

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: P252290

Luminaire Tested: **LD6B40D010 EU6B30509027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252290
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3172.0 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

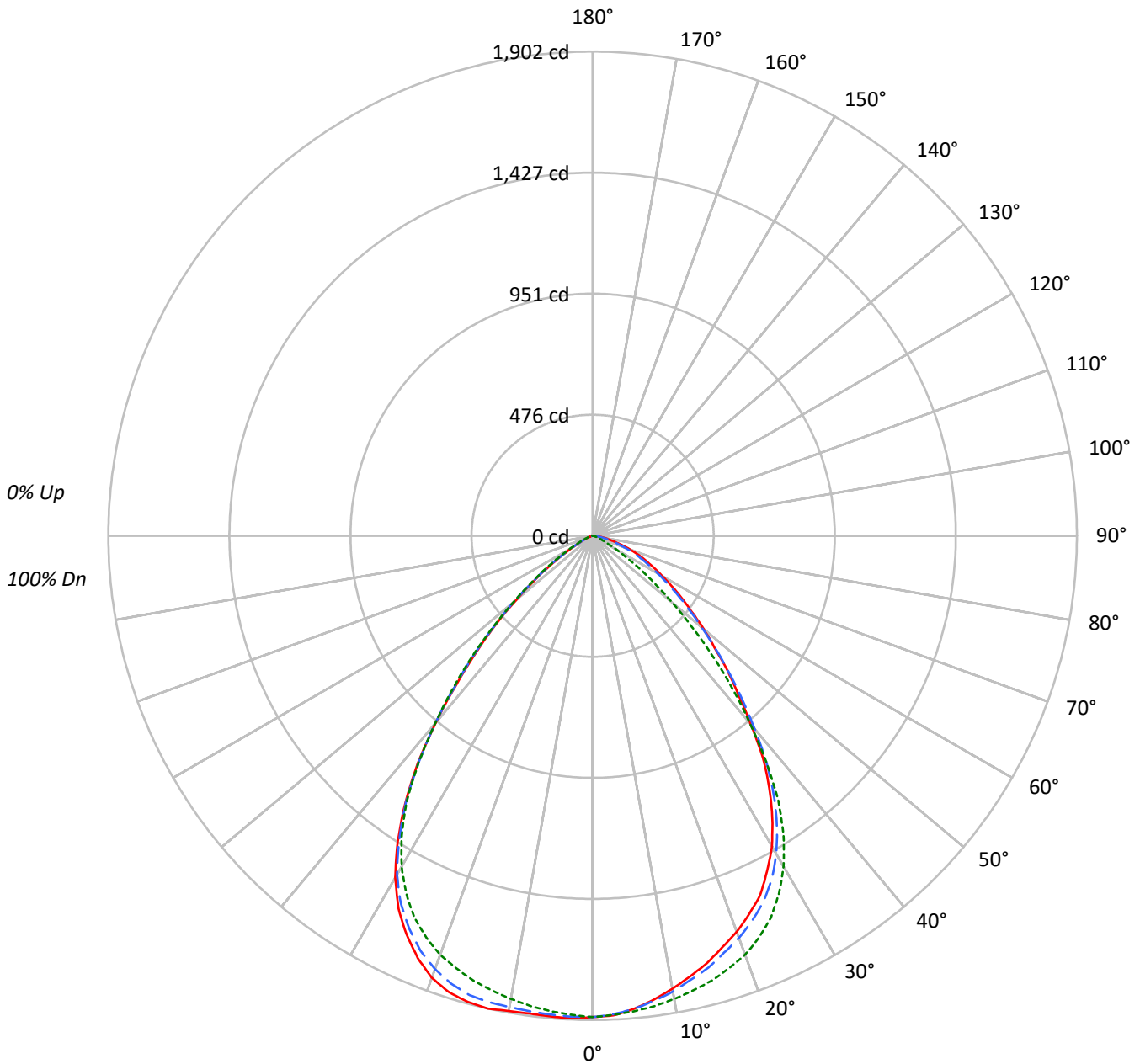
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90								
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52								
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47								
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43								
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40								
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	123350	123350	123350
5°	122178	122774	124123
10°	119655	122378	125558
15°	117368	122150	128012
20°	114937	121596	128254
25°	112102	119171	124433
30°	106137	113015	116804
35°	96385	101299	102207
40°	82261	81870	81486
45°	69106	61310	59409
50°	57711	41482	39401
55°	48569	25456	23113
60°	41115	13413	11626
65°	35598	7055	5635
70°	29624	4349	3052
75°	21880	2874	1739
80°	17170	1728	864
85°	13699	1722	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.2	5.6
10°-20°	510.2	16.1
20°-30°	753.4	23.8
30°-40°	776.4	24.5
40°-50°	536.3	16.9
50°-60°	264.3	8.3
60°-70°	107.1	3.4
70°-80°	38.2	1.2
80°-90°	7.9	0.2
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°	1441.8	45.5
0°-40°	2218.2	69.9
0°-60°	3018.8	95.2
0°-90°	3172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1891	1891	1891	1891	1891	
5°	1866	1866	1875	1888	1895	176
15°	1738	1756	1808	1868	1895	489
25°	1557	1587	1656	1704	1729	712
35°	1210	1240	1272	1279	1283	750
45°	749	754	664	655	644	579
55°	427	411	224	210	203	386
65°	231	208	46	36	36	229
75°	87	73	11	7	7	97
85°	18	14	2	0	0	22
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°	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7
2.5°	1886.1	1879.3	1883.9	1874.7	1886.1	1874.7	1877.0	1879.3	1877.0	1879.3	1881.6
5°	1865.6	1858.7	1865.6	1854.2	1865.6	1858.7	1858.7	1861.0	1861.0	1863.3	1865.6
7.5°	1838.2	1831.3	1838.2	1826.8	1840.5	1833.6	1833.6	1838.2	1835.9	1838.2	1842.8
10°	1806.2	1797.1	1803.9	1797.1	1810.8	1801.7	1806.2	1806.2	1806.2	1813.1	1817.6
12.5°	1772.0	1762.8	1772.0	1760.5	1774.3	1767.4	1769.7	1776.5	1778.8	1783.4	1785.7
15°	1737.7	1726.3	1730.9	1724.0	1737.7	1730.9	1733.1	1742.3	1742.3	1749.1	1756.0
