

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: P251821

Luminaire Tested: **LD4B10D010 EU4B10209024 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251821
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 EU4B10209024 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 700.0 lumens
Efficiency: N/A
Efficacy: 69.7 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

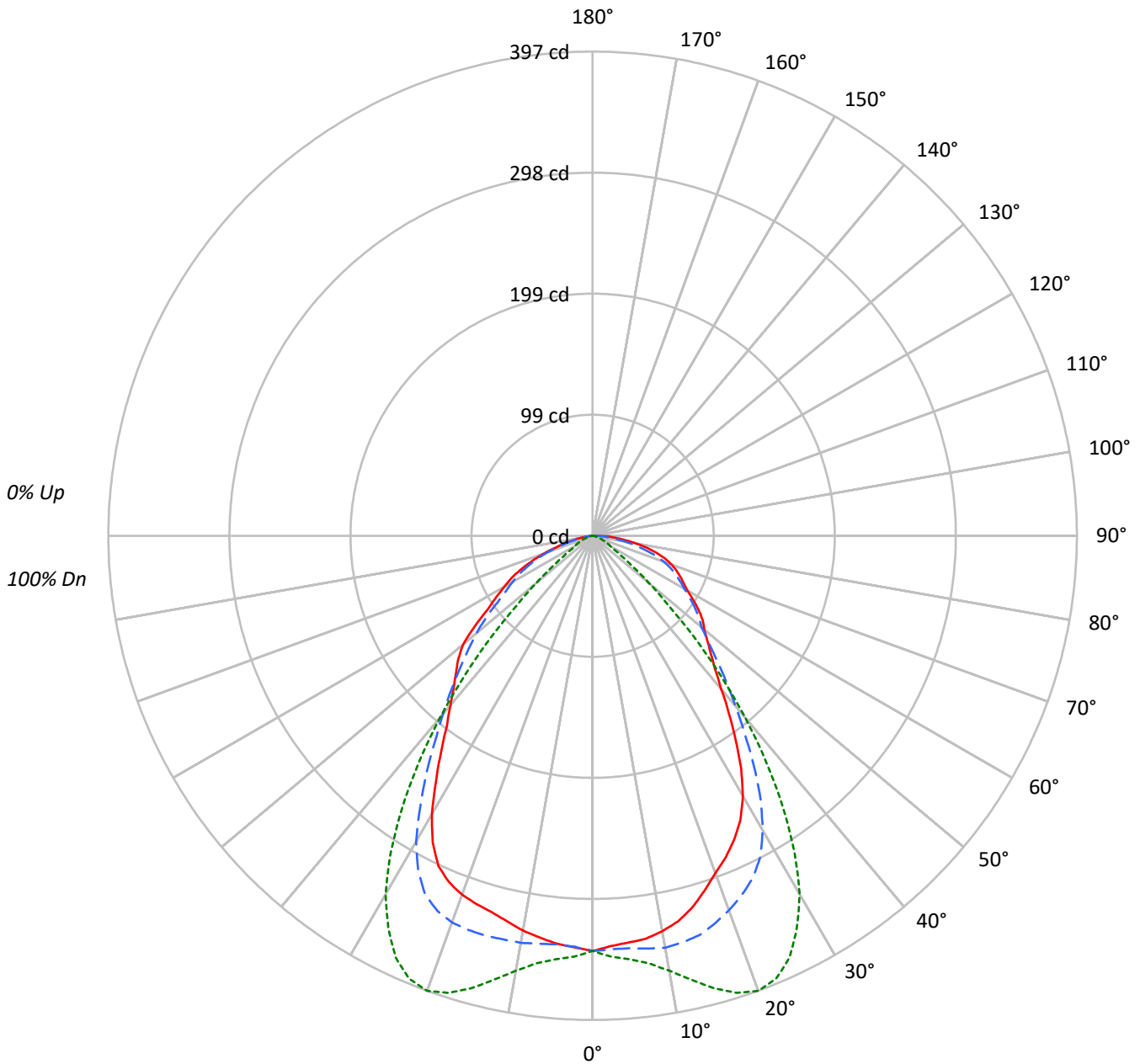
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	85	85	85
5°	84	87	84
10°	83	92	83
15°	81	99	82
20°	78	105	83
25°	75	105	82
30°	71	98	76
35°	62	83	66
40°	53	63	59
45°	48	42	56
50°	46	23	54
55°	46	13	45
60°	45	8	42
65°	47	7	38
70°	50	5	31
75°	53	3	21
80°	52	2	14
85°	53	1	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	4.7
10°-20°	97.5	13.9
20°-30°	148.8	21.3
30°-40°	148.5	21.2
40°-50°	109.5	15.6
50°-60°	74.8	10.7
60°-70°	52.8	7.5
70°-80°	28.2	4.0
80°-90°	7.2	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°	278.9	39.8
0°-40°	427.4	61.1
0°-60°	611.7	87.4
0°-90°	700.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	700.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	340	340	340	340	340	
5°	335	339	348	336	336	32
15°	316	339	384	339	320	88
25°	275	310	382	325	299	126
35°	204	231	272	237	216	128
45°	137	144	118	154	158	107
55°	106	102	29	95	105	94
65°	79	75	12	58	64	79
75°	55	44	4	20	22	57
85°	19	12	0	2	0	21
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°	340.4	340.4	340.4	340.4	340.4	340.4	340.4	340.4	340.4
2.5°	336.8	338.9	339.4	342.9	345.4	342.4	337.3	337.3	337.8
5°	334.8	337.3	339.4	345.4	348.5	343.4	336.3	335.3	335.8
7.5°	333.3	336.8	341.4	350.5	353.5	346.9	337.3	333.3	332.3
10°	329.2	334.3	342.9	356.0	362.1	354.0	338.9	331.3	328.7
