

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: P252707

Luminaire Tested: **LD6B40D010 EU6B30509030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3331.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

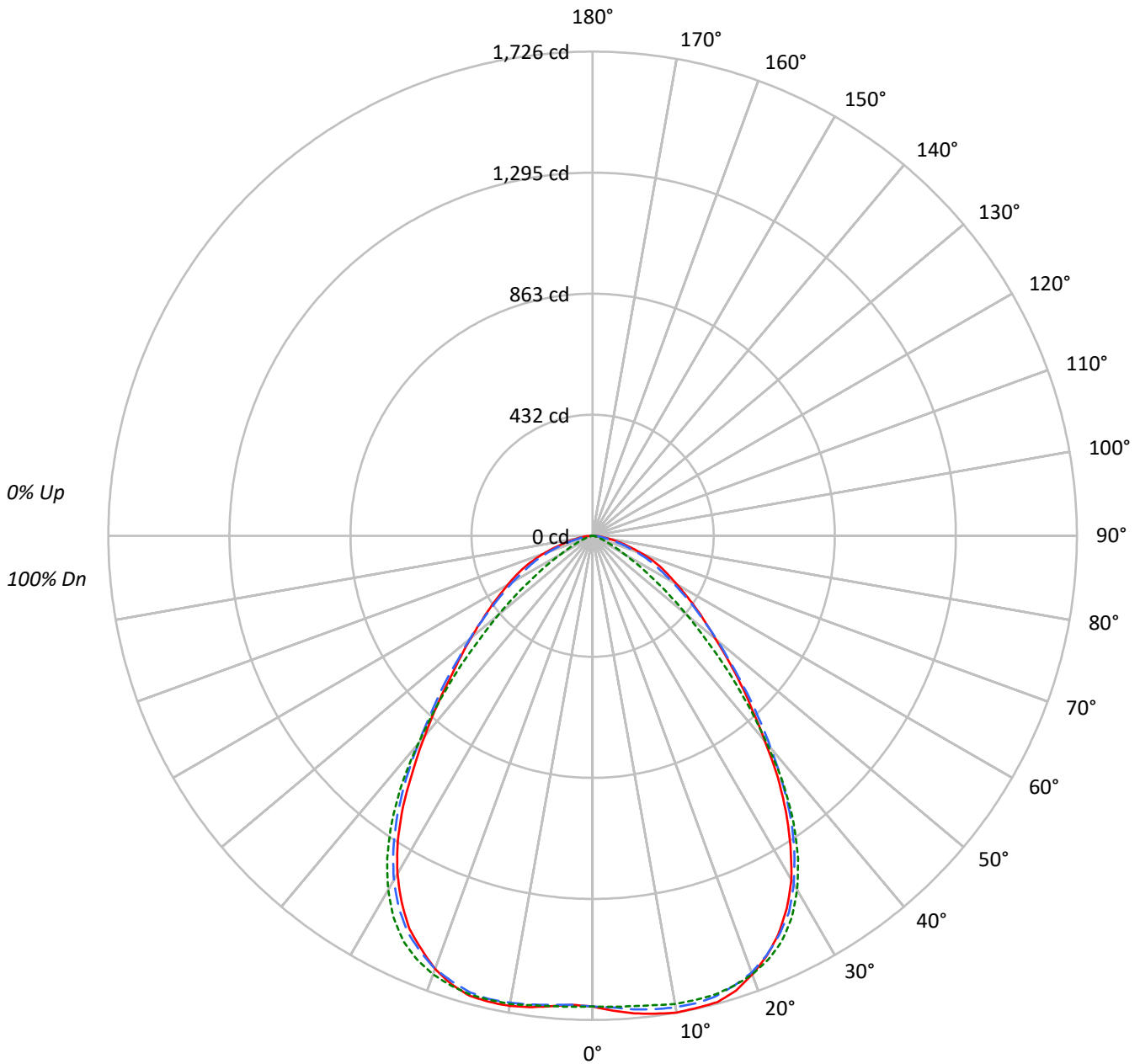
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

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	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	109487	109487	109487
5°	111929	110219	110219
10°	114323	112276	112753
15°	116240	114315	114632
20°	115528	115528	114042
25°	112779	114823	111239
30°	106755	109798	104789
35°	95661	99444	93773
40°	81265	82278	79247
45°	68774	62860	66356
50°	58066	44334	57335
55°	51025	28618	50491
60°	45225	17041	45525
65°	41773	10266	41773
70°	36224	5894	35327
75°	28711	3579	26921
80°	21415	2668	20514
85°	19537	1797	17741



TEST NUMBER: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	4.9
10°-20°	478.2	14.4
20°-30°	719.2	21.6
30°-40°	756.1	22.7
40°-50°	564.9	17.0
50°-60°	351.7	10.6
60°-70°	200.0	6.0
70°-80°	82.4	2.5
80°-90°	17.0	0.5
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°	1358.9	40.8
0°-40°	2115.1	63.5
0°-60°	3031.6	91.0
0°-90°	3331.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3331.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1678	1678	1678	1678	1678	
5°	1709	1695	1683	1678	1683	164
15°	1721	1700	1692	1685	1697	484
25°	1567	1571	1595	1560	1545	717
35°	1201	1232	1249	1213	1177	745
45°	745	762	681	748	719	578
55°	449	439	252	432	444	403
65°	271	242	66	242	271	266
75°	114	90	14	88	107	124
85°	26	17	2	14	24	29
90°	0	0	0	0	0	



TEST NUMBER: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2
2.5°	1694.8	1692.5	1694.8	1690.1	1687.7	1687.7	1690.1	1685.4	1683.0	1685.4	1683.0
5°	1709.1	1704.3	1706.7	1704.3	1699.6	1699.6	1702.0	1694.8	1694.8	1697.2	1694.8
7.5°	1718.6	1718.6	1718.6	1713.8	1711.5	1709.1	1713.8	1706.7	1704.3	1704.3	1702.0
10°	1725.7	1723.3	1725.7	1721.0	1716.2	1713.8	1718.6	1713.8	1709.1	1713.8	1706.7
12.5°	1723.3	1723.3	1723.3	1721.0	1716.2	1713.8	1718.6	1711.5	1709.1	1711.5	1706.7
15°	1721.0	1713.8	1716.2	1713.8	1706.7	1706.7	1709.1	1702.0	1697.2	1704.3	1699.6
17.5°	1699.6	1694.8	1697.2	1692.5	1687.7	1685.4	1687.7	1685.4	1680.6	1685.4	1680.6
20°	1664.0	1664.0	1666.4	1661.6	1656.9	1654.5	1659.2	1654.5	1649.7	1656.9	1656.9
