

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: P274362

Luminaire Tested: **LD4B15DE010W2N2765 EU4B1020W2N902765 4LBCSSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274362  
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: LD4B15DE010W2N2765 EU4B1020W2N902765 4LBCSSQ1MB  
Description: PORTFOLIO 4" W2N SQ DOWNLIGHT, CAST SHALLOW WITH MATTE BLACK FINISH  
Light Source: W2N 2700K-6500K CCT TUNING RANGE  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1038.2 lumens  
Efficiency: N/A  
Efficacy: 47.2 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

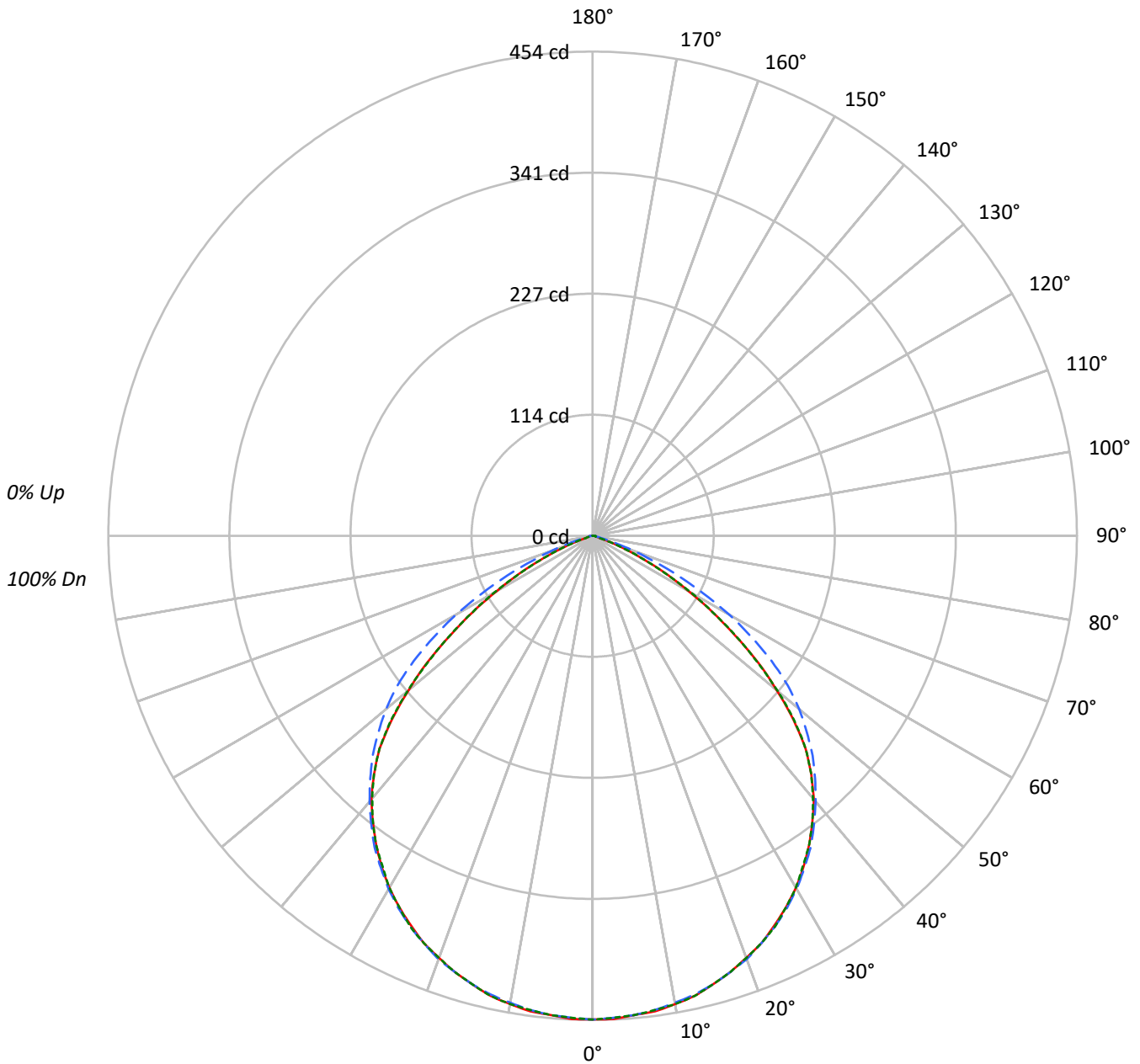
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67								
4	87	77	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58								
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51								
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45								
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40								
8	65	52	44	39	63	51	44	38	50	43	38	49	43	38	48	42	38	36								
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33								
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	34720	34720	34720
5°	34661	34661	34661
10°	34657	34556	34657
15°	34511	34511	34511
20°	34309	34415	34309
25°	34044	34154	34154
30°	33683	33798	33683
35°	33060	33303	33060
40°	32244	32504	32114
45°	30591	31565	30591
50°	26853	30092	27007
55°	21792	27330	21966
60°	15875	22626	16273
65°	9853	15956	9853
70°	4051	8706	4051
75°	769	2691	769
80°	1146	1146	1146
85°	2283	2283	2283



