20°	350.7	40.7
20°-30°	201.8	23.4
30°-40°	70.2	8.1
40°-50°	19.9	2.3
50°-60°	7.6	0.9
60°-70°	2.1	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°	762.6	88.4
0°-40°	832.7	96.6
0°-60°	860.2	99.8
0°-90°	862.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	862.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2530	2530	2530	2530	2530	
5°	2381	2367	2357	2362	2349	212
15°	1299	1293	1277	1273	1271	355
25°	440	434	427	424	421	206
35°	101	106	105	105	102	68
45°	19	22	31	22	20	16
55°	7	8	10	8	8	6
65°	1	2	3	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°	2530.2	2530.2	2530.2	2530.2	2530.2
1°	2536.8	2524.7	2511.5	2511.5	2498.2
2°	2512.6	2501.5	2487.2	2488.3	2474.0
3°	2480.6	2469.6	2455.2	2457.4	2444.2
4°	2436.5	2422.2	2412.2	2415.5	2403.4
5°	2381.4	2367.0	2357.1	2361.5	2349.4
6°	2306.4	2296.5	2287.7	2293.2	2282.1
7°	2222.6	2211.6	2205.0	2209.4	2200.6
8°	2120.1	2112.4	2104.6	2109.1	2100.2
9°	2015.3	2003.2	1995.5	1998.8	1992.2
10°	1893.0	1887.5	1878.6	1881.9	1876.4
11°	1775.0	1775.0	1758.5	1752.9	1756.3
12°	1653.7	1652.6	1637.2	1630.6	1632.8
13°	1531.3	1530.2	1514.8	1509.3	1510.4
14°	1410.1	1411.2	1394.6	1390.2	1389.1
15°	1298.7	1293.2	1276.7	1273.4	1271.2
16°	1181.9	1180.8	1164.2	1159.8	1157.6
17°	1077.1	1071.6	1055.1	1050.7	1047.4
18°	968.0	969.1	952.5	949.2	943.7
19°	875.4	873.2	857.7	854.4	848.9
20°	788.3	778.4	768.4	765.1	759.6
22.5°	594.2	588.7	575.5	572.2	571.1
25°	439.9	434.4	426.7	424.5	421.1
26°	384.8	385.9	375.9	373.7	371.5
27°	340.7	338.5	329.6	328.5	325.2
28°	293.3	295.5	285.5	284.4	282.2
29°	255.8	255.8	250.3	247.0	244.8
30°	223.8	222.7	217.2	215.0	212.8
32.5°	154.3	153.2	151.0	149.9	147.7
35°	101.4	105.8	104.7	104.7	102.5
37.5°	62.8	71.7	75.0	73.9	67.3
40°	39.7	46.3	54.0	49.6	40.8
42.5°	26.5	32.0	39.7	33.1	26.5
45°	18.7	22.0	30.9	22.0	19.8
47.5°	14.3	16.5	23.2	16.5	14.3
50°	11.0	13.2	16.5	13.2	12.1
52.5°	8.8	9.9	13.2	9.9	8.8
55°	6.6	7.7	9.9	7.7	7.7
57.5°	5.5	6.6	7.7	6.6	5.5
60°	3.3	4.4	5.5	4.4	4.4
62.5°	2.2	3.3	4.4	3.3	2.2
65°	1.1	2.2	3.3	2.2	1.1
67.5°	0.0	1.1	1.1	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	1.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)