

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: P402052

Luminaire Tested: **LA1MR152D010 EA1M152309040SC1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402052  
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 EA1M152309040SC1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

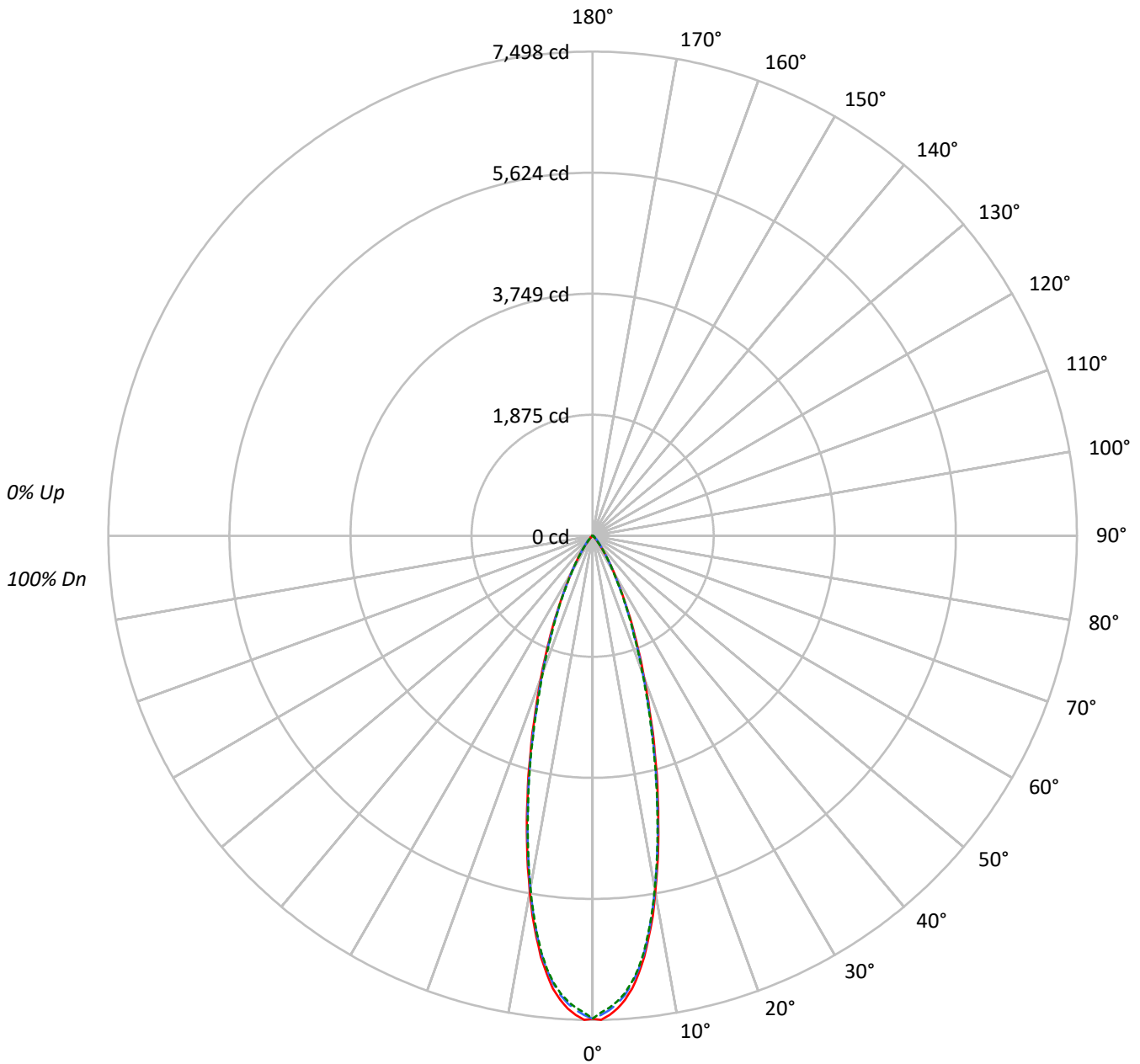
Lumens per Lamp: N/A  
Luminaire Lumens: 2549.1 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

