

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: P640146

Luminaire Tested: LCR621RD9FSE020-23W-4000K

Issue Date: 2/13/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640146  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2208386A001)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: LCR621RD9FSE020-23W-4000K  
Description: LCR 6  
Light Source: 4000K CCT, 93 CRI LEDS  
Ballast/Driver: -

**Summary**

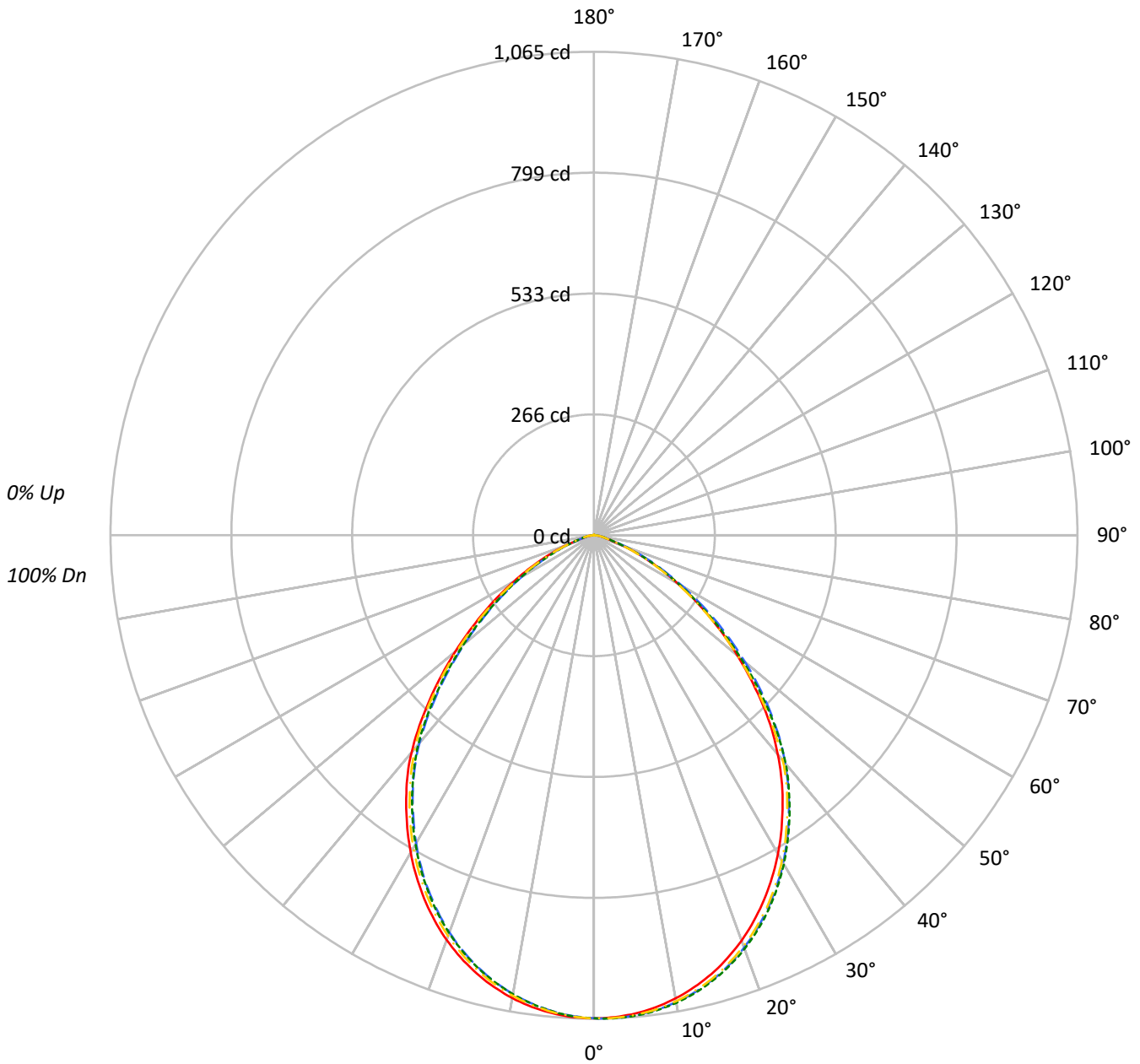
Lumens per Lamp: N/A  
Luminaire Lumens: 2080.0 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.15 / 1.22  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.1  
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



