

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: P252596

Luminaire Tested: **LD6B40D010 EU6B30508027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30508027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3983.0 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

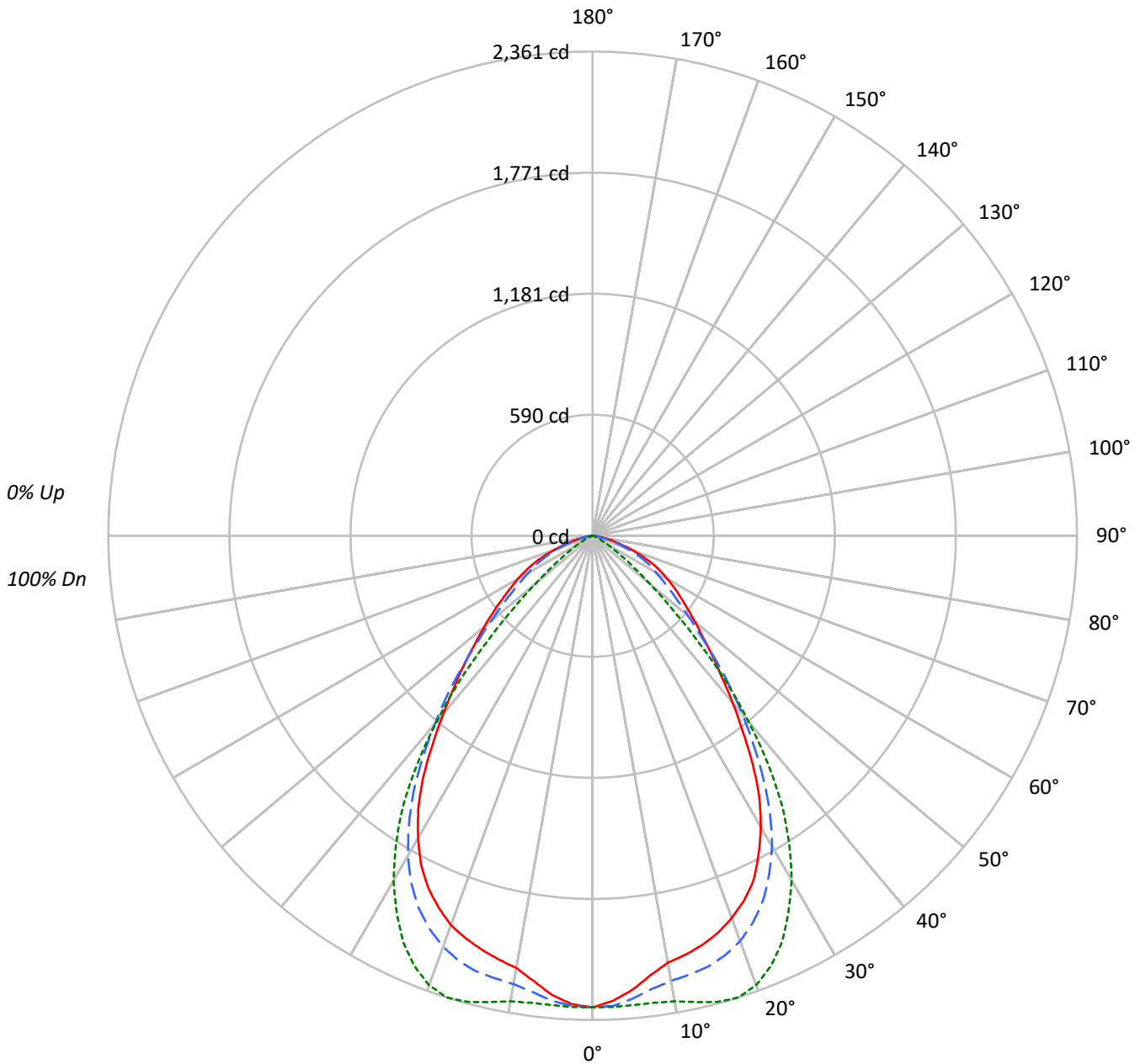
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	150027	150027	150027
5°	145551	150424	147293
10°	140013	152693	141775
15°	139515	158913	141136
20°	137689	161871	140272
25°	133575	157309	136448
30°	123569	146200	128172
35°	108404	128522	114759
40°	90335	100751	96229
45°	76035	66467	81192
50°	65841	36427	69880
55°	59568	19348	61080
60°	54802	10060	54802
65°	49662	5341	48427
70°	40058	3052	37025
75°	27476	2017	25459
80°	17996	1014	15967
85°	11977	2021	9956



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	5.4
10°-20°	620.1	15.6
20°-30°	916.1	23.0
30°-40°	925.4	23.2
40°-50°	637.8	16.0
50°-60°	366.3	9.2
60°-70°	213.2	5.4
70°-80°	77.8	2.0
80°-90°	11.9	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°	1750.6	44.0
0°-40°	2676.0	67.2
0°-60°	3680.1	92.4
0°-90°	3983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3983.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2300	2300	2300	2300	2300	
5°	2222	2265	2297	2276	2249	208
15°	2066	2175	2353	2199	2090	582
25°	1856	1965	2185	2004	1896	845
35°	1361	1454	1614	1521	1441	845
45°	824	835	720	888	880	641
55°	524	460	170	478	537	471
65°	322	271	35	268	314	315
75°	109	88	8	85	101	123
85°	16	8	3	11	13	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°	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6
2.5°	2270.3	2273.0	2275.7	2273.0	2275.7	2286.3	2278.3	2283.6	2283.6	2286.3	2294.3
5°	2222.5	2222.5	2227.8	2225.1	2233.1	2243.8	2235.8	2243.8	2246.4	2251.7	2265.0
7.5°	2161.3	2161.3	2164.0	2164.0	2174.6	2185.3	2180.0	2190.6	2201.2	2211.9	2227.8
10°	2113.5	2118.8	2118.8	2121.5	2132.1	2145.4	2142.7	2156.0	2166.7	2182.6	2203.9
12.5°	2092.2	2094.9	2094.9	2100.2	2110.8	2124.1	2121.5	2134.8	2150.7	2169.3	2190.6
15°	2065.6	2071.0	2068.3	2073.6	2084.2	2097.5	2094.9	2108.2	2126.8	2145.4	2174.6
17.5°	2031.1	2033.7	2036.4	2036.4	2047.0	2057.7	2057.7	2071.0	2092.2	2113.5	2145.4
20°	1983.2	1988.5	1988.5	1991.2	1999.2	2015.1	2012.5	2025.8	2047.0	2068.3	2102.9
22.5°	1927.4	1930.1	1930.1	1932.7	1946.0	1954.0	1956.6	1967.3	1985.9	2009.8	2041.7
