

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: P252607

Luminaire Tested: **LD6B40D010 EU6B30509727 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252607
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 EU6B30509727 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2974.0 lumens
Efficiency: N/A
Efficacy: 69.1 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

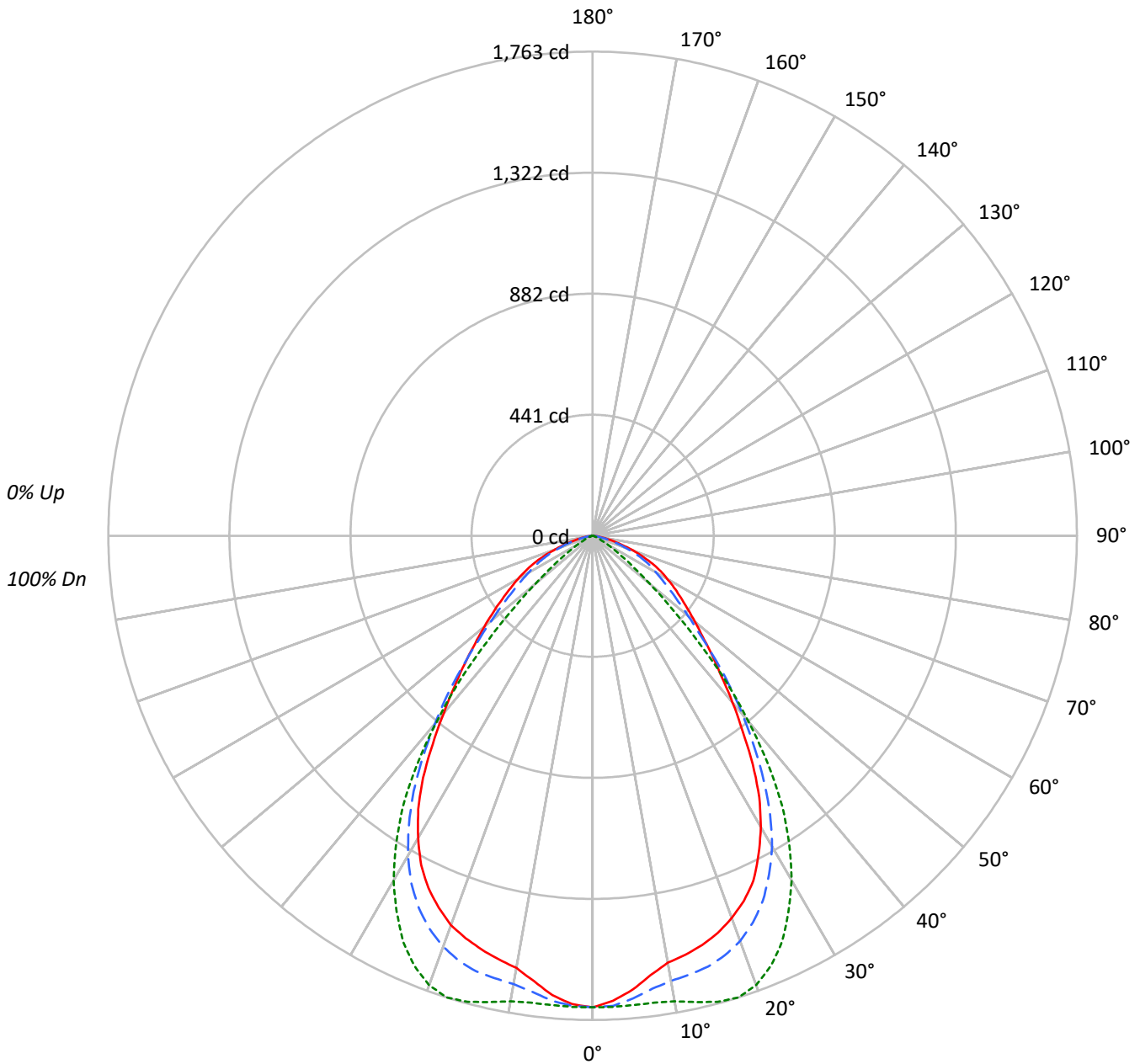
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	112018	112018	112018
5°	108680	112322	109977
10°	104544	114011	105856
15°	104177	118651	105379
20°	102808	120867	104739
25°	99735	117458	101880
30°	92268	109166	95704
35°	80942	95963	85689
40°	67451	75227	71846
45°	56779	49629	60618
50°	49155	27201	52179
55°	44474	14445	45611
60°	40919	7516	40919
65°	37080	3983	36154
70°	29910	2270	27640
75°	20519	1512	19006
80°	13413	751	11947
85°	8908	1497	7411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	5.4
10°-20°	463.0	15.6
20°-30°	684.1	23.0
30°-40°	690.9	23.2
40°-50°	476.2	16.0
50°-60°	273.5	9.2
60°-70°	159.2	5.4
70°-80°	58.1	2.0
80°-90°	8.9	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°	1307.1	44.0
0°-40°	1998.1	67.2
0°-60°	2747.8	92.4
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1717	1717	1717	1717	1717	
5°	1660	1691	1715	1699	1679	156
15°	1542	1624	1757	1642	1560	435
25°	1386	1467	1632	1497	1415	631
35°	1016	1086	1205	1135	1076	631
45°	615	623	538	663	657	479
55°	391	343	127	357	401	352
65°	240	202	26	200	234	235
75°	81	66	6	64	75	92
85°	12	6	2	8	10	15
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°	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0
2.5°	1695.2	1697.2	1699.2	1697.2	1699.2	1707.1	1701.2	1705.1	1705.1	1707.1	1713.1
5°	1659.5	1659.5	1663.4	1661.5	1667.4	1675.4	1669.4	1675.4	1677.3	1681.3	1691.2
7.5°	1613.8	1613.8	1615.8	1615.8	1623.7	1631.7	1627.7	1635.7	1643.6	1651.5	1663.4
10°	1578.1	1582.1	1582.1	1584.0	1592.0	1601.9	1599.9	1609.8	1617.8	1629.7	1645.6
12.5°	1562.2	1564.2	1564.2	1568.2	1576.1	1586.0	1584.0	1594.0	1605.9	1619.8	1635.7
15°	1542.4	1546.3	1544.3	1548.3	1556.3	1566.2	1564.2	1574.1	1588.0	1601.9	1623.7
17.5°	1516.6	1518.5	1520.5	1520.5	1528.5	1536.4	1536.4	1546.3	1562.2	1578.1	1601.9
20°	1480.8	1484.8	1484.8	1486.8	1492.7	1504.6	1502.7	1512.6	1528.5	1544.3	1570.1
