

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: P252296

Luminaire Tested: **LD6B40D010 EU6B30509730 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252296  
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: io LED  
Catalog Number: LD6B40D010 EU6B30509730 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

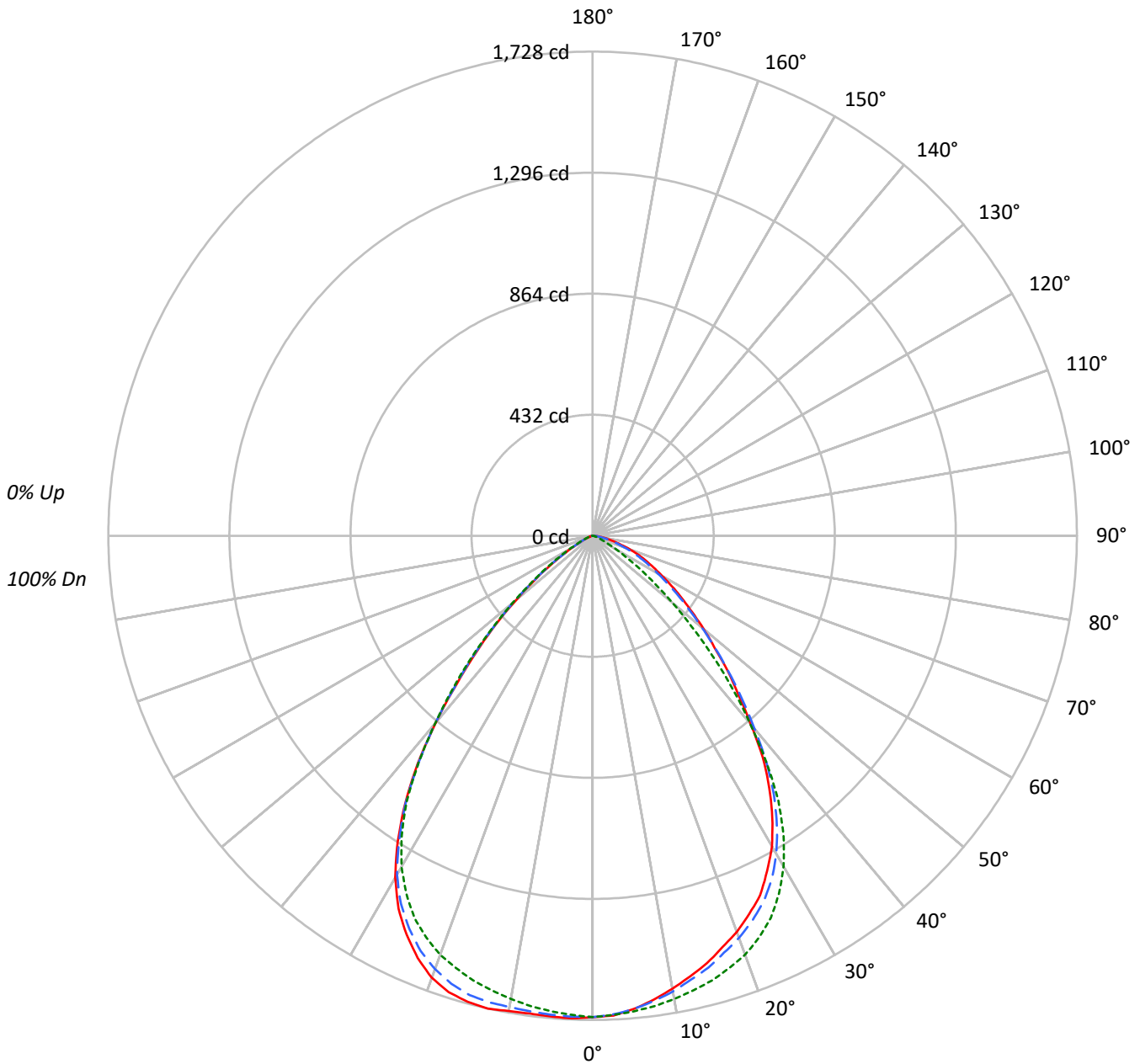
Lumens per Lamp: N/A  
Luminaire Lumens: 2882.0 lumens  
Efficiency: N/A  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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



