

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: P401962

Luminaire Tested: **LA1MR102D010 EA1M102309030MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P401962  
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 EA1M102309030MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

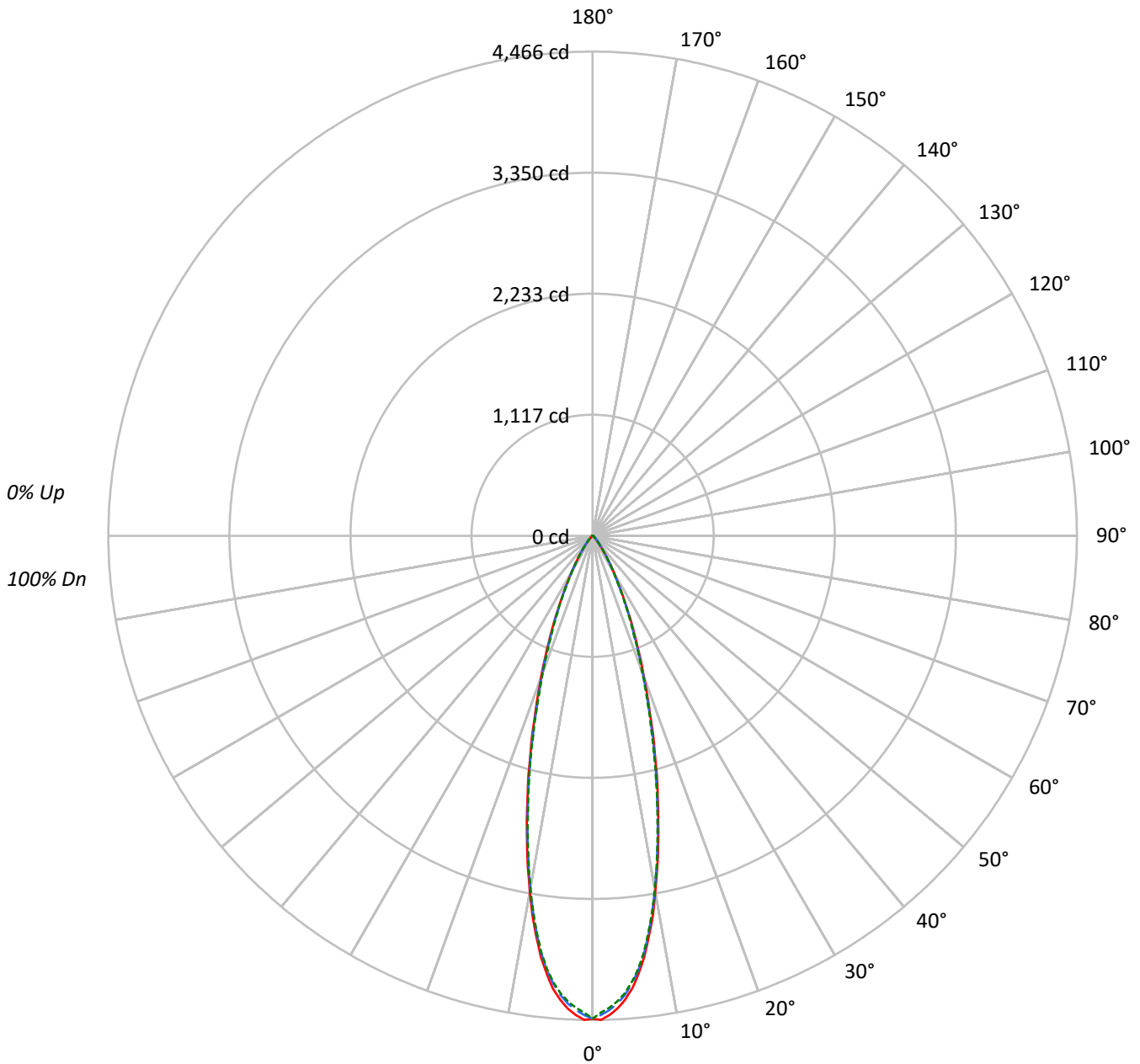
Lumens per Lamp: N/A  
Luminaire Lumens: 1518.3 lumens  
Efficiency: N/A  
Efficacy: 64.6 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P401962

CATALOG NUMBER: LA1MR102D010 EA1M102309030MW1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P401962

