

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: P432043

Luminaire Tested: **LAMR4B412R659730DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P432043  
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: LAMR4B412R659730DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5092.6 lumens  
Efficiency: N/A  
Efficacy: 94.1 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

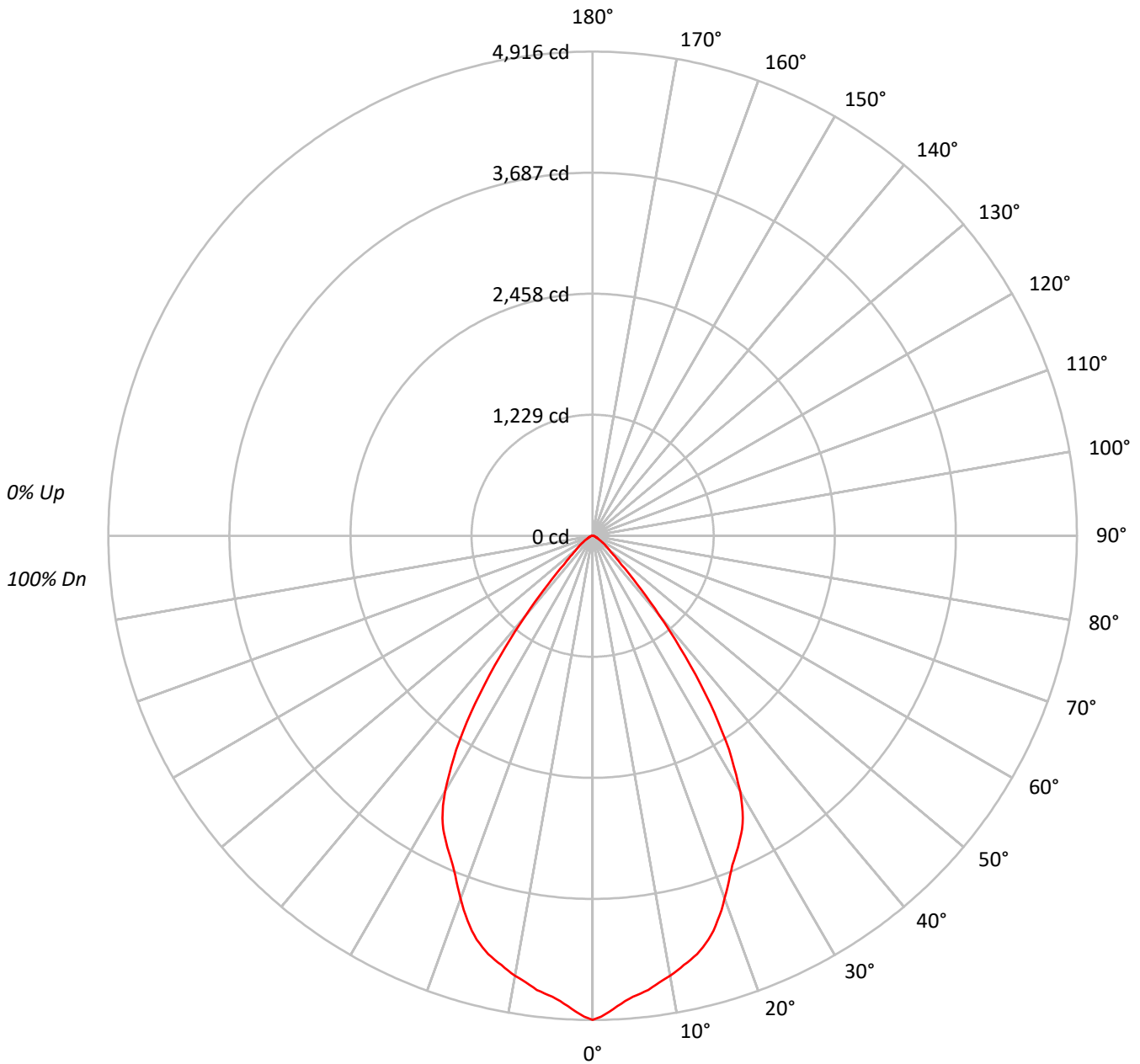
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2425257
5°	2327345
10°	2272243
15°	2208784
20°	2056963
25°	1899901
30°	1705528
35°	1252976
40°	676715
45°	291029
50°	162109
55°	113544
60°	72921
65°	55453
70°	45729
75°	40222
80°	44892
85°	30003



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	444.1	8.7
10°-20°	1206.6	23.7
20°-30°	1599.5	31.4
30°-40°	1266.7	24.9
40°-50°	377.3	7.4
50°-60°	120.8	2.4
60°-70°	48.2	0.9
70°-80°	23.0	0.5
80°-90°	6.5	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°	3250.2	63.8
0°-40°	4516.9	88.7
0°-60°	5015.0	98.5
0°-90°	5092.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5092.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4916	
5°	4699	444
15°	4324	1207
25°	3490	1600
35°	2080	1267
45°	417	377
55°	132	121
65°	48	48
75°	21	23
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4915.6
1°	4884.0
2°	4836.4
3°	4783.6
4°	4736.1
5°	4699.2
6°	4672.8
7°	4646.4
8°	4604.1
9°	4567.2
10°	4535.5
11°	4498.5
12°	4456.3
13°	4419.3
14°	4377.1
15°	4324.3
16°	4266.2
17°	4192.3
18°	4107.8
19°	4018.0
20°	3917.7
21°	3822.7
22°	3722.4
23°	3632.6
24°	3558.7
25°	3490.0
26°	3416.1
27°	3342.2
28°	3247.2
29°	3131.0
30°	2993.7
32.5°	2576.6
35°	2080.3
37.5°	1541.7
40°	1050.7
42.5°	665.3
45°	417.1
47.5°	279.8
50°	211.2
52.5°	169.0
55°	132.0
57.5°	100.3
60°	73.9



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	37.0
70°	31.7
72.5°	26.4
75°	21.1
77.5°	15.8
80°	15.8
82.5°	10.6
85°	5.3
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		58.1
65°		47.5



(END OF REPORT)