TEST NUMBER: P640146  
CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

### 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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	79	79	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	70	70	70	68
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	61	61	61	60
5	82	70	63	57	80	69	62	56	67	61	56	65	60	55	64	59	55	55	55	55	53
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	49	49	49	47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	44	44	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	40	40	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	36	36	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	33	33	33	33	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	58340	58340	58340	58340
5°	58177	58452	58161	57930
10°	57659	58210	57631	57152
15°	56777	57600	56697	55999
20°	55439	56565	55328	54406
25°	53604	55037	53465	52322
30°	51299	52951	51090	49767
35°	48479	50259	48258	46719
40°	45077	47002	44748	43074
45°	40648	42082	39624	37911
50°	35197	36152	33995	32101
55°	29485	30011	28185	26236
60°	23529	23836	22356	20481
65°	17421	17654	16513	14865
70°	11092	11572	10579	9665
75°	6672	6714	6015	6354
80°	5493	5777	4925	5335
85°	4088	4969	3334	4088

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 42640 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	4.8
10°-20°	281.5	13.5
20°-30°	407.2	19.6
30°-40°	451.5	21.7
40°-50°	397.4	19.1
50°-60°	267.2	12.8
60°-70°	128.6	6.2
70°-80°	36.8	1.8
80°-90°	7.9	0.4
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
<b>0°-30°</b>	<b>789.0</b>	<b>37.9</b>
<b>0°-40°</b>	<b>1240.4</b>	<b>59.6</b>
<b>0°-60°</b>	<b>1905.1</b>	<b>91.6</b>
<b>0°-90°</b>	<b>2078.4</b>	<b>99.9</b>
90°-120°	0.4	0.0
90°-150°	1.2	0.1
<b>90°-180°</b>	<b>2.0</b>	<b>0.1</b>
<b>0°-180°</b>	<b>2080.0</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1064	1064	1064	1064	1064	
5°	1057	1062	1057	1053	1057	100
15°	1000	1015	999	987	1000	282
25°	886	910	884	865	886	407
35°	724	751	721	698	724	452
45°	524	543	511	489	524	403
55°	308	314	295	274	308	276
65°	134	136	127	115	134	135
75°	32	32	28	30	32	37
85°	6	8	5	6	6	8
90°	0	0	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°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	1	1	0	0	0
165°	0	1	1	0	0	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°	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2
0.5°	1064.2	1064.5	1064.7	1064.8	1064.6	1064.6	1064.2	1064.2	1064.0	1063.9	1063.6
1°	1064.0	1064.3	1064.8	1065.2	1065.1	1064.8	1064.4	1064.1	1063.9	1063.3	1062.9
1.5°	1063.5	1064.1	1064.8	1065.3	1065.2	1064.8	1064.6	1064.0	1063.4	1062.8	1062.1
2°	1063.1	1063.7	1064.8	1065.3	1065.2	1064.7	1064.4	1063.6	1062.9	1062.2	1061.0
2.5°	1062.4	1063.3	1064.6	1065.2	1065.0	1064.6	1064.0	1063.3	1062.4	1061.4	1060.1
3°	1061.6	1062.8	1064.3	1064.9	1064.7	1064.1	1063.6	1062.8	1061.6	1060.5	1058.8
3.5°	1060.7	1062.0	1063.7	1064.4	1064.3	1063.5	1062.9	1062.1	1060.7	1059.5	1057.5
