

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: P251868

Luminaire Tested: **LD4B40D010 EU4B30508027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251868
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: LD4B40D010 EU4B30508027 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: 3531.0 lumens
Efficiency: N/A
Efficacy: 82.1 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

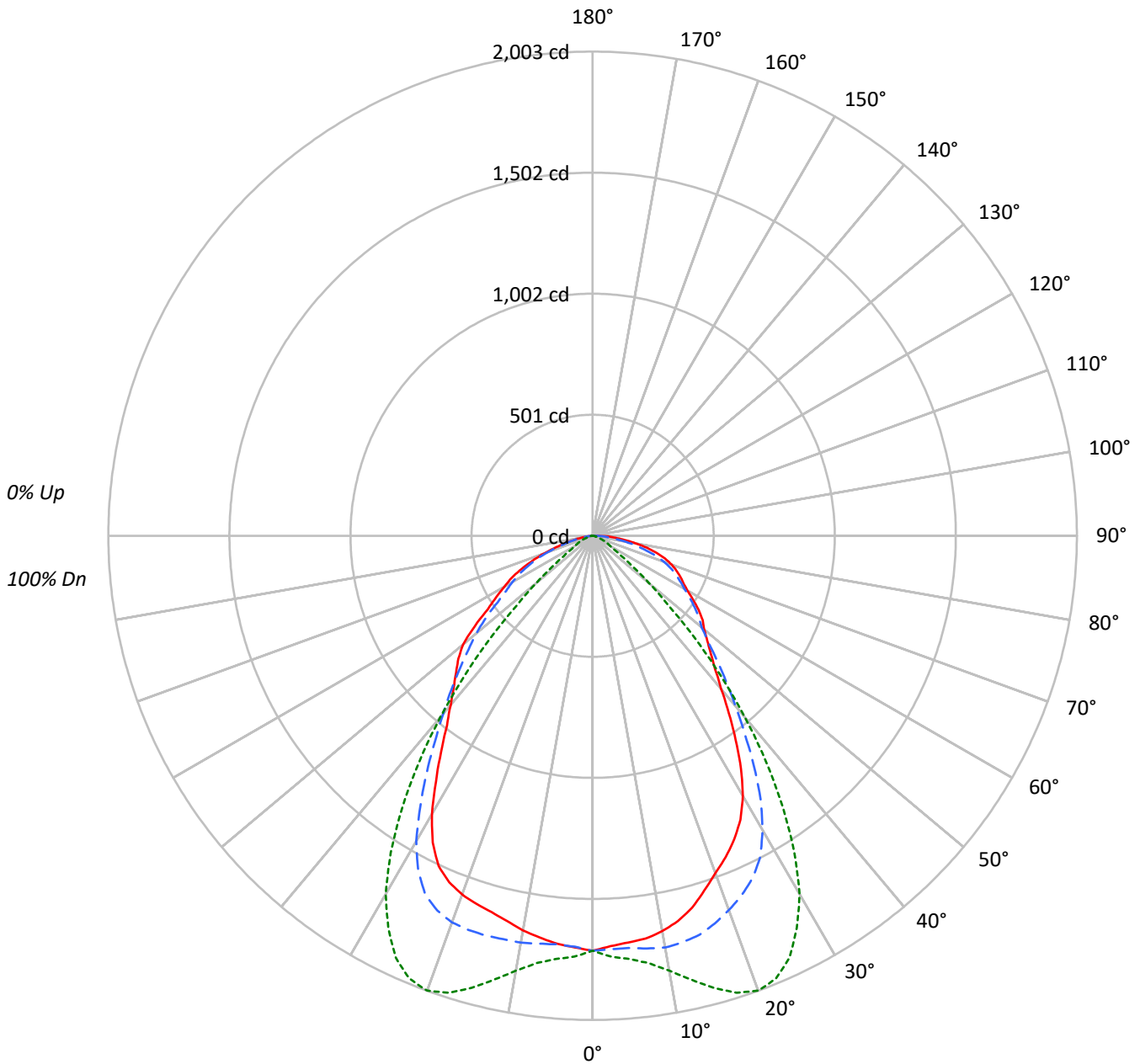
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	428	428	428
5°	422	440	424
10°	420	462	420
15°	411	499	416
20°	394	531	419
25°	381	529	414
30°	357	492	382
35°	313	417	332
40°	269	319	297
45°	244	209	281
50°	233	118	271
55°	233	63	229
60°	225	42	210
65°	236	35	191
70°	253	24	156
75°	265	17	108
80°	260	11	70
85°	270	7	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.4	4.7
10°-20°	492.0	13.9
20°-30°	750.5	21.3
30°-40°	749.1	21.2
40°-50°	552.4	15.6
50°-60°	377.4	10.7
60°-70°	266.4	7.5
70°-80°	142.3	4.0
80°-90°	36.5	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°	1406.9	39.8
0°-40°	2156.0	61.1
0°-60°	3085.7	87.4
0°-90°	3531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3531.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1717	1717	1717	1717	1717	
5°	1689	1712	1758	1696	1694	161
15°	1592	1709	1936	1712	1612	446
25°	1385	1564	1926	1638	1508	635
35°	1031	1163	1372	1196	1092	644
45°	691	724	594	776	798	540
55°	536	515	145	480	528	476
65°	400	380	59	293	324	396
75°	276	224	18	102	112	286
85°	94	61	3	13	0	105
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°	1716.9	1716.9	1716.9	1716.9	1716.9	1716.9	1716.9	1716.9	1716.9
2.5°	1699.1	1709.3	1711.8	1729.7	1742.4	1727.1	1701.6	1701.6	1704.2
5°	1688.9	1701.6	1711.8	1742.4	1757.7	1732.2	1696.5	1691.4	1694.0
7.5°	1681.2	1699.1	1722.0	1767.9	1783.2	1750.1	1701.6	1681.2	1676.1
10°	1660.8	1686.3	1729.7	1796.0	1826.6	1785.8	1709.3	1671.0	1658.2
