

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: P430499

Luminaire Tested: **LAM4B312R459040DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430499  
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: LAM4B312R459040DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3871.4 lumens  
Efficiency: N/A  
Efficacy: 94.7 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

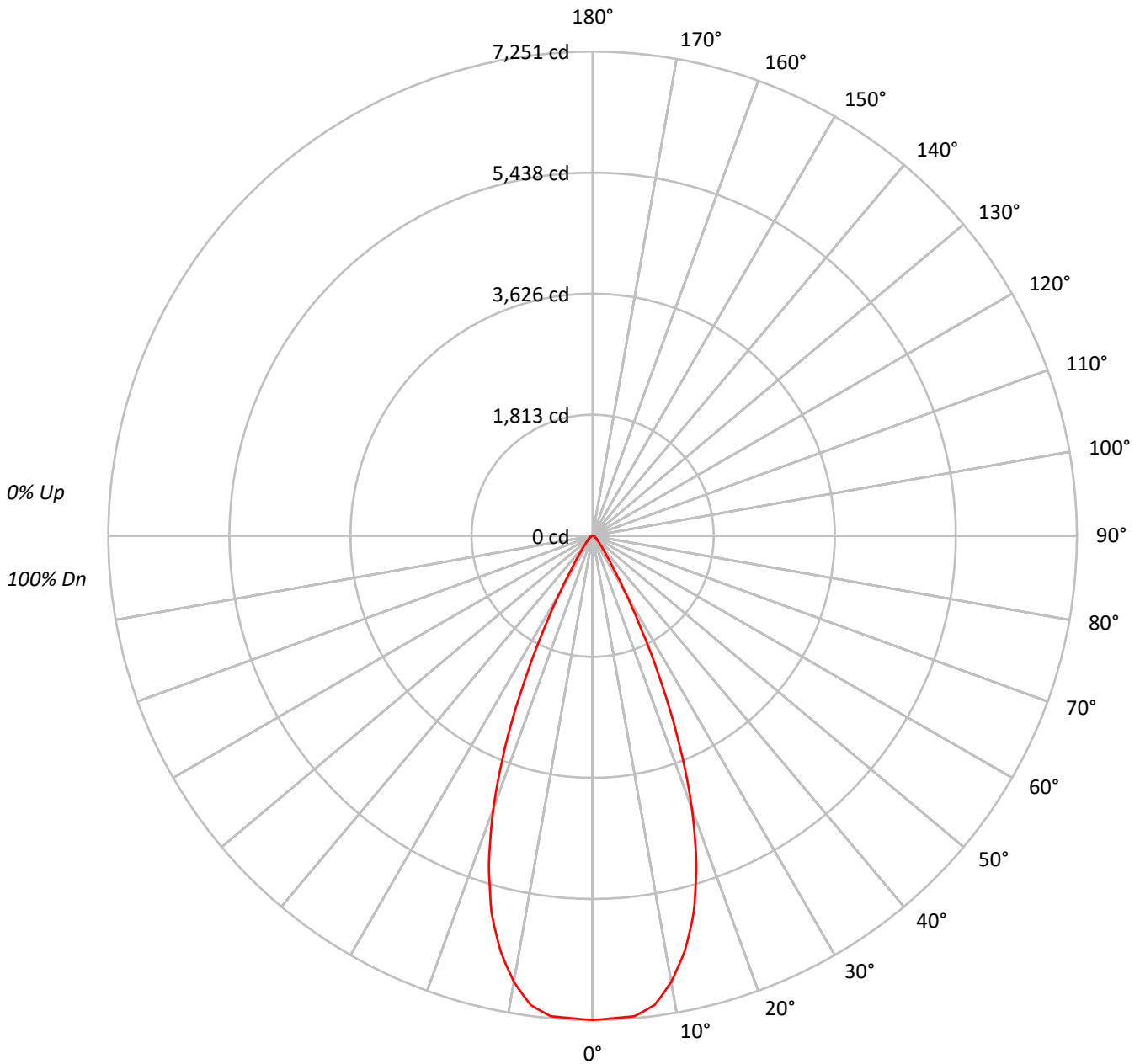
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	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°	3577396
5°	3576154
10°	3399172
15°	2985891
20°	2284202
25°	1333469
30°	545778
35°	230803
40°	125850
45°	81287
50°	63477
55°	54966
60°	44503
65°	35140
70°	32457
75°	28594
80°	32106
85°	21511



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	675.7	17.5
10°-20°	1591.5	41.1
20°-30°	1121.3	29.0
30°-40°	276.0	7.1
40°-50°	96.3	2.5
50°-60°	57.0	1.5
60°-70°	31.6	0.8
70°-80°	17.3	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°	3388.5	87.5
0°-40°	3664.5	94.7
0°-60°	3817.8	98.6
0°-90°	3871.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3871.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7251	
5°	7221	676
15°	5846	1591
25°	2450	1121
35°	383	276
45°	116	96
55°	64	57
65°	30	32
75°	15	17
85°	4	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7250.8
2.5°	7232.0
5°	7220.7
7.5°	7089.2
10°	6784.9
12.5°	6371.7
15°	5845.7
17.5°	5165.7
20°	4350.5
22.5°	3415.0
25°	2449.5
27.5°	1581.6
30°	958.0
32.5°	582.3
35°	383.2
37.5°	270.5
40°	195.4
42.5°	150.3
45°	116.5
47.5°	97.7
50°	82.7
52.5°	71.4
55°	63.9
57.5°	56.4
60°	45.1
62.5°	37.6
65°	30.1
67.5°	26.3
70°	22.5
72.5°	18.8
75°	15.0
77.5°	15.0
80°	11.3
82.5°	7.5
85°	3.8
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)