

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: P402436

Luminaire Tested: **LD1MRT102D010TR309040SC1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402436  
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: LD1MRT102D010TR309040SC1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

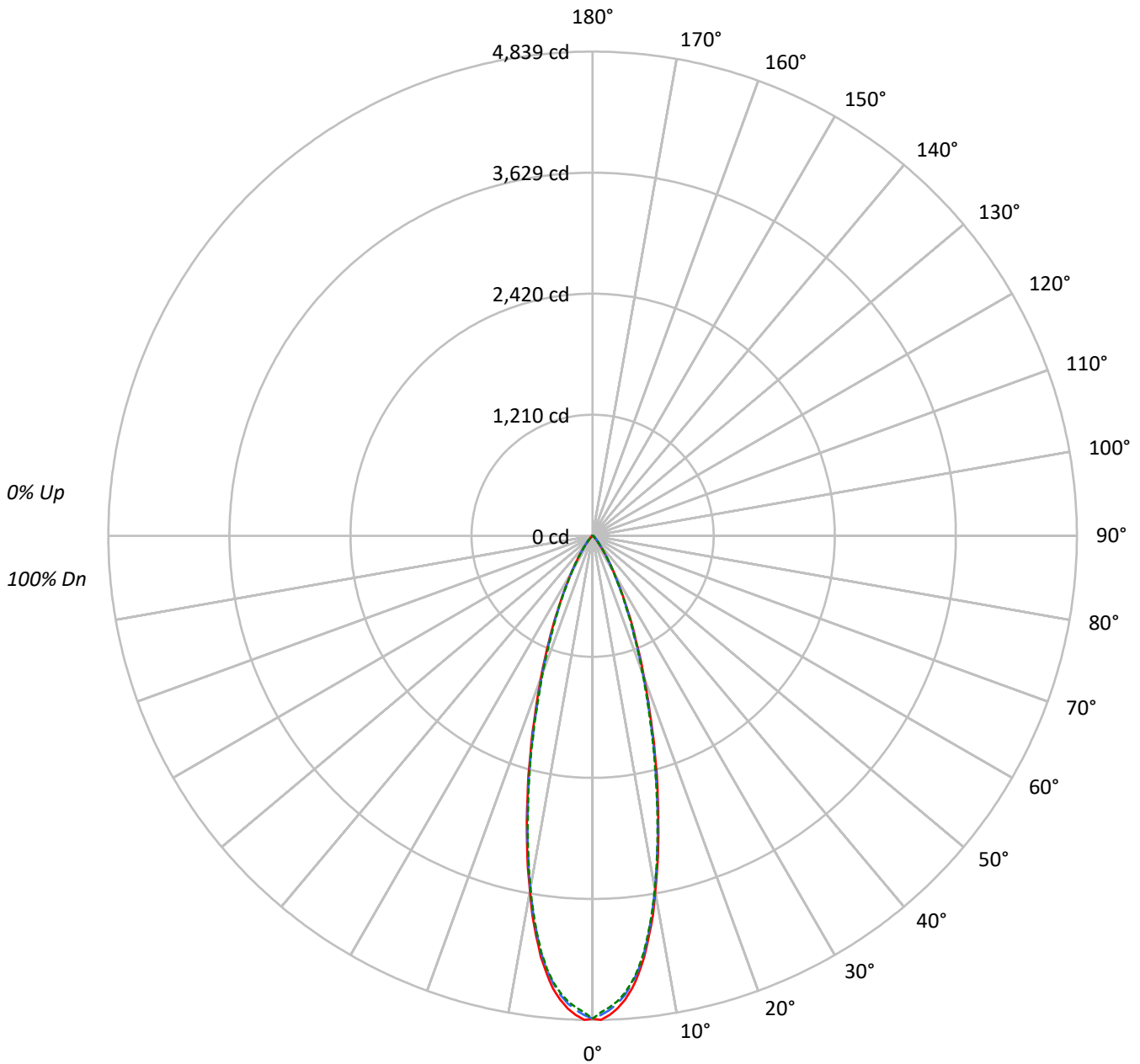
Lumens per Lamp: N/A  
Luminaire Lumens: 1644.9 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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°	1496068	1496068	1496068
5°	1413469	1399061	1394486
10°	1136559	1127966	1126643
15°	795026	781515	778145
20°	496000	483530	477988
25°	286979	278360	274768
30°	152813	148302	145296
35°	73229	75613	74023
40°	30634	41682	31484
45°	15651	25822	16616
50°	10128	15192	11141
55°	6810	10215	7945
60°	3906	6510	5208
65°	1540	4621	1540
70°	0	1903	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	400.8	24.4
10°-20°	668.9	40.7
20°-30°	384.8	23.4
30°-40°	133.9	8.1
40°-50°	38.0	2.3
50°-60°	14.5	0.9
60°-70°	3.9	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°	1454.5	88.4
0°-40°	1588.4	96.6
0°-60°	1640.9	99.8
0°-90°	1644.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1644.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4826	4826	4826	4826	4826	
5°	4542	4515	4496	4504	4481	403
15°	2477	2467	2435	2429	2425	676
25°	839	828	814	810	803	394
35°	194	202	200	200	196	131
45°	36	42	59	42	38	31
55°	13	15	19	15	15	12
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°	4826.0	4826.0	4826.0	4826.0	4826.0
1°	4838.7	4815.5	4790.3	4790.3	4765.1
