

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: P251816

Luminaire Tested: **LD4B10D010 EU4B10208027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251816
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 EU4B10208027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 928.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

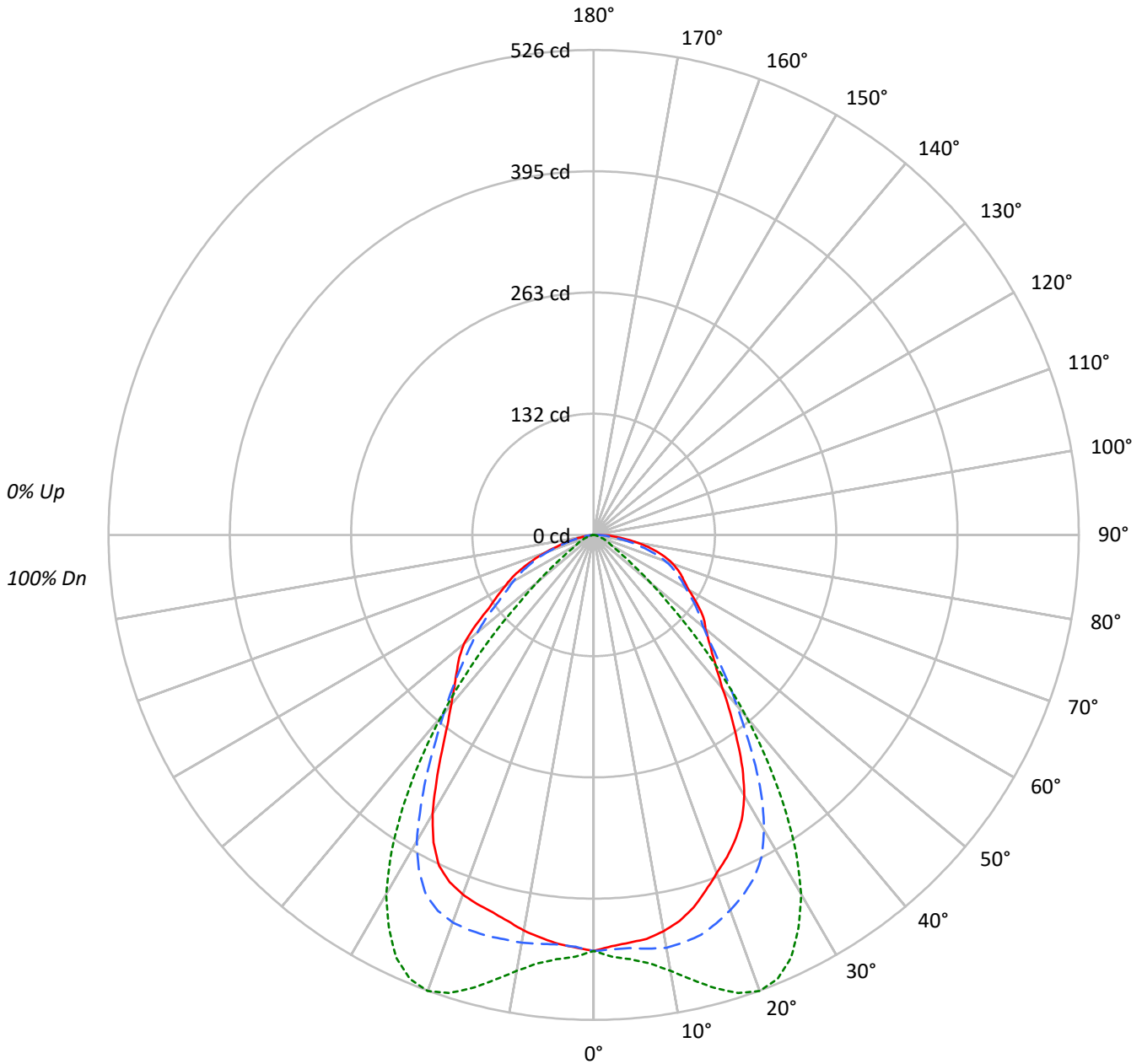
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251816

CATALOG NUMBER: LD4B10D010 EU4B10208027 4LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P251816

CATALOG NUMBER: LD4B10D010 EU4B10208027 4LBDW1LI

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°	112	112	112
5°	111	116	111
10°	110	121	110
15°	108	131	109
20°	103	140	110
25°	100	139	109
30°	94	129	100
35°	82	110	87
40°	71	84	78
45°	64	55	74
50°	61	31	71
55°	61	17	60
60°	59	11	55
65°	62	9	50
70°	66	6	41
75°	70	5	28
80°	68	3	18
85°	71	2	0



