

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: P252287

Luminaire Tested: **LD6B40D010 EU6B30508040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252287
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: LD6B40D010 EU6B30508040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4000.0 lumens
Efficiency: N/A
Efficacy: 93.0 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): 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

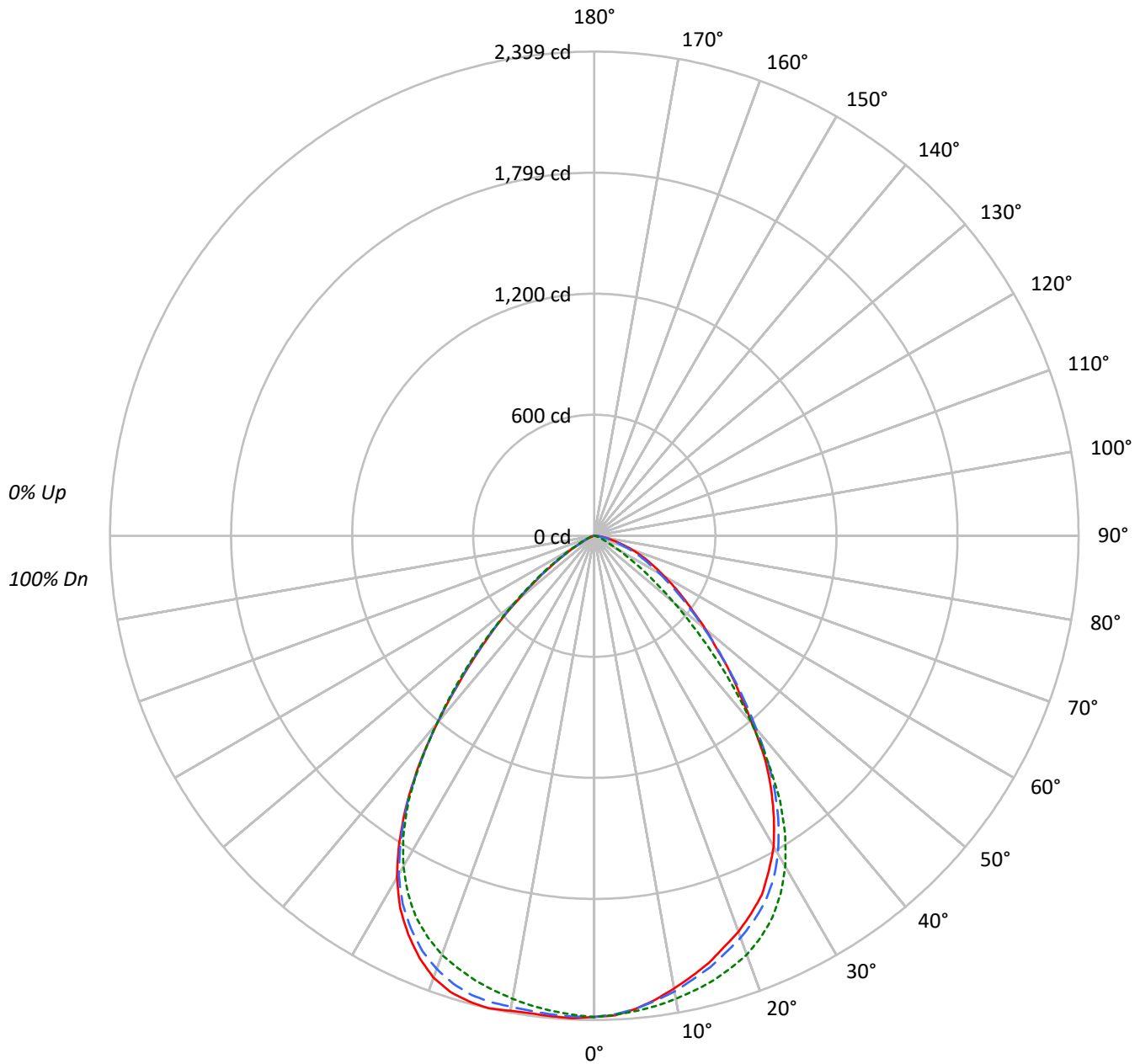




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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102	109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89	102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78	95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	74	69	89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62	83	73	66	61		71	65	61		70	64	60		68	63	60
6	79	68	61	55	78	67	60	55		66	59	55		64	59	54		63	58	54
7	74	63	55	50	73	62	55	50		61	54	50		59	54	49		58	53	49
8	70	58	51	46	68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	54	47	42	64	53	46	42		52	46	42		51	46	41		50	45	41
10	62	50	43	39	61	50	43	38		49	43	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	155547	155547	155547
5°	154071	154825	156521
10°	150891	154323	158330
15°	148005	154036	161426
20°	144944	153338	161732
25°	141364	150283	156913
30°	133845	142516	147292
35°	121545	127741	128888
40°	103732	103246	102752
45°	87144	77308	74919
50°	72773	52311	49682
55°	61251	32098	29152
60°	51853	16910	14653
65°	44892	8892	7117
70°	37349	5494	3853
75°	27577	3630	2168
80°	21641	2179	1090
85°	17217	2171	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.7	5.6
10°-20°	643.4	16.1
20°-30°	950.1	23.8
30°-40°	979.1	24.5
40°-50°	676.3	16.9
50°-60°	333.3	8.3
60°-70°	135.1	3.4
70°-80°	48.1	1.2
80°-90°	9.9	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°	1818.1	45.5
0°-40°	2797.3	69.9
0°-60°	3806.9	95.2
0°-90°	4000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4000.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2384	2384	2384	2384	2384	
5°	2353	2353	2364	2381	2390	222
15°	2191	2214	2281	2356	2390	617
25°	1964	2001	2088	2148	2180	898
35°	1526	1564	1604	1612	1618	946
45°	944	950	838	826	812	730
55°	538	518	282	265	256	487
65°	291	262	58	46	46	289
75°	109	92	14	9	9	123
85°	23	17	3	0	0	28
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°	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2
