

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: P430899

Luminaire Tested: **LAM4B412R709027DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430899  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-14)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B412R709027DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 70 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5111.5 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

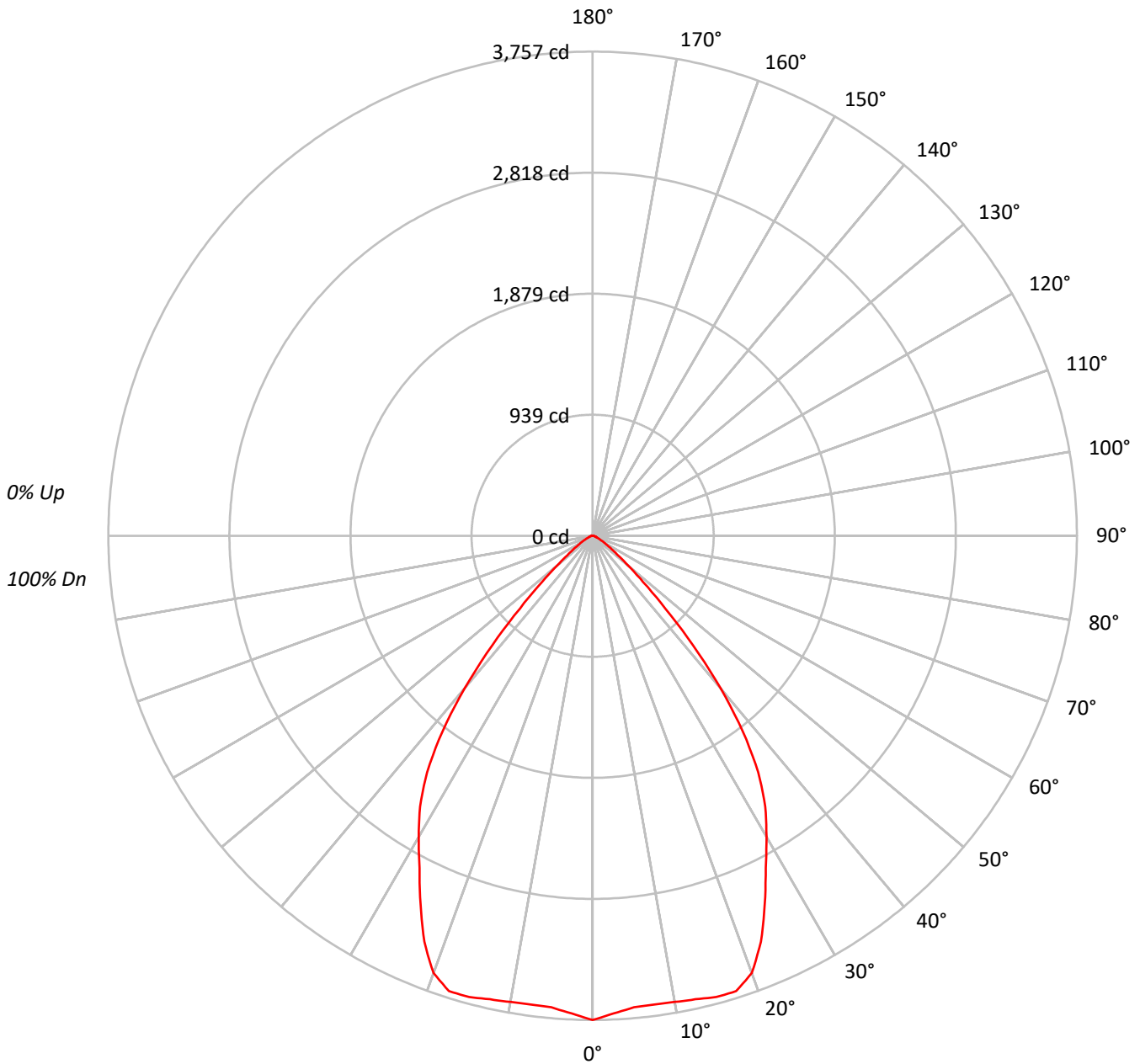
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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	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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92																																				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84																																				
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76																																				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70																																				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64																																				
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	64	60	58																																				
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54																																				
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50																																				
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46																																				
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43																																				

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

	0°
0°	1853726
5°	1819254
10°	1840289
15°	1892353
20°	1895565
25°	1719709
30°	1536610
35°	1349585
40°	993658
45°	556521
50°	273866
55°	153456
60°	93249
65°	61290
70°	45440
75°	40032
80°	29833
85°	29437



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.1	6.9
10°-20°	1043.9	20.4
20°-30°	1448.7	28.3
30°-40°	1363.0	26.7
40°-50°	650.6	12.7
50°-60°	172.0	3.4
60°-70°	54.3	1.1
70°-80°	22.1	0.4
80°-90°	5.7	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°	2843.8	55.6
0°-40°	4206.8	82.3
0°-60°	5029.4	98.4
0°-90°	5111.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5111.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3757	
5°	3673	351
15°	3705	1044
25°	3159	1449
35°	2241	1363
45°	798	651
55°	178	172
65°	52	54
75°	21	22
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3757.2
2.5°	3710.0
5°	3673.3
7.5°	3668.0
10°	3673.3
12.5°	3683.8
15°	3704.8
17.5°	3704.8
20°	3610.3
22.5°	3410.9
25°	3159.0
27.5°	2907.1
30°	2697.2
32.5°	2492.6
35°	2240.7
37.5°	1915.4
40°	1542.8
42.5°	1149.2
45°	797.6
47.5°	530.0
50°	356.8
52.5°	246.6
55°	178.4
57.5°	125.9
60°	94.5
62.5°	68.2
65°	52.5
67.5°	36.7
70°	31.5
72.5°	26.2
75°	21.0
77.5°	15.7
80°	10.5
82.5°	10.5
85°	5.2
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)