

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: P251877

Luminaire Tested: **LD4B40D010 EU4B30509040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251877
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 EU4B30509040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3203.0 lumens
Efficiency: N/A
Efficacy: 74.5 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

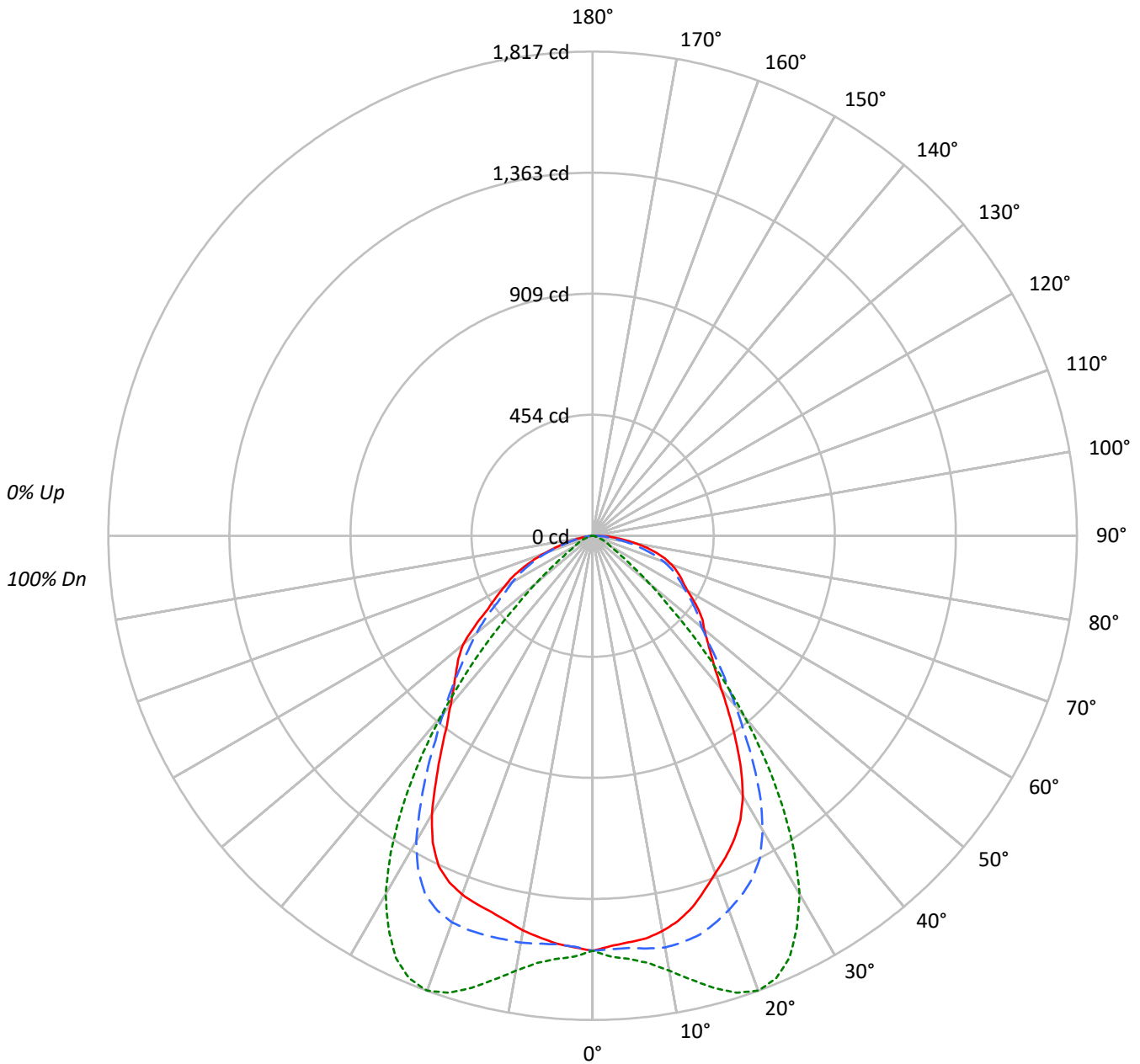
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	388	388	388
5°	383	399	384
10°	381	419	381
15°	372	453	377
20°	357	482	380
25°	345	480	376
30°	324	447	347
35°	284	379	301
40°	244	289	269
45°	221	190	255
50°	212	107	246
55°	211	57	208
60°	204	38	190
65°	214	31	173
70°	229	22	142
75°	241	16	98
80°	236	10	63
85°	245	7	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.1	4.7
10°-20°	446.3	13.9
20°-30°	680.8	21.3
30°-40°	679.5	21.2
40°-50°	501.1	15.6
50°-60°	342.3	10.7
60°-70°	241.7	7.5
70°-80°	129.1	4.0
80°-90°	33.1	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°	1276.2	39.8
0°-40°	1955.7	61.1
0°-60°	2799.1	87.4
0°-90°	3203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1557	1557	1557	1557	1557	
5°	1532	1553	1594	1539	1537	146
15°	1444	1550	1756	1553	1462	405
25°	1257	1419	1747	1486	1368	576
35°	935	1055	1245	1085	990	584
45°	627	657	539	704	724	489
55°	486	468	132	435	479	432
65°	363	345	53	266	294	359
75°	250	204	16	93	102	259
85°	86	56	2	12	0	95
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°	1557.4	1557.4	1557.4	1557.4	1557.4	1557.4	1557.4	1557.4	1557.4
2.5°	1541.2	1550.5	1552.8	1569.0	1580.6	1566.7	1543.5	1543.5	1545.9
5°	1532.0	1543.5	1552.8	1580.6	1594.5	1571.3	1538.9	1534.3	1536.6
7.5°	1525.0	1541.2	1562.1	1603.7	1617.6	1587.5	1543.5	1525.0	1520.4
10°	1506.5	1529.7	1569.0	1629.2	1656.9	1619.9	1550.5	1515.8	1504.2
12.5°	1481.1	1508.8	1562.1	1656.9	1705.5	1650.0	1550.5	1499.6	1481.1
