

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: P431597

Luminaire Tested: **LAMR4B312R359030DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431597  
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: LAMR4B312R359030DE01021MMS  
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: 3508.6 lumens  
Efficiency: N/A  
Efficacy: 85.8 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

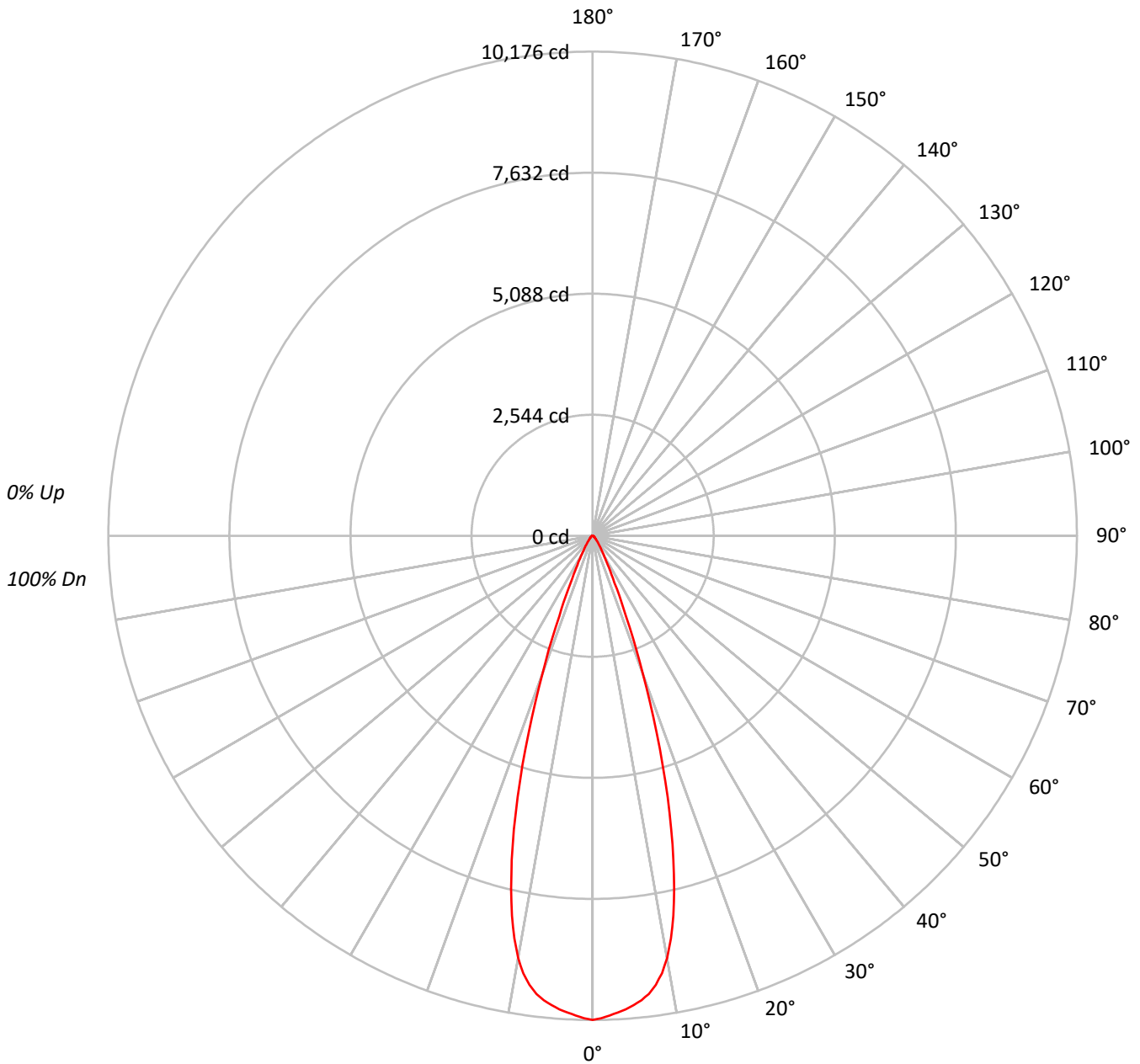
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	5020828
5°	4905096
10°	4513926
15°	3262531
20°	1611726
25°	591256
30°	266622
35°	145156
40°	89975
45°	60913
50°	45593
55°	39052
60°	34438
65°	32571
70°	30293
75°	26688
80°	29833
85°	19813



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	920.3	26.2
10°-20°	1681.9	47.9
20°-30°	585.5	16.7
30°-40°	162.3	4.6
40°-50°	70.5	2.0
50°-60°	40.9	1.2
60°-70°	27.6	0.8
70°-80°	15.2	0.4
80°-90°	4.3	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°	3187.7	90.9
0°-40°	3350.0	95.5
0°-60°	3461.4	98.7
0°-90°	3508.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3508.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10176	
5°	9904	920
15°	6387	1682
25°	1086	586
35°	241	162
45°	87	71
55°	45	41
65°	28	28
75°	14	15
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	10176.4
1°	10141.5
2°	10089.1
3°	10036.7
4°	9977.4
5°	9904.0
6°	9813.2
7°	9701.5
8°	9530.3
9°	9310.3
10°	9010.0
11°	8625.9
12°	8161.4
13°	7616.6
14°	7019.4
15°	6387.3
16°	5713.3
17°	5035.8
18°	4354.8
19°	3698.3
20°	3069.7
22.5°	1829.9
25°	1086.1
26°	904.5
27°	754.3
28°	639.1
29°	544.8
30°	468.0
32.5°	331.8
35°	241.0
37.5°	181.6
40°	139.7
42.5°	108.3
45°	87.3
47.5°	73.3
50°	59.4
52.5°	52.4
55°	45.4
57.5°	38.4
60°	34.9
62.5°	31.4
65°	27.9
67.5°	24.4



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	14.0
77.5°	10.5
80°	10.5
82.5°	7.0
85°	3.5
87.5°	0.0
90°	0.0



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— 0°-180°







70°		21.0
72.5°		17.5



(END OF REPORT)