

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: P252500

Luminaire Tested: **LD6B40D010 EU6B30509035 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B40D010 EU6B30509035 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3073.0 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

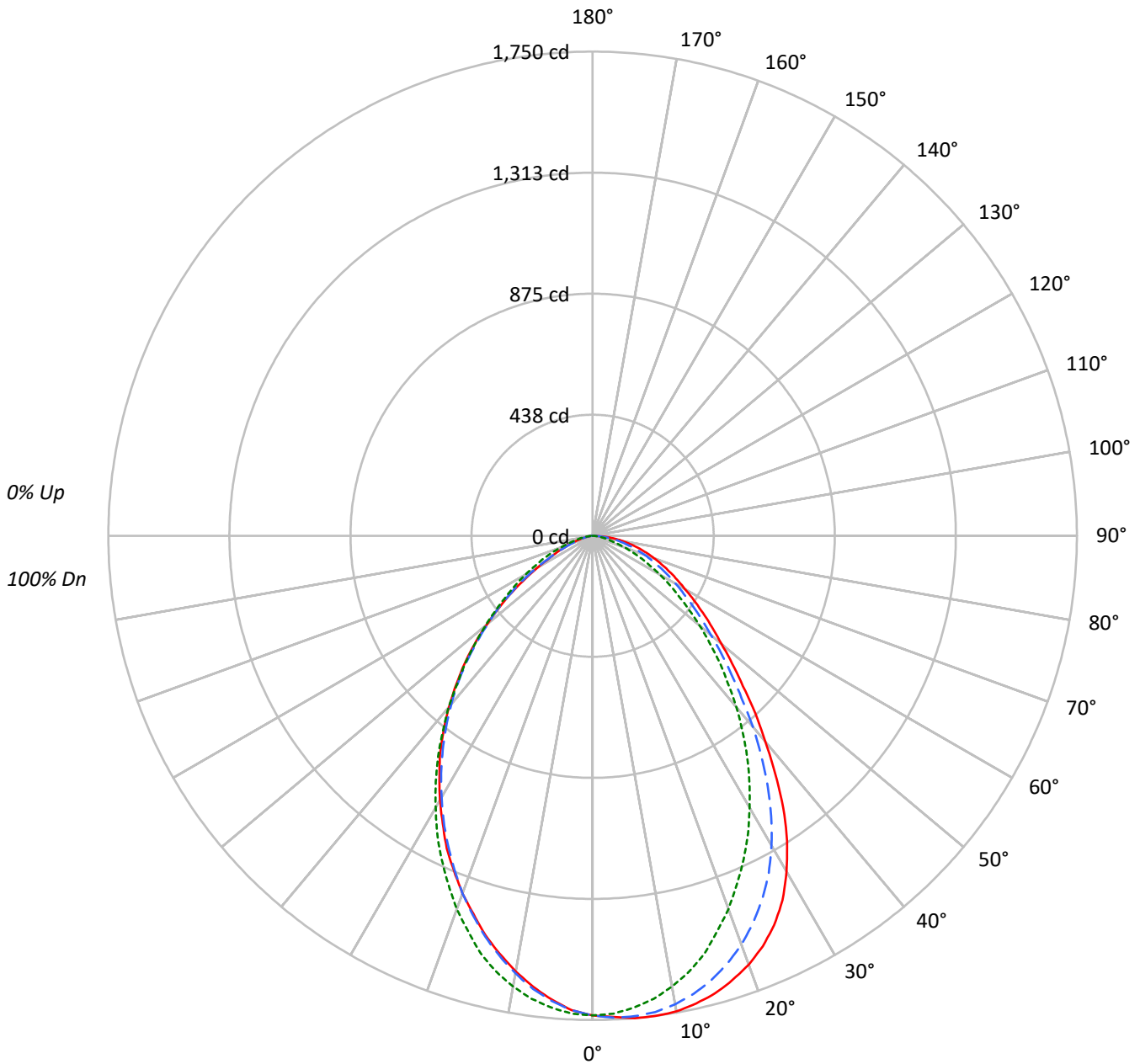
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252500

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### Luminous Intensity Polar Plot





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**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	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88				88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59				59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53				53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47				47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35				35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33

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

	0°	90°	180°
0°	113101	113101	113101
5°	114640	112119	110226
10°	115648	109586	105916
15°	115632	105548	100996
20°	114514	99636	95456
25°	111793	92904	89780
30°	105565	85436	83078
35°	95692	77478	76514
40°	82636	68899	68695
45°	70868	59981	60424
50°	61588	51317	50586
55°	55325	43268	40538
60°	50274	36443	29841
65°	47207	30103	21936
70°	45017	23424	16080
75°	43104	16990	10915
80°	40727	11760	7251
85°	36080	7186	3593



