

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: P251829

Luminaire Tested: **LD4B15D010 EU4B10208027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251829
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 EU4B10208027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1292.0 lumens
Efficiency: N/A
Efficacy: 89.8 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

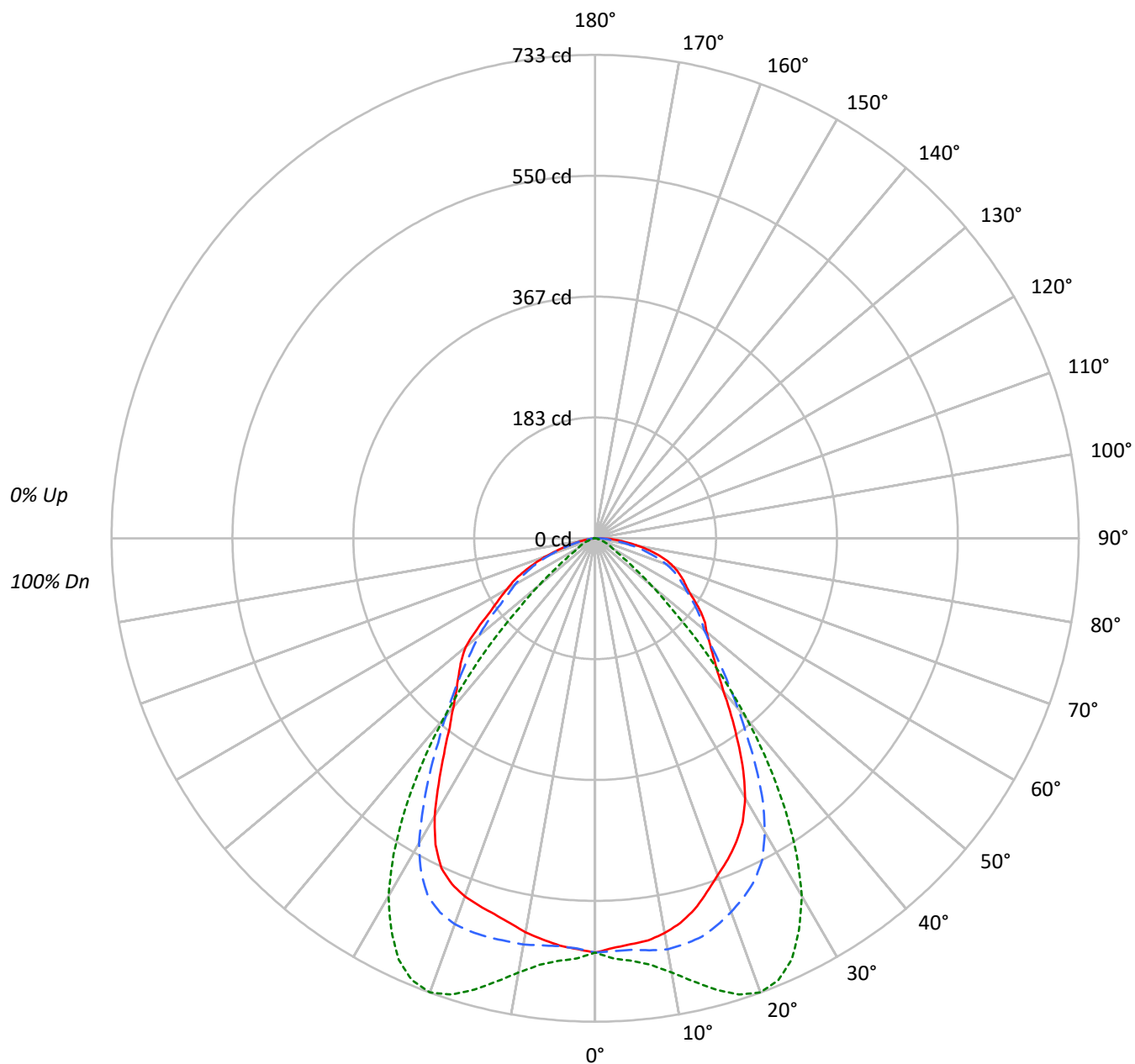
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
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	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°	157	157	157
5°	155	161	155
10°	154	169	154
15°	150	183	152
20°	144	194	153
25°	139	194	152
30°	131	180	140
35°	115	153	122
40°	98	117	109
45°	89	77	103
50°	85	43	99
55°	85	23	84
60°	82	15	77
65°	86	13	70
70°	93	9	57
75°	97	6	40
80°	95	4	25
85°	99	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	4.7
10°-20°	180.0	13.9
20°-30°	274.6	21.3
30°-40°	274.1	21.2
40°-50°	202.1	15.6
50°-60°	138.1	10.7
60°-70°	97.5	7.5
70°-80°	52.1	4.0
80°-90°	13.4	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°	514.8	39.8
0°-40°	788.9	61.1
0°-60°	1129.1	87.4
0°-90°	1292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1292.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	628	628	628	628	628	
5°	618	626	643	621	620	59
15°	582	625	708	626	590	163
25°	507	572	705	599	552	232
35°	377	426	502	438	400	236
45°	253	265	218	284	292	197
55°	196	189	53	176	193	174
65°	147	139	22	107	119	145
75°	101	82	6	37	41	105
85°	34	22	1	5	0	38
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°	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2	628.2
2.5°	621.7	625.4	626.4	632.9	637.6	632.0	622.6	622.6	623.6
5°	618.0	622.6	626.4	637.6	643.2	633.8	620.8	618.9	619.8
7.5°	615.2	621.7	630.1	646.9	652.5	640.4	622.6	615.2	613.3
