

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P640216

Luminaire Tested: LCR830RD9FSE010-33W-3000K

Issue Date: 2/13/2023

Test Information

Test Method: LM-79-2019
Report Number: P640216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2208047C001)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR830RD9FSE010-33W-3000K
Description: LCR 8
Light Source: 3000K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

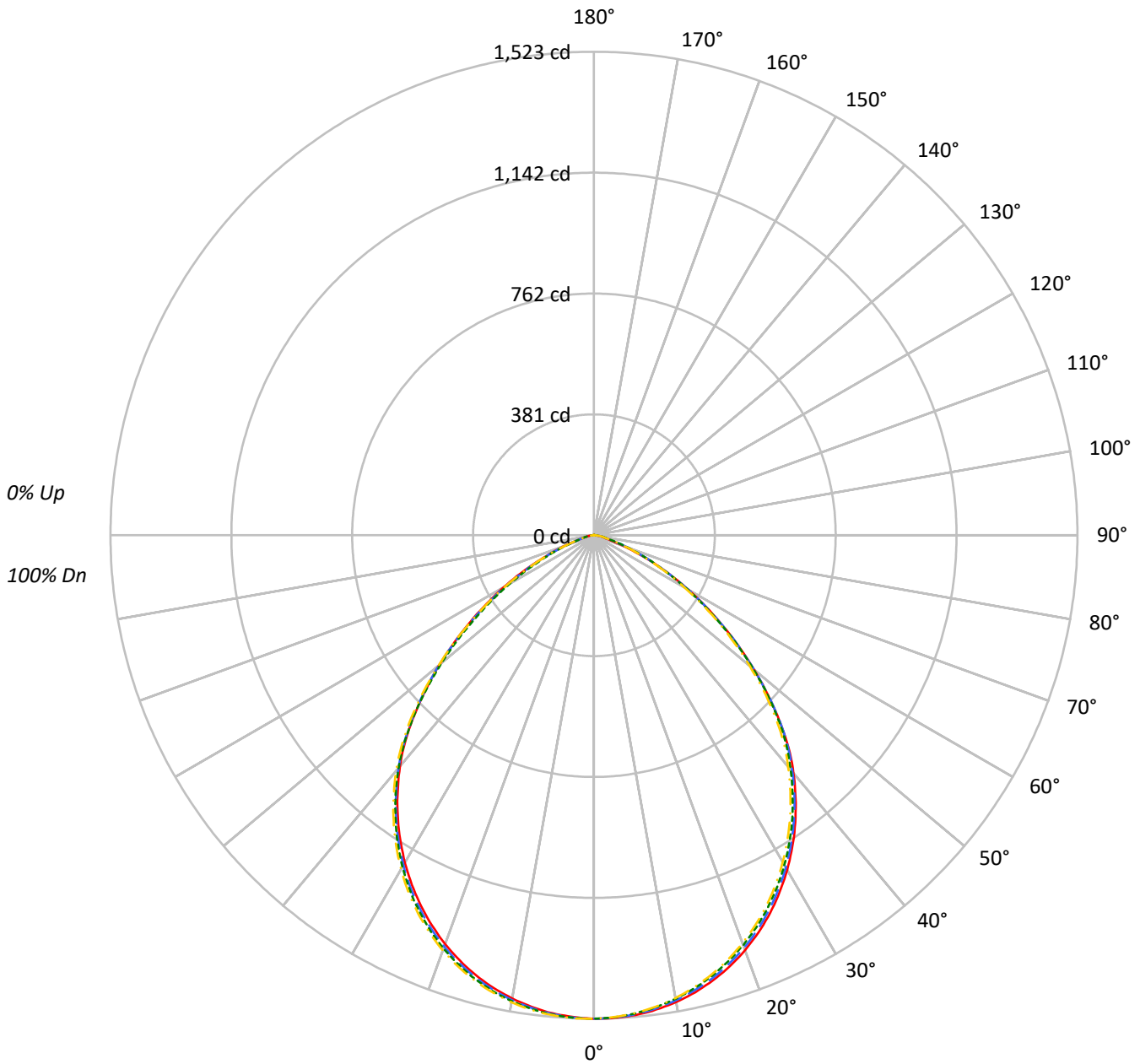
Lumens per Lamp: N/A
Luminaire Lumens: 3150.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.26
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
Input Voltage (V): 120
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: 24 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



