

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: P252706

Luminaire Tested: **LD6B40D010 EU6B30509027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252706
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 EU6B30509027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3204.0 lumens
Efficiency: N/A
Efficacy: 74.5 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

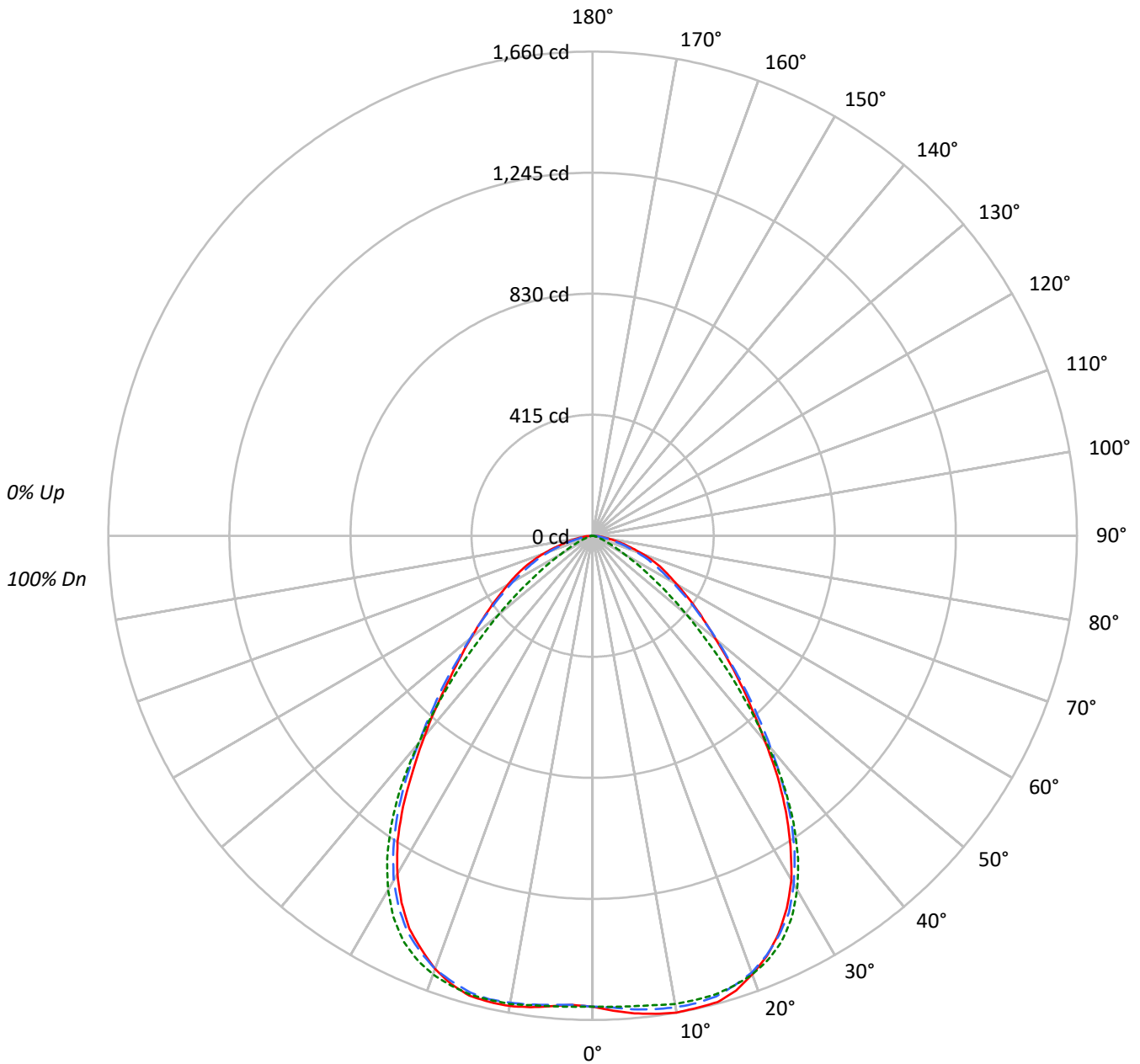
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	105311	105311	105311
5°	107659	106015	106015
10°	109964	107996	108453
15°	111802	109952	110262
20°	111119	111119	109696
25°	108474	110447	106999
30°	102687	105610	100796
35°	92013	95653	90197
40°	78173	79144	76223
45°	66144	60461	63828
50°	55853	42639	55153
55°	49080	27526	48569
60°	43502	16388	43790
65°	40183	9864	40183
70°	34850	5665	33973
75°	27627	3453	25888
80°	20589	2555	19725
85°	18789	1722	17067



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	4.9
10°-20°	460.0	14.4
20°-30°	691.8	21.6
30°-40°	727.3	22.7
40°-50°	543.3	17.0
50°-60°	338.2	10.6
60°-70°	192.4	6.0
70°-80°	79.2	2.5
80°-90°	16.4	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°	1307.1	40.8
0°-40°	2034.4	63.5
0°-60°	2916.0	91.0
0°-90°	3204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3204.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1614	1614	1614	1614	1614	
5°	1644	1630	1619	1614	1619	157
15°	1655	1635	1628	1621	1632	465
25°	1507	1512	1534	1500	1486	690
35°	1155	1185	1201	1167	1132	717
45°	717	733	655	719	692	556
55°	432	422	242	416	427	388
65°	260	233	64	233	260	256
75°	110	87	14	84	103	119
85°	25	16	2	14	23	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°	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2
2.5°	1630.2	1627.9	1630.2	1625.7	1623.4	1623.4	1625.7	1621.1	1618.8	1621.1	1618.8
5°	1643.9	1639.4	1641.6	1639.4	1634.8	1634.8	1637.1	1630.2	1630.2	1632.5	1630.2
7.5°	1653.1	1653.1	1653.1	1648.5	1646.2	1643.9	1648.5	1641.6	1639.4	1639.4	1637.1
10°	1659.9	1657.6	1659.9	1655.3	1650.8	1648.5	1653.1	1648.5	1643.9	1648.5	1641.6
12.5°	1657.6	1657.6	1657.6	1655.3	1650.8	1648.5	1653.1	1646.2	1643.9	1646.2	1641.6
15°	1655.3	1648.5	1650.8	1648.5	1641.6	1641.6	1643.9	1637.1	1632.5	1639.4	1634.8
17.5°	1634.8	1630.2	1632.5	1627.9	1623.4	1621.1	1623.4	1621.1	1616.5	1621.1	1616.5
20°	1600.5	1600.5	1602.8	1598.3	1593.7	1591.4	1596.0	1591.4	1586.8	1593.7	1593.7
