

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: P251834

Luminaire Tested: **LD4B15D010 EU4B10209024 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251834
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 EU4B10209024 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 976.0 lumens
Efficiency: N/A
Efficacy: 67.8 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

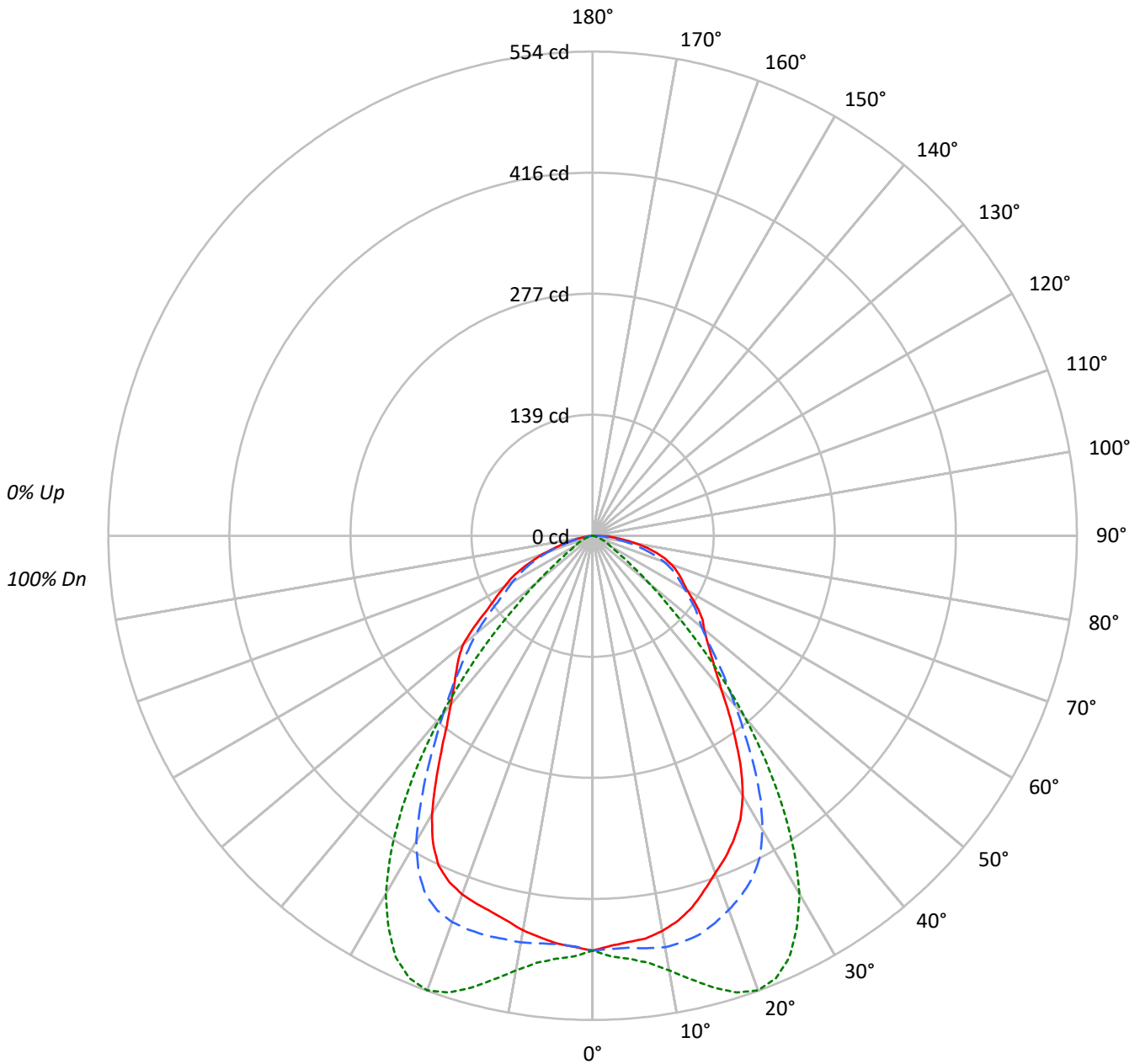
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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°	118	118	118
5°	117	122	117
10°	116	128	116
15°	113	138	115
20°	109	147	116
25°	105	146	115
30°	99	136	106
35°	87	115	92
40°	74	88	82
45°	67	58	78
50°	64	33	75
55°	64	17	63
60°	62	12	58
65°	65	10	53
70°	70	7	43
75°	73	5	30
80°	72	3	19
85°	75	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	4.7
10°-20°	136.0	13.9
20°-30°	207.4	21.3
30°-40°	207.1	21.2
40°-50°	152.7	15.6
50°-60°	104.3	10.7
60°-70°	73.6	7.5
70°-80°	39.3	4.0
80°-90°	10.1	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°	388.9	39.8
0°-40°	595.9	61.1
0°-60°	852.9	87.4
0°-90°	976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	976.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	475	475	475	475	475	
5°	467	473	486	469	468	44
15°	440	472	535	473	446	123
25°	383	432	532	453	417	175
35°	285	322	379	331	302	178
45°	191	200	164	214	221	149
55°	148	142	40	133	146	132
65°	111	105	16	81	90	109
75°	76	62	5	28	31	79
85°	26	17	1	4	0	29
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°	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6
2.5°	469.6	472.5	473.2	478.1	481.6	477.4	470.3	470.3	471.0
5°	466.8	470.3	473.2	481.6	485.9	478.8	468.9	467.5	468.2
7.5°	464.7	469.6	476.0	488.7	492.9	483.7	470.3	464.7	463.3
