

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: P402339

Luminaire Tested: **LA1MRT102D010TR509040SB1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402339  
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: LA1MRT102D010TR509040SB1MW  
Description: 1 INCH 50° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

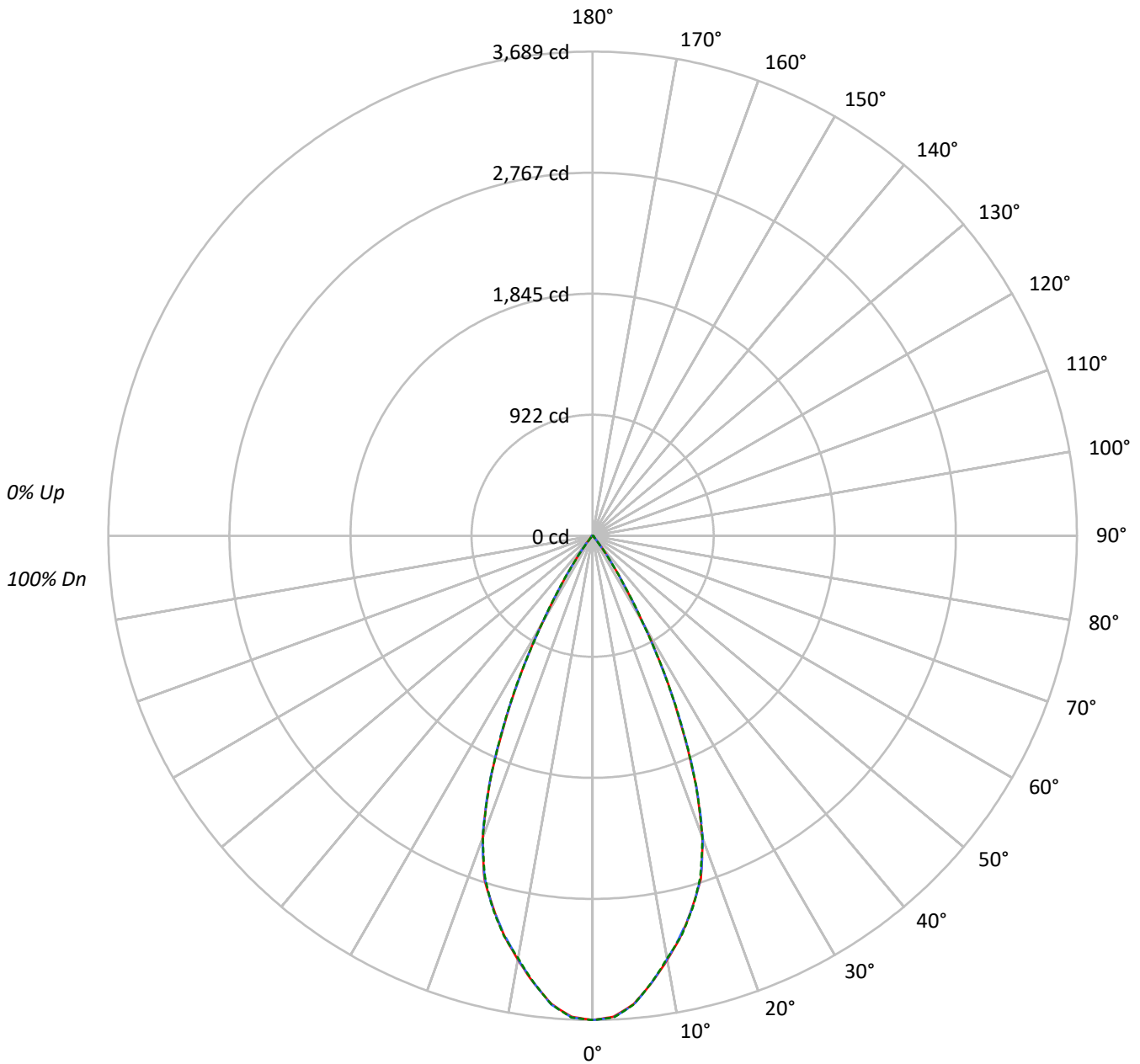
Lumens per Lamp: N/A  
Luminaire Lumens: 2082.3 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.71  
Luminous Opening: Rectangular (W 0.1' x L: 1.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P402339

CATALOG NUMBER: LA1MRT102D010TR509040SB1MW

### 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°	295136	295136	295136
5°	287670	288056	287887
10°	266366	265977	265530
15°	242784	243074	243406
20°	208264	208902	208085
25°	141170	142909	142671
30°	69938	70372	70123
35°	23361	23488	22091
40°	5336	5190	4480
45°	2082	2308	1923
50°	1693	1780	1531
55°	1520	1520	1325
60°	1200	1312	1088
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°	332.1	15.9
10°-20°	814.1	39.1
20°-30°	724.8	34.8
30°-40°	180.9	8.7
40°-50°	17.2	0.8
50°-60°	9.4	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°	1871.0	89.8
0°-40°	2051.9	98.5
0°-60°	2078.5	99.8
0°-90°	2082.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3689	3689	3689	3689	3689	
5°	3582	3595	3587	3584	3585	332
15°	2931	2946	2935	2929	2939	814
25°	1599	1617	1619	1630	1616	722
35°	239	248	240	237	226	180
45°	18	18	20	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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3689.2	3689.2	3689.2	3689.2	3689.2
2.5°	3668.1	3684.4	3672.8	3673.5	3674.2
5°	3582.2	3595.1	3587.0	3584.2	3584.9
7.5°	3437.1	3448.6	3435.7	3440.5	3435.0
10°	3279.0	3290.5	3274.2	3274.2	3268.7
12.5°	3118.2	3130.4	3110.7	3108.6	3121.6
15°	2931.4	2946.4	2934.9	2929.4	2938.9
17.5°	2742.7	2740.6	2733.8	2730.4	2727.0
20°	2446.3	2458.5	2453.8	2433.3	2444.2
22.5°	2056.5	2057.2	2064.0	2067.4	2058.6
25°	1599.3	1617.0	1619.0	1629.9	1616.3
27.5°	1185.0	1188.4	1170.0	1171.4	1184.3
30°	757.1	767.3	761.8	767.3	759.1
32.5°	436.8	445.6	442.2	446.3	447.0
35°	239.2	248.0	240.5	237.1	226.2
37.5°	118.6	118.6	121.3	111.8	106.3
40°	51.1	52.5	49.7	47.0	42.9
42.5°	25.9	25.9	27.3	23.2	22.5
45°	18.4	18.4	20.4	17.7	17.0
47.5°	15.7	15.7	17.0	15.0	14.3
50°	13.6	13.6	14.3	12.9	12.3
52.5°	12.3	12.3	12.9	11.6	10.9
55°	10.9	10.9	10.9	10.2	9.5
57.5°	8.9	9.5	9.5	8.9	8.2
60°	7.5	7.5	8.2	7.5	6.8
62.5°	6.1	6.1	6.1	6.1	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)