

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: P402258

Luminaire Tested: **LD1MR022D010 ED1M22309040MW1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402258  
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: LD1MR022D010 ED1M22309040MW1MW  
Description: 1 INCH 30° OPTIC WITH MATTE WHITE BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

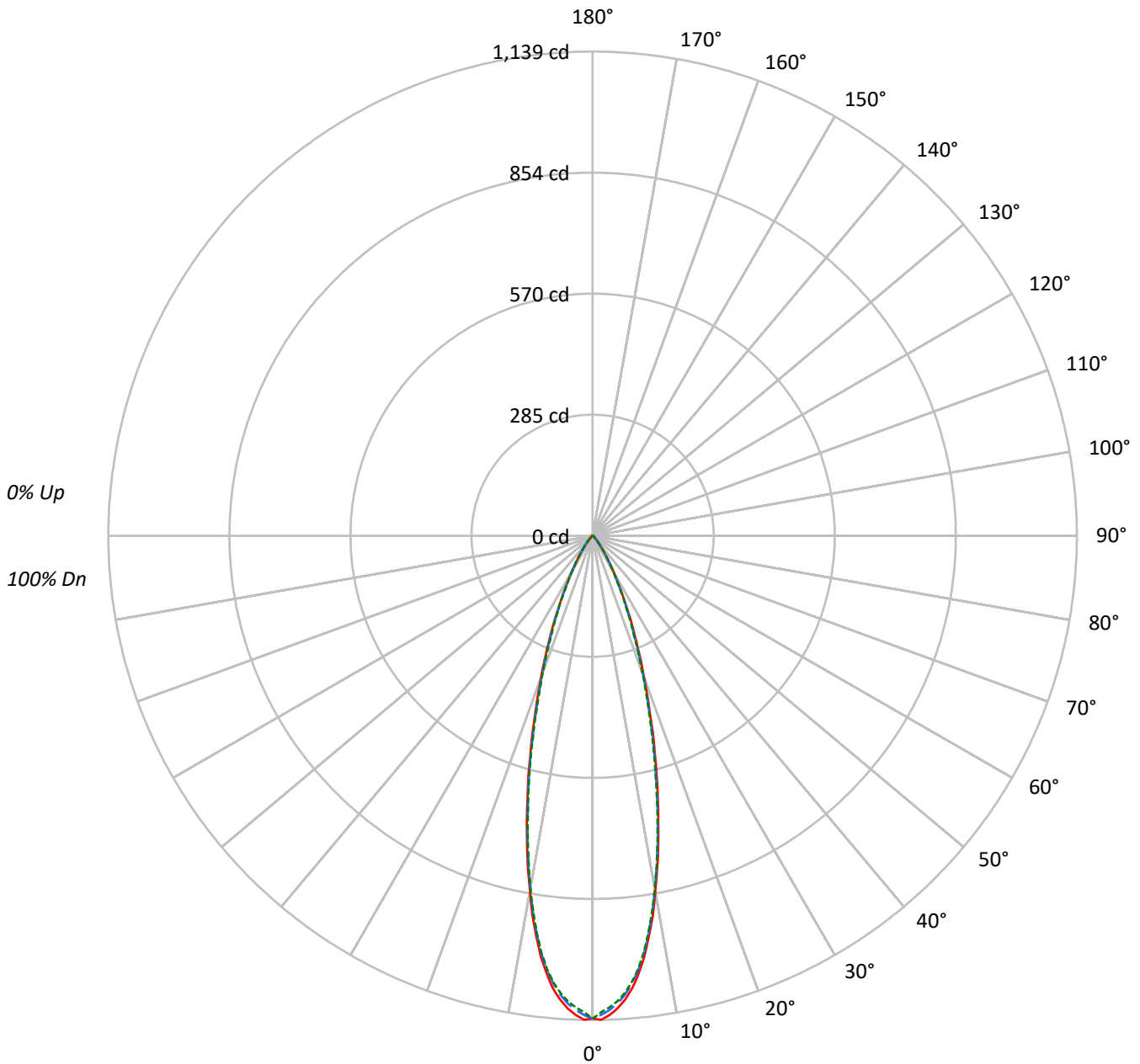
Lumens per Lamp: N/A  
Luminaire Lumens: 387.2 lumens  
Efficiency: N/A  
Efficacy: 67.9 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 5.7  
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																	
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	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°	352131	352131	352131
5°	332689	329297	328208
10°	267503	265489	265174
15°	187107	183929	183159
20°	116751	113814	112495
25°	67555	65502	64681
30°	35975	34901	34185
35°	17219	17787	17408
40°	7203	9834	7406
45°	3683	6094	3902
50°	2363	3569	2604
55°	1621	2432	1892
60°	930	1550	1240
65°	367	1100	367
70°	0	453	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.3	24.4
10°-20°	157.4	40.7
20°-30°	90.6	23.4
30°-40°	31.5	8.1
40°-50°	8.9	2.3
50°-60°	3.4	0.9
60°-70°	0.9	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°	342.3	88.4
0°-40°	373.9	96.6
0°-60°	386.2	99.8
0°-90°	387.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	387.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1069	1063	1058	1060	1055	95
15°	583	581	573	572	571	159
25°	198	195	192	191	189	93
35°	46	48	47	47	46	31
45°	8	10	14	10	9	7
55°	3	4	4	4	4	3
65°	0	1	2	1	0	1
