

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: P252395

Luminaire Tested: **LD6B40D010 EU6B30509030 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509030 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3226.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

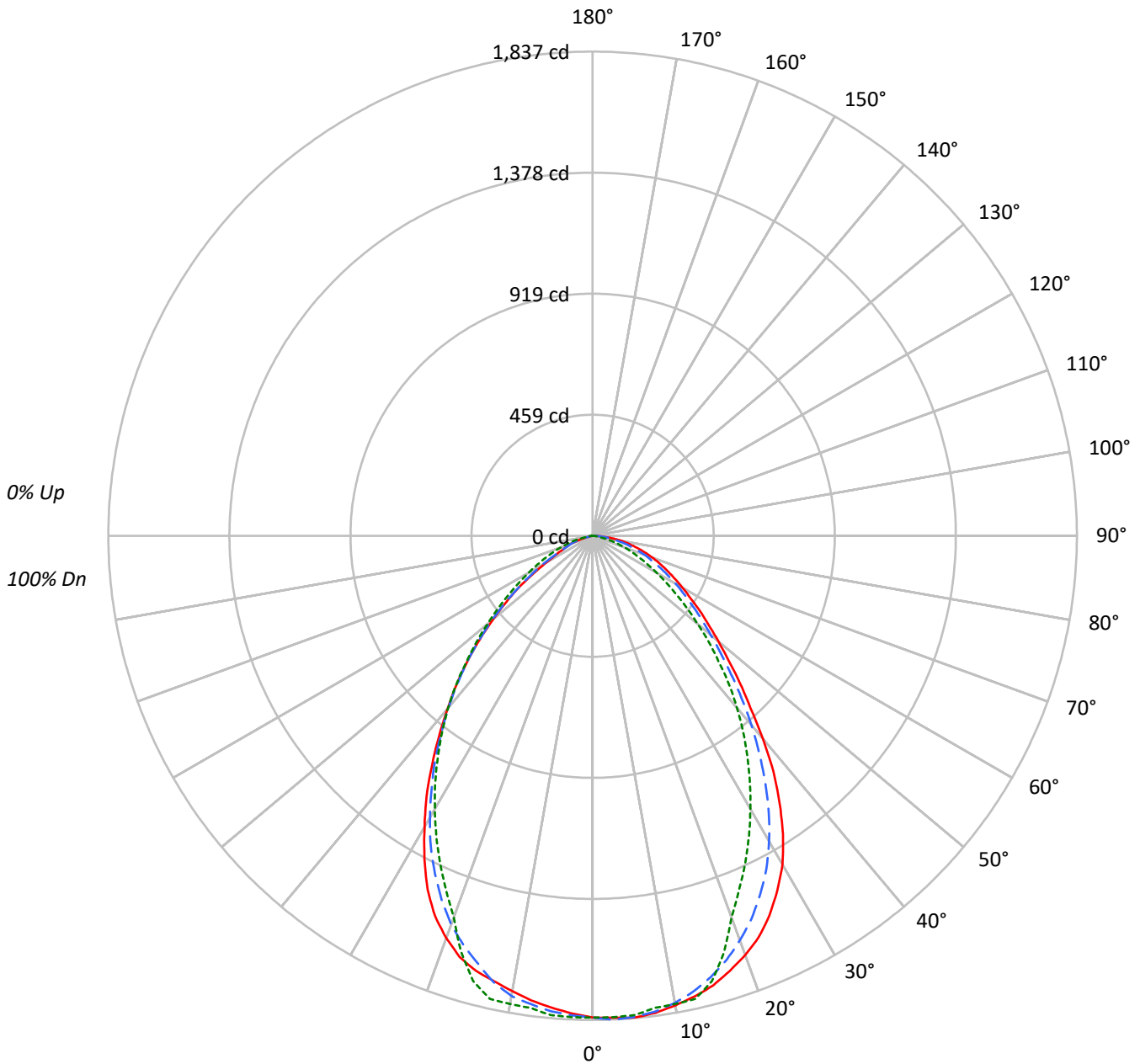
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44								
8	67	55	47	42	66	54	47	42	53	46	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	40	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	119253	119253	119253
5°	120174	119552	117685
10°	119834	119516	116217
15°	119293	118165	115443
20°	117513	106960	112730
25°	114319	98598	106631
30°	108548	90129	96035
35°	98504	81484	84510
40°	85515	72578	72783
45°	72935	62426	61762
50°	63131	52768	49875
55°	56428	44007	38616
60°	51423	36548	26018
65°	48010	30056	19420
70°	45742	24454	16309
75°	43079	17342	5394
80°	41027	8904	1766
85°	33760	5315	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	5.4
10°-20°	482.8	15.0
20°-30°	666.4	20.7
30°-40°	678.1	21.0
40°-50°	545.0	16.9
50°-60°	362.4	11.2
60°-70°	206.5	6.4
70°-80°	92.7	2.9
80°-90°	19.5	0.6
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°	1321.8	41.0
0°-40°	1999.9	62.0
0°-60°	2907.2	90.1
0°-90°	3226.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3226.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1828	1828	1828	1828	1828	
5°	1835	1833	1826	1811	1797	174
15°	1766	1733	1750	1681	1709	497
25°	1588	1503	1370	1415	1481	728
35°	1237	1142	1023	1042	1061	769
45°	790	743	677	669	669	613
55°	496	463	387	344	340	446
65°	311	278	195	126	126	310
75°	171	142	69	28	21	183
85°	45	31	7	2	0	54
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°	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9
2.5°	1830.3	1839.7	1837.4	1835.0	1837.4	1835.0	1830.3	1830.3	1825.5	1825.5	1837.4
5°	1835.0	1839.7	1837.4	1835.0	1835.0	1837.4	1827.9	1827.9	1823.1	1820.8	1832.6
7.5°	1825.5	1832.6	1827.9	1827.9	1825.5	1827.9	1818.4	1818.4	1811.3	1808.9	1820.8
10°	1808.9	1818.4	1813.6	1813.6	1813.6	1808.9	1804.1	1801.8	1794.6	1792.3	1799.4
12.5°	1789.9	1797.0	1794.6	1789.9	1789.9	1789.9	1780.4	1778.0	1768.5	1763.8	1770.9
15°	1766.2	1770.9	1768.5	1766.2	1761.4	1761.4	1751.9	1747.2	1737.7	1728.2	1732.9
17.5°	1730.5	1737.7	1732.9	1730.5	1723.4	1723.4	1713.9	1709.2	1694.9	1685.4	1687.8
