

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: P251826

Luminaire Tested: **LD4B10D010 EU4B10209050 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251826
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 EU4B10209050 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 845.0 lumens
Efficiency: N/A
Efficacy: 84.1 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

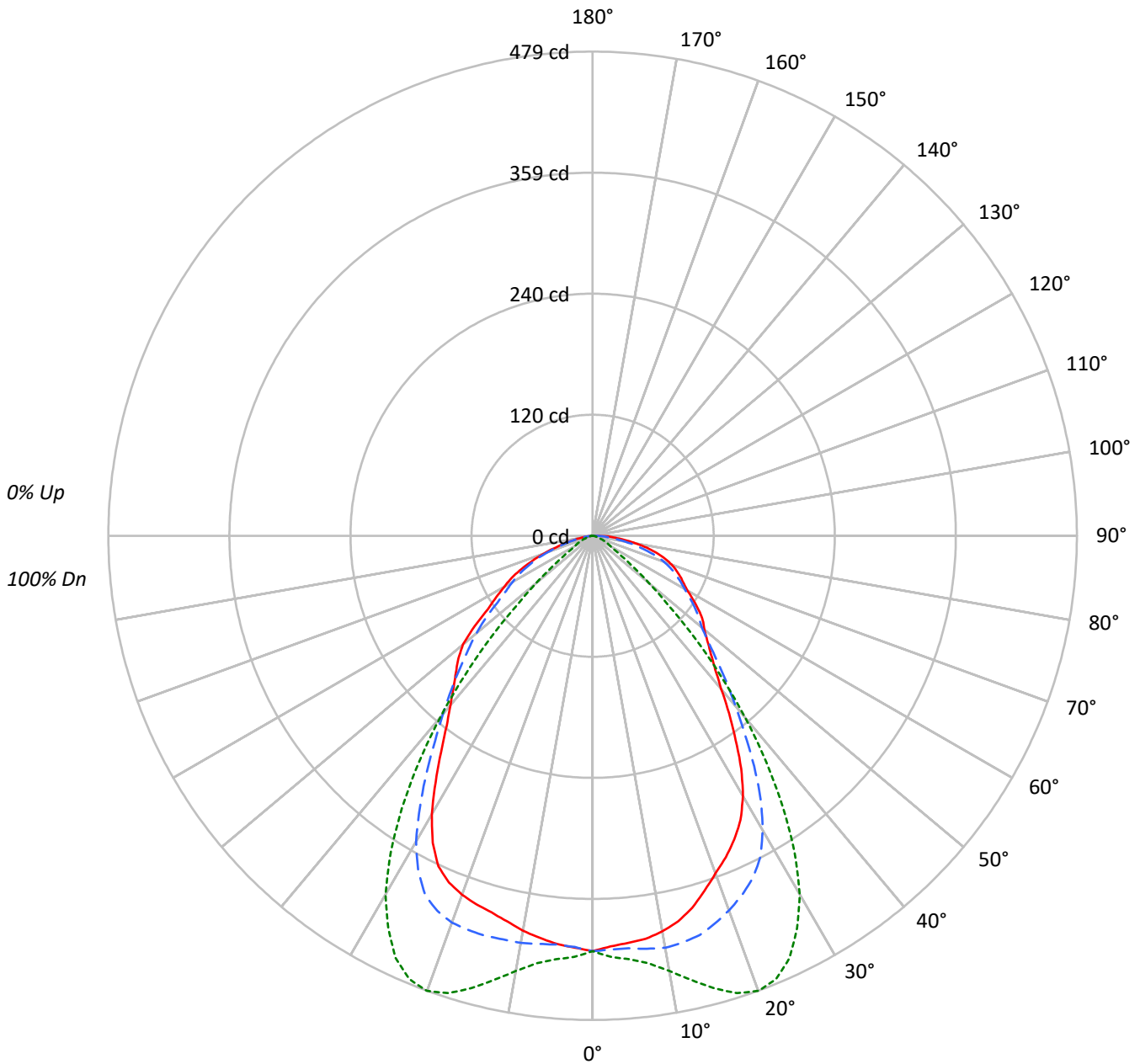
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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°	102	102	102
5°	101	105	101
10°	101	111	100
15°	98	120	100
20°	94	127	100
25°	91	127	99
30°	86	118	92
35°	75	100	79
40°	64	76	71
45°	58	50	67
50°	56	28	65
55°	56	15	55
60°	54	10	50
65°	56	8	46
70°	60	6	37
75°	63	4	26
80°	62	3	17
85°	65	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	4.7
10°-20°	117.7	13.9
20°-30°	179.6	21.3
30°-40°	179.3	21.2
40°-50°	132.2	15.6
50°-60°	90.3	10.7
60°-70°	63.8	7.5
70°-80°	34.1	4.0
80°-90°	8.7	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°	336.7	39.8
0°-40°	515.9	61.1
0°-60°	738.4	87.4
0°-90°	845.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	845.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	411	411	411	411	411	
5°	404	410	421	406	405	38
15°	381	409	463	410	386	107
25°	332	374	461	392	361	152
35°	247	278	328	286	261	154
45°	165	173	142	186	191	129
55°	128	123	35	115	126	114
65°	96	91	14	70	78	95
75°	66	54	4	24	27	68
85°	23	15	1	3	0	25
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°	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9
2.5°	406.6	409.0	409.7	413.9	417.0	413.3	407.2	407.2	407.8
5°	404.2	407.2	409.7	417.0	420.6	414.5	406.0	404.8	405.4
7.5°	402.3	406.6	412.1	423.1	426.7	418.8	407.2	402.3	401.1