TEST NUMBER: P252500

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.2	5.3
10°-20°	444.1	14.5
20°-30°	616.6	20.1
30°-40°	638.7	20.8
40°-50°	524.8	17.1
50°-60°	360.7	11.7
60°-70°	207.4	6.7
70°-80°	95.3	3.1
80°-90°	23.2	0.8
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°	1222.9	39.8
0°-40°	1861.6	60.6
0°-60°	2747.1	89.4
0°-90°	3073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3073.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1734	1734	1734	1734	1734	
5°	1750	1743	1712	1688	1683	167
15°	1712	1661	1563	1500	1495	482
25°	1553	1450	1291	1235	1247	711
35°	1202	1103	973	944	961	745
45°	768	710	650	643	655	598
55°	486	441	380	359	356	438
65°	306	267	195	137	142	304
75°	171	135	67	43	43	181
85°	48	34	10	5	5	54
90°	0	0	0	0	0	



TEST NUMBER: P252500

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6
2.5°	1740.9	1755.3	1745.7	1743.3	1748.1	1748.1	1748.1	1740.9	1745.7	1738.4	1743.3
5°	1750.5	1762.5	1752.9	1748.1	1752.9	1755.3	1748.1	1743.3	1750.5	1740.9	1743.3
7.5°	1750.5	1762.5	1752.9	1750.5	1752.9	1752.9	1750.5	1740.9	1745.7	1736.0	1736.0
10°	1745.7	1755.3	1745.7	1740.9	1743.3	1740.9	1740.9	1728.8	1731.2	1719.2	1719.2
12.5°	1731.2	1743.3	1731.2	1726.4	1726.4	1726.4	1719.2	1709.5	1712.0	1697.5	1695.1
15°	1712.0	1721.6	1709.5	1704.7	1704.7	1702.3	1697.5	1683.1	1683.1	1668.6	1661.4
17.5°	1683.1	1692.7	1683.1	1675.8	1673.4	1668.6	1663.8	1649.4	1644.5	1627.7	1620.5
20°	1649.4	1656.6	1646.9	1639.7	1634.9	1630.1	1620.5	1606.0	1601.2	1584.3	1572.3
22.5°	1606.0	1615.6	1601.2	1594.0	1589.2	1581.9	1572.3	1557.9	1550.6	1529.0	1514.5
25°	1553.0	1557.9	1545.8	1538.6	1529.0	1524.1	1516.9	1497.7	1490.4	1466.4	1449.5
27.5°	1485.6	1490.4	1476.0	1471.2	1459.1	1454.3	1444.7	1427.8	1418.2	1394.1	1377.3
30°	1401.3	1406.2	1396.5	1389.3	1379.7	1370.0	1362.8	1346.0	1331.5	1307.4	1293.0
32.5°	1307.4	1314.7	1305.0	1295.4	1278.5	1281.0	1268.9	1252.1	1240.0	1218.4	1201.5
35°	1201.5	1206.3	1194.3	1191.9	1182.2	1172.6	1160.6	1148.5	1141.3	1117.2	1102.8
37.5°	1083.5	1095.6	1083.5	1073.9	1069.1	1061.8	1054.6	1037.8	1033.0	1018.5	999.2
40°	970.3	977.6	970.3	960.7	953.5	953.5	943.9	934.2	922.2	907.7	900.5
42.5°	869.2	864.4	862.0	857.2	847.6	845.1	842.7	830.7	823.5	809.0	797.0
45°	768.1	770.5	765.7	763.3	756.1	751.2	746.4	736.8	734.4	719.9	710.3
47.5°	683.8	681.4	676.6	676.6	671.8	667.0	662.1	654.9	652.5	640.5	630.8
50°	606.8	609.2	606.8	604.4	597.1	594.7	589.9	585.1	580.3	568.2	558.6
52.5°	544.2	541.8	539.4	539.4	532.1	529.7	524.9	520.1	515.3	503.2	496.0
55°	486.4	486.4	484.0	481.6	474.3	471.9	469.5	464.7	457.5	447.9	440.6
57.5°	433.4	433.4	431.0	428.6	423.8	423.8	419.0	414.1	409.3	399.7	390.1
60°	385.3	387.7	385.3	382.8	378.0	378.0	375.6	368.4	366.0	353.9	346.7
62.5°	344.3	344.3	344.3	341.9	339.5	334.7	334.7	327.5	322.6	315.4	305.8
65°	305.8	305.8	305.8	303.4	298.6	296.2	293.8	288.9	284.1	276.9	267.3
67.5°	269.7	269.7	269.7	267.3	262.5	260.0	257.6	255.2	248.0	240.8	231.2
70°	236.0	236.0	233.6	231.2	228.7	226.3	223.9	219.1	214.3	204.7	197.4
72.5°	202.3	202.3	202.3	197.4	195.0	195.0	190.2	187.8	183.0	173.4	166.1
75°	171.0	168.5	168.5	166.1	163.7	161.3	158.9	156.5	149.3	144.5	134.8
77.5°	139.7	139.7	137.2	134.8	134.8	132.4	130.0	125.2	122.8	115.6	108.4
80°	108.4	108.4	108.4	108.4	105.9	103.5	103.5	98.7	96.3	89.1	84.3
82.5°	81.9	79.5	79.5	79.5	77.1	74.6	74.6	72.2	69.8	65.0	60.2
85°	48.2	45.7	45.7	45.7	43.3	43.3	40.9	40.9	38.5	33.7	33.7
87.5°	14.4	14.4	16.9	16.9	14.4	14.4	14.4	14.4	14.4	12.0	12.0
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: P252500

