

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: P431295

Luminaire Tested: **LAMR4B212R309050DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431295  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B212R309050DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2470.2 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

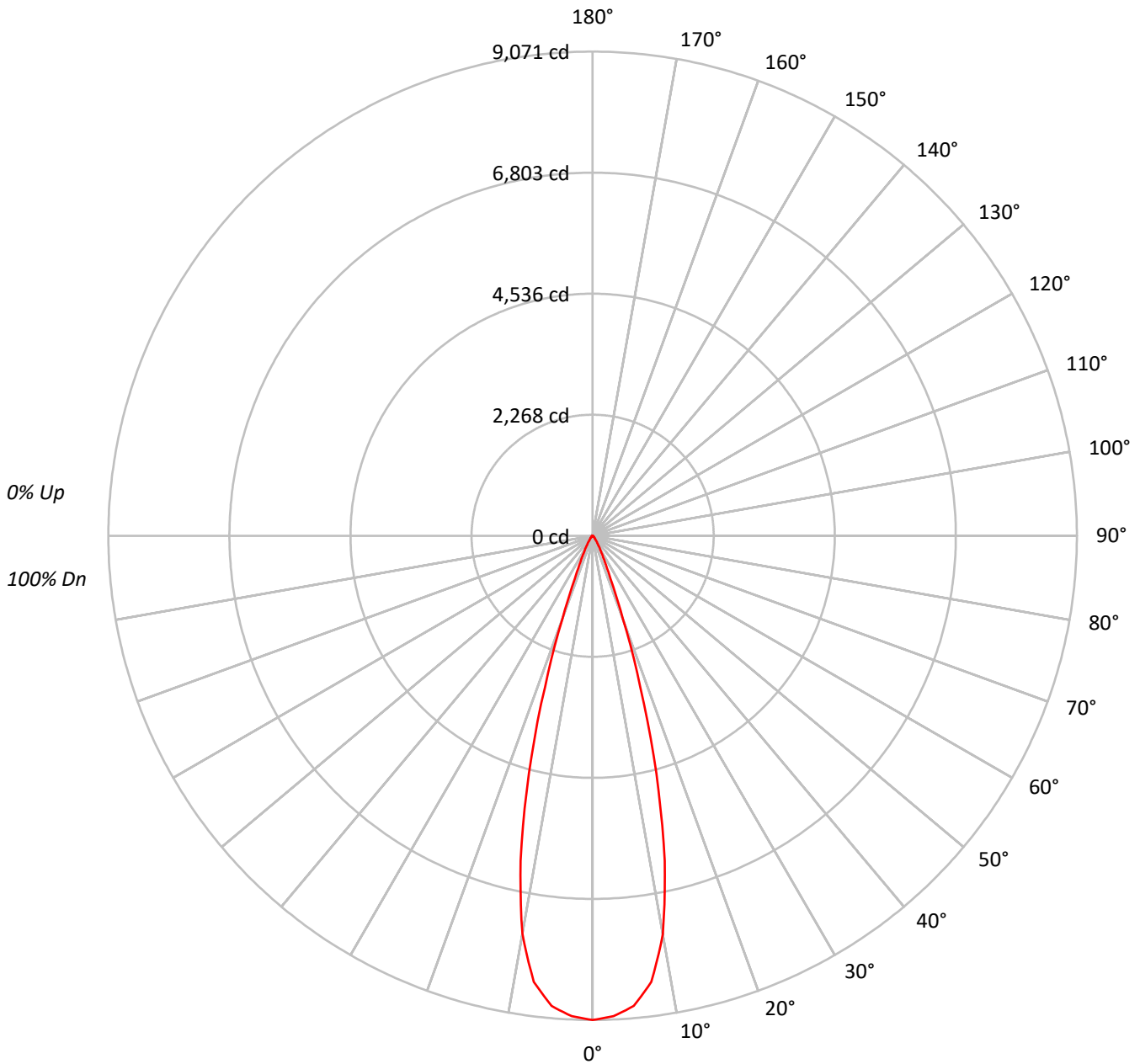
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	95	94	93	93	93	93
3	107	103	99	96	105	101	98	95	99	96	94	96	94	92	94	92	91	90	90	90	90
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	90	88	87	87	87	87
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84	84	84	84
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81	81	81	81
7	95	88	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	79	79	79
8	92	86	81	79	91	85	81	78	84	81	78	83	80	78	83	80	78	77	77	77	77
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75	74	74	74	74
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	78	76	73	72	72	72	72

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

	0°
0°	4475643
5°	4377888
10°	3795856
15°	2352672
20°	862279
25°	288251
30°	141458
35°	70530
40°	43732
45°	27770
50°	19803
55°	16085
60°	13913
65°	10974
70°	13560
75°	13344
80°	13354
85°	13020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	805.6	32.6
10°-20°	1216.3	49.2
20°-30°	296.6	12.0
30°-40°	81.2	3.3
40°-50°	32.7	1.3
50°-60°	17.5	0.7
60°-70°	10.5	0.4
70°-80°	8.0	0.3
80°-90°	1.9	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°	2318.4	93.9
0°-40°	2399.6	97.1
0°-60°	2449.8	99.2
0°-90°	2470.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2470.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9071	
5°	8840	806
15°	4606	1216
25°	530	297
35°	117	81
45°	40	33
55°	19	17
65°	9	10
75°	7	8
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9071.4
2.5°	9010.5
5°	8839.5
7.5°	8431.8
10°	7576.7
12.5°	6236.6
15°	4606.0
17.5°	2968.4
20°	1642.3
22.5°	876.2
25°	529.5
27.5°	358.5
30°	248.3
32.5°	168.7
35°	117.1
37.5°	86.7
40°	67.9
42.5°	51.5
45°	39.8
47.5°	32.8
50°	25.8
52.5°	23.4
55°	18.7
57.5°	16.4
60°	14.1
62.5°	11.7
65°	9.4
67.5°	9.4
70°	9.4
72.5°	9.4
75°	7.0
77.5°	7.0
80°	4.7
82.5°	2.3
85°	2.3
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)