

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: P402107

Luminaire Tested: **LA1MR052D010 EA1M52309030SB1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P402107
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 EA1M52309030SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

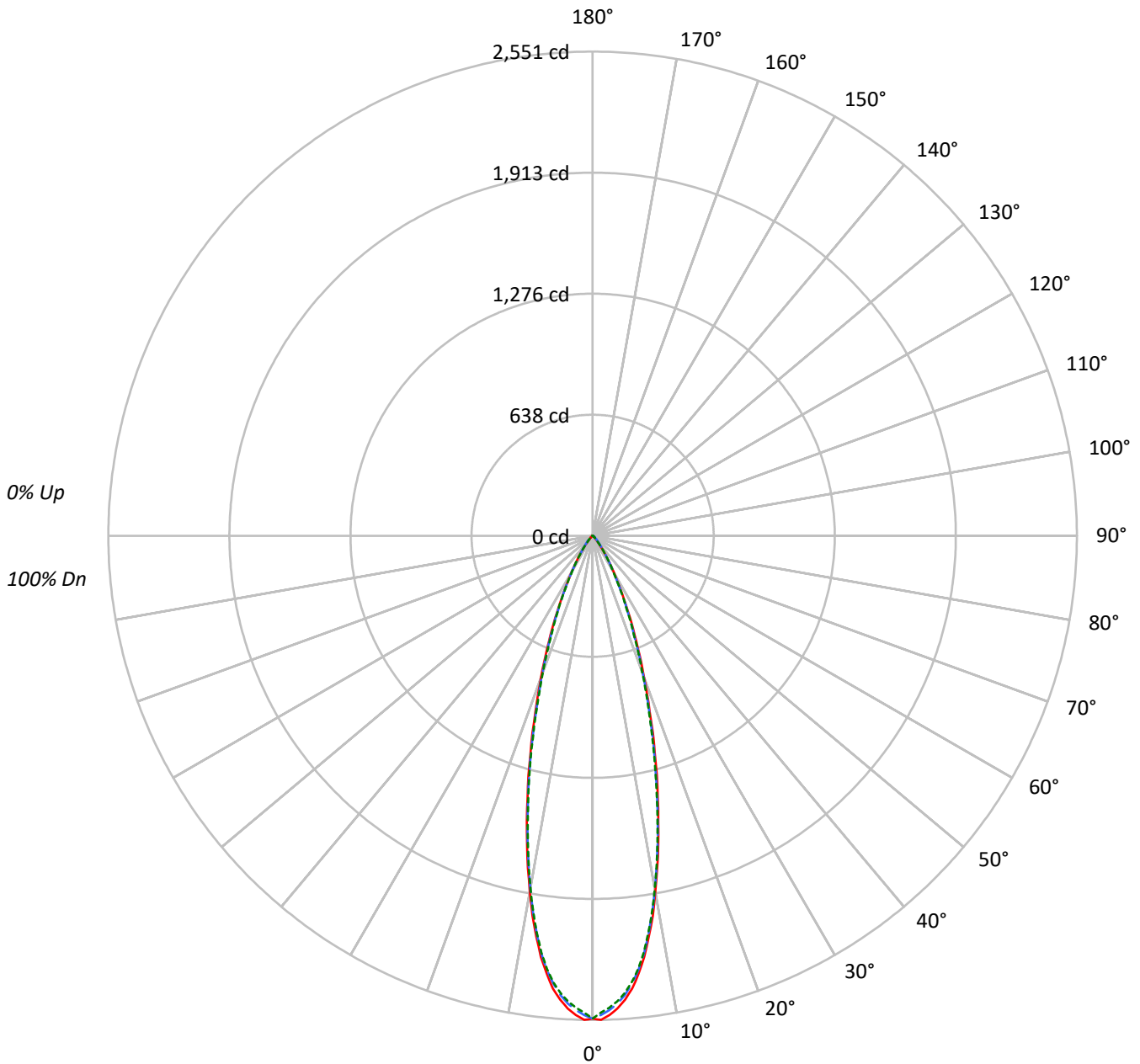
Lumens per Lamp: N/A
Luminaire Lumens: 867.2 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P402107

