

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: P252292

Luminaire Tested: **LD6B40D010 EU6B30509035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252292
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 EU6B30509035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3345.0 lumens
Efficiency: N/A
Efficacy: 77.8 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

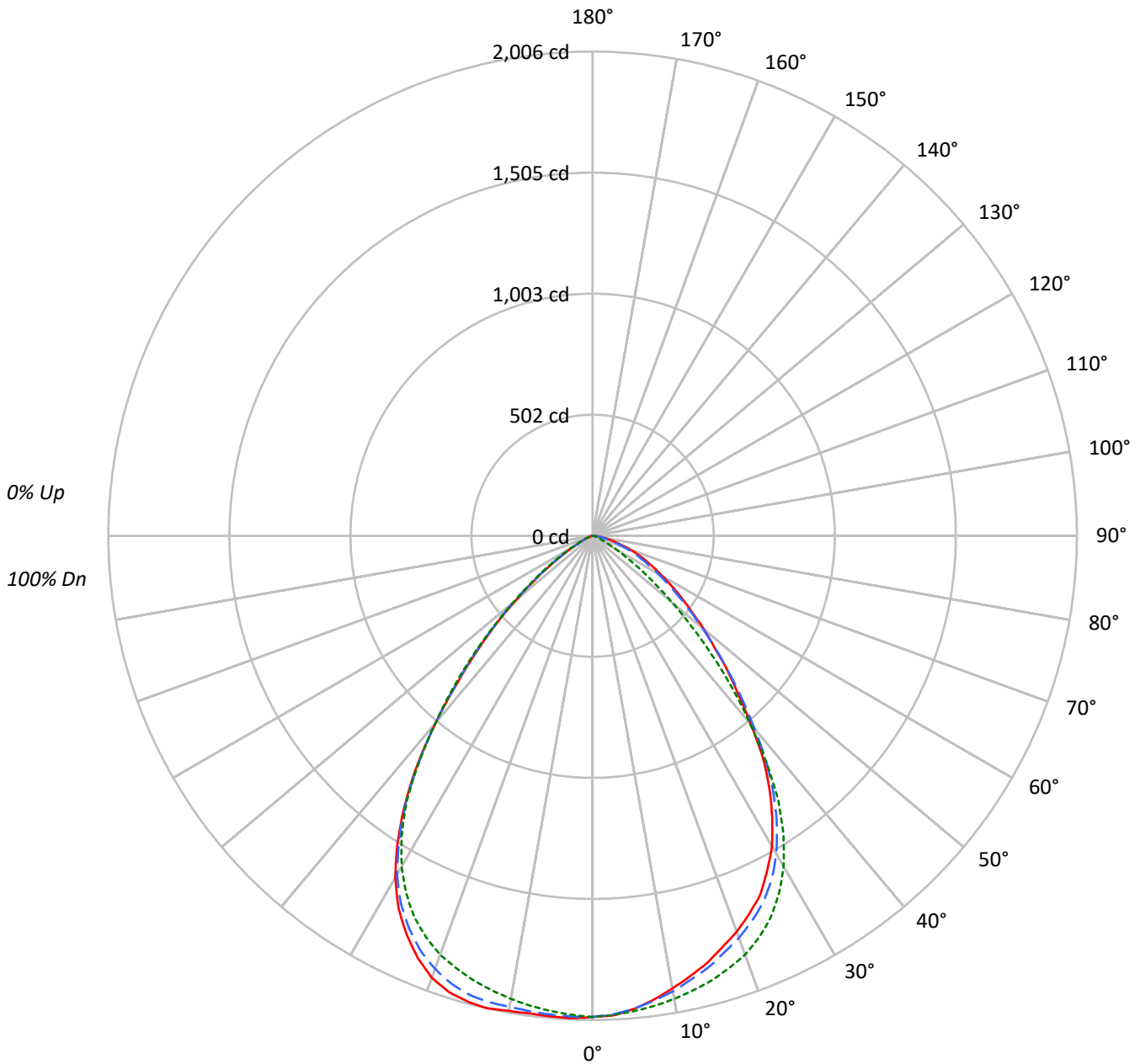
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252292