2.5°	2378.5	2369.8	2375.6	2364.1	2378.5	2364.1	2367.0	2369.8	2367.0	2369.8	2372.7
5°	2352.6	2343.9	2352.6	2338.2	2352.6	2343.9	2343.9	2346.8	2346.8	2349.7	2352.6
7.5°	2318.0	2309.4	2318.0	2303.6	2320.9	2312.3	2312.3	2318.0	2315.1	2318.0	2323.8
10°	2277.7	2266.2	2274.8	2266.2	2283.5	2271.9	2277.7	2277.7	2277.7	2286.3	2292.1
12.5°	2234.5	2223.0	2234.5	2220.1	2237.4	2228.8	2231.6	2240.3	2243.1	2248.9	2251.8
15°	2191.3	2176.9	2182.7	2174.0	2191.3	2182.7	2185.6	2197.1	2197.1	2205.7	2214.4
17.5°	2136.6	2125.1	2136.6	2125.1	2139.5	2133.7	2139.5	2148.1	2148.1	2156.8	2165.4
20°	2087.7	2076.1	2084.8	2076.1	2093.4	2084.8	2087.7	2099.2	2102.1	2110.7	2119.3
22.5°	2027.2	2018.5	2024.3	2015.7	2032.9	2027.2	2030.1	2041.6	2044.5	2050.2	2064.6
25°	1963.8	1946.6	1955.2	1949.4	1966.7	1958.1	1963.8	1975.4	1981.1	1989.8	2001.3
27.5°	1871.7	1863.1	1868.8	1868.8	1883.2	1874.6	1877.4	1889.0	1897.6	1906.2	1920.6
30°	1776.7	1762.3	1768.0	1770.9	1782.4	1776.7	1782.4	1793.9	1796.8	1808.3	1819.9
32.5°	1655.7	1650.0	1661.5	1655.7	1661.5	1661.5	1664.4	1673.0	1678.8	1684.5	1698.9
35°	1526.1	1514.6	1526.1	1520.4	1534.8	1526.1	1534.8	1543.4	1543.4	1554.9	1563.6
37.5°	1385.1	1370.7	1376.4	1376.4	1382.2	1379.3	1379.3	1393.7	1396.6	1405.2	1413.8
40°	1218.0	1212.3	1223.8	1220.9	1223.8	1223.8	1226.7	1235.3	1241.1	1244.0	1246.8
42.5°	1068.3	1071.2	1074.1	1074.1	1074.1	1074.1	1074.1	1085.6	1082.7	1091.3	1094.2
45°	944.5	933.0	938.7	935.8	944.5	935.8	944.5	953.1	947.4	956.0	950.2
47.5°	817.8	817.8	817.8	814.9	820.7	817.8	823.5	826.4	826.4	826.4	823.5
50°	717.0	708.4	711.2	711.2	714.1	711.2	717.0	719.9	719.9	714.1	702.6
52.5°	619.1	616.2	616.2	622.0	622.0	619.1	619.1	619.1	619.1	610.5	604.7
55°	538.5	532.7	535.6	535.6	535.6	535.6	538.5	535.6	535.6	527.0	518.3
57.5°	466.5	460.7	460.7	460.7	463.6	460.7	460.7	460.7	457.8	449.2	437.7
60°	397.4	394.5	397.4	397.4	400.3	397.4	397.4	397.4	391.6	383.0	371.5
62.5°	339.8	339.8	339.8	342.7	342.7	339.8	339.8	336.9	334.0	322.5	311.0
65°	290.8	288.0	290.8	290.8	293.7	293.7	290.8	288.0	285.1	273.6	262.0
67.5°	241.9	239.0	241.9	241.9	244.8	241.9	241.9	241.9	233.2	227.5	216.0
70°	195.8	192.9	192.9	192.9	195.8	190.0	192.9	192.9	187.2	178.5	167.0
72.5°	149.7	149.7	149.7	149.7	149.7	149.7	146.9	146.9	141.1	132.5	126.7
75°	109.4	109.4	112.3	112.3	109.4	109.4	109.4	106.5	103.7	97.9	92.1
77.5°	80.6	80.6	80.6	80.6	77.7	77.7	77.7	74.9	72.0	69.1	63.3
80°	57.6	57.6	57.6	54.7	57.6	54.7	54.7	54.7	49.0	46.1	43.2
82.5°	40.3	37.4	37.4	37.4	37.4	37.4	37.4	34.6	34.6	31.7	28.8