22.5°	1621.3	1621.3	1621.3	1618.9	1616.5	1616.5	1616.5	1614.1	1611.8	1616.5	1618.9
25°	1566.7	1564.3	1566.7	1569.0	1566.7	1564.3	1566.7	1566.7	1561.9	1571.4	1571.4
27.5°	1497.8	1497.8	1502.6	1500.2	1500.2	1497.8	1502.6	1502.6	1500.2	1507.3	1514.4
30°	1417.1	1412.4	1417.1	1417.1	1419.5	1419.5	1421.9	1421.9	1421.9	1429.0	1433.7
32.5°	1312.7	1315.0	1322.2	1319.8	1317.4	1324.5	1324.5	1329.3	1331.7	1336.4	1338.8
35°	1201.1	1203.5	1203.5	1205.9	1210.6	1205.9	1217.7	1215.4	1217.7	1227.2	1232.0
37.5°	1082.4	1075.3	1087.2	1082.4	1084.8	1084.8	1089.5	1091.9	1099.0	1110.9	1110.9
40°	954.2	956.6	961.4	963.7	966.1	966.1	966.1	973.2	975.6	989.8	987.5
42.5°	842.7	842.7	847.4	849.8	849.8	849.8	849.8	856.9	861.7	866.4	871.2
45°	745.4	738.2	743.0	743.0	747.7	745.4	750.1	754.8	757.2	764.3	762.0
47.5°	652.8	650.4	652.8	655.2	652.8	655.2	657.5	659.9	662.3	662.3	662.3
50°	572.1	572.1	574.4	576.8	576.8	576.8	576.8	579.2	579.2	583.9	579.2
52.5°	505.6	508.0	508.0	505.6	508.0	508.0	510.4	510.4	508.0	508.0	500.9
55°	448.6	446.3	448.6	446.3	448.6	448.6	446.3	446.3	443.9	441.5	439.1
57.5°	394.0	394.0	394.0	394.0	391.7	394.0	391.7	389.3	389.3	384.5	377.4
60°	346.6	346.6	346.6	346.6	346.6	344.2	346.6	344.2	339.4	334.7	325.2
62.5°	306.2	303.8	306.2	303.8	303.8	301.5	301.5	299.1	294.3	289.6	280.1
65°	270.6	273.0	270.6	270.6	268.2	265.9	265.9	263.5	256.4	251.6	242.1
67.5°	232.6	230.3	230.3	230.3	227.9	227.9	227.9	223.1	218.4	211.3	201.8
70°	189.9	189.9	189.9	187.5	187.5	185.2	185.2	182.8	178.0	173.3	161.4
72.5°	149.5	149.5	149.5	144.8	147.2	144.8	144.8	140.1	137.7	130.6	123.4
75°	113.9	113.9	111.6	111.6	109.2	106.8	106.8	104.4	102.1	97.3	90.2
77.5°	83.1	83.1	83.1	80.7	78.3	76.0	76.0	73.6	71.2	68.8	64.1
80°	57.0	57.0	57.0	57.0	54.6	52.2	52.2	49.8	49.8	47.5	42.7
82.5°	38.0	38.0	38.0	38.0	35.6	35.6	35.6	33.2	30.9	30.9	26.1
85°	26.1	26.1	23.7	23.7	23.7	23.7	21.4	21.4	19.0	16.6	16.6
87.5°	14.2	14.2	14.2	14.2	11.9	11.9	11.9	11.9	9.5	9.5	7.1
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: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2
2.5°	1690.1	1690.1	1687.7	1680.6	1683.0	1680.6	1683.0	1680.6	1673.5	1680.6	1673.5
5°	1699.6	1702.0	1697.2	1687.7	1690.1	1687.7	1687.7	1685.4	1678.2	1683.0	1678.2
7.5°	1709.1	1706.7	1704.3	1694.8	1697.2	1694.8	1694.8	1690.1	1683.0	1687.7	1680.6
10°	1713.8	1713.8	1709.1	1699.6	1699.6	1697.2	1699.6	1697.2	1687.7	1694.8	1690.1