20°	1692.6	1694.9	1692.6	1687.8	1680.7	1678.3	1668.8	1659.3	1647.5	1635.6	1633.2
22.5°	1647.5	1649.8	1642.7	1638.0	1630.8	1628.5	1616.6	1609.5	1590.5	1576.2	1573.9
25°	1588.1	1590.5	1590.5	1578.6	1573.9	1569.1	1557.3	1545.4	1528.8	1509.8	1502.7
27.5°	1516.9	1524.0	1519.3	1507.4	1497.9	1495.5	1483.7	1474.2	1452.8	1436.2	1426.7
30°	1440.9	1438.6	1436.2	1429.1	1414.8	1412.5	1400.6	1388.7	1372.1	1350.7	1338.9
32.5°	1343.6	1343.6	1341.2	1334.1	1319.9	1315.1	1305.6	1291.4	1272.4	1255.8	1243.9
35°	1236.8	1239.2	1236.8	1222.5	1213.0	1208.3	1203.6	1186.9	1170.3	1151.3	1141.8
37.5°	1125.2	1118.1	1120.5	1108.6	1096.7	1101.5	1087.2	1080.1	1061.1	1046.9	1037.4
40°	1004.1	1008.9	999.4	994.7	987.5	980.4	980.4	968.5	959.0	942.4	937.7
42.5°	885.5	892.6	890.2	885.5	876.0	878.3	866.5	861.7	849.8	842.7	835.6
45°	790.5	790.5	790.5	785.8	783.4	778.6	771.5	764.4	757.3	747.8	743.0
47.5°	697.9	697.9	700.3	695.5	690.8	688.4	683.7	683.7	671.8	662.3	657.6
50°	622.0	622.0	622.0	617.2	612.5	612.5	607.7	603.0	595.8	588.7	584.0
52.5°	553.1	553.1	553.1	548.4	546.0	543.6	541.2	538.9	529.4	524.6	519.9
55°	496.1	493.8	493.8	491.4	486.6	486.6	484.3	479.5	472.4	465.3	462.9
57.5°	439.2	441.5	439.2	439.2	434.4	434.4	429.7	427.3	420.2	415.4	410.7
60°	394.1	394.1	394.1	391.7	386.9	389.3	384.6	382.2	375.1	367.9	363.2
62.5°	349.0	351.3	351.3	349.0	344.2	344.2	341.8	339.5	332.3	325.2	318.1
65°	311.0	311.0	311.0	308.6	306.2	306.2	303.9	301.5	294.4	284.9	277.7
67.5°	275.4	273.0	273.0	273.0	270.6	268.2	265.9	263.5	256.4	249.3	239.8
70°	239.8	239.8	239.8	237.4	232.6	235.0	232.6	230.3	223.1	216.0	208.9
72.5°	206.5	206.5	204.2	201.8	201.8	199.4	199.4	197.0	189.9	180.4	173.3
75°	170.9	170.9	170.9	170.9	166.2	168.5	163.8	161.4	156.7	149.6	142.4
77.5°	140.1	140.1	140.1	137.7	135.3	135.3	132.9	130.6	123.4	118.7	109.2
80°	109.2	109.2	109.2	109.2	106.8	104.5	102.1	99.7	95.0	87.8	80.7
82.5°	80.7	80.7	78.3	78.3	78.3	76.0	73.6	71.2	66.5	61.7	57.0
85°	45.1	47.5	47.5	42.7	45.1	42.7	42.7	38.0	38.0	33.2	30.9
87.5°	16.6	14.2	14.2	14.2	14.2	14.2	14.2	11.9	11.9	11.9	9.5
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°	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9
2.5°	1827.9	1825.5	1835.0	1835.0	1820.8	1827.9	1830.3	1825.5	1825.5	1827.9	1820.8
5°	1823.1	1818.4	1827.9	1830.3	1816.0	1823.1	1825.5	1820.8	1823.1	1825.5	1816.0
