

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: P252173

Luminaire Tested: **LD6B30D010 EU6B30509027 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252173
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B30D010 EU6B30509027 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3090.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

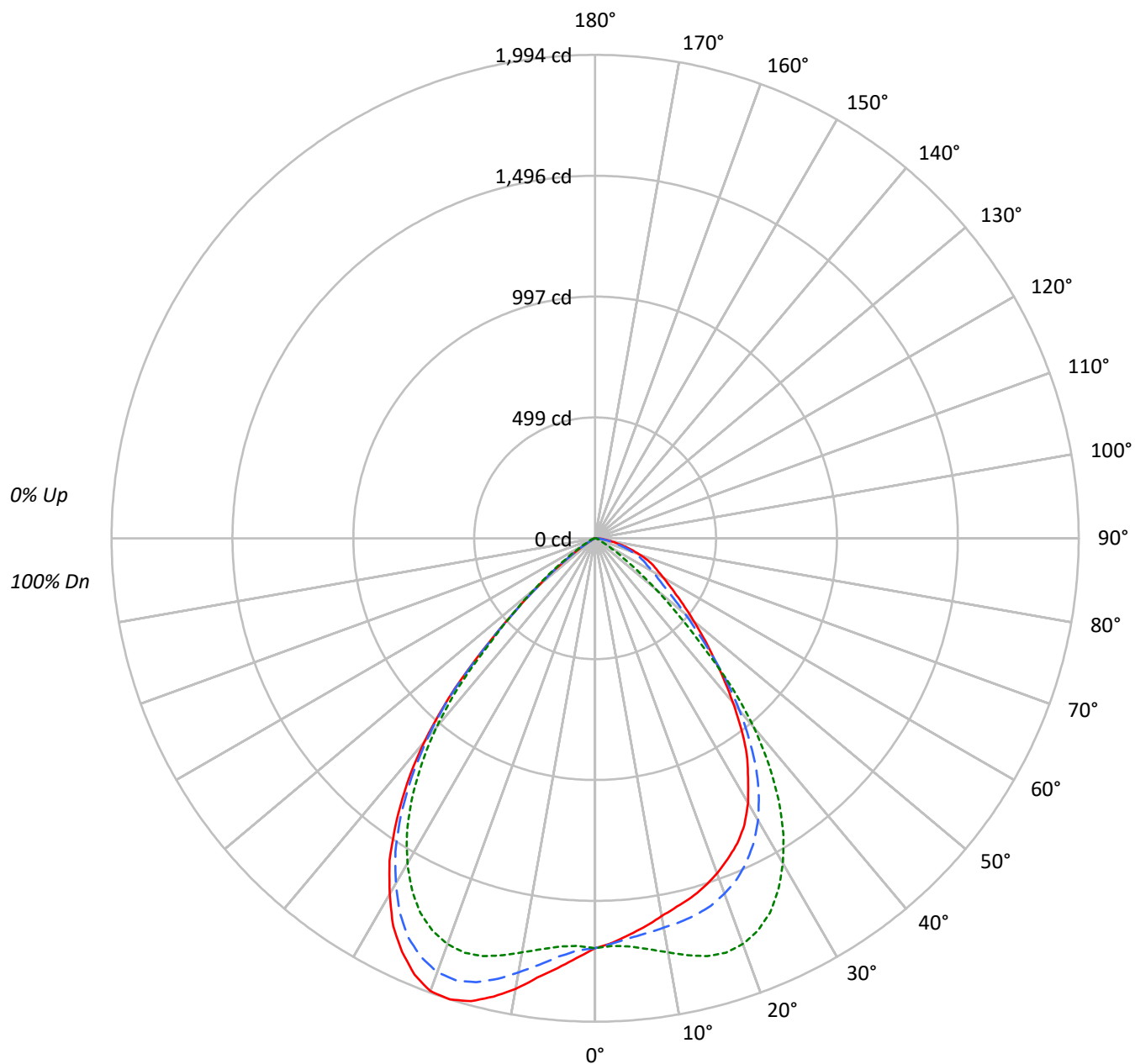
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80		
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72		
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53		
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48		
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40		
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	110289	110289	110289
5°	107430	110711	116533
10°	104816	114879	125048
15°	103589	120509	133497
20°	102107	123651	138008
25°	99937	122735	135533
30°	94965	116639	127592
35°	86884	105162	113915
40°	75150	86852	93461
45°	63376	56964	61134
50°	53803	32966	30997
55°	46692	15810	11943
60°	42172	7385	2949
65°	40909	4245	1003
70°	36681	3395	916
75°	30148	2445	403
80°	22467	1202	0
85°	19388	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	5.3
10°-20°	497.6	16.1
20°-30°	760.3	24.6
30°-40°	795.2	25.7
40°-50°	515.9	16.7
50°-60°	204.8	6.6
60°-70°	97.2	3.1
70°-80°	46.2	1.5
80°-90°	9.4	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°	1421.3	46.0
0°-40°	2216.5	71.7
0°-60°	2937.2	95.1
0°-90°	3090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3090.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1690	1690	1690	1690	1690	
5°	1640	1655	1690	1732	1779	155
15°	1534	1608	1784	1896	1976	432
25°	1388	1476	1705	1820	1883	636
35°	1091	1157	1320	1398	1430	675
45°	687	680	617	654	663	534
55°	410	349	139	108	105	372
65°	265	220	28	6	6	259
75°	120	97	10	3	2	129
85°	26	16	0	0	0	30
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°	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5
2.5°	1669.5	1672.7	1654.9	1650.1	1663.0	1667.8	1669.5	1664.6	1666.2	1672.7	1672.7
5°	1640.4	1643.6	1627.4	1622.6	1635.5	1638.8	1643.6	1642.0	1646.8	1656.5	1654.9
7.5°	1612.9	1617.7	1600.0	1593.5	1609.7	1617.7	1621.0	1621.0	1627.4	1640.4	1642.0
10°	1582.2	1588.7	1572.5	1569.3	1587.0	1595.1	1596.7	1600.0	1609.7	1627.4	1630.7