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6
2.5°	1738.4	1745.7	1736.0	1733.6	1743.3	1738.4	1736.0	1731.2	1733.6	1728.8	1721.6
5°	1736.0	1745.7	1733.6	1726.4	1738.4	1731.2	1726.4	1721.6	1721.6	1712.0	1707.1
7.5°	1728.8	1733.6	1721.6	1714.4	1721.6	1714.4	1709.5	1702.3	1699.9	1687.9	1680.7
10°	1709.5	1714.4	1699.9	1690.3	1697.5	1687.9	1680.7	1673.4	1668.6	1654.2	1644.5
12.5°	1683.1	1685.5	1668.6	1656.6	1661.4	1654.2	1642.1	1632.5	1627.7	1613.2	1601.2
15°	1646.9	1649.4	1630.1	1613.2	1618.1	1608.4	1594.0	1584.3	1577.1	1562.7	1545.8
17.5°	1603.6	1601.2	1579.5	1562.7	1565.1	1553.0	1538.6	1524.1	1514.5	1497.7	1485.6
20°	1555.4	1548.2	1524.1	1504.9	1507.3	1492.8	1476.0	1461.5	1449.5	1435.1	1418.2
22.5°	1495.3	1485.6	1464.0	1439.9	1442.3	1430.2	1406.2	1394.1	1382.1	1362.8	1348.4
25°	1430.2	1415.8	1394.1	1370.0	1370.0	1355.6	1336.3	1321.9	1309.9	1290.6	1273.7
27.5°	1353.2	1346.0	1317.1	1297.8	1295.4	1281.0	1264.1	1247.2	1232.8	1215.9	1199.1
30°	1268.9	1256.9	1235.2	1213.5	1208.7	1196.7	1179.8	1160.6	1150.9	1134.1	1119.6
32.5°	1179.8	1167.8	1143.7	1122.0	1119.6	1110.0	1095.6	1076.3	1066.7	1054.6	1045.0
35°	1078.7	1073.9	1049.8	1033.0	1033.0	1023.3	1008.9	992.0	984.8	972.8	960.7
37.5°	982.4	975.2	953.5	939.0	939.0	927.0	912.6	905.3	898.1	888.5	881.3
40°	881.3	876.4	859.6	845.1	847.6	837.9	828.3	818.7	813.8	809.0	801.8
42.5°	787.4	782.5	770.5	758.5	758.5	751.2	741.6	734.4	729.6	722.3	719.9
45°	703.1	695.9	686.2	674.2	674.2	667.0	662.1	657.3	654.9	650.1	642.9
47.5°	621.2	616.4	606.8	594.7	594.7	594.7	585.1	577.9	577.9	573.1	570.7
50°	551.4	544.2	536.9	527.3	527.3	522.5	515.3	508.0	508.0	505.6	500.8
52.5°	486.4	481.6	471.9	462.3	462.3	457.5	450.3	447.9	445.4	438.2	435.8
55°	431.0	426.2	419.0	406.9	404.5	402.1	394.9	390.1	387.7	380.4	380.4
57.5°	380.4	375.6	363.6	356.4	353.9	349.1	341.9	337.1	334.7	329.9	325.1
60°	337.1	329.9	320.2	310.6	308.2	303.4	296.2	291.3	288.9	279.3	274.5
62.5°	296.2	288.9	279.3	269.7	267.3	262.5	252.8	248.0	243.2	233.6	228.7
65°	257.6	250.4	240.8	231.2	226.3	223.9	214.3	207.1	202.3	195.0	185.4
67.5°	221.5	214.3	204.7	192.6	192.6	185.4	178.2	171.0	163.7	156.5	149.3
70°	187.8	180.6	171.0	161.3	158.9	154.1	146.9	137.2	132.4	122.8	115.6
72.5°	156.5	149.3	139.7	130.0	127.6	122.8	115.6	105.9	98.7	91.5	84.3
75°	127.6	120.4	110.8	103.5	101.1	96.3	89.1	79.5	72.2	67.4	60.2
77.5°	101.1	93.9	86.7	79.5	77.1	72.2	65.0	60.2	53.0	48.2	40.9
80°	77.1	72.2	65.0	60.2	57.8	53.0	48.2	40.9	36.1	31.3	28.9
82.5°	55.4	50.6	45.7	38.5	38.5	33.7	31.3	26.5	21.7	19.3	16.9
85°	31.3	26.5	24.1	21.7	19.3	19.3	16.9	14.4	12.0	9.6	9.6
87.5°	9.6	9.6	7.2	7.2	7.2	7.2	4.8	4.8	4.8	4.8	4.8
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: P252500

