

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: P252710

Luminaire Tested: **LD6B40D010 EU6B30509050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509050 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3399.0 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

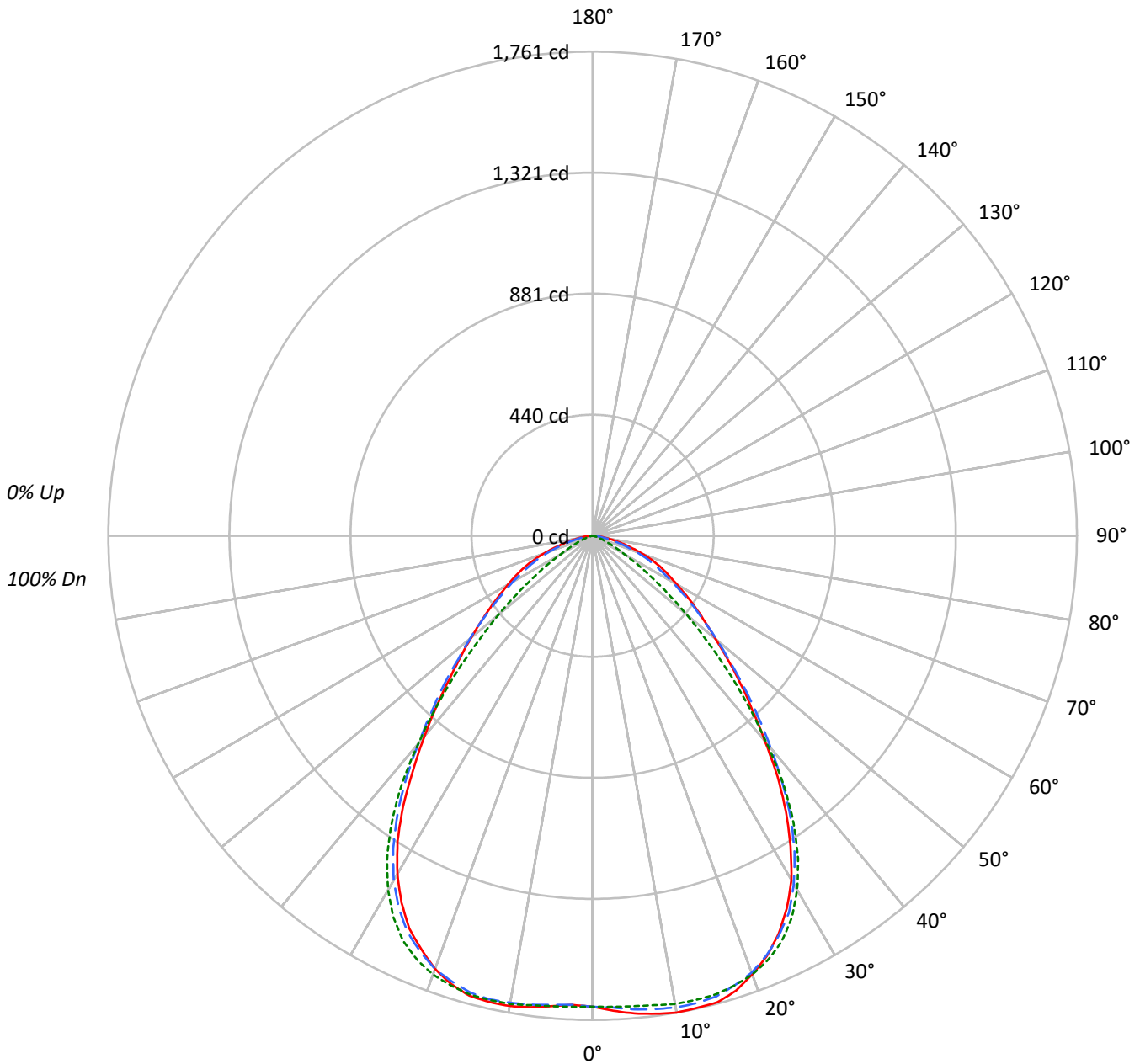
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	111725	111725	111725
5°	114214	112466	112466
10°	116654	114568	115051
15°	118611	116645	116976
20°	117888	117888	116375
25°	115075	117170	113506
30°	108932	112036	106928
35°	97612	101475	95684
40°	82926	83956	80865
45°	70176	64142	67713
50°	59243	45237	58513
55°	52072	29209	51514
60°	46138	17380	46464
65°	42622	10466	42622
70°	36968	6009	36033
75°	29316	3655	27476
80°	21829	2743	20927
85°	19911	1797	18115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.9	4.9
10°-20°	488.0	14.4
20°-30°	733.9	21.6
30°-40°	771.6	22.7
40°-50°	576.4	17.0
50°-60°	358.8	10.6
60°-70°	204.1	6.0
70°-80°	84.0	2.5
80°-90°	17.4	0.5
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°	1386.7	40.8
0°-40°	2158.3	63.5
0°-60°	3093.5	91.0
0°-90°	3399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3399.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1712	1712	1712	1712	1712	
5°	1744	1729	1717	1712	1717	167
15°	1756	1734	1727	1720	1732	494
25°	1599	1604	1628	1591	1577	732
35°	1226	1257	1274	1238	1201	761
45°	761	778	695	763	734	589
55°	458	448	257	441	453	412
65°	276	247	68	247	276	272
75°	116	92	14	90	109	126
85°	27	17	2	14	24	30
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°	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5
2.5°	1729.4	1727.0	1729.4	1724.6	1722.2	1722.2	1724.6	1719.8	1717.3	1719.8	1717.3
5°	1744.0	1739.1	1741.6	1739.1	1734.3	1734.3	1736.7	1729.4	1729.4	1731.9	1729.4
7.5°	1753.7	1753.7	1753.7	1748.8	1746.4	1744.0	1748.8	1741.6	1739.1	1739.1	1736.7
10°	1760.9	1758.5	1760.9	1756.1	1751.2	1748.8	1753.7	1748.8	1744.0	1748.8	1741.6
12.5°	1758.5	1758.5	1758.5	1756.1	1751.2	1748.8	1753.7	1746.4	1744.0	1746.4	1741.6
15°	1756.1	1748.8	1751.2	1748.8	1741.6	1741.6	1744.0	1736.7	1731.9	1739.1	1734.3
17.5°	1734.3	1729.4	1731.9	1727.0	1722.2	1719.8	1722.2	1719.8	1714.9	1719.8	1714.9
20°	1698.0	1698.0	1700.4	1695.5	1690.7	1688.3	1693.1	1688.3	1683.4	1690.7	1690.7
22.5°	1654.4	1654.4	1654.4	1651.9	1649.5	1649.5	1649.5	1647.1	1644.7	1649.5	1651.9
