

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: P401964

Luminaire Tested: **LA1MR102D010 EA1M102309030SC1MW**

Issue Date: 6/3/2020



Test Information

Test Method: LM-41-14
Report Number: P401964
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: LA1MR102D010 EA1M102309030SC1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

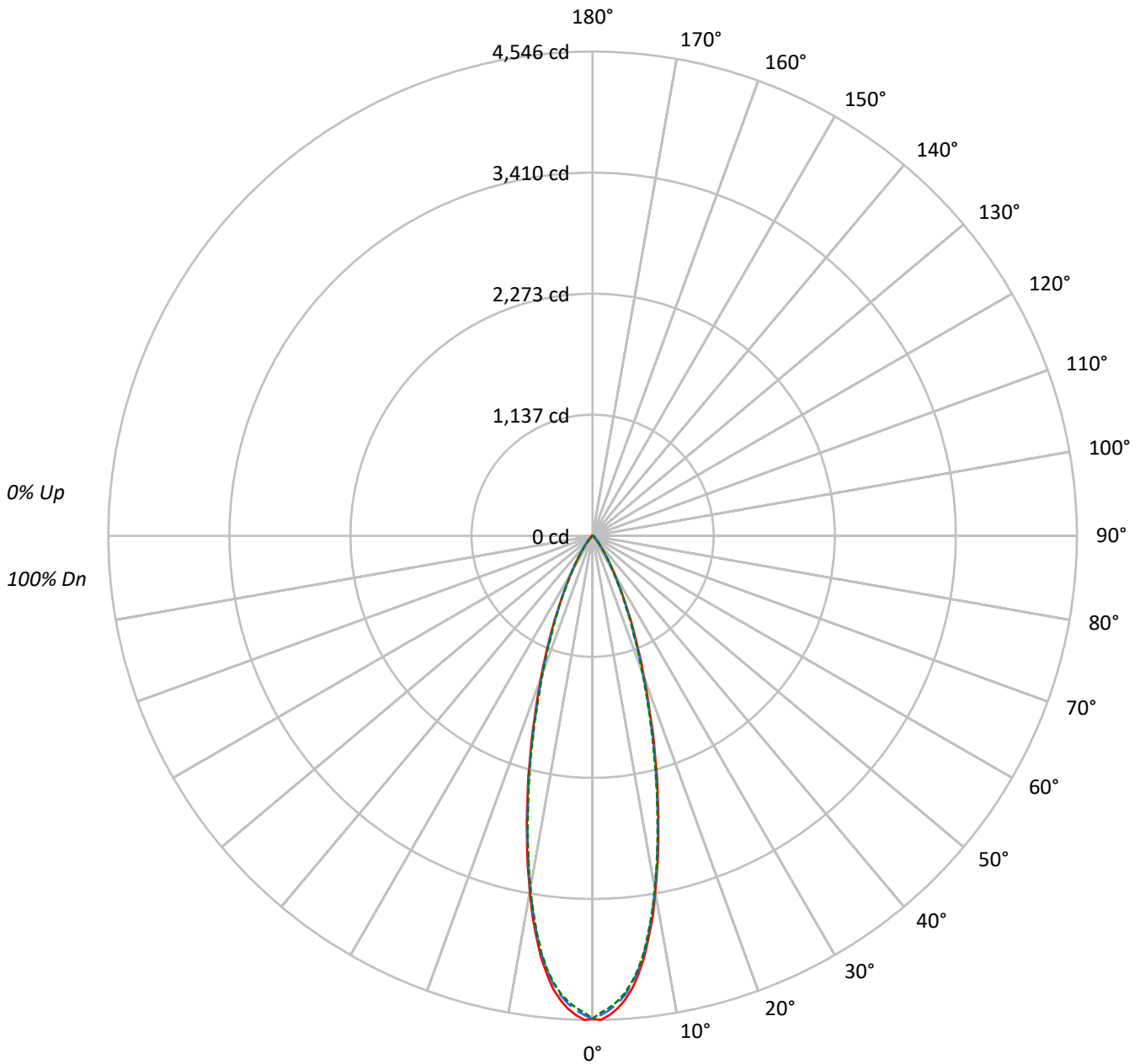
Lumens per Lamp: N/A
Luminaire Lumens: 1545.5 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P401964

