

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: P402393

Luminaire Tested: **LA1MRT52D010TR309030MMS1MW**

Issue Date: 6/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P402393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2005-766-2)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 6/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LA1MRT52D010TR309030MMS1MW  
Description: 1 INCH 30° OPTIC WITH MATTE METALIC SILVER BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

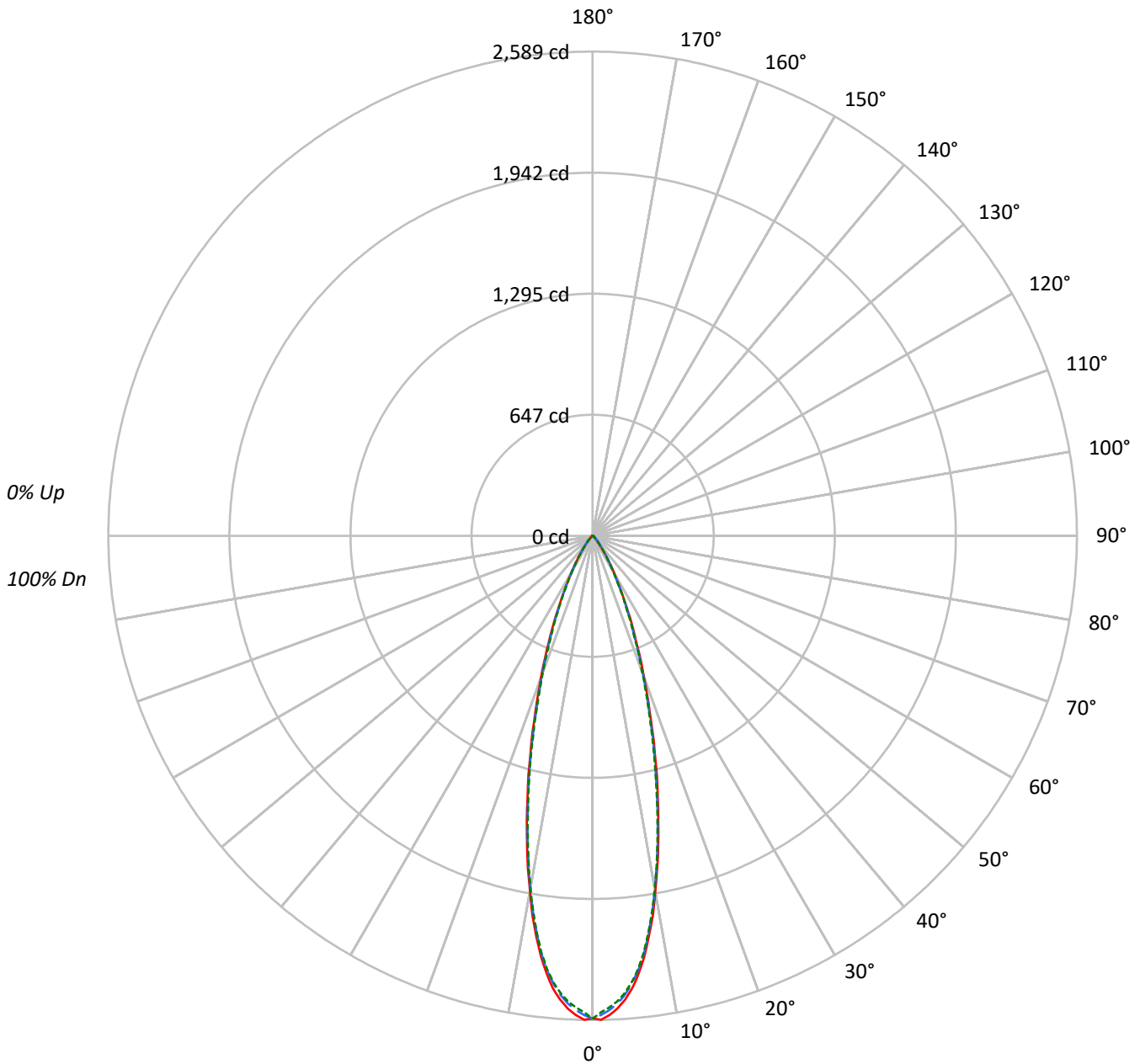
Lumens per Lamp: N/A  
Luminaire Lumens: 880.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P402393

CATALOG NUMBER: LA1MRT52D010TR309030MMS1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P402393

