

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: P431166

Luminaire Tested: **LAMR4B112R659030DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431166  
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: LAMR4B112R659030DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1143.6 lumens  
Efficiency: N/A  
Efficacy: 80.0 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

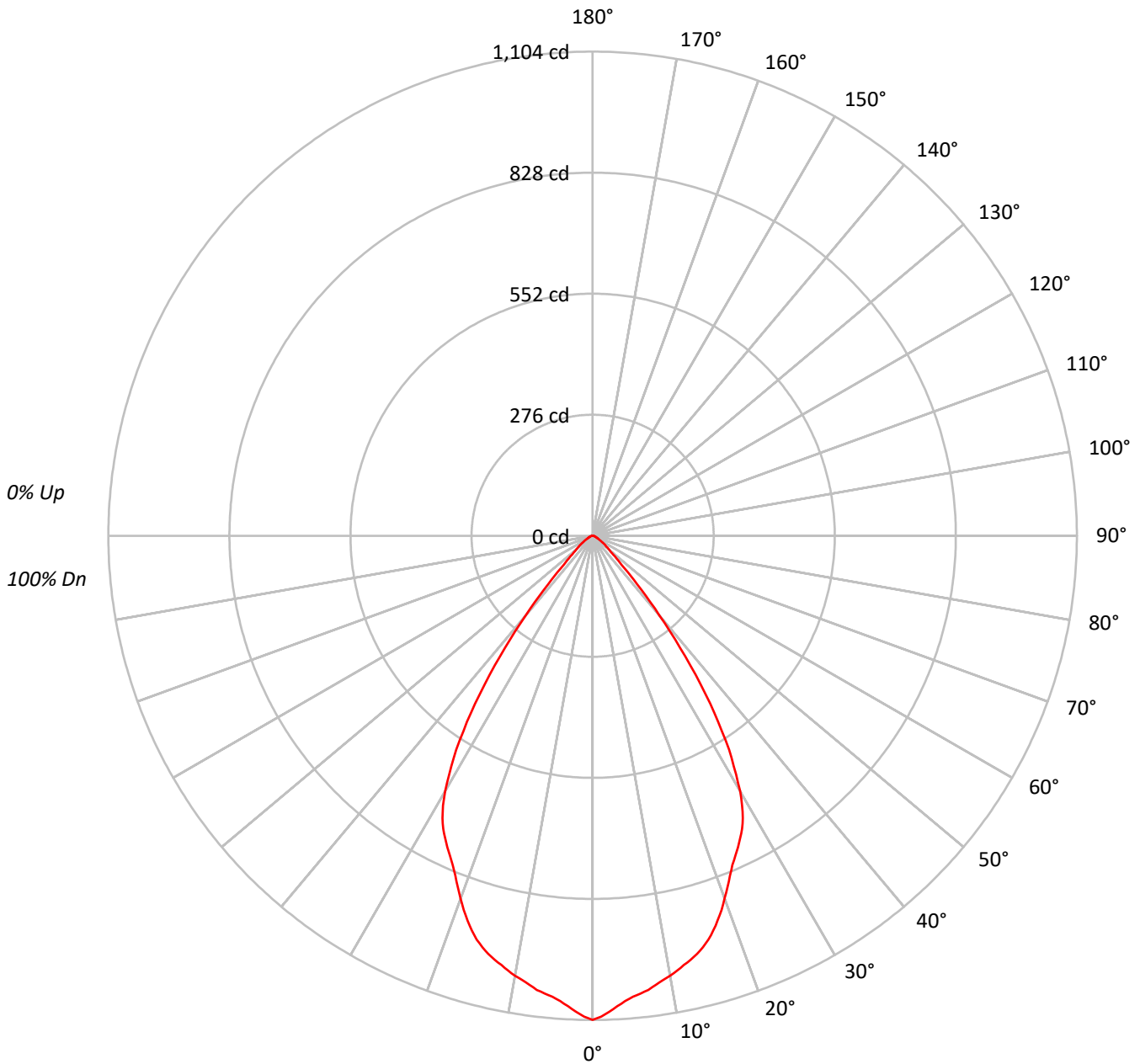
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	544642
5°	522652
10°	510259
15°	496022
20°	461933
25°	426634
30°	383013
35°	281397
40°	151998
45°	65379
50°	36382
55°	25461
60°	16380
65°	12492
70°	10242
75°	8959
80°	10229
85°	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	8.7
10°-20°	271.0	23.7
20°-30°	359.2	31.4
30°-40°	284.5	24.9
40°-50°	84.7	7.4
50°-60°	27.1	2.4
60°-70°	10.8	0.9
70°-80°	5.2	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°	729.9	63.8
0°-40°	1014.3	88.7
0°-60°	1126.2	98.5
0°-90°	1143.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1143.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1104	
5°	1055	100
15°	971	271
25°	784	359
35°	467	284
45°	94	85
55°	30	27
65°	11	11
75°	5	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1103.9
1°	1096.8
2°	1086.1
3°	1074.2
4°	1063.6
5°	1055.3
6°	1049.3
7°	1043.4
8°	1033.9
9°	1025.6
10°	1018.5
11°	1010.2
12°	1000.7
13°	992.4
14°	982.9
15°	971.1
16°	958.0
17°	941.4
18°	922.5
19°	902.3
20°	879.8
21°	858.4
22°	835.9
23°	815.8
24°	799.2
25°	783.7
26°	767.1
27°	750.5
28°	729.2
29°	703.1
30°	672.3
32.5°	578.6
35°	467.2
37.5°	346.2
40°	236.0
42.5°	149.4
45°	93.7
47.5°	62.8
50°	47.4
52.5°	37.9
55°	29.6
57.5°	22.5
60°	16.6



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	8.3
70°	7.1
72.5°	5.9
75°	4.7
77.5°	3.6
80°	3.6
82.5°	2.4
85°	1.2
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		<i>13.0</i>
65°		<i>10.7</i>



(END OF REPORT)