

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: P402070

Luminaire Tested: **LA1MR022D010 EA1M22309027MW1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402070
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: LA1MR022D010 EA1M22309027MW1MW
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

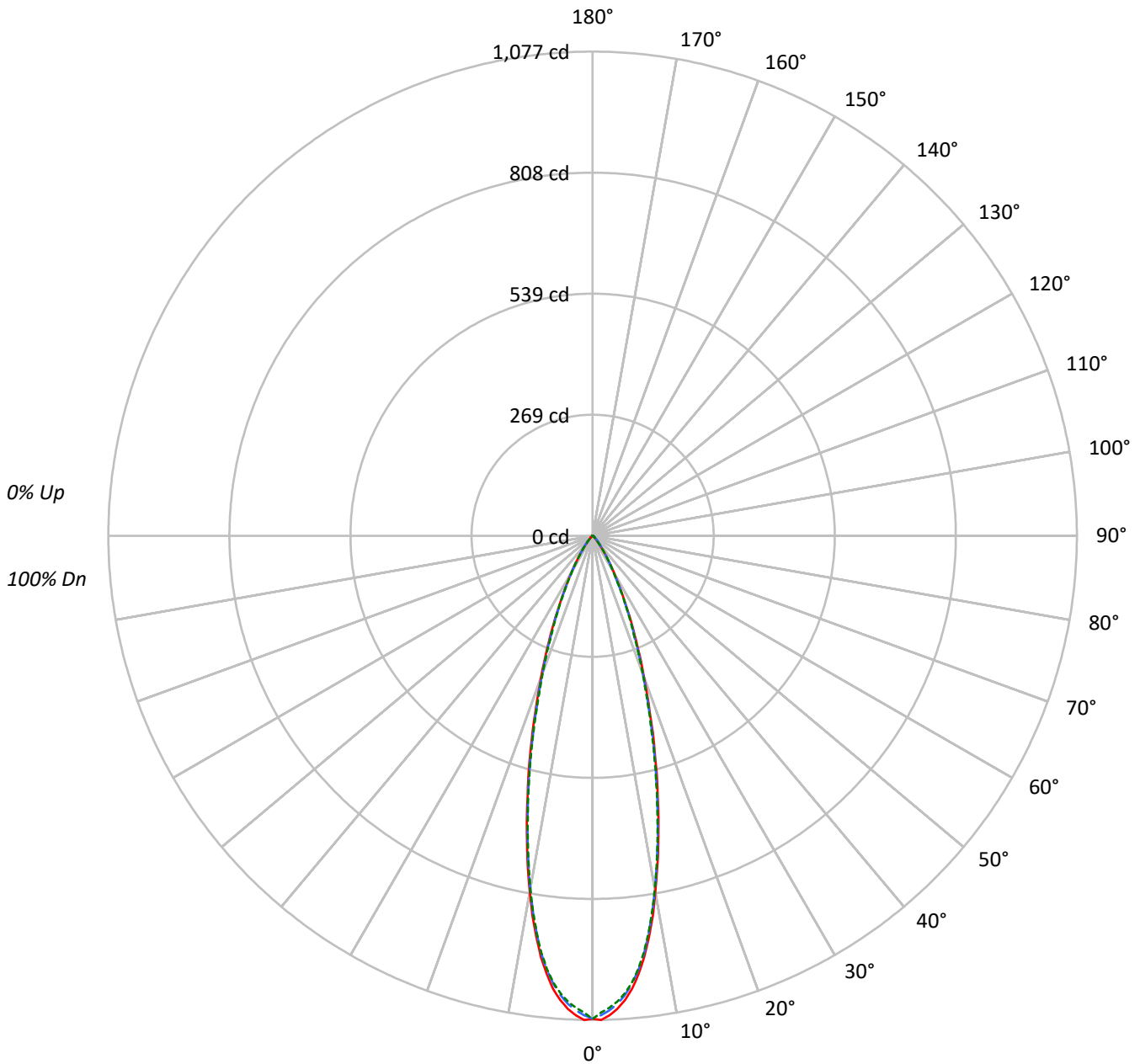
Lumens per Lamp: N/A
Luminaire Lumens: 366.3 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 5.7
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: P402070

