

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: P252302

Luminaire Tested: **LD6B50D010TE EU6B30509024 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30509024 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3570.0 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

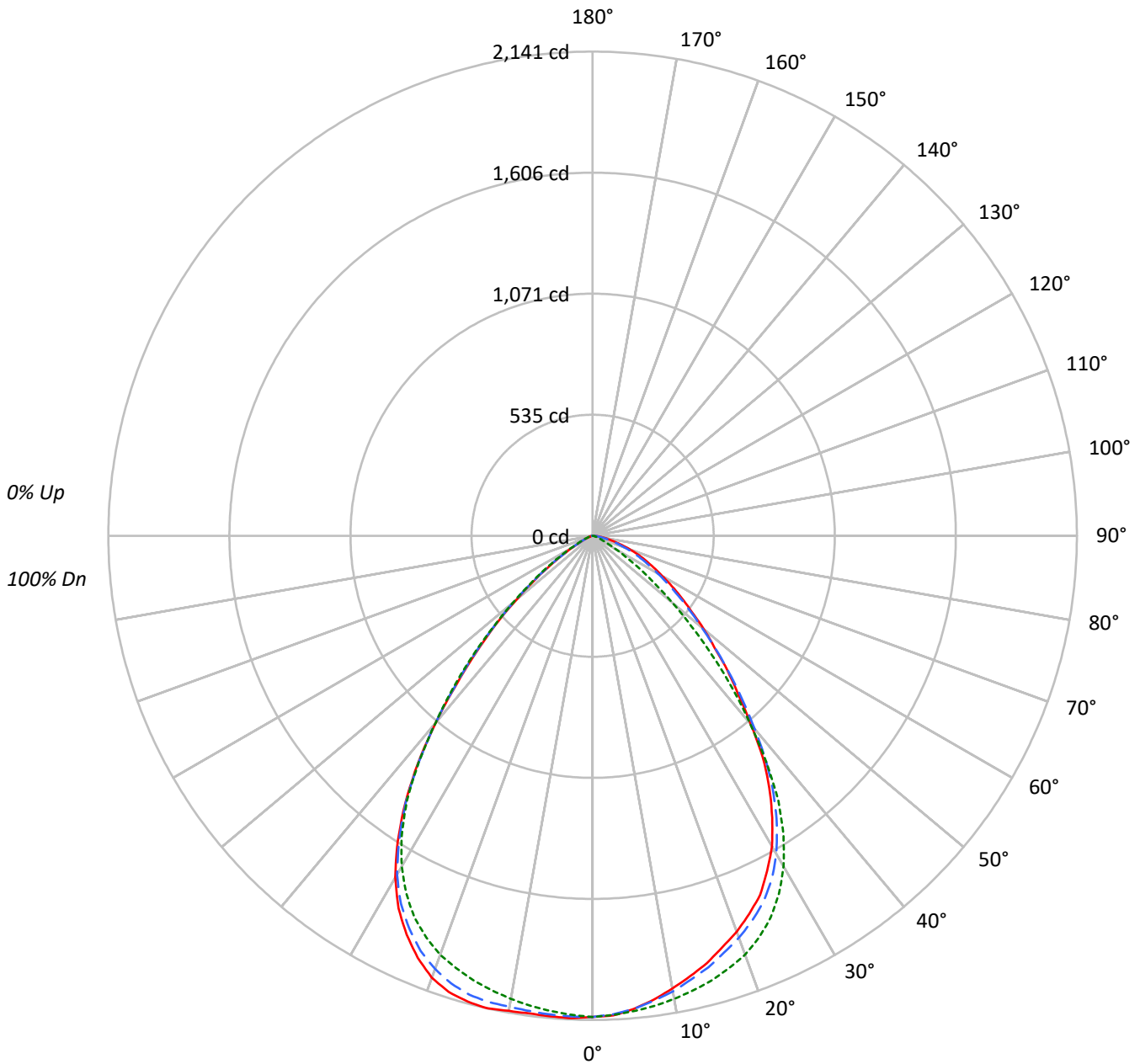
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10					0
RW	70	50	30	10	70	50	30	10	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58					58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52					52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47					47			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40					40			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	138826	138826	138826
5°	137509	138177	139696
10°	134674	137734	141312
15°	132099	137475	144074
20°	129358	136856	144347
25°	126168	134123	140047
30°	119456	127200	131457
35°	108483	114011	115030
40°	92584	92149	91706
45°	77779	69004	66864
50°	64948	46688	44344
55°	54665	28652	26013
60°	46282	15084	13074
65°	40075	7935	6345
70°	33343	4902	3434
75°	24627	3227	1941
80°	19311	1916	977
85°	15420	1946	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.5	5.6
10°-20°	574.2	16.1
20°-30°	847.9	23.8
30°-40°	873.9	24.5
40°-50°	603.6	16.9
50°-60°	297.5	8.3
60°-70°	120.5	3.4
70°-80°	43.0	1.2
80°-90°	8.9	0.2
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°	1622.7	45.5
0°-40°	2496.6	69.9
0°-60°	3397.6	95.2
0°-90°	3570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3570.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2128	2128	2128	2128	2128	
5°	2100	2100	2110	2125	2133	198
15°	1956	1976	2035	2102	2133	551
25°	1753	1786	1863	1917	1946	801
35°	1362	1396	1432	1439	1444	844
45°	843	848	748	738	725	652
55°	481	463	252	236	229	434
65°	260	234	51	41	41	258
75°	98	82	13	8	8	110
85°	21	15	3	0	0	25
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°	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9
2.5°	2122.8	2115.1	2120.2	2109.9	2122.8	2109.9	2112.5	2115.1	2112.5	2115.1	2117.7
5°	2099.7	2092.0	2099.7	2086.8	2099.7	2092.0	2092.0	2094.5	2094.5	2097.1	2099.7
7.5°	2068.8	2061.1	2068.8	2056.0	2071.4	2063.7	2063.7	2068.8	2066.3	2068.8	2074.0
10°	2032.9	2022.6	2030.3	2022.6	2038.0	2027.7	2032.9	2032.9	2032.9	2040.6	2045.7
12.5°	1994.3	1984.0	1994.3	1981.5	1996.9	1989.2	1991.7	1999.4	2002.0	2007.2	2009.7
