

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: P402083

Luminaire Tested: **LA1MR022D010 EA1M22309040SB1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402083
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: LA1MR022D010 EA1M22309040SB1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

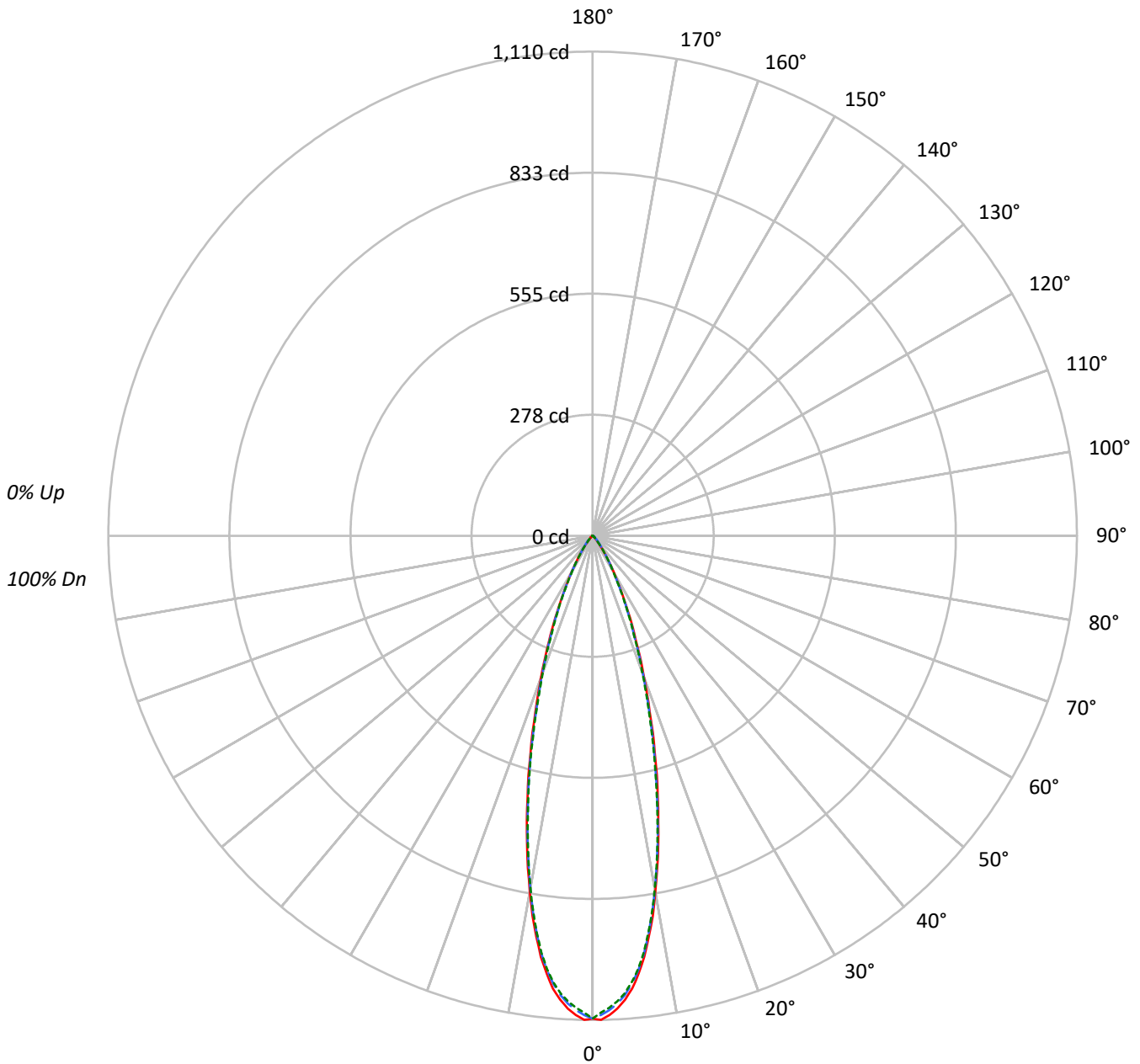
Lumens per Lamp: N/A
Luminaire Lumens: 377.3 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 5.7
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			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°	343203	343203	343203
5°	324256	320957	319899
10°	260736	258752	258469
15°	182389	179276	178505
20°	113781	110911	109658
25°	65844	63861	63040
30°	35044	34006	33326
35°	16803	17333	16992
40°	7041	9550	7203
45°	3595	5919	3814
50°	2315	3472	2556
55°	1567	2324	1838
60°	868	1488	1178
65°	367	1027	367
70°	0	453	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	24.4
10°-20°	153.5	40.7
20°-30°	88.3	23.4
30°-40°	30.7	8.1
40°-50°	8.7	2.3
50°-60°	3.3	0.9
60°-70°	0.9	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°	333.7	88.4
0°-40°	364.4	96.6
0°-60°	376.4	99.8
0°-90°	377.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	377.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1042	1036	1031	1033	1028	93
15°	568	566	559	557	556	155
25°	192	190	187	186	184	90
35°	44	46	46	46	45	30
45°	8	10	14	10	9	7
55°	3	3	4	3	3	3
65°	0	1	1	1	0	1
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°	1107.1	1107.1	1107.1	1107.1	1107.1
