

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: P431940

Luminaire Tested: **LAMR4B412R459040DE01021MW**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-908-8)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 11/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LAMR4B412R459040DE01021MW
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6031.6 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.66
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

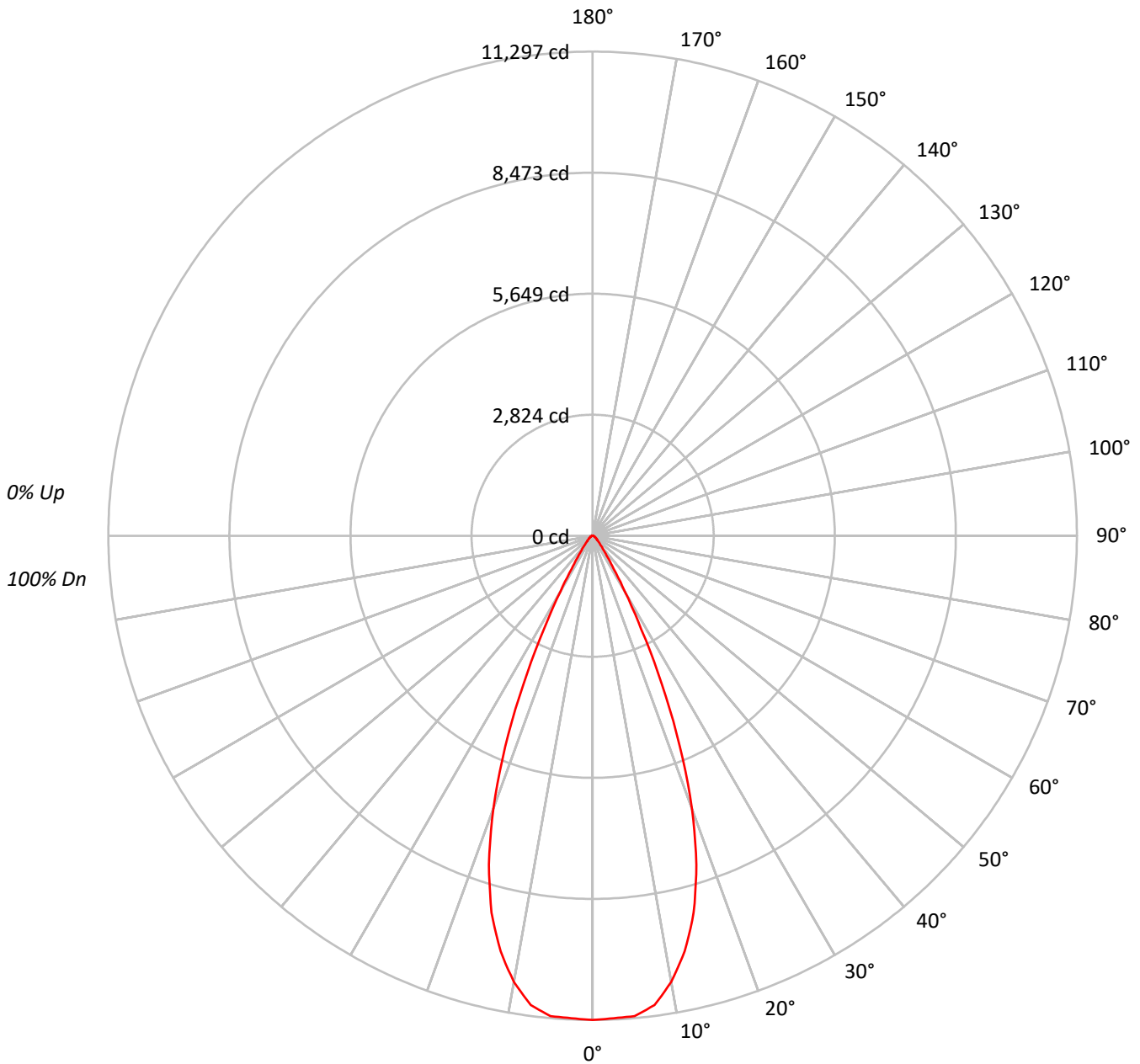
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431940

CATALOG NUMBER: LAMR4B412R459040DE01021MW

Luminous Intensity Polar Plot





TEST NUMBER: P431940

CATALOG NUMBER: LAMR4B412R459040DE01021MW

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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	112	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89																			
3	105	99	94	91	103	98	93	90	95	92	89	93	90	87	90	88	86	85																			
4	100	94	89	85	99	93	88	85	90	87	84	89	85	83	87	84	82	80																			
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76																			
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73																			
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69																			
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66																			
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63																			
10	79	71	66	62	78	70	66	62	70	65	62	69	65	62	68	65	62	61																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5573709
5°	5571772
10°	5296073
15°	4652119
20°	3558850
25°	2077587
30°	850343
35°	359576
40°	196052
45°	126641
50°	98862
55°	85588
60°	69270
65°	54636
70°	50633
75°	44607
80°	50006
85°	33399



TEST NUMBER: P431940

CATALOG NUMBER: LAMR4B412R459040DE01021MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1052.8	17.5
10°-20°	2479.6	41.1
20°-30°	1747.1	29.0
30°-40°	430.0	7.1
40°-50°	150.1	2.5
50°-60°	88.8	1.5
60°-70°	49.1	0.8
70°-80°	27.0	0.4
80°-90°	7.2	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°	5279.4	87.5
0°-40°	5709.4	94.7
0°-60°	5948.3	98.6
0°-90°	6031.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6031.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	11297	
5°	11250	###
15°	9108	2480
25°	3816	1747
35°	597	430
45°	182	150
55°	100	89
65°	47	49
75°	23	27
85°	6	7
90°	0	



TEST NUMBER: P431940

CATALOG NUMBER: LAMR4B412R459040DE01021MW

CANDELA DISTRIBUTION (FULL):

0°	
0°	11297.0
2.5°	11267.7
5°	11250.1
7.5°	11045.3
10°	10571.2
12.5°	9927.3
15°	9107.8
17.5°	8048.4
20°	6778.2
22.5°	5320.7
25°	3816.4
27.5°	2464.3
30°	1492.6
32.5°	907.3
35°	597.0
37.5°	421.4
40°	304.4
42.5°	234.1
45°	181.5
47.5°	152.2
50°	128.8
52.5°	111.2
55°	99.5
57.5°	87.8
60°	70.2
62.5°	58.5
65°	46.8
67.5°	41.0
70°	35.1
72.5°	29.3
75°	23.4
77.5°	23.4
80°	17.6
82.5°	11.7
85°	5.9
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)