

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: P431757

Luminaire Tested: **LAMR4B312R659730DE01021MW**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-22)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 11/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LAMR4B312R659730DE01021MW
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 65 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3268.6 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.98 / 0.97
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

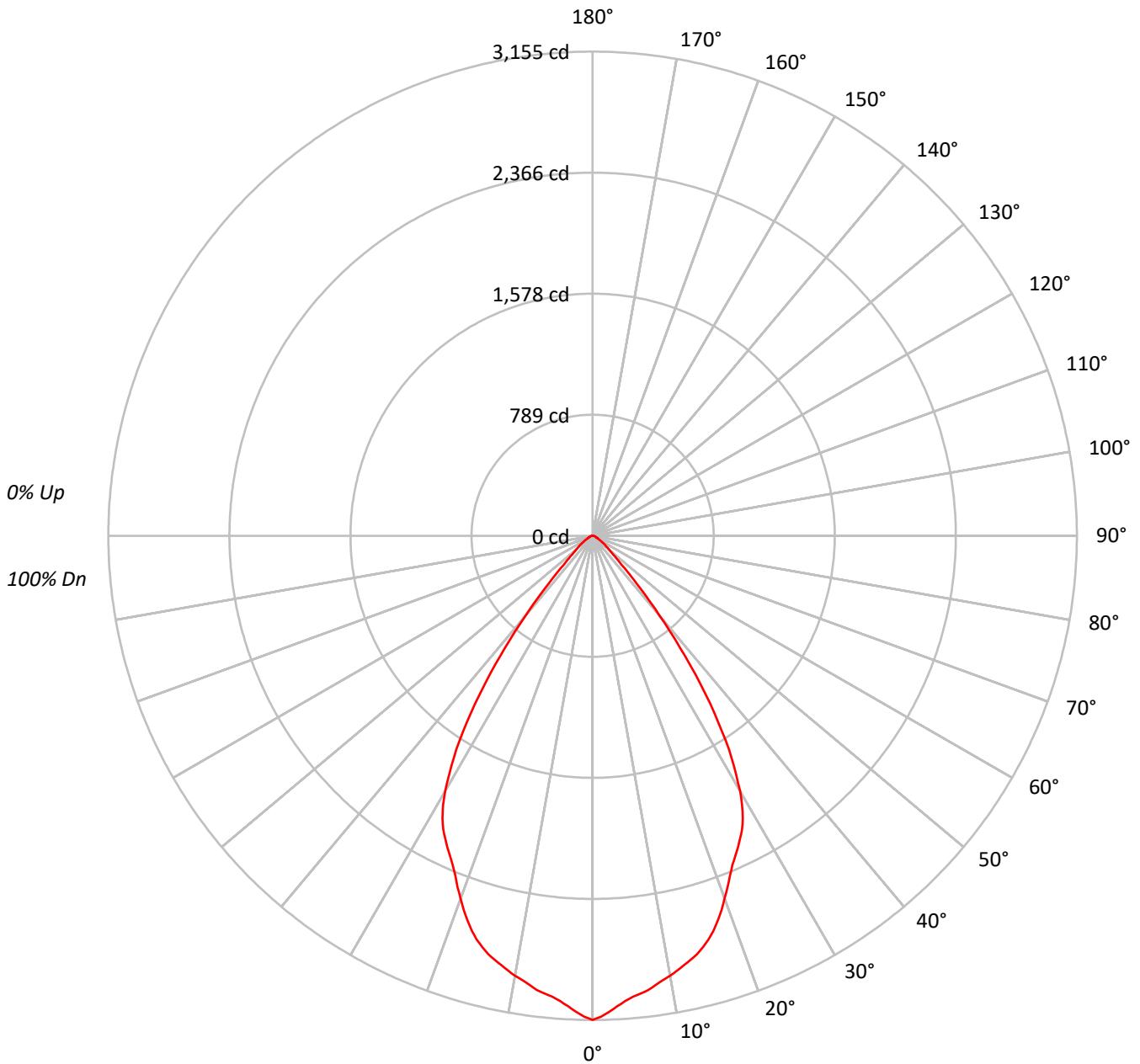
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431757

CATALOG NUMBER: LAMR4B312R659730DE01021MW

Luminous Intensity Polar Plot





TEST NUMBER: P431757

CATALOG NUMBER: LAMR4B312R659730DE01021MW

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	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50	50	50	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47	47	47	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1556612
5°	1493766
10°	1458384
15°	1417681
20°	1320222
25°	1219420
30°	1094689
35°	804198
40°	434355
45°	186786
50°	104081
55°	72857
60°	46772
65°	35607
70°	29284
75°	25925
80°	28981
85°	19247



TEST NUMBER: P431757

CATALOG NUMBER: LAMR4B312R659730DE01021MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.0	8.7
10°-20°	774.4	23.7
20°-30°	1026.6	31.4
30°-40°	813.0	24.9
40°-50°	242.2	7.4
50°-60°	77.5	2.4
60°-70°	30.9	0.9
70°-80°	14.8	0.5
80°-90°	4.2	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°	2086.1	63.8
0°-40°	2899.1	88.7
0°-60°	3218.8	98.5
0°-90°	3268.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3268.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3155	
5°	3016	285
15°	2776	774
25°	2240	1027
35°	1335	813
45°	268	242
55°	85	78
65°	30	31
75°	14	15
85°	3	4
90°	0	



TEST NUMBER: P431757

CATALOG NUMBER: LAMR4B312R659730DE01021MW

CANDELA DISTRIBUTION (FULL):

	0°
0°	3155.0
1°	3134.7
2°	3104.2
3°	3070.3
4°	3039.8
5°	3016.1
6°	2999.1
7°	2982.2
8°	2955.1
9°	2931.4
10°	2911.0
11°	2887.3
12°	2860.2
13°	2836.5
14°	2809.4
15°	2775.5
16°	2738.2
17°	2690.7
18°	2636.5
19°	2578.9
20°	2514.5
21°	2453.5
22°	2389.1
23°	2331.5
24°	2284.1
25°	2240.0
26°	2192.6
27°	2145.1
28°	2084.1
29°	2009.6
30°	1921.5
32.5°	1653.8
35°	1335.2
37.5°	989.5
40°	674.4
42.5°	427.0
45°	267.7
47.5°	179.6
50°	135.6
52.5°	108.4
55°	84.7
57.5°	64.4
60°	47.4



TEST NUMBER: P431757

CATALOG NUMBER: LAMR4B312R659730DE01021MW

CANDELA DISTRIBUTION (continued):

	0°
67.5°	23.7
70°	20.3
72.5°	16.9
75°	13.6
77.5°	10.2
80°	10.2
82.5°	6.8
85°	3.4
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







62.5°		37.3
65°		30.5



(END OF REPORT)