

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: P251824

Luminaire Tested: **LD4B10D010 EU4B10209035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251824
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 EU4B10209035 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 840.0 lumens
Efficiency: N/A
Efficacy: 83.6 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

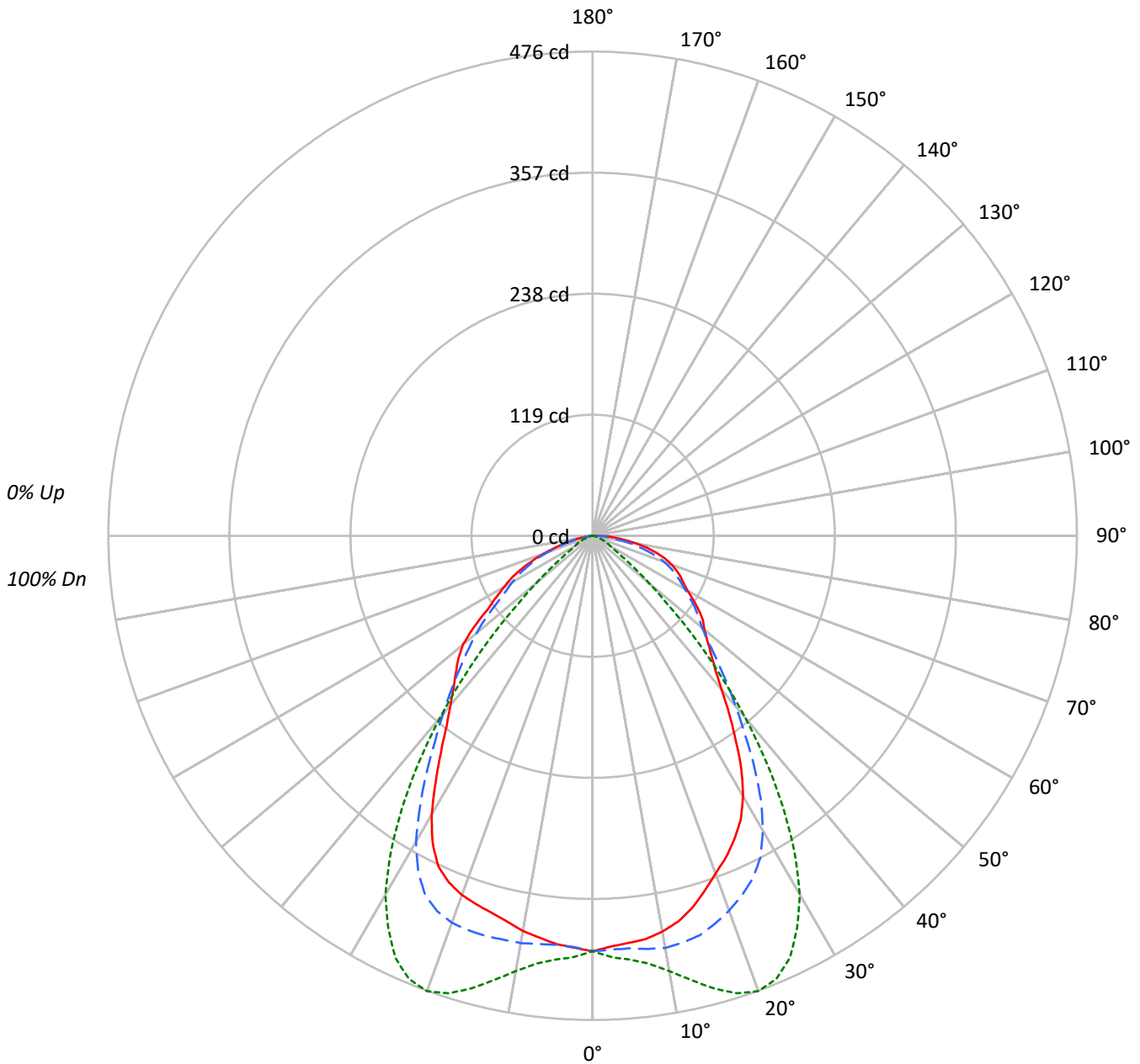
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	102	102	102
5°	100	105	101
10°	100	110	100
15°	98	119	99
20°	94	126	100
25°	91	126	99
30°	85	117	91
35°	75	99	79
40°	64	76	71
45°	58	50	67
50°	56	28	64
55°	55	15	55
60°	54	10	50
65°	56	8	45
70°	60	6	37
75°	63	4	26
80°	62	3	17
85°	64	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	4.7
10°-20°	117.1	13.9
20°-30°	178.5	21.3
30°-40°	178.2	21.2
40°-50°	131.4	15.6
50°-60°	89.8	10.7
60°-70°	63.4	7.5
70°-80°	33.8	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°	334.7	39.8
0°-40°	512.9	61.1
0°-60°	734.1	87.4
0°-90°	840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	408	408	408	408	408	
5°	402	407	418	404	403	38
15°	379	407	461	407	384	106
25°	330	372	458	390	359	151
35°	245	277	326	285	260	153
45°	164	172	141	184	190	128
55°	127	123	35	114	126	113
65°	95	90	14	70	77	94
75°	66	53	4	24	27	68
85°	22	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°	408.4	408.4	408.4	408.4	408.4	408.4	408.4	408.4	408.4
2.5°	404.2	406.6	407.2	411.5	414.5	410.9	404.8	404.8	405.4
5°	401.8	404.8	407.2	414.5	418.2	412.1	403.6	402.4	403.0
7.5°	399.9	404.2	409.7	420.6	424.2	416.3	404.8	399.9	398.7
10°	395.1	401.2	411.5	427.3	434.5	424.8	406.6	397.5	394.5
12.5°	388.4	395.7	409.7	434.5	447.3	432.7	406.6	393.3	388.4