22.5°	1559.4	1559.4	1559.4	1557.2	1554.9	1554.9	1554.9	1552.6	1550.3	1554.9	1557.2
25°	1506.9	1504.6	1506.9	1509.2	1506.9	1504.6	1506.9	1506.9	1502.4	1511.5	1511.5
27.5°	1440.7	1440.7	1445.3	1443.0	1443.0	1440.7	1445.3	1445.3	1443.0	1449.9	1456.7
30°	1363.1	1358.5	1363.1	1363.1	1365.4	1365.4	1367.7	1367.7	1367.7	1374.5	1379.1
32.5°	1262.6	1264.9	1271.8	1269.5	1267.2	1274.0	1274.0	1278.6	1280.9	1285.5	1287.7
35°	1155.3	1157.6	1157.6	1159.9	1164.4	1159.9	1171.3	1169.0	1171.3	1180.4	1185.0
37.5°	1041.2	1034.3	1045.7	1041.2	1043.4	1043.4	1048.0	1050.3	1057.1	1068.6	1068.6
40°	917.9	920.1	924.7	927.0	929.3	929.3	929.3	936.1	938.4	952.1	949.8
42.5°	810.5	810.5	815.1	817.4	817.4	817.4	817.4	824.2	828.8	833.4	837.9
45°	716.9	710.1	714.7	714.7	719.2	716.9	721.5	726.1	728.4	735.2	732.9
47.5°	627.9	625.6	627.9	630.2	627.9	630.2	632.5	634.7	637.0	637.0	637.0
50°	550.3	550.3	552.5	554.8	554.8	554.8	554.8	557.1	557.1	561.7	557.1
52.5°	486.3	488.6	488.6	486.3	488.6	488.6	490.9	490.9	488.6	488.6	481.8
55°	431.5	429.2	431.5	429.2	431.5	431.5	429.2	429.2	427.0	424.7	422.4
57.5°	379.0	379.0	379.0	379.0	376.7	379.0	376.7	374.4	374.4	369.9	363.0
60°	333.4	333.4	333.4	333.4	333.4	331.1	333.4	331.1	326.5	321.9	312.8
62.5°	294.5	292.3	294.5	292.3	292.3	290.0	290.0	287.7	283.1	278.6	269.4
65°	260.3	262.6	260.3	260.3	258.0	255.7	255.7	253.4	246.6	242.0	232.9
67.5°	223.8	221.5	221.5	221.5	219.2	219.2	219.2	214.6	210.1	203.2	194.1
70°	182.7	182.7	182.7	180.4	180.4	178.1	178.1	175.8	171.2	166.7	155.3
72.5°	143.8	143.8	143.8	139.3	141.6	139.3	139.3	134.7	132.4	125.6	118.7
75°	109.6	109.6	107.3	107.3	105.0	102.7	102.7	100.5	98.2	93.6	86.8
77.5°	79.9	79.9	79.9	77.6	75.3	73.1	73.1	70.8	68.5	66.2	61.6
80°	54.8	54.8	54.8	54.8	52.5	50.2	50.2	47.9	47.9	45.7	41.1
82.5°	36.5	36.5	36.5	36.5	34.2	34.2	34.2	32.0	29.7	29.7	25.1
85°	25.1	25.1	22.8	22.8	22.8	22.8	20.5	20.5	18.3	16.0	16.0
87.5°	13.7	13.7	13.7	13.7	11.4	11.4	11.4	11.4	9.1	9.1	6.8
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°	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2
2.5°	1625.7	1625.7	1623.4	1616.5	1618.8	1616.5	1618.8	1616.5	1609.7	1616.5	1609.7
5°	1634.8	1637.1	1632.5	1623.4	1625.7	1623.4	1623.4	1621.1	1614.2	1618.8	1614.2
7.5°	1643.9	1641.6	1639.4	1630.2	1632.5	1630.2	1630.2	1625.7	1618.8	1623.4	1616.5
