

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: P431078

Luminaire Tested: **LAMR4B112R459050DE010x1MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431078  
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: LAMR4B112R459050DE010x1MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1260.7 lumens  
Efficiency: N/A  
Efficacy: 88.2 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

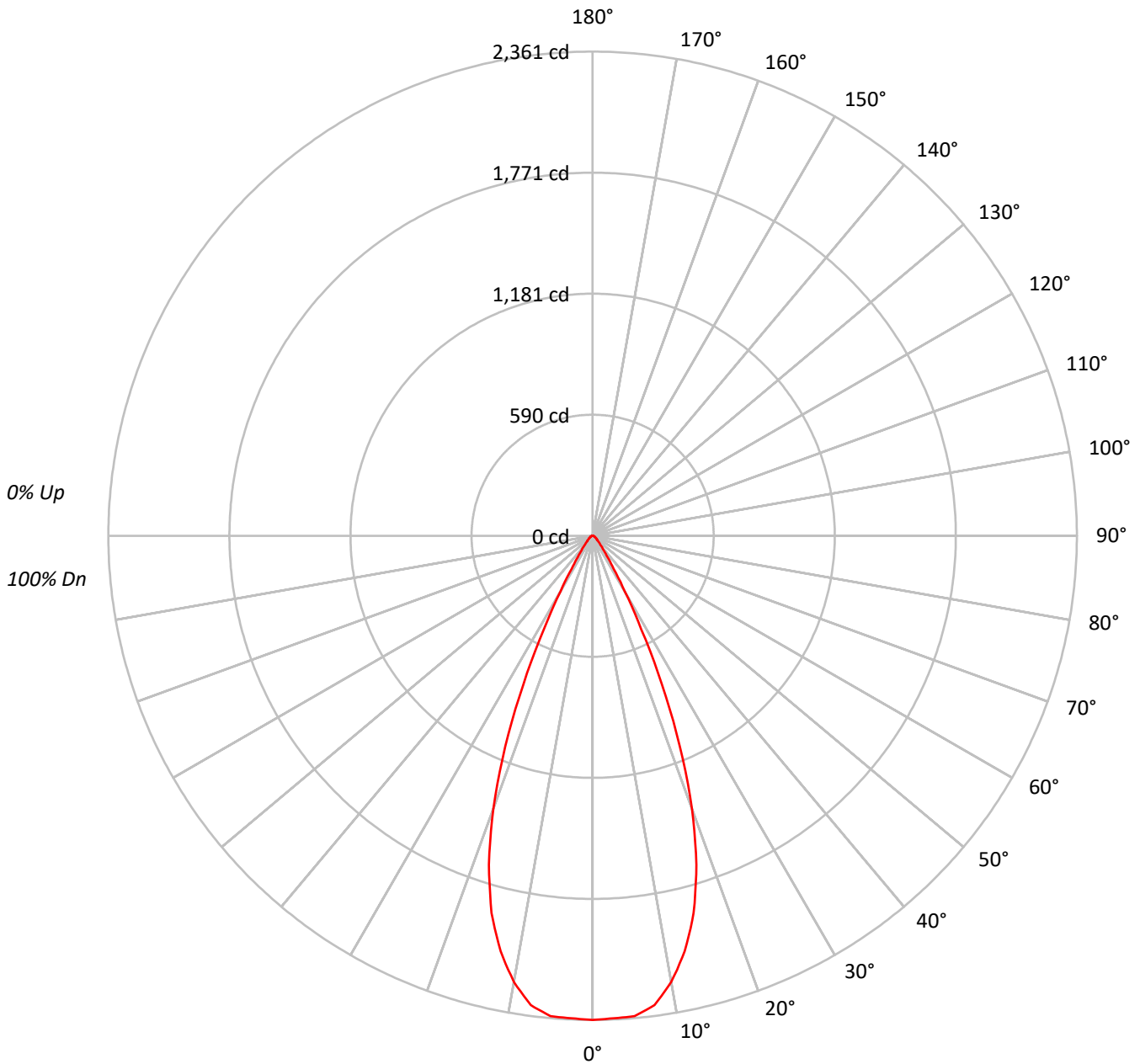
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1164968
5°	1164564
10°	1106939
15°	972380
20°	743829
25°	434255
30°	177748
35°	75168
40°	40962
45°	26444
50°	20647
55°	17892
60°	14505
65°	11441
70°	10531
75°	9341
80°	10513
85°	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.0	17.5
10°-20°	518.3	41.1
20°-30°	365.2	29.0
30°-40°	89.9	7.1
40°-50°	31.3	2.5
50°-60°	18.6	1.5
60°-70°	10.3	0.8
70°-80°	5.6	0.4
80°-90°	1.5	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°	1103.5	87.5
0°-40°	1193.3	94.7
0°-60°	1243.3	98.6
0°-90°	1260.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2361	
5°	2351	220
15°	1904	518
25°	798	365
35°	125	90
45°	38	31
55°	21	19
65°	10	10
75°	5	6
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2361.2
2.5°	2355.1
5°	2351.4
7.5°	2308.6
10°	2209.5
12.5°	2074.9
15°	1903.7
17.5°	1682.2
20°	1416.7
22.5°	1112.1
25°	797.7
27.5°	515.1
30°	312.0
32.5°	189.6
35°	124.8
37.5°	88.1
40°	63.6
42.5°	48.9
45°	37.9
47.5°	31.8
50°	26.9
52.5°	23.2
55°	20.8
57.5°	18.4
60°	14.7
62.5°	12.2
65°	9.8
67.5°	8.6
70°	7.3
72.5°	6.1
75°	4.9
77.5°	4.9
80°	3.7
82.5°	2.4
85°	1.2
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)