

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: io LED

Report Number: P274365

Luminaire Tested: **LD4B15DE010W2N2050 EU4B1020W2N902050 4LBCSSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274365
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1808-906-3)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B15DE010W2N2050 EU4B1020W2N902050 4LBCSSQ1MB
Description: PORTFOLIO 4" W2N SQ DOWNLIGHT, CAST SHALLOW WITH MATTE BLACK FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1026.0 lumens
Efficiency: N/A
Efficacy: 46.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

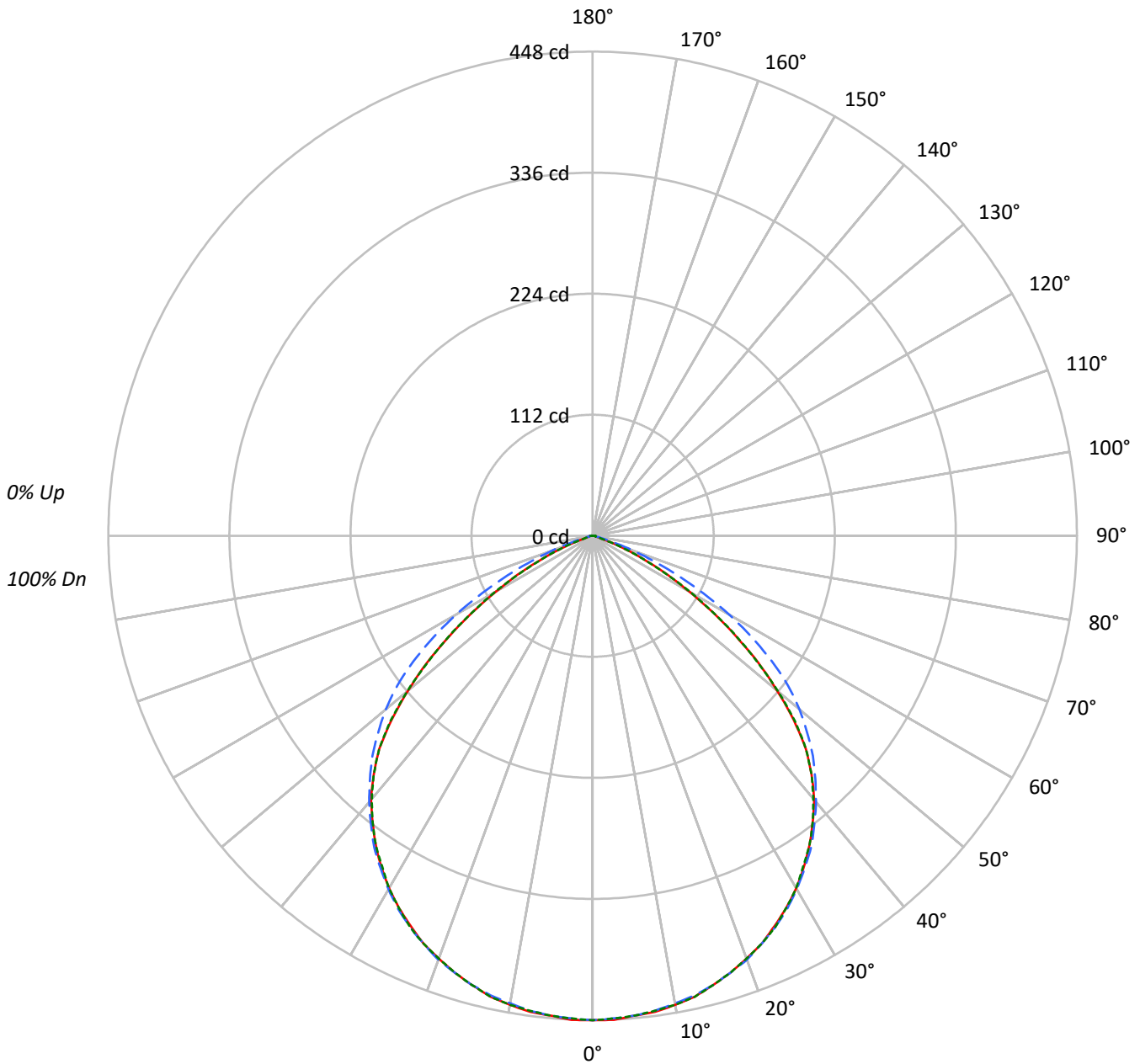
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67					67			
4	87	77	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58					58			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51					51			
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	51	44	38	50	43	38	49	43	38	48	42	38	36					36			
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34314	34314	34314
5°	34246	34246	34246
10°	34245	34144	34245
15°	34106	34106	34106
20°	33910	34008	33910
25°	33639	33749	33749
30°	33286	33392	33286
35°	32677	32910	32677
40°	31865	32124	31735
45°	30223	31197	30223
50°	26543	29746	26686
55°	21539	27010	21712
60°	15691	22351	16074
65°	9744	15775	9744
70°	4006	8594	4006
75°	769	2662	769
80°	1146	1146	1146
85°	2283	2283	2283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.4	4.1
10°-20°	121.4	11.8
20°-30°	183.8	17.9
30°-40°	218.9	21.3
40°-50°	217.1	21.2
50°-60°	160.8	15.7
60°-70°	69.9	6.8
70°-80°	9.2	0.9
80°-90°	2.5	0.2
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°	347.6	33.9
0°-40°	566.5	55.2
0°-60°	944.4	92.0
0°-90°	1026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	446	447	446	446	446	42
15°	430	430	430	429	430	121
25°	398	398	400	400	400	184
35°	350	351	352	351	350	218
45°	279	284	288	283	279	212
55°	161	179	202	181	163	145
65°	54	67	87	68	54	55
75°	3	4	9	4	3	6
85°	3	3	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	447.0	447.0	447.0	447.0
5°	445.7	447.0	445.7	445.7	445.7
7.5°	444.4	444.4	443.2	443.2	443.2
10°	440.6	440.6	439.3	439.3	440.6
12.5°	436.8	435.5	435.5	435.5	436.8
15°	430.4	430.4	430.4	429.1	430.4
17.5°	423.9	423.9	423.9	423.9	423.9
20°	416.3	416.3	417.5	416.3	416.3
22.5°	408.6	408.6	408.6	408.6	408.6
25°	398.3	398.3	399.6	399.6	399.6
27.5°	388.1	388.1	389.4	388.1	388.1
30°	376.6	376.6	377.8	376.6	376.6
32.5°	363.7	363.7	365.0	362.5	362.5
35°	349.7	350.9	352.2	350.9	349.7
37.5°	334.3	335.6	336.9	334.3	334.3
40°	318.9	320.2	321.5	318.9	317.6
42.5°	299.7	303.6	304.8	302.3	299.7
45°	279.2	284.3	288.2	283.1	279.2
47.5°	252.3	261.3	269.0	262.6	253.6
50°	222.9	236.9	249.8	236.9	224.1
52.5°	193.4	207.5	228.0	208.8	192.1
55°	161.4	179.3	202.4	180.6	162.7
57.5°	131.9	148.6	174.2	149.9	131.9
60°	102.5	120.4	146.0	121.7	105.0
62.5°	78.1	92.2	115.3	92.2	76.8
65°	53.8	66.6	87.1	67.9	53.8
67.5°	33.3	44.8	60.2	44.8	34.6
70°	17.9	25.6	38.4	26.9	17.9
72.5°	6.4	11.5	20.5	11.5	6.4
75°	2.6	3.8	9.0	3.8	2.6
77.5°	2.6	2.6	3.8	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6
85°	2.6	2.6	2.6	2.6	2.6
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)