

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: P252396

Luminaire Tested: **LD6B40D010 EU6B30509035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3273.0 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

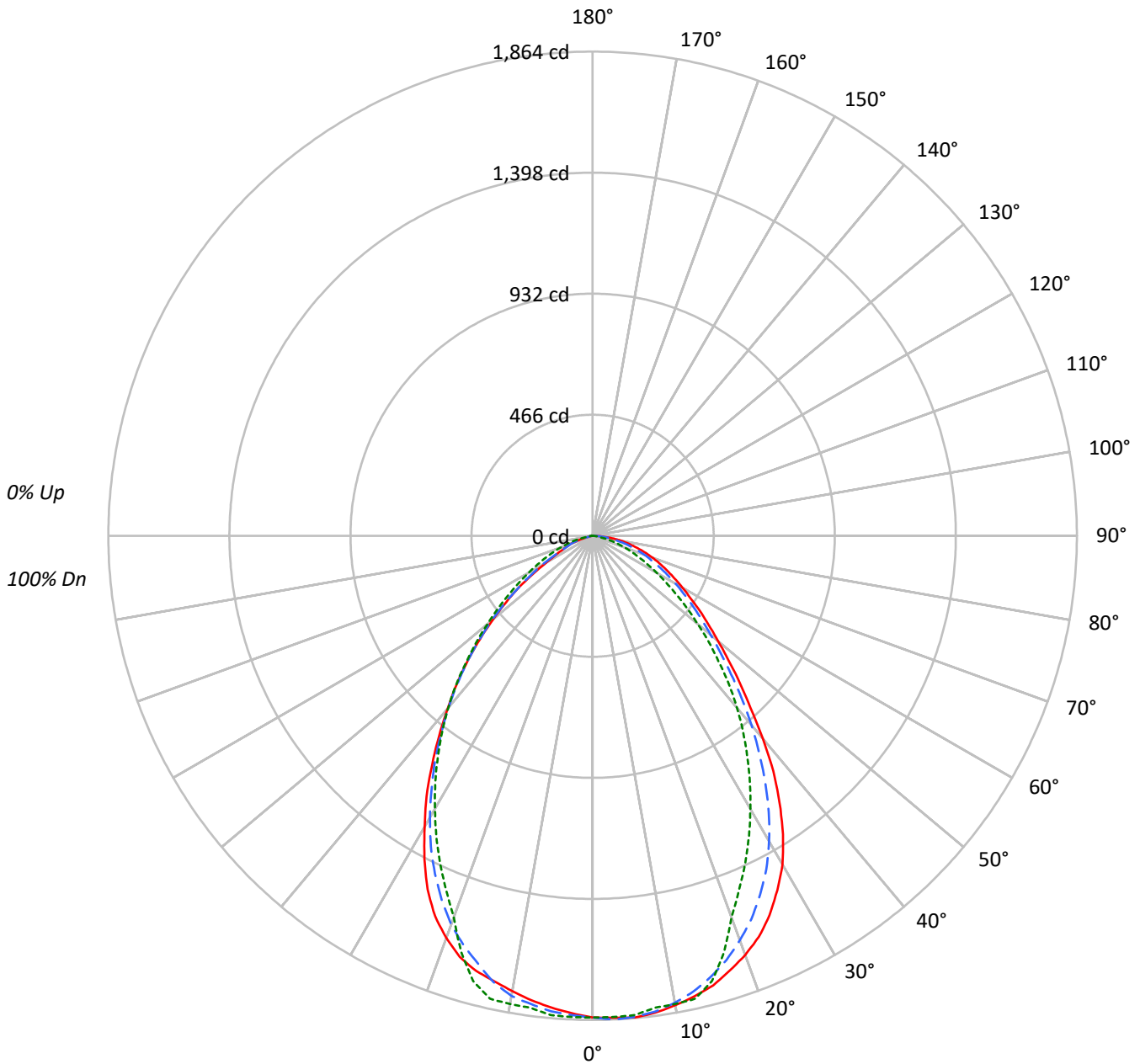
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44								
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	120989	120989	120989
5°	121922	121294	119401
10°	121577	121259	117907
15°	121029	119887	117125
20°	119221	108522	114375
25°	115990	100038	108186
30°	110130	91447	97429
35°	99937	82671	85745
40°	86767	73634	73839
45°	73996	63330	62666
50°	64044	53539	50596
55°	57259	44656	39173
60°	52166	37083	26396
65°	48705	30489	19698
70°	46410	24817	16538
75°	43709	17595	5470
80°	41628	9055	1803
85°	34284	5390	0



TEST NUMBER: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	5.4
10°-20°	489.8	15.0
20°-30°	676.1	20.7
30°-40°	688.0	21.0
40°-50°	552.9	16.9
50°-60°	367.7	11.2
60°-70°	209.5	6.4
70°-80°	94.1	2.9
80°-90°	19.8	0.6
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°	1341.0	41.0
0°-40°	2029.0	62.0
0°-60°	2949.6	90.1
0°-90°	3273.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3273.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1854	1854	1854	1854	1854	
5°	1862	1859	1852	1838	1823	177
15°	1792	1758	1775	1705	1734	504
25°	1611	1525	1390	1435	1503	738
35°	1255	1158	1038	1057	1077	780
45°	802	754	686	679	679	622
55°	503	470	393	349	344	452
65°	316	282	198	128	128	314
75°	173	144	70	29	22	185
85°	46	31	7	2	0	54
90°	0	0	0	0	0	



TEST NUMBER: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5
2.5°	1856.9	1866.6	1864.1	1861.7	1864.1	1861.7	1856.9	1856.9	1852.1	1852.1	1864.1
5°	1861.7	1866.6	1864.1	1861.7	1861.7	1864.1	1854.5	1854.5	1849.7	1847.3	1859.3
7.5°	1852.1	1859.3	1854.5	1854.5	1852.1	1854.5	1844.9	1844.9	1837.6	1835.2	1847.3
10°	1835.2	1844.9	1840.1	1840.1	1840.1	1835.2	1830.4	1828.0	1820.8	1818.4	1825.6
12.5°	1816.0	1823.2	1820.8	1816.0	1816.0	1816.0	1806.3	1803.9	1794.3	1789.5	1796.7
15°	1791.9	1796.7	1794.3	1791.9	1787.1	1787.1	1777.4	1772.6	1763.0	1753.4	1758.2
17.5°	1755.8	1763.0	1758.2	1755.8	1748.5	1748.5	1738.9	1734.1	1719.6	1710.0	1712.4
20°	1717.2	1719.6	1717.2	1712.4	1705.2	1702.8	1693.1	1683.5	1671.5	1659.4	1657.0
