

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: P402519

Luminaire Tested: **LD1MRT52D010TR509027SB1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402519  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1912-604-8)  
Test Lab: INNOVATION CENTER (G3)  
Issue Date: 6/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD1MRT52D010TR509027SB1MW  
Description: 1 INCH 50° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

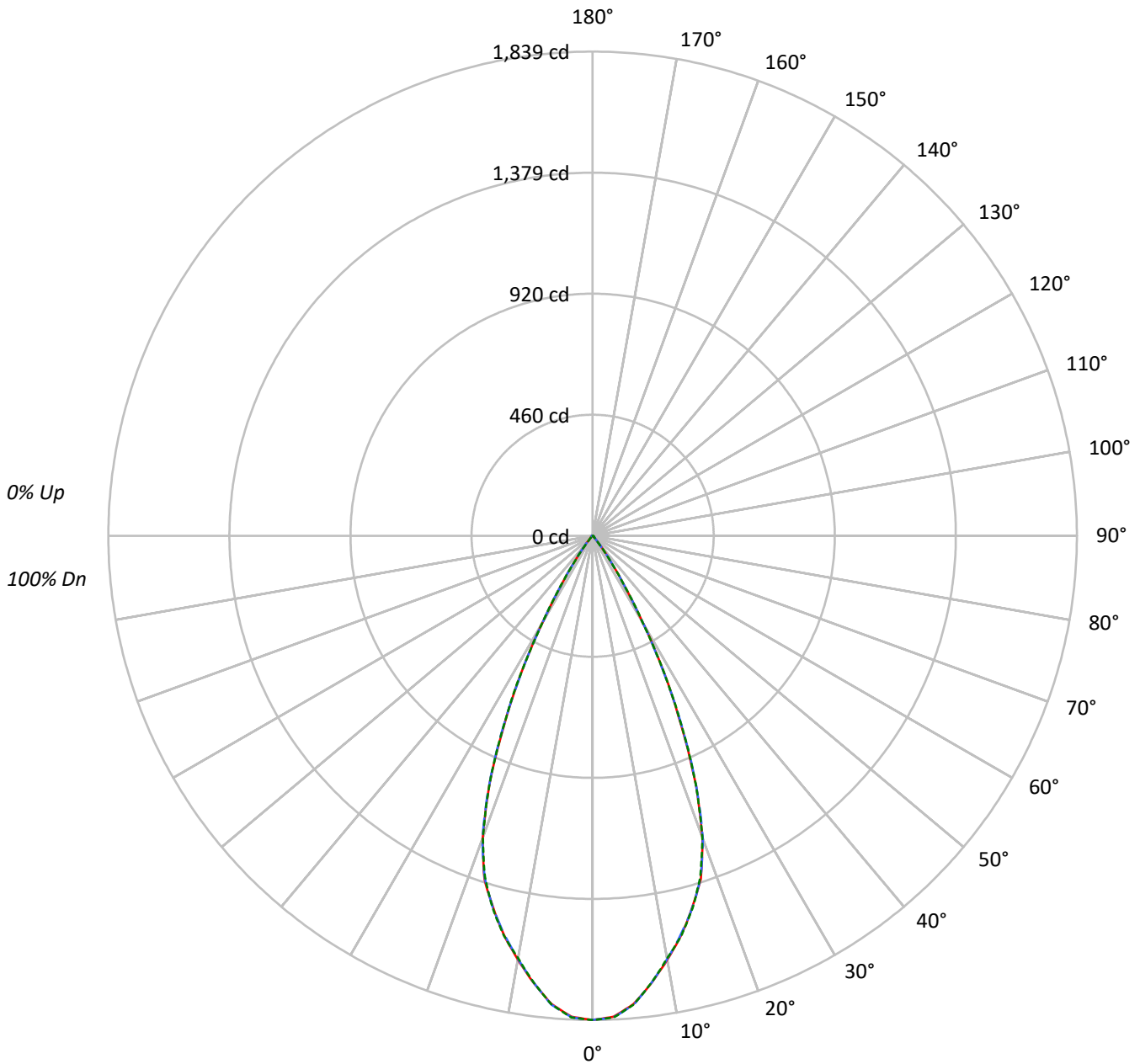
Lumens per Lamp: N/A  
Luminaire Lumens: 1038.0 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.1  
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	104	103	102	101	100	99	98	97	95																			
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90																			
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85																			
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81																			
5	97	89	84	81	95	89	84	80	87	83	80	85	82	79	84	81	78	77																			
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73																			
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70																			
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67																			
9	82	74	69	65	81	73	69	65	73	68	65	72	68	65	71	67	65	64																			
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61																			

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

	0°	45°	90°
0°	147120	147120	147120
5°	143394	143586	143506
10°	132777	132582	132363
15°	121028	121169	121334
20°	103813	104128	103727
25°	70369	71243	71119
30°	34863	35084	34955
35°	11641	11710	11016
40°	2663	2590	2235
45°	1041	1154	962
50°	846	884	759
55°	753	753	669
60°	592	656	544
65°	379	454	322
70°	0	70	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.5	15.9
10°-20°	405.8	39.1
20°-30°	361.3	34.8
30°-40°	90.2	8.7
40°-50°	8.6	0.8
50°-60°	4.7	0.5
60°-70°	1.9	0.2
70°-80°	0.0	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°	932.6	89.8
0°-40°	1022.8	98.5
0°-60°	1036.1	99.8
0°-90°	1038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1038.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1839	1839	1839	1839	1839	
5°	1786	1792	1788	1787	1787	165
15°	1461	1469	1463	1460	1465	406
25°	797	806	807	812	806	360
35°	119	124	120	118	113	90
45°	9	9	10	9	8	9
55°	5	5	5	5	5	5
65°	2	2	2	2	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°	1839.0	1839.0	1839.0	1839.0	1839.0
2.5°	1828.4	1836.6	1830.8	1831.2	1831.5
5°	1785.6	1792.1	1788.0	1786.7	1787.0
7.5°	1713.3	1719.1	1712.6	1715.0	1712.3
10°	1634.5	1640.3	1632.1	1632.1	1629.4
12.5°	1554.3	1560.4	1550.6	1549.6	1556.0
15°	1461.3	1468.7	1463.0	1460.2	1465.0
17.5°	1367.2	1366.1	1362.8	1361.1	1359.4
20°	1219.4	1225.5	1223.1	1213.0	1218.4
22.5°	1025.1	1025.5	1028.9	1030.6	1026.1
25°	797.2	806.0	807.1	812.5	805.7
27.5°	590.7	592.4	583.2	583.9	590.3
30°	377.4	382.5	379.8	382.5	378.4
32.5°	217.7	222.1	220.4	222.5	222.8
35°	119.2	123.6	119.9	118.2	112.8
37.5°	59.1	59.1	60.5	55.7	53.0
40°	25.5	26.2	24.8	23.4	21.4
42.5°	12.9	12.9	13.6	11.5	11.2
45°	9.2	9.2	10.2	8.8	8.5
47.5°	7.8	7.8	8.5	7.5	7.1
50°	6.8	6.8	7.1	6.5	6.1
52.5°	6.1	6.1	6.5	5.8	5.4
55°	5.4	5.4	5.4	5.1	4.8
57.5°	4.4	4.8	4.8	4.4	4.1
60°	3.7	3.7	4.1	3.7	3.4
62.5°	3.1	3.1	3.1	3.1	2.7
65°	2.0	2.0	2.4	2.0	1.7
67.5°	0.3	0.7	1.7	0.0	0.0
70°	0.0	0.0	0.3	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
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°







(END OF REPORT)