17.5°	1694.3	1685.2	1694.3	1685.2	1696.6	1692.0	1696.6	1703.5	1703.5	1710.3	1717.2
20°	1655.5	1646.4	1653.2	1646.4	1660.1	1653.2	1655.5	1664.6	1666.9	1673.8	1680.6
22.5°	1607.6	1600.7	1605.3	1598.4	1612.1	1607.6	1609.8	1619.0	1621.3	1625.8	1637.2
25°	1557.3	1543.6	1550.5	1545.9	1559.6	1552.8	1557.3	1566.5	1571.0	1577.9	1587.0
27.5°	1484.3	1477.4	1482.0	1482.0	1493.4	1486.5	1488.8	1498.0	1504.8	1511.7	1523.1
30°	1408.9	1397.5	1402.0	1404.3	1413.5	1408.9	1413.5	1422.6	1424.9	1434.0	1443.1
32.5°	1313.0	1308.4	1317.6	1313.0	1317.6	1317.6	1319.8	1326.7	1331.3	1335.8	1347.2
35°	1210.2	1201.1	1210.2	1205.7	1217.1	1210.2	1217.1	1223.9	1223.9	1233.1	1239.9
37.5°	1098.3	1086.9	1091.5	1091.5	1096.1	1093.8	1093.8	1105.2	1107.5	1114.3	1121.2
40°	965.9	961.3	970.5	968.2	970.5	970.5	972.8	979.6	984.2	986.5	988.7
42.5°	847.2	849.4	851.7	851.7	851.7	851.7	851.7	860.9	858.6	865.4	867.7
45°	749.0	739.8	744.4	742.1	749.0	742.1	749.0	755.8	751.3	758.1	753.5
47.5°	648.5	648.5	648.5	646.2	650.8	648.5	653.1	655.4	655.4	655.4	653.1
50°	568.6	561.7	564.0	564.0	566.3	564.0	568.6	570.9	570.9	566.3	557.2
52.5°	490.9	488.7	488.7	493.2	493.2	490.9	490.9	490.9	490.9	484.1	479.5
55°	427.0	422.4	424.7	424.7	424.7	424.7	427.0	424.7	424.7	417.9	411.0
57.5°	369.9	365.4	365.4	365.4	367.6	365.4	365.4	365.4	363.1	356.2	347.1
60°	315.1	312.8	315.1	315.1	317.4	315.1	315.1	315.1	310.6	303.7	294.6
62.5°	269.4	269.4	269.4	271.7	271.7	269.4	269.4	267.2	264.9	255.7	246.6
65°	230.6	228.3	230.6	230.6	232.9	232.9	230.6	228.3	226.1	216.9	207.8
67.5°	191.8	189.5	191.8	191.8	194.1	191.8	191.8	191.8	185.0	180.4	171.3
70°	155.3	153.0	153.0	153.0	155.3	150.7	153.0	153.0	148.4	141.6	132.4
72.5°	118.7	118.7	118.7	118.7	118.7	118.7	116.5	116.5	111.9	105.0	100.5
75°	86.8	86.8	89.1	89.1	86.8	86.8	86.8	84.5	82.2	77.6	73.1
77.5°	63.9	63.9	63.9	63.9	61.7	61.7	61.7	59.4	57.1	54.8	50.2
80°	45.7	45.7	45.7	43.4	45.7	43.4	43.4	43.4	38.8	36.5	34.3
82.5°	32.0	29.7	29.7	29.7	29.7	29.7	29.7	27.4	27.4	25.1	22.8
85°	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	16.0	13.7	13.7
87.5°	9.1	11.4	11.4	11.4	11.4	11.4	11.4	9.1	9.1	9.1	6.9
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°	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7
2.5°	1881.6	1881.6	1886.1	1879.3	1890.7	1883.9	1881.6	1893.0	1886.1	1883.9	1888.4
