

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: P431525

Luminaire Tested: **LAMR4B312R209030DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-3)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R209030DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

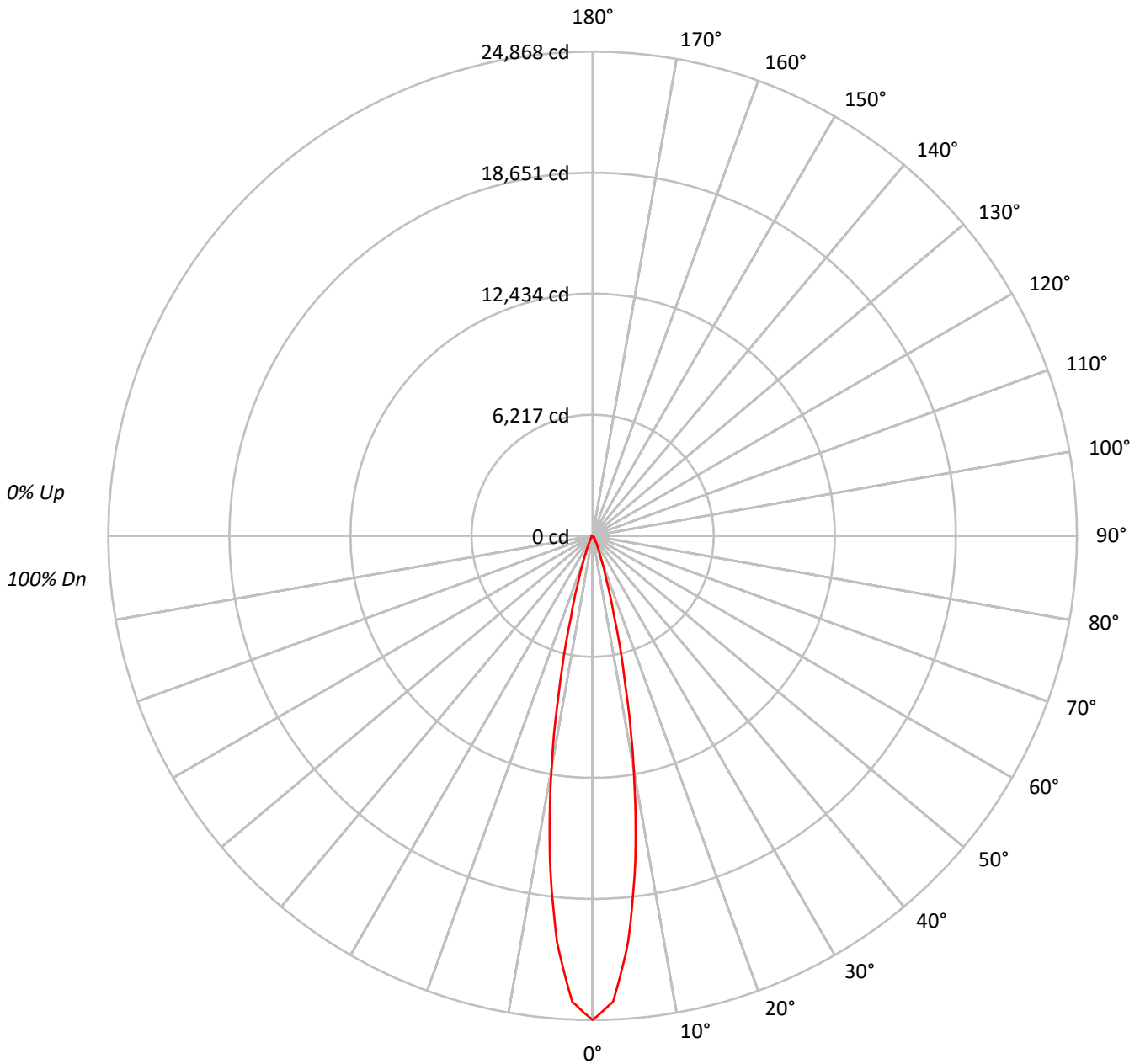
Lumens per Lamp: N/A  
Luminaire Lumens: 3552.0 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94
3	108	104	100	98	107	103	100	97	100	98	95	98	96	94	96	94	93	91
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78

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

	0°
0°	12269412
5°	10370832
10°	6091446
15°	2181099
20°	721672
25°	287271
30°	137299
35°	78480
40°	56613
45°	47726
50°	55034
55°	44815
60°	22498
65°	19029
70°	23513
75°	24782
80°	18468
85°	18681



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1714.6	48.3
10°-20°	1337.1	37.6
20°-30°	277.5	7.8
30°-40°	87.5	2.5
40°-50°	56.3	1.6
50°-60°	45.2	1.3
60°-70°	17.7	0.5
70°-80°	13.3	0.4
80°-90°	2.7	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°	3329.3	93.7
0°-40°	3416.8	96.2
0°-60°	3518.3	99.1
0°-90°	3552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	24868	
5°	20940	###
15°	4270	1337
25°	528	278
35°	130	87
45°	68	56
55°	52	45
65°	16	18
75°	13	13
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	24868.1
2.5°	23956.1
5°	20940.0
7.5°	16777.4
10°	12158.8
12.5°	7670.5
15°	4270.1
17.5°	2348.4
20°	1374.5
22.5°	840.3
25°	527.7
27.5°	348.5
30°	241.0
32.5°	169.4
35°	130.3
37.5°	104.2
40°	87.9
42.5°	74.9
45°	68.4
47.5°	68.4
50°	71.7
52.5°	68.4
55°	52.1
57.5°	35.8
60°	22.8
62.5°	19.5
65°	16.3
67.5°	16.3
70°	16.3
72.5°	16.3
75°	13.0
77.5°	9.8
80°	6.5
82.5°	3.3
85°	3.3
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)