

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: P251822

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251822
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: LD4B10D010 EU4B10209027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 796.0 lumens
Efficiency: N/A
Efficacy: 79.2 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

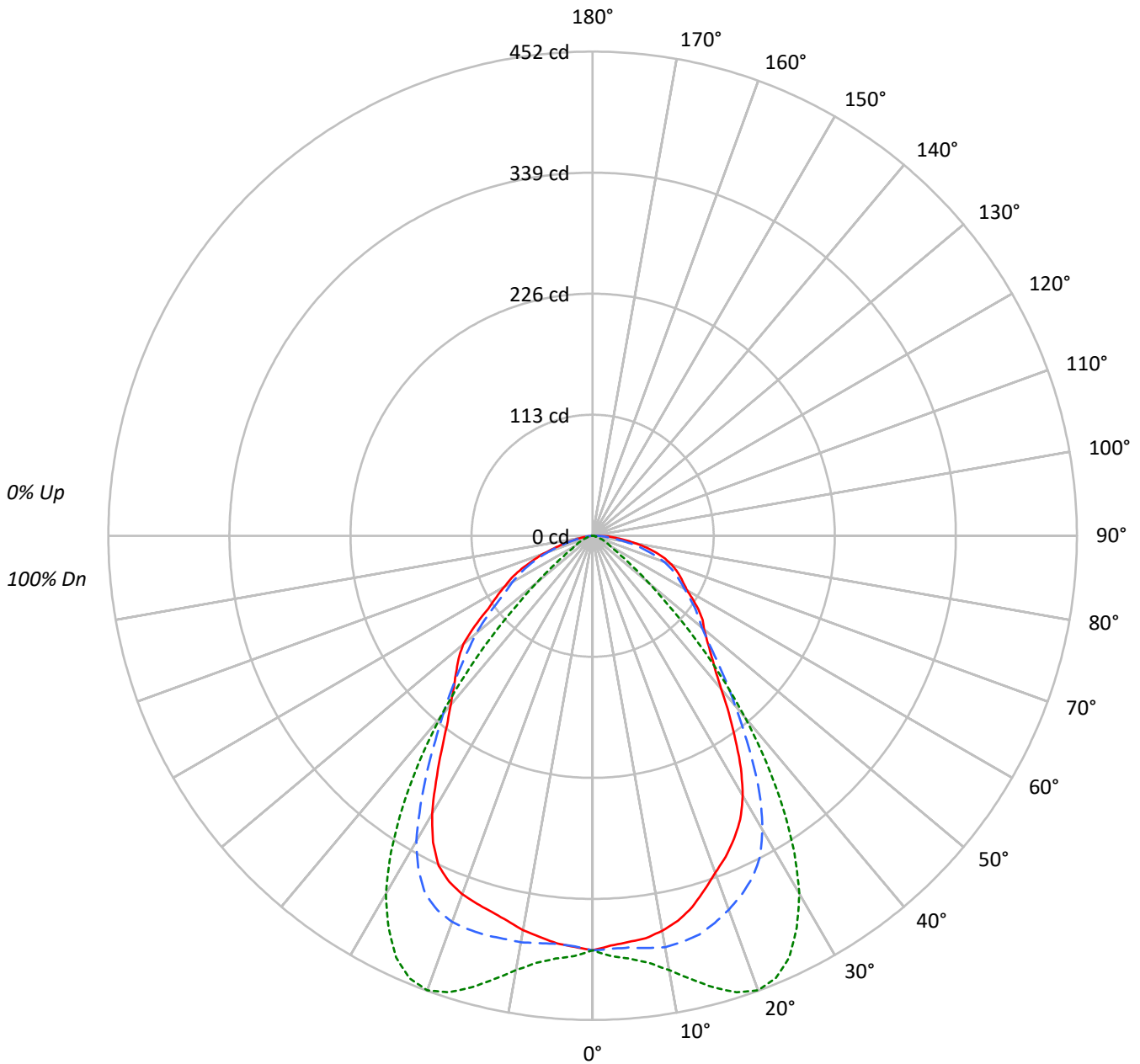
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
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°	96	96	96
5°	95	99	96
10°	95	104	95
15°	93	113	94
20°	89	120	94
25°	86	119	93
30°	81	111	86
35°	71	94	75
40°	61	72	67
45°	55	47	63
50°	53	27	61
55°	52	14	52
60°	51	9	47
65°	53	8	43
70°	57	5	35
75°	60	4	24
80°	59	2	16
85°	61	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	4.7
10°-20°	110.9	13.9
20°-30°	169.2	21.3
30°-40°	168.9	21.2
40°-50°	124.5	15.6
50°-60°	85.1	10.7
60°-70°	60.1	7.5
70°-80°	32.1	4.0
80°-90°	8.2	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°	317.2	39.8
0°-40°	486.0	61.1
0°-60°	695.6	87.4
0°-90°	796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	387	387	387	387	387	
5°	381	386	396	382	382	36
15°	359	385	436	386	364	101
25°	312	352	434	369	340	143
35°	232	262	309	270	246	145
45°	156	163	134	175	180	122
55°	121	116	33	108	119	107
65°	90	86	13	66	73	89
75°	62	51	4	23	25	64
85°	21	14	1	3	0	24
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°	387.0	387.0	387.0	387.0	387.0	387.0	387.0	387.0	387.0
2.5°	383.0	385.3	385.9	389.9	392.8	389.3	383.6	383.6	384.2
5°	380.7	383.6	385.9	392.8	396.2	390.5	382.4	381.3	381.9
7.5°	379.0	383.0	388.2	398.5	402.0	394.5	383.6	379.0	377.8
10°	374.4	380.1	389.9	404.9	411.8	402.6	385.3	376.7	373.8
