

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: P431737

Luminaire Tested: **LAMR4B312R659027DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-22)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R659027DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3259.2 lumens  
Efficiency: N/A  
Efficacy: 79.7 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

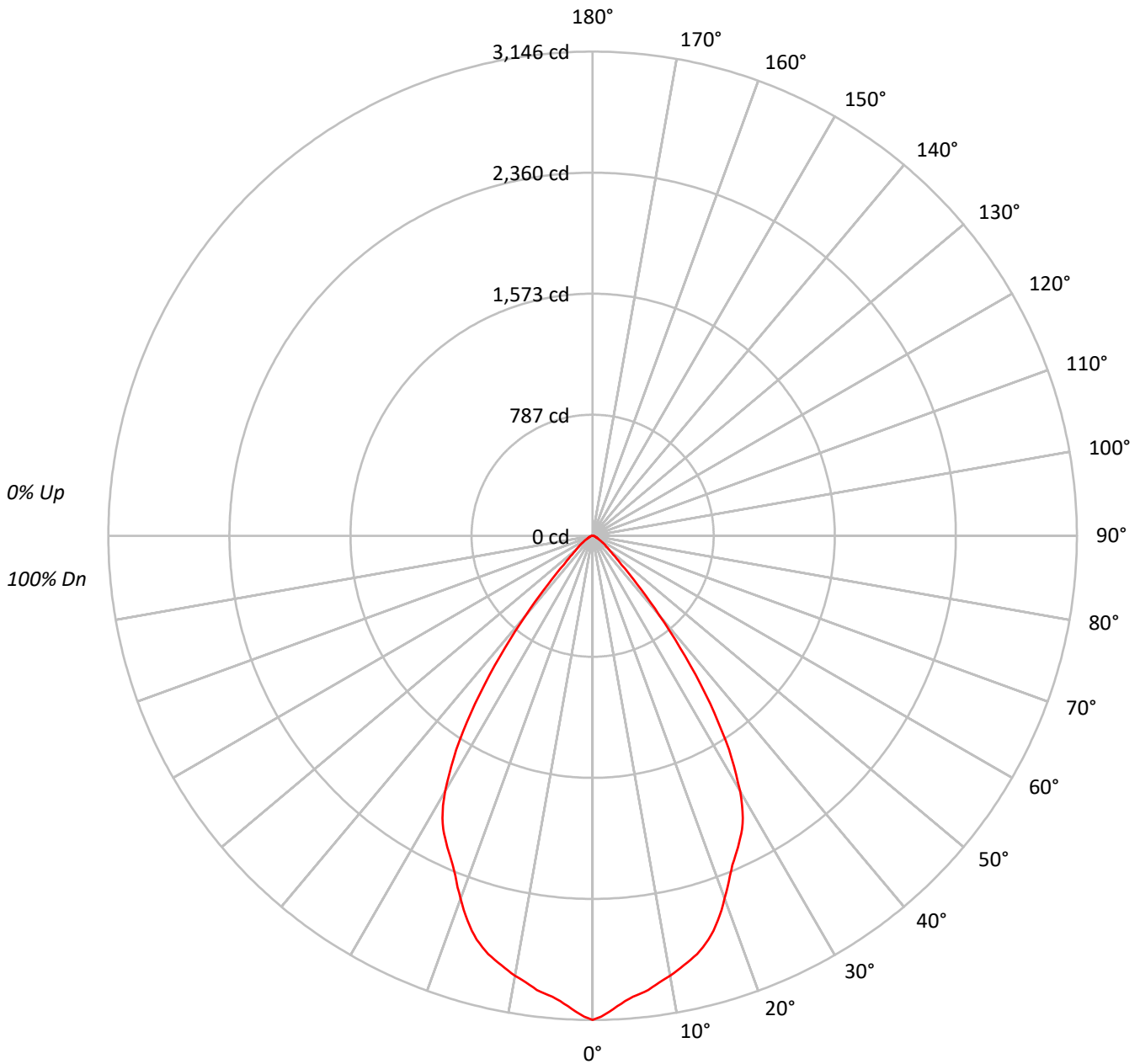
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50	50	50	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47	47	47	47

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

	0°
0°	1552123
5°	1489457
10°	1454176
15°	1413595
20°	1316442
25°	1215936
30°	1091499
35°	801909
40°	433067
45°	186228
50°	103774
55°	72685
60°	46674
65°	35490
70°	29284
75°	25735
80°	28697
85°	19247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.2	8.7
10°-20°	772.2	23.7
20°-30°	1023.7	31.4
30°-40°	810.7	24.9
40°-50°	241.5	7.4
50°-60°	77.3	2.4
60°-70°	30.9	0.9
70°-80°	14.7	0.5
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°	2080.1	63.8
0°-40°	2890.8	88.7
0°-60°	3209.5	98.5
0°-90°	3259.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3259.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3146	
5°	3007	284
15°	2768	772
25°	2234	1024
35°	1331	811
45°	267	241
55°	84	77
65°	30	31
75°	14	15
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3145.9
1°	3125.7
2°	3095.2
3°	3061.5
4°	3031.0
5°	3007.4
6°	2990.5
7°	2973.6
8°	2946.6
9°	2922.9
10°	2902.6
11°	2879.0
12°	2851.9
13°	2828.3
14°	2801.3
15°	2767.5
16°	2730.3
17°	2683.0
18°	2628.9
19°	2571.5
20°	2507.3
21°	2446.5
22°	2382.3
23°	2324.8
24°	2277.5
25°	2233.6
26°	2186.3
27°	2139.0
28°	2078.1
29°	2003.8
30°	1915.9
32.5°	1649.0
35°	1331.4
37.5°	986.7
40°	672.4
42.5°	425.8
45°	266.9
47.5°	179.1
50°	135.2
52.5°	108.1
55°	84.5
57.5°	64.2
60°	47.3



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**CANDELA DISTRIBUTION (continued):**

	0°
67.5°	23.7
70°	20.3
72.5°	16.9
75°	13.5
77.5°	10.1
80°	10.1
82.5°	6.8
85°	3.4
87.5°	0.0
90°	0.0



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— 0°-180°







62.5°		37.2
65°		30.4



(END OF REPORT)