7.5°	1806.5	1806.5	1813.6	1816.0	1801.8	1808.9	1808.9	1804.1	1806.5	1806.5	1799.4
10°	1789.9	1782.8	1789.9	1789.9	1778.0	1780.4	1785.1	1782.8	1792.3	1804.1	1804.1
12.5°	1759.0	1751.9	1763.8	1763.8	1756.7	1766.2	1778.0	1785.1	1794.6	1799.4	1785.1
15°	1721.1	1723.4	1744.8	1761.4	1754.3	1768.5	1780.4	1775.7	1763.8	1749.5	1728.2
17.5°	1671.2	1664.1	1683.1	1692.6	1683.1	1687.8	1697.3	1687.8	1668.8	1657.0	1628.5
20°	1614.2	1595.2	1595.2	1590.5	1573.9	1573.9	1571.5	1554.9	1547.8	1540.6	1528.8
22.5°	1550.1	1528.8	1521.6	1507.4	1493.2	1490.8	1483.7	1467.1	1457.6	1452.8	1438.6
25°	1476.5	1457.6	1445.7	1431.4	1410.1	1405.3	1398.2	1381.6	1376.8	1369.7	1357.9
27.5°	1400.6	1376.8	1360.2	1346.0	1327.0	1324.6	1310.4	1298.5	1289.0	1284.3	1274.8
30°	1312.7	1286.6	1274.8	1255.8	1241.5	1236.8	1224.9	1208.3	1201.2	1196.4	1189.3
32.5°	1215.4	1194.1	1182.2	1165.6	1146.6	1149.0	1134.7	1120.5	1115.7	1111.0	1103.8
35°	1120.5	1099.1	1084.9	1070.6	1058.7	1054.0	1044.5	1032.6	1025.5	1023.1	1018.4
37.5°	1016.0	999.4	987.5	973.3	963.8	959.0	954.3	942.4	937.7	937.7	928.2
40°	913.9	899.7	890.2	883.1	871.2	868.8	864.1	857.0	854.6	852.2	845.1
42.5°	821.4	802.4	795.2	790.5	783.4	778.6	776.3	771.5	769.1	766.8	759.6
45°	733.5	716.9	709.8	705.0	697.9	695.5	693.2	686.0	681.3	676.6	674.2
47.5°	648.1	636.2	633.8	622.0	617.2	612.5	607.7	603.0	600.6	598.2	588.7
50°	574.5	567.4	555.5	548.4	543.6	541.2	531.7	524.6	522.3	519.9	512.8
52.5°	508.0	498.5	491.4	479.5	477.1	472.4	467.7	458.2	453.4	451.0	443.9
55°	448.7	441.5	432.0	422.5	415.4	413.1	405.9	396.4	391.7	386.9	382.2
57.5°	398.8	386.9	377.4	367.9	363.2	356.1	349.0	344.2	337.1	330.0	322.8
60°	351.3	341.8	330.0	320.5	315.7	311.0	301.5	294.4	287.2	280.1	273.0
62.5°	306.2	296.7	284.9	275.4	270.6	265.9	256.4	249.3	242.1	235.0	225.5
65°	265.9	256.4	246.9	237.4	232.6	227.9	218.4	208.9	201.8	194.7	185.2
67.5°	232.6	220.8	211.3	201.8	197.0	192.3	182.8	175.7	166.2	159.0	149.6
70°	197.0	187.5	180.4	170.9	166.2	161.4	151.9	142.4	135.3	128.2	118.7
72.5°	166.2	154.3	147.2	137.7	132.9	130.6	121.1	113.9	106.8	97.3	90.2
75°	132.9	123.4	113.9	106.8	102.1	99.7	90.2	83.1	76.0	68.8	61.7
77.5°	102.1	95.0	85.5	78.3	73.6	71.2	61.7	54.6	47.5	42.7	35.6
80°	76.0	66.5	61.7	54.6	52.2	47.5	42.7	35.6	30.9	23.7	19.0
82.5°	52.2	45.1	40.4	35.6	33.2	30.9	26.1	21.4	16.6	14.2	11.9
85°	28.5	23.7	21.4	19.0	16.6	16.6	14.2	11.9	9.5	7.1	4.7
