

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: P430912

Luminaire Tested: **LAM4B412R709727DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430912  
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: LAM4B412R709727DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 70 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4867.3 lumens  
Efficiency: N/A  
Efficacy: 90.0 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

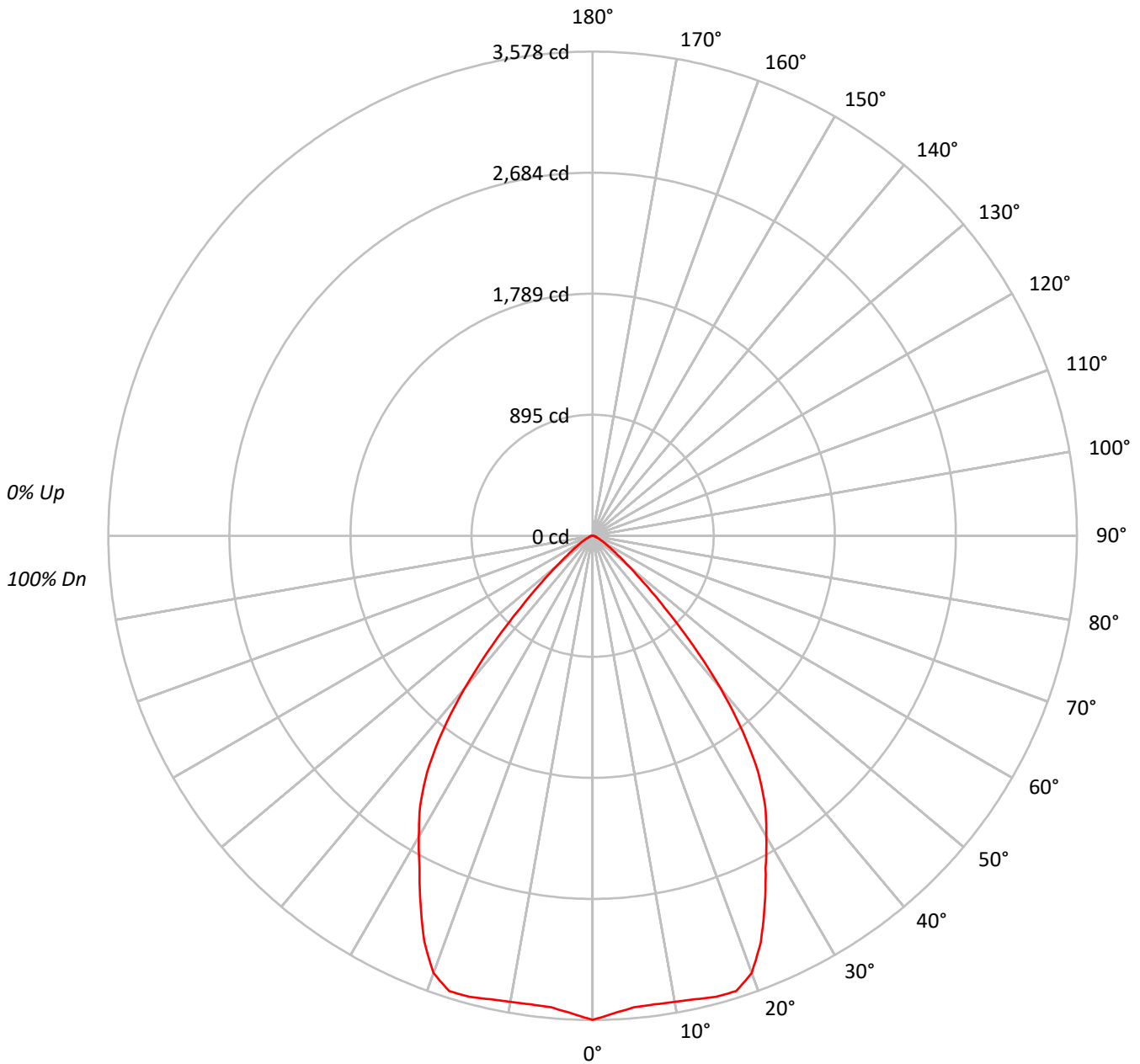
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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°	1765164
5°	1732286
10°	1752315
15°	1801893
20°	1804995
25°	1637562
30°	1463175
35°	1285078
40°	946126
45°	529937
50°	260818
55°	146145
60°	88710
65°	58372
70°	43276
75°	38125
80°	28413
85°	28304



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.4	6.9
10°-20°	994.0	20.4
20°-30°	1379.5	28.3
30°-40°	1297.9	26.7
40°-50°	619.6	12.7
50°-60°	163.8	3.4
60°-70°	51.7	1.1
70°-80°	21.1	0.4
80°-90°	5.4	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°	2707.9	55.6
0°-40°	4005.7	82.3
0°-60°	4789.1	98.4
0°-90°	4867.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4867.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3578	
5°	3498	334
15°	3528	994
25°	3008	1379
35°	2134	1298
45°	760	620
55°	170	164
65°	50	52
75°	20	21
85°	5	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3577.7
2.5°	3532.7
5°	3497.7
7.5°	3492.7
10°	3497.7
12.5°	3507.7
15°	3527.7
17.5°	3527.7
20°	3437.8
22.5°	3247.9
25°	3008.1
27.5°	2768.2
30°	2568.3
32.5°	2373.5
35°	2133.6
37.5°	1823.8
40°	1469.0
42.5°	1094.3
45°	759.5
47.5°	504.7
50°	339.8
52.5°	234.8
55°	169.9
57.5°	119.9
60°	89.9
62.5°	65.0
65°	50.0
67.5°	35.0
70°	30.0
72.5°	25.0
75°	20.0
77.5°	15.0
80°	10.0
82.5°	10.0
85°	5.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)