

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: P252608

Luminaire Tested: **LD6B40D010 EU6B30509730 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509730 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3109.0 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

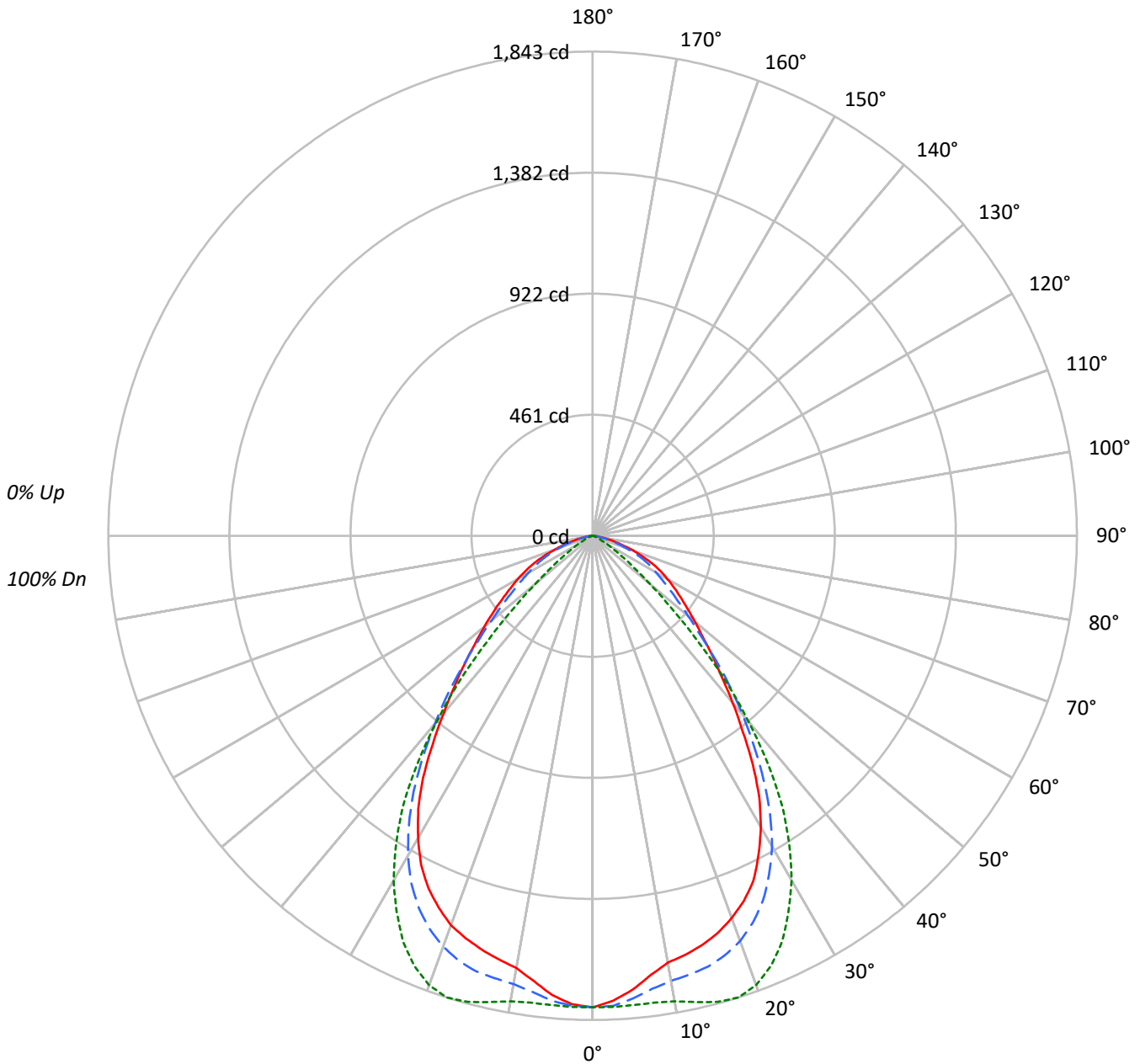
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79								
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50								
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38								
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	117107	117107	117107
5°	113612	117417	114974
10°	109288	119185	110666
15°	108905	124041	110161
20°	107474	126351	109494
25°	104263	122792	106509
30°	96457	114115	100050
35°	84622	100320	89576
40°	70517	78642	75108
45°	59354	51889	63376
50°	51388	28429	54554
55°	46498	15105	47681
60°	42785	7855	42785
65°	38763	4168	37806
70°	31264	2384	28899
75°	21451	1563	19888
80°	14051	789	12473
85°	9357	1572	7785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.4	5.4
10°-20°	484.0	15.6
20°-30°	715.1	23.0
30°-40°	722.3	23.2
40°-50°	497.9	16.0
50°-60°	285.9	9.2
60°-70°	166.4	5.4
70°-80°	60.7	2.0
80°-90°	9.3	0.3
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°	1366.5	44.0
0°-40°	2088.8	67.2
0°-60°	2872.6	92.4
0°-90°	3109.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3109.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1795	1795	1795	1795	1795	
5°	1735	1768	1793	1776	1756	163
15°	1612	1697	1836	1716	1631	454
25°	1448	1534	1706	1565	1480	660
35°	1062	1135	1260	1187	1125	659
45°	643	652	562	693	687	500
55°	409	359	133	374	419	368
65°	251	212	27	210	245	246
75°	85	68	6	66	79	96
85°	12	6	2	8	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1772.2	1774.2	1776.3	1774.2	1776.3	1784.6	1778.4	1782.5	1782.5	1784.6	1790.8
5°	1734.8	1734.8	1739.0	1736.9	1743.1	1751.4	1745.2	1751.4	1753.5	1757.6	1768.0
7.5°	1687.1	1687.1	1689.1	1689.1	1697.4	1705.8	1701.6	1709.9	1718.2	1726.5	1739.0
10°	1649.7	1653.9	1653.9	1655.9	1664.2	1674.6	1672.5	1682.9	1691.2	1703.7	1720.3
12.5°	1633.1	1635.2	1635.2	1639.3	1647.6	1658.0	1655.9	1666.3	1678.8	1693.3	1709.9
15°	1612.4	1616.5	1614.4	1618.6	1626.9	1637.3	1635.2	1645.6	1660.1	1674.6	1697.4
17.5°	1585.4	1587.5	1589.5	1589.5	1597.8	1606.1	1606.1	1616.5	1633.1	1649.7	1674.6
