

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: P431585

Luminaire Tested: **LAMR4B312R309727DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431585  
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: LAMR4B312R309727DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3252.8 lumens  
Efficiency: N/A  
Efficacy: 79.5 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

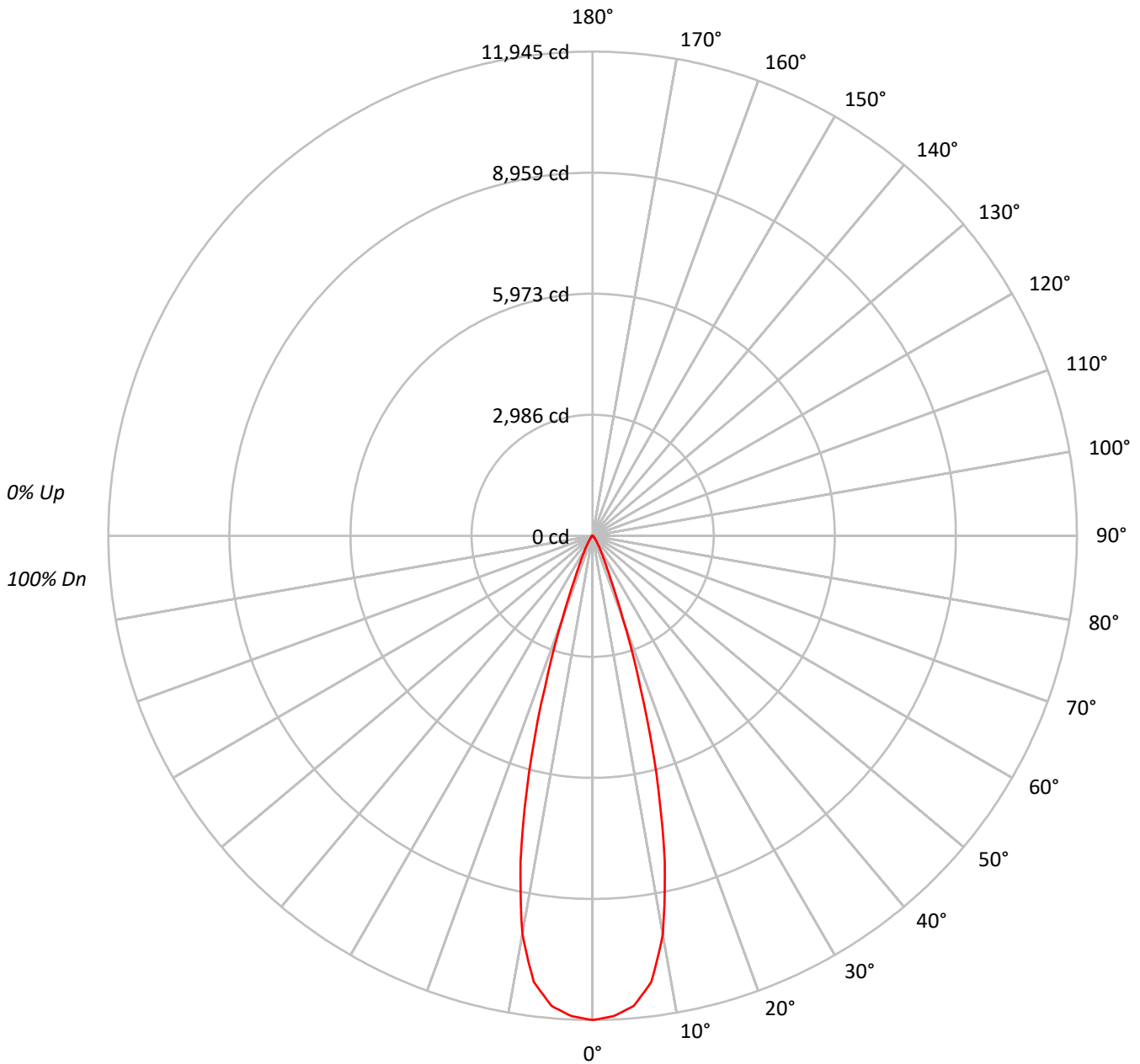
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5893567
5°	5764826
10°	4998435
15°	3098008
20°	1135459
25°	379545
30°	186294
35°	92936
40°	57643
45°	36562
50°	26020
55°	21246
60°	18255
65°	14359
70°	17743
75°	17728
80°	17616
85°	17549



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1060.8	32.6
10°-20°	1601.6	49.2
20°-30°	390.5	12.0
30°-40°	106.9	3.3
40°-50°	43.0	1.3
50°-60°	23.0	0.7
60°-70°	13.7	0.4
70°-80°	10.6	0.3
80°-90°	2.5	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°	3052.9	93.9
0°-40°	3159.8	97.1
0°-60°	3225.9	99.2
0°-90°	3252.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3252.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	11945	
5°	11640	###
15°	6065	1602
25°	697	390
35°	154	107
45°	52	43
55°	25	23
65°	12	14
75°	9	11
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	11945.3
2.5°	11865.1
5°	11639.9
7.5°	11103.1
10°	9977.1
12.5°	8212.4
15°	6065.2
17.5°	3908.8
20°	2162.6
22.5°	1153.8
25°	697.2
27.5°	472.0
30°	327.0
32.5°	222.1
35°	154.3
37.5°	114.1
40°	89.5
42.5°	67.9
45°	52.4
47.5°	43.2
50°	33.9
52.5°	30.9
55°	24.7
57.5°	21.6
60°	18.5
62.5°	15.4
65°	12.3
67.5°	12.3
70°	12.3
72.5°	12.3
75°	9.3
77.5°	9.3
80°	6.2
82.5°	3.1
85°	3.1
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)