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

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

	0°	90°	180°
0°	112070	112070	112070
5°	111005	111549	112773
10°	108718	111189	114077
15°	106635	110985	116307
20°	104433	110480	116527
25°	101852	108280	113053
30°	96434	102687	106122
35°	87577	92037	92865
40°	74741	74384	74034
45°	62786	55700	53984
50°	52433	37696	35798
55°	44133	23124	20997
60°	37357	12187	10556
65°	32341	6406	5125
70°	26915	3949	2766
75°	19863	2622	1563
80°	15592	1540	789
85°	12426	1572	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.9	5.6
10°-20°	463.6	16.1
20°-30°	684.5	23.8
30°-40°	705.5	24.5
40°-50°	487.2	16.9
50°-60°	240.2	8.3
60°-70°	97.3	3.4
70°-80°	34.7	1.2
80°-90°	7.2	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°	1310.0	45.5
0°-40°	2015.4	69.9
0°-60°	2742.8	95.2
0°-90°	2882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2882.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1718	1718	1718	1718	1718	
5°	1695	1695	1703	1716	1722	160
15°	1579	1595	1643	1697	1722	445
25°	1415	1442	1504	1548	1570	647
35°	1100	1127	1156	1162	1166	681
45°	680	685	604	595	585	526
55°	388	373	203	191	185	351
65°	210	189	42	33	33	208
75°	79	66	10	6	6	89
85°	17	12	2	0	0	20
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°	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8
2.5°	1713.7	1707.5	1711.6	1703.3	1713.7	1703.3	1705.4	1707.5	1705.4	1707.5	1709.6
5°	1695.0	1688.8	1695.0	1684.7	1695.0	1688.8	1688.8	1690.9	1690.9	1693.0	1695.0
7.5°	1670.1	1663.9	1670.1	1659.8	1672.2	1666.0	1666.0	1670.1	1668.1	1670.1	1674.3
10°	1641.1	1632.8	1639.0	1632.8	1645.2	1636.9	1641.1	1641.1	1641.1	1647.3	1651.5
12.5°	1610.0	1601.7	1610.0	1599.6	1612.0	1605.8	1607.9	1614.1	1616.2	1620.3	1622.4
15°	1578.8	1568.5	1572.6	1566.4	1578.8	1572.6	1574.7	1583.0	1583.0	1589.2	1595.4
17.5°	1539.4	1531.1	1539.4	1531.1	1541.5	1537.4	1541.5	1547.7	1547.7	1553.9	1560.2
20°	1504.2	1495.9	1502.1	1495.9	1508.3	1502.1	1504.2	1512.5	1514.5	1520.8	1527.0
22.5°	1460.6	1454.4	1458.5	1452.3	1464.7	1460.6	1462.7	1471.0	1473.0	1477.2	1487.6
25°	1414.9	1402.5	1408.7	1404.6	1417.0	1410.8	1414.9	1423.2	1427.4	1433.6	1441.9
27.5°	1348.6	1342.3	1346.5	1346.5	1356.9	1350.6	1352.7	1361.0	1367.2	1373.4	1383.8
30°	1280.1	1269.7	1273.9	1275.9	1284.2	1280.1	1284.2	1292.5	1294.6	1302.9	1311.2
32.5°	1193.0	1188.8	1197.1	1193.0	1197.1	1197.1	1199.2	1205.4	1209.5	1213.7	1224.1
35°	1099.6	1091.3	1099.6	1095.4	1105.8	1099.6	1105.8	1112.0	1112.0	1120.3	1126.6
37.5°	997.9	987.6	991.7	991.7	995.9	993.8	993.8	1004.2	1006.2	1012.5	1018.7
40°	877.6	873.4	881.7	879.7	881.7	881.7	883.8	890.0	894.2	896.3	898.3
42.5°	769.7	771.8	773.9	773.9	773.9	773.9	773.9	782.2	780.1	786.3	788.4
45°	680.5	672.2	676.4	674.3	680.5	674.3	680.5	686.7	682.6	688.8	684.7
47.5°	589.2	589.2	589.2	587.1	591.3	589.2	593.4	595.4	595.4	595.4	593.4
50°	516.6	510.4	512.5	512.5	514.5	512.5	516.6	518.7	518.7	514.5	506.2
52.5°	446.1	444.0	444.0	448.1	448.1	446.1	446.1	446.1	446.1	439.8	435.7
