

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: P252389

Luminaire Tested: **LD6B40D010 EU6B30508030 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252389  
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 EU6B30508030 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3778.0 lumens  
Efficiency: N/A  
Efficacy: 87.8 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

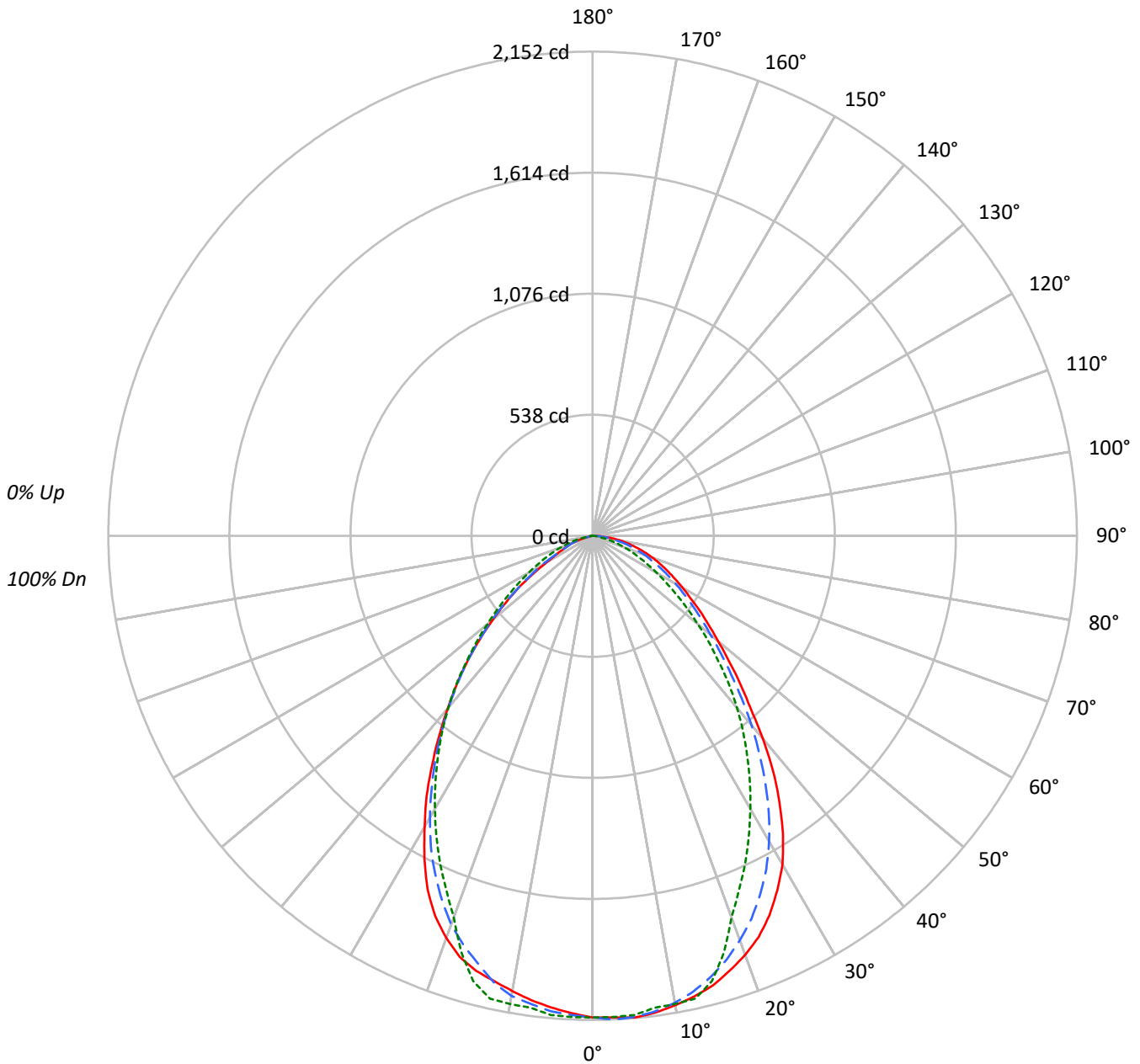
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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°	139654	139654	139654
5°	140738	140011	137823
10°	140338	139967	136105
15°	139704	138387	135192
20°	137619	125268	132024
25°	133885	115471	124880
30°	127125	105557	112465
35°	115357	95430	98974
40°	100155	84995	85234
45°	85418	73101	72335
50°	73930	61791	58411
55°	66085	51537	45213
60°	60217	42798	30467
65°	56222	35197	22739
70°	53563	28632	19094
75°	50464	20317	6302
80°	48053	10445	2104
85°	39524	6213	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.1	5.4
10°-20°	565.4	15.0
20°-30°	780.4	20.7
30°-40°	794.1	21.0
40°-50°	638.2	16.9
50°-60°	424.4	11.2
60°-70°	241.8	6.4
70°-80°	108.6	2.9
80°-90°	22.9	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°	1547.9	41.0
0°-40°	2342.1	62.0
0°-60°	3404.7	90.1
0°-90°	3778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3778.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2141	2141	2141	2141	2141	
5°	2149	2146	2138	2121	2104	204
15°	2068	2029	2049	1968	2002	582
25°	1860	1760	1604	1657	1735	852
35°	1448	1337	1198	1220	1243	900
45°	926	870	792	784	784	718
55°	581	542	453	403	398	522
65°	364	325	228	147	147	363
75°	200	167	81	33	25	214
85°	53	36	8	3	0	63
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°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2143.4	2154.5	2151.8	2149.0	2151.8	2149.0	2143.4	2143.4	2137.9	2137.9	2151.8
5°	2149.0	2154.5	2151.8	2149.0	2149.0	2151.8	2140.6	2140.6	2135.1	2132.3	2146.2
7.5°	2137.9	2146.2	2140.6	2140.6	2137.9	2140.6	2129.5	2129.5	2121.2	2118.4	2132.3
10°	2118.4	2129.5	2124.0	2124.0	2124.0	2118.4	2112.8	2110.1	2101.7	2098.9	2107.3
12.5°	2096.2	2104.5	2101.7	2096.2	2096.2	2096.2	2085.0	2082.3	2071.1	2065.6	2073.9
15°	2068.4	2073.9	2071.1	2068.4	2062.8	2062.8	2051.7	2046.1	2035.0	2023.9	2029.4
17.5°	2026.7	2035.0	2029.4	2026.7	2018.3	2018.3	2007.2	2001.6	1985.0	1973.8	1976.6
