

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: P431656

Luminaire Tested: **LAMR4B312R459727DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431656  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-8)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R459727DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3219.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.66  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

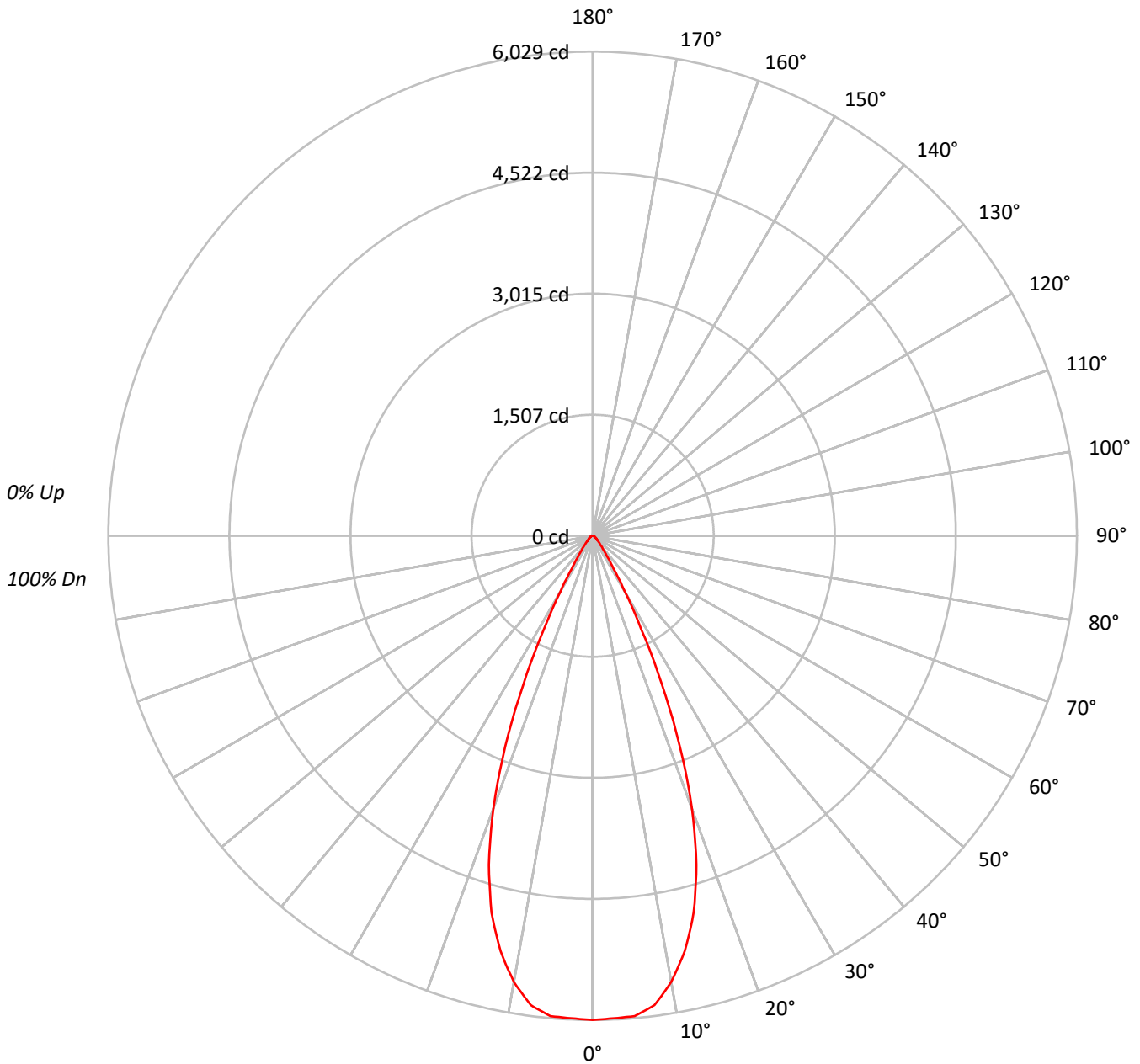
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20																										
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	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	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																																				
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89																																				
3	105	99	94	91	103	98	93	90	95	92	89	93	90	87	90	88	86	85																																				
4	100	94	89	85	99	93	88	85	90	87	84	89	85	83	87	84	82	80																																				
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76																																				
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73																																				
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69																																				
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66																																				
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63																																				
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	65	62	61																																				

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

	0°
0°	2974684
5°	2973665
10°	2826489
15°	2482819
20°	1899345
25°	1108802
30°	453828
35°	191894
40°	104596
45°	67542
50°	52732
55°	45676
60°	37003
65°	29186
70°	26976
75°	23828
80°	26708
85°	17549



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	561.9	17.5
10°-20°	1323.3	41.1
20°-30°	932.4	29.0
30°-40°	229.5	7.1
40°-50°	80.1	2.5
50°-60°	47.4	1.5
60°-70°	26.2	0.8
70°-80°	14.4	0.4
80°-90°	3.8	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°	2817.6	87.5
0°-40°	3047.1	94.7
0°-60°	3174.6	98.6
0°-90°	3219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3219.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6029	
5°	6004	562
15°	4861	1323
25°	2037	932
35°	319	229
45°	97	80
55°	53	47
65°	25	26
75°	12	14
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6029.2
2.5°	6013.6
5°	6004.2
7.5°	5894.9
10°	5641.8
12.5°	5298.2
15°	4860.8
17.5°	4295.4
20°	3617.5
22.5°	2839.7
25°	2036.8
27.5°	1315.2
30°	796.6
32.5°	484.2
35°	318.6
37.5°	224.9
40°	162.4
42.5°	125.0
45°	96.8
47.5°	81.2
50°	68.7
52.5°	59.4
55°	53.1
57.5°	46.9
60°	37.5
62.5°	31.2
65°	25.0
67.5°	21.9
70°	18.7
72.5°	15.6
75°	12.5
77.5°	12.5
80°	9.4
82.5°	6.2
85°	3.1
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)