

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: P402038

Luminaire Tested: **LA1MR152D010 EA1M152309027MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402038  
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: LA1MR152D010 EA1M152309027MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

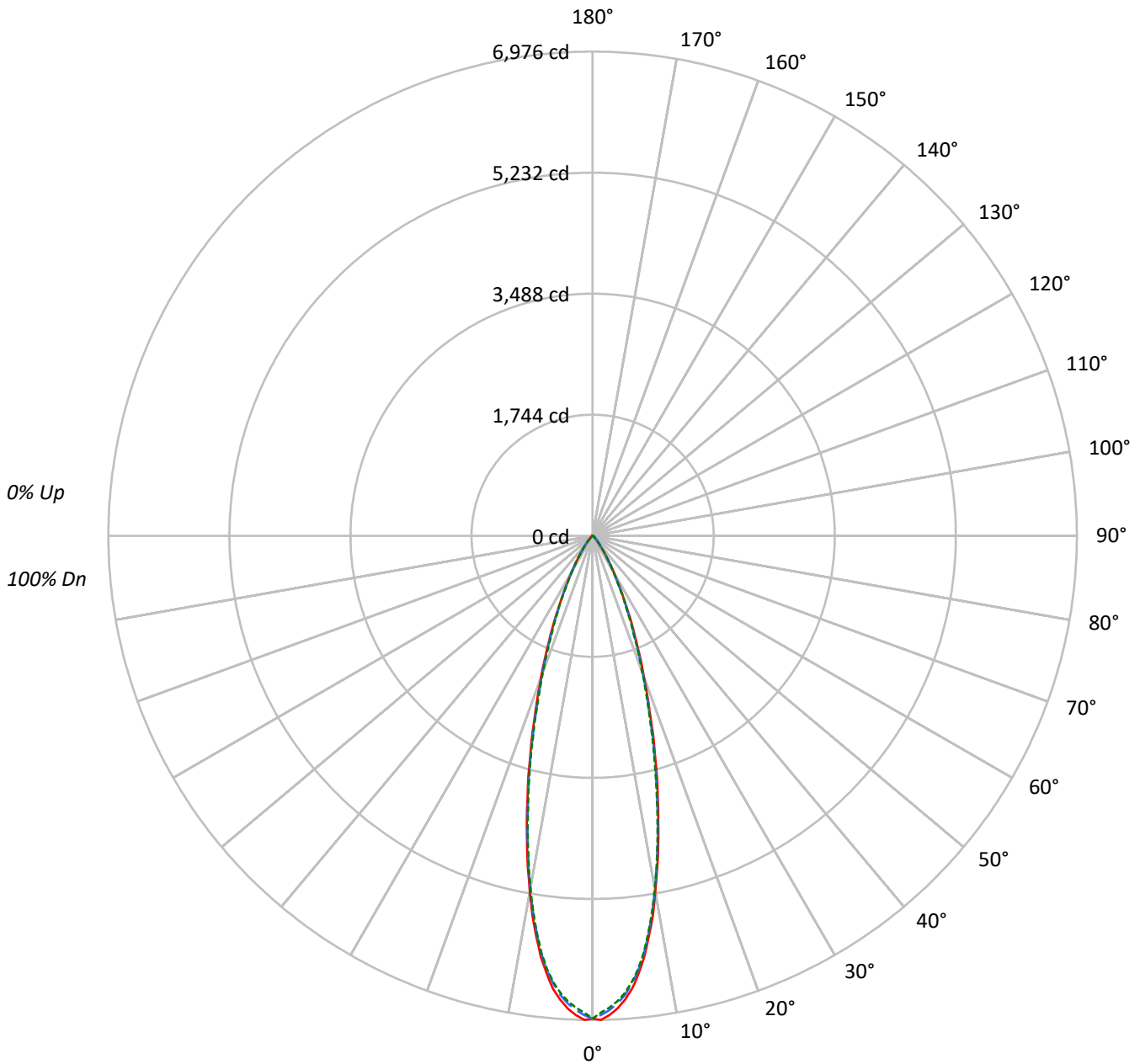
Lumens per Lamp: N/A  
Luminaire Lumens: 2371.5 lumens  
Efficiency: N/A  
Efficacy: 69.3 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.2  
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: P402038

CATALOG NUMBER: LA1MR152D010 EA1M152309027MW1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P402038

