

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: P402001

Luminaire Tested: **LA1MR102D010 EA1M102WW9040MMS1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P402001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-14)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LA1MR102D010 EA1M102WW9040MMS1MW
Description: 1 INCH WW OPTIC WITH MATTE METALIC SILVER BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

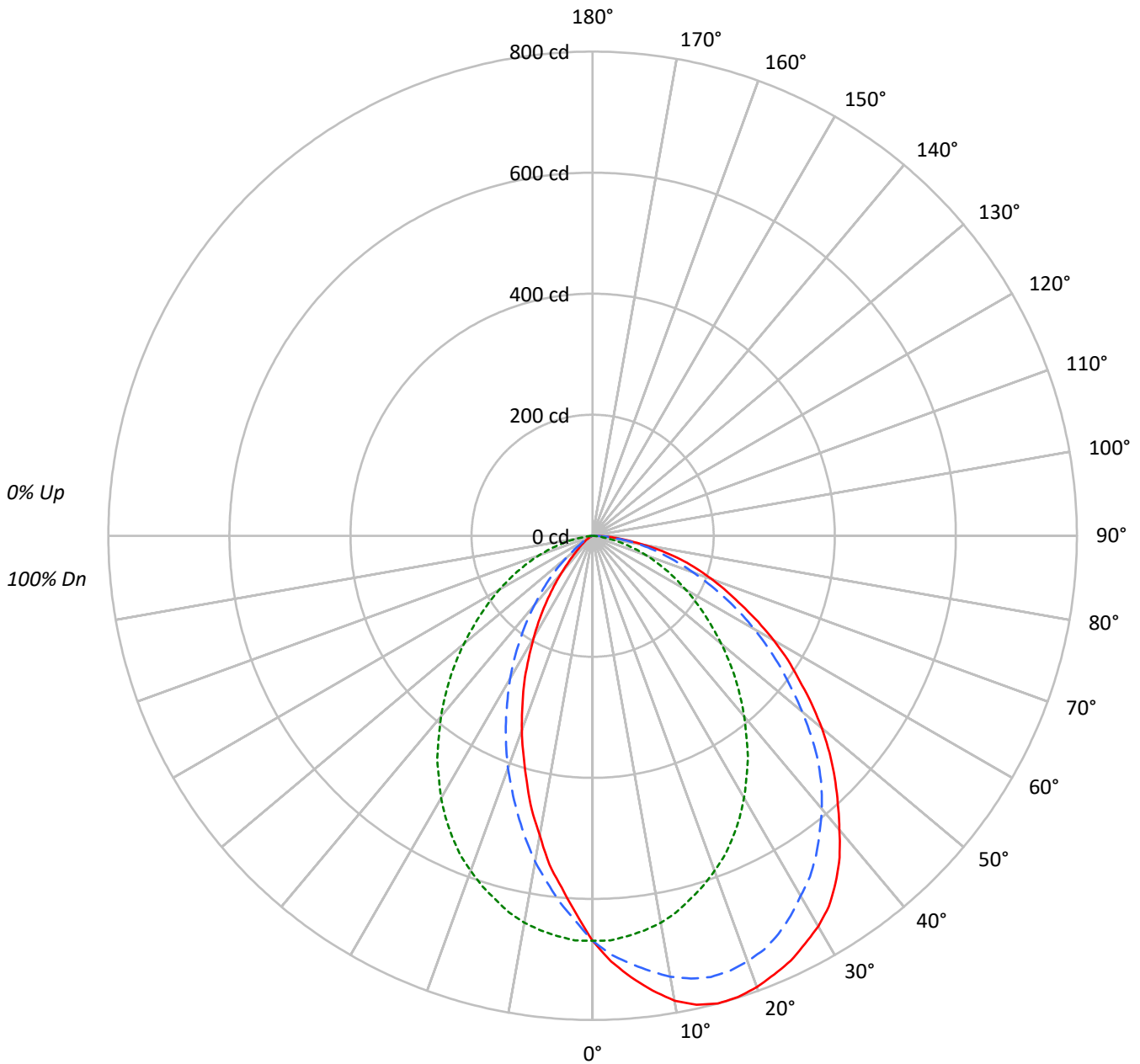
Lumens per Lamp: N/A
Luminaire Lumens: 1393.9 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.13 / 1.2
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')
CIE Type: Direct

