

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: P251840

Luminaire Tested: **LD4B15D010 EU4B10209727 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251840
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 EU4B10209727 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 964.0 lumens
Efficiency: N/A
Efficacy: 67.0 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

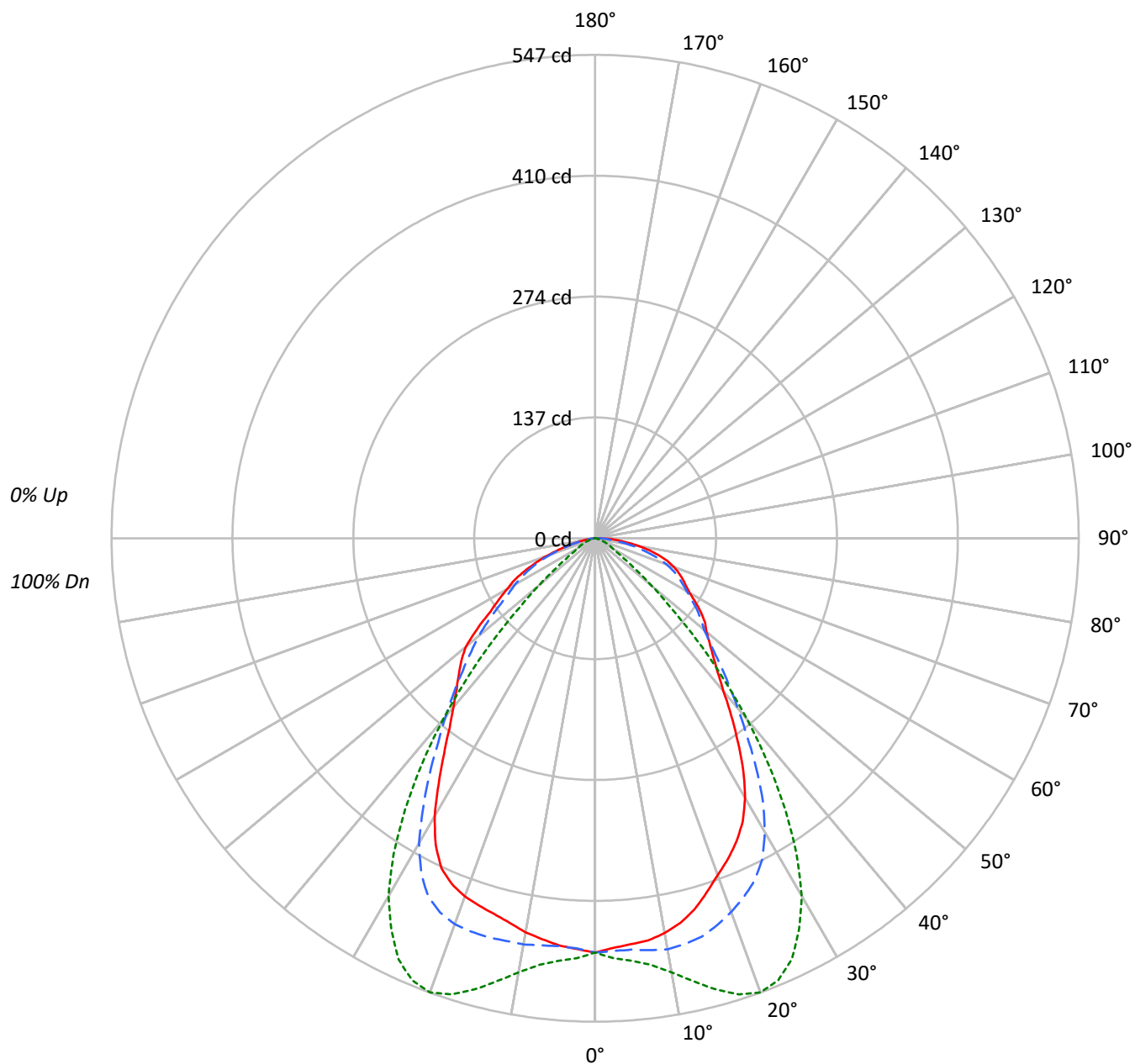
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	117	117	117
5°	115	120	116
10°	115	126	115
15°	112	136	114
20°	107	145	114
25°	104	145	113
30°	98	134	104
35°	86	114	91
40°	73	87	81
45°	66	57	77
50°	64	32	74
55°	64	17	63
60°	61	11	57
65°	64	9	52
70°	69	7	43
75°	72	5	29
80°	71	3	19
85°	74	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	4.7
10°-20°	134.3	13.9
20°-30°	204.9	21.3
30°-40°	204.5	21.2
40°-50°	150.8	15.6
50°-60°	103.0	10.7
60°-70°	72.7	7.5
70°-80°	38.8	4.0
80°-90°	10.0	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°	384.1	39.8
0°-40°	588.6	61.1
0°-60°	842.4	87.4
0°-90°	964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	964.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	469	469	469	469	469	
5°	461	467	480	463	462	44
15°	435	467	529	467	440	122
25°	378	427	526	447	412	173
35°	281	318	375	327	298	176
45°	189	198	162	212	218	147
55°	146	141	40	131	144	130
65°	109	104	16	80	88	108
75°	75	61	5	28	31	78
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°	468.7	468.7	468.7	468.7	468.7	468.7	468.7	468.7	468.7
2.5°	463.9	466.6	467.3	472.2	475.7	471.5	464.6	464.6	465.3
5°	461.1	464.6	467.3	475.7	479.9	472.9	463.2	461.8	462.5
7.5°	459.0	463.9	470.1	482.7	486.8	477.8	464.6	459.0	457.6
10°	453.4	460.4	472.2	490.3	498.7	487.5	466.6	456.2	452.7