20°	1982.2	1985.0	1982.2	1976.6	1968.3	1965.5	1954.4	1943.3	1929.4	1915.5	1912.7
22.5°	1929.4	1932.1	1923.8	1918.2	1909.9	1907.1	1893.2	1884.9	1862.6	1846.0	1843.2
25°	1859.9	1862.6	1862.6	1848.7	1843.2	1837.6	1823.7	1809.8	1790.4	1768.1	1759.8
27.5°	1776.5	1784.8	1779.2	1765.3	1754.2	1751.4	1737.5	1726.4	1701.4	1681.9	1670.8
30°	1687.5	1684.7	1681.9	1673.6	1656.9	1654.1	1640.2	1626.3	1606.9	1581.9	1568.0
32.5°	1573.5	1573.5	1570.7	1562.4	1545.7	1540.2	1529.0	1512.4	1490.1	1470.7	1456.8
35°	1448.4	1451.2	1448.4	1431.7	1420.6	1415.1	1409.5	1390.0	1370.6	1348.3	1337.2
37.5°	1317.7	1309.4	1312.2	1298.3	1284.4	1289.9	1273.3	1264.9	1242.7	1226.0	1214.9
40°	1176.0	1181.5	1170.4	1164.8	1156.5	1148.2	1148.2	1134.3	1123.1	1103.7	1098.1
42.5°	1037.0	1045.3	1042.5	1037.0	1025.8	1028.6	1014.7	1009.2	995.3	986.9	978.6
45°	925.8	925.8	925.8	920.2	917.4	911.9	903.5	895.2	886.8	875.7	870.2
47.5°	817.3	817.3	820.1	814.6	809.0	806.2	800.7	800.7	786.8	775.6	770.1
50°	728.4	728.4	728.4	722.8	717.3	717.3	711.7	706.1	697.8	689.5	683.9
52.5°	647.8	647.8	647.8	642.2	639.4	636.6	633.9	631.1	620.0	614.4	608.8
55°	581.0	578.3	578.3	575.5	569.9	569.9	567.1	561.6	553.2	544.9	542.1
57.5°	514.3	517.1	514.3	514.3	508.8	508.8	503.2	500.4	492.1	486.5	481.0
60°	461.5	461.5	461.5	458.7	453.1	455.9	450.4	447.6	439.2	430.9	425.3
62.5°	408.7	411.4	411.4	408.7	403.1	403.1	400.3	397.5	389.2	380.9	372.5
65°	364.2	364.2	364.2	361.4	358.6	358.6	355.8	353.1	344.7	333.6	325.3
67.5°	322.5	319.7	319.7	319.7	316.9	314.1	311.4	308.6	300.2	291.9	280.8
70°	280.8	280.8	280.8	278.0	272.4	275.2	272.4	269.7	261.3	253.0	244.6
72.5°	241.9	241.9	239.1	236.3	236.3	233.5	233.5	230.7	222.4	211.3	202.9
75°	200.2	200.2	200.2	200.2	194.6	197.4	191.8	189.0	183.5	175.1	166.8
77.5°	164.0	164.0	164.0	161.2	158.5	158.5	155.7	152.9	144.6	139.0	127.9
80°	127.9	127.9	127.9	127.9	125.1	122.3	119.5	116.8	111.2	102.9	94.5
82.5°	94.5	94.5	91.7	91.7	91.7	89.0	86.2	83.4	77.8	72.3	66.7
85°	52.8	55.6	55.6	50.0	52.8	50.0	50.0	44.5	44.5	38.9	36.1
87.5°	19.5	16.7	16.7	16.7	16.7	16.7	16.7	13.9	13.9	13.9	11.1
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°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2140.6	2137.9	2149.0	2149.0	2132.3	2140.6	2143.4	2137.9	2137.9	2140.6	2132.3
5°	2135.1	2129.5	2140.6	2143.4	2126.7	2135.1	2137.9	2132.3	2135.1	2137.9	2126.7
