

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: P402112

Luminaire Tested: **LA1MR052D010 EA1M52309035SC1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402112
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 EA1M52309035SC1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

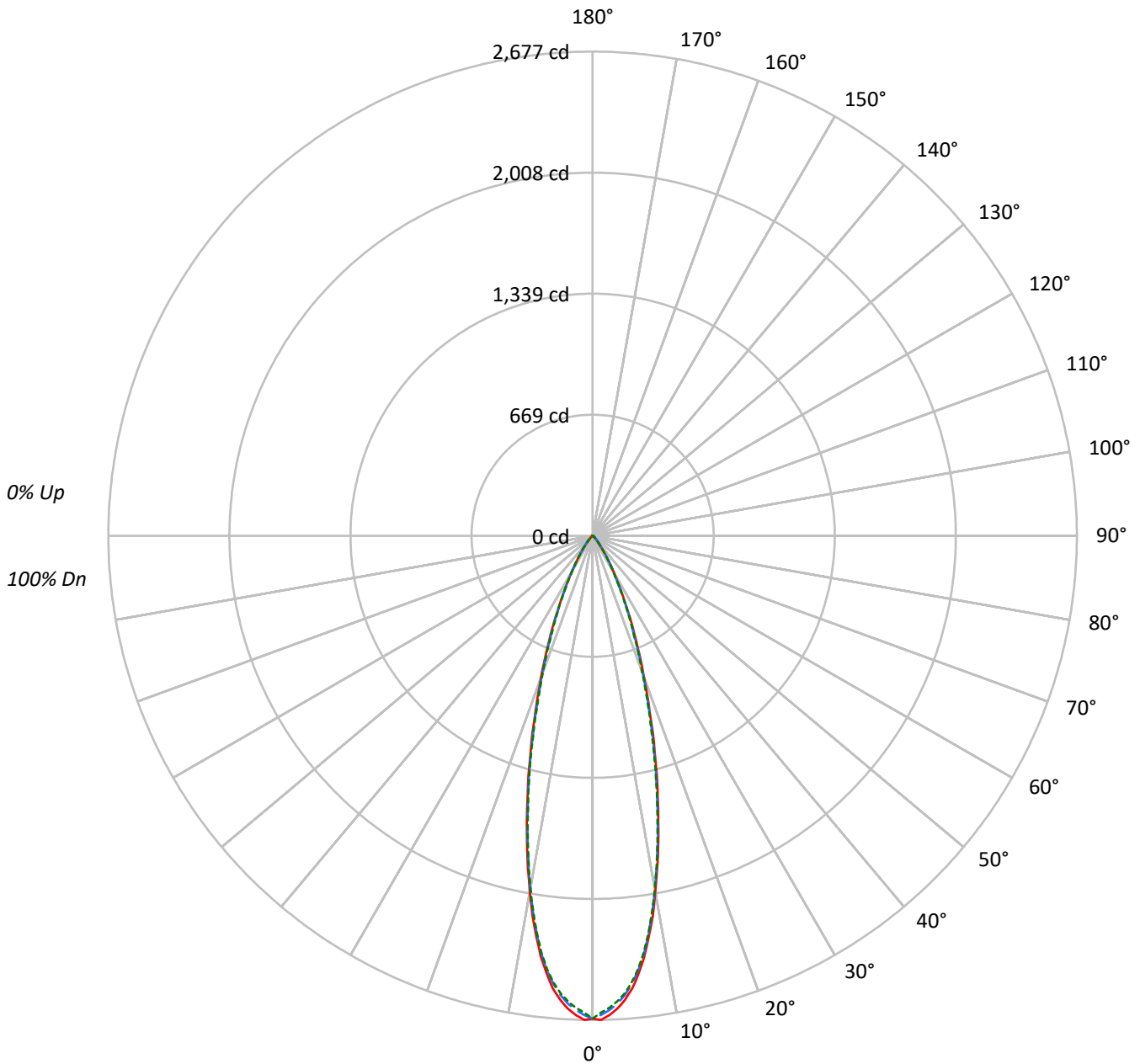
Lumens per Lamp: N/A
Luminaire Lumens: 910.1 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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			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	75	72	87	80	75	72	79	75	72	78	74	71	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°	827798	827798	827798
5°	782072	774106	771585
10°	628876	624091	623367
15°	439877	432431	430538
20°	274441	267546	264478
25°	158779	154025	152041
30°	84550	82044	80398
35°	40493	41818	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°	221.7	24.4
10°-20°	370.1	40.7
20°-30°	212.9	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°	804.8	88.4
0°-40°	878.8	96.6
0°-60°	907.9	99.8
0°-90°	910.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	910.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2670	2670	2670	2670	2670	
5°	2513	2498	2488	2492	2480	223
15°	1371	1365	1347	1344	1342	374
25°	464	458	450	448	444	218
35°	107	112	110	110	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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2670.3	2670.3	2670.3	2670.3	2670.3
1°	2677.3	2664.5	2650.5	2650.5	2636.6
2°	2651.7	2640.0	2624.9	2626.1	2611.0
3°	2617.9	2606.3	2591.2	2593.5	2579.5
4°	2571.4	2556.3	2545.8	2549.3	2536.5
5°	2513.2	2498.1	2487.6	2492.3	2479.5
6°	2434.1	2423.6	2414.3	2420.1	2408.5
7°	2345.7	2334.0	2327.1	2331.7	2322.4
8°	2237.5	2229.3	2221.2	2225.8	2216.5
9°	2126.9	2114.1	2106.0	2109.5	2102.5
10°	1997.8	1992.0	1982.6	1986.1	1980.3
11°	1873.3	1873.3	1855.8	1850.0	1853.5
12°	1745.3	1744.1	1727.8	1720.9	1723.2
13°	1616.1	1615.0	1598.7	1592.9	1594.0
14°	1488.2	1489.3	1471.9	1467.2	1466.0
15°	1370.6	1364.8	1347.4	1343.9	1341.5
16°	1247.3	1246.1	1228.7	1224.0	1221.7
17°	1136.8	1130.9	1113.5	1108.8	1105.4
18°	1021.6	1022.7	1005.3	1001.8	996.0
19°	923.8	921.5	905.2	901.7	895.9
20°	831.9	821.4	811.0	807.5	801.7
22.5°	627.1	621.3	607.4	603.9	602.7
25°	464.2	458.4	450.3	448.0	444.5
26°	406.1	407.2	396.8	394.4	392.1
27°	359.5	357.2	347.9	346.7	343.2
28°	309.5	311.8	301.4	300.2	297.9
29°	269.9	269.9	264.1	260.6	258.3
30°	236.2	235.0	229.2	226.9	224.6
32.5°	162.9	161.7	159.4	158.2	155.9
35°	107.0	111.7	110.5	110.5	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	33.7	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)