

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: P401990

Luminaire Tested: **LA1MR102D010 EA1M102WW9027MW1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P401990
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 EA1M102WW9027MW1MW
Description: 1 INCH WW OPTIC WITH MATTE WHITE BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

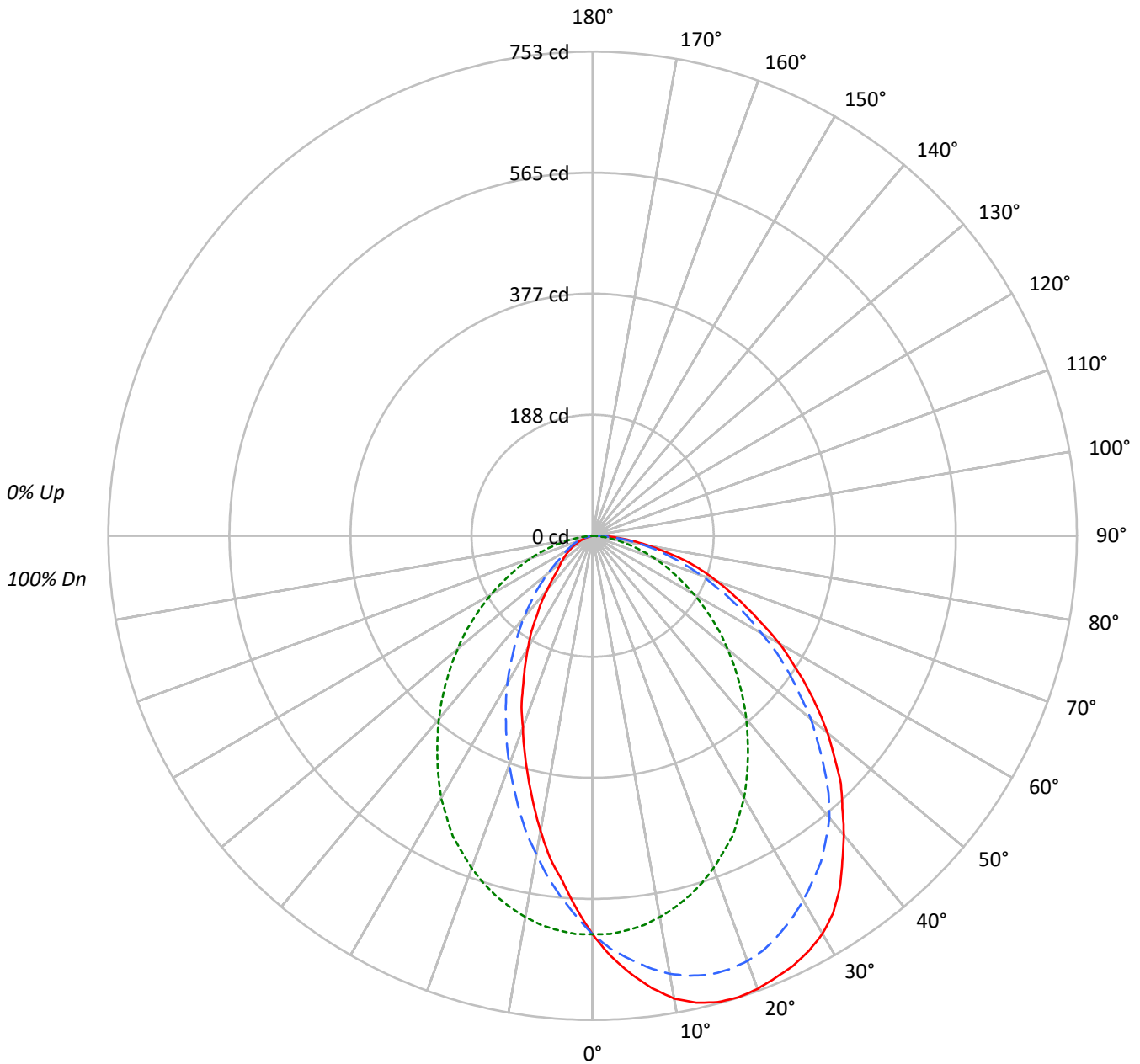
Lumens per Lamp: N/A
Luminaire Lumens: 1389.0 lumens
Efficiency: N/A
Efficacy: 59.1 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.14 / 1.24
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	73195	73195	73195
5°	81062	73001	63885
10°	87635	72178	55869
15°	91794	70899	47425
20°	94231	69108	39826
25°	96138	67093	33214
30°	97473	64214	27409
35°	96563	60680	21769
40°	93700	57333	16958
45°	91172	53761	13194
50°	87618	50322	11575
55°	83366	46717	10295
60°	79336	42987	8975
65°	73743	39121	7545
70°	70749	35219	5870
75°	67986	30115	3194
80°	60527	23803	0
85°	55555	14905	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	4.2
10°-20°	161.5	11.6
20°-30°	231.8	16.7
30°-40°	259.9	18.7
40°-50°	244.5	17.6
50°-60°	200.2	14.4
60°-70°	138.7	10.0
70°-80°	74.3	5.4
80°-90°	19.8	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°	451.5	32.5
0°-40°	711.4	51.2
0°-60°	1156.1	83.2
0°-90°	1389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1389.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	620	620	620	620	620	
5°	684	661	616	564	539	67
15°	751	707	580	441	388	212
25°	738	685	515	319	255	340
35°	670	619	421	212	151	417
45°	546	509	322	126	79	419
55°	405	373	227	62	50	362
65°	264	240	140	35	27	264
75°	149	124	66	13	7	155
85°	41	36	11	0	0	47
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°	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8
2.5°	654.8	651.8	642.8	634.8	619.8	605.8	591.9	582.9	579.9
5°	683.8	677.8	660.8	642.8	615.8	588.9	563.9	546.9	538.9
