

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: P252284

Luminaire Tested: **LD6B40D010 EU6B30508027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252284
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 EU6B30508027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3694.0 lumens
Efficiency: N/A
Efficacy: 85.9 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

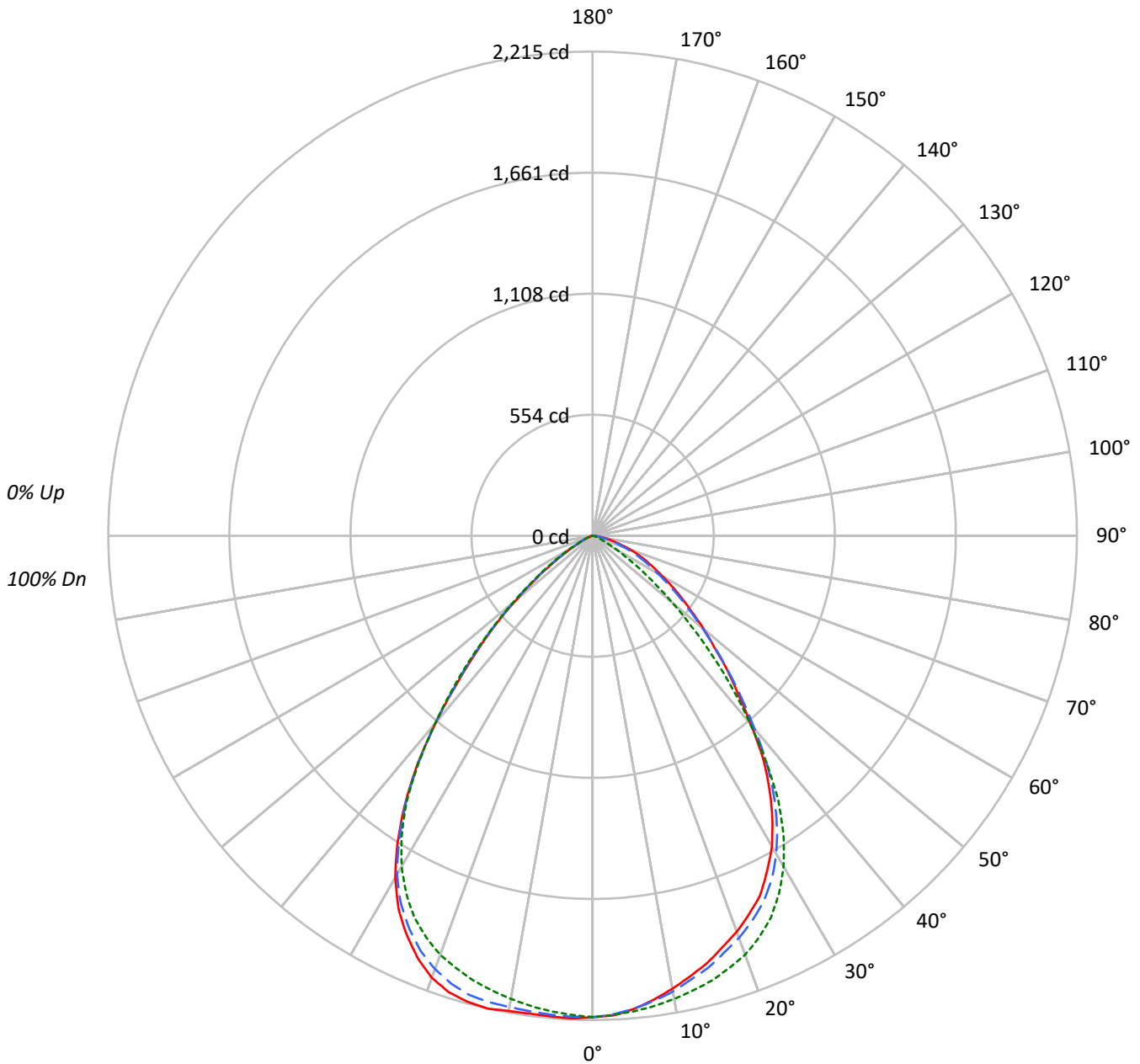
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	100	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90	90	90	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80	80	80	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72	72	72	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64	64	64	64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58	58	58	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52	52	52	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47	47	47	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43	43	43	43
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40	40	40	40
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37	37	37	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	143653	143653	143653
5°	142283	142977	144549
10°	139351	142517	146221
15°	136685	142250	149079
20°	133850	141605	149360
25°	130552	138780	144906
30°	123607	131615	136022
35°	112250	117969	119028
40°	95803	95343	94892
45°	80473	71394	69189
50°	67211	48312	45887
55°	56565	29642	26923
60°	47887	15619	13531
65°	41464	8213	6561
70°	34488	5074	3548
75°	25484	3353	2017
80°	19988	1991	1014
85°	15944	2021	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.5	5.6
10°-20°	594.2	16.1
20°-30°	877.4	23.8
30°-40°	904.2	24.5
40°-50°	624.5	16.9
50°-60°	307.8	8.3
60°-70°	124.7	3.4
70°-80°	44.5	1.2
80°-90°	9.2	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°	1679.1	45.5
0°-40°	2583.3	69.9
0°-60°	3515.6	95.2
0°-90°	3694.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3694.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2202	2202	2202	2202	2202	
5°	2173	2173	2183	2199	2207	205
15°	2024	2045	2106	2175	2207	570
25°	1814	1848	1928	1984	2013	829
35°	1409	1444	1481	1489	1494	873
45°	872	878	774	763	750	674
55°	497	479	261	245	237	449
65°	269	242	53	42	42	267
75°	101	85	13	8	8	113
85°	21	16	3	0	0	26
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°	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2196.5	2188.6	2193.9	2183.2	2196.5	2183.2	2185.9	2188.6	2185.9	2188.6	2191.2
