

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: P401996

Luminaire Tested: **LA1MR102D010 EA1M102WW9030SC1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P401996  
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 EA1M102WW9030SC1MW  
Description: 1 INCH WW OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

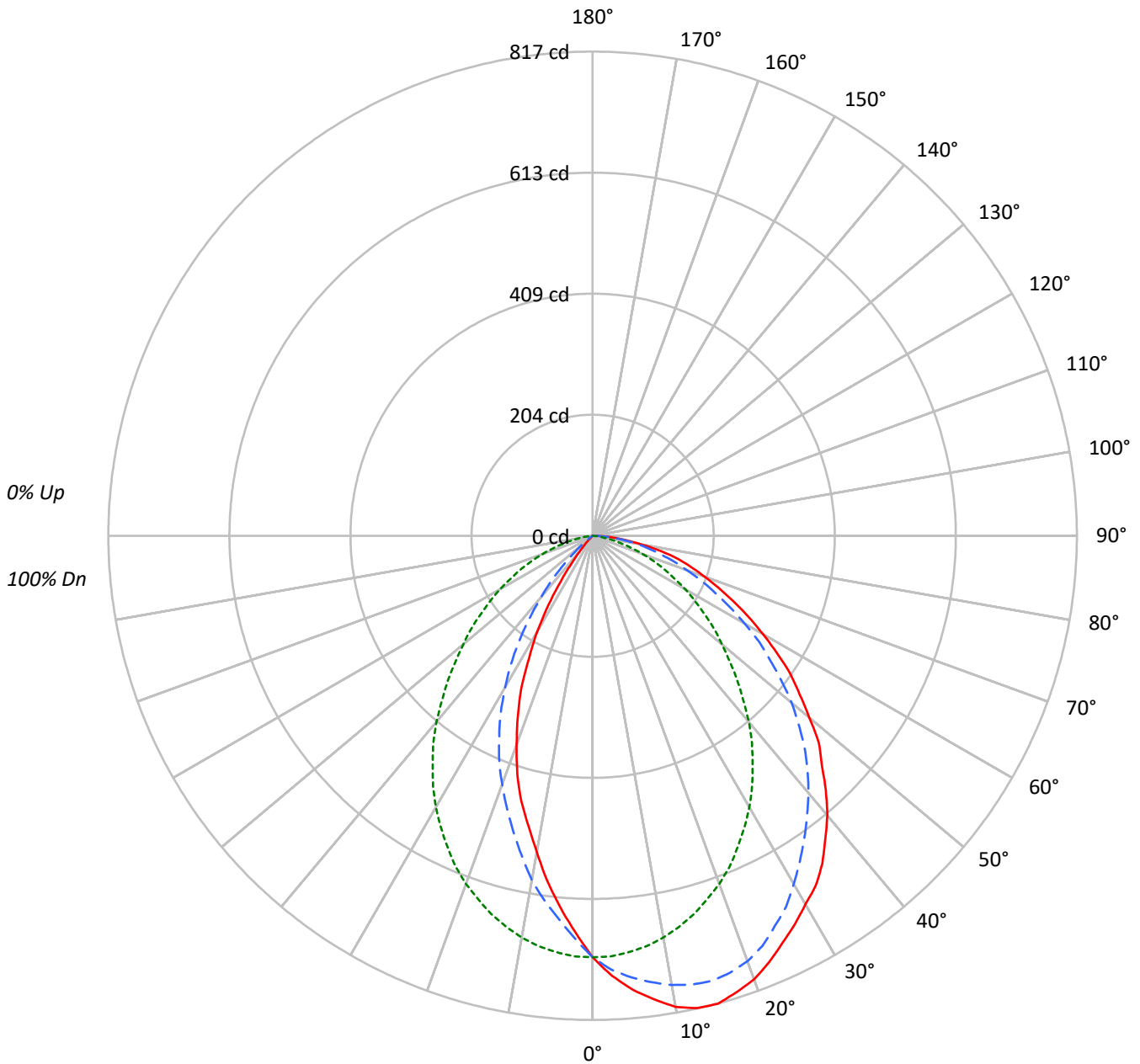
Lumens per Lamp: N/A  
Luminaire Lumens: 1376.1 lumens  
Efficiency: N/A  
Efficacy: 58.6 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.12 / 1.15  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P401996