12.5°	1556.3	1562.8	1551.5	1546.6	1566.0	1574.1	1577.3	1583.8	1595.1	1617.7	1621.0
15°	1533.7	1538.6	1525.6	1522.4	1541.8	1551.5	1553.1	1562.8	1577.3	1603.2	1608.1
17.5°	1504.6	1507.9	1498.2	1494.9	1514.3	1524.0	1525.6	1536.9	1554.7	1580.6	1588.7
20°	1470.7	1473.9	1464.2	1461.0	1480.4	1491.7	1493.3	1503.0	1524.0	1551.5	1559.6
22.5°	1430.3	1436.7	1425.4	1422.2	1441.6	1451.3	1456.1	1464.2	1485.2	1512.7	1524.0
25°	1388.3	1388.3	1380.2	1378.6	1396.3	1407.7	1406.0	1417.3	1438.4	1465.8	1475.5
27.5°	1333.3	1331.7	1323.6	1322.0	1341.4	1351.1	1347.9	1359.2	1378.6	1406.0	1415.7
30°	1260.6	1263.8	1252.5	1249.3	1265.4	1281.6	1280.0	1291.3	1310.7	1336.5	1343.0
32.5°	1173.3	1176.5	1174.9	1170.1	1184.6	1192.7	1197.6	1205.6	1221.8	1249.3	1255.7
35°	1090.9	1086.0	1079.6	1079.6	1094.1	1107.1	1102.2	1111.9	1128.1	1155.5	1157.2
37.5°	989.1	987.5	984.2	981.0	997.2	1000.4	1002.0	1008.5	1023.0	1045.6	1042.4
40°	882.4	884.0	882.4	875.9	885.6	898.6	897.0	900.2	913.1	929.3	924.4
42.5°	782.2	782.2	782.2	775.7	787.1	793.5	796.8	795.1	798.4	812.9	806.4
45°	686.9	688.5	686.9	685.2	686.9	690.1	686.9	685.2	685.2	690.1	680.4
47.5°	604.4	604.4	599.6	594.7	599.6	601.2	596.4	591.5	589.9	588.3	572.1
50°	530.1	528.5	526.9	518.8	523.6	525.2	518.8	515.5	509.1	501.0	481.6
52.5°	465.4	463.8	462.2	454.1	457.4	459.0	452.5	446.1	438.0	431.5	407.3
55°	410.5	408.9	408.9	404.0	400.8	404.0	397.6	392.7	381.4	373.3	349.1
57.5°	363.6	363.6	360.4	355.5	357.2	357.2	350.7	344.2	334.5	324.8	305.4
60°	323.2	323.2	323.2	318.4	318.4	318.4	315.1	308.7	300.6	290.9	271.5
62.5°	290.9	290.9	289.3	284.4	286.1	286.1	282.8	276.4	268.3	261.8	242.4
65°	265.0	265.0	265.0	260.2	260.2	261.8	258.6	252.1	245.7	237.6	219.8
67.5°	232.7	231.1	231.1	227.9	229.5	231.1	227.9	223.0	214.9	210.1	193.9
70°	192.3	193.9	195.6	190.7	192.3	192.3	190.7	185.9	181.0	176.2	161.6
72.5°	156.8	156.8	155.1	153.5	153.5	155.1	151.9	147.1	143.8	140.6	129.3
75°	119.6	118.0	119.6	116.4	116.4	116.4	113.1	111.5	109.9	105.0	97.0
77.5°	87.3	85.7	85.7	82.4	84.0	84.0	82.4	79.2	76.0	74.3	67.9
80°	59.8	59.8	59.8	58.2	58.2	56.6	56.6	54.9	51.7	50.1	46.9
82.5°	40.4	40.4	40.4	38.8	38.8	38.8	37.2	35.6	33.9	32.3	29.1
85°	25.9	25.9	25.9	24.2	24.2	24.2	22.6	22.6	21.0	19.4	16.2
87.5°	14.5	14.5	14.5	12.9	12.9	12.9	12.9	12.9	11.3	9.7	8.1
