

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: P274363

Luminaire Tested: **LD4B20DE010W2N2765 EU4B1020W2N902765 4LBCSSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274363
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: LD4B20DE010W2N2765 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: 1262.4 lumens
Efficiency: N/A
Efficacy: 45.1 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

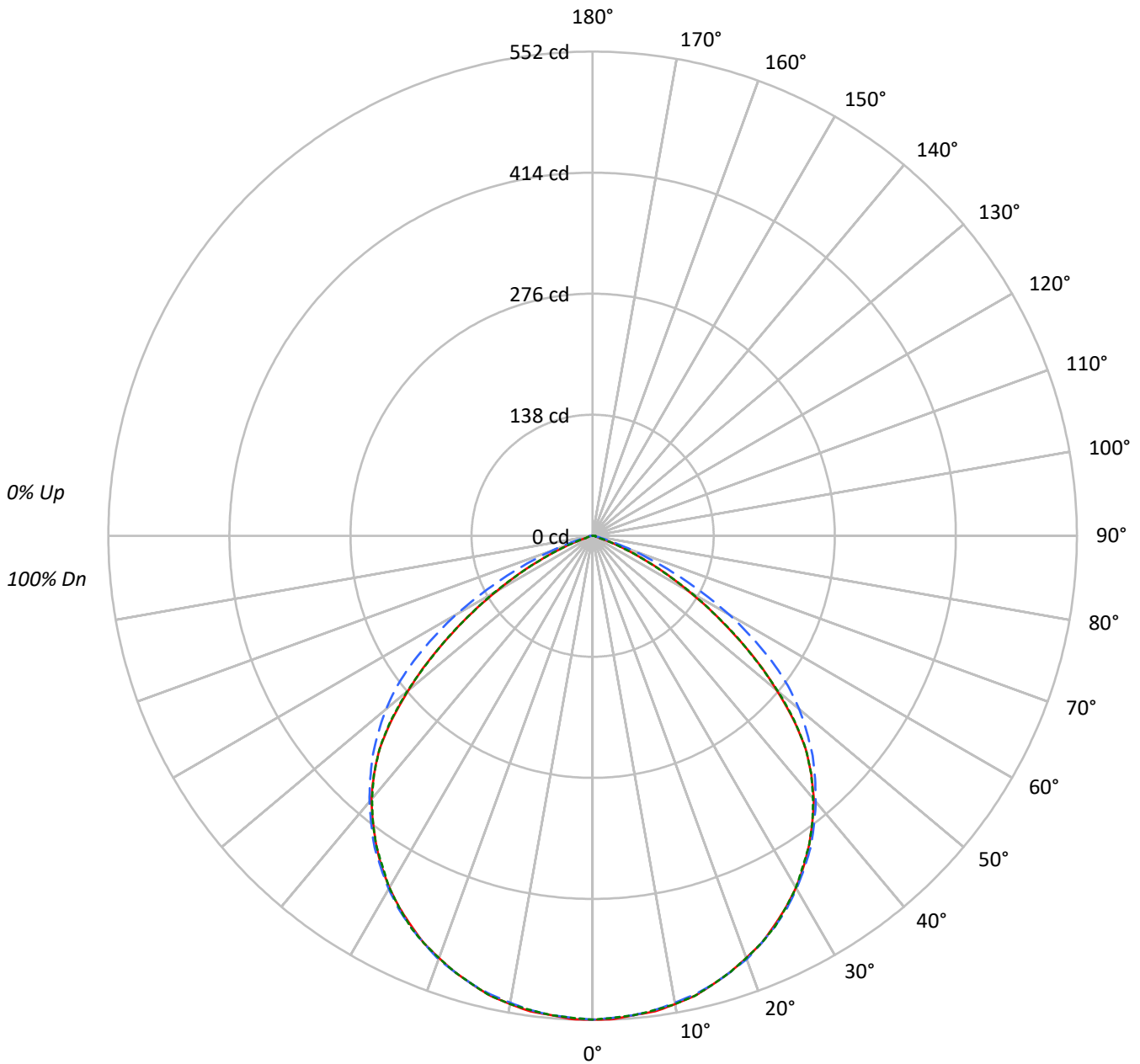
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	32																			
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°	42221	42221	42221
5°	42137	42137	42137
10°	42134	42010	42134
15°	41959	41959	41959
20°	41722	41844	41722
25°	41392	41527	41527
30°	40949	41090	40949
35°	40199	40498	40199
40°	39209	39528	39049
45°	37183	38385	37183
50°	32652	36593	32842
55°	26503	33229	26703
60°	19304	27510	19779
65°	11990	19416	11990
70°	4946	10586	4946
75°	946	3253	946
80°	1411	1411	1411
85°	2810	2810	2810



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	4.1
10°-20°	149.4	11.8
20°-30°	226.1	17.9
30°-40°	269.3	21.3
40°-50°	267.2	21.2
50°-60°	197.9	15.7
60°-70°	86.0	6.8
70°-80°	11.3	0.9
80°-90°	3.1	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°	427.7	33.9
0°-40°	697.0	55.2
0°-60°	1162.0	92.0
0°-90°	1262.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1262.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	548	550	548	548	548	52
15°	530	530	530	528	530	149
25°	490	490	492	492	492	226
35°	430	432	433	432	430	269
45°	344	350	355	348	344	261
55°	199	221	249	222	200	178
65°	66	82	107	84	66	68
75°	3	5	11	5	3	7
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°	551.6	551.6	551.6	551.6	551.6
2.5°	551.6	550.0	550.0	550.0	550.0
5°	548.4	550.0	548.4	548.4	548.4
7.5°	546.8	546.8	545.3	545.3	545.3
10°	542.1	542.1	540.5	540.5	542.1
12.5°	537.4	535.8	535.8	535.8	537.4
15°	529.5	529.5	529.5	527.9	529.5
17.5°	521.6	521.6	521.6	521.6	521.6
20°	512.2	512.2	513.7	512.2	512.2
22.5°	502.7	502.7	502.7	502.7	502.7
25°	490.1	490.1	491.7	491.7	491.7
27.5°	477.5	477.5	479.1	477.5	477.5
30°	463.3	463.3	464.9	463.3	463.3
32.5°	447.6	447.6	449.1	446.0	446.0
35°	430.2	431.8	433.4	431.8	430.2
37.5°	411.3	412.9	414.5	411.3	411.3
40°	392.4	394.0	395.6	392.4	390.8
42.5°	368.8	373.5	375.1	371.9	368.8
45°	343.5	349.8	354.6	348.3	343.5
47.5°	310.5	321.5	330.9	323.1	312.0
50°	274.2	291.5	307.3	291.5	275.8
52.5°	238.0	255.3	280.5	256.9	236.4
55°	198.6	220.6	249.0	222.2	200.1
57.5°	162.3	182.8	214.3	184.4	162.3
60°	126.1	148.1	179.7	149.7	129.2
62.5°	96.1	113.5	141.8	113.5	94.6
65°	66.2	81.9	107.2	83.5	66.2
67.5°	41.0	55.2	74.1	55.2	42.5
70°	22.1	31.5	47.3	33.1	22.1
72.5°	7.9	14.2	25.2	14.2	7.9
75°	3.2	4.7	11.0	4.7	3.2
77.5°	3.2	3.2	4.7	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2
82.5°	3.2	3.2	3.2	3.2	3.2
85°	3.2	3.2	3.2	3.2	3.2
87.5°	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)