

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: PORTFOLIO

Report Number: P252281

Luminaire Tested: **LE\_6B30D010 EC6B30509050 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252281  
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: PORTFOLIO  
Catalog Number: LE\_6B30D010 EC6B30509050 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2975.0 lumens  
Efficiency: N/A  
Efficacy: 106.2 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

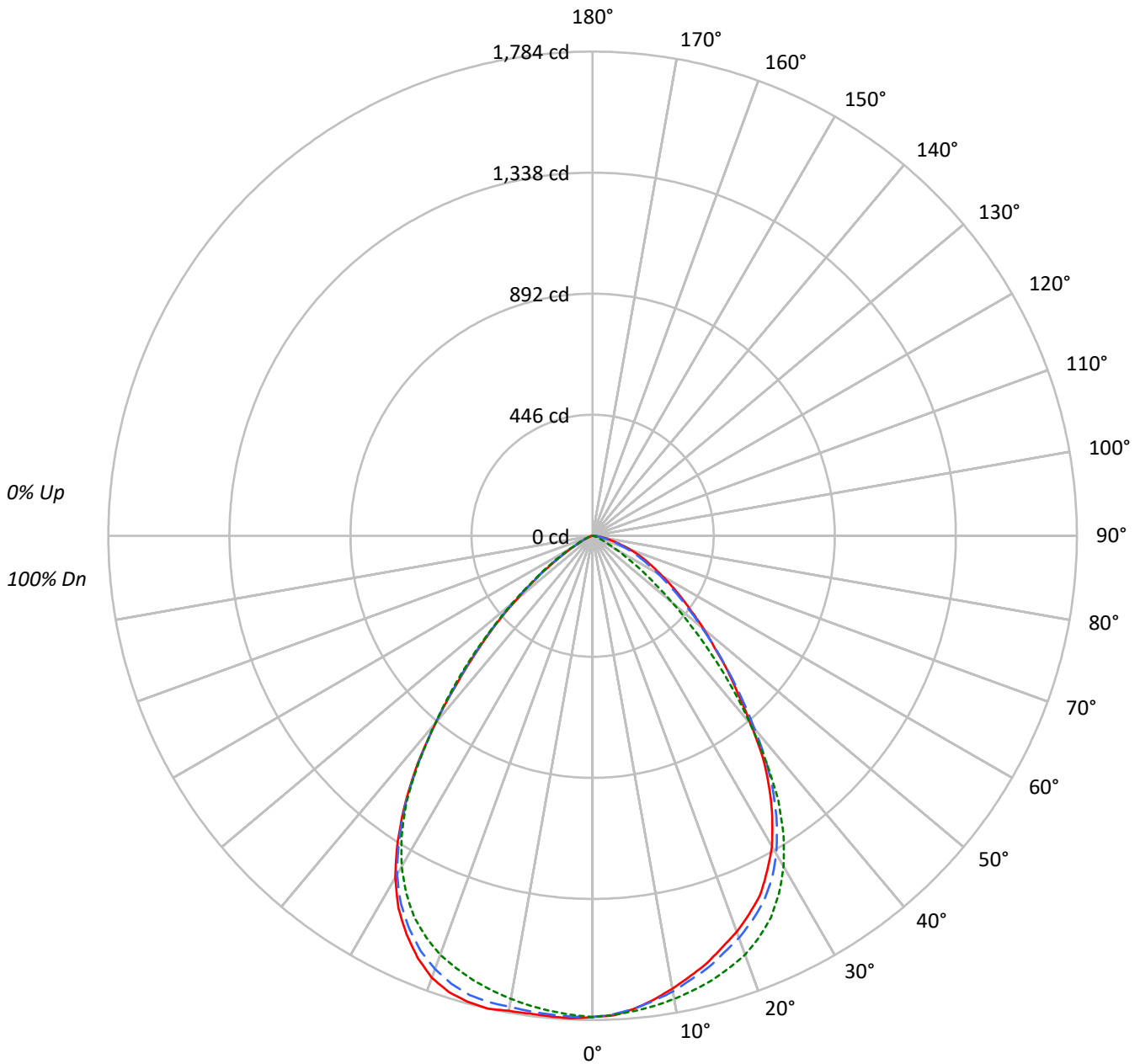
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

