

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: P252705

Luminaire Tested: **LE\_6B40D010 EC6B30509024 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252705  
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: PORTFOLIO  
Catalog Number: LE\_6B40D010 EC6B30509024 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3522.5 lumens  
Efficiency: N/A  
Efficacy: 81.9 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

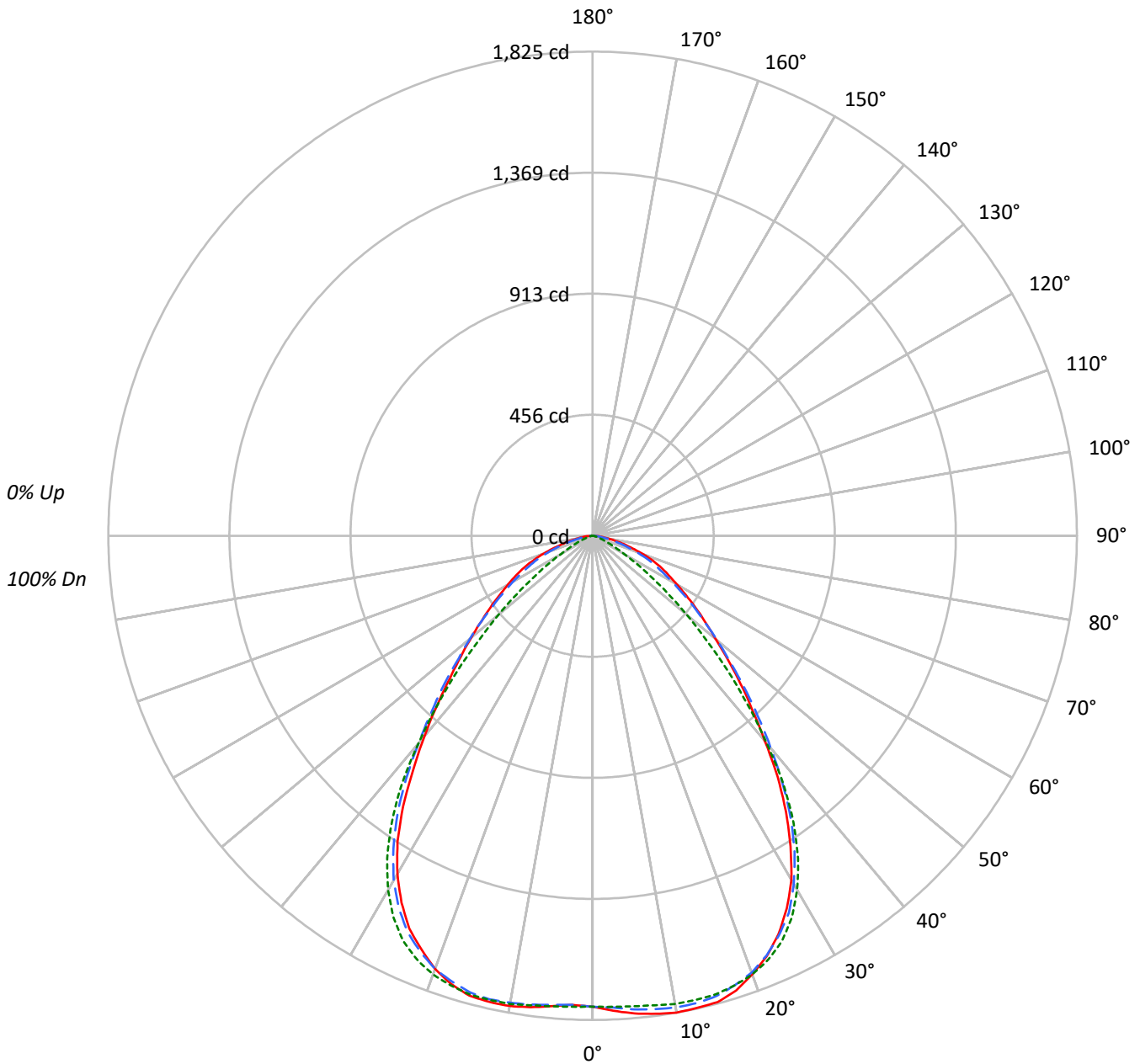
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

### Luminous Intensity Polar Plot





TEST NUMBER: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**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	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°	115789	115789	115789
5°	118366	116559	116559
10°	120894	118728	119238
15°	122920	120887	121225
20°	122165	122165	120596
25°	119265	121432	117631
30°	112895	116104	110815
35°	101156	105162	99157
40°	85941	87005	83803
45°	72723	66467	70176
50°	61405	46881	60634
55°	53960	30267	53391
60°	47821	18006	48148
65°	44166	10837	44166
70°	38322	6218	37349
75°	30374	3781	28484
80°	22617	2818	21716
85°	20660	1871	18789



TEST NUMBER: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.9	4.9
10°-20°	505.7	14.4
20°-30°	760.5	21.6
30°-40°	799.6	22.7
40°-50°	597.3	17.0
50°-60°	371.9	10.6
60°-70°	211.5	6.0
70°-80°	87.1	2.5
80°-90°	18.0	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°	1437.1	40.8
0°-40°	2236.7	63.5
0°-60°	3205.9	91.0
0°-90°	3522.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3522.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1775	1775	1775	1775	1775	
5°	1807	1792	1780	1775	1780	173
15°	1820	1797	1790	1782	1795	512
25°	1657	1662	1687	1649	1634	758
35°	1270	1303	1320	1283	1245	788
45°	788	806	720	791	761	611
55°	474	464	266	457	469	427
65°	286	256	70	256	286	282
75°	120	95	15	93	113	131
85°	28	18	2	15	25	31
90°	0	0	0	0	0	



TEST NUMBER: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8