20°	1548.0	1552.2	1552.2	1554.3	1560.5	1572.9	1570.9	1581.2	1597.8	1614.4	1641.4
22.5°	1504.5	1506.5	1506.5	1508.6	1519.0	1525.2	1527.3	1535.6	1550.1	1568.8	1593.7
25°	1448.4	1450.5	1448.4	1454.7	1458.8	1471.3	1467.1	1477.5	1494.1	1508.6	1533.5
27.5°	1367.5	1371.7	1371.7	1373.7	1384.1	1394.5	1394.5	1404.9	1419.4	1429.8	1454.7
30°	1280.4	1286.6	1280.4	1290.7	1294.9	1303.2	1309.4	1315.6	1328.1	1342.6	1365.4
32.5°	1180.7	1178.7	1180.7	1184.9	1197.3	1203.6	1207.7	1213.9	1226.4	1238.8	1257.5
35°	1062.5	1066.6	1068.7	1077.0	1077.0	1087.4	1089.4	1093.6	1112.3	1120.6	1135.1
37.5°	938.0	942.1	944.2	948.3	956.6	960.8	967.0	973.2	985.7	1000.2	1008.5
40°	828.0	828.0	830.0	834.2	840.4	842.5	848.7	857.0	865.3	877.8	886.1
42.5°	724.2	726.3	724.2	728.4	734.6	742.9	740.8	751.2	753.3	761.6	767.8
45°	643.3	643.3	639.1	643.3	643.3	651.6	649.5	653.7	651.6	655.7	651.6
47.5°	566.5	568.6	566.5	568.6	568.6	568.6	570.7	566.5	568.6	562.4	549.9
50°	506.3	508.4	504.3	506.3	504.3	502.2	504.3	498.0	496.0	487.7	475.2
52.5°	454.5	452.4	450.3	450.3	450.3	448.2	446.2	439.9	433.7	425.4	410.9
55°	408.8	406.7	404.6	404.6	400.5	398.4	398.4	392.2	386.0	375.6	359.0
57.5°	367.3	365.2	363.1	363.1	361.1	356.9	356.9	350.7	342.4	329.9	315.4
60°	327.9	327.9	327.9	325.8	325.8	321.6	321.6	315.4	307.1	294.7	278.1
62.5°	292.6	290.5	290.5	290.5	290.5	288.4	286.4	282.2	273.9	261.5	246.9
65°	251.1	251.1	251.1	251.1	249.0	249.0	249.0	242.8	238.6	226.2	211.7
67.5°	205.4	205.4	205.4	205.4	203.4	205.4	205.4	201.3	197.1	184.7	172.2
70°	163.9	161.9	159.8	161.9	159.8	159.8	161.9	157.7	155.6	145.3	132.8
72.5°	120.4	122.4	120.4	120.4	120.4	118.3	120.4	118.3	114.1	105.8	97.5
75°	85.1	87.2	87.2	85.1	85.1	85.1	83.0	83.0	78.9	72.6	68.5
77.5°	58.1	58.1	58.1	58.1	56.0	56.0	56.0	54.0	51.9	47.7	43.6
80°	37.4	37.4	37.4	37.4	35.3	35.3	35.3	33.2	33.2	29.1	24.9
82.5°	22.8	22.8	22.8	22.8	22.8	22.8	20.8	20.8	18.7	16.6	14.5
85°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	10.4	10.4	8.3	6.2
87.5°	4.2	4.2	6.2	6.2	6.2	6.2	6.2	6.2	4.2	4.2	4.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1786.7	1788.8	1788.8	1788.8	1795.0	1797.1	1790.8	1784.6	1797.1	1795.0	1799.1
5°	1765.9	1772.2	1776.3	1778.4	1784.6	1788.8	1782.5	1780.5	1790.8	1792.9	1795.0
7.5°	1741.0	1751.4	1761.8	1765.9	1774.2	1778.4	1776.3	1776.3	1788.8	1792.9	1792.9