22.5°	1439.1	1441.1	1441.1	1443.1	1453.0	1459.0	1461.0	1468.9	1482.8	1500.7	1524.5
25°	1385.5	1387.5	1385.5	1391.5	1395.5	1407.4	1403.4	1413.3	1429.2	1443.1	1466.9
27.5°	1308.1	1312.1	1312.1	1314.1	1324.0	1333.9	1333.9	1343.9	1357.8	1367.7	1391.5
30°	1224.8	1230.7	1224.8	1234.7	1238.6	1246.6	1252.5	1258.5	1270.4	1284.3	1306.1
32.5°	1129.5	1127.5	1129.5	1133.4	1145.4	1151.3	1155.3	1161.2	1173.1	1185.1	1202.9
35°	1016.3	1020.3	1022.3	1030.2	1030.2	1040.1	1042.1	1046.1	1064.0	1071.9	1085.8
37.5°	897.2	901.2	903.2	907.2	915.1	919.1	925.0	931.0	942.9	956.8	964.7
40°	792.0	792.0	794.0	798.0	803.9	805.9	811.9	819.8	827.8	839.7	847.6
42.5°	692.8	694.8	692.8	696.7	702.7	710.6	708.7	718.6	720.6	728.5	734.5
45°	615.4	615.4	611.4	615.4	615.4	623.3	621.3	625.3	623.3	627.3	623.3
47.5°	541.9	543.9	541.9	543.9	543.9	543.9	545.9	541.9	543.9	537.9	526.0
50°	484.3	486.3	482.4	484.3	482.4	480.4	482.4	476.4	474.4	466.5	454.6
52.5°	434.7	432.7	430.7	430.7	430.7	428.8	426.8	420.8	414.9	406.9	393.0
55°	391.0	389.1	387.1	387.1	383.1	381.1	381.1	375.2	369.2	359.3	343.4
57.5°	351.3	349.4	347.4	347.4	345.4	341.4	341.4	335.5	327.5	315.6	301.7
60°	313.6	313.6	313.6	311.6	311.6	307.7	307.7	301.7	293.8	281.9	266.0
62.5°	279.9	277.9	277.9	277.9	277.9	275.9	273.9	270.0	262.0	250.1	236.2
65°	240.2	240.2	240.2	240.2	238.2	238.2	238.2	232.2	228.3	216.4	202.5
67.5°	196.5	196.5	196.5	196.5	194.5	196.5	196.5	192.5	188.6	176.7	164.8
70°	156.8	154.8	152.8	154.8	152.8	152.8	154.8	150.9	148.9	139.0	127.0
72.5°	115.1	117.1	115.1	115.1	115.1	113.1	115.1	113.1	109.2	101.2	93.3
75°	81.4	83.4	83.4	81.4	81.4	81.4	79.4	79.4	75.4	69.5	65.5
77.5°	55.6	55.6	55.6	55.6	53.6	53.6	53.6	51.6	49.6	45.7	41.7
80°	35.7	35.7	35.7	35.7	33.7	33.7	33.7	31.8	31.8	27.8	23.8
82.5°	21.8	21.8	21.8	21.8	21.8	21.8	19.9	19.9	17.9	15.9	13.9
85°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	9.9	9.9	7.9	6.0
87.5°	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0
2.5°	1709.1	1711.1	1711.1	1711.1	1717.0	1719.0	1713.1	1707.1	1719.0	1717.0	1721.0
5°	1689.2	1695.2	1699.2	1701.2	1707.1	1711.1	1705.1	1703.1	1713.1	1715.1	1717.0
7.5°	1665.4	1675.4	1685.3	1689.2	1697.2	1701.2	1699.2	1699.2	1711.1	1715.1	1715.1
10°	1649.5	1663.4	1675.4	1685.3	1695.2	1701.2	1701.2	1703.1	1717.0	1721.0	1725.0