15°	1955.8	1942.9	1948.0	1940.3	1955.8	1948.0	1950.6	1960.9	1960.9	1968.6	1976.3
17.5°	1906.9	1896.6	1906.9	1896.6	1909.5	1904.4	1909.5	1917.2	1917.2	1924.9	1932.6
20°	1863.2	1853.0	1860.7	1853.0	1868.4	1860.7	1863.2	1873.5	1876.1	1883.8	1891.5
22.5°	1809.3	1801.6	1806.7	1799.0	1814.4	1809.3	1811.8	1822.1	1824.7	1829.8	1842.7
25°	1752.7	1737.3	1745.0	1739.9	1755.3	1747.6	1752.7	1763.0	1768.1	1775.9	1786.1
27.5°	1670.5	1662.8	1667.9	1667.9	1680.8	1673.1	1675.6	1685.9	1693.6	1701.3	1714.2
30°	1585.7	1572.8	1578.0	1580.5	1590.8	1585.7	1590.8	1601.1	1603.7	1613.9	1624.2
32.5°	1477.7	1472.6	1482.9	1477.7	1482.9	1482.9	1485.4	1493.2	1498.3	1503.4	1516.3
35°	1362.1	1351.8	1362.1	1356.9	1369.8	1362.1	1369.8	1377.5	1377.5	1387.8	1395.5
37.5°	1236.2	1223.3	1228.4	1228.4	1233.6	1231.0	1231.0	1243.9	1246.4	1254.1	1261.9
40°	1087.1	1082.0	1092.2	1089.7	1092.2	1092.2	1094.8	1102.5	1107.7	1110.2	1112.8
42.5°	953.5	956.0	958.6	958.6	958.6	958.6	958.6	968.9	966.3	974.0	976.6
45°	843.0	832.7	837.8	835.2	843.0	835.2	843.0	850.7	845.5	853.2	848.1
47.5°	729.9	729.9	729.9	727.3	732.4	729.9	735.0	737.6	737.6	737.6	735.0
50°	639.9	632.2	634.8	634.8	637.4	634.8	639.9	642.5	642.5	637.4	627.1
52.5°	552.5	550.0	550.0	555.1	555.1	552.5	552.5	552.5	552.5	544.8	539.7
55°	480.6	475.4	478.0	478.0	478.0	478.0	480.6	478.0	478.0	470.3	462.6
57.5°	416.3	411.2	411.2	411.2	413.8	411.2	411.2	411.2	408.6	400.9	390.6
60°	354.7	352.1	354.7	354.7	357.2	354.7	354.7	354.7	349.5	341.8	331.5
62.5°	303.3	303.3	303.3	305.8	305.8	303.3	303.3	300.7	298.1	287.8	277.6
65°	259.6	257.0	259.6	259.6	262.1	262.1	259.6	257.0	254.4	244.1	233.9
67.5°	215.9	213.3	215.9	215.9	218.4	215.9	215.9	215.9	208.2	203.0	192.7
70°	174.8	172.2	172.2	172.2	174.8	169.6	172.2	172.2	167.0	159.3	149.1
72.5°	133.6	133.6	133.6	133.6	133.6	133.6	131.1	131.1	125.9	118.2	113.1
75°	97.7	97.7	100.2	100.2	97.7	97.7	97.7	95.1	92.5	87.4	82.2
77.5°	72.0	72.0	72.0	72.0	69.4	69.4	69.4	66.8	64.2	61.7	56.5
80°	51.4	51.4	51.4	48.8	51.4	48.8	48.8	48.8	43.7	41.1	38.5
82.5°	36.0	33.4	33.4	33.4	33.4	33.4	33.4	30.8	30.8	28.3	25.7
85°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	18.0	15.4	15.4
87.5°	10.3	12.8	12.8	12.8	12.8	12.8	12.8	10.3	10.3	10.3	7.7
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°	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9
