

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: P431582

Luminaire Tested: **LAMR4B312R309050DE01021MMS**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P431582
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-8)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 11/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LAMR4B312R309050DE01021MMS
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3805.5 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.51 / 0.51 / 0.46
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

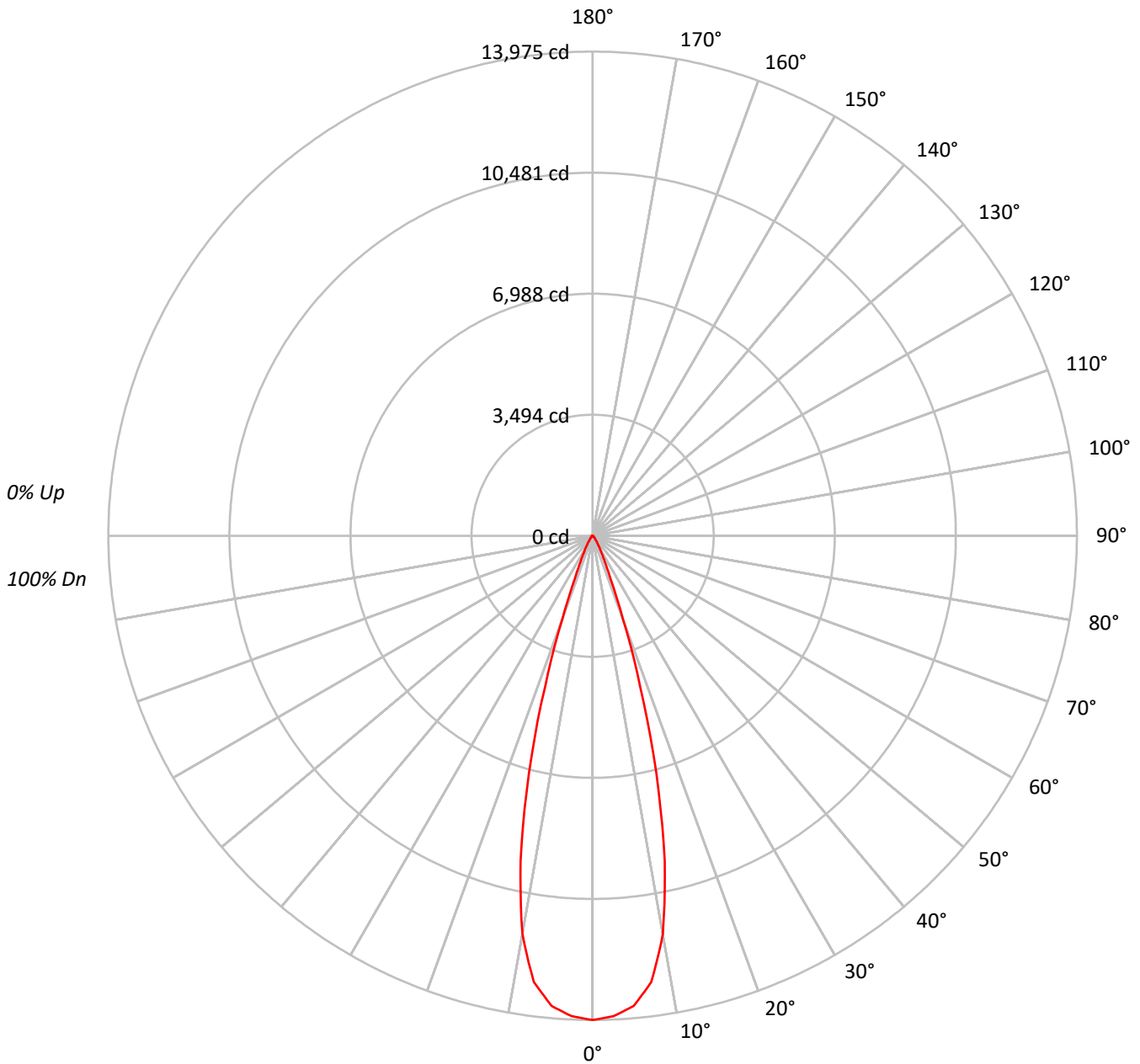
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	111	109	107	107	105	104	103	102	101	100	99	98	96	96	95	94	93	92	91	90	89	87	96																		
2	111	107	104	102	109	106	103	100	102	100	98	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64																		
3	107	103	99	96	105	101	98	95	99	96	94	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60																		
4	104	98	94	91	102	97	94	91	95	92	90	88	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56																		
5	101	95	91	87	99	94	90	87	92	89	86	84	82	80	78	76	74	72	70	68	66	64	62	60	58	56	54	52																		
6	98	91	87	84	97	91	87	84	89	86	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47																	
7	95	88	84	81	94	88	84	81	87	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45																	
8	92	86	81	79	91	85	81	78	84	81	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42																	
9	90	83	79	76	89	83	79	76	82	78	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40																	
10	88	81	77	74	87	80	77	74	80	76	74	72	70	68	66	64	62	60	58	56	54	52	50	48	46	44	42	40	38																	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6895078
5°	6744458
10°	5847814
15°	3624473
20°	1328413
25°	444054
30°	217969
35°	108716
40°	67433
45°	42841
50°	30472
55°	24859
60°	21413
65°	16811
70°	20773
75°	20588
80°	20457
85°	20379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1241.1	32.6
10°-20°	1873.8	49.2
20°-30°	456.9	12.0
30°-40°	125.1	3.3
40°-50°	50.4	1.3
50°-60°	27.0	0.7
60°-70°	16.0	0.4
70°-80°	12.3	0.3
80°-90°	2.9	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°	3571.7	93.9
0°-40°	3696.8	97.1
0°-60°	3774.2	99.2
0°-90°	3805.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3805.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	13975	
5°	13618	###
15°	7096	1874
25°	816	457
35°	180	125
45°	61	50
55°	29	27
65°	14	16
75°	11	12
85°	4	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	13975.2
2.5°	13881.4
5°	13617.9
7.5°	12989.9
10°	11672.5
12.5°	9608.0
15°	7095.9
17.5°	4573.0
20°	2530.1
22.5°	1349.9
25°	815.7
27.5°	552.2
30°	382.6
32.5°	259.9
35°	180.5
37.5°	133.5
40°	104.7
42.5°	79.4
45°	61.4
47.5°	50.5
50°	39.7
52.5°	36.1
55°	28.9
57.5°	25.3
60°	21.7
62.5°	18.0
65°	14.4
67.5°	14.4
70°	14.4
72.5°	14.4
75°	10.8
77.5°	10.8
80°	7.2
82.5°	3.6
85°	3.6
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)