

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: P252599

Luminaire Tested: **LD6B40D010 EU6B30508040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252599
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 EU6B30508040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4313.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

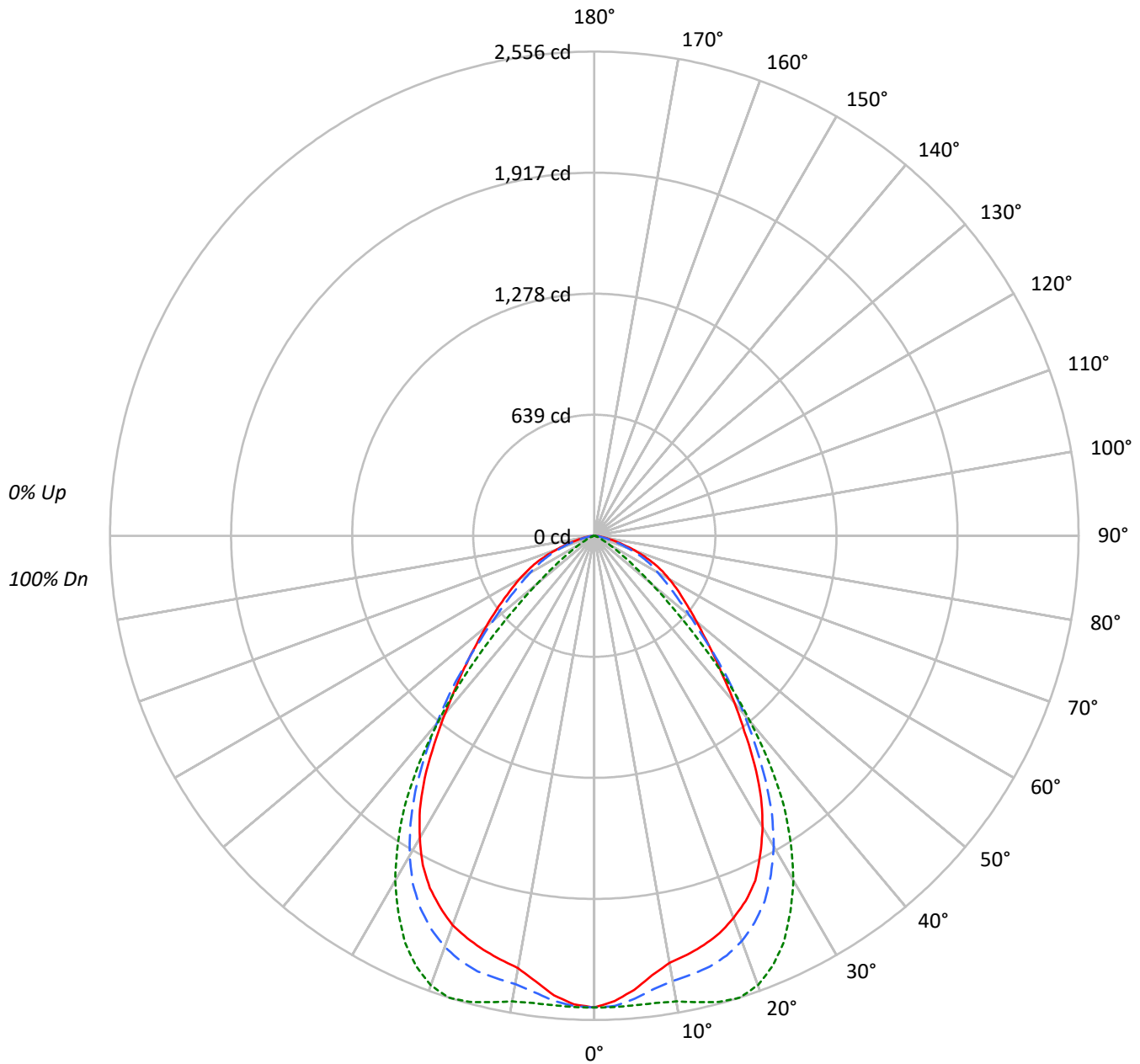
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	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	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°	162456	162456	162456
5°	157608	162886	159494
10°	151613	165346	153521
15°	151078	172077	152827
20°	149096	175284	151894
25°	144647	170338	147749
30°	133807	158313	138794
35°	117387	139170	124269
40°	97821	109097	104200
45°	82337	71975	87919
50°	71291	39442	75676
55°	64504	20952	66142
60°	59343	10895	59343
65°	53768	5774	52440
70°	43377	3300	40077
75°	29744	2168	27577
80°	19462	1090	17320
85°	12950	2171	10779



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.2	5.4
10°-20°	671.4	15.6
20°-30°	992.0	23.0
30°-40°	1002.0	23.2
40°-50°	690.7	16.0
50°-60°	396.7	9.2
60°-70°	230.9	5.4
70°-80°	84.2	2.0
80°-90°	12.9	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°	1895.7	44.0
0°-40°	2897.7	67.2
0°-60°	3985.0	92.4
0°-90°	4313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4313.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2490	2490	2490	2490	2490	
5°	2407	2453	2487	2464	2435	226
15°	2237	2355	2548	2381	2263	630
25°	2009	2127	2366	2171	2052	916
35°	1474	1575	1747	1647	1560	915
45°	892	904	780	962	953	694
55°	567	498	184	518	582	511
65°	348	294	37	291	340	341
75°	118	95	9	92	109	133
85°	17	9	3	12	14	22
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°	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1
2.5°	2458.4	2461.3	2464.2	2461.3	2464.2	2475.7	2467.1	2472.8	2472.8	2475.7	2484.4
5°	2406.6	2406.6	2412.4	2409.5	2418.1	2429.7	2421.0	2429.7	2432.5	2438.3	2452.7
7.5°	2340.4	2340.4	2343.3	2343.3	2354.8	2366.3	2360.6	2372.1	2383.6	2395.1	2412.4
10°	2288.6	2294.4	2294.4	2297.2	2308.7	2323.1	2320.3	2334.7	2346.2	2363.4	2386.5
12.5°	2265.6	2268.4	2268.4	2274.2	2285.7	2300.1	2297.2	2311.6	2328.9	2349.1	2372.1
15°	2236.8	2242.5	2239.7	2245.4	2256.9	2271.3	2268.4	2282.8	2303.0	2323.1	2354.8
17.5°	2199.4	2202.2	2205.1	2205.1	2216.6	2228.1	2228.1	2242.5	2265.6	2288.6	2323.1