2.5°	2117.7	2117.7	2122.8	2115.1	2127.9	2120.2	2117.7	2130.5	2122.8	2120.2	2125.4
5°	2099.7	2102.2	2104.8	2099.7	2112.5	2104.8	2104.8	2117.7	2112.5	2109.9	2117.7
7.5°	2076.5	2079.1	2084.3	2081.7	2092.0	2086.8	2089.4	2102.2	2097.1	2097.1	2104.8
10°	2048.3	2053.4	2058.6	2058.6	2071.4	2066.3	2066.3	2081.7	2076.5	2079.1	2089.4
12.5°	2014.9	2022.6	2030.3	2032.9	2045.7	2038.0	2040.6	2058.6	2056.0	2058.6	2068.8
15°	1978.9	1989.2	1996.9	1996.9	2012.3	2004.6	2012.3	2030.3	2025.1	2035.4	2048.3
17.5°	1937.8	1948.0	1958.3	1960.9	1976.3	1971.2	1981.5	1999.4	1999.4	2004.6	2020.0
20°	1899.2	1912.1	1917.2	1924.9	1940.3	1937.8	1942.9	1963.5	1963.5	1971.2	1986.6
22.5°	1847.8	1860.7	1870.9	1878.7	1891.5	1891.5	1899.2	1917.2	1917.2	1922.3	1937.8
25°	1791.3	1806.7	1814.4	1822.1	1835.0	1832.4	1840.1	1855.5	1858.1	1863.2	1878.7
27.5°	1719.3	1732.2	1742.4	1747.6	1765.6	1755.3	1763.0	1781.0	1778.4	1783.6	1796.4
30°	1629.4	1642.2	1652.5	1652.5	1667.9	1667.9	1675.6	1683.3	1683.3	1688.5	1698.8
32.5°	1524.0	1539.4	1539.4	1547.1	1557.4	1547.1	1557.4	1567.7	1562.5	1570.3	1578.0
35°	1403.2	1410.9	1413.5	1413.5	1421.2	1418.6	1416.1	1423.8	1418.6	1431.5	1439.2
37.5°	1256.7	1267.0	1261.9	1267.0	1264.4	1256.7	1256.7	1269.6	1259.3	1261.9	1269.6
40°	1115.4	1115.4	1112.8	1099.9	1102.5	1094.8	1092.2	1094.8	1084.5	1082.0	1092.2
42.5°	968.9	966.3	958.6	940.6	943.2	930.3	920.1	920.1	914.9	912.3	914.9
45°	837.8	830.1	817.3	796.7	791.6	781.3	760.7	755.6	747.9	747.9	750.4
47.5°	717.0	706.7	686.2	663.1	650.2	637.4	616.8	609.1	596.2	591.1	596.2
50°	616.8	598.8	573.1	539.7	526.8	511.4	490.9	478.0	465.2	460.0	457.5
52.5°	524.3	498.6	472.9	431.8	421.5	406.1	377.8	364.9	352.1	341.8	341.8
55°	444.6	421.5	385.5	346.9	331.5	316.1	287.8	269.8	257.0	251.9	246.7
57.5°	372.6	346.9	313.5	272.4	257.0	241.6	213.3	195.3	182.5	174.8	169.6
60°	313.5	285.3	251.9	215.9	197.9	182.5	154.2	136.2	123.4	115.6	110.5
62.5°	257.0	233.9	200.5	167.0	151.6	136.2	113.1	95.1	82.2	77.1	69.4
65°	215.9	192.7	161.9	133.6	120.8	105.4	84.8	69.4	59.1	51.4	46.3
67.5°	174.8	156.8	131.1	105.4	92.5	82.2	64.2	51.4	41.1	36.0	33.4
70°	138.8	120.8	100.2	79.7	72.0	61.7	48.8	36.0	30.8	25.7	23.1
72.5°	102.8	89.9	74.5	59.1	51.4	46.3	33.4	28.3	20.6	18.0	15.4
75°	74.5	64.2	54.0	41.1	36.0	33.4	25.7	18.0	15.4	12.8	10.3
77.5°	51.4	46.3	36.0	28.3	25.7	23.1	18.0	12.8	10.3	7.7	7.7
80°	33.4	28.3	23.1	18.0	18.0	15.4	10.3	7.7	7.7	5.1	5.1