5°	2172.6	2164.6	2172.6	2159.3	2172.6	2164.6	2164.6	2167.3	2167.3	2169.9	2172.6
7.5°	2140.7	2132.7	2140.7	2127.4	2143.3	2135.4	2135.4	2140.7	2138.0	2140.7	2146.0
10°	2103.5	2092.8	2100.8	2092.8	2108.8	2098.1	2103.5	2103.5	2103.5	2111.4	2116.8
12.5°	2063.6	2052.9	2063.6	2050.3	2066.2	2058.3	2060.9	2068.9	2071.5	2076.9	2079.5
15°	2023.7	2010.4	2015.7	2007.7	2023.7	2015.7	2018.4	2029.0	2029.0	2037.0	2045.0
17.5°	1973.2	1962.5	1973.2	1962.5	1975.8	1970.5	1975.8	1983.8	1983.8	1991.8	1999.7
20°	1927.9	1917.3	1925.3	1917.3	1933.3	1925.3	1927.9	1938.6	1941.2	1949.2	1957.2
22.5°	1872.1	1864.1	1869.4	1861.5	1877.4	1872.1	1874.8	1885.4	1888.1	1893.4	1906.7
25°	1813.6	1797.6	1805.6	1800.3	1816.3	1808.3	1813.6	1824.2	1829.6	1837.5	1848.2
27.5°	1728.5	1720.5	1725.8	1725.8	1739.1	1731.2	1733.8	1744.5	1752.4	1760.4	1773.7
30°	1640.8	1627.5	1632.8	1635.4	1646.1	1640.8	1646.1	1656.7	1659.4	1670.0	1680.6
32.5°	1529.1	1523.7	1534.4	1529.1	1534.4	1534.4	1537.0	1545.0	1550.3	1555.7	1569.0
35°	1409.4	1398.8	1409.4	1404.1	1417.4	1409.4	1417.4	1425.4	1425.4	1436.0	1444.0
37.5°	1279.1	1265.8	1271.1	1271.1	1276.4	1273.8	1273.8	1287.1	1289.7	1297.7	1305.7
40°	1124.9	1119.5	1130.2	1127.5	1130.2	1130.2	1132.8	1140.8	1146.1	1148.8	1151.5
42.5°	986.6	989.2	991.9	991.9	991.9	991.9	991.9	1002.5	999.9	1007.9	1010.5
45°	872.2	861.6	866.9	864.3	872.2	864.3	872.2	880.2	874.9	882.9	877.5
47.5°	755.2	755.2	755.2	752.6	757.9	755.2	760.5	763.2	763.2	763.2	760.5
50°	662.2	654.2	656.8	656.8	659.5	656.8	662.2	664.8	664.8	659.5	648.9
52.5°	571.7	569.1	569.1	574.4	574.4	571.7	571.7	571.7	571.7	563.8	558.4
55°	497.3	492.0	494.6	494.6	494.6	494.6	497.3	494.6	494.6	486.6	478.7
57.5°	430.8	425.5	425.5	425.5	428.1	425.5	425.5	425.5	422.8	414.8	404.2
60°	367.0	364.3	367.0	367.0	369.6	367.0	367.0	367.0	361.7	353.7	343.0
62.5°	313.8	313.8	313.8	316.4	316.4	313.8	313.8	311.1	308.5	297.8	287.2
65°	268.6	265.9	268.6	268.6	271.2	271.2	268.6	265.9	263.3	252.6	242.0
67.5°	223.4	220.7	223.4	223.4	226.0	223.4	223.4	223.4	215.4	210.1	199.4
70°	180.8	178.2	178.2	178.2	180.8	175.5	178.2	178.2	172.9	164.9	154.2
72.5°	138.3	138.3	138.3	138.3	138.3	138.3	135.6	135.6	130.3	122.3	117.0
75°	101.1	101.1	103.7	103.7	101.1	101.1	101.1	98.4	95.7	90.4	85.1
77.5°	74.5	74.5	74.5	74.5	71.8	71.8	71.8	69.1	66.5	63.8	58.5
80°	53.2	53.2	53.2	50.5	53.2	50.5	50.5	50.5	45.2	42.5	39.9
82.5°	37.2	34.6	34.6	34.6	34.6	34.6	34.6	31.9	31.9	29.3	26.6
