

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: P251841

Luminaire Tested: **LD4B15D010 EU4B10209730 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251841
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 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: 1008.0 lumens
Efficiency: N/A
Efficacy: 70.0 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

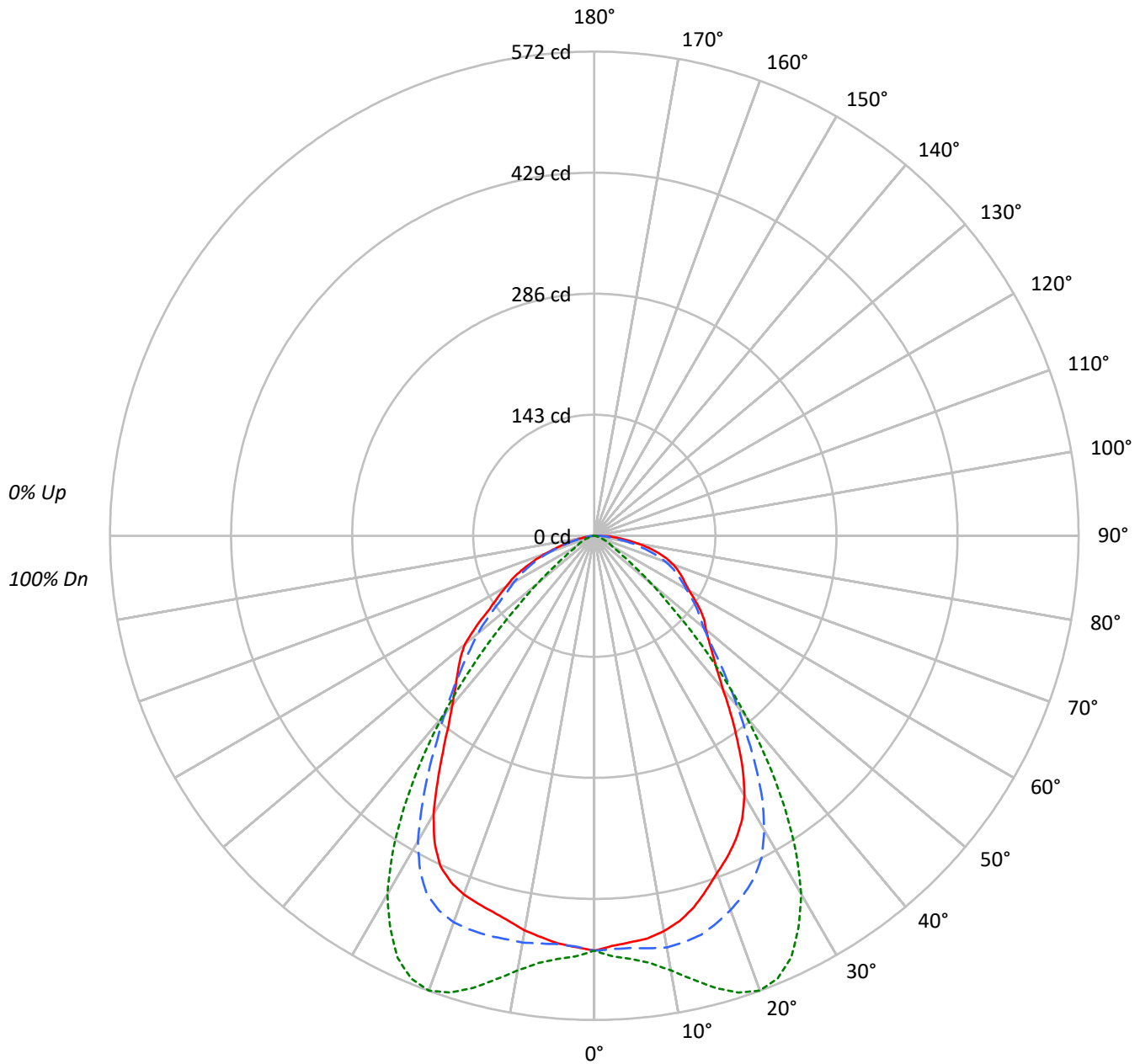
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	122	122	122
5°	121	126	121
10°	120	132	120
15°	117	143	119
20°	112	152	120
25°	109	151	118
30°	102	141	109
35°	89	119	95
40°	77	91	85
45°	70	60	80
50°	67	34	77
55°	66	18	66
60°	64	12	60
65°	67	10	55
70°	72	7	45
75°	76	5	31
80°	74	3	20
85°	77	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	4.7
10°-20°	140.5	13.9
20°-30°	214.2	21.3
30°-40°	213.8	21.2
40°-50°	157.7	15.6
50°-60°	107.7	10.7
60°-70°	76.1	7.5
70°-80°	40.6	4.0
80°-90°	10.4	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°	401.6	39.8
0°-40°	615.5	61.1
0°-60°	880.9	87.4
0°-90°	1008.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1008.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	490	490	490	490	490	
5°	482	489	502	484	484	46
15°	454	488	553	489	460	127
25°	396	446	550	468	430	181
35°	294	332	392	342	312	184
45°	197	207	170	221	228	154
55°	153	147	42	137	151	136
65°	114	108	17	84	92	113
75°	79	64	5	29	32	82
85°	27	18	1	4	0	30
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°	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1
2.5°	485.0	487.9	488.7	493.8	497.4	493.0	485.8	485.8	486.5
5°	482.1	485.8	488.7	497.4	501.8	494.5	484.3	482.8	483.6
7.5°	479.9	485.0	491.6	504.7	509.1	499.6	485.8	479.9	478.5
10°	474.1	481.4	493.8	512.7	521.4	509.8	487.9	477.0	473.4