22.5°	1671.5	1673.9	1666.6	1661.8	1654.6	1652.2	1640.2	1632.9	1613.7	1599.2	1596.8
25°	1611.3	1613.7	1613.7	1601.6	1596.8	1592.0	1579.9	1567.9	1551.0	1531.8	1524.6
27.5°	1539.0	1546.2	1541.4	1529.4	1519.7	1517.3	1505.3	1495.6	1474.0	1457.1	1447.5
30°	1461.9	1459.5	1457.1	1449.9	1435.4	1433.0	1421.0	1408.9	1392.1	1370.4	1358.4
32.5°	1363.2	1363.2	1360.8	1353.6	1339.1	1334.3	1324.6	1310.2	1290.9	1274.1	1262.0
35°	1254.8	1257.2	1254.8	1240.4	1230.7	1225.9	1221.1	1204.2	1187.4	1168.1	1158.5
37.5°	1141.6	1134.4	1136.8	1124.7	1112.7	1117.5	1103.1	1095.8	1076.6	1062.1	1052.5
40°	1018.8	1023.6	1014.0	1009.1	1001.9	994.7	994.7	982.6	973.0	956.2	951.3
42.5°	898.4	905.6	903.2	898.4	888.7	891.1	879.1	874.3	862.2	855.0	847.8
45°	802.0	802.0	802.0	797.2	794.8	790.0	782.7	775.5	768.3	758.7	753.8
47.5°	708.1	708.1	710.5	705.7	700.9	698.5	693.6	693.6	681.6	672.0	667.1
50°	631.0	631.0	631.0	626.2	621.4	621.4	616.6	611.7	604.5	597.3	592.5
52.5°	561.2	561.2	561.2	556.4	553.9	551.5	549.1	546.7	537.1	532.3	527.5
55°	503.4	501.0	501.0	498.5	493.7	493.7	491.3	486.5	479.3	472.1	469.6
57.5°	445.6	448.0	445.6	445.6	440.7	440.7	435.9	433.5	426.3	421.5	416.7
60°	399.8	399.8	399.8	397.4	392.6	395.0	390.2	387.8	380.5	373.3	368.5
62.5°	354.0	356.5	356.5	354.0	349.2	349.2	346.8	344.4	337.2	330.0	322.7
65°	315.5	315.5	315.5	313.1	310.7	310.7	308.3	305.9	298.6	289.0	281.8
67.5°	279.4	277.0	277.0	277.0	274.6	272.2	269.7	267.3	260.1	252.9	243.3
70°	243.3	243.3	243.3	240.8	236.0	238.4	236.0	233.6	226.4	219.2	211.9
72.5°	209.5	209.5	207.1	204.7	204.7	202.3	202.3	199.9	192.7	183.0	175.8
75°	173.4	173.4	173.4	173.4	168.6	171.0	166.2	163.8	159.0	151.7	144.5
77.5°	142.1	142.1	142.1	139.7	137.3	137.3	134.9	132.5	125.2	120.4	110.8
80°	110.8	110.8	110.8	110.8	108.4	106.0	103.6	101.2	96.3	89.1	81.9
82.5°	81.9	81.9	79.5	79.5	79.5	77.1	74.7	72.3	67.4	62.6	57.8
85°	45.8	48.2	48.2	43.4	45.8	43.4	43.4	38.5	38.5	33.7	31.3
87.5°	16.9	14.5	14.5	14.5	14.5	14.5	14.5	12.0	12.0	12.0	9.6
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: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5
2.5°	1854.5	1852.1	1861.7	1861.7	1847.3	1854.5	1856.9	1852.1	1852.1	1854.5	1847.3
5°	1849.7	1844.9	1854.5	1856.9	1842.5	1849.7	1852.1	1847.3	1849.7	1852.1	1842.5
7.5°	1832.8	1832.8	1840.1	1842.5	1828.0	1835.2	1835.2	1830.4	1832.8	1832.8	1825.6