85°	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	18.6	16.0	16.0
87.5°	10.6	13.3	13.3	13.3	13.3	13.3	13.3	10.6	10.6	10.6	8.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2191.2	2191.2	2196.5	2188.6	2201.9	2193.9	2191.2	2204.5	2196.5	2193.9	2199.2
5°	2172.6	2175.3	2177.9	2172.6	2185.9	2177.9	2177.9	2191.2	2185.9	2183.2	2191.2
7.5°	2148.7	2151.3	2156.6	2154.0	2164.6	2159.3	2162.0	2175.3	2169.9	2169.9	2177.9
10°	2119.4	2124.7	2130.1	2130.1	2143.3	2138.0	2138.0	2154.0	2148.7	2151.3	2162.0
12.5°	2084.8	2092.8	2100.8	2103.5	2116.8	2108.8	2111.4	2130.1	2127.4	2130.1	2140.7
15°	2047.6	2058.3	2066.2	2066.2	2082.2	2074.2	2082.2	2100.8	2095.5	2106.1	2119.4
17.5°	2005.1	2015.7	2026.3	2029.0	2045.0	2039.6	2050.3	2068.9	2068.9	2074.2	2090.2
20°	1965.2	1978.5	1983.8	1991.8	2007.7	2005.1	2010.4	2031.7	2031.7	2039.6	2055.6
22.5°	1912.0	1925.3	1935.9	1943.9	1957.2	1957.2	1965.2	1983.8	1983.8	1989.1	2005.1
25°	1853.5	1869.4	1877.4	1885.4	1898.7	1896.0	1904.0	1920.0	1922.6	1927.9	1943.9
27.5°	1779.0	1792.3	1803.0	1808.3	1826.9	1816.3	1824.2	1842.9	1840.2	1845.5	1858.8
30°	1686.0	1699.3	1709.9	1709.9	1725.8	1725.8	1733.8	1741.8	1741.8	1747.1	1757.8
32.5°	1576.9	1592.9	1592.9	1600.9	1611.5	1600.9	1611.5	1622.1	1616.8	1624.8	1632.8
35°	1451.9	1459.9	1462.6	1462.6	1470.6	1467.9	1465.2	1473.2	1467.9	1481.2	1489.2
37.5°	1300.4	1311.0	1305.7	1311.0	1308.3	1300.4	1300.4	1313.7	1303.0	1305.7	1313.7
40°	1154.1	1154.1	1151.5	1138.2	1140.8	1132.8	1130.2	1132.8	1122.2	1119.5	1130.2
42.5°	1002.5	999.9	991.9	973.3	975.9	962.6	952.0	952.0	946.7	944.0	946.7
45°	866.9	858.9	845.6	824.4	819.0	808.4	787.1	781.8	773.8	773.8	776.5
47.5°	741.9	731.3	710.0	686.1	672.8	659.5	638.2	630.2	616.9	611.6	616.9
50°	638.2	619.6	593.0	558.4	545.1	529.2	507.9	494.6	481.3	476.0	473.3
52.5°	542.5	515.9	489.3	446.8	436.1	420.2	390.9	377.6	364.3	353.7	353.7
55°	460.0	436.1	398.9	359.0	343.0	327.1	297.8	279.2	265.9	260.6	255.3
57.5°	385.6	359.0	324.4	281.9	265.9	250.0	220.7	202.1	188.8	180.8	175.5
60°	324.4	295.2	260.6	223.4	204.8	188.8	159.6	140.9	127.6	119.7	114.3
62.5°	265.9	242.0	207.4	172.9	156.9	140.9	117.0	98.4	85.1	79.8	71.8
65°	223.4	199.4	167.5	138.3	125.0	109.0	87.8	71.8	61.2	53.2	47.9
67.5°	180.8	162.2	135.6	109.0	95.7	85.1	66.5	53.2	42.5	37.2	34.6
70°	143.6	125.0	103.7	82.4	74.5	63.8	50.5	37.2	31.9	26.6	23.9
72.5°	106.4	93.1	77.1	61.2	53.2	47.9	34.6	29.3	21.3	18.6	16.0
75°	77.1	66.5	55.8	42.5	37.2	34.6	26.6	18.6	16.0	13.3	10.6
