

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: P402048

Luminaire Tested: **LA1MR152D010 EA1M152309035SC1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402048  
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 EA1M152309035SC1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

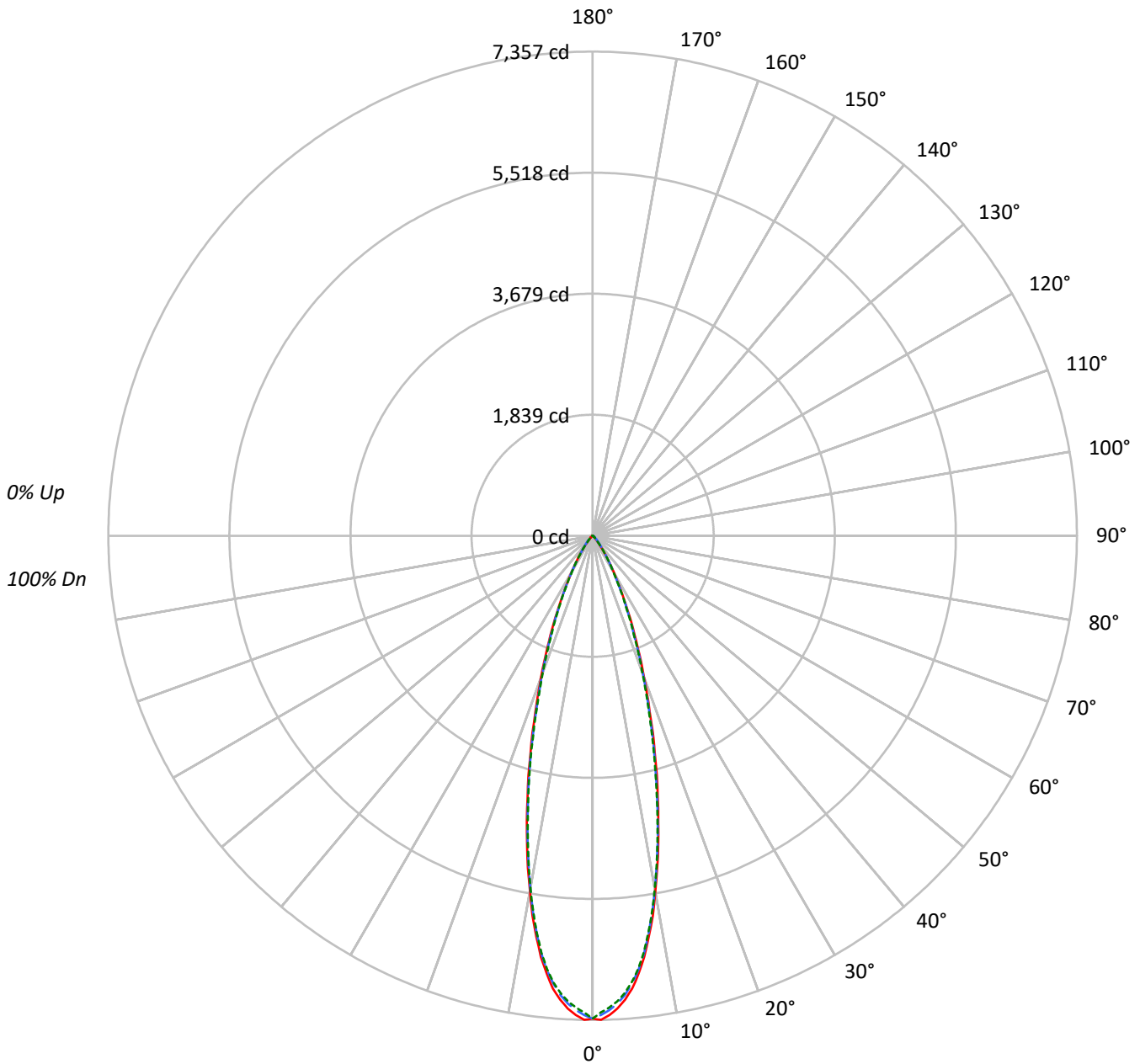
Lumens per Lamp: N/A  
Luminaire Lumens: 2500.9 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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									
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°	2274638	2274638	2274638
5°	2149019	2127142	2120172
10°	1728038	1714943	1712929
15°	1208747	1188207	1183072
20°	754144	735142	726730
25°	436352	423217	417745
30°	232316	225443	220897
35°	111300	114933	112511
40°	46578	63413	47873
45°	23849	39238	25208
50°	15433	23149	16976
55°	10377	15566	12107
60°	5952	9920	7936
65°	2347	7042	2347
70°	0	2900	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	609.3	24.4
10°-20°	1017.0	40.7
20°-30°	585.1	23.4
30°-40°	203.5	8.1
40°-50°	57.7	2.3
50°-60°	22.1	0.9
60°-70°	6.0	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°	2211.4	88.4
0°-40°	2414.9	96.6
0°-60°	2494.8	99.8
0°-90°	2500.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2500.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7338	7338	7338	7338	7338	
5°	6906	6864	6836	6848	6813	613
15°	3766	3750	3702	3693	3686	1028
25°	1276	1260	1237	1231	1221	598
35°	294	307	304	304	297	199
45°	54	64	90	64	58	47
55°	19	22	29	22	22	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°	7337.5	7337.5	7337.5	7337.5	7337.5
