

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: P431556

Luminaire Tested: **LAMR4B312R259040DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431556  
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: LAMR4B312R259040DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 25 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3930.9 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

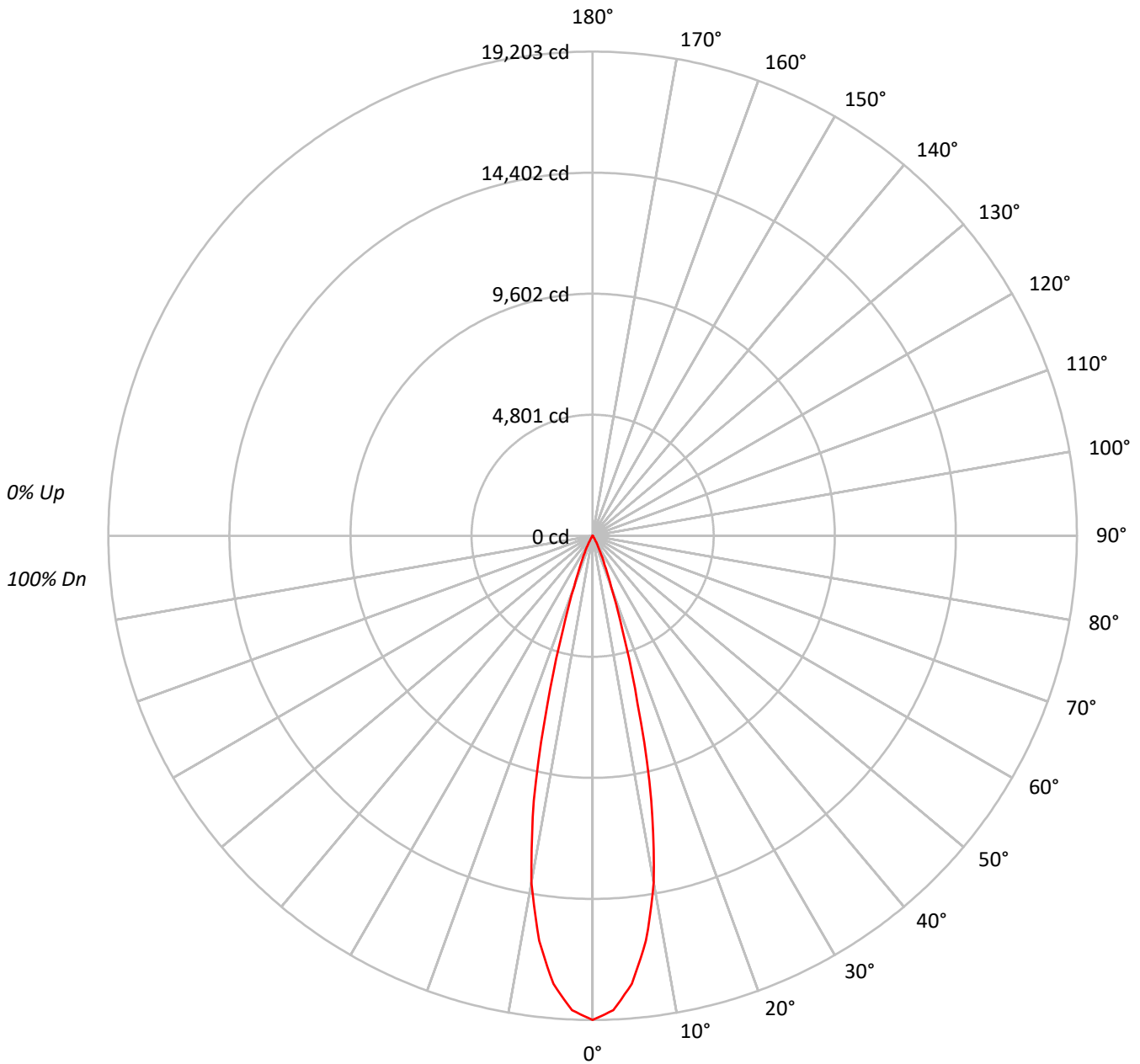
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20																	
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	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97																											
2	112	109	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																											
3	109	104	101	99	107	103	100	98	101	98	96	99	96	95	96	95	93	92																											
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																											
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	92	90	89	88																											
6	100	95	91	88	99	94	91	88	93	90	87	92	89	87	91	88	86	85																											
7	98	92	88	86	97	92	88	86	91	87	85	90	87	85	89	86	84	83																											
8	96	90	86	83	95	89	86	83	88	85	83	88	85	83	87	84	82	81																											
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80																											
10	91	85	82	79	91	85	82	79	84	81	79	84	81	79	83	81	79	78																											

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

	0°
0°	3093692
5°	2884763
10°	2284276
15°	1149629
20°	368911
25°	128999
30°	43214
35°	8673
40°	2860
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°	1579.3	40.2
10°-20°	1915.6	48.7
20°-30°	389.8	9.9
30°-40°	44.1	1.1
40°-50°	2.2	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°	3884.6	98.8
0°-40°	3928.7	99.9
0°-60°	3930.9	100.0
0°-90°	3930.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3930.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	19203	
5°	17838	###
15°	6893	1916
25°	726	390
35°	44	44
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°	19203.1
2.5°	18831.7
5°	17838.1
7.5°	16198.4
10°	13963.5
12.5°	10762.2
15°	6892.8
17.5°	3883.0
20°	2151.8
22.5°	1225.9
25°	725.7
27.5°	434.1
30°	232.3
32.5°	101.7
35°	44.1
37.5°	27.1
40°	13.6
42.5°	5.1
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)