77.5°	53.2	47.9	37.2	29.3	26.6	23.9	18.6	13.3	10.6	8.0	8.0
80°	34.6	29.3	23.9	18.6	18.6	16.0	10.6	8.0	8.0	5.3	5.3
82.5°	21.3	18.6	16.0	13.3	10.6	10.6	8.0	5.3	5.3	2.7	2.7
85°	13.3	10.6	8.0	8.0	5.3	5.3	5.3	2.7	2.7	2.7	2.7
87.5°	5.3	5.3	5.3	2.7	2.7	2.7	2.7	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°	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2199.2	2199.2	2204.5	2196.5	2201.9	2201.9	2207.2	2196.5	2201.9	2204.5	2209.8
5°	2188.6	2191.2	2196.5	2193.9	2196.5	2196.5	2201.9	2188.6	2199.2	2199.2	2207.2
7.5°	2177.9	2177.9	2183.2	2180.6	2185.9	2188.6	2193.9	2183.2	2193.9	2193.9	2201.9
10°	2164.6	2164.6	2172.6	2169.9	2177.9	2180.6	2188.6	2177.9	2188.6	2191.2	2199.2
12.5°	2146.0	2148.7	2156.6	2156.6	2164.6	2169.9	2177.9	2172.6	2185.9	2188.6	2199.2
15°	2124.7	2130.1	2140.7	2138.0	2146.0	2154.0	2164.6	2156.6	2175.3	2180.6	2191.2
17.5°	2098.1	2103.5	2111.4	2111.4	2119.4	2124.7	2138.0	2132.7	2148.7	2151.3	2164.6
20°	2058.3	2066.2	2076.9	2074.2	2082.2	2087.5	2098.1	2092.8	2108.8	2114.1	2127.4
22.5°	2010.4	2015.7	2023.7	2023.7	2031.7	2037.0	2047.6	2039.6	2055.6	2058.3	2068.9
25°	1946.6	1951.9	1957.2	1959.9	1967.8	1970.5	1975.8	1970.5	1983.8	1986.5	1999.7
27.5°	1864.1	1866.8	1874.8	1874.8	1880.1	1882.7	1890.7	1880.1	1898.7	1898.7	1906.7
30°	1765.7	1763.1	1773.7	1768.4	1773.7	1773.7	1781.7	1776.4	1789.7	1784.4	1792.3
32.5°	1635.4	1640.8	1640.8	1635.4	1646.1	1643.4	1643.4	1638.1	1646.1	1648.7	1654.0
35°	1483.9	1491.8	1491.8	1494.5	1497.2	1489.2	1491.8	1475.9	1489.2	1491.8	1494.5
37.5°	1319.0	1311.0	1316.3	1308.3	1321.6	1305.7	1305.7	1295.1	1305.7	1305.7	1308.3
40°	1130.2	1127.5	1132.8	1127.5	1124.9	1122.2	1116.9	1108.9	1119.5	1114.2	1122.2
42.5°	952.0	949.3	949.3	944.0	941.4	941.4	936.1	930.7	928.1	928.1	941.4
45°	768.5	773.8	768.5	765.9	771.2	765.9	768.5	757.9	763.2	757.9	763.2
47.5°	614.3	616.9	611.6	606.3	614.3	606.3	606.3	598.3	609.0	609.0	603.6
50°	476.0	473.3	468.0	473.3	470.7	470.7	470.7	462.7	468.0	460.0	465.4
52.5°	351.0	348.4	348.4	345.7	348.4	345.7	345.7	343.0	343.0	340.4	343.0
55°	255.3	252.6	247.3	247.3	247.3	250.0	247.3	244.7	244.7	242.0	244.7
57.5°	172.9	167.5	167.5	167.5	167.5	164.9	164.9	162.2	164.9	162.2	164.9
60°	111.7	111.7	106.4	106.4	106.4	106.4	106.4	103.7	106.4	106.4	106.4
62.5°	69.1	69.1	66.5	63.8	66.5	63.8	63.8	63.8	66.5	63.8	66.5
65°	45.2	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
67.5°	31.9	29.3	29.3	29.3	29.3	29.3	29.3	26.6	29.3	29.3	29.3
70°	21.3	21.3	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
