

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: P402422

Luminaire Tested: **LD1MRT102D010TR309027MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402422  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2005-766-2)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 6/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD1MRT102D010TR309027MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

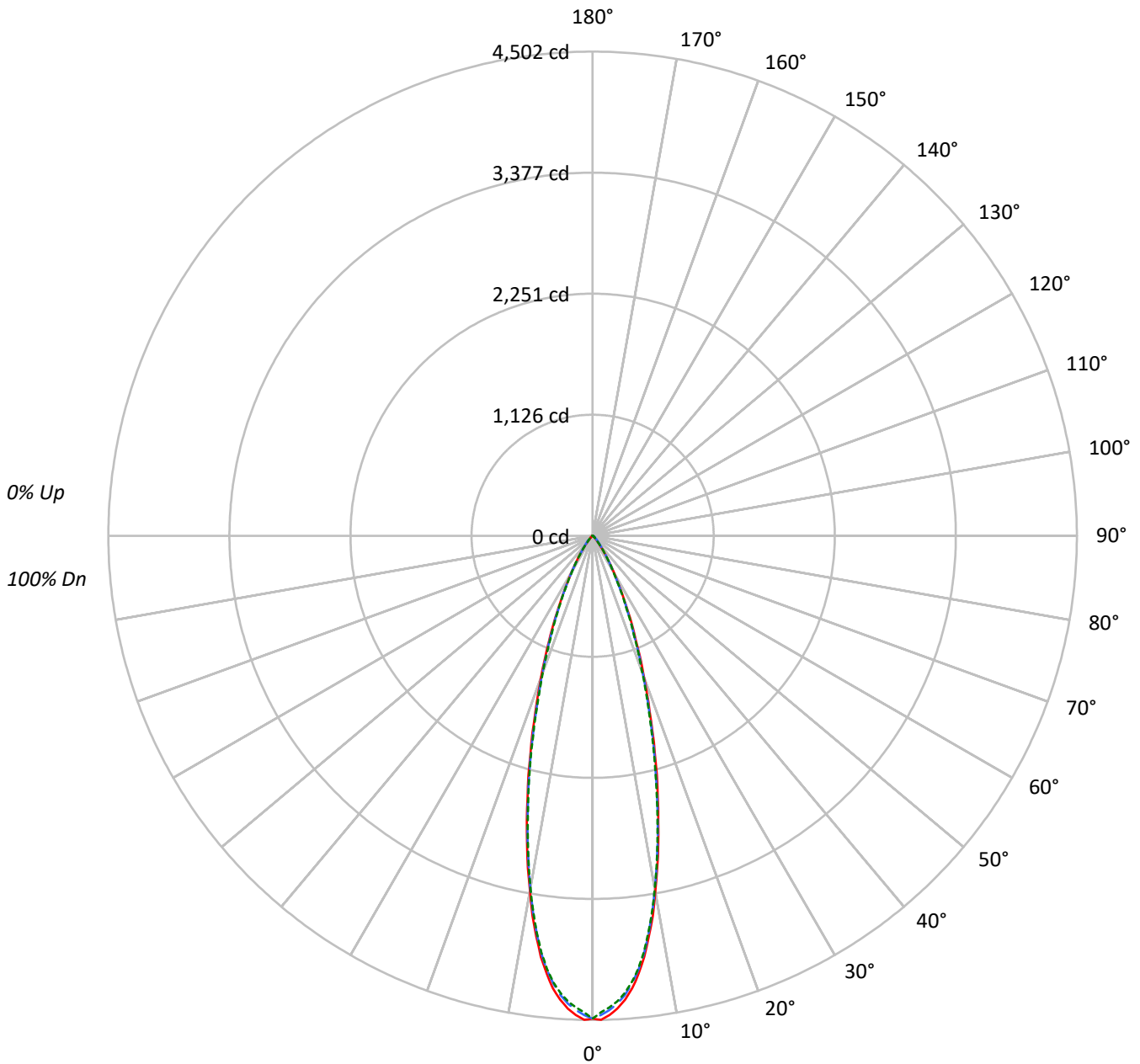
Lumens per Lamp: N/A  
Luminaire Lumens: 1530.3 lumens  
Efficiency: N/A  
Efficacy: 65.1 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	95																			
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91																			
3	106	101	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87																			
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83																			
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79																			
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76																			
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	77	74	73																			
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70																			
9	85	77	73	69	84	77	72	69	76	72	69	75	71	69	74	71	69	67																			
10	82	74	70	67	81	74	70	67	73	69	66	73	69	66	72	69	66	65																			