### Luminous Intensity Polar Plot





TEST NUMBER: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	115685	115685	115685
5°	114594	115144	116415
10°	112223	114780	117761
15°	110080	114558	120063
20°	107807	114042	120290
25°	105141	111778	116702
30°	99546	105994	109542
35°	90404	95007	95860
40°	77152	76785	76428
45°	64816	57499	55728
50°	54118	38914	36955
55°	45554	23875	21680
60°	38557	12578	10895
65°	33375	6623	5280
70°	27773	4082	2861
75°	20519	2722	1613
80°	16118	1578	789
85°	12800	1572	0



TEST NUMBER: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.1	5.6
10°-20°	478.5	16.1
20°-30°	706.6	23.8
30°-40°	728.2	24.5
40°-50°	503.0	16.9
50°-60°	247.9	8.3
60°-70°	100.4	3.4
70°-80°	35.8	1.2
80°-90°	7.4	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°	1352.2	45.5
0°-40°	2080.5	69.9
0°-60°	2831.3	95.2
0°-90°	2975.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2975.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1773	1773	1773	1773	1773	
5°	1750	1750	1758	1771	1778	165
15°	1630	1647	1696	1752	1778	459
25°	1461	1488	1553	1598	1621	668
35°	1135	1163	1193	1199	1204	703
45°	702	707	623	615	604	543
55°	400	386	210	197	191	362
65°	216	195	43	34	34	215
75°	81	68	11	6	6	91
85°	17	13	2	0	0	21
90°	0	0	0	0	0	