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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
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	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77		
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67		
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52		
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46		
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	47	43	41		
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37		
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	46961	46961	46961	46961
5°	46948	46790	46778	46920
10°	46746	46423	46398	46661
15°	46315	45865	45808	46185
20°	45656	45137	44964	45466
25°	44670	44048	43843	44398
30°	43348	42703	42400	42952
35°	41612	40983	40562	41032
40°	39360	38797	38265	38555
45°	36039	35812	34852	34883
50°	31571	31422	30468	30041
55°	26574	26268	25542	24612
60°	21228	20802	20247	18977
65°	15272	15366	14418	13250
70°	9088	10206	8691	7916
75°	4861	6124	4801	4623
80°	4049	5008	3942	3853
85°	2937	4706	2830	2724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 36108 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.7	4.6
10°-20°	406.4	12.9
20°-30°	598.0	19.0
30°-40°	680.4	21.6
40°-50°	623.1	19.8
50°-60°	428.9	13.6
60°-70°	202.4	6.4
70°-80°	53.4	1.7
80°-90°	11.3	0.4
90°-100°	0.1	0.0
100°-110°	0.2	0.0
110°-120°	0.3	0.0
120°-130°	0.4	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1148.1	36.4
0°-40°	1828.4	58.0
0°-60°	2880.4	91.4
0°-90°	3147.5	99.9
90°-120°	0.6	0.0
90°-150°	1.8	0.1
90°-180°	2.0	0.1
0°-180°	3150.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1523	1523	1523	1523	1523	
5°	1517	1512	1511	1516	1517	144
15°	1451	1437	1435	1447	1451	409
25°	1313	1295	1289	1305	1313	604
35°	1105	1089	1078	1090	1105	690
45°	826	821	799	800	826	634
55°	494	489	475	458	494	443
65°	209	211	198	182	209	210
75°	41	51	40	39	41	51
85°	8	13	8	8	8	10
90°	0	1	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	1	0	1	1	1	0
145°	1	1	1	1	1	0
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9
0.5°	1523.4	1522.9	1522.9	1522.6	1522.6	1522.6	1522.4	1522.4	1522.5	1522.5	1522.7
1°	1523.0	1522.8	1522.4	1522.1	1522.1	1522.1	1521.8	1521.8	1522.0	1522.1	1522.3
1.5°	1522.8	1522.7	1521.9	1521.5	1521.2	1521.1	1521.2	1521.1	1521.2	1521.5	1521.8
2°	1522.6	1522.2	1521.3	1520.9	1520.4	1520.2	1520.1	1519.9	1520.0	1520.5	1521.2
2.5°	1521.7	1521.4	1520.6	1519.9	1519.3	1519.1	1518.7	1518.7	1519.1	1519.3	1520.5
3°	1520.9	1520.7	1519.7	1518.7	1518.1	1517.8	1517.4	1517.3	1517.6	1518.5	1519.5
3.5°	1520.1	1519.9	1518.6	1517.4	1516.9	1516.3	1515.9	1515.7	1516.1	1517.5	1518.3
4°	1519.1	1518.5	1517.2	1515.9	1515.3	1514.7	1514.3	1514.4	1514.7	1515.8	1517.0
4.5°	1518.0	1517.2	1515.6	1514.2	1513.5	1512.6	1512.4	1512.7	1513.1	1514.6	1515.3
5°	1516.7	1515.5	1513.9	1512.4	1511.6	1510.8	1510.4	1510.6	1511.2	1512.4	1513.7
5.5°	1515.1	1513.7	1512.2	1510.0	1509.3	1508.6	1507.9	1508.2	1509.5	1510.2	1511.8
6°	1513.4	1512.0	1510.4	1508.1	1507.0	1506.4	1505.7	1505.8	1506.7	1508.1	1509.6
6.5°	1511.6	1509.8	1508.0	1505.9	1504.6	1503.7	1503.1	1503.1	1504.2	1505.8	1507.5
7°	1509.7	1507.8	1505.6	1503.5	1501.9	1501.0	1500.3	1500.6	1501.6	1503.2	1505.1
7.5°	1506.6	1505.4	1502.6	1500.8	1499.1	1498.2	1497.4	1497.4	1498.7	1500.3	1502.4
8°	1504.5	1502.8	1500.1	1498.0	1496.2	1495.0	1494.2	1494.2	1495.6	1497.4	1499.5
8.5°	1501.7	1500.1	1497.1	1495.0	1492.9	1491.8	1491.1	1491.2	1492.4	1494.3	1496.4
9°	1499.1	1497.1	1494.1	1491.7	1489.7	1488.4	1487.6	1487.9	1488.9	1491.0	1493.2
9.5°	1496.2	1494.1	1490.7	1488.3	1486.2	1484.7	1483.9	1484.2	1485.5	1487.4	1490.3
10°	1492.9	1490.9	1487.5	1484.7	1482.6	1480.9	1480.1	1480.3	1481.8	1483.8	1487.0
10.5°	1489.5	1487.4	1483.9	1480.9	1478.7	1476.7	1476.0	1476.5	1477.8	1480.1	1483.2
11°	1485.9	1483.8	1480.3	1477.1	1474.8	1472.5	1471.8	1472.6	1473.8	1476.2	1479.3
11.5°	1482.4	1479.9	1476.4	1473.2	1470.7	1468.3	1467.4	1468.3	1469.7	1472.0	1475.2
12°	1478.4	1475.9	1472.1	1468.3	1466.3	1463.6	1462.7	1463.9	1465.4	1467.7	1471.1
12.5°	1474.5	1471.7	1467.9	1464.1	1461.9	1459.3	1458.2	1459.3	1460.7	1463.2	1466.5
13°	1469.9	1467.5	1463.4	1459.5	1457.1	1454.3	1453.5	1454.3	1456.0	1458.6	1461.9
13.5°	1465.3	1463.0	1458.8	1454.8	1452.4	1449.4	1448.3	1449.2	1450.8	1453.6	1457.2
14°	1460.7	1458.3	1453.9	1449.8	1447.3	1444.5	1443.2	1444.0	1445.8	1448.3	1452.2
14.5°	1456.1	1453.6	1449.1	1444.6	1441.9	1439.3	1438.0	1438.6	1440.5	1443.1	1447.1
15°	1450.8	1448.3	1443.8	1439.1	1436.7	1433.7	1432.3	1433.1	1434.9	1437.8	1441.8
15.5°	1445.6	1443.0	1438.4	1433.5	1431.2	1428.3	1426.7	1427.2	1429.2	1432.2	1436.3
16°	1440.4	1437.6	1432.9	1428.1	1425.3	1422.6	1420.5	1421.5	1423.5	1426.5	1430.7
16.5°	1435.1	1432.1	1427.4	1422.2	1419.3	1416.4	1414.6	1415.6	1417.3	1420.6	1425.0
17°	1429.3	1426.2	1421.3	1416.1	1413.2	1410.4	1408.4	1409.1	1411.3	1414.5	1418.8
17.5°	1423.4	1420.0	1415.4	1410.1	1407.3	1403.9	1401.9	1402.7	1404.7	1408.0	1412.4
18°	1417.4	1413.8	1409.0	1403.7	1401.1	1397.5	1395.5	1396.2	1398.1	1401.5	1406.0
18.5°	1411.0	1407.1	1402.7	1397.2	1394.6	1390.6	1388.8	1389.3	1391.4	1394.8	1399.6
19°	1404.6	1400.7	1396.1	1390.3	1387.5	1383.8	1381.8	1382.2	1384.5	1388.1	1392.7
19.5°	1398.1	1394.3	1389.6	1383.8	1380.8	1377.0	1374.7	1375.0	1377.3	1381.3	1386.0
20°	1391.3	1387.7	1382.6	1376.8	1375.5	1369.8	1367.8	1368.1	1370.2	1374.2	1378.9
20.5°	1383.8	1380.7	1375.5	1369.8	1366.6	1362.7	1360.0	1360.7	1362.9	1366.6	1371.6
21°	1376.7	1373.4	1368.2	1362.5	1359.3	1355.4	1352.5	1353.2	1355.3	1359.3	1364.0
21.5°	1369.5	1366.1	1360.8	1355.0	1351.6	1347.5	1344.5	1345.4	1347.4	1351.6	1356.3
22°	1361.7	1358.6	1353.2	1347.6	1344.2	1339.6	1337.0	1337.7	1339.4	1343.9	1348.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1353.9	1350.8	1345.7	1339.6	1336.4	1331.9	1329.2	1329.7	1331.4	1335.7	1340.6
23°	1346.4	1343.0	1337.6	1331.6	1328.4	1323.7	1321.2	1321.3	1323.4	1327.5	1332.5
23.5°	1338.2	1335.0	1329.4	1323.2	1320.2	1315.3	1312.7	1312.6	1314.8	1319.1	1324.1
24°	1329.8	1326.6	1321.0	1315.0	1311.7	1306.7	1304.1	1304.0	1306.1	1310.6	1315.5
24.5°	1321.6	1318.4	1312.6	1306.3	1303.5	1298.3	1295.6	1295.2	1297.4	1301.7	1306.9
25°	1312.9	1309.7	1304.0	1297.6	1294.6	1289.5	1286.2	1286.3	1288.6	1292.7	1297.8
25.5°	1303.9	1301.1	1295.0	1288.9	1285.7	1280.3	1277.5	1277.4	1279.4	1284.0	1289.3
26°	1295.1	1292.2	1286.0	1280.1	1276.8	1271.1	1268.4	1268.2	1270.2	1274.7	1280.3
26.5°	1286.0	1283.0	1277.2	1271.1	1267.7	1262.5	1258.9	1258.7	1260.6	1265.2	1270.7
27°	1276.4	1273.8	1267.8	1261.9	1258.1	1252.5	1249.1	1249.1	1251.2	1255.5	1261.1
27.5°	1267.0	1264.1	1258.3	1252.3	1249.2	1243.3	1240.0	1239.4	1241.5	1245.6	1251.5
28°	1257.3	1254.5	1248.1	1242.7	1239.3	1233.6	1229.7	1229.5	1231.6	1236.1	1241.5
28.5°	1247.6	1244.7	1238.9	1232.7	1230.1	1223.7	1219.9	1219.6	1221.4	1225.7	1231.4
29°	1237.8	1235.0	1229.2	1223.0	1219.8	1213.8	1209.7	1209.1	1211.5	1215.6	1221.3
29.5°	1227.5	1224.8	1218.8	1212.9	1209.7	1203.7	1199.5	1199.1	1201.2	1205.4	1211.0
30°	1217.4	1214.6	1208.8	1202.6	1199.3	1193.7	1189.0	1188.8	1190.8	1194.9	1200.3
30.5°	1206.8	1204.0	1198.0	1192.2	1188.9	1183.0	1178.6	1178.0	1180.0	1184.0	1189.4
31°	1196.0	1193.6	1187.6	1181.7	1178.3	1172.3	1167.7	1167.4	1169.1	1173.4	1178.8
31.5°	1185.2	1182.6	1177.1	1170.9	1167.8	1161.3	1156.6	1156.4	1158.1	1162.4	1167.8
32°	1174.5	1171.9	1166.2	1160.2	1156.8	1150.5	1145.3	1145.3	1147.2	1151.4	1156.7
32.5°	1163.1	1160.8	1154.9	1149.1	1146.0	1139.8	1135.0	1134.3	1136.0	1140.1	1145.4
33°	1152.1	1149.7	1144.0	1138.0	1135.0	1128.2	1123.7	1123.0	1124.6	1128.7	1133.5
33.5°	1141.0	1138.2	1132.5	1126.6	1123.6	1116.9	1112.2	1111.5	1112.9	1116.8	1121.8
34°	1129.4	1126.8	1121.4	1115.5	1112.2	1105.3	1100.8	1099.7	1101.3	1105.3	1110.1
34.5°	1117.3	1114.7	1109.4	1103.8	1100.5	1094.0	1089.1	1088.0	1089.4	1093.1	1098.2
35°	1105.4	1103.3	1097.9	1092.0	1088.7	1082.2	1077.2	1076.1	1077.5	1081.3	1086.5
35.5°	1093.1	1091.1	1086.1	1080.3	1077.0	1070.4	1065.6	1064.0	1065.6	1069.0	1074.2
36°	1081.1	1079.3	1074.0	1068.2	1064.8	1057.9	1053.1	1051.6	1053.5	1056.8	1061.8
36.5°	1068.7	1066.8	1061.6	1056.0	1052.7	1046.1	1040.8	1039.5	1041.0	1044.4	1049.3
37°	1056.2	1054.4	1049.6	1043.4	1040.1	1033.3	1028.3	1027.0	1028.3	1031.6	1036.7
37.5°	1043.4	1041.7	1037.2	1030.9	1027.7	1021.2	1016.0	1014.7	1015.6	1018.8	1023.7
38°	1030.6	1029.0	1024.2	1018.4	1014.9	1008.4	1003.1	1002.2	1002.8	1006.2	1010.7
38.5°	1017.8	1015.8	1011.2	1005.6	1002.1	995.7	990.3	989.3	990.1	992.9	997.7
39°	1004.7	1003.0	998.9	993.0	989.7	982.7	977.5	976.2	977.1	980.0	984.7
39.5°	991.4	989.7	985.9	979.7	976.8	970.2	964.6	963.3	963.8	966.7	971.2
40°	977.8	976.8	972.6	966.6	963.8	956.8	951.2	950.1	950.6	953.7	957.9
40.5°	964.5	963.4	959.1	953.5	950.6	943.7	938.5	937.0	937.6	940.1	944.0
41°	951.2	950.3	945.9	940.0	937.3	930.3	925.2	923.6	924.0	926.1	930.0
41.5°	936.8	936.6	932.5	926.5	924.1	917.4	911.9	910.4	909.8	911.3	915.0
42°	922.4	922.7	919.1	913.1	910.9	903.9	898.5	896.1	894.7	896.2	900.2
42.5°	907.3	907.7	905.2	899.2	897.4	890.2	884.1	881.3	879.7	880.7	884.4
43°	891.6	892.7	890.0	884.8	882.8	876.0	869.4	865.9	864.0	865.0	868.7
43.5°	875.3	877.1	874.5	869.6	868.2	860.9	854.1	850.4	848.1	849.1	852.6
44°	859.3	860.7	858.8	853.6	852.5	845.4	838.5	834.1	831.9	833.3	836.6
44.5°	842.8	844.2	842.9	837.8	837.1	829.7	822.7	818.2	815.8	816.7	820.0



