

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: P430558

Luminaire Tested: **LAM4B312R609024DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430558  
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: LAM4B312R609024DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 60 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2948.4 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

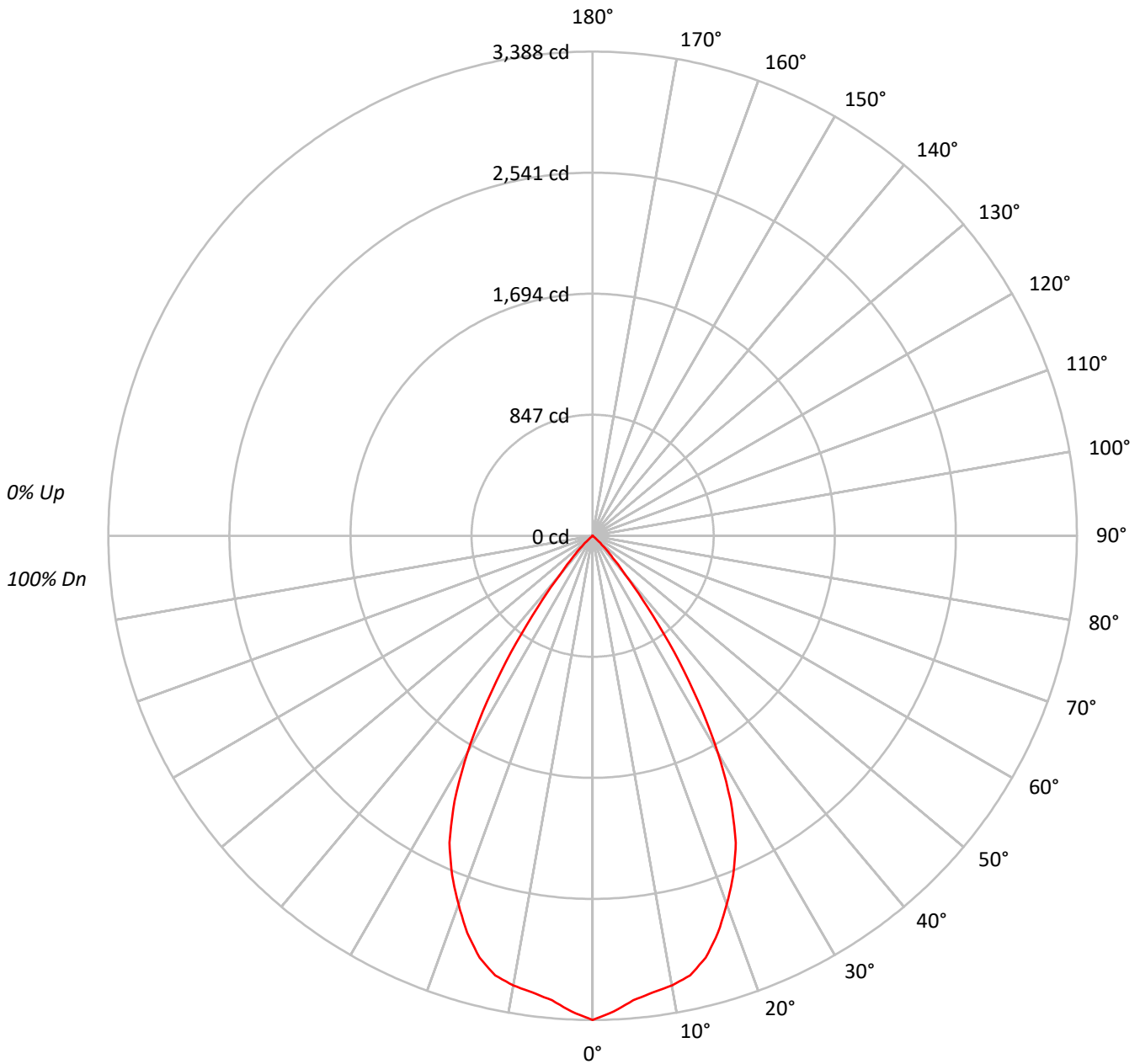
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1671817
5°	1615750
10°	1600715
15°	1561007
20°	1440614
25°	1290081
30°	998295
35°	598029
40°	229801
45°	84008
50°	3301
55°	2495
60°	2862
65°	1634
70°	2020
75°	2669
80°	3978
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.8	10.5
10°-20°	850.2	28.8
20°-30°	1060.6	36.0
30°-40°	617.9	21.0
40°-50°	103.2	3.5
50°-60°	2.8	0.1
60°-70°	1.9	0.1
70°-80°	1.5	0.1
80°-90°	0.6	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°	2220.6	75.3
0°-40°	2838.5	96.3
0°-60°	2944.4	99.9
0°-90°	2948.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3388	
5°	3262	310
15°	3056	850
25°	2370	1061
35°	993	618
45°	120	103
55°	3	3
65°	1	2
75°	1	1
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3388.5
2.5°	3332.6
5°	3262.4
7.5°	3222.3
10°	3195.1
12.5°	3150.7
15°	3056.1
17.5°	2914.3
20°	2743.8
22.5°	2570.4
25°	2369.8
27.5°	2091.8
30°	1752.3
32.5°	1372.6
35°	992.9
37.5°	626.1
40°	356.8
42.5°	209.2
45°	120.4
47.5°	41.6
50°	4.3
52.5°	2.9
55°	2.9
57.5°	2.9
60°	2.9
62.5°	2.9
65°	1.4
67.5°	1.4
70°	1.4
72.5°	1.4
75°	1.4
77.5°	1.4
80°	1.4
82.5°	1.4
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)