

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: P402019

Luminaire Tested: **LA1MR012D010 EA1M12309040SB1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402019
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: LA1MR012D010 EA1M12309040SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

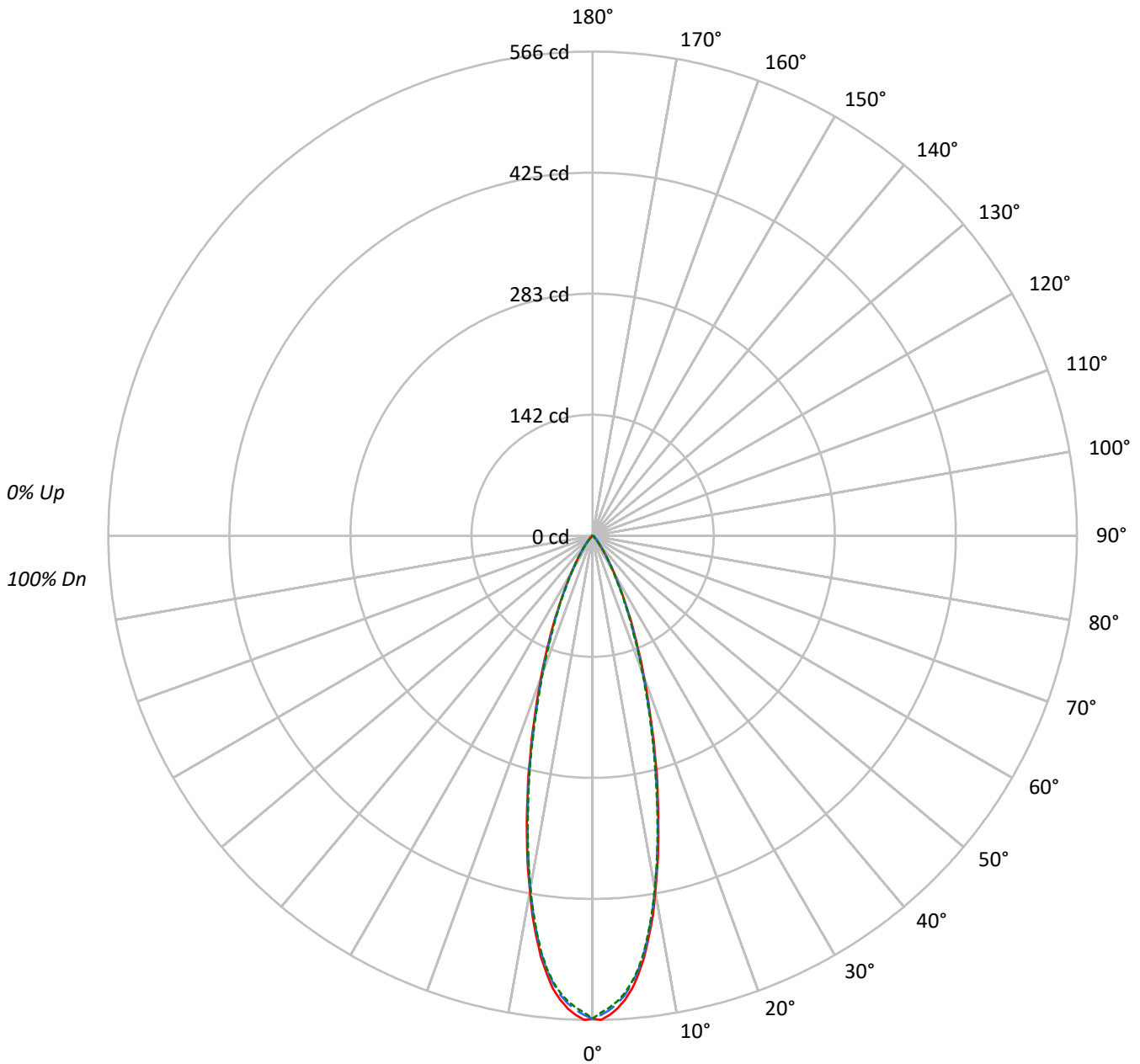
Lumens per Lamp: N/A
Luminaire Lumens: 192.4 lumens
Efficiency: N/A
Efficacy: 53.4 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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°	174996	174996	174996
5°	165333	163653	163124
10°	132933	131926	131800
15°	93008	91403	91018
20°	58029	56544	55918
25°	33555	32563	32153
30°	17862	17361	17003
35°	8553	8856	8666
40°	3602	4897	3683
45°	1841	3025	1929
50°	1206	1784	1302
55°	811	1189	919
60°	434	744	620
65°	147	513	147
70°	0	181	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	24.4
10°-20°	78.2	40.7
20°-30°	45.0	23.4
30°-40°	15.7	8.1
40°-50°	4.4	2.3
50°-60°	1.7	0.9
60°-70°	0.4	0.2
70°-80°	0.0	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°	170.1	88.4
0°-40°	185.8	96.6
0°-60°	192.0	99.8
0°-90°	192.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	192.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	531	528	526	527	524	47
15°	290	288	285	284	284	79
25°	98	97	95	95	94	46
35°	23	24	23	23	23	15
45°	4	5	7	5	4	4
55°	2	2	2	2	2	1
65°	0	0	1	0	0	0
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°	564.5	564.5	564.5	564.5	564.5
