

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: P251830

Luminaire Tested: **LD4B15D010 EU4B10208030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251830
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 EU4B10208030 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1350.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

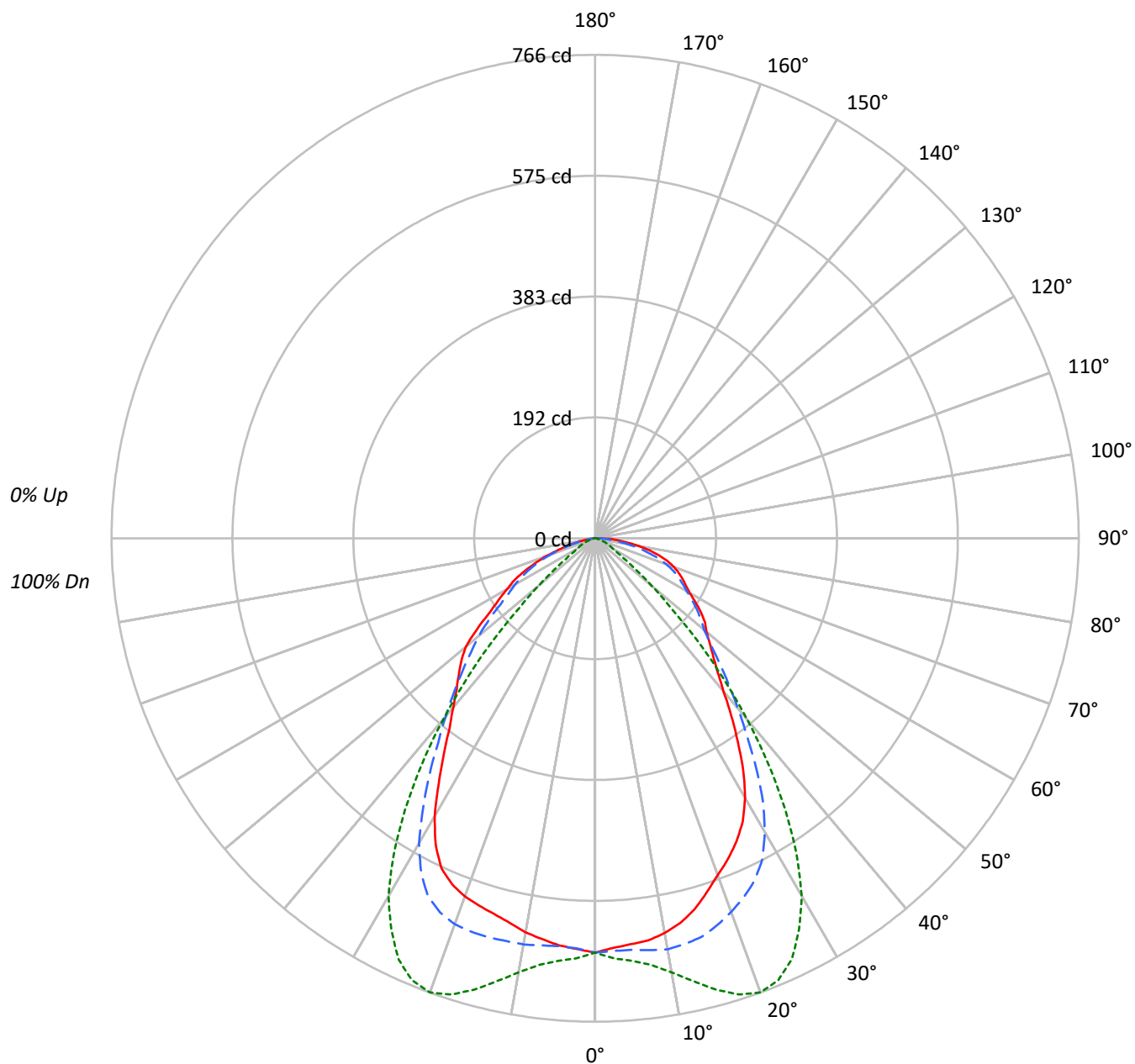
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	164	164	164
5°	161	168	162
10°	161	177	160
15°	157	191	159
20°	151	203	160
25°	146	202	158
30°	137	188	146
35°	120	160	127
40°	103	122	114
45°	93	80	108
50°	89	45	104
55°	89	24	88
60°	86	16	80
65°	90	13	73
70°	97	9	60
75°	101	7	41
80°	99	4	27
85°	103	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	4.7
10°-20°	188.1	13.9
20°-30°	286.9	21.3
30°-40°	286.4	21.2
40°-50°	211.2	15.6
50°-60°	144.3	10.7
60°-70°	101.9	7.5
70°-80°	54.4	4.0
80°-90°	14.0	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°	537.9	39.8
0°-40°	824.3	61.1
0°-60°	1179.8	87.4
0°-90°	1350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1350.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	656	656	656	656	656	
5°	646	654	672	649	648	61
15°	609	654	740	654	616	171
25°	530	598	736	626	576	243
35°	394	445	525	457	418	246
45°	264	277	227	296	305	206
55°	205	197	56	183	202	182
65°	153	145	22	112	124	151
75°	105	86	7	39	43	109
85°	36	23	1	5	0	40
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°	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4	656.4
2.5°	649.6	653.5	654.5	661.3	666.2	660.3	650.6	650.6	651.5
5°	645.7	650.6	654.5	666.2	672.0	662.3	648.6	646.7	647.6
7.5°	642.8	649.6	658.4	675.9	681.8	669.1	650.6	642.8	640.8
10°	635.0	644.7	661.3	686.7	698.4	682.8	653.5	638.9	634.0