10°	1816.0	1808.7	1816.0	1816.0	1803.9	1806.3	1811.2	1808.7	1818.4	1830.4	1830.4
12.5°	1784.7	1777.4	1789.5	1789.5	1782.3	1791.9	1803.9	1811.2	1820.8	1825.6	1811.2
15°	1746.1	1748.5	1770.2	1787.1	1779.8	1794.3	1806.3	1801.5	1789.5	1775.0	1753.4
17.5°	1695.6	1688.3	1707.6	1717.2	1707.6	1712.4	1722.0	1712.4	1693.1	1681.1	1652.2
20°	1637.7	1618.5	1618.5	1613.7	1596.8	1596.8	1594.4	1577.5	1570.3	1563.1	1551.0
22.5°	1572.7	1551.0	1543.8	1529.4	1514.9	1512.5	1505.3	1488.4	1478.8	1474.0	1459.5
25°	1498.1	1478.8	1466.7	1452.3	1430.6	1425.8	1418.6	1401.7	1396.9	1389.7	1377.6
27.5°	1421.0	1396.9	1380.0	1365.6	1346.3	1343.9	1329.5	1317.4	1307.8	1303.0	1293.3
30°	1331.9	1305.4	1293.3	1274.1	1259.6	1254.8	1242.8	1225.9	1218.7	1213.9	1206.6
32.5°	1233.1	1211.5	1199.4	1182.6	1163.3	1165.7	1151.2	1136.8	1132.0	1127.2	1119.9
35°	1136.8	1115.1	1100.7	1086.2	1074.2	1069.4	1059.7	1047.7	1040.5	1038.0	1033.2
37.5°	1030.8	1014.0	1001.9	987.5	977.8	973.0	968.2	956.2	951.3	951.3	941.7
40°	927.3	912.8	903.2	895.9	883.9	881.5	876.7	869.5	867.0	864.6	857.4
42.5°	833.3	814.1	806.8	802.0	794.8	790.0	787.6	782.7	780.3	777.9	770.7
45°	744.2	727.4	720.1	715.3	708.1	705.7	703.3	696.0	691.2	686.4	684.0
47.5°	657.5	645.5	643.1	631.0	626.2	621.4	616.6	611.7	609.3	606.9	597.3
50°	582.8	575.6	563.6	556.4	551.5	549.1	539.5	532.3	529.9	527.5	520.2
52.5°	515.4	505.8	498.5	486.5	484.1	479.3	474.5	464.8	460.0	457.6	450.4
55°	455.2	448.0	438.3	428.7	421.5	419.1	411.8	402.2	397.4	392.6	387.8
57.5°	404.6	392.6	382.9	373.3	368.5	361.3	354.0	349.2	342.0	334.8	327.5
60°	356.5	346.8	334.8	325.1	320.3	315.5	305.9	298.6	291.4	284.2	277.0
62.5°	310.7	301.1	289.0	279.4	274.6	269.7	260.1	252.9	245.7	238.4	228.8
65°	269.7	260.1	250.5	240.8	236.0	231.2	221.6	211.9	204.7	197.5	187.9
67.5°	236.0	224.0	214.4	204.7	199.9	195.1	185.5	178.2	168.6	161.4	151.7
70°	199.9	190.3	183.0	173.4	168.6	163.8	154.1	144.5	137.3	130.1	120.4
72.5°	168.6	156.5	149.3	139.7	134.9	132.5	122.8	115.6	108.4	98.7	91.5
75°	134.9	125.2	115.6	108.4	103.6	101.2	91.5	84.3	77.1	69.8	62.6
77.5°	103.6	96.3	86.7	79.5	74.7	72.3	62.6	55.4	48.2	43.4	36.1
80°	77.1	67.4	62.6	55.4	53.0	48.2	43.4	36.1	31.3	24.1	19.3
82.5°	53.0	45.8	40.9	36.1	33.7	31.3	26.5	21.7	16.9	14.5	12.0
85°	28.9	24.1	21.7	19.3	16.9	16.9	14.5	12.0	9.6	7.2	4.8
