

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: P431446

Luminaire Tested: **LAMR4B212R659024DE010x1MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431446  
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: LAMR4B212R659024DE010x1MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1956.2 lumens  
Efficiency: N/A  
Efficacy: 68.9 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

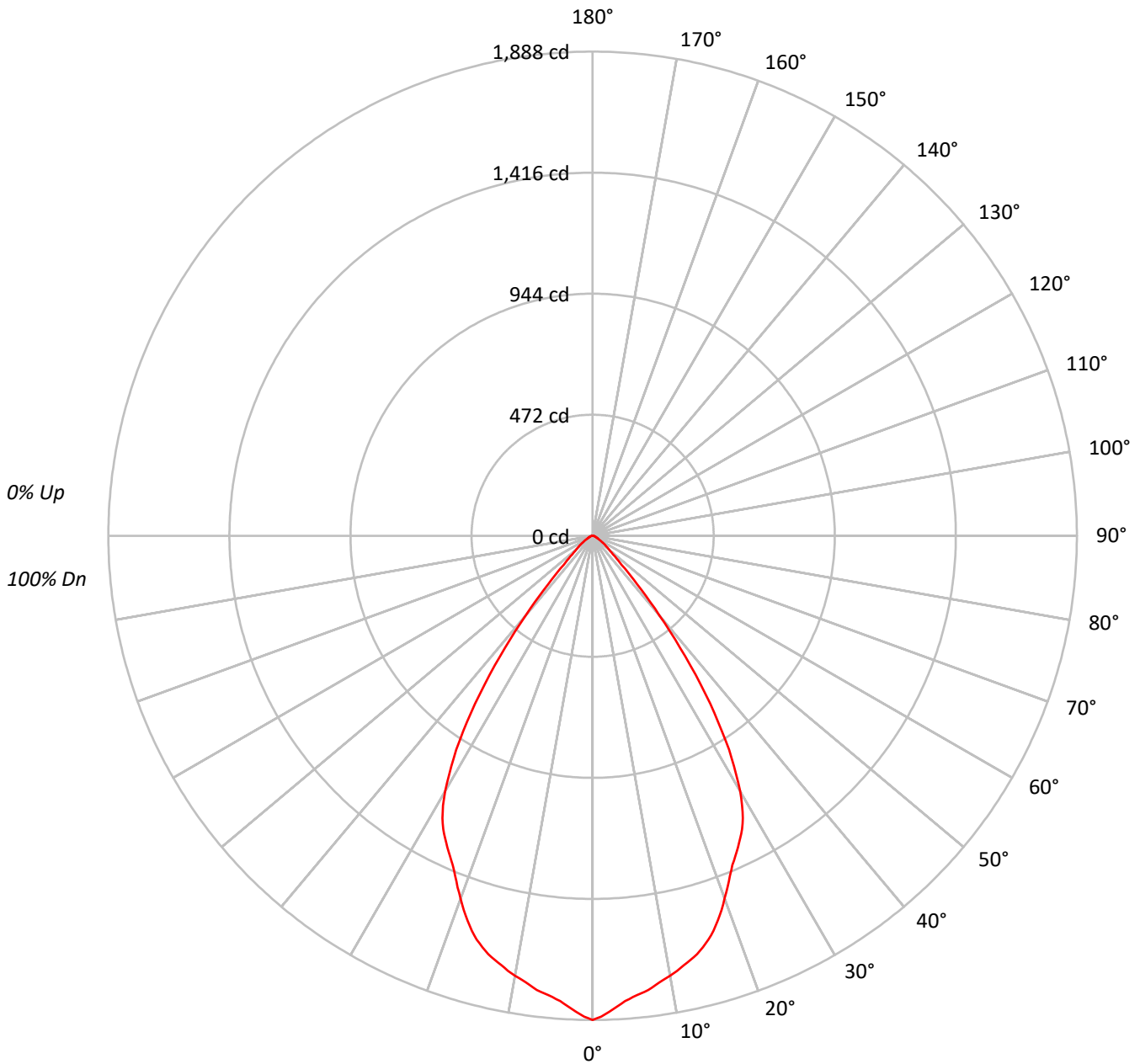
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	82	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°	931599
5°	893952
10°	872826
15°	848412
20°	790138
25°	729801
30°	655105
35°	481302
40°	259943
45°	111779
50°	62249
55°	43611
60°	28024
65°	21364
70°	17599
75°	15441
80°	17332
85°	11322



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.6	8.7
10°-20°	463.5	23.7
20°-30°	614.4	31.4
30°-40°	486.6	24.9
40°-50°	144.9	7.4
50°-60°	46.4	2.4
60°-70°	18.5	0.9
70°-80°	8.8	0.5
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°	1248.5	63.8
0°-40°	1735.0	88.7
0°-60°	1926.3	98.5
0°-90°	1956.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1956.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1888	
5°	1805	171
15°	1661	463
25°	1341	614
35°	799	487
45°	160	145
55°	51	46
65°	18	19
75°	8	9
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1888.2
1°	1876.0
2°	1857.8
3°	1837.5
4°	1819.2
5°	1805.0
6°	1794.9
7°	1784.7
8°	1768.5
9°	1754.3
10°	1742.2
11°	1728.0
12°	1711.7
13°	1697.5
14°	1681.3
15°	1661.0
16°	1638.7
17°	1610.3
18°	1577.9
19°	1543.4
20°	1504.9
21°	1468.4
22°	1429.8
23°	1395.3
24°	1367.0
25°	1340.6
26°	1312.2
27°	1283.8
28°	1247.3
29°	1202.7
30°	1149.9
32.5°	989.7
35°	799.1
37.5°	592.2
40°	403.6
42.5°	255.5
45°	160.2
47.5°	107.5
50°	81.1
52.5°	64.9
55°	50.7
57.5°	38.5
60°	28.4



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	14.2
70°	12.2
72.5°	10.1
75°	8.1
77.5°	6.1
80°	6.1
82.5°	4.1
85°	2.0
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°	22.3
65°	18.3



(END OF REPORT)