10°	397.4	403.5	413.9	429.8	437.1	427.4	409.0	399.9	396.8
12.5°	390.7	398.1	412.1	437.1	449.9	435.3	409.0	395.6	390.7
15°	381.0	388.9	409.0	443.2	463.4	443.8	409.7	391.3	385.8
17.5°	368.1	377.9	402.3	446.3	474.4	451.8	409.0	388.3	382.2
20°	355.3	366.9	394.4	446.3	479.2	454.8	407.2	385.2	377.9
22.5°	344.3	355.9	385.2	440.8	474.4	451.2	401.7	379.7	371.2
25°	331.5	343.7	374.2	429.2	460.9	440.2	391.9	368.7	360.8
27.5°	316.9	330.3	359.0	410.9	437.7	420.0	373.6	351.0	342.5
30°	297.3	309.5	336.4	384.6	409.7	392.6	349.2	326.0	318.1
32.5°	273.5	284.5	309.5	352.9	371.8	357.8	317.5	297.9	288.8
35°	246.6	256.4	278.4	312.6	328.5	319.9	286.3	268.0	261.3
37.5°	221.6	228.9	247.3	272.3	282.1	276.6	255.8	242.4	236.9
40°	197.8	205.1	219.8	232.0	234.4	236.3	230.2	221.6	218.6
42.5°	179.5	186.2	195.4	194.1	186.8	197.2	207.0	205.7	203.3
45°	165.4	170.3	173.4	155.1	142.2	159.3	185.6	192.3	191.1
47.5°	153.8	156.3	154.5	123.9	100.7	123.9	166.7	180.1	180.1
50°	144.1	145.9	141.0	103.2	72.7	99.5	150.2	164.8	167.3
52.5°	137.4	138.0	131.9	87.3	50.1	78.8	132.5	145.3	147.1
55°	128.2	128.8	123.3	75.7	34.8	62.3	114.8	126.4	126.4
57.5°	117.8	119.0	113.6	65.9	24.4	51.9	101.3	112.3	112.9
60°	108.1	108.7	105.0	58.6	20.1	44.6	91.6	100.7	100.7
62.5°	101.3	102.0	97.7	54.3	17.1	39.1	81.2	89.7	90.4
65°	95.8	95.8	91.0	50.1	14.0	33.0	70.2	77.5	77.5
67.5°	89.7	88.5	83.6	44.6	11.0	26.9	59.2	64.7	64.1
70°	83.0	81.2	75.1	38.5	7.9	21.4	46.4	50.7	51.3
72.5°	75.1	72.7	64.7	31.7	6.1	15.9	34.2	37.9	37.9
75°	65.9	62.9	53.7	25.0	4.3	11.0	24.4	26.9	26.9
77.5°	54.9	51.9	42.7	18.3	3.1	7.3	16.5	18.3	18.3
80°	43.3	40.3	31.7	12.8	1.8	4.3	10.4	12.2	11.6
82.5°	32.4	29.3	21.4	7.9	1.2	2.4	6.7	6.7	6.1
85°	22.6	20.8	14.7	4.9	0.6	1.2	3.1	1.2	0.0
87.5°	15.3	13.4	9.2	2.4	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)