

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: P251832

Luminaire Tested: **LD4B15D010 EU4B10208040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251832
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: LD4B15D010 EU4B10208040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1399.0 lumens
Efficiency: N/A
Efficacy: 97.2 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

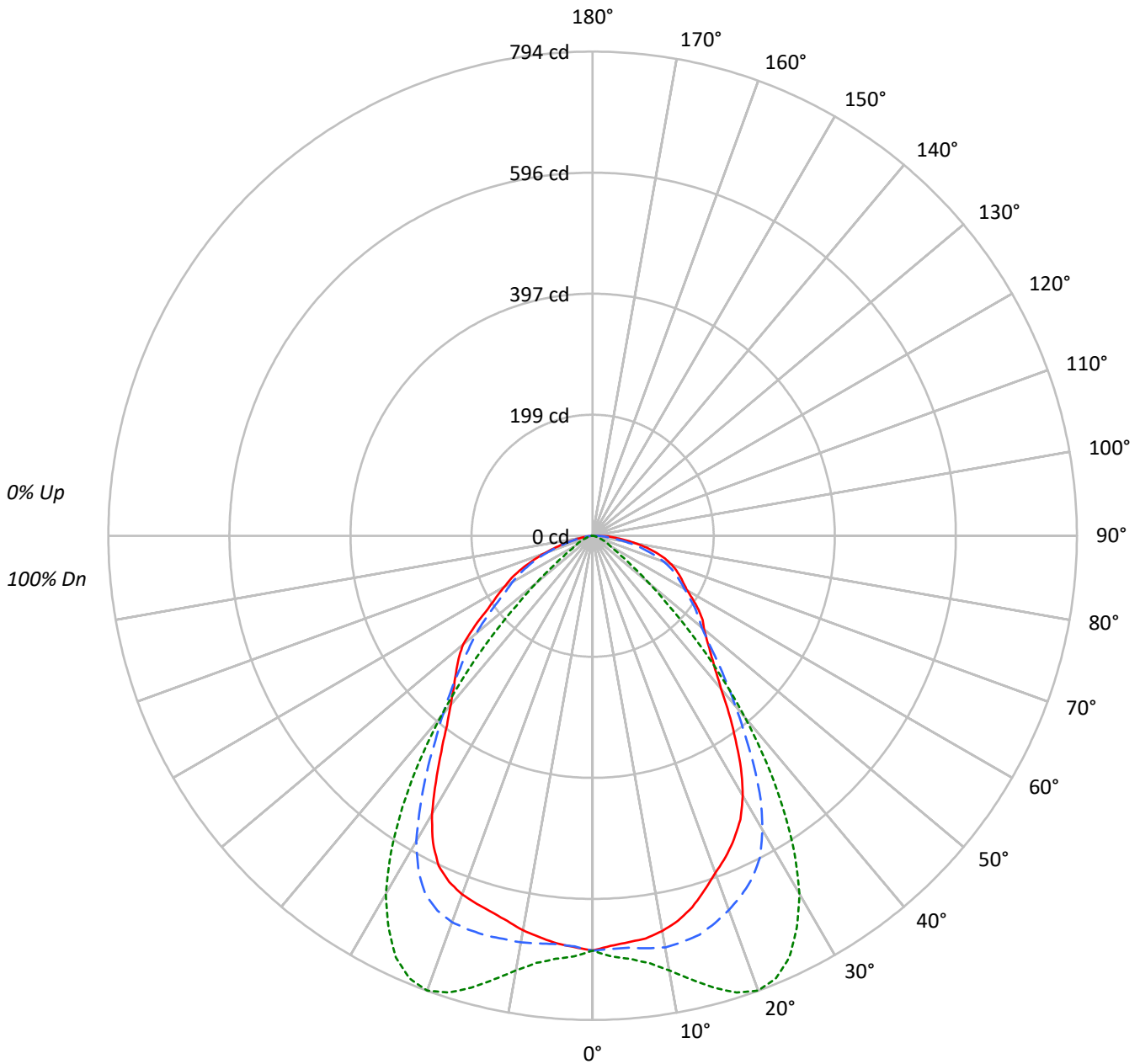
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	169	169	169
5°	167	174	168
10°	166	183	166
15°	163	198	165
20°	156	210	166
25°	151	210	164
30°	142	195	152
35°	124	165	132
40°	107	126	118
45°	97	83	111
50°	92	47	107
55°	92	25	91
60°	89	17	83
65°	94	14	76
70°	100	10	62
75°	105	7	43
80°	103	4	28
85°	107	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	4.7
10°-20°	195.0	13.9
20°-30°	297.3	21.3
30°-40°	296.8	21.2
40°-50°	218.9	15.6
50°-60°	149.5	10.7
60°-70°	105.6	7.5
70°-80°	56.4	4.0
80°-90°	14.5	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°	557.4	39.8
0°-40°	854.2	61.1
0°-60°	1222.6	87.4
0°-90°	1399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1399.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	680	680	680	680	680	
5°	669	678	696	672	671	64
15°	631	677	767	678	639	177
25°	549	620	763	649	597	251
35°	408	461	544	474	433	255
45°	274	287	236	307	316	214
55°	212	204	58	190	209	189
65°	159	151	23	116	128	157
75°	109	89	7	40	44	113
85°	37	24	1	5	0	41
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°	680.2	680.2	680.2	680.2	680.2	680.2	680.2	680.2	680.2
2.5°	673.2	677.2	678.2	685.3	690.4	684.3	674.2	674.2	675.2
5°	669.1	674.2	678.2	690.4	696.4	686.3	672.2	670.1	671.2
7.5°	666.1	673.2	682.3	700.5	706.5	693.4	674.2	666.1	664.1
10°	658.0	668.1	685.3	711.6	723.7	707.5	677.2	662.1	657.0