10°	1724.4	1739.0	1751.4	1761.8	1772.2	1778.4	1778.4	1780.5	1795.0	1799.1	1803.3
12.5°	1720.3	1739.0	1755.6	1770.1	1778.4	1788.8	1790.8	1797.1	1811.6	1817.8	1817.8
15°	1709.9	1734.8	1755.6	1774.2	1786.7	1799.1	1803.3	1815.7	1832.3	1836.5	1840.6
17.5°	1691.2	1716.1	1741.0	1763.9	1780.5	1790.8	1803.3	1815.7	1836.5	1842.7	1844.8
20°	1658.0	1687.1	1712.0	1734.8	1751.4	1765.9	1778.4	1792.9	1811.6	1819.9	1822.0
22.5°	1608.2	1637.3	1662.2	1687.1	1703.7	1716.1	1728.6	1745.2	1763.9	1772.2	1772.2
25°	1548.0	1575.0	1602.0	1620.7	1637.3	1651.8	1658.0	1676.7	1695.4	1705.8	1705.8
27.5°	1471.3	1496.2	1521.1	1541.8	1552.2	1564.6	1575.0	1591.6	1606.1	1614.4	1622.7
30°	1373.7	1398.6	1421.5	1442.2	1454.7	1467.1	1477.5	1489.9	1504.5	1514.8	1516.9
32.5°	1267.9	1288.7	1311.5	1332.2	1344.7	1348.8	1359.2	1371.7	1384.1	1392.4	1394.5
35°	1151.7	1166.2	1180.7	1199.4	1211.9	1211.9	1222.2	1230.5	1240.9	1259.6	1255.4
37.5°	1014.7	1035.5	1045.9	1052.1	1060.4	1068.7	1070.8	1081.1	1093.6	1097.7	1104.0
40°	886.1	892.3	898.5	898.5	906.8	906.8	906.8	908.9	921.4	923.4	931.7
42.5°	757.4	757.4	751.2	745.0	747.0	745.0	734.6	734.6	740.8	749.1	749.1
45°	637.1	622.5	603.9	589.3	579.0	574.8	562.4	562.4	560.3	562.4	570.7
47.5°	535.4	510.5	479.4	450.3	439.9	431.6	412.9	404.6	400.5	402.6	406.7
50°	450.3	423.3	388.0	352.8	334.1	323.7	300.9	286.4	284.3	280.1	288.4
52.5°	388.0	354.8	317.5	276.0	257.3	240.7	215.8	203.4	195.1	195.1	197.1
55°	334.1	298.8	257.3	215.8	197.1	184.7	159.8	143.2	134.9	132.8	139.0
57.5°	288.4	255.2	213.7	172.2	153.6	139.0	114.1	99.6	93.4	89.2	91.3
60°	253.2	220.0	178.5	139.0	122.4	105.8	85.1	68.5	60.2	60.2	62.3
62.5°	220.0	188.8	151.5	114.1	99.6	85.1	62.3	47.7	41.5	39.4	41.5
65°	186.8	157.7	126.6	95.5	80.9	68.5	49.8	37.4	29.1	27.0	29.1
67.5°	151.5	128.7	101.7	76.8	64.3	54.0	37.4	27.0	20.8	18.7	20.8
70°	118.3	97.5	76.8	56.0	47.7	39.4	27.0	20.8	14.5	12.5	14.5
72.5°	85.1	70.6	54.0	39.4	33.2	27.0	18.7	14.5	10.4	8.3	10.4
75°	58.1	47.7	35.3	24.9	20.8	18.7	12.5	8.3	6.2	6.2	6.2
77.5°	37.4	29.1	22.8	16.6	12.5	10.4	6.2	4.2	4.2	4.2	4.2
80°	20.8	16.6	12.5	8.3	6.2	6.2	4.2	4.2	2.1	2.1	2.1
82.5°	12.5	8.3	6.2	4.2	4.2	2.1	2.1	2.1	2.1	2.1	2.1
85°	6.2	4.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	2.1	2.1	2.1	2.1	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1790.8	1792.9	1786.7	1795.0	1788.8	1797.1	1797.1	1788.8	1790.8	1786.7	1795.0