85°	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	20.2	17.3	17.3
87.5°	11.5	14.4	14.4	14.4	14.4	14.4	14.4	11.5	11.5	11.5	8.6
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°	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2
2.5°	2372.7	2372.7	2378.5	2369.8	2384.2	2375.6	2372.7	2387.1	2378.5	2375.6	2381.4
5°	2352.6	2355.5	2358.3	2352.6	2367.0	2358.3	2358.3	2372.7	2367.0	2364.1	2372.7
7.5°	2326.7	2329.5	2335.3	2332.4	2343.9	2338.2	2341.1	2355.5	2349.7	2349.7	2358.3
10°	2295.0	2300.7	2306.5	2306.5	2320.9	2315.1	2315.1	2332.4	2326.7	2329.5	2341.1
12.5°	2257.5	2266.2	2274.8	2277.7	2292.1	2283.5	2286.3	2306.5	2303.6	2306.5	2318.0
15°	2217.2	2228.8	2237.4	2237.4	2254.7	2246.0	2254.7	2274.8	2269.1	2280.6	2295.0
17.5°	2171.2	2182.7	2194.2	2197.1	2214.4	2208.6	2220.1	2240.3	2240.3	2246.0	2263.3
20°	2128.0	2142.4	2148.1	2156.8	2174.0	2171.2	2176.9	2200.0	2200.0	2208.6	2225.9
22.5°	2070.4	2084.8	2096.3	2104.9	2119.3	2119.3	2128.0	2148.1	2148.1	2153.9	2171.2
25°	2007.0	2024.3	2032.9	2041.6	2056.0	2053.1	2061.7	2079.0	2081.9	2087.7	2104.9
27.5°	1926.4	1940.8	1952.3	1958.1	1978.2	1966.7	1975.4	1995.5	1992.6	1998.4	2012.8
30°	1825.6	1840.0	1851.5	1851.5	1868.8	1868.8	1877.4	1886.1	1886.1	1891.8	1903.4
32.5°	1707.6	1724.8	1724.8	1733.5	1745.0	1733.5	1745.0	1756.5	1750.8	1759.4	1768.0
35°	1572.2	1580.9	1583.7	1583.7	1592.4	1589.5	1586.6	1595.3	1589.5	1603.9	1612.5
37.5°	1408.1	1419.6	1413.8	1419.6	1416.7	1408.1	1408.1	1422.5	1411.0	1413.8	1422.5
40°	1249.7	1249.7	1246.8	1232.4	1235.3	1226.7	1223.8	1226.7	1215.2	1212.3	1223.8
42.5°	1085.6	1082.7	1074.1	1053.9	1056.8	1042.4	1030.9	1030.9	1025.1	1022.2	1025.1
45°	938.7	930.1	915.7	892.7	886.9	875.4	852.3	846.6	837.9	837.9	840.8
47.5°	803.4	791.9	768.8	742.9	728.5	714.1	691.1	682.4	668.0	662.3	668.0
50°	691.1	670.9	642.1	604.7	590.3	573.0	550.0	535.6	521.2	515.4	512.6
52.5°	587.4	558.6	529.8	483.8	472.2	455.0	423.3	408.9	394.5	383.0	383.0
55°	498.2	472.2	431.9	388.7	371.5	354.2	322.5	302.4	288.0	282.2	276.4
57.5°	417.5	388.7	351.3	305.2	288.0	270.7	239.0	218.8	204.4	195.8	190.0
60°	351.3	319.6	282.2	241.9	221.7	204.4	172.8	152.6	138.2	129.6	123.8
62.5°	288.0	262.0	224.6	187.2	169.9	152.6	126.7	106.5	92.1	86.4	77.7
65°	241.9	216.0	181.4	149.7	135.3	118.1	95.0	77.7	66.2	57.6	51.8
67.5°	195.8	175.7	146.9	118.1	103.7	92.1	72.0	57.6	46.1	40.3	37.4
70°	155.5	135.3	112.3	89.3	80.6	69.1	54.7	40.3	34.6	28.8	25.9
72.5°	115.2	100.8	83.5	66.2	57.6	51.8	37.4	31.7	23.0	20.2	17.3
75°	83.5	72.0	60.5	46.1	40.3	37.4	28.8	20.2	17.3	14.4	11.5
