

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: P431017

Luminaire Tested: **LAMR4B112R359027DE010x1MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431017  
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: LAMR4B112R359027DE010x1MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1120.4 lumens  
Efficiency: N/A  
Efficacy: 78.4 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

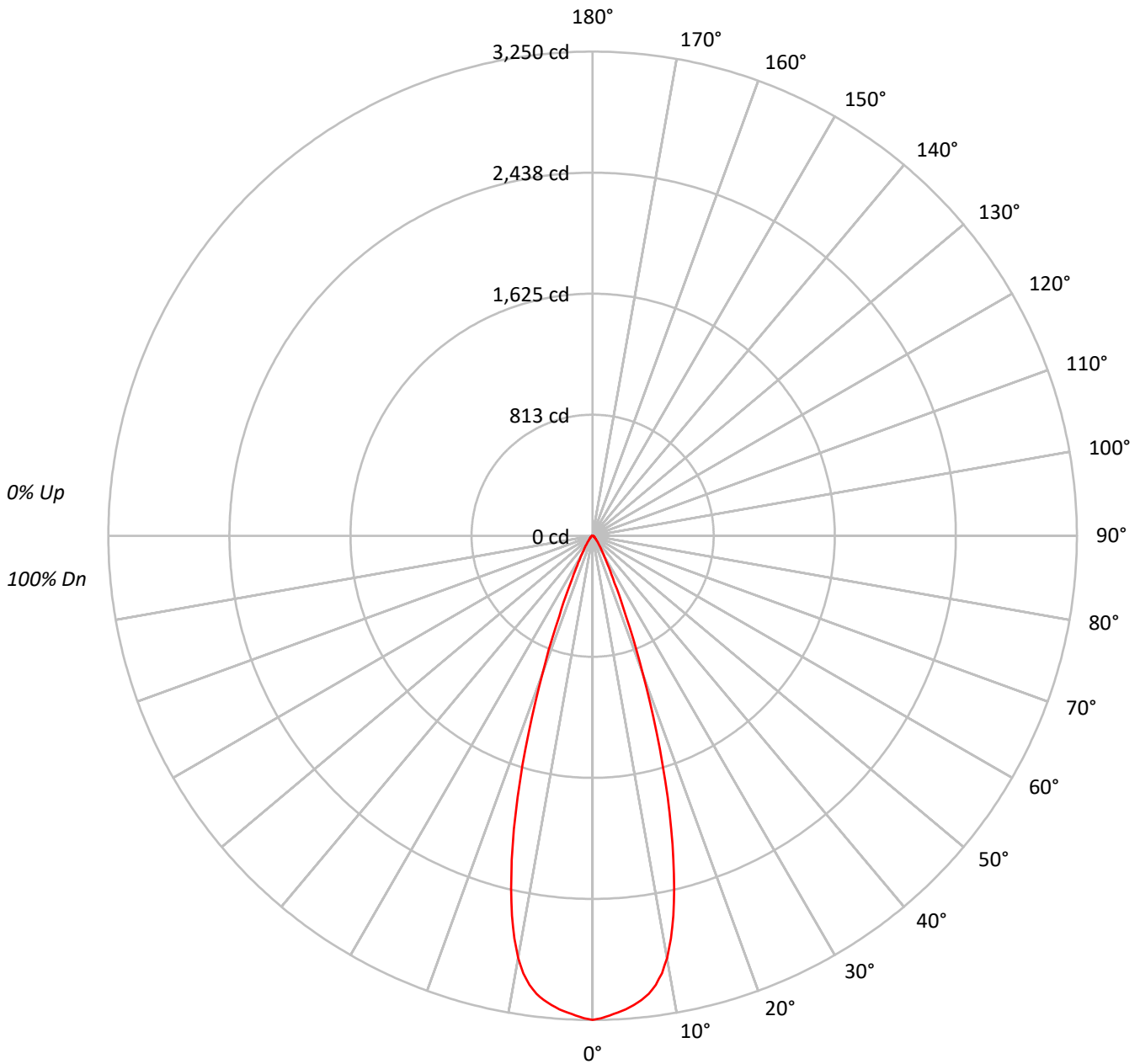
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87	87	87	87
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84	84	84	84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81	81	81	81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78	78	78	78
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75	75	75	75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72	72	72	72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70	70	70	70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68	68	68	68

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

	0°
0°	1603385
5°	1566422
10°	1441501
15°	1041897
20°	514700
25°	188792
30°	85114
35°	46378
40°	28725
45°	19467
50°	14584
55°	12473
60°	11052
65°	10390
70°	9665
75°	8578
80°	9376
85°	6227



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.9	26.2
10°-20°	537.1	47.9
20°-30°	187.0	16.7
30°-40°	51.8	4.6
40°-50°	22.5	2.0
50°-60°	13.1	1.2
60°-70°	8.8	0.8
70°-80°	4.9	0.4
80°-90°	1.3	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°	1018.0	90.9
0°-40°	1069.8	95.5
0°-60°	1105.4	98.7
0°-90°	1120.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3250	
5°	3163	294
15°	2040	537
25°	347	187
35°	77	52
45°	28	23
55°	14	13
65°	9	9
75°	4	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3249.8
1°	3238.6
2°	3221.9
3°	3205.2
4°	3186.2
5°	3162.8
6°	3133.8
7°	3098.1
8°	3043.5
9°	2973.2
10°	2877.3
11°	2754.6
12°	2606.3
13°	2432.3
14°	2241.6
15°	2039.8
16°	1824.5
17°	1608.2
18°	1390.7
19°	1181.0
20°	980.3
22.5°	584.4
25°	346.8
26°	288.8
27°	240.9
28°	204.1
29°	174.0
30°	149.4
32.5°	105.9
35°	77.0
37.5°	58.0
40°	44.6
42.5°	34.6
45°	27.9
47.5°	23.4
50°	19.0
52.5°	16.7
55°	14.5
57.5°	12.3
60°	11.2
62.5°	10.0
65°	8.9
67.5°	7.8



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	4.5
77.5°	3.3
80°	3.3
82.5°	2.2
85°	1.1
87.5°	0.0
90°	0.0



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— 0°-180°







70°	6.7
72.5°	5.6



(END OF REPORT)