12.5°	368.1	375.0	388.2	411.8	423.9	410.1	385.3	372.7	368.1
15°	358.9	366.3	385.3	417.5	436.5	418.1	385.9	368.6	363.5
17.5°	346.8	356.0	379.0	420.4	446.9	425.6	385.3	365.8	360.0
20°	334.7	345.6	371.5	420.4	451.5	428.5	383.6	362.9	356.0
22.5°	324.4	335.3	362.9	415.2	446.9	425.0	378.4	357.7	349.7
25°	312.3	323.8	352.5	404.3	434.2	414.7	369.2	347.4	339.9
27.5°	298.5	311.1	338.2	387.0	412.4	395.7	352.0	330.7	322.6
30°	280.1	291.6	316.9	362.3	385.9	369.8	329.0	307.1	299.6
32.5°	257.6	268.0	291.6	332.4	350.2	337.0	299.1	280.7	272.0
35°	232.3	241.5	262.2	294.5	309.4	301.4	269.7	252.5	246.1
37.5°	208.8	215.7	232.9	256.5	265.7	260.5	241.0	228.3	223.1
40°	186.3	193.2	207.0	218.5	220.8	222.6	216.8	208.8	205.9
42.5°	169.1	175.4	184.0	182.9	176.0	185.8	195.0	193.8	191.5
45°	155.9	160.5	163.3	146.1	134.0	150.1	174.8	181.2	180.0
47.5°	144.9	147.2	145.5	116.7	94.9	116.7	157.0	169.7	169.7
50°	135.7	137.5	132.8	97.2	68.4	93.7	141.5	155.3	157.6
52.5°	129.4	130.0	124.2	82.2	47.2	74.2	124.8	136.9	138.6
55°	120.8	121.3	116.2	71.3	32.8	58.7	108.1	119.0	119.0
57.5°	111.0	112.1	107.0	62.1	23.0	48.9	95.5	105.8	106.4
60°	101.8	102.4	98.9	55.2	19.0	42.0	86.3	94.9	94.9
62.5°	95.5	96.0	92.0	51.2	16.1	36.8	76.5	84.5	85.1
65°	90.3	90.3	85.7	47.2	13.2	31.1	66.1	73.0	73.0
67.5°	84.5	83.4	78.8	42.0	10.4	25.3	55.8	61.0	60.4
70°	78.2	76.5	70.7	36.2	7.5	20.1	43.7	47.7	48.3
72.5°	70.7	68.4	61.0	29.9	5.8	15.0	32.2	35.7	35.7
75°	62.1	59.2	50.6	23.6	4.0	10.4	23.0	25.3	25.3
77.5°	51.8	48.9	40.3	17.3	2.9	6.9	15.5	17.3	17.3
80°	40.8	38.0	29.9	12.1	1.7	4.0	9.8	11.5	10.9
82.5°	30.5	27.6	20.1	7.5	1.2	2.3	6.3	6.3	5.8
85°	21.3	19.6	13.8	4.6	0.6	1.2	2.9	1.2	0.0
87.5°	14.4	12.7	8.6	2.3	0.0	0.6	0.6	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)