7.5°	709.8	700.8	677.8	648.8	610.8	569.9	534.9	511.9	505.9
10°	730.8	718.8	691.8	652.8	601.9	549.9	502.9	474.9	465.9
12.5°	743.8	731.8	700.8	652.8	591.9	527.9	473.9	437.9	425.9
15°	750.8	737.8	706.8	651.8	579.9	504.9	440.9	402.9	387.9
17.5°	752.8	739.8	706.8	646.8	565.9	481.9	408.9	368.9	351.9
20°	749.8	736.8	703.8	640.8	549.9	456.9	378.9	333.9	316.9
22.5°	743.8	730.8	696.8	631.8	531.9	431.9	348.9	300.9	288.9
25°	737.8	721.8	684.8	618.8	514.9	403.9	318.9	271.9	254.9
27.5°	727.8	711.8	670.8	602.9	491.9	376.9	291.9	241.9	226.9
30°	714.8	698.8	654.8	584.9	470.9	350.9	264.9	214.9	201.0
32.5°	695.8	683.8	636.8	565.9	445.9	324.9	237.9	191.0	177.0
35°	669.8	660.8	618.8	541.9	420.9	298.9	211.9	165.0	151.0
37.5°	637.8	632.8	595.9	517.9	395.9	274.9	188.0	144.0	131.0
40°	607.8	599.9	572.9	489.9	371.9	248.9	167.0	124.0	110.0
42.5°	574.9	569.9	542.9	462.9	346.9	224.9	145.0	104.0	93.0
45°	545.9	534.9	508.9	435.9	321.9	203.9	126.0	87.0	79.0
47.5°	509.9	504.9	474.9	408.9	297.9	181.0	107.0	74.0	70.0
50°	476.9	468.9	442.9	380.9	273.9	161.0	90.0	66.0	63.0
52.5°	440.9	432.9	405.9	353.9	250.9	142.0	75.0	59.0	56.0
55°	404.9	397.9	372.9	324.9	226.9	124.0	62.0	52.0	50.0
57.5°	368.9	363.9	339.9	294.9	203.9	105.0	55.0	46.0	43.0
60°	335.9	327.9	302.9	265.9	182.0	88.0	48.0	40.0	38.0
62.5°	297.9	292.9	270.9	234.9	160.0	72.0	41.0	35.0	32.0
65°	263.9	260.9	239.9	208.9	140.0	59.0	35.0	29.0	27.0
67.5°	233.9	228.9	207.9	179.0	121.0	46.0	30.0	24.0	22.0
70°	204.9	199.0	180.0	155.0	102.0	36.0	24.0	19.0	17.0
72.5°	177.0	170.0	151.0	128.0	84.0	28.0	19.0	14.0	12.0
75°	149.0	143.0	124.0	104.0	66.0	21.0	13.0	9.0	7.0
77.5°	116.0	114.0	102.0	82.0	49.0	16.0	9.0	5.0	3.0
80°	89.0	87.0	78.0	62.0	35.0	10.0	4.0	0.0	0.0
82.5°	63.0	62.0	56.0	43.0	21.0	5.0	1.0	0.0	0.0
85°	41.0	40.0	36.0	26.0	11.0	1.0	0.0	0.0	0.0
87.5°	24.0	22.0	19.0	13.0	3.0	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)