5°	1786.7	1786.7	1782.5	1788.8	1780.5	1788.8	1786.7	1772.2	1776.3	1768.0	1776.3
7.5°	1786.7	1782.5	1776.3	1782.5	1772.2	1778.4	1770.1	1755.6	1751.4	1741.0	1741.0
10°	1792.9	1786.7	1778.4	1780.5	1770.1	1772.2	1759.7	1739.0	1732.7	1720.3	1716.1
12.5°	1807.4	1801.2	1788.8	1792.9	1778.4	1778.4	1761.8	1736.9	1724.4	1707.8	1703.7
15°	1828.2	1817.8	1803.3	1805.4	1790.8	1782.5	1761.8	1732.7	1716.1	1693.3	1687.1
17.5°	1832.3	1822.0	1803.3	1803.3	1784.6	1774.2	1749.3	1716.1	1695.4	1672.5	1660.1
20°	1809.5	1799.1	1778.4	1776.3	1759.7	1745.2	1718.2	1685.0	1664.2	1639.3	1629.0
22.5°	1761.8	1749.3	1730.7	1728.6	1712.0	1703.7	1674.6	1641.4	1620.7	1595.8	1587.5
25°	1691.2	1685.0	1666.3	1664.2	1649.7	1639.3	1614.4	1583.3	1564.6	1539.7	1531.4
27.5°	1608.2	1602.0	1583.3	1583.3	1566.7	1560.5	1537.7	1508.6	1494.1	1471.3	1460.9
30°	1508.6	1500.3	1489.9	1487.9	1473.3	1467.1	1446.4	1419.4	1404.9	1386.2	1382.0
32.5°	1390.3	1384.1	1377.9	1375.8	1361.3	1355.1	1340.5	1313.6	1301.1	1284.5	1278.3
35°	1253.4	1249.2	1243.0	1240.9	1234.7	1228.5	1213.9	1193.2	1187.0	1174.5	1168.3
37.5°	1095.7	1099.8	1095.7	1095.7	1089.4	1091.5	1079.1	1066.6	1060.4	1052.1	1047.9
40°	925.5	933.8	940.0	940.0	938.0	946.3	944.2	933.8	931.7	927.6	925.5
42.5°	753.3	757.4	769.9	778.2	776.1	796.8	798.9	807.2	813.4	809.3	811.4
45°	572.7	585.2	601.8	610.1	620.5	647.4	662.0	678.6	693.1	701.4	699.3
47.5°	412.9	427.5	446.2	458.6	477.3	510.5	547.8	568.6	589.3	599.7	610.1
50°	298.8	313.3	336.2	354.8	367.3	412.9	452.4	479.4	502.2	516.7	527.1
52.5°	209.6	226.2	251.1	267.7	286.4	329.9	375.6	406.7	431.6	450.3	460.7
55°	145.3	163.9	186.8	203.4	224.1	269.8	313.3	346.5	373.5	390.1	402.6
57.5°	101.7	118.3	141.1	155.6	176.4	220.0	263.5	296.7	323.7	340.3	354.8
60°	68.5	85.1	107.9	122.4	139.0	182.6	222.0	257.3	282.2	298.8	313.3
62.5°	47.7	62.3	85.1	99.6	114.1	151.5	188.8	220.0	244.9	263.5	276.0
65°	37.4	49.8	68.5	80.9	95.5	126.6	157.7	184.7	209.6	228.3	236.6
67.5°	27.0	39.4	54.0	64.3	74.7	101.7	128.7	149.4	172.2	186.8	197.1
70°	18.7	27.0	39.4	47.7	56.0	76.8	97.5	116.2	132.8	143.2	151.5
72.5°	14.5	18.7	27.0	33.2	39.4	54.0	70.6	85.1	97.5	105.8	114.1
75°	8.3	12.5	18.7	22.8	27.0	37.4	47.7	58.1	66.4	72.6	76.8
77.5°	4.2	6.2	10.4	12.5	16.6	22.8	31.1	37.4	43.6	47.7	51.9
80°	4.2	4.2	6.2	6.2	8.3	12.5	16.6	20.8	24.9	29.1	31.1