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	826.4	828.0	826.6	821.6	821.2	813.9	806.5	802.2	799.2	800.3	803.6
45.5°	809.9	811.4	809.9	805.7	804.9	797.7	790.8	785.8	783.1	783.9	787.2
46°	793.3	794.6	793.4	788.9	789.3	781.4	774.3	769.2	766.6	767.3	770.6
46.5°	776.0	777.9	776.6	772.5	772.0	764.8	757.6	752.9	750.2	750.9	753.6
47°	759.2	761.1	759.8	755.2	755.6	748.2	741.0	736.7	733.3	734.1	736.7
47.5°	742.1	744.3	742.6	738.1	738.8	731.6	724.7	720.3	717.1	717.6	720.0
48°	725.6	727.4	725.6	721.2	722.4	714.9	707.7	704.0	701.0	701.2	703.3
48.5°	708.9	710.4	708.6	704.6	705.6	698.2	690.7	687.7	684.9	684.8	686.6
49°	691.9	693.5	691.4	687.1	688.7	681.5	673.7	671.4	668.7	668.4	669.9
49.5°	675.2	676.6	675.2	670.5	671.9	664.7	656.7	655.0	652.5	651.9	653.2
50°	658.1	659.7	657.6	653.2	655.0	648.0	641.3	637.8	635.1	634.6	635.9
50.5°	641.2	642.9	640.6	636.1	637.9	631.3	624.6	620.9	618.7	617.9	619.1
51°	624.7	625.9	623.9	619.2	621.2	614.0	608.1	604.4	602.3	601.4	601.8
51.5°	607.9	609.4	607.1	602.6	604.3	597.4	591.7	588.1	586.5	585.2	585.2
52°	591.4	592.9	590.7	585.6	587.9	580.9	574.9	572.1	569.8	568.9	568.7
52.5°	574.9	576.6	573.8	569.0	570.8	564.2	558.4	555.7	553.6	552.4	552.1
53°	558.7	559.9	557.2	552.4	554.1	547.6	542.2	539.4	537.9	536.2	535.2
53.5°	542.3	543.6	540.9	535.9	537.2	530.9	526.2	523.5	521.8	520.1	518.8
54°	525.9	527.3	524.1	519.4	520.8	514.8	510.1	507.7	505.9	504.2	502.8
54.5°	510.3	511.5	508.5	503.3	504.5	498.9	494.0	492.2	490.1	488.4	486.6
55°	494.3	495.5	492.4	487.0	488.6	483.1	478.4	476.8	475.1	472.6	470.7
55.5°	478.0	480.2	476.5	471.0	472.3	467.3	462.7	461.3	459.4	457.3	454.5
56°	463.3	464.4	461.0	455.5	456.5	451.6	447.6	446.0	444.2	441.7	438.9
56.5°	447.7	449.1	445.6	440.1	440.8	436.0	432.1	430.8	428.9	426.5	423.6
57°	432.2	433.6	430.0	424.4	425.4	420.7	417.1	415.9	414.4	411.2	408.2
57.5°	416.6	418.9	414.9	409.1	409.9	405.6	402.1	401.3	399.4	396.3	393.0
58°	402.6	403.8	400.0	394.3	395.1	390.9	387.6	387.1	384.9	381.7	377.9
58.5°	387.7	389.2	385.4	379.5	380.4	376.0	372.9	372.4	370.6	367.3	363.5
59°	373.0	374.4	370.8	364.4	365.8	361.8	358.9	358.1	356.8	353.0	348.7
59.5°	358.2	360.3	356.5	350.5	351.5	347.4	344.5	344.1	342.2	338.8	334.3
60°	344.2	346.0	342.3	336.5	337.3	333.3	330.7	330.4	328.3	324.7	320.0
60.5°	329.3	332.5	326.7	323.0	323.4	319.8	316.9	316.8	314.9	311.0	306.1
61°	315.8	319.0	313.6	309.5	309.8	306.2	303.6	303.2	301.8	297.5	292.1
61.5°	302.3	305.4	300.4	296.0	296.6	292.8	290.6	290.3	288.2	284.3	278.6
62°	288.8	291.9	287.3	282.4	283.5	280.1	277.7	277.4	275.6	271.0	265.6
62.5°	275.3	278.4	274.1	268.9	270.7	267.3	264.8	264.8	262.2	258.2	252.4
63°	262.0	264.8	261.4	255.8	257.8	254.6	252.5	252.1	248.8	245.3	239.3
63.5°	248.9	252.1	248.9	244.0	245.6	242.2	240.2	239.7	235.8	232.9	227.1
64°	235.4	239.8	236.7	232.0	233.7	230.4	228.4	228.1	223.1	220.7	214.7
64.5°	222.3	227.7	224.8	220.1	222.0	218.8	216.5	216.1	210.1	208.3	202.9
65°	209.3	215.4	213.2	208.7	210.6	207.5	205.5	204.7	197.6	196.3	191.3
65.5°	196.6	203.6	201.6	197.6	199.5	196.3	194.2	193.4	185.5	184.7	180.0
66°	183.8	191.8	190.4	186.4	188.4	185.4	183.4	181.8	173.9	173.1	168.7
66.5°	171.9	180.3	179.6	175.9	177.8	175.2	172.9	170.8	162.9	162.0	158.0
67°	160.3	169.0	169.0	165.6	167.7	165.1	162.8	160.2	152.4	151.2	147.9