12.5°	1632.7	1663.3	1722.0	1826.6	1880.2	1819.0	1709.3	1653.1	1632.7
15°	1591.9	1625.1	1709.3	1852.1	1936.3	1854.7	1711.8	1635.3	1612.3
17.5°	1538.3	1579.2	1681.2	1864.9	1982.2	1887.8	1709.3	1622.5	1597.0
20°	1484.8	1533.2	1648.0	1864.9	2002.6	1900.6	1701.6	1609.8	1579.2
22.5°	1438.8	1487.3	1609.8	1841.9	1982.2	1885.3	1678.6	1586.8	1551.1
25°	1385.3	1436.3	1563.8	1793.4	1926.1	1839.4	1637.8	1540.9	1507.7
27.5°	1324.0	1380.2	1500.1	1716.9	1829.2	1755.2	1561.3	1466.9	1431.2
30°	1242.4	1293.4	1405.7	1607.2	1711.8	1640.4	1459.2	1362.3	1329.1
32.5°	1142.9	1188.8	1293.4	1474.6	1553.6	1495.0	1326.6	1245.0	1206.7
35°	1030.7	1071.5	1163.3	1306.2	1372.5	1336.8	1196.5	1119.9	1091.9
37.5°	926.1	956.7	1033.2	1137.8	1178.6	1155.7	1068.9	1012.8	989.8
40°	826.6	857.2	918.4	969.4	979.6	987.3	961.8	926.1	913.3
42.5°	750.0	778.1	816.4	811.3	780.6	824.0	864.8	859.7	849.5
45°	691.4	711.8	724.5	648.0	594.4	665.8	775.5	803.6	798.5
47.5°	642.9	653.1	645.4	517.9	420.9	517.9	696.5	752.6	752.6
50°	602.1	609.7	589.3	431.1	303.6	415.8	627.6	688.8	699.0
52.5°	574.0	576.6	551.0	364.8	209.2	329.1	553.6	607.2	614.8
55°	535.7	538.3	515.3	316.3	145.4	260.2	479.6	528.1	528.1
57.5°	492.4	497.5	474.5	275.5	102.0	216.8	423.5	469.4	472.0
60°	451.6	454.1	438.8	244.9	84.2	186.2	382.7	420.9	420.9
62.5°	423.5	426.0	408.2	227.1	71.4	163.3	339.3	375.0	377.6
65°	400.5	400.5	380.1	209.2	58.7	137.8	293.4	324.0	324.0
67.5°	375.0	369.9	349.5	186.2	45.9	112.2	247.5	270.4	267.9
70°	347.0	339.3	313.8	160.7	33.2	89.3	193.9	211.7	214.3
72.5°	313.8	303.6	270.4	132.7	25.5	66.3	142.9	158.2	158.2
75°	275.5	262.8	224.5	104.6	17.9	45.9	102.0	112.2	112.2
77.5°	229.6	216.8	178.6	76.5	12.8	30.6	68.9	76.5	76.5
80°	181.1	168.4	132.7	53.6	7.7	17.9	43.4	51.0	48.5
82.5°	135.2	122.5	89.3	33.2	5.1	10.2	28.1	28.1	25.5
85°	94.4	86.7	61.2	20.4	2.6	5.1	12.8	5.1	0.0
87.5°	63.8	56.1	38.3	10.2	0.0	2.6	2.6	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)