

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: P252586

Luminaire Tested: **LD6B30D010 EU6B30508040 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252586  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B30D010 EU6B30508040 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3051.0 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

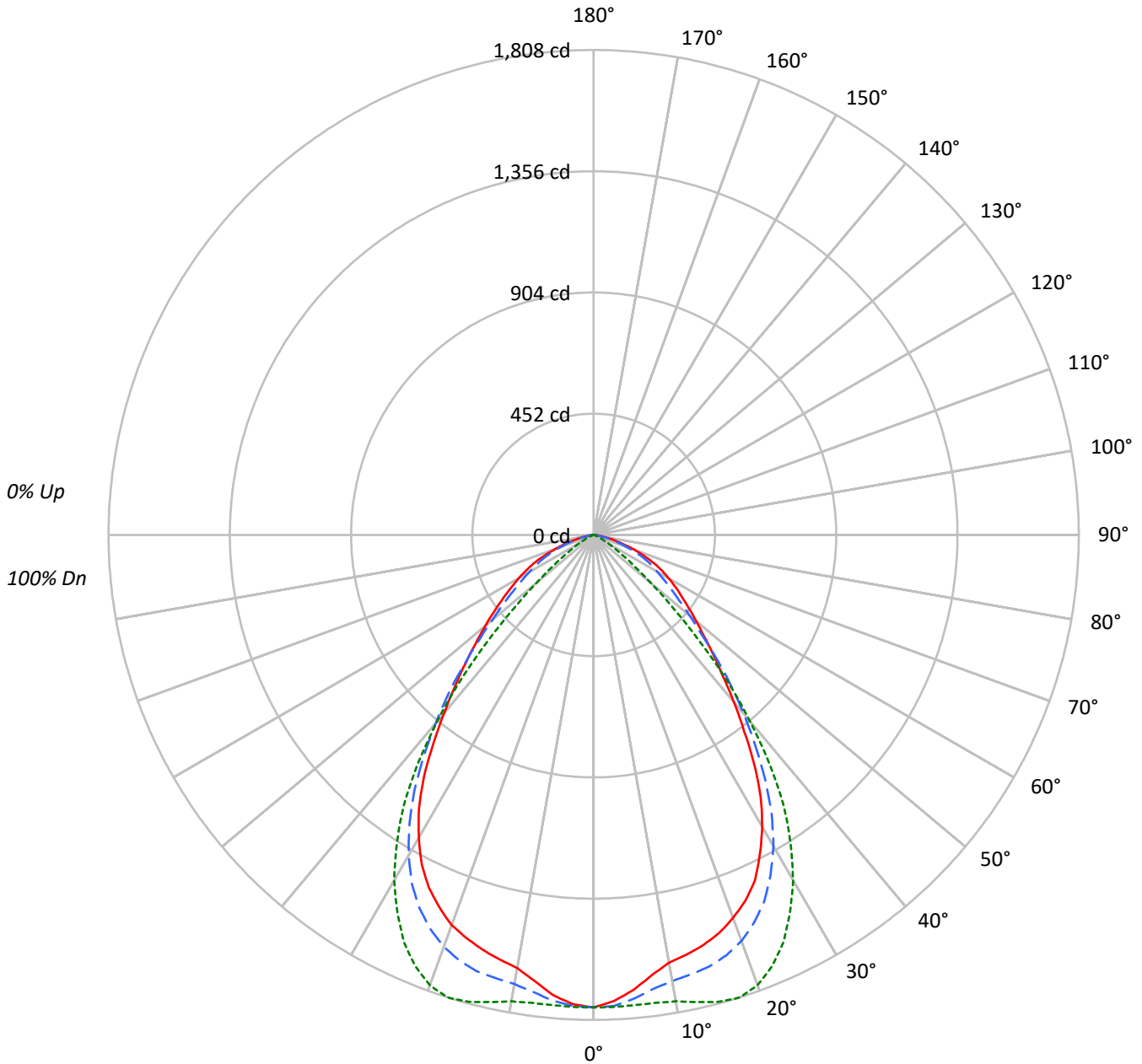
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

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

	0°	90°	180°
0°	114921	114921	114921
5°	111490	115229	112826
10°	107247	116966	108599
15°	106872	121724	108108
20°	105474	123991	107453
25°	102320	120496	104522
30°	94656	111991	98182
35°	83037	98448	87903
40°	69197	77177	73711
45°	58246	50921	62195
50°	50434	27901	53529
55°	45634	14821	46794
60°	41989	7711	41989
65°	38037	4091	37096
70°	30692	2327	28365
75°	21048	1538	19510
80°	13788	751	12248
85°	9132	1497	7635



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.3	5.4
10°-20°	475.0	15.6
20°-30°	701.8	23.0
30°-40°	708.8	23.2
40°-50°	488.6	16.0
50°-60°	280.6	9.2
60°-70°	163.3	5.4
70°-80°	59.6	2.0
80°-90°	9.1	0.3
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	44.0
0°-40°	2049.8	67.2
0°-60°	2819.0	92.4
0°-90°	3051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3051.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1762	1762	1762	1762	1762	
5°	1702	1735	1760	1743	1723	160
15°	1582	1666	1802	1684	1601	446
25°	1421	1505	1674	1536	1452	648
35°	1043	1114	1236	1165	1104	647
45°	631	639	552	680	674	491
55°	401	352	130	367	411	361
65°	246	208	26	206	240	241
75°	84	67	6	65	77	94
85°	12	6	2	8	10	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5
2.5°	1739.1	1741.1	1743.2	1741.1	1743.2	1751.3	1745.2	1749.3	1749.3	1751.3	1757.4
5°	1702.4	1702.4	1706.5	1704.5	1710.6	1718.7	1712.6	1718.7	1720.8	1724.8	1735.0
7.5°	1655.6	1655.6	1657.6	1657.6	1665.8	1673.9	1669.9	1678.0	1686.1	1694.3	1706.5
10°	1618.9	1623.0	1623.0	1625.1	1633.2	1643.4	1641.3	1651.5	1659.7	1671.9	1688.2
12.5°	1602.7	1604.7	1604.7	1608.8	1616.9	1627.1	1625.1	1635.2	1647.5	1661.7	1678.0
15°	1582.3	1586.4	1584.3	1588.4	1596.5	1606.7	1604.7	1614.9	1629.1	1643.4	1665.8
17.5°	1555.8	1557.9	1559.9	1559.9	1568.0	1576.2	1576.2	1586.4	1602.7	1618.9	1643.4
