

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: P251854

Luminaire Tested: **LD4B20D010 EU4B10209730 4LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P251854  
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: LD4B20D010 EU4B10209730 4LBDW1LI  
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1365.0 lumens  
Efficiency: N/A  
Efficacy: 65.6 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

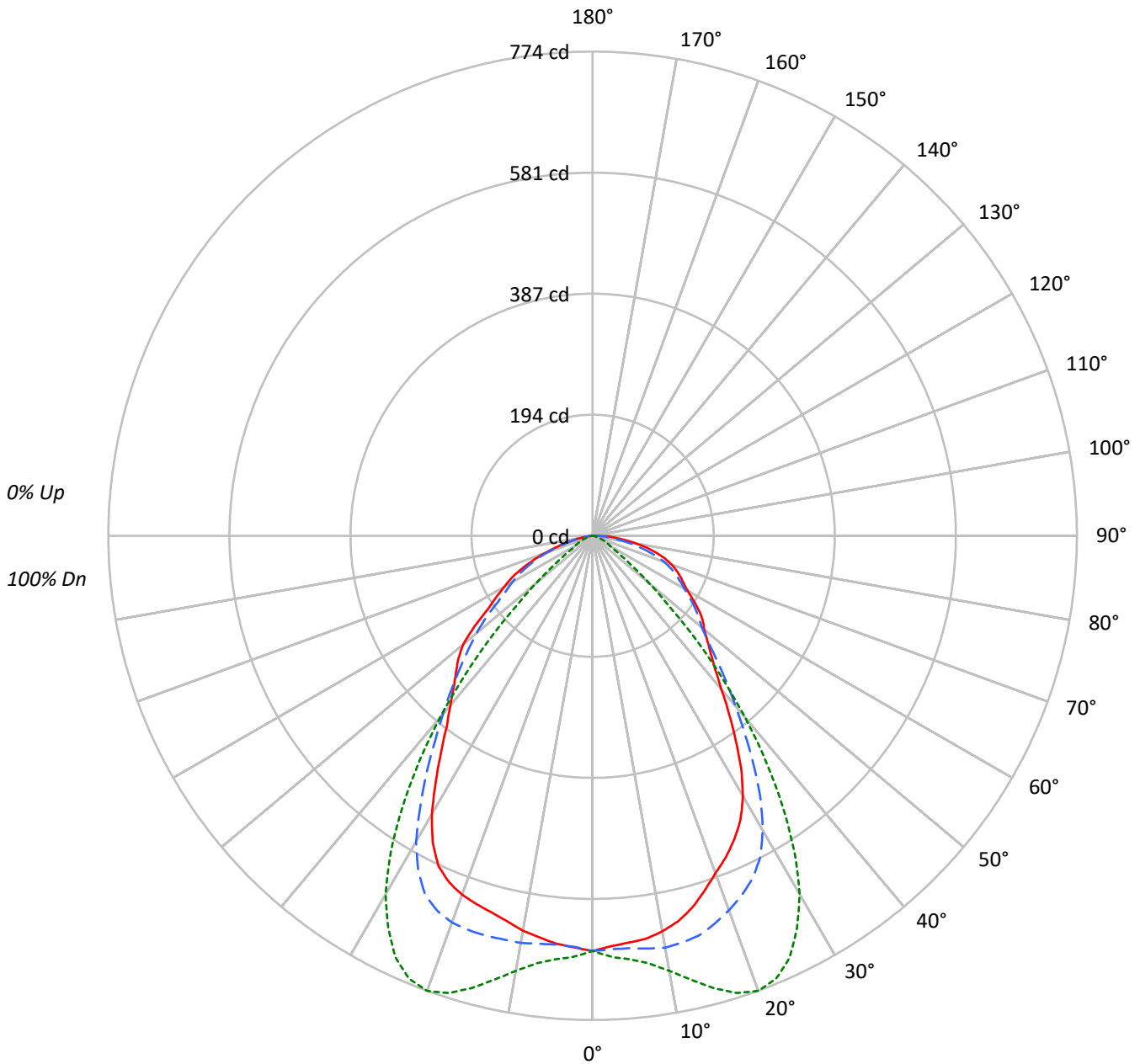
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	165	165	165
5°	163	170	164
10°	162	179	162
15°	159	193	161
20°	152	205	162
25°	147	205	160
30°	138	190	148
35°	121	161	128
40°	104	123	115
45°	94	81	109
50°	90	46	105
55°	90	24	89
60°	87	16	81
65°	91	13	74
70°	98	9	60
75°	103	7	42
80°	100	4	27
85°	104	3	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	4.7
10°-20°	190.2	13.9
20°-30°	290.1	21.3
30°-40°	289.6	21.2
40°-50°	213.5	15.6
50°-60°	145.9	10.7
60°-70°	103.0	7.5
70°-80°	55.0	4.0
80°-90°	14.1	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°	543.9	39.8
0°-40°	833.5	61.1
0°-60°	1192.9	87.4
0°-90°	1365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1365.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	664	664	664	664	664	
5°	653	662	680	656	655	62
15°	615	661	748	662	623	173
25°	536	604	745	633	583	245
35°	398	450	531	462	422	249
45°	267	280	230	300	309	209
55°	207	199	56	185	204	184
65°	155	147	23	113	125	153
75°	106	87	7	39	43	110
85°	36	24	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°	663.7	663.7	663.7	663.7	663.7	663.7	663.7	663.7	663.7
2.5°	656.8	660.8	661.7	668.6	673.6	667.7	657.8	657.8	658.8
5°	652.9	657.8	661.7	673.6	679.5	669.6	655.8	653.9	654.8
7.5°	649.9	656.8	665.7	683.4	689.4	676.5	657.8	649.9	647.9
10°	642.0	651.9	668.6	694.3	706.1	690.3	660.8	646.0	641.0