7.5°	2115.6	2115.6	2124.0	2126.7	2110.1	2118.4	2118.4	2112.8	2115.6	2115.6	2107.3
10°	2096.2	2087.8	2096.2	2096.2	2082.3	2085.0	2090.6	2087.8	2098.9	2112.8	2112.8
12.5°	2060.0	2051.7	2065.6	2065.6	2057.2	2068.4	2082.3	2090.6	2101.7	2107.3	2090.6
15°	2015.5	2018.3	2043.3	2062.8	2054.5	2071.1	2085.0	2079.5	2065.6	2048.9	2023.9
17.5°	1957.2	1948.8	1971.1	1982.2	1971.1	1976.6	1987.7	1976.6	1954.4	1940.5	1907.1
20°	1890.4	1868.2	1868.2	1862.6	1843.2	1843.2	1840.4	1820.9	1812.6	1804.3	1790.4
22.5°	1815.4	1790.4	1782.0	1765.3	1748.7	1745.9	1737.5	1718.1	1707.0	1701.4	1684.7
25°	1729.2	1707.0	1693.1	1676.4	1651.4	1645.8	1637.5	1618.0	1612.4	1604.1	1590.2
27.5°	1640.2	1612.4	1593.0	1576.3	1554.1	1551.3	1534.6	1520.7	1509.6	1504.0	1492.9
30°	1537.4	1506.8	1492.9	1470.7	1454.0	1448.4	1434.5	1415.1	1406.7	1401.2	1392.8
32.5°	1423.4	1398.4	1384.5	1365.0	1342.8	1345.5	1328.9	1312.2	1306.6	1301.1	1292.7
35°	1312.2	1287.2	1270.5	1253.8	1239.9	1234.3	1223.2	1209.3	1201.0	1198.2	1192.6
37.5°	1189.9	1170.4	1156.5	1139.8	1128.7	1123.1	1117.6	1103.7	1098.1	1098.1	1087.0
40°	1070.3	1053.6	1042.5	1034.2	1020.3	1017.5	1011.9	1003.6	1000.8	998.0	989.7
42.5°	961.9	939.7	931.3	925.8	917.4	911.9	909.1	903.5	900.7	898.0	889.6
45°	859.0	839.6	831.2	825.7	817.3	814.6	811.8	803.4	797.9	792.3	789.5
47.5°	759.0	745.1	742.3	728.4	722.8	717.3	711.7	706.1	703.4	700.6	689.5
50°	672.8	664.4	650.5	642.2	636.6	633.9	622.7	614.4	611.6	608.8	600.5
52.5°	594.9	583.8	575.5	561.6	558.8	553.2	547.7	536.6	531.0	528.2	519.9
55°	525.4	517.1	506.0	494.9	486.5	483.7	475.4	464.3	458.7	453.1	447.6
57.5°	467.1	453.1	442.0	430.9	425.3	417.0	408.7	403.1	394.8	386.4	378.1
60°	411.4	400.3	386.4	375.3	369.7	364.2	353.1	344.7	336.4	328.0	319.7
62.5°	358.6	347.5	333.6	322.5	316.9	311.4	300.2	291.9	283.6	275.2	264.1
65°	311.4	300.2	289.1	278.0	272.4	266.9	255.8	244.6	236.3	228.0	216.8
67.5°	272.4	258.5	247.4	236.3	230.7	225.2	214.1	205.7	194.6	186.3	175.1
70°	230.7	219.6	211.3	200.2	194.6	189.0	177.9	166.8	158.5	150.1	139.0
72.5°	194.6	180.7	172.4	161.2	155.7	152.9	141.8	133.4	125.1	114.0	105.6
75°	155.7	144.6	133.4	125.1	119.5	116.8	105.6	97.3	89.0	80.6	72.3
77.5°	119.5	111.2	100.1	91.7	86.2	83.4	72.3	63.9	55.6	50.0	41.7
80°	89.0	77.8	72.3	63.9	61.2	55.6	50.0	41.7	36.1	27.8	22.2
82.5°	61.2	52.8	47.3	41.7	38.9	36.1	30.6	25.0	19.5	16.7	13.9
85°	33.4	27.8	25.0	22.2	19.5	19.5	16.7	13.9	11.1	8.3	5.6