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	149.7	158.2	158.9	155.8	157.8	155.2	152.8	149.7	142.0	141.0	138.1
68°	139.3	147.7	148.9	146.3	148.0	145.5	143.2	139.6	132.1	131.0	128.1
68.5°	129.5	137.3	139.2	136.8	139.0	136.6	134.1	129.8	122.7	121.6	119.0
69°	119.8	127.6	130.0	128.1	130.0	127.6	125.2	120.6	113.6	112.5	110.1
69.5°	110.1	118.2	121.1	119.3	121.4	119.1	116.5	111.9	104.7	103.8	101.6
70°	100.8	109.3	112.6	111.1	113.2	111.1	108.3	103.5	96.4	95.6	93.5
70.5°	92.0	100.9	104.3	103.3	105.4	103.4	100.6	95.7	89.3	88.7	86.6
71°	83.7	92.6	96.4	95.7	97.9	95.8	93.2	89.1	82.3	81.8	79.6
71.5°	76.0	85.0	89.1	88.5	90.8	89.5	86.9	82.5	75.2	75.0	72.7
72°	68.7	77.9	82.1	81.8	84.5	83.1	80.6	75.9	68.1	68.1	65.7
72.5°	62.2	71.2	75.2	75.5	78.2	76.8	74.3	69.4	61.1	61.2	60.2
73°	56.3	64.9	69.2	69.5	72.0	70.5	68.0	62.8	55.3	56.0	55.0
73.5°	51.0	59.3	63.5	63.9	65.8	64.2	61.7	57.4	50.7	51.3	50.4
74°	47.1	54.4	58.3	58.9	60.6	59.2	56.7	52.8	47.1	47.1	46.3
74.5°	43.7	50.0	53.4	54.1	55.8	54.5	52.1	48.4	43.3	43.3	42.8
75°	40.8	46.0	49.0	49.8	51.4	50.2	47.9	44.6	40.3	40.1	40.0
75.5°	38.7	42.4	45.2	46.0	47.5	46.4	44.2	41.1	38.2	37.8	37.9
76°	36.7	39.2	41.8	42.7	44.0	42.9	41.0	38.4	36.2	35.8	36.0
76.5°	34.8	36.9	39.1	39.8	40.9	40.1	38.6	36.4	34.3	33.9	34.1
77°	33.0	35.0	37.2	37.8	38.6	38.0	36.7	34.4	32.4	32.0	32.3
77.5°	31.3	32.9	35.3	36.0	36.8	36.2	34.9	32.6	30.6	30.2	30.6
78°	29.5	31.2	33.5	34.2	35.0	34.4	33.1	30.8	28.9	28.4	28.8
78.5°	27.8	29.5	31.9	32.6	33.2	32.6	31.4	29.0	27.2	26.7	27.1
79°	26.1	27.8	30.2	30.9	31.5	30.9	29.7	27.3	25.5	25.0	25.5
79.5°	24.4	26.1	28.5	29.3	29.8	29.3	28.0	25.6	23.8	23.3	23.9
80°	22.8	24.4	26.8	27.6	28.2	27.7	26.3	24.0	22.2	21.8	22.3
80.5°	21.2	22.8	25.1	26.0	26.6	26.1	24.7	22.3	20.7	20.2	20.8
81°	19.7	21.2	23.5	24.4	25.0	24.5	23.2	20.7	19.1	18.6	19.2
81.5°	18.2	19.7	22.0	22.8	23.5	23.0	21.6	19.2	17.6	17.1	17.8
82°	16.7	18.2	20.4	21.4	22.0	21.4	20.1	17.7	16.1	15.5	16.3
82.5°	15.2	16.7	19.0	19.9	20.5	20.0	18.6	16.1	14.6	14.1	14.9
83°	13.8	15.2	17.5	18.4	19.0	18.5	17.1	14.7	13.2	12.6	13.5
83.5°	12.4	13.7	16.0	17.0	17.6	17.1	15.7	13.3	11.8	11.3	12.1
84°	11.0	12.3	14.7	15.6	16.1	15.6	14.2	11.8	10.4	9.9	10.8
84.5°	9.6	10.9	13.3	14.2	14.7	14.3	12.9	10.5	9.2	8.8	9.6
85°	8.3	9.6	11.9	12.8	13.3	12.9	11.5	9.3	8.0	7.6	8.3
85.5°	7.1	8.3	10.6	11.5	12.0	11.5	10.2	8.1	6.8	6.5	7.1
86°	6.1	7.3	9.4	10.1	10.7	10.2	9.0	6.9	5.6	5.3	5.8
86.5°	5.0	6.1	8.2	8.8	9.4	8.9	7.8	5.8	4.4	4.2	4.6
87°	4.1	5.1	7.0	7.6	8.1	7.7	6.6	4.6	3.5	3.3	3.4
87.5°	3.3	4.2	5.8	6.3	6.8	6.4	5.4	3.7	2.7	2.3	2.3
88°	2.5	3.2	4.6	5.0	5.6	5.1	4.2	2.7	1.9	1.4	1.2
88.5°	1.8	2.5	3.4	3.8	4.3	3.9	3.0	1.9	1.0	0.6	0.3
89°	1.0	1.7	2.6	2.9	3.1	2.7	1.9	1.0	0.3	0.2	0.1
89.5°	0.3	1.0	1.8	2.0	1.9	1.5	0.9	0.3	0.2	0.2	0.1



