

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: P430722

Luminaire Tested: **LAM4B412R309727DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430722  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B412R309727DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5067.9 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

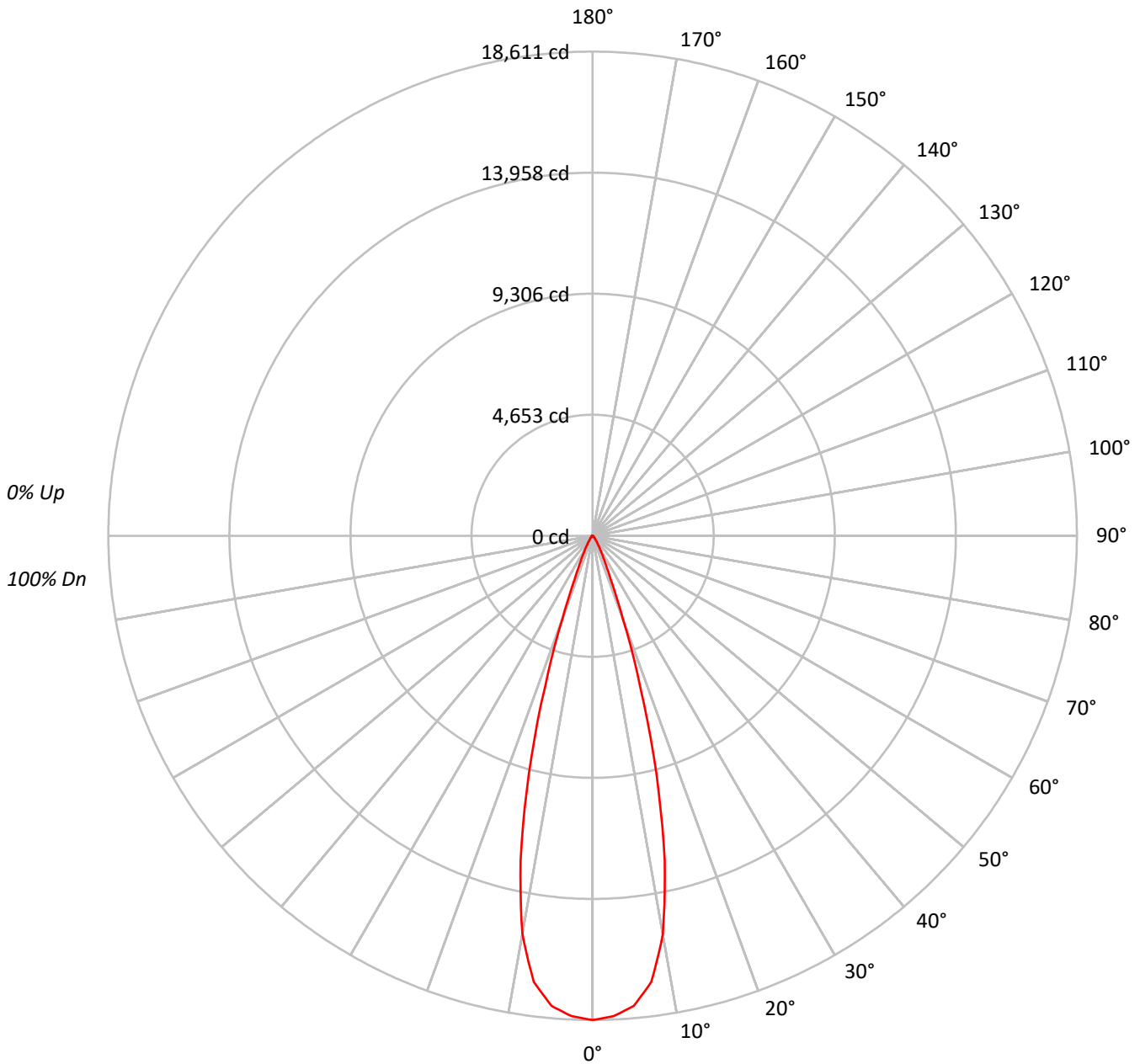
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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															
1	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96				96															
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	95	94				93																
3	107	103	99	96	105	101	98	95	99	96	94	96	94	92	94	92	91				90																
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	90	88				87																
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85				84																
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82				81																
7	95	88	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80				79																
8	92	86	81	79	91	85	81	78	84	81	78	83	80	78	83	80	78				77																
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75				74																
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	78	76	73				72																

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

	0°
0°	9182385
5°	8981814
10°	7787700
15°	4826808
20°	1769082
25°	591364
30°	290265
35°	144734
40°	89782
45°	57006
50°	40604
55°	33117
60°	28419
65°	22415
70°	27697
75°	27450
80°	27276
85°	27172



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1652.8	32.6
10°-20°	2495.3	49.2
20°-30°	608.4	12.0
30°-40°	166.6	3.3
40°-50°	67.1	1.3
50°-60°	35.9	0.7
60°-70°	21.4	0.4
70°-80°	16.5	0.3
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°	4756.6	93.9
0°-40°	4923.1	97.1
0°-60°	5026.1	99.2
0°-90°	5067.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5067.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	18611	
5°	18135	###
15°	9450	2495
25°	1086	608
35°	240	167
45°	82	67
55°	38	36
65°	19	21
75°	14	16
85°	5	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	18611.2
2.5°	18486.3
5°	18135.4
7.5°	17299.0
10°	15544.6
12.5°	12795.2
15°	9449.8
17.5°	6090.0
20°	3369.4
22.5°	1797.7
25°	1086.3
27.5°	735.4
30°	509.5
32.5°	346.1
35°	240.3
37.5°	177.8
40°	139.4
42.5°	105.7
45°	81.7
47.5°	67.3
50°	52.9
52.5°	48.1
55°	38.5
57.5°	33.6
60°	28.8
62.5°	24.0
65°	19.2
67.5°	19.2
70°	19.2
72.5°	19.2
75°	14.4
77.5°	14.4
80°	9.6
82.5°	4.8
85°	4.8
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)