12.5°	646.9	659.0	682.3	723.7	744.9	720.7	677.2	655.0	646.9
15°	630.7	643.9	677.2	733.8	767.2	734.8	678.2	647.9	638.8
17.5°	609.5	625.7	666.1	738.9	785.4	748.0	677.2	642.9	632.7
20°	588.3	607.5	653.0	738.9	793.5	753.0	674.2	637.8	625.7
22.5°	570.1	589.3	637.8	729.8	785.4	747.0	665.1	628.7	614.5
25°	548.8	569.1	619.6	710.6	763.1	728.8	648.9	610.5	597.4
27.5°	524.6	546.8	594.3	680.2	724.7	695.4	618.6	581.2	567.0
30°	492.2	512.5	556.9	636.8	678.2	649.9	578.2	539.8	526.6
32.5°	452.8	471.0	512.5	584.2	615.6	592.3	525.6	493.3	478.1
35°	408.4	424.5	460.9	517.5	543.8	529.6	474.1	443.7	432.6
37.5°	366.9	379.0	409.4	450.8	467.0	457.9	423.5	401.3	392.2
40°	327.5	339.6	363.9	384.1	388.1	391.2	381.1	366.9	361.9
42.5°	297.2	308.3	323.4	321.4	309.3	326.5	342.7	340.6	336.6
45°	273.9	282.0	287.1	256.7	235.5	263.8	307.3	318.4	316.4
47.5°	254.7	258.8	255.7	205.2	166.8	205.2	275.9	298.2	298.2
50°	238.5	241.6	233.5	170.8	120.3	164.8	248.7	272.9	277.0
52.5°	227.4	228.4	218.3	144.5	82.9	130.4	219.3	240.6	243.6
55°	212.3	213.3	204.2	125.3	57.6	103.1	190.0	209.2	209.2
57.5°	195.1	197.1	188.0	109.2	40.4	85.9	167.8	186.0	187.0
60°	178.9	179.9	173.9	97.0	33.4	73.8	151.6	166.8	166.8
62.5°	167.8	168.8	161.7	90.0	28.3	64.7	134.4	148.6	149.6
65°	158.7	158.7	150.6	82.9	23.2	54.6	116.2	128.4	128.4
67.5°	148.6	146.6	138.5	73.8	18.2	44.5	98.0	107.1	106.1
70°	137.5	134.4	124.3	63.7	13.1	35.4	76.8	83.9	84.9
72.5°	124.3	120.3	107.1	52.6	10.1	26.3	56.6	62.7	62.7
75°	109.2	104.1	88.9	41.4	7.1	18.2	40.4	44.5	44.5
77.5°	91.0	85.9	70.8	30.3	5.1	12.1	27.3	30.3	30.3
80°	71.8	66.7	52.6	21.2	3.0	7.1	17.2	20.2	19.2
82.5°	53.6	48.5	35.4	13.1	2.0	4.0	11.1	11.1	10.1
85°	37.4	34.4	24.3	8.1	1.0	2.0	5.1	2.0	0.0
87.5°	25.3	22.2	15.2	4.0	0.0	1.0	1.0	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)