2.5°	1792.2	1789.8	1792.2	1787.2	1784.8	1784.8	1787.2	1782.2	1779.8	1782.2	1779.8
5°	1807.4	1802.4	1804.9	1802.4	1797.2	1797.2	1799.9	1792.2	1792.2	1794.8	1792.2
7.5°	1817.4	1817.4	1817.4	1812.4	1809.9	1807.4	1812.4	1804.9	1802.4	1802.4	1799.9
10°	1824.9	1822.4	1824.9	1819.9	1814.9	1812.4	1817.4	1812.4	1807.4	1812.4	1804.9
12.5°	1822.4	1822.4	1822.4	1819.9	1814.9	1812.4	1817.4	1809.9	1807.4	1809.9	1804.9
15°	1819.9	1812.4	1814.9	1812.4	1804.9	1804.9	1807.4	1799.9	1794.8	1802.4	1797.2
17.5°	1797.2	1792.2	1794.8	1789.8	1784.8	1782.2	1784.8	1782.2	1777.2	1782.2	1777.2
20°	1759.6	1759.6	1762.1	1757.1	1752.1	1749.6	1754.6	1749.6	1744.6	1752.1	1752.1
22.5°	1714.5	1714.5	1714.5	1712.0	1709.5	1709.5	1709.5	1706.9	1704.4	1709.5	1712.0
25°	1656.8	1654.2	1656.8	1659.2	1656.8	1654.2	1656.8	1656.8	1651.8	1661.8	1661.8
27.5°	1583.9	1583.9	1589.0	1586.5	1586.5	1583.9	1589.0	1589.0	1586.5	1594.0	1601.5
30°	1498.6	1493.6	1498.6	1498.6	1501.1	1501.1	1503.6	1503.6	1503.6	1511.1	1516.1
32.5°	1388.1	1390.6	1398.1	1395.6	1393.1	1400.8	1400.8	1405.8	1408.2	1413.2	1415.8
35°	1270.1	1272.6	1272.6	1275.1	1280.2	1275.1	1287.8	1285.2	1287.8	1297.8	1302.8
37.5°	1144.6	1137.1	1149.6	1144.6	1147.1	1147.1	1152.1	1154.8	1162.2	1174.8	1174.8
40°	1009.1	1011.6	1016.6	1019.1	1021.6	1021.6	1021.6	1029.1	1031.8	1046.8	1044.2
42.5°	891.1	891.1	896.1	898.6	898.6	898.6	898.6	906.1	911.2	916.2	921.2
45°	788.2	780.6	785.8	785.8	790.8	788.2	793.2	798.2	800.8	808.2	805.8
47.5°	690.2	687.8	690.2	692.9	690.2	692.9	695.4	697.9	700.4	700.4	700.4
50°	605.0	605.0	607.5	610.0	610.0	610.0	610.0	612.5	612.5	617.5	612.5
52.5°	534.6	537.1	537.1	534.6	537.1	537.1	539.8	539.8	537.1	537.1	529.6
55°	474.4	471.9	474.4	471.9	474.4	474.4	471.9	471.9	469.4	466.9	464.4
57.5°	416.8	416.8	416.8	416.8	414.1	416.8	414.1	411.6	411.6	406.6	399.1
60°	366.5	366.5	366.5	366.5	366.5	364.0	366.5	364.0	359.0	354.0	343.9
62.5°	323.9	321.2	323.9	321.2	321.2	318.8	318.8	316.2	311.2	306.2	296.2
65°	286.1	288.6	286.1	286.1	283.6	281.1	281.1	278.6	271.1	266.1	256.0
