

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: P430883

Luminaire Tested: **LAM4B412R659040DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430883  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-22)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B412R659040DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5815.0 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

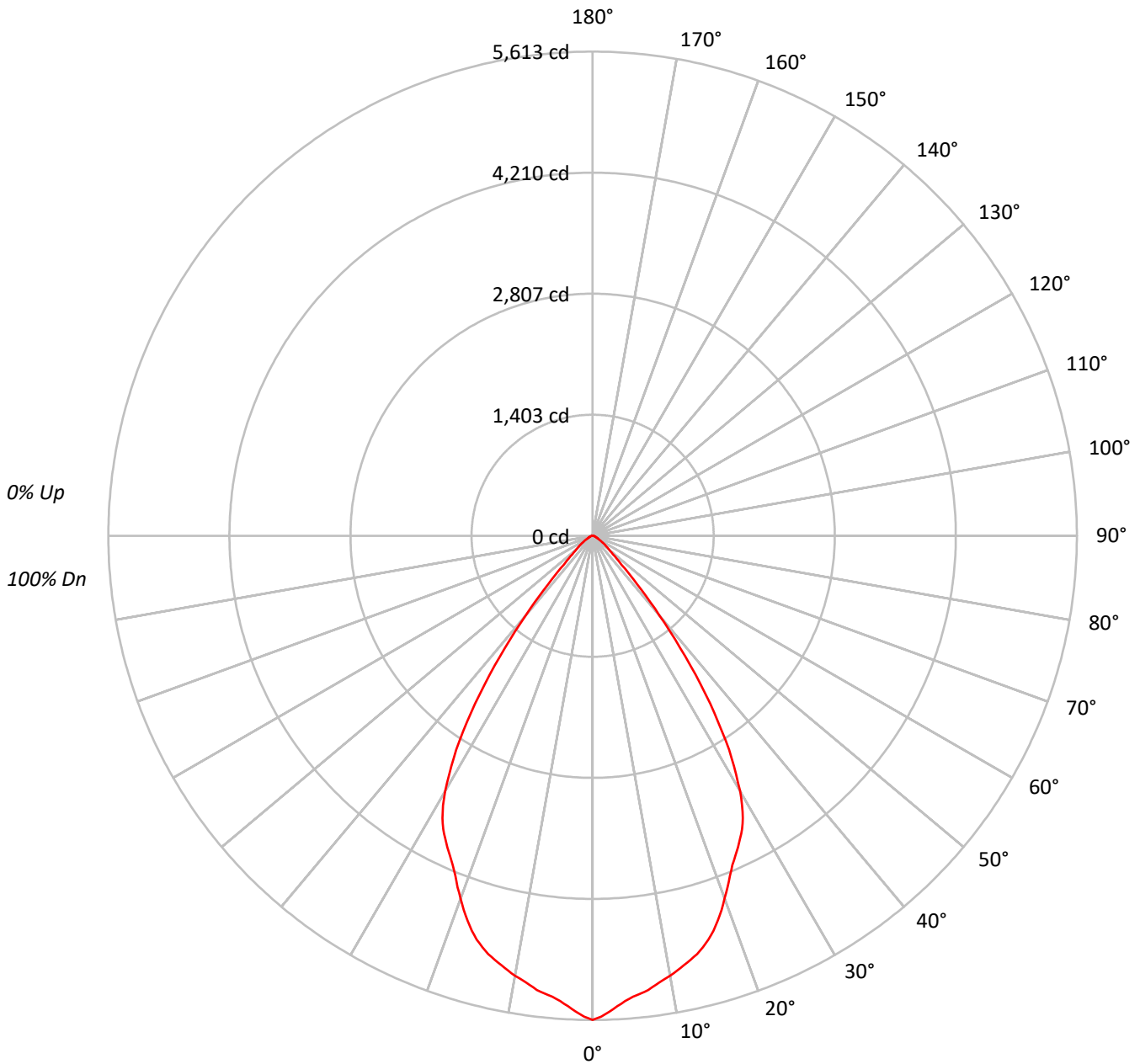
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50	50	50	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47	47	47	47

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

	0°
0°	2769290
5°	2657439
10°	2594531
15°	2522099
20°	2348730
25°	2169425
30°	1947482
35°	1430716
40°	772680
45°	332335
50°	185136
55°	129629
60°	83282
65°	63392
70°	52220
75°	45941
80°	51427
85°	33965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	507.1	8.7
10°-20°	1377.8	23.7
20°-30°	1826.4	31.4
30°-40°	1446.4	24.9
40°-50°	430.8	7.4
50°-60°	137.9	2.4
60°-70°	55.1	0.9
70°-80°	26.2	0.5
80°-90°	7.4	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°	3711.3	63.8
0°-40°	5157.6	88.7
0°-60°	5726.3	98.5
0°-90°	5815.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5815.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5613	
5°	5366	507
15°	4938	1378
25°	3985	1826
35°	2375	1446
45°	476	431
55°	151	138
65°	54	55
75°	24	26
85°	6	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5612.9
1°	5576.7
2°	5522.5
3°	5462.2
4°	5407.9
5°	5365.7
6°	5335.6
7°	5305.4
8°	5257.2
9°	5215.0
10°	5178.8
11°	5136.6
12°	5088.4
13°	5046.2
14°	4997.9
15°	4937.7
16°	4871.3
17°	4786.9
18°	4690.5
19°	4588.0
20°	4473.4
21°	4364.9
22°	4250.4
23°	4147.9
24°	4063.5
25°	3985.1
26°	3900.7
27°	3816.3
28°	3707.8
29°	3575.1
30°	3418.4
32.5°	2942.1
35°	2375.4
37.5°	1760.4
40°	1199.7
42.5°	759.6
45°	476.3
47.5°	319.5
50°	241.2
52.5°	192.9
55°	150.7
57.5°	114.5
60°	84.4



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	42.2
70°	36.2
72.5°	30.1
75°	24.1
77.5°	18.1
80°	18.1
82.5°	12.1
85°	6.0
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		66.3
65°		54.3



(END OF REPORT)