12.5°	323.7	329.7	341.4	362.1	372.7	360.6	338.9	327.7	323.7
15°	315.6	322.2	338.9	367.2	383.9	367.7	339.4	324.2	319.6
17.5°	305.0	313.1	333.3	369.7	393.0	374.3	338.9	321.7	316.6
20°	294.3	304.0	326.7	369.7	397.0	376.8	337.3	319.1	313.1
22.5°	285.2	294.9	319.1	365.1	393.0	373.7	332.8	314.6	307.5
25°	274.6	284.7	310.0	355.5	381.8	364.6	324.7	305.5	298.9
27.5°	262.5	273.6	297.4	340.4	362.6	348.0	309.5	290.8	283.7
30°	246.3	256.4	278.7	318.6	339.4	325.2	289.3	270.1	263.5
32.5°	226.6	235.7	256.4	292.3	308.0	296.4	263.0	246.8	239.2
35°	204.3	212.4	230.6	258.9	272.1	265.0	237.2	222.0	216.5
37.5°	183.6	189.7	204.8	225.6	233.7	229.1	211.9	200.8	196.2
40°	163.9	169.9	182.1	192.2	194.2	195.7	190.7	183.6	181.1
42.5°	148.7	154.3	161.8	160.8	154.8	163.4	171.4	170.4	168.4
45°	137.1	141.1	143.6	128.5	117.8	132.0	153.7	159.3	158.3
47.5°	127.4	129.5	128.0	102.7	83.4	102.7	138.1	149.2	149.2
50°	119.4	120.9	116.8	85.5	60.2	82.4	124.4	136.6	138.6
52.5°	113.8	114.3	109.2	72.3	41.5	65.2	109.7	120.4	121.9
55°	106.2	106.7	102.2	62.7	28.8	51.6	95.1	104.7	104.7
57.5°	97.6	98.6	94.1	54.6	20.2	43.0	84.0	93.1	93.6
60°	89.5	90.0	87.0	48.6	16.7	36.9	75.9	83.4	83.4
62.5°	84.0	84.5	80.9	45.0	14.2	32.4	67.3	74.3	74.9
65°	79.4	79.4	75.4	41.5	11.6	27.3	58.2	64.2	64.2
67.5°	74.3	73.3	69.3	36.9	9.1	22.3	49.1	53.6	53.1
70°	68.8	67.3	62.2	31.9	6.6	17.7	38.4	42.0	42.5
72.5°	62.2	60.2	53.6	26.3	5.1	13.1	28.3	31.4	31.4
75°	54.6	52.1	44.5	20.7	3.5	9.1	20.2	22.3	22.3
77.5°	45.5	43.0	35.4	15.2	2.5	6.1	13.7	15.2	15.2
80°	35.9	33.4	26.3	10.6	1.5	3.5	8.6	10.1	9.6
82.5°	26.8	24.3	17.7	6.6	1.0	2.0	5.6	5.6	5.1
85°	18.7	17.2	12.1	4.0	0.5	1.0	2.5	1.0	0.0
87.5°	12.6	11.1	7.6	2.0	0.0	0.5	0.5	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)