67.5°	246.0	243.5	243.5	243.5	241.0	241.0	241.0	236.0	231.0	223.4	213.4
70°	200.9	200.9	200.9	198.2	198.2	195.8	195.8	193.2	188.2	183.2	170.8
72.5°	158.1	158.1	158.1	153.1	155.6	153.1	153.1	148.1	145.6	138.0	130.5
75°	120.5	120.5	118.0	118.0	115.5	113.0	113.0	110.5	108.0	102.9	95.4
77.5°	87.9	87.9	87.9	85.4	82.9	80.4	80.4	77.9	75.2	72.8	67.8
80°	60.2	60.2	60.2	60.2	57.8	55.2	55.2	52.8	52.8	50.2	45.1
82.5°	40.1	40.1	40.1	40.1	37.6	37.6	37.6	35.1	32.6	32.6	27.6
85°	27.6	27.6	25.1	25.1	25.1	25.1	22.6	22.6	20.1	17.6	17.6
87.5°	15.0	15.0	15.0	15.0	12.5	12.5	12.5	12.5	10.0	10.0	7.5
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: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8
2.5°	1787.2	1787.2	1784.8	1777.2	1779.8	1777.2	1779.8	1777.2	1769.8	1777.2	1769.8
5°	1797.2	1799.9	1794.8	1784.8	1787.2	1784.8	1784.8	1782.2	1774.8	1779.8	1774.8
7.5°	1807.4	1804.9	1802.4	1792.2	1794.8	1792.2	1792.2	1787.2	1779.8	1784.8	1777.2
10°	1812.4	1812.4	1807.4	1797.2	1797.2	1794.8	1797.2	1794.8	1784.8	1792.2	1787.2
12.5°	1812.4	1809.9	1809.9	1797.2	1799.9	1797.2	1799.9	1794.8	1787.2	1792.2	1789.8
15°	1804.9	1804.9	1802.4	1789.8	1792.2	1792.2	1794.8	1789.8	1782.2	1789.8	1784.8
17.5°	1789.8	1789.8	1787.2	1777.2	1782.2	1782.2	1784.8	1779.8	1772.2	1777.2	1777.2
20°	1759.6	1762.1	1762.1	1754.6	1759.6	1759.6	1762.1	1759.6	1757.1	1759.6	1754.6
22.5°	1724.5	1729.5	1729.5	1722.0	1727.0	1727.0	1734.5	1732.0	1727.0	1729.5	1727.0
25°	1671.8	1676.9	1681.9	1676.9	1681.9	1681.9	1689.4	1686.9	1681.9	1686.9	1679.4
27.5°	1611.5	1614.0	1619.1	1614.0	1621.6	1619.1	1626.6	1624.1	1616.6	1624.1	1621.6
30°	1526.2	1536.2	1543.8	1536.2	1543.8	1543.8	1548.8	1546.2	1543.8	1541.2	1541.2
32.5°	1430.9	1440.9	1440.9	1438.4	1443.4	1443.4	1445.9	1440.9	1438.4	1440.9	1443.4
35°	1312.9	1317.9	1322.9	1320.4	1322.9	1325.4	1322.9	1325.4	1317.9	1320.4	1320.4
37.5°	1184.9	1189.9	1189.9	1182.2	1187.4	1187.4	1182.2	1182.2	1177.2	1182.2	1172.2
40°	1049.2	1044.2	1046.8	1041.8	1036.8	1036.8	1034.2	1024.1	1019.1	1021.6	1024.1
