

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: P430452

Luminaire Tested: **LAM4B312R359040DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-6)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B312R359040DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3832.9 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 0.57 / 0.57 / 0.51  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

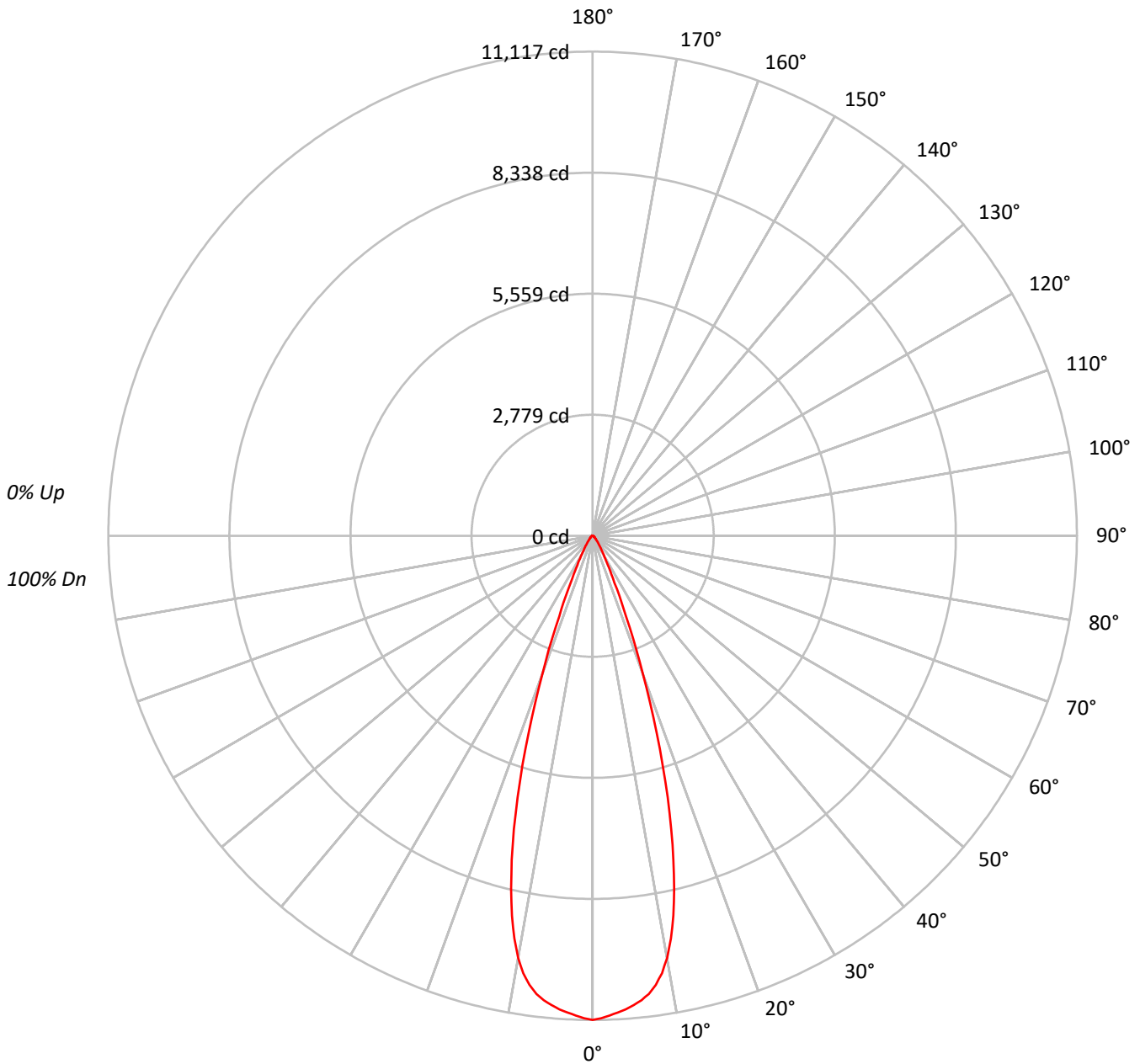
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P430452

CATALOG NUMBER: LAM4B312R359040DE01021MW

### Luminous Intensity Polar Plot





TEST NUMBER: P430452

CATALOG NUMBER: LAM4B312R359040DE01021MW

**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	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87	87	87	87
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84	84	84	84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81	81	81	81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78	78	78	78
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75	75	75	75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72	72	72	72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70	70	70	70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68	68	68	68

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

	0°
0°	5484999
5°	5358610
10°	4931252
15°	3564149
20°	1760734
25°	645912
30°	291234
35°	158527
40°	98284
45°	66565
50°	49815
55°	42665
60°	37694
65°	35607
70°	33034
75°	29166
80°	32390
85°	21511



TEST NUMBER: P430452

CATALOG NUMBER: LAM4B312R359040DE01021MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1005.4	26.2
10°-20°	1837.4	47.9
20°-30°	639.7	16.7
30°-40°	177.3	4.6
40°-50°	77.1	2.0
50°-60°	44.7	1.2
60°-70°	30.2	0.8
70°-80°	16.6	0.4
80°-90°	4.6	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°	3482.4	90.9
0°-40°	3659.7	95.5
0°-60°	3781.5	98.7
0°-90°	3832.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3832.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	11117	
5°	10820	###
15°	6978	1837
25°	1186	640
35°	263	177
45°	95	77
55°	50	45
65°	30	30
75°	15	17
85°	4	5
90°	0	



TEST NUMBER: P430452

CATALOG NUMBER: LAM4B312R359040DE01021MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	11117.2
1°	11079.1
2°	11021.9
3°	10964.6
4°	10899.8
5°	10819.7
6°	10720.5
7°	10598.4
8°	10411.4
9°	10171.1
10°	9843.0
11°	9423.3
12°	8915.9
13°	8320.8
14°	7668.4
15°	6977.8
16°	6241.5
17°	5501.4
18°	4757.4
19°	4040.2
20°	3353.5
22.5°	1999.1
25°	1186.5
26°	988.1
27°	824.1
28°	698.2
29°	595.2
30°	511.2
32.5°	362.4
35°	263.2
37.5°	198.4
40°	152.6
42.5°	118.3
45°	95.4
47.5°	80.1
50°	64.9
52.5°	57.2
55°	49.6
57.5°	42.0
60°	38.2
62.5°	34.3
65°	30.5
67.5°	26.7



TEST NUMBER: P430452

CATALOG NUMBER: LAM4B312R359040DE01021MW

**CANDELA DISTRIBUTION (continued):**

	0°
75°	15.3
77.5°	11.4
80°	11.4
82.5°	7.6
85°	3.8
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







70°		22.9
72.5°		19.1



(END OF REPORT)