

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: P432008

Luminaire Tested: **LAMR4B412R609035DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P432008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2009-969-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B412R609035DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 60 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5627.2 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.89  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

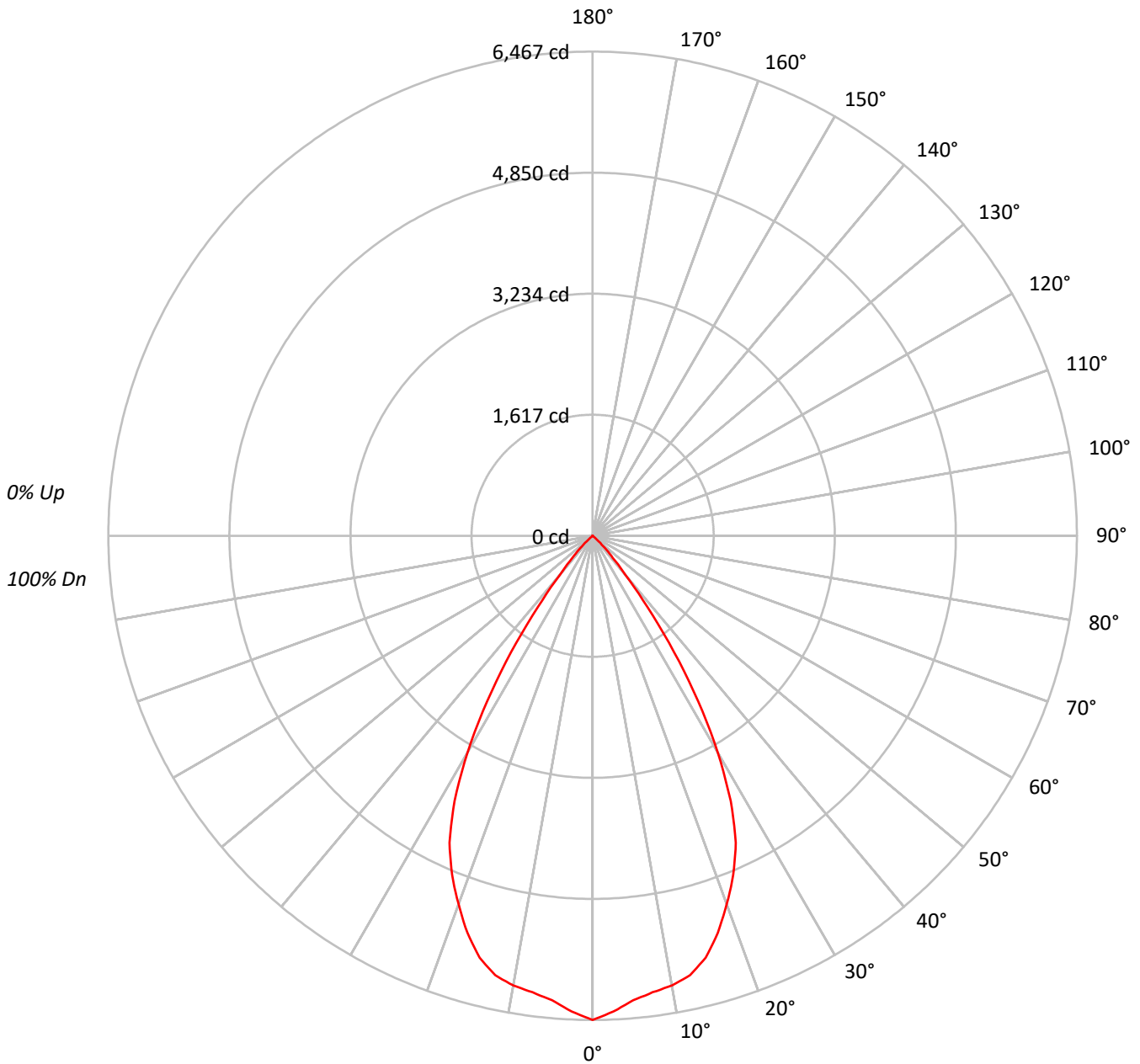
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	92	88	101	96	91	88	93	89	86	91	87	85	88	86	84	82			
4	98	91	85	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77			
5	93	85	80	75	92	84	79	75	83	78	74	81	77	74	79	76	73	72			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	69	67			
7	84	75	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63			
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	64	60	59			
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	54	72	63	58	54	62	58	54	62	57	54	61	57	54	53			

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

	0°
0°	3190834
5°	3083812
10°	3055092
15°	2979353
20°	2749496
25°	2462249
30°	1905324
35°	1141429
40°	438541
45°	160272
50°	6294
55°	4731
60°	5427
65°	3152
70°	3895
75°	5147
80°	7671
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	591.3	10.5
10°-20°	1622.6	28.8
20°-30°	2024.3	36.0
30°-40°	1179.3	21.0
40°-50°	196.8	3.5
50°-60°	5.2	0.1
60°-70°	3.7	0.1
70°-80°	2.9	0.1
80°-90°	1.1	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°	4238.2	75.3
0°-40°	5417.5	96.3
0°-60°	5619.6	99.9
0°-90°	5627.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5627.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6467	
5°	6227	591
15°	5833	1623
25°	4523	2024
35°	1895	1179
45°	230	197
55°	6	5
65°	3	4
75°	3	3
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6467.3
2.5°	6360.6
5°	6226.6
7.5°	6150.1
10°	6098.1
12.5°	6013.3
15°	5832.9
17.5°	5562.1
20°	5236.7
22.5°	4905.8
25°	4523.0
27.5°	3992.5
30°	3344.4
32.5°	2619.7
35°	1895.1
37.5°	1195.0
40°	680.9
42.5°	399.2
45°	229.7
47.5°	79.3
50°	8.2
52.5°	5.5
55°	5.5
57.5°	5.5
60°	5.5
62.5°	5.5
65°	2.7
67.5°	2.7
70°	2.7
72.5°	2.7
75°	2.7
77.5°	2.7
80°	2.7
82.5°	2.7
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)