

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: P251839

Luminaire Tested: **LD4B15D010 EU4B10209050 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251839
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 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: 1176.0 lumens
Efficiency: N/A
Efficacy: 81.7 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

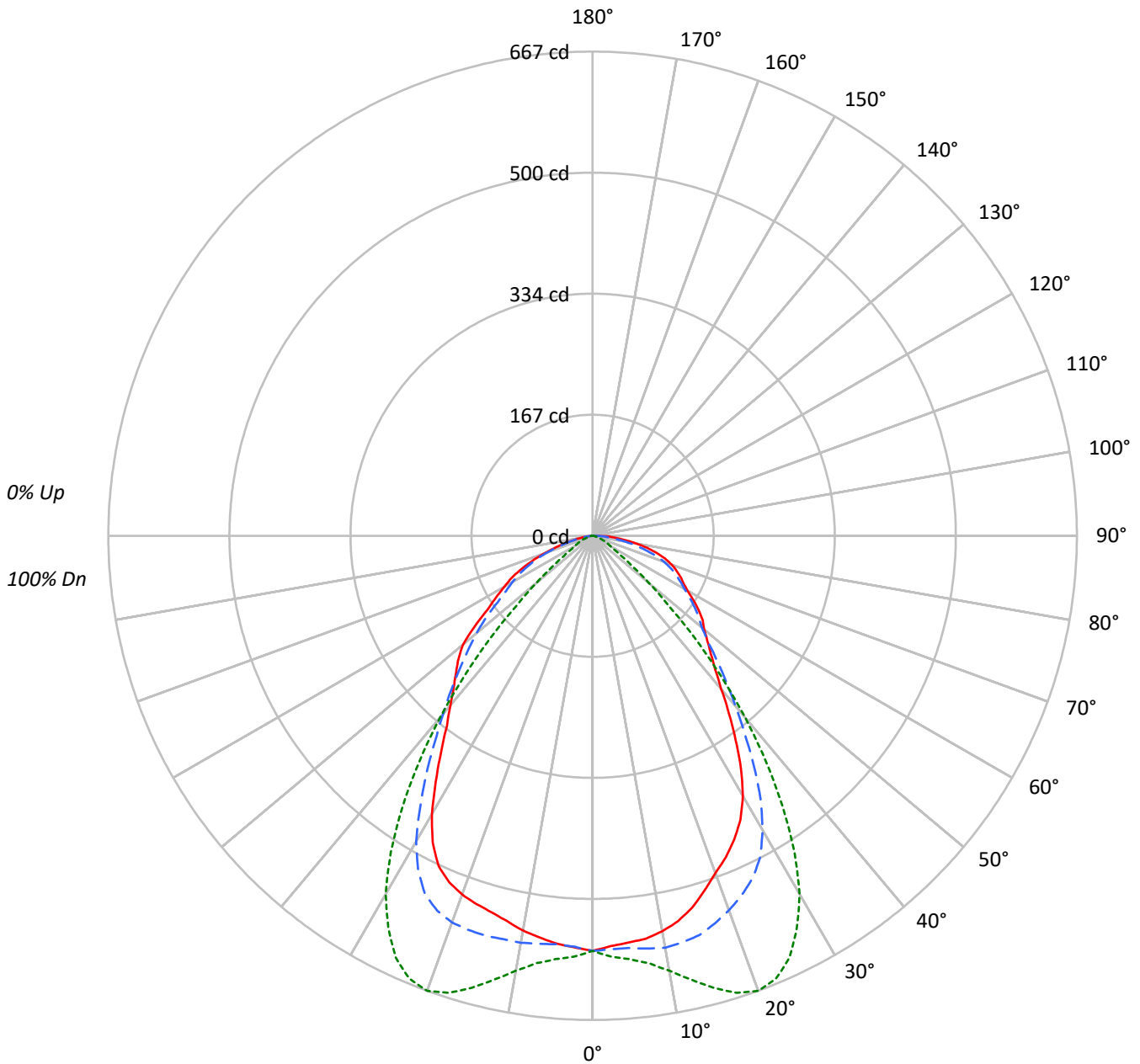
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	141	146	141
10°	140	154	140
15°	137	166	139
20°	131	177	139
25°	127	176	138
30°	119	164	127
35°	104	139	111
40°	90	106	99
45°	81	70	94
50°	78	39	90
55°	77	21	76
60°	75	14	70
65°	79	11	64
70°	84	8	52
75°	88	6	36
80°	87	4	23
85°	90	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	4.7
10°-20°	163.9	13.9
20°-30°	250.0	21.3
30°-40°	249.5	21.2
40°-50°	184.0	15.6
50°-60°	125.7	10.7
60°-70°	88.7	7.5
70°-80°	47.4	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°	468.6	39.8
0°-40°	718.1	61.1
0°-60°	1027.7	87.4
0°-90°	1176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	572	572	572	572	572	
5°	562	570	585	565	564	53
15°	530	569	645	570	537	149
25°	461	521	642	546	502	211
35°	343	387	457	398	364	215
45°	230	241	198	258	266	180
55°	178	172	48	160	176	159
65°	133	127	20	98	108	132
75°	92	75	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°	571.8	571.8	571.8	571.8	571.8	571.8	571.8	571.8	571.8
2.5°	565.9	569.3	570.1	576.1	580.3	575.2	566.7	566.7	567.6
5°	562.5	566.7	570.1	580.3	585.4	576.9	565.0	563.3	564.2
7.5°	559.9	565.9	573.5	588.8	593.9	582.9	566.7	559.9	558.2
10°	553.1	561.6	576.1	598.2	608.4	594.8	569.3	556.5	552.3
12.5°	543.8	554.0	573.5	608.4	626.2	605.8	569.3	550.6	543.8