77.5°	57.6	51.8	40.3	31.7	28.8	25.9	20.2	14.4	11.5	8.6	8.6
80°	37.4	31.7	25.9	20.2	20.2	17.3	11.5	8.6	8.6	5.8	5.8
82.5°	23.0	20.2	17.3	14.4	11.5	11.5	8.6	5.8	5.8	2.9	2.9
85°	14.4	11.5	8.6	8.6	5.8	5.8	5.8	2.9	2.9	2.9	2.9
87.5°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	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°	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2
2.5°	2381.4	2381.4	2387.1	2378.5	2384.2	2384.2	2390.0	2378.5	2384.2	2387.1	2392.9
5°	2369.8	2372.7	2378.5	2375.6	2378.5	2378.5	2384.2	2369.8	2381.4	2381.4	2390.0
7.5°	2358.3	2358.3	2364.1	2361.2	2367.0	2369.8	2375.6	2364.1	2375.6	2375.6	2384.2
10°	2343.9	2343.9	2352.6	2349.7	2358.3	2361.2	2369.8	2358.3	2369.8	2372.7	2381.4
12.5°	2323.8	2326.7	2335.3	2335.3	2343.9	2349.7	2358.3	2352.6	2367.0	2369.8	2381.4
15°	2300.7	2306.5	2318.0	2315.1	2323.8	2332.4	2343.9	2335.3	2355.5	2361.2	2372.7
17.5°	2271.9	2277.7	2286.3	2286.3	2295.0	2300.7	2315.1	2309.4	2326.7	2329.5	2343.9
20°	2228.8	2237.4	2248.9	2246.0	2254.7	2260.4	2271.9	2266.2	2283.5	2289.2	2303.6
22.5°	2176.9	2182.7	2191.3	2191.3	2200.0	2205.7	2217.2	2208.6	2225.9	2228.8	2240.3
25°	2107.8	2113.6	2119.3	2122.2	2130.8	2133.7	2139.5	2133.7	2148.1	2151.0	2165.4
27.5°	2018.5	2021.4	2030.1	2030.1	2035.8	2038.7	2047.3	2035.8	2056.0	2056.0	2064.6
30°	1912.0	1909.1	1920.6	1914.9	1920.6	1920.6	1929.3	1923.5	1937.9	1932.2	1940.8
32.5°	1770.9	1776.7	1776.7	1770.9	1782.4	1779.5	1779.5	1773.8	1782.4	1785.3	1791.1
35°	1606.8	1615.4	1615.4	1618.3	1621.2	1612.5	1615.4	1598.1	1612.5	1615.4	1618.3
37.5°	1428.2	1419.6	1425.4	1416.7	1431.1	1413.8	1413.8	1402.3	1413.8	1413.8	1416.7
40°	1223.8	1220.9	1226.7	1220.9	1218.0	1215.2	1209.4	1200.8	1212.3	1206.5	1215.2
42.5°	1030.9	1028.0	1028.0	1022.2	1019.4	1019.4	1013.6	1007.8	1005.0	1005.0	1019.4
45°	832.2	837.9	832.2	829.3	835.1	829.3	832.2	820.7	826.4	820.7	826.4
47.5°	665.2	668.0	662.3	656.5	665.2	656.5	656.5	647.9	659.4	659.4	653.7
50°	515.4	512.6	506.8	512.6	509.7	509.7	509.7	501.0	506.8	498.2	503.9
52.5°	380.1	377.2	377.2	374.3	377.2	374.3	374.3	371.5	371.5	368.6	371.5
55°	276.4	273.6	267.8	267.8	267.8	270.7	267.8	264.9	264.9	262.0	264.9
57.5°	187.2	181.4	181.4	181.4	181.4	178.5	178.5	175.7	178.5	175.7	178.5
60°	120.9	120.9	115.2	115.2	115.2	115.2	115.2	112.3	115.2	115.2	115.2
62.5°	74.9	74.9	72.0	69.1	72.0	69.1	69.1	69.1	72.0	69.1	72.0
65°	49.0	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
67.5°	34.6	31.7	31.7	31.7	31.7	31.7	31.7	28.8	31.7	31.7	31.7
