

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: P431980

Luminaire Tested: **LAMR4B412R559030DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431980  
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: LAMR4B412R559030DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 55 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5530.1 lumens  
Efficiency: N/A  
Efficacy: 102.2 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

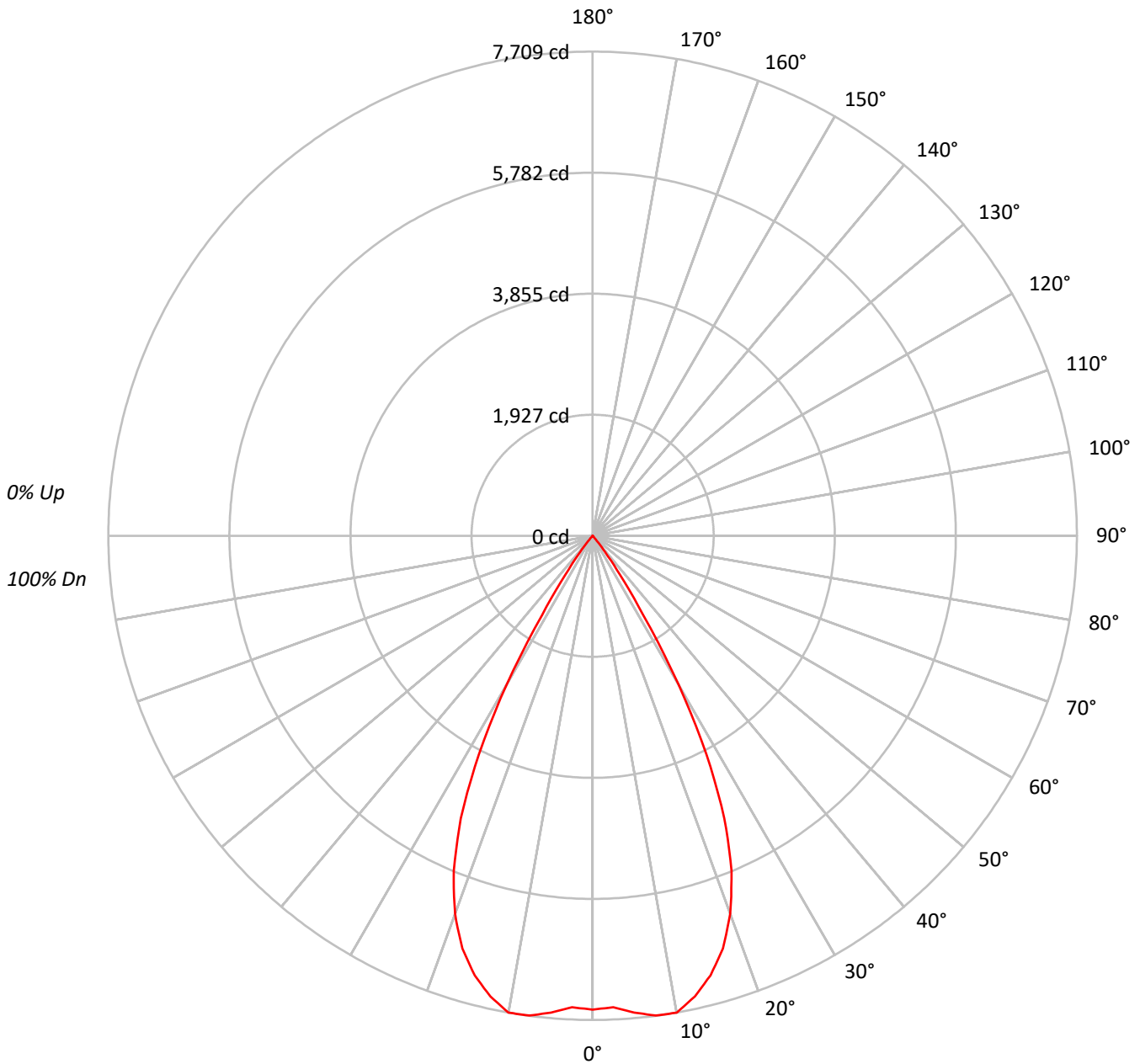
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			100
1	114	112	109	107	112	110	108	106	105	104	102	102	101	99	98	97	97	95			95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90			90
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85			85
4	100	94	89	85	99	92	88	85	90	87	84	88	85	83	87	84	82	80			80
5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76			76
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72			72
7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	68			68
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	72	69	66	65			65
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			62
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59			59

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

	0°
0°	3721907
5°	3774012
10°	3862338
15°	3700886
20°	3362431
25°	2702159
30°	1555524
35°	451428
40°	68979
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°	730.8	13.2
10°-20°	2015.9	36.5
20°-30°	2175.8	39.3
30°-40°	595.1	10.8
40°-50°	12.5	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°	4922.4	89.0
0°-40°	5517.6	99.8
0°-60°	5530.1	100.0
0°-90°	5530.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5530.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7544	
5°	7620	731
15°	7246	2016
25°	4964	2176
35°	750	595
45°	0	13
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	7543.7
2.5°	7513.1
5°	7620.2
7.5°	7704.3
10°	7709.4
12.5°	7513.1
15°	7245.5
17.5°	6891.1
20°	6404.1
22.5°	5777.0
25°	4963.7
27.5°	3926.1
30°	2730.4
32.5°	1496.5
35°	749.5
37.5°	321.2
40°	107.1
42.5°	15.3
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)