

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: P251871

Luminaire Tested: **LD4B40D010 EU4B30508040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251871
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 EU4B30508040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3824.0 lumens
Efficiency: N/A
Efficacy: 88.9 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

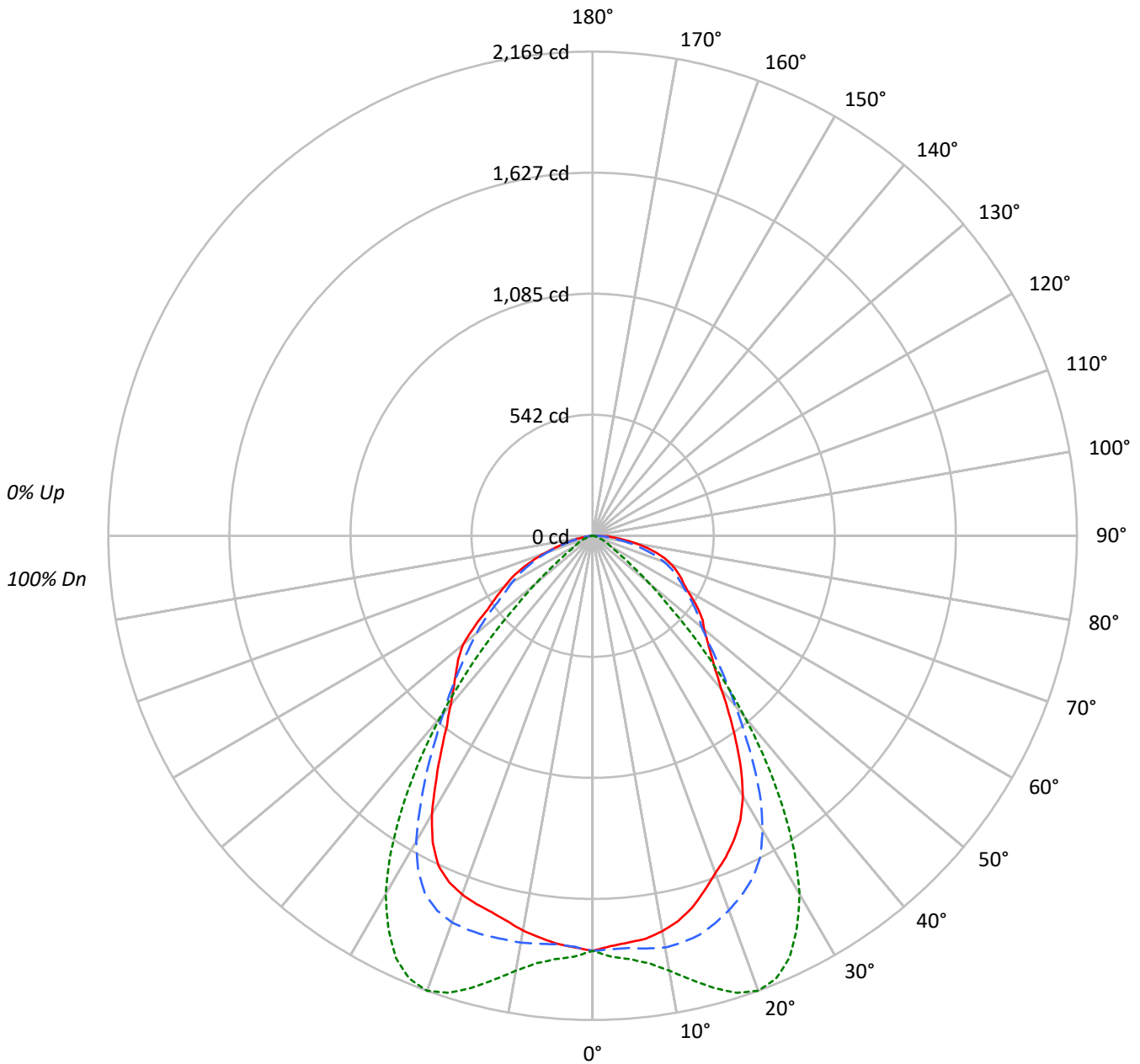
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	463	463	463
5°	457	476	459
10°	455	500	454
15°	445	541	450
20°	426	575	453
25°	412	573	449
30°	387	533	414
35°	340	452	360
40°	291	345	322
45°	264	227	305
50°	253	127	293
55°	252	68	248
60°	244	45	227
65°	256	37	207
70°	274	26	169
75°	287	19	117
80°	282	12	75
85°	292	8	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	4.7
10°-20°	532.9	13.9
20°-30°	812.7	21.3
30°-40°	811.2	21.2
40°-50°	598.2	15.6
50°-60°	408.7	10.7
60°-70°	288.5	7.5
70°-80°	154.1	4.0
80°-90°	39.6	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°	1523.7	39.8
0°-40°	2334.9	61.1
0°-60°	3341.8	87.4
0°-90°	3824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3824.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1859	1859	1859	1859	1859	
5°	1829	1854	1904	1837	1834	174
15°	1724	1851	2097	1854	1746	483
25°	1500	1694	2086	1774	1633	687
35°	1116	1260	1486	1296	1182	698
45°	749	785	644	840	865	584
55°	580	558	158	519	572	516
65°	434	412	64	318	351	429
75°	298	243	19	110	122	309
85°	102	66	3	14	0	113
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°	1859.4	1859.4	1859.4	1859.4	1859.4	1859.4	1859.4	1859.4	1859.4
2.5°	1840.0	1851.1	1853.9	1873.2	1887.0	1870.4	1842.8	1842.8	1845.6
5°	1829.0	1842.8	1853.9	1887.0	1903.6	1876.0	1837.3	1831.8	1834.5
7.5°	1820.7	1840.0	1864.9	1914.6	1931.2	1895.3	1842.8	1820.7	1815.2
10°	1798.6	1826.2	1873.2	1945.0	1978.2	1934.0	1851.1	1809.7	1795.8