12.5°	624.2	635.9	658.4	698.4	718.8	695.4	653.5	632.0	624.2
15°	608.6	621.3	653.5	708.1	740.3	709.1	654.5	625.2	616.4
17.5°	588.1	603.8	642.8	713.0	757.9	721.8	653.5	620.3	610.6
20°	567.7	586.2	630.1	713.0	765.7	726.7	650.6	615.5	603.8
22.5°	550.1	568.6	615.5	704.2	757.9	720.8	641.8	606.7	593.0
25°	529.6	549.1	597.9	685.7	736.4	703.2	626.2	589.1	576.4
27.5°	506.2	527.7	573.5	656.4	699.3	671.1	596.9	560.8	547.2
30°	475.0	494.5	537.4	614.5	654.5	627.2	557.9	520.8	508.2
32.5°	437.0	454.5	494.5	563.8	594.0	571.6	507.2	476.0	461.4
35°	394.0	409.7	444.8	499.4	524.7	511.1	457.4	428.2	417.5
37.5°	354.1	365.8	395.0	435.0	450.6	441.8	408.7	387.2	378.4
40°	316.0	327.7	351.1	370.6	374.5	377.5	367.7	354.1	349.2
42.5°	286.8	297.5	312.1	310.2	298.5	315.0	330.7	328.7	324.8
45°	264.3	272.1	277.0	247.7	227.3	254.6	296.5	307.2	305.3
47.5°	245.8	249.7	246.8	198.0	160.9	198.0	266.3	287.7	287.7
50°	230.2	233.1	225.3	164.8	116.1	159.0	239.9	263.3	267.3
52.5°	219.5	220.4	210.7	139.5	80.0	125.8	211.7	232.1	235.1
55°	204.8	205.8	197.0	120.9	55.6	99.5	183.4	201.9	201.9
57.5°	188.2	190.2	181.4	105.3	39.0	82.9	161.9	179.5	180.4
60°	172.6	173.6	167.8	93.6	32.2	71.2	146.3	160.9	160.9
62.5°	161.9	162.9	156.1	86.8	27.3	62.4	129.7	143.4	144.4
65°	153.1	153.1	145.3	80.0	22.4	52.7	112.2	123.9	123.9
67.5°	143.4	141.4	133.6	71.2	17.6	42.9	94.6	103.4	102.4
70°	132.7	129.7	120.0	61.4	12.7	34.1	74.1	81.0	81.9
72.5°	120.0	116.1	103.4	50.7	9.8	25.4	54.6	60.5	60.5
75°	105.3	100.5	85.8	40.0	6.8	17.6	39.0	42.9	42.9
77.5°	87.8	82.9	68.3	29.3	4.9	11.7	26.3	29.3	29.3
80°	69.3	64.4	50.7	20.5	2.9	6.8	16.6	19.5	18.5
82.5°	51.7	46.8	34.1	12.7	2.0	3.9	10.7	10.7	9.8
85°	36.1	33.2	23.4	7.8	1.0	2.0	4.9	2.0	0.0
87.5°	24.4	21.5	14.6	3.9	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)