

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: P274479

Luminaire Tested: **LDSQ4B10DE010W2N2050 EU4B1020W2N902050 4LBCSSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274479
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: LDSQ4B10DE010W2N2050 EU4B1020W2N902050 4LBCSSQ1MW
Description: PORTFOLIO 4" W2N SQ DOWNLIGHT, CAST SHALLOW WITH MATTE WHITE FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 786.5 lumens
Efficiency: N/A
Efficacy: 56.2 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

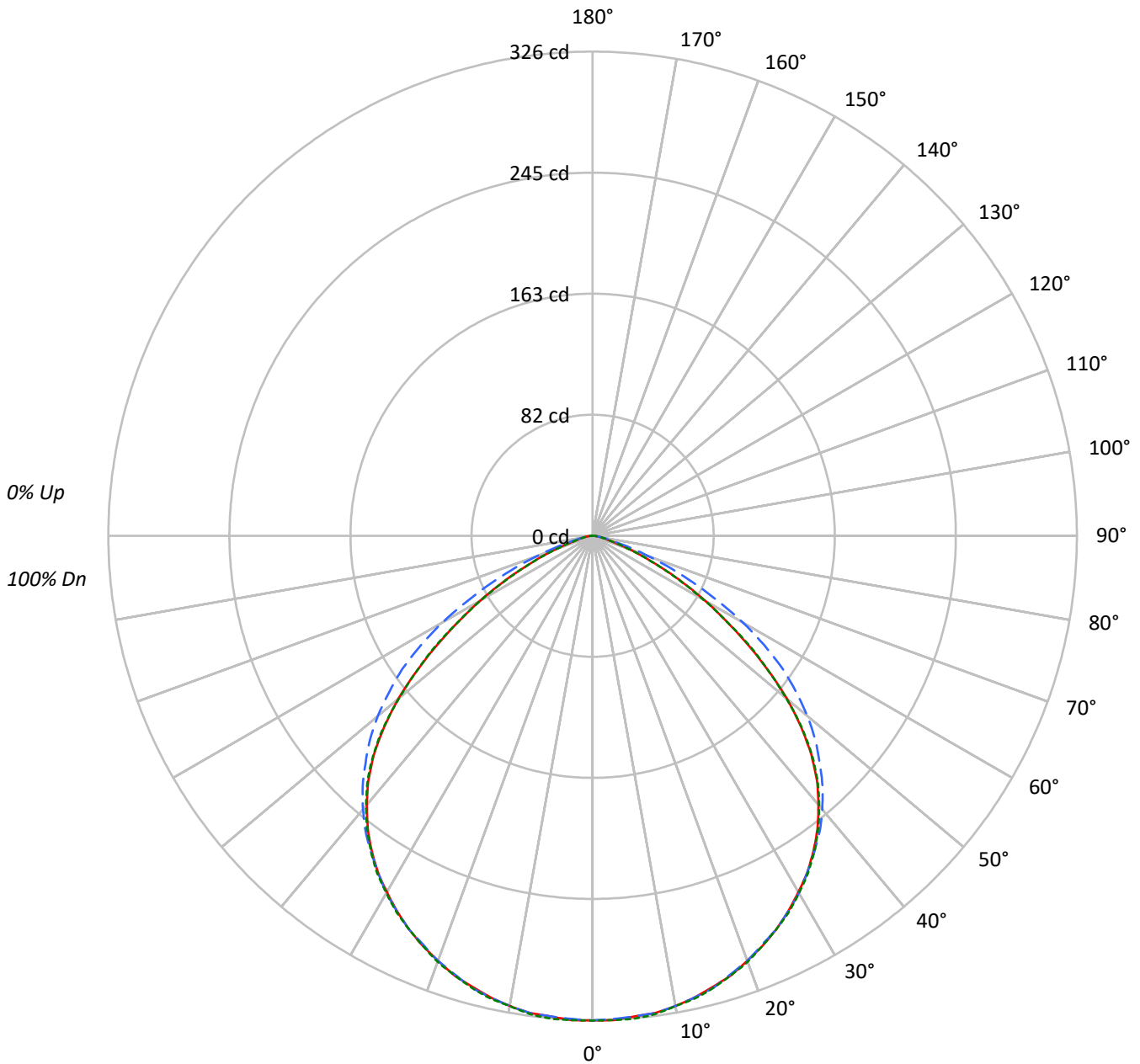
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	24984	24984	24984
5°	24956	24956	25079
10°	24988	24988	24988
15°	24898	24962	24962
20°	24803	24803	24868
25°	24695	24695	24695
30°	24483	24553	24553
35°	24220	24295	24295
40°	23631	24031	23711
45°	22527	23403	22624
50°	20351	22470	20256
55°	16975	20858	17188
60°	13395	17850	13273
65°	9382	13493	9382
70°	5796	8885	5617
75°	3105	4554	3105
80°	2513	2513	2513
85°	2108	2108	2108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.9	3.9
10°-20°	88.8	11.3
20°-30°	134.8	17.1
30°-40°	162.4	20.6
40°-50°	163.0	20.7
50°-60°	125.4	15.9
60°-70°	62.8	8.0
70°-80°	15.7	2.0
80°-90°	2.7	0.3
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°	254.5	32.4
0°-40°	416.9	53.0
0°-60°	705.3	89.7
0°-90°	786.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	326	326	326	326	326	
5°	325	326	325	325	326	31
15°	314	315	315	314	315	89