CATALOG NUMBER: LA1MR152D010 EA1M152309027MW1MW

**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																			
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°	2156961	2156961	2156961
5°	2037832	2017076	2010479
10°	1638608	1626206	1624317
15°	1146196	1126747	1121869
20°	715118	697105	689122
25°	413777	401326	396127
30°	220288	213809	209442
35°	105548	108991	106721
40°	44150	60135	45405
45°	22578	37221	23937
50°	14613	21944	16060
55°	9837	14755	11458
60°	5642	9424	7502
65°	2201	6675	2201
70°	0	2719	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402038

CATALOG NUMBER: LA1MR152D010 EA1M152309027MW1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	577.8	24.4
10°-20°	964.4	40.7
20°-30°	554.8	23.4
30°-40°	193.0	8.1
40°-50°	54.7	2.3
50°-60°	21.0	0.9
60°-70°	5.7	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°	2097.0	88.4
0°-40°	2290.0	96.6
0°-60°	2365.7	99.8
0°-90°	2371.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2371.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6958	6958	6958	6958	6958	
5°	6549	6509	6482	6494	6461	582
15°	3571	3556	3511	3502	3496	975
25°	1210	1194	1173	1167	1158	567
35°	279	291	288	288	282	188
45°	52	61	85	61	55	44
55°	18	21	27	21	21	17
65°	3	6	9	6	3	3
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P402038

CATALOG NUMBER: LA1MR152D010 EA1M152309027MW1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6957.9	6957.9	6957.9	6957.9	6957.9
1°	6976.1	6942.7	6906.4	6906.4	6870.0
2°	6909.4	6879.1	6839.7	6842.7	6803.3
3°	6821.5	6791.1	6751.7	6757.8	6721.4
4°	6700.2	6660.8	6633.5	6642.6	6609.2
5°	6548.6	6509.2	6481.9	6494.0	6460.7
6°	6342.4	6315.2	6290.9	6306.1	6275.7
7°	6112.0	6081.7	6063.5	6075.6	6051.4
8°	5830.1	5808.9	5787.6	5799.8	5775.5
9°	5542.1	5508.7	5487.5	5496.6	5478.4
10°	5205.5	5190.4	5166.1	5175.2	5160.1
11°	4881.1	4881.1	4835.7	4820.5	4829.6
12°	4547.6	4544.6	4502.2	4484.0	4490.0
13°	4211.1	4208.1	4165.6	4150.5	4153.5
14°	3877.6	3880.7	3835.2	3823.1	3820.0
15°	3571.4	3556.3	3510.8	3501.7	3495.6
16°	3250.0	3247.0	3201.5	3189.4	3183.3
17°	2962.0	2946.9	2901.4	2889.3	2880.2
18°	2661.9	2664.9	2619.4	2610.3	2595.2
19°	2407.2	2401.2	2358.7	2349.6	2334.5
20°	2167.7	2140.4	2113.1	2104.0	2088.9
22.5°	1634.1	1619.0	1582.6	1573.5	1570.5
25°	1209.7	1194.5	1173.3	1167.2	1158.1
26°	1058.1	1061.1	1033.8	1027.8	1021.7
27°	936.8	930.8	906.5	903.5	894.4
28°	806.4	812.5	785.2	782.2	776.1
29°	703.4	703.4	688.2	679.1	673.1
30°	615.4	612.4	597.3	591.2	585.1
32.5°	424.4	421.4	415.4	412.3	406.3
35°	278.9	291.0	288.0	288.0	282.0
37.5°	172.8	197.1	206.2	203.1	184.9
40°	109.1	127.3	148.6	136.4	112.2
42.5°	72.8	87.9	109.1	91.0	72.8
45°	51.5	60.6	84.9	60.6	54.6
47.5°	39.4	45.5	63.7	45.5	39.4
50°	30.3	36.4	45.5	36.4	33.3
52.5°	24.3	27.3	36.4	27.3	24.3
55°	18.2	21.2	27.3	21.2	21.2
57.5°	15.2	18.2	21.2	18.2	15.2
60°	9.1	12.1	15.2	12.1	12.1
62.5°	6.1	9.1	12.1	9.1	6.1
65°	3.0	6.1	9.1	6.1	3.0
67.5°	0.0	3.0	3.0	0.0	0.0



TEST NUMBER: P402038

CATALOG NUMBER: LA1MR152D010 EA1M152309027MW1MW

**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	3.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)