

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: P431864

Luminaire Tested: **LAMR4B412R309035DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B412R309035DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6028.6 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

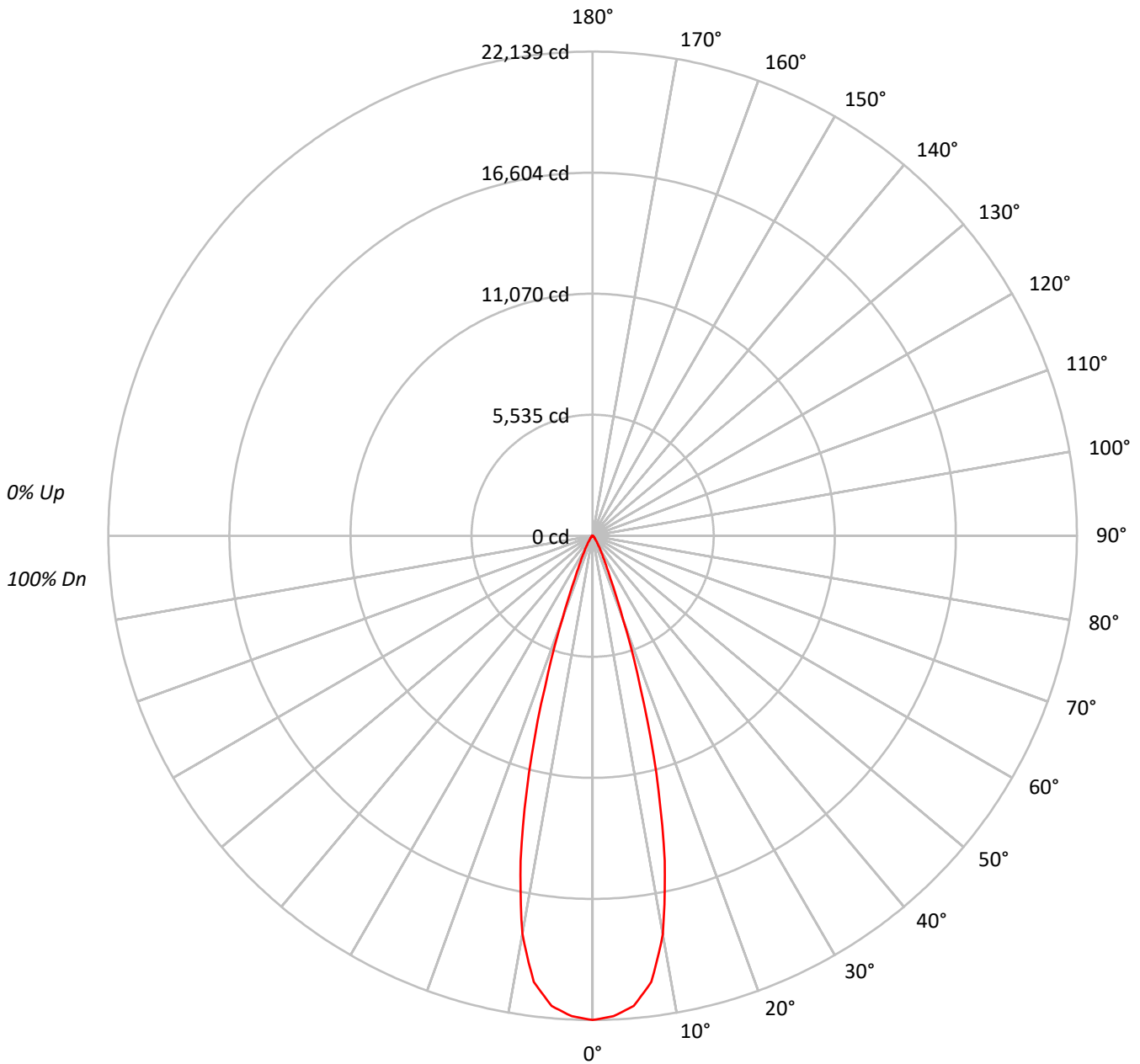
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100																
1	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96			96																
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	95	94			93																	
3	107	103	99	96	105	101	98	95	99	96	94	96	94	92	94	92	91			90																	
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	90	88			87																	
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85			84																	
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82			81																	
7	95	88	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80			79																	
8	92	86	81	79	91	85	81	78	84	81	78	83	80	78	83	80	78			77																	
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75			74																	
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	78	76	73			72																	

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

	0°
0°	10922831
5°	10684235
10°	9263819
15°	5741724
20°	2104427
25°	703453
30°	345299
35°	172199
40°	106785
45°	67821
50°	48280
55°	39310
60°	33846
65°	26734
70°	33034
75°	32788
80°	32390
85°	32267



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1966.1	32.6
10°-20°	2968.3	49.2
20°-30°	723.7	12.0
30°-40°	198.2	3.3
40°-50°	79.8	1.3
50°-60°	42.7	0.7
60°-70°	25.5	0.4
70°-80°	19.6	0.3
80°-90°	4.6	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°	5658.1	93.9
0°-40°	5856.3	97.1
0°-60°	5978.8	99.2
0°-90°	6028.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6028.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	22139	
5°	21573	###
15°	11241	2968
25°	1292	724
35°	286	198
45°	97	80
55°	46	43
65°	23	25
75°	17	20
85°	6	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	22138.8
2.5°	21990.2
5°	21572.8
7.5°	20577.9
10°	18491.0
12.5°	15220.5
15°	11241.0
17.5°	7244.3
20°	4008.1
22.5°	2138.4
25°	1292.2
27.5°	874.8
30°	606.1
32.5°	411.7
35°	285.9
37.5°	211.6
40°	165.8
42.5°	125.8
45°	97.2
47.5°	80.0
50°	62.9
52.5°	57.2
55°	45.7
57.5°	40.0
60°	34.3
62.5°	28.6
65°	22.9
67.5°	22.9
70°	22.9
72.5°	22.9
75°	17.2
77.5°	17.2
80°	11.4
82.5°	5.7
85°	5.7
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)