CATALOG NUMBER: LA1MR102D010 EA1M102WW9030SC1MW

### 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°	56896	56896	56896
5°	61731	56639	50504
10°	65588	55922	43996
15°	67690	54712	38446
20°	67809	53200	31917
25°	66891	51135	25219
30°	66335	48839	17228
35°	65971	45921	9200
40°	64330	42786	3112
45°	61829	39055	339
50°	59379	35433	0
55°	56864	32093	0
60°	53008	28880	0
65°	49577	25157	0
70°	46874	20888	0
75°	45375	15640	0
80°	38376	9583	0
85°	32769	1836	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.3	4.8
10°-20°	182.2	13.2
20°-30°	252.7	18.4
30°-40°	264.9	19.2
40°-50°	232.3	16.9
50°-60°	180.2	13.1
60°-70°	119.3	8.7
70°-80°	62.7	4.6
80°-90°	15.6	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°	501.2	36.4
0°-40°	766.1	55.7
0°-60°	1178.5	85.6
0°-90°	1376.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1376.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	711	711	711	711	711	
5°	769	748	705	650	629	74
15°	817	778	661	517	464	230
25°	758	727	579	373	286	350
35°	676	623	470	215	94	421
45°	546	506	345	68	3	423
55°	408	365	230	1	0	362
65°	262	228	133	0	0	261
75°	147	116	51	0	0	152
85°	36	29	2	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°	711.2	711.2	711.2	711.2	711.2	711.2	711.2	711.2	711.2
2.5°	742.9	741.0	733.0	725.1	710.2	695.3	680.5	671.5	669.5
5°	768.7	762.8	747.9	733.0	705.3	679.5	649.7	633.8	628.9
7.5°	788.6	780.6	759.8	736.0	698.3	659.6	620.9	599.1	587.2
10°	807.4	798.5	769.7	735.0	688.4	634.8	590.2	556.5	541.6
12.5°	816.3	806.4	775.7	734.0	675.5	612.0	552.5	516.8	500.9
15°	817.3	807.4	777.7	726.1	660.6	585.2	516.8	476.1	464.2
17.5°	807.4	799.5	772.7	717.2	642.8	561.4	481.1	439.4	422.6
20°	796.5	786.6	763.8	706.2	624.9	531.7	446.4	394.8	374.9
22.5°	778.7	770.7	748.9	693.3	604.1	499.9	411.6	352.1	329.3
25°	757.8	747.9	727.1	676.5	579.3	466.2	373.0	310.5	285.7
27.5°	739.0	726.1	706.2	657.6	554.5	436.4	335.3	262.9	232.1
30°	718.1	707.2	678.5	633.8	528.7	401.7	294.6	214.3	186.5
32.5°	700.3	683.4	650.7	608.0	500.9	369.0	255.9	168.6	138.9
35°	675.5	661.6	622.9	578.3	470.2	337.3	215.2	122.0	94.2
37.5°	644.7	634.8	594.2	547.5	441.4	304.5	174.6	83.3	54.6
40°	616.0	604.1	566.4	516.8	409.7	273.8	134.9	48.6	29.8
42.5°	582.3	572.3	536.6	481.1	375.9	241.0	101.2	25.8	12.9
45°	546.5	537.6	505.9	446.4	345.2	212.3	68.4	10.9	3.0
47.5°	517.8	503.9	471.2	410.7	313.4	182.5	39.7	2.0	0.0
50°	477.1	471.2	438.4	374.0	284.7	154.7	21.8	0.0	0.0
52.5°	440.4	433.5	401.7	341.2	258.9	127.0	8.9	0.0	0.0
55°	407.7	397.8	365.0	309.5	230.1	96.2	1.0	0.0	0.0
57.5°	369.0	361.1	333.3	278.7	204.3	72.4	0.0	0.0	0.0
60°	331.3	326.3	295.6	251.0	180.5	47.6	0.0	0.0	0.0
62.5°	296.6	291.6	260.9	221.2	154.7	27.8	0.0	0.0	0.0
65°	261.9	255.9	228.1	194.4	132.9	13.9	0.0	0.0	0.0
67.5°	230.1	224.2	198.4	165.6	111.1	5.0	0.0	0.0	0.0
70°	200.4	192.4	168.6	140.9	89.3	1.0	0.0	0.0	0.0
72.5°	172.6	163.7	142.8	117.0	69.4	0.0	0.0	0.0	0.0
75°	146.8	138.9	116.1	94.2	50.6	0.0	0.0	0.0	0.0
77.5°	116.1	111.1	94.2	71.4	35.7	0.0	0.0	0.0	0.0
80°	83.3	82.3	72.4	51.6	20.8	0.0	0.0	0.0	0.0
82.5°	56.5	56.5	50.6	34.7	9.9	0.0	0.0	0.0	0.0
85°	35.7	32.7	28.8	19.8	2.0	0.0	0.0	0.0	0.0
87.5°	15.9	15.9	11.9	6.9	1.0	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)