CATALOG NUMBER: LA1MR052D010 EA1M52309030SB1MW

Luminous Intensity Polar Plot





TEST NUMBER: P402107

CATALOG NUMBER: LA1MR052D010 EA1M52309030SB1MW

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°	788737	788737	788737
5°	745197	737604	735177
10°	599191	594658	593966
15°	419144	412019	410254
20°	261509	254911	252008
25°	151288	146739	144858
30°	80577	78178	76603
35°	38601	39850	39017
40°	16147	21974	16592
45°	8242	13591	8768
50°	5353	8006	5884
55°	3621	5405	4216
60°	2046	3410	2728
65°	807	2421	807
70°	0	997	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402107

CATALOG NUMBER: LA1MR052D010 EA1M52309030SB1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.3	24.4
10°-20°	352.6	40.7
20°-30°	202.9	23.4
30°-40°	70.6	8.1
40°-50°	20.0	2.3
50°-60°	7.7	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°	766.8	88.4
0°-40°	837.4	96.6
0°-60°	865.1	99.8
0°-90°	867.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	867.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2544	2544	2544	2544	2544	
5°	2395	2380	2370	2375	2362	213
15°	1306	1300	1284	1280	1278	357
25°	442	437	429	427	424	208
35°	102	106	105	105	103	69
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



TEST NUMBER: P402107

CATALOG NUMBER: LA1MR052D010 EA1M52309030SB1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2544.3	2544.3	2544.3	2544.3	2544.3
1°	2551.0	2538.8	2525.5	2525.5	2512.2
2°	2526.6	2515.5	2501.1	2502.2	2487.8
3°	2494.4	2483.4	2468.9	2471.2	2457.9
4°	2450.1	2435.7	2425.7	2429.0	2416.8
5°	2394.7	2380.3	2370.3	2374.7	2362.5
6°	2319.3	2309.3	2300.4	2306.0	2294.9
7°	2235.0	2223.9	2217.3	2221.7	2212.8
8°	2131.9	2124.2	2116.4	2120.8	2112.0
9°	2026.6	2014.4	2006.6	2010.0	2003.3
10°	1903.5	1898.0	1889.1	1892.5	1886.9
11°	1784.9	1784.9	1768.3	1762.7	1766.1
12°	1663.0	1661.9	1646.3	1639.7	1641.9
13°	1539.9	1538.8	1523.3	1517.7	1518.8
14°	1418.0	1419.1	1402.4	1398.0	1396.9
15°	1306.0	1300.4	1283.8	1280.5	1278.3
16°	1188.5	1187.4	1170.7	1166.3	1164.1
17°	1083.1	1077.6	1061.0	1056.5	1053.2
18°	973.4	974.5	957.9	954.5	949.0
19°	880.3	878.0	862.5	859.2	853.7
20°	792.7	782.7	772.7	769.4	763.9
22.5°	597.6	592.0	578.7	575.4	574.3
25°	442.3	436.8	429.0	426.8	423.5
26°	386.9	388.0	378.0	375.8	373.6
27°	342.6	340.4	331.5	330.4	327.0
28°	294.9	297.1	287.1	286.0	283.8
29°	257.2	257.2	251.7	248.3	246.1
30°	225.1	223.9	218.4	216.2	214.0
32.5°	155.2	154.1	151.9	150.8	148.6
35°	102.0	106.4	105.3	105.3	103.1
37.5°	63.2	72.1	75.4	74.3	67.6
40°	39.9	46.6	54.3	49.9	41.0
42.5°	26.6	32.2	39.9	33.3	26.6
45°	18.8	22.2	31.0	22.2	20.0
47.5°	14.4	16.6	23.3	16.6	14.4
50°	11.1	13.3	16.6	13.3	12.2
52.5°	8.9	10.0	13.3	10.0	8.9
55°	6.7	7.8	10.0	7.8	7.8
57.5°	5.5	6.7	7.8	6.7	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



TEST NUMBER: P402107

CATALOG NUMBER: LA1MR052D010 EA1M52309030SB1MW

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	1.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)