

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: P251837

Luminaire Tested: **LD4B15D010 EU4B10209035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251837
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: LD4B15D010 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: 1170.0 lumens
Efficiency: N/A
Efficacy: 81.3 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

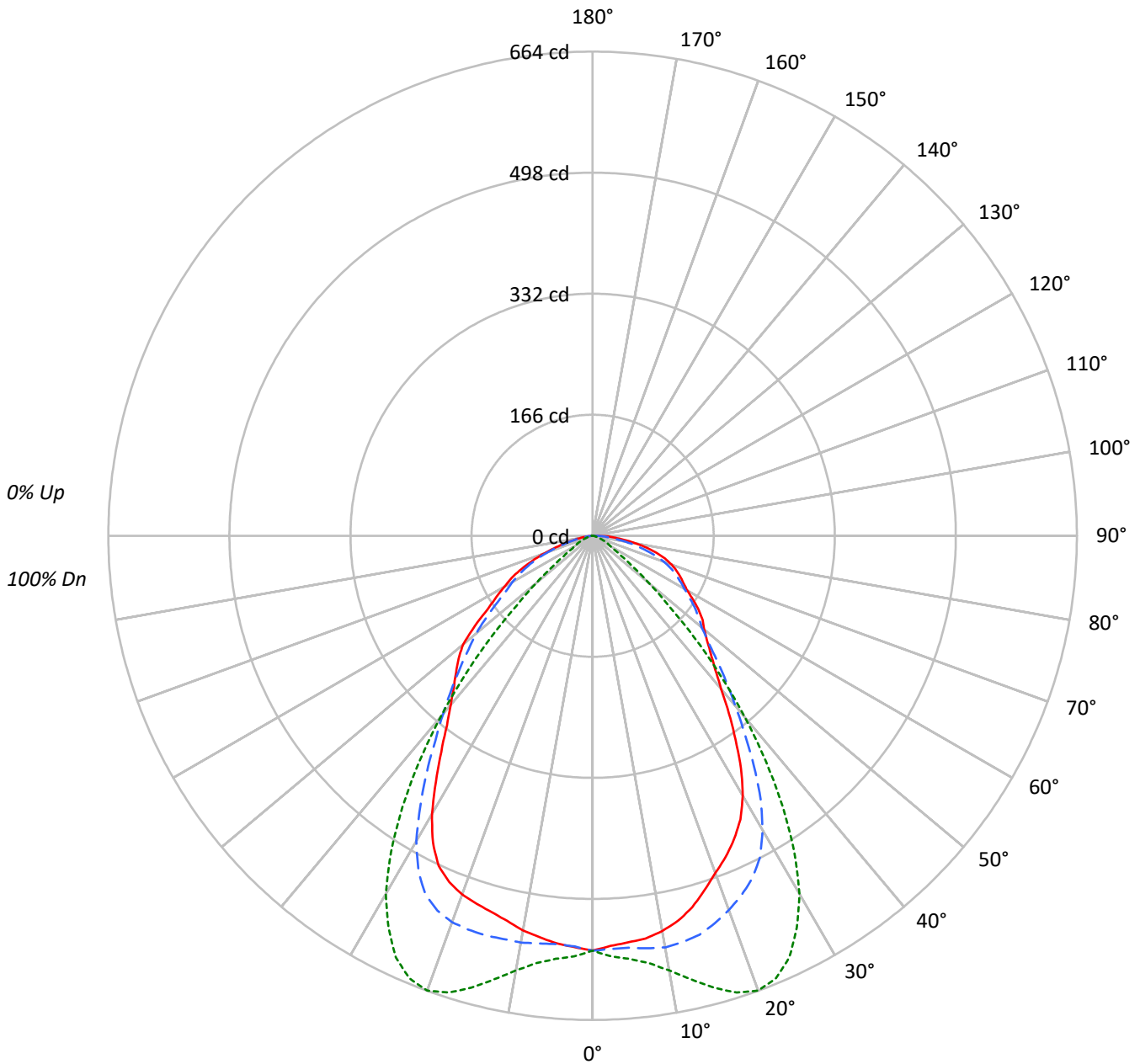
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	142	142	142
5°	140	146	140
10°	139	153	139
15°	136	165	138
20°	130	176	139
25°	126	175	137
30°	118	163	127
35°	104	138	110
40°	89	106	98
45°	81	69	93
50°	77	39	90
55°	77	21	76
60°	75	14	70
65°	78	11	63
70°	84	8	52
75°	88	6	36
80°	86	4	23
85°	89	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	4.7
10°-20°	163.0	13.9
20°-30°	248.7	21.3
30°-40°	248.2	21.2
40°-50°	183.0	15.6
50°-60°	125.0	10.7
60°-70°	88.3	7.5
70°-80°	47.2	4.0
80°-90°	12.1	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°	466.2	39.8
0°-40°	714.4	61.1
0°-60°	1022.5	87.4
0°-90°	1170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1170.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	569	569	569	569	569	
5°	560	567	582	562	561	53
15°	528	566	642	567	534	148
25°	459	518	638	543	500	210
35°	342	386	455	396	362	213
45°	229	240	197	257	265	179
55°	178	171	48	159	175	158
65°	133	126	19	97	107	131
75°	91	74	6	34	37	95
85°	31	20	1	4	0	35
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°	568.9	568.9	568.9	568.9	568.9	568.9	568.9	568.9	568.9
2.5°	563.0	566.4	567.2	573.1	577.4	572.3	563.8	563.8	564.7
5°	559.6	563.8	567.2	577.4	582.4	574.0	562.1	560.4	561.3
7.5°	557.1	563.0	570.6	585.8	590.9	579.9	563.8	557.1	555.4
10°	550.3	558.8	573.1	595.1	605.2	591.7	566.4	553.7	549.5