42.5°	916.2	916.2	908.8	896.1	883.6	883.6	876.0	871.0	861.0	866.0	863.5
45°	803.2	790.8	780.6	760.6	753.0	748.0	735.5	722.9	717.9	720.4	717.9
47.5°	695.4	685.2	660.1	632.6	625.0	617.5	602.5	587.4	582.4	577.4	577.4
50°	605.0	587.4	559.8	529.6	517.1	504.5	484.5	469.4	459.4	461.9	461.9
52.5°	522.1	502.0	469.4	431.8	416.8	401.6	384.0	366.5	359.0	356.5	356.5
55°	449.4	426.8	394.1	351.4	338.9	321.2	298.8	278.6	268.6	266.1	271.1
57.5°	384.0	364.0	326.4	283.6	268.6	251.0	228.4	210.9	198.2	195.8	198.2
60°	331.4	303.8	271.1	231.0	210.9	195.8	170.8	155.6	143.1	138.0	140.6
62.5°	278.6	253.5	220.9	180.8	165.6	150.6	128.0	110.5	100.4	97.9	100.4
65°	238.5	213.4	183.2	148.1	133.0	118.0	97.9	80.4	72.8	70.2	72.8
67.5°	198.2	175.8	150.6	118.0	105.4	92.9	72.8	60.2	50.2	47.8	50.2
70°	160.6	140.6	115.5	92.9	80.4	70.2	55.2	42.6	35.1	32.6	35.1
72.5°	120.5	105.4	87.9	67.8	60.2	52.8	40.1	30.1	25.1	22.6	25.1
75°	87.9	75.2	62.8	47.8	42.6	37.6	27.6	20.1	17.6	15.0	17.6
77.5°	60.2	52.8	42.6	32.6	27.6	25.1	17.6	15.0	12.5	10.0	10.0
80°	40.1	35.1	27.6	22.6	20.1	17.6	12.5	10.0	7.5	7.5	7.5
82.5°	25.1	20.1	17.6	12.5	10.0	10.0	7.5	5.0	5.0	5.0	5.0
85°	15.0	12.5	10.0	7.5	5.0	5.0	2.5	2.5	2.5	2.5	2.5
87.5°	7.5	5.0	5.0	2.5	2.5	2.5	2.5	2.5	0.0	0.0	2.5
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: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8
2.5°	1774.8	1769.8	1769.8	1772.2	1774.8	1777.2	1772.2	1769.8	1769.8	1777.2	1772.2
5°	1774.8	1772.2	1772.2	1772.2	1777.2	1779.8	1774.8	1772.2	1774.8	1782.2	1779.8
7.5°	1782.2	1777.2	1779.8	1779.8	1782.2	1787.2	1782.2	1779.8	1782.2	1789.8	1784.8
10°	1787.2	1782.2	1784.8	1782.2	1789.8	1792.2	1787.2	1784.8	1787.2	1797.2	1794.8
12.5°	1789.8	1787.2	1787.2	1784.8	1792.2	1794.8	1789.8	1787.2	1789.8	1797.2	1794.8
15°	1784.8	1782.2	1782.2	1782.2	1787.2	1792.2	1784.8	1782.2	1782.2	1789.8	1787.2
17.5°	1774.8	1769.8	1769.8	1769.8	1772.2	1774.8	1767.1	1764.6	1762.1	1769.8	1767.1
20°	1757.1	1752.1	1747.1	1747.1	1749.6	1749.6	1744.6	1737.0	1737.0	1739.6	1734.5