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°	1135.9	1135.9	1135.9	1135.9	1135.9
1°	1138.8	1133.4	1127.5	1127.5	1121.5
2°	1128.0	1123.0	1116.6	1117.1	1110.6
3°	1113.6	1108.7	1102.2	1103.2	1097.3
4°	1093.8	1087.4	1082.9	1084.4	1079.0
5°	1069.1	1062.6	1058.2	1060.2	1054.7
6°	1035.4	1031.0	1027.0	1029.5	1024.5
7°	997.8	992.8	989.9	991.9	987.9
8°	951.8	948.3	944.8	946.8	942.9
9°	904.7	899.3	895.8	897.3	894.3
10°	849.8	847.3	843.4	844.9	842.4
11°	796.8	796.8	789.4	786.9	788.4
12°	742.4	741.9	735.0	732.0	733.0
13°	687.5	687.0	680.0	677.6	678.1
14°	633.0	633.5	626.1	624.1	623.6
15°	583.0	580.6	573.1	571.7	570.7
16°	530.6	530.1	522.7	520.7	519.7
17°	483.6	481.1	473.7	471.7	470.2
18°	434.6	435.0	427.6	426.1	423.7
19°	393.0	392.0	385.1	383.6	381.1
20°	353.9	349.4	345.0	343.5	341.0
22.5°	266.8	264.3	258.4	256.9	256.4
25°	197.5	195.0	191.5	190.6	189.1
26°	172.7	173.2	168.8	167.8	166.8
27°	152.9	151.9	148.0	147.5	146.0
28°	131.7	132.6	128.2	127.7	126.7
29°	114.8	114.8	112.4	110.9	109.9
30°	100.5	100.0	97.5	96.5	95.5
32.5°	69.3	68.8	67.8	67.3	66.3
35°	45.5	47.5	47.0	47.0	46.0
37.5°	28.2	32.2	33.7	33.2	30.2
40°	17.8	20.8	24.3	22.3	18.3
42.5°	11.9	14.4	17.8	14.8	11.9
45°	8.4	9.9	13.9	9.9	8.9
47.5°	6.4	7.4	10.4	7.4	6.4
50°	4.9	5.9	7.4	5.9	5.4
52.5°	4.0	4.5	5.9	4.5	4.0
55°	3.0	3.5	4.5	3.5	3.5
57.5°	2.5	3.0	3.5	3.0	2.5
60°	1.5	2.0	2.5	2.0	2.0
62.5°	1.0	1.5	2.0	1.5	1.0
65°	0.5	1.0	1.5	1.0	0.5
67.5°	0.0	0.5	0.5	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



Report Generated By E9808895 / USPTCWHP6082093







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







70°	0.0	0.0	0.5	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)