82.5°	2.1	2.1	4.2	4.2	4.2	6.2	8.3	12.5	14.5	16.6	18.7
85°	2.1	2.1	2.1	2.1	2.1	4.2	4.2	6.2	8.3	10.4	10.4
87.5°	0.0	0.0	2.1	2.1	2.1	2.1	2.1	4.2	4.2	4.2	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252608

CATALOG NUMBER: LD6B40D010 EU6B30509730 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1788.8	1792.9	1790.8	1795.0	1788.8	1786.7	1790.8	1784.6
5°	1765.9	1768.0	1765.9	1765.9	1761.8	1757.6	1761.8	1755.6
7.5°	1730.7	1730.7	1724.4	1724.4	1716.1	1712.0	1712.0	1709.9
10°	1701.6	1695.4	1689.1	1691.2	1678.8	1674.6	1672.5	1670.5
12.5°	1687.1	1682.9	1672.5	1672.5	1660.1	1655.9	1653.9	1651.8
15°	1670.5	1662.2	1653.9	1651.8	1641.4	1637.3	1635.2	1631.0
17.5°	1641.4	1635.2	1624.8	1624.8	1614.4	1612.4	1608.2	1606.1
20°	1610.3	1602.0	1593.7	1593.7	1581.2	1581.2	1575.0	1577.1
22.5°	1566.7	1560.5	1552.2	1552.2	1541.8	1539.7	1533.5	1531.4
25°	1514.8	1506.5	1500.3	1498.2	1489.9	1485.8	1483.7	1479.6
27.5°	1446.4	1440.1	1433.9	1429.8	1419.4	1417.3	1411.1	1413.2
30°	1361.3	1357.1	1355.1	1350.9	1338.5	1334.3	1334.3	1328.1
32.5°	1267.9	1261.7	1257.5	1251.3	1240.9	1238.8	1232.6	1234.7
35°	1153.8	1145.5	1139.2	1141.3	1128.9	1126.8	1122.6	1124.7
37.5°	1035.5	1027.2	1018.9	1016.8	1006.4	1006.4	1000.2	1000.2
40°	913.1	904.8	900.6	900.6	888.2	890.2	884.0	881.9
42.5°	803.1	794.8	792.7	790.6	784.4	782.3	776.1	778.2
45°	699.3	697.2	697.2	693.1	686.9	684.8	686.9	686.9
47.5°	608.0	610.1	608.0	608.0	603.9	608.0	603.9	605.9
50°	531.2	535.4	535.4	535.4	533.3	535.4	535.4	537.5
52.5°	466.9	473.1	471.1	473.1	471.1	475.2	473.1	475.2
55°	410.9	415.0	417.1	419.2	419.2	419.2	419.2	419.2
57.5°	359.0	365.2	367.3	369.4	369.4	373.5	369.4	369.4
60°	317.5	323.7	325.8	327.9	327.9	329.9	325.8	327.9
62.5°	280.1	286.4	286.4	288.4	288.4	288.4	284.3	286.4
65°	242.8	244.9	246.9	246.9	244.9	244.9	242.8	244.9
67.5°	201.3	203.4	201.3	201.3	199.2	199.2	195.1	197.1
70°	155.6	155.6	157.7	155.6	153.6	155.6	153.6	151.5
72.5°	116.2	116.2	116.2	114.1	114.1	112.1	114.1	114.1
75°	78.9	78.9	80.9	80.9	80.9	80.9	78.9	78.9
77.5°	51.9	51.9	51.9	51.9	54.0	51.9	51.9	51.9
80°	33.2	33.2	35.3	35.3	33.2	33.2	33.2	33.2
82.5°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
85°	12.5	12.5	12.5	12.5	10.4	10.4	10.4	10.4
87.5°	6.2	6.2	6.2	6.2	6.2	6.2	4.2	4.2
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)