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.1	0.2	1.0	1.1	0.8	0.5	0.2	0.2	0.2	0.2	0.1
90.5°	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1
91°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1
91.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1
92°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
92.5°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
93°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
93.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
94°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
94.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
96°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
96.5°	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
97°	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
97.5°	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
98°	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
98.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
99°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
99.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
100°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
100.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
101°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
101.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
102°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
102.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1
103°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
103.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
104°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
104.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
105°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1
105.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1
106°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
106.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
107°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
107.5°	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
108°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
108.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
109°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
109.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
111°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
111.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
112°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
113°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
113.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2
114°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2
114.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2
115°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2
115.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2
116°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2
116.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3
117°	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
117.5°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
118°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
118.5°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
119°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
119.5°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
120°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
120.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
121°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
121.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
122°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3
122.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3
123°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3
123.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3
124°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4
124.5°	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
125°	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125.5°	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
126°	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
126.5°	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127°	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127.5°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
128°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4
128.5°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4
129°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4
129.5°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4
130°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4
130.5°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4
131°	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
131.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
132°	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
132.5°	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
133°	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
133.5°	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
134°	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5
134.5°	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
135.5°	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5
136°	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5
136.5°	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.5
137°	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.5
137.5°	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6
138°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
138.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
139°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
139.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
140°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
140.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
141°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
141.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
142°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
142.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
143°	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6
143.5°	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
144°	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
144.5°	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
145°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
145.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
146°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
146.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
147°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
147.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
148°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
148.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
149°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
149.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7
150°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
150.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
151°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
151.5°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
152°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
152.5°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
153°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
153.5°	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
154°	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
154.5°	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155.5°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
156°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
156.5°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.8
157°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9
158°	0.8	0.8	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9
158.5°	0.8	0.8	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9
159°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
159.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
161°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
161.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
162°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
163°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
163.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
164°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
164.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
165.5°	0.8	0.8	0.8	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
166°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
166.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
167°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
167.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
168°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
168.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
169°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
169.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
170°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
170.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
171°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
171.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
172°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
172.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
173°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
173.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
174°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
174.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
175°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
175.5°	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	0.9	0.9
176°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9
176.5°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9
177°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9
177.5°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9
178°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9
178.5°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9
179°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9
179.5°	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9



TEST NUMBER: P640216
CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1522.9	1522.9	1522.9	1522.9	1522.9	1522.9
0.5°	1523.4	1522.9	1522.7	1523.1	1523.3	1523.4
1°	1523.0	1522.7	1522.9	1523.3	1523.5	1523.0
1.5°	1522.5	1521.9	1522.7	1523.3	1523.3	1522.8
2°	1522.0	1521.5	1522.4	1523.1	1523.0	1522.6
2.5°	1521.4	1521.3	1521.8	1522.6	1522.4	1521.7
3°	1520.8	1520.6	1521.1	1522.0	1521.8	1520.9
3.5°	1519.9	1519.5	1520.3	1521.0	1521.1	1520.1
4°	1518.3	1518.4	1519.7	1520.0	1520.1	1519.1
4.5°	1517.1	1517.2	1518.1	1518.8	1519.0	1518.0
5°	1515.3	1515.8	1516.6	1517.5	1517.6	1516.7
5.5°	1513.5	1514.0	1515.1	1515.9	1516.1	1515.1
6°	1511.5	1512.1	1513.3	1514.3	1514.3	1513.4
6.5°	1509.5	1509.6	1511.3	1512.4	1512.4	1511.6
7°	1507.1	1507.1	1509.1	1510.3	1510.2	1509.7
7.5°	1504.5	1505.1	1506.9	1508.1	1507.9	1506.6
8°	1501.7	1502.3	1504.4	1505.6	1505.6	1504.5
8.5°	1499.3	1499.9	1501.8	1503.0	1502.7	1501.7
9°	1496.1	1496.8	1498.7	1500.4	1499.9	1499.1
9.5°	1493.0	1493.5	1495.7	1497.3	1497.1	1496.2
10°	1489.5	1490.2	1492.4	1494.0	1493.9	1492.9
10.5°	1486.1	1486.9	1488.9	1490.2	1490.6	1489.5
11°	1482.6	1483.1	1485.5	1486.8	1487.2	1485.9
11.5°	1478.4	1479.4	1481.3	1483.0	1483.2	1482.4
12°	1474.2	1475.4	1477.2	1479.3	1479.5	1478.4
12.5°	1470.0	1471.0	1473.3	1475.1	1475.1	1474.5
13°	1465.4	1466.2	1469.0	1471.1	1471.0	1469.9
13.5°	1461.1	1461.8	1464.5	1466.5	1466.5	1465.3
14°	1456.4	1456.9	1459.8	1461.9	1461.8	1460.7
14.5°	1451.5	1452.0	1454.9	1457.0	1457.0	1456.1
15°	1446.0	1446.7	1449.6	1452.2	1452.2	1450.8
15.5°	1440.9	1441.8	1444.4	1446.7	1446.9	1445.6
16°	1435.4	1436.1	1439.2	1441.5	1441.7	1440.4
16.5°	1429.5	1430.5	1433.5	1435.7	1436.1	1435.1
17°	1423.7	1424.3	1427.6	1430.0	1430.4	1429.3
17.5°	1417.8	1418.3	1421.5	1424.0	1424.5	1423.4
18°	1411.3	1412.3	1415.4	1418.0	1418.4	1417.4
18.5°	1404.9	1405.6	1408.9	1411.6	1412.2	1411.0
19°	1398.1	1399.1	1402.3	1405.0	1405.5	1404.6
19.5°	1391.5	1392.3	1395.3	1398.2	1398.7	1398.1
20°	1384.6	1385.5	1388.5	1391.6	1392.2	1391.3
20.5°	1377.2	1378.2	1381.4	1384.5	1384.9	1383.8
21°	1369.9	1370.5	1374.1	1377.3	1377.7	1376.7
21.5°	1362.3	1363.1	1366.4	1369.6	1370.9	1369.5
22°	1354.3	1355.5	1358.6	1362.2	1362.6	1361.7

TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1346.4	1347.4	1350.7	1354.5	1354.7	1353.9
23°	1338.6	1339.2	1342.7	1346.2	1347.2	1346.4
23.5°	1330.3	1330.7	1334.5	1338.3	1339.2	1338.2
24°	1321.8	1322.4	1326.2	1329.7	1330.8	1329.8
24.5°	1313.2	1313.5	1317.3	1321.3	1321.9	1321.6
25°	1304.3	1304.9	1308.6	1312.5	1313.5	1312.9
25.5°	1295.5	1295.6	1299.5	1303.5	1304.7	1303.9
26°	1286.2	1287.7	1290.3	1294.6	1295.8	1295.1
26.5°	1276.9	1277.1	1281.3	1285.1	1286.4	1286.0
27°	1267.4	1267.7	1271.4	1275.8	1277.3	1276.4
27.5°	1257.9	1257.5	1261.7	1266.1	1268.0	1267.0
28°	1247.8	1247.7	1251.4	1256.3	1257.9	1257.3
28.5°	1237.6	1237.6	1241.5	1246.0	1248.1	1247.6
29°	1227.4	1227.3	1231.6	1236.0	1237.8	1237.8
29.5°	1216.9	1216.7	1220.8	1225.6	1227.8	1227.5
30°	1206.6	1206.3	1210.3	1215.2	1217.1	1217.4
30.5°	1195.8	1195.5	1199.2	1204.5	1206.5	1206.8
31°	1185.1	1184.4	1188.4	1193.5	1196.2	1196.0
31.5°	1173.9	1173.2	1177.3	1182.5	1185.4	1185.2
32°	1162.6	1162.0	1165.5	1171.4	1174.2	1174.5
32.5°	1151.4	1150.7	1154.1	1160.0	1163.0	1163.1
33°	1139.9	1138.8	1142.7	1148.2	1151.7	1152.1
33.5°	1128.2	1126.9	1130.9	1136.6	1140.2	1141.0
34°	1116.2	1114.8	1118.7	1124.7	1128.3	1129.4
34.5°	1104.3	1102.6	1106.6	1112.8	1116.5	1117.3
35°	1092.0	1090.0	1094.4	1100.2	1104.4	1105.4
35.5°	1079.7	1077.6	1081.9	1088.1	1092.5	1093.1
36°	1067.3	1065.1	1068.7	1075.5	1079.9	1081.1
36.5°	1054.3	1052.2	1056.3	1062.8	1067.5	1068.7
37°	1041.5	1039.1	1043.3	1049.6	1054.6	1056.2
37.5°	1028.7	1026.0	1030.1	1036.7	1041.7	1043.4
38°	1015.6	1012.6	1016.0	1023.5	1028.6	1030.6
38.5°	1002.1	999.1	1002.9	1010.0	1015.7	1017.8
39°	988.8	985.9	989.5	996.8	1002.6	1004.7
39.5°	975.3	972.0	975.7	983.2	989.0	991.4
40°	961.9	957.8	961.8	969.3	975.4	977.8
40.5°	948.0	943.6	948.0	955.6	961.9	964.5
41°	933.4	929.0	932.9	941.4	948.3	951.2
41.5°	918.5	913.5	917.9	926.5	933.7	936.8
42°	903.1	898.1	902.3	911.3	918.7	922.4
42.5°	887.7	882.6	886.7	895.7	903.0	907.3
43°	872.0	866.4	870.2	879.8	887.1	891.6
43.5°	855.6	850.0	854.3	863.4	871.1	875.3
44°	839.4	833.1	836.6	846.9	854.6	859.3
44.5°	823.0	816.9	820.4	830.2	838.3	842.8

TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	806.4	799.9	803.3	813.3	821.6	826.4
45.5°	789.9	782.6	786.1	796.4	805.0	809.9
46°	772.6	765.5	768.7	779.3	788.2	793.3
46.5°	755.8	748.3	751.6	761.8	771.1	776.0
47°	739.1	730.6	733.8	744.6	754.2	759.2
47.5°	722.4	713.6	716.5	727.1	737.0	742.1
48°	705.2	695.8	699.1	710.0	720.1	725.6
48.5°	688.0	678.4	681.5	692.5	703.2	708.9
49°	670.8	660.8	664.2	674.8	686.2	691.9
49.5°	653.6	643.7	646.4	657.5	668.9	675.2
50°	636.6	626.2	628.6	640.0	651.9	658.1
50.5°	619.1	608.4	611.8	622.7	634.9	641.2
51°	602.0	591.2	594.5	605.3	618.1	624.7
51.5°	584.7	574.2	577.4	588.3	600.8	607.9
52°	568.1	557.1	559.9	571.6	584.3	591.4
52.5°	550.7	540.1	543.3	554.7	567.5	574.9
53°	534.0	523.1	526.5	537.8	550.9	558.7
53.5°	517.1	506.2	510.1	520.8	533.9	542.3
54°	500.8	489.8	492.8	504.3	517.8	525.9
54.5°	484.0	473.8	477.0	488.2	501.6	510.3
55°	467.9	457.8	461.0	472.2	485.5	494.3
55.5°	452.1	441.3	445.1	455.9	469.4	478.0
56°	435.7	425.6	429.2	440.2	454.0	463.3
56.5°	419.6	410.3	414.0	424.7	438.0	447.7
57°	404.1	394.7	398.3	409.3	422.9	432.2
57.5°	389.4	379.4	383.0	393.9	407.5	416.6
58°	373.6	364.7	368.6	379.3	392.6	402.6
58.5°	358.8	349.9	353.7	364.3	377.2	387.7
59°	344.0	335.6	339.7	349.5	363.1	373.0
59.5°	329.9	321.7	331.2	335.2	348.5	358.2
60°	315.1	307.7	316.0	321.4	334.4	344.2
60.5°	301.2	293.8	300.7	307.7	320.6	329.3
61°	287.6	279.9	285.5	294.0	306.7	315.8
61.5°	274.4	265.9	270.2	280.3	292.8	302.3
62°	260.8	253.4	257.3	266.5	279.0	288.8
62.5°	247.8	240.6	244.2	253.4	265.1	275.3
63°	235.0	228.2	232.1	241.1	252.3	262.0
63.5°	222.7	216.1	219.9	228.5	239.6	248.9
64°	210.5	204.3	208.2	216.5	227.3	235.4
64.5°	198.8	192.6	196.5	204.8	214.9	222.3
65°	187.4	181.6	185.4	193.4	203.3	209.3
65.5°	176.3	170.7	174.4	181.9	191.7	196.6
66°	165.4	159.9	163.8	171.0	180.2	183.8
66.5°	154.8	149.6	153.4	160.5	168.9	171.9
67°	144.7	139.8	143.3	150.2	157.6	160.3