TEST NUMBER: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
2.5°	1769.0	1762.6	1766.9	1758.2	1769.0	1758.2	1760.4	1762.6	1760.4	1762.6	1764.8
5°	1749.8	1743.2	1749.8	1739.0	1749.8	1743.2	1743.2	1745.5	1745.5	1747.6	1749.8
7.5°	1724.0	1717.6	1724.0	1713.4	1726.1	1719.8	1719.8	1724.0	1721.9	1724.0	1728.2
10°	1694.0	1685.5	1691.9	1685.5	1698.4	1689.8	1694.0	1694.0	1694.0	1700.5	1704.8
12.5°	1661.9	1653.4	1661.9	1651.2	1664.0	1657.6	1659.8	1666.2	1668.4	1672.6	1674.8
15°	1629.8	1619.1	1623.4	1617.0	1629.8	1623.4	1625.5	1634.1	1634.1	1640.5	1646.9
17.5°	1589.1	1580.5	1589.1	1580.5	1591.2	1587.0	1591.2	1597.6	1597.6	1604.1	1610.5
20°	1552.8	1544.1	1550.5	1544.1	1557.0	1550.5	1552.8	1561.2	1563.4	1569.9	1576.2
22.5°	1507.8	1501.2	1505.6	1499.1	1512.0	1507.8	1509.9	1518.4	1520.6	1524.9	1535.5
25°	1460.6	1447.8	1454.1	1449.9	1462.8	1456.4	1460.6	1469.1	1473.5	1479.9	1488.5
27.5°	1392.1	1385.6	1389.9	1389.9	1400.6	1394.2	1396.4	1404.9	1411.4	1417.8	1428.5
30°	1321.4	1310.6	1315.0	1317.1	1325.6	1321.4	1325.6	1334.2	1336.4	1345.0	1353.5
32.5°	1231.5	1227.1	1235.8	1231.5	1235.8	1235.8	1237.9	1244.2	1248.6	1252.9	1263.6
35°	1135.1	1126.5	1135.1	1130.8	1141.5	1135.1	1141.5	1147.9	1147.9	1156.5	1162.9
37.5°	1030.1	1019.4	1023.8	1023.8	1028.0	1025.9	1025.9	1036.5	1038.8	1045.1	1051.5
40°	905.9	901.6	910.2	908.0	910.2	910.2	912.4	918.8	923.0	925.2	927.4
42.5°	794.5	796.8	798.9	798.9	798.9	798.9	798.9	807.4	805.2	811.6	813.9
45°	702.5	693.9	698.1	696.0	702.5	696.0	702.5	708.9	704.6	711.0	706.8
47.5°	608.2	608.2	608.2	606.1	610.4	608.2	612.5	614.6	614.6	614.6	612.5
50°	533.2	526.9	529.0	529.0	531.1	529.0	533.2	535.4	535.4	531.1	522.5
52.5°	460.5	458.2	458.2	462.6	462.6	460.5	460.5	460.5	460.5	454.0	449.8
55°	400.5	396.2	398.4	398.4	398.4	398.4	400.5	398.4	398.4	391.9	385.5
57.5°	347.0	342.6	342.6	342.6	344.8	342.6	342.6	342.6	340.5	334.1	325.5
60°	295.5	293.4	295.5	295.5	297.8	295.5	295.5	295.5	291.2	284.9	276.2
62.5°	252.8	252.8	252.8	254.9	254.9	252.8	252.8	250.6	248.4	239.9	231.2
65°	216.2	214.1	216.2	216.2	218.5	218.5	216.2	214.1	212.0	203.5	194.9
67.5°	179.9	177.8	179.9	179.9	182.0	179.9	179.9	179.9	173.5	169.2	160.6
70°	145.6	143.5	143.5	143.5	145.6	141.4	143.5	143.5	139.2	132.8	124.2
72.5°	111.4	111.4	111.4	111.4	111.4	111.4	109.2	109.2	105.0	98.5	94.2
75°	81.4	81.4	83.5	83.5	81.4	81.4	81.4	79.2	77.1	72.9	68.5
77.5°	60.0	60.0	60.0	60.0	57.9	57.9	57.9	55.6	53.5	51.4	47.1
80°	42.9	42.9	42.9	40.8	42.9	40.8	40.8	40.8	36.4	34.2	32.1
82.5°	30.0	27.9	27.9	27.9	27.9	27.9	27.9	25.8	25.8	23.5	21.4
85°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	15.0	12.9	12.9
87.5°	8.6	10.8	10.8	10.8	10.8	10.8	10.8	8.6	8.6	8.6	6.4
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: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
2.5°	1764.8	1764.8	1769.0	1762.6	1773.2	1766.9	1764.8	1775.4	1769.0	1766.9	1771.1
5°	1749.8	1751.9	1754.0	1749.8	1760.4	1754.0	1754.0	1764.8	1760.4	1758.2	1764.8
7.5°	1730.5	1732.6	1736.9	1734.8	1743.2	1739.0	1741.1	1751.9	1747.6	1747.6	1754.0
10°	1706.9	1711.1	1715.5	1715.5	1726.1	1721.9	1721.9	1734.8	1730.5	1732.6	1741.1
12.5°	1679.0	1685.5	1691.9	1694.0	1704.8	1698.4	1700.5	1715.5	1713.4	1715.5	1724.0
15°	1649.1	1657.6	1664.0	1664.0	1676.9	1670.5	1676.9	1691.9	1687.6	1696.1	1706.9
17.5°	1614.8	1623.4	1631.9	1634.1	1646.9	1642.6	1651.2	1666.2	1666.2	1670.5	1683.4
20°	1582.6	1593.4	1597.6	1604.1	1617.0	1614.8	1619.1	1636.2	1636.2	1642.6	1655.5
22.5°	1539.9	1550.5	1559.1	1565.5	1576.2	1576.2	1582.6	1597.6	1597.6	1602.0	1614.8
25°	1492.8	1505.6	1512.0	1518.4	1529.1	1527.0	1533.4	1546.2	1548.4	1552.8	1565.5
27.5°	1432.8	1443.5	1452.0	1456.4	1471.2	1462.8	1469.1	1484.1	1482.0	1486.2	1497.0
30°	1357.8	1368.5	1377.1	1377.1	1389.9	1389.9	1396.4	1402.8	1402.8	1407.0	1415.6
32.5°	1270.0	1282.9	1282.9	1289.2	1297.9	1289.2	1297.9	1306.4	1302.1	1308.5	1315.0
35°	1169.4	1175.8	1177.9	1177.9	1184.4	1182.2	1180.0	1186.5	1182.2	1192.9	1199.4