1°	1110.0	1104.7	1098.9	1098.9	1093.2
2°	1099.4	1094.6	1088.3	1088.8	1082.5
3°	1085.4	1080.6	1074.3	1075.3	1069.5
4°	1066.1	1059.9	1055.5	1057.0	1051.7
5°	1042.0	1035.7	1031.4	1033.3	1028.0
6°	1009.2	1004.9	1001.0	1003.4	998.6
7°	972.6	967.7	964.8	966.8	962.9
8°	927.7	924.3	920.9	922.9	919.0
9°	881.9	876.6	873.2	874.6	871.7
10°	828.3	825.9	822.0	823.5	821.1
11°	776.7	776.7	769.5	767.0	768.5
12°	723.6	723.1	716.4	713.5	714.5
13°	670.1	669.6	662.8	660.4	660.9
14°	617.0	617.5	610.3	608.3	607.8
15°	568.3	565.9	558.6	557.2	556.2
16°	517.2	516.7	509.4	507.5	506.5
17°	471.3	468.9	461.7	459.7	458.3
18°	423.6	424.0	416.8	415.4	412.9
19°	383.0	382.1	375.3	373.9	371.5
20°	344.9	340.6	336.2	334.8	332.4
22.5°	260.0	257.6	251.8	250.4	249.9
25°	192.5	190.1	186.7	185.7	184.3
26°	168.4	168.8	164.5	163.5	162.6
27°	149.1	148.1	144.2	143.8	142.3
28°	128.3	129.3	124.9	124.5	123.5
29°	111.9	111.9	109.5	108.1	107.1
30°	97.9	97.4	95.0	94.1	93.1
32.5°	67.5	67.1	66.1	65.6	64.6
35°	44.4	46.3	45.8	45.8	44.9
37.5°	27.5	31.4	32.8	32.3	29.4
40°	17.4	20.3	23.6	21.7	17.8
42.5°	11.6	14.0	17.4	14.5	11.6
45°	8.2	9.6	13.5	9.6	8.7
47.5°	6.3	7.2	10.1	7.2	6.3
50°	4.8	5.8	7.2	5.8	5.3
52.5°	3.9	4.3	5.8	4.3	3.9
55°	2.9	3.4	4.3	3.4	3.4
57.5°	2.4	2.9	3.4	2.9	2.4
60°	1.4	1.9	2.4	1.9	1.9
62.5°	1.0	1.4	1.9	1.4	1.0
65°	0.5	1.0	1.4	1.0	0.5
67.5°	0.0	0.5	0.5	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	0.5	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)