82.5°	20.6	18.0	15.4	12.8	10.3	10.3	7.7	5.1	5.1	2.6	2.6
85°	12.8	10.3	7.7	7.7	5.1	5.1	5.1	2.6	2.6	2.6	2.6
87.5°	5.1	5.1	5.1	2.6	2.6	2.6	2.6	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°	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9
2.5°	2125.4	2125.4	2130.5	2122.8	2127.9	2127.9	2133.1	2122.8	2127.9	2130.5	2135.6
5°	2115.1	2117.7	2122.8	2120.2	2122.8	2122.8	2127.9	2115.1	2125.4	2125.4	2133.1
7.5°	2104.8	2104.8	2109.9	2107.4	2112.5	2115.1	2120.2	2109.9	2120.2	2120.2	2127.9
10°	2092.0	2092.0	2099.7	2097.1	2104.8	2107.4	2115.1	2104.8	2115.1	2117.7	2125.4
12.5°	2074.0	2076.5	2084.3	2084.3	2092.0	2097.1	2104.8	2099.7	2112.5	2115.1	2125.4
15°	2053.4	2058.6	2068.8	2066.3	2074.0	2081.7	2092.0	2084.3	2102.2	2107.4	2117.7
17.5°	2027.7	2032.9	2040.6	2040.6	2048.3	2053.4	2066.3	2061.1	2076.5	2079.1	2092.0
20°	1989.2	1996.9	2007.2	2004.6	2012.3	2017.4	2027.7	2022.6	2038.0	2043.1	2056.0
22.5°	1942.9	1948.0	1955.8	1955.8	1963.5	1968.6	1978.9	1971.2	1986.6	1989.2	1999.4
25°	1881.2	1886.4	1891.5	1894.1	1901.8	1904.4	1909.5	1904.4	1917.2	1919.8	1932.6
27.5°	1801.6	1804.1	1811.8	1811.8	1817.0	1819.5	1827.3	1817.0	1835.0	1835.0	1842.7
30°	1706.5	1703.9	1714.2	1709.0	1714.2	1714.2	1721.9	1716.7	1729.6	1724.5	1732.2
32.5°	1580.5	1585.7	1585.7	1580.5	1590.8	1588.2	1588.2	1583.1	1590.8	1593.4	1598.5
35°	1434.0	1441.8	1441.8	1444.3	1446.9	1439.2	1441.8	1426.3	1439.2	1441.8	1444.3
37.5°	1274.7	1267.0	1272.1	1264.4	1277.3	1261.9	1261.9	1251.6	1261.9	1261.9	1264.4
40°	1092.2	1089.7	1094.8	1089.7	1087.1	1084.5	1079.4	1071.7	1082.0	1076.8	1084.5
42.5°	920.1	917.5	917.5	912.3	909.8	909.8	904.6	899.5	896.9	896.9	909.8
45°	742.7	747.9	742.7	740.2	745.3	740.2	742.7	732.4	737.6	732.4	737.6
47.5°	593.7	596.2	591.1	586.0	593.7	586.0	586.0	578.2	588.5	588.5	583.4
50°	460.0	457.5	452.3	457.5	454.9	454.9	454.9	447.2	452.3	444.6	449.7
52.5°	339.2	336.7	336.7	334.1	336.7	334.1	334.1	331.5	331.5	329.0	331.5
55°	246.7	244.1	239.0	239.0	239.0	241.6	239.0	236.4	236.4	233.9	236.4
57.5°	167.0	161.9	161.9	161.9	161.9	159.3	159.3	156.8	159.3	156.8	159.3
60°	107.9	107.9	102.8	102.8	102.8	102.8	102.8	100.2	102.8	102.8	102.8
62.5°	66.8	66.8	64.2	61.7	64.2	61.7	61.7	61.7	64.2	61.7	64.2
65°	43.7	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
67.5°	30.8	28.3	28.3	28.3	28.3	28.3	28.3	25.7	28.3	28.3	28.3
70°	20.6	20.6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