37.5°	1047.2	1055.9	1051.5	1055.9	1053.8	1047.2	1047.2	1058.0	1049.4	1051.5	1058.0
40°	929.5	929.5	927.4	916.6	918.8	912.4	910.2	912.4	903.8	901.6	910.2
42.5°	807.4	805.2	798.9	783.9	786.0	775.2	766.8	766.8	762.4	760.2	762.4
45°	698.1	691.8	681.0	663.9	659.6	651.0	633.9	629.6	623.2	623.2	625.4
47.5°	597.5	589.0	571.9	552.5	541.9	531.1	514.0	507.6	496.9	492.6	496.9
50°	514.0	499.0	477.6	449.8	439.0	426.2	409.0	398.4	387.6	383.4	381.2
52.5°	436.9	415.5	394.1	359.8	351.2	338.4	314.9	304.1	293.4	284.9	284.9
55°	370.5	351.2	321.2	289.1	276.2	263.4	239.9	224.9	214.1	209.9	205.6
57.5°	310.5	289.1	261.2	227.0	214.1	201.4	177.8	162.8	152.0	145.6	141.4
60°	261.2	237.8	209.9	179.9	164.9	152.0	128.5	113.5	102.8	96.4	92.1
62.5°	214.1	194.9	167.0	139.2	126.4	113.5	94.2	79.2	68.5	64.2	57.9
65°	179.9	160.6	134.9	111.4	100.6	87.8	70.6	57.9	49.2	42.9	38.5
67.5°	145.6	130.6	109.2	87.8	77.1	68.5	53.5	42.9	34.2	30.0	27.9
70°	115.6	100.6	83.5	66.4	60.0	51.4	40.8	30.0	25.8	21.4	19.2
72.5°	85.6	75.0	62.1	49.2	42.9	38.5	27.9	23.5	17.1	15.0	12.9
75°	62.1	53.5	45.0	34.2	30.0	27.9	21.4	15.0	12.9	10.8	8.6
77.5°	42.9	38.5	30.0	23.5	21.4	19.2	15.0	10.8	8.6	6.4	6.4
80°	27.9	23.5	19.2	15.0	15.0	12.9	8.6	6.4	6.4	4.2	4.2
82.5°	17.1	15.0	12.9	10.8	8.6	8.6	6.4	4.2	4.2	2.1	2.1
85°	10.8	8.6	6.4	6.4	4.2	4.2	4.2	2.1	2.1	2.1	2.1
87.5°	4.2	4.2	4.2	2.1	2.1	2.1	2.1	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: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
2.5°	1771.1	1771.1	1775.4	1769.0	1773.2	1773.2	1777.6	1769.0	1773.2	1775.4	1779.8
5°	1762.6	1764.8	1769.0	1766.9	1769.0	1769.0	1773.2	1762.6	1771.1	1771.1	1777.6
7.5°	1754.0	1754.0	1758.2	1756.1	1760.4	1762.6	1766.9	1758.2	1766.9	1766.9	1773.2
10°	1743.2	1743.2	1749.8	1747.6	1754.0	1756.1	1762.6	1754.0	1762.6	1764.8	1771.1
12.5°	1728.2	1730.5	1736.9	1736.9	1743.2	1747.6	1754.0	1749.8	1760.4	1762.6	1771.1
15°	1711.1	1715.5	1724.0	1721.9	1728.2	1734.8	1743.2	1736.9	1751.9	1756.1	1764.8
17.5°	1689.8	1694.0	1700.5	1700.5	1706.9	1711.1	1721.9	1717.6	1730.5	1732.6	1743.2
20°	1657.6	1664.0	1672.6	1670.5	1676.9	1681.2	1689.8	1685.5	1698.4	1702.6	1713.4
22.5°	1619.1	1623.4	1629.8	1629.8	1636.2	1640.5	1649.1	1642.6	1655.5	1657.6	1666.2
25°	1567.6	1572.0	1576.2	1578.4	1584.9	1587.0	1591.2	1587.0	1597.6	1599.8	1610.5
27.5°	1501.2	1503.4	1509.9	1509.9	1514.1	1516.2	1522.8	1514.1	1529.1	1529.1	1535.5
30°	1422.0	1419.9	1428.5	1424.2	1428.5	1428.5	1434.9	1430.6	1441.4	1437.0	1443.5
32.5°	1317.1	1321.4	1321.4	1317.1	1325.6	1323.5	1323.5	1319.2	1325.6	1327.9	1332.1
35°	1195.0	1201.5	1201.5	1203.6	1205.8	1199.4	1201.5	1188.6	1199.4	1201.5	1203.6
37.5°	1062.2	1055.9	1060.1	1053.8	1064.4	1051.5	1051.5	1043.0	1051.5	1051.5	1053.8
40°	910.2	908.0	912.4	908.0	905.9	903.8	899.5	893.1	901.6	897.4	903.8
42.5°	766.8	764.6	764.6	760.2	758.1	758.1	753.9	749.6	747.4	747.4	758.1
45°	618.9	623.2	618.9	616.8	621.1	616.8	618.9	610.4	614.6	610.4	614.6
47.5°	494.8	496.9	492.6	488.2	494.8	488.2	488.2	481.9	490.4	490.4	486.1
50°	383.4	381.2	376.9	381.2	379.1	379.1	379.1	372.6	376.9	370.5	374.8
52.5°	282.8	280.5	280.5	278.4	280.5	278.4	278.4	276.2	276.2	274.1	276.2
55°	205.6	203.5	199.1	199.1	199.1	201.4	199.1	197.0	197.0	194.9	197.0
57.5°	139.2	134.9	134.9	134.9	134.9	132.8	132.8	130.6	132.8	130.6	132.8
60°	90.0	90.0	85.6	85.6	85.6	85.6	85.6	83.5	85.6	85.6	85.6
62.5°	55.6	55.6	53.5	51.4	53.5	51.4	51.4	51.4	53.5	51.4	53.5
65°	36.4	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
67.5°	25.8	23.5	23.5	23.5	23.5	23.5	23.5	21.4	23.5	23.5	23.5
70°	17.1	17.1	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
72.5°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
75°	8.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
77.5°	6.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
80°	4.2	4.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
85°	2.1	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P252281

