

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: P431459

Luminaire Tested: **LAMR4B212R659040DE010x1MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431459  
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: LAMR4B212R659040DE010x1MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2422.6 lumens  
Efficiency: N/A  
Efficacy: 85.3 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

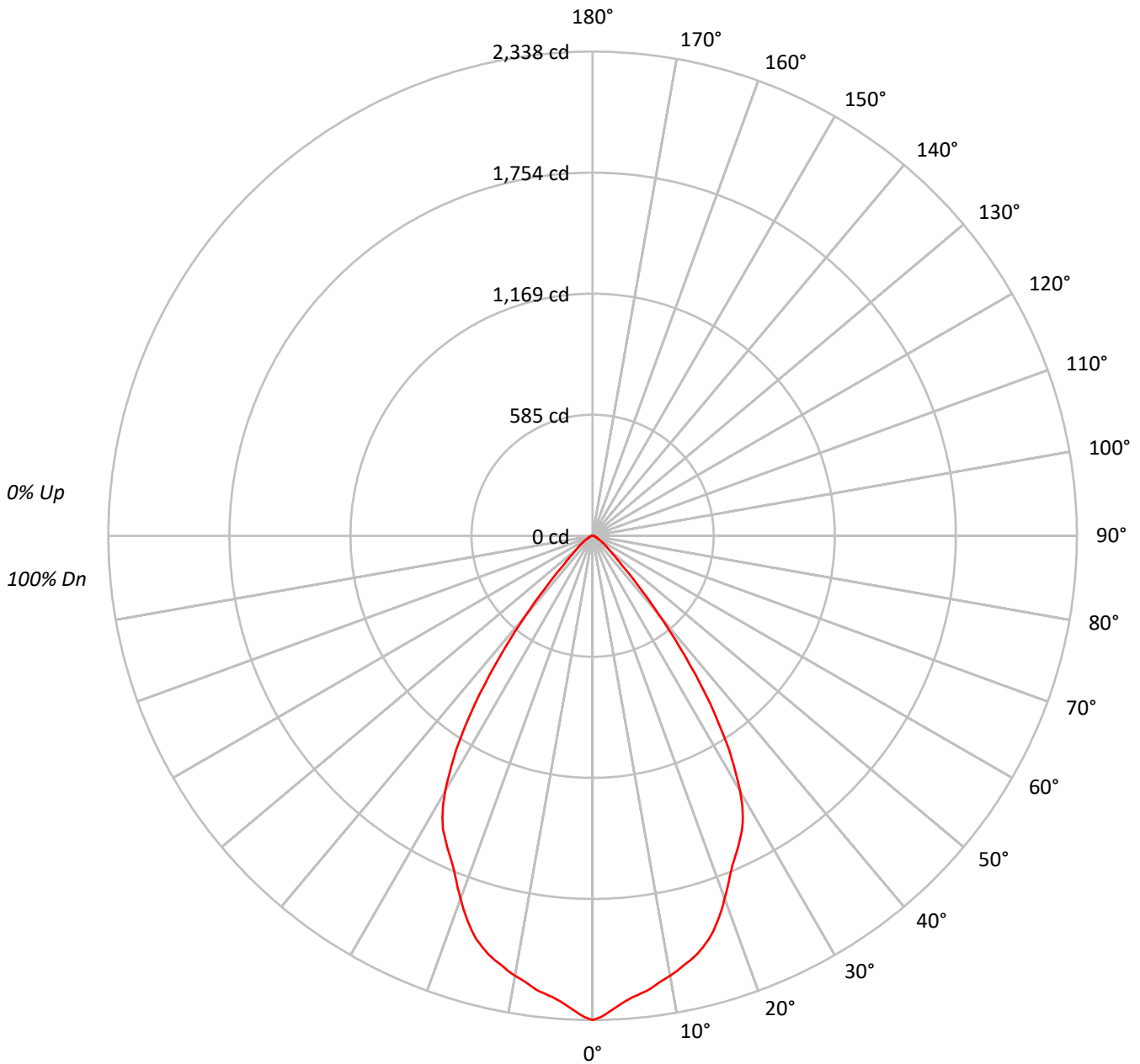
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20																	
RC	80									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	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																											
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93																											
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85																											
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79																											
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72																											
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67																											
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62																											
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58																											
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54																											
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50																											
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47																											

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

	0°
0°	1153719
5°	1107163
10°	1080938
15°	1050734
20°	978524
25°	903841
30°	811375
35°	596041
40°	321902
45°	138432
50°	77140
55°	54019
60°	34734
65°	26384
70°	21782
75°	19063
80°	21309
85°	14152



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.3	8.7
10°-20°	574.0	23.7
20°-30°	760.9	31.4
30°-40°	602.6	24.9
40°-50°	179.5	7.4
50°-60°	57.5	2.4
60°-70°	22.9	0.9
70°-80°	10.9	0.5
80°-90°	3.1	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°	1546.2	63.8
0°-40°	2148.7	88.7
0°-60°	2385.7	98.5
0°-90°	2422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2422.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2338	
5°	2236	211
15°	2057	574
25°	1660	761
35°	990	603
45°	198	179
55°	63	57
65°	23	23
75°	10	11
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2338.4
1°	2323.4
2°	2300.8
3°	2275.6
4°	2253.0
5°	2235.5
6°	2222.9
7°	2210.3
8°	2190.2
9°	2172.7
10°	2157.6
11°	2140.0
12°	2119.9
13°	2102.3
14°	2082.2
15°	2057.1
16°	2029.5
17°	1994.3
18°	1954.1
19°	1911.4
20°	1863.7
21°	1818.5
22°	1770.8
23°	1728.1
24°	1692.9
25°	1660.3
26°	1625.1
27°	1589.9
28°	1544.7
29°	1489.5
30°	1424.2
32.5°	1225.7
35°	989.6
37.5°	733.4
40°	499.8
42.5°	316.5
45°	198.4
47.5°	133.1
50°	100.5
52.5°	80.4
55°	62.8
57.5°	47.7
60°	35.2



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	17.6
70°	15.1
72.5°	12.6
75°	10.0
77.5°	7.5
80°	7.5
82.5°	5.0
85°	2.5
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		27.6
65°		22.6



(END OF REPORT)