

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: P401960

Luminaire Tested: **LA1MR102D010 EA1M102309027SC1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P401960
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 EA1M102309027SC1MW
Description: 1 INCH 30° OPTIC WITH SPECULAR CLEAR BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

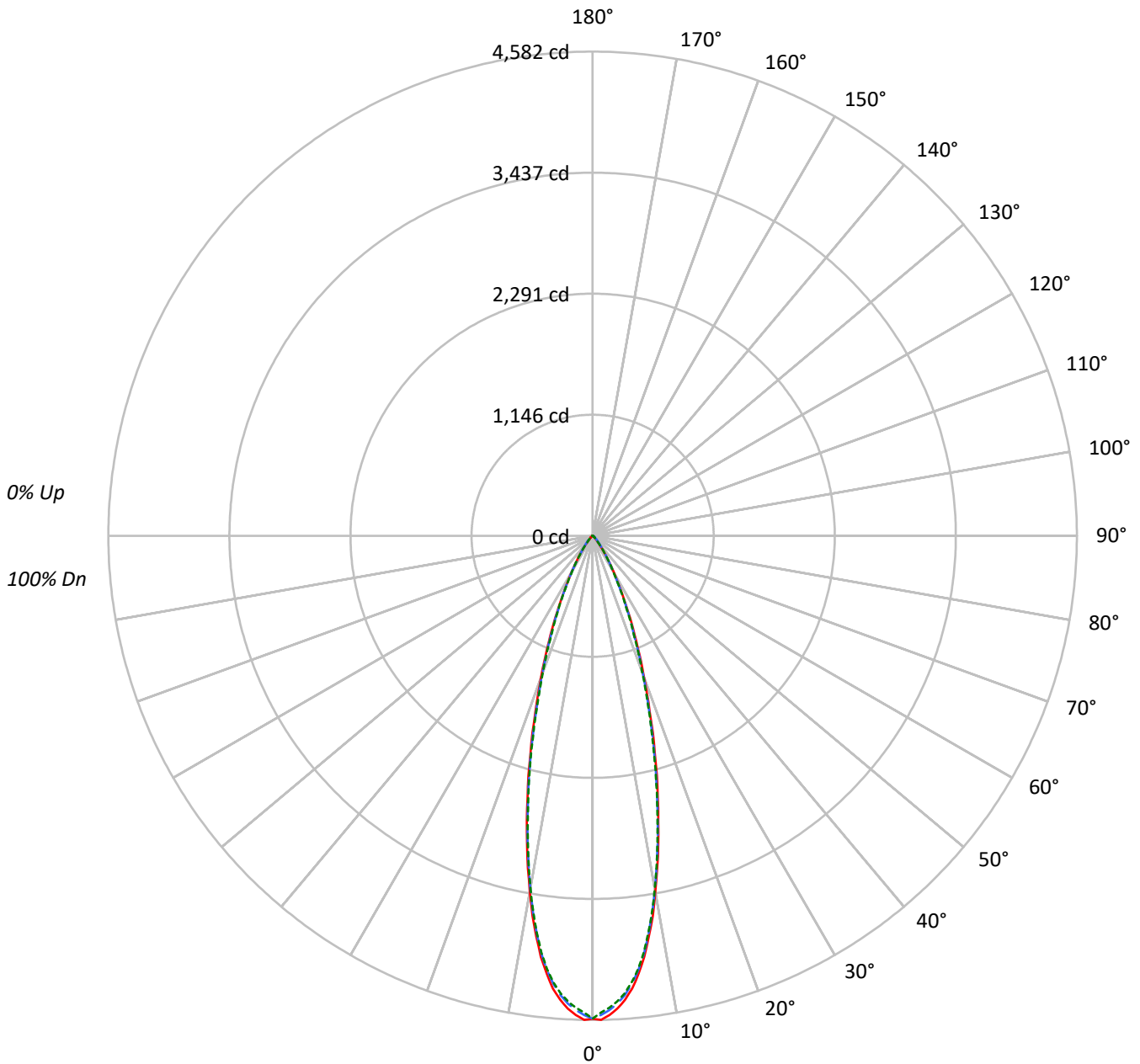
Lumens per Lamp: N/A
Luminaire Lumens: 1557.7 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1416801	1416801	1416801
5°	1338566	1324936	1320580
10°	1076341	1068188	1066929
15°	752887	740114	736904
20°	469740	457897	452652
25°	271792	263617	260197
30°	144723	140427	137564
35°	69331	71601	70088
40°	29015	39497	29825
45°	14862	24463	15695
50°	9597	14420	10562
55°	6432	9674	7513
60°	3720	6200	4960
65°	1467	4401	1467
70°	0	1813	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.5	24.4
10°-20°	633.4	40.7
20°-30°	364.4	23.4
30°-40°	126.8	8.1
40°-50°	36.0	2.3
50°-60°	13.8	0.9
60°-70°	3.8	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°	1377.4	88.4
0°-40°	1504.2	96.6
0°-60°	1553.9	99.8
0°-90°	1557.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1557.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4570	4570	4570	4570	4570	
5°	4302	4276	4258	4266	4244	382
15°	2346	2336	2306	2300	2296	640
25°	795	785	771	767	761	373
35°	183	191	189	189	185	124
45°	34	40	56	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4570.3	4570.3	4570.3	4570.3	4570.3
1°	4582.3	4560.3	4536.5	4536.5	4512.6
2°	4538.4	4518.5	4492.6	4494.6	4468.7
3°	4480.7	4460.8	4434.9	4438.9	4415.0