25°	1598.6	1596.2	1598.6	1601.1	1598.6	1596.2	1598.6	1598.6	1593.8	1603.5	1603.5
27.5°	1528.4	1528.4	1533.2	1530.8	1530.8	1528.4	1533.2	1533.2	1530.8	1538.1	1545.4
30°	1446.0	1441.2	1446.0	1446.0	1448.5	1448.5	1450.9	1450.9	1450.9	1458.2	1463.0
32.5°	1339.5	1341.9	1349.2	1346.7	1344.3	1351.6	1351.6	1356.4	1358.8	1363.7	1366.1
35°	1225.6	1228.1	1228.1	1230.5	1235.3	1230.5	1242.6	1240.2	1242.6	1252.3	1257.1
37.5°	1104.5	1097.3	1109.4	1104.5	1106.9	1106.9	1111.8	1114.2	1121.5	1133.6	1133.6
40°	973.7	976.1	981.0	983.4	985.8	985.8	985.8	993.1	995.5	1010.1	1007.6
42.5°	859.9	859.9	864.7	867.1	867.1	867.1	867.1	874.4	879.3	884.1	888.9
45°	760.6	753.3	758.1	758.1	763.0	760.6	765.4	770.3	772.7	779.9	777.5
47.5°	666.1	663.7	666.1	668.5	666.1	668.5	670.9	673.4	675.8	675.8	675.8
50°	583.7	583.7	586.2	588.6	588.6	588.6	588.6	591.0	591.0	595.9	591.0
52.5°	515.9	518.3	518.3	515.9	518.3	518.3	520.8	520.8	518.3	518.3	511.1
55°	457.8	455.4	457.8	455.4	457.8	457.8	455.4	455.4	452.9	450.5	448.1
57.5°	402.1	402.1	402.1	402.1	399.7	402.1	399.7	397.2	397.2	392.4	385.1
60°	353.6	353.6	353.6	353.6	353.6	351.2	353.6	351.2	346.4	341.5	331.8
62.5°	312.5	310.0	312.5	310.0	310.0	307.6	307.6	305.2	300.4	295.5	285.8
65°	276.1	278.6	276.1	276.1	273.7	271.3	271.3	268.9	261.6	256.8	247.1
67.5°	237.4	235.0	235.0	235.0	232.5	232.5	232.5	227.7	222.8	215.6	205.9
70°	193.8	193.8	193.8	191.4	191.4	188.9	188.9	186.5	181.7	176.8	164.7
72.5°	152.6	152.6	152.6	147.8	150.2	147.8	147.8	142.9	140.5	133.2	126.0
75°	116.3	116.3	113.8	113.8	111.4	109.0	109.0	106.6	104.2	99.3	92.0
77.5°	84.8	84.8	84.8	82.4	79.9	77.5	77.5	75.1	72.7	70.2	65.4
80°	58.1	58.1	58.1	58.1	55.7	53.3	53.3	50.9	50.9	48.4	43.6
82.5°	38.8	38.8	38.8	38.8	36.3	36.3	36.3	33.9	31.5	31.5	26.6
85°	26.6	26.6	24.2	24.2	24.2	24.2	21.8	21.8	19.4	17.0	17.0
87.5°	14.5	14.5	14.5	14.5	12.1	12.1	12.1	12.1	9.7	9.7	7.3
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°	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5
2.5°	1724.6	1724.6	1722.2	1714.9	1717.3	1714.9	1717.3	1714.9	1707.6	1714.9	1707.6
5°	1734.3	1736.7	1731.9	1722.2	1724.6	1722.2	1722.2	1719.8	1712.5	1717.3	1712.5
7.5°	1744.0	1741.6	1739.1	1729.4	1731.9	1729.4	1729.4	1724.6	1717.3	1722.2	1714.9
10°	1748.8	1748.8	1744.0	1734.3	1734.3	1731.9	1734.3	1731.9	1722.2	1729.4	1724.6