12.5°	1645.6	1663.4	1679.3	1693.2	1701.2	1711.1	1713.1	1719.0	1732.9	1738.9	1738.9
15°	1635.7	1659.5	1679.3	1697.2	1709.1	1721.0	1725.0	1736.9	1752.8	1756.7	1760.7
17.5°	1617.8	1641.6	1665.4	1687.3	1703.1	1713.1	1725.0	1736.9	1756.7	1762.7	1764.7
20°	1586.0	1613.8	1637.6	1659.5	1675.4	1689.2	1701.2	1715.1	1732.9	1740.9	1742.8
22.5°	1538.4	1566.2	1590.0	1613.8	1629.7	1641.6	1653.5	1669.4	1687.3	1695.2	1695.2
25°	1480.8	1506.6	1532.4	1550.3	1566.2	1580.1	1586.0	1603.9	1621.8	1631.7	1631.7
27.5°	1407.4	1431.2	1455.0	1474.9	1484.8	1496.7	1506.6	1522.5	1536.4	1544.3	1552.3
30°	1314.1	1337.9	1359.7	1379.6	1391.5	1403.4	1413.3	1425.2	1439.1	1449.1	1451.0
32.5°	1212.8	1232.7	1254.5	1274.4	1286.3	1290.3	1300.2	1312.1	1324.0	1331.9	1333.9
35°	1101.7	1115.6	1129.5	1147.3	1159.2	1159.2	1169.2	1177.1	1187.0	1204.9	1200.9
37.5°	970.7	990.5	1000.4	1006.4	1014.3	1022.3	1024.3	1034.2	1046.1	1050.1	1056.0
40°	847.6	853.6	859.5	859.5	867.5	867.5	867.5	869.4	881.3	883.3	891.3
42.5°	724.5	724.5	718.6	712.6	714.6	712.6	702.7	702.7	708.7	716.6	716.6
45°	609.4	595.5	577.6	563.7	553.8	549.8	537.9	537.9	536.0	537.9	545.9
47.5°	512.1	488.3	458.5	430.7	420.8	412.9	395.0	387.1	383.1	385.1	389.1
50°	430.7	404.9	371.2	337.5	319.6	309.7	287.8	273.9	271.9	268.0	275.9
52.5°	371.2	339.4	303.7	264.0	246.1	230.3	206.4	194.5	186.6	186.6	188.6
55°	319.6	285.8	246.1	206.4	188.6	176.7	152.8	137.0	129.0	127.0	133.0
57.5°	275.9	244.2	204.5	164.8	146.9	133.0	109.2	95.3	89.3	85.4	87.3
60°	242.2	210.4	170.7	133.0	117.1	101.2	81.4	65.5	57.6	57.6	59.6
62.5°	210.4	180.6	144.9	109.2	95.3	81.4	59.6	45.7	39.7	37.7	39.7
65°	178.7	150.9	121.1	91.3	77.4	65.5	47.6	35.7	27.8	25.8	27.8
67.5°	144.9	123.1	97.3	73.4	61.5	51.6	35.7	25.8	19.9	17.9	19.9
70°	113.1	93.3	73.4	53.6	45.7	37.7	25.8	19.9	13.9	11.9	13.9
72.5°	81.4	67.5	51.6	37.7	31.8	25.8	17.9	13.9	9.9	7.9	9.9
75°	55.6	45.7	33.7	23.8	19.9	17.9	11.9	7.9	6.0	6.0	6.0
77.5°	35.7	27.8	21.8	15.9	11.9	9.9	6.0	4.0	4.0	4.0	4.0
80°	19.9	15.9	11.9	7.9	6.0	6.0	4.0	4.0	2.0	2.0	2.0
82.5°	11.9	7.9	6.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	6.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	2.0	2.0	2.0	2.0	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°	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0
2.5°	1713.1	1715.1	1709.1	1717.0	1711.1	1719.0	1719.0	1711.1	1713.1	1709.1	1717.0
