

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: P431655

Luminaire Tested: **LAMR4B312R459050DE01021MW**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431655
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: LAMR4B312R459050DE01021MW
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 45 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

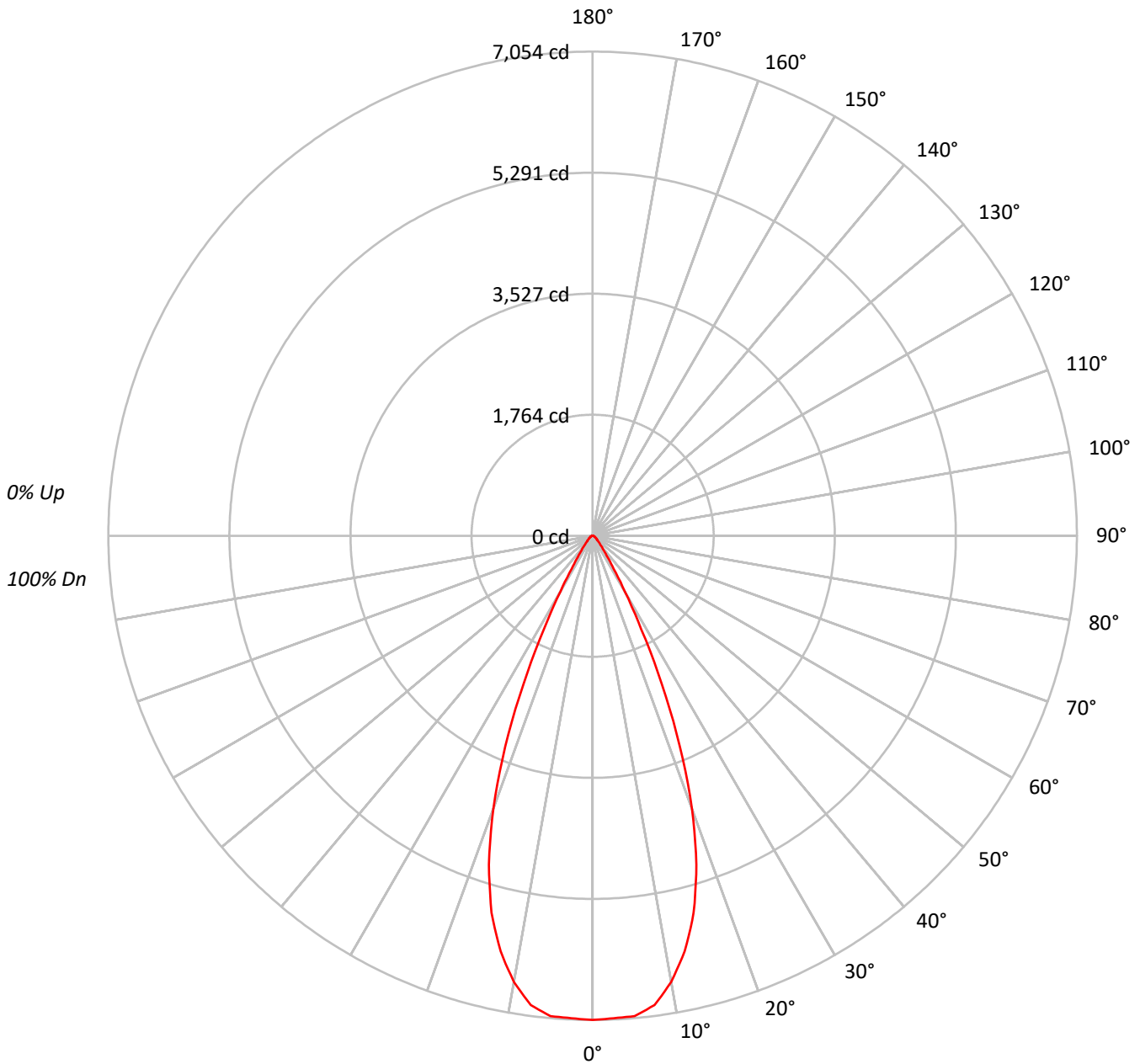
Lumens per Lamp: N/A
Luminaire Lumens: 3766.1 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.66
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	3480151
5°	3478983
10°	3306839
15°	2904778
20°	2222089
25°	1297213
30°	530966
35°	224539
40°	122372
45°	79054
50°	61712
55°	53417
60°	43319
65°	34089
70°	31592
75°	27832
80°	31254
85°	20945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	657.3	17.5
10°-20°	1548.2	41.1
20°-30°	1090.9	29.0
30°-40°	268.5	7.1
40°-50°	93.7	2.5
50°-60°	55.4	1.5
60°-70°	30.7	0.8
70°-80°	16.9	0.4
80°-90°	4.5	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°	3296.4	87.5
0°-40°	3564.9	94.7
0°-60°	3714.0	98.6
0°-90°	3766.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3766.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	7054	
5°	7024	657
15°	5687	1548
25°	2383	1091
35°	373	268
45°	113	94
55°	62	55
65°	29	31
75°	15	17
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	7053.7
2.5°	7035.5
5°	7024.5
7.5°	6896.6
10°	6600.6
12.5°	6198.5
15°	5686.9
17.5°	5025.3
20°	4232.2
22.5°	3322.2
25°	2382.9
27.5°	1538.7
30°	932.0
32.5°	566.5
35°	372.8
37.5°	263.1
40°	190.0
42.5°	146.2
45°	113.3
47.5°	95.0
50°	80.4
52.5°	69.4
55°	62.1
57.5°	54.8
60°	43.9
62.5°	36.5
65°	29.2
67.5°	25.6
70°	21.9
72.5°	18.3
75°	14.6
77.5°	14.6
80°	11.0
82.5°	7.3
85°	3.7
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)