12.5°	631.2	643.0	665.7	706.1	726.8	703.2	660.8	639.1	631.2
15°	615.4	628.2	660.8	716.0	748.5	717.0	661.7	632.2	623.3
17.5°	594.7	610.5	649.9	720.9	766.3	729.8	660.8	627.2	617.4
20°	574.0	592.7	637.1	720.9	774.2	734.7	657.8	622.3	610.5
22.5°	556.2	575.0	622.3	712.0	766.3	728.8	648.9	613.4	599.6
25°	535.5	555.2	604.5	693.3	744.6	711.1	633.1	595.7	582.8
27.5°	511.8	533.5	579.9	663.7	707.1	678.5	603.6	567.1	553.3
30°	480.3	500.0	543.4	621.3	661.7	634.1	564.1	526.6	513.8
32.5°	441.8	459.6	500.0	570.0	600.6	577.9	512.8	481.3	466.5
35°	398.4	414.2	449.7	504.9	530.6	516.8	462.5	432.9	422.1
37.5°	358.0	369.8	399.4	439.8	455.6	446.8	413.2	391.5	382.6
40°	319.5	331.4	355.0	374.8	378.7	381.7	371.8	358.0	353.1
42.5°	289.9	300.8	315.6	313.6	301.8	318.5	334.3	332.4	328.4
45°	267.3	275.2	280.1	250.5	229.8	257.4	299.8	310.7	308.7
47.5°	248.5	252.5	249.5	200.2	162.7	200.2	269.2	290.9	290.9
50°	232.7	235.7	227.8	166.7	117.4	160.8	242.6	266.3	270.2
52.5°	221.9	222.9	213.0	141.0	80.9	127.2	214.0	234.7	237.7
55°	207.1	208.1	199.2	122.3	56.2	100.6	185.4	204.1	204.1
57.5°	190.3	192.3	183.4	106.5	39.4	83.8	163.7	181.5	182.4
60°	174.6	175.5	169.6	94.7	32.5	72.0	147.9	162.7	162.7
62.5°	163.7	164.7	157.8	87.8	27.6	63.1	131.2	145.0	146.0
65°	154.8	154.8	146.9	80.9	22.7	53.3	113.4	125.2	125.2
67.5°	145.0	143.0	135.1	72.0	17.8	43.4	95.7	104.5	103.6
70°	134.1	131.2	121.3	62.1	12.8	34.5	75.0	81.9	82.8
72.5°	121.3	117.4	104.5	51.3	9.9	25.6	55.2	61.1	61.1
75°	106.5	101.6	86.8	40.4	6.9	17.8	39.4	43.4	43.4
77.5°	88.8	83.8	69.0	29.6	4.9	11.8	26.6	29.6	29.6
80°	70.0	65.1	51.3	20.7	3.0	6.9	16.8	19.7	18.7
82.5°	52.3	47.3	34.5	12.8	2.0	3.9	10.8	10.8	9.9
85°	36.5	33.5	23.7	7.9	1.0	2.0	4.9	2.0	0.0
87.5°	24.7	21.7	14.8	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)