

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: P402004

Luminaire Tested: **LA1MR102D010 EA1M102WW9040SC1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-15)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LA1MR102D010 EA1M102WW9040SC1MW
Description: 1 INCH WW OPTIC WITH SPECULAR CLEAR BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

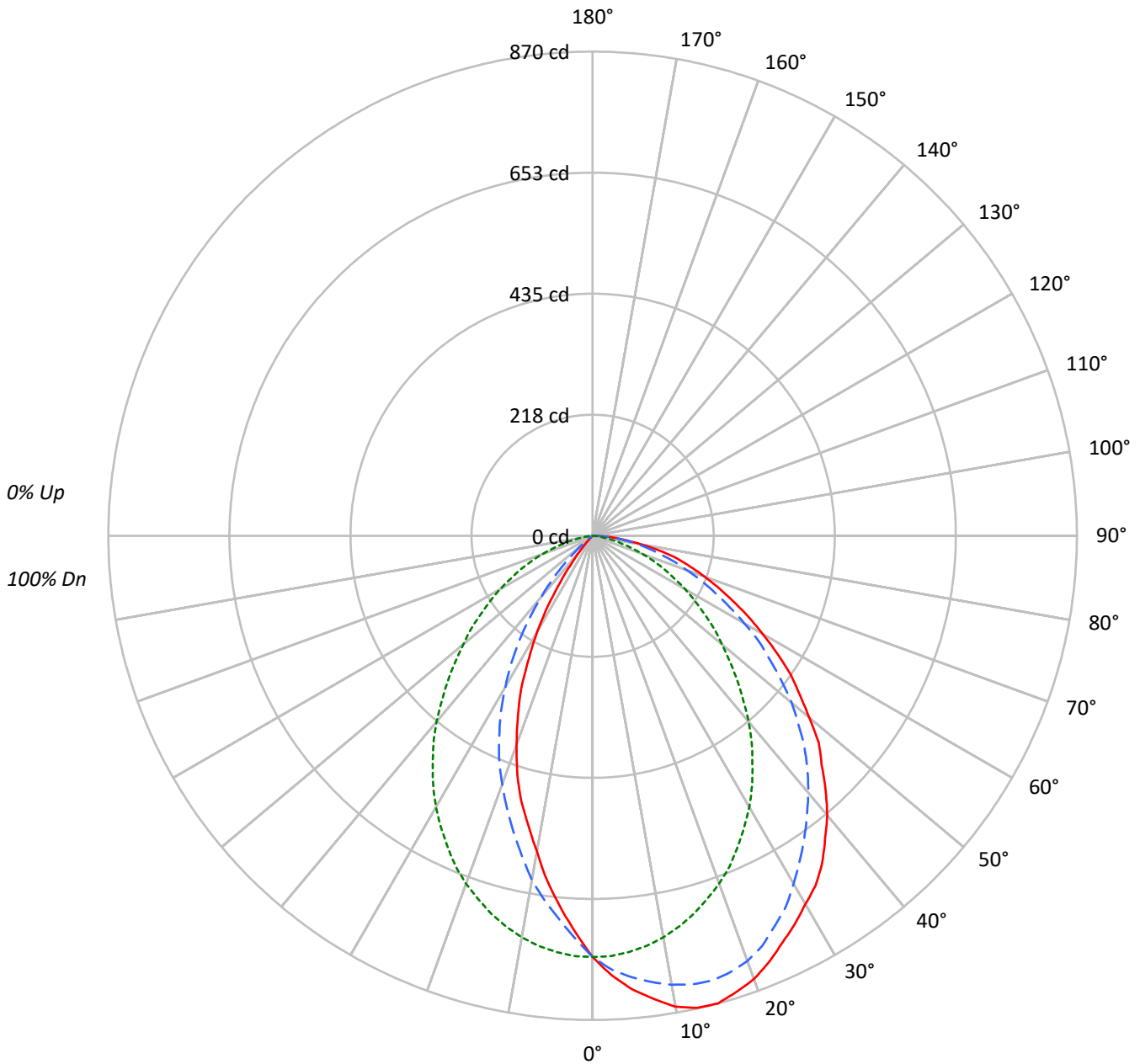
Lumens per Lamp: N/A
Luminaire Lumens: 1464.6 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.12 / 1.15
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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				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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	60552	60552	60552
5°	65706	60277	53748
10°	69804	59520	46823
15°	72047	58232	40922
20°	72168	56623	33977
25°	71199	54419	26834
30°	70603	51980	18337
35°	70209	48870	9795
40°	68466	45533	3311
45°	65812	41567	362
50°	63200	37711	0
55°	60518	34158	0
60°	56416	30736	0
65°	52757	26785	0
70°	49892	22221	0
75°	48281	16629	0
80°	40864	10228	0
85°	34880	1928	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	4.8
10°-20°	193.9	13.2
20°-30°	268.9	18.4
30°-40°	281.9	19.2
40°-50°	247.2	16.9
50°-60°	191.8	13.1
60°-70°	126.9	8.7
70°-80°	66.8	4.6
80°-90°	16.6	1.1
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°	533.4	36.4
0°-40°	815.3	55.7
0°-60°	1254.3	85.6
0°-90°	1464.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1464.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	757	757	757	757	757	
5°	818	796	751	692	669	79
15°	870	828	703	550	494	244
25°	807	774	616	397	304	372
35°	719	663	500	229	100	448
45°	582	538	367	73	3	450
55°	434	388	245	1	0	386
65°	279	243	142	0	0	278
75°	156	124	54	0	0	162
85°	38	31	2	0	0	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	756.9	756.9	756.9	756.9	756.9	756.9	756.9	756.9	756.9
2.5°	790.7	788.6	780.2	771.7	755.9	740.1	724.2	714.7	712.6
