

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: P252157

Luminaire Tested: **LD6B20D010 EU6B10208040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10208040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE 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: 2687.0 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

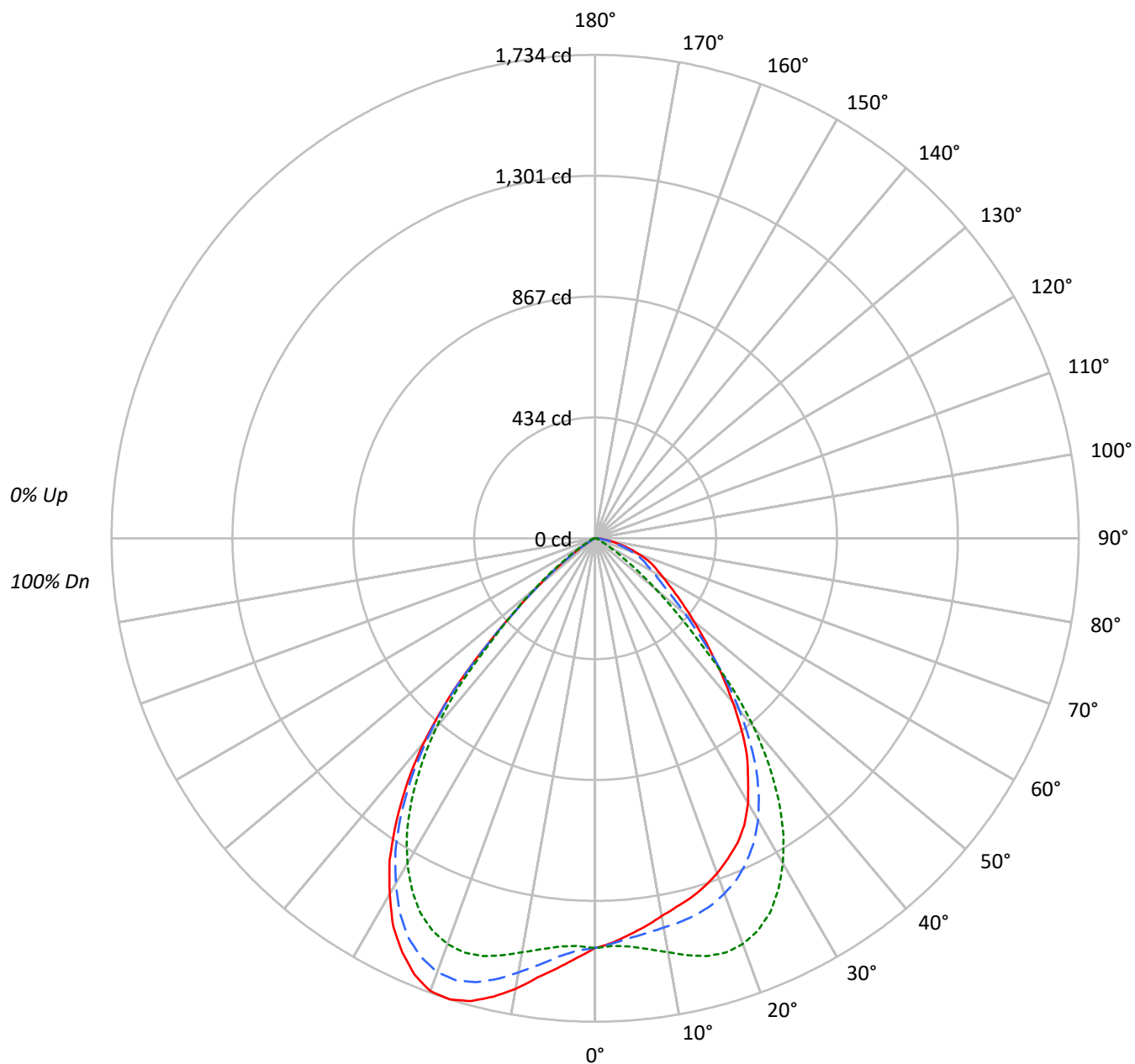
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80		
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72		
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53		
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48		
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40		
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	95904	95904	95904
5°	93415	96270	101332
10°	91143	99894	108745
15°	90081	104792	116085
20°	88791	107523	120013
25°	86900	106725	117854
30°	82580	101421	110951
35°	75550	91447	99053
40°	65348	75525	81265
45°	55109	49527	53163
50°	46790	28673	26957
55°	40606	13752	10385
60°	36678	6420	2570
65°	35583	3690	864
70°	31894	2957	801
75°	26215	2117	353
80°	19537	1052	0
85°	16842	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	5.3
10°-20°	432.7	16.1
20°-30°	661.2	24.6
30°-40°	691.5	25.7
40°-50°	448.6	16.7
50°-60°	178.1	6.6
60°-70°	84.5	3.1
70°-80°	40.2	1.5
80°-90°	8.2	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°	1235.9	46.0
0°-40°	1927.4	71.7
0°-60°	2554.1	95.1
0°-90°	2687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2687.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1470	1470	1470	1470	1470	
5°	1426	1439	1470	1506	1547	135
15°	1334	1398	1552	1648	1719	376
25°	1207	1283	1483	1582	1637	553
35°	949	1006	1148	1216	1244	587
45°	597	592	537	569	576	465
55°	357	304	121	94	91	323
65°	230	191	24	6	6	225
75°	104	84	8	3	1	112
85°	22	14	0	0	0	26
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°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1451.7	1454.5	1439.1	1434.9	1446.1	1450.3	1451.7	1447.5	1448.9	1454.5	1454.5
5°	1426.4	1429.2	1415.2	1411.0	1422.2	1425.0	1429.2	1427.8	1432.1	1440.5	1439.1
7.5°	1402.5	1406.8	1391.3	1385.7	1399.7	1406.8	1409.6	1409.6	1415.2	1426.4	1427.8
10°	1375.8	1381.5	1367.4	1364.6	1380.1	1387.1	1388.5	1391.3	1399.7	1415.2	1418.0