2°	4792.4	4771.4	4744.0	4746.1	4718.8
3°	4731.4	4710.4	4683.0	4687.3	4662.0
4°	4647.3	4620.0	4601.0	4607.3	4584.2
5°	4542.2	4514.8	4495.9	4504.3	4481.2
6°	4399.2	4380.2	4363.4	4373.9	4352.9
7°	4239.3	4218.3	4205.7	4214.1	4197.3
8°	4043.8	4029.1	4014.3	4022.8	4005.9
9°	3844.0	3820.9	3806.2	3812.5	3799.9
10°	3610.6	3600.1	3583.3	3589.6	3579.1
11°	3385.6	3385.6	3354.0	3343.5	3349.8
12°	3154.3	3152.2	3122.7	3110.1	3114.3
13°	2920.9	2918.8	2889.3	2878.8	2880.9
14°	2689.5	2691.6	2660.1	2651.7	2649.6
15°	2477.2	2466.6	2435.1	2428.8	2424.6
16°	2254.3	2252.2	2220.6	2212.2	2208.0
17°	2054.5	2044.0	2012.4	2004.0	1997.7
18°	1846.3	1848.4	1816.9	1810.6	1800.0
19°	1669.7	1665.5	1636.0	1629.7	1619.2
20°	1503.5	1484.6	1465.7	1459.4	1448.9
22.5°	1133.4	1122.9	1097.7	1091.4	1089.3
25°	839.0	828.5	813.8	809.6	803.3
26°	733.9	736.0	717.1	712.9	708.7
27°	649.8	645.6	628.8	626.6	620.3
28°	559.4	563.6	544.6	542.5	538.3
29°	487.9	487.9	477.3	471.0	466.8
30°	426.9	424.8	414.3	410.1	405.9
32.5°	294.4	292.3	288.1	286.0	281.8
35°	193.5	201.9	199.8	199.8	195.6
37.5°	119.9	136.7	143.0	140.9	128.3
40°	75.7	88.3	103.0	94.6	77.8
42.5°	50.5	61.0	75.7	63.1	50.5
45°	35.7	42.1	58.9	42.1	37.9
47.5°	27.3	31.5	44.2	31.5	27.3
50°	21.0	25.2	31.5	25.2	23.1
52.5°	16.8	18.9	25.2	18.9	16.8
55°	12.6	14.7	18.9	14.7	14.7
57.5°	10.5	12.6	14.7	12.6	10.5
60°	6.3	8.4	10.5	8.4	8.4
62.5°	4.2	6.3	8.4	6.3	4.2
65°	2.1	4.2	6.3	4.2	2.1
67.5°	0.0	2.1	2.1	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	2.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)