1°	7356.7	7321.5	7283.2	7283.2	7244.8
2°	7286.4	7254.4	7212.8	7216.0	7174.5
3°	7193.6	7161.7	7120.1	7126.5	7088.1
4°	7065.8	7024.2	6995.4	7005.0	6969.8
5°	6905.9	6864.3	6835.6	6848.4	6813.2
6°	6688.5	6659.7	6634.1	6650.1	6618.2
7°	6445.5	6413.5	6394.4	6407.1	6381.6
8°	6148.2	6125.8	6103.4	6116.2	6090.6
9°	5844.4	5809.3	5786.9	5796.5	5777.3
10°	5489.6	5473.6	5448.0	5457.6	5441.6
11°	5147.5	5147.5	5099.5	5083.5	5093.1
12°	4795.8	4792.6	4747.8	4728.6	4735.0
13°	4440.9	4437.7	4392.9	4376.9	4380.1
14°	4089.2	4092.4	4044.4	4031.6	4028.4
15°	3766.3	3750.3	3702.3	3692.7	3686.3
16°	3427.4	3424.2	3376.2	3363.4	3357.0
17°	3123.6	3107.7	3059.7	3046.9	3037.3
18°	2807.1	2810.3	2762.4	2752.8	2736.8
19°	2538.6	2532.2	2487.4	2477.8	2461.8
20°	2286.0	2257.2	2228.4	2218.8	2202.9
22.5°	1723.3	1707.3	1668.9	1659.3	1656.1
25°	1275.7	1259.7	1237.3	1230.9	1221.3
26°	1115.8	1119.0	1090.2	1083.8	1077.4
27°	987.9	981.5	956.0	952.8	943.2
28°	850.4	856.8	828.1	824.9	818.5
29°	741.7	741.7	725.8	716.2	709.8
30°	649.0	645.8	629.8	623.4	617.1
32.5°	447.6	444.4	438.0	434.8	428.4
35°	294.1	306.9	303.7	303.7	297.3
37.5°	182.2	207.8	217.4	214.2	195.0
40°	115.1	134.3	156.7	143.9	118.3
42.5°	76.7	92.7	115.1	95.9	76.7
45°	54.4	63.9	89.5	63.9	57.5
47.5°	41.6	48.0	67.1	48.0	41.6
50°	32.0	38.4	48.0	38.4	35.2
52.5°	25.6	28.8	38.4	28.8	25.6
55°	19.2	22.4	28.8	22.4	22.4
57.5°	16.0	19.2	22.4	19.2	16.0
60°	9.6	12.8	16.0	12.8	12.8
62.5°	6.4	9.6	12.8	9.6	6.4
65°	3.2	6.4	9.6	6.4	3.2
67.5°	0.0	3.2	3.2	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	3.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)