

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: P431884

Luminaire Tested: **LAMR4B412R359030DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431884  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-6)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B412R359030DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5466.4 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 0.57 / 0.57 / 0.51  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

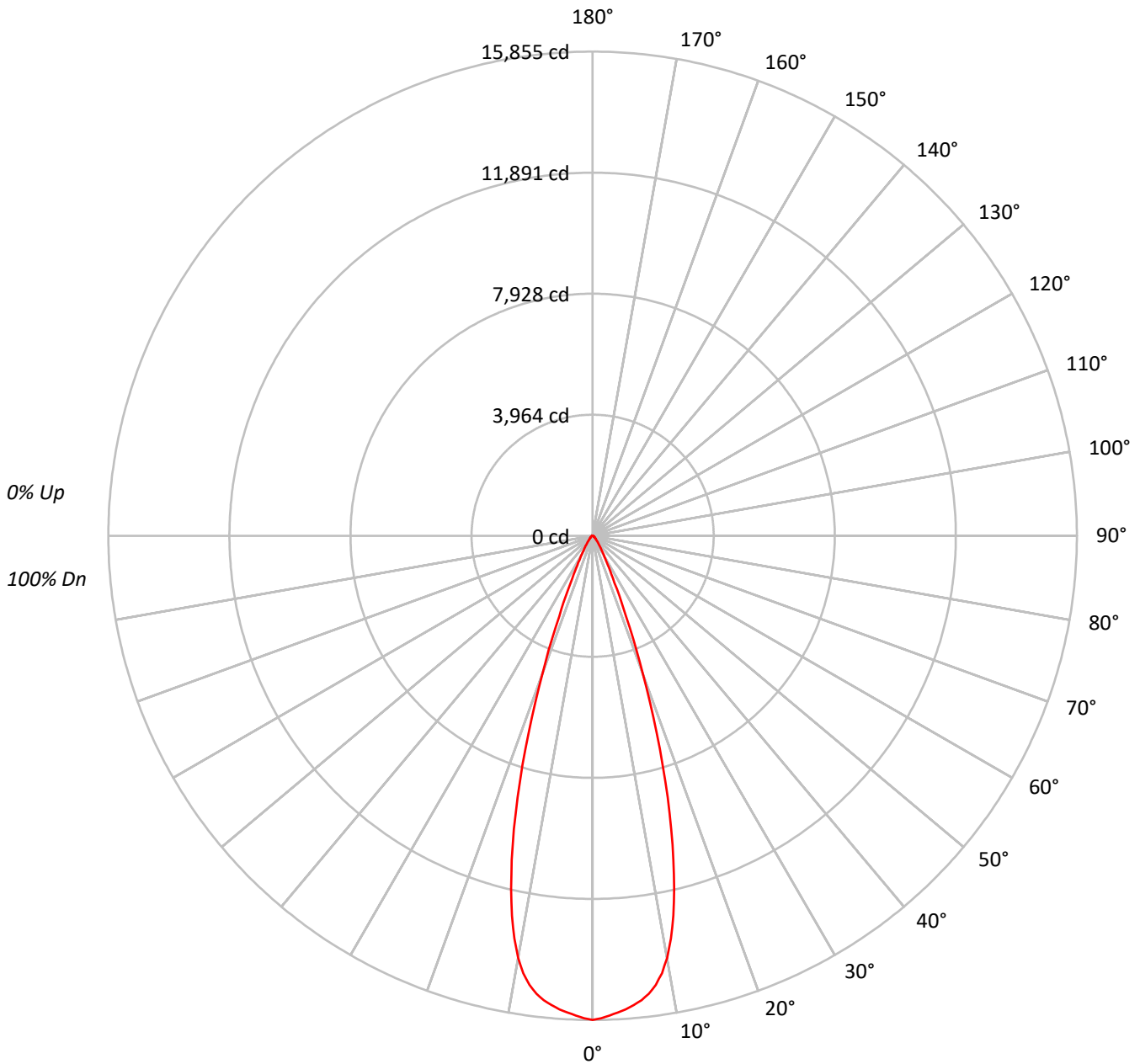
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68

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

	0°
0°	7822631
5°	7642322
10°	7032858
15°	5083170
20°	2511126
25°	921207
30°	415372
35°	226105
40°	140148
45°	94893
50°	71000
55°	60815
60°	53680
65°	50783
70°	47027
75°	41557
80°	46313
85°	30569



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1433.8	26.2
10°-20°	2620.4	47.9
20°-30°	912.3	16.7
30°-40°	252.8	4.6
40°-50°	109.9	2.0
50°-60°	63.7	1.2
60°-70°	43.1	0.8
70°-80°	23.7	0.4
80°-90°	6.6	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°	4966.6	90.9
0°-40°	5219.4	95.5
0°-60°	5393.0	98.7
0°-90°	5466.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5466.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	15855	
5°	15431	###
15°	9952	2620
25°	1692	912
35°	375	253
45°	136	110
55°	71	64
65°	44	43
75°	22	24
85°	5	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	15855.2
1°	15800.8
2°	15719.2
3°	15637.6
4°	15545.1
5°	15430.8
6°	15289.3
7°	15115.2
8°	14848.6
9°	14505.8
10°	14037.9
11°	13439.4
12°	12715.7
13°	11866.9
14°	10936.5
15°	9951.7
16°	8901.6
17°	7846.0
18°	6785.0
19°	5762.1
20°	4782.7
22.5°	2851.1
25°	1692.2
26°	1409.2
27°	1175.3
28°	995.7
29°	848.8
30°	729.1
32.5°	516.9
35°	375.4
37.5°	282.9
40°	217.6
42.5°	168.7
45°	136.0
47.5°	114.3
50°	92.5
52.5°	81.6
55°	70.7
57.5°	59.9
60°	54.4
62.5°	49.0
65°	43.5
67.5°	38.1



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	21.8
77.5°	16.3
80°	16.3
82.5°	10.9
85°	5.4
87.5°	0.0
90°	0.0



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— 0°-180°







70°	32.6
72.5°	27.2



(END OF REPORT)