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

	0°	45°	90°
0°	1391846	1391846	1391846
5°	1314978	1301597	1297334
10°	1057391	1049364	1048136
15°	739632	727084	723939
20°	461460	449848	444668
25°	267004	258965	255613
30°	142146	137957	135165
35°	68120	70352	68839
40°	28489	38809	29299
45°	14599	24025	15432
50°	9453	14131	10369
55°	6324	9512	7404
60°	3658	6076	4836
65°	1467	4328	1467
70°	0	1813	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	372.8	24.4
10°-20°	622.3	40.7
20°-30°	358.0	23.4
30°-40°	124.6	8.1
40°-50°	35.3	2.3
50°-60°	13.5	0.9
60°-70°	3.7	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	1353.1	88.4
0°-40°	1477.7	96.6
0°-60°	1526.6	99.8
0°-90°	1530.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1530.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4490	4490	4490	4490	4490	
5°	4226	4200	4183	4190	4169	375
15°	2305	2295	2266	2260	2256	629
25°	781	771	757	753	747	366
35°	180	188	186	186	182	122
45°	33	39	55	39	35	29
55°	12	14	18	14	14	11
65°	2	4	6	4	2	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4489.8	4489.8	4489.8	4489.8	4489.8
1°	4501.6	4480.1	4456.6	4456.6	4433.1
2°	4458.5	4439.0	4413.5	4415.5	4390.1
3°	4401.8	4382.2	4356.8	4360.7	4337.2
4°	4323.6	4298.1	4280.5	4286.4	4264.9
5°	4225.7	4200.3	4182.7	4190.5	4169.0
6°	4092.7	4075.1	4059.4	4069.2	4049.7
7°	3944.0	3924.5	3912.7	3920.5	3904.9
8°	3762.1	3748.4	3734.7	3742.5	3726.9
9°	3576.2	3554.7	3541.0	3546.9	3535.1
10°	3359.1	3349.3	3333.6	3339.5	3329.7
11°	3149.7	3149.7	3120.4	3110.6	3116.5
12°	2934.5	2932.6	2905.2	2893.5	2897.4
13°	2717.4	2715.4	2688.0	2678.3	2680.2
14°	2502.2	2504.1	2474.8	2467.0	2465.0
15°	2304.6	2294.8	2265.5	2259.6	2255.7
16°	2097.2	2095.3	2065.9	2058.1	2054.2
17°	1911.4	1901.6	1872.2	1864.4	1858.5
18°	1717.7	1719.6	1690.3	1684.4	1674.6
19°	1553.3	1549.4	1522.0	1516.2	1506.4
20°	1398.8	1381.2	1363.6	1357.7	1347.9
22.5°	1054.5	1044.7	1021.2	1015.4	1013.4
25°	780.6	770.8	757.1	753.2	747.3
26°	682.8	684.7	667.1	663.2	659.3
27°	604.5	600.6	585.0	583.0	577.1
28°	520.4	524.3	506.7	504.7	500.8
29°	453.9	453.9	444.1	438.2	434.3
30°	397.1	395.2	385.4	381.5	377.6
32.5°	273.9	271.9	268.0	266.1	262.2
35°	180.0	187.8	185.9	185.9	181.9
37.5°	111.5	127.2	133.0	131.1	119.3
40°	70.4	82.2	95.9	88.0	72.4
42.5°	47.0	56.7	70.4	58.7	47.0
45°	33.3	39.1	54.8	39.1	35.2
47.5°	25.4	29.3	41.1	29.3	25.4
50°	19.6	23.5	29.3	23.5	21.5
52.5°	15.7	17.6	23.5	17.6	15.7
55°	11.7	13.7	17.6	13.7	13.7
57.5°	9.8	11.7	13.7	11.7	9.8
60°	5.9	7.8	9.8	7.8	7.8
62.5°	3.9	5.9	7.8	5.9	3.9
65°	2.0	3.9	5.9	3.9	2.0
67.5°	0.0	2.0	2.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	0.0	2.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)