15°	1444.0	1474.1	1550.5	1680.1	1756.4	1682.4	1552.8	1483.4	1462.5
17.5°	1395.4	1432.5	1525.0	1691.6	1798.1	1712.5	1550.5	1471.8	1448.7
20°	1346.8	1390.8	1494.9	1691.6	1816.6	1724.0	1543.5	1460.2	1432.5
22.5°	1305.2	1349.2	1460.2	1670.8	1798.1	1710.2	1522.7	1439.4	1407.0
25°	1256.6	1302.9	1418.6	1626.9	1747.2	1668.5	1485.7	1397.8	1367.7
27.5°	1201.0	1252.0	1360.7	1557.4	1659.2	1592.1	1416.3	1330.6	1298.2
30°	1127.0	1173.3	1275.1	1457.9	1552.8	1488.0	1323.7	1235.8	1205.7
32.5°	1036.7	1078.4	1173.3	1337.6	1409.3	1356.1	1203.4	1129.3	1094.6
35°	934.9	971.9	1055.3	1184.8	1245.0	1212.6	1085.3	1015.9	990.5
37.5°	840.0	867.8	937.2	1032.1	1069.1	1048.3	969.6	918.7	897.9
40°	749.8	777.6	833.1	879.4	888.6	895.6	872.4	840.0	828.5
42.5°	680.4	705.8	740.5	735.9	708.1	747.5	784.5	779.9	770.6
45°	627.1	645.6	657.2	587.8	539.2	604.0	703.5	729.0	724.3
47.5°	583.2	592.4	585.5	469.8	381.8	469.8	631.8	682.7	682.7
50°	546.1	553.1	534.6	391.1	275.4	377.2	569.3	624.8	634.1
52.5°	520.7	523.0	499.9	330.9	189.8	298.5	502.2	550.8	557.7
55°	486.0	488.3	467.5	287.0	131.9	236.0	435.1	479.0	479.0
57.5°	446.6	451.3	430.4	249.9	92.6	196.7	384.1	425.8	428.1
60°	409.6	411.9	398.0	222.2	76.4	168.9	347.1	381.8	381.8
62.5°	384.1	386.5	370.3	206.0	64.8	148.1	307.8	340.2	342.5
65°	363.3	363.3	344.8	189.8	53.2	125.0	266.1	293.9	293.9
67.5°	340.2	335.6	317.0	168.9	41.7	101.8	224.5	245.3	243.0
70°	314.7	307.8	284.6	145.8	30.1	81.0	175.9	192.1	194.4
72.5°	284.6	275.4	245.3	120.3	23.1	60.2	129.6	143.5	143.5
75°	249.9	238.4	203.6	94.9	16.2	41.7	92.6	101.8	101.8
77.5°	208.3	196.7	162.0	69.4	11.6	27.8	62.5	69.4	69.4
80°	164.3	152.7	120.3	48.6	6.9	16.2	39.3	46.3	44.0
82.5°	122.7	111.1	81.0	30.1	4.6	9.3	25.5	25.5	23.1
85°	85.6	78.7	55.5	18.5	2.3	4.6	11.6	4.6	0.0
87.5°	57.9	50.9	34.7	9.3	0.0	2.3	2.3	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)