

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: P431821

Luminaire Tested: **LAMR4B412R209050DE01021MB**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431821
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: LAMR4B412R209050DE01021MB
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5881.5 lumens
Efficiency: N/A
Efficacy: 108.7 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

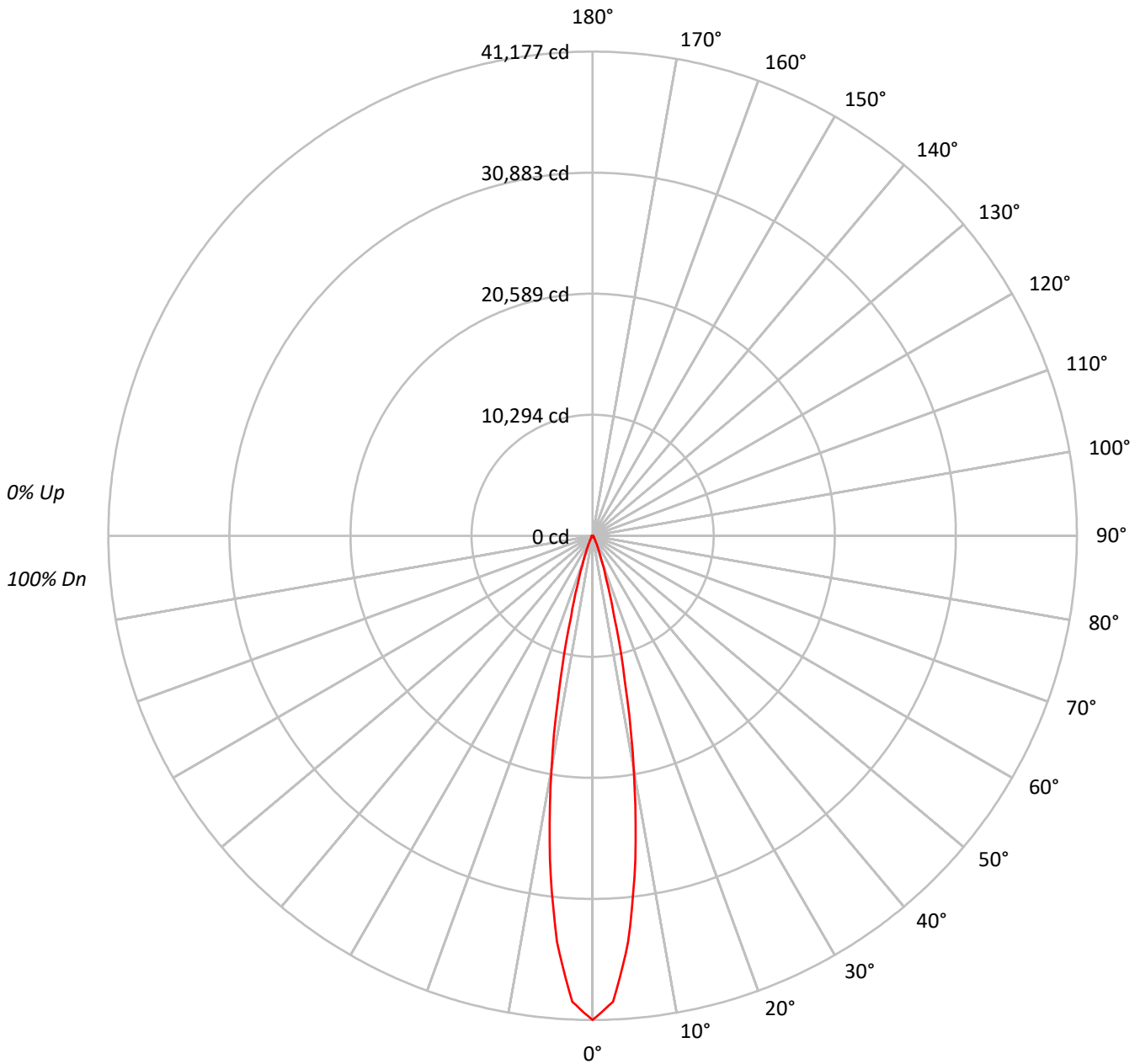
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									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	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	89	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	89	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	89	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	89	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°	20315988
5°	17172295
10°	10086396
15°	3611499
20°	1194947
25°	475628
30°	227370
35°	129917
40°	93775
45°	79054
50°	91110
55°	74234
60°	37299
65°	31521
70°	38949
75°	41175
80°	30686
85°	30569



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2839.1	48.3
10°-20°	2214.1	37.6
20°-30°	459.5	7.8
30°-40°	144.9	2.5
40°-50°	93.2	1.6
50°-60°	74.8	1.3
60°-70°	29.4	0.5
70°-80°	22.1	0.4
80°-90°	4.4	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°	5512.7	93.7
0°-40°	5657.6	96.2
0°-60°	5825.6	99.0
0°-90°	5881.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5881.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	41177	
5°	34673	###
15°	7070	2214
25°	874	460
35°	216	145
45°	113	93
55°	86	75
65°	27	29
75°	22	22
85°	5	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	41177.2
2.5°	39667.1
5°	34673.0
7.5°	27780.5
10°	20132.9
12.5°	12701.0
15°	7070.5
17.5°	3888.5
20°	2275.9
22.5°	1391.4
25°	873.7
27.5°	577.1
30°	399.1
32.5°	280.4
35°	215.7
37.5°	172.6
40°	145.6
42.5°	124.0
45°	113.3
47.5°	113.3
50°	118.7
52.5°	113.3
55°	86.3
57.5°	59.3
60°	37.8
62.5°	32.4
65°	27.0
67.5°	27.0
70°	27.0
72.5°	27.0
75°	21.6
77.5°	16.2
80°	10.8
82.5°	5.4
85°	5.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)