

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: P430955

Luminaire Tested: **LAMR4B112R209040DE010x1MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P430955  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-3)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B112R209040DE010x1MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1299.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

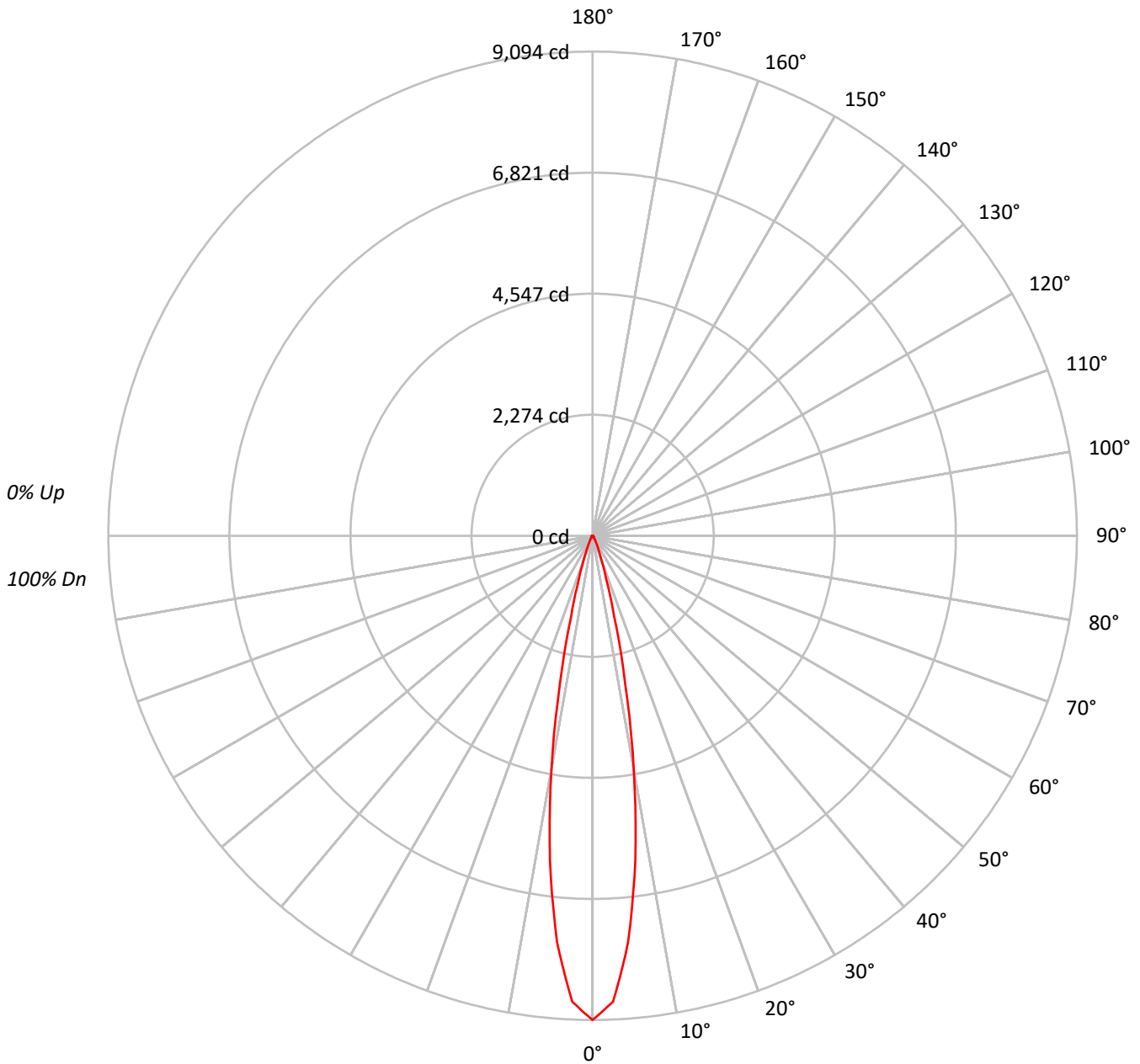
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	95	94	94	93	91	91	91	89	88	87	87	85														
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94	93	91	91	91	89	88	87	87	85	84	83	83	81														
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91	91	89	88	87	87	85	84	83	83	81	80	80	78														
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	87	87	85	84	83	83	81	80	79	79	77	76	74														
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	85	84	83	83	81	80	79	78	76	75	73	72	70														
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	83	82	82	80	79	78	76	75	73	72	70	68	66														
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	81	80	79	78	76	75	73	72	70	68	66	64	62														
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	79	78	76	75	73	72	70	68	66	64	62	60	58														
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	79	78	76	75	73	72	70	68	66	64	62	60	58	56														
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	77	75	74	72	71	69	68	66	64	62	60	58	56	54														

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

	0°
0°	4486843
5°	3792535
10°	2227605
15°	797589
20°	263887
25°	105066
30°	50191
35°	28670
40°	20739
45°	17444
50°	20110
55°	16429
60°	8190
65°	7005
70°	8655
75°	9150
80°	6819
85°	6793



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	627.0	48.3
10°-20°	489.0	37.6
20°-30°	101.5	7.8
30°-40°	32.0	2.5
40°-50°	20.6	1.6
50°-60°	16.5	1.3
60°-70°	6.5	0.5
70°-80°	4.9	0.4
80°-90°	1.0	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°	1217.5	93.7
0°-40°	1249.5	96.2
0°-60°	1286.6	99.0
0°-90°	1299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1299.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	9094	
5°	7658	627
15°	1562	489
25°	193	101
35°	48	32
45°	25	21
55°	19	17
65°	6	6
75°	5	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	9094.1
2.5°	8760.6
5°	7657.6
7.5°	6135.4
10°	4446.4
12.5°	2805.1
15°	1561.5
17.5°	858.8
20°	502.6
22.5°	307.3
25°	193.0
27.5°	127.4
30°	88.1
32.5°	61.9
35°	47.6
37.5°	38.1
40°	32.2
42.5°	27.4
45°	25.0
47.5°	25.0
50°	26.2
52.5°	25.0
55°	19.1
57.5°	13.1
60°	8.3
62.5°	7.1
65°	6.0
67.5°	6.0
70°	6.0
72.5°	6.0
75°	4.8
77.5°	3.6
80°	2.4
82.5°	1.2
85°	1.2
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)