TEST NUMBER: P640216
 CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	135.0	130.2	133.6	140.4	146.9	149.7
68°	125.5	120.9	124.4	130.8	136.7	139.3
68.5°	116.6	112.0	115.4	121.5	126.8	129.5
69°	107.7	103.6	106.8	112.6	117.5	119.8
69.5°	99.4	95.4	98.5	104.1	108.4	110.1
70°	91.7	87.8	90.7	96.1	99.9	100.8
70.5°	84.8	80.6	83.4	88.3	91.8	92.0
71°	78.0	73.8	76.5	81.1	83.9	83.7
71.5°	71.3	67.5	70.0	74.3	76.9	76.0
72°	64.5	61.7	64.0	68.0	70.1	68.7
72.5°	59.0	56.4	58.5	62.1	64.0	62.2
73°	53.9	51.6	53.4	56.6	58.3	56.3
73.5°	49.4	47.5	49.0	51.8	53.4	51.0
74°	45.6	43.9	45.1	47.4	48.7	47.1
74.5°	42.3	40.9	41.8	43.6	44.7	43.7
75°	39.7	38.8	39.3	40.4	41.0	40.8
75.5°	37.7	36.8	37.4	38.2	38.2	38.7
76°	35.8	35.0	35.5	36.3	36.1	36.7
76.5°	34.0	33.0	33.7	34.4	34.2	34.8
77°	32.2	31.3	32.0	32.7	32.5	33.0
77.5°	30.5	29.7	30.3	31.0	30.7	31.3
78°	28.8	28.0	28.6	29.2	28.9	29.5
78.5°	27.1	26.4	27.0	27.5	27.1	27.8
79°	25.5	24.8	25.3	25.8	25.4	26.1
79.5°	23.9	23.2	23.7	24.2	23.7	24.4
80°	22.4	21.7	22.1	22.6	22.1	22.8
80.5°	20.9	20.2	20.7	21.1	20.6	21.2
81°	19.3	18.7	19.1	19.6	19.0	19.7
81.5°	17.9	17.2	17.7	18.0	17.4	18.2
82°	16.4	15.7	16.2	16.6	16.0	16.7
82.5°	15.0	14.3	14.8	15.2	14.5	15.2
83°	13.6	13.0	13.4	13.7	13.1	13.8
83.5°	12.2	11.6	12.1	12.4	11.7	12.4
84°	10.9	10.3	10.7	11.1	10.3	11.0
84.5°	9.6	9.0	9.4	9.8	9.1	9.6
85°	8.3	7.7	8.1	8.6	7.9	8.3
85.5°	7.0	6.4	6.8	7.4	6.7	7.1
86°	5.7	5.2	5.6	6.1	5.7	6.1
86.5°	4.4	3.9	4.3	5.0	4.7	5.0
87°	3.2	3.0	3.1	3.8	3.8	4.1
87.5°	2.0	2.1	2.4	2.9	2.9	3.3
88°	0.9	1.1	1.6	2.0	2.1	2.5
88.5°	0.2	0.2	0.9	1.1	1.2	1.8
89°	0.1	0.1	0.1	0.2	0.4	1.0
89.5°	0.1	0.1	0.1	0.1	0.2	0.3



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.1	0.1	0.1	0.1	0.2	0.1
90.5°	0.1	0.1	0.1	0.1	0.2	0.1
91°	0.1	0.1	0.1	0.1	0.2	0.1
91.5°	0.1	0.1	0.1	0.1	0.2	0.1
92°	0.1	0.1	0.1	0.1	0.2	0.1
92.5°	0.1	0.1	0.1	0.1	0.2	0.1
93°	0.1	0.1	0.1	0.1	0.1	0.1
93.5°	0.1	0.1	0.1	0.1	0.1	0.1
94°	0.1	0.1	0.1	0.1	0.1	0.1
94.5°	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.1	0.1	0.1	0.1	0.1	0.1
95.5°	0.1	0.1	0.1	0.1	0.1	0.1
96°	0.1	0.1	0.1	0.1	0.1	0.1
96.5°	0.1	0.1	0.1	0.1	0.1	0.2
97°	0.1	0.1	0.1	0.1	0.1	0.2
97.5°	0.1	0.2	0.1	0.1	0.1	0.2
98°	0.1	0.2	0.1	0.1	0.1	0.2
98.5°	0.1	0.2	0.2	0.1	0.2	0.2
99°	0.1	0.2	0.2	0.2	0.2	0.2
99.5°	0.1	0.2	0.2	0.2	0.2	0.2
100°	0.1	0.2	0.2	0.2	0.2	0.2
100.5°	0.1	0.2	0.2	0.2	0.2	0.2
101°	0.1	0.2	0.2	0.2	0.2	0.2
101.5°	0.1	0.2	0.2	0.2	0.2	0.2
102°	0.1	0.2	0.2	0.2	0.2	0.2
102.5°	0.1	0.2	0.2	0.2	0.2	0.2
103°	0.1	0.2	0.2	0.2	0.2	0.2
103.5°	0.1	0.2	0.2	0.2	0.2	0.2
104°	0.1	0.2	0.2	0.2	0.2	0.2
104.5°	0.1	0.2	0.2	0.2	0.2	0.2
105°	0.1	0.2	0.2	0.2	0.2	0.2
105.5°	0.1	0.2	0.2	0.2	0.2	0.2
106°	0.1	0.2	0.2	0.2	0.2	0.2
106.5°	0.1	0.2	0.2	0.2	0.2	0.2
107°	0.2	0.2	0.2	0.2	0.2	0.2
107.5°	0.2	0.2	0.2	0.2	0.2	0.2
108°	0.2	0.2	0.2	0.2	0.2	0.2
108.5°	0.2	0.2	0.2	0.2	0.2	0.3
109°	0.2	0.2	0.2	0.2	0.2	0.3
109.5°	0.2	0.2	0.2	0.2	0.2	0.3
110°	0.2	0.2	0.2	0.2	0.2	0.3
110.5°	0.2	0.3	0.2	0.2	0.3	0.3
111°	0.2	0.3	0.3	0.3	0.3	0.3
111.5°	0.2	0.3	0.3	0.3	0.3	0.3
112°	0.2	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.2	0.3	0.3	0.3	0.3	0.3
113°	0.2	0.3	0.3	0.3	0.3	0.3
113.5°	0.2	0.3	0.3	0.3	0.3	0.3
114°	0.2	0.3	0.3	0.3	0.3	0.3
114.5°	0.2	0.3	0.3	0.3	0.3	0.3
115°	0.2	0.3	0.3	0.3	0.3	0.3
115.5°	0.2	0.3	0.3	0.3	0.3	0.3
116°	0.2	0.3	0.3	0.3	0.3	0.3
116.5°	0.2	0.3	0.3	0.3	0.3	0.3
117°	0.3	0.3	0.3	0.3	0.3	0.4
117.5°	0.3	0.3	0.3	0.3	0.3	0.4
118°	0.3	0.3	0.3	0.3	0.3	0.4
118.5°	0.3	0.3	0.3	0.3	0.3	0.4
119°	0.3	0.3	0.3	0.3	0.4	0.4
119.5°	0.3	0.4	0.3	0.3	0.4	0.4
120°	0.3	0.4	0.4	0.4	0.4	0.4
120.5°	0.3	0.4	0.4	0.4	0.4	0.4
121°	0.3	0.4	0.4	0.4	0.4	0.4
121.5°	0.3	0.4	0.4	0.4	0.4	0.4
122°	0.3	0.4	0.4	0.4	0.4	0.4
122.5°	0.3	0.4	0.4	0.4	0.4	0.4
123°	0.3	0.4	0.4	0.4	0.4	0.4
123.5°	0.3	0.4	0.4	0.4	0.4	0.4
124°	0.3	0.4	0.4	0.4	0.4	0.4
124.5°	0.4	0.4	0.4	0.4	0.4	0.5
125°	0.4	0.4	0.4	0.4	0.4	0.5
125.5°	0.4	0.4	0.4	0.4	0.4	0.5
126°	0.4	0.4	0.4	0.4	0.4	0.5
126.5°	0.4	0.4	0.4	0.4	0.5	0.5
127°	0.4	0.5	0.4	0.4	0.5	0.5
127.5°	0.4	0.5	0.5	0.5	0.5	0.5
128°	0.4	0.5	0.5	0.5	0.5	0.5
128.5°	0.4	0.5	0.5	0.5	0.5	0.5
129°	0.4	0.5	0.5	0.5	0.5	0.5
129.5°	0.4	0.5	0.5	0.5	0.5	0.5
130°	0.4	0.5	0.5	0.5	0.5	0.5
130.5°	0.4	0.5	0.5	0.5	0.5	0.5
131°	0.5	0.5	0.5	0.5	0.5	0.5
131.5°	0.5	0.5	0.5	0.5	0.5	0.5
132°	0.5	0.5	0.5	0.5	0.5	0.6
132.5°	0.5	0.5	0.5	0.5	0.5	0.6
133°	0.5	0.5	0.5	0.5	0.5	0.6
133.5°	0.5	0.5	0.5	0.5	0.5	0.6
134°	0.5	0.5	0.5	0.5	0.6	0.6
134.5°	0.5	0.6	0.5	0.5	0.6	0.6



