

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: P431721

Luminaire Tested: **LAMR4B312R609035DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431721  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2009-969-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R609035DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 60 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3611.8 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.89  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

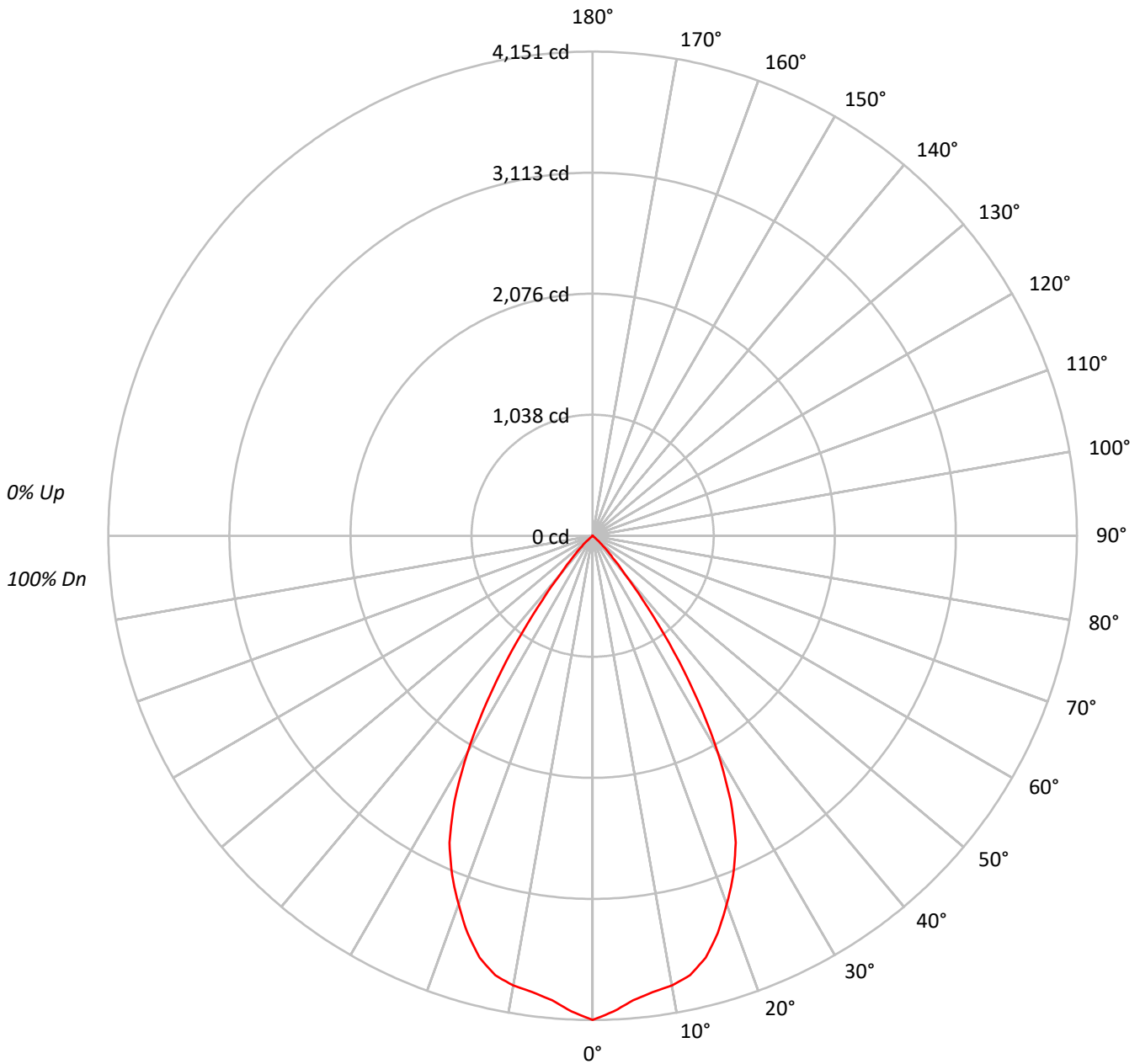
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	92	88	101	96	91	88	93	89	86	91	87	85	88	86	84	82			
4	98	91	85	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77			
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	69	67			
7	84	75	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63			
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	64	60	59			
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	54	72	63	58	54	62	58	54	62	57	54	61	57	54	53			

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

	0°
0°	2047969
5°	1979323
10°	1960878
15°	1912222
20°	1764724
25°	1580347
30°	1222873
35°	732584
40°	281455
45°	102847
50°	4068
55°	3011
60°	3454
65°	2101
70°	2597
75°	3431
80°	5114
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	379.5	10.5
10°-20°	1041.5	28.8
20°-30°	1299.3	36.0
30°-40°	756.9	21.0
40°-50°	126.3	3.5
50°-60°	3.3	0.1
60°-70°	2.4	0.1
70°-80°	1.9	0.1
80°-90°	0.7	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°	2720.2	75.3
0°-40°	3477.1	96.3
0°-60°	3606.8	99.9
0°-90°	3611.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3611.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4151	
5°	3996	379
15°	3744	1041
25°	2903	1299
35°	1216	757
45°	147	126
55°	4	3
65°	2	2
75°	2	2
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4150.9
2.5°	4082.5
5°	3996.5
7.5°	3947.3
10°	3914.0
12.5°	3859.6
15°	3743.7
17.5°	3570.0
20°	3361.1
22.5°	3148.7
25°	2903.0
27.5°	2562.5
30°	2146.5
32.5°	1681.4
35°	1216.3
37.5°	767.0
40°	437.0
42.5°	256.3
45°	147.4
47.5°	50.9
50°	5.3
52.5°	3.5
55°	3.5
57.5°	3.5
60°	3.5
62.5°	3.5
65°	1.8
67.5°	1.8
70°	1.8
72.5°	1.8
75°	1.8
77.5°	1.8
80°	1.8
82.5°	1.8
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)