87.5°	9.5	7.1	7.1	7.1	7.1	4.7	4.7	4.7	2.4	2.4	2.4
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°	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9
2.5°	1825.5	1825.5	1825.5	1823.1	1823.1	1823.1	1820.8	1830.3	1820.8	1818.4	1825.5
5°	1823.1	1818.4	1818.4	1818.4	1818.4	1816.0	1813.6	1818.4	1811.3	1808.9	1808.9
7.5°	1808.9	1806.5	1806.5	1804.1	1801.8	1799.4	1797.0	1799.4	1792.3	1789.9	1789.9
10°	1811.3	1806.5	1806.5	1799.4	1794.6	1787.5	1780.4	1782.8	1773.3	1766.2	1766.2
12.5°	1782.8	1770.9	1763.8	1756.7	1751.9	1749.5	1740.0	1744.8	1735.3	1732.9	1732.9
15°	1718.7	1704.4	1692.6	1687.8	1687.8	1683.1	1676.0	1685.4	1680.7	1683.1	1694.9
17.5°	1619.0	1611.9	1604.7	1602.4	1604.7	1609.5	1614.2	1628.5	1628.5	1635.6	1647.5
20°	1531.1	1526.4	1531.1	1531.1	1533.5	1543.0	1552.5	1564.4	1569.1	1576.2	1592.9
22.5°	1445.7	1445.7	1450.4	1457.6	1455.2	1471.8	1474.2	1495.5	1495.5	1509.8	1524.0
25°	1362.6	1362.6	1367.3	1369.7	1374.5	1384.0	1393.5	1410.1	1414.8	1429.1	1440.9
27.5°	1281.9	1279.5	1279.5	1281.9	1286.6	1298.5	1303.3	1322.2	1329.4	1338.9	1350.7
30°	1191.7	1189.3	1194.1	1198.8	1196.4	1208.3	1215.4	1229.7	1234.4	1243.9	1253.4
32.5°	1106.2	1106.2	1106.2	1111.0	1111.0	1120.5	1120.5	1137.1	1137.1	1144.2	1153.7
35°	1018.4	1018.4	1020.8	1023.1	1025.5	1027.9	1030.3	1039.8	1042.1	1044.5	1049.2
37.5°	935.3	932.9	935.3	935.3	930.6	940.1	940.1	949.5	942.4	949.5	951.9
40°	849.8	849.8	847.5	847.5	847.5	852.2	847.5	854.6	849.8	854.6	852.2
42.5°	762.0	762.0	757.3	762.0	759.6	759.6	759.6	764.4	757.3	762.0	764.4
45°	674.2	671.8	671.8	669.4	669.4	669.4	671.8	671.8	669.4	674.2	674.2
47.5°	588.7	586.3	586.3	586.3	586.3	588.7	581.6	586.3	581.6	581.6	581.6
50°	515.1	512.8	510.4	508.0	505.6	505.6	503.3	503.3	498.5	496.1	493.8
52.5°	443.9	441.5	436.8	436.8	434.4	432.0	424.9	424.9	417.8	415.4	415.4
55°	379.8	372.7	370.3	365.6	365.6	360.8	356.1	351.3	344.2	339.5	339.5
57.5°	320.5	313.4	308.6	306.2	303.9	299.1	289.6	287.2	277.7	275.4	273.0
60°	268.2	261.1	254.0	249.3	246.9	239.8	230.3	225.5	220.8	213.6	206.5
62.5°	218.4	211.3	201.8	199.4	194.7	187.5	180.4	173.3	168.5	161.4	156.7
65°	175.7	168.5	161.4	156.7	151.9	144.8	137.7	130.6	125.8	123.4	121.1
67.5°	142.4	132.9	125.8	123.4	118.7	113.9	106.8	104.5	99.7	99.7	99.7
70°	111.6	104.5	97.3	95.0	92.6	87.8	83.1	83.1	83.1	83.1	83.1
72.5°	83.1	78.3	71.2	68.8	66.5	64.1	59.3	61.7	59.3	59.3	59.3
