

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: P430602

Luminaire Tested: **LAM4B312R659727DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430602  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-22)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B312R659727DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3103.4 lumens  
Efficiency: N/A  
Efficacy: 75.9 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

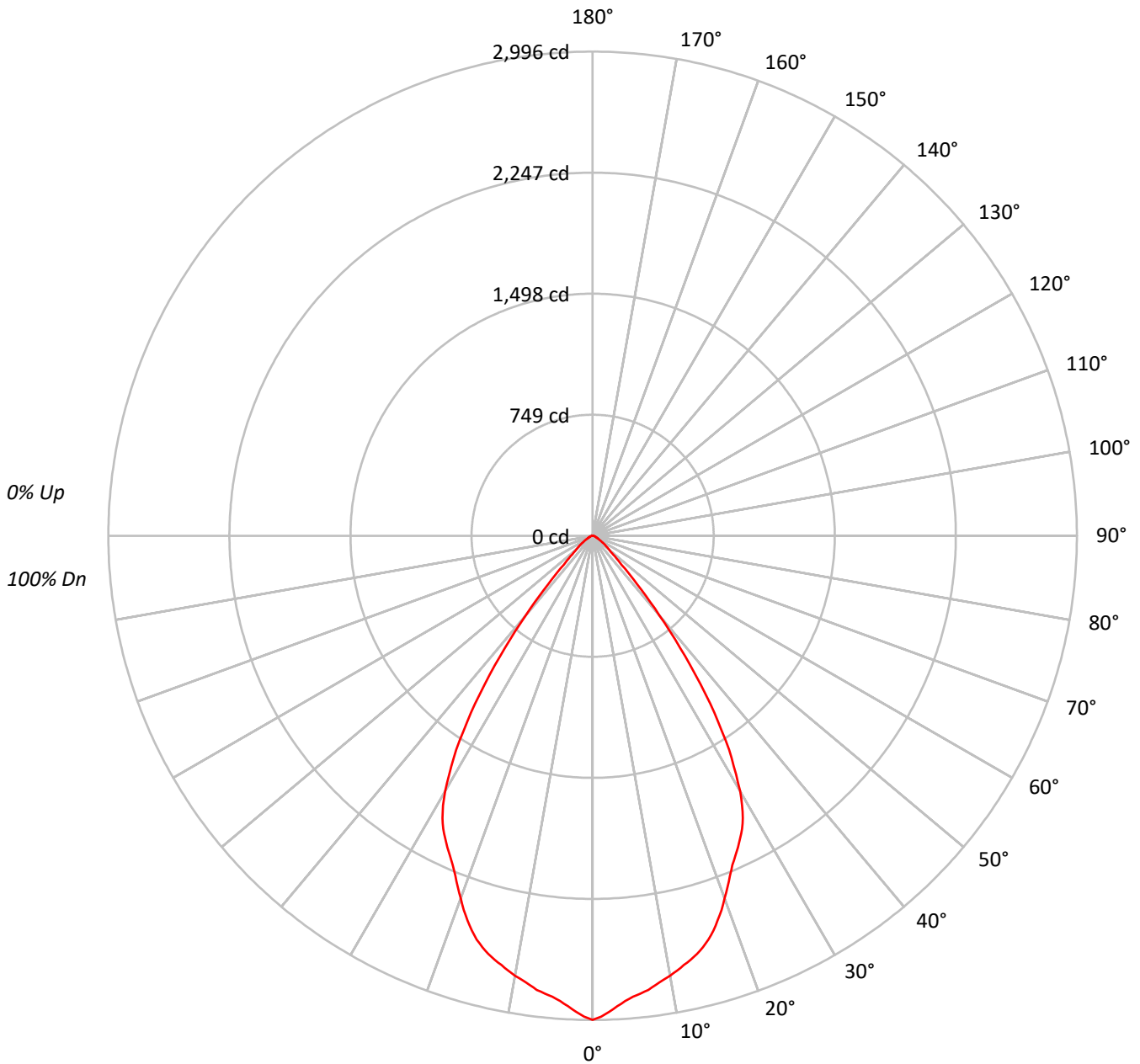
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50	50	50	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47	47	47	47

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

	0°
0°	1477968
5°	1418288
10°	1384688
15°	1346018
20°	1253541
25°	1157796
30°	1039371
35°	763542
40°	412392
45°	177367
50°	98785
55°	69159
60°	44404
65°	33856
70°	27841
75°	24591
80°	27560
85°	18115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.6	8.7
10°-20°	735.3	23.7
20°-30°	974.7	31.4
30°-40°	771.9	24.9
40°-50°	229.9	7.4
50°-60°	73.6	2.4
60°-70°	29.4	0.9
70°-80°	14.0	0.5
80°-90°	3.9	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°	1980.7	63.8
0°-40°	2752.6	88.7
0°-60°	3056.1	98.5
0°-90°	3103.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3103.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2996	
5°	2864	271
15°	2635	735
25°	2127	975
35°	1268	772
45°	254	230
55°	80	74
65°	29	29
75°	13	14
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2995.6
1°	2976.3
2°	2947.3
3°	2915.1
4°	2886.2
5°	2863.7
6°	2847.6
7°	2831.5
8°	2805.8
9°	2783.2
10°	2763.9
11°	2741.4
12°	2715.7
13°	2693.1
14°	2667.4
15°	2635.2
16°	2599.8
17°	2554.8
18°	2503.3
19°	2448.6
20°	2387.5
21°	2329.5
22°	2268.4
23°	2213.7
24°	2168.7
25°	2126.8
26°	2081.8
27°	2036.7
28°	1978.8
29°	1908.0
30°	1824.4
32.5°	1570.2
35°	1267.7
37.5°	939.5
40°	640.3
42.5°	405.4
45°	254.2
47.5°	170.5
50°	128.7
52.5°	103.0
55°	80.4
57.5°	61.1
60°	45.0



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	22.5
70°	19.3
72.5°	16.1
75°	12.9
77.5°	9.7
80°	9.7
82.5°	6.4
85°	3.2
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		35.4
65°		29.0



(END OF REPORT)