5°	1865.6	1867.9	1870.2	1865.6	1877.0	1870.2	1870.2	1881.6	1877.0	1874.7	1881.6
7.5°	1845.0	1847.3	1851.9	1849.6	1858.7	1854.2	1856.5	1867.9	1863.3	1863.3	1870.2
10°	1819.9	1824.5	1829.1	1829.1	1840.5	1835.9	1835.9	1849.6	1845.0	1847.3	1856.5
12.5°	1790.2	1797.1	1803.9	1806.2	1817.6	1810.8	1813.1	1829.1	1826.8	1829.1	1838.2
15°	1758.3	1767.4	1774.3	1774.3	1788.0	1781.1	1788.0	1803.9	1799.4	1808.5	1819.9
17.5°	1721.7	1730.9	1740.0	1742.3	1756.0	1751.4	1760.5	1776.5	1776.5	1781.1	1794.8
20°	1687.5	1698.9	1703.5	1710.3	1724.0	1721.7	1726.3	1744.6	1744.6	1751.4	1765.1
22.5°	1641.8	1653.2	1662.4	1669.2	1680.6	1680.6	1687.5	1703.5	1703.5	1708.0	1721.7
25°	1591.6	1605.3	1612.1	1619.0	1630.4	1628.1	1635.0	1648.7	1650.9	1655.5	1669.2
27.5°	1527.6	1539.1	1548.2	1552.8	1568.7	1559.6	1566.5	1582.4	1580.2	1584.7	1596.1
30°	1447.7	1459.1	1468.3	1468.3	1482.0	1482.0	1488.8	1495.7	1495.7	1500.2	1509.4
32.5°	1354.1	1367.8	1367.8	1374.6	1383.8	1374.6	1383.8	1392.9	1388.3	1395.2	1402.0
35°	1246.8	1253.6	1255.9	1255.9	1262.8	1260.5	1258.2	1265.0	1260.5	1271.9	1278.7
37.5°	1116.6	1125.7	1121.2	1125.7	1123.5	1116.6	1116.6	1128.0	1118.9	1121.2	1128.0
40°	991.0	991.0	988.7	977.3	979.6	972.8	970.5	972.8	963.6	961.3	970.5
42.5°	860.9	858.6	851.7	835.7	838.0	826.6	817.5	817.5	812.9	810.6	812.9
45°	744.4	737.6	726.1	707.9	703.3	694.2	675.9	671.3	664.5	664.5	666.8
47.5°	637.1	628.0	609.7	589.1	577.7	566.3	548.0	541.2	529.8	525.2	529.8
50°	548.0	532.0	509.2	479.5	468.1	454.4	436.1	424.7	413.3	408.7	406.5
52.5°	465.8	443.0	420.2	383.6	374.5	360.8	335.7	324.3	312.8	303.7	303.7
55°	395.0	374.5	342.5	308.3	294.6	280.9	255.7	239.8	228.3	223.8	219.2
57.5°	331.1	308.3	278.6	242.0	228.3	214.6	189.5	173.5	162.1	155.3	150.7
60°	278.6	253.5	223.8	191.8	175.8	162.1	137.0	121.0	109.6	102.8	98.2
62.5°	228.3	207.8	178.1	148.4	134.7	121.0	100.5	84.5	73.1	68.5	61.7
65°	191.8	171.3	143.9	118.7	107.3	93.6	75.4	61.7	52.5	45.7	41.1
67.5°	155.3	139.3	116.5	93.6	82.2	73.1	57.1	45.7	36.5	32.0	29.7
70°	123.3	107.3	89.1	70.8	63.9	54.8	43.4	32.0	27.4	22.8	20.6
72.5°	91.3	79.9	66.2	52.5	45.7	41.1	29.7	25.1	18.3	16.0	13.7
75°	66.2	57.1	48.0	36.5	32.0	29.7	22.8	16.0	13.7	11.4	9.1
77.5°	45.7	41.1	32.0	25.1	22.8	20.6	16.0	11.4	9.1	6.9	6.9
80°	29.7	25.1	20.6	16.0	16.0	13.7	9.1	6.9	6.9	4.6	4.6
82.5°	18.3	16.0	13.7	11.4	9.1	9.1	6.9	4.6	4.6	2.3	2.3
