

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: P251818

Luminaire Tested: **LD4B10D010 EU4B10208035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251818
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 EU4B10208035 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 994.0 lumens
Efficiency: N/A
Efficacy: 98.9 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

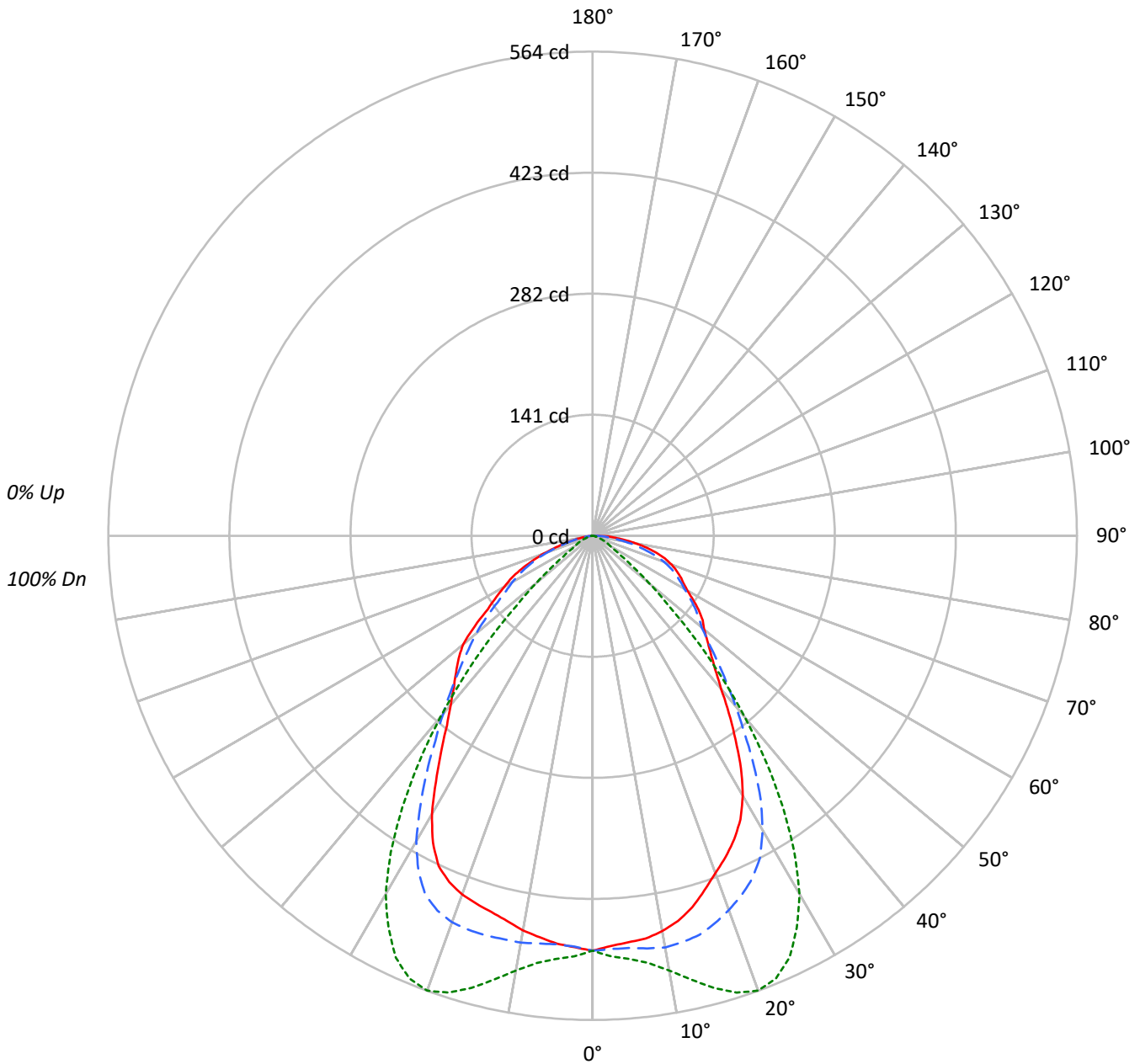
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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°	120	120	120
5°	119	124	119
10°	118	130	118
15°	116	141	117
20°	111	149	118
25°	107	149	117
30°	101	139	108
35°	88	118	93
40°	76	90	84
45°	69	59	79
50°	66	33	76
55°	66	18	65
60°	63	12	59
65°	67	10	54
70°	71	7	44
75°	75	5	30
80°	73	3	20
85°	76	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	4.7
10°-20°	138.5	13.9
20°-30°	211.3	21.3
30°-40°	210.9	21.2
40°-50°	155.5	15.6
50°-60°	106.2	10.7
60°-70°	75.0	7.5
70°-80°	40.0	4.0
80°-90°	10.3	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°	396.1	39.8
0°-40°	606.9	61.1
0°-60°	868.7	87.4
0°-90°	994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	994.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	483	483	483	483	483	
5°	475	482	495	478	477	45
15°	448	481	545	482	454	126
25°	390	440	542	461	424	179
35°	290	328	386	337	307	181
45°	195	204	167	218	225	152
55°	151	145	41	135	149	134
65°	113	107	16	83	91	111
75°	78	63	5	29	32	80
85°	27	17	1	4	0	29
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°	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3	483.3
2.5°	478.3	481.2	481.9	486.9	490.5	486.2	479.0	479.0	479.7
5°	475.4	479.0	481.9	490.5	494.8	487.6	477.6	476.1	476.9
7.5°	473.3	478.3	484.8	497.7	502.0	492.7	479.0	473.3	471.8