5°	818.2	811.8	796.0	780.2	750.6	723.2	691.5	674.6	669.3
7.5°	839.3	830.8	808.7	783.3	743.2	702.0	660.9	637.6	625.0
10°	859.3	849.8	819.2	782.3	732.7	675.7	628.1	592.3	576.4
12.5°	868.8	858.3	825.6	781.2	718.9	651.4	588.0	550.0	533.1
15°	869.9	859.3	827.7	772.8	703.1	622.9	550.0	506.7	494.1
17.5°	859.3	850.9	822.4	763.3	684.1	597.5	512.0	467.7	449.7
20°	847.7	837.2	812.9	751.7	665.1	565.9	475.1	420.2	399.1
22.5°	828.7	820.3	797.1	737.9	642.9	532.1	438.1	374.8	350.5
25°	806.6	796.0	773.8	720.0	616.5	496.2	396.9	330.4	304.0
27.5°	786.5	772.8	751.7	699.9	590.1	464.5	356.8	279.8	247.0
30°	764.3	752.7	722.1	674.6	562.7	427.6	313.5	228.0	198.5
32.5°	745.3	727.4	692.5	647.1	533.1	392.7	272.4	179.5	147.8
35°	718.9	704.2	663.0	615.5	500.4	358.9	229.1	129.9	100.3
37.5°	686.2	675.7	632.4	582.8	469.8	324.1	185.8	88.7	58.1
40°	655.6	642.9	602.8	550.0	436.0	291.4	143.6	51.7	31.7
42.5°	619.7	609.1	571.1	512.0	400.1	256.5	107.7	27.4	13.7
45°	581.7	572.2	538.4	475.1	367.4	225.9	72.8	11.6	3.2
47.5°	551.1	536.3	501.5	437.1	333.6	194.3	42.2	2.1	0.0
50°	507.8	501.5	466.6	398.0	303.0	164.7	23.2	0.0	0.0
52.5°	468.7	461.3	427.6	363.2	275.5	135.1	9.5	0.0	0.0
55°	433.9	423.3	388.5	329.4	244.9	102.4	1.1	0.0	0.0
57.5°	392.7	384.3	354.7	296.7	217.5	77.1	0.0	0.0	0.0
60°	352.6	347.3	314.6	267.1	192.1	50.7	0.0	0.0	0.0
62.5°	315.7	310.4	277.7	235.4	164.7	29.6	0.0	0.0	0.0
65°	278.7	272.4	242.8	206.9	141.5	14.8	0.0	0.0	0.0
67.5°	244.9	238.6	211.1	176.3	118.2	5.3	0.0	0.0	0.0
70°	213.3	204.8	179.5	149.9	95.0	1.1	0.0	0.0	0.0
72.5°	183.7	174.2	152.0	124.6	73.9	0.0	0.0	0.0	0.0
75°	156.2	147.8	123.5	100.3	53.8	0.0	0.0	0.0	0.0
77.5°	123.5	118.2	100.3	76.0	38.0	0.0	0.0	0.0	0.0
80°	88.7	87.6	77.1	54.9	22.2	0.0	0.0	0.0	0.0
82.5°	60.2	60.2	53.8	36.9	10.6	0.0	0.0	0.0	0.0
85°	38.0	34.8	30.6	21.1	2.1	0.0	0.0	0.0	0.0
87.5°	16.9	16.9	12.7	7.4	1.1	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)