

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: P401998

Luminaire Tested: **LA1MR102D010 EA1M102WW9035MW1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P401998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-13)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LA1MR102D010 EA1M102WW9035MW1MW
Description: 1 INCH WW OPTIC WITH MATTE WHITE BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

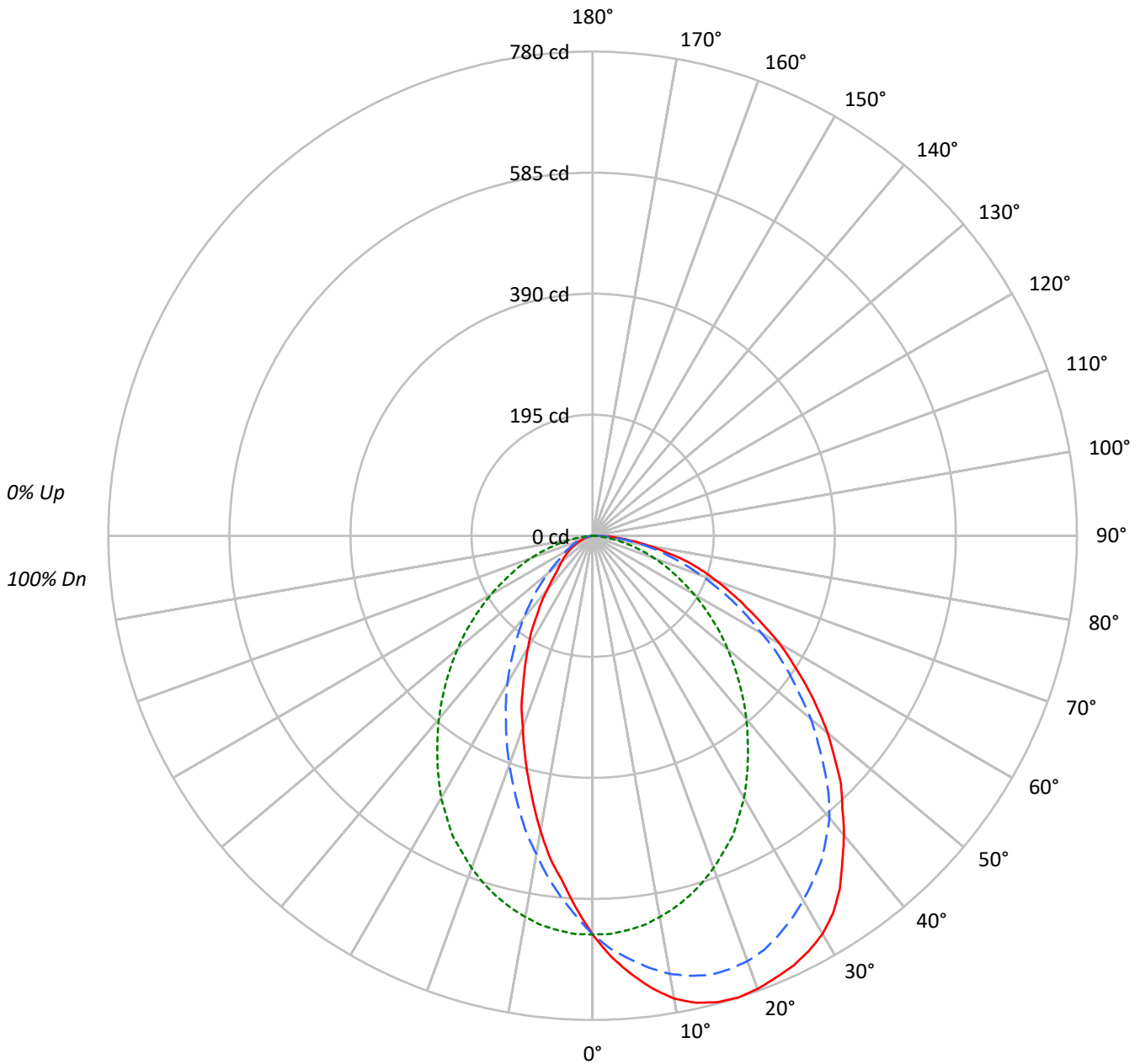
Lumens per Lamp: N/A
Luminaire Lumens: 1439.0 lumens
Efficiency: N/A
Efficacy: 61.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.14 / 1.24
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')
CIE Type: Direct

