

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: P431169

Luminaire Tested: **LAMR4B112R659035DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-22)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B112R659035DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1235.7 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

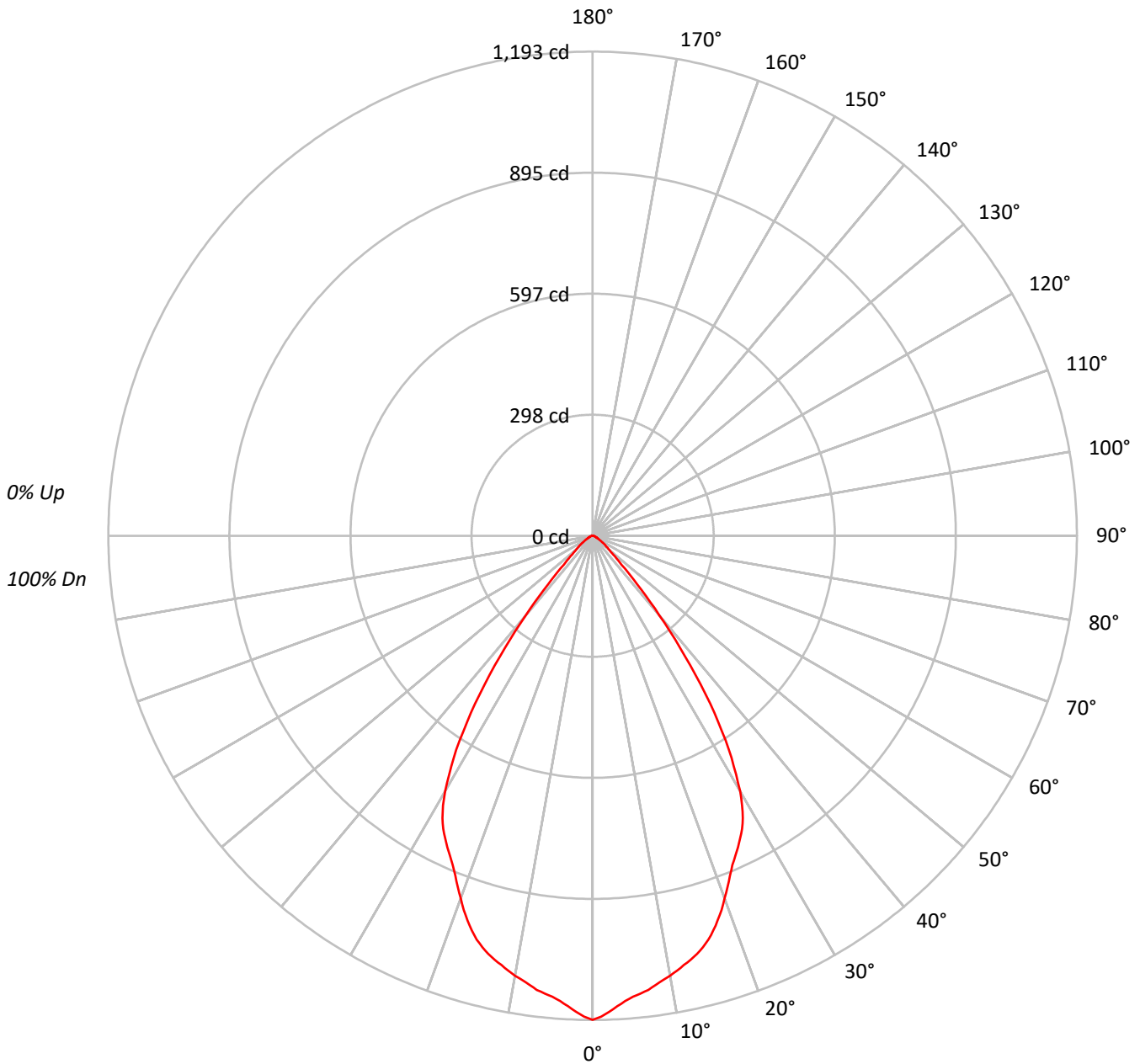
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50	50	50	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47	47	47	47

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	588503
5°	564750
10°	551390
15°	535966
20°	499159
25°	461039
30°	413891
35°	304044
40°	164236
45°	70612
50°	39299
55°	27526
60°	17663
65°	13426
70°	11108
75°	9722
80°	10797
85°	7359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.8	8.7
10°-20°	292.8	23.7
20°-30°	388.1	31.4
30°-40°	307.4	24.9
40°-50°	91.5	7.4
50°-60°	29.3	2.4
60°-70°	11.7	0.9
70°-80°	5.6	0.4
80°-90°	1.6	0.1
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°	788.7	63.8
0°-40°	1096.1	88.7
0°-60°	1216.9	98.5
0°-90°	1235.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1193	
5°	1140	108
15°	1049	293
25°	847	388
35°	505	307
45°	101	92
55°	32	29
65°	12	12
75°	5	6
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1192.8
1°	1185.1
2°	1173.6
3°	1160.8
4°	1149.3
5°	1140.3
6°	1133.9
7°	1127.5
8°	1117.2
9°	1108.3
10°	1100.6
11°	1091.6
12°	1081.4
13°	1072.4
14°	1062.1
15°	1049.3
16°	1035.2
17°	1017.3
18°	996.8
19°	975.0
20°	950.7
21°	927.6
22°	903.3
23°	881.5
24°	863.6
25°	846.9
26°	829.0
27°	811.0
28°	788.0
29°	759.8
30°	726.5
32.5°	625.2
35°	504.8
37.5°	374.1
40°	255.0
42.5°	161.4
45°	101.2
47.5°	67.9
50°	51.2
52.5°	41.0
55°	32.0
57.5°	24.3
60°	17.9



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	9.0
70°	7.7
72.5°	6.4
75°	5.1
77.5°	3.8
80°	3.8
82.5°	2.6
85°	1.3
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		14.1
65°		11.5



(END OF REPORT)