25°	292	292	292	292	292	135
35°	259	259	260	260	260	162
45°	208	212	216	213	209	159
55°	127	139	156	140	129	114
65°	52	62	74	62	52	53
75°	10	12	15	11	10	13
85°	2	2	2	2	2	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	326.4	326.4	326.4	326.4	326.4
2.5°	326.4	326.4	325.6	325.6	326.4
5°	324.8	325.6	324.8	324.8	326.4
7.5°	324.0	324.0	324.0	324.0	324.8
10°	321.5	321.5	321.5	321.5	321.5
12.5°	318.3	319.1	318.3	318.3	319.1
15°	314.2	315.0	315.0	314.2	315.0
17.5°	310.2	310.2	309.4	310.2	310.2
20°	304.5	304.5	304.5	304.5	305.3
22.5°	298.8	298.8	298.0	299.7	298.8
25°	292.4	292.4	292.4	292.4	292.4
27.5°	285.1	285.1	285.1	285.9	285.9
30°	277.0	277.8	277.8	277.8	277.8
32.5°	268.9	268.9	268.9	269.7	269.7
35°	259.2	259.2	260.0	260.0	260.0
37.5°	248.6	249.4	251.1	250.3	249.4
40°	236.5	238.1	240.5	238.9	237.3
42.5°	223.5	226.0	229.2	226.8	224.3
45°	208.1	212.2	216.2	213.0	209.0
47.5°	190.3	196.8	203.3	197.6	191.1
50°	170.9	179.8	188.7	179.8	170.1
52.5°	149.0	160.4	172.5	161.2	149.0
55°	127.2	139.3	156.3	140.1	128.8
57.5°	106.1	119.1	136.9	119.1	106.1
60°	87.5	98.8	116.6	98.8	86.7
62.5°	68.8	79.4	94.8	79.4	68.0
65°	51.8	61.6	74.5	61.6	51.8
67.5°	37.3	45.4	56.7	44.5	37.3
70°	25.9	31.6	39.7	30.8	25.1
72.5°	16.2	19.4	25.9	19.4	16.2
75°	10.5	12.1	15.4	11.3	10.5
77.5°	8.1	8.1	8.9	8.1	8.1
80°	5.7	5.7	5.7	5.7	5.7
82.5°	4.0	4.0	4.0	4.0	4.0
85°	2.4	2.4	2.4	2.4	2.4
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)