

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: P431806

Luminaire Tested: **LAMR4B412R209024DE01021MB**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431806
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-3)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 11/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LAMR4B412R209024DE01021MB
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4881.7 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

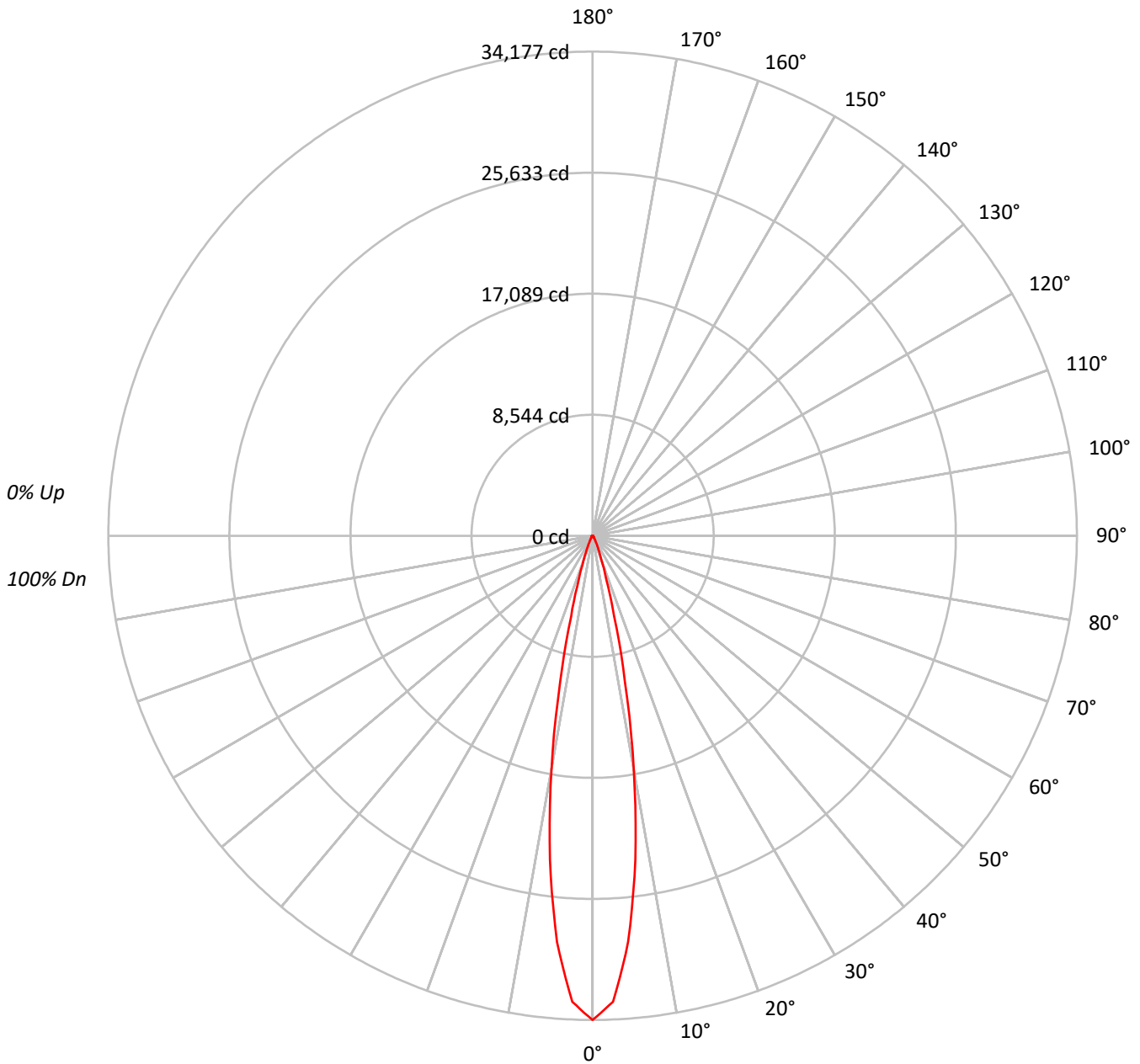
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	95	94	94	93	91	91	90	88	87	87	85	85	83	83	81	81	80	80								
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94	93	91	91	90	88	87	87	85	85	83	83	81	81	80	80	79	79	78	78								
3	108	104	100	98	107	103	100	97	100	98	95	98	96	94	96	94	93	91	91	90	88	87	87	85	85	83	83	81	81	80	80	79	79	78	78	77	77								
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	88	87	87	85	85	83	83	81	81	80	80	79	79	78	78	77	77	76	76									
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	85	85	83	83	81	81	80	80	79	79	78	78	77	77	76	76	75	75								
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	83	83	81	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74								
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	81	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73								
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73	72	72								
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73	72	72	71	71								
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	78	77	77	76	76	75	75	74	74	73	73	72	72	71	71	70	70	69	69								

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16862430
5°	14253158
10°	8371805
15°	2997588
20°	991807
25°	394787
30°	188743
35°	107873
40°	77867
45°	65588
50°	75605
55°	61589
60°	30886
65°	26151
70°	32313
75°	34122
80°	25571
85°	25474



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2356.5	48.3
10°-20°	1837.7	37.6
20°-30°	381.4	7.8
30°-40°	120.3	2.5
40°-50°	77.4	1.6
50°-60°	62.1	1.3
60°-70°	24.4	0.5
70°-80°	18.3	0.4
80°-90°	3.7	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°	4575.6	93.7
0°-40°	4695.9	96.2
0°-60°	4835.3	99.1
0°-90°	4881.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4881.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	34177	
5°	28779	###
15°	5869	1838
25°	725	381
35°	179	120
45°	94	77
55°	72	62
65°	22	24
75°	18	18
85°	4	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	34177.4
2.5°	32924.0
5°	28778.9
7.5°	23058.0
10°	16710.5
12.5°	10542.0
15°	5868.6
17.5°	3227.5
20°	1889.0
22.5°	1154.9
25°	725.2
27.5°	479.0
30°	331.3
32.5°	232.8
35°	179.1
37.5°	143.2
40°	120.9
42.5°	103.0
45°	94.0
47.5°	94.0
50°	98.5
52.5°	94.0
55°	71.6
57.5°	49.2
60°	31.3
62.5°	26.9
65°	22.4
67.5°	22.4
70°	22.4
72.5°	22.4
75°	17.9
77.5°	13.4
80°	9.0
82.5°	4.5
85°	4.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)