

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: P431703

Luminaire Tested: **LAMR4B312R559050DE01021MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431703  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-898-142)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B312R559050DE01021MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 55 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3772.2 lumens  
Efficiency: N/A  
Efficacy: 92.2 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.81  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

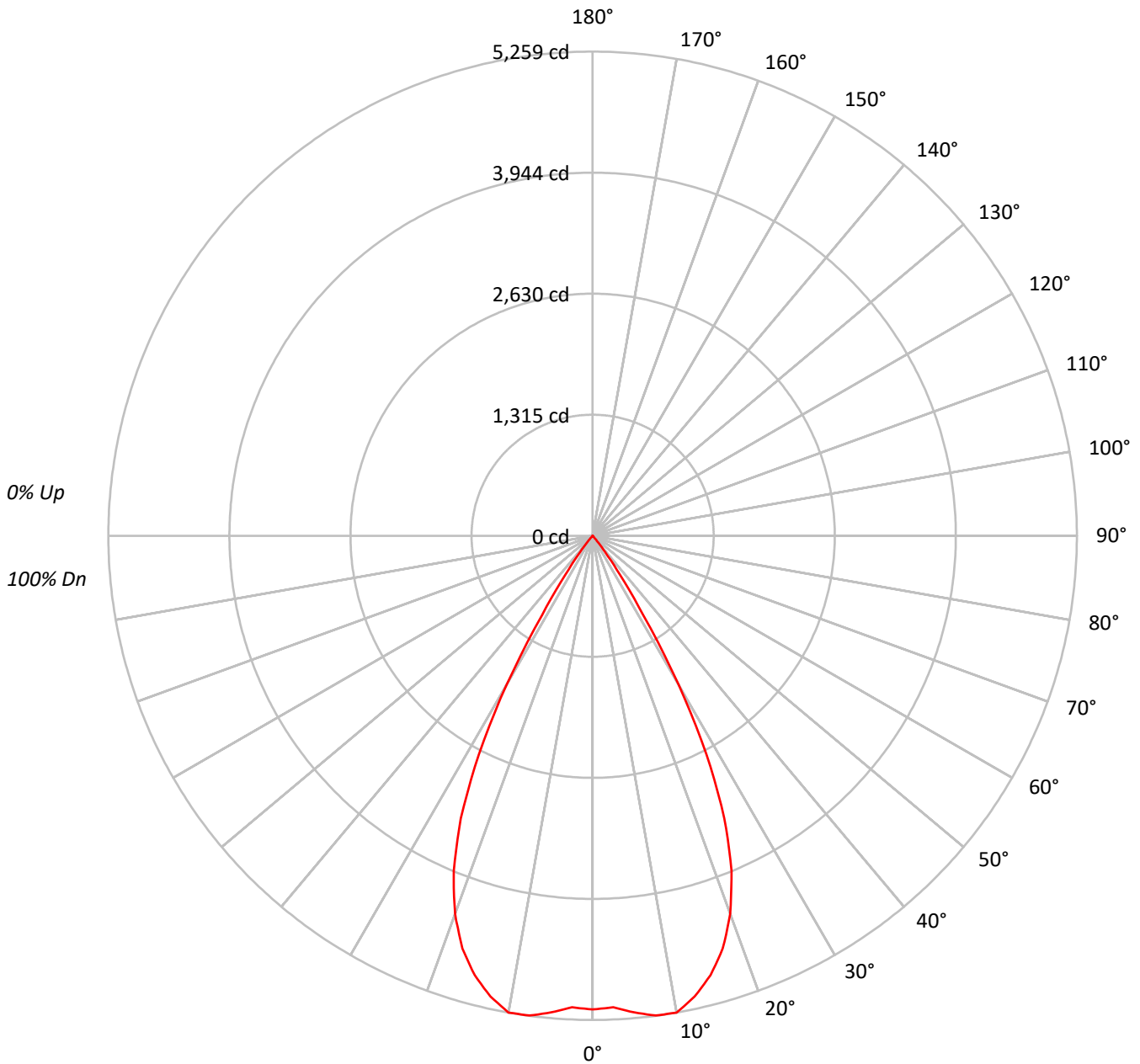
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									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	110	108	106	105	104	102	102	101	99	98	97	97	95	95	94	93	91	88	86	85	85	84	82	80	76	72	68	65	62	59																			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72																			
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68																			
4	100	94	89	85	99	92	88	85	90	87	84	88	85	83	87	84	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63																		
5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59																			
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55																			
7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52																			
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48																			
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45																			
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	2538783
5°	2574334
10°	2634610
15°	2524448
20°	2293600
25°	1843176
30°	1061077
35°	307959
40°	47016
45°	0
50°	0
55°	0
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	498.5	13.2
10°-20°	1375.1	36.5
20°-30°	1484.2	39.3
30°-40°	406.0	10.8
40°-50°	8.5	0.2
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	3357.7	89.0
0°-40°	3763.7	99.8
0°-60°	3772.2	100.0
0°-90°	3772.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3772.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5146	
5°	5198	498
15°	4942	1375
25°	3386	1484
35°	511	406
45°	0	9
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5145.7
2.5°	5124.9
5°	5197.9
7.5°	5255.3
10°	5258.8
12.5°	5124.9
15°	4942.3
17.5°	4700.5
20°	4368.4
22.5°	3940.6
25°	3385.8
27.5°	2678.1
30°	1862.5
32.5°	1020.8
35°	511.3
37.5°	219.1
40°	73.0
42.5°	10.4
45°	0.0
47.5°	0.0
50°	0.0
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)