25°	1855.6	1858.3	1855.6	1863.6	1868.9	1884.9	1879.5	1892.8	1914.1	1932.7	1964.6
27.5°	1751.9	1757.3	1757.3	1759.9	1773.2	1786.5	1786.5	1799.8	1818.4	1831.7	1863.6
30°	1640.3	1648.3	1640.3	1653.6	1658.9	1669.5	1677.5	1685.5	1701.4	1720.0	1749.3
32.5°	1512.7	1510.0	1512.7	1518.0	1533.9	1541.9	1547.2	1555.2	1571.2	1587.1	1611.0
35°	1361.1	1366.5	1369.1	1379.8	1379.8	1393.0	1395.7	1401.0	1424.9	1435.6	1454.2
37.5°	1201.6	1206.9	1209.6	1214.9	1225.6	1230.9	1238.9	1246.8	1262.8	1281.4	1292.0
40°	1060.7	1060.7	1063.4	1068.7	1076.7	1079.3	1087.3	1098.0	1108.6	1124.5	1135.2
42.5°	927.8	930.5	927.8	933.1	941.1	951.7	949.1	962.4	965.0	975.7	983.6
45°	824.1	824.1	818.8	824.1	824.1	834.8	832.1	837.4	834.8	840.1	834.8
47.5°	725.8	728.4	725.8	728.4	728.4	728.4	731.1	725.8	728.4	720.4	704.5
50°	648.7	651.3	646.0	648.7	646.0	643.4	646.0	638.0	635.4	624.7	608.8
52.5°	582.2	579.5	576.9	576.9	576.9	574.2	571.6	563.6	555.6	545.0	526.4
55°	523.7	521.1	518.4	518.4	513.1	510.4	510.4	502.5	494.5	481.2	459.9
57.5°	470.6	467.9	465.2	465.2	462.6	457.3	457.3	449.3	438.6	422.7	404.1
60°	420.0	420.0	420.0	417.4	417.4	412.1	412.1	404.1	393.5	377.5	356.2
62.5°	374.8	372.2	372.2	372.2	372.2	369.5	366.9	361.6	350.9	335.0	316.4
65°	321.7	321.7	321.7	321.7	319.0	319.0	319.0	311.0	305.7	289.8	271.2
67.5°	263.2	263.2	263.2	263.2	260.5	263.2	263.2	257.9	252.6	236.6	220.7
70°	210.0	207.4	204.7	207.4	204.7	204.7	207.4	202.0	199.4	186.1	170.1
72.5°	154.2	156.9	154.2	154.2	154.2	151.5	154.2	151.5	146.2	135.6	124.9
75°	109.0	111.7	111.7	109.0	109.0	109.0	106.3	106.3	101.0	93.0	87.7
77.5°	74.4	74.4	74.4	74.4	71.8	71.8	71.8	69.1	66.5	61.1	55.8
80°	47.9	47.9	47.9	47.9	45.2	45.2	45.2	42.5	42.5	37.2	31.9
82.5°	29.2	29.2	29.2	29.2	29.2	29.2	26.6	26.6	23.9	21.3	18.6
85°	16.0	16.0	16.0	16.0	16.0	16.0	16.0	13.3	13.3	10.6	8.0
87.5°	5.3	5.3	8.0	8.0	8.0	8.0	8.0	8.0	5.3	5.3	5.3
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°	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6
2.5°	2289.0	2291.6	2291.6	2291.6	2299.6	2302.2	2294.3	2286.3	2302.2	2299.6	2304.9
5°	2262.4	2270.3	2275.7	2278.3	2286.3	2291.6	2283.6	2281.0	2294.3	2296.9	2299.6
7.5°	2230.5	2243.8	2257.0	2262.4	2273.0	2278.3	2275.7	2275.7	2291.6	2296.9	2296.9
10°	2209.2	2227.8	2243.8	2257.0	2270.3	2278.3	2278.3	2281.0	2299.6	2304.9	2310.2
