

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: P432004

Luminaire Tested: **LAMR4B412R609030DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P432004  
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: LAMR4B412R609030DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 60 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5207.6 lumens  
Efficiency: N/A  
Efficacy: 96.3 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

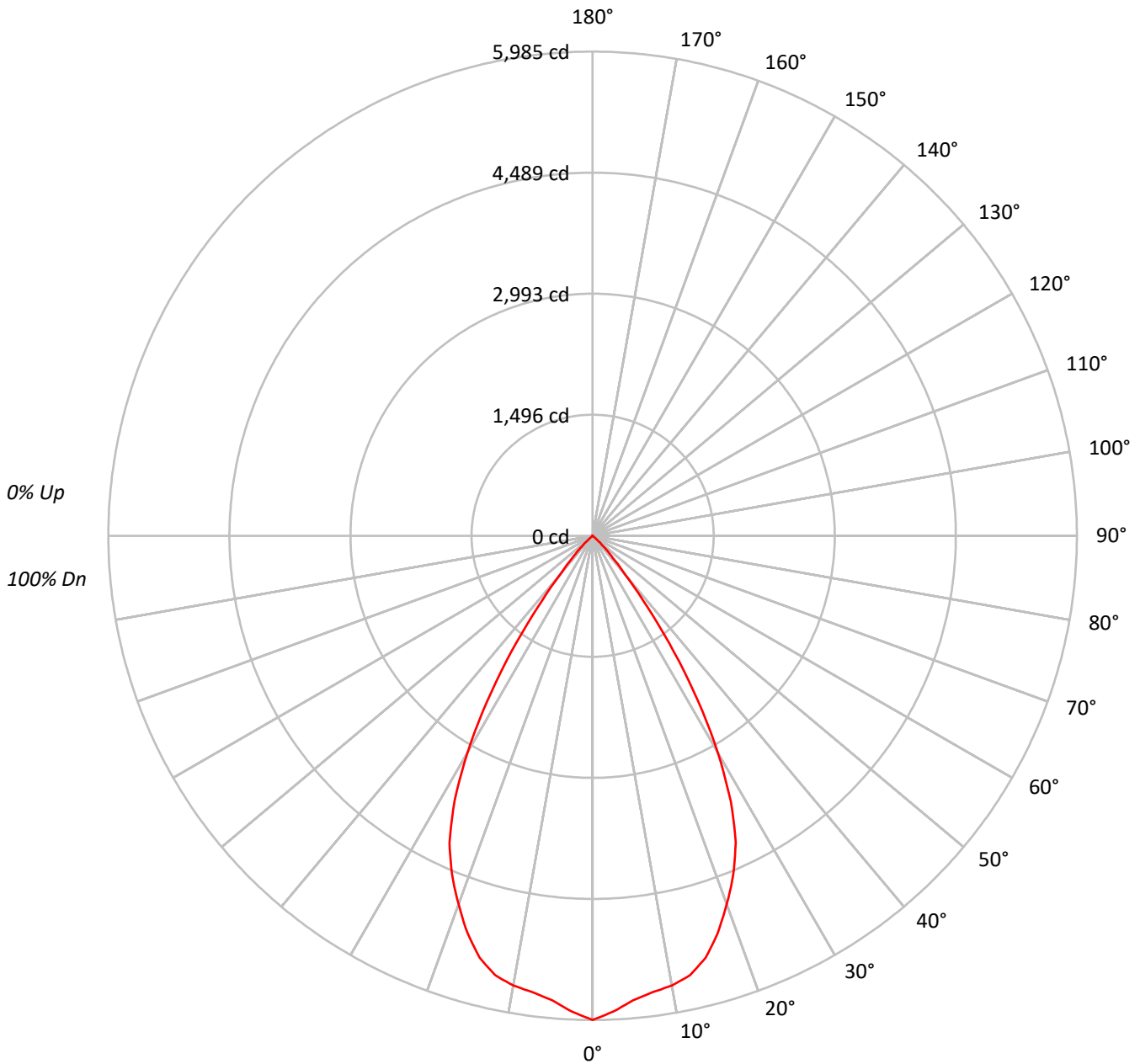
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
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°	2952877
5°	2853861
10°	2827291
15°	2757161
20°	2544466
25°	2278629
30°	1763239
35°	1056323
40°	405823
45°	148340
50°	5833
55°	4387
60°	5032
65°	2919
70°	3606
75°	4766
80°	7103
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	547.2	10.5
10°-20°	1501.6	28.8
20°-30°	1873.4	36.0
30°-40°	1091.4	21.0
40°-50°	182.2	3.5
50°-60°	4.8	0.1
60°-70°	3.4	0.1
70°-80°	2.6	0.1
80°-90°	1.0	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°	3922.2	75.3
0°-40°	5013.5	96.3
0°-60°	5200.5	99.9
0°-90°	5207.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5207.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5985	
5°	5762	547
15°	5398	1502
25°	4186	1873
35°	1754	1091
45°	213	182
55°	5	5
65°	2	3
75°	2	3
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5985.0
2.5°	5886.3
5°	5762.3
7.5°	5691.5
10°	5643.4
12.5°	5564.9
15°	5397.9
17.5°	5147.4
20°	4846.2
22.5°	4540.0
25°	4185.7
27.5°	3694.8
30°	3095.0
32.5°	2424.4
35°	1753.8
37.5°	1105.9
40°	630.1
42.5°	369.5
45°	212.6
47.5°	73.4
50°	7.6
52.5°	5.1
55°	5.1
57.5°	5.1
60°	5.1
62.5°	5.1
65°	2.5
67.5°	2.5
70°	2.5
72.5°	2.5
75°	2.5
77.5°	2.5
80°	2.5
82.5°	2.5
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)