

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: P431355

Luminaire Tested: **LAMR4B212R459027DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431355  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-8)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B212R459027DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2194.3 lumens  
Efficiency: N/A  
Efficacy: 77.3 lumens/watt  
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.66  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

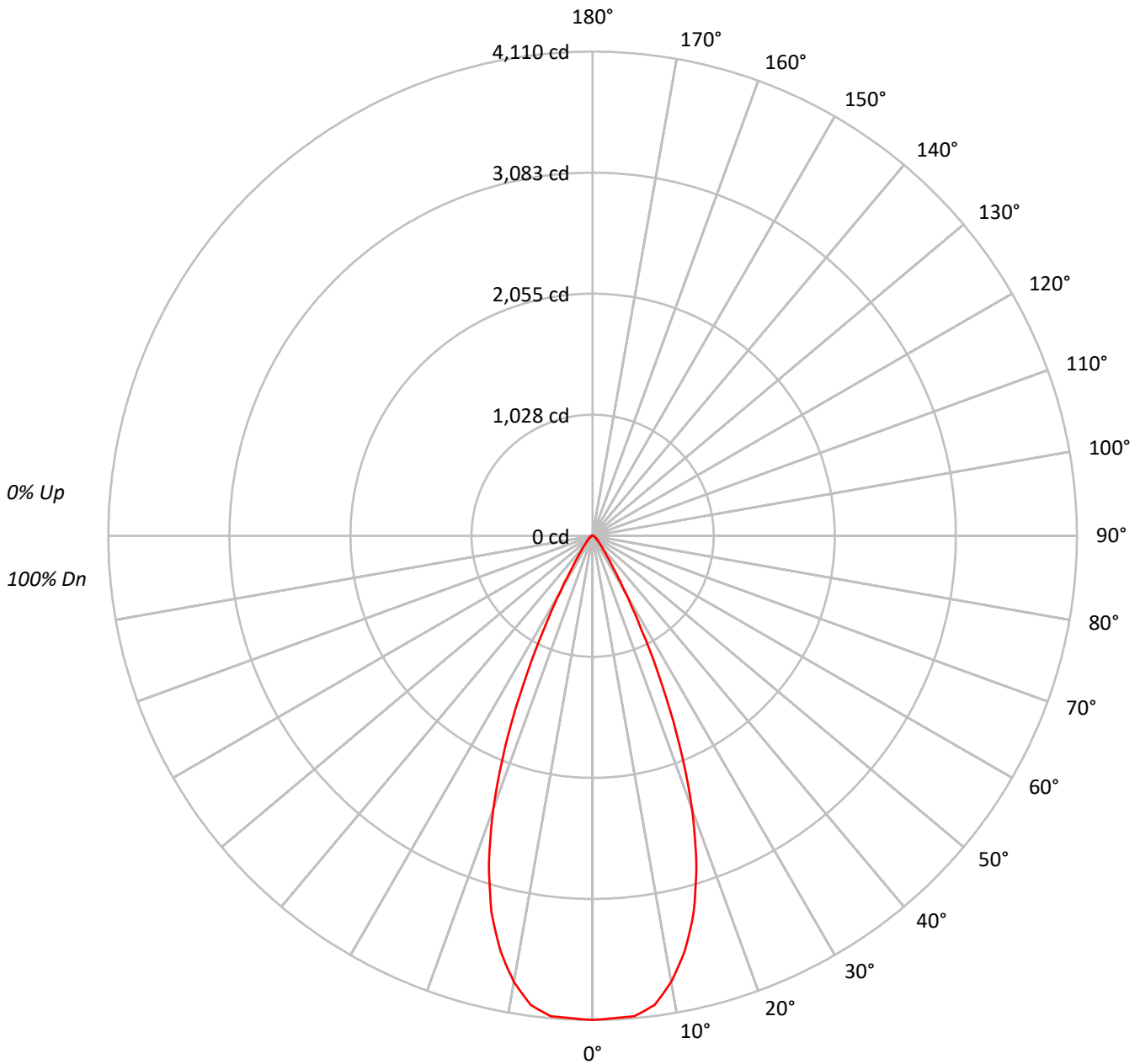
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	112	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																											
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89																											
3	105	99	94	91	103	98	93	90	95	92	89	93	90	87	90	88	86	85																											
4	100	94	89	85	99	93	88	85	90	87	84	89	85	83	87	84	82	80																											
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76																											
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73																											
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69																											
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66																											
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63																											
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	65	62	61																											

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

	0°
0°	2027790
5°	2027116
10°	1926760
15°	1692483
20°	1294757
25°	755877
30°	309350
35°	130821
40°	71298
45°	46051
50°	35922
55°	31139
60°	25261
65°	19846
70°	18465
75°	16203
80°	18184
85°	11888



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	383.0	17.5
10°-20°	902.1	41.1
20°-30°	635.6	29.0
30°-40°	156.4	7.1
40°-50°	54.6	2.5
50°-60°	32.3	1.5
60°-70°	17.9	0.8
70°-80°	9.8	0.4
80°-90°	2.6	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°	1920.7	87.5
0°-40°	2077.1	94.7
0°-60°	2164.0	98.6
0°-90°	2194.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2194.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4110	
5°	4093	383
15°	3314	902
25°	1388	636
35°	217	156
45°	66	55
55°	36	32
65°	17	18
75°	8	10
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4110.0
2.5°	4099.3
5°	4093.0
7.5°	4018.4
10°	3845.9
12.5°	3611.7
15°	3313.5
17.5°	2928.1
20°	2466.0
22.5°	1935.7
25°	1388.5
27.5°	896.5
30°	543.0
32.5°	330.1
35°	217.2
37.5°	153.3
40°	110.7
42.5°	85.2
45°	66.0
47.5°	55.4
50°	46.8
52.5°	40.5
55°	36.2
57.5°	31.9
60°	25.6
62.5°	21.3
65°	17.0
67.5°	14.9
70°	12.8
72.5°	10.6
75°	8.5
77.5°	8.5
80°	6.4
82.5°	4.3
85°	2.1
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)