12.5°	1768.2	1801.4	1864.9	1978.2	2036.2	1969.9	1851.1	1790.3	1768.2
15°	1724.0	1759.9	1851.1	2005.8	2097.0	2008.6	1853.9	1771.0	1746.1
17.5°	1666.0	1710.2	1820.7	2019.6	2146.7	2044.5	1851.1	1757.2	1729.5
20°	1608.0	1660.5	1784.8	2019.6	2168.8	2058.3	1842.8	1743.3	1710.2
22.5°	1558.2	1610.7	1743.3	1994.8	2146.7	2041.7	1817.9	1718.5	1679.8
25°	1500.2	1555.5	1693.6	1942.3	2085.9	1992.0	1773.7	1668.7	1632.8
27.5°	1433.9	1494.7	1624.5	1859.4	1980.9	1900.8	1690.8	1588.6	1549.9
30°	1345.5	1400.8	1522.3	1740.6	1853.9	1776.5	1580.3	1475.3	1439.4
32.5°	1237.7	1287.5	1400.8	1596.9	1682.6	1619.0	1436.7	1348.3	1306.8
35°	1116.2	1160.4	1259.8	1414.6	1486.4	1447.7	1295.8	1212.9	1182.5
37.5°	1002.9	1036.1	1118.9	1232.2	1276.4	1251.6	1157.6	1096.8	1072.0
40°	895.2	928.3	994.6	1049.9	1060.9	1069.2	1041.6	1002.9	989.1
42.5°	812.3	842.7	884.1	878.6	845.4	892.4	936.6	931.1	920.0
45°	748.7	770.8	784.6	701.8	643.7	721.1	839.9	870.3	864.8
47.5°	696.2	707.3	699.0	560.9	455.9	560.9	754.3	815.0	815.0
50°	652.0	660.3	638.2	466.9	328.8	450.3	679.7	746.0	757.0
52.5°	621.6	624.4	596.8	395.1	226.6	356.4	599.5	657.6	665.8
55°	580.2	583.0	558.1	342.6	157.5	281.8	519.4	571.9	571.9
57.5°	533.2	538.8	513.9	298.4	110.5	234.8	458.6	508.4	511.1
60°	489.0	491.8	475.2	265.2	91.2	201.7	414.4	455.9	455.9
62.5°	458.6	461.4	442.1	245.9	77.4	176.8	367.5	406.1	408.9
65°	433.8	433.8	411.7	226.6	63.5	149.2	317.7	350.9	350.9
67.5°	406.1	400.6	378.5	201.7	49.7	121.6	268.0	292.9	290.1
70°	375.7	367.5	339.8	174.1	35.9	96.7	210.0	229.3	232.1
72.5°	339.8	328.8	292.9	143.7	27.6	71.8	154.7	171.3	171.3
75°	298.4	284.6	243.1	113.3	19.3	49.7	110.5	121.6	121.6
77.5°	248.7	234.8	193.4	82.9	13.8	33.2	74.6	82.9	82.9
80°	196.2	182.3	143.7	58.0	8.3	19.3	47.0	55.3	52.5
82.5°	146.4	132.6	96.7	35.9	5.5	11.1	30.4	30.4	27.6
85°	102.2	93.9	66.3	22.1	2.8	5.5	13.8	5.5	0.0
87.5°	69.1	60.8	41.4	11.1	0.0	2.8	2.8	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)