5°	1709.1	1709.1	1705.1	1711.1	1703.1	1711.1	1709.1	1695.2	1699.2	1691.2	1699.2
7.5°	1709.1	1705.1	1699.2	1705.1	1695.2	1701.2	1693.2	1679.3	1675.4	1665.4	1665.4
10°	1715.1	1709.1	1701.2	1703.1	1693.2	1695.2	1683.3	1663.4	1657.5	1645.6	1641.6
12.5°	1728.9	1723.0	1711.1	1715.1	1701.2	1701.2	1685.3	1661.5	1649.5	1633.7	1629.7
15°	1748.8	1738.9	1725.0	1727.0	1713.1	1705.1	1685.3	1657.5	1641.6	1619.8	1613.8
17.5°	1752.8	1742.8	1725.0	1725.0	1707.1	1697.2	1673.4	1641.6	1621.8	1599.9	1588.0
20°	1730.9	1721.0	1701.2	1699.2	1683.3	1669.4	1643.6	1611.8	1592.0	1568.2	1558.2
22.5°	1685.3	1673.4	1655.5	1653.5	1637.6	1629.7	1601.9	1570.1	1550.3	1526.5	1518.5
25°	1617.8	1611.8	1594.0	1592.0	1578.1	1568.2	1544.3	1514.6	1496.7	1472.9	1464.9
27.5°	1538.4	1532.4	1514.6	1514.6	1498.7	1492.7	1470.9	1443.1	1429.2	1407.4	1397.5
30°	1443.1	1435.2	1425.2	1423.3	1409.4	1403.4	1383.6	1357.8	1343.9	1326.0	1322.0
32.5°	1330.0	1324.0	1318.1	1316.1	1302.2	1296.2	1282.3	1256.5	1244.6	1228.7	1222.8
35°	1198.9	1195.0	1189.0	1187.0	1181.1	1175.1	1161.2	1141.4	1135.4	1123.5	1117.6
37.5°	1048.1	1052.1	1048.1	1048.1	1042.1	1044.1	1032.2	1020.3	1014.3	1006.4	1002.4
40°	885.3	893.3	899.2	899.2	897.2	905.2	903.2	893.3	891.3	887.3	885.3
42.5°	720.6	724.5	736.4	744.4	742.4	762.2	764.2	772.2	778.1	774.2	776.1
45°	547.9	559.8	575.7	583.6	593.5	619.3	633.2	649.1	663.0	670.9	669.0
47.5°	395.0	408.9	426.8	438.7	456.6	488.3	524.0	543.9	563.7	573.7	583.6
50°	285.8	299.7	321.6	339.4	351.3	395.0	432.7	458.5	480.4	494.3	504.2
52.5°	200.5	216.4	240.2	256.1	273.9	315.6	359.3	389.1	412.9	430.7	440.7
55°	139.0	156.8	178.7	194.5	214.4	258.1	299.7	331.5	357.3	373.2	385.1
57.5°	97.3	113.1	135.0	148.9	168.7	210.4	252.1	283.9	309.7	325.5	339.4
60°	65.5	81.4	103.2	117.1	133.0	174.7	212.4	246.1	270.0	285.8	299.7
62.5°	45.7	59.6	81.4	95.3	109.2	144.9	180.6	210.4	234.2	252.1	264.0
65°	35.7	47.6	65.5	77.4	91.3	121.1	150.9	176.7	200.5	218.4	226.3
67.5°	25.8	37.7	51.6	61.5	71.5	97.3	123.1	142.9	164.8	178.7	188.6
70°	17.9	25.8	37.7	45.7	53.6	73.4	93.3	111.2	127.0	137.0	144.9
72.5°	13.9	17.9	25.8	31.8	37.7	51.6	67.5	81.4	93.3	101.2	109.2
75°	7.9	11.9	17.9	21.8	25.8	35.7	45.7	55.6	63.5	69.5	73.4
77.5°	4.0	6.0	9.9	11.9	15.9	21.8	29.8	35.7	41.7	45.7	49.6
80°	4.0	4.0	6.0	6.0	7.9	11.9	15.9	19.9	23.8	27.8	29.8
