

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: P402011

Luminaire Tested: **LA1MR012D010 EA1M12309030SB1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402011
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 EA1M12309030SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

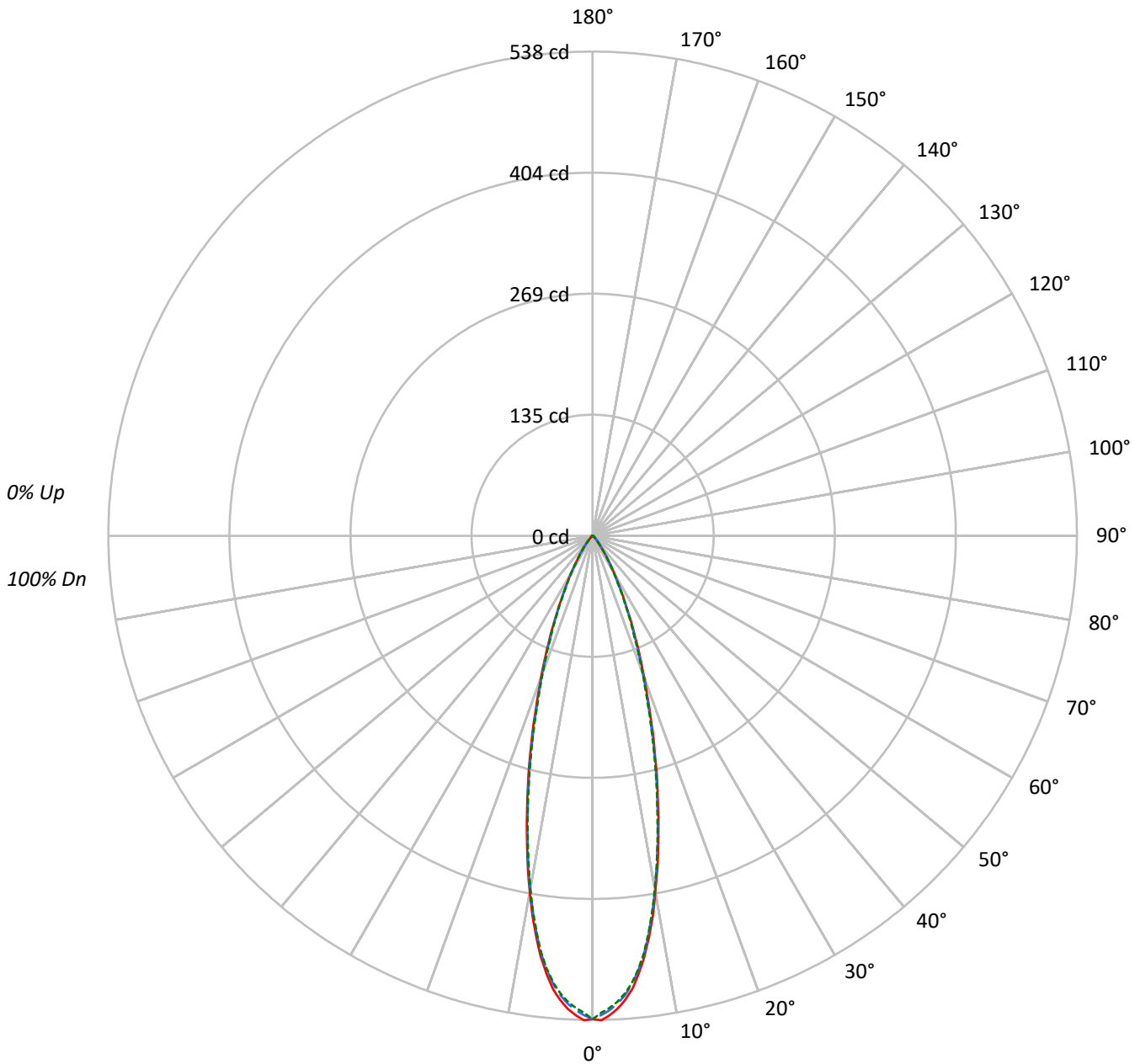
Lumens per Lamp: N/A
Luminaire Lumens: 183.0 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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°	166502	166502	166502
5°	157304	155686	155188
10°	126480	125536	125378
15°	88482	86974	86589
20°	55192	53806	53179
25°	31947	30990	30579
30°	17003	16502	16180
35°	8137	8401	8250
40°	3399	4654	3521
45°	1754	2893	1841
50°	1109	1688	1254
55°	757	1135	865
60°	434	744	558
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°	44.6	24.4
10°-20°	74.4	40.7
20°-30°	42.8	23.4
30°-40°	14.9	8.1
40°-50°	4.2	2.3
50°-60°	1.6	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°	161.9	88.4
0°-40°	176.8	96.6
0°-60°	182.6	99.8
0°-90°	183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	506	502	500	501	499	45
15°	276	274	271	270	270	75
25°	93	92	91	90	89	44
35°	22	22	22	22	22	15
45°	4	5	7	5	4	3
55°	1	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°	537.1	537.1	537.1	537.1	537.1
1°	538.5	535.9	533.1	533.1	530.3
2°	533.3	531.0	527.9	528.2	525.1
3°	526.5	524.2	521.1	521.6	518.8
4°	517.2	514.1	512.0	512.7	510.1
5°	505.5	502.4	500.3	501.3	498.7
6°	489.6	487.4	485.6	486.7	484.4
7°	471.8	469.4	468.0	469.0	467.1
8°	450.0	448.4	446.7	447.7	445.8
9°	427.8	425.2	423.6	424.3	422.9
10°	401.8	400.6	398.8	399.5	398.3
11°	376.8	376.8	373.2	372.1	372.8
12°	351.0	350.8	347.5	346.1	346.6
13°	325.0	324.8	321.5	320.4	320.6
14°	299.3	299.5	296.0	295.1	294.9
15°	275.7	274.5	271.0	270.3	269.8
16°	250.9	250.6	247.1	246.2	245.7
17°	228.6	227.5	223.9	223.0	222.3
18°	205.5	205.7	202.2	201.5	200.3
19°	185.8	185.3	182.1	181.4	180.2
20°	167.3	165.2	163.1	162.4	161.2
22.5°	126.1	125.0	122.2	121.5	121.2
25°	93.4	92.2	90.6	90.1	89.4
26°	81.7	81.9	79.8	79.3	78.9
27°	72.3	71.8	70.0	69.7	69.0
28°	62.2	62.7	60.6	60.4	59.9
29°	54.3	54.3	53.1	52.4	52.0
30°	47.5	47.3	46.1	45.6	45.2
32.5°	32.8	32.5	32.1	31.8	31.4
35°	21.5	22.5	22.2	22.2	21.8
37.5°	13.3	15.2	15.9	15.7	14.3
40°	8.4	9.8	11.5	10.5	8.7
42.5°	5.6	6.8	8.4	7.0	5.6
45°	4.0	4.7	6.6	4.7	4.2
47.5°	3.0	3.5	4.9	3.5	3.0
50°	2.3	2.8	3.5	2.8	2.6
52.5°	1.9	2.1	2.8	2.1	1.9
55°	1.4	1.6	2.1	1.6	1.6
57.5°	1.2	1.4	1.6	1.4	1.2
60°	0.7	0.9	1.2	0.9	0.9
62.5°	0.5	0.7	0.9	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)