20°	2147.5	2153.3	2153.3	2156.2	2164.8	2182.1	2179.2	2193.6	2216.6	2239.7	2277.1
22.5°	2087.1	2090.0	2090.0	2092.8	2107.2	2115.9	2118.8	2130.3	2150.4	2176.3	2210.9
25°	2009.4	2012.2	2009.4	2018.0	2023.8	2041.0	2035.3	2049.7	2072.7	2092.8	2127.4
27.5°	1897.1	1902.8	1902.8	1905.7	1920.1	1934.5	1934.5	1948.9	1969.1	1983.5	2018.0
30°	1776.2	1784.8	1776.2	1790.6	1796.3	1807.8	1816.5	1825.1	1842.4	1862.5	1894.2
32.5°	1638.0	1635.1	1638.0	1643.8	1661.0	1669.7	1675.4	1684.1	1701.3	1718.6	1744.5
35°	1473.9	1479.7	1482.6	1494.1	1494.1	1508.5	1511.3	1517.1	1543.0	1554.5	1574.7
37.5°	1301.2	1306.9	1309.8	1315.6	1327.1	1332.9	1341.5	1350.1	1367.4	1387.6	1399.1
40°	1148.6	1148.6	1151.5	1157.3	1165.9	1168.8	1177.4	1188.9	1200.4	1217.7	1229.2
42.5°	1004.7	1007.6	1004.7	1010.4	1019.1	1030.6	1027.7	1042.1	1045.0	1056.5	1065.1
45°	892.4	892.4	886.7	892.4	892.4	903.9	901.0	906.8	903.9	909.7	903.9
47.5°	785.9	788.8	785.9	788.8	788.8	788.8	791.7	785.9	788.8	780.1	762.9
50°	702.4	705.3	699.5	702.4	699.5	696.7	699.5	690.9	688.0	676.5	659.2
52.5°	630.4	627.6	624.7	624.7	624.7	621.8	618.9	610.3	601.7	590.1	570.0
55°	567.1	564.2	561.4	561.4	555.6	552.7	552.7	544.1	535.4	521.1	498.0
57.5°	509.5	506.7	503.8	503.8	500.9	495.1	495.1	486.5	475.0	457.7	437.6
60°	454.8	454.8	454.8	452.0	452.0	446.2	446.2	437.6	426.1	408.8	385.8
62.5°	405.9	403.0	403.0	403.0	403.0	400.1	397.3	391.5	380.0	362.7	342.6
65°	348.3	348.3	348.3	348.3	345.4	345.4	345.4	336.8	331.1	313.8	293.6
67.5°	285.0	285.0	285.0	285.0	282.1	285.0	285.0	279.2	273.5	256.2	238.9
70°	227.4	224.5	221.7	224.5	221.7	221.7	224.5	218.8	215.9	201.5	184.2
72.5°	167.0	169.8	167.0	167.0	167.0	164.1	167.0	164.1	158.3	146.8	135.3
75°	118.0	120.9	120.9	118.0	118.0	118.0	115.1	115.1	109.4	100.8	95.0
77.5°	80.6	80.6	80.6	80.6	77.7	77.7	77.7	74.8	72.0	66.2	60.5
80°	51.8	51.8	51.8	51.8	48.9	48.9	48.9	46.1	46.1	40.3	34.5
82.5°	31.7	31.7	31.7	31.7	31.7	31.7	28.8	28.8	25.9	23.0	20.2
85°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	14.4	14.4	11.5	8.6
87.5°	5.8	5.8	8.6	8.6	8.6	8.6	8.6	8.6	5.8	5.8	5.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1
2.5°	2478.6	2481.5	2481.5	2481.5	2490.1	2493.0	2484.4	2475.7	2493.0	2490.1	2495.9
5°	2449.8	2458.4	2464.2	2467.1	2475.7	2481.5	2472.8	2470.0	2484.4	2487.2	2490.1
7.5°	2415.3	2429.7	2444.0	2449.8	2461.3	2467.1	2464.2	2464.2	2481.5	2487.2	2487.2