CATALOG NUMBER: LA1MRT52D010TR309030MMS1MW

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

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

	0°	45°	90°
0°	800394	800394	800394
5°	756182	748495	746037
10°	608037	603441	602748
15°	425338	418117	416288
20°	265369	258672	255703
25°	153546	148928	147013
30°	81758	79324	77713
35°	39169	40455	39585
40°	16389	22298	16835
45°	8374	13810	8900
50°	5450	8150	5980
55°	3675	5459	4270
60°	2108	3472	2790
65°	807	2494	807
70°	0	997	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402393

CATALOG NUMBER: LA1MRT52D010TR309030MMS1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.4	24.4
10°-20°	357.9	40.7
20°-30°	205.9	23.4
30°-40°	71.6	8.1
40°-50°	20.3	2.3
50°-60°	7.8	0.9
60°-70°	2.1	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°	778.1	88.4
0°-40°	849.8	96.6
0°-60°	877.9	99.8
0°-90°	880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	880.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2582	2582	2582	2582	2582	
5°	2430	2415	2405	2410	2397	216
15°	1325	1320	1303	1299	1297	362
25°	449	443	435	433	430	211
35°	104	108	107	107	105	70
45°	19	22	32	22	20	16
55°	7	8	10	8	8	6
65°	1	2	3	2	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P402393

CATALOG NUMBER: LA1MRT52D010TR309030MMS1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2581.9	2581.9	2581.9	2581.9	2581.9
1°	2588.6	2576.3	2562.8	2562.8	2549.3
2°	2563.9	2552.6	2538.0	2539.1	2524.5
3°	2531.3	2520.0	2505.4	2507.6	2494.1
4°	2486.3	2471.6	2461.5	2464.9	2452.5
5°	2430.0	2415.4	2405.3	2409.8	2397.4
6°	2353.5	2343.4	2334.4	2340.0	2328.8
7°	2268.0	2256.8	2250.0	2254.5	2245.5
8°	2163.4	2155.5	2147.6	2152.1	2143.1
9°	2056.5	2044.1	2036.3	2039.6	2032.9
10°	1931.6	1926.0	1917.0	1920.4	1914.8
11°	1811.3	1811.3	1794.4	1788.8	1792.1
12°	1687.5	1686.4	1670.6	1663.9	1666.1
13°	1562.6	1561.5	1545.8	1540.1	1541.3
14°	1438.9	1440.0	1423.1	1418.6	1417.5
15°	1325.3	1319.6	1302.8	1299.4	1297.1
16°	1206.0	1204.9	1188.0	1183.5	1181.3
17°	1099.1	1093.5	1076.6	1072.1	1068.8
18°	987.8	988.9	972.0	968.6	963.0
19°	893.3	891.0	875.3	871.9	866.3
20°	804.4	794.3	784.1	780.8	775.1
22.5°	606.4	600.8	587.3	583.9	582.8
25°	448.9	443.3	435.4	433.1	429.8
26°	392.6	393.8	383.6	381.4	379.1
27°	347.6	345.4	336.4	335.3	331.9
28°	299.3	301.5	291.4	290.3	288.0
29°	261.0	261.0	255.4	252.0	249.8
30°	228.4	227.3	221.6	219.4	217.1
32.5°	157.5	156.4	154.1	153.0	150.8
35°	103.5	108.0	106.9	106.9	104.6
37.5°	64.1	73.1	76.5	75.4	68.6
40°	40.5	47.3	55.1	50.6	41.6
42.5°	27.0	32.6	40.5	33.8	27.0
45°	19.1	22.5	31.5	22.5	20.3
47.5°	14.6	16.9	23.6	16.9	14.6
50°	11.3	13.5	16.9	13.5	12.4
52.5°	9.0	10.1	13.5	10.1	9.0
55°	6.8	7.9	10.1	7.9	7.9
57.5°	5.6	6.8	7.9	6.8	5.6
60°	3.4	4.5	5.6	4.5	4.5
62.5°	2.3	3.4	4.5	3.4	2.3
65°	1.1	2.3	3.4	2.3	1.1
67.5°	0.0	1.1	1.1	0.0	0.0



TEST NUMBER: P402393

CATALOG NUMBER: LA1MRT52D010TR309030MMS1MW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
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



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°    - - 45°-225°    - - - - 90°-270°







70°	0.0	0.0	1.1	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)