

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: P430424

Luminaire Tested: **LAM4B312R309035DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430424  
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: LAM4B312R309035DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3869.3 lumens  
Efficiency: N/A  
Efficacy: 94.6 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

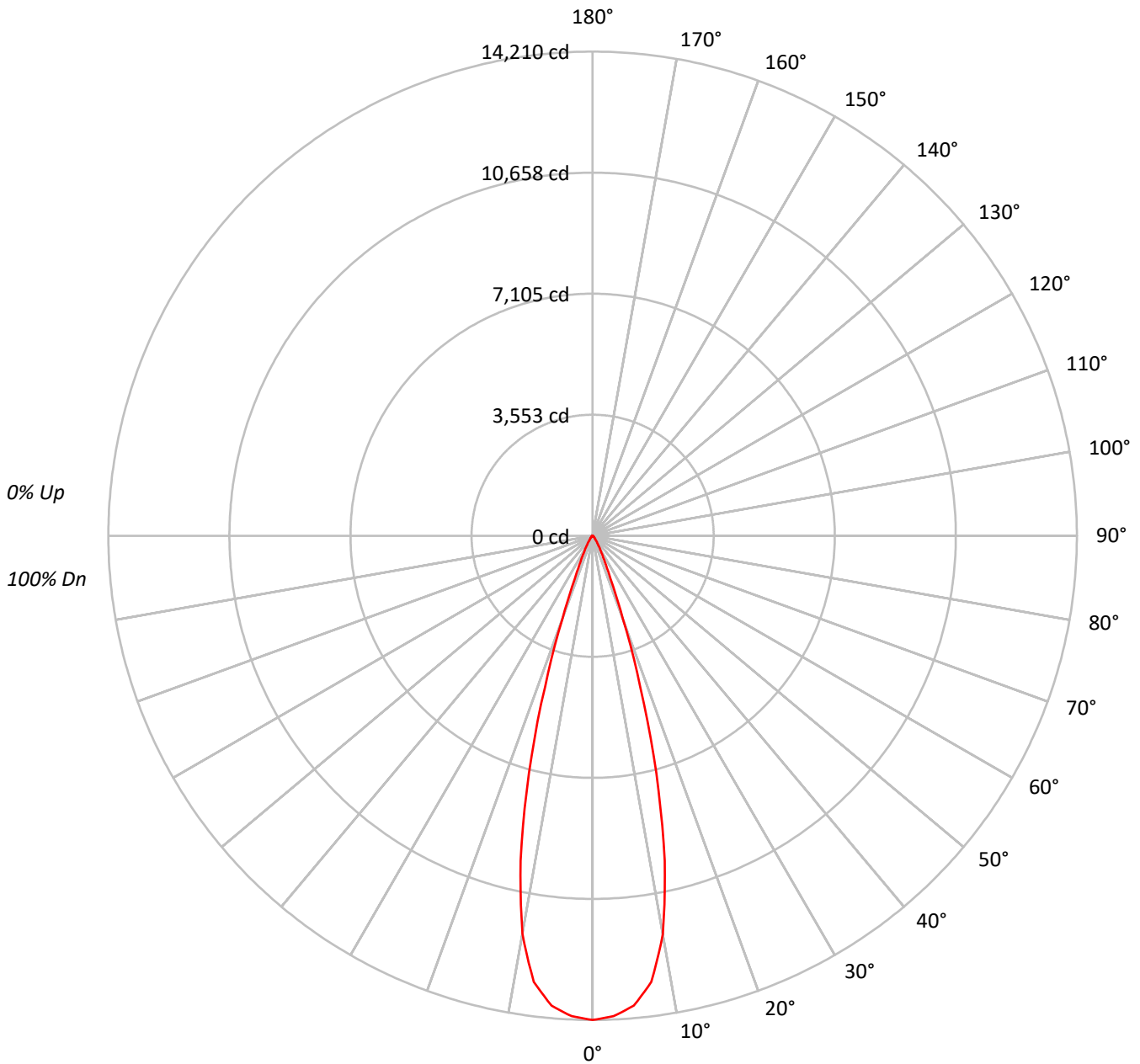
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20																		
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	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	96	96	96	96	96	96	96	96	96	96																		
2	111	107	104	102	109	106	103	100	102	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64																		
3	107	103	99	96	105	101	98	95	99	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60																		
4	104	98	94	91	102	97	94	91	95	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56																		
5	101	95	91	87	99	94	90	87	92	89	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52																		
6	98	91	87	84	97	91	87	84	89	86	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49																		
7	95	88	84	81	94	88	84	81	87	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47																		
8	92	86	81	79	91	85	81	78	84	81	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44																		
9	90	83	79	76	89	83	79	76	82	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42																		
10	88	81	77	74	87	80	77	74	80	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40																		

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

	0°
0°	7010677
5°	6857527
10°	5945808
15°	3685205
20°	1350675
25°	451512
30°	221615
35°	110523
40°	68528
45°	43539
50°	31010
55°	25289
60°	21709
65°	17161
70°	21205
75°	20969
80°	20741
85°	20945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1261.9	32.6
10°-20°	1905.2	49.2
20°-30°	464.5	12.0
30°-40°	127.2	3.3
40°-50°	51.2	1.3
50°-60°	27.4	0.7
60°-70°	16.3	0.4
70°-80°	12.6	0.3
80°-90°	3.0	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°	3631.6	93.9
0°-40°	3758.8	97.1
0°-60°	3837.4	99.2
0°-90°	3869.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3869.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	14210	
5°	13846	###
15°	7215	1905
25°	829	465
35°	184	127
45°	62	51
55°	29	27
65°	15	16
75°	11	13
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	14209.5
2.5°	14114.0
5°	13846.2
7.5°	13207.6
10°	11868.1
12.5°	9769.0
15°	7214.8
17.5°	4649.6
20°	2572.5
22.5°	1372.5
25°	829.4
27.5°	561.5
30°	389.0
32.5°	264.2
35°	183.5
37.5°	135.8
40°	106.4
42.5°	80.7
45°	62.4
47.5°	51.4
50°	40.4
52.5°	36.7
55°	29.4
57.5°	25.7
60°	22.0
62.5°	18.3
65°	14.7
67.5°	14.7
70°	14.7
72.5°	14.7
75°	11.0
77.5°	11.0
80°	7.3
82.5°	3.7
85°	3.7
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)