

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: P431175

Luminaire Tested: **LAMR4B112R659050DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431175  
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: LAMR4B112R659050DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1215.4 lumens  
Efficiency: N/A  
Efficacy: 85.0 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

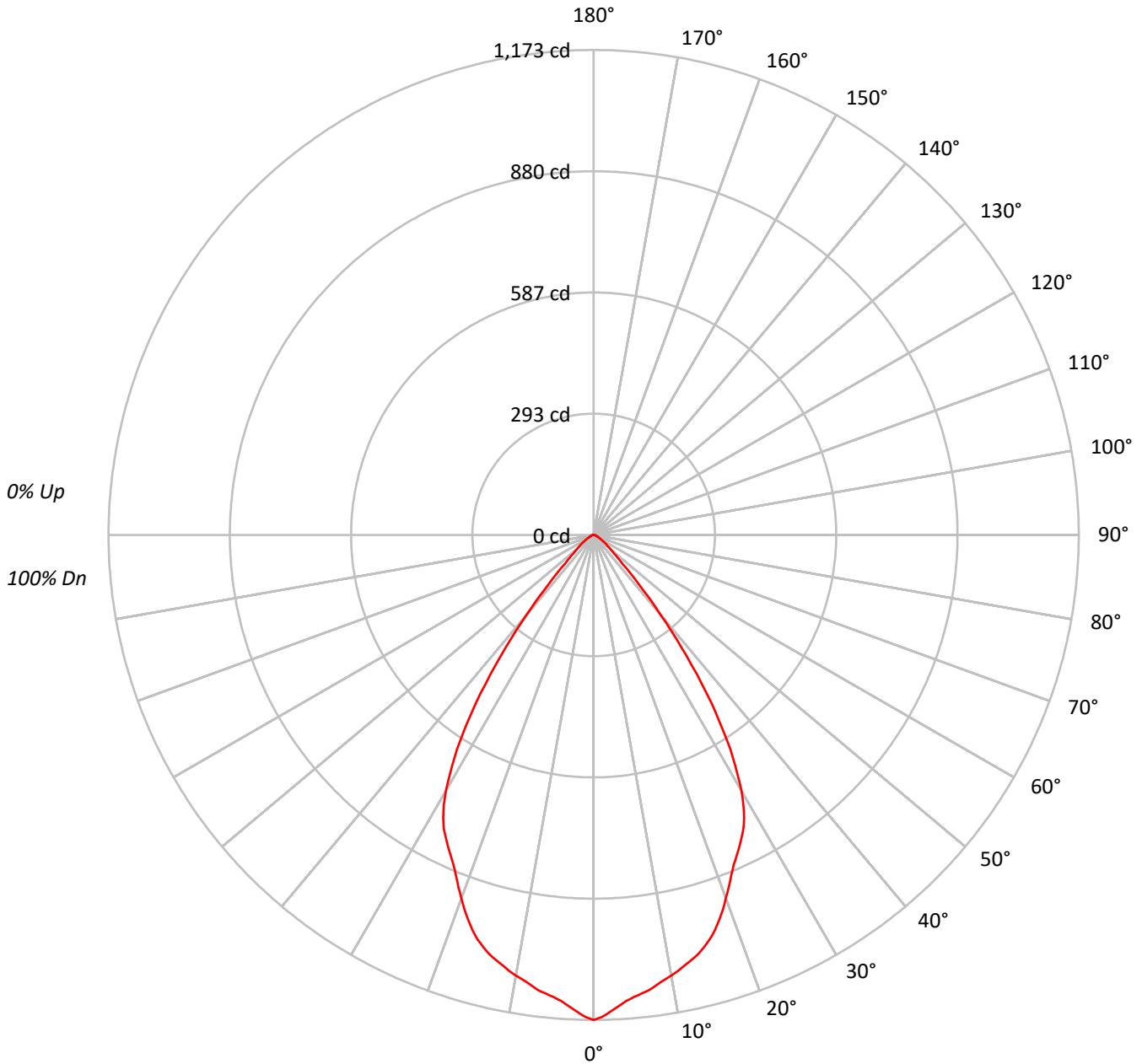
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	578833
5°	555439
10°	542272
15°	527129
20°	490916
25°	453418
30°	407055
35°	299045
40°	161531
45°	69426
50°	38685
55°	27096
60°	17367
65°	13192
70°	10963
75°	9531
80°	10797
85°	7359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	8.7
10°-20°	288.0	23.7
20°-30°	381.7	31.4
30°-40°	302.3	24.9
40°-50°	90.0	7.4
50°-60°	28.8	2.4
60°-70°	11.5	0.9
70°-80°	5.5	0.5
80°-90°	1.5	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°	775.7	63.8
0°-40°	1078.0	88.7
0°-60°	1196.9	98.5
0°-90°	1215.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1173	
5°	1122	106
15°	1032	288
25°	833	382
35°	496	302
45°	100	90
55°	32	29
65°	11	12
75°	5	5
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1173.2
1°	1165.6
2°	1154.3
3°	1141.7
4°	1130.3
5°	1121.5
6°	1115.2
7°	1108.9
8°	1098.8
9°	1090.0
10°	1082.4
11°	1073.6
12°	1063.5
13°	1054.7
14°	1044.6
15°	1032.0
16°	1018.2
17°	1000.5
18°	980.4
19°	958.9
20°	935.0
21°	912.3
22°	888.4
23°	867.0
24°	849.3
25°	832.9
26°	815.3
27°	797.7
28°	775.0
29°	747.2
30°	714.5
32.5°	614.9
35°	496.5
37.5°	368.0
40°	250.8
42.5°	158.8
45°	99.5
47.5°	66.8
50°	50.4
52.5°	40.3
55°	31.5
57.5°	23.9
60°	17.6



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	8.8
70°	7.6
72.5°	6.3
75°	5.0
77.5°	3.8
80°	3.8
82.5°	2.5
85°	1.3
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		13.9
65°		11.3



(END OF REPORT)