12.5°	1748.8	1746.4	1746.4	1734.3	1736.7	1734.3	1736.7	1731.9	1724.6	1729.4	1727.0
15°	1741.6	1741.6	1739.1	1727.0	1729.4	1729.4	1731.9	1727.0	1719.8	1727.0	1722.2
17.5°	1727.0	1727.0	1724.6	1714.9	1719.8	1719.8	1722.2	1717.3	1710.1	1714.9	1714.9
20°	1698.0	1700.4	1700.4	1693.1	1698.0	1698.0	1700.4	1698.0	1695.5	1698.0	1693.1
22.5°	1664.0	1668.9	1668.9	1661.6	1666.5	1666.5	1673.7	1671.3	1666.5	1668.9	1666.5
25°	1613.2	1618.0	1622.9	1618.0	1622.9	1622.9	1630.1	1627.7	1622.9	1627.7	1620.4
27.5°	1555.0	1557.5	1562.3	1557.5	1564.7	1562.3	1569.6	1567.2	1559.9	1567.2	1564.7
30°	1472.7	1482.4	1489.6	1482.4	1489.6	1489.6	1494.5	1492.1	1489.6	1487.2	1487.2
32.5°	1380.6	1390.3	1390.3	1387.9	1392.8	1392.8	1395.2	1390.3	1387.9	1390.3	1392.8
35°	1266.8	1271.7	1276.5	1274.1	1276.5	1278.9	1276.5	1278.9	1271.7	1274.1	1274.1
37.5°	1143.3	1148.1	1148.1	1140.9	1145.7	1145.7	1140.9	1140.9	1136.0	1140.9	1131.2
40°	1012.5	1007.6	1010.1	1005.2	1000.4	1000.4	997.9	988.3	983.4	985.8	988.3
42.5°	884.1	884.1	876.8	864.7	852.6	852.6	845.3	840.5	830.8	835.7	833.2
45°	775.1	763.0	753.3	733.9	726.7	721.8	709.7	697.6	692.7	695.2	692.7
47.5°	670.9	661.3	637.0	610.4	603.1	595.9	581.3	566.8	561.9	557.1	557.1
50°	583.7	566.8	540.1	511.1	499.0	486.9	467.5	452.9	443.3	445.7	445.7
52.5°	503.8	484.4	452.9	416.6	402.1	387.6	370.6	353.6	346.4	344.0	344.0
55°	433.6	411.8	380.3	339.1	327.0	310.0	288.2	268.9	259.2	256.8	261.6
57.5°	370.6	351.2	314.9	273.7	259.2	242.2	220.4	203.5	191.4	188.9	191.4
60°	319.7	293.1	261.6	222.8	203.5	188.9	164.7	150.2	138.1	133.2	135.6
62.5°	268.9	244.6	213.2	174.4	159.9	145.3	123.5	106.6	96.9	94.5	96.9
65°	230.1	205.9	176.8	142.9	128.4	113.8	94.5	77.5	70.2	67.8	70.2
67.5°	191.4	169.6	145.3	113.8	101.7	89.6	70.2	58.1	48.4	46.0	48.4
70°	155.0	135.6	111.4	89.6	77.5	67.8	53.3	41.2	33.9	31.5	33.9
72.5°	116.3	101.7	84.8	65.4	58.1	50.9	38.8	29.1	24.2	21.8	24.2
75°	84.8	72.7	60.6	46.0	41.2	36.3	26.6	19.4	17.0	14.5	17.0
77.5°	58.1	50.9	41.2	31.5	26.6	24.2	17.0	14.5	12.1	9.7	9.7
80°	38.8	33.9	26.6	21.8	19.4	17.0	12.1	9.7	7.3	7.3	7.3
82.5°	24.2	19.4	17.0	12.1	9.7	9.7	7.3	4.8	4.8	4.8	4.8
85°	14.5	12.1	9.7	7.3	4.8	4.8	2.4	2.4	2.4	2.4	2.4
87.5°	7.3	4.8	4.8	2.4	2.4	2.4	2.4	2.4	0.0	0.0	2.4
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°	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5