12.5°	541.0	551.1	570.6	605.2	623.0	602.7	566.4	547.8	541.0
15°	527.5	538.5	566.4	613.7	641.6	614.5	567.2	541.9	534.2
17.5°	509.7	523.3	557.1	617.9	656.8	625.5	566.4	537.6	529.2
20°	492.0	508.0	546.1	617.9	663.6	629.8	563.8	533.4	523.3
22.5°	476.8	492.8	533.4	610.3	656.8	624.7	556.2	525.8	514.0
25°	459.0	475.9	518.2	594.3	638.2	609.5	542.7	510.6	499.6
27.5°	438.7	457.3	497.0	568.9	606.1	581.6	517.3	486.1	474.2
30°	411.7	428.6	465.8	532.6	567.2	543.5	483.5	451.4	440.4
32.5°	378.7	393.9	428.6	488.6	514.8	495.4	439.6	412.5	399.8
35°	341.5	355.0	385.5	432.8	454.8	442.9	396.5	371.1	361.8
37.5°	306.9	317.0	342.4	377.0	390.5	382.9	354.2	335.6	328.0
40°	273.9	284.0	304.3	321.2	324.6	327.1	318.7	306.9	302.6
42.5°	248.5	257.8	270.5	268.8	258.7	273.0	286.6	284.9	281.5
45°	229.1	235.8	240.1	214.7	197.0	220.6	257.0	266.3	264.6
47.5°	213.0	216.4	213.9	171.6	139.5	171.6	230.8	249.4	249.4
50°	199.5	202.0	195.3	142.9	100.6	137.8	207.9	228.2	231.6
52.5°	190.2	191.0	182.6	120.9	69.3	109.0	183.4	201.2	203.7
55°	177.5	178.4	170.8	104.8	48.2	86.2	158.9	175.0	175.0
57.5°	163.1	164.8	157.2	91.3	33.8	71.9	140.3	155.5	156.4
60°	149.6	150.5	145.4	81.2	27.9	61.7	126.8	139.5	139.5
62.5°	140.3	141.2	135.3	75.2	23.7	54.1	112.4	124.3	125.1
65°	132.7	132.7	126.0	69.3	19.4	45.6	97.2	107.4	107.4
67.5°	124.3	122.6	115.8	61.7	15.2	37.2	82.0	89.6	88.8
70°	115.0	112.4	104.0	53.3	11.0	29.6	64.2	70.2	71.0
72.5°	104.0	100.6	89.6	44.0	8.5	22.0	47.3	52.4	52.4
75°	91.3	87.1	74.4	34.7	5.9	15.2	33.8	37.2	37.2
77.5°	76.1	71.9	59.2	25.4	4.2	10.1	22.8	25.4	25.4
80°	60.0	55.8	44.0	17.8	2.5	5.9	14.4	16.9	16.1
82.5°	44.8	40.6	29.6	11.0	1.7	3.4	9.3	9.3	8.5
85°	31.3	28.7	20.3	6.8	0.8	1.7	4.2	1.7	0.0
87.5°	21.1	18.6	12.7	3.4	0.0	0.8	0.8	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)