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.9	4.1
10°-20°	122.9	11.8
20°-30°	186.0	17.9
30°-40°	221.5	21.3
40°-50°	219.7	21.2
50°-60°	162.7	15.7
60°-70°	70.7	6.8
70°-80°	9.3	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°	351.7	33.9
0°-40°	573.2	55.2
0°-60°	955.7	92.1
0°-90°	1038.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1038.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	454	454	454	454	454	
5°	451	452	451	451	451	43
15°	436	436	436	434	436	123
25°	403	403	404	404	404	186
35°	354	355	356	355	354	221
45°	283	288	292	286	283	215
55°	163	182	205	183	165	146
65°	54	67	88	69	54	56
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°	453.6	453.6	453.6	453.6	453.6
2.5°	453.6	452.4	452.4	452.4	452.4
5°	451.1	452.4	451.1	451.1	451.1
7.5°	449.8	449.8	448.5	448.5	448.5
10°	445.9	445.9	444.6	444.6	445.9
12.5°	442.0	440.7	440.7	440.7	442.0
15°	435.5	435.5	435.5	434.2	435.5
17.5°	429.0	429.0	429.0	429.0	429.0
20°	421.2	421.2	422.5	421.2	421.2
22.5°	413.5	413.5	413.5	413.5	413.5
25°	403.1	403.1	404.4	404.4	404.4
27.5°	392.7	392.7	394.0	392.7	392.7
30°	381.1	381.1	382.4	381.1	381.1
32.5°	368.1	368.1	369.4	366.8	366.8
35°	353.8	355.1	356.4	355.1	353.8
37.5°	338.3	339.6	340.9	338.3	338.3
40°	322.7	324.0	325.3	322.7	321.4
42.5°	303.3	307.2	308.5	305.9	303.3
45°	282.6	287.7	291.6	286.4	282.6
47.5°	255.3	264.4	272.2	265.7	256.6
50°	225.5	239.8	252.7	239.8	226.8
52.5°	195.7	210.0	230.7	211.3	194.4
55°	163.3	181.5	204.8	182.8	164.6
57.5°	133.5	150.4	176.3	151.6	133.5
60°	103.7	121.8	147.8	123.1	106.3
62.5°	79.1	93.3	116.7	93.3	77.8
65°	54.4	67.4	88.1	68.7	54.4
67.5°	33.7	45.4	60.9	45.4	35.0
70°	18.1	25.9	38.9	27.2	18.1
72.5°	6.5	11.7	20.7	11.7	6.5
75°	2.6	3.9	9.1	3.9	2.6
77.5°	2.6	2.6	3.9	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)