10°	1648.5	1648.5	1643.9	1634.8	1634.8	1632.5	1634.8	1632.5	1623.4	1630.2	1625.7
12.5°	1648.5	1646.2	1646.2	1634.8	1637.1	1634.8	1637.1	1632.5	1625.7	1630.2	1627.9
15°	1641.6	1641.6	1639.4	1627.9	1630.2	1630.2	1632.5	1627.9	1621.1	1627.9	1623.4
17.5°	1627.9	1627.9	1625.7	1616.5	1621.1	1621.1	1623.4	1618.8	1612.0	1616.5	1616.5
20°	1600.5	1602.8	1602.8	1596.0	1600.5	1600.5	1602.8	1600.5	1598.3	1600.5	1596.0
22.5°	1568.6	1573.1	1573.1	1566.3	1570.9	1570.9	1577.7	1575.4	1570.9	1573.1	1570.9
25°	1520.6	1525.2	1529.8	1525.2	1529.8	1529.8	1536.6	1534.3	1529.8	1534.3	1527.5
27.5°	1465.8	1468.1	1472.7	1468.1	1475.0	1472.7	1479.5	1477.2	1470.4	1477.2	1475.0
30°	1388.2	1397.3	1404.2	1397.3	1404.2	1404.2	1408.8	1406.5	1404.2	1401.9	1401.9
32.5°	1301.4	1310.6	1310.6	1308.3	1312.9	1312.9	1315.1	1310.6	1308.3	1310.6	1312.9
35°	1194.1	1198.7	1203.3	1201.0	1203.3	1205.5	1203.3	1205.5	1198.7	1201.0	1201.0
37.5°	1077.7	1082.3	1082.3	1075.4	1080.0	1080.0	1075.4	1075.4	1070.8	1075.4	1066.3
40°	954.4	949.8	952.1	947.5	943.0	943.0	940.7	931.6	927.0	929.3	931.6
42.5°	833.4	833.4	826.5	815.1	803.7	803.7	796.8	792.3	783.1	787.7	785.4
45°	730.6	719.2	710.1	691.8	685.0	680.4	669.0	657.6	653.0	655.3	653.0
47.5°	632.5	623.3	600.5	575.4	568.5	561.7	548.0	534.3	529.7	525.1	525.1
50°	550.3	534.3	509.2	481.8	470.3	458.9	440.7	427.0	417.8	420.1	420.1
52.5°	474.9	456.6	427.0	392.7	379.0	365.3	349.3	333.4	326.5	324.2	324.2
55°	408.7	388.1	358.5	319.7	308.2	292.3	271.7	253.4	244.3	242.0	246.6
57.5°	349.3	331.1	296.8	258.0	244.3	228.3	207.8	191.8	180.4	178.1	180.4
60°	301.4	276.3	246.6	210.1	191.8	178.1	155.3	141.6	130.1	125.6	127.9
62.5°	253.4	230.6	200.9	164.4	150.7	137.0	116.4	100.5	91.3	89.0	91.3
65°	216.9	194.1	166.7	134.7	121.0	107.3	89.0	73.1	66.2	63.9	66.2
67.5°	180.4	159.8	137.0	107.3	95.9	84.5	66.2	54.8	45.7	43.4	45.7
70°	146.1	127.9	105.0	84.5	73.1	63.9	50.2	38.8	32.0	29.7	32.0
72.5°	109.6	95.9	79.9	61.6	54.8	47.9	36.5	27.4	22.8	20.5	22.8
75°	79.9	68.5	57.1	43.4	38.8	34.2	25.1	18.3	16.0	13.7	16.0
77.5°	54.8	47.9	38.8	29.7	25.1	22.8	16.0	13.7	11.4	9.1	9.1
80°	36.5	32.0	25.1	20.5	18.3	16.0	11.4	9.1	6.8	6.8	6.8
82.5°	22.8	18.3	16.0	11.4	9.1	9.1	6.8	4.6	4.6	4.6	4.6
85°	13.7	11.4	9.1	6.8	4.6	4.6	2.3	2.3	2.3	2.3	2.3
87.5°	6.8	4.6	4.6	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2
