

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: P431232

Luminaire Tested: **LAMR4B212R209024DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431232  
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: LAMR4B212R209024DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2033.8 lumens  
Efficiency: N/A  
Efficacy: 71.6 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

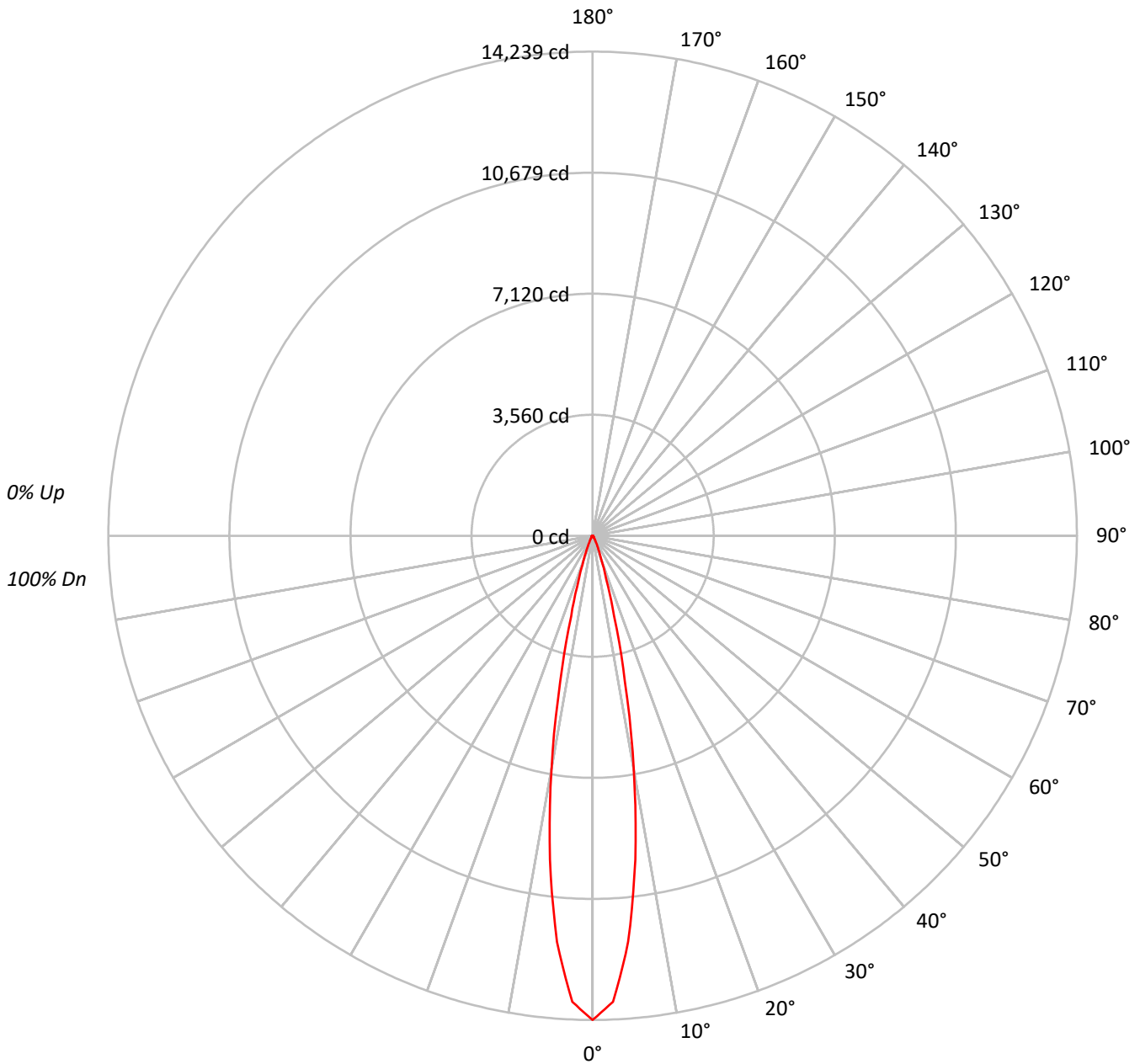
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P431232

CATALOG NUMBER: LAMR4B212R209024DE010x1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P431232

CATALOG NUMBER: LAMR4B212R209024DE010x1MW

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

RF	20				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	97	97
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94	94	94	94
3	108	104	100	98	107	103	100	97	100	98	95	98	96	94	96	94	93	91	91	91	91
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	87	87
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	78	78	78

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

	0°
0°	7025231
5°	5938118
10°	3487847
15°	1248867
20°	413209
25°	164458
30°	78619
35°	44932
40°	32461
45°	27352
50°	31470
55°	25633
60°	12927
65°	10857
70°	13416
75°	14297
80°	10513
85°	10756



TEST NUMBER: P431232

CATALOG NUMBER: LAMR4B212R209024DE010x1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	981.8	48.3
10°-20°	765.6	37.6
20°-30°	158.9	7.8
30°-40°	50.1	2.5
40°-50°	32.2	1.6
50°-60°	25.9	1.3
60°-70°	10.1	0.5
70°-80°	7.6	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°	1906.3	93.7
0°-40°	1956.4	96.2
0°-60°	2014.5	99.1
0°-90°	2033.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2033.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	14239	
5°	11990	982
15°	2445	766
25°	302	159
35°	75	50
45°	39	32
55°	30	26
65°	9	10
75°	8	8
85°	2	2
90°	0	



TEST NUMBER: P431232

CATALOG NUMBER: LAMR4B212R209024DE010x1MW

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	14239.0
2.5°	13716.8
5°	11989.8
7.5°	9606.4
10°	6961.9
12.5°	4392.0
15°	2445.0
17.5°	1344.6
20°	787.0
22.5°	481.2
25°	302.1
27.5°	199.6
30°	138.0
32.5°	97.0
35°	74.6
37.5°	59.7
40°	50.4
42.5°	42.9
45°	39.2
47.5°	39.2
50°	41.0
52.5°	39.2
55°	29.8
57.5°	20.5
60°	13.1
62.5°	11.2
65°	9.3
67.5°	9.3
70°	9.3
72.5°	9.3
75°	7.5
77.5°	5.6
80°	3.7
82.5°	1.9
85°	1.9
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)