

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: P401966

Luminaire Tested: **LA1MR102D010 EA1M102309035MW1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P401966
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: LA1MR102D010 EA1M102309035MW1MW
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

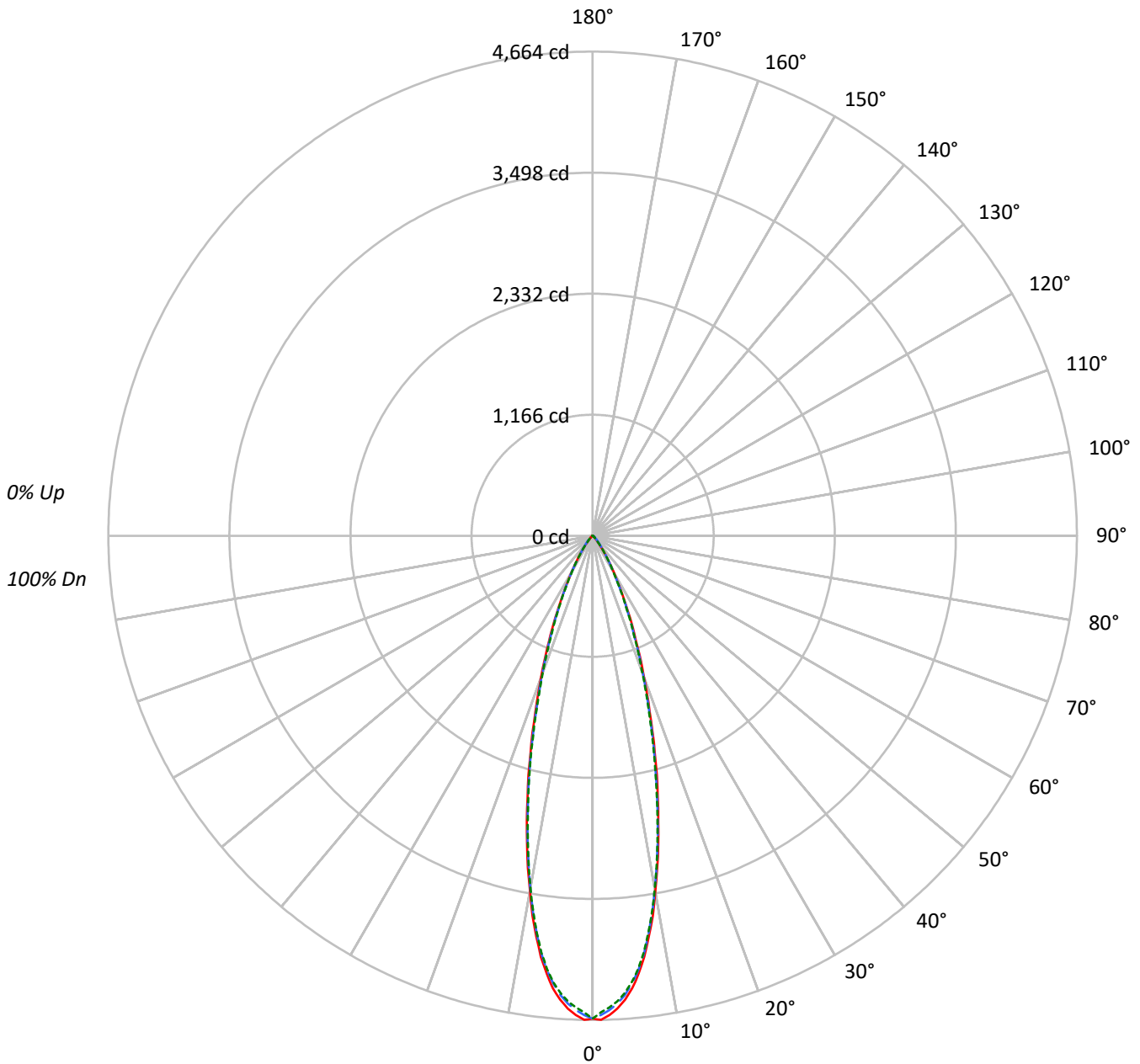
Lumens per Lamp: N/A
Luminaire Lumens: 1585.4 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	100	100
1	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	95	95	95	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87	87	87	87
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83	83	83	83
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79	79	79	79
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76	76	76	76
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	77	74	73	73	73	73
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70	70	70	70
9	85	77	73	69	84	77	72	69	76	72	69	75	71	69	74	71	69	67	67	67	67
10	82	74	70	67	81	74	70	67	73	69	66	73	69	66	72	69	66	65	65	65	65

