

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: P251817

Luminaire Tested: **LD4B10D010 EU4B10208030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251817
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 EU4B10208030 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 970.0 lumens
Efficiency: N/A
Efficacy: 96.5 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

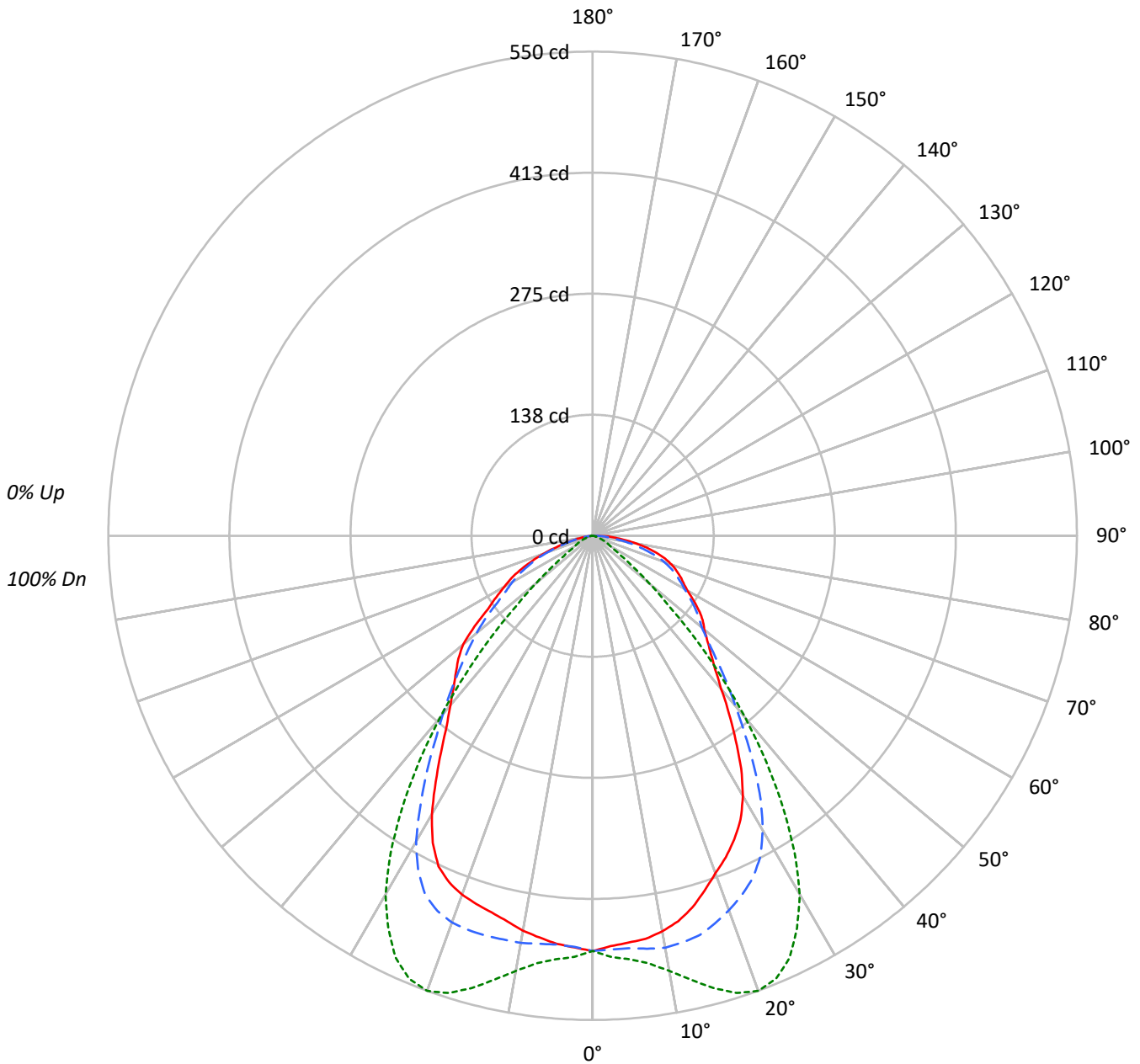
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251817

CATALOG NUMBER: LD4B10D010 EU4B10208030 4LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P251817

CATALOG NUMBER: LD4B10D010 EU4B10208030 4LBDW1LI

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°	118	118	118
5°	116	121	116
10°	115	127	115
15°	113	137	114
20°	108	146	115
25°	105	145	114
30°	98	135	105
35°	86	115	91
40°	74	88	82
45°	67	58	77
50°	64	32	74
55°	64	17	63
60°	62	12	58
65°	65	9	52
70°	69	7	43
75°	73	5	30
80°	71	3	19
85°	74	2	0