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									
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74																			
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	63																			
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55																			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																			
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35																			
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32																			
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	79029	79029	79029
5°	86835	78703	69195
10°	93535	77838	60246
15°	97809	76010	51362
20°	99748	74010	42981
25°	100946	71511	34791
30°	101619	68223	26482
35°	100888	64515	19016
40°	97785	60046	12210
45°	94479	55698	7048
50°	90759	51002	4648
55°	85837	46285	2821
60°	81509	41877	1984
65°	75811	37445	1174
70°	72165	32422	725
75°	68853	26008	0
80°	58827	16526	0
85°	48644	5691	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	4.5
10°-20°	173.2	12.4
20°-30°	245.3	17.6
30°-40°	268.0	19.2
40°-50°	243.3	17.5
50°-60°	190.7	13.7
60°-70°	127.8	9.2
70°-80°	66.8	4.8
80°-90°	16.2	1.2
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°	481.1	34.5
0°-40°	749.0	53.7
0°-60°	1183.0	84.9
0°-90°	1393.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1393.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	669	669	669	669	669	
5°	732	709	664	609	584	71
15°	800	755	622	477	420	226
25°	775	726	549	339	267	357
35°	700	644	448	208	132	436
45°	566	527	334	100	42	436
55°	417	379	225	26	14	375
65°	271	240	134	10	4	271
75°	151	121	57	2	0	157
85°	36	30	4	0	0	41
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°	669.2	669.2	669.2	669.2	669.2	669.2	669.2	669.2	669.2
2.5°	704.0	700.8	692.4	683.9	669.2	654.4	637.5	631.2	624.8
5°	732.5	724.0	709.3	691.3	663.9	636.4	609.0	592.1	583.7
7.5°	757.8	748.3	725.1	696.6	657.6	616.4	577.3	553.1	547.8
10°	780.0	769.4	739.9	699.8	649.1	594.2	546.7	516.1	502.4
12.5°	793.7	781.0	749.4	698.7	637.5	569.9	511.9	478.1	464.4
15°	800.0	787.4	754.7	695.5	621.7	545.7	477.1	434.8	420.1
17.5°	799.0	787.4	753.6	691.3	606.9	518.2	442.2	400.0	380.0
20°	793.7	782.1	748.3	683.9	588.9	490.8	408.5	358.9	342.0
22.5°	784.2	771.5	739.9	673.4	571.0	462.3	373.6	320.9	302.9
25°	774.7	758.9	726.2	659.7	548.8	431.7	338.8	285.0	267.0
27.5°	759.9	745.2	708.2	642.8	525.6	402.1	304.0	249.1	229.0
30°	745.2	729.3	687.1	623.8	500.3	370.5	272.3	213.2	194.2
32.5°	726.2	710.3	668.1	599.5	472.8	339.9	240.6	182.6	162.5
35°	699.8	687.1	643.8	573.1	447.5	307.1	207.9	150.9	131.9
37.5°	670.2	659.7	616.4	546.7	416.9	278.6	178.4	123.5	104.5
40°	634.3	626.9	588.9	517.2	389.5	249.1	148.8	97.1	79.2
42.5°	599.5	593.2	559.4	486.6	361.0	220.6	123.5	71.8	58.1
45°	565.7	557.3	526.7	453.8	333.5	195.3	100.3	51.7	42.2
47.5°	530.9	521.4	489.7	421.1	305.0	168.9	78.1	36.9	31.7
50°	494.0	484.5	451.7	389.5	277.6	144.6	55.9	28.5	25.3
52.5°	456.0	446.5	413.7	358.9	250.1	120.3	40.1	22.2	19.0
55°	416.9	408.5	378.9	326.1	224.8	99.2	26.4	16.9	13.7
57.5°	383.1	373.6	343.0	297.6	200.5	79.2	20.1	12.7	10.6
60°	345.1	334.6	308.2	267.0	177.3	60.2	15.8	9.5	8.4
62.5°	308.2	299.8	273.4	235.4	155.2	44.3	11.6	7.4	6.3
65°	271.3	262.8	239.6	207.9	134.0	30.6	9.5	5.3	4.2
67.5°	239.6	230.1	206.9	177.3	112.9	19.0	6.3	4.2	3.2
70°	209.0	198.4	176.3	150.9	93.9	10.6	4.2	2.1	2.1
72.5°	179.4	169.9	147.8	125.6	74.9	7.4	3.2	1.1	1.1
75°	150.9	145.7	121.4	100.3	57.0	5.3	2.1	1.1	0.0
77.5°	118.2	111.9	98.2	74.9	40.1	3.2	1.1	0.0	0.0
80°	86.5	81.3	74.9	54.9	24.3	2.1	0.0	0.0	0.0
82.5°	57.0	57.0	50.7	36.9	12.7	1.1	0.0	0.0	0.0
85°	35.9	33.8	29.6	20.1	4.2	0.0	0.0	0.0	0.0
87.5°	15.8	14.8	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)