

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: P431861

Luminaire Tested: **LAMR4B412R309030DE01021MMS**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431861
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: LAMR4B412R309030DE01021MMS
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5579.0 lumens
Efficiency: N/A
Efficacy: 103.1 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

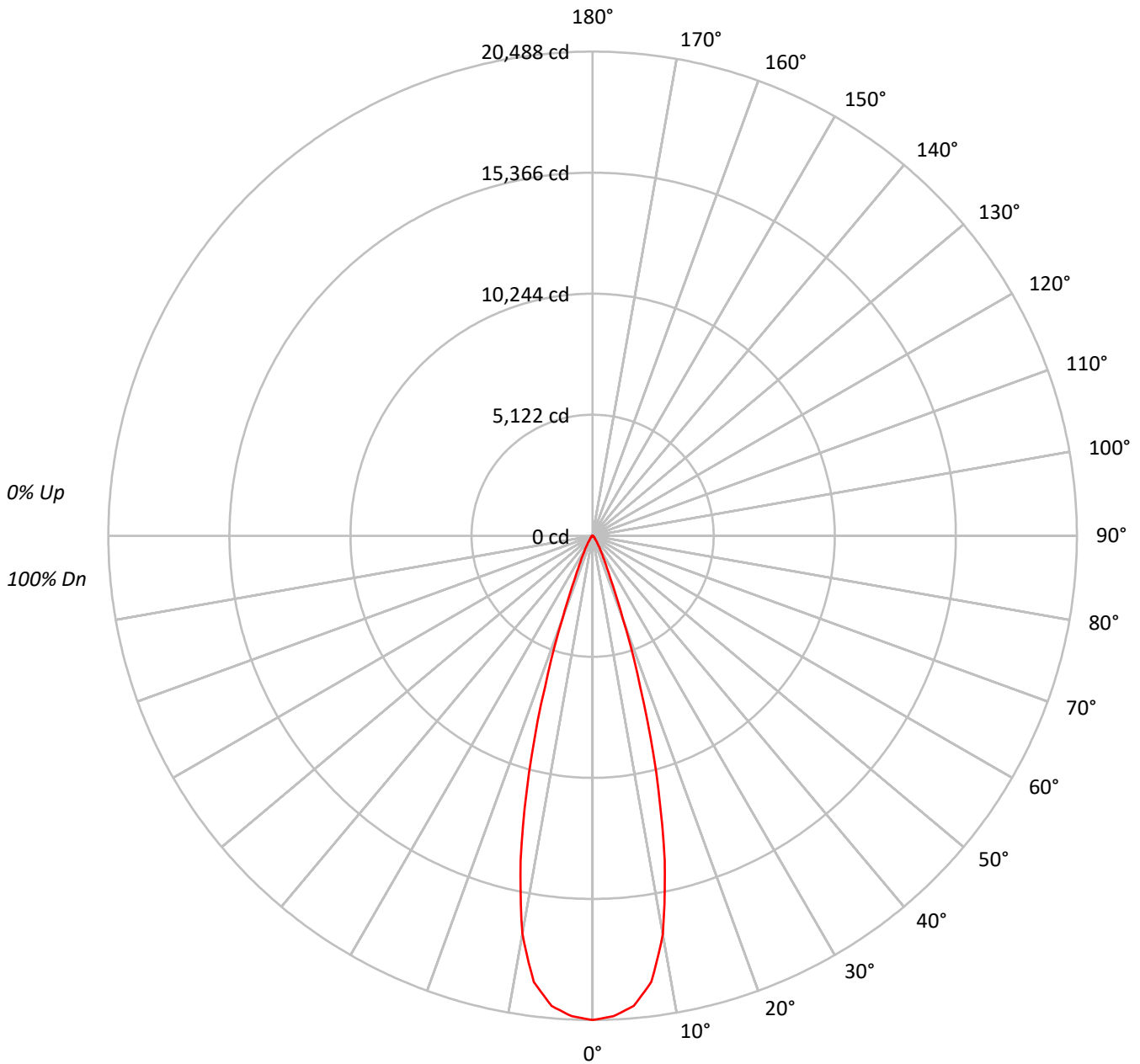
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10108360
5°	9887553
10°	8573003
15°	5313534
20°	1947492
25°	650975
30°	319548
35°	159370
40°	98799
45°	62797
50°	44672
55°	36386
60°	31280
65°	24750
70°	30582
75°	30310
80°	30117
85°	30003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1819.5	32.6
10°-20°	2747.0	49.2
20°-30°	669.8	12.0
30°-40°	183.4	3.3
40°-50°	73.8	1.3
50°-60°	39.5	0.7
60°-70°	23.6	0.4
70°-80°	18.2	0.3
80°-90°	4.3	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°	5236.2	93.9
0°-40°	5419.6	97.1
0°-60°	5532.9	99.2
0°-90°	5579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5579.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	20488	
5°	19964	###
15°	10403	2747
25°	1196	670
35°	265	183
45°	90	74
55°	42	39
65°	21	24
75°	16	18
85°	5	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	20488.0
2.5°	20350.4
5°	19964.2
7.5°	19043.5
10°	17112.1
12.5°	14085.5
15°	10402.7
17.5°	6704.1
20°	3709.2
22.5°	1979.0
25°	1195.8
27.5°	809.6
30°	560.9
32.5°	381.0
35°	264.6
37.5°	195.8
40°	153.4
42.5°	116.4
45°	90.0
47.5°	74.1
50°	58.2
52.5°	52.9
55°	42.3
57.5°	37.0
60°	31.7
62.5°	26.5
65°	21.2
67.5°	21.2
70°	21.2
72.5°	21.2
75°	15.9
77.5°	15.9
80°	10.6
82.5°	5.3
85°	5.3
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)