85°	11.4	9.1	6.9	6.9	4.6	4.6	4.6	2.3	2.3	2.3	2.3
87.5°	4.6	4.6	4.6	2.3	2.3	2.3	2.3	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°	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7
2.5°	1888.4	1888.4	1893.0	1886.1	1890.7	1890.7	1895.3	1886.1	1890.7	1893.0	1897.6
5°	1879.3	1881.6	1886.1	1883.9	1886.1	1886.1	1890.7	1879.3	1888.4	1888.4	1895.3
7.5°	1870.2	1870.2	1874.7	1872.4	1877.0	1879.3	1883.9	1874.7	1883.9	1883.9	1890.7
10°	1858.7	1858.7	1865.6	1863.3	1870.2	1872.4	1879.3	1870.2	1879.3	1881.6	1888.4
12.5°	1842.8	1845.0	1851.9	1851.9	1858.7	1863.3	1870.2	1865.6	1877.0	1879.3	1888.4
15°	1824.5	1829.1	1838.2	1835.9	1842.8	1849.6	1858.7	1851.9	1867.9	1872.4	1881.6
17.5°	1801.7	1806.2	1813.1	1813.1	1819.9	1824.5	1835.9	1831.3	1845.0	1847.3	1858.7
20°	1767.4	1774.3	1783.4	1781.1	1788.0	1792.5	1801.7	1797.1	1810.8	1815.4	1826.8
22.5°	1726.3	1730.9	1737.7	1737.7	1744.6	1749.1	1758.3	1751.4	1765.1	1767.4	1776.5
25°	1671.5	1676.1	1680.6	1682.9	1689.8	1692.0	1696.6	1692.0	1703.5	1705.7	1717.2
27.5°	1600.7	1603.0	1609.8	1609.8	1614.4	1616.7	1623.5	1614.4	1630.4	1630.4	1637.2
30°	1516.2	1513.9	1523.1	1518.5	1523.1	1523.1	1529.9	1525.4	1536.8	1532.2	1539.1
32.5°	1404.3	1408.9	1408.9	1404.3	1413.5	1411.2	1411.2	1406.6	1413.5	1415.7	1420.3
35°	1274.2	1281.0	1281.0	1283.3	1285.6	1278.7	1281.0	1267.3	1278.7	1281.0	1283.3
37.5°	1132.6	1125.7	1130.3	1123.5	1134.9	1121.2	1121.2	1112.0	1121.2	1121.2	1123.5
40°	970.5	968.2	972.8	968.2	965.9	963.6	959.1	952.2	961.3	956.8	963.6
42.5°	817.5	815.2	815.2	810.6	808.3	808.3	803.8	799.2	796.9	796.9	808.3
45°	659.9	664.5	659.9	657.6	662.2	657.6	659.9	650.8	655.4	650.8	655.4
47.5°	527.5	529.8	525.2	520.6	527.5	520.6	520.6	513.8	522.9	522.9	518.3
50°	408.7	406.5	401.9	406.5	404.2	404.2	404.2	397.3	401.9	395.0	399.6
52.5°	301.4	299.1	299.1	296.9	299.1	296.9	296.9	294.6	294.6	292.3	294.6
55°	219.2	216.9	212.4	212.4	212.4	214.6	212.4	210.1	210.1	207.8	210.1
57.5°	148.4	143.9	143.9	143.9	143.9	141.6	141.6	139.3	141.6	139.3	141.6
60°	95.9	95.9	91.3	91.3	91.3	91.3	91.3	89.1	91.3	91.3	91.3
62.5°	59.4	59.4	57.1	54.8	57.1	54.8	54.8	54.8	57.1	54.8	57.1
65°	38.8	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
67.5°	27.4	25.1	25.1	25.1	25.1	25.1	25.1	22.8	25.1	25.1	25.1
70°	18.3	18.3	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