70°	23.0	23.0	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
72.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
75°	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
77.5°	8.6	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	5.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
85°	2.9	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	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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: P252287

CATALOG NUMBER: LD6B40D010 EU6B30508040 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2	2384.2
2.5°	2384.2	2387.1	2381.4	2384.2	2378.5	2384.2	2387.1	2392.9
5°	2378.5	2381.4	2375.6	2381.4	2375.6	2381.4	2384.2	2390.0
7.5°	2372.7	2378.5	2372.7	2378.5	2372.7	2378.5	2381.4	2387.1
10°	2372.7	2381.4	2375.6	2384.2	2375.6	2381.4	2387.1	2390.0
12.5°	2372.7	2381.4	2378.5	2384.2	2381.4	2387.1	2392.9	2398.6
15°	2367.0	2375.6	2369.8	2378.5	2375.6	2378.5	2390.0	2390.0
17.5°	2335.3	2343.9	2343.9	2349.7	2349.7	2358.3	2364.1	2369.8
20°	2295.0	2303.6	2300.7	2309.4	2309.4	2318.0	2323.8	2329.5
22.5°	2234.5	2246.0	2243.1	2251.8	2248.9	2254.7	2266.2	2263.3
25°	2156.8	2171.2	2168.3	2174.0	2171.2	2171.2	2176.9	2179.8
27.5°	2061.7	2070.4	2067.5	2073.3	2067.5	2073.3	2079.0	2081.9
30°	1937.9	1943.7	1940.8	1943.7	1940.8	1946.6	1949.4	1955.2
32.5°	1788.2	1796.8	1788.2	1793.9	1791.1	1791.1	1802.6	1796.8
35°	1609.7	1612.5	1615.4	1615.4	1609.7	1612.5	1618.3	1618.3
37.5°	1411.0	1425.4	1408.1	1416.7	1413.8	1413.8	1413.8	1422.5
40°	1203.6	1206.5	1200.8	1200.8	1200.8	1197.9	1209.4	1206.5
42.5°	1007.8	1010.7	1007.8	999.2	1002.1	1002.1	1010.7	999.2
45°	817.8	823.5	820.7	820.7	814.9	814.9	817.8	812.0
47.5°	647.9	653.7	645.0	647.9	642.1	647.9	645.0	650.8
50°	492.4	498.2	495.3	498.2	498.2	492.4	501.0	489.5
52.5°	368.6	371.5	368.6	365.7	362.8	362.8	368.6	365.7
55°	262.0	259.2	259.2	259.2	262.0	262.0	259.2	256.3
57.5°	175.7	175.7	172.8	172.8	175.7	169.9	172.8	169.9
60°	112.3	112.3	112.3	112.3	109.4	112.3	112.3	112.3
62.5°	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1
65°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
67.5°	28.8	31.7	31.7	31.7	28.8	28.8	28.8	28.8
70°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
72.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
75°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
77.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	2.9	2.9	2.9	2.9	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)