TEST NUMBER: P251817

CATALOG NUMBER: LD4B10D010 EU4B10208030 4LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	4.7
10°-20°	135.2	13.9
20°-30°	206.2	21.3
30°-40°	205.8	21.2
40°-50°	151.7	15.6
50°-60°	103.7	10.7
60°-70°	73.2	7.5
70°-80°	39.1	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°	386.5	39.8
0°-40°	592.3	61.1
0°-60°	847.7	87.4
0°-90°	970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	970.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	472	472	472	472	472	
5°	464	470	483	466	465	44
15°	437	470	532	470	443	123
25°	380	430	529	450	414	174
35°	283	320	377	329	300	177
45°	190	199	163	213	219	148
55°	147	142	40	132	145	131
65°	110	104	16	81	89	109
75°	76	62	5	28	31	79
85°	26	17	1	4	0	29
90°	0	0	0	0	0	



TEST NUMBER: P251817

CATALOG NUMBER: LD4B10D010 EU4B10208030 4LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	471.7	471.7	471.7	471.7	471.7	471.7	471.7	471.7	471.7
2.5°	466.7	469.6	470.3	475.2	478.7	474.5	467.4	467.4	468.1
5°	463.9	467.4	470.3	478.7	482.9	475.9	466.0	464.6	465.3
7.5°	461.8	466.7	473.1	485.7	489.9	480.8	467.4	461.8	460.4
10°	456.2	463.2	475.2	493.4	501.8	490.6	469.6	459.0	455.5
12.5°	448.5	456.9	473.1	501.8	516.5	499.7	469.6	454.1	448.5
15°	437.3	446.4	469.6	508.8	531.9	509.5	470.3	449.2	442.9
17.5°	422.6	433.8	461.8	512.3	544.5	518.6	469.6	445.7	438.7
20°	407.9	421.2	452.7	512.3	550.1	522.1	467.4	442.2	433.8
22.5°	395.3	408.6	442.2	506.0	544.5	517.9	461.1	435.9	426.1
25°	380.5	394.6	429.6	492.7	529.1	505.3	449.9	423.3	414.2
27.5°	363.7	379.1	412.1	471.7	502.5	482.2	428.9	403.0	393.2
30°	341.3	355.3	386.2	441.5	470.3	450.6	400.9	374.2	365.1
32.5°	314.0	326.6	355.3	405.1	426.8	410.7	364.4	342.0	331.5
35°	283.1	294.3	319.6	358.8	377.0	367.2	328.7	307.7	300.0
37.5°	254.4	262.8	283.8	312.6	323.8	317.5	293.6	278.2	271.9
40°	227.1	235.5	252.3	266.3	269.1	271.2	264.2	254.4	250.9
42.5°	206.0	213.8	224.3	222.9	214.5	226.4	237.6	236.2	233.4
45°	189.9	195.5	199.0	178.0	163.3	182.9	213.0	220.8	219.4
47.5°	176.6	179.4	177.3	142.3	115.6	142.3	191.3	206.7	206.7
50°	165.4	167.5	161.9	118.4	83.4	114.2	172.4	189.2	192.0
52.5°	157.7	158.4	151.4	100.2	57.5	90.4	152.1	166.8	168.9
55°	147.2	147.9	141.6	86.9	39.9	71.5	131.8	145.1	145.1
57.5°	135.3	136.7	130.4	75.7	28.0	59.6	116.3	129.0	129.7
60°	124.0	124.7	120.5	67.3	23.1	51.2	105.1	115.6	115.6
62.5°	116.3	117.0	112.1	62.4	19.6	44.9	93.2	103.0	103.7
65°	110.0	110.0	104.4	57.5	16.1	37.8	80.6	89.0	89.0
67.5°	103.0	101.6	96.0	51.2	12.6	30.8	68.0	74.3	73.6
70°	95.3	93.2	86.2	44.2	9.1	24.5	53.3	58.2	58.9
72.5°	86.2	83.4	74.3	36.4	7.0	18.2	39.2	43.5	43.5
75°	75.7	72.2	61.7	28.7	4.9	12.6	28.0	30.8	30.8
77.5°	63.1	59.6	49.1	21.0	3.5	8.4	18.9	21.0	21.0
80°	49.8	46.3	36.4	14.7	2.1	4.9	11.9	14.0	13.3
82.5°	37.1	33.6	24.5	9.1	1.4	2.8	7.7	7.7	7.0
85°	25.9	23.8	16.8	5.6	0.7	1.4	3.5	1.4	0.0
87.5°	17.5	15.4	10.5	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)