12.5°	2203.9	2227.8	2249.1	2267.7	2278.3	2291.6	2294.3	2302.2	2320.9	2328.8	2328.8
15°	2190.6	2222.5	2249.1	2273.0	2289.0	2304.9	2310.2	2326.2	2347.4	2352.8	2358.1
17.5°	2166.7	2198.6	2230.5	2259.7	2281.0	2294.3	2310.2	2326.2	2352.8	2360.7	2363.4
20°	2124.1	2161.3	2193.2	2222.5	2243.8	2262.4	2278.3	2296.9	2320.9	2331.5	2334.1
22.5°	2060.3	2097.5	2129.4	2161.3	2182.6	2198.6	2214.5	2235.8	2259.7	2270.3	2270.3
25°	1983.2	2017.8	2052.3	2076.3	2097.5	2116.1	2124.1	2148.1	2172.0	2185.3	2185.3
27.5°	1884.9	1916.8	1948.7	1975.2	1988.5	2004.5	2017.8	2039.1	2057.7	2068.3	2078.9
30°	1759.9	1791.8	1821.1	1847.6	1863.6	1879.5	1892.8	1908.8	1927.4	1940.7	1943.3
32.5°	1624.3	1650.9	1680.2	1706.7	1722.7	1728.0	1741.3	1757.3	1773.2	1783.8	1786.5
35°	1475.5	1494.1	1512.7	1536.6	1552.6	1552.6	1565.8	1576.5	1589.8	1613.7	1608.4
37.5°	1300.0	1326.6	1339.9	1347.8	1358.5	1369.1	1371.8	1385.1	1401.0	1406.3	1414.3
40°	1135.2	1143.1	1151.1	1151.1	1161.8	1161.8	1161.8	1164.4	1180.4	1183.0	1193.7
42.5°	970.3	970.3	962.4	954.4	957.1	954.4	941.1	941.1	949.1	959.7	959.7
45°	816.2	797.5	773.6	755.0	741.7	736.4	720.4	720.4	717.8	720.4	731.1
47.5°	685.9	654.0	614.1	576.9	563.6	553.0	529.0	518.4	513.1	515.7	521.1
50°	576.9	542.3	497.1	451.9	428.0	414.7	385.5	366.9	364.2	358.9	369.5
52.5°	497.1	454.6	406.7	353.6	329.7	308.4	276.5	260.5	249.9	249.9	252.6
55°	428.0	382.8	329.7	276.5	252.6	236.6	204.7	183.4	172.8	170.1	178.1
57.5°	369.5	327.0	273.8	220.7	196.7	178.1	146.2	127.6	119.6	114.3	117.0
60°	324.3	281.8	228.6	178.1	156.9	135.6	109.0	87.7	77.1	77.1	79.8
62.5°	281.8	241.9	194.1	146.2	127.6	109.0	79.8	61.1	53.2	50.5	53.2
65°	239.3	202.0	162.2	122.3	103.7	87.7	63.8	47.9	37.2	34.6	37.2
67.5°	194.1	164.8	130.3	98.4	82.4	69.1	47.9	34.6	26.6	23.9	26.6
70°	151.5	124.9	98.4	71.8	61.1	50.5	34.6	26.6	18.6	16.0	18.6
72.5°	109.0	90.4	69.1	50.5	42.5	34.6	23.9	18.6	13.3	10.6	13.3
75°	74.4	61.1	45.2	31.9	26.6	23.9	16.0	10.6	8.0	8.0	8.0
77.5°	47.9	37.2	29.2	21.3	16.0	13.3	8.0	5.3	5.3	5.3	5.3
80°	26.6	21.3	16.0	10.6	8.0	8.0	5.3	5.3	2.7	2.7	2.7
82.5°	16.0	10.6	8.0	5.3	5.3	2.7	2.7	2.7	2.7	2.7	2.7
85°	8.0	5.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
87.5°	2.7	2.7	2.7	2.7	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6
2.5°	2294.3	2296.9	2289.0	2299.6	2291.6	2302.2	2302.2	2291.6	2294.3	2289.0	2299.6
