

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: P274334

Luminaire Tested: **LD4B10DE010W2N2050 EU4B1020W2N902050 4LBDW0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-14)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B10DE010W2N2050 EU4B1020W2N902050 4LBDW0LI
Description: PORTFOLIO 4" W2N RN DOWNLIGHT, DOUBLE WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 776.2 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18
Luminous Opening: Circular (Dia: 7.42' x H: 0')
CIE Type: Direct

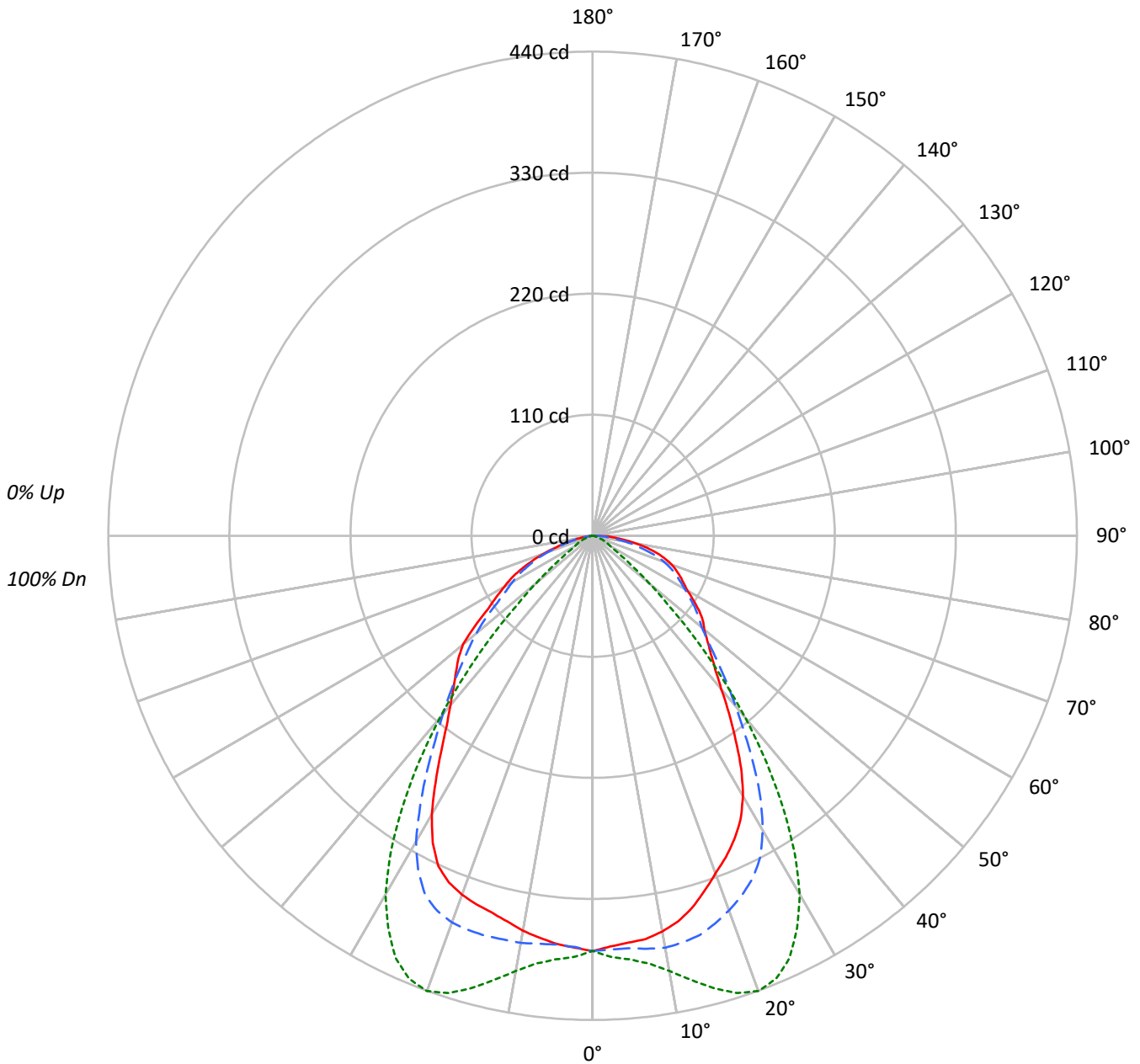
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																			
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66																			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																			
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	94	94	94
5°	93	97	93
10°	92	102	92
15°	90	110	91
20°	87	117	92
25°	84	116	91
30°	79	108	84
35°	69	92	73
40°	59	70	65
45°	54	46	62
50°	51	26	60
55°	51	14	50
60°	49	9	46
65°	52	8	42
70°	56	5	34
75°	58	4	24
80°	57	2	15
85°	59	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	4.7
10°-20°	108.2	13.9
20°-30°	165.0	21.3
30°-40°	164.7	21.2
40°-50°	121.4	15.6
50°-60°	83.0	10.7
60°-70°	58.6	7.5
70°-80°	31.3	4.0
80°-90°	8.0	1.0
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°	309.3	39.8
0°-40°	473.9	61.1
0°-60°	678.3	87.4
0°-90°	776.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	377	377	377	377	377	
5°	371	376	386	373	372	35
15°	350	376	426	376	354	98
25°	304	344	423	360	331	139
35°	227	256	302	263	240	142
45°	152	159	131	170	176	119
55°	118	113	32	105	116	105
65°	88	84	13	64	71	87
75°	61	49	4	22	25	63
85°	21	14	1	3	0	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	377.4	377.4	377.4	377.4	377.4	377.4	377.4	377.4	377.4
2.5°	373.5	375.7	376.3	380.2	383.0	379.7	374.0	374.0	374.6
5°	371.2	374.0	376.3	383.0	386.4	380.8	372.9	371.8	372.4