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°	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5
2.5°	1684.0	1661.4	1675.9	1675.9	1671.1	1684.0	1692.1	1698.6	1696.9	1682.4	1680.8
5°	1671.1	1651.7	1667.8	1669.5	1664.6	1682.4	1693.7	1701.8	1703.4	1690.5	1692.1
7.5°	1661.4	1645.2	1666.2	1672.7	1671.1	1687.2	1700.2	1713.1	1719.6	1709.9	1711.5
10°	1656.5	1643.6	1666.2	1675.9	1677.5	1695.3	1714.7	1732.5	1740.6	1734.1	1739.0
12.5°	1650.1	1642.0	1667.8	1682.4	1688.9	1706.6	1730.9	1751.9	1764.8	1761.6	1771.3
15°	1643.6	1637.1	1667.8	1688.9	1696.9	1713.1	1740.6	1771.3	1785.8	1784.2	1797.1
17.5°	1627.4	1625.8	1658.2	1680.8	1692.1	1711.5	1737.3	1774.5	1789.1	1792.3	1808.5
20°	1601.6	1601.6	1637.1	1661.4	1674.3	1692.1	1724.4	1760.0	1777.7	1781.0	1798.8
22.5°	1566.0	1569.3	1603.2	1627.4	1646.8	1659.8	1693.7	1730.9	1747.0	1751.9	1771.3
25°	1519.2	1522.4	1554.7	1579.0	1600.0	1614.5	1646.8	1680.8	1700.2	1705.0	1719.6
27.5°	1457.8	1464.2	1494.9	1519.2	1536.9	1546.6	1580.6	1616.1	1630.7	1635.5	1650.1
30°	1386.6	1388.3	1419.0	1440.0	1457.8	1465.8	1494.9	1532.1	1543.4	1548.3	1569.3
32.5°	1299.4	1297.8	1326.8	1346.2	1360.8	1370.5	1401.2	1425.4	1436.7	1444.8	1456.1
35°	1194.3	1192.7	1213.7	1236.3	1247.7	1250.9	1281.6	1307.5	1313.9	1320.4	1334.9
37.5°	1076.3	1076.3	1094.1	1105.4	1118.4	1123.2	1137.8	1166.8	1178.2	1176.5	1187.9
40°	951.9	945.4	958.4	969.7	972.9	974.5	989.1	1011.7	1019.8	1019.8	1027.9
42.5°	821.0	811.3	812.9	819.4	822.6	811.3	821.0	835.5	830.7	837.2	838.8
45°	682.0	667.5	661.0	646.5	649.7	638.4	631.9	635.1	633.5	617.4	620.6
47.5°	568.9	543.0	531.7	510.7	505.8	492.9	484.8	470.3	457.4	457.4	449.3
50°	473.5	447.7	425.0	400.8	392.7	381.4	363.6	344.2	334.5	324.8	316.8
52.5°	397.6	370.1	342.6	316.8	305.4	290.9	266.7	247.3	229.5	219.8	210.1
55°	336.2	305.4	276.4	248.9	234.3	219.8	195.6	172.9	151.9	139.0	130.9
57.5°	289.3	260.2	229.5	200.4	187.5	171.3	145.5	121.2	101.8	87.3	79.2
60°	255.3	226.3	198.8	168.1	155.1	139.0	111.5	88.9	69.5	56.6	46.9
62.5°	226.3	200.4	171.3	143.8	130.9	114.7	88.9	66.3	48.5	35.6	27.5
65°	205.2	179.4	155.1	127.7	116.4	100.2	76.0	54.9	38.8	27.5	19.4
67.5°	181.0	158.4	134.1	111.5	100.2	87.3	64.6	46.9	32.3	22.6	16.2
70°	151.9	134.1	113.1	92.1	84.0	72.7	53.3	38.8	25.9	17.8	12.9
72.5°	121.2	106.7	90.5	74.3	67.9	56.6	43.6	30.7	19.4	12.9	9.7