12.5°	1353.4	1359.0	1349.1	1344.9	1361.8	1368.8	1371.6	1377.2	1387.1	1406.8	1409.6
15°	1333.7	1337.9	1326.7	1323.8	1340.7	1349.1	1350.5	1359.0	1371.6	1394.1	1398.3
17.5°	1308.4	1311.2	1302.8	1300.0	1316.8	1325.2	1326.7	1336.5	1352.0	1374.4	1381.5
20°	1278.9	1281.7	1273.3	1270.4	1287.3	1297.1	1298.5	1307.0	1325.2	1349.1	1356.2
22.5°	1243.7	1249.4	1239.5	1236.7	1253.6	1262.0	1266.2	1273.3	1291.5	1315.4	1325.2
25°	1207.2	1207.2	1200.2	1198.8	1214.2	1224.1	1222.7	1232.5	1250.8	1274.7	1283.1
27.5°	1159.4	1158.0	1151.0	1149.6	1166.4	1174.9	1172.1	1181.9	1198.8	1222.7	1231.1
30°	1096.2	1099.0	1089.1	1086.3	1100.4	1114.4	1113.0	1122.9	1139.7	1162.2	1167.8
32.5°	1020.3	1023.1	1021.7	1017.5	1030.1	1037.2	1041.4	1048.4	1062.4	1086.3	1092.0
35°	948.6	944.4	938.8	938.8	951.4	962.7	958.5	966.9	980.9	1004.8	1006.2
37.5°	860.1	858.7	855.9	853.1	867.1	869.9	871.3	876.9	889.6	909.3	906.5
40°	767.3	768.7	767.3	761.7	770.1	781.4	780.0	782.8	794.0	808.1	803.9
42.5°	680.2	680.2	680.2	674.6	684.4	690.0	692.8	691.4	694.2	706.9	701.3
45°	597.3	598.7	597.3	595.9	597.3	600.1	597.3	595.9	595.9	600.1	591.7
47.5°	525.6	525.6	521.4	517.2	521.4	522.8	518.6	514.4	513.0	511.5	497.5
50°	461.0	459.6	458.1	451.1	455.3	456.7	451.1	448.3	442.7	435.7	418.8
52.5°	404.7	403.3	401.9	394.9	397.7	399.1	393.5	387.9	380.9	375.2	354.1
55°	357.0	355.6	355.6	351.3	348.5	351.3	345.7	341.5	331.7	324.6	303.6
57.5°	316.2	316.2	313.4	309.2	310.6	310.6	305.0	299.3	290.9	282.5	265.6
60°	281.1	281.1	281.1	276.9	276.9	276.9	274.0	268.4	261.4	253.0	236.1
62.5°	253.0	253.0	251.6	247.3	248.7	248.7	245.9	240.3	233.3	227.7	210.8
65°	230.5	230.5	230.5	226.3	226.3	227.7	224.9	219.2	213.6	206.6	191.1
67.5°	202.4	201.0	201.0	198.2	199.6	201.0	198.2	193.9	186.9	182.7	168.6
70°	167.2	168.6	170.0	165.8	167.2	167.2	165.8	161.6	157.4	153.2	140.5
72.5°	136.3	136.3	134.9	133.5	133.5	134.9	132.1	127.9	125.1	122.3	112.4
75°	104.0	102.6	104.0	101.2	101.2	101.2	98.4	97.0	95.6	91.3	84.3
77.5°	75.9	74.5	74.5	71.7	73.1	73.1	71.7	68.9	66.1	64.6	59.0
80°	52.0	52.0	52.0	50.6	50.6	49.2	49.2	47.8	45.0	43.6	40.8
82.5°	35.1	35.1	35.1	33.7	33.7	33.7	32.3	30.9	29.5	28.1	25.3
85°	22.5	22.5	22.5	21.1	21.1	21.1	19.7	19.7	18.3	16.9	14.1