10°	2392.2	2412.4	2429.7	2444.0	2458.4	2467.1	2467.1	2470.0	2490.1	2495.9	2501.6
12.5°	2386.5	2412.4	2435.4	2455.6	2467.1	2481.5	2484.4	2493.0	2513.1	2521.8	2521.8
15°	2372.1	2406.6	2435.4	2461.3	2478.6	2495.9	2501.6	2518.9	2541.9	2547.7	2553.4
17.5°	2346.2	2380.7	2415.3	2446.9	2470.0	2484.4	2501.6	2518.9	2547.7	2556.3	2559.2
20°	2300.1	2340.4	2375.0	2406.6	2429.7	2449.8	2467.1	2487.2	2513.1	2524.7	2527.5
22.5°	2231.0	2271.3	2305.9	2340.4	2363.4	2380.7	2398.0	2421.0	2446.9	2458.4	2458.4
25°	2147.5	2185.0	2222.4	2248.3	2271.3	2291.5	2300.1	2326.0	2351.9	2366.3	2366.3
27.5°	2041.0	2075.6	2110.1	2138.9	2153.3	2170.6	2185.0	2208.0	2228.1	2239.7	2251.2
30°	1905.7	1940.3	1971.9	2000.7	2018.0	2035.3	2049.7	2066.9	2087.1	2101.5	2104.4
32.5°	1758.9	1787.7	1819.4	1848.2	1865.4	1871.2	1885.6	1902.8	1920.1	1931.6	1934.5
35°	1597.7	1617.9	1638.0	1663.9	1681.2	1681.2	1695.6	1707.1	1721.5	1747.4	1741.6
37.5°	1407.7	1436.5	1450.9	1459.5	1471.0	1482.6	1485.4	1499.8	1517.1	1522.9	1531.5
40°	1229.2	1237.9	1246.5	1246.5	1258.0	1258.0	1258.0	1260.9	1278.2	1281.0	1292.6
42.5°	1050.7	1050.7	1042.1	1033.5	1036.3	1033.5	1019.1	1019.1	1027.7	1039.2	1039.2
45°	883.8	863.6	837.7	817.6	803.2	797.4	780.1	780.1	777.3	780.1	791.7
47.5°	742.7	708.2	665.0	624.7	610.3	598.8	572.9	561.4	555.6	558.5	564.2
50°	624.7	587.3	538.3	489.4	463.5	449.1	417.4	397.3	394.4	388.6	400.1
52.5°	538.3	492.3	440.4	382.9	357.0	333.9	299.4	282.1	270.6	270.6	273.5
55°	463.5	414.5	357.0	299.4	273.5	256.2	221.7	198.6	187.1	184.2	192.9
57.5°	400.1	354.1	296.5	238.9	213.0	192.9	158.3	138.2	129.5	123.8	126.7
60°	351.2	305.1	247.6	192.9	169.8	146.8	118.0	95.0	83.5	83.5	86.4
62.5°	305.1	262.0	210.1	158.3	138.2	118.0	86.4	66.2	57.6	54.7	57.6
65°	259.1	218.8	175.6	132.4	112.3	95.0	69.1	51.8	40.3	37.4	40.3
67.5°	210.1	178.5	141.1	106.5	89.2	74.8	51.8	37.4	28.8	25.9	28.8
70°	164.1	135.3	106.5	77.7	66.2	54.7	37.4	28.8	20.2	17.3	20.2
72.5°	118.0	97.9	74.8	54.7	46.1	37.4	25.9	20.2	14.4	11.5	14.4
75°	80.6	66.2	48.9	34.5	28.8	25.9	17.3	11.5	8.6	8.6	8.6
77.5°	51.8	40.3	31.7	23.0	17.3	14.4	8.6	5.8	5.8	5.8	5.8
80°	28.8	23.0	17.3	11.5	8.6	8.6	5.8	5.8	2.9	2.9	2.9
82.5°	17.3	11.5	8.6	5.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9
85°	8.6	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	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°	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1