20°	1519.2	1523.2	1523.2	1525.3	1531.4	1543.6	1541.6	1551.7	1568.0	1584.3	1610.8
22.5°	1476.4	1478.4	1478.4	1480.5	1490.7	1496.8	1498.8	1506.9	1521.2	1539.5	1564.0
25°	1421.4	1423.5	1421.4	1427.5	1431.6	1443.8	1439.7	1449.9	1466.2	1480.5	1504.9
27.5°	1342.0	1346.1	1346.1	1348.1	1358.3	1368.5	1368.5	1378.6	1392.9	1403.1	1427.5
30°	1256.5	1262.6	1256.5	1266.6	1270.7	1278.9	1285.0	1291.1	1303.3	1317.6	1340.0
32.5°	1158.7	1156.7	1158.7	1162.8	1175.0	1181.1	1185.2	1191.3	1203.5	1215.7	1234.1
35°	1042.6	1046.7	1048.8	1056.9	1056.9	1067.1	1069.1	1073.2	1091.5	1099.7	1113.9
37.5°	920.5	924.5	926.6	930.6	938.8	942.9	949.0	955.1	967.3	981.5	989.7
40°	812.5	812.5	814.6	818.6	824.7	826.8	832.9	841.0	849.2	861.4	869.5
42.5°	710.7	712.7	710.7	714.8	720.9	729.0	727.0	737.2	739.2	747.4	753.5
45°	631.3	631.3	627.2	631.3	631.3	639.4	637.4	641.5	639.4	643.5	639.4
47.5°	555.9	558.0	555.9	558.0	558.0	558.0	560.0	555.9	558.0	551.9	539.6
50°	496.9	498.9	494.8	496.9	494.8	492.8	494.8	488.7	486.7	478.6	466.3
52.5°	446.0	443.9	441.9	441.9	441.9	439.9	437.8	431.7	425.6	417.5	403.2
55°	401.2	399.1	397.1	397.1	393.0	391.0	391.0	384.9	378.8	368.6	352.3
57.5°	360.4	358.4	356.4	356.4	354.3	350.3	350.3	344.2	336.0	323.8	309.5
60°	321.8	321.8	321.8	319.7	319.7	315.6	315.6	309.5	301.4	289.2	272.9
62.5°	287.1	285.1	285.1	285.1	285.1	283.1	281.0	277.0	268.8	256.6	242.3
65°	246.4	246.4	246.4	246.4	244.4	244.4	244.4	238.3	234.2	222.0	207.7
67.5°	201.6	201.6	201.6	201.6	199.6	201.6	201.6	197.5	193.5	181.2	169.0
70°	160.9	158.8	156.8	158.8	156.8	156.8	158.8	154.8	152.7	142.5	130.3
72.5°	118.1	120.1	118.1	118.1	118.1	116.1	118.1	116.1	112.0	103.9	95.7
75°	83.5	85.5	85.5	83.5	83.5	83.5	81.5	81.5	77.4	71.3	67.2
77.5°	57.0	57.0	57.0	57.0	55.0	55.0	55.0	52.9	50.9	46.8	42.8
80°	36.7	36.7	36.7	36.7	34.6	34.6	34.6	32.6	32.6	28.5	24.4
82.5°	22.4	22.4	22.4	22.4	22.4	22.4	20.4	20.4	18.3	16.3	14.3
85°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	10.2	10.2	8.1	6.1
87.5°	4.1	4.1	6.1	6.1	6.1	6.1	6.1	6.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5
2.5°	1753.3	1755.4	1755.4	1755.4	1761.5	1763.5	1757.4	1751.3	1763.5	1761.5	1765.6
5°	1733.0	1739.1	1743.2	1745.2	1751.3	1755.4	1749.3	1747.2	1757.4	1759.5	1761.5
7.5°	1708.5	1718.7	1728.9	1733.0	1741.1	1745.2	1743.2	1743.2	1755.4	1759.5	1759.5
10°	1692.3	1706.5	1718.7	1728.9	1739.1	1745.2	1745.2	1747.2	1761.5	1765.6	1769.6