87.5°	12.6	12.6	12.6	11.2	11.2	11.2	11.2	11.2	9.8	8.4	7.0
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°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1464.4	1444.7	1457.4	1457.4	1453.1	1464.4	1471.4	1477.0	1475.6	1463.0	1461.6
5°	1453.1	1436.3	1450.3	1451.7	1447.5	1463.0	1472.8	1479.8	1481.2	1470.0	1471.4
7.5°	1444.7	1430.7	1448.9	1454.5	1453.1	1467.2	1478.4	1489.7	1495.3	1486.9	1488.3
10°	1440.5	1429.2	1448.9	1457.4	1458.8	1474.2	1491.1	1506.5	1513.6	1507.9	1512.2
12.5°	1434.9	1427.8	1450.3	1463.0	1468.6	1484.1	1505.1	1523.4	1534.6	1531.8	1540.3
15°	1429.2	1423.6	1450.3	1468.6	1475.6	1489.7	1513.6	1540.3	1552.9	1551.5	1562.8
17.5°	1415.2	1413.8	1441.9	1461.6	1471.4	1488.3	1510.8	1543.1	1555.7	1558.5	1572.6
20°	1392.7	1392.7	1423.6	1444.7	1455.9	1471.4	1499.5	1530.4	1545.9	1548.7	1564.2
22.5°	1361.8	1364.6	1394.1	1415.2	1432.1	1443.3	1472.8	1505.1	1519.2	1523.4	1540.3
25°	1321.0	1323.8	1352.0	1373.0	1391.3	1403.9	1432.1	1461.6	1478.4	1482.6	1495.3
27.5°	1267.6	1273.3	1300.0	1321.0	1336.5	1344.9	1374.4	1405.4	1418.0	1422.2	1434.9
30°	1205.8	1207.2	1233.9	1252.2	1267.6	1274.7	1300.0	1332.3	1342.1	1346.3	1364.6
32.5°	1129.9	1128.5	1153.8	1170.7	1183.3	1191.7	1218.4	1239.5	1249.4	1256.4	1266.2
35°	1038.6	1037.2	1055.4	1075.1	1084.9	1087.7	1114.4	1136.9	1142.6	1148.2	1160.8
37.5°	936.0	936.0	951.4	961.3	972.5	976.7	989.4	1014.7	1024.5	1023.1	1032.9
40°	827.8	822.1	833.4	843.2	846.0	847.4	860.1	879.8	886.8	886.8	893.8
42.5°	713.9	705.5	706.9	712.5	715.3	705.5	713.9	726.6	722.4	728.0	729.4
45°	593.1	580.4	574.8	562.1	565.0	555.1	549.5	552.3	550.9	536.8	539.7
47.5°	494.7	472.2	462.4	444.1	439.9	428.6	421.6	409.0	397.7	397.7	390.7
50°	411.8	389.3	369.6	348.5	341.5	331.7	316.2	299.3	290.9	282.5	275.4
52.5°	345.7	321.8	297.9	275.4	265.6	253.0	231.9	215.0	199.6	191.1	182.7
55°	292.3	265.6	240.3	216.4	203.8	191.1	170.0	150.4	132.1	120.9	113.8
57.5°	251.6	226.3	199.6	174.3	163.0	149.0	126.5	105.4	88.5	75.9	68.9
60°	222.0	196.7	172.9	146.2	134.9	120.9	97.0	77.3	60.4	49.2	40.8
62.5°	196.7	174.3	149.0	125.1	113.8	99.8	77.3	57.6	42.2	30.9	23.9
65°	178.5	156.0	134.9	111.0	101.2	87.1	66.1	47.8	33.7	23.9	16.9
67.5°	157.4	137.7	116.6	97.0	87.1	75.9	56.2	40.8	28.1	19.7	14.1
70°	132.1	116.6	98.4	80.1	73.1	63.2	46.4	33.7	22.5	15.5	11.2