4°	4401.0	4375.1	4357.2	4363.2	4341.3
5°	4301.5	4275.6	4257.7	4265.6	4243.7
6°	4166.0	4148.1	4132.2	4142.2	4122.2
7°	4014.7	3994.8	3982.8	3990.8	3974.9
8°	3829.5	3815.6	3801.6	3809.6	3793.7
9°	3640.3	3618.4	3604.5	3610.4	3598.5
10°	3419.3	3409.3	3393.4	3399.4	3389.4
11°	3206.2	3206.2	3176.3	3166.4	3172.3
12°	2987.1	2985.1	2957.3	2945.3	2949.3
13°	2766.1	2764.1	2736.2	2726.3	2728.2
14°	2547.0	2549.0	2519.1	2511.2	2509.2
15°	2345.9	2335.9	2306.1	2300.1	2296.1
16°	2134.8	2132.8	2102.9	2095.0	2091.0
17°	1945.6	1935.7	1905.8	1897.8	1891.8
18°	1748.5	1750.5	1720.6	1714.6	1704.7
19°	1581.2	1577.2	1549.3	1543.3	1533.4
20°	1423.9	1405.9	1388.0	1382.0	1372.1
22.5°	1073.4	1063.4	1039.5	1033.5	1031.6
25°	794.6	784.6	770.7	766.7	760.7
26°	695.0	697.0	679.1	675.1	671.1
27°	615.3	611.4	595.4	593.4	587.5
28°	529.7	533.7	515.8	513.8	509.8
29°	462.0	462.0	452.1	446.1	442.1
30°	404.3	402.3	392.3	388.3	384.3
32.5°	278.8	276.8	272.8	270.8	266.9
35°	183.2	191.2	189.2	189.2	185.2
37.5°	113.5	129.4	135.4	133.4	121.5
40°	71.7	83.6	97.6	89.6	73.7
42.5°	47.8	57.8	71.7	59.7	47.8
45°	33.9	39.8	55.8	39.8	35.8
47.5°	25.9	29.9	41.8	29.9	25.9
50°	19.9	23.9	29.9	23.9	21.9
52.5°	15.9	17.9	23.9	17.9	15.9
55°	11.9	13.9	17.9	13.9	13.9
57.5°	10.0	11.9	13.9	11.9	10.0
60°	6.0	8.0	10.0	8.0	8.0
62.5°	4.0	6.0	8.0	6.0	4.0
65°	2.0	4.0	6.0	4.0	2.0
67.5°	0.0	2.0	2.0	0.0	0.0



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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



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— 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)