

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: P430660

Luminaire Tested: **LAM4B412R209030DE01021MB**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P430660
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: LAM4B412R209030DE01021MB
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

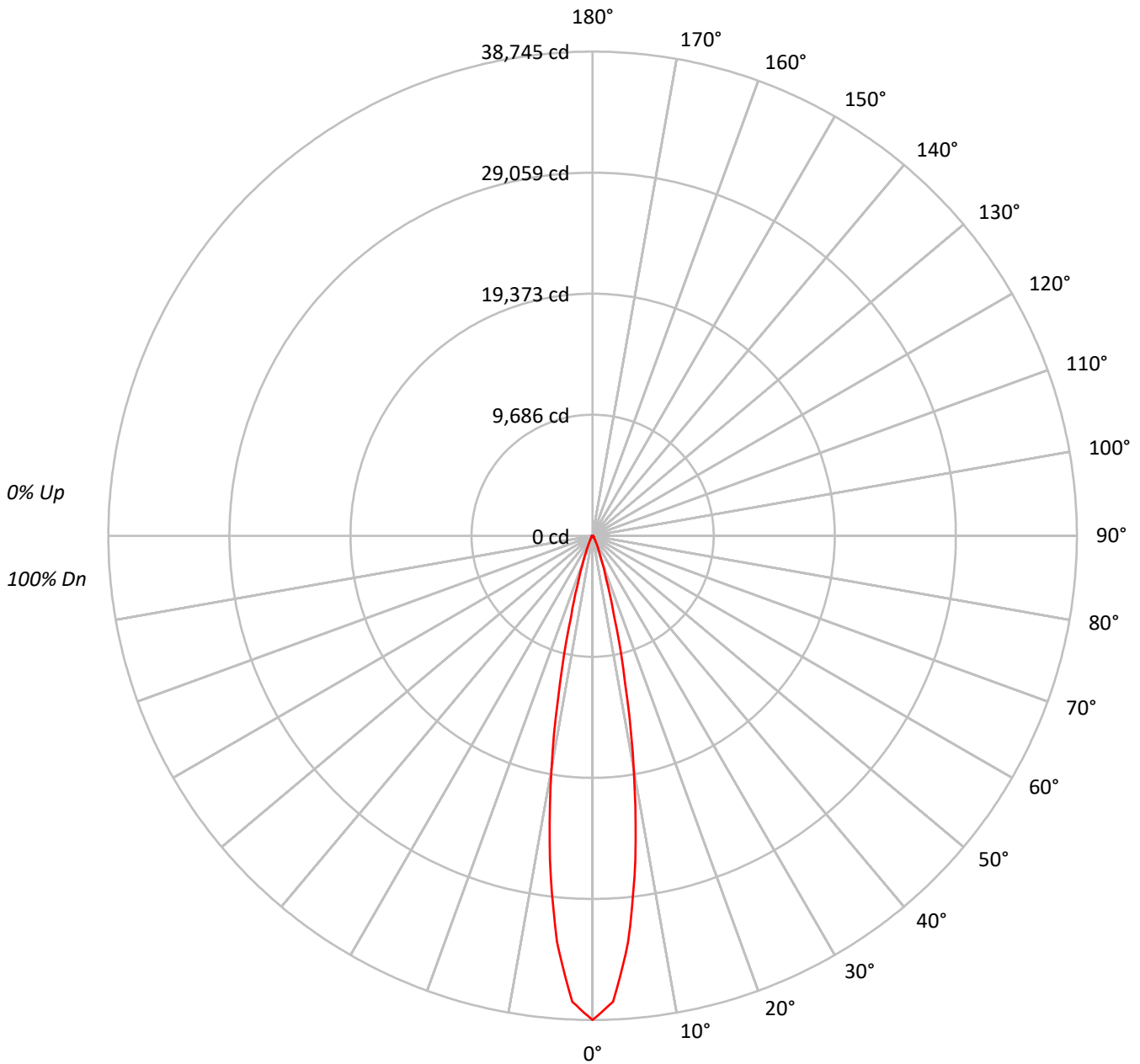
Lumens per Lamp: N/A
Luminaire Lumens: 5534.1 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

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																	
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	93	91	91	89	88	87	87	85	85	83	83	81	81	80	80	79	79	78						
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									
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										
4	105	100	97	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	87	87	85	85	83	83	81	81	80	80	79	79	78	78	77	77											
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	85	85	83	83	81	81	80	80	79	79	78	78	77	77	76	76											
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	83	83	81	81	80	80	79	79	78	78	77	77	76	76	75	75											
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	81	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74											
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73											
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73	72	72											
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	77	77	76	76	75	75	74	74	73	73	72	72	71	71	70	70											

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)