

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: P402431

Luminaire Tested: **LD1MRT102D010TR309035SB1MW**

Issue Date: 6/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P402431  
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: LD1MRT102D010TR309035SB1MW  
Description: 1 INCH 30° OPTIC WITH SPECULAR BLACK BAFFLE  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

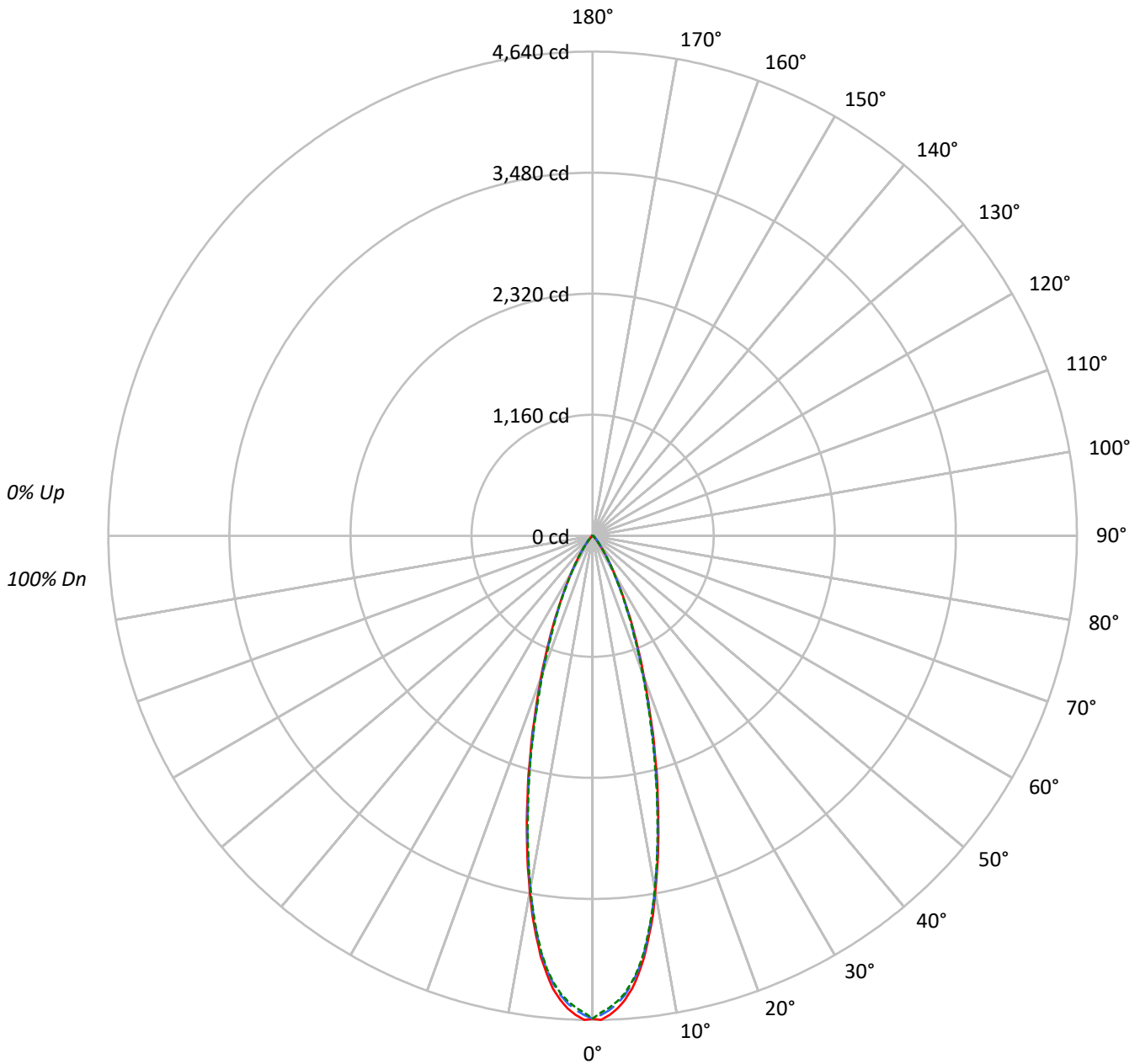
Lumens per Lamp: N/A  
Luminaire Lumens: 1577.4 lumens  
Efficiency: N/A  
Efficacy: 67.1 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.5 / 0.52  
Luminous Opening: Rectangular (W 0.08' x L: 0.42' x H: 0')  
CIE Type: Direct