12.5°	1688.2	1706.5	1722.8	1737.1	1745.2	1755.4	1757.4	1763.5	1777.8	1783.9	1783.9
15°	1678.0	1702.4	1722.8	1741.1	1753.3	1765.6	1769.6	1781.9	1798.1	1802.2	1806.3
17.5°	1659.7	1684.1	1708.5	1730.9	1747.2	1757.4	1769.6	1781.9	1802.2	1808.3	1810.4
20°	1627.1	1655.6	1680.0	1702.4	1718.7	1733.0	1745.2	1759.5	1777.8	1785.9	1788.0
22.5°	1578.2	1606.7	1631.2	1655.6	1671.9	1684.1	1696.3	1712.6	1730.9	1739.1	1739.1
25°	1519.2	1545.6	1572.1	1590.4	1606.7	1621.0	1627.1	1645.4	1663.7	1673.9	1673.9
27.5°	1443.8	1468.3	1492.7	1513.1	1523.2	1535.5	1545.6	1561.9	1576.2	1584.3	1592.5
30°	1348.1	1372.5	1394.9	1415.3	1427.5	1439.7	1449.9	1462.1	1476.4	1486.6	1488.6
32.5°	1244.2	1264.6	1287.0	1307.4	1319.6	1323.7	1333.8	1346.1	1358.3	1366.4	1368.5
35°	1130.2	1144.5	1158.7	1177.0	1189.3	1189.3	1199.4	1207.6	1217.8	1236.1	1232.0
37.5°	995.8	1016.2	1026.4	1032.5	1040.6	1048.8	1050.8	1061.0	1073.2	1077.3	1083.4
40°	869.5	875.7	881.8	881.8	889.9	889.9	889.9	891.9	904.2	906.2	914.3
42.5°	743.3	743.3	737.2	731.1	733.1	731.1	720.9	720.9	727.0	735.1	735.1
45°	625.2	610.9	592.6	578.3	568.2	564.1	551.9	551.9	549.8	551.9	560.0
47.5°	525.4	501.0	470.4	441.9	431.7	423.6	405.2	397.1	393.0	395.1	399.1
50°	441.9	415.4	380.8	346.2	327.9	317.7	295.3	281.0	279.0	274.9	283.1
52.5°	380.8	348.2	311.6	270.8	252.5	236.2	211.8	199.6	191.4	191.4	193.5
55°	327.9	293.2	252.5	211.8	193.5	181.2	156.8	140.5	132.4	130.3	136.4
57.5°	283.1	250.5	209.8	169.0	150.7	136.4	112.0	97.7	91.6	87.6	89.6
60°	248.4	215.9	175.1	136.4	120.1	103.9	83.5	67.2	59.1	59.1	61.1
62.5°	215.9	185.3	148.7	112.0	97.7	83.5	61.1	46.8	40.7	38.7	40.7
65°	183.3	154.8	124.2	93.7	79.4	67.2	48.9	36.7	28.5	26.5	28.5
67.5°	148.7	126.3	99.8	75.3	63.1	52.9	36.7	26.5	20.4	18.3	20.4
70°	116.1	95.7	75.3	55.0	46.8	38.7	26.5	20.4	14.3	12.2	14.3
72.5°	83.5	69.2	52.9	38.7	32.6	26.5	18.3	14.3	10.2	8.1	10.2
75°	57.0	46.8	34.6	24.4	20.4	18.3	12.2	8.1	6.1	6.1	6.1
77.5°	36.7	28.5	22.4	16.3	12.2	10.2	6.1	4.1	4.1	4.1	4.1
80°	20.4	16.3	12.2	8.1	6.1	6.1	4.1	4.1	2.0	2.0	2.0
82.5°	12.2	8.1	6.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
85°	6.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	2.0	2.0	2.0	2.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5
2.5°	1757.4	1759.5	1753.3	1761.5	1755.4	1763.5	1763.5	1755.4	1757.4	1753.3	1761.5
