

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: P274476

Luminaire Tested: **LD4B10DE010W2N2765 EU4B1020W2N902765 4LBCSSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274476  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1808-906-36)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10DE010W2N2765 EU4B1020W2N902765 4LBCSSQ1MW  
Description: PORTFOLIO 4" W2N SQ DOWNLIGHT, CAST SHALLOW WITH MATTE WHITE FINISH  
Light Source: W2N 2700K-6500K CCT TUNING RANGE  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 884.8 lumens  
Efficiency: N/A  
Efficacy: 63.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

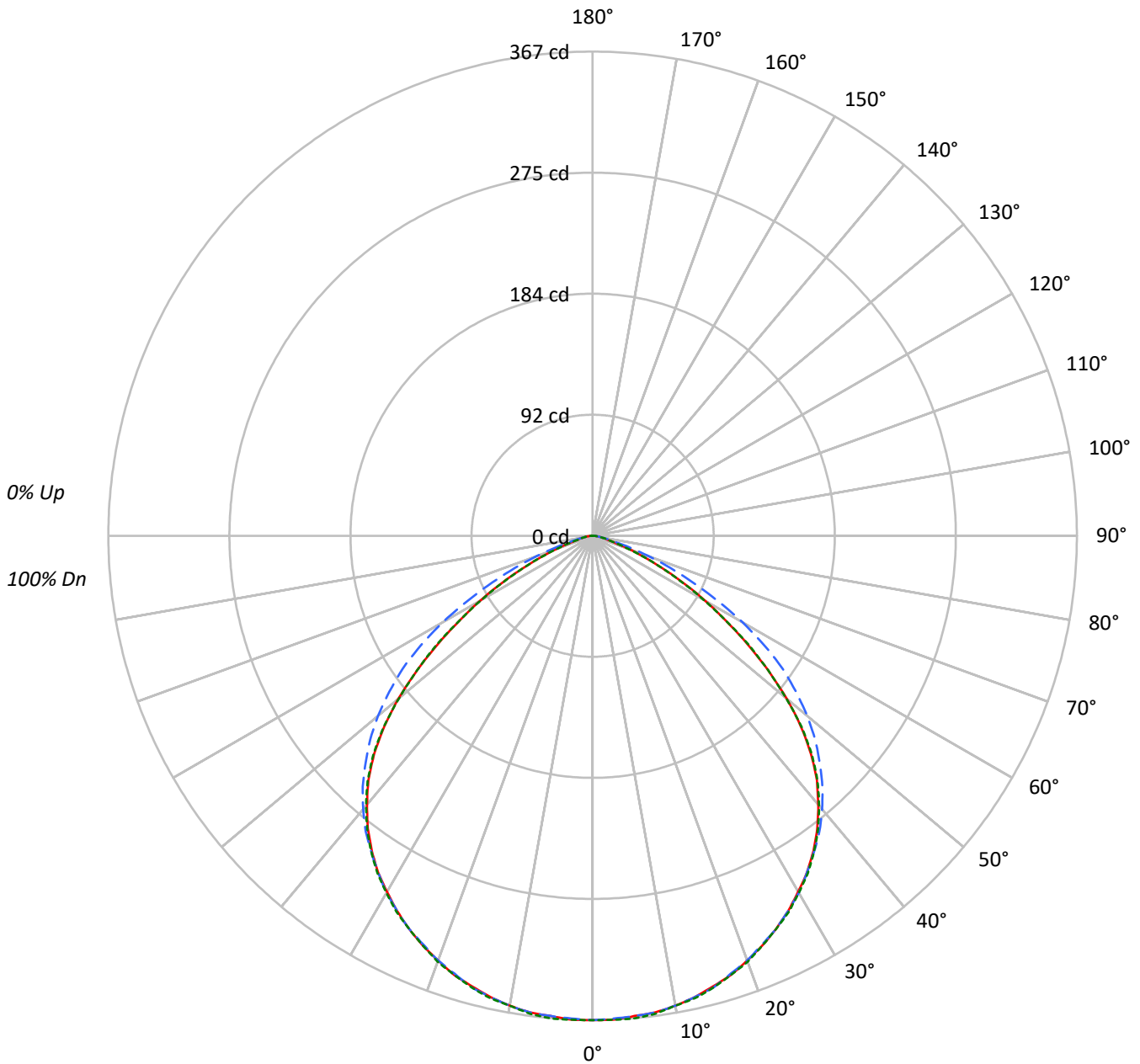
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88																			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																			
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49																			
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44																			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35																			
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31																			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28																			