75°	52.2	47.5	42.7	40.4	38.0	35.6	33.2	30.9	28.5	26.1	26.1
77.5°	28.5	23.7	21.4	19.0	19.0	16.6	14.2	14.2	11.9	11.9	11.9
80°	16.6	14.2	11.9	9.5	9.5	7.1	7.1	7.1	7.1	4.7	4.7
82.5°	9.5	7.1	4.7	4.7	4.7	4.7	2.4	2.4	2.4	2.4	2.4
85°	4.7	4.7	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	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	0.0	0.0	0.0



TEST NUMBER: P252395

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9	1827.9
2.5°	1813.6	1820.8	1813.6	1820.8	1820.8	1820.8	1820.8	1813.6
5°	1801.8	1806.5	1799.4	1804.1	1806.5	1804.1	1804.1	1797.0
7.5°	1780.4	1785.1	1778.0	1785.1	1787.5	1785.1	1782.8	1778.0
10°	1759.0	1761.4	1754.3	1759.0	1763.8	1763.8	1761.4	1754.3
12.5°	1725.8	1732.9	1725.8	1730.5	1735.3	1737.7	1737.7	1730.5
15°	1687.8	1699.7	1694.9	1702.1	1709.2	1711.6	1711.6	1709.2
17.5°	1649.8	1661.7	1654.6	1666.5	1673.6	1678.3	1680.7	1676.0
20°	1595.2	1609.5	1604.7	1614.2	1623.7	1630.8	1630.8	1623.7
22.5°	1524.0	1543.0	1540.6	1547.8	1559.6	1562.0	1566.8	1562.0
25°	1445.7	1459.9	1457.6	1464.7	1478.9	1478.9	1481.3	1481.3
27.5°	1355.5	1369.7	1367.3	1372.1	1381.6	1384.0	1386.3	1381.6
30°	1258.2	1265.3	1265.3	1272.4	1279.5	1281.9	1281.9	1274.8
32.5°	1151.3	1160.8	1165.6	1163.2	1170.3	1175.1	1172.7	1172.7
35°	1054.0	1056.4	1058.7	1061.1	1063.5	1068.2	1063.5	1061.1
37.5°	949.5	956.7	951.9	956.7	961.4	959.0	956.7	956.7
40°	854.6	857.0	852.2	857.0	859.3	859.3	859.3	854.6
42.5°	759.6	764.4	759.6	764.4	764.4	764.4	764.4	762.0
45°	664.7	669.4	669.4	671.8	671.8	669.4	669.4	669.4
47.5°	576.8	581.6	576.8	581.6	584.0	579.2	579.2	579.2
50°	493.8	491.4	491.4	493.8	493.8	493.8	493.8	491.4
52.5°	408.3	410.7	410.7	410.7	413.1	410.7	413.1	413.1
55°	334.7	334.7	334.7	337.1	334.7	334.7	337.1	339.5
57.5°	268.2	265.9	263.5	263.5	265.9	263.5	263.5	263.5
60°	206.5	204.2	201.8	201.8	201.8	201.8	201.8	199.4
62.5°	154.3	154.3	154.3	156.7	156.7	156.7	156.7	159.0
65°	123.4	123.4	123.4	123.4	123.4	123.4	123.4	125.8
67.5°	99.7	99.7	99.7	102.1	102.1	102.1	102.1	102.1
70°	83.1	83.1	85.5	83.1	85.5	85.5	85.5	85.5
72.5°	57.0	57.0	57.0	57.0	57.0	54.6	57.0	54.6
75°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	21.4
77.5°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
80°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	2.4	2.4	2.4	2.4	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)