

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: P431941

Luminaire Tested: **LAMR4B412R459050DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431941  
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: LAMR4B412R459050DE01021MB  
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: 5867.7 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

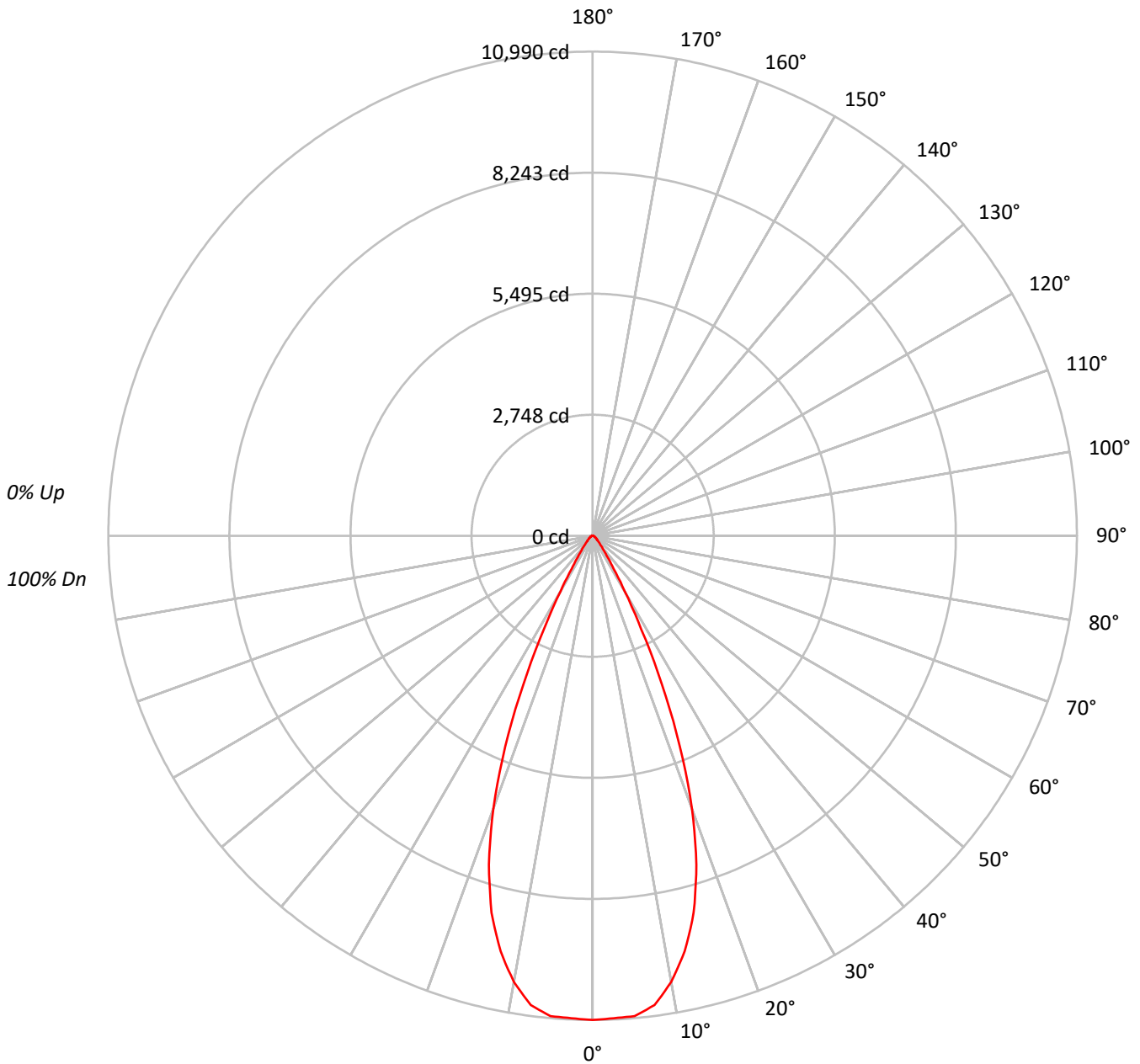
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
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°	5422241
5°	5420369
10°	5152139
15°	4525700
20°	3462137
25°	2021135
30°	827213
35°	349819
40°	190707
45°	123152
50°	96176
55°	83266
60°	67396
65°	53235
70°	49335
75°	43463
80°	48586
85°	32267



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1024.1	17.5
10°-20°	2412.2	41.1
20°-30°	1699.6	29.0
30°-40°	418.3	7.1
40°-50°	146.0	2.5
50°-60°	86.4	1.5
60°-70°	47.8	0.8
70°-80°	26.3	0.4
80°-90°	7.0	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°	5135.9	87.5
0°-40°	5554.2	94.7
0°-60°	5786.6	98.6
0°-90°	5867.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5867.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10990	
5°	10944	###
15°	8860	2412
25°	3713	1700
35°	581	418
45°	176	146
55°	97	86
65°	46	48
75°	23	26
85°	6	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	10990.0
2.5°	10961.5
5°	10944.4
7.5°	10745.1
10°	10283.9
12.5°	9657.5
15°	8860.3
17.5°	7829.7
20°	6594.0
22.5°	5176.1
25°	3712.7
27.5°	2397.3
30°	1452.0
32.5°	882.6
35°	580.8
37.5°	410.0
40°	296.1
42.5°	227.8
45°	176.5
47.5°	148.1
50°	125.3
52.5°	108.2
55°	96.8
57.5°	85.4
60°	68.3
62.5°	56.9
65°	45.6
67.5°	39.9
70°	34.2
72.5°	28.5
75°	22.8
77.5°	22.8
80°	17.1
82.5°	11.4
85°	5.7
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)