15°	378.7	386.6	406.6	440.6	460.6	441.2	407.2	389.0	383.6
17.5°	366.0	375.7	399.9	443.6	471.6	449.1	406.6	386.0	379.9
20°	353.2	364.7	392.1	443.6	476.4	452.1	404.8	383.0	375.7
22.5°	342.3	353.8	383.0	438.2	471.6	448.5	399.3	377.5	369.0
25°	329.5	341.7	372.0	426.6	458.2	437.6	389.6	366.6	358.7
27.5°	315.0	328.3	356.9	408.4	435.1	417.5	371.4	349.0	340.5
30°	295.6	307.7	334.4	382.3	407.2	390.2	347.1	324.1	316.2
32.5°	271.9	282.8	307.7	350.8	369.6	355.6	315.6	296.2	287.1
35°	245.2	254.9	276.7	310.7	326.5	318.0	284.6	266.4	259.8
37.5°	220.3	227.6	245.8	270.7	280.4	274.9	254.3	240.9	235.5
40°	196.6	203.9	218.5	230.6	233.0	234.9	228.8	220.3	217.3
42.5°	178.4	185.1	194.2	193.0	185.7	196.0	205.7	204.5	202.1
45°	164.5	169.3	172.4	154.2	141.4	158.4	184.5	191.2	190.0
47.5°	152.9	155.4	153.5	123.2	100.1	123.2	165.7	179.0	179.0
50°	143.2	145.0	140.2	102.6	72.2	98.9	149.3	163.9	166.3
52.5°	136.6	137.2	131.1	86.8	49.8	78.3	131.7	144.4	146.3
55°	127.4	128.1	122.6	75.3	34.6	61.9	114.1	125.6	125.6
57.5°	117.1	118.3	112.9	65.5	24.3	51.6	100.7	111.7	112.3
60°	107.4	108.0	104.4	58.3	20.0	44.3	91.0	100.1	100.1
62.5°	100.7	101.4	97.1	54.0	17.0	38.8	80.7	89.2	89.8
65°	95.3	95.3	90.4	49.8	14.0	32.8	69.8	77.1	77.1
67.5°	89.2	88.0	83.1	44.3	10.9	26.7	58.9	64.3	63.7
70°	82.5	80.7	74.6	38.2	7.9	21.2	46.1	50.4	51.0
72.5°	74.6	72.2	64.3	31.6	6.1	15.8	34.0	37.6	37.6
75°	65.5	62.5	53.4	24.9	4.2	10.9	24.3	26.7	26.7
77.5°	54.6	51.6	42.5	18.2	3.0	7.3	16.4	18.2	18.2
80°	43.1	40.1	31.6	12.7	1.8	4.2	10.3	12.1	11.5
82.5°	32.2	29.1	21.2	7.9	1.2	2.4	6.7	6.7	6.1
85°	22.5	20.6	14.6	4.9	0.6	1.2	3.0	1.2	0.0
87.5°	15.2	13.4	9.1	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)