2.5°	2484.4	2487.2	2478.6	2490.1	2481.5	2493.0	2493.0	2481.5	2484.4	2478.6	2490.1
5°	2478.6	2478.6	2472.8	2481.5	2470.0	2481.5	2478.6	2458.4	2464.2	2452.7	2464.2
7.5°	2478.6	2472.8	2464.2	2472.8	2458.4	2467.1	2455.6	2435.4	2429.7	2415.3	2415.3
10°	2487.2	2478.6	2467.1	2470.0	2455.6	2458.4	2441.2	2412.4	2403.7	2386.5	2380.7
12.5°	2507.4	2498.7	2481.5	2487.2	2467.1	2467.1	2444.0	2409.5	2392.2	2369.2	2363.4
15°	2536.2	2521.8	2501.6	2504.5	2484.4	2472.8	2444.0	2403.7	2380.7	2349.1	2340.4
17.5°	2541.9	2527.5	2501.6	2501.6	2475.7	2461.3	2426.8	2380.7	2351.9	2320.3	2303.0
20°	2510.3	2495.9	2467.1	2464.2	2441.2	2421.0	2383.6	2337.5	2308.7	2274.2	2259.8
22.5°	2444.0	2426.8	2400.9	2398.0	2375.0	2363.4	2323.1	2277.1	2248.3	2213.8	2202.2
25°	2346.2	2337.5	2311.6	2308.7	2288.6	2274.2	2239.7	2196.5	2170.6	2136.0	2124.5
27.5°	2231.0	2222.4	2196.5	2196.5	2173.4	2164.8	2133.1	2092.8	2072.7	2041.0	2026.6
30°	2092.8	2081.3	2066.9	2064.1	2043.9	2035.3	2006.5	1969.1	1948.9	1923.0	1917.2
32.5°	1928.8	1920.1	1911.5	1908.6	1888.5	1879.8	1859.7	1822.2	1805.0	1781.9	1773.3
35°	1738.8	1733.0	1724.4	1721.5	1712.9	1704.2	1684.1	1655.3	1646.6	1629.4	1620.7
37.5°	1520.0	1525.7	1520.0	1520.0	1511.3	1514.2	1496.9	1479.7	1471.0	1459.5	1453.8
40°	1283.9	1295.4	1304.1	1304.1	1301.2	1312.7	1309.8	1295.4	1292.6	1286.8	1283.9
42.5°	1045.0	1050.7	1068.0	1079.5	1076.6	1105.4	1108.3	1119.8	1128.5	1122.7	1125.6
45°	794.5	811.8	834.8	846.3	860.7	898.2	918.3	941.3	961.5	973.0	970.1
47.5°	572.9	593.0	618.9	636.2	662.1	708.2	760.0	788.8	817.6	832.0	846.3
50°	414.5	434.7	466.4	492.3	509.5	572.9	627.6	665.0	696.7	716.8	731.2
52.5°	290.8	313.8	348.3	371.4	397.3	457.7	521.1	564.2	598.8	624.7	639.1
55°	201.5	227.4	259.1	282.1	310.9	374.2	434.7	480.7	518.2	541.2	558.5
57.5°	141.1	164.1	195.8	215.9	244.7	305.1	365.6	411.7	449.1	472.1	492.3
60°	95.0	118.0	149.7	169.8	192.9	253.3	308.0	357.0	391.5	414.5	434.7
62.5°	66.2	86.4	118.0	138.2	158.3	210.1	262.0	305.1	339.7	365.6	382.9
65°	51.8	69.1	95.0	112.3	132.4	175.6	218.8	256.2	290.8	316.7	328.2
67.5°	37.4	54.7	74.8	89.2	103.6	141.1	178.5	207.3	238.9	259.1	273.5
70°	25.9	37.4	54.7	66.2	77.7	106.5	135.3	161.2	184.2	198.6	210.1
72.5°	20.2	25.9	37.4	46.1	54.7	74.8	97.9	118.0	135.3	146.8	158.3
75°	11.5	17.3	25.9	31.7	37.4	51.8	66.2	80.6	92.1	100.8	106.5
77.5°	5.8	8.6	14.4	17.3	23.0	31.7	43.2	51.8	60.5	66.2	72.0
80°	5.8	5.8	8.6	8.6	11.5	17.3	23.0	28.8	34.5	40.3	43.2