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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				
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	76	72	87	80	75	72	79	75	72	78	74	72	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°	2318472	2318472	2318472
5°	2190438	2168126	2161030
10°	1761311	1747996	1745918
15°	1232015	1211122	1205890
20°	768660	749328	740718
25°	444766	431358	425817
30°	236790	229810	225121
35°	113457	117166	114706
40°	47469	64627	48804
45°	24288	39983	25735
50°	15722	23583	17266
55°	10593	15836	12323
60°	6076	10106	8060
65°	2421	7189	2421
70°	0	2991	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	621.1	24.4
10°-20°	1036.6	40.7
20°-30°	596.3	23.4
30°-40°	207.5	8.1
40°-50°	58.8	2.3
50°-60°	22.5	0.9
60°-70°	6.1	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°	2254.0	88.4
0°-40°	2461.5	96.6
0°-60°	2542.9	99.8
0°-90°	2549.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2549.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7479	7479	7479	7479	7479	
5°	7039	6997	6967	6980	6944	625
15°	3839	3822	3774	3764	3757	1048
25°	1300	1284	1261	1255	1245	610
35°	300	313	310	310	303	202
45°	55	65	91	65	59	48
55°	20	23	29	23	23	18
65°	3	6	10	6	3	4
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°	7478.9	7478.9	7478.9	7478.9	7478.9
1°	7498.4	7462.6	7423.5	7423.5	7384.4
2°	7426.8	7394.2	7351.8	7355.1	7312.7
3°	7332.3	7299.7	7257.3	7263.8	7224.7
4°	7201.9	7159.5	7130.2	7140.0	7104.1
5°	7039.0	6996.6	6967.3	6980.3	6944.5
6°	6817.4	6788.0	6762.0	6778.3	6745.7
7°	6569.7	6537.1	6517.6	6530.6	6504.5
8°	6266.6	6243.8	6221.0	6234.0	6208.0
9°	5957.0	5921.2	5898.4	5908.2	5888.6
10°	5595.3	5579.0	5553.0	5562.7	5546.4
11°	5246.6	5246.6	5197.8	5181.5	5191.2
12°	4888.2	4884.9	4839.3	4819.7	4826.2
13°	4526.4	4523.2	4477.6	4461.3	4464.5
14°	4168.0	4171.2	4122.4	4109.3	4106.1
15°	3838.8	3822.5	3773.7	3763.9	3757.4
16°	3493.4	3490.2	3441.3	3428.2	3421.7
17°	3183.8	3167.5	3118.7	3105.6	3095.8
18°	2861.2	2864.5	2815.6	2805.8	2789.5
19°	2587.5	2581.0	2535.3	2525.6	2509.3
20°	2330.0	2300.7	2271.4	2261.6	2245.3
22.5°	1756.5	1740.2	1701.1	1691.3	1688.0
25°	1300.3	1284.0	1261.1	1254.6	1244.9
26°	1137.3	1140.6	1111.2	1104.7	1098.2
27°	1007.0	1000.4	974.4	971.1	961.3
28°	866.8	873.4	844.0	840.8	834.2
29°	756.0	756.0	739.7	730.0	723.4
30°	661.5	658.3	642.0	635.5	628.9
32.5°	456.2	453.0	446.5	443.2	436.7
35°	299.8	312.8	309.6	309.6	303.1
37.5°	185.8	211.8	221.6	218.3	198.8
40°	117.3	136.9	159.7	146.6	120.6
42.5°	78.2	94.5	117.3	97.8	78.2
45°	55.4	65.2	91.2	65.2	58.7
47.5°	42.4	48.9	68.4	48.9	42.4
50°	32.6	39.1	48.9	39.1	35.8
52.5°	26.1	29.3	39.1	29.3	26.1
55°	19.6	22.8	29.3	22.8	22.8
57.5°	16.3	19.6	22.8	19.6	16.3
60°	9.8	13.0	16.3	13.0	13.0
62.5°	6.5	9.8	13.0	9.8	6.5
65°	3.3	6.5	9.8	6.5	3.3
67.5°	0.0	3.3	3.3	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	3.3	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)