

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: P430597

Luminaire Tested: **LAM4B312R659050DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430597  
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: LAM4B312R659050DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

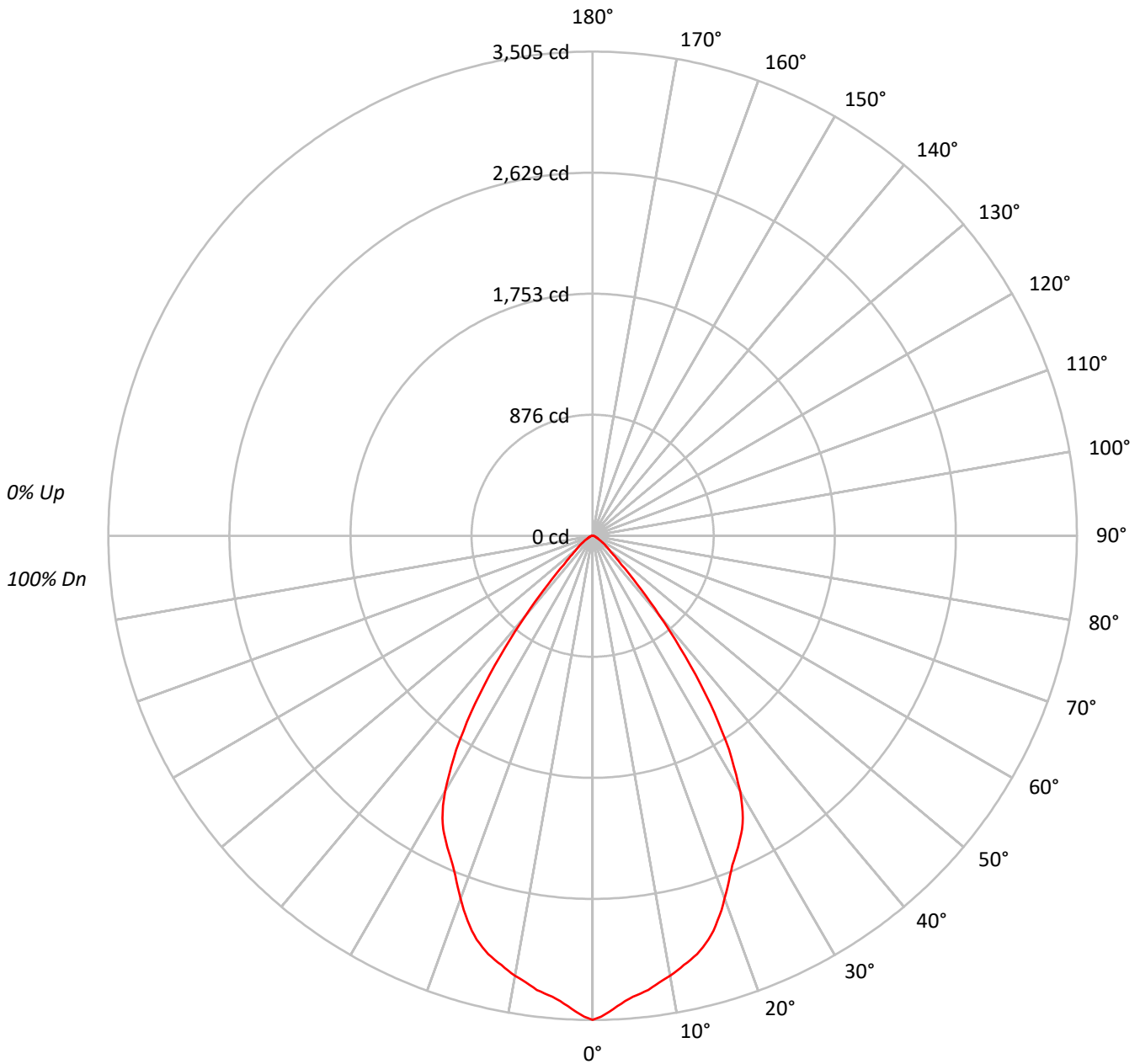
Lumens per Lamp: N/A  
Luminaire Lumens: 3630.9 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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	81	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°	1729098
5°	1659284
10°	1620004
15°	1574747
20°	1466552
25°	1354591
30°	1215980
35°	893339
40°	482466
45°	207509
50°	115595
55°	80943
60°	52002
65°	39576
70°	32602
75°	28785
80°	32106
85°	21511



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.6	8.7
10°-20°	860.3	23.7
20°-30°	1140.4	31.4
30°-40°	903.1	24.9
40°-50°	269.0	7.4
50°-60°	86.1	2.4
60°-70°	34.4	0.9
70°-80°	16.4	0.5
80°-90°	4.6	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°	2317.3	63.8
0°-40°	3220.4	88.7
0°-60°	3575.5	98.5
0°-90°	3630.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3630.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3505	
5°	3350	317
15°	3083	860
25°	2488	1140
35°	1483	903
45°	297	269
55°	94	86
65°	34	34
75°	15	16
85°	4	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3504.6
1°	3482.1
2°	3448.2
3°	3410.5
4°	3376.7
5°	3350.3
6°	3331.5
7°	3312.7
8°	3282.5
9°	3256.2
10°	3233.6
11°	3207.3
12°	3177.1
13°	3150.8
14°	3120.7
15°	3083.0
16°	3041.6
17°	2988.9
18°	2928.7
19°	2864.7
20°	2793.2
21°	2725.4
22°	2653.9
23°	2589.9
24°	2537.2
25°	2488.3
26°	2435.6
27°	2382.9
28°	2315.1
29°	2232.3
30°	2134.4
32.5°	1837.0
35°	1483.2
37.5°	1099.2
40°	749.1
42.5°	474.3
45°	297.4
47.5°	199.5
50°	150.6
52.5°	120.5
55°	94.1
57.5°	71.5
60°	52.7



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	26.4
70°	22.6
72.5°	18.8
75°	15.1
77.5°	11.3
80°	11.3
82.5°	7.5
85°	3.8
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		41.4
65°		33.9



(END OF REPORT)