

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: P402003

Luminaire Tested: **LA1MR102D010 EA1M102WW9040SB1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P402003
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-16)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 6/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LA1MR102D010 EA1M102WW9040SB1MW
Description: 1 INCH WW OPTIC WITH SPECULAR BLACK BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

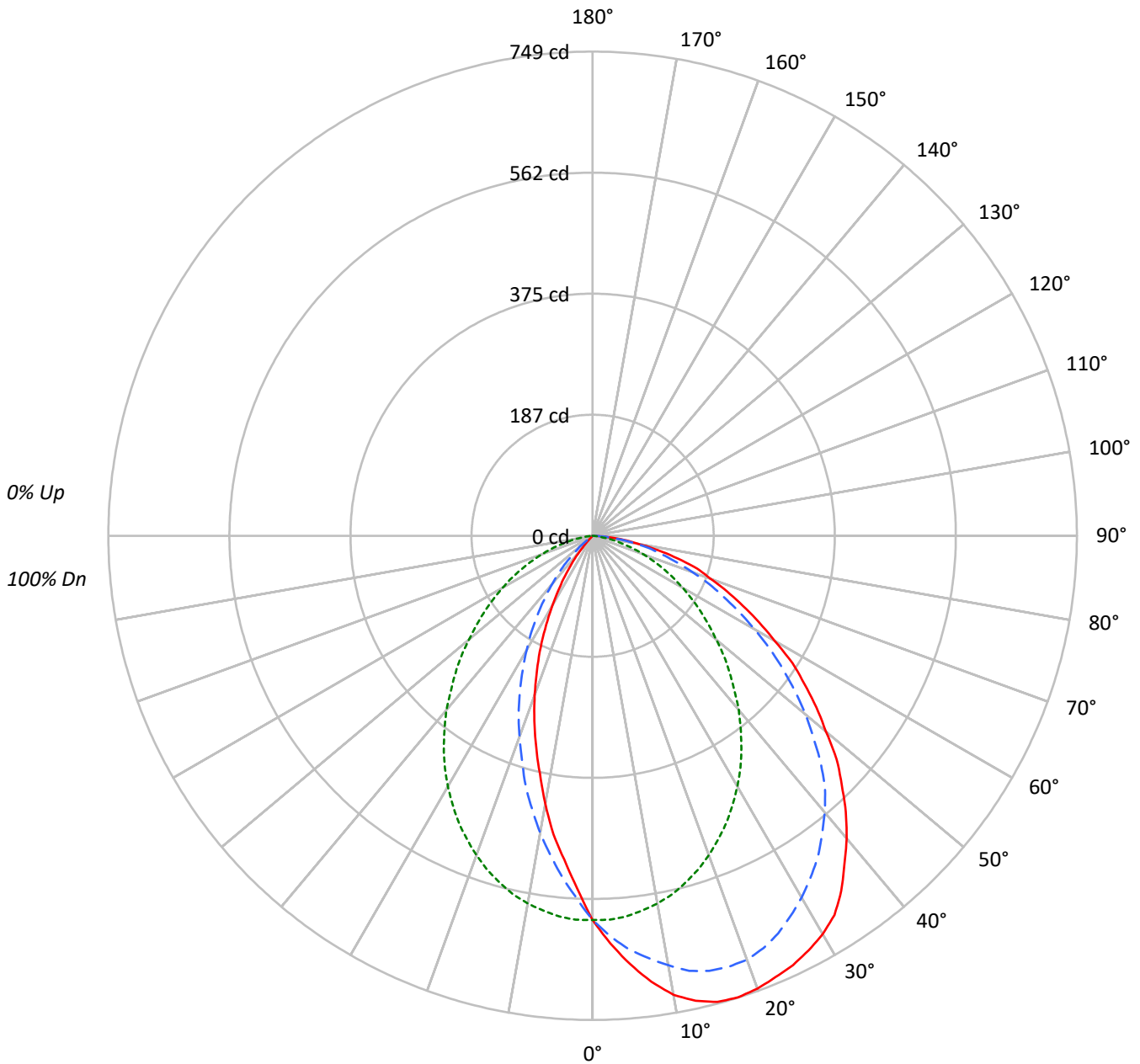
Lumens per Lamp: N/A
Luminaire Lumens: 1241.8 lumens
Efficiency: N/A
Efficacy: 52.8 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.13 / 1.2
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	70196	70196	70196
5°	78857	70096	59581
10°	86472	69264	50521
15°	91268	67904	41312
20°	93678	66080	32914
25°	95486	63836	24771
30°	97037	61050	16841
35°	96664	57840	10193
40°	94239	54203	4070
45°	90988	50087	351
50°	86515	45784	0
55°	82398	41961	0
60°	76809	37909	0
65°	71704	33644	0
70°	66709	28797	0
75°	62146	22632	0
80°	48082	13670	0
85°	31436	1490	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	4.5
10°-20°	154.0	12.4
20°-30°	217.9	17.5
30°-40°	238.6	19.2
40°-50°	217.0	17.5
50°-60°	171.7	13.8
60°-70°	115.2	9.3
70°-80°	59.4	4.8
80°-90°	12.4	1.0
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°	427.5	34.4
0°-40°	666.0	53.6
0°-60°	1054.8	84.9
0°-90°	1241.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1241.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	594	594	594	594	594	
5°	665	642	591	531	503	65
15°	746	697	555	400	338	210
25°	733	679	490	266	190	338
35°	670	607	401	147	71	418
45°	545	499	300	55	2	420
55°	400	359	204	1	0	358
65°	257	224	120	0	0	255
75°	136	111	50	0	0	143
85°	23	22	1	0	0	31
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°	594.4	594.4	594.4	594.4	594.4	594.4	594.4	594.4	594.4
2.5°	631.4	629.3	619.8	610.3	594.4	578.6	561.7	553.3	545.9
