

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: P402331

Luminaire Tested: **LA1MRT102D010TR509030SB1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402331  
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: LA1MRT102D010TR509030SB1MW  
Description: 1 INCH 50° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

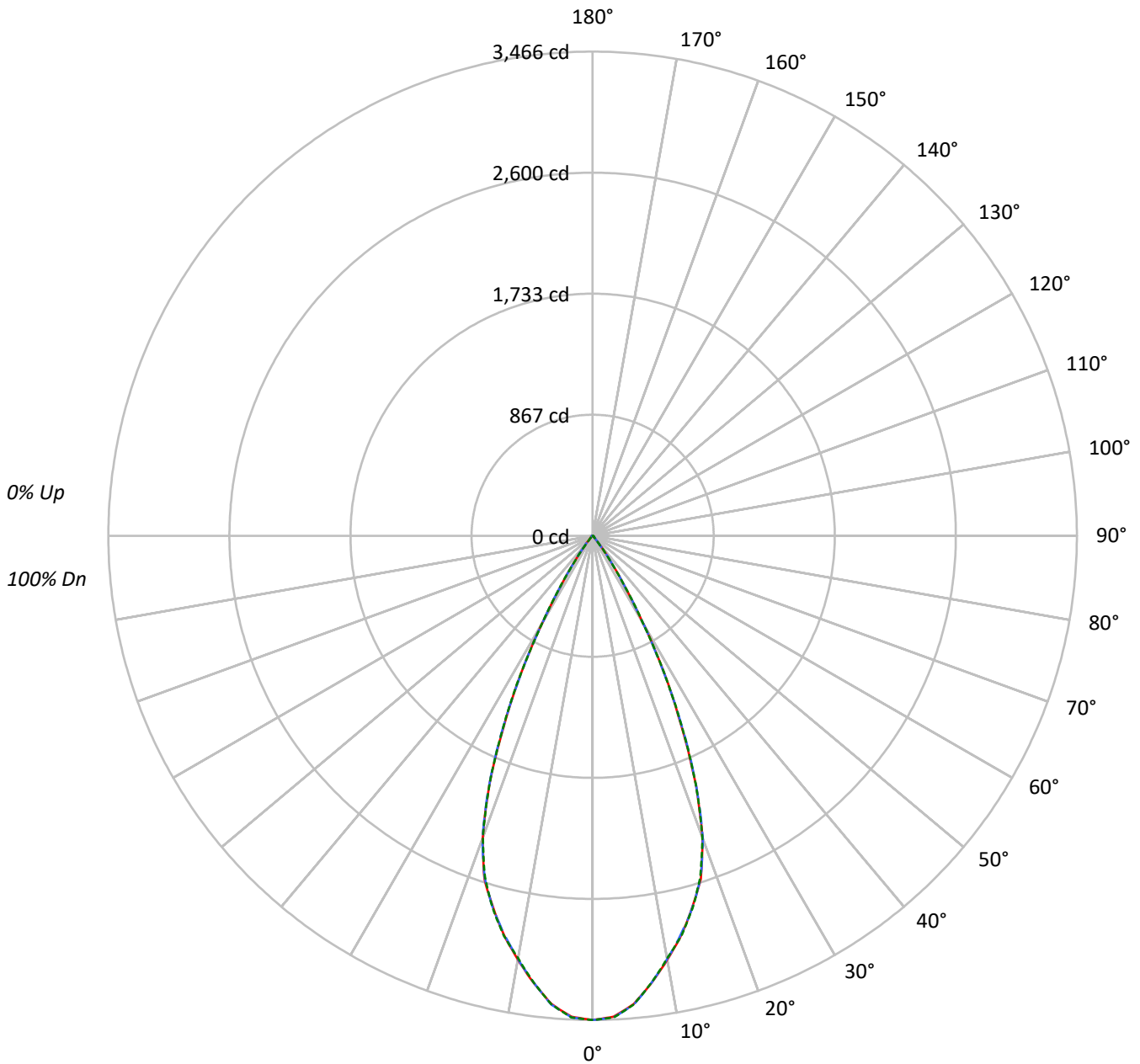
Lumens per Lamp: N/A  
Luminaire Lumens: 1956.5 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	277296	277296	277296
5°	270284	270646	270493
10°	250266	249900	249486
15°	228117	228382	228696
20°	195681	196277	195511
25°	132635	134277	134047
30°	65707	66123	65883
35°	21945	22072	20763
40°	5013	4877	4209
45°	1957	2172	1810
50°	1593	1668	1431
55°	1423	1423	1255
60°	1120	1232	1024
65°	719	852	606
70°	0	140	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	312.0	15.9
10°-20°	764.9	39.1
20°-30°	681.0	34.8
30°-40°	170.0	8.7
40°-50°	16.2	0.8
50°-60°	8.9	0.5
60°-70°	3.5	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°	1757.9	89.9
0°-40°	1927.9	98.5
0°-60°	1952.9	99.8
0°-90°	1956.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3466	3466	3466	3466	3466	
5°	3366	3378	3370	3368	3368	312
15°	2754	2768	2758	2752	2761	765
25°	1503	1519	1521	1531	1519	679
35°	225	233	226	223	213	169
45°	17	17	19	17	16	16
55°	10	10	10	10	9	9
65°	4	4	4	4	3	3
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3466.2	3466.2	3466.2	3466.2	3466.2
2.5°	3446.4	3461.8	3450.9	3451.5	3452.2
5°	3365.7	3377.9	3370.2	3367.7	3368.3
7.5°	3229.4	3240.2	3228.1	3232.6	3227.4
10°	3080.8	3091.7	3076.3	3076.3	3071.2
12.5°	2929.7	2941.3	2922.7	2920.8	2932.9
15°	2754.3	2768.4	2757.5	2752.4	2761.3
17.5°	2577.0	2575.0	2568.6	2565.4	2562.2
20°	2298.5	2310.0	2305.5	2286.3	2296.5
22.5°	1932.2	1932.9	1939.3	1942.5	1934.2
25°	1502.6	1519.3	1521.2	1531.4	1518.6
27.5°	1113.4	1116.6	1099.3	1100.6	1112.7
30°	711.3	720.9	715.8	720.9	713.2
32.5°	410.4	418.7	415.5	419.4	420.0
35°	224.7	233.0	226.0	222.8	212.6
37.5°	111.4	111.4	114.0	105.0	99.9
40°	48.0	49.3	46.7	44.2	40.3
42.5°	24.3	24.3	25.6	21.8	21.1
45°	17.3	17.3	19.2	16.6	16.0
47.5°	14.7	14.7	16.0	14.1	13.4
50°	12.8	12.8	13.4	12.2	11.5
52.5°	11.5	11.5	12.2	10.9	10.2
55°	10.2	10.2	10.2	9.6	9.0
57.5°	8.3	9.0	9.0	8.3	7.7
60°	7.0	7.0	7.7	7.0	6.4
62.5°	5.8	5.8	5.8	5.8	5.1
65°	3.8	3.8	4.5	3.8	3.2
67.5°	0.6	1.3	3.2	0.0	0.0
70°	0.0	0.0	0.6	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)