10°	459.1	466.1	478.1	496.4	504.9	493.6	472.5	461.9	458.4
12.5°	451.3	459.8	476.0	504.9	519.7	502.8	472.5	456.9	451.3
15°	440.0	449.2	472.5	511.9	535.2	512.6	473.2	452.0	445.7
17.5°	425.2	436.5	464.7	515.5	547.9	521.8	472.5	448.5	441.4
20°	410.4	423.8	455.5	515.5	553.5	525.3	470.3	445.0	436.5
22.5°	397.7	411.1	445.0	509.1	547.9	521.1	464.0	438.6	428.7
25°	382.9	397.0	432.3	495.7	532.4	508.4	452.7	425.9	416.7
27.5°	366.0	381.5	414.6	474.6	505.6	485.1	431.6	405.5	395.6
30°	343.4	357.5	388.5	444.2	473.2	453.4	403.3	376.6	367.4
32.5°	315.9	328.6	357.5	407.6	429.4	413.2	366.7	344.1	333.5
35°	284.9	296.2	321.6	361.0	379.4	369.5	330.7	309.6	301.8
37.5°	256.0	264.4	285.6	314.5	325.8	319.4	295.5	279.9	273.6
40°	228.5	236.9	253.9	268.0	270.8	272.9	265.8	256.0	252.4
42.5°	207.3	215.1	225.7	224.2	215.8	227.8	239.0	237.6	234.8
45°	191.1	196.7	200.3	179.1	164.3	184.0	214.4	222.1	220.7
47.5°	177.7	180.5	178.4	143.1	116.4	143.1	192.5	208.0	208.0
50°	166.4	168.5	162.9	119.2	83.9	114.9	173.5	190.4	193.2
52.5°	158.7	159.4	152.3	100.8	57.8	91.0	153.0	167.8	169.9
55°	148.1	148.8	142.4	87.4	40.2	71.9	132.6	146.0	146.0
57.5°	136.1	137.5	131.2	76.2	28.2	59.9	117.1	129.7	130.5
60°	124.8	125.5	121.3	67.7	23.3	51.5	105.8	116.4	116.4
62.5°	117.1	117.8	112.8	62.8	19.7	45.1	93.8	103.7	104.4
65°	110.7	110.7	105.1	57.8	16.2	38.1	81.1	89.6	89.6
67.5°	103.7	102.2	96.6	51.5	12.7	31.0	68.4	74.7	74.0
70°	95.9	93.8	86.7	44.4	9.2	24.7	53.6	58.5	59.2
72.5°	86.7	83.9	74.7	36.7	7.1	18.3	39.5	43.7	43.7
75°	76.2	72.6	62.1	28.9	4.9	12.7	28.2	31.0	31.0
77.5°	63.5	59.9	49.4	21.2	3.5	8.5	19.0	21.2	21.2
80°	50.1	46.5	36.7	14.8	2.1	4.9	12.0	14.1	13.4
82.5°	37.4	33.8	24.7	9.2	1.4	2.8	7.8	7.8	7.1
85°	26.1	24.0	16.9	5.6	0.7	1.4	3.5	1.4	0.0
87.5°	17.6	15.5	10.6	2.8	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)