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBSW1H

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																			
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°	130077	130077	130077
5°	128838	129473	130888
10°	126181	129056	132401
15°	123771	128809	134990
20°	121207	128226	135252
25°	118221	125672	131222
30°	111923	119185	123170
35°	101642	106827	107782
40°	86750	86341	85932
45°	72870	64650	62657
50°	60857	43745	41553
55°	51219	26843	24375
60°	43359	14144	12252
65°	37543	7441	5943
70°	31226	4597	3224
75°	23064	3025	1815
80°	18109	1803	902
85°	14447	1797	0



TEST NUMBER: P252292

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.9	5.6
10°-20°	538.0	16.1
20°-30°	794.5	23.8
30°-40°	818.8	24.5
40°-50°	565.5	16.9
50°-60°	278.7	8.3
60°-70°	112.9	3.4
70°-80°	40.2	1.2
80°-90°	8.3	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°	1520.4	45.5
0°-40°	2339.2	69.9
0°-60°	3183.5	95.2
0°-90°	3345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3345.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1994	1994	1994	1994	1994	
5°	1967	1967	1977	1991	1999	186
15°	1832	1852	1907	1970	1999	516
25°	1642	1674	1746	1796	1823	751
35°	1276	1308	1341	1348	1353	791
45°	790	795	701	691	679	611
55°	450	433	236	222	214	407
65°	243	219	48	38	38	242
75°	92	77	12	7	7	103
85°	19	14	2	0	0	24
90°	0	0	0	0	0	



TEST NUMBER: P252292

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8
2.5°	1989.0	1981.8	1986.6	1977.0	1989.0	1977.0	1979.4	1981.8	1979.4	1981.8	1984.2
5°	1967.3	1960.1	1967.3	1955.3	1967.3	1960.1	1960.1	1962.5	1962.5	1964.9	1967.3
7.5°	1938.4	1931.2	1938.4	1926.4	1940.8	1933.6	1933.6	1938.4	1936.0	1938.4	1943.3
10°	1904.7	1895.1	1902.3	1895.1	1909.5	1899.9	1904.7	1904.7	1904.7	1912.0	1916.8
12.5°	1868.6	1859.0	1868.6	1856.6	1871.0	1863.8	1866.2	1873.4	1875.8	1880.6	1883.1
15°	1832.5	1820.4	1825.3	1818.0	1832.5	1825.3	1827.7	1837.3	1837.3	1844.5	1851.8
17.5°	1786.7	1777.1	1786.7	1777.1	1789.1	1784.3	1789.1	1796.4	1796.4	1803.6	1810.8
20°	1745.8	1736.2	1743.4	1736.2	1750.6	1743.4	1745.8	1755.4	1757.8	1765.1	1772.3
22.5°	1695.2	1688.0	1692.8	1685.6	1700.0	1695.2	1697.6	1707.3	1709.7	1714.5	1726.5
25°	1642.3	1627.8	1635.0	1630.2	1644.7	1637.4	1642.3	1651.9	1656.7	1663.9	1673.6
27.5°	1565.2	1558.0	1562.8	1562.8	1574.8	1567.6	1570.0	1579.6	1586.9	1594.1	1606.1
30°	1485.7	1473.7	1478.5	1480.9	1490.6	1485.7	1490.6	1500.2	1502.6	1512.2	1521.9
32.5°	1384.6	1379.8	1389.4	1384.6	1389.4	1389.4	1391.8	1399.0	1403.9	1408.7	1420.7
35°	1276.2	1266.6	1276.2	1271.4	1283.5	1276.2	1283.5	1290.7	1290.7	1300.3	1307.5
37.5°	1158.2	1146.2	1151.0	1151.0	1155.8	1153.4	1153.4	1165.5	1167.9	1175.1	1182.3
40°	1018.6	1013.8	1023.4	1021.0	1023.4	1023.4	1025.8	1033.0	1037.8	1040.3	1042.7
42.5°	893.4	895.8	898.2	898.2	898.2	898.2	898.2	907.8	905.4	912.6	915.0
45°	789.8	780.2	785.0	782.6	789.8	782.6	789.8	797.0	792.2	799.5	794.6
47.5°	683.9	683.9	683.9	681.5	686.3	683.9	688.7	691.1	691.1	691.1	688.7
50°	599.6	592.4	594.8	594.8	597.2	594.8	599.6	602.0	602.0	597.2	587.6
52.5°	517.7	515.3	515.3	520.1	520.1	517.7	517.7	517.7	517.7	510.5	505.7
55°	450.3	445.5	447.9	447.9	447.9	447.9	450.3	447.9	447.9	440.7	433.4
57.5°	390.1	385.3	385.3	385.3	387.7	385.3	385.3	385.3	382.9	375.6	366.0
60°	332.3	329.9	332.3	332.3	334.7	332.3	332.3	332.3	327.5	320.3	310.6
62.5°	284.1	284.1	284.1	286.6	286.6	284.1	284.1	281.7	279.3	269.7	260.1
65°	243.2	240.8	243.2	243.2	245.6	245.6	243.2	240.8	238.4	228.8	219.1
67.5°	202.3	199.9	202.3	202.3	204.7	202.3	202.3	202.3	195.0	190.2	180.6
70°	163.7	161.3	161.3	161.3	163.7	158.9	161.3	161.3	156.5	149.3	139.7
72.5°	125.2	125.2	125.2	125.2	125.2	125.2	122.8	122.8	118.0	110.8	106.0
75°	91.5	91.5	93.9	93.9	91.5	91.5	91.5	89.1	86.7	81.9	77.1
77.5°	67.4	67.4	67.4	67.4	65.0	65.0	65.0	62.6	60.2	57.8	53.0
80°	48.2	48.2	48.2	45.8	48.2	45.8	45.8	45.8	40.9	38.5	36.1
82.5°	33.7	31.3	31.3	31.3	31.3	31.3	31.3	28.9	28.9	26.5	24.1
85°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	16.9	14.4	14.4
87.5°	9.6	12.0	12.0	12.0	12.0	12.0	12.0	9.6	9.6	9.6	7.2
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: P252292

