

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: P402017

Luminaire Tested: **LA1MR012D010 EA1M12309040MMS1MW**

Issue Date: 6/3/2020

Test Information

Test Method: LM-41-14
Report Number: P402017
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: LA1MR012D010 EA1M12309040MMS1MW
Description: 1 INCH 30° OPTIC WITH MATTE METALIC SILVER BAFFLE
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

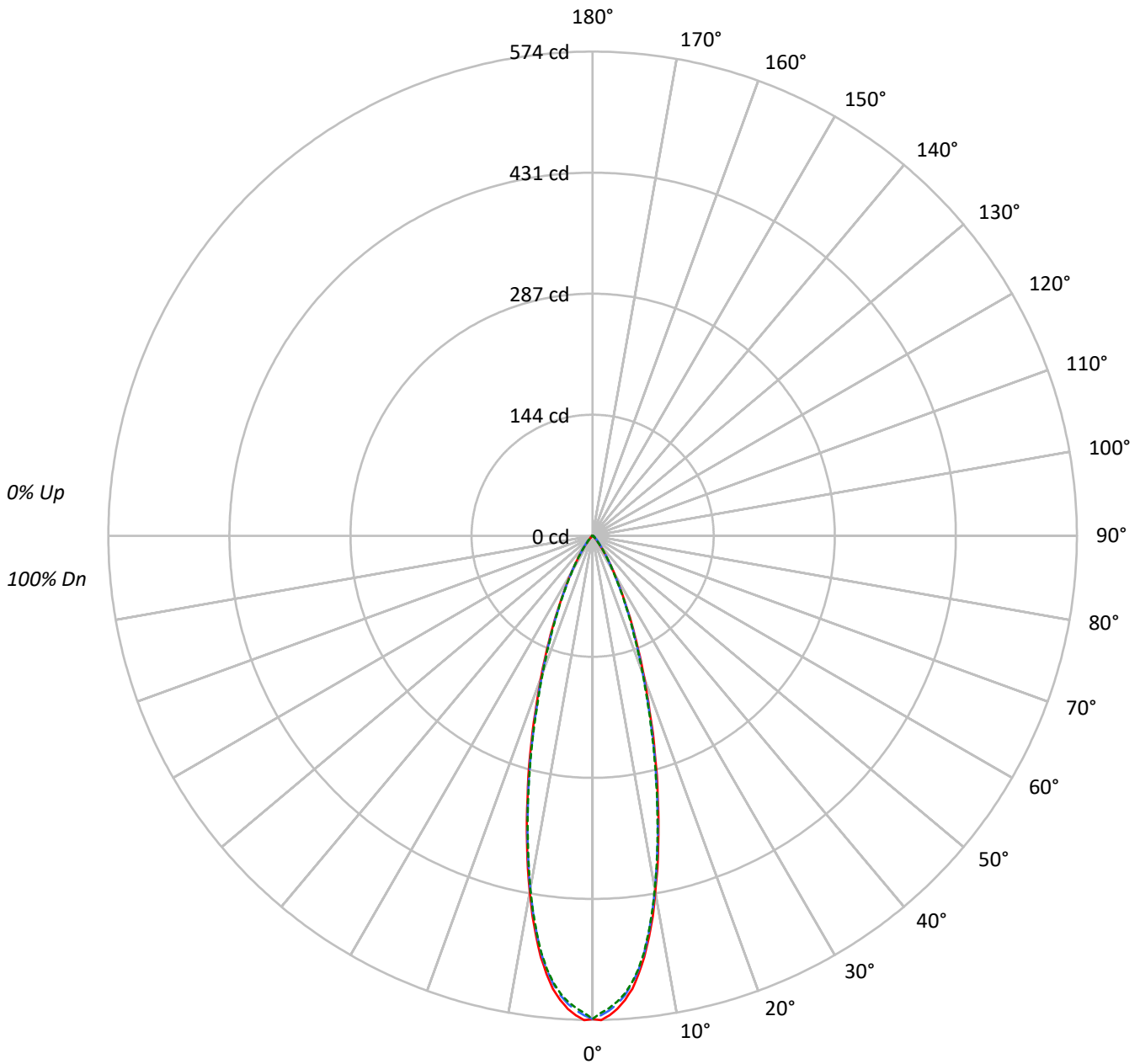
Lumens per Lamp: N/A
Luminaire Lumens: 195.2 lumens
Efficiency: N/A
Efficacy: 54.2 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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: P402017