82.5°	2.9	2.9	5.8	5.8	5.8	8.6	11.5	17.3	20.2	23.0	25.9
85°	2.9	2.9	2.9	2.9	2.9	5.8	5.8	8.6	11.5	14.4	14.4
87.5°	0.0	0.0	2.9	2.9	2.9	2.9	2.9	5.8	5.8	5.8	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



TEST NUMBER: P252599

CATALOG NUMBER: LD6B40D010 EU6B30508040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1	2490.1
2.5°	2481.5	2487.2	2484.4	2490.1	2481.5	2478.6	2484.4	2475.7
5°	2449.8	2452.7	2449.8	2449.8	2444.0	2438.3	2444.0	2435.4
7.5°	2400.9	2400.9	2392.2	2392.2	2380.7	2375.0	2375.0	2372.1
10°	2360.6	2351.9	2343.3	2346.2	2328.9	2323.1	2320.3	2317.4
12.5°	2340.4	2334.7	2320.3	2320.3	2303.0	2297.2	2294.4	2291.5
15°	2317.4	2305.9	2294.4	2291.5	2277.1	2271.3	2268.4	2262.7
17.5°	2277.1	2268.4	2254.1	2254.1	2239.7	2236.8	2231.0	2228.1
20°	2233.9	2222.4	2210.9	2210.9	2193.6	2193.6	2185.0	2187.8
22.5°	2173.4	2164.8	2153.3	2153.3	2138.9	2136.0	2127.4	2124.5
25°	2101.5	2090.0	2081.3	2078.5	2066.9	2061.2	2058.3	2052.5
27.5°	2006.5	1997.8	1989.2	1983.5	1969.1	1966.2	1957.5	1960.4
30°	1888.5	1882.7	1879.8	1874.1	1856.8	1851.0	1851.0	1842.4
32.5°	1758.9	1750.3	1744.5	1735.9	1721.5	1718.6	1710.0	1712.9
35°	1600.6	1589.1	1580.4	1583.3	1566.0	1563.2	1557.4	1560.3
37.5°	1436.5	1425.0	1413.5	1410.6	1396.2	1396.2	1387.6	1387.6
40°	1266.6	1255.1	1249.4	1249.4	1232.1	1235.0	1226.3	1223.5
42.5°	1114.1	1102.6	1099.7	1096.8	1088.2	1085.3	1076.6	1079.5
45°	970.1	967.3	967.3	961.5	952.9	950.0	952.9	952.9
47.5°	843.5	846.3	843.5	843.5	837.7	843.5	837.7	840.6
50°	737.0	742.7	742.7	742.7	739.8	742.7	742.7	745.6
52.5°	647.7	656.4	653.5	656.4	653.5	659.2	656.4	659.2
55°	570.0	575.7	578.6	581.5	581.5	581.5	581.5	581.5
57.5°	498.0	506.7	509.5	512.4	512.4	518.2	512.4	512.4
60°	440.4	449.1	452.0	454.8	454.8	457.7	452.0	454.8
62.5°	388.6	397.3	397.3	400.1	400.1	400.1	394.4	397.3
65°	336.8	339.7	342.6	342.6	339.7	339.7	336.8	339.7
67.5°	279.2	282.1	279.2	279.2	276.4	276.4	270.6	273.5
70°	215.9	215.9	218.8	215.9	213.0	215.9	213.0	210.1
72.5°	161.2	161.2	161.2	158.3	158.3	155.5	158.3	158.3
75°	109.4	109.4	112.3	112.3	112.3	112.3	109.4	109.4
77.5°	72.0	72.0	72.0	72.0	74.8	72.0	72.0	72.0
80°	46.1	46.1	48.9	48.9	46.1	46.1	46.1	46.1
82.5°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
85°	17.3	17.3	17.3	17.3	14.4	14.4	14.4	14.4
87.5°	8.6	8.6	8.6	8.6	8.6	8.6	5.8	5.8
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)