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8
2.5°	1984.2	1984.2	1989.0	1981.8	1993.8	1986.6	1984.2	1996.2	1989.0	1986.6	1991.4
5°	1967.3	1969.7	1972.2	1967.3	1979.4	1972.2	1972.2	1984.2	1979.4	1977.0	1984.2
7.5°	1945.7	1948.1	1952.9	1950.5	1960.1	1955.3	1957.7	1969.7	1964.9	1964.9	1972.2
10°	1919.2	1924.0	1928.8	1928.8	1940.8	1936.0	1936.0	1950.5	1945.7	1948.1	1957.7
12.5°	1887.9	1895.1	1902.3	1904.7	1916.8	1909.5	1912.0	1928.8	1926.4	1928.8	1938.4
15°	1854.2	1863.8	1871.0	1871.0	1885.5	1878.2	1885.5	1902.3	1897.5	1907.1	1919.2
17.5°	1815.6	1825.3	1834.9	1837.3	1851.8	1846.9	1856.6	1873.4	1873.4	1878.2	1892.7
20°	1779.5	1791.6	1796.4	1803.6	1818.0	1815.6	1820.4	1839.7	1839.7	1846.9	1861.4
22.5°	1731.4	1743.4	1753.0	1760.2	1772.3	1772.3	1779.5	1796.4	1796.4	1801.2	1815.6
25°	1678.4	1692.8	1700.0	1707.3	1719.3	1716.9	1724.1	1738.6	1741.0	1745.8	1760.2
27.5°	1611.0	1623.0	1632.6	1637.4	1654.3	1644.7	1651.9	1668.7	1666.3	1671.2	1683.2
30°	1526.7	1538.7	1548.3	1548.3	1562.8	1562.8	1570.0	1577.2	1577.2	1582.1	1591.7
32.5°	1427.9	1442.4	1442.4	1449.6	1459.2	1449.6	1459.2	1468.9	1464.1	1471.3	1478.5
35°	1314.8	1322.0	1324.4	1324.4	1331.6	1329.2	1326.8	1334.0	1329.2	1341.3	1348.5
37.5°	1177.5	1187.1	1182.3	1187.1	1184.7	1177.5	1177.5	1189.6	1179.9	1182.3	1189.6
40°	1045.1	1045.1	1042.7	1030.6	1033.0	1025.8	1023.4	1025.8	1016.2	1013.8	1023.4
42.5°	907.8	905.4	898.2	881.3	883.7	871.7	862.1	862.1	857.2	854.8	857.2
45°	785.0	777.8	765.7	746.5	741.7	732.0	712.8	708.0	700.7	700.7	703.1
47.5°	671.8	662.2	642.9	621.3	609.2	597.2	577.9	570.7	558.7	553.8	558.7
50°	577.9	561.1	537.0	505.7	493.6	479.2	459.9	447.9	435.8	431.0	428.6
52.5°	491.2	467.2	443.1	404.5	394.9	380.5	354.0	341.9	329.9	320.3	320.3
55°	416.6	394.9	361.2	325.1	310.6	296.2	269.7	252.8	240.8	236.0	231.2
57.5°	349.2	325.1	293.8	255.2	240.8	226.4	199.9	183.0	171.0	163.7	158.9
60°	293.8	267.3	236.0	202.3	185.4	171.0	144.5	127.6	115.6	108.4	103.5
62.5°	240.8	219.1	187.8	156.5	142.1	127.6	106.0	89.1	77.1	72.2	65.0
65°	202.3	180.6	151.7	125.2	113.2	98.7	79.5	65.0	55.4	48.2	43.3
67.5°	163.7	146.9	122.8	98.7	86.7	77.1	60.2	48.2	38.5	33.7	31.3
70°	130.0	113.2	93.9	74.6	67.4	57.8	45.8	33.7	28.9	24.1	21.7
72.5°	96.3	84.3	69.8	55.4	48.2	43.3	31.3	26.5	19.3	16.9	14.4
75°	69.8	60.2	50.6	38.5	33.7	31.3	24.1	16.9	14.4	12.0	9.6
77.5°	48.2	43.3	33.7	26.5	24.1	21.7	16.9	12.0	9.6	7.2	7.2
80°	31.3	26.5	21.7	16.9	16.9	14.4	9.6	7.2	7.2	4.8	4.8
82.5°	19.3	16.9	14.4	12.0	9.6	9.6	7.2	4.8	4.8	2.4	2.4
85°	12.0	9.6	7.2	7.2	4.8	4.8	4.8	2.4	2.4	2.4	2.4
87.5°	4.8	4.8	4.8	2.4	2.4	2.4	2.4	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