2.5°	1614.2	1609.7	1609.7	1612.0	1614.2	1616.5	1612.0	1609.7	1609.7	1616.5	1612.0
5°	1614.2	1612.0	1612.0	1612.0	1616.5	1618.8	1614.2	1612.0	1614.2	1621.1	1618.8
7.5°	1621.1	1616.5	1618.8	1618.8	1621.1	1625.7	1621.1	1618.8	1621.1	1627.9	1623.4
10°	1625.7	1621.1	1623.4	1621.1	1627.9	1630.2	1625.7	1623.4	1625.7	1634.8	1632.5
12.5°	1627.9	1625.7	1625.7	1623.4	1630.2	1632.5	1627.9	1625.7	1627.9	1634.8	1632.5
15°	1623.4	1621.1	1621.1	1621.1	1625.7	1630.2	1623.4	1621.1	1621.1	1627.9	1625.7
17.5°	1614.2	1609.7	1609.7	1609.7	1612.0	1614.2	1607.4	1605.1	1602.8	1609.7	1607.4
20°	1598.3	1593.7	1589.1	1589.1	1591.4	1591.4	1586.8	1580.0	1580.0	1582.3	1577.7
22.5°	1568.6	1566.3	1561.7	1559.4	1564.0	1561.7	1552.6	1545.7	1543.5	1545.7	1541.2
25°	1527.5	1522.9	1520.6	1518.3	1520.6	1518.3	1509.2	1500.1	1500.1	1500.1	1493.2
27.5°	1470.4	1465.8	1463.6	1463.6	1465.8	1461.3	1452.1	1443.0	1438.4	1438.4	1431.6
30°	1397.3	1397.3	1395.1	1392.8	1390.5	1390.5	1376.8	1367.7	1363.1	1365.4	1360.8
32.5°	1308.3	1306.0	1303.7	1296.9	1299.2	1296.9	1285.5	1278.6	1271.8	1267.2	1264.9
35°	1194.1	1194.1	1191.8	1191.8	1191.8	1189.6	1178.1	1171.3	1166.7	1164.4	1157.6
37.5°	1068.6	1066.3	1064.0	1064.0	1064.0	1064.0	1057.1	1050.3	1050.3	1048.0	1043.4
40°	927.0	929.3	931.6	929.3	936.1	943.0	933.8	929.3	927.0	933.8	924.7
42.5°	790.0	787.7	799.1	801.4	801.4	812.8	815.1	817.4	815.1	819.7	819.7
45°	657.6	655.3	666.7	671.3	682.7	696.4	703.2	714.7	719.2	723.8	719.2
47.5°	532.0	541.1	550.3	561.7	570.8	593.6	607.3	618.8	623.3	630.2	630.2
50°	427.0	436.1	452.1	461.2	472.6	500.0	522.9	538.8	548.0	554.8	552.5
52.5°	328.8	344.8	365.3	374.4	390.4	422.4	447.5	465.8	477.2	484.0	486.3
55°	253.4	267.1	287.7	301.4	317.4	351.6	383.6	404.1	415.5	424.7	429.2
57.5°	187.2	203.2	226.0	237.5	255.7	294.5	321.9	347.1	360.8	372.2	374.4
60°	137.0	153.0	173.5	187.2	205.5	244.3	276.3	299.1	315.1	324.2	328.8
62.5°	98.2	114.2	134.7	148.4	164.4	198.6	230.6	253.4	269.4	280.8	287.7
65°	70.8	86.8	107.3	118.7	132.4	164.4	194.1	216.9	232.9	246.6	251.2
67.5°	52.5	63.9	82.2	93.6	107.3	132.4	157.5	178.1	194.1	205.5	210.1
70°	38.8	47.9	63.9	70.8	79.9	102.7	123.3	141.6	155.3	164.4	169.0
72.5°	27.4	34.2	45.7	52.5	59.4	77.6	93.6	107.3	116.4	125.6	130.1
75°	18.3	22.8	32.0	36.5	41.1	54.8	66.2	77.6	84.5	91.3	93.6
77.5°	11.4	16.0	22.8	25.1	29.7	36.5	45.7	52.5	57.1	61.6	66.2
80°	6.8	9.1	13.7	16.0	18.3	25.1	29.7	34.2	38.8	43.4	45.7
