

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: P430454

Luminaire Tested: **LAM4B312R359050DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430454  
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: LAM4B312R359050DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3728.7 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

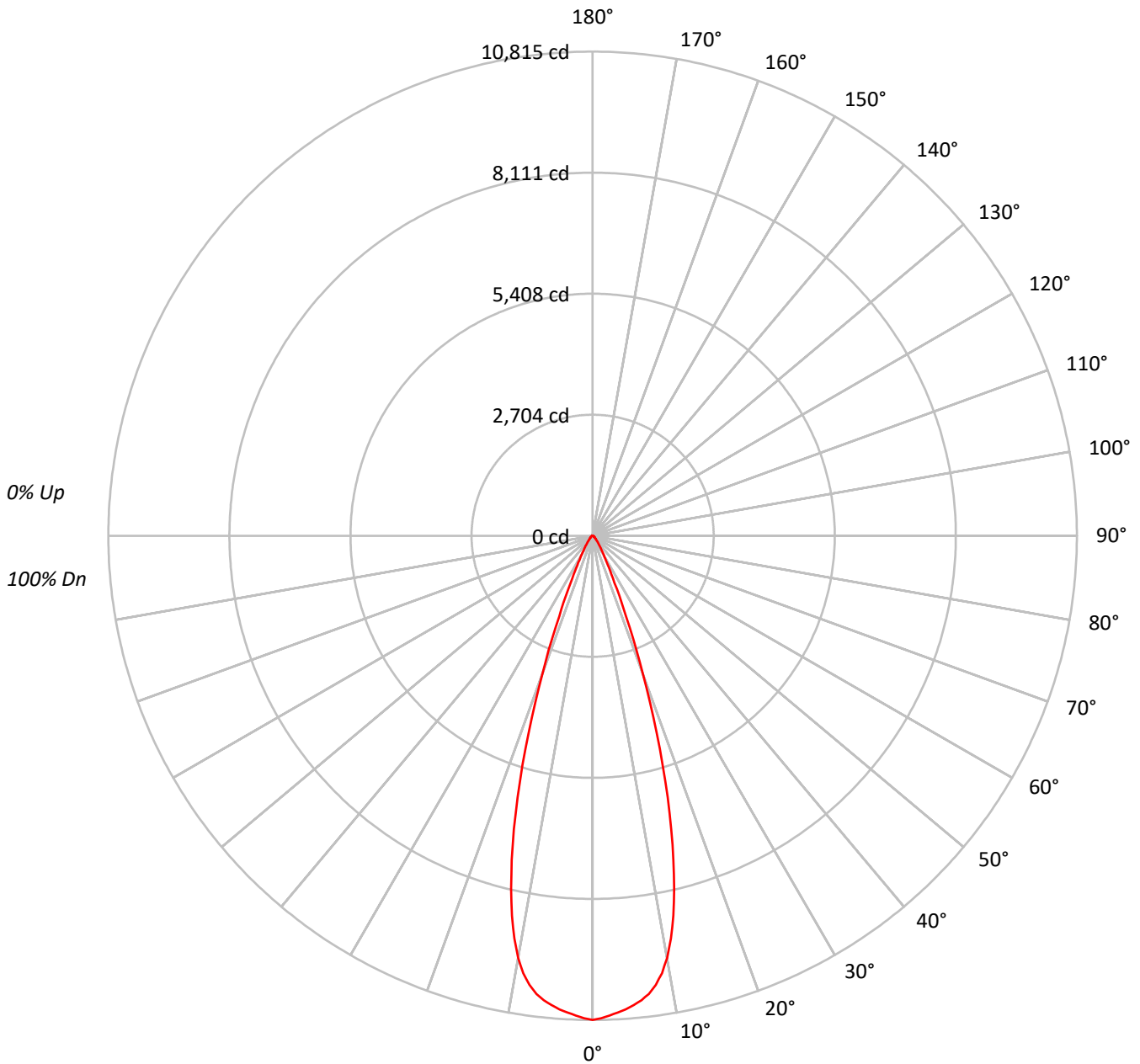
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°
0°	5335949
5°	5212953
10°	4797237
15°	3467305
20°	1712902
25°	628383
30°	283315
35°	154250
40°	95643
45°	64751
50°	48433
55°	41461
60°	36609
65°	34673
70°	32169
75°	28213
80°	31538
85°	20945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	978.0	26.2
10°-20°	1787.4	47.9
20°-30°	622.3	16.7
30°-40°	172.5	4.6
40°-50°	75.0	2.0
50°-60°	43.5	1.2
60°-70°	29.4	0.8
70°-80°	16.1	0.4
80°-90°	4.5	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°	3387.8	90.9
0°-40°	3560.3	95.5
0°-60°	3678.7	98.7
0°-90°	3728.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3728.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10815	
5°	10526	978
15°	6788	1787
25°	1154	622
35°	256	172
45°	93	75
55°	48	43
65°	30	29
75°	15	16
85°	4	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	10815.1
1°	10778.0
2°	10722.3
3°	10666.7
4°	10603.6
5°	10525.6
6°	10429.1
7°	10310.4
8°	10128.5
9°	9894.7
10°	9575.5
11°	9167.3
12°	8673.6
13°	8094.6
14°	7460.0
15°	6788.2
16°	6071.9
17°	5351.9
18°	4628.2
19°	3930.4
20°	3262.4
22.5°	1944.8
25°	1154.3
26°	961.3
27°	801.7
28°	679.2
29°	579.0
30°	497.3
32.5°	352.6
35°	256.1
37.5°	193.0
40°	148.5
42.5°	115.1
45°	92.8
47.5°	77.9
50°	63.1
52.5°	55.7
55°	48.2
57.5°	40.8
60°	37.1
62.5°	33.4
65°	29.7
67.5°	26.0



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**CANDELA DISTRIBUTION (continued):**

	0°
75°	14.8
77.5°	11.1
80°	11.1
82.5°	7.4
85°	3.7
87.5°	0.0
90°	0.0



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— 0°-180°







70°	22.3
72.5°	18.6



(END OF REPORT)