5°	1753.3	1753.3	1749.3	1755.4	1747.2	1755.4	1753.3	1739.1	1743.2	1735.0	1743.2
7.5°	1753.3	1749.3	1743.2	1749.3	1739.1	1745.2	1737.1	1722.8	1718.7	1708.5	1708.5
10°	1759.5	1753.3	1745.2	1747.2	1737.1	1739.1	1726.9	1706.5	1700.4	1688.2	1684.1
12.5°	1773.7	1767.6	1755.4	1759.5	1745.2	1745.2	1728.9	1704.5	1692.3	1676.0	1671.9
15°	1794.1	1783.9	1769.6	1771.7	1757.4	1749.3	1728.9	1700.4	1684.1	1661.7	1655.6
17.5°	1798.1	1788.0	1769.6	1769.6	1751.3	1741.1	1716.7	1684.1	1663.7	1641.3	1629.1
20°	1775.7	1765.6	1745.2	1743.2	1726.9	1712.6	1686.1	1653.6	1633.2	1608.8	1598.6
22.5°	1728.9	1716.7	1698.4	1696.3	1680.0	1671.9	1643.4	1610.8	1590.4	1566.0	1557.9
25°	1659.7	1653.6	1635.2	1633.2	1618.9	1608.8	1584.3	1553.8	1535.5	1511.0	1502.9
27.5°	1578.2	1572.1	1553.8	1553.8	1537.5	1531.4	1509.0	1480.5	1466.2	1443.8	1433.6
30°	1480.5	1472.3	1462.1	1460.1	1445.9	1439.7	1419.4	1392.9	1378.6	1360.3	1356.2
32.5°	1364.4	1358.3	1352.2	1350.1	1335.9	1329.8	1315.5	1289.0	1276.8	1260.5	1254.4
35°	1230.0	1225.9	1219.8	1217.8	1211.7	1205.6	1191.3	1170.9	1164.8	1152.6	1146.5
37.5°	1075.2	1079.3	1075.2	1075.2	1069.1	1071.2	1058.9	1046.7	1040.6	1032.5	1028.4
40°	908.2	916.4	922.5	922.5	920.5	928.6	926.6	916.4	914.3	910.3	908.2
42.5°	739.2	743.3	755.5	763.7	761.6	782.0	784.0	792.2	798.3	794.2	796.2
45°	562.0	574.3	590.6	598.7	608.9	635.4	649.6	665.9	680.2	688.3	686.3
47.5°	405.2	419.5	437.8	450.0	468.4	501.0	537.6	558.0	578.3	588.5	598.7
50°	293.2	307.5	329.9	348.2	360.4	405.2	443.9	470.4	492.8	507.1	517.2
52.5°	205.7	222.0	246.4	262.7	281.0	323.8	368.6	399.1	423.6	441.9	452.1
55°	142.5	160.9	183.3	199.6	219.9	264.7	307.5	340.1	366.6	382.8	395.1
57.5°	99.8	116.1	138.5	152.7	173.1	215.9	258.6	291.2	317.7	334.0	348.2
60°	67.2	83.5	105.9	120.1	136.4	179.2	217.9	252.5	277.0	293.2	307.5
62.5°	46.8	61.1	83.5	97.7	112.0	148.7	185.3	215.9	240.3	258.6	270.8
65°	36.7	48.9	67.2	79.4	93.7	124.2	154.8	181.2	205.7	224.0	232.2
67.5°	26.5	38.7	52.9	63.1	73.3	99.8	126.3	146.6	169.0	183.3	193.5
70°	18.3	26.5	38.7	46.8	55.0	75.3	95.7	114.0	130.3	140.5	148.7
72.5°	14.3	18.3	26.5	32.6	38.7	52.9	69.2	83.5	95.7	103.9	112.0
75°	8.1	12.2	18.3	22.4	26.5	36.7	46.8	57.0	65.2	71.3	75.3
77.5°	4.1	6.1	10.2	12.2	16.3	22.4	30.5	36.7	42.8	46.8	50.9
80°	4.1	4.1	6.1	6.1	8.1	12.2	16.3	20.4	24.4	28.5	30.5