72.5°	105.4	92.8	78.7	64.6	59.0	49.2	37.9	26.7	16.9	11.2	8.4
75°	80.1	70.3	59.0	49.2	43.6	37.9	28.1	19.7	12.6	8.4	5.6
77.5°	54.8	50.6	42.2	33.7	30.9	26.7	18.3	12.6	8.4	5.6	2.8
80°	37.9	33.7	28.1	22.5	19.7	16.9	11.2	8.4	4.2	2.8	1.4
82.5°	23.9	19.7	16.9	14.1	12.6	9.8	7.0	4.2	2.8	1.4	1.4
85°	12.6	11.2	9.8	7.0	7.0	5.6	4.2	2.8	1.4	0.0	0.0
87.5°	7.0	5.6	4.2	2.8	2.8	1.4	1.4	1.4	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°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1478.4	1478.4	1477.0	1493.9	1474.2	1493.9	1484.1	1493.9	1479.8	1478.4	1479.8
5°	1489.7	1493.9	1495.3	1510.8	1492.5	1516.4	1507.9	1516.4	1506.5	1509.4	1513.6
7.5°	1512.2	1519.2	1517.8	1537.5	1519.2	1545.9	1540.3	1552.9	1543.1	1545.9	1551.5
10°	1537.5	1545.9	1547.3	1567.0	1550.1	1582.4	1575.4	1589.5	1581.0	1585.2	1592.3
12.5°	1567.0	1576.8	1578.2	1600.7	1582.4	1616.2	1611.9	1626.0	1619.0	1623.2	1631.6
15°	1589.5	1603.5	1606.3	1628.8	1609.1	1644.3	1641.5	1659.7	1648.5	1655.5	1662.5
17.5°	1600.7	1613.3	1619.0	1640.0	1623.2	1658.3	1655.5	1671.0	1662.5	1669.6	1678.0
20°	1593.7	1609.1	1613.3	1634.4	1617.6	1652.7	1648.5	1663.9	1655.5	1661.1	1669.6
22.5°	1568.4	1583.8	1589.5	1609.1	1593.7	1626.0	1624.6	1638.6	1627.4	1634.4	1641.5
25°	1523.4	1540.3	1543.1	1561.3	1544.5	1578.2	1575.4	1590.9	1582.4	1586.6	1596.5
27.5°	1458.8	1478.4	1482.6	1498.1	1485.5	1513.6	1513.6	1526.2	1516.4	1516.4	1526.2
30°	1381.5	1401.1	1403.9	1416.6	1405.4	1430.7	1432.1	1444.7	1429.2	1437.7	1439.1
32.5°	1287.3	1300.0	1308.4	1319.6	1302.8	1335.1	1330.9	1340.7	1332.3	1332.3	1339.3
35°	1173.5	1188.9	1193.1	1207.2	1193.1	1218.4	1218.4	1224.1	1215.6	1215.6	1226.9
37.5°	1049.8	1061.0	1062.4	1076.5	1065.3	1086.3	1084.9	1089.1	1080.7	1086.3	1086.3
40°	905.0	913.5	916.3	923.3	921.9	937.4	936.0	938.8	934.6	936.0	938.8
42.5°	736.4	747.6	753.3	758.9	750.5	771.5	767.3	771.5	770.1	771.5	775.8
45°	542.5	550.9	555.1	556.5	553.7	566.4	576.2	567.8	569.2	566.4	572.0
47.5°	392.1	393.5	390.7	399.1	392.1	397.7	400.5	401.9	393.5	392.1	397.7
50°	268.4	275.4	265.6	269.8	268.4	274.0	271.2	272.6	264.2	268.4	265.6
52.5°	178.5	177.1	174.3	175.7	172.9	172.9	172.9	175.7	170.0	167.2	164.4
55°	108.2	105.4	99.8	98.4	98.4	99.8	97.0	94.2	94.2	92.8	92.8