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				
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	100	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85	85	85	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72	72	72	72
3	92	82	74	68	90	81	73	68	78	71	66	75	70	65	72	68	64	62	62	62	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54	54	54	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47	47	47	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42	42	42	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37	37	37	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33	33	33	33
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	75841	75841	75841
5°	83978	75633	66184
10°	90789	74768	57884
15°	95095	73442	49137
20°	97624	71597	41259
25°	99604	69504	34413
30°	100992	66519	28391
35°	100038	62857	22548
40°	97076	59399	17559
45°	94445	55698	13662
50°	90759	52141	11997
55°	86372	48405	10665
60°	82194	44522	9306
65°	76398	40518	7824
70°	73304	36462	6077
75°	70405	31210	3331
80°	62704	24687	0
85°	57587	15447	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	4.2
10°-20°	167.4	11.6
20°-30°	240.2	16.7
30°-40°	269.3	18.7
40°-50°	253.2	17.6
50°-60°	207.4	14.4
60°-70°	143.7	10.0
70°-80°	77.0	5.4
80°-90°	20.5	1.4
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°	467.8	32.5
0°-40°	737.0	51.2
0°-60°	1197.7	83.2
0°-90°	1439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	642	642	642	642	642	
5°	708	685	638	584	558	69
15°	778	732	601	457	402	220
25°	764	710	533	330	264	352
35°	694	641	436	220	156	432
45°	566	527	334	130	82	434
55°	420	386	235	64	52	375
65°	273	249	145	36	28	273
75°	154	128	68	14	7	161
85°	42	37	11	0	0	49
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°	642.2	642.2	642.2	642.2	642.2	642.2	642.2	642.2	642.2
2.5°	678.4	675.3	666.0	657.7	642.2	627.7	613.2	603.8	600.7
5°	708.4	702.2	684.6	666.0	638.0	610.0	584.2	566.5	558.3
7.5°	735.4	726.1	702.2	672.2	632.8	590.4	554.1	530.3	524.1
10°	757.1	744.7	716.7	676.3	623.5	569.7	521.0	492.0	482.7
12.5°	770.6	758.2	726.1	676.3	613.2	546.9	490.9	453.7	441.2
15°	777.8	764.4	732.3	675.3	600.7	523.0	456.8	417.4	401.9
17.5°	779.9	766.4	732.3	670.1	586.2	499.2	423.6	382.2	364.6
20°	776.8	763.3	729.2	663.9	569.7	473.3	392.5	345.9	328.3
22.5°	770.6	757.1	721.9	654.6	551.0	447.4	361.5	311.8	299.3
25°	764.4	747.8	709.5	641.1	533.4	418.4	330.4	281.7	264.1
27.5°	754.0	737.4	695.0	624.5	509.6	390.5	302.4	250.6	235.1
30°	740.6	724.0	678.4	605.9	487.8	363.5	274.5	222.7	208.2
32.5°	720.9	708.4	659.8	586.2	461.9	336.6	246.5	197.8	183.3
35°	693.9	684.6	641.1	561.4	436.0	309.7	219.6	170.9	156.4
37.5°	660.8	655.6	617.3	536.5	410.2	284.8	194.7	149.1	135.7
40°	629.7	621.4	593.5	507.5	385.3	257.9	173.0	128.4	113.9
42.5°	595.5	590.4	562.4	479.5	359.4	233.0	150.2	107.7	96.3
45°	565.5	554.1	527.2	451.6	333.5	211.3	130.5	90.1	81.8
47.5°	528.2	523.0	492.0	423.6	308.6	187.5	110.8	76.6	72.5
50°	494.0	485.8	458.8	394.6	283.8	166.8	93.2	68.4	65.3
52.5°	456.8	448.5	420.5	366.7	260.0	147.1	77.7	61.1	58.0
55°	419.5	412.2	386.3	336.6	235.1	128.4	64.2	53.9	51.8
57.5°	382.2	377.0	352.2	305.5	211.3	108.8	57.0	47.6	44.5
60°	348.0	339.7	313.8	275.5	188.5	91.1	49.7	41.4	39.4
62.5°	308.6	303.5	280.7	243.4	165.7	74.6	42.5	36.3	33.1
65°	273.4	270.3	248.6	216.5	145.0	61.1	36.3	30.0	28.0
67.5°	242.4	237.2	215.4	185.4	125.3	47.6	31.1	24.9	22.8
70°	212.3	206.1	186.4	160.5	105.6	37.3	24.9	19.7	17.6
72.5°	183.3	176.1	156.4	132.6	87.0	29.0	19.7	14.5	12.4
75°	154.3	148.1	128.4	107.7	68.4	21.8	13.5	9.3	7.3
77.5°	120.1	118.1	105.6	84.9	50.8	16.6	9.3	5.2	3.1
80°	92.2	90.1	80.8	64.2	36.3	10.4	4.1	0.0	0.0
82.5°	65.3	64.2	58.0	44.5	21.8	5.2	1.0	0.0	0.0
85°	42.5	41.4	37.3	26.9	11.4	1.0	0.0	0.0	0.0
87.5°	24.9	22.8	19.7	13.5	3.1	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)