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6
2.5°	1721.6	1724.0	1719.2	1724.0	1719.2	1721.6	1716.8	1721.6	1716.8	1721.6	1712.0
5°	1704.7	1704.7	1697.5	1702.3	1697.5	1699.9	1690.3	1692.7	1687.9	1692.7	1683.1
7.5°	1675.8	1678.2	1666.2	1671.0	1663.8	1663.8	1656.6	1659.0	1651.8	1654.2	1646.9
10°	1642.1	1639.7	1627.7	1632.5	1622.9	1622.9	1615.6	1615.6	1606.0	1608.4	1598.8
12.5°	1594.0	1591.6	1577.1	1581.9	1572.3	1572.3	1565.1	1565.1	1555.4	1560.3	1550.6
15°	1538.6	1536.2	1521.7	1524.1	1514.5	1514.5	1504.9	1507.3	1500.1	1504.9	1495.3
17.5°	1476.0	1473.6	1459.1	1461.5	1449.5	1451.9	1444.7	1442.3	1437.5	1439.9	1432.7
20°	1411.0	1406.2	1391.7	1394.1	1389.3	1382.1	1377.3	1379.7	1374.9	1379.7	1372.5
22.5°	1343.6	1333.9	1321.9	1321.9	1317.1	1317.1	1309.9	1314.7	1305.0	1312.3	1307.4
25°	1266.5	1259.3	1249.7	1254.5	1244.8	1244.8	1237.6	1240.0	1235.2	1240.0	1235.2
27.5°	1191.9	1187.1	1172.6	1177.4	1170.2	1172.6	1165.4	1167.8	1165.4	1170.2	1165.4
30°	1112.4	1110.0	1100.4	1100.4	1098.0	1095.6	1093.1	1093.1	1090.7	1098.0	1093.1
32.5°	1037.8	1030.5	1020.9	1028.1	1016.1	1023.3	1018.5	1023.3	1018.5	1023.3	1020.9
35°	960.7	958.3	946.3	948.7	946.3	946.3	943.9	943.9	943.9	951.1	951.1
37.5°	878.9	876.4	869.2	871.6	866.8	864.4	864.4	869.2	869.2	874.0	874.0
40°	799.4	801.8	794.6	794.6	792.2	792.2	792.2	797.0	794.6	799.4	797.0
42.5°	719.9	719.9	712.7	715.1	712.7	715.1	715.1	719.9	719.9	722.3	719.9
45°	645.3	645.3	642.9	645.3	640.5	642.9	640.5	645.3	642.9	645.3	645.3
47.5°	570.7	570.7	570.7	568.2	568.2	568.2	568.2	568.2	565.8	570.7	568.2
50°	500.8	503.2	500.8	500.8	498.4	500.8	498.4	498.4	493.6	496.0	496.0
52.5°	438.2	438.2	433.4	433.4	433.4	431.0	431.0	431.0	428.6	428.6	423.8
55°	378.0	378.0	373.2	373.2	370.8	368.4	366.0	366.0	358.8	358.8	351.5
57.5°	322.6	320.2	313.0	313.0	308.2	305.8	303.4	301.0	296.2	291.3	288.9
60°	272.1	267.3	262.5	260.0	255.2	250.4	245.6	240.8	236.0	233.6	231.2
62.5°	223.9	216.7	211.9	209.5	204.7	197.4	192.6	187.8	183.0	180.6	175.8
65°	180.6	173.4	166.1	163.7	158.9	154.1	146.9	142.1	137.2	134.8	134.8
67.5°	142.1	134.8	125.2	125.2	120.4	115.6	110.8	105.9	103.5	105.9	105.9
70°	105.9	101.1	93.9	91.5	86.7	81.9	79.5	79.5	79.5	81.9	79.5
72.5°	79.5	72.2	67.4	65.0	62.6	60.2	60.2	60.2	57.8	60.2	60.2
75°	55.4	50.6	45.7	45.7	43.3	43.3	43.3	43.3	43.3	43.3	43.3
77.5°	38.5	33.7	31.3	31.3	31.3	28.9	28.9	28.9	28.9	28.9	28.9
80°	24.1	24.1	21.7	21.7	19.3	19.3	19.3	19.3	19.3	19.3	19.3
82.5°	14.4	14.4	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
85°	7.2	7.2	7.2	7.2	7.2	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	4.8	4.8	4.8	4.8	4.8
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: P252500