57.5°	63.2	59.0	56.2	54.8	52.0	50.6	49.2	49.2	46.4	46.4	46.4
60°	35.1	30.9	28.1	25.3	25.3	23.9	22.5	21.1	21.1	21.1	19.7
62.5°	18.3	15.5	12.6	11.2	11.2	9.8	8.4	8.4	8.4	8.4	7.0
65°	12.6	9.8	8.4	7.0	7.0	5.6	5.6	5.6	5.6	5.6	5.6
67.5°	9.8	8.4	7.0	5.6	5.6	5.6	4.2	4.2	4.2	4.2	4.2
70°	8.4	5.6	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
72.5°	5.6	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0
80°	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252157

CATALOG NUMBER: LD6B20D010 EU6B10208040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1492.5	1491.1	1492.5	1495.3	1489.7	1506.5	1498.1	1506.5
5°	1524.8	1526.2	1527.6	1531.8	1524.8	1545.9	1534.6	1547.3
7.5°	1567.0	1568.4	1569.8	1574.0	1569.8	1590.9	1578.2	1589.5
10°	1610.5	1613.3	1613.3	1620.4	1616.2	1635.8	1627.4	1641.5
12.5°	1651.3	1654.1	1656.9	1661.1	1658.3	1679.4	1672.4	1683.6
15°	1683.6	1689.2	1690.6	1696.3	1693.5	1715.9	1707.5	1718.7
17.5°	1699.1	1704.7	1704.7	1711.7	1708.9	1732.8	1721.6	1734.2
20°	1690.6	1694.9	1696.3	1703.3	1700.5	1724.4	1713.1	1728.6
22.5°	1663.9	1665.3	1666.8	1673.8	1672.4	1693.5	1683.6	1693.5
25°	1614.8	1619.0	1617.6	1623.2	1623.2	1640.0	1628.8	1637.2
27.5°	1544.5	1548.7	1548.7	1555.7	1550.1	1567.0	1555.7	1568.4
30°	1458.8	1463.0	1460.2	1465.8	1460.2	1477.0	1468.6	1472.8
32.5°	1356.2	1356.2	1357.6	1359.0	1356.2	1371.6	1363.2	1371.6
35°	1233.9	1236.7	1238.1	1239.5	1236.7	1248.0	1238.1	1243.7
37.5°	1096.2	1103.2	1101.8	1103.2	1099.0	1113.0	1104.6	1107.4
40°	948.6	948.6	947.2	950.0	945.8	957.0	951.4	954.2
42.5°	777.2	781.4	775.8	782.8	771.5	787.0	781.4	777.2
45°	583.2	577.6	576.2	577.6	573.4	574.8	579.0	576.2
47.5°	397.7	397.7	394.9	390.7	396.3	397.7	392.1	392.1
50°	267.0	267.0	264.2	262.8	265.6	264.2	261.4	265.6
52.5°	170.0	164.4	164.4	167.2	164.4	161.6	165.8	163.0
55°	92.8	89.9	89.9	92.8	89.9	89.9	88.5	91.3
57.5°	45.0	46.4	45.0	45.0	45.0	45.0	43.6	45.0
60°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
62.5°	8.4	8.4	7.0	7.0	7.0	7.0	7.0	7.0
65°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
67.5°	4.2	4.2	4.2	4.2	4.2	5.6	4.2	4.2
70°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
72.5°	4.2	4.2	5.6	5.6	5.6	5.6	5.6	5.6
75°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)