

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: P431909

Luminaire Tested: **LAMR4B412R409030DE01021MMS**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1911-585-7)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 11/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LAMR4B412R409030DE01021MMS
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 40 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5926.1 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.6
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

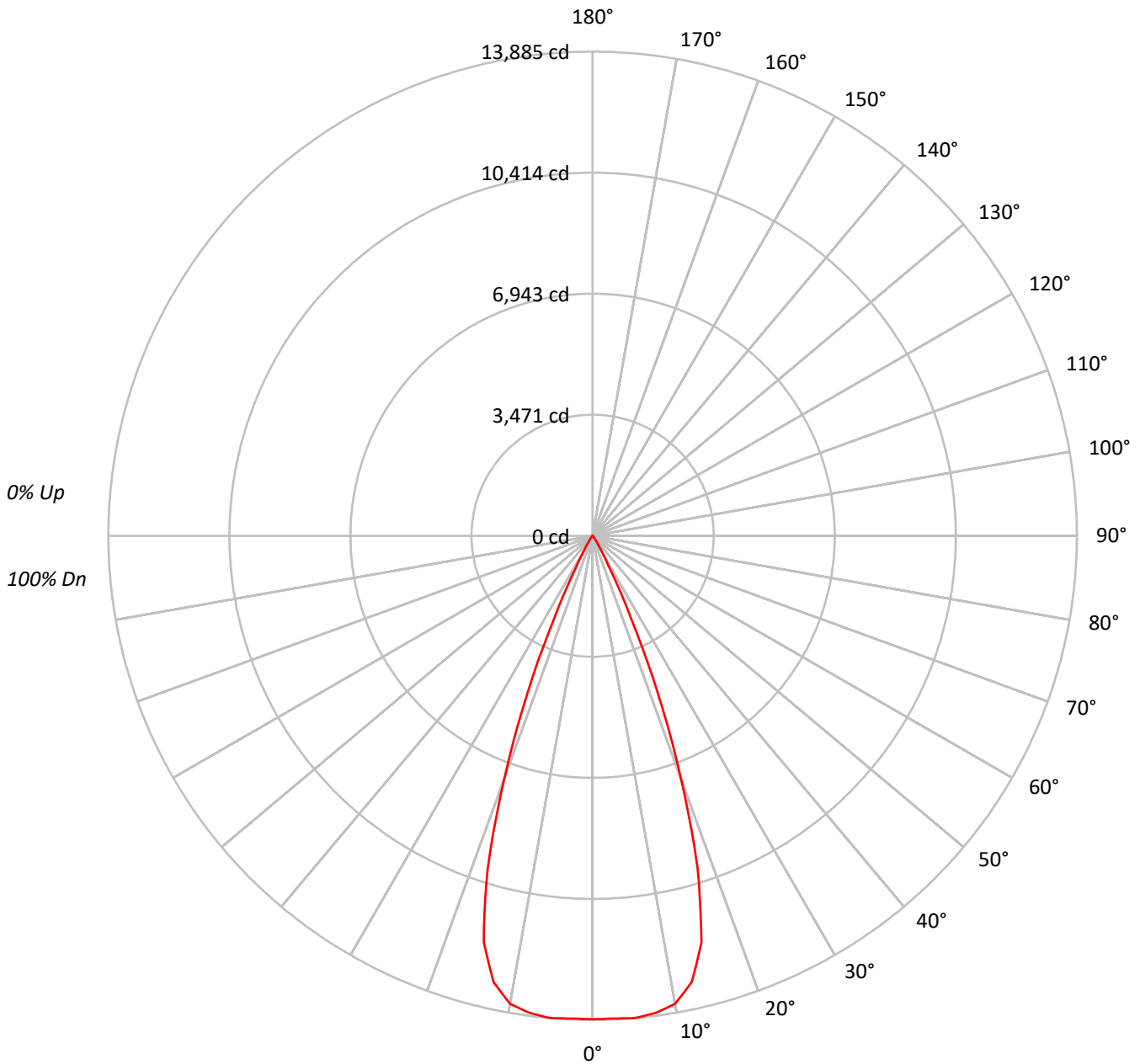
Input Watts (W): 54.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P431909

CATALOG NUMBER: LAMR4B412R409030DE01021MMS

Luminous Intensity Polar Plot





TEST NUMBER: P431909

CATALOG NUMBER: LAMR4B412R409030DE01021MMS

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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96			96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92			92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89			89
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86			86
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	84	82			82
6	97	90	85	82	95	89	85	82	88	84	82	87	83	81	85	83	80	79			79
7	93	87	82	79	92	86	82	79	85	81	78	84	80	78	83	80	78	77			77
8	91	83	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	74			74
9	88	81	76	73	87	80	76	73	79	75	73	79	75	73	78	75	72	71			71
10	85	78	73	71	84	77	73	70	77	73	70	76	73	70	75	72	70	69			69

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2234107
5°	2245471
10°	2229539
15°	2011384
20°	1269022
25°	457035
30°	95748
35°	29127
40°	5804
45°	0
50°	0
55°	0
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P431909

CATALOG NUMBER: LAMR4B412R409030DE01021MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1316.7	22.2
10°-20°	3148.4	53.1
20°-30°	1342.5	22.7
30°-40°	115.1	1.9
40°-50°	3.4	0.1
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	5807.6	98.0
0°-40°	5922.7	99.9
0°-60°	5926.1	100.0
0°-90°	5926.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5926.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	13868	
5°	13885	###
15°	12060	3148
25°	2571	1342
35°	148	115
45°	0	3
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P431909

CATALOG NUMBER: LAMR4B412R409030DE01021MMS

CANDELA DISTRIBUTION (FULL):

	0°
0°	13867.5
2.5°	13854.9
5°	13885.0
7.5°	13802.2
10°	13628.9
12.5°	13111.7
15°	12059.6
17.5°	10005.8
20°	7402.0
22.5°	4873.6
25°	2571.1
27.5°	1042.0
30°	514.7
32.5°	273.7
35°	148.1
37.5°	75.3
40°	27.6
42.5°	5.0
45°	0.0
47.5°	0.0
50°	0.0
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)