TEST NUMBER: P640216
 CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.5	0.6	0.6	0.6	0.6	0.6
135.5°	0.5	0.6	0.6	0.6	0.6	0.6
136°	0.5	0.6	0.6	0.6	0.6	0.6
136.5°	0.5	0.6	0.6	0.6	0.6	0.6
137°	0.5	0.6	0.6	0.6	0.6	0.6
137.5°	0.6	0.6	0.6	0.6	0.6	0.6
138°	0.6	0.6	0.6	0.6	0.6	0.6
138.5°	0.6	0.6	0.6	0.6	0.6	0.6
139°	0.6	0.6	0.6	0.6	0.6	0.6
139.5°	0.6	0.6	0.6	0.6	0.6	0.6
140°	0.6	0.6	0.6	0.6	0.6	0.6
140.5°	0.6	0.6	0.6	0.6	0.6	0.6
141°	0.6	0.6	0.6	0.6	0.6	0.6
141.5°	0.6	0.6	0.6	0.6	0.6	0.6
142°	0.6	0.6	0.6	0.6	0.6	0.6
142.5°	0.6	0.6	0.6	0.6	0.6	0.6
143°	0.6	0.6	0.6	0.6	0.6	0.7
143.5°	0.7	0.6	0.6	0.6	0.6	0.7
144°	0.7	0.6	0.6	0.6	0.6	0.7
144.5°	0.7	0.6	0.6	0.6	0.7	0.7
145°	0.7	0.7	0.7	0.7	0.7	0.7
145.5°	0.7	0.7	0.7	0.7	0.7	0.7
146°	0.7	0.7	0.7	0.7	0.7	0.7
146.5°	0.7	0.7	0.7	0.7	0.7	0.7
147°	0.7	0.7	0.7	0.7	0.7	0.7
147.5°	0.7	0.7	0.7	0.7	0.7	0.7
148°	0.7	0.7	0.7	0.7	0.7	0.7
148.5°	0.7	0.7	0.7	0.7	0.7	0.7
149°	0.7	0.7	0.7	0.7	0.7	0.7
149.5°	0.7	0.7	0.7	0.7	0.7	0.7
150°	0.7	0.7	0.7	0.7	0.7	0.7
150.5°	0.8	0.7	0.7	0.7	0.7	0.7
151°	0.8	0.7	0.7	0.7	0.7	0.7
151.5°	0.8	0.7	0.7	0.7	0.7	0.7
152°	0.8	0.7	0.7	0.7	0.7	0.7
152.5°	0.8	0.7	0.7	0.7	0.7	0.7
153°	0.8	0.7	0.7	0.7	0.7	0.7
153.5°	0.8	0.7	0.7	0.7	0.7	0.7
154°	0.8	0.7	0.7	0.7	0.7	0.8
154.5°	0.8	0.7	0.7	0.7	0.7	0.8
155°	0.8	0.7	0.7	0.7	0.7	0.8
155.5°	0.8	0.7	0.7	0.7	0.7	0.8
156°	0.8	0.7	0.7	0.7	0.7	0.8
156.5°	0.8	0.7	0.7	0.7	0.8	0.8
157°	0.8	0.7	0.7	0.7	0.8	0.8



TEST NUMBER: P640216

CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.9	0.7	0.7	0.7	0.8	0.8
158°	0.9	0.7	0.7	0.7	0.8	0.8
158.5°	0.9	0.7	0.7	0.7	0.8	0.8
159°	0.9	0.7	0.7	0.8	0.8	0.8
159.5°	0.9	0.7	0.7	0.8	0.8	0.8
160°	0.9	0.7	0.7	0.8	0.8	0.8
160.5°	0.9	0.7	0.7	0.8	0.8	0.8
161°	0.9	0.7	0.7	0.8	0.8	0.8
161.5°	0.9	0.7	0.7	0.8	0.8	0.8
162°	0.9	0.7	0.7	0.8	0.8	0.8
162.5°	0.9	0.7	0.7	0.8	0.8	0.8
163°	0.9	0.7	0.7	0.8	0.8	0.8
163.5°	0.9	0.7	0.7	0.8	0.8	0.8
164°	0.9	0.7	0.7	0.8	0.8	0.8
164.5°	0.9	0.7	0.7	0.8	0.8	0.8
165°	0.9	0.7	0.8	0.8	0.8	0.8
165.5°	0.9	0.7	0.8	0.8	0.8	0.8
166°	0.9	0.7	0.8	0.8	0.8	0.8
166.5°	0.9	0.7	0.8	0.8	0.8	0.8
167°	0.9	0.8	0.8	0.8	0.8	0.8
167.5°	0.9	0.8	0.8	0.8	0.8	0.8
168°	0.9	0.8	0.8	0.8	0.8	0.8
168.5°	0.9	0.8	0.8	0.8	0.8	0.8
169°	0.9	0.8	0.8	0.8	0.8	0.8
169.5°	0.9	0.8	0.8	0.8	0.8	0.8
170°	0.9	0.8	0.8	0.8	0.8	0.8
170.5°	0.9	0.8	0.8	0.8	0.8	0.8
171°	0.9	0.8	0.8	0.8	0.8	0.8
171.5°	0.9	0.8	0.8	0.8	0.8	0.8
172°	0.9	0.8	0.8	0.8	0.8	0.8
172.5°	0.9	0.8	0.8	0.8	0.8	0.8
173°	0.9	0.8	0.8	0.8	0.8	0.8
173.5°	0.9	0.8	0.8	0.8	0.8	0.8
174°	0.9	0.8	0.8	0.8	0.8	0.8
174.5°	0.9	0.8	0.8	0.8	0.8	0.8
175°	0.9	0.8	0.8	0.8	0.8	0.8
175.5°	0.9	0.8	0.8	0.8	0.8	0.8
176°	0.9	0.9	0.9	0.9	0.9	0.9
176.5°	0.9	0.9	0.9	0.9	0.9	0.9
177°	0.9	0.9	0.9	0.9	0.9	0.9
177.5°	0.9	0.9	0.9	0.9	0.9	0.9
178°	0.9	0.9	0.9	0.9	0.9	0.9
178.5°	0.9	0.9	0.9	0.9	0.9	0.9
179°	0.9	0.9	0.9	0.9	0.9	0.9
179.5°	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P640216
CATALOG NUMBER: LCR830RD9FSE010-33W-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.9	0.9	0.9	0.9	0.9	0.9

(END OF REPORT)