

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: P431593

Luminaire Tested: **LAMR4B312R359027DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431593  
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: LAMR4B312R359027DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3347.1 lumens  
Efficiency: N/A  
Efficacy: 81.8 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

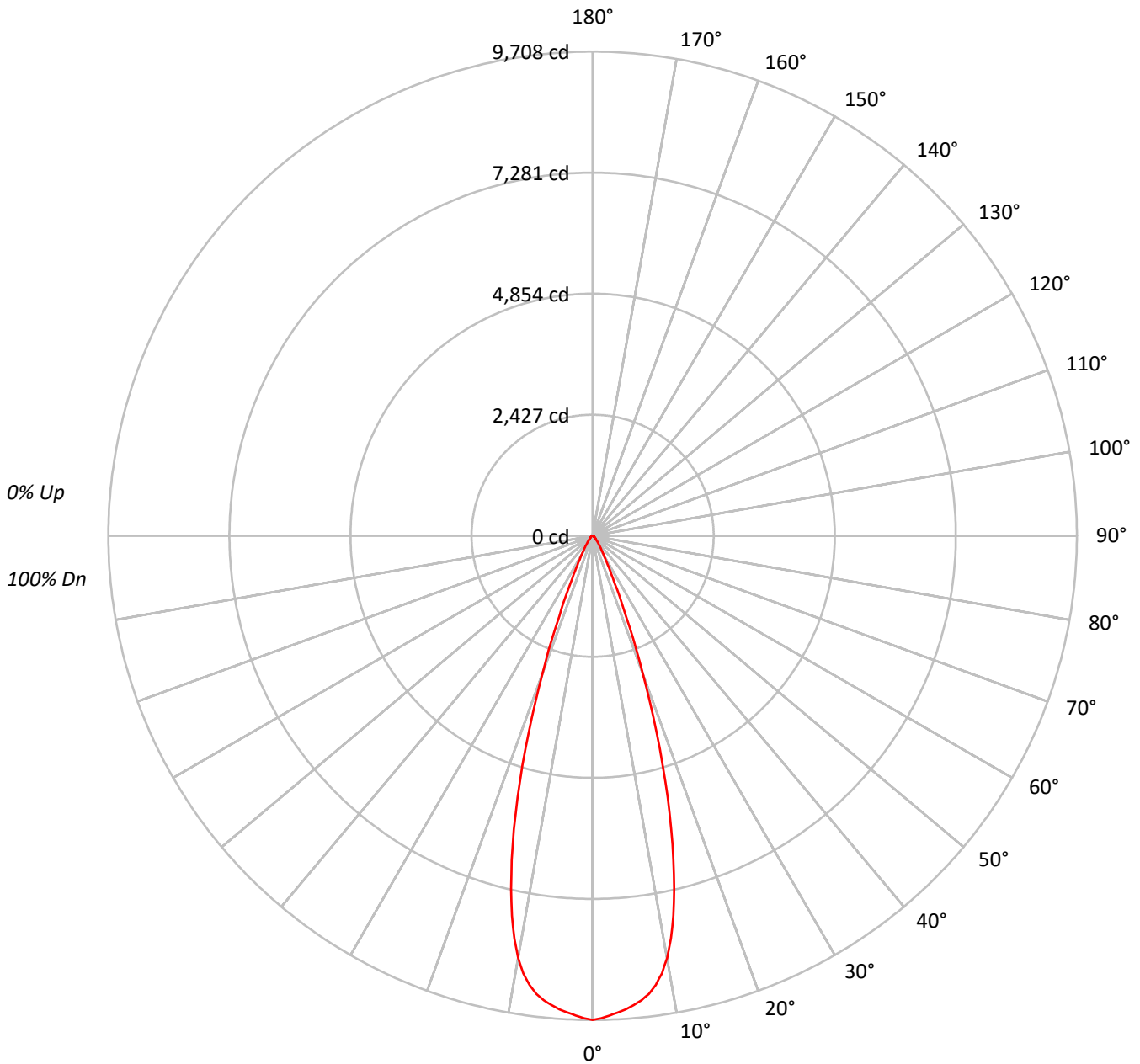
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4789827
5°	4679405
10°	4306216
15°	3112412
20°	1537538
25°	564036
30°	254317
35°	138470
40°	85853
45°	58122
50°	43444
55°	37246
60°	32859
65°	31171
70°	28851
75°	25353
80°	28413
85°	18681



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	877.9	26.2
10°-20°	1604.5	47.9
20°-30°	558.6	16.7
30°-40°	154.8	4.6
40°-50°	67.3	2.0
50°-60°	39.0	1.2
60°-70°	26.4	0.8
70°-80°	14.5	0.4
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°	3041.0	90.9
0°-40°	3195.8	95.5
0°-60°	3302.1	98.7
0°-90°	3347.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3347.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9708	
5°	9448	878
15°	6093	1604
25°	1036	559
35°	230	155
45°	83	67
55°	43	39
65°	27	26
75°	13	15
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9708.2
1°	9674.8
2°	9624.9
3°	9574.9
4°	9518.3
5°	9448.3
6°	9361.7
7°	9255.1
8°	9091.8
9°	8881.9
10°	8595.4
11°	8228.9
12°	7785.8
13°	7266.1
14°	6696.4
15°	6093.4
16°	5450.4
17°	4804.1
18°	4154.5
19°	3528.1
20°	2928.4
22.5°	1745.7
25°	1036.1
26°	862.9
27°	719.6
28°	609.7
29°	519.7
30°	446.4
32.5°	316.5
35°	229.9
37.5°	173.2
40°	133.3
42.5°	103.3
45°	83.3
47.5°	70.0
50°	56.6
52.5°	50.0
55°	43.3
57.5°	36.6
60°	33.3
62.5°	30.0
65°	26.7
67.5°	23.3



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	13.3
77.5°	10.0
80°	10.0
82.5°	6.7
85°	3.3
87.5°	0.0
90°	0.0



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— 0°-180°







70°	20.0
72.5°	16.7



(END OF REPORT)