

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: P431813

Luminaire Tested: **LAMR4B412R209030DE01021MMS**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431813
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: LAMR4B412R209030DE01021MMS
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5534.1 lumens
Efficiency: N/A
Efficacy: 102.3 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

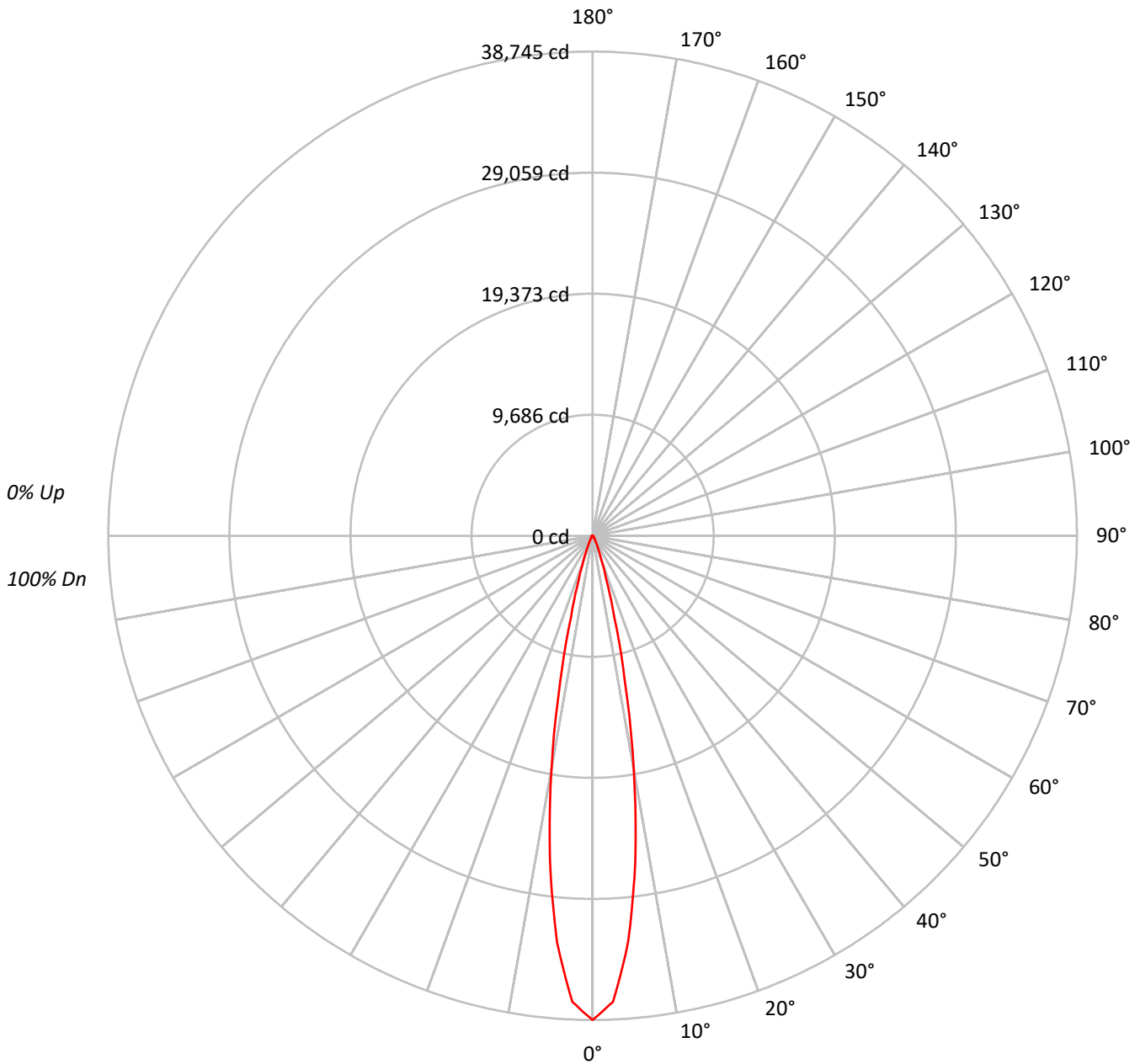
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97	97	97	97
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94	94	94	94
3	108	104	100	98	107	103	100	97	100	98	95	98	96	94	96	94	93	91	91	91	91
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	87	87
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	78	78	78

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	19116188
5°	16158142
10°	9490718
15°	3398196
20°	1124381
25°	447538
30°	213924
35°	122268
40°	88236
45°	74380
50°	85660
55°	69847
60°	35030
65°	29653
70°	36641
75°	38697
80°	28697
85°	28871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2671.5	48.3
10°-20°	2083.3	37.6
20°-30°	432.4	7.8
30°-40°	136.3	2.5
40°-50°	87.7	1.6
50°-60°	70.4	1.3
60°-70°	27.6	0.5
70°-80°	20.7	0.4
80°-90°	4.1	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°	5187.2	93.7
0°-40°	5323.5	96.2
0°-60°	5481.6	99.1
0°-90°	5534.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5534.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	38745	
5°	32625	###
15°	6653	2083
25°	822	432
35°	203	136
45°	107	88
55°	81	70
65°	25	28
75°	20	21
85°	5	4
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	38745.4
2.5°	37324.4
5°	32625.3
7.5°	26139.8
10°	18943.9
12.5°	11950.9
15°	6652.9
17.5°	3658.9
20°	2141.5
22.5°	1309.3
25°	822.1
27.5°	543.0
30°	375.5
32.5°	263.9
35°	203.0
37.5°	162.4
40°	137.0
42.5°	116.7
45°	106.6
47.5°	106.6
50°	111.6
52.5°	106.6
55°	81.2
57.5°	55.8
60°	35.5
62.5°	30.4
65°	25.4
67.5°	25.4
70°	25.4
72.5°	25.4
75°	20.3
77.5°	15.2
80°	10.1
82.5°	5.1
85°	5.1
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)