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
2.5°	1773.2	1775.4	1771.1	1773.2	1769.0	1773.2	1775.4	1779.8
5°	1769.0	1771.1	1766.9	1771.1	1766.9	1771.1	1773.2	1777.6
7.5°	1764.8	1769.0	1764.8	1769.0	1764.8	1769.0	1771.1	1775.4
10°	1764.8	1771.1	1766.9	1773.2	1766.9	1771.1	1775.4	1777.6
12.5°	1764.8	1771.1	1769.0	1773.2	1771.1	1775.4	1779.8	1784.0
15°	1760.4	1766.9	1762.6	1769.0	1766.9	1769.0	1777.6	1777.6
17.5°	1736.9	1743.2	1743.2	1747.6	1747.6	1754.0	1758.2	1762.6
20°	1706.9	1713.4	1711.1	1717.6	1717.6	1724.0	1728.2	1732.6
22.5°	1661.9	1670.5	1668.4	1674.8	1672.6	1676.9	1685.5	1683.4
25°	1604.1	1614.8	1612.6	1617.0	1614.8	1614.8	1619.1	1621.2
27.5°	1533.4	1539.9	1537.8	1542.0	1537.8	1542.0	1546.2	1548.4
30°	1441.4	1445.6	1443.5	1445.6	1443.5	1447.8	1449.9	1454.1
32.5°	1330.0	1336.4	1330.0	1334.2	1332.1	1332.1	1340.6	1336.4
35°	1197.1	1199.4	1201.5	1201.5	1197.1	1199.4	1203.6	1203.6
37.5°	1049.4	1060.1	1047.2	1053.8	1051.5	1051.5	1051.5	1058.0
40°	895.2	897.4	893.1	893.1	893.1	890.9	899.5	897.4
42.5°	749.6	751.8	749.6	743.1	745.2	745.2	751.8	743.1
45°	608.2	612.5	610.4	610.4	606.1	606.1	608.2	604.0
47.5°	481.9	486.1	479.8	481.9	477.6	481.9	479.8	484.0
50°	366.2	370.5	368.4	370.5	370.5	366.2	372.6	364.1
52.5°	274.1	276.2	274.1	272.0	269.9	269.9	274.1	272.0
55°	194.9	192.8	192.8	192.8	194.9	194.9	192.8	190.6
57.5°	130.6	130.6	128.5	128.5	130.6	126.4	128.5	126.4
60°	83.5	83.5	83.5	83.5	81.4	83.5	83.5	83.5
62.5°	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
65°	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
67.5°	21.4	23.5	23.5	23.5	21.4	21.4	21.4	21.4
70°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
72.5°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
75°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	2.1	2.1	2.1	2.1	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)