

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: P431877

Luminaire Tested: **LAMR4B412R309730DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431877  
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: LAMR4B412R309730DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5337.6 lumens  
Efficiency: N/A  
Efficacy: 98.7 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

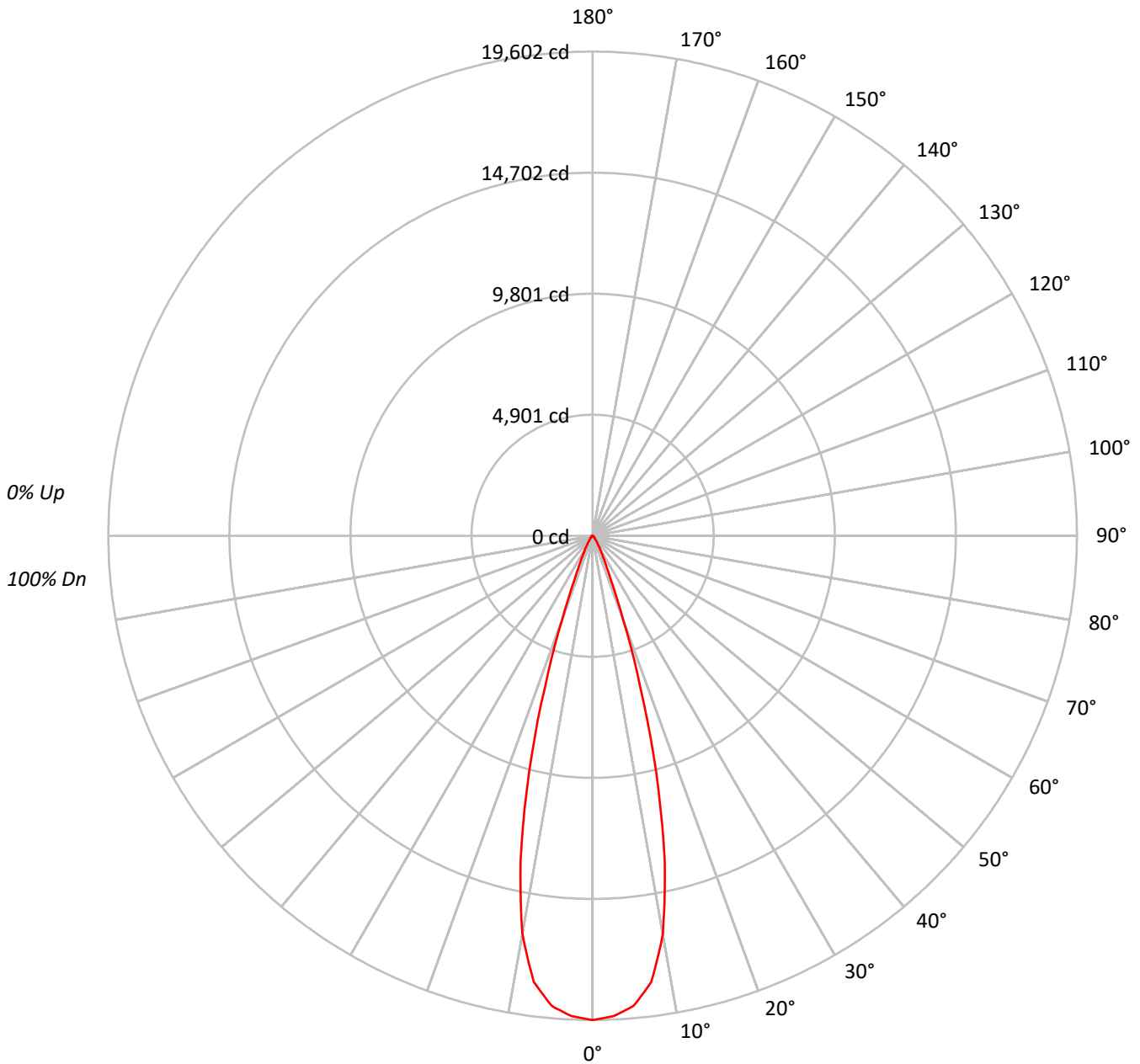
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

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

	0°
0°	9671078
5°	9459843
10°	8202170
15°	5083681
20°	1863275
25°	622830
30°	305704
35°	152443
40°	94548
45°	60076
50°	42753
55°	34837
60°	29997
65°	23582
70°	29139
75°	28975
80°	28697
85°	28871



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1740.8	32.6
10°-20°	2628.1	49.2
20°-30°	640.8	12.0
30°-40°	175.5	3.3
40°-50°	70.6	1.3
50°-60°	37.8	0.7
60°-70°	22.5	0.4
70°-80°	17.4	0.3
80°-90°	4.1	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°	5009.7	93.9
0°-40°	5185.2	97.1
0°-60°	5293.6	99.2
0°-90°	5337.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5337.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	19602	
5°	19101	###
15°	9953	2628
25°	1144	641
35°	253	175
45°	86	71
55°	40	38
65°	20	23
75°	15	17
85°	5	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	19601.7
2.5°	19470.1
5°	19100.6
7.5°	18219.7
10°	16371.9
12.5°	13476.2
15°	9952.7
17.5°	6414.1
20°	3548.8
22.5°	1893.4
25°	1144.1
27.5°	774.6
30°	536.6
32.5°	364.5
35°	253.1
37.5°	187.3
40°	146.8
42.5°	111.4
45°	86.1
47.5°	70.9
50°	55.7
52.5°	50.6
55°	40.5
57.5°	35.4
60°	30.4
62.5°	25.3
65°	20.2
67.5°	20.2
70°	20.2
72.5°	20.2
75°	15.2
77.5°	15.2
80°	10.1
82.5°	5.1
85°	5.1
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)