

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: P209335

Luminaire Tested: **LDSQ6B20D010 EU6B10209027 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35360)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B20D010 EU6B10209027 6LBSQ1LI
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW
IRIDESCENT TRIM.
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
WATTAGE D010TR-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W
DL3-21.8 6 W DLE-22.46 W
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1658.6 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

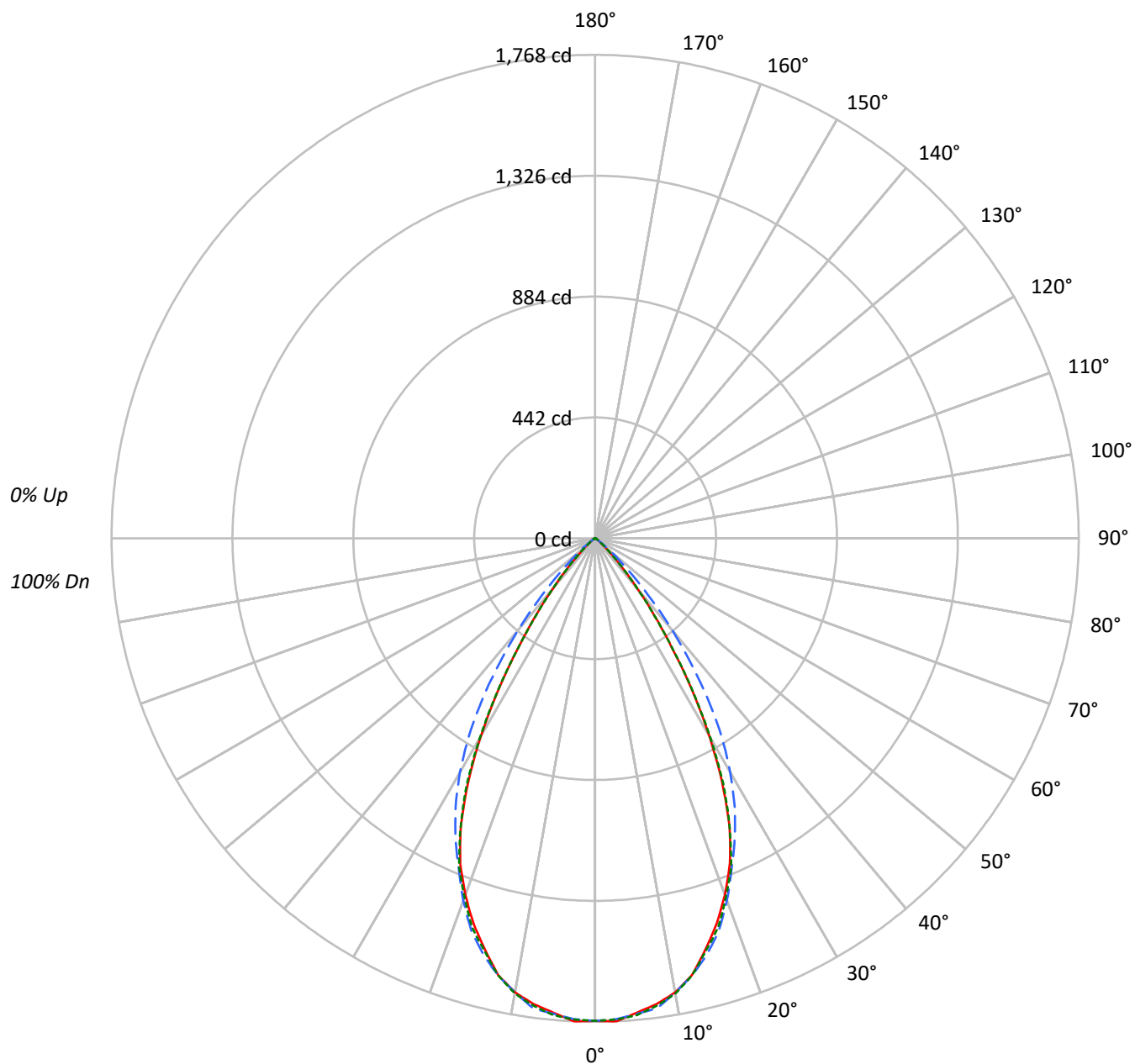
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20							
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						
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93						
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87						
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80						
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75						
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69						
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65						
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60						
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56						
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53						
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50						