CATALOG NUMBER: LA1MR102D010 EA1M102309030SC1MW

Luminous Intensity Polar Plot





TEST NUMBER: P401964

CATALOG NUMBER: LA1MR102D010 EA1M102309030SC1MW

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	76	72	87	80	75	72	79	75	72	78	74	72	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°	1405672	1405672	1405672
5°	1328048	1314511	1310217
10°	1067873	1059783	1058556
15°	746982	734305	731128
20°	466045	454301	449089
25°	269637	261531	258144
30°	143577	139318	136490
35°	68801	71034	69520
40°	28773	39173	29582
45°	14731	24244	15607
50°	9549	14275	10465
55°	6432	9620	7459
60°	3658	6138	4898
65°	1467	4328	1467
70°	0	1813	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P401964

CATALOG NUMBER: LA1MR102D010 EA1M102309030SC1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	376.5	24.4
10°-20°	628.5	40.7
20°-30°	361.6	23.4
30°-40°	125.8	8.1
40°-50°	35.7	2.3
50°-60°	13.7	0.9
60°-70°	3.7	0.2
70°-80°	0.1	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°	1366.6	88.4
0°-40°	1492.4	96.6
0°-60°	1541.7	99.8
0°-90°	1545.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1545.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4534	4534	4534	4534	4534	
5°	4268	4242	4224	4232	4210	379
15°	2328	2318	2288	2282	2278	635
25°	788	778	765	761	755	370
35°	182	190	188	188	184	123
45°	34	40	55	40	36	29
55°	12	14	18	14	14	11
65°	2	4	6	4	2	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P401964

CATALOG NUMBER: LA1MR102D010 EA1M102309030SC1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4534.4	4534.4	4534.4	4534.4	4534.4
1°	4546.3	4524.5	4500.8	4500.8	4477.1
2°	4502.8	4483.0	4457.4	4459.3	4433.6
3°	4445.5	4425.7	4400.1	4404.0	4380.3
4°	4366.5	4340.8	4323.0	4328.9	4307.2
5°	4267.7	4242.0	4224.2	4232.1	4210.4
6°	4133.3	4115.5	4099.7	4109.6	4089.9
7°	3983.2	3963.4	3951.6	3959.5	3943.7
8°	3799.4	3785.6	3771.8	3779.7	3763.9
9°	3611.7	3590.0	3576.2	3582.1	3570.2
10°	3392.4	3382.5	3366.7	3372.7	3362.8
11°	3181.0	3181.0	3151.4	3141.5	3147.4
12°	2963.7	2961.7	2934.0	2922.2	2926.1
13°	2744.4	2742.4	2714.7	2704.8	2706.8
14°	2527.0	2529.0	2499.4	2491.5	2489.5
15°	2327.5	2317.6	2288.0	2282.0	2278.1
16°	2118.0	2116.1	2086.4	2078.5	2074.6
17°	1930.3	1920.5	1890.8	1882.9	1877.0
18°	1734.7	1736.7	1707.1	1701.1	1691.3
19°	1568.8	1564.8	1537.2	1531.2	1521.4
20°	1412.7	1394.9	1377.1	1371.2	1361.3
22.5°	1064.9	1055.1	1031.4	1025.4	1023.5
25°	788.3	778.5	764.6	760.7	754.7
26°	689.5	691.5	673.7	669.8	665.8
27°	610.5	606.6	590.8	588.8	582.9
28°	525.6	529.5	511.7	509.8	505.8
29°	458.4	458.4	448.5	442.6	438.6
30°	401.1	399.1	389.2	385.3	381.3
32.5°	276.6	274.6	270.7	268.7	264.8
35°	181.8	189.7	187.7	187.7	183.7
37.5°	112.6	128.4	134.4	132.4	120.5
40°	71.1	83.0	96.8	88.9	73.1
42.5°	47.4	57.3	71.1	59.3	47.4
45°	33.6	39.5	55.3	39.5	35.6
47.5°	25.7	29.6	41.5	29.6	25.7
50°	19.8	23.7	29.6	23.7	21.7
52.5°	15.8	17.8	23.7	17.8	15.8
55°	11.9	13.8	17.8	13.8	13.8
57.5°	9.9	11.9	13.8	11.9	9.9
60°	5.9	7.9	9.9	7.9	7.9
62.5°	4.0	5.9	7.9	5.9	4.0
65°	2.0	4.0	5.9	4.0	2.0
67.5°	0.0	2.0	2.0	0.0	0.0



TEST NUMBER: P401964

CATALOG NUMBER: LA1MR102D010 EA1M102309030SC1MW

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	2.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)