TEST NUMBER: P252292

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8
2.5°	1991.4	1991.4	1996.2	1989.0	1993.8	1993.8	1998.6	1989.0	1993.8	1996.2	2001.0
5°	1981.8	1984.2	1989.0	1986.6	1989.0	1989.0	1993.8	1981.8	1991.4	1991.4	1998.6
7.5°	1972.2	1972.2	1977.0	1974.6	1979.4	1981.8	1986.6	1977.0	1986.6	1986.6	1993.8
10°	1960.1	1960.1	1967.3	1964.9	1972.2	1974.6	1981.8	1972.2	1981.8	1984.2	1991.4
12.5°	1943.3	1945.7	1952.9	1952.9	1960.1	1964.9	1972.2	1967.3	1979.4	1981.8	1991.4
15°	1924.0	1928.8	1938.4	1936.0	1943.3	1950.5	1960.1	1952.9	1969.7	1974.6	1984.2
17.5°	1899.9	1904.7	1912.0	1912.0	1919.2	1924.0	1936.0	1931.2	1945.7	1948.1	1960.1
20°	1863.8	1871.0	1880.6	1878.2	1885.5	1890.3	1899.9	1895.1	1909.5	1914.4	1926.4
22.5°	1820.4	1825.3	1832.5	1832.5	1839.7	1844.5	1854.2	1846.9	1861.4	1863.8	1873.4
25°	1762.7	1767.5	1772.3	1774.7	1781.9	1784.3	1789.1	1784.3	1796.4	1798.8	1810.8
27.5°	1688.0	1690.4	1697.6	1697.6	1702.5	1704.9	1712.1	1702.5	1719.3	1719.3	1726.5
30°	1598.9	1596.5	1606.1	1601.3	1606.1	1606.1	1613.4	1608.5	1620.6	1615.8	1623.0
32.5°	1480.9	1485.7	1485.7	1480.9	1490.6	1488.1	1488.1	1483.3	1490.6	1493.0	1497.8
35°	1343.7	1350.9	1350.9	1353.3	1355.7	1348.5	1350.9	1336.4	1348.5	1350.9	1353.3
37.5°	1194.4	1187.1	1192.0	1184.7	1196.8	1182.3	1182.3	1172.7	1182.3	1182.3	1184.7
40°	1023.4	1021.0	1025.8	1021.0	1018.6	1016.2	1011.4	1004.1	1013.8	1009.0	1016.2
42.5°	862.1	859.7	859.7	854.8	852.4	852.4	847.6	842.8	840.4	840.4	852.4
45°	695.9	700.7	695.9	693.5	698.3	693.5	695.9	686.3	691.1	686.3	691.1
47.5°	556.2	558.7	553.8	549.0	556.2	549.0	549.0	541.8	551.4	551.4	546.6
50°	431.0	428.6	423.8	428.6	426.2	426.2	426.2	419.0	423.8	416.6	421.4
52.5°	317.9	315.4	315.4	313.0	315.4	313.0	313.0	310.6	310.6	308.2	310.6
55°	231.2	228.8	223.9	223.9	223.9	226.4	223.9	221.5	221.5	219.1	221.5
57.5°	156.5	151.7	151.7	151.7	151.7	149.3	149.3	146.9	149.3	146.9	149.3
60°	101.1	101.1	96.3	96.3	96.3	96.3	96.3	93.9	96.3	96.3	96.3
62.5°	62.6	62.6	60.2	57.8	60.2	57.8	57.8	57.8	60.2	57.8	60.2
65°	40.9	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
67.5°	28.9	26.5	26.5	26.5	26.5	26.5	26.5	24.1	26.5	26.5	26.5
70°	19.3	19.3	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
72.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
75°	9.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
77.5°	7.2	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
80°	4.8	4.8	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
85°	2.4	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	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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: P252292