2.5°	1712.5	1707.6	1707.6	1710.1	1712.5	1714.9	1710.1	1707.6	1707.6	1714.9	1710.1
5°	1712.5	1710.1	1710.1	1710.1	1714.9	1717.3	1712.5	1710.1	1712.5	1719.8	1717.3
7.5°	1719.8	1714.9	1717.3	1717.3	1719.8	1724.6	1719.8	1717.3	1719.8	1727.0	1722.2
10°	1724.6	1719.8	1722.2	1719.8	1727.0	1729.4	1724.6	1722.2	1724.6	1734.3	1731.9
12.5°	1727.0	1724.6	1724.6	1722.2	1729.4	1731.9	1727.0	1724.6	1727.0	1734.3	1731.9
15°	1722.2	1719.8	1719.8	1719.8	1724.6	1729.4	1722.2	1719.8	1719.8	1727.0	1724.6
17.5°	1712.5	1707.6	1707.6	1707.6	1710.1	1712.5	1705.2	1702.8	1700.4	1707.6	1705.2
20°	1695.5	1690.7	1685.8	1685.8	1688.3	1688.3	1683.4	1676.2	1676.2	1678.6	1673.7
22.5°	1664.0	1661.6	1656.8	1654.4	1659.2	1656.8	1647.1	1639.8	1637.4	1639.8	1635.0
25°	1620.4	1615.6	1613.2	1610.8	1613.2	1610.8	1601.1	1591.4	1591.4	1591.4	1584.1
27.5°	1559.9	1555.0	1552.6	1552.6	1555.0	1550.2	1540.5	1530.8	1526.0	1526.0	1518.7
30°	1482.4	1482.4	1480.0	1477.5	1475.1	1475.1	1460.6	1450.9	1446.0	1448.5	1443.6
32.5°	1387.9	1385.5	1383.1	1375.8	1378.2	1375.8	1363.7	1356.4	1349.2	1344.3	1341.9
35°	1266.8	1266.8	1264.4	1264.4	1264.4	1262.0	1249.9	1242.6	1237.7	1235.3	1228.1
37.5°	1133.6	1131.2	1128.7	1128.7	1128.7	1128.7	1121.5	1114.2	1114.2	1111.8	1106.9
40°	983.4	985.8	988.3	985.8	993.1	1000.4	990.7	985.8	983.4	990.7	981.0
42.5°	838.1	835.7	847.8	850.2	850.2	862.3	864.7	867.1	864.7	869.6	869.6
45°	697.6	695.2	707.3	712.1	724.2	738.8	746.0	758.1	763.0	767.8	763.0
47.5°	564.4	574.1	583.7	595.9	605.5	629.8	644.3	656.4	661.3	668.5	668.5
50°	452.9	462.6	479.6	489.3	501.4	530.5	554.7	571.6	581.3	588.6	586.2
52.5°	348.8	365.8	387.6	397.2	414.2	448.1	474.7	494.1	506.2	513.5	515.9
55°	268.9	283.4	305.2	319.7	336.7	373.0	406.9	428.7	440.8	450.5	455.4
57.5°	198.6	215.6	239.8	251.9	271.3	312.5	341.5	368.2	382.7	394.8	397.2
60°	145.3	162.3	184.1	198.6	218.0	259.2	293.1	317.3	334.3	344.0	348.8
62.5°	104.2	121.1	142.9	157.4	174.4	210.7	244.6	268.9	285.8	297.9	305.2
65°	75.1	92.0	113.8	126.0	140.5	174.4	205.9	230.1	247.1	261.6	266.4
67.5°	55.7	67.8	87.2	99.3	113.8	140.5	167.1	188.9	205.9	218.0	222.8
70°	41.2	50.9	67.8	75.1	84.8	109.0	130.8	150.2	164.7	174.4	179.2
72.5°	29.1	36.3	48.4	55.7	63.0	82.4	99.3	113.8	123.5	133.2	138.1
75°	19.4	24.2	33.9	38.8	43.6	58.1	70.2	82.4	89.6	96.9	99.3
77.5°	12.1	17.0	24.2	26.6	31.5	38.8	48.4	55.7	60.6	65.4	70.2
80°	7.3	9.7	14.5	17.0	19.4	26.6	31.5	36.3	41.2	46.0	48.4