CATALOG NUMBER: LA1MR102D010 EA1M102309030MW1MW

**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°	1380934	1380934	1380934
5°	1304647	1291359	1287158
10°	1049081	1041148	1039920
15°	733823	721371	718258
20°	457831	446318	441171
25°	264917	256947	253629
30°	141036	136884	134092
35°	67590	69785	68309
40°	28287	38485	29056
45°	14467	23806	15300
50°	9356	14034	10321
55°	6269	9458	7350
60°	3596	6014	4836
65°	1394	4254	1394
70°	0	1722	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P401962

CATALOG NUMBER: LA1MR102D010 EA1M102309030MW1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	369.9	24.4
10°-20°	617.4	40.7
20°-30°	355.2	23.4
30°-40°	123.6	8.1
40°-50°	35.0	2.3
50°-60°	13.4	0.9
60°-70°	3.6	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°	1342.5	88.4
0°-40°	1466.1	96.6
0°-60°	1514.6	99.8
0°-90°	1518.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1518.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4455	4455	4455	4455	4455	
5°	4192	4167	4150	4158	4136	372
15°	2286	2277	2248	2242	2238	624
25°	774	765	751	747	742	363
35°	179	186	184	184	180	121
45°	33	39	54	39	35	28
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



TEST NUMBER: P401962

CATALOG NUMBER: LA1MR102D010 EA1M102309030MW1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4454.6	4454.6	4454.6	4454.6	4454.6
1°	4466.2	4444.9	4421.6	4421.6	4398.3
2°	4423.5	4404.1	4378.9	4380.8	4355.6
3°	4367.2	4347.8	4322.6	4326.5	4303.2
4°	4289.6	4264.4	4246.9	4252.7	4231.4
5°	4192.5	4167.3	4149.8	4157.6	4136.3
6°	4060.6	4043.1	4027.6	4037.3	4017.9
7°	3913.0	3893.6	3882.0	3889.8	3874.2
8°	3732.5	3718.9	3705.4	3713.1	3697.6
9°	3548.1	3526.8	3513.2	3519.0	3507.4
10°	3332.7	3323.0	3307.5	3313.3	3303.6
11°	3125.0	3125.0	3095.9	3086.2	3092.0
12°	2911.5	2909.6	2882.4	2870.7	2874.6
13°	2696.0	2694.1	2666.9	2657.2	2659.2
14°	2482.5	2484.5	2455.4	2447.6	2445.7
15°	2286.5	2276.8	2247.7	2241.8	2238.0
16°	2080.7	2078.8	2049.7	2041.9	2038.0
17°	1896.4	1886.6	1857.5	1849.8	1843.9
18°	1704.2	1706.1	1677.0	1671.2	1661.5
19°	1541.1	1537.3	1510.1	1504.3	1494.6
20°	1387.8	1370.3	1352.9	1347.1	1337.3
22.5°	1046.2	1036.5	1013.2	1007.4	1005.4
25°	774.5	764.8	751.2	747.3	741.5
26°	677.4	679.3	661.9	658.0	654.1
27°	599.8	595.9	580.4	578.4	572.6
28°	516.3	520.2	502.7	500.8	496.9
29°	450.3	450.3	440.6	434.8	430.9
30°	394.0	392.1	382.4	378.5	374.6
32.5°	271.7	269.8	265.9	264.0	260.1
35°	178.6	186.3	184.4	184.4	180.5
37.5°	110.6	126.2	132.0	130.0	118.4
40°	69.9	81.5	95.1	87.3	71.8
42.5°	46.6	56.3	69.9	58.2	46.6
45°	33.0	38.8	54.3	38.8	34.9
47.5°	25.2	29.1	40.8	29.1	25.2
50°	19.4	23.3	29.1	23.3	21.4
52.5°	15.5	17.5	23.3	17.5	15.5
55°	11.6	13.6	17.5	13.6	13.6
57.5°	9.7	11.6	13.6	11.6	9.7
60°	5.8	7.8	9.7	7.8	7.8
62.5°	3.9	5.8	7.8	5.8	3.9
65°	1.9	3.9	5.8	3.9	1.9
67.5°	0.0	1.9	1.9	0.0	0.0



TEST NUMBER: P401962

CATALOG NUMBER: LA1MR102D010 EA1M102309030MW1MW

**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	1.9	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)