7.5°	369.6	373.5	378.5	388.6	392.0	384.7	374.0	369.6	368.4
10°	365.1	370.7	380.2	394.8	401.5	392.5	375.7	367.3	364.5
12.5°	358.9	365.6	378.5	401.5	413.3	399.8	375.7	363.4	358.9
15°	349.9	357.2	375.7	407.1	425.6	407.7	376.3	359.5	354.4
17.5°	338.2	347.1	369.6	409.9	435.7	415.0	375.7	356.7	351.1
20°	326.4	337.0	362.3	409.9	440.2	417.8	374.0	353.9	347.1
22.5°	316.3	326.9	353.9	404.9	435.7	414.4	369.0	348.8	341.0
25°	304.5	315.7	343.8	394.2	423.4	404.3	360.0	338.7	331.4
27.5°	291.0	303.4	329.7	377.4	402.1	385.8	343.2	322.5	314.6
30°	273.1	284.3	309.0	353.3	376.3	360.6	320.8	299.5	292.2
32.5°	251.2	261.3	284.3	324.1	341.5	328.6	291.6	273.7	265.3
35°	226.6	235.5	255.7	287.1	301.7	293.9	263.0	246.2	240.0
37.5°	203.6	210.3	227.1	250.1	259.1	254.0	235.0	222.6	217.6
40°	181.7	188.4	201.9	213.1	215.3	217.0	211.4	203.6	200.8
42.5°	164.9	171.0	179.5	178.3	171.6	181.1	190.1	189.0	186.7
45°	152.0	156.5	159.3	142.4	130.7	146.4	170.5	176.6	175.5
47.5°	141.3	143.6	141.9	113.8	92.5	113.8	153.1	165.4	165.4
50°	132.3	134.0	129.5	94.8	66.7	91.4	138.0	151.4	153.7
52.5°	126.2	126.7	121.1	80.2	46.0	72.3	121.7	133.5	135.1
55°	117.8	118.3	113.3	69.5	32.0	57.2	105.4	116.1	116.1
57.5°	108.2	109.4	104.3	60.6	22.4	47.7	93.1	103.2	103.7
60°	99.3	99.8	96.5	53.8	18.5	40.9	84.1	92.5	92.5
62.5°	93.1	93.7	89.7	49.9	15.7	35.9	74.6	82.4	83.0
65°	88.0	88.0	83.6	46.0	12.9	30.3	64.5	71.2	71.2
67.5°	82.4	81.3	76.8	40.9	10.1	24.7	54.4	59.4	58.9
70°	76.3	74.6	69.0	35.3	7.3	19.6	42.6	46.5	47.1
72.5°	69.0	66.7	59.4	29.2	5.6	14.6	31.4	34.8	34.8
75°	60.6	57.8	49.3	23.0	3.9	10.1	22.4	24.7	24.7
77.5°	50.5	47.7	39.3	16.8	2.8	6.7	15.1	16.8	16.8
80°	39.8	37.0	29.2	11.8	1.7	3.9	9.5	11.2	10.7
82.5°	29.7	26.9	19.6	7.3	1.1	2.2	6.2	6.2	5.6
85°	20.7	19.1	13.5	4.5	0.6	1.1	2.8	1.1	0.0
87.5°	14.0	12.3	8.4	2.2	0.0	0.6	0.6	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)