82.5°	4.6	6.8	9.1	9.1	11.4	13.7	18.3	22.8	25.1	27.4	29.7
85°	2.3	2.3	4.6	4.6	6.8	6.8	9.1	11.4	13.7	16.0	18.3
87.5°	2.3	2.3	2.3	2.3	4.6	4.6	6.8	6.8	6.8	9.1	9.1
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: P252706

CATALOG NUMBER: LD6B40D010 EU6B30509027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2	1614.2
2.5°	1607.4	1614.2	1607.4	1612.0	1609.7	1609.7	1607.4	1609.7
5°	1614.2	1623.4	1614.2	1621.1	1616.5	1616.5	1616.5	1618.8
7.5°	1621.1	1630.2	1623.4	1630.2	1627.9	1625.7	1625.7	1630.2
10°	1627.9	1634.8	1630.2	1637.1	1634.8	1632.5	1632.5	1637.1
12.5°	1627.9	1637.1	1632.5	1639.4	1637.1	1634.8	1634.8	1637.1
15°	1621.1	1632.5	1625.7	1632.5	1630.2	1627.9	1627.9	1632.5
17.5°	1600.5	1609.7	1605.1	1609.7	1609.7	1607.4	1609.7	1612.0
20°	1573.1	1580.0	1575.4	1580.0	1580.0	1575.4	1577.7	1580.0
22.5°	1534.3	1541.2	1536.6	1541.2	1538.9	1536.6	1536.6	1534.3
25°	1486.4	1495.5	1488.7	1493.2	1488.7	1484.1	1484.1	1486.4
27.5°	1427.0	1433.9	1424.7	1429.3	1424.7	1420.2	1420.2	1417.9
30°	1349.4	1351.7	1344.8	1349.4	1344.8	1342.5	1338.0	1338.0
32.5°	1255.8	1258.1	1251.2	1251.2	1246.6	1246.6	1237.5	1244.4
35°	1146.2	1148.5	1146.2	1143.9	1137.0	1134.8	1132.5	1132.5
37.5°	1032.0	1032.0	1025.2	1022.9	1018.3	1013.8	1016.0	1009.2
40°	915.6	913.3	906.4	908.7	906.4	899.6	897.3	895.0
42.5°	806.0	806.0	799.1	801.4	796.8	794.6	787.7	790.0
45°	710.1	710.1	703.2	703.2	701.0	694.1	696.4	691.8
47.5°	623.3	623.3	621.0	621.0	614.2	611.9	611.9	611.9
50°	548.0	548.0	548.0	548.0	545.7	543.4	541.1	543.4
52.5°	484.0	488.6	486.3	486.3	484.0	481.8	479.5	479.5
55°	427.0	429.2	429.2	431.5	429.2	427.0	429.2	427.0
57.5°	376.7	381.3	381.3	381.3	381.3	381.3	379.0	376.7
60°	333.4	335.6	335.6	337.9	337.9	337.9	335.6	335.6
62.5°	290.0	294.5	296.8	296.8	299.1	296.8	296.8	296.8
65°	255.7	260.3	262.6	260.3	262.6	262.6	260.3	260.3
67.5°	214.6	219.2	219.2	219.2	219.2	221.5	219.2	219.2
70°	173.5	178.1	175.8	178.1	178.1	178.1	178.1	178.1
72.5°	132.4	134.7	137.0	137.0	139.3	137.0	137.0	137.0
75°	95.9	100.5	100.5	100.5	100.5	102.7	102.7	102.7
77.5°	68.5	70.8	70.8	73.1	73.1	73.1	73.1	75.3
80°	47.9	47.9	50.2	50.2	52.5	52.5	52.5	52.5
82.5°	32.0	34.2	34.2	34.2	34.2	34.2	34.2	34.2
85°	18.3	20.5	20.5	20.5	20.5	22.8	22.8	22.8
87.5°	11.4	11.4	11.4	11.4	11.4	11.4	9.1	9.1
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)