TEST NUMBER: P251816

CATALOG NUMBER: LD4B10D010 EU4B10208027 4LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	4.7
10°-20°	129.3	13.9
20°-30°	197.2	21.3
30°-40°	196.9	21.2
40°-50°	145.2	15.6
50°-60°	99.2	10.7
60°-70°	70.0	7.5
70°-80°	37.4	4.0
80°-90°	9.6	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°	369.8	39.8
0°-40°	566.6	61.1
0°-60°	811.0	87.4
0°-90°	928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	928.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	451	451	451	451	451	
5°	444	450	462	446	445	42
15°	418	449	509	450	424	117
25°	364	411	506	430	396	167
35°	271	306	361	314	287	169
45°	182	190	156	204	210	142
55°	141	135	38	126	139	125
65°	105	100	15	77	85	104
75°	72	59	5	27	30	75
85°	25	16	1	3	0	27
90°	0	0	0	0	0	



TEST NUMBER: P251816

CATALOG NUMBER: LD4B10D010 EU4B10208027 4LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2	451.2
2.5°	446.5	449.2	449.9	454.6	457.9	453.9	447.2	447.2	447.9
5°	443.9	447.2	449.9	457.9	462.0	455.3	445.9	444.5	445.2
7.5°	441.8	446.5	452.6	464.6	468.7	459.9	447.2	441.8	440.5
10°	436.5	443.2	454.6	472.0	480.1	469.3	449.2	439.2	435.8
12.5°	429.1	437.2	452.6	480.1	494.1	478.0	449.2	434.5	429.1
15°	418.4	427.1	449.2	486.8	508.9	487.4	449.9	429.8	423.7
17.5°	404.3	415.0	441.8	490.1	521.0	496.2	449.2	426.4	419.7
20°	390.2	403.0	433.1	490.1	526.3	499.5	447.2	423.1	415.0
22.5°	378.1	390.9	423.1	484.1	521.0	495.5	441.2	417.0	407.6
25°	364.1	377.5	411.0	471.3	506.2	483.4	430.4	405.0	396.3
27.5°	348.0	362.7	394.2	451.2	480.7	461.3	410.3	385.5	376.1
30°	326.5	339.9	369.4	422.4	449.9	431.1	383.5	358.0	349.3
32.5°	300.4	312.4	339.9	387.5	408.3	392.9	348.6	327.2	317.1
35°	270.9	281.6	305.7	343.3	360.7	351.3	314.5	294.3	287.0
37.5°	243.4	251.4	271.5	299.0	309.8	303.7	280.9	266.2	260.1
40°	217.2	225.3	241.4	254.8	257.5	259.5	252.8	243.4	240.0
42.5°	197.1	204.5	214.6	213.2	205.2	216.6	227.3	226.0	223.3
45°	181.7	187.1	190.4	170.3	156.2	175.0	203.8	211.2	209.9
47.5°	169.0	171.6	169.6	136.1	110.6	136.1	183.0	197.8	197.8
50°	158.2	160.2	154.9	113.3	79.8	109.3	164.9	181.0	183.7
52.5°	150.9	151.5	144.8	95.9	55.0	86.5	145.5	159.6	161.6
55°	140.8	141.5	135.4	83.1	38.2	68.4	126.0	138.8	138.8
57.5°	129.4	130.7	124.7	72.4	26.8	57.0	111.3	123.4	124.0
60°	118.7	119.3	115.3	64.4	22.1	48.9	100.6	110.6	110.6
62.5°	111.3	112.0	107.3	59.7	18.8	42.9	89.2	98.6	99.2
65°	105.3	105.3	99.9	55.0	15.4	36.2	77.1	85.2	85.2
67.5°	98.6	97.2	91.9	48.9	12.1	29.5	65.0	71.1	70.4
70°	91.2	89.2	82.5	42.2	8.7	23.5	51.0	55.6	56.3
72.5°	82.5	79.8	71.1	34.9	6.7	17.4	37.5	41.6	41.6
75°	72.4	69.1	59.0	27.5	4.7	12.1	26.8	29.5	29.5
77.5°	60.3	57.0	46.9	20.1	3.4	8.0	18.1	20.1	20.1
80°	47.6	44.3	34.9	14.1	2.0	4.7	11.4	13.4	12.7
82.5°	35.5	32.2	23.5	8.7	1.3	2.7	7.4	7.4	6.7
85°	24.8	22.8	16.1	5.4	0.7	1.3	3.4	1.3	0.0
87.5°	16.8	14.8	10.1	2.7	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)