15°	530.2	541.2	569.3	616.9	644.9	617.7	570.1	544.6	537.0
17.5°	512.3	525.9	559.9	621.1	660.2	628.7	569.3	540.4	531.9
20°	494.5	510.6	548.9	621.1	667.0	633.0	566.7	536.1	525.9
22.5°	479.2	495.3	536.1	613.5	660.2	627.9	559.1	528.5	516.6
25°	461.4	478.4	520.8	597.3	641.5	612.6	545.5	513.2	502.1
27.5°	441.0	459.7	499.6	571.8	609.2	584.6	520.0	488.6	476.7
30°	413.8	430.8	468.2	535.3	570.1	546.3	486.0	453.7	442.7
32.5°	380.6	395.9	430.8	491.1	517.4	497.9	441.8	414.6	401.9
35°	343.3	356.9	387.4	435.0	457.1	445.2	398.5	373.0	363.7
37.5°	308.4	318.6	344.1	378.9	392.5	384.9	356.0	337.3	329.7
40°	275.3	285.5	305.9	322.9	326.3	328.8	320.3	308.4	304.2
42.5°	249.8	259.1	271.9	270.2	260.0	274.4	288.0	286.3	282.9
45°	230.3	237.1	241.3	215.8	198.0	221.8	258.3	267.6	265.9
47.5°	214.1	217.5	215.0	172.5	140.2	172.5	232.0	250.6	250.6
50°	200.5	203.1	196.3	143.6	101.1	138.5	209.0	229.4	232.8
52.5°	191.2	192.0	183.5	121.5	69.7	109.6	184.4	202.2	204.8
55°	178.4	179.3	171.6	105.4	48.4	86.7	159.7	175.9	175.9
57.5°	164.0	165.7	158.0	91.8	34.0	72.2	141.0	156.3	157.2
60°	150.4	151.2	146.1	81.6	28.0	62.0	127.4	140.2	140.2
62.5°	141.0	141.9	135.9	75.6	23.8	54.4	113.0	124.9	125.7
65°	133.4	133.4	126.6	69.7	19.5	45.9	97.7	107.9	107.9
67.5°	124.9	123.2	116.4	62.0	15.3	37.4	82.4	90.1	89.2
70°	115.6	113.0	104.5	53.5	11.0	29.7	64.6	70.5	71.4
72.5°	104.5	101.1	90.1	44.2	8.5	22.1	47.6	52.7	52.7
75°	91.8	87.5	74.8	34.8	5.9	15.3	34.0	37.4	37.4
77.5°	76.5	72.2	59.5	25.5	4.2	10.2	22.9	25.5	25.5
80°	60.3	56.1	44.2	17.8	2.5	5.9	14.4	17.0	16.1
82.5°	45.0	40.8	29.7	11.0	1.7	3.4	9.3	9.3	8.5
85°	31.4	28.9	20.4	6.8	0.8	1.7	4.2	1.7	0.0
87.5°	21.2	18.7	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)