5°	665.2	656.7	642.0	619.8	591.3	560.7	531.1	514.2	502.6
7.5°	695.8	683.1	658.9	627.2	584.9	540.6	498.4	475.1	465.6
10°	721.1	707.4	674.7	631.4	577.6	517.4	466.7	434.0	421.3
12.5°	737.0	724.3	689.5	633.5	568.1	494.1	432.9	392.8	376.9
15°	746.5	732.8	696.9	633.5	555.4	469.9	400.2	351.6	337.9
17.5°	748.6	735.9	699.0	630.3	541.7	445.6	363.2	315.7	299.9
20°	745.4	732.8	697.9	625.1	525.8	420.2	330.5	278.7	261.9
22.5°	739.1	725.4	690.5	618.7	507.9	393.8	298.8	240.7	224.9
25°	732.8	715.9	678.9	608.2	489.9	365.3	266.1	208.0	190.1
27.5°	723.3	705.3	663.1	593.4	468.8	336.8	234.4	174.2	155.2
30°	711.6	692.6	646.2	575.4	447.7	309.4	203.8	143.6	123.5
32.5°	695.8	677.9	627.2	556.4	425.5	280.9	176.3	116.1	95.0
35°	670.5	658.9	607.1	533.2	401.2	253.4	146.8	88.7	70.7
37.5°	639.8	629.3	582.8	507.9	375.9	228.1	120.4	65.5	49.6
40°	611.3	598.7	558.5	480.4	351.6	203.8	97.1	43.3	26.4
42.5°	579.7	567.0	532.2	450.9	324.1	176.3	75.0	25.3	11.6
45°	544.8	530.0	499.4	424.5	299.9	153.1	54.9	9.5	2.1
47.5°	512.1	499.4	463.5	394.9	275.6	130.9	35.9	1.1	0.0
50°	470.9	461.4	429.7	364.3	249.2	110.9	21.1	0.0	0.0
52.5°	436.1	425.5	393.8	336.8	226.0	90.8	8.4	0.0	0.0
55°	400.2	390.7	359.0	306.2	203.8	71.8	1.1	0.0	0.0
57.5°	366.4	353.7	324.1	276.6	181.6	54.9	0.0	0.0	0.0
60°	325.2	316.8	289.3	247.1	160.5	39.1	0.0	0.0	0.0
62.5°	290.4	283.0	255.5	218.6	140.4	24.3	0.0	0.0	0.0
65°	256.6	247.1	223.8	191.1	120.4	13.7	0.0	0.0	0.0
67.5°	224.9	216.5	195.3	163.7	101.4	4.2	0.0	0.0	0.0
70°	193.2	185.8	163.7	139.4	83.4	0.0	0.0	0.0	0.0
72.5°	170.0	158.4	136.2	111.9	65.5	0.0	0.0	0.0	0.0
75°	136.2	133.0	110.9	88.7	49.6	0.0	0.0	0.0	0.0
77.5°	104.5	99.3	89.7	67.6	33.8	0.0	0.0	0.0	0.0
80°	70.7	70.7	65.5	48.6	20.1	0.0	0.0	0.0	0.0
82.5°	48.6	45.4	42.2	30.6	8.4	0.0	0.0	0.0	0.0
85°	23.2	23.2	22.2	15.8	1.1	0.0	0.0	0.0	0.0
87.5°	5.3	6.3	6.3	4.2	0.0	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)