87.5°	11.1	8.3	8.3	8.3	8.3	5.6	5.6	5.6	2.8	2.8	2.8
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°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2137.9	2137.9	2137.9	2135.1	2135.1	2135.1	2132.3	2143.4	2132.3	2129.5	2137.9
5°	2135.1	2129.5	2129.5	2129.5	2129.5	2126.7	2124.0	2129.5	2121.2	2118.4	2118.4
7.5°	2118.4	2115.6	2115.6	2112.8	2110.1	2107.3	2104.5	2107.3	2098.9	2096.2	2096.2
10°	2121.2	2115.6	2115.6	2107.3	2101.7	2093.4	2085.0	2087.8	2076.7	2068.4	2068.4
12.5°	2087.8	2073.9	2065.6	2057.2	2051.7	2048.9	2037.8	2043.3	2032.2	2029.4	2029.4
15°	2012.8	1996.1	1982.2	1976.6	1976.6	1971.1	1962.7	1973.8	1968.3	1971.1	1985.0
17.5°	1896.0	1887.7	1879.3	1876.5	1879.3	1884.9	1890.4	1907.1	1907.1	1915.5	1929.4
20°	1793.1	1787.6	1793.1	1793.1	1795.9	1807.0	1818.2	1832.1	1837.6	1846.0	1865.4
22.5°	1693.1	1693.1	1698.6	1707.0	1704.2	1723.6	1726.4	1751.4	1751.4	1768.1	1784.8
25°	1595.8	1595.8	1601.3	1604.1	1609.7	1620.8	1631.9	1651.4	1656.9	1673.6	1687.5
27.5°	1501.2	1498.5	1498.5	1501.2	1506.8	1520.7	1526.3	1548.5	1556.8	1568.0	1581.9
30°	1395.6	1392.8	1398.4	1403.9	1401.2	1415.1	1423.4	1440.1	1445.6	1456.8	1467.9
32.5°	1295.5	1295.5	1295.5	1301.1	1301.1	1312.2	1312.2	1331.6	1331.6	1340.0	1351.1
35°	1192.6	1192.6	1195.4	1198.2	1201.0	1203.8	1206.5	1217.7	1220.4	1223.2	1228.8
37.5°	1095.3	1092.6	1095.3	1095.3	1089.8	1100.9	1100.9	1112.0	1103.7	1112.0	1114.8
40°	995.3	995.3	992.5	992.5	992.5	998.0	992.5	1000.8	995.3	1000.8	998.0
42.5°	892.4	892.4	886.8	892.4	889.6	889.6	889.6	895.2	886.8	892.4	895.2
45°	789.5	786.8	786.8	784.0	784.0	784.0	786.8	786.8	784.0	789.5	789.5
47.5°	689.5	686.7	686.7	686.7	686.7	689.5	681.1	686.7	681.1	681.1	681.1
50°	603.3	600.5	597.7	594.9	592.2	592.2	589.4	589.4	583.8	581.0	578.3
52.5°	519.9	517.1	511.5	511.5	508.8	506.0	497.6	497.6	489.3	486.5	486.5
55°	444.8	436.5	433.7	428.1	428.1	422.6	417.0	411.4	403.1	397.5	397.5
57.5°	375.3	367.0	361.4	358.6	355.8	350.3	339.2	336.4	325.3	322.5	319.7
60°	314.1	305.8	297.5	291.9	289.1	280.8	269.7	264.1	258.5	250.2	241.9
62.5°	255.8	247.4	236.3	233.5	228.0	219.6	211.3	202.9	197.4	189.0	183.5
65°	205.7	197.4	189.0	183.5	177.9	169.6	161.2	152.9	147.3	144.6	141.8
67.5°	166.8	155.7	147.3	144.6	139.0	133.4	125.1	122.3	116.8	116.8	116.8
70°	130.7	122.3	114.0	111.2	108.4	102.9	97.3	97.3	97.3	97.3	97.3