82.5°	2.0	2.0	4.0	4.0	4.0	6.0	7.9	11.9	13.9	15.9	17.9
85°	2.0	2.0	2.0	2.0	2.0	4.0	4.0	6.0	7.9	9.9	9.9
87.5°	0.0	0.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	6.0
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: P252607

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0	1717.0
2.5°	1711.1	1715.1	1713.1	1717.0	1711.1	1709.1	1713.1	1707.1
5°	1689.2	1691.2	1689.2	1689.2	1685.3	1681.3	1685.3	1679.3
7.5°	1655.5	1655.5	1649.5	1649.5	1641.6	1637.6	1637.6	1635.7
10°	1627.7	1621.8	1615.8	1617.8	1605.9	1601.9	1599.9	1597.9
12.5°	1613.8	1609.8	1599.9	1599.9	1588.0	1584.0	1582.1	1580.1
15°	1597.9	1590.0	1582.1	1580.1	1570.1	1566.2	1564.2	1560.2
17.5°	1570.1	1564.2	1554.3	1554.3	1544.3	1542.4	1538.4	1536.4
20°	1540.4	1532.4	1524.5	1524.5	1512.6	1512.6	1506.6	1508.6
22.5°	1498.7	1492.7	1484.8	1484.8	1474.9	1472.9	1466.9	1464.9
25°	1449.1	1441.1	1435.2	1433.2	1425.2	1421.3	1419.3	1415.3
27.5°	1383.6	1377.6	1371.6	1367.7	1357.8	1355.8	1349.8	1351.8
30°	1302.2	1298.2	1296.2	1292.2	1280.3	1276.4	1276.4	1270.4
32.5°	1212.8	1206.9	1202.9	1197.0	1187.0	1185.1	1179.1	1181.1
35°	1103.7	1095.7	1089.8	1091.8	1079.8	1077.9	1073.9	1075.9
37.5°	990.5	982.6	974.6	972.7	962.7	962.7	956.8	956.8
40°	873.4	865.5	861.5	861.5	849.6	851.6	845.6	843.6
42.5°	768.2	760.3	758.3	756.3	750.3	748.4	742.4	744.4
45°	669.0	667.0	667.0	663.0	657.0	655.1	657.0	657.0
47.5°	581.6	583.6	581.6	581.6	577.6	581.6	577.6	579.6
50°	508.2	512.1	512.1	512.1	510.1	512.1	512.1	514.1
52.5°	446.6	452.6	450.6	452.6	450.6	454.6	452.6	454.6
55°	393.0	397.0	399.0	401.0	401.0	401.0	401.0	401.0
57.5°	343.4	349.4	351.3	353.3	353.3	357.3	353.3	353.3
60°	303.7	309.7	311.6	313.6	313.6	315.6	311.6	313.6
62.5°	268.0	273.9	273.9	275.9	275.9	275.9	271.9	273.9
65°	232.2	234.2	236.2	236.2	234.2	234.2	232.2	234.2
67.5°	192.5	194.5	192.5	192.5	190.6	190.6	186.6	188.6
70°	148.9	148.9	150.9	148.9	146.9	148.9	146.9	144.9
72.5°	111.2	111.2	111.2	109.2	109.2	107.2	109.2	109.2
75°	75.4	75.4	77.4	77.4	77.4	77.4	75.4	75.4
77.5°	49.6	49.6	49.6	49.6	51.6	49.6	49.6	49.6
80°	31.8	31.8	33.7	33.7	31.8	31.8	31.8	31.8
82.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
85°	11.9	11.9	11.9	11.9	9.9	9.9	9.9	9.9
87.5°	6.0	6.0	6.0	6.0	6.0	6.0	4.0	4.0
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)