

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: P251887

Luminaire Tested: **LD4B50D010TE EU4B30509027 4LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P251887  
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: LD4B50D010TE EU4B30509027 4LBDW1LI  
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

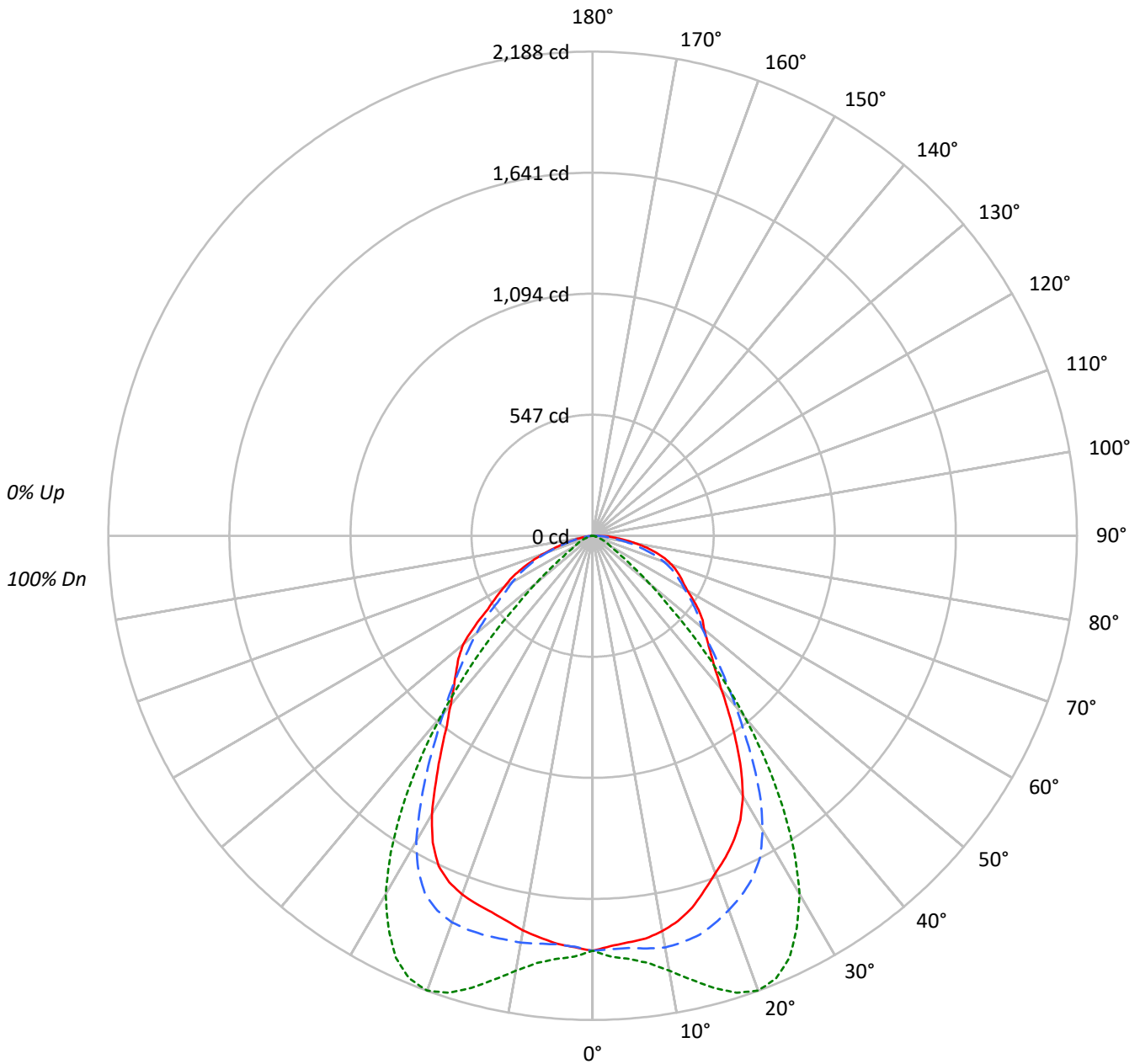
Lumens per Lamp: N/A  
Luminaire Lumens: 3857.0 lumens  
Efficiency: N/A  
Efficacy: 65.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18  
Luminous Opening: Circular (Dia: 7.42' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 58.77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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									
RC	80									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°	467	467	467
5°	461	480	463
10°	459	505	458
15°	449	546	454
20°	430	580	457
25°	416	578	453
30°	390	538	418
35°	342	456	363
40°	294	348	324
45°	266	229	307
50°	255	129	296
55°	254	69	251
60°	246	46	229
65°	258	38	209
70°	276	26	171
75°	290	19	118
80°	284	12	76
85°	295	8	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.6	4.7
10°-20°	537.5	13.9
20°-30°	819.8	21.3
30°-40°	818.2	21.2
40°-50°	603.4	15.6
50°-60°	412.2	10.7
60°-70°	291.0	7.5
70°-80°	155.4	4.0
80°-90°	39.9	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°	1536.8	39.8
0°-40°	2355.1	61.1
0°-60°	3370.6	87.4
0°-90°	3857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3857.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1875	1875	1875	1875	1875	
5°	1845	1870	1920	1853	1850	175
15°	1739	1867	2115	1870	1761	488
25°	1513	1708	2104	1789	1647	693
35°	1126	1271	1499	1307	1193	704
45°	755	791	649	847	872	589
55°	585	563	159	524	577	520
65°	438	415	64	320	354	433
75°	301	245	20	112	123	312
85°	103	67	3	14	0	114
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°	1875.4	1875.4	1875.4	1875.4	1875.4	1875.4	1875.4	1875.4	1875.4
2.5°	1855.9	1867.1	1869.9	1889.4	1903.3	1886.6	1858.7	1858.7	1861.5
5°	1844.8	1858.7	1869.9	1903.3	1920.0	1892.1	1853.1	1847.6	1850.3