22.5°	1724.5	1722.0	1717.0	1714.5	1719.5	1717.0	1706.9	1699.4	1696.9	1699.4	1694.4
25°	1679.4	1674.2	1671.8	1669.2	1671.8	1669.2	1659.2	1649.2	1649.2	1649.2	1641.6
27.5°	1616.6	1611.5	1609.0	1609.0	1611.5	1606.5	1596.5	1586.5	1581.4	1581.4	1573.9
30°	1536.2	1536.2	1533.8	1531.2	1528.8	1528.8	1513.6	1503.6	1498.6	1501.1	1496.1
32.5°	1438.4	1435.9	1433.4	1425.8	1428.2	1425.8	1413.2	1405.8	1398.1	1393.1	1390.6
35°	1312.9	1312.9	1310.4	1310.4	1310.4	1307.9	1295.2	1287.8	1282.8	1280.2	1272.6
37.5°	1174.8	1172.2	1169.8	1169.8	1169.8	1169.8	1162.2	1154.8	1154.8	1152.1	1147.1
40°	1019.1	1021.6	1024.1	1021.6	1029.1	1036.8	1026.6	1021.6	1019.1	1026.6	1016.6
42.5°	868.5	866.0	878.6	881.1	881.1	893.6	896.1	898.6	896.1	901.1	901.1
45°	722.9	720.4	733.0	738.0	750.5	765.6	773.1	785.8	790.8	795.8	790.8
47.5°	584.9	594.9	605.0	617.5	627.5	652.6	667.8	680.2	685.2	692.9	692.9
50°	469.4	479.5	497.0	507.0	519.6	549.8	574.9	592.4	602.5	610.0	607.5
52.5°	361.5	379.0	401.6	411.6	429.2	464.4	492.0	512.1	524.6	532.1	534.6
55°	278.6	293.8	316.2	331.4	348.9	386.6	421.8	444.2	456.9	466.9	471.9
57.5°	205.9	223.4	248.5	261.0	281.1	323.9	354.0	381.5	396.6	409.1	411.6
60°	150.6	168.1	190.8	205.9	225.9	268.6	303.8	328.9	346.4	356.5	361.5
62.5°	108.0	125.5	148.1	163.1	180.8	218.4	253.5	278.6	296.2	308.8	316.2
65°	77.9	95.4	118.0	130.5	145.6	180.8	213.4	238.5	256.0	271.1	276.1
67.5°	57.8	70.2	90.4	102.9	118.0	145.6	173.2	195.8	213.4	225.9	231.0
70°	42.6	52.8	70.2	77.9	87.9	113.0	135.5	155.6	170.8	180.8	185.8
72.5°	30.1	37.6	50.2	57.8	65.2	85.4	102.9	118.0	128.0	138.0	143.1
75°	20.1	25.1	35.1	40.1	45.1	60.2	72.8	85.4	92.9	100.4	102.9
77.5°	12.5	17.6	25.1	27.6	32.6	40.1	50.2	57.8	62.8	67.8	72.8
80°	7.5	10.0	15.0	17.6	20.1	27.6	32.6	37.6	42.6	47.8	50.2
82.5°	5.0	7.5	10.0	10.0	12.5	15.0	20.1	25.1	27.6	30.1	32.6
85°	2.5	2.5	5.0	5.0	7.5	7.5	10.0	12.5	15.0	17.6	20.1
87.5°	2.5	2.5	2.5	2.5	5.0	5.0	7.5	7.5	7.5	10.0	10.0
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: P252705

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8	1774.8