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1441973	1441973	1441973
5°	1362310	1348462	1344043
10°	1095448	1087138	1085879
15°	766238	753240	749999
20°	478054	466045	460668
25°	276615	268303	264814
30°	147264	142933	140034
35°	70579	72850	71336
40°	29542	40185	30351
45°	15125	24858	16002
50°	9790	14661	10755
55°	6594	9837	7675
60°	3782	6262	5022
65°	1467	4475	1467
70°	0	1813	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.3	24.4
10°-20°	644.7	40.7
20°-30°	370.9	23.4
30°-40°	129.0	8.1
40°-50°	36.6	2.3
50°-60°	14.0	0.9
60°-70°	3.8	0.2
70°-80°	0.1	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°	1401.9	88.4
0°-40°	1530.9	96.6
0°-60°	1581.5	99.8
0°-90°	1585.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1585.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4652	4652	4652	4652	4652	
5°	4378	4352	4333	4341	4319	389
15°	2388	2377	2347	2341	2337	652
25°	809	799	784	780	774	379
35°	186	195	192	192	188	126
45°	34	40	57	40	36	30
55°	12	14	18	14	14	11
65°	2	4	6	4	2	2
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°	4651.5	4651.5	4651.5	4651.5	4651.5
1°	4663.6	4641.3	4617.0	4617.0	4592.7
2°	4619.0	4598.8	4572.4	4574.4	4548.1
3°	4560.2	4540.0	4513.6	4517.7	4493.4
4°	4479.2	4452.8	4434.6	4440.7	4418.4
5°	4377.8	4351.5	4333.3	4341.4	4319.1
6°	4240.0	4221.8	4205.6	4215.7	4195.4
7°	4086.0	4065.7	4053.6	4061.7	4045.4
8°	3897.5	3883.3	3869.1	3877.2	3861.0
9°	3704.9	3682.7	3668.5	3674.5	3662.4
10°	3480.0	3469.8	3453.6	3459.7	3449.6
11°	3263.1	3263.1	3232.7	3222.6	3228.7
12°	3040.2	3038.1	3009.8	2997.6	3001.7
13°	2815.2	2813.2	2784.8	2774.7	2776.7
14°	2592.2	2594.3	2563.9	2555.8	2553.7
15°	2387.5	2377.4	2347.0	2340.9	2336.9
16°	2172.7	2170.7	2140.3	2132.2	2128.1
17°	1980.2	1970.0	1939.6	1931.5	1925.4
18°	1779.5	1781.5	1751.1	1745.1	1734.9
19°	1609.3	1605.2	1576.8	1570.8	1560.6
20°	1449.1	1430.9	1412.7	1406.6	1396.4
22.5°	1092.4	1082.3	1058.0	1051.9	1049.9
25°	808.7	798.6	784.4	780.3	774.2
26°	707.3	709.4	691.1	687.1	683.0
27°	626.3	622.2	606.0	604.0	597.9
28°	539.1	543.2	524.9	522.9	518.9
29°	470.2	470.2	460.1	454.0	449.9
30°	411.4	409.4	399.3	395.2	391.2
32.5°	283.7	281.7	277.7	275.6	271.6
35°	186.5	194.6	192.5	192.5	188.5
37.5°	115.5	131.7	137.8	135.8	123.6
40°	73.0	85.1	99.3	91.2	75.0
42.5°	48.6	58.8	73.0	60.8	48.6
45°	34.5	40.5	56.7	40.5	36.5
47.5°	26.3	30.4	42.6	30.4	26.3
50°	20.3	24.3	30.4	24.3	22.3
52.5°	16.2	18.2	24.3	18.2	16.2
55°	12.2	14.2	18.2	14.2	14.2
57.5°	10.1	12.2	14.2	12.2	10.1
60°	6.1	8.1	10.1	8.1	8.1
62.5°	4.1	6.1	8.1	6.1	4.1
65°	2.0	4.1	6.1	4.1	2.0
67.5°	0.0	2.0	2.0	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	2.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)