

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: P432059

Luminaire Tested: **LAMR4B412R709040DE01021MMS**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P432059  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-14)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B412R709040DE01021MMS  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 70 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5853.4 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

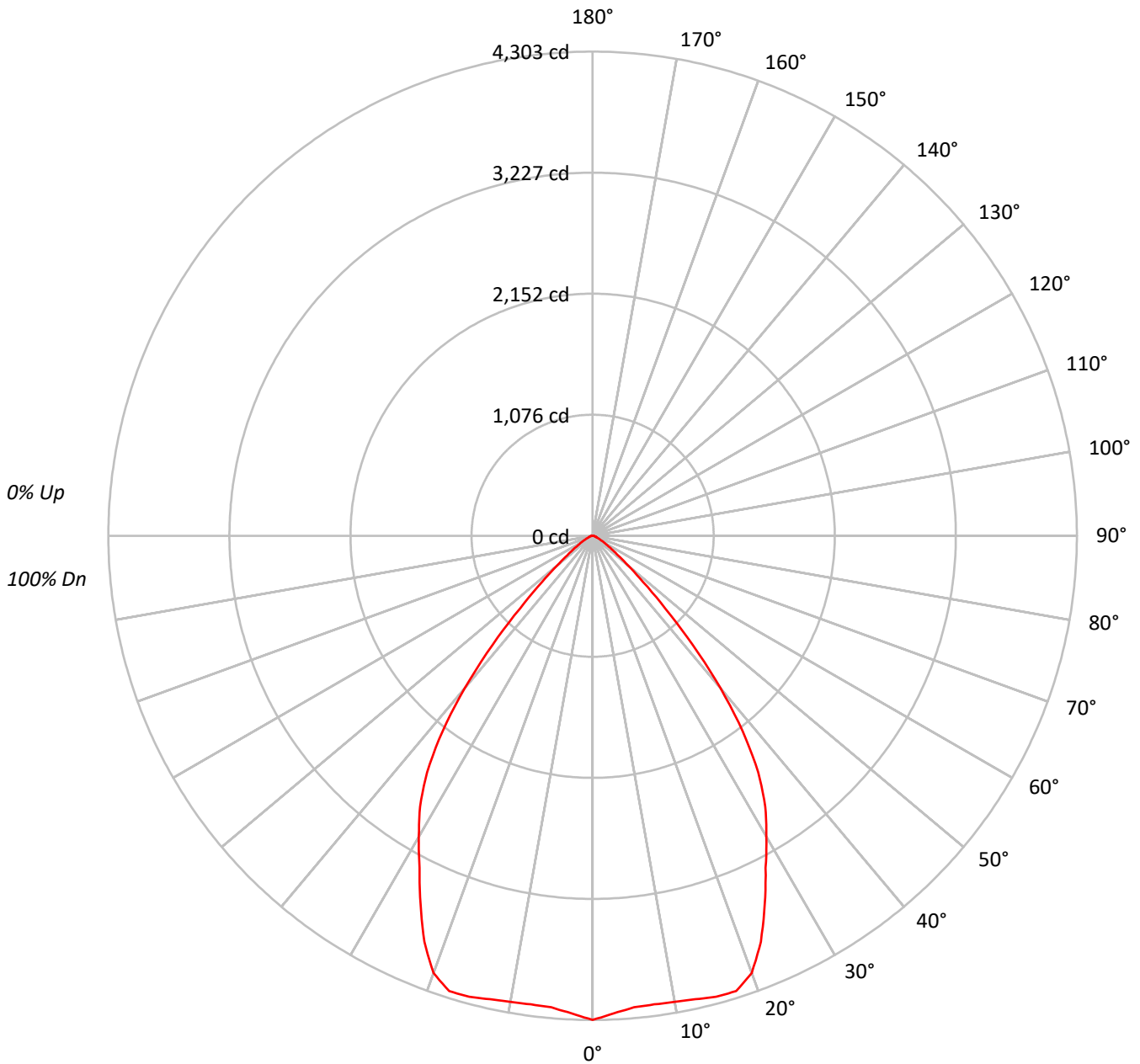
Input Watts (W): 54.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84	84	84	84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	64	60	58	58	58	58
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46	46	46	46
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43	43	43	43

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

	0°
0°	2122815
5°	2083279
10°	2107367
15°	2167002
20°	2170688
25°	1969309
30°	1759650
35°	1545455
40°	1137863
45°	637319
50°	313626
55°	175735
60°	106767
65°	70163
70°	52076
75°	45751
80°	34095
85°	33965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	402.1	6.9
10°-20°	1195.4	20.4
20°-30°	1659.0	28.3
30°-40°	1560.8	26.7
40°-50°	745.1	12.7
50°-60°	197.0	3.4
60°-70°	62.2	1.1
70°-80°	25.3	0.4
80°-90°	6.5	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°	3256.5	55.6
0°-40°	4817.4	82.3
0°-60°	5759.4	98.4
0°-90°	5853.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5853.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4303	
5°	4206	402
15°	4242	1195
25°	3618	1659
35°	2566	1561
45°	913	745
55°	204	197
65°	60	62
75°	24	25
85°	6	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4302.6
2.5°	4248.5
5°	4206.4
7.5°	4200.4
10°	4206.4
12.5°	4218.4
15°	4242.5
17.5°	4242.5
20°	4134.3
22.5°	3906.0
25°	3617.5
27.5°	3329.1
30°	3088.7
32.5°	2854.4
35°	2565.9
37.5°	2193.4
40°	1766.7
42.5°	1316.0
45°	913.4
47.5°	606.9
50°	408.6
52.5°	282.4
55°	204.3
57.5°	144.2
60°	108.2
62.5°	78.1
65°	60.1
67.5°	42.1
70°	36.1
72.5°	30.0
75°	24.0
77.5°	18.0
80°	12.0
82.5°	12.0
85°	6.0
87.5°	0.0
90°	0.0



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— 0°-180°







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