5°	2289.0	2289.0	2283.6	2291.6	2281.0	2291.6	2289.0	2270.3	2275.7	2265.0	2275.7
7.5°	2289.0	2283.6	2275.7	2283.6	2270.3	2278.3	2267.7	2249.1	2243.8	2230.5	2230.5
10°	2296.9	2289.0	2278.3	2281.0	2267.7	2270.3	2254.4	2227.8	2219.8	2203.9	2198.6
12.5°	2315.5	2307.6	2291.6	2296.9	2278.3	2278.3	2257.0	2225.1	2209.2	2187.9	2182.6
15°	2342.1	2328.8	2310.2	2312.9	2294.3	2283.6	2257.0	2219.8	2198.6	2169.3	2161.3
17.5°	2347.4	2334.1	2310.2	2310.2	2286.3	2273.0	2241.1	2198.6	2172.0	2142.7	2126.8
20°	2318.2	2304.9	2278.3	2275.7	2254.4	2235.8	2201.2	2158.7	2132.1	2100.2	2086.9
22.5°	2257.0	2241.1	2217.2	2214.5	2193.2	2182.6	2145.4	2102.9	2076.3	2044.4	2033.7
25°	2166.7	2158.7	2134.8	2132.1	2113.5	2100.2	2068.3	2028.4	2004.5	1972.6	1962.0
27.5°	2060.3	2052.3	2028.4	2028.4	2007.2	1999.2	1969.9	1932.7	1914.1	1884.9	1871.6
30°	1932.7	1922.1	1908.8	1906.1	1887.5	1879.5	1853.0	1818.4	1799.8	1775.9	1770.5
32.5°	1781.2	1773.2	1765.2	1762.6	1744.0	1736.0	1717.4	1682.8	1666.9	1645.6	1637.6
35°	1605.7	1600.4	1592.4	1589.8	1581.8	1573.8	1555.2	1528.6	1520.7	1504.7	1496.7
37.5°	1403.7	1409.0	1403.7	1403.7	1395.7	1398.4	1382.4	1366.5	1358.5	1347.8	1342.5
40°	1185.7	1196.3	1204.3	1204.3	1201.6	1212.3	1209.6	1196.3	1193.7	1188.3	1185.7
42.5°	965.0	970.3	986.3	996.9	994.3	1020.9	1023.5	1034.1	1042.1	1036.8	1039.5
45°	733.7	749.7	771.0	781.6	794.9	829.4	848.1	869.3	887.9	898.6	895.9
47.5°	529.0	547.6	571.6	587.5	611.5	654.0	701.8	728.4	755.0	768.3	781.6
50°	382.8	401.4	430.7	454.6	470.6	529.0	579.5	614.1	643.4	662.0	675.3
52.5°	268.5	289.8	321.7	342.9	366.9	422.7	481.2	521.1	553.0	576.9	590.2
55°	186.1	210.0	239.3	260.5	287.1	345.6	401.4	444.0	478.5	499.8	515.7
57.5°	130.3	151.5	180.8	199.4	226.0	281.8	337.6	380.2	414.7	436.0	454.6
60°	87.7	109.0	138.2	156.9	178.1	233.9	284.5	329.7	361.6	382.8	401.4
62.5°	61.1	79.8	109.0	127.6	146.2	194.1	241.9	281.8	313.7	337.6	353.6
65°	47.9	63.8	87.7	103.7	122.3	162.2	202.0	236.6	268.5	292.4	303.1
67.5°	34.6	50.5	69.1	82.4	95.7	130.3	164.8	191.4	220.7	239.3	252.6
70°	23.9	34.6	50.5	61.1	71.8	98.4	124.9	148.9	170.1	183.4	194.1
72.5°	18.6	23.9	34.6	42.5	50.5	69.1	90.4	109.0	124.9	135.6	146.2
75°	10.6	16.0	23.9	29.2	34.6	47.9	61.1	74.4	85.1	93.0	98.4
77.5°	5.3	8.0	13.3	16.0	21.3	29.2	39.9	47.9	55.8	61.1	66.5
80°	5.3	5.3	8.0	8.0	10.6	16.0	21.3	26.6	31.9	37.2	39.9
