

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: P431533

Luminaire Tested: **LAMR4B312R209050DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431533  
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: LAMR4B312R209050DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3775.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

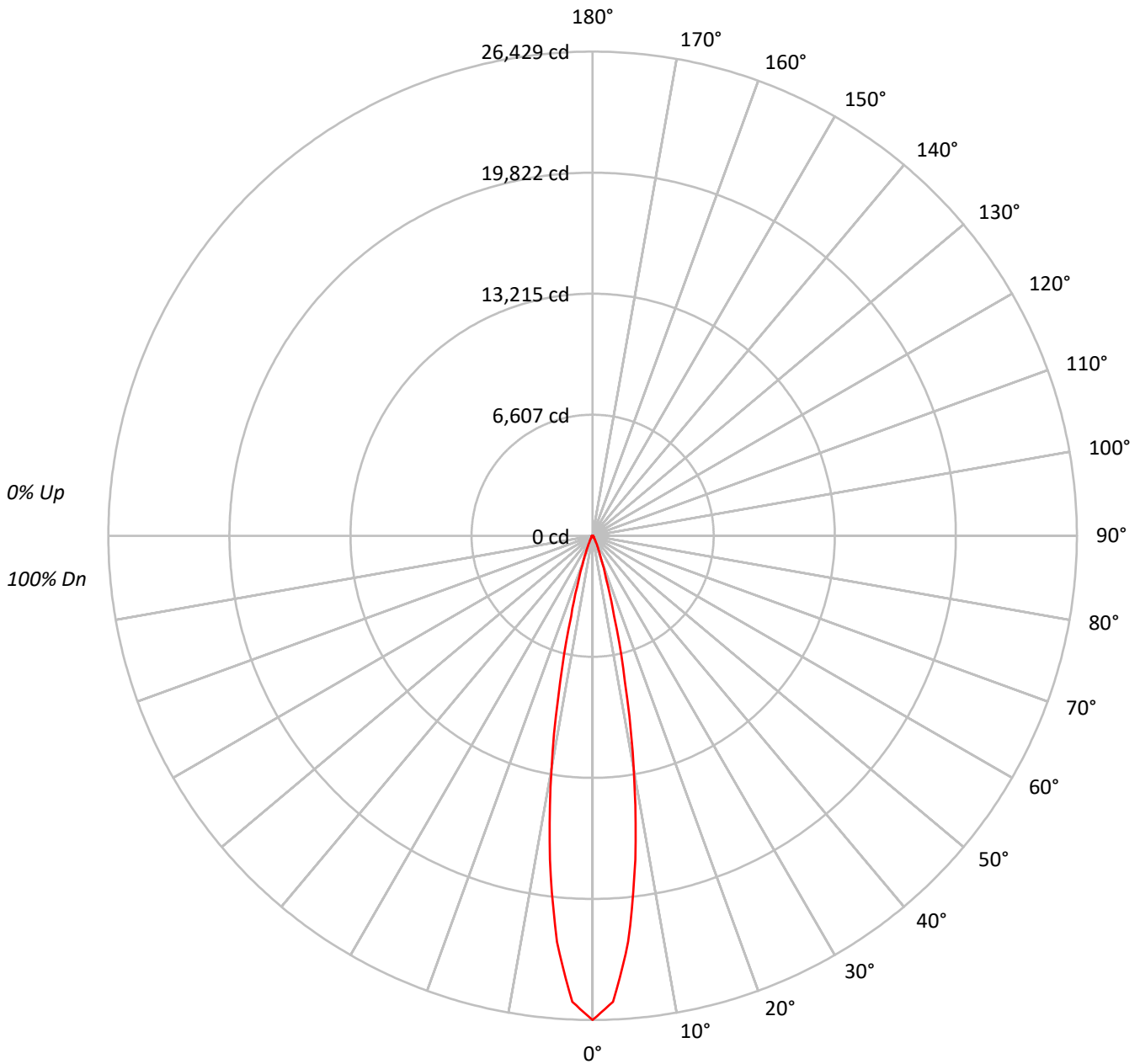
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	13039479
5°	11021758
10°	6473802
15°	2317989
20°	766984
25°	305291
30°	145959
35°	83419
40°	60220
45°	50726
50°	58488
55°	47654
60°	23880
65°	20197
70°	24956
75°	26307
80°	19605
85°	19813



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1822.3	48.3
10°-20°	1421.1	37.6
20°-30°	295.0	7.8
30°-40°	93.0	2.5
40°-50°	59.8	1.6
50°-60°	48.0	1.3
60°-70°	18.9	0.5
70°-80°	14.1	0.4
80°-90°	2.8	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°	3538.3	93.7
0°-40°	3631.3	96.2
0°-60°	3739.1	99.1
0°-90°	3775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3775.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	26429	
5°	22254	###
15°	4538	1421
25°	561	295
35°	138	93
45°	73	60
55°	55	48
65°	17	19
75°	14	14
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	26428.9
2.5°	25459.7
5°	22254.3
7.5°	17830.4
10°	12922.0
12.5°	8151.9
15°	4538.1
17.5°	2495.8
20°	1460.8
22.5°	893.1
25°	560.8
27.5°	370.4
30°	256.2
32.5°	180.0
35°	138.5
37.5°	110.8
40°	93.5
42.5°	79.6
45°	72.7
47.5°	72.7
50°	76.2
52.5°	72.7
55°	55.4
57.5°	38.1
60°	24.2
62.5°	20.8
65°	17.3
67.5°	17.3
70°	17.3
72.5°	17.3
75°	13.8
77.5°	10.4
80°	6.9
82.5°	3.5
85°	3.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)