

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: P402170

Luminaire Tested: **LD1MR102D010 ED1M102WW9030MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402170  
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: LD1MR102D010 ED1M102WW9030MW1MW  
Description: 1 INCH WW OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

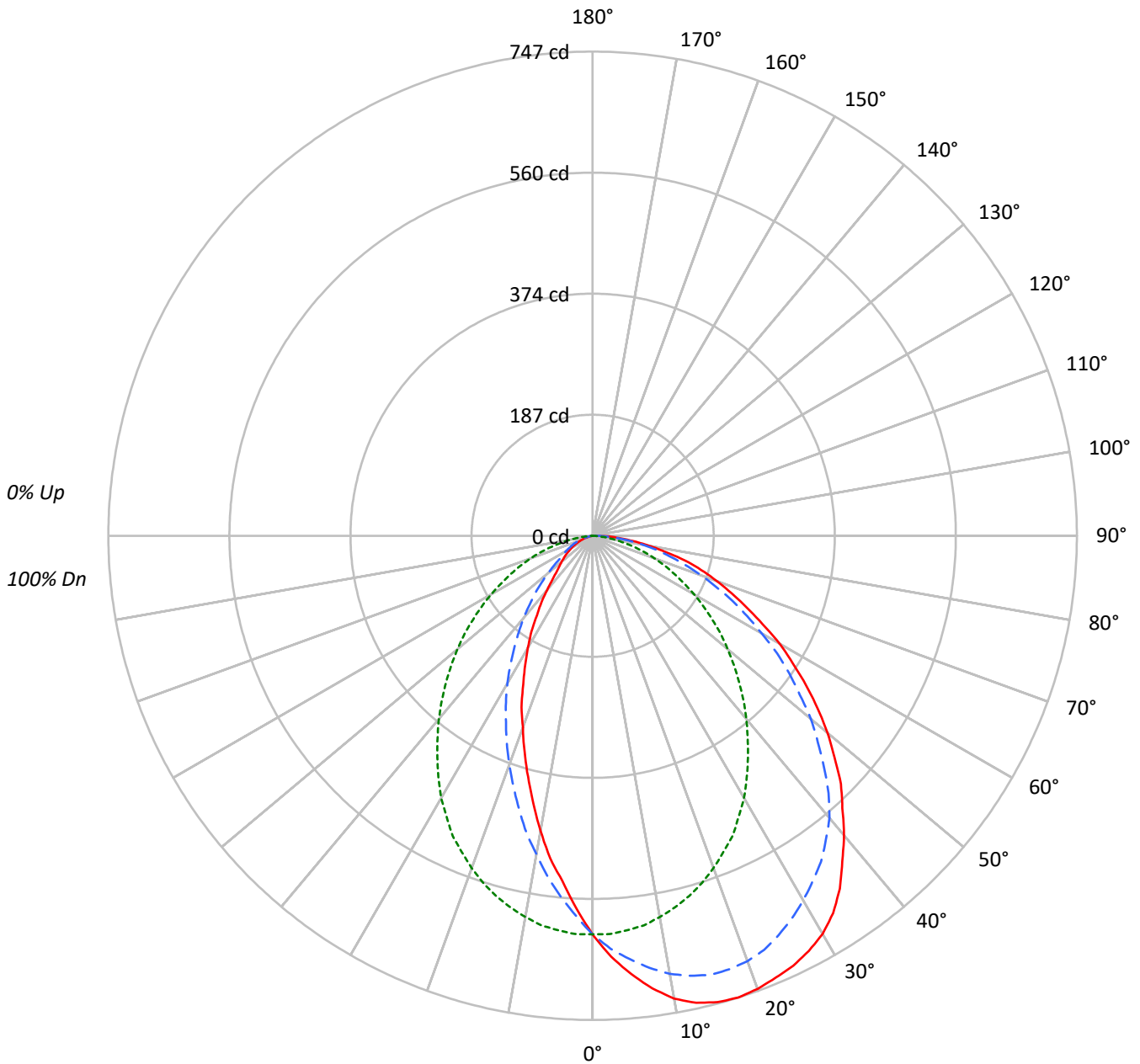
Lumens per Lamp: N/A  
Luminaire Lumens: 1378.1 lumens  
Efficiency: N/A  
Efficacy: 58.6 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.14 / 1.24  
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	72629	72629	72629
5°	80434	72432	63375
10°	86952	71602	55426
15°	91072	70337	47058
20°	93489	68555	39512
25°	95382	66559	32954
30°	96710	63710	27191
35°	95814	60204	21596
40°	92975	56886	16819
45°	90454	53344	13094
50°	86920	49936	11483
55°	82707	46367	10212
60°	78722	42632	8904
65°	73185	38814	7489
70°	70197	34943	5835
75°	67439	29887	3148
80°	60051	23599	0
85°	55148	14769	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.7	4.2
10°-20°	160.3	11.6
20°-30°	230.0	16.7
30°-40°	257.9	18.7
40°-50°	242.5	17.6
50°-60°	198.6	14.4
60°-70°	137.6	10.0
70°-80°	73.7	5.4
80°-90°	19.7	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°	448.0	32.5
0°-40°	705.9	51.2
0°-60°	1147.0	83.2
0°-90°	1378.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1378.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	615	615	615	615	615	
5°	678	656	611	559	535	66
15°	745	701	575	437	385	210
25°	732	680	511	316	253	337
35°	665	614	418	210	150	414
45°	542	505	319	125	78	416
55°	402	370	225	62	50	360
65°	262	238	139	35	27	262
75°	148	123	66	13	7	154
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°	615.0	615.0	615.0	615.0	615.0	615.0	615.0	615.0	615.0
2.5°	649.7	646.7	637.8	629.9	615.0	601.1	587.2	578.3	575.3
5°	678.5	672.5	655.6	637.8	611.0	584.2	559.4	542.6	534.6