82.5°	2.7	2.7	5.3	5.3	5.3	8.0	10.6	16.0	18.6	21.3	23.9
85°	2.7	2.7	2.7	2.7	2.7	5.3	5.3	8.0	10.6	13.3	13.3
87.5°	0.0	0.0	2.7	2.7	2.7	2.7	2.7	5.3	5.3	5.3	8.0
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: P252596

CATALOG NUMBER: LD6B40D010 EU6B30508027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6	2299.6
2.5°	2291.6	2296.9	2294.3	2299.6	2291.6	2289.0	2294.3	2286.3
5°	2262.4	2265.0	2262.4	2262.4	2257.0	2251.7	2257.0	2249.1
7.5°	2217.2	2217.2	2209.2	2209.2	2198.6	2193.2	2193.2	2190.6
10°	2180.0	2172.0	2164.0	2166.7	2150.7	2145.4	2142.7	2140.1
12.5°	2161.3	2156.0	2142.7	2142.7	2126.8	2121.5	2118.8	2116.1
15°	2140.1	2129.4	2118.8	2116.1	2102.9	2097.5	2094.9	2089.6
17.5°	2102.9	2094.9	2081.6	2081.6	2068.3	2065.6	2060.3	2057.7
20°	2063.0	2052.3	2041.7	2041.7	2025.8	2025.8	2017.8	2020.4
22.5°	2007.2	1999.2	1988.5	1988.5	1975.2	1972.6	1964.6	1962.0
25°	1940.7	1930.1	1922.1	1919.4	1908.8	1903.5	1900.8	1895.5
27.5°	1853.0	1845.0	1837.0	1831.7	1818.4	1815.7	1807.8	1810.4
30°	1744.0	1738.6	1736.0	1730.7	1714.7	1709.4	1709.4	1701.4
32.5°	1624.3	1616.4	1611.0	1603.1	1589.8	1587.1	1579.1	1581.8
35°	1478.1	1467.5	1459.5	1462.2	1446.2	1443.6	1438.2	1440.9
37.5°	1326.6	1315.9	1305.3	1302.7	1289.4	1289.4	1281.4	1281.4
40°	1169.7	1159.1	1153.8	1153.8	1137.8	1140.5	1132.5	1129.9
42.5°	1028.8	1018.2	1015.5	1012.9	1004.9	1002.2	994.3	996.9
45°	895.9	893.2	893.2	887.9	880.0	877.3	880.0	880.0
47.5°	778.9	781.6	778.9	778.9	773.6	778.9	773.6	776.3
50°	680.6	685.9	685.9	685.9	683.2	685.9	685.9	688.5
52.5°	598.2	606.1	603.5	606.1	603.5	608.8	606.1	608.8
55°	526.4	531.7	534.4	537.0	537.0	537.0	537.0	537.0
57.5°	459.9	467.9	470.6	473.2	473.2	478.5	473.2	473.2
60°	406.7	414.7	417.4	420.0	420.0	422.7	417.4	420.0
62.5°	358.9	366.9	366.9	369.5	369.5	369.5	364.2	366.9
65°	311.0	313.7	316.4	316.4	313.7	313.7	311.0	313.7
67.5°	257.9	260.5	257.9	257.9	255.2	255.2	249.9	252.6
70°	199.4	199.4	202.0	199.4	196.7	199.4	196.7	194.1
72.5°	148.9	148.9	148.9	146.2	146.2	143.6	146.2	146.2
75°	101.0	101.0	103.7	103.7	103.7	103.7	101.0	101.0
77.5°	66.5	66.5	66.5	66.5	69.1	66.5	66.5	66.5
80°	42.5	42.5	45.2	45.2	42.5	42.5	42.5	42.5
82.5°	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
85°	16.0	16.0	16.0	16.0	13.3	13.3	13.3	13.3
87.5°	8.0	8.0	8.0	8.0	8.0	8.0	5.3	5.3
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)