82.5°	2.0	2.0	4.1	4.1	4.1	6.1	8.1	12.2	14.3	16.3	18.3
85°	2.0	2.0	2.0	2.0	2.0	4.1	4.1	6.1	8.1	10.2	10.2
87.5°	0.0	0.0	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1	6.1
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: P252586

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5	1761.5
2.5°	1755.4	1759.5	1757.4	1761.5	1755.4	1753.3	1757.4	1751.3
5°	1733.0	1735.0	1733.0	1733.0	1728.9	1724.8	1728.9	1722.8
7.5°	1698.4	1698.4	1692.3	1692.3	1684.1	1680.0	1680.0	1678.0
10°	1669.9	1663.7	1657.6	1659.7	1647.5	1643.4	1641.3	1639.3
12.5°	1655.6	1651.5	1641.3	1641.3	1629.1	1625.1	1623.0	1621.0
15°	1639.3	1631.2	1623.0	1621.0	1610.8	1606.7	1604.7	1600.6
17.5°	1610.8	1604.7	1594.5	1594.5	1584.3	1582.3	1578.2	1576.2
20°	1580.3	1572.1	1564.0	1564.0	1551.7	1551.7	1545.6	1547.7
22.5°	1537.5	1531.4	1523.2	1523.2	1513.1	1511.0	1504.9	1502.9
25°	1486.6	1478.4	1472.3	1470.3	1462.1	1458.1	1456.0	1452.0
27.5°	1419.4	1413.3	1407.2	1403.1	1392.9	1390.9	1384.8	1386.8
30°	1335.9	1331.8	1329.8	1325.7	1313.5	1309.4	1309.4	1303.3
32.5°	1244.2	1238.1	1234.1	1228.0	1217.8	1215.7	1209.6	1211.7
35°	1132.2	1124.1	1118.0	1120.0	1107.8	1105.8	1101.7	1103.7
37.5°	1016.2	1008.0	999.9	997.8	987.7	987.7	981.5	981.5
40°	896.0	887.9	883.8	883.8	871.6	873.6	867.5	865.5
42.5°	788.1	779.9	777.9	775.9	769.8	767.7	761.6	763.7
45°	686.3	684.2	684.2	680.2	674.1	672.0	674.1	674.1
47.5°	596.7	598.7	596.7	596.7	592.6	596.7	592.6	594.6
50°	521.3	525.4	525.4	525.4	523.4	525.4	525.4	527.4
52.5°	458.2	464.3	462.3	464.3	462.3	466.3	464.3	466.3
55°	403.2	407.3	409.3	411.4	411.4	411.4	411.4	411.4
57.5°	352.3	358.4	360.4	362.5	362.5	366.6	362.5	362.5
60°	311.6	317.7	319.7	321.8	321.8	323.8	319.7	321.8
62.5°	274.9	281.0	281.0	283.1	283.1	283.1	279.0	281.0
65°	238.3	240.3	242.3	242.3	240.3	240.3	238.3	240.3
67.5°	197.5	199.6	197.5	197.5	195.5	195.5	191.4	193.5
70°	152.7	152.7	154.8	152.7	150.7	152.7	150.7	148.7
72.5°	114.0	114.0	114.0	112.0	112.0	110.0	112.0	112.0
75°	77.4	77.4	79.4	79.4	79.4	79.4	77.4	77.4
77.5°	50.9	50.9	50.9	50.9	52.9	50.9	50.9	50.9
80°	32.6	32.6	34.6	34.6	32.6	32.6	32.6	32.6
82.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
85°	12.2	12.2	12.2	12.2	10.2	10.2	10.2	10.2
87.5°	6.1	6.1	6.1	6.1	6.1	6.1	4.1	4.1
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)