

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: P431022

Luminaire Tested: **LAMR4B112R359030DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-6)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B112R359030DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1174.5 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 0.57 / 0.57 / 0.51  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

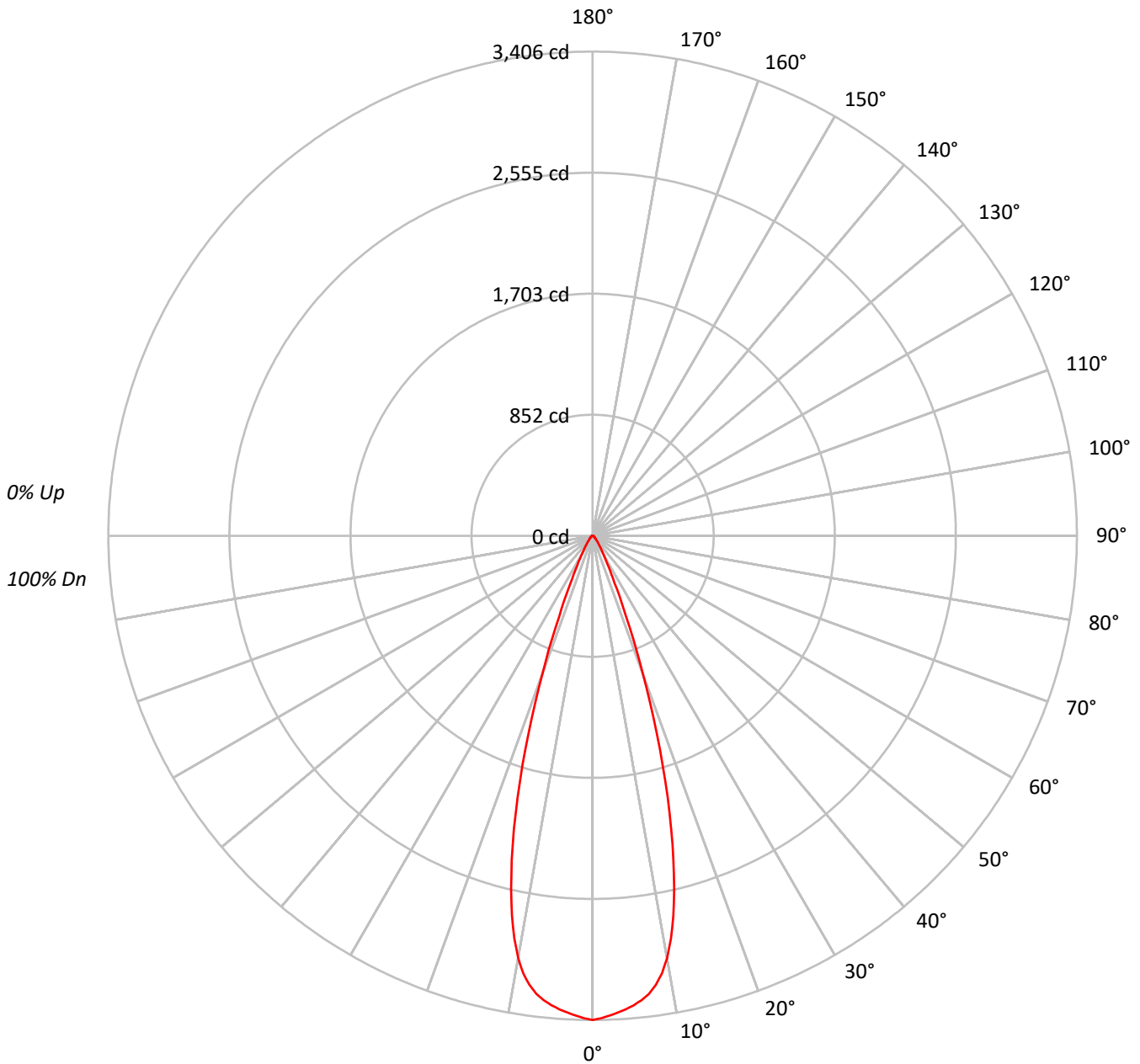
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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	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	96																											
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91																											
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87																											
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84																											
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81																											
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78																											
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75																											
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72																											
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70																											
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68																											

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

	0°
0°	1680697
5°	1641949
10°	1511038
15°	1092107
20°	539535
25°	197938
30°	89216
35°	48606
40°	30142
45°	20374
50°	15274
55°	13075
60°	11545
65°	10974
70°	10098
75°	8959
80°	9944
85°	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	308.1	26.2
10°-20°	563.0	47.9
20°-30°	196.0	16.7
30°-40°	54.3	4.6
40°-50°	23.6	2.0
50°-60°	13.7	1.2
60°-70°	9.3	0.8
70°-80°	5.1	0.4
80°-90°	1.4	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°	1067.1	90.9
0°-40°	1121.4	95.5
0°-60°	1158.7	98.7
0°-90°	1174.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1174.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3406	
5°	3315	308
15°	2138	563
25°	364	196
35°	81	54
45°	29	24
55°	15	14
65°	9	9
75°	5	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3406.5
1°	3394.8
2°	3377.3
3°	3359.8
4°	3339.9
5°	3315.3
6°	3284.9
7°	3247.5
8°	3190.3
9°	3116.6
10°	3016.1
11°	2887.5
12°	2732.0
13°	2549.6
14°	2349.7
15°	2138.1
16°	1912.5
17°	1685.7
18°	1457.8
19°	1238.0
20°	1027.6
22.5°	612.6
25°	363.6
26°	302.8
27°	252.5
28°	213.9
29°	182.4
30°	156.6
32.5°	111.1
35°	80.7
37.5°	60.8
40°	46.8
42.5°	36.2
45°	29.2
47.5°	24.5
50°	19.9
52.5°	17.5
55°	15.2
57.5°	12.9
60°	11.7
62.5°	10.5
65°	9.4
67.5°	8.2



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	4.7
77.5°	3.5
80°	3.5
82.5°	2.3
85°	1.2
87.5°	0.0
90°	0.0



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— 0°-180°







70°	7.0
72.5°	5.8



(END OF REPORT)