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									
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°	1434719	1434719	1434719
5°	1355495	1341678	1337290
10°	1089940	1081692	1080433
15°	762419	749453	746212
20°	475678	463703	458359
25°	275213	266935	263480
30°	146548	142217	139318
35°	70201	72510	70958
40°	29380	39982	30189
45°	15037	24770	15914
50°	9742	14565	10707
55°	6540	9783	7621
60°	3720	6262	5022
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°	384.3	24.4
10°-20°	641.5	40.7
20°-30°	369.0	23.4
30°-40°	128.4	8.1
40°-50°	36.4	2.3
50°-60°	13.9	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°	1394.8	88.4
0°-40°	1523.2	96.6
0°-60°	1573.6	99.8
0°-90°	1577.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4628	4628	4628	4628	4628	
5°	4356	4330	4312	4320	4297	387
15°	2376	2366	2335	2329	2325	648
25°	805	794	780	776	770	377
35°	186	194	192	192	188	125
45°	34	40	56	40	36	30
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°	4628.1	4628.1	4628.1	4628.1	4628.1
1°	4640.2	4618.0	4593.8	4593.8	4569.6
2°	4595.8	4575.7	4549.5	4551.5	4525.3
3°	4537.4	4517.2	4491.0	4495.0	4470.8
4°	4456.7	4430.5	4412.3	4418.4	4396.2
5°	4355.9	4329.7	4311.5	4319.6	4297.4
6°	4218.7	4200.6	4184.5	4194.5	4174.4
7°	4065.5	4045.3	4033.2	4041.3	4025.1
8°	3877.9	3863.8	3849.7	3857.8	3841.6
9°	3686.4	3664.2	3650.1	3656.1	3644.0
10°	3462.5	3452.4	3436.3	3442.3	3432.3
11°	3246.7	3246.7	3216.5	3206.4	3212.5
12°	3024.9	3022.9	2994.7	2982.6	2986.6
13°	2801.1	2799.1	2770.8	2760.7	2762.8
14°	2579.2	2581.3	2551.0	2542.9	2540.9
15°	2375.6	2365.5	2335.2	2329.2	2325.1
16°	2161.8	2159.8	2129.5	2121.5	2117.4
17°	1970.2	1960.1	1929.9	1921.8	1915.8
18°	1770.6	1772.6	1742.3	1736.3	1726.2
19°	1601.2	1597.2	1568.9	1562.9	1552.8
20°	1441.9	1423.7	1405.6	1399.5	1389.4
22.5°	1087.0	1076.9	1052.7	1046.6	1044.6
25°	804.6	794.5	780.4	776.4	770.3
26°	703.8	705.8	687.7	683.6	679.6
27°	623.1	619.1	603.0	600.9	594.9
28°	536.4	540.5	522.3	520.3	516.3
29°	467.9	467.9	457.8	451.7	447.7
30°	409.4	407.4	397.3	393.2	389.2
32.5°	282.3	280.3	276.3	274.3	270.2
35°	185.5	193.6	191.6	191.6	187.5
37.5°	114.9	131.1	137.1	135.1	123.0
40°	72.6	84.7	98.8	90.7	74.6
42.5°	48.4	58.5	72.6	60.5	48.4
45°	34.3	40.3	56.5	40.3	36.3
47.5°	26.2	30.2	42.3	30.2	26.2
50°	20.2	24.2	30.2	24.2	22.2
52.5°	16.1	18.1	24.2	18.1	16.1
55°	12.1	14.1	18.1	14.1	14.1
57.5°	10.1	12.1	14.1	12.1	10.1
60°	6.0	8.1	10.1	8.1	8.1
62.5°	4.0	6.0	8.1	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)