72.5°	97.3	91.7	83.4	80.6	77.8	75.1	69.5	72.3	69.5	69.5	69.5
75°	61.2	55.6	50.0	47.3	44.5	41.7	38.9	36.1	33.4	30.6	30.6
77.5°	33.4	27.8	25.0	22.2	22.2	19.5	16.7	16.7	13.9	13.9	13.9
80°	19.5	16.7	13.9	11.1	11.1	8.3	8.3	8.3	8.3	5.6	5.6
82.5°	11.1	8.3	5.6	5.6	5.6	5.6	2.8	2.8	2.8	2.8	2.8
85°	5.6	5.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0.0
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: P252389

CATALOG NUMBER: LD6B40D010 EU6B30508030 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2124.0	2132.3	2124.0	2132.3	2132.3	2132.3	2132.3	2124.0
5°	2110.1	2115.6	2107.3	2112.8	2115.6	2112.8	2112.8	2104.5
7.5°	2085.0	2090.6	2082.3	2090.6	2093.4	2090.6	2087.8	2082.3
10°	2060.0	2062.8	2054.5	2060.0	2065.6	2065.6	2062.8	2054.5
12.5°	2021.1	2029.4	2021.1	2026.7	2032.2	2035.0	2035.0	2026.7
15°	1976.6	1990.5	1985.0	1993.3	2001.6	2004.4	2004.4	2001.6
17.5°	1932.1	1946.0	1937.7	1951.6	1959.9	1965.5	1968.3	1962.7
20°	1868.2	1884.9	1879.3	1890.4	1901.6	1909.9	1909.9	1901.6
22.5°	1784.8	1807.0	1804.3	1812.6	1826.5	1829.3	1834.8	1829.3
25°	1693.1	1709.7	1707.0	1715.3	1732.0	1732.0	1734.8	1734.8
27.5°	1587.4	1604.1	1601.3	1606.9	1618.0	1620.8	1623.6	1618.0
30°	1473.4	1481.8	1481.8	1490.1	1498.5	1501.2	1501.2	1492.9
32.5°	1348.3	1359.4	1365.0	1362.2	1370.6	1376.1	1373.3	1373.3
35°	1234.3	1237.1	1239.9	1242.7	1245.5	1251.0	1245.5	1242.7
37.5°	1112.0	1120.4	1114.8	1120.4	1125.9	1123.1	1120.4	1120.4
40°	1000.8	1003.6	998.0	1003.6	1006.4	1006.4	1006.4	1000.8
42.5°	889.6	895.2	889.6	895.2	895.2	895.2	895.2	892.4
45°	778.4	784.0	784.0	786.8	786.8	784.0	784.0	784.0
47.5°	675.6	681.1	675.6	681.1	683.9	678.3	678.3	678.3
50°	578.3	575.5	575.5	578.3	578.3	578.3	578.3	575.5
52.5°	478.2	481.0	481.0	481.0	483.7	481.0	483.7	483.7
55°	392.0	392.0	392.0	394.8	392.0	392.0	394.8	397.5
57.5°	314.1	311.4	308.6	308.6	311.4	308.6	308.6	308.6
60°	241.9	239.1	236.3	236.3	236.3	236.3	236.3	233.5
62.5°	180.7	180.7	180.7	183.5	183.5	183.5	183.5	186.3
65°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	147.3
67.5°	116.8	116.8	116.8	119.5	119.5	119.5	119.5	119.5
70°	97.3	97.3	100.1	97.3	100.1	100.1	100.1	100.1
72.5°	66.7	66.7	66.7	66.7	66.7	63.9	66.7	63.9
75°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	25.0
77.5°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	2.8	2.8	2.8	2.8	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)