

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: P431450

Luminaire Tested: **LAMR4B212R659027DE010x1MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431450  
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: LAMR4B212R659027DE010x1MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2115.6 lumens  
Efficiency: N/A  
Efficacy: 74.5 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

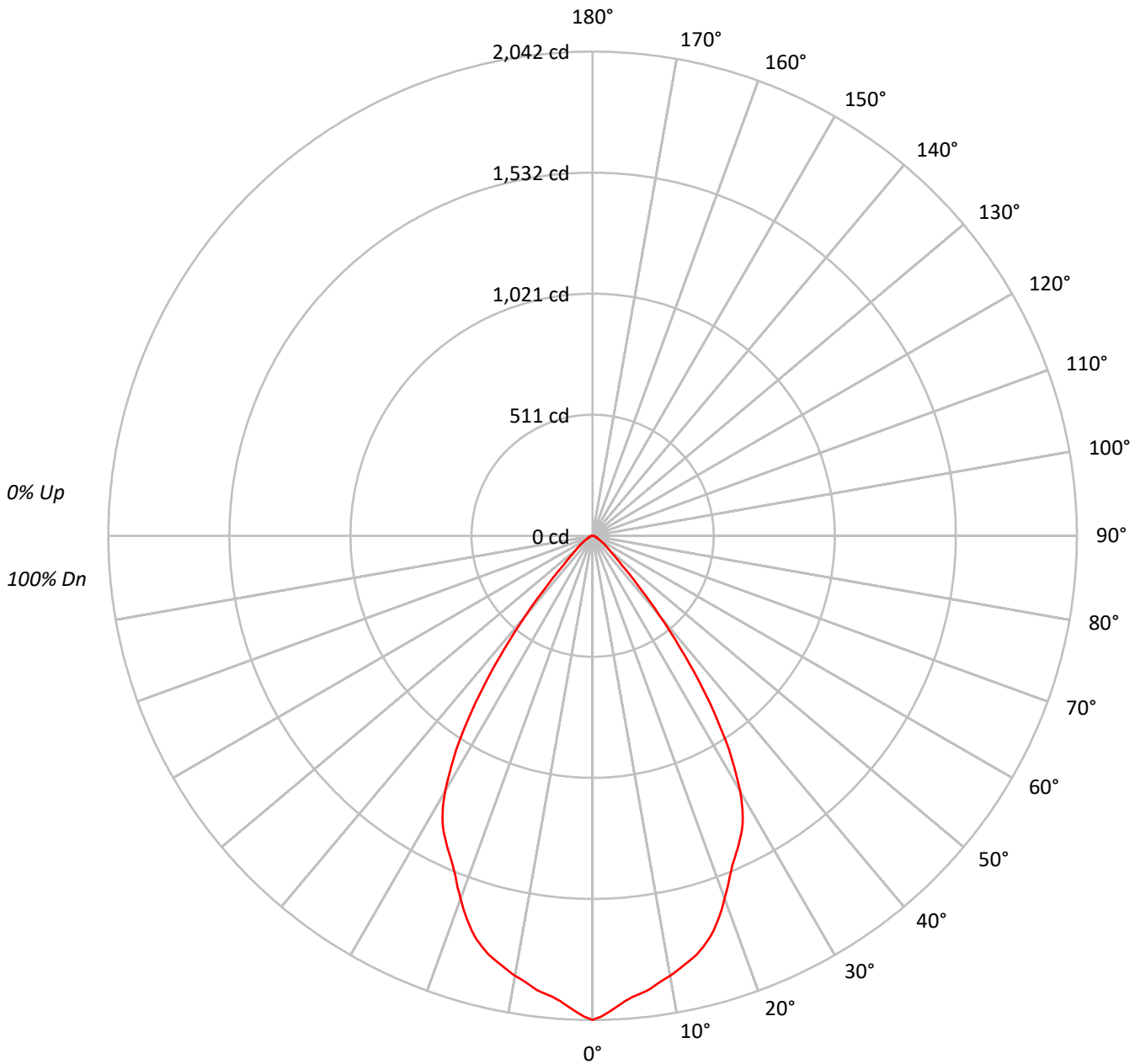
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1007481
5°	966805
10°	943917
15°	917573
20°	854508
25°	789248
30°	708543
35°	520512
40°	281133
45°	120919
50°	67315
55°	47138
60°	30294
65°	22998
70°	19042
75°	16775
80°	18752
85°	12454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.5	8.7
10°-20°	501.3	23.7
20°-30°	664.5	31.4
30°-40°	526.2	24.9
40°-50°	156.7	7.4
50°-60°	50.2	2.4
60°-70°	20.0	0.9
70°-80°	9.6	0.5
80°-90°	2.7	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°	1350.2	63.8
0°-40°	1876.4	88.7
0°-60°	2083.3	98.5
0°-90°	2115.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2115.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2042	
5°	1952	184
15°	1796	501
25°	1450	664
35°	864	526
45°	173	157
55°	55	50
65°	20	20
75°	9	10
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2042.0
1°	2028.9
2°	2009.1
3°	1987.2
4°	1967.5
5°	1952.1
6°	1941.1
7°	1930.2
8°	1912.6
9°	1897.3
10°	1884.1
11°	1868.8
12°	1851.2
13°	1835.9
14°	1818.3
15°	1796.4
16°	1772.3
17°	1741.6
18°	1706.5
19°	1669.2
20°	1627.5
21°	1588.0
22°	1546.3
23°	1509.1
24°	1478.3
25°	1449.8
26°	1419.1
27°	1388.4
28°	1348.9
29°	1300.7
30°	1243.7
32.5°	1070.4
35°	864.2
37.5°	640.5
40°	436.5
42.5°	276.4
45°	173.3
47.5°	116.2
50°	87.7
52.5°	70.2
55°	54.8
57.5°	41.7
60°	30.7



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	15.4
70°	13.2
72.5°	11.0
75°	8.8
77.5°	6.6
80°	6.6
82.5°	4.4
85°	2.2
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		24.1
65°		19.7



(END OF REPORT)