82.5°	4.8	7.3	9.7	9.7	12.1	14.5	19.4	24.2	26.6	29.1	31.5
85°	2.4	2.4	4.8	4.8	7.3	7.3	9.7	12.1	14.5	17.0	19.4
87.5°	2.4	2.4	2.4	2.4	4.8	4.8	7.3	7.3	7.3	9.7	9.7
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: P252710

CATALOG NUMBER: LD6B40D010 EU6B30509050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5	1712.5
2.5°	1705.2	1712.5	1705.2	1710.1	1707.6	1707.6	1705.2	1707.6
5°	1712.5	1722.2	1712.5	1719.8	1714.9	1714.9	1714.9	1717.3
7.5°	1719.8	1729.4	1722.2	1729.4	1727.0	1724.6	1724.6	1729.4
10°	1727.0	1734.3	1729.4	1736.7	1734.3	1731.9	1731.9	1736.7
12.5°	1727.0	1736.7	1731.9	1739.1	1736.7	1734.3	1734.3	1736.7
15°	1719.8	1731.9	1724.6	1731.9	1729.4	1727.0	1727.0	1731.9
17.5°	1698.0	1707.6	1702.8	1707.6	1707.6	1705.2	1707.6	1710.1
20°	1668.9	1676.2	1671.3	1676.2	1676.2	1671.3	1673.7	1676.2
22.5°	1627.7	1635.0	1630.1	1635.0	1632.6	1630.1	1630.1	1627.7
25°	1576.8	1586.5	1579.3	1584.1	1579.3	1574.4	1574.4	1576.8
27.5°	1513.9	1521.1	1511.4	1516.3	1511.4	1506.6	1506.6	1504.2
30°	1431.5	1433.9	1426.7	1431.5	1426.7	1424.2	1419.4	1419.4
32.5°	1332.2	1334.6	1327.4	1327.4	1322.5	1322.5	1312.8	1320.1
35°	1215.9	1218.4	1215.9	1213.5	1206.3	1203.8	1201.4	1201.4
37.5°	1094.8	1094.8	1087.6	1085.1	1080.3	1075.5	1077.9	1070.6
40°	971.3	968.9	961.6	964.0	961.6	954.3	951.9	949.5
42.5°	855.0	855.0	847.8	850.2	845.3	842.9	835.7	838.1
45°	753.3	753.3	746.0	746.0	743.6	736.3	738.8	733.9
47.5°	661.3	661.3	658.8	658.8	651.6	649.1	649.1	649.1
50°	581.3	581.3	581.3	581.3	578.9	576.5	574.1	576.5
52.5°	513.5	518.3	515.9	515.9	513.5	511.1	508.7	508.7
55°	452.9	455.4	455.4	457.8	455.4	452.9	455.4	452.9
57.5°	399.7	404.5	404.5	404.5	404.5	404.5	402.1	399.7
60°	353.6	356.1	356.1	358.5	358.5	358.5	356.1	356.1
62.5°	307.6	312.5	314.9	314.9	317.3	314.9	314.9	314.9
65°	271.3	276.1	278.6	276.1	278.6	278.6	276.1	276.1
67.5°	227.7	232.5	232.5	232.5	232.5	235.0	232.5	232.5
70°	184.1	188.9	186.5	188.9	188.9	188.9	188.9	188.9
72.5°	140.5	142.9	145.3	145.3	147.8	145.3	145.3	145.3
75°	101.7	106.6	106.6	106.6	106.6	109.0	109.0	109.0
77.5°	72.7	75.1	75.1	77.5	77.5	77.5	77.5	79.9
80°	50.9	50.9	53.3	53.3	55.7	55.7	55.7	55.7
82.5°	33.9	36.3	36.3	36.3	36.3	36.3	36.3	36.3
85°	19.4	21.8	21.8	21.8	21.8	24.2	24.2	24.2
87.5°	12.1	12.1	12.1	12.1	12.1	12.1	9.7	9.7
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)