1°	566.0	563.3	560.3	560.3	557.4
2°	560.6	558.1	554.9	555.2	552.0
3°	553.5	551.0	547.8	548.3	545.3
4°	543.6	540.4	538.2	538.9	536.2
5°	531.3	528.1	525.9	526.9	524.2
6°	514.6	512.4	510.4	511.6	509.2
7°	495.9	493.4	492.0	492.9	491.0
8°	473.0	471.3	469.6	470.6	468.6
9°	449.7	446.9	445.2	446.0	444.5
10°	422.3	421.1	419.1	419.9	418.7
11°	396.0	396.0	392.3	391.1	391.8
12°	369.0	368.7	365.3	363.8	364.3
13°	341.7	341.4	338.0	336.7	337.0
14°	314.6	314.9	311.2	310.2	309.9
15°	289.8	288.5	284.8	284.1	283.6
16°	263.7	263.4	259.8	258.8	258.3
17°	240.3	239.1	235.4	234.4	233.7
18°	216.0	216.2	212.5	211.8	210.6
19°	195.3	194.8	191.4	190.6	189.4
20°	175.9	173.7	171.4	170.7	169.5
22.5°	132.6	131.4	128.4	127.7	127.4
25°	98.1	96.9	95.2	94.7	94.0
26°	85.8	86.1	83.9	83.4	82.9
27°	76.0	75.5	73.5	73.3	72.6
28°	65.4	65.9	63.7	63.5	63.0
29°	57.1	57.1	55.8	55.1	54.6
30°	49.9	49.7	48.5	48.0	47.5
32.5°	34.4	34.2	33.7	33.5	33.0
35°	22.6	23.6	23.4	23.4	22.9
37.5°	14.0	16.0	16.7	16.5	15.0
40°	8.9	10.3	12.1	11.1	9.1
42.5°	5.9	7.1	8.9	7.4	5.9
45°	4.2	4.9	6.9	4.9	4.4
47.5°	3.2	3.7	5.2	3.7	3.2
50°	2.5	3.0	3.7	3.0	2.7
52.5°	2.0	2.2	3.0	2.2	2.0
55°	1.5	1.7	2.2	1.7	1.7
57.5°	1.2	1.5	1.7	1.5	1.2
60°	0.7	1.0	1.2	1.0	1.0
62.5°	0.5	0.7	1.0	0.7	0.5
65°	0.2	0.5	0.7	0.5	0.2
67.5°	0.0	0.2	0.2	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	0.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)