

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: P431523

Luminaire Tested: **LAMR4B312R209027DE01021MW**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431523
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: LAMR4B312R209027DE01021MW
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3388.5 lumens
Efficiency: N/A
Efficacy: 82.8 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

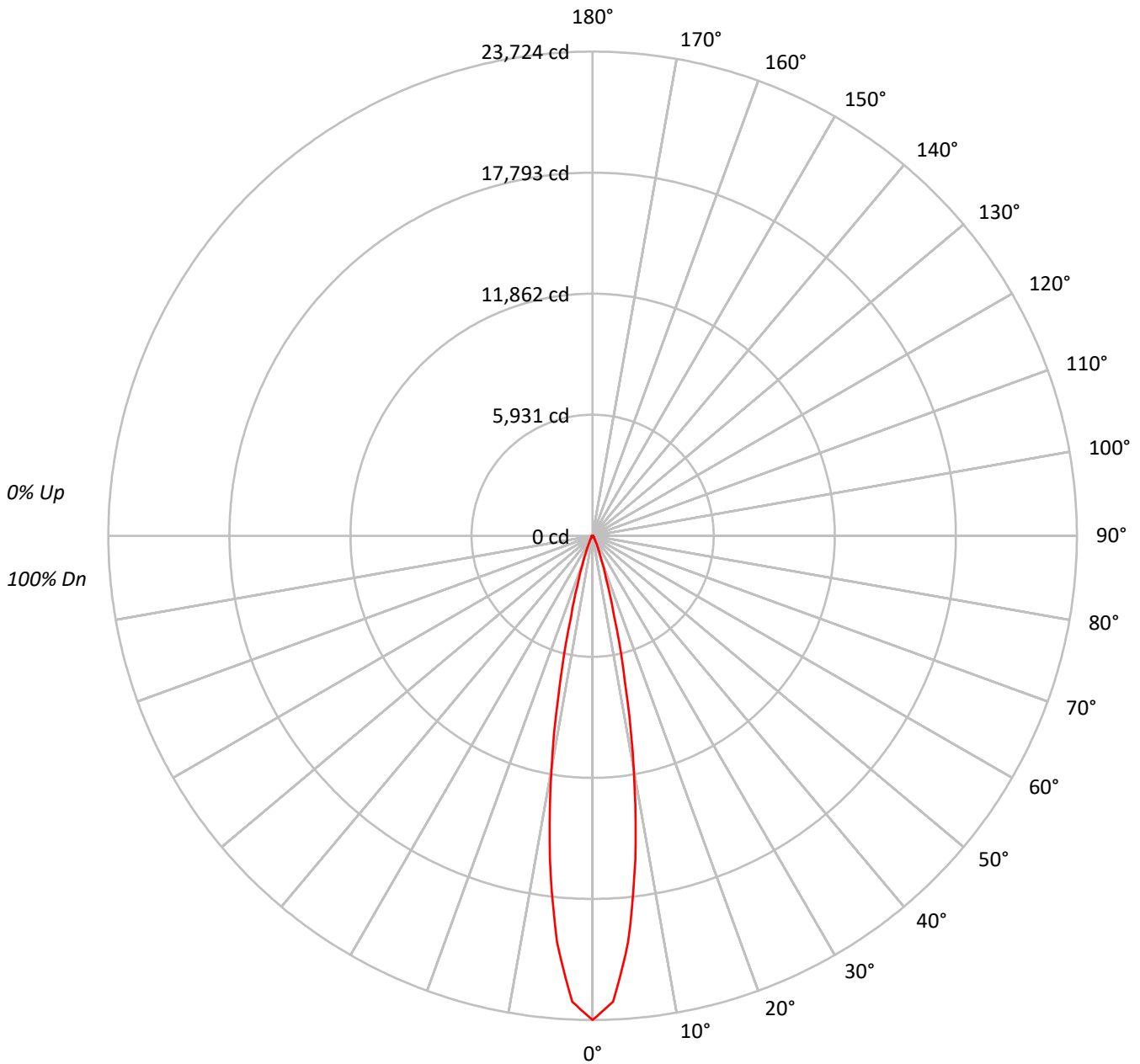
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431523

CATALOG NUMBER: LAMR4B312R209027DE01021MW

Luminous Intensity Polar Plot





TEST NUMBER: P431523

CATALOG NUMBER: LAMR4B312R209027DE01021MW

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	102	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	96	98	96	94	96	94	93	91	91	91	91
4	105	100	97	94	104	99	96	93	97	94	92	96	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°	11704838
5°	9893645
10°	5811142
15°	2080730
20°	688490
25°	274043
30°	130975
35°	74867
40°	54037
45°	45563
50°	52501
55°	42751
60°	21511
65°	18095
70°	22359
75°	23638
80°	17616
85°	17549



TEST NUMBER: P431523

CATALOG NUMBER: LAMR4B312R209027DE01021MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1635.7	48.3
10°-20°	1275.6	37.6
20°-30°	264.8	7.8
30°-40°	83.5	2.5
40°-50°	53.7	1.6
50°-60°	43.1	1.3
60°-70°	16.9	0.5
70°-80°	12.7	0.4
80°-90°	2.5	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°	3176.1	93.7
0°-40°	3259.6	96.2
0°-60°	3356.4	99.1
0°-90°	3388.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3388.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	23724	
5°	19976	###
15°	4074	1276
25°	503	265
35°	124	83
45°	65	54
55°	50	43
65°	16	17
75°	12	13
85°	3	3
90°	0	



TEST NUMBER: P431523

CATALOG NUMBER: LAMR4B312R209027DE01021MW

CANDELA DISTRIBUTION (FULL):

	0°
0°	23723.8
2.5°	22853.8
5°	19976.5
7.5°	16005.4
10°	11599.3
12.5°	7317.6
15°	4073.6
17.5°	2240.3
20°	1311.3
22.5°	801.7
25°	503.4
27.5°	332.5
30°	229.9
32.5°	161.6
35°	124.3
37.5°	99.4
40°	83.9
42.5°	71.5
45°	65.3
47.5°	65.3
50°	68.4
52.5°	65.3
55°	49.7
57.5°	34.2
60°	21.8
62.5°	18.6
65°	15.5
67.5°	15.5
70°	15.5
72.5°	15.5
75°	12.4
77.5°	9.3
80°	6.2
82.5°	3.1
85°	3.1
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)