

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: P430140

Luminaire Tested: **LAM4B212R309040DE010x1MW**

Issue Date: 11/23/2020

Test Information

Test Method: LM-41-14
Report Number: P430140
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: LAM4B212R309040DE010x1MW
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 30 DEG TIR OPTIC
Light Source: HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2539.1 lumens
Efficiency: N/A
Efficacy: 89.4 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

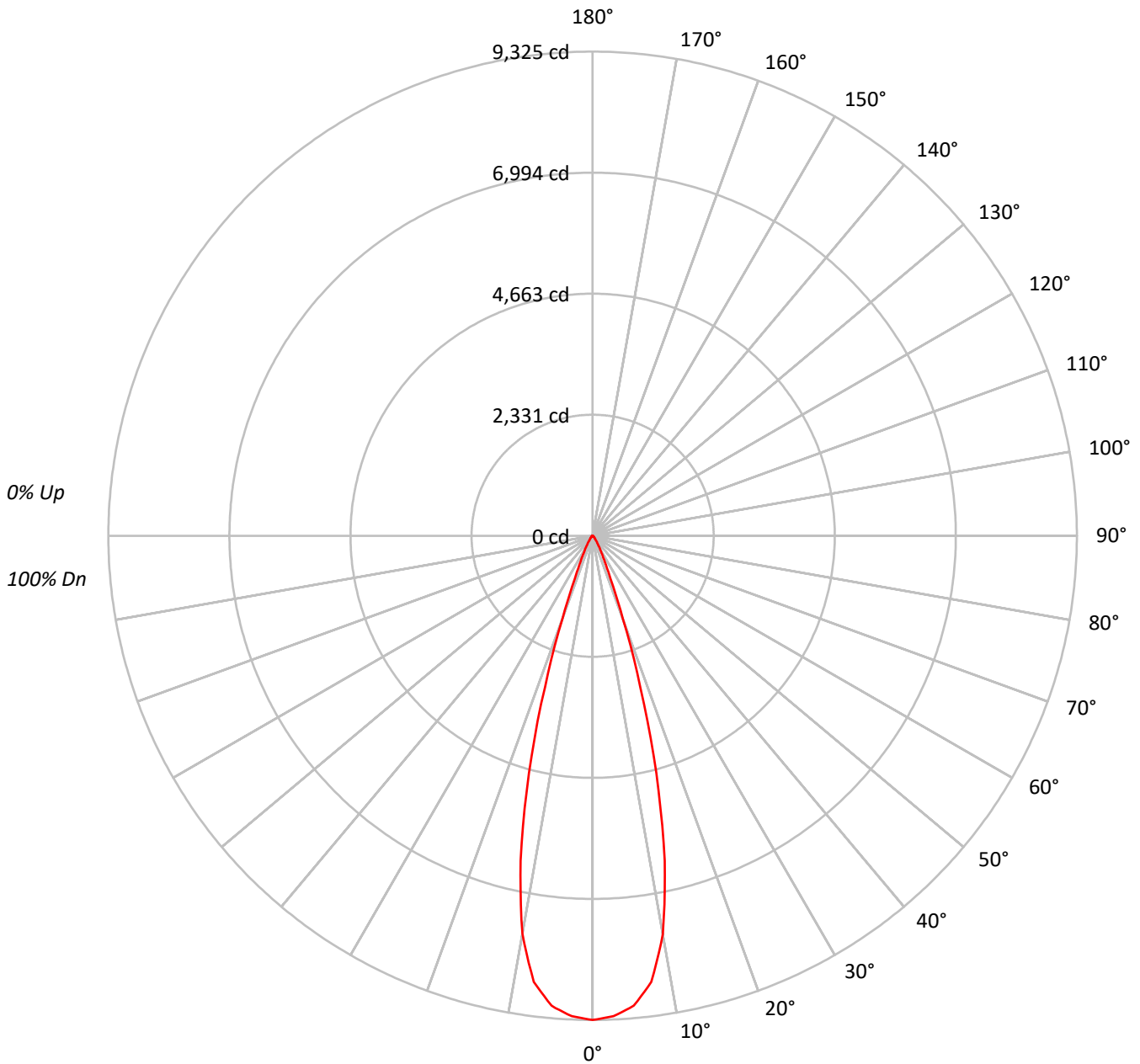
Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20																																
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									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	88	87	85	84	81																													
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	62	60	58	56	54	52	50																									
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	58	56	54	52	50	48	46	44	42	40																						
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	54	52	50	48	46	44	42	40	38	36	34	32	30																			
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	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20																
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	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1								
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	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1									
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	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0										
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	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0											
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	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4600666
5°	4500168
10°	3901866
15°	2418409
20°	886379
25°	296308
30°	145446
35°	72518
40°	44955
45°	28538
50°	20340
55°	16601
60°	14209
65°	11207
70°	13848
75°	13725
80°	13638
85°	13586



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	828.1	32.6
10°-20°	1250.2	49.2
20°-30°	304.8	12.0
30°-40°	83.5	3.3
40°-50°	33.6	1.3
50°-60°	18.0	0.7
60°-70°	10.7	0.4
70°-80°	8.2	0.3
80°-90°	2.0	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°	2383.2	93.9
0°-40°	2466.7	97.1
0°-60°	2518.3	99.2
0°-90°	2539.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2539.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	9325	
5°	9086	828
15°	4735	1250
25°	544	305
35°	120	83
45°	41	34
55°	19	18
65°	10	11
75°	7	8
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	9324.8
2.5°	9262.2
5°	9086.4
7.5°	8667.4
10°	7788.3
12.5°	6410.8
15°	4734.7
17.5°	3051.3
20°	1688.2
22.5°	900.7
25°	544.3
27.5°	368.5
30°	255.3
32.5°	173.4
35°	120.4
37.5°	89.1
40°	69.8
42.5°	53.0
45°	40.9
47.5°	33.7
50°	26.5
52.5°	24.1
55°	19.3
57.5°	16.9
60°	14.4
62.5°	12.0
65°	9.6
67.5°	9.6
70°	9.6
72.5°	9.6
75°	7.2
77.5°	7.2
80°	4.8
82.5°	2.4
85°	2.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)