

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: P431170

Luminaire Tested: **LAMR4B112R659040DE010x1MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431170  
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: LAMR4B112R659040DE010x1MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1249.4 lumens  
Efficiency: N/A  
Efficacy: 87.4 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

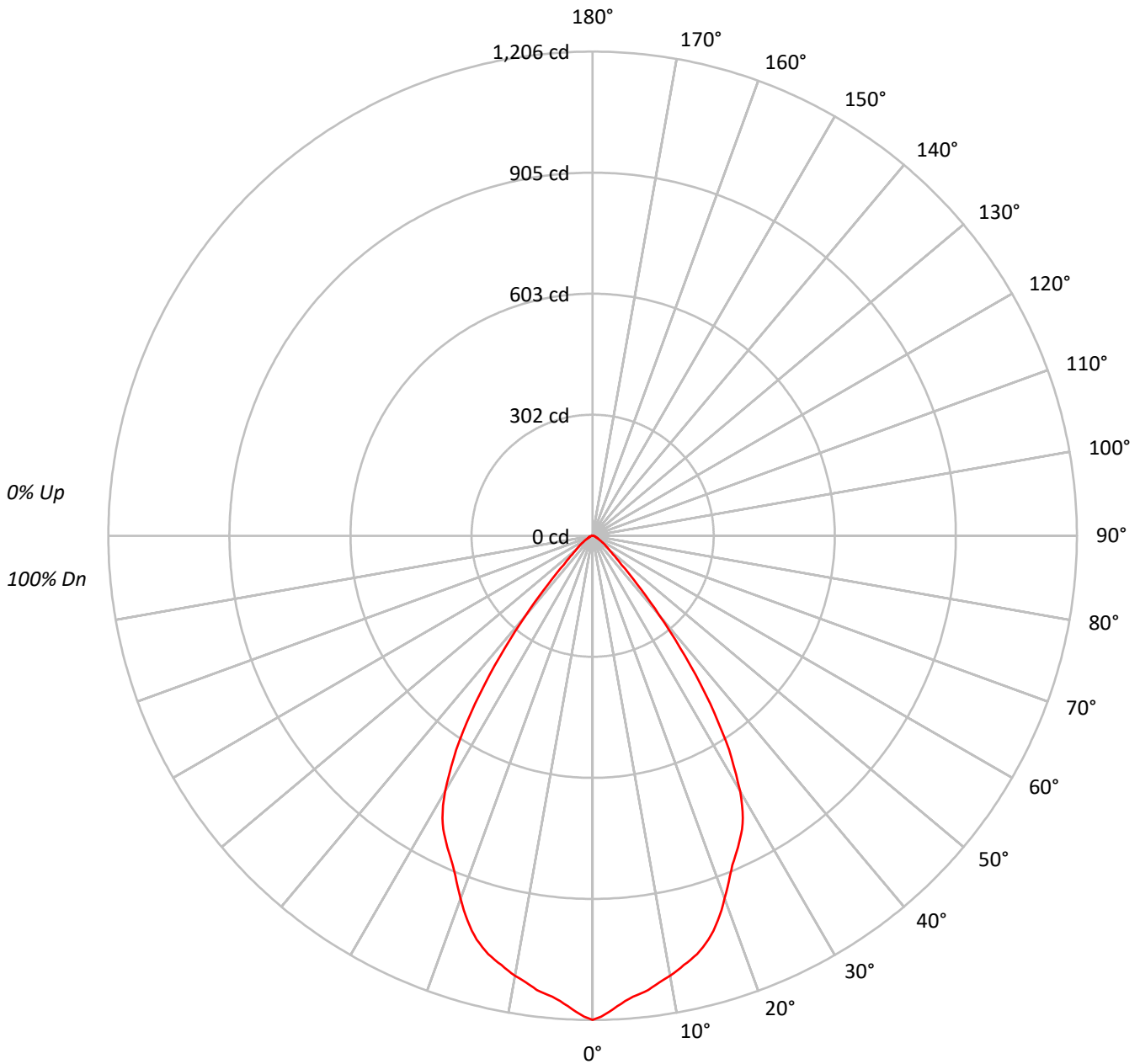
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	81	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°	594966
5°	570941
10°	557452
15°	541891
20°	504619
25°	466102
30°	418392
35°	307417
40°	166039
45°	71379
50°	39760
55°	27870
60°	17860
65°	13659
70°	11252
75°	9913
80°	11081
85°	7359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	8.7
10°-20°	296.0	23.7
20°-30°	392.4	31.4
30°-40°	310.8	24.9
40°-50°	92.6	7.4
50°-60°	29.6	2.4
60°-70°	11.8	0.9
70°-80°	5.7	0.5
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°	797.4	63.8
0°-40°	1108.1	88.7
0°-60°	1230.3	98.5
0°-90°	1249.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1206	
5°	1153	109
15°	1061	296
25°	856	392
35°	510	311
45°	102	93
55°	32	30
65°	12	12
75°	5	6
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1205.9
1°	1198.2
2°	1186.5
3°	1173.6
4°	1161.9
5°	1152.8
6°	1146.4
7°	1139.9
8°	1129.5
9°	1120.4
10°	1112.7
11°	1103.6
12°	1093.2
13°	1084.2
14°	1073.8
15°	1060.9
16°	1046.6
17°	1028.5
18°	1007.8
19°	985.7
20°	961.1
21°	937.8
22°	913.2
23°	891.2
24°	873.0
25°	856.2
26°	838.1
27°	819.9
28°	796.6
29°	768.1
30°	734.4
32.5°	632.1
35°	510.4
37.5°	378.2
40°	257.8
42.5°	163.2
45°	102.3
47.5°	68.7
50°	51.8
52.5°	41.5
55°	32.4
57.5°	24.6
60°	18.1



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	9.1
70°	7.8
72.5°	6.5
75°	5.2
77.5°	3.9
80°	3.9
82.5°	2.6
85°	1.3
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		14.2
65°		11.7



(END OF REPORT)