4°	1059.7	1061.0	1063.1	1063.9	1063.7	1062.9	1062.2	1061.0	1059.6	1058.3	1056.0
4.5°	1058.7	1060.0	1062.3	1063.3	1062.8	1062.4	1061.3	1059.8	1058.2	1056.7	1054.2
5°	1057.2	1058.8	1061.3	1062.5	1062.2	1061.6	1060.2	1058.6	1056.9	1055.2	1052.4
5.5°	1055.8	1057.5	1060.4	1061.7	1061.2	1060.7	1059.0	1057.3	1055.4	1053.4	1050.5
6°	1054.1	1056.1	1059.3	1060.6	1060.1	1059.5	1057.8	1056.0	1053.6	1051.5	1048.3
6.5°	1052.3	1054.5	1057.7	1059.4	1058.8	1058.1	1056.5	1054.4	1051.9	1049.6	1046.0
7°	1050.5	1052.7	1056.3	1057.9	1057.4	1056.7	1054.9	1052.6	1050.1	1047.3	1043.6
7.5°	1048.4	1050.6	1054.6	1056.5	1055.8	1055.0	1053.2	1050.7	1047.9	1045.0	1041.0
8°	1046.1	1048.6	1052.9	1054.8	1054.0	1053.2	1051.2	1048.6	1045.6	1042.7	1038.2
8.5°	1043.8	1046.3	1051.0	1052.9	1051.9	1051.1	1049.2	1046.3	1043.3	1040.1	1035.5
9°	1041.2	1044.0	1048.9	1050.9	1050.0	1049.2	1046.9	1044.2	1040.7	1037.5	1032.5
9.5°	1038.5	1041.6	1046.5	1048.7	1048.1	1046.9	1044.7	1041.7	1038.2	1034.5	1029.6
10°	1035.8	1038.9	1044.4	1046.6	1045.7	1044.8	1042.4	1039.0	1035.3	1031.6	1026.2
10.5°	1032.9	1036.1	1041.9	1044.2	1043.4	1042.5	1039.8	1036.2	1032.2	1028.5	1022.8
11°	1029.8	1033.2	1039.4	1041.6	1040.8	1039.7	1037.1	1033.2	1029.1	1025.2	1019.2
11.5°	1026.6	1030.1	1036.6	1038.8	1038.2	1037.1	1034.1	1030.1	1025.7	1021.9	1015.4
12°	1023.2	1026.9	1033.6	1036.1	1035.3	1034.1	1031.0	1027.0	1022.3	1018.4	1011.8
12.5°	1019.8	1023.6	1030.6	1033.1	1032.3	1031.0	1027.9	1023.6	1018.9	1014.8	1007.8
13°	1016.2	1020.1	1027.4	1030.0	1029.1	1027.8	1024.8	1020.2	1015.2	1011.0	1003.7
13.5°	1012.3	1016.3	1024.1	1026.8	1025.9	1024.5	1021.3	1016.5	1011.6	1006.9	999.4
14°	1008.5	1012.6	1020.5	1023.5	1022.4	1021.1	1017.8	1012.8	1007.5	1002.6	995.0
14.5°	1004.4	1008.5	1016.8	1019.9	1018.6	1017.5	1014.0	1009.0	1003.4	998.4	990.3
15°	1000.4	1004.5	1013.1	1016.3	1014.9	1013.8	1010.2	1005.0	999.0	993.9	985.5
15.5°	996.0	1000.3	1009.2	1012.6	1011.2	1010.0	1006.1	1000.8	994.6	989.3	980.7
16°	991.5	996.0	1005.2	1008.4	1007.3	1005.9	1001.7	996.3	989.9	984.4	975.8
16.5°	986.9	991.4	1001.0	1004.2	1003.1	1001.4	997.4	991.8	985.3	979.7	970.6
17°	981.9	986.9	996.3	1000.0	998.7	997.2	993.1	987.2	980.5	974.6	965.2
17.5°	976.9	981.9	991.7	995.5	994.3	992.6	988.4	982.4	975.5	969.4	959.7
18°	971.9	977.0	987.2	990.9	989.4	987.9	983.7	977.3	970.3	964.2	954.2
18.5°	966.7	972.0	982.3	986.3	984.8	983.1	978.8	972.2	965.0	958.8	948.7
19°	961.4	966.9	977.3	981.5	979.9	978.3	973.9	967.0	959.6	953.0	942.8
19.5°	955.8	961.3	972.2	976.4	974.9	973.2	968.7	961.7	954.0	947.5	936.8
20°	950.3	955.9	966.9	971.3	969.6	968.1	963.4	956.1	948.4	941.6	930.7
20.5°	944.5	950.4	961.5	966.0	964.2	962.5	957.8	950.6	942.7	935.6	924.3
21°	938.5	944.6	956.1	960.5	958.6	956.9	952.4	944.7	936.8	929.2	917.9
21.5°	932.4	938.4	950.4	954.9	953.1	951.4	946.4	938.8	930.5	923.1	911.5
22°	926.1	932.4	944.6	949.3	947.5	945.8	940.5	932.6	924.2	916.7	905.0