87.5°	9.6	7.2	7.2	7.2	7.2	4.8	4.8	4.8	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: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5
2.5°	1852.1	1852.1	1852.1	1849.7	1849.7	1849.7	1847.3	1856.9	1847.3	1844.9	1852.1
5°	1849.7	1844.9	1844.9	1844.9	1844.9	1842.5	1840.1	1844.9	1837.6	1835.2	1835.2
7.5°	1835.2	1832.8	1832.8	1830.4	1828.0	1825.6	1823.2	1825.6	1818.4	1816.0	1816.0
10°	1837.6	1832.8	1832.8	1825.6	1820.8	1813.6	1806.3	1808.7	1799.1	1791.9	1791.9
12.5°	1808.7	1796.7	1789.5	1782.3	1777.4	1775.0	1765.4	1770.2	1760.6	1758.2	1758.2
15°	1743.7	1729.3	1717.2	1712.4	1712.4	1707.6	1700.4	1710.0	1705.2	1707.6	1719.6
17.5°	1642.6	1635.3	1628.1	1625.7	1628.1	1632.9	1637.7	1652.2	1652.2	1659.4	1671.5
20°	1553.5	1548.6	1553.5	1553.5	1555.9	1565.5	1575.1	1587.2	1592.0	1599.2	1616.1
22.5°	1466.7	1466.7	1471.6	1478.8	1476.4	1493.2	1495.6	1517.3	1517.3	1531.8	1546.2
25°	1382.5	1382.5	1387.3	1389.7	1394.5	1404.1	1413.8	1430.6	1435.4	1449.9	1461.9
27.5°	1300.6	1298.2	1298.2	1300.6	1305.4	1317.4	1322.2	1341.5	1348.7	1358.4	1370.4
30°	1209.0	1206.6	1211.5	1216.3	1213.9	1225.9	1233.1	1247.6	1252.4	1262.0	1271.7
32.5°	1122.3	1122.3	1122.3	1127.2	1127.2	1136.8	1136.8	1153.6	1153.6	1160.9	1170.5
35°	1033.2	1033.2	1035.6	1038.0	1040.5	1042.9	1045.3	1054.9	1057.3	1059.7	1064.5
37.5°	948.9	946.5	948.9	948.9	944.1	953.7	953.7	963.4	956.2	963.4	965.8
40°	862.2	862.2	859.8	859.8	859.8	864.6	859.8	867.0	862.2	867.0	864.6
42.5°	773.1	773.1	768.3	773.1	770.7	770.7	770.7	775.5	768.3	773.1	775.5
45°	684.0	681.6	681.6	679.2	679.2	679.2	681.6	681.6	679.2	684.0	684.0
47.5°	597.3	594.9	594.9	594.9	594.9	597.3	590.1	594.9	590.1	590.1	590.1
50°	522.6	520.2	517.8	515.4	513.0	513.0	510.6	510.6	505.8	503.4	501.0
52.5°	450.4	448.0	443.2	443.2	440.7	438.3	431.1	431.1	423.9	421.5	421.5
55°	385.4	378.1	375.7	370.9	370.9	366.1	361.3	356.5	349.2	344.4	344.4
57.5°	325.1	317.9	313.1	310.7	308.3	303.5	293.8	291.4	281.8	279.4	277.0
60°	272.2	264.9	257.7	252.9	250.5	243.3	233.6	228.8	224.0	216.8	209.5
62.5°	221.6	214.4	204.7	202.3	197.5	190.3	183.0	175.8	171.0	163.8	159.0
65°	178.2	171.0	163.8	159.0	154.1	146.9	139.7	132.5	127.6	125.2	122.8
67.5°	144.5	134.9	127.6	125.2	120.4	115.6	108.4	106.0	101.2	101.2	101.2
70°	113.2	106.0	98.7	96.3	93.9	89.1	84.3	84.3	84.3	84.3	84.3