CATALOG NUMBER: LA1MR022D010 EA1M22309027MW1MW

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								
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	76	72	87	80	75	72	79	75	72	78	74	72	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°	333128	333128	333128
5°	314733	311528	310501
10°	253086	251166	250851
15°	177029	174012	173274
20°	110450	107678	106425
25°	63895	61979	61193
30°	34042	33004	32360
35°	16311	16841	16462
40°	6839	9267	7001
45°	3507	5743	3683
50°	2267	3376	2508
55°	1513	2270	1784
60°	868	1426	1178
65°	367	1027	367
70°	0	453	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402070

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	24.4
10°-20°	148.9	40.7
20°-30°	85.7	23.4
30°-40°	29.8	8.1
40°-50°	8.5	2.3
50°-60°	3.2	0.9
60°-70°	0.9	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°	323.9	88.4
0°-40°	353.7	96.6
0°-60°	365.4	99.8
0°-90°	366.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	366.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1011	1005	1001	1003	998	90
15°	552	549	542	541	540	151
25°	187	184	181	180	179	88
35°	43	45	44	44	44	29
45°	8	9	13	9	8	7
55°	3	3	4	3	3	3
65°	0	1	1	1	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P402070

CATALOG NUMBER: LA1MR022D010 EA1M22309027MW1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.6	1074.6	1074.6	1074.6	1074.6
1°	1077.4	1072.3	1066.6	1066.6	1061.0
2°	1067.1	1062.4	1056.3	1056.8	1050.7
3°	1053.5	1048.9	1042.8	1043.7	1038.1
4°	1034.8	1028.7	1024.5	1025.9	1020.8
5°	1011.4	1005.3	1001.1	1003.0	997.8
6°	979.6	975.3	971.6	973.9	969.3
7°	944.0	939.3	936.5	938.4	934.6
8°	900.4	897.1	893.9	895.7	892.0
9°	855.9	850.8	847.5	848.9	846.1
10°	804.0	801.6	797.9	799.3	796.9
11°	753.9	753.9	746.8	744.5	745.9
12°	702.4	701.9	695.3	692.5	693.5
13°	650.4	649.9	643.4	641.0	641.5
14°	598.9	599.3	592.3	590.4	590.0
15°	551.6	549.2	542.2	540.8	539.9
16°	502.0	501.5	494.5	492.6	491.7
17°	457.5	455.1	448.1	446.2	444.8
18°	411.1	411.6	404.6	403.2	400.8
19°	371.8	370.8	364.3	362.9	360.5
20°	334.8	330.6	326.4	325.0	322.6
22.5°	252.4	250.0	244.4	243.0	242.5
25°	186.8	184.5	181.2	180.3	178.9
26°	163.4	163.9	159.7	158.7	157.8
27°	144.7	143.7	140.0	139.5	138.1
28°	124.6	125.5	121.3	120.8	119.9
29°	108.6	108.6	106.3	104.9	103.9
30°	95.1	94.6	92.2	91.3	90.4
32.5°	65.6	65.1	64.1	63.7	62.7
35°	43.1	45.0	44.5	44.5	43.5
37.5°	26.7	30.4	31.8	31.4	28.6
40°	16.9	19.7	22.9	21.1	17.3
42.5°	11.2	13.6	16.9	14.0	11.2
45°	8.0	9.4	13.1	9.4	8.4
47.5°	6.1	7.0	9.8	7.0	6.1
50°	4.7	5.6	7.0	5.6	5.2
52.5°	3.7	4.2	5.6	4.2	3.7
55°	2.8	3.3	4.2	3.3	3.3
57.5°	2.3	2.8	3.3	2.8	2.3
60°	1.4	1.9	2.3	1.9	1.9
62.5°	0.9	1.4	1.9	1.4	0.9
65°	0.5	0.9	1.4	0.9	0.5
67.5°	0.0	0.5	0.5	0.0	0.0



TEST NUMBER: P402070

CATALOG NUMBER: LA1MR022D010 EA1M22309027MW1MW

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	0.5	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)