75°	92.1	80.8	67.9	56.6	50.1	43.6	32.3	22.6	14.5	9.7	6.5
77.5°	63.0	58.2	48.5	38.8	35.6	30.7	21.0	14.5	9.7	6.5	3.2
80°	43.6	38.8	32.3	25.9	22.6	19.4	12.9	9.7	4.8	3.2	1.6
82.5°	27.5	22.6	19.4	16.2	14.5	11.3	8.1	4.8	3.2	1.6	1.6
85°	14.5	12.9	11.3	8.1	8.1	6.5	4.8	3.2	1.6	0.0	0.0
87.5°	8.1	6.5	4.8	3.2	3.2	1.6	1.6	1.6	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°	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5
2.5°	1700.2	1700.2	1698.6	1717.9	1695.3	1717.9	1706.6	1717.9	1701.8	1700.2	1701.8
5°	1713.1	1717.9	1719.6	1737.3	1716.3	1743.8	1734.1	1743.8	1732.5	1735.7	1740.6
7.5°	1739.0	1747.0	1745.4	1768.0	1747.0	1777.7	1771.3	1785.8	1774.5	1777.7	1784.2
10°	1768.0	1777.7	1779.4	1802.0	1782.6	1819.8	1811.7	1827.8	1818.1	1823.0	1831.1
12.5°	1802.0	1813.3	1814.9	1840.8	1819.8	1858.6	1853.7	1869.9	1861.8	1866.6	1876.3
15°	1827.8	1844.0	1847.2	1873.1	1850.5	1890.9	1887.6	1908.7	1895.7	1903.8	1911.9
17.5°	1840.8	1855.3	1861.8	1886.0	1866.6	1907.0	1903.8	1921.6	1911.9	1920.0	1929.7
20°	1832.7	1850.5	1855.3	1879.6	1860.2	1900.6	1895.7	1913.5	1903.8	1910.3	1920.0
22.5°	1803.6	1821.4	1827.8	1850.5	1832.7	1869.9	1868.2	1884.4	1871.5	1879.6	1887.6
25°	1751.9	1771.3	1774.5	1795.5	1776.1	1814.9	1811.7	1829.5	1819.8	1824.6	1835.9
27.5°	1677.5	1700.2	1705.0	1722.8	1708.3	1740.6	1740.6	1755.1	1743.8	1743.8	1755.1
30°	1588.7	1611.3	1614.5	1629.1	1616.1	1645.2	1646.8	1661.4	1643.6	1653.3	1654.9
32.5°	1480.4	1494.9	1504.6	1517.5	1498.2	1535.3	1530.5	1541.8	1532.1	1532.1	1540.2
35°	1349.5	1367.2	1372.1	1388.3	1372.1	1401.2	1401.2	1407.7	1398.0	1398.0	1410.9
37.5°	1207.3	1220.2	1221.8	1238.0	1225.0	1249.3	1247.7	1252.5	1242.8	1249.3	1249.3
40°	1040.8	1050.5	1053.7	1061.8	1060.2	1078.0	1076.3	1079.6	1074.7	1076.3	1079.6
42.5°	846.9	859.8	866.2	872.7	863.0	887.3	882.4	887.3	885.6	887.3	892.1
45°	623.8	633.5	638.4	640.0	636.8	651.3	662.6	652.9	654.5	651.3	657.8
47.5°	450.9	452.5	449.3	459.0	450.9	457.4	460.6	462.2	452.5	450.9	457.4
50°	308.7	316.8	305.4	310.3	308.7	315.1	311.9	313.5	303.8	308.7	305.4
52.5°	205.2	203.6	200.4	202.0	198.8	198.8	198.8	202.0	195.6	192.3	189.1
55°	124.4	121.2	114.7	113.1	113.1	114.7	111.5	108.3	108.3	106.7	106.7
57.5°	72.7	67.9	64.6	63.0	59.8	58.2	56.6	56.6	53.3	53.3	53.3