72.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
75°	10.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
77.5°	8.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
80°	5.3	5.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	2.7	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	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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: P252284

CATALOG NUMBER: LD6B40D010 EU6B30508027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2201.9	2204.5	2199.2	2201.9	2196.5	2201.9	2204.5	2209.8
5°	2196.5	2199.2	2193.9	2199.2	2193.9	2199.2	2201.9	2207.2
7.5°	2191.2	2196.5	2191.2	2196.5	2191.2	2196.5	2199.2	2204.5
10°	2191.2	2199.2	2193.9	2201.9	2193.9	2199.2	2204.5	2207.2
12.5°	2191.2	2199.2	2196.5	2201.9	2199.2	2204.5	2209.8	2215.1
15°	2185.9	2193.9	2188.6	2196.5	2193.9	2196.5	2207.2	2207.2
17.5°	2156.6	2164.6	2164.6	2169.9	2169.9	2177.9	2183.2	2188.6
20°	2119.4	2127.4	2124.7	2132.7	2132.7	2140.7	2146.0	2151.3
22.5°	2063.6	2074.2	2071.5	2079.5	2076.9	2082.2	2092.8	2090.2
25°	1991.8	2005.1	2002.4	2007.7	2005.1	2005.1	2010.4	2013.0
27.5°	1904.0	1912.0	1909.3	1914.7	1909.3	1914.7	1920.0	1922.6
30°	1789.7	1795.0	1792.3	1795.0	1792.3	1797.6	1800.3	1805.6
32.5°	1651.4	1659.4	1651.4	1656.7	1654.0	1654.0	1664.7	1659.4
35°	1486.5	1489.2	1491.8	1491.8	1486.5	1489.2	1494.5	1494.5
37.5°	1303.0	1316.3	1300.4	1308.3	1305.7	1305.7	1305.7	1313.7
40°	1111.6	1114.2	1108.9	1108.9	1108.9	1106.2	1116.9	1114.2
42.5°	930.7	933.4	930.7	922.8	925.4	925.4	933.4	922.8
45°	755.2	760.5	757.9	757.9	752.6	752.6	755.2	749.9
47.5°	598.3	603.6	595.7	598.3	593.0	598.3	595.7	601.0
50°	454.7	460.0	457.4	460.0	460.0	454.7	462.7	452.1
52.5°	340.4	343.0	340.4	337.7	335.1	335.1	340.4	337.7
55°	242.0	239.3	239.3	239.3	242.0	242.0	239.3	236.7
57.5°	162.2	162.2	159.6	159.6	162.2	156.9	159.6	156.9
60°	103.7	103.7	103.7	103.7	101.1	103.7	103.7	103.7
62.5°	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
65°	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
67.5°	26.6	29.3	29.3	29.3	26.6	26.6	26.6	26.6
70°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
72.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
75°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
77.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
80°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	2.7	2.7	2.7	2.7	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)