12.5°	1713.8	1711.5	1711.5	1699.6	1702.0	1699.6	1702.0	1697.2	1690.1	1694.8	1692.5
15°	1706.7	1706.7	1704.3	1692.5	1694.8	1694.8	1697.2	1692.5	1685.4	1692.5	1687.7
17.5°	1692.5	1692.5	1690.1	1680.6	1685.4	1685.4	1687.7	1683.0	1675.9	1680.6	1680.6
20°	1664.0	1666.4	1666.4	1659.2	1664.0	1664.0	1666.4	1664.0	1661.6	1664.0	1659.2
22.5°	1630.8	1635.5	1635.5	1628.4	1633.1	1633.1	1640.2	1637.9	1633.1	1635.5	1633.1
25°	1580.9	1585.7	1590.4	1585.7	1590.4	1590.4	1597.5	1595.1	1590.4	1595.1	1588.0
27.5°	1523.9	1526.3	1531.1	1526.3	1533.4	1531.1	1538.2	1535.8	1528.7	1535.8	1533.4
30°	1443.2	1452.7	1459.8	1452.7	1459.8	1459.8	1464.6	1462.2	1459.8	1457.5	1457.5
32.5°	1353.0	1362.5	1362.5	1360.1	1364.9	1364.9	1367.3	1362.5	1360.1	1362.5	1364.9
35°	1241.5	1246.2	1251.0	1248.6	1251.0	1253.3	1251.0	1253.3	1246.2	1248.6	1248.6
37.5°	1120.4	1125.1	1125.1	1118.0	1122.8	1122.8	1118.0	1118.0	1113.3	1118.0	1108.5
40°	992.2	987.5	989.8	985.1	980.4	980.4	978.0	968.5	963.7	966.1	968.5
42.5°	866.4	866.4	859.3	847.4	835.6	835.6	828.4	823.7	814.2	818.9	816.6
45°	759.6	747.7	738.2	719.2	712.1	707.4	695.5	683.6	678.9	681.3	678.9
47.5°	657.5	648.0	624.3	598.2	591.1	583.9	569.7	555.5	550.7	546.0	546.0
50°	572.1	555.5	529.3	500.9	489.0	477.1	458.1	443.9	434.4	436.8	436.8
52.5°	493.7	474.7	443.9	408.3	394.0	379.8	363.2	346.6	339.4	337.1	337.1
55°	424.9	403.5	372.7	332.3	320.5	303.8	282.5	263.5	254.0	251.6	256.4
57.5°	363.2	344.2	308.6	268.2	254.0	237.4	216.0	199.4	187.5	185.2	187.5
60°	313.3	287.2	256.4	218.4	199.4	185.2	161.4	147.2	135.3	130.6	132.9
62.5°	263.5	239.7	208.9	170.9	156.7	142.4	121.1	104.4	94.9	92.6	94.9
65°	225.5	201.8	173.3	140.1	125.8	111.6	92.6	76.0	68.8	66.5	68.8
67.5°	187.5	166.2	142.4	111.6	99.7	87.8	68.8	57.0	47.5	45.1	47.5
70°	151.9	132.9	109.2	87.8	76.0	66.5	52.2	40.4	33.2	30.9	33.2
72.5°	113.9	99.7	83.1	64.1	57.0	49.8	38.0	28.5	23.7	21.4	23.7
75°	83.1	71.2	59.3	45.1	40.4	35.6	26.1	19.0	16.6	14.2	16.6
77.5°	57.0	49.8	40.4	30.9	26.1	23.7	16.6	14.2	11.9	9.5	9.5
80°	38.0	33.2	26.1	21.4	19.0	16.6	11.9	9.5	7.1	7.1	7.1
82.5°	23.7	19.0	16.6	11.9	9.5	9.5	7.1	4.7	4.7	4.7	4.7
85°	14.2	11.9	9.5	7.1	4.7	4.7	2.4	2.4	2.4	2.4	2.4
87.5°	7.1	4.7	4.7	2.4	2.4	2.4	2.4	2.4	0.0	0.0	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: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2
