

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: P431487

Luminaire Tested: **LAMR4B212R709050DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P431487  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-14)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B212R709050DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 70 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2372.4 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

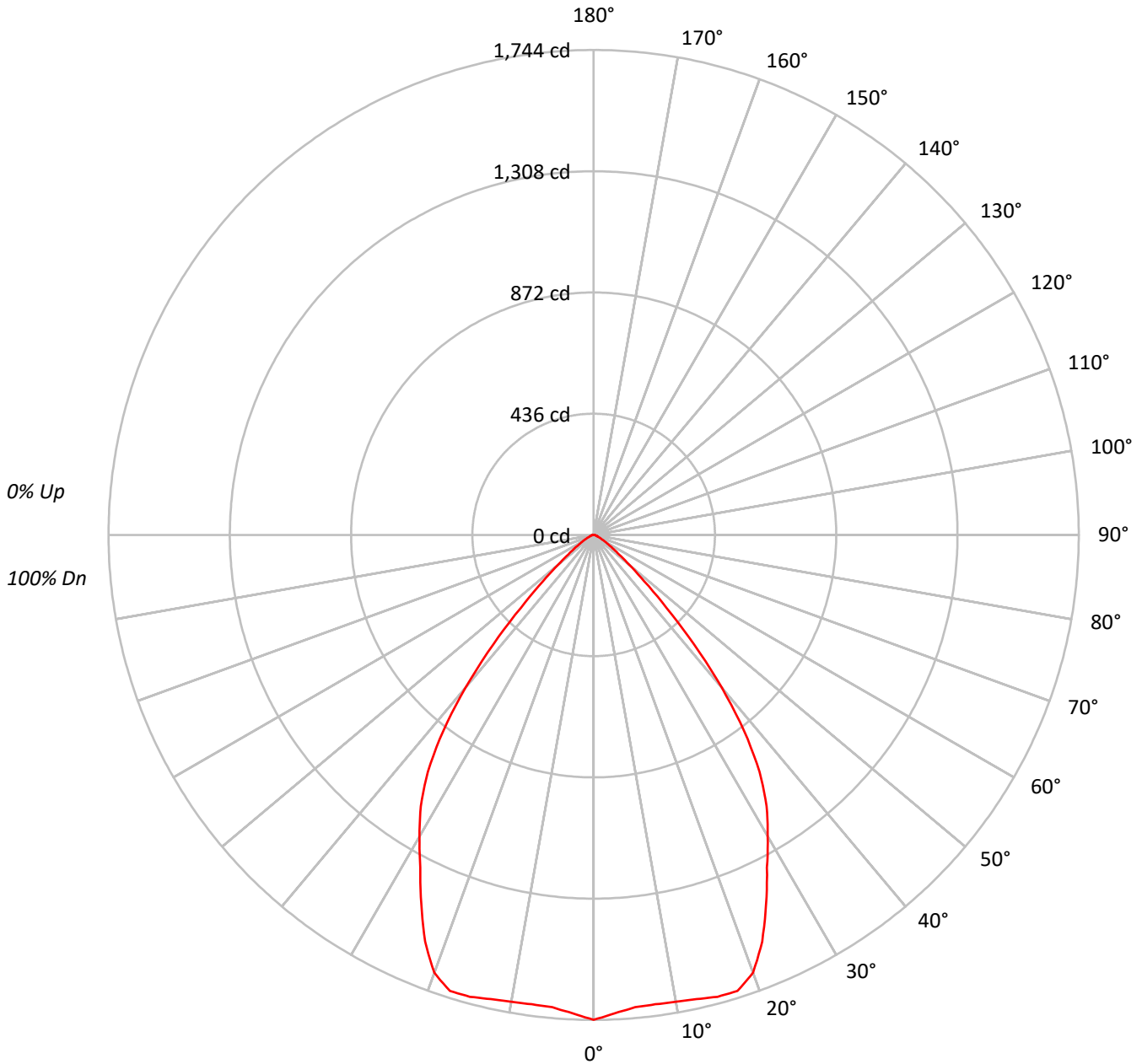
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92			92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	86	84			84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76			76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70			70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64			64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	64	60	58			58
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54			54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50			50
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46			46
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43			43

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	860355
5°	844376
10°	854139
15°	878293
20°	879763
25°	798176
30°	713214
35°	626397
40°	461148
45°	258305
50°	127108
55°	71223
60°	43220
65°	28485
70°	21061
75°	18491
80°	13922
85°	13586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.0	6.9
10°-20°	484.5	20.4
20°-30°	672.4	28.3
30°-40°	632.6	26.7
40°-50°	302.0	12.7
50°-60°	79.8	3.4
60°-70°	25.2	1.1
70°-80°	10.3	0.4
80°-90°	2.7	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°	1319.9	55.6
0°-40°	1952.5	82.3
0°-60°	2334.3	98.4
0°-90°	2372.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2372.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1744	
5°	1705	163
15°	1720	485
25°	1466	672
35°	1040	633
45°	370	302
55°	83	80
65°	24	25
75°	10	10
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1743.8
2.5°	1721.9
5°	1704.9
7.5°	1702.4
10°	1704.9
12.5°	1709.7
15°	1719.5
17.5°	1719.5
20°	1675.6
22.5°	1583.1
25°	1466.2
27.5°	1349.3
30°	1251.9
32.5°	1156.9
35°	1040.0
37.5°	889.0
40°	716.0
42.5°	533.4
45°	370.2
47.5°	246.0
50°	165.6
52.5°	114.5
55°	82.8
57.5°	58.5
60°	43.8
62.5°	31.7
65°	24.4
67.5°	17.0
70°	14.6
72.5°	12.2
75°	9.7
77.5°	7.3
80°	4.9
82.5°	4.9
85°	2.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)