72.5°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
75°	10.3	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
77.5°	7.7	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	5.1	5.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	2.6	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	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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: P252302

CATALOG NUMBER: LD6B50D010TE EU6B30509024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9	2127.9
2.5°	2127.9	2130.5	2125.4	2127.9	2122.8	2127.9	2130.5	2135.6
5°	2122.8	2125.4	2120.2	2125.4	2120.2	2125.4	2127.9	2133.1
7.5°	2117.7	2122.8	2117.7	2122.8	2117.7	2122.8	2125.4	2130.5
10°	2117.7	2125.4	2120.2	2127.9	2120.2	2125.4	2130.5	2133.1
12.5°	2117.7	2125.4	2122.8	2127.9	2125.4	2130.5	2135.6	2140.8
15°	2112.5	2120.2	2115.1	2122.8	2120.2	2122.8	2133.1	2133.1
17.5°	2084.3	2092.0	2092.0	2097.1	2097.1	2104.8	2109.9	2115.1
20°	2048.3	2056.0	2053.4	2061.1	2061.1	2068.8	2074.0	2079.1
22.5°	1994.3	2004.6	2002.0	2009.7	2007.2	2012.3	2022.6	2020.0
25°	1924.9	1937.8	1935.2	1940.3	1937.8	1937.8	1942.9	1945.5
27.5°	1840.1	1847.8	1845.2	1850.4	1845.2	1850.4	1855.5	1858.1
30°	1729.6	1734.7	1732.2	1734.7	1732.2	1737.3	1739.9	1745.0
32.5°	1596.0	1603.7	1596.0	1601.1	1598.5	1598.5	1608.8	1603.7
35°	1436.6	1439.2	1441.8	1441.8	1436.6	1439.2	1444.3	1444.3
37.5°	1259.3	1272.1	1256.7	1264.4	1261.9	1261.9	1261.9	1269.6
40°	1074.2	1076.8	1071.7	1071.7	1071.7	1069.1	1079.4	1076.8
42.5°	899.5	902.1	899.5	891.8	894.4	894.4	902.1	891.8
45°	729.9	735.0	732.4	732.4	727.3	727.3	729.9	724.7
47.5°	578.2	583.4	575.7	578.2	573.1	578.2	575.7	580.8
50°	439.5	444.6	442.0	444.6	444.6	439.5	447.2	436.9
52.5°	329.0	331.5	329.0	326.4	323.8	323.8	329.0	326.4
55°	233.9	231.3	231.3	231.3	233.9	233.9	231.3	228.7
57.5°	156.8	156.8	154.2	154.2	156.8	151.6	154.2	151.6
60°	100.2	100.2	100.2	100.2	97.7	100.2	100.2	100.2
62.5°	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
65°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
67.5°	25.7	28.3	28.3	28.3	25.7	25.7	25.7	25.7
70°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
72.5°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
75°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	2.6	2.6	2.6	2.6	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)