

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: P431309

Luminaire Tested: **LAMR4B212R359030DE010x1MMS**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431309
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: LAMR4B212R359030DE010x1MMS
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 35 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2277.4 lumens
Efficiency: N/A
Efficacy: 80.2 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

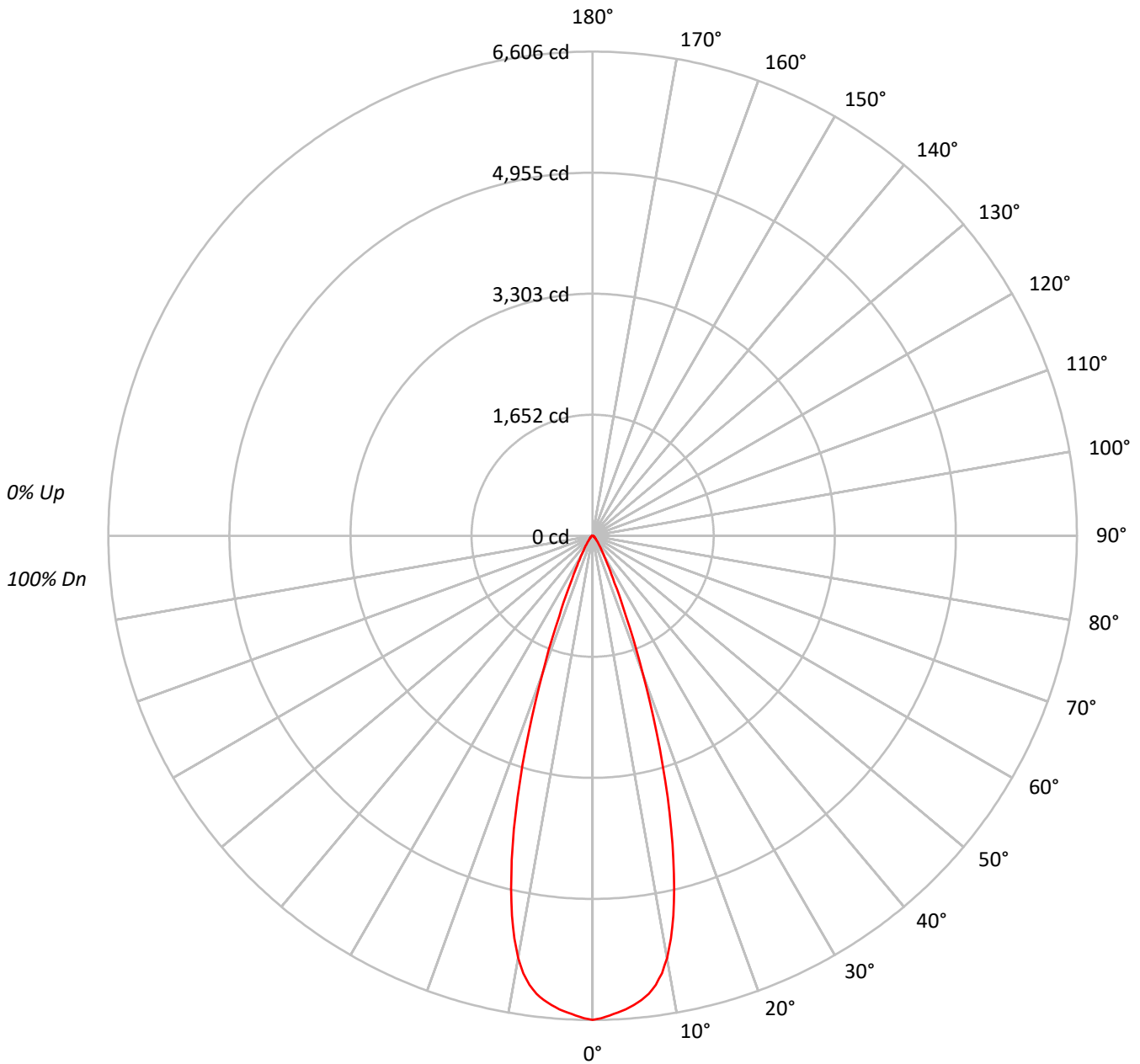
Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431309

CATALOG NUMBER: LAMR4B212R359030DE010x1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P431309

CATALOG NUMBER: LAMR4B212R359030DE010x1MMS

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	114	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87	87	87	87
4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84	84	84	84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81	81	81	81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78	78	78	78
7	92	85	81	77	91	85	80	77	84	80	77	82	79	76	81	78	76	75	75	75	75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72	72	72	72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70	70	70	70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68	68	68	68

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3259068
5°	3183954
10°	2930044
15°	2117762
20°	1046202
25°	383791
30°	173077
35°	94201
40°	58416
45°	39562
50°	29551
55°	25375
60°	22399
65°	21131
70°	19619
75°	17347
80°	19321
85°	13020



TEST NUMBER: P431309

CATALOG NUMBER: LAMR4B212R359030DE010x1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	597.4	26.2
10°-20°	1091.7	47.9
20°-30°	380.1	16.7
30°-40°	105.4	4.6
40°-50°	45.8	2.0
50°-60°	26.5	1.2
60°-70°	17.9	0.8
70°-80°	9.9	0.4
80°-90°	2.8	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°	2069.2	90.9
0°-40°	2174.5	95.5
0°-60°	2246.9	98.7
0°-90°	2277.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2277.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	6606	
5°	6429	597
15°	4146	1092
25°	705	380
35°	156	105
45°	57	46
55°	30	27
65°	18	18
75°	9	10
85°	2	3
90°	0	



TEST NUMBER: P431309

CATALOG NUMBER: LAMR4B212R359030DE010x1MMS

CANDELA DISTRIBUTION (FULL):

	0°
0°	6605.6
1°	6582.9
2°	6548.9
3°	6514.9
4°	6476.4
5°	6428.8
6°	6369.8
7°	6297.3
8°	6186.2
9°	6043.4
10°	5848.5
11°	5599.1
12°	5297.6
13°	4944.0
14°	4556.4
15°	4146.1
16°	3708.6
17°	3268.8
18°	2826.8
19°	2400.6
20°	1992.6
22.5°	1187.8
25°	705.0
26°	587.1
27°	489.6
28°	414.8
29°	353.6
30°	303.8
32.5°	215.4
35°	156.4
37.5°	117.9
40°	90.7
42.5°	70.3
45°	56.7
47.5°	47.6
50°	38.5
52.5°	34.0
55°	29.5
57.5°	24.9
60°	22.7
62.5°	20.4
65°	18.1
67.5°	15.9



TEST NUMBER: P431309

CATALOG NUMBER: LAMR4B212R359030DE010x1MMS

CANDELA DISTRIBUTION (continued):

	0°
75°	9.1
77.5°	6.8
80°	6.8
82.5°	4.5
85°	2.3
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







70°		13.6
72.5°		11.3



(END OF REPORT)