

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: P251820

Luminaire Tested: **LD4B10D010 EU4B10208050 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251820
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: LD4B10D010 EU4B10208050 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1004.0 lumens
Efficiency: N/A
Efficacy: 99.9 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

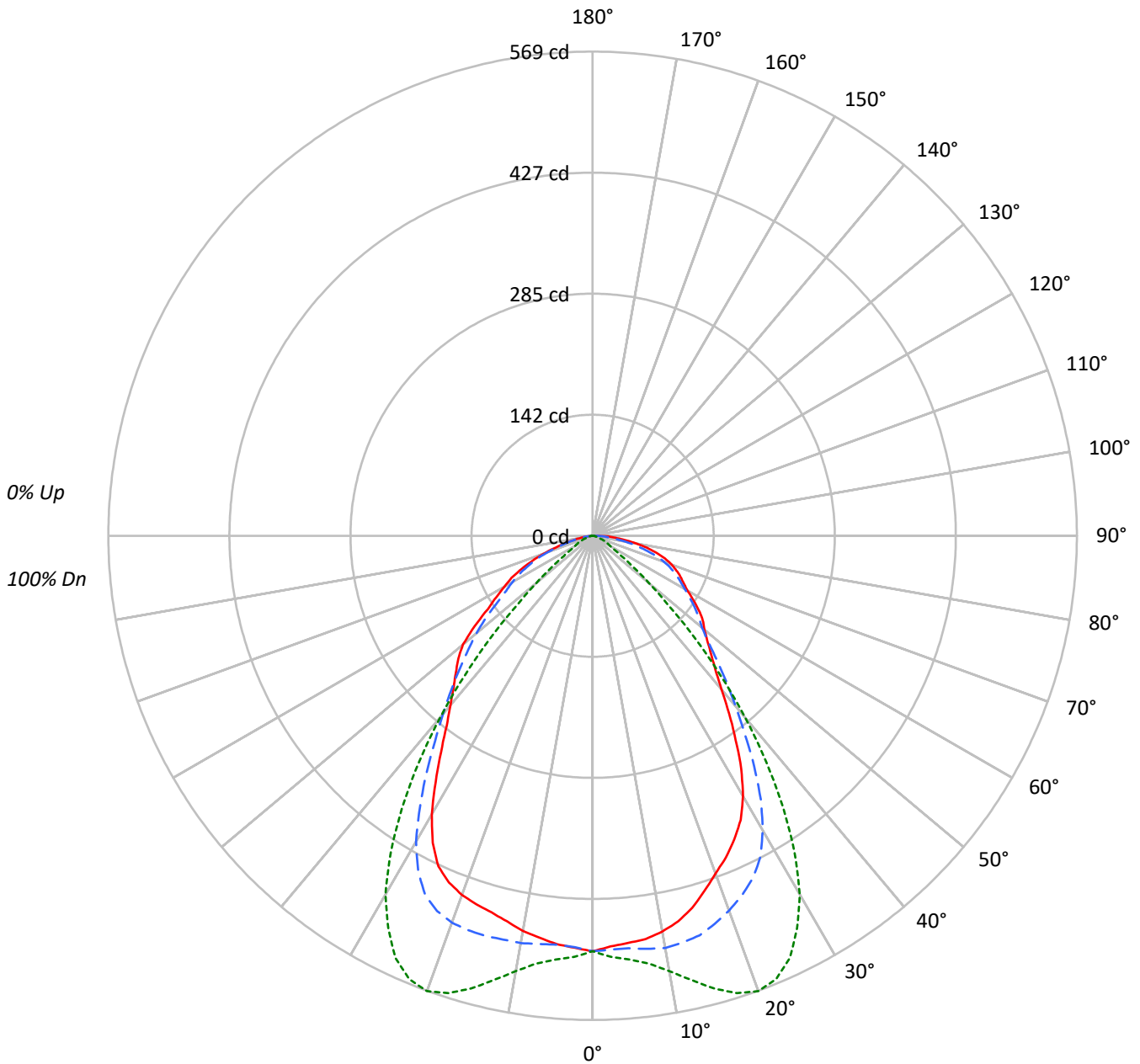
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100				
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76				
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				52				
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38				
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	122	122	122
5°	120	125	120
10°	119	131	119
15°	117	142	118
20°	112	151	119
25°	108	151	118
30°	102	140	109
35°	89	119	94
40°	76	91	84
45°	69	60	80
50°	66	33	77
55°	66	18	65
60°	64	12	60
65°	67	10	54
70°	72	7	44
75°	75	5	31
80°	74	3	20
85°	77	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	4.7
10°-20°	139.9	13.9
20°-30°	213.4	21.3
30°-40°	213.0	21.2
40°-50°	157.1	15.6
50°-60°	107.3	10.7
60°-70°	75.8	7.5
70°-80°	40.5	4.0
80°-90°	10.4	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°	400.0	39.8
0°-40°	613.0	61.1
0°-60°	877.4	87.4
0°-90°	1004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1004.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	488	488	488	488	488	
5°	480	487	500	482	482	46
15°	453	486	551	487	458	127
25°	394	445	548	466	429	180
35°	293	331	390	340	310	183
45°	197	206	169	220	227	153
55°	152	146	41	136	150	135
65°	114	108	17	83	92	113
75°	78	64	5	29	32	81
85°	27	17	1	4	0	30
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°	488.2	488.2	488.2	488.2	488.2	488.2	488.2	488.2	488.2
2.5°	483.1	486.0	486.7	491.8	495.4	491.1	483.8	483.8	484.6
5°	480.2	483.8	486.7	495.4	499.8	492.5	482.4	480.9	481.7