12.5°	445.8	454.1	470.1	498.7	513.3	496.6	466.6	451.3	445.8
15°	434.6	443.7	466.6	505.6	528.6	506.3	467.3	446.4	440.2
17.5°	420.0	431.1	459.0	509.1	541.2	515.4	466.6	443.0	436.0
20°	405.4	418.6	449.9	509.1	546.7	518.9	464.6	439.5	431.1
22.5°	392.8	406.1	439.5	502.9	541.2	514.7	458.3	433.2	423.5
25°	378.2	392.1	426.9	489.6	525.8	502.2	447.1	420.7	411.6
27.5°	361.5	376.8	409.5	468.7	499.4	479.2	426.2	400.5	390.7
30°	339.2	353.1	383.8	438.8	467.3	447.8	398.4	371.9	362.9
32.5°	312.0	324.6	353.1	402.6	424.2	408.1	362.2	339.9	329.4
35°	281.4	292.5	317.6	356.6	374.7	365.0	326.7	305.8	298.1
37.5°	252.8	261.2	282.1	310.6	321.8	315.5	291.8	276.5	270.2
40°	225.7	234.0	250.7	264.7	267.5	269.5	262.6	252.8	249.3
42.5°	204.8	212.4	222.9	221.5	213.1	225.0	236.1	234.7	231.9
45°	188.7	194.3	197.8	176.9	162.3	181.8	211.7	219.4	218.0
47.5°	175.5	178.3	176.2	141.4	114.9	141.4	190.1	205.5	205.5
50°	164.4	166.5	160.9	117.7	82.9	113.5	171.3	188.1	190.8
52.5°	156.7	157.4	150.4	99.6	57.1	89.8	151.1	165.8	167.9
55°	146.3	147.0	140.7	86.4	39.7	71.0	130.9	144.2	144.2
57.5°	134.4	135.8	129.5	75.2	27.9	59.2	115.6	128.2	128.9
60°	123.3	124.0	119.8	66.9	23.0	50.8	104.5	114.9	114.9
62.5°	115.6	116.3	111.4	62.0	19.5	44.6	92.6	102.4	103.1
65°	109.3	109.3	103.8	57.1	16.0	37.6	80.1	88.5	88.5
67.5°	102.4	101.0	95.4	50.8	12.5	30.6	67.6	73.8	73.1
70°	94.7	92.6	85.7	43.9	9.1	24.4	52.9	57.8	58.5
72.5°	85.7	82.9	73.8	36.2	7.0	18.1	39.0	43.2	43.2
75°	75.2	71.7	61.3	28.6	4.9	12.5	27.9	30.6	30.6
77.5°	62.7	59.2	48.8	20.9	3.5	8.4	18.8	20.9	20.9
80°	49.5	46.0	36.2	14.6	2.1	4.9	11.8	13.9	13.2
82.5°	36.9	33.4	24.4	9.1	1.4	2.8	7.7	7.7	7.0
85°	25.8	23.7	16.7	5.6	0.7	1.4	3.5	1.4	0.0
87.5°	17.4	15.3	10.4	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)