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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°	919.9	926.2	938.5	943.5	941.7	939.8	934.6	926.3	917.7	910.1	898.1
23°	913.4	919.7	932.4	937.5	935.7	933.7	928.6	920.1	911.1	903.4	891.4
23.5°	906.8	913.3	926.3	931.2	929.5	927.6	922.0	913.7	904.5	896.7	884.2
24°	900.1	906.7	919.9	924.9	923.0	921.3	915.5	907.2	897.8	889.9	877.2
24.5°	893.1	900.0	913.2	918.5	916.4	914.6	909.0	900.4	891.0	883.0	869.8
25°	886.2	893.2	906.5	911.6	909.9	908.0	902.6	893.3	883.9	875.6	862.6
25.5°	879.0	886.2	899.8	905.0	903.1	901.2	895.6	886.6	876.7	868.2	855.1
26°	872.0	879.0	892.8	898.2	896.1	894.4	888.5	879.5	869.4	860.8	847.6
26.5°	864.7	871.7	885.9	891.4	889.4	887.2	881.4	872.1	862.1	853.5	839.9
27°	857.3	864.6	878.7	884.2	882.0	880.1	874.3	864.7	854.4	845.6	832.1
27.5°	849.6	857.0	871.5	877.1	874.6	872.9	866.7	857.2	847.0	838.0	824.1
28°	842.3	849.6	864.1	869.6	867.3	865.4	859.2	849.6	839.4	830.2	816.1
28.5°	834.1	842.0	856.7	862.1	859.6	857.8	851.7	842.1	831.5	822.3	808.2
29°	826.6	834.1	849.2	854.4	852.1	850.3	844.1	834.1	823.7	814.2	800.0
29.5°	818.5	826.1	841.2	846.9	844.3	842.5	836.1	826.3	815.4	806.2	791.4
30°	810.4	818.1	833.2	838.9	836.5	834.5	828.1	818.1	807.1	797.7	783.1
30.5°	802.3	810.1	825.4	831.1	828.4	826.4	819.9	810.0	799.0	789.5	774.6
31°	794.1	801.8	817.5	822.8	820.1	818.4	812.0	801.5	790.5	780.8	766.2
31.5°	785.7	793.6	809.0	814.8	811.7	810.0	803.5	793.2	782.1	772.4	757.4
32°	777.3	785.3	800.6	806.2	803.3	801.6	795.0	784.6	773.4	763.8	748.8
32.5°	768.6	776.7	792.4	797.8	794.9	792.9	786.5	776.3	765.1	755.2	740.2
33°	760.1	768.1	784.2	789.3	786.2	784.5	777.7	767.4	756.2	746.4	731.4
33.5°	751.2	759.4	775.5	780.5	777.3	775.7	769.1	758.7	747.6	737.9	722.5
34°	742.5	750.7	766.8	771.7	768.8	766.8	760.2	750.0	738.7	729.0	713.7
34.5°	733.4	741.8	757.8	762.9	759.7	757.7	751.2	741.2	730.1	719.8	704.8
35°	724.4	732.6	748.8	753.8	751.0	748.7	742.4	732.4	721.1	710.6	696.0
35.5°	715.5	723.5	739.8	744.8	741.8	739.9	733.4	723.3	712.1	701.4	687.1
36°	706.5	714.4	730.8	735.8	733.0	730.9	724.3	714.3	703.0	692.2	677.9
36.5°	697.4	705.3	721.8	726.9	723.7	721.6	715.1	705.2	694.0	684.3	668.2
37°	688.1	696.0	712.5	717.5	714.4	712.4	705.9	696.1	685.0	674.9	658.6
37.5°	678.7	686.3	703.4	708.1	705.1	703.1	696.8	687.1	675.7	665.4	648.8
38°	669.0	676.6	693.9	698.5	695.8	693.8	687.6	677.6	666.2	655.7	638.9
38.5°	659.5	667.1	684.3	688.9	686.5	684.5	678.1	667.9	656.7	645.9	629.1
39°	650.0	657.7	674.4	679.1	676.9	674.7	668.0	657.9	646.4	636.2	619.4
39.5°	639.8	647.9	664.6	669.6	667.0	664.4	657.6	647.2	636.3	626.2	608.7
40°	629.9	637.9	654.9	659.4	656.8	653.8	646.6	636.5	625.3	615.6	597.9
40.5°	620.0	628.2	644.9	649.6	646.2	642.9	635.5	625.2	614.4	604.5	586.9
41°	610.1	618.0	635.0	639.6	635.4	631.8	624.3	614.1	603.0	593.3	575.9
41.5°	600.1	608.2	625.1	629.1	624.3	620.4	612.9	602.9	591.8	582.0	564.3
42°	590.2	598.3	614.7	618.4	613.1	608.9	601.4	591.4	580.2	570.6	552.9
42.5°	579.8	587.5	604.2	607.3	601.8	597.0	590.1	579.8	568.8	559.3	541.5
43°	569.1	576.7	593.6	596.2	589.9	585.3	578.1	568.4	557.5	547.9	530.0
43.5°	558.1	565.8	582.5	584.8	578.2	573.6	566.6	556.8	546.0	536.2	518.3
44°	546.7	554.4	571.1	573.3	566.5	561.7	554.8	545.2	534.1	524.5	506.8
44.5°	535.7	543.6	559.6	561.7	554.6	549.7	543.1	533.5	522.6	513.2	495.3