7.5°	478.0	483.1	489.6	502.7	507.0	497.6	483.8	478.0	476.6
10°	472.2	479.5	491.8	510.7	519.4	507.8	486.0	475.1	471.5
12.5°	464.2	473.0	489.6	519.4	534.6	517.2	486.0	470.1	464.2
15°	452.6	462.1	486.0	526.6	550.6	527.4	486.7	465.0	458.4
17.5°	437.4	449.0	478.0	530.3	563.6	536.8	486.0	461.3	454.1
20°	422.2	436.0	468.6	530.3	569.4	540.4	483.8	457.7	449.0
22.5°	409.1	422.9	457.7	523.7	563.6	536.1	477.3	451.2	441.0
25°	393.9	408.4	444.7	509.9	547.7	523.0	465.7	438.1	428.7
27.5°	376.5	392.4	426.5	488.2	520.1	499.1	443.9	417.1	406.9
30°	353.3	367.8	399.7	457.0	486.7	466.4	414.9	387.4	377.9
32.5°	325.0	338.0	367.8	419.3	441.8	425.1	377.2	354.0	343.1
35°	293.1	304.7	330.8	371.4	390.3	380.1	340.2	318.4	310.5
37.5°	263.3	272.0	293.8	323.5	335.1	328.6	303.9	288.0	281.4
40°	235.0	243.7	261.1	275.6	278.5	280.7	273.5	263.3	259.7
42.5°	213.3	221.2	232.1	230.7	222.0	234.3	245.9	244.5	241.6
45°	196.6	202.4	206.0	184.2	169.0	189.3	220.5	228.5	227.0
47.5°	182.8	185.7	183.5	147.3	119.7	147.3	198.0	214.0	214.0
50°	171.2	173.4	167.6	122.6	86.3	118.2	178.4	195.9	198.8
52.5°	163.2	163.9	156.7	103.7	59.5	93.6	157.4	172.6	174.8
55°	152.3	153.1	146.5	89.9	41.3	74.0	136.4	150.2	150.2
57.5°	140.0	141.5	134.9	78.3	29.0	61.7	120.4	133.5	134.2
60°	128.4	129.1	124.8	69.6	23.9	53.0	108.8	119.7	119.7
62.5°	120.4	121.1	116.1	64.6	20.3	46.4	96.5	106.6	107.4
65°	113.9	113.9	108.1	59.5	16.7	39.2	83.4	92.1	92.1
67.5°	106.6	105.2	99.4	53.0	13.1	31.9	70.4	76.9	76.2
70°	98.7	96.5	89.2	45.7	9.4	25.4	55.1	60.2	60.9
72.5°	89.2	86.3	76.9	37.7	7.3	18.9	40.6	45.0	45.0
75°	78.3	74.7	63.8	29.7	5.1	13.1	29.0	31.9	31.9
77.5°	65.3	61.7	50.8	21.8	3.6	8.7	19.6	21.8	21.8
80°	51.5	47.9	37.7	15.2	2.2	5.1	12.3	14.5	13.8
82.5°	38.4	34.8	25.4	9.4	1.5	2.9	8.0	8.0	7.3
85°	26.8	24.7	17.4	5.8	0.7	1.5	3.6	1.5	0.0
87.5°	18.1	16.0	10.9	2.9	0.0	0.7	0.7	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)