

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: P431321

Luminaire Tested: **LAMR4B212R359727DE010x1MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431321  
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: LAMR4B212R359727DE010x1MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2068.8 lumens  
Efficiency: N/A  
Efficacy: 72.8 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

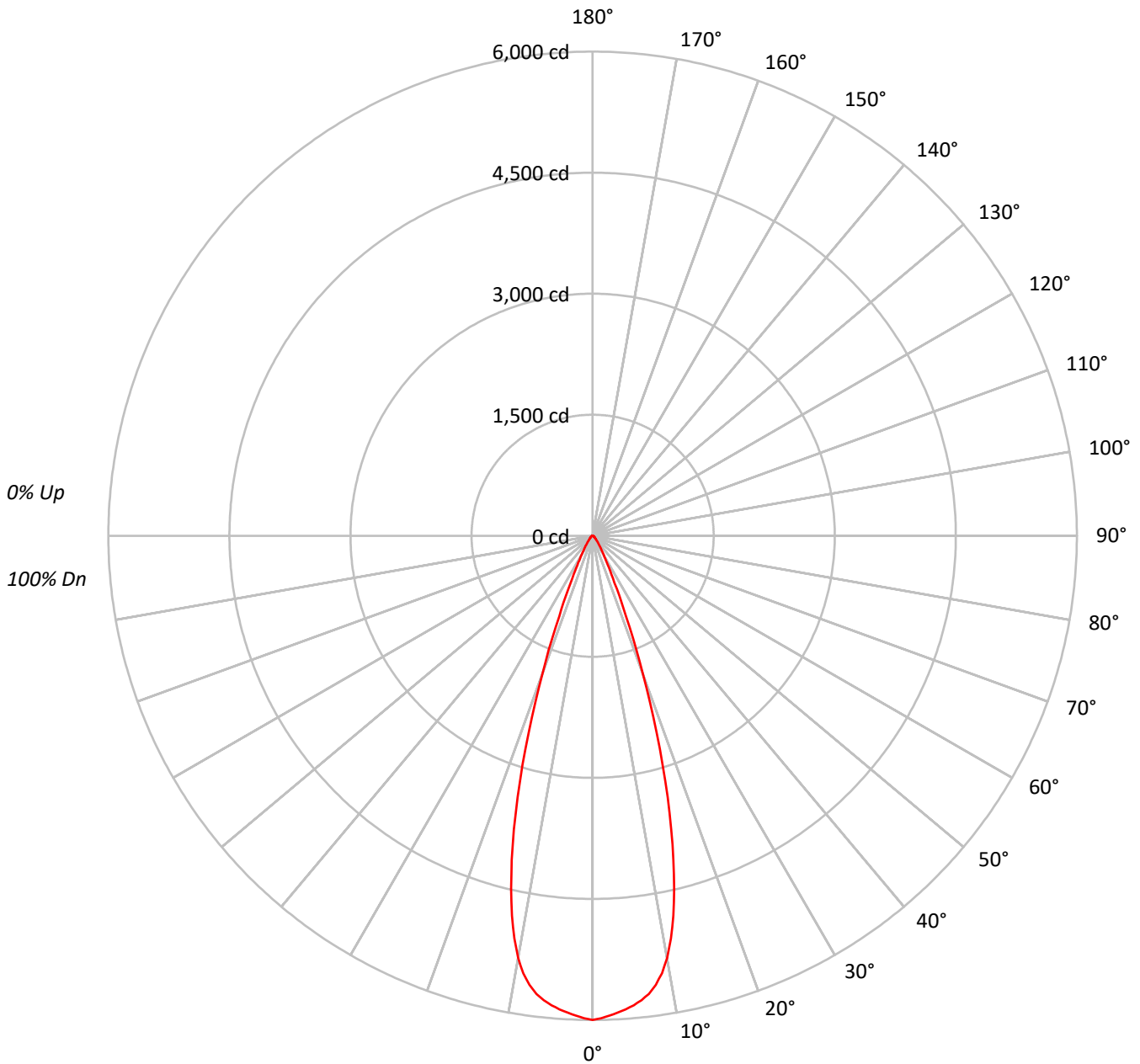
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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
1	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96				96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91				91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87				87
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84				84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81				81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78				78
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75				75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72				72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70				70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68				68

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

	0°
0°	2960524
5°	2892293
10°	2661613
15°	1923766
20°	950329
25°	348624
30°	157182
35°	85588
40°	53071
45°	35934
50°	26865
55°	23053
60°	20327
65°	19263
70°	17888
75°	15631
80°	17616
85°	11888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	542.6	26.2
10°-20°	991.7	47.9
20°-30°	345.3	16.7
30°-40°	95.7	4.6
40°-50°	41.6	2.0
50°-60°	24.1	1.2
60°-70°	16.3	0.8
70°-80°	9.0	0.4
80°-90°	2.5	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°	1879.6	90.9
0°-40°	1975.3	95.5
0°-60°	2041.0	98.7
0°-90°	2068.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2068.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6000	
5°	5840	543
15°	3766	992
25°	640	345
35°	142	96
45°	52	42
55°	27	24
65°	16	16
75°	8	9
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6000.5
1°	5979.9
2°	5949.0
3°	5918.1
4°	5883.1
5°	5839.9
6°	5786.3
7°	5720.4
8°	5619.5
9°	5489.8
10°	5312.7
11°	5086.2
12°	4812.3
13°	4491.1
14°	4139.0
15°	3766.3
16°	3368.8
17°	2969.4
18°	2567.8
19°	2180.7
20°	1810.0
22.5°	1079.0
25°	640.4
26°	533.3
27°	444.8
28°	376.8
29°	321.2
30°	275.9
32.5°	195.6
35°	142.1
37.5°	107.1
40°	82.4
42.5°	63.8
45°	51.5
47.5°	43.2
50°	35.0
52.5°	30.9
55°	26.8
57.5°	22.7
60°	20.6
62.5°	18.5
65°	16.5
67.5°	14.4



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	8.2
77.5°	6.2
80°	6.2
82.5°	4.1
85°	2.1
87.5°	0.0
90°	0.0



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— 0°-180°







70°		12.4
72.5°		10.3



(END OF REPORT)