7.5°	704.2	695.3	672.5	643.7	606.1	565.4	530.7	507.9	501.9
10°	725.1	713.2	686.4	647.7	597.1	545.5	498.9	471.2	462.2
12.5°	738.0	726.1	695.3	647.7	587.2	523.7	470.2	434.5	422.5
15°	744.9	732.0	701.3	646.7	575.3	500.9	437.4	399.7	384.9
17.5°	746.9	734.0	701.3	641.8	561.4	478.1	405.7	366.0	349.1
20°	743.9	731.0	698.3	635.8	545.5	453.3	375.9	331.3	314.4
22.5°	738.0	725.1	691.4	626.9	527.7	428.5	346.2	298.6	286.7
25°	732.0	716.2	679.5	614.0	510.8	400.7	316.4	269.8	252.9
27.5°	722.1	706.2	665.6	598.1	488.0	373.9	289.6	240.0	225.2
30°	709.2	693.3	649.7	580.3	467.2	348.2	262.9	213.3	199.4
32.5°	690.4	678.5	631.8	561.4	442.4	322.4	236.1	189.5	175.6
35°	664.6	655.6	614.0	537.6	417.6	296.6	210.3	163.7	149.8
37.5°	632.8	627.9	591.2	513.8	392.8	272.8	186.5	142.8	129.9
40°	603.1	595.1	568.4	486.0	369.0	247.0	165.6	123.0	109.1
42.5°	570.3	565.4	538.6	459.2	344.2	223.2	143.8	103.2	92.2
45°	541.6	530.7	504.9	432.5	319.4	202.3	125.0	86.3	78.4
47.5°	505.9	500.9	471.2	405.7	295.6	179.5	106.1	73.4	69.4
50°	473.1	465.2	439.4	377.9	271.8	159.7	89.3	65.5	62.5
52.5°	437.4	429.5	402.7	351.1	249.0	140.8	74.4	58.5	55.5
55°	401.7	394.8	370.0	322.4	225.2	123.0	61.5	51.6	49.6
57.5°	366.0	361.1	337.2	292.6	202.3	104.1	54.6	45.6	42.7
60°	333.3	325.3	300.5	263.8	180.5	87.3	47.6	39.7	37.7
62.5°	295.6	290.6	268.8	233.1	158.7	71.4	40.7	34.7	31.7
65°	261.9	258.9	238.1	207.3	138.9	58.5	34.7	28.8	26.8
67.5°	232.1	227.1	206.3	177.6	120.0	45.6	29.8	23.8	21.8
70°	203.3	197.4	178.5	153.7	101.2	35.7	23.8	18.8	16.9
72.5°	175.6	168.6	149.8	127.0	83.3	27.8	18.8	13.9	11.9
75°	147.8	141.8	123.0	103.2	65.5	20.8	12.9	8.9	6.9
77.5°	115.1	113.1	101.2	81.3	48.6	15.9	8.9	5.0	3.0
80°	88.3	86.3	77.4	61.5	34.7	9.9	4.0	0.0	0.0
82.5°	62.5	61.5	55.5	42.7	20.8	5.0	1.0	0.0	0.0
85°	40.7	39.7	35.7	25.8	10.9	1.0	0.0	0.0	0.0
87.5°	23.8	21.8	18.8	12.9	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)