

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: P430421

Luminaire Tested: **LAM4B312R309030DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B312R309030DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3580.8 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

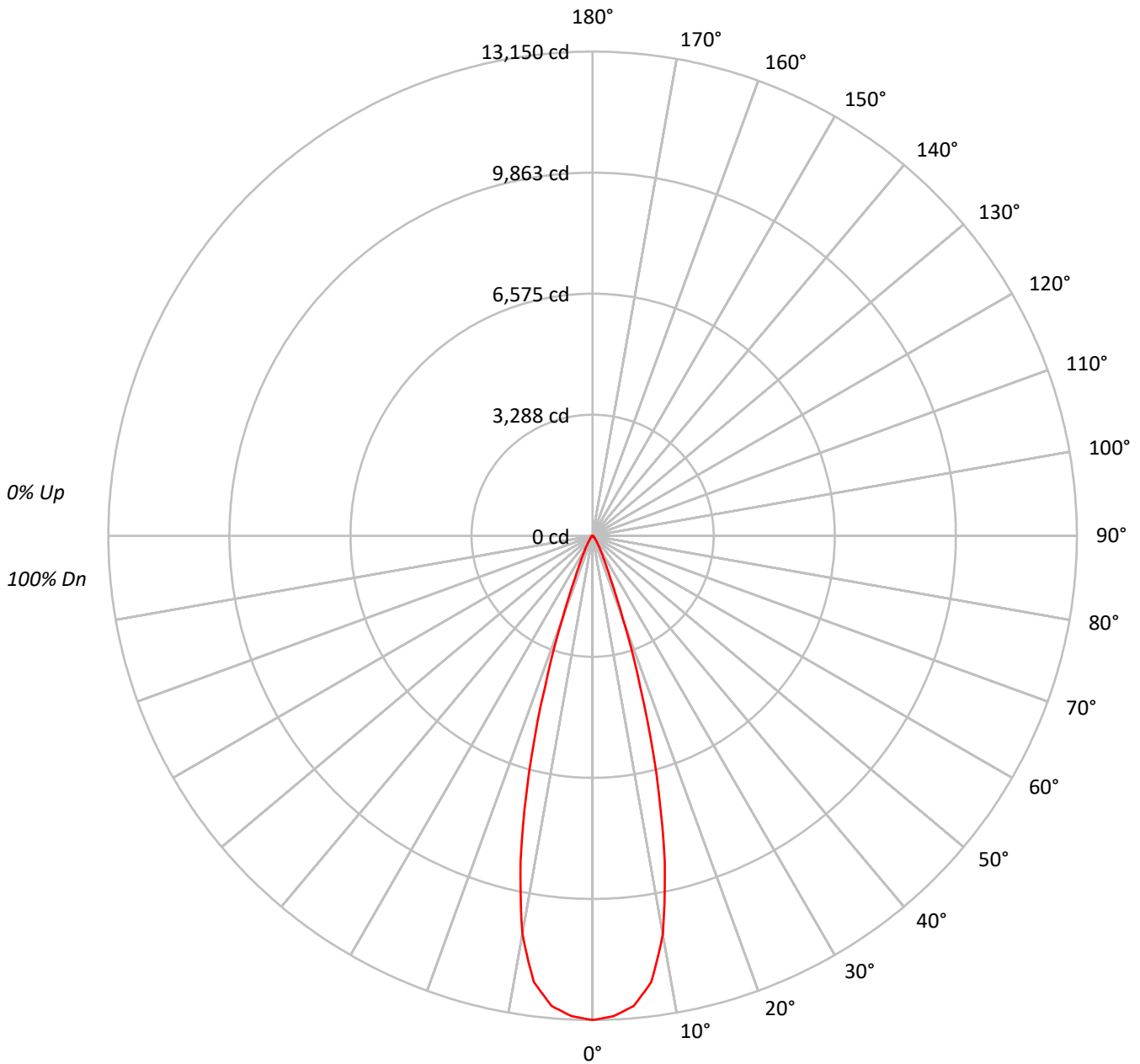
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	95	94	93
3	107	103	99	96	105	101	98	95	99	96	94	96	94	92	94	92	91	90
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	90	88	87
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81
7	95	88	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79
8	92	86	81	79	91	85	81	78	84	81	78	83	80	78	83	80	78	77
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75	74
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	78	76	73	72

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

	0°
0°	6487892
5°	6346167
10°	5502431
15°	3410403
20°	1249971
25°	417815
30°	205094
35°	102271
40°	63440
45°	40260
50°	28707
55°	23397
60°	20130
65°	15877
70°	19619
75°	19444
80°	19321
85°	19247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1167.8	32.6
10°-20°	1763.1	49.2
20°-30°	429.9	12.0
30°-40°	117.7	3.3
40°-50°	47.4	1.3
50°-60°	25.4	0.7
60°-70°	15.1	0.4
70°-80°	11.7	0.3
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°	3360.8	93.9
0°-40°	3478.5	97.1
0°-60°	3551.2	99.2
0°-90°	3580.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3580.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	13150	
5°	12814	###
15°	6677	1763
25°	768	430
35°	170	118
45°	58	47
55°	27	25
65°	14	15
75°	10	12
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	13149.9
2.5°	13061.6
5°	12813.7
7.5°	12222.7
10°	10983.1
12.5°	9040.5
15°	6676.8
17.5°	4302.9
20°	2380.7
22.5°	1270.2
25°	767.5
27.5°	519.6
30°	360.0
32.5°	244.5
35°	169.8
37.5°	125.7
40°	98.5
42.5°	74.7
45°	57.7
47.5°	47.5
50°	37.4
52.5°	34.0
55°	27.2
57.5°	23.8
60°	20.4
62.5°	17.0
65°	13.6
67.5°	13.6
70°	13.6
72.5°	13.6
75°	10.2
77.5°	10.2
80°	6.8
82.5°	3.4
85°	3.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)