10°	467.5	474.7	486.9	505.6	514.2	502.7	481.2	470.4	466.8
12.5°	459.6	468.2	484.8	514.2	529.3	512.0	481.2	465.4	459.6
15°	448.1	457.5	481.2	521.4	545.1	522.1	481.9	460.3	453.9
17.5°	433.1	444.5	473.3	525.0	558.0	531.4	481.2	456.8	449.6
20°	418.0	431.6	463.9	525.0	563.8	535.0	479.0	453.2	444.5
22.5°	405.0	418.7	453.2	518.5	558.0	530.7	472.6	446.7	436.6
25°	390.0	404.3	440.2	504.9	542.2	517.8	461.1	433.8	424.4
27.5°	372.7	388.5	422.3	483.3	514.9	494.1	439.5	412.9	402.9
30°	349.7	364.1	395.7	452.4	481.9	461.8	410.8	383.5	374.2
32.5°	321.7	334.7	364.1	415.1	437.4	420.8	373.4	350.5	339.7
35°	290.1	301.6	327.5	367.7	386.4	376.3	336.8	315.3	307.4
37.5°	260.7	269.3	290.9	320.3	331.8	325.3	300.9	285.1	278.6
40°	232.7	241.3	258.5	272.9	275.8	277.9	270.7	260.7	257.1
42.5°	211.1	219.0	229.8	228.4	219.8	232.0	243.5	242.0	239.1
45°	194.6	200.4	204.0	182.4	167.3	187.4	218.3	226.2	224.8
47.5°	181.0	183.8	181.7	145.8	118.5	145.8	196.1	211.9	211.9
50°	169.5	171.6	165.9	121.4	85.5	117.1	176.7	193.9	196.8
52.5°	161.6	162.3	155.1	102.7	58.9	92.6	155.8	170.9	173.1
55°	150.8	151.5	145.1	89.1	40.9	73.3	135.0	148.7	148.7
57.5°	138.6	140.0	133.6	77.6	28.7	61.0	119.2	132.1	132.9
60°	127.1	127.8	123.5	68.9	23.7	52.4	107.7	118.5	118.5
62.5°	119.2	119.9	114.9	63.9	20.1	46.0	95.5	105.6	106.3
65°	112.8	112.8	107.0	58.9	16.5	38.8	82.6	91.2	91.2
67.5°	105.6	104.1	98.4	52.4	12.9	31.6	69.7	76.1	75.4
70°	97.7	95.5	88.3	45.2	9.3	25.1	54.6	59.6	60.3
72.5°	88.3	85.5	76.1	37.3	7.2	18.7	40.2	44.5	44.5
75°	77.6	74.0	63.2	29.4	5.0	12.9	28.7	31.6	31.6
77.5°	64.6	61.0	50.3	21.5	3.6	8.6	19.4	21.5	21.5
80°	51.0	47.4	37.3	15.1	2.2	5.0	12.2	14.4	13.6
82.5°	38.1	34.5	25.1	9.3	1.4	2.9	7.9	7.9	7.2
85°	26.6	24.4	17.2	5.7	0.7	1.4	3.6	1.4	0.0
87.5°	18.0	15.8	10.8	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)