

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: P402413

Luminaire Tested: **LA1MRT52D010TR509035MMS1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402413  
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: LA1MRT52D010TR509035MMS1MW  
Description: 1 INCH 50° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

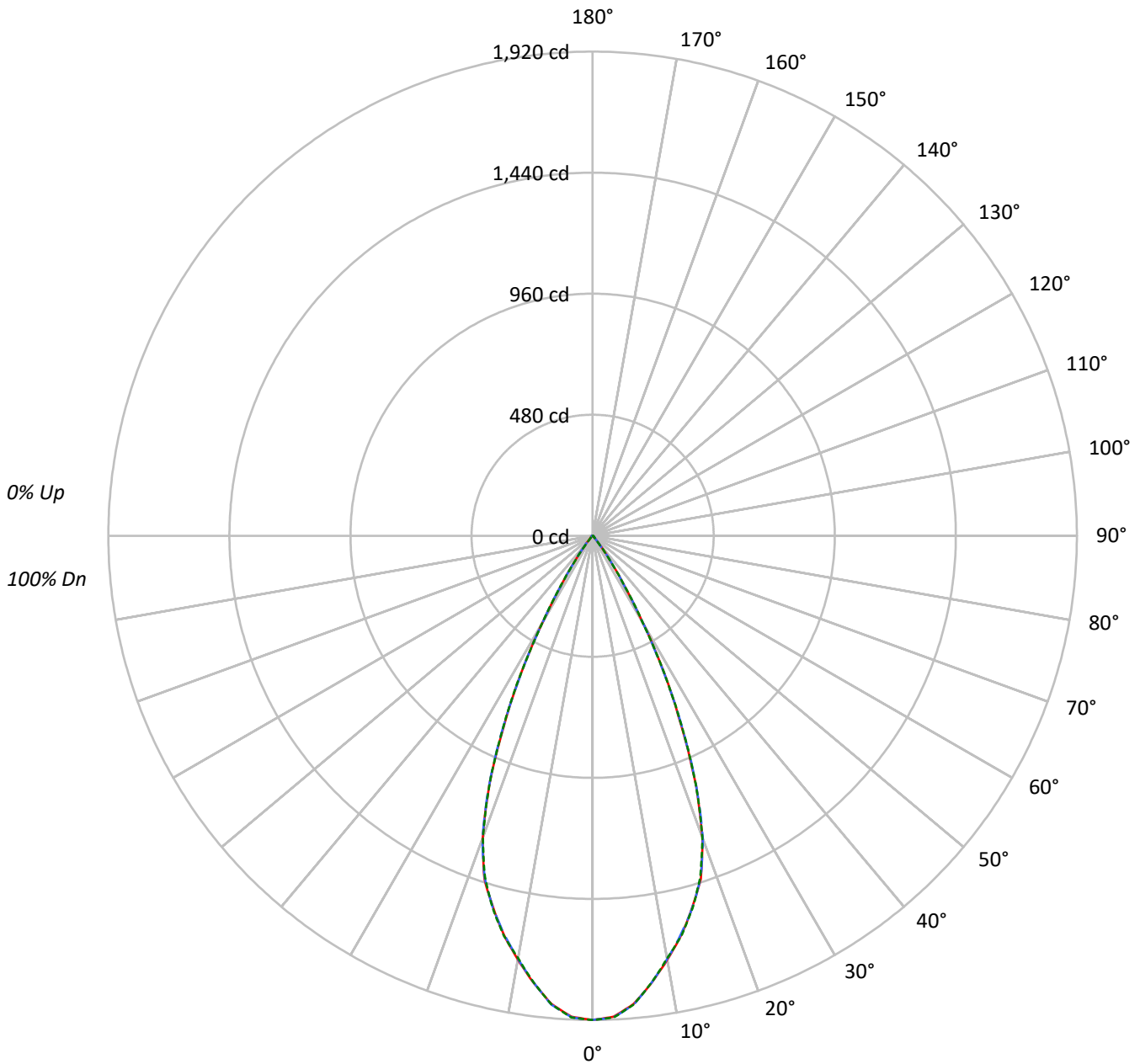
Lumens per Lamp: N/A  
Luminaire Lumens: 1083.8 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