60°	40.4	35.6	32.3	29.1	29.1	27.5	25.9	24.2	24.2	24.2	22.6
62.5°	21.0	17.8	14.5	12.9	12.9	11.3	9.7	9.7	9.7	9.7	8.1
65°	14.5	11.3	9.7	8.1	8.1	6.5	6.5	6.5	6.5	6.5	6.5
67.5°	11.3	9.7	8.1	6.5	6.5	6.5	4.8	4.8	4.8	4.8	4.8
70°	9.7	6.5	6.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
72.5°	6.5	6.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	4.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0
80°	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252173

CATALOG NUMBER: LD6B30D010 EU6B30509027 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5	1690.5
2.5°	1716.3	1714.7	1716.3	1719.6	1713.1	1732.5	1722.8	1732.5
5°	1753.5	1755.1	1756.7	1761.6	1753.5	1777.7	1764.8	1779.4
7.5°	1802.0	1803.6	1805.2	1810.1	1805.2	1829.5	1814.9	1827.8
10°	1852.1	1855.3	1855.3	1863.4	1858.6	1881.2	1871.5	1887.6
12.5°	1899.0	1902.2	1905.4	1910.3	1907.0	1931.3	1923.2	1936.1
15°	1936.1	1942.6	1944.2	1950.7	1947.4	1973.3	1963.6	1976.5
17.5°	1953.9	1960.4	1960.4	1968.4	1965.2	1992.7	1979.8	1994.3
20°	1944.2	1949.1	1950.7	1958.8	1955.5	1983.0	1970.1	1987.8
22.5°	1913.5	1915.1	1916.7	1924.8	1923.2	1947.4	1936.1	1947.4
25°	1856.9	1861.8	1860.2	1866.6	1866.6	1886.0	1873.1	1882.8
27.5°	1776.1	1781.0	1781.0	1789.1	1782.6	1802.0	1789.1	1803.6
30°	1677.5	1682.4	1679.2	1685.6	1679.2	1698.6	1688.9	1693.7
32.5°	1559.6	1559.6	1561.2	1562.8	1559.6	1577.3	1567.6	1577.3
35°	1419.0	1422.2	1423.8	1425.4	1422.2	1435.1	1423.8	1430.3
37.5°	1260.6	1268.7	1267.0	1268.7	1263.8	1280.0	1270.3	1273.5
40°	1090.9	1090.9	1089.3	1092.5	1087.7	1100.6	1094.1	1097.4
42.5°	893.7	898.6	892.1	900.2	887.3	905.0	898.6	893.7
45°	670.7	664.2	662.6	664.2	659.4	661.0	665.8	662.6
47.5°	457.4	457.4	454.1	449.3	455.7	457.4	450.9	450.9
50°	307.1	307.1	303.8	302.2	305.4	303.8	300.6	305.4
52.5°	195.6	189.1	189.1	192.3	189.1	185.9	190.7	187.5
55°	106.7	103.4	103.4	106.7	103.4	103.4	101.8	105.0
57.5°	51.7	53.3	51.7	51.7	51.7	51.7	50.1	51.7
60°	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6
62.5°	9.7	9.7	8.1	8.1	8.1	8.1	8.1	8.1
65°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
67.5°	4.8	4.8	4.8	4.8	4.8	6.5	4.8	4.8
70°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
72.5°	4.8	4.8	6.5	6.5	6.5	6.5	6.5	6.5
75°	3.2	3.2	3.2	1.6	1.6	1.6	1.6	1.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)