2.5°	1678.2	1673.5	1673.5	1675.9	1678.2	1680.6	1675.9	1673.5	1673.5	1680.6	1675.9
5°	1678.2	1675.9	1675.9	1675.9	1680.6	1683.0	1678.2	1675.9	1678.2	1685.4	1683.0
7.5°	1685.4	1680.6	1683.0	1683.0	1685.4	1690.1	1685.4	1683.0	1685.4	1692.5	1687.7
10°	1690.1	1685.4	1687.7	1685.4	1692.5	1694.8	1690.1	1687.7	1690.1	1699.6	1697.2
12.5°	1692.5	1690.1	1690.1	1687.7	1694.8	1697.2	1692.5	1690.1	1692.5	1699.6	1697.2
15°	1687.7	1685.4	1685.4	1685.4	1690.1	1694.8	1687.7	1685.4	1685.4	1692.5	1690.1
17.5°	1678.2	1673.5	1673.5	1673.5	1675.9	1678.2	1671.1	1668.7	1666.4	1673.5	1671.1
20°	1661.6	1656.9	1652.1	1652.1	1654.5	1654.5	1649.7	1642.6	1642.6	1645.0	1640.2
22.5°	1630.8	1628.4	1623.6	1621.3	1626.0	1623.6	1614.1	1607.0	1604.6	1607.0	1602.3
25°	1588.0	1583.3	1580.9	1578.5	1580.9	1578.5	1569.0	1559.5	1559.5	1559.5	1552.4
27.5°	1528.7	1523.9	1521.6	1521.6	1523.9	1519.2	1509.7	1500.2	1495.5	1495.5	1488.3
30°	1452.7	1452.7	1450.4	1448.0	1445.6	1445.6	1431.4	1421.9	1417.1	1419.5	1414.7
32.5°	1360.1	1357.8	1355.4	1348.3	1350.7	1348.3	1336.4	1329.3	1322.2	1317.4	1315.0
35°	1241.5	1241.5	1239.1	1239.1	1239.1	1236.7	1224.8	1217.7	1213.0	1210.6	1203.5
37.5°	1110.9	1108.5	1106.2	1106.2	1106.2	1106.2	1099.0	1091.9	1091.9	1089.5	1084.8
40°	963.7	966.1	968.5	966.1	973.2	980.4	970.9	966.1	963.7	970.9	961.4
42.5°	821.3	818.9	830.8	833.2	833.2	845.0	847.4	849.8	847.4	852.2	852.2
45°	683.6	681.3	693.1	697.9	709.7	724.0	731.1	743.0	747.7	752.5	747.7
47.5°	553.1	562.6	572.1	583.9	593.4	617.2	631.4	643.3	648.0	655.2	655.2
50°	443.9	453.4	470.0	479.5	491.4	519.8	543.6	560.2	569.7	576.8	574.4
52.5°	341.8	358.4	379.8	389.3	405.9	439.1	465.3	484.2	496.1	503.2	505.6
55°	263.5	277.7	299.1	313.3	329.9	365.6	398.8	420.2	432.0	441.5	446.3
57.5°	194.6	211.3	235.0	246.9	265.9	306.2	334.7	360.8	375.0	386.9	389.3
60°	142.4	159.0	180.4	194.6	213.6	254.0	287.2	311.0	327.6	337.1	341.8
62.5°	102.1	118.7	140.1	154.3	170.9	206.5	239.7	263.5	280.1	292.0	299.1
65°	73.6	90.2	111.6	123.4	137.7	170.9	201.8	225.5	242.1	256.4	261.1
67.5°	54.6	66.5	85.5	97.3	111.6	137.7	163.8	185.2	201.8	213.6	218.4
70°	40.4	49.8	66.5	73.6	83.1	106.8	128.2	147.2	161.4	170.9	175.7
72.5°	28.5	35.6	47.5	54.6	61.7	80.7	97.3	111.6	121.1	130.6	135.3
75°	19.0	23.7	33.2	38.0	42.7	57.0	68.8	80.7	87.8	94.9	97.3
77.5°	11.9	16.6	23.7	26.1	30.9	38.0	47.5	54.6	59.3	64.1	68.8