CATALOG NUMBER: LD6B40D010 EU6B30509035 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6	1733.6
2.5°	1712.0	1719.2	1709.5	1716.8	1714.4	1712.0	1707.1	1716.8
5°	1683.1	1685.5	1675.8	1685.5	1683.1	1678.2	1673.4	1683.1
7.5°	1642.1	1649.4	1637.3	1646.9	1644.5	1639.7	1634.9	1644.5
10°	1596.4	1603.6	1594.0	1601.2	1601.2	1596.4	1589.2	1598.8
12.5°	1545.8	1550.6	1541.0	1550.6	1548.2	1543.4	1541.0	1548.2
15°	1490.4	1497.7	1488.0	1495.3	1492.8	1490.4	1488.0	1495.3
17.5°	1430.2	1437.5	1430.2	1437.5	1437.5	1430.2	1427.8	1432.7
20°	1370.0	1374.9	1367.6	1374.9	1372.5	1372.5	1367.6	1374.9
22.5°	1302.6	1309.9	1305.0	1309.9	1307.4	1307.4	1305.0	1309.9
25°	1235.2	1242.4	1235.2	1242.4	1240.0	1240.0	1235.2	1247.2
27.5°	1167.8	1172.6	1165.4	1175.0	1172.6	1167.8	1170.2	1172.6
30°	1095.6	1100.4	1095.6	1102.8	1102.8	1102.8	1098.0	1102.8
32.5°	1023.3	1030.5	1023.3	1030.5	1028.1	1028.1	1025.7	1030.5
35°	951.1	953.5	948.7	955.9	955.9	958.3	953.5	960.7
37.5°	876.4	878.9	876.4	878.9	883.7	876.4	881.3	883.7
40°	799.4	804.2	801.8	804.2	804.2	806.6	804.2	806.6
42.5°	722.3	727.2	722.3	729.6	727.2	727.2	729.6	729.6
45°	642.9	650.1	645.3	650.1	652.5	650.1	650.1	654.9
47.5°	568.2	573.1	570.7	573.1	573.1	573.1	573.1	577.9
50°	493.6	496.0	496.0	498.4	498.4	500.8	496.0	498.4
52.5°	419.0	423.8	423.8	423.8	421.4	423.8	423.8	423.8
55°	351.5	353.9	349.1	353.9	353.9	351.5	351.5	356.4
57.5°	286.5	286.5	286.5	286.5	286.5	284.1	286.5	286.5
60°	226.3	228.7	226.3	226.3	226.3	226.3	223.9	228.7
62.5°	175.8	175.8	173.4	175.8	175.8	175.8	178.2	178.2
65°	137.2	139.7	137.2	139.7	139.7	139.7	139.7	142.1
67.5°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
70°	81.9	81.9	81.9	84.3	81.9	81.9	81.9	84.3
72.5°	60.2	60.2	60.2	60.2	60.2	60.2	62.6	62.6
75°	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
77.5°	28.9	28.9	28.9	31.3	28.9	31.3	28.9	28.9
80°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
82.5°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
85°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
87.5°	4.8	4.8	4.8	4.8	2.4	2.4	2.4	2.4
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)