

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: P431199

Luminaire Tested: **LAMR4B112R709050DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431199  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-14)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B112R709050DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 70 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1223.4 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

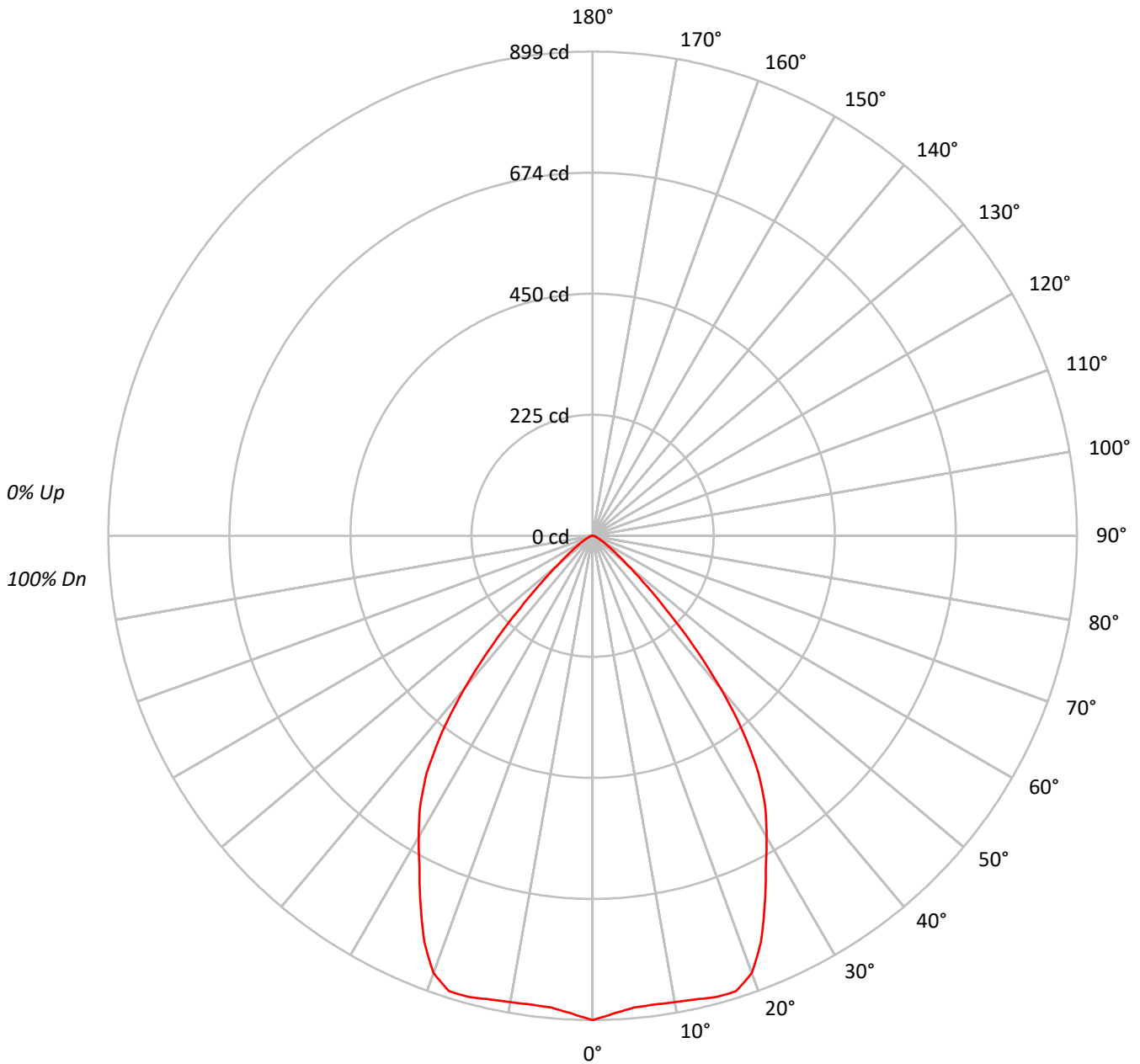
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P431199

CATALOG NUMBER: LAMR4B112R709050DE010x1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P431199

CATALOG NUMBER: LAMR4B112R709050DE010x1MW

**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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92																											
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84																											
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76																											
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70																											
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64																											
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	64	60	58																											
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54																											
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50																											
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46																											
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43																											

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

	0°
0°	443696
5°	435436
10°	440471
15°	452912
20°	453690
25°	411609
30°	367802
35°	323016
40°	237852
45°	133199
50°	65550
55°	36730
60°	22301
65°	14710
70°	10819
75°	9531
80°	7103
85°	7359



TEST NUMBER: P431199

CATALOG NUMBER: LAMR4B112R709050DE010x1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	6.9
10°-20°	249.9	20.4
20°-30°	346.7	28.3
30°-40°	326.2	26.7
40°-50°	155.8	12.7
50°-60°	41.1	3.4
60°-70°	13.0	1.1
70°-80°	5.3	0.4
80°-90°	1.4	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°	680.6	55.6
0°-40°	1006.9	82.3
0°-60°	1203.8	98.4
0°-90°	1223.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	899	
5°	879	84
15°	887	250
25°	756	347
35°	536	326
45°	191	156
55°	43	41
65°	13	13
75°	5	5
85°	1	1
90°	0	



TEST NUMBER: P431199

CATALOG NUMBER: LAMR4B112R709050DE010x1MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	899.3
2.5°	888.0
5°	879.2
7.5°	877.9
10°	879.2
12.5°	881.7
15°	886.7
17.5°	886.7
20°	864.1
22.5°	816.4
25°	756.1
27.5°	695.8
30°	645.6
32.5°	596.6
35°	536.3
37.5°	458.4
40°	369.3
42.5°	275.1
45°	190.9
47.5°	126.9
50°	85.4
52.5°	59.0
55°	42.7
57.5°	30.1
60°	22.6
62.5°	16.3
65°	12.6
67.5°	8.8
70°	7.5
72.5°	6.3
75°	5.0
77.5°	3.8
80°	2.5
82.5°	2.5
85°	1.3
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)