CATALOG NUMBER: LA1MR012D010 EA1M12309040MMS1MW

Luminous Intensity Polar Plot





TEST NUMBER: P402017

CATALOG NUMBER: LA1MR012D010 EA1M12309040MMS1MW

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	96																			
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	68																			
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°	177600	177600	177600
5°	167791	166080	165520
10°	134916	133878	133720
15°	94356	92751	92366
20°	58887	57402	56742
25°	34068	33042	32631
30°	18149	17612	17254
35°	8704	8969	8780
40°	3642	4937	3723
45°	1841	3069	1973
50°	1206	1784	1302
55°	811	1189	919
60°	434	744	620
65°	147	513	147
70°	0	181	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P402017

CATALOG NUMBER: LA1MR012D010 EA1M12309040MMS1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	24.4
10°-20°	79.4	40.7
20°-30°	45.7	23.4
30°-40°	15.9	8.1
40°-50°	4.5	2.3
50°-60°	1.7	0.9
60°-70°	0.4	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°	172.6	88.5
0°-40°	188.5	96.6
0°-60°	194.7	99.8
0°-90°	195.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	195.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	539	536	534	535	532	48
15°	294	293	289	288	288	80
25°	100	98	97	96	95	47
35°	23	24	24	24	23	16
45°	4	5	7	5	4	4
55°	2	2	2	2	2	1
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P402017

CATALOG NUMBER: LA1MR012D010 EA1M12309040MMS1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	572.9	572.9	572.9	572.9	572.9
1°	574.4	571.6	568.6	568.6	565.6
2°	568.9	566.4	563.1	563.4	560.1
3°	561.6	559.1	555.9	556.4	553.4
4°	551.6	548.4	546.1	546.9	544.2
5°	539.2	535.9	533.7	534.7	531.9
6°	522.2	519.9	517.9	519.2	516.7
7°	503.2	500.7	499.2	500.2	498.2
8°	480.0	478.3	476.5	477.5	475.5
9°	456.3	453.5	451.8	452.5	451.0
10°	428.6	427.3	425.3	426.1	424.8
11°	401.9	401.9	398.1	396.9	397.6
12°	374.4	374.2	370.7	369.2	369.7
13°	346.7	346.5	343.0	341.7	342.0
14°	319.3	319.5	315.8	314.8	314.5
15°	294.0	292.8	289.0	288.3	287.8
16°	267.6	267.3	263.6	262.6	262.1
17°	243.9	242.6	238.9	237.9	237.1
18°	219.2	219.4	215.7	214.9	213.7
19°	198.2	197.7	194.2	193.4	192.2
20°	178.5	176.2	174.0	173.2	172.0
22.5°	134.5	133.3	130.3	129.5	129.3
25°	99.6	98.3	96.6	96.1	95.4
26°	87.1	87.4	85.1	84.6	84.1
27°	77.1	76.6	74.6	74.4	73.6
28°	66.4	66.9	64.6	64.4	63.9
29°	57.9	57.9	56.7	55.9	55.4
30°	50.7	50.4	49.2	48.7	48.2
32.5°	34.9	34.7	34.2	33.9	33.4
35°	23.0	24.0	23.7	23.7	23.2
37.5°	14.2	16.2	17.0	16.7	15.2
40°	9.0	10.5	12.2	11.2	9.2
42.5°	6.0	7.2	9.0	7.5	6.0
45°	4.2	5.0	7.0	5.0	4.5
47.5°	3.2	3.7	5.2	3.7	3.2
50°	2.5	3.0	3.7	3.0	2.7
52.5°	2.0	2.2	3.0	2.2	2.0
55°	1.5	1.7	2.2	1.7	1.7
57.5°	1.2	1.5	1.7	1.5	1.2
60°	0.7	1.0	1.2	1.0	1.0
62.5°	0.5	0.7	1.0	0.7	0.5
65°	0.2	0.5	0.7	0.5	0.2
67.5°	0.0	0.2	0.2	0.0	0.0



TEST NUMBER: P402017

CATALOG NUMBER: LA1MR012D010 EA1M12309040MMS1MW

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	0.2	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)