55°	388.0	383.8	385.9	385.9	385.9	385.9	388.0	385.9	385.9	379.7	373.4
57.5°	336.1	332.0	332.0	332.0	334.0	332.0	332.0	332.0	329.9	323.7	315.4
60°	286.3	284.2	286.3	286.3	288.4	286.3	286.3	286.3	282.2	275.9	267.6
62.5°	244.8	244.8	244.8	246.9	246.9	244.8	244.8	242.7	240.7	232.4	224.1
65°	209.5	207.5	209.5	209.5	211.6	211.6	209.5	207.5	205.4	197.1	188.8
67.5°	174.3	172.2	174.3	174.3	176.3	174.3	174.3	174.3	168.1	163.9	155.6
70°	141.1	139.0	139.0	139.0	141.1	136.9	139.0	139.0	134.9	128.6	120.3
72.5°	107.9	107.9	107.9	107.9	107.9	107.9	105.8	105.8	101.7	95.4	91.3
75°	78.8	78.8	80.9	80.9	78.8	78.8	78.8	76.8	74.7	70.5	66.4
77.5°	58.1	58.1	58.1	58.1	56.0	56.0	56.0	53.9	51.9	49.8	45.6
80°	41.5	41.5	41.5	39.4	41.5	39.4	39.4	39.4	35.3	33.2	31.1
82.5°	29.0	27.0	27.0	27.0	27.0	27.0	27.0	24.9	24.9	22.8	20.7
85°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	14.5	12.4	12.4
87.5°	8.3	10.4	10.4	10.4	10.4	10.4	10.4	8.3	8.3	8.3	6.2
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°	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8
2.5°	1709.6	1709.6	1713.7	1707.5	1717.8	1711.6	1709.6	1719.9	1713.7	1711.6	1715.8
5°	1695.0	1697.1	1699.2	1695.0	1705.4	1699.2	1699.2	1709.6	1705.4	1703.3	1709.6
7.5°	1676.4	1678.4	1682.6	1680.5	1688.8	1684.7	1686.7	1697.1	1693.0	1693.0	1699.2
10°	1653.5	1657.7	1661.8	1661.8	1672.2	1668.1	1668.1	1680.5	1676.4	1678.4	1686.7
12.5°	1626.6	1632.8	1639.0	1641.1	1651.5	1645.2	1647.3	1661.8	1659.8	1661.8	1670.1
15°	1597.5	1605.8	1612.0	1612.0	1624.5	1618.3	1624.5	1639.0	1634.9	1643.2	1653.5
17.5°	1564.3	1572.6	1580.9	1583.0	1595.4	1591.3	1599.6	1614.1	1614.1	1618.3	1630.7
20°	1533.2	1543.6	1547.7	1553.9	1566.4	1564.3	1568.5	1585.1	1585.1	1591.3	1603.7
22.5°	1491.7	1502.1	1510.4	1516.6	1527.0	1527.0	1533.2	1547.7	1547.7	1551.9	1564.3
25°	1446.1	1458.5	1464.7	1471.0	1481.3	1479.3	1485.5	1497.9	1500.0	1504.2	1516.6
27.5°	1388.0	1398.3	1406.6	1410.8	1425.3	1417.0	1423.2	1437.8	1435.7	1439.8	1450.2
30°	1315.4	1325.7	1334.0	1334.0	1346.5	1346.5	1352.7	1358.9	1358.9	1363.1	1371.4
32.5°	1230.3	1242.7	1242.7	1249.0	1257.3	1249.0	1257.3	1265.6	1261.4	1267.6	1273.9
35°	1132.8	1139.0	1141.1	1141.1	1147.3	1145.2	1143.2	1149.4	1145.2	1155.6	1161.8
37.5°	1014.5	1022.8	1018.7	1022.8	1020.8	1014.5	1014.5	1024.9	1016.6	1018.7	1024.9
40°	900.4	900.4	898.3	888.0	890.0	883.8	881.7	883.8	875.5	873.4	881.7
42.5°	782.2	780.1	773.9	759.3	761.4	751.0	742.7	742.7	738.6	736.5	738.6
45°	676.4	670.1	659.8	643.2	639.0	630.7	614.1	610.0	603.7	603.7	605.8
47.5°	578.8	570.5	553.9	535.3	524.9	514.5	497.9	491.7	481.3	477.2	481.3
50°	497.9	483.4	462.7	435.7	425.3	412.9	396.3	385.9	375.5	371.4	369.3
52.5°	423.2	402.5	381.7	348.5	340.3	327.8	305.0	294.6	284.2	275.9	275.9
55°	358.9	340.3	311.2	280.1	267.6	255.2	232.4	217.8	207.5	203.3	199.2
57.5°	300.8	280.1	253.1	219.9	207.5	195.0	172.2	157.7	147.3	141.1	136.9
60°	253.1	230.3	203.3	174.3	159.8	147.3	124.5	110.0	99.6	93.4	89.2
62.5°	207.5	188.8	161.8	134.9	122.4	110.0	91.3	76.8	66.4	62.2	56.0