80°	7.1	9.5	14.2	16.6	19.0	26.1	30.9	35.6	40.4	45.1	47.5
82.5°	4.7	7.1	9.5	9.5	11.9	14.2	19.0	23.7	26.1	28.5	30.9
85°	2.4	2.4	4.7	4.7	7.1	7.1	9.5	11.9	14.2	16.6	19.0
87.5°	2.4	2.4	2.4	2.4	4.7	4.7	7.1	7.1	7.1	9.5	9.5
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: P252707

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2	1678.2
2.5°	1671.1	1678.2	1671.1	1675.9	1673.5	1673.5	1671.1	1673.5
5°	1678.2	1687.7	1678.2	1685.4	1680.6	1680.6	1680.6	1683.0
7.5°	1685.4	1694.8	1687.7	1694.8	1692.5	1690.1	1690.1	1694.8
10°	1692.5	1699.6	1694.8	1702.0	1699.6	1697.2	1697.2	1702.0
12.5°	1692.5	1702.0	1697.2	1704.3	1702.0	1699.6	1699.6	1702.0
15°	1685.4	1697.2	1690.1	1697.2	1694.8	1692.5	1692.5	1697.2
17.5°	1664.0	1673.5	1668.7	1673.5	1673.5	1671.1	1673.5	1675.9
20°	1635.5	1642.6	1637.9	1642.6	1642.6	1637.9	1640.2	1642.6
22.5°	1595.1	1602.3	1597.5	1602.3	1599.9	1597.5	1597.5	1595.1
25°	1545.3	1554.8	1547.7	1552.4	1547.7	1542.9	1542.9	1545.3
27.5°	1483.6	1490.7	1481.2	1486.0	1481.2	1476.5	1476.5	1474.1
30°	1402.9	1405.2	1398.1	1402.9	1398.1	1395.8	1391.0	1391.0
32.5°	1305.6	1307.9	1300.8	1300.8	1296.1	1296.1	1286.6	1293.7
35°	1191.6	1194.0	1191.6	1189.2	1182.1	1179.7	1177.4	1177.4
37.5°	1072.9	1072.9	1065.8	1063.4	1058.7	1053.9	1056.3	1049.2
40°	951.9	949.5	942.4	944.7	942.4	935.3	932.9	930.5
42.5°	837.9	837.9	830.8	833.2	828.4	826.1	818.9	821.3
45°	738.2	738.2	731.1	731.1	728.7	721.6	724.0	719.2
47.5°	648.0	648.0	645.7	645.7	638.5	636.2	636.2	636.2
50°	569.7	569.7	569.7	569.7	567.3	564.9	562.6	564.9
52.5°	503.2	508.0	505.6	505.6	503.2	500.9	498.5	498.5
55°	443.9	446.3	446.3	448.6	446.3	443.9	446.3	443.9
57.5°	391.7	396.4	396.4	396.4	396.4	396.4	394.0	391.7
60°	346.6	348.9	348.9	351.3	351.3	351.3	348.9	348.9
62.5°	301.5	306.2	308.6	308.6	311.0	308.6	308.6	308.6
65°	265.9	270.6	273.0	270.6	273.0	273.0	270.6	270.6
67.5°	223.1	227.9	227.9	227.9	227.9	230.3	227.9	227.9
70°	180.4	185.2	182.8	185.2	185.2	185.2	185.2	185.2
72.5°	137.7	140.1	142.4	142.4	144.8	142.4	142.4	142.4
75°	99.7	104.4	104.4	104.4	104.4	106.8	106.8	106.8
77.5°	71.2	73.6	73.6	76.0	76.0	76.0	76.0	78.3
80°	49.8	49.8	52.2	52.2	54.6	54.6	54.6	54.6
82.5°	33.2	35.6	35.6	35.6	35.6	35.6	35.6	35.6
85°	19.0	21.4	21.4	21.4	21.4	23.7	23.7	23.7
87.5°	11.9	11.9	11.9	11.9	11.9	11.9	9.5	9.5
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)