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

	0°	45°	90°
0°	28107	28107	28107
5°	28076	28076	28214
10°	28113	28113	28113
15°	28013	28084	28084
20°	27907	27907	27980
25°	27778	27778	27778
30°	27541	27620	27620
35°	27248	27332	27332
40°	26579	27038	26679
45°	25352	26337	25449
50°	22887	25281	22780
55°	19083	23460	19337
60°	15064	20085	14926
65°	10559	15178	10559
70°	6535	9981	6311
75°	3490	5116	3490
80°	2821	2821	2821
85°	2371	2371	2371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.8	3.9
10°-20°	99.9	11.3
20°-30°	151.6	17.1
30°-40°	182.7	20.6
40°-50°	183.4	20.7
50°-60°	141.0	15.9
60°-70°	70.7	8.0
70°-80°	17.6	2.0
80°-90°	3.1	0.4
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°	286.3	32.4
0°-40°	469.0	53.0
0°-60°	793.4	89.7
0°-90°	884.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	884.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	365	366	365	365	367	35
15°	354	354	354	354	354	100
25°	329	329	329	329	329	152
35°	292	292	292	292	292	182
45°	234	239	243	240	235	179
55°	143	157	176	158	145	128
65°	58	69	84	69	58	59
75°	12	14	17	13	12	15
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	367.2	367.2	367.2	367.2	367.2
2.5°	367.2	367.2	366.3	366.3	367.2
5°	365.4	366.3	365.4	365.4	367.2
7.5°	364.4	364.4	364.4	364.4	365.4
10°	361.7	361.7	361.7	361.7	361.7
12.5°	358.1	359.0	358.1	358.1	359.0
15°	353.5	354.4	354.4	353.5	354.4
17.5°	349.0	349.0	348.0	349.0	349.0
20°	342.6	342.6	342.6	342.6	343.5
22.5°	336.2	336.2	335.3	337.1	336.2
25°	328.9	328.9	328.9	328.9	328.9
27.5°	320.7	320.7	320.7	321.6	321.6
30°	311.6	312.5	312.5	312.5	312.5
32.5°	302.5	302.5	302.5	303.4	303.4
35°	291.6	291.6	292.5	292.5	292.5
37.5°	279.7	280.6	282.4	281.5	280.6
40°	266.0	267.9	270.6	268.8	267.0
42.5°	251.5	254.2	257.8	255.1	252.4
45°	234.2	238.7	243.3	239.6	235.1
47.5°	214.1	221.4	228.7	222.3	215.0
50°	192.2	202.3	212.3	202.3	191.3
52.5°	167.6	180.4	194.1	181.3	167.6
55°	143.0	156.7	175.8	157.6	144.9
57.5°	119.4	133.9	154.0	133.9	119.4
60°	98.4	111.2	131.2	111.2	97.5
62.5°	77.4	89.3	106.6	89.3	76.5
65°	58.3	69.2	83.8	69.2	58.3
67.5°	41.9	51.0	63.8	50.1	41.9
70°	29.2	35.5	44.6	34.6	28.2
72.5°	18.2	21.9	29.2	21.9	18.2
75°	11.8	13.7	17.3	12.8	11.8
77.5°	9.1	9.1	10.0	9.1	9.1
80°	6.4	6.4	6.4	6.4	6.4
82.5°	4.6	4.6	4.6	4.6	4.6
85°	2.7	2.7	2.7	2.7	2.7
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)