

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: P430847

Luminaire Tested: **LAM4B412R609024DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430847  
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: LAM4B412R609024DE01021MMS  
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: 4593.6 lumens  
Efficiency: N/A  
Efficacy: 84.9 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

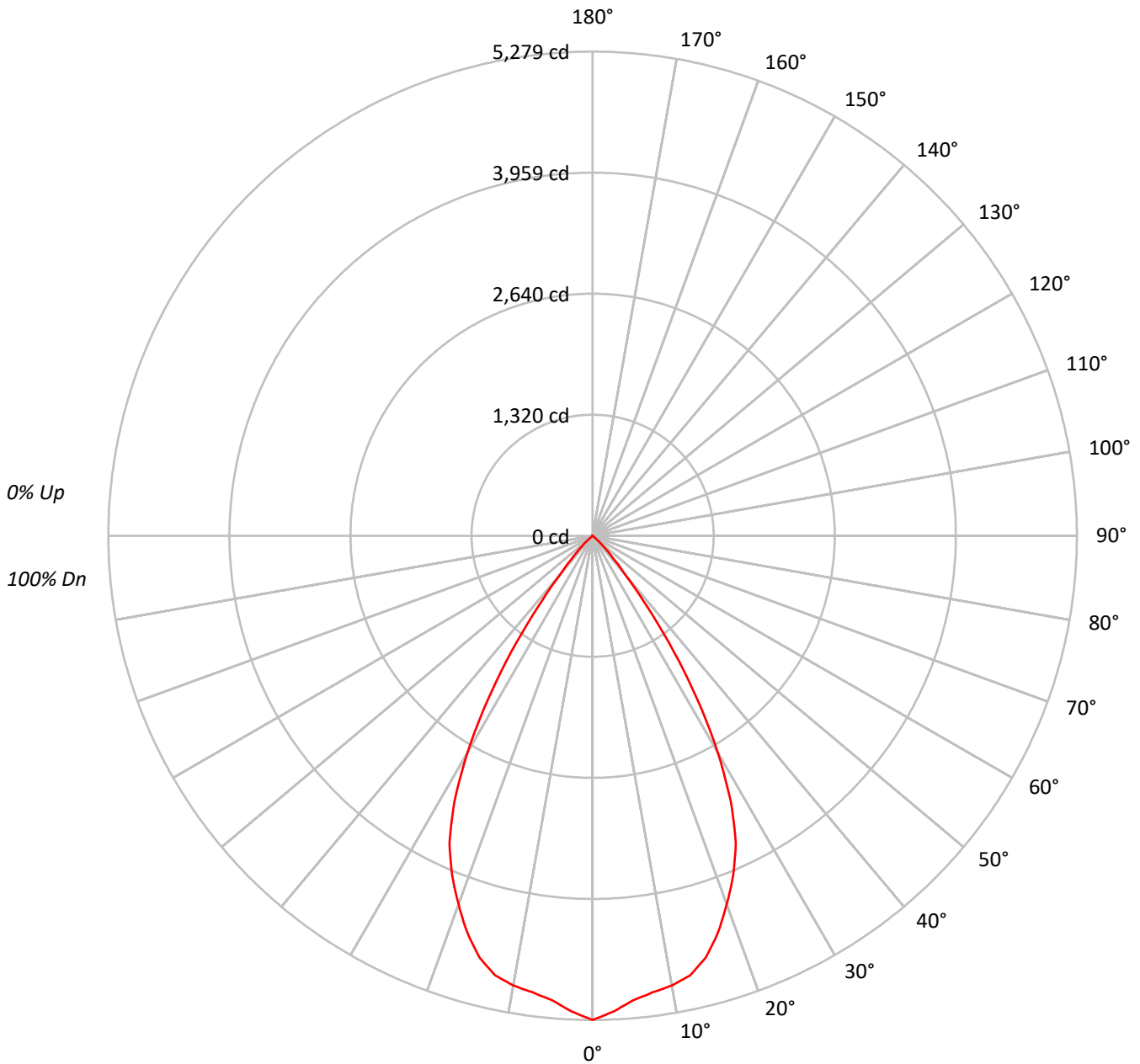
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88	88	88	88
3	103	97	92	88	101	96	91	88	93	89	86	91	87	85	88	86	84	82	82	82	82
4	98	91	85	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77	77	77	77
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72	72	72	72
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	69	67	67	67	67
7	84	75	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63	63	63	63
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	64	60	59	59	59	59
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56	56	56	56
10	73	64	58	54	72	63	58	54	62	58	54	62	57	54	61	57	54	53	53	53	53

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

	0°
0°	2604748
5°	2517428
10°	2493982
15°	2432098
20°	2244509
25°	2009975
30°	1555353
35°	931766
40°	357969
45°	130827
50°	5143
55°	3871
60°	4440
65°	2568
70°	3174
75°	4194
80°	6251
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	482.7	10.5
10°-20°	1324.6	28.8
20°-30°	1652.5	36.0
30°-40°	962.7	21.0
40°-50°	160.7	3.5
50°-60°	4.3	0.1
60°-70°	3.0	0.1
70°-80°	2.3	0.1
80°-90°	0.9	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°	3459.8	75.3
0°-40°	4422.5	96.3
0°-60°	4587.4	99.9
0°-90°	4593.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4593.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5279	
5°	5083	483
15°	4762	1325
25°	3692	1652
35°	1547	963
45°	188	161
55°	4	4
65°	2	3
75°	2	2
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5279.4
2.5°	5192.4
5°	5083.0
7.5°	5020.5
10°	4978.1
12.5°	4908.9
15°	4761.5
17.5°	4540.5
20°	4274.9
22.5°	4004.8
25°	3692.2
27.5°	3259.2
30°	2730.1
32.5°	2138.6
35°	1547.0
37.5°	975.5
40°	555.8
42.5°	325.9
45°	187.5
47.5°	64.7
50°	6.7
52.5°	4.5
55°	4.5
57.5°	4.5
60°	4.5
62.5°	4.5
65°	2.2
67.5°	2.2
70°	2.2
72.5°	2.2
75°	2.2
77.5°	2.2
80°	2.2
82.5°	2.2
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)