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					20					
RC	80					70					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	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	100	99	98	97	95		
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	93	92	91	89	87	85	
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90	90	88	87	85	83	81	77	
3	105	99	95	92	103	98	94	91	96	92	90	93	90	88	91	89	87	85	85	83	82	80	78	77	73	
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81	81	79	78	77	75	73	70	
5	97	89	84	81	95	89	84	80	87	83	80	85	82	79	84	81	78	77	77	75	74	72	70	67	64	
6	93	85	80	76	91	84	79	76	83	79	75	82	78	75	80	77	75	73	73	71	70	68	67	65	62	
7	89	81	76	72	88	80	76	72	79	75	72	78	74	71	77	74	71	70	70	68	67	65	64	62	59	
8	85	77	72	69	84	77	72	69	76	71	68	75	71	68	74	70	68	67	67	65	64	62	61	59	56	
9	82	74	69	65	81	73	69	65	73	68	65	72	68	65	71	67	65	64	64	62	61	59	57	55	52	
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	64	62	61	61	59	57	55	53	51	48	

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

	0°	45°	90°
0°	153600	153600	153600
5°	149714	149914	149834
10°	138626	138423	138195
15°	126362	126502	126685
20°	108393	108725	108299
25°	73467	74376	74253
30°	36396	36627	36498
35°	12159	12227	11495
40°	2778	2705	2329
45°	1086	1199	1007
50°	884	921	797
55°	795	795	697
60°	624	688	560
65°	398	473	341
70°	0	94	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.8	15.9
10°-20°	423.7	39.1
20°-30°	377.2	34.8
30°-40°	94.2	8.7
40°-50°	9.0	0.8
50°-60°	4.9	0.5
60°-70°	2.0	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°	973.7	89.8
0°-40°	1067.9	98.5
0°-60°	1081.8	99.8
0°-90°	1083.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1083.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1864	1871	1867	1865	1866	173
15°	1526	1534	1527	1525	1530	424
25°	832	842	843	848	841	376
35°	124	129	125	123	118	94
45°	10	10	11	9	9	9
55°	6	6	6	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°	1920.0	1920.0	1920.0	1920.0	1920.0
2.5°	1909.0	1917.5	1911.5	1911.9	1912.2
5°	1864.3	1871.1	1866.8	1865.4	1865.8
7.5°	1788.8	1794.8	1788.1	1790.6	1787.7
10°	1706.5	1712.6	1704.0	1704.0	1701.2
12.5°	1622.8	1629.2	1618.9	1617.9	1624.6
15°	1525.7	1533.5	1527.4	1524.6	1529.6
17.5°	1427.4	1426.4	1422.8	1421.0	1419.3
20°	1273.2	1279.5	1277.1	1266.4	1272.1
22.5°	1070.3	1070.7	1074.2	1076.0	1071.4
25°	832.3	841.6	842.6	848.3	841.2
27.5°	616.7	618.5	608.9	609.6	616.4
30°	394.0	399.3	396.5	399.3	395.1
32.5°	227.3	231.9	230.2	232.3	232.6
35°	124.5	129.1	125.2	123.4	117.7
37.5°	61.7	61.7	63.1	58.2	55.3
40°	26.6	27.3	25.9	24.5	22.3
42.5°	13.5	13.5	14.2	12.1	11.7
45°	9.6	9.6	10.6	9.2	8.9
47.5°	8.2	8.2	8.9	7.8	7.4
50°	7.1	7.1	7.4	6.7	6.4
52.5°	6.4	6.4	6.7	6.0	5.7
55°	5.7	5.7	5.7	5.3	5.0
57.5°	4.6	5.0	5.0	4.6	4.3
60°	3.9	3.9	4.3	3.9	3.5
62.5°	3.2	3.2	3.2	3.2	2.8
65°	2.1	2.1	2.5	2.1	1.8
67.5°	0.4	0.7	1.8	0.0	0.0
70°	0.0	0.0	0.4	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)