

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: P431815

Luminaire Tested: **LAMR4B412R209035DE01021MB**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431815
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: LAMR4B412R209035DE01021MB
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5980.0 lumens
Efficiency: N/A
Efficacy: 110.5 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

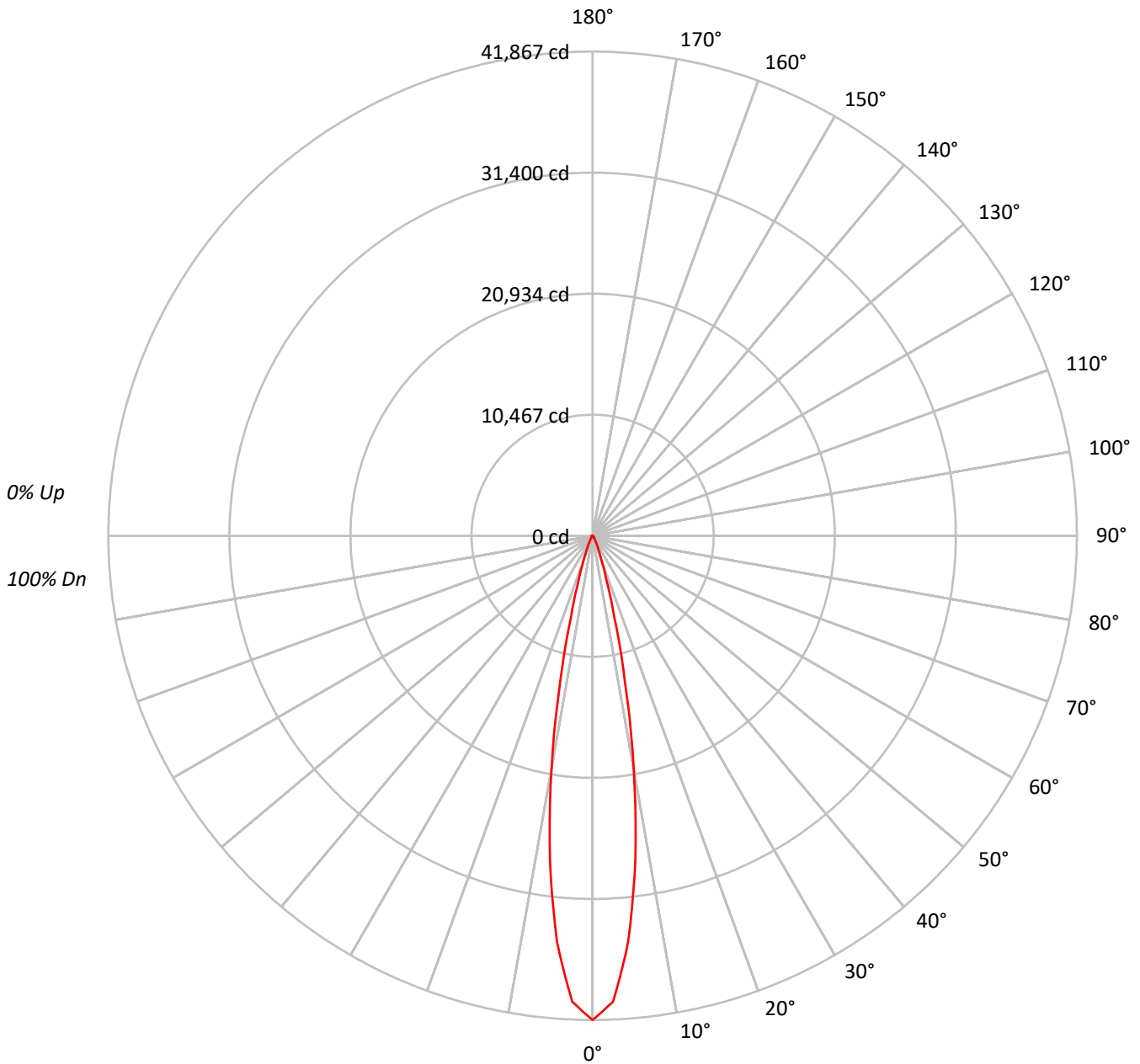
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431815

CATALOG NUMBER: LAMR4B412R209035DE01021MB

Luminous Intensity Polar Plot





TEST NUMBER: P431815

CATALOG NUMBER: LAMR4B412R209035DE01021MB

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	20656470
5°	17460093
10°	10255430
15°	3672027
20°	1215003
25°	483576
30°	231187
35°	132086
40°	95385
45°	80380
50°	92568
55°	75438
60°	37892
65°	31988
70°	39526
75°	41747
80°	31254
85°	31135



TEST NUMBER: P431815

CATALOG NUMBER: LAMR4B412R209035DE01021MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2886.7	48.3
10°-20°	2251.2	37.6
20°-30°	467.2	7.8
30°-40°	147.3	2.5
40°-50°	94.8	1.6
50°-60°	76.1	1.3
60°-70°	29.9	0.5
70°-80°	22.4	0.4
80°-90°	4.5	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°	5605.1	93.7
0°-40°	5752.4	96.2
0°-60°	5923.3	99.1
0°-90°	5980.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5980.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	41867	
5°	35254	###
15°	7189	2251
25°	888	467
35°	219	147
45°	115	95
55°	88	76
65°	27	30
75°	22	22
85°	6	4
90°	0	



TEST NUMBER: P431815

CATALOG NUMBER: LAMR4B412R209035DE01021MB

CANDELA DISTRIBUTION (FULL):

	0°
0°	41867.3
2.5°	40331.9
5°	35254.1
7.5°	28246.1
10°	20470.3
12.5°	12913.9
15°	7189.0
17.5°	3953.7
20°	2314.1
22.5°	1414.8
25°	888.3
27.5°	586.7
30°	405.8
32.5°	285.1
35°	219.3
37.5°	175.5
40°	148.1
42.5°	126.1
45°	115.2
47.5°	115.2
50°	120.6
52.5°	115.2
55°	87.7
57.5°	60.3
60°	38.4
62.5°	32.9
65°	27.4
67.5°	27.4
70°	27.4
72.5°	27.4
75°	21.9
77.5°	16.5
80°	11.0
82.5°	5.5
85°	5.5
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)