12.5°	466.1	474.8	491.6	521.4	536.7	519.3	487.9	471.9	466.1
15°	454.4	463.9	487.9	528.7	552.8	529.5	488.7	466.8	460.3
17.5°	439.2	450.8	479.9	532.4	565.9	538.9	487.9	463.2	455.9
20°	423.9	437.7	470.5	532.4	571.7	542.6	485.8	459.5	450.8
22.5°	410.7	424.6	459.5	525.8	565.9	538.2	479.2	453.0	442.8
25°	395.5	410.0	446.4	512.0	549.8	525.1	467.6	439.9	430.4
27.5°	378.0	394.0	428.2	490.1	522.2	501.1	445.7	418.8	408.6
30°	354.7	369.2	401.3	458.8	488.7	468.3	416.6	388.9	379.4
32.5°	326.3	339.4	369.2	420.9	443.5	426.8	378.7	355.4	344.5
35°	294.2	305.9	332.1	372.9	391.8	381.6	341.6	319.7	311.7
37.5°	264.4	273.1	295.0	324.8	336.5	329.9	305.1	289.1	282.6
40°	236.0	244.7	262.2	276.7	279.7	281.8	274.6	264.4	260.7
42.5°	214.1	222.1	233.0	231.6	222.9	235.2	246.9	245.4	242.5
45°	197.4	203.2	206.8	185.0	169.7	190.1	221.4	229.4	228.0
47.5°	183.5	186.4	184.3	147.8	120.2	147.8	198.8	214.8	214.8
50°	171.9	174.1	168.2	123.1	86.7	118.7	179.2	196.6	199.5
52.5°	163.9	164.6	157.3	104.1	59.7	93.9	158.0	173.3	175.5
55°	152.9	153.7	147.1	90.3	41.5	74.3	136.9	150.8	150.8
57.5°	140.6	142.0	135.5	78.7	29.1	61.9	120.9	134.0	134.7
60°	128.9	129.6	125.3	69.9	24.0	53.2	109.2	120.2	120.2
62.5°	120.9	121.6	116.5	64.8	20.4	46.6	96.9	107.1	107.8
65°	114.3	114.3	108.5	59.7	16.8	39.3	83.8	92.5	92.5
67.5°	107.1	105.6	99.8	53.2	13.1	32.0	70.6	77.2	76.5
70°	99.0	96.9	89.6	45.9	9.5	25.5	55.3	60.4	61.2
72.5°	89.6	86.7	77.2	37.9	7.3	18.9	40.8	45.2	45.2
75°	78.7	75.0	64.1	29.9	5.1	13.1	29.1	32.0	32.0
77.5°	65.5	61.9	51.0	21.8	3.6	8.7	19.7	21.8	21.8
80°	51.7	48.1	37.9	15.3	2.2	5.1	12.4	14.6	13.8
82.5°	38.6	35.0	25.5	9.5	1.5	2.9	8.0	8.0	7.3
85°	26.9	24.8	17.5	5.8	0.7	1.5	3.6	1.5	0.0
87.5°	18.2	16.0	10.9	2.9	0.0	0.7	0.7	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)