

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: P402178

Luminaire Tested: **LD1MR102D010 ED1M102WW9040MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402178  
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 ED1M102WW9040MW1MW  
Description: 1 INCH WW OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

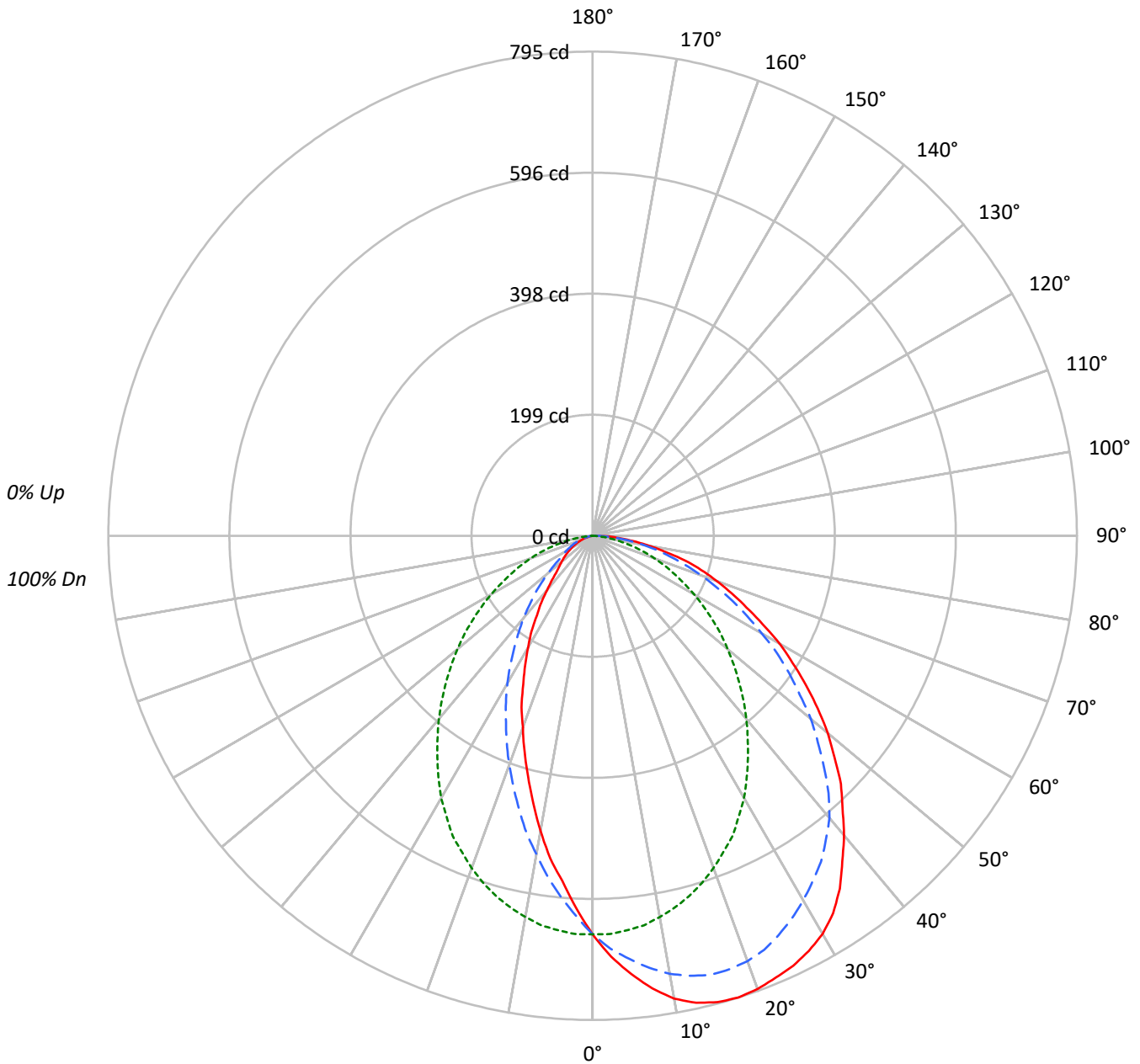
Lumens per Lamp: N/A  
Luminaire Lumens: 1466.7 lumens  
Efficiency: N/A  
Efficacy: 62.4 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.14 / 1.24  
Luminous Opening: Rectangular (W 0.1' x L: 0.88' x H: 0')  
CIE Type: Direct

