

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: P431849

Luminaire Tested: **LAMR4B412R259727DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431849  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1911-585-5)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B412R259727DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 25 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5092.6 lumens  
Efficiency: N/A  
Efficacy: 94.1 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.41  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct

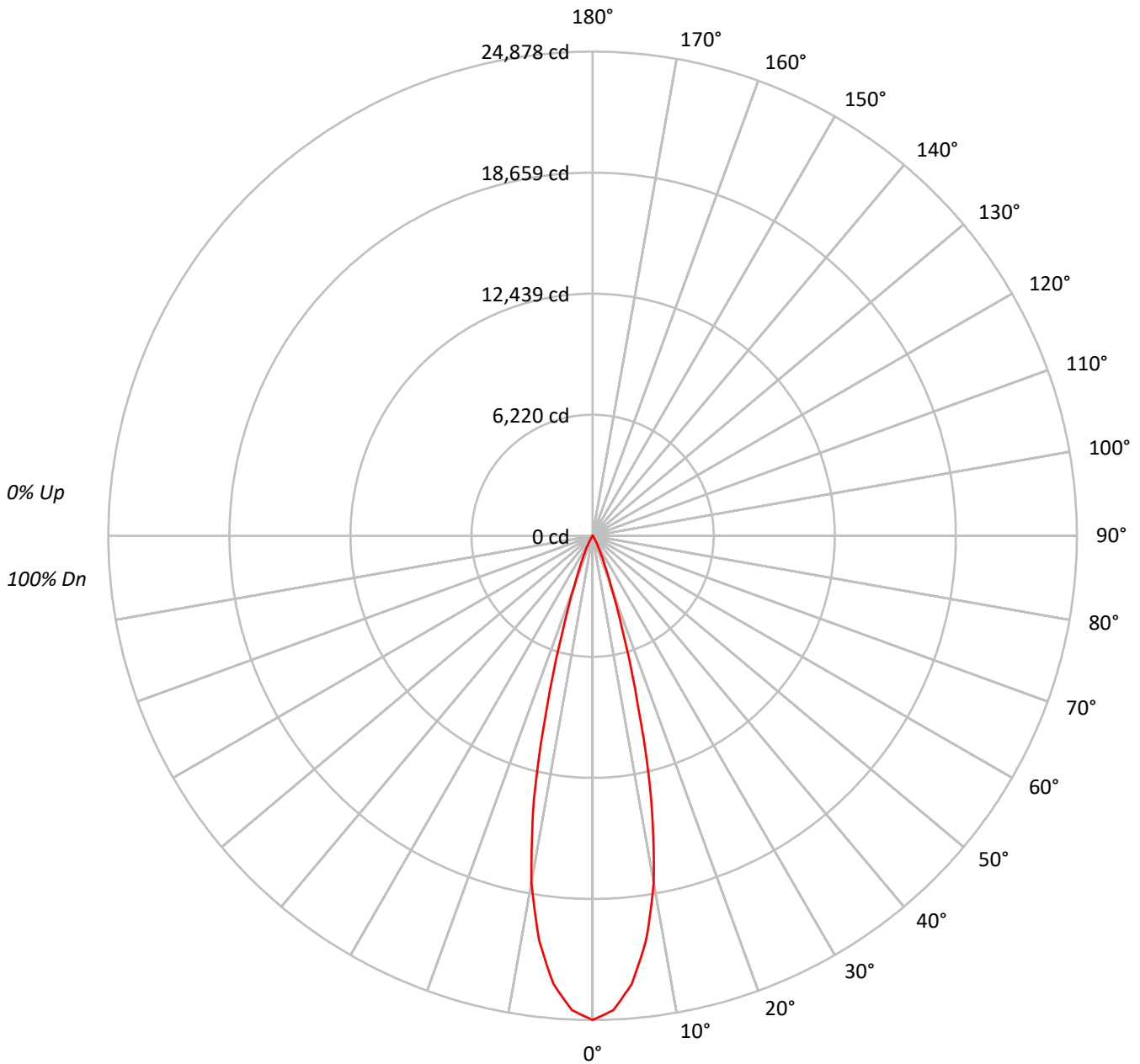
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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									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	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97																											
2	112	109	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																											
3	109	104	101	99	107	103	100	98	101	98	96	99	96	95	96	95	93	92																											
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																											
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	92	90	89	88																											
6	100	95	91	88	99	94	91	88	93	90	87	92	89	87	91	88	86	85																											
7	98	92	88	86	97	92	88	86	91	87	85	90	87	85	89	86	84	83																											
8	96	90	86	83	95	89	86	83	88	85	83	88	85	83	87	84	82	81																											
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80																											
10	91	85	82	79	91	85	82	79	84	81	79	84	81	79	83	81	79	78																											

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

	0°
0°	4007989
5°	3737314
10°	2959376
15°	1489374
20°	477932
25°	167128
30°	55994
35°	11230
40°	3701
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°	2046.0	40.2
10°-20°	2481.7	48.7
20°-30°	505.0	9.9
30°-40°	57.2	1.1
40°-50°	2.8	0.1
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°	5032.7	98.8
0°-40°	5089.8	99.9
0°-60°	5092.6	100.0
0°-90°	5092.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5092.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	24878	
5°	23110	###
15°	8930	2482
25°	940	505
35°	57	57
45°	0	3
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	24878.3
2.5°	24397.2
5°	23109.9
7.5°	20985.7
10°	18090.3
12.5°	13942.9
15°	8929.8
17.5°	5030.6
20°	2787.7
22.5°	1588.3
25°	940.2
27.5°	562.4
30°	301.0
32.5°	131.8
35°	57.1
37.5°	35.1
40°	17.6
42.5°	6.6
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)