7.5°	1836.4	1855.9	1881.0	1931.2	1947.9	1911.7	1858.7	1836.4	1830.8
10°	1814.1	1842.0	1889.4	1961.8	1995.3	1950.7	1867.1	1825.3	1811.3
12.5°	1783.5	1816.9	1881.0	1995.3	2053.8	1986.9	1867.1	1805.8	1783.5
15°	1738.9	1775.1	1867.1	2023.1	2115.1	2025.9	1869.9	1786.3	1761.2
17.5°	1680.4	1724.9	1836.4	2037.1	2165.2	2062.1	1867.1	1772.3	1744.5
20°	1621.8	1674.8	1800.2	2037.1	2187.5	2076.1	1858.7	1758.4	1724.9
22.5°	1571.7	1624.6	1758.4	2012.0	2165.2	2059.3	1833.6	1733.3	1694.3
25°	1513.2	1568.9	1708.2	1959.0	2103.9	2009.2	1789.0	1683.1	1646.9
27.5°	1446.3	1507.6	1638.6	1875.4	1998.0	1917.2	1705.4	1602.3	1563.3
30°	1357.1	1412.8	1535.5	1755.6	1869.9	1791.8	1594.0	1488.1	1451.9
32.5°	1248.4	1298.6	1412.8	1610.7	1697.1	1633.0	1449.1	1359.9	1318.1
35°	1125.8	1170.4	1270.7	1426.8	1499.2	1460.2	1306.9	1223.3	1192.7
37.5°	1011.6	1045.0	1128.6	1242.9	1287.4	1262.4	1167.6	1106.3	1081.2
40°	902.9	936.3	1003.2	1058.9	1070.1	1078.4	1050.6	1011.6	997.6
42.5°	819.3	849.9	891.7	886.2	852.7	900.1	944.7	939.1	928.0
45°	755.2	777.5	791.4	707.8	649.3	727.3	847.1	877.8	872.2
47.5°	702.2	713.4	705.0	565.7	459.8	565.7	760.8	822.1	822.1
50°	657.7	666.0	643.7	470.9	331.6	454.2	685.5	752.4	763.5
52.5°	627.0	629.8	601.9	398.5	228.5	359.5	604.7	663.2	671.6
55°	585.2	588.0	562.9	345.5	158.8	284.2	523.9	576.8	576.8
57.5°	537.8	543.4	518.3	301.0	111.5	236.9	462.6	512.7	515.5
60°	493.2	496.0	479.3	267.5	92.0	203.4	418.0	459.8	459.8
62.5°	462.6	465.4	445.9	248.0	78.0	178.3	370.6	409.6	412.4
65°	437.5	437.5	415.2	228.5	64.1	150.5	320.5	353.9	353.9
67.5°	409.6	404.1	381.8	203.4	50.2	122.6	270.3	295.4	292.6
70°	379.0	370.6	342.8	175.6	36.2	97.5	211.8	231.3	234.1
72.5°	342.8	331.6	295.4	144.9	27.9	72.5	156.1	172.8	172.8
75°	301.0	287.0	245.2	114.3	19.5	50.2	111.5	122.6	122.6
77.5°	250.8	236.9	195.1	83.6	13.9	33.4	75.2	83.6	83.6
80°	197.9	183.9	144.9	58.5	8.4	19.5	47.4	55.7	52.9
82.5°	147.7	133.8	97.5	36.2	5.6	11.1	30.7	30.7	27.9
85°	103.1	94.7	66.9	22.3	2.8	5.6	13.9	5.6	0.0
87.5°	69.7	61.3	41.8	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)