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°	77293	77293	77293
5°	85602	77091	67453
10°	92540	76207	58999
15°	96929	74860	50078
20°	99509	72966	42063
25°	101520	70846	35078
30°	102928	67800	28937
35°	101970	64068	22980
40°	98957	60540	17898
45°	96266	56767	13929
50°	92523	53151	12218
55°	88040	49332	10871
60°	83777	45372	9471
65°	77879	41301	7964
70°	74720	37187	6181
75°	71774	31803	3377
80°	63928	25095	0
85°	58671	15718	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.4	4.2
10°-20°	170.6	11.6
20°-30°	244.8	16.7
30°-40°	274.5	18.7
40°-50°	258.1	17.6
50°-60°	211.4	14.4
60°-70°	146.5	10.0
70°-80°	78.5	5.4
80°-90°	20.9	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°	476.8	32.5
0°-40°	751.3	51.2
0°-60°	1220.8	83.2
0°-90°	1466.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1466.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	654	654	654	654	654	
5°	722	698	650	595	569	70
15°	793	746	612	466	410	224
25°	779	723	544	337	269	359
35°	707	654	444	224	159	441
45°	576	537	340	133	83	443
55°	428	394	240	66	53	383
65°	279	253	148	37	28	279
75°	157	131	70	14	7	164
85°	43	38	12	0	0	50
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°	654.5	654.5	654.5	654.5	654.5	654.5	654.5	654.5	654.5
2.5°	691.5	688.3	678.8	670.4	654.5	639.8	625.0	615.5	612.3
5°	722.1	715.8	697.8	678.8	650.3	621.8	595.4	577.5	569.0
7.5°	749.5	740.0	715.8	685.1	645.0	601.7	564.8	540.5	534.2
10°	771.7	759.0	730.5	689.4	635.5	580.6	531.0	501.5	492.0
12.5°	785.4	772.8	740.0	689.4	625.0	557.4	500.4	462.4	449.7
15°	792.8	779.1	746.4	688.3	612.3	533.1	465.6	425.4	409.6
17.5°	794.9	781.2	746.4	683.0	597.5	508.8	431.8	389.6	371.6
20°	791.8	778.0	743.2	676.7	580.6	482.5	400.1	352.6	334.7
22.5°	785.4	771.7	735.8	667.2	561.6	456.1	368.4	317.8	305.1
25°	779.1	762.2	723.2	653.5	543.7	426.5	336.8	287.1	269.2
27.5°	768.5	751.7	708.4	636.6	519.4	398.0	308.3	255.5	239.6
30°	754.8	737.9	691.5	617.6	497.2	370.5	279.8	227.0	212.2
32.5°	734.8	722.1	672.5	597.5	470.8	343.1	251.3	201.6	186.9
35°	707.3	697.8	653.5	572.2	444.4	315.7	223.8	174.2	159.4
37.5°	673.5	668.3	629.2	546.8	418.1	290.3	198.5	152.0	138.3
40°	641.9	633.4	604.9	517.3	392.7	262.9	176.3	130.9	116.1
42.5°	607.0	601.7	573.2	488.8	366.3	237.5	153.1	109.8	98.2
45°	576.4	564.8	537.3	460.3	339.9	215.4	133.0	91.8	83.4
47.5°	538.4	533.1	501.5	431.8	314.6	191.1	113.0	78.1	73.9
50°	503.6	495.1	467.7	402.2	289.3	170.0	95.0	69.7	66.5
52.5°	465.6	457.1	428.6	373.7	265.0	149.9	79.2	62.3	59.1
55°	427.6	420.2	393.8	343.1	239.6	130.9	65.5	54.9	52.8
57.5°	389.6	384.3	358.9	311.4	215.4	110.8	58.1	48.6	45.4
60°	354.7	346.3	319.9	280.8	192.1	92.9	50.7	42.2	40.1
62.5°	314.6	309.3	286.1	248.1	168.9	76.0	43.3	36.9	33.8
65°	278.7	275.5	253.4	220.6	147.8	62.3	36.9	30.6	28.5
67.5°	247.0	241.8	219.6	189.0	127.7	48.6	31.7	25.3	23.2
70°	216.4	210.1	190.0	163.6	107.7	38.0	25.3	20.1	17.9
72.5°	186.9	179.5	159.4	135.1	88.7	29.6	20.1	14.8	12.7
75°	157.3	151.0	130.9	109.8	69.7	22.2	13.7	9.5	7.4
77.5°	122.5	120.3	107.7	86.6	51.7	16.9	9.5	5.3	3.2
80°	94.0	91.8	82.3	65.5	36.9	10.6	4.2	0.0	0.0
82.5°	66.5	65.5	59.1	45.4	22.2	5.3	1.1	0.0	0.0
85°	43.3	42.2	38.0	27.4	11.6	1.1	0.0	0.0	0.0
87.5°	25.3	23.2	20.1	13.7	3.2	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)