10°	607.7	617.0	632.9	657.2	668.4	653.4	625.4	611.4	606.8
12.5°	597.4	608.6	630.1	668.4	688.0	665.6	625.4	604.9	597.4
15°	582.5	594.6	625.4	677.7	708.5	678.6	626.4	598.4	590.0
17.5°	562.9	577.8	615.2	682.4	725.3	690.8	625.4	593.7	584.3
20°	543.3	561.0	603.0	682.4	732.8	695.4	622.6	589.0	577.8
22.5°	526.5	544.2	589.0	674.0	725.3	689.8	614.2	580.6	567.5
25°	506.9	525.5	572.2	656.2	704.8	673.0	599.3	563.8	551.7
27.5°	484.5	505.0	548.9	628.2	669.3	642.2	571.3	536.7	523.7
30°	454.6	473.3	514.3	588.1	626.4	600.2	533.9	498.5	486.3
32.5°	418.2	435.0	473.3	539.5	568.5	547.0	485.4	455.5	441.5
35°	377.1	392.1	425.7	477.9	502.2	489.1	437.8	409.8	399.5
37.5°	338.8	350.0	378.1	416.3	431.3	422.9	391.1	370.6	362.2
40°	302.4	313.6	336.0	354.7	358.5	361.3	351.9	338.8	334.2
42.5°	274.4	284.7	298.7	296.8	285.6	301.5	316.4	314.6	310.8
45°	253.0	260.4	265.1	237.1	217.5	243.6	283.8	294.0	292.2
47.5°	235.2	239.0	236.2	189.5	154.0	189.5	254.8	275.4	275.4
50°	220.3	223.1	215.6	157.8	111.1	152.2	229.6	252.0	255.8
52.5°	210.0	211.0	201.6	133.5	76.5	120.4	202.6	222.2	225.0
55°	196.0	197.0	188.6	115.7	53.2	95.2	175.5	193.2	193.2
57.5°	180.2	182.0	173.6	100.8	37.3	79.3	155.0	171.8	172.7
60°	165.2	166.2	160.6	89.6	30.8	68.1	140.0	154.0	154.0
62.5°	155.0	155.9	149.4	83.1	26.1	59.7	124.2	137.2	138.2
65°	146.6	146.6	139.1	76.5	21.5	50.4	107.3	118.6	118.6
67.5°	137.2	135.4	127.9	68.1	16.8	41.1	90.5	98.9	98.0
70°	127.0	124.2	114.8	58.8	12.1	32.7	70.9	77.5	78.4
72.5°	114.8	111.1	98.9	48.5	9.3	24.3	52.3	57.9	57.9
75°	100.8	96.1	82.1	38.3	6.5	16.8	37.3	41.1	41.1
77.5°	84.0	79.3	65.3	28.0	4.7	11.2	25.2	28.0	28.0
80°	66.3	61.6	48.5	19.6	2.8	6.5	15.9	18.7	17.7
82.5°	49.5	44.8	32.7	12.1	1.9	3.7	10.3	10.3	9.3
85°	34.5	31.7	22.4	7.5	0.9	1.9	4.7	1.9	0.0
87.5°	23.3	20.5	14.0	3.7	0.0	0.9	0.9	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)