2.5°	1767.1	1774.8	1767.1	1772.2	1769.8	1769.8	1767.1	1769.8
5°	1774.8	1784.8	1774.8	1782.2	1777.2	1777.2	1777.2	1779.8
7.5°	1782.2	1792.2	1784.8	1792.2	1789.8	1787.2	1787.2	1792.2
10°	1789.8	1797.2	1792.2	1799.9	1797.2	1794.8	1794.8	1799.9
12.5°	1789.8	1799.9	1794.8	1802.4	1799.9	1797.2	1797.2	1799.9
15°	1782.2	1794.8	1787.2	1794.8	1792.2	1789.8	1789.8	1794.8
17.5°	1759.6	1769.8	1764.6	1769.8	1769.8	1767.1	1769.8	1772.2
20°	1729.5	1737.0	1732.0	1737.0	1737.0	1732.0	1734.5	1737.0
22.5°	1686.9	1694.4	1689.4	1694.4	1691.9	1689.4	1689.4	1686.9
25°	1634.1	1644.1	1636.6	1641.6	1636.6	1631.6	1631.6	1634.1
27.5°	1568.9	1576.4	1566.4	1571.4	1566.4	1561.4	1561.4	1558.9
30°	1483.5	1486.0	1478.5	1483.5	1478.5	1476.0	1471.0	1471.0
32.5°	1380.6	1383.1	1375.6	1375.6	1370.6	1370.6	1360.5	1368.0
35°	1260.1	1262.6	1260.1	1257.6	1250.1	1247.6	1245.0	1245.0
37.5°	1134.6	1134.6	1127.1	1124.6	1119.5	1114.5	1117.0	1109.5
40°	1006.6	1004.1	996.5	999.0	996.5	989.0	986.5	984.0
42.5°	886.1	886.1	878.6	881.1	876.0	873.5	866.0	868.5
45°	780.6	780.6	773.1	773.1	770.6	763.1	765.6	760.6
47.5°	685.2	685.2	682.8	682.8	675.2	672.8	672.8	672.8
50°	602.5	602.5	602.5	602.5	600.0	597.4	594.9	597.4
52.5°	532.1	537.1	534.6	534.6	532.1	529.6	527.1	527.1
55°	469.4	471.9	471.9	474.4	471.9	469.4	471.9	469.4
57.5°	414.1	419.2	419.2	419.2	419.2	419.2	416.8	414.1
60°	366.5	369.0	369.0	371.5	371.5	371.5	369.0	369.0
62.5°	318.8	323.9	326.4	326.4	328.9	326.4	326.4	326.4
65°	281.1	286.1	288.6	286.1	288.6	288.6	286.1	286.1
67.5°	236.0	241.0	241.0	241.0	241.0	243.5	241.0	241.0
70°	190.8	195.8	193.2	195.8	195.8	195.8	195.8	195.8
72.5°	145.6	148.1	150.6	150.6	153.1	150.6	150.6	150.6
75°	105.4	110.5	110.5	110.5	110.5	113.0	113.0	113.0
77.5°	75.2	77.9	77.9	80.4	80.4	80.4	80.4	82.9
80°	52.8	52.8	55.2	55.2	57.8	57.8	57.8	57.8
82.5°	35.1	37.6	37.6	37.6	37.6	37.6	37.6	37.6
85°	20.1	22.6	22.6	22.6	22.6	25.1	25.1	25.1
87.5°	12.5	12.5	12.5	12.5	12.5	12.5	10.0	10.0
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)