72.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
75°	9.1	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
77.5°	6.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	4.6	4.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	2.3	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	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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: P252290

CATALOG NUMBER: LD6B40D010 EU6B30509027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7	1890.7
2.5°	1890.7	1893.0	1888.4	1890.7	1886.1	1890.7	1893.0	1897.6
5°	1886.1	1888.4	1883.9	1888.4	1883.9	1888.4	1890.7	1895.3
7.5°	1881.6	1886.1	1881.6	1886.1	1881.6	1886.1	1888.4	1893.0
10°	1881.6	1888.4	1883.9	1890.7	1883.9	1888.4	1893.0	1895.3
12.5°	1881.6	1888.4	1886.1	1890.7	1888.4	1893.0	1897.6	1902.1
15°	1877.0	1883.9	1879.3	1886.1	1883.9	1886.1	1895.3	1895.3
17.5°	1851.9	1858.7	1858.7	1863.3	1863.3	1870.2	1874.7	1879.3
20°	1819.9	1826.8	1824.5	1831.3	1831.3	1838.2	1842.8	1847.3
22.5°	1772.0	1781.1	1778.8	1785.7	1783.4	1788.0	1797.1	1794.8
25°	1710.3	1721.7	1719.4	1724.0	1721.7	1721.7	1726.3	1728.6
27.5°	1635.0	1641.8	1639.5	1644.1	1639.5	1644.1	1648.7	1650.9
30°	1536.8	1541.3	1539.1	1541.3	1539.1	1543.6	1545.9	1550.5
32.5°	1418.0	1424.9	1418.0	1422.6	1420.3	1420.3	1429.4	1424.9
35°	1276.5	1278.7	1281.0	1281.0	1276.5	1278.7	1283.3	1283.3
37.5°	1118.9	1130.3	1116.6	1123.5	1121.2	1121.2	1121.2	1128.0
40°	954.5	956.8	952.2	952.2	952.2	949.9	959.1	956.8
42.5°	799.2	801.5	799.2	792.4	794.6	794.6	801.5	792.4
45°	648.5	653.1	650.8	650.8	646.2	646.2	648.5	643.9
47.5°	513.8	518.3	511.5	513.8	509.2	513.8	511.5	516.1
50°	390.5	395.0	392.8	395.0	395.0	390.5	397.3	388.2
52.5°	292.3	294.6	292.3	290.0	287.7	287.7	292.3	290.0
55°	207.8	205.5	205.5	205.5	207.8	207.8	205.5	203.2
57.5°	139.3	139.3	137.0	137.0	139.3	134.7	137.0	134.7
60°	89.1	89.1	89.1	89.1	86.8	89.1	89.1	89.1
62.5°	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
65°	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
67.5°	22.8	25.1	25.1	25.1	22.8	22.8	22.8	22.8
70°	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
72.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
75°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	2.3	2.3	2.3	2.3	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)