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8	1993.8
2.5°	1993.8	1996.2	1991.4	1993.8	1989.0	1993.8	1996.2	2001.0
5°	1989.0	1991.4	1986.6	1991.4	1986.6	1991.4	1993.8	1998.6
7.5°	1984.2	1989.0	1984.2	1989.0	1984.2	1989.0	1991.4	1996.2
10°	1984.2	1991.4	1986.6	1993.8	1986.6	1991.4	1996.2	1998.6
12.5°	1984.2	1991.4	1989.0	1993.8	1991.4	1996.2	2001.0	2005.9
15°	1979.4	1986.6	1981.8	1989.0	1986.6	1989.0	1998.6	1998.6
17.5°	1952.9	1960.1	1960.1	1964.9	1964.9	1972.2	1977.0	1981.8
20°	1919.2	1926.4	1924.0	1931.2	1931.2	1938.4	1943.3	1948.1
22.5°	1868.6	1878.2	1875.8	1883.1	1880.6	1885.5	1895.1	1892.7
25°	1803.6	1815.6	1813.2	1818.0	1815.6	1815.6	1820.4	1822.9
27.5°	1724.1	1731.4	1728.9	1733.8	1728.9	1733.8	1738.6	1741.0
30°	1620.6	1625.4	1623.0	1625.4	1623.0	1627.8	1630.2	1635.0
32.5°	1495.4	1502.6	1495.4	1500.2	1497.8	1497.8	1507.4	1502.6
35°	1346.1	1348.5	1350.9	1350.9	1346.1	1348.5	1353.3	1353.3
37.5°	1179.9	1192.0	1177.5	1184.7	1182.3	1182.3	1182.3	1189.6
40°	1006.5	1009.0	1004.1	1004.1	1004.1	1001.7	1011.4	1009.0
42.5°	842.8	845.2	842.8	835.6	838.0	838.0	845.2	835.6
45°	683.9	688.7	686.3	686.3	681.5	681.5	683.9	679.1
47.5°	541.8	546.6	539.4	541.8	537.0	541.8	539.4	544.2
50°	411.8	416.6	414.2	416.6	416.6	411.8	419.0	409.4
52.5°	308.2	310.6	308.2	305.8	303.4	303.4	308.2	305.8
55°	219.1	216.7	216.7	216.7	219.1	219.1	216.7	214.3
57.5°	146.9	146.9	144.5	144.5	146.9	142.1	144.5	142.1
60°	93.9	93.9	93.9	93.9	91.5	93.9	93.9	93.9
62.5°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
65°	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
67.5°	24.1	26.5	26.5	26.5	24.1	24.1	24.1	24.1
70°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
72.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
75°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
77.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	2.4	2.4	2.4	2.4	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)