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.2	10.0
10°-20°	439.5	26.5
20°-30°	539.4	32.5
30°-40°	372.4	22.5
40°-50°	116.4	7.0
50°-60°	18.2	1.1
60°-70°	5.3	0.3
70°-80°	1.7	0.1
80°-90°	0.4	0.0
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°	1144.2	69.0
0°-40°	1516.6	91.4
0°-60°	1651.2	99.6
0°-90°	1658.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1658.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1742	1748	1746	1747	1750	165
15°	1557	1579	1577	1575	1563	435
25°	1162	1192	1208	1200	1163	521
35°	490	580	720	586	493	313
45°	92	126	202	125	94	83
55°	16	17	19	17	14	15
65°	4	6	4	6	4	5
75°	1	1	1	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0
2.5°	1768.3	1743.9	1759.4	1756.1	1765.0	1770.5	1765.0	1775.0	1768.3	1760.5	1762.8
5°	1741.6	1745.0	1743.9	1746.1	1748.3	1748.3	1759.4	1760.5	1762.8	1746.1	1750.5
7.5°	1718.3	1718.3	1723.8	1721.6	1729.4	1727.2	1728.3	1737.2	1738.3	1733.8	1730.5
10°	1686.0	1681.6	1676.0	1676.0	1686.0	1687.1	1696.0	1697.1	1703.8	1686.0	1688.2
12.5°	1636.0	1633.8	1624.9	1629.3	1637.1	1632.6	1647.1	1648.2	1646.0	1638.2	1642.6
15°	1557.0	1565.9	1563.7	1562.6	1580.4	1578.1	1577.0	1580.4	1581.5	1577.0	1573.7
17.5°	1478.0	1485.8	1486.9	1489.2	1492.5	1495.8	1500.3	1512.5	1508.1	1504.7	1515.9
20°	1386.9	1383.5	1392.4	1401.3	1404.6	1404.6	1411.3	1420.2	1413.5	1409.1	1410.2
22.5°	1287.9	1293.4	1289.0	1297.9	1302.3	1307.9	1314.6	1322.3	1316.8	1304.6	1319.0
25°	1162.2	1165.5	1180.0	1178.9	1185.6	1198.9	1208.9	1208.9	1208.9	1207.8	1207.8
27.5°	1004.3	1002.0	1019.8	1032.1	1048.8	1069.9	1083.2	1104.4	1107.7	1104.4	1096.6
30°	835.2	833.0	855.2	870.8	900.8	910.9	947.6	967.6	988.7	987.6	982.0
32.5°	659.5	664.0	681.7	704.0	728.5	759.6	794.1	838.6	857.5	861.9	851.9
35°	490.5	497.1	513.8	532.7	562.7	597.2	645.0	687.3	719.6	719.6	711.8
37.5°	353.7	355.9	371.5	383.7	414.8	446.0	487.1	545.0	565.0	572.8	565.0
40°	241.3	241.3	250.2	263.6	289.2	315.9	353.7	397.0	426.0	438.2	424.8
42.5°	153.5	155.7	162.4	171.3	190.2	213.5	242.4	274.7	295.8	304.7	292.5
45°	92.3	94.5	100.1	106.8	119.0	133.5	153.5	176.8	194.6	202.4	196.9
47.5°	55.6	57.8	60.1	64.5	73.4	83.4	93.4	106.8	117.9	119.0	116.8
50°	32.3	32.3	34.5	37.8	42.3	47.8	53.4	61.2	64.5	69.0	64.5
52.5°	21.1	21.1	21.1	22.2	24.5	26.7	28.9	33.4	35.6	35.6	34.5
55°	15.6	15.6	15.6	15.6	16.7	16.7	16.7	17.8	18.9	18.9	18.9
57.5°	11.1	11.1	11.1	12.2	12.2	12.2	11.1	11.1	11.1	11.1	11.1
60°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.8	7.8	7.8
62.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
65°	4.4	4.4	4.4	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4
67.5°	3.3	3.3	3.3	4.4	4.4	4.4	4.4	4.4	3.3	3.3	3.3
70°	2.2	2.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0	1765.0
2.5°	1769.4	1763.9	1763.9	1763.9	1761.6	1763.9	1767.2	1761.6
5°	1750.5	1752.8	1742.7	1750.5	1753.9	1748.3	1761.6	1750.5
7.5°	1733.8	1730.5	1714.9	1726.1	1732.7	1735.0	1733.8	1724.9
10°	1700.5	1692.7	1686.0	1686.0	1683.8	1682.7	1694.9	1690.5
12.5°	1640.4	1646.0	1636.0	1641.5	1637.1	1638.2	1639.3	1637.1
15°	1589.3	1583.7	1570.4	1579.3	1573.7	1568.1	1579.3	1562.6
17.5°	1509.2	1508.1	1500.3	1494.7	1497.0	1495.8	1501.4	1493.6
20°	1414.7	1416.9	1412.4	1410.2	1406.9	1399.1	1405.8	1396.9
22.5°	1312.3	1314.6	1319.0	1310.1	1311.2	1300.1	1310.1	1300.1
25°	1208.9	1207.8	1202.2	1197.8	1185.6	1173.3	1171.1	1163.3
27.5°	1095.5	1087.7	1074.3	1059.9	1041.0	1024.3	1023.2	1017.6
30°	970.9	954.2	929.8	906.4	877.5	851.9	851.9	843.0
32.5°	839.7	801.9	768.5	739.6	701.8	687.3	672.9	665.1
35°	682.9	649.5	609.5	561.6	543.8	508.3	510.5	492.7
37.5°	534.9	493.8	456.0	417.1	385.9	369.2	360.3	351.4
40°	397.0	357.0	315.9	290.3	262.5	248.0	242.4	240.2
42.5°	271.4	238.0	211.3	190.2	175.7	160.1	155.7	153.5
45°	176.8	157.9	133.5	116.8	106.8	97.9	97.9	94.5
47.5°	105.7	93.4	81.2	70.1	63.4	57.8	55.6	54.5
50°	58.9	52.3	45.6	41.1	36.7	33.4	32.3	32.3
52.5°	32.3	28.9	26.7	23.4	21.1	21.1	21.1	20.0
55°	16.7	16.7	16.7	16.7	15.6	15.6	15.6	14.5
57.5°	11.1	11.1	12.2	12.2	12.2	11.1	11.1	11.1
60°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
62.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
65°	4.4	5.6	5.6	5.6	5.6	4.4	4.4	4.4
67.5°	3.3	4.4	4.4	4.4	3.3	3.3	3.3	3.3
70°	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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)