

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: P431284

Luminaire Tested: **LAMR4B212R309030DE010x1MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431284  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B212R309030DE010x1MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2324.2 lumens  
Efficiency: N/A  
Efficacy: 81.8 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

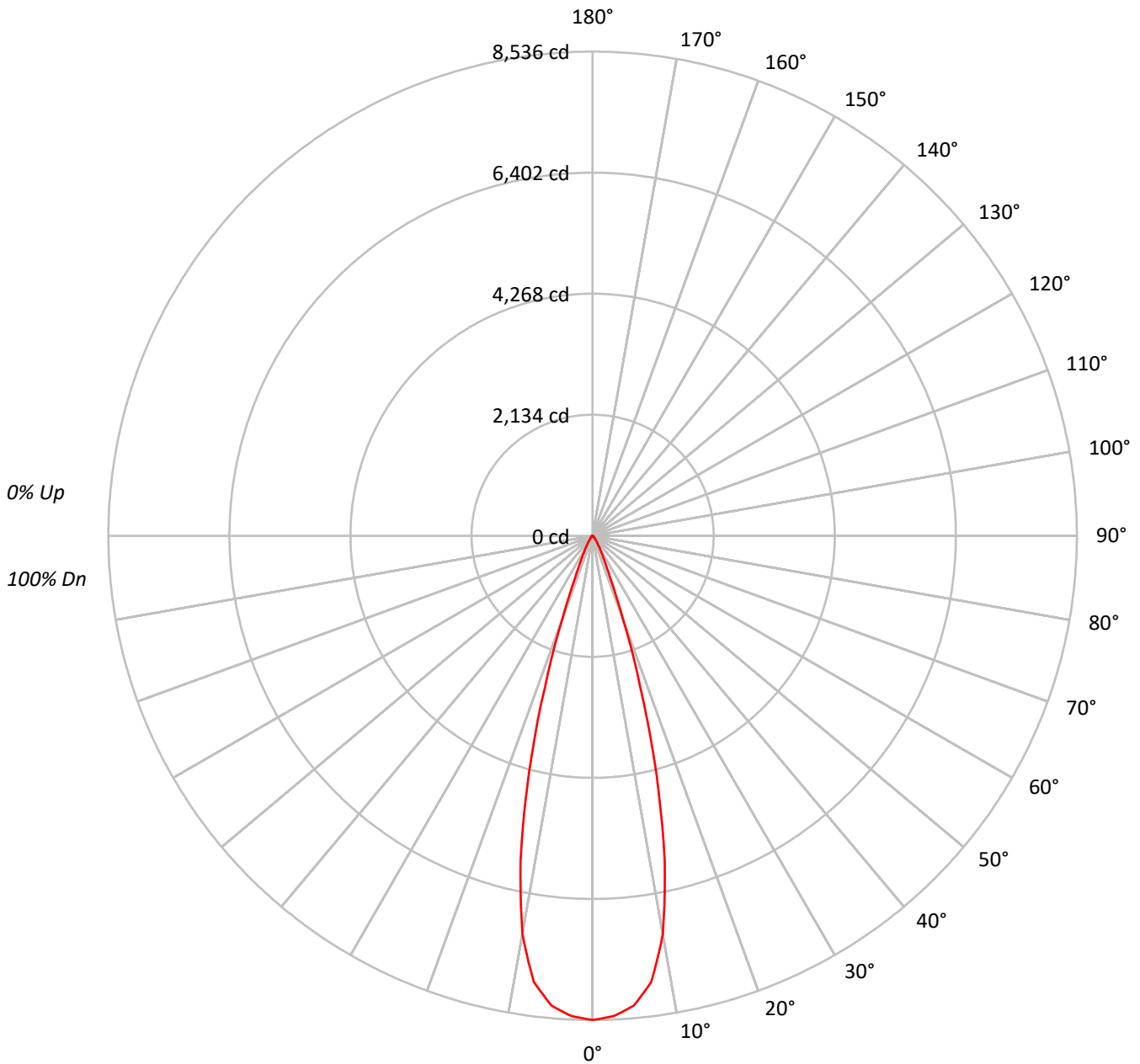
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10																									
RCR																																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	96	96	96	92	92	92	88	88	88																									
1	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96	94	93	92	91	90	89	88	87	86	85	84																									
2	111	107	104	102	109	106	103	100	102	100	98	96	94	92	90	89	87	85	83	81	80	79	78	77	76	75	74	73	72																									
3	107	103	99	96	105	101	98	95	99	96	94	92	90	88	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72																									
4	104	98	94	91	102	97	94	91	95	92	90	88	86	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69																									
5	101	95	91	87	99	94	90	87	92	89	86	84	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66																									
6	98	91	87	84	97	91	87	84	89	86	83	81	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63																									
7	95	88	84	81	94	88	84	81	87	83	81	79	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61																									
8	92	86	81	79	91	85	81	78	84	81	78	76	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58																									
9	90	83	79	76	89	83	79	76	82	78	76	74	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56																									
10	88	81	77	74	87	80	77	74	80	76	74	72	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54																									

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

	0°
0°	4211340
5°	4119310
10°	3571663
15°	2213738
20°	811350
25°	271212
30°	133140
35°	66374
40°	41156
45°	26165
50°	18575
55°	15139
60°	13025
65°	10273
70°	12694
75°	12581
80°	12502
85°	12454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	758.0	32.6
10°-20°	1144.4	49.2
20°-30°	279.0	12.0
30°-40°	76.4	3.3
40°-50°	30.8	1.3
50°-60°	16.4	0.7
60°-70°	9.8	0.4
70°-80°	7.5	0.3
80°-90°	1.8	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°	2181.5	93.9
0°-40°	2257.9	97.1
0°-60°	2305.1	99.2
0°-90°	2324.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2324.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	8536	
5°	8317	758
15°	4334	1144
25°	498	279
35°	110	76
45°	38	31
55°	18	16
65°	9	10
75°	7	8
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	8535.7
2.5°	8478.4
5°	8317.4
7.5°	7933.9
10°	7129.2
12.5°	5868.3
15°	4334.0
17.5°	2793.1
20°	1545.3
22.5°	824.5
25°	498.2
27.5°	337.3
30°	233.7
32.5°	158.7
35°	110.2
37.5°	81.6
40°	63.9
42.5°	48.5
45°	37.5
47.5°	30.9
50°	24.2
52.5°	22.0
55°	17.6
57.5°	15.4
60°	13.2
62.5°	11.0
65°	8.8
67.5°	8.8
70°	8.8
72.5°	8.8
75°	6.6
77.5°	6.6
80°	4.4
82.5°	2.2
85°	2.2
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)