72.5°	84.3	79.5	72.3	69.8	67.4	65.0	60.2	62.6	60.2	60.2	60.2
75°	53.0	48.2	43.4	40.9	38.5	36.1	33.7	31.3	28.9	26.5	26.5
77.5°	28.9	24.1	21.7	19.3	19.3	16.9	14.5	14.5	12.0	12.0	12.0
80°	16.9	14.5	12.0	9.6	9.6	7.2	7.2	7.2	7.2	4.8	4.8
82.5°	9.6	7.2	4.8	4.8	4.8	4.8	2.4	2.4	2.4	2.4	2.4
85°	4.8	4.8	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0
87.5°	2.4	2.4	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: P252396

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5	1854.5
2.5°	1840.1	1847.3	1840.1	1847.3	1847.3	1847.3	1847.3	1840.1
5°	1828.0	1832.8	1825.6	1830.4	1832.8	1830.4	1830.4	1823.2
7.5°	1806.3	1811.2	1803.9	1811.2	1813.6	1811.2	1808.7	1803.9
10°	1784.7	1787.1	1779.8	1784.7	1789.5	1789.5	1787.1	1779.8
12.5°	1750.9	1758.2	1750.9	1755.8	1760.6	1763.0	1763.0	1755.8
15°	1712.4	1724.5	1719.6	1726.9	1734.1	1736.5	1736.5	1734.1
17.5°	1673.9	1685.9	1678.7	1690.7	1698.0	1702.8	1705.2	1700.4
20°	1618.5	1632.9	1628.1	1637.7	1647.4	1654.6	1654.6	1647.4
22.5°	1546.2	1565.5	1563.1	1570.3	1582.4	1584.8	1589.6	1584.8
25°	1466.7	1481.2	1478.8	1486.0	1500.5	1500.5	1502.9	1502.9
27.5°	1375.2	1389.7	1387.3	1392.1	1401.7	1404.1	1406.5	1401.7
30°	1276.5	1283.7	1283.7	1290.9	1298.2	1300.6	1300.6	1293.3
32.5°	1168.1	1177.7	1182.6	1180.1	1187.4	1192.2	1189.8	1189.8
35°	1069.4	1071.8	1074.2	1076.6	1079.0	1083.8	1079.0	1076.6
37.5°	963.4	970.6	965.8	970.6	975.4	973.0	970.6	970.6
40°	867.0	869.5	864.6	869.5	871.9	871.9	871.9	867.0
42.5°	770.7	775.5	770.7	775.5	775.5	775.5	775.5	773.1
45°	674.4	679.2	679.2	681.6	681.6	679.2	679.2	679.2
47.5°	585.3	590.1	585.3	590.1	592.5	587.7	587.7	587.7
50°	501.0	498.5	498.5	501.0	501.0	501.0	501.0	498.5
52.5°	414.3	416.7	416.7	416.7	419.1	416.7	419.1	419.1
55°	339.6	339.6	339.6	342.0	339.6	339.6	342.0	344.4
57.5°	272.2	269.7	267.3	267.3	269.7	267.3	267.3	267.3
60°	209.5	207.1	204.7	204.7	204.7	204.7	204.7	202.3
62.5°	156.5	156.5	156.5	159.0	159.0	159.0	159.0	161.4
65°	125.2	125.2	125.2	125.2	125.2	125.2	125.2	127.6
67.5°	101.2	101.2	101.2	103.6	103.6	103.6	103.6	103.6
70°	84.3	84.3	86.7	84.3	86.7	86.7	86.7	86.7
72.5°	57.8	57.8	57.8	57.8	57.8	55.4	57.8	55.4
75°	24.1	24.1	24.1	24.1	24.1	24.1	24.1	21.7
77.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
80°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)