65°	174.3	155.6	130.7	107.9	97.5	85.1	68.5	56.0	47.7	41.5	37.3
67.5°	141.1	126.6	105.8	85.1	74.7	66.4	51.9	41.5	33.2	29.0	27.0
70°	112.0	97.5	80.9	64.3	58.1	49.8	39.4	29.0	24.9	20.7	18.7
72.5°	83.0	72.6	60.2	47.7	41.5	37.3	27.0	22.8	16.6	14.5	12.4
75°	60.2	51.9	43.6	33.2	29.0	27.0	20.7	14.5	12.4	10.4	8.3
77.5°	41.5	37.3	29.0	22.8	20.7	18.7	14.5	10.4	8.3	6.2	6.2
80°	27.0	22.8	18.7	14.5	14.5	12.4	8.3	6.2	6.2	4.1	4.1
82.5°	16.6	14.5	12.4	10.4	8.3	8.3	6.2	4.1	4.1	2.1	2.1
85°	10.4	8.3	6.2	6.2	4.1	4.1	4.1	2.1	2.1	2.1	2.1
87.5°	4.1	4.1	4.1	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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8
2.5°	1715.8	1715.8	1719.9	1713.7	1717.8	1717.8	1722.0	1713.7	1717.8	1719.9	1724.1
5°	1707.5	1709.6	1713.7	1711.6	1713.7	1713.7	1717.8	1707.5	1715.8	1715.8	1722.0
7.5°	1699.2	1699.2	1703.3	1701.3	1705.4	1707.5	1711.6	1703.3	1711.6	1711.6	1717.8
10°	1688.8	1688.8	1695.0	1693.0	1699.2	1701.3	1707.5	1699.2	1707.5	1709.6	1715.8
12.5°	1674.3	1676.4	1682.6	1682.6	1688.8	1693.0	1699.2	1695.0	1705.4	1707.5	1715.8
15°	1657.7	1661.8	1670.1	1668.1	1674.3	1680.5	1688.8	1682.6	1697.1	1701.3	1709.6
17.5°	1636.9	1641.1	1647.3	1647.3	1653.5	1657.7	1668.1	1663.9	1676.4	1678.4	1688.8
20°	1605.8	1612.0	1620.3	1618.3	1624.5	1628.6	1636.9	1632.8	1645.2	1649.4	1659.8
22.5°	1568.5	1572.6	1578.8	1578.8	1585.1	1589.2	1597.5	1591.3	1603.7	1605.8	1614.1
25°	1518.7	1522.8	1527.0	1529.1	1535.3	1537.4	1541.5	1537.4	1547.7	1549.8	1560.2
27.5°	1454.4	1456.4	1462.7	1462.7	1466.8	1468.9	1475.1	1466.8	1481.3	1481.3	1487.6
30°	1377.6	1375.5	1383.8	1379.7	1383.8	1383.8	1390.0	1385.9	1396.3	1392.1	1398.3
32.5°	1275.9	1280.1	1280.1	1275.9	1284.2	1282.2	1282.2	1278.0	1284.2	1286.3	1290.5
35°	1157.7	1163.9	1163.9	1166.0	1168.1	1161.8	1163.9	1151.5	1161.8	1163.9	1166.0
37.5°	1029.0	1022.8	1027.0	1020.8	1031.1	1018.7	1018.7	1010.4	1018.7	1018.7	1020.8
40°	881.7	879.7	883.8	879.7	877.6	875.5	871.4	865.1	873.4	869.3	875.5
42.5°	742.7	740.7	740.7	736.5	734.4	734.4	730.3	726.1	724.1	724.1	734.4
45°	599.6	603.7	599.6	597.5	601.7	597.5	599.6	591.3	595.4	591.3	595.4
47.5°	479.3	481.3	477.2	473.0	479.3	473.0	473.0	466.8	475.1	475.1	471.0
50°	371.4	369.3	365.1	369.3	367.2	367.2	367.2	361.0	365.1	358.9	363.1
52.5°	273.9	271.8	271.8	269.7	271.8	269.7	269.7	267.6	267.6	265.6	267.6
55°	199.2	197.1	192.9	192.9	192.9	195.0	192.9	190.9	190.9	188.8	190.9
57.5°	134.9	130.7	130.7	130.7	130.7	128.6	128.6	126.6	128.6	126.6	128.6
60°	87.1	87.1	83.0	83.0	83.0	83.0	83.0	80.9	83.0	83.0	83.0
62.5°	53.9	53.9	51.9	49.8	51.9	49.8	49.8	49.8	51.9	49.8	51.9
65°	35.3	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2
67.5°	24.9	22.8	22.8	22.8	22.8	22.8	22.8	20.7	22.8	22.8	22.8
70°	16.6	16.6	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
72.5°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
75°	8.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
77.5°	6.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	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: P252296

