

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: P431543

Luminaire Tested: **LAMR4B312R259024DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431543  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1911-585-5)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R259024DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 25 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3174.0 lumens  
Efficiency: N/A  
Efficacy: 77.6 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.41  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct

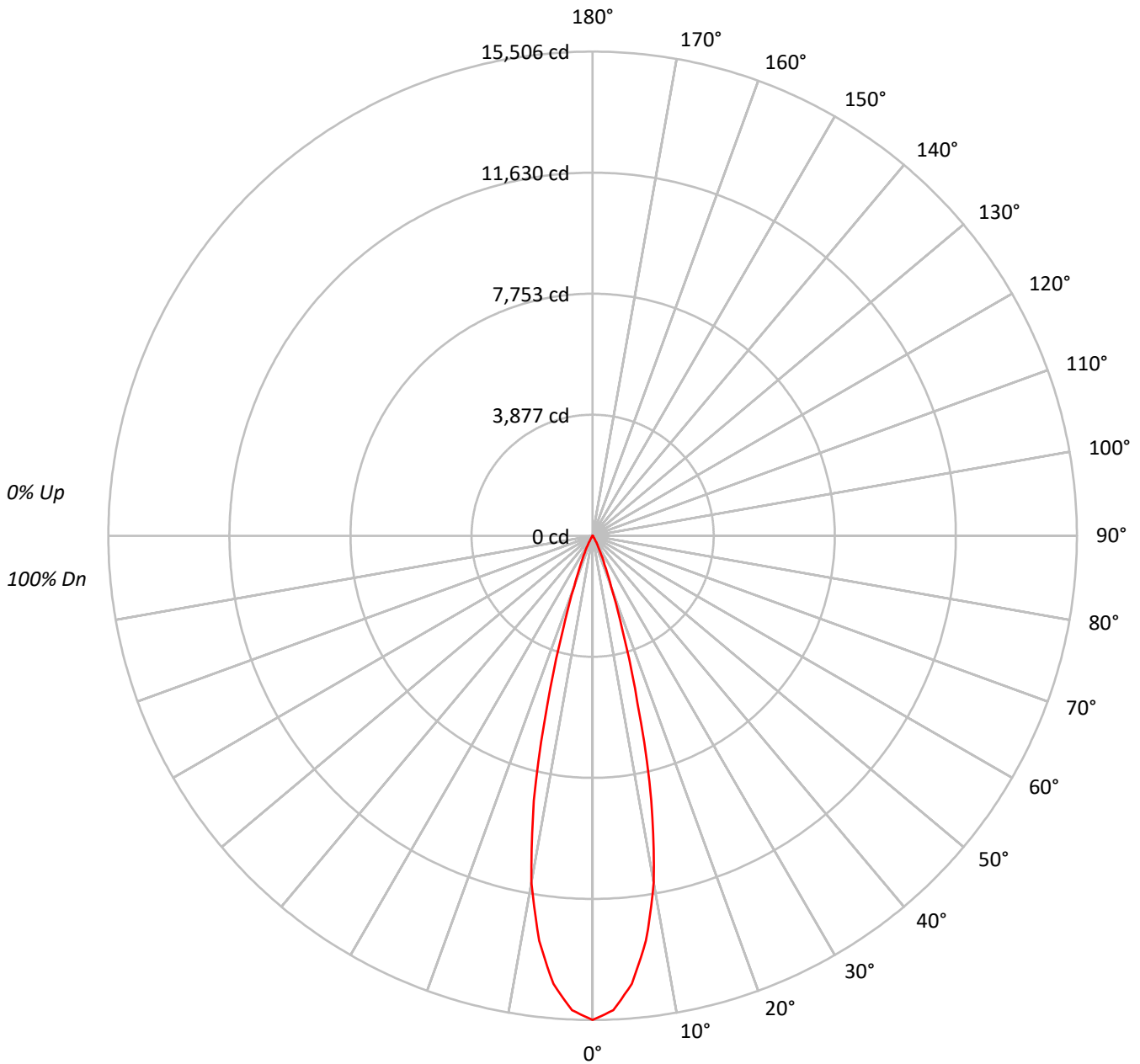
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97	97	97	97
2	112	109	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	95	95
3	109	104	101	99	107	103	100	98	101	98	96	99	96	95	96	95	93	92	92	92	92
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90	90	90	90
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	92	90	89	88	88	88	88
6	100	95	91	88	99	94	91	88	93	90	87	92	89	87	91	88	86	85	85	85	85
7	98	92	88	86	97	92	88	86	91	87	85	90	87	85	89	86	84	83	83	83	83
8	96	90	86	83	95	89	86	83	88	85	83	88	85	83	87	84	82	81	81	81	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80
10	91	85	82	79	91	85	82	79	84	81	79	84	81	79	83	81	79	78	78	78	78

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

	0°
0°	2498011
5°	2329306
10°	1844451
15°	928269
20°	297865
25°	104166
30°	34899
35°	7002
40°	2313
45°	0
50°	0
55°	0
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1275.2	40.2
10°-20°	1546.7	48.7
20°-30°	314.7	9.9
30°-40°	35.6	1.1
40°-50°	1.8	0.1
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	3136.6	98.8
0°-40°	3172.2	99.9
0°-60°	3174.0	100.0
0°-90°	3174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	15506	
5°	14403	###
15°	5566	1547
25°	586	315
35°	36	36
45°	0	2
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	15505.6
2.5°	15205.7
5°	14403.4
7.5°	13079.4
10°	11274.9
12.5°	8690.0
15°	5565.6
17.5°	3135.3
20°	1737.4
22.5°	989.9
25°	586.0
27.5°	350.5
30°	187.6
32.5°	82.1
35°	35.6
37.5°	21.9
40°	11.0
42.5°	4.1
45°	0.0
47.5°	0.0
50°	0.0
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)