

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: P402337

Luminaire Tested: **LA1MRT102D010TR509040MMS1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402337  
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: LA1MRT102D010TR509040MMS1MW  
Description: 1 INCH 50° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

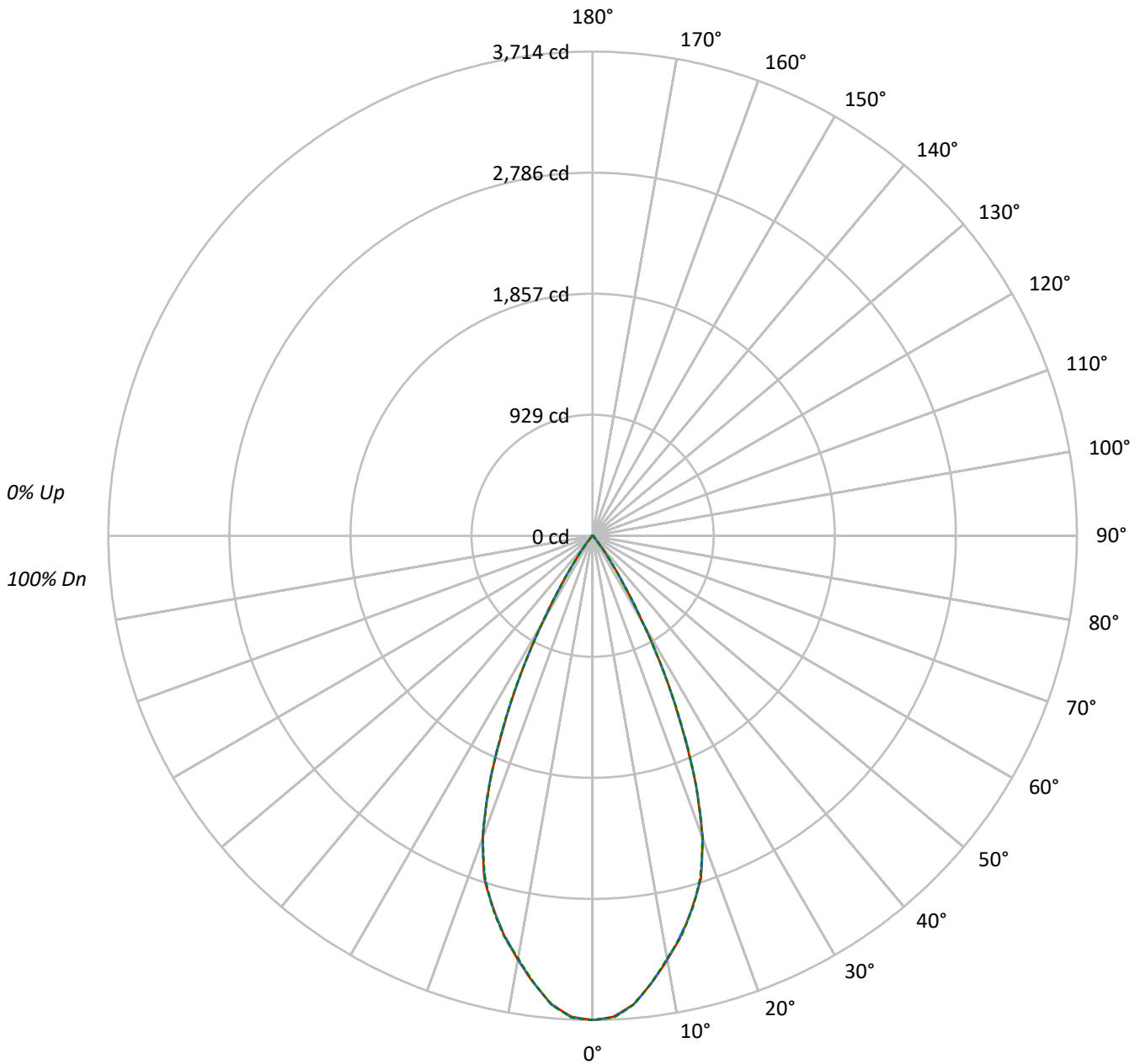
Lumens per Lamp: N/A  
Luminaire Lumens: 2096.6 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

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			100																
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95			95																
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90			90																
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85			85																
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81			81																
5	97	89	84	81	95	89	84	80	87	83	80	85	82	79	84	81	78	77			77																
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73			73																
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70			70																
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67			67																
9	82	74	69	65	81	73	69	65	73	68	65	72	68	65	71	67	65	64			64																
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61			61																

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

	0°	45°	90°
0°	297160	297160	297160
5°	289646	290031	289871
10°	268194	267804	267357
15°	244457	244739	245079
20°	209694	210332	209515
25°	142141	143898	143651
30°	70418	70862	70603
35°	23517	23654	22247
40°	5378	5232	4511
45°	2093	2331	1946
50°	1705	1792	1531
55°	1534	1534	1339
60°	1200	1312	1104
65°	776	909	644
70°	0	164	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.4	15.9
10°-20°	819.7	39.1
20°-30°	729.7	34.8
30°-40°	182.2	8.7
40°-50°	17.4	0.8
50°-60°	9.5	0.5
60°-70°	3.8	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°	1883.8	89.8
0°-40°	2066.0	98.5
0°-60°	2092.8	99.8
0°-90°	2096.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2096.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3714	3714	3714	3714	3714	
5°	3607	3620	3612	3609	3610	334
15°	2952	2967	2955	2950	2959	820
25°	1610	1628	1630	1641	1627	727
35°	241	250	242	239	228	181
45°	18	18	21	18	17	18
55°	11	11	11	10	10	10
65°	4	4	5	4	3	4
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°	3714.5	3714.5	3714.5	3714.5	3714.5
2.5°	3693.3	3709.7	3698.1	3698.7	3699.4
5°	3606.8	3619.8	3611.6	3608.9	3609.6
7.5°	3460.7	3472.3	3459.3	3464.1	3458.6
10°	3301.5	3313.2	3296.7	3296.7	3291.2
12.5°	3139.6	3151.9	3132.0	3130.0	3143.0
15°	2951.6	2966.7	2955.0	2949.5	2959.1
17.5°	2761.5	2759.5	2752.6	2749.2	2745.8
20°	2463.1	2475.4	2470.6	2450.1	2461.0
22.5°	2070.6	2071.3	2078.2	2081.6	2072.7
25°	1610.3	1628.1	1630.2	1641.1	1627.4
27.5°	1193.1	1196.6	1178.0	1179.4	1192.4
30°	762.3	772.5	767.1	772.5	764.3
32.5°	439.8	448.7	445.3	449.4	450.1
35°	240.8	249.7	242.2	238.8	227.8
37.5°	119.4	119.4	122.1	112.5	107.0
40°	51.5	52.8	50.1	47.3	43.2
42.5°	26.1	26.1	27.4	23.3	22.6
45°	18.5	18.5	20.6	17.8	17.2
47.5°	15.8	15.8	17.2	15.1	14.4
50°	13.7	13.7	14.4	13.0	12.3
52.5°	12.3	12.3	13.0	11.7	11.0
55°	11.0	11.0	11.0	10.3	9.6
57.5°	8.9	9.6	9.6	8.9	8.2
60°	7.5	7.5	8.2	7.5	6.9
62.5°	6.2	6.2	6.2	6.2	5.5
65°	4.1	4.1	4.8	4.1	3.4
67.5°	0.7	1.4	3.4	0.0	0.0
70°	0.0	0.0	0.7	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)