CATALOG NUMBER: LD6B40D010 EU6B30509730 6LBSW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8	1717.8
2.5°	1717.8	1719.9	1715.8	1717.8	1713.7	1717.8	1719.9	1724.1
5°	1713.7	1715.8	1711.6	1715.8	1711.6	1715.8	1717.8	1722.0
7.5°	1709.6	1713.7	1709.6	1713.7	1709.6	1713.7	1715.8	1719.9
10°	1709.6	1715.8	1711.6	1717.8	1711.6	1715.8	1719.9	1722.0
12.5°	1709.6	1715.8	1713.7	1717.8	1715.8	1719.9	1724.1	1728.2
15°	1705.4	1711.6	1707.5	1713.7	1711.6	1713.7	1722.0	1722.0
17.5°	1682.6	1688.8	1688.8	1693.0	1693.0	1699.2	1703.3	1707.5
20°	1653.5	1659.8	1657.7	1663.9	1663.9	1670.1	1674.3	1678.4
22.5°	1610.0	1618.3	1616.2	1622.4	1620.3	1624.5	1632.8	1630.7
25°	1553.9	1564.3	1562.2	1566.4	1564.3	1564.3	1568.5	1570.5
27.5°	1485.5	1491.7	1489.6	1493.8	1489.6	1493.8	1497.9	1500.0
30°	1396.3	1400.4	1398.3	1400.4	1398.3	1402.5	1404.6	1408.7
32.5°	1288.4	1294.6	1288.4	1292.5	1290.5	1290.5	1298.8	1294.6
35°	1159.8	1161.8	1163.9	1163.9	1159.8	1161.8	1166.0	1166.0
37.5°	1016.6	1027.0	1014.5	1020.8	1018.7	1018.7	1018.7	1024.9
40°	867.2	869.3	865.1	865.1	865.1	863.1	871.4	869.3
42.5°	726.1	728.2	726.1	719.9	722.0	722.0	728.2	719.9
45°	589.2	593.4	591.3	591.3	587.1	587.1	589.2	585.1
47.5°	466.8	471.0	464.7	466.8	462.7	466.8	464.7	468.9
50°	354.8	358.9	356.8	358.9	358.9	354.8	361.0	352.7
52.5°	265.6	267.6	265.6	263.5	261.4	261.4	265.6	263.5
55°	188.8	186.7	186.7	186.7	188.8	188.8	186.7	184.6
57.5°	126.6	126.6	124.5	124.5	126.6	122.4	124.5	122.4
60°	80.9	80.9	80.9	80.9	78.8	80.9	80.9	80.9
62.5°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
65°	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2
67.5°	20.7	22.8	22.8	22.8	20.7	20.7	20.7	20.7
70°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
72.5°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
75°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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



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















(END OF REPORT)