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	524.3	532.3	548.7	550.0	542.8	537.9	531.2	521.8	511.1	501.8	483.8
45.5°	513.3	521.2	537.4	538.4	530.8	526.0	519.4	510.2	499.7	490.1	472.4
46°	502.1	509.8	526.1	526.8	518.8	514.0	507.6	498.5	488.2	478.7	460.9
46.5°	490.4	498.5	514.6	514.8	506.9	502.1	496.0	487.0	476.7	467.3	449.4
47°	479.3	487.1	503.0	503.0	495.0	489.9	484.2	475.4	465.2	455.9	438.0
47.5°	468.3	475.9	491.6	491.2	482.8	478.0	472.3	463.8	453.9	444.6	427.0
48°	457.0	464.9	480.2	479.5	470.9	466.0	460.5	452.6	442.6	433.2	415.6
48.5°	446.0	453.8	468.8	467.8	459.2	454.4	449.1	441.3	431.4	422.3	404.6
49°	434.8	442.5	457.4	456.3	447.3	442.7	437.5	429.9	420.3	411.4	393.6
49.5°	423.8	431.7	446.1	444.4	435.6	431.0	426.1	418.9	409.3	400.4	382.9
50°	412.7	420.4	434.7	433.1	423.9	419.4	414.5	407.5	398.6	389.6	371.9
50.5°	402.0	409.4	423.2	421.4	412.3	407.9	403.1	396.4	387.8	378.8	361.3
51°	390.9	398.3	412.0	410.1	400.9	396.5	391.8	385.6	376.6	368.1	350.7
51.5°	380.4	387.6	401.0	398.7	389.7	385.3	380.8	374.7	366.1	357.7	340.3
52°	369.8	377.0	389.8	387.8	378.6	374.2	369.6	364.1	355.9	347.3	329.8
52.5°	359.3	366.1	378.9	376.5	367.3	363.0	358.6	353.1	345.1	336.9	319.9
53°	348.8	355.2	368.2	365.4	356.3	352.1	347.8	342.6	334.8	326.7	309.7
53.5°	338.7	345.6	357.1	354.2	345.6	341.5	337.1	332.0	324.6	316.6	299.8
54°	328.6	335.3	346.8	341.9	334.8	330.6	326.7	321.7	314.8	306.6	290.0
54.5°	318.6	324.9	336.2	331.8	324.3	320.2	316.0	311.3	304.6	296.8	280.8
55°	308.5	314.6	325.7	321.7	314.0	309.8	305.9	301.6	294.9	287.2	270.8
55.5°	298.4	304.3	315.2	311.7	303.6	299.6	295.7	291.4	285.2	277.6	261.6
56°	288.4	293.9	304.6	301.6	293.4	289.3	285.6	281.6	275.7	268.0	252.3
56.5°	278.8	284.1	294.1	291.5	283.4	279.3	275.7	271.9	266.1	258.7	243.3
57°	269.2	274.3	284.0	281.5	273.5	269.4	265.7	262.4	256.8	249.6	234.3
57.5°	259.8	264.5	274.1	271.5	263.8	259.8	256.2	252.8	247.7	240.7	225.6
58°	250.7	255.1	264.1	261.8	254.1	250.2	246.8	243.8	238.7	231.7	217.0
58.5°	241.4	245.7	254.7	252.3	244.9	240.9	237.6	234.6	229.8	223.1	208.6
59°	232.3	236.4	245.0	242.8	235.5	231.6	228.3	225.5	221.0	214.5	200.1
59.5°	223.4	227.3	235.6	233.5	226.4	222.5	219.3	216.7	212.4	206.0	191.9
60°	214.6	218.2	226.2	224.3	217.4	213.5	210.4	207.8	203.9	197.7	184.1
60.5°	206.0	209.3	217.3	215.4	208.6	204.8	201.7	199.4	195.6	189.5	176.4
61°	197.5	200.6	208.1	206.4	199.8	196.2	193.4	191.1	187.4	181.6	168.6
61.5°	189.0	192.1	199.3	197.8	191.5	187.9	184.9	182.8	179.4	173.8	161.0
62°	180.8	183.5	190.7	189.4	183.1	179.7	176.6	174.7	171.6	166.2	153.7
62.5°	172.7	175.2	182.4	180.8	174.8	171.5	168.6	166.7	163.8	158.6	146.4
63°	164.7	167.1	174.1	172.7	166.5	163.5	160.8	158.9	156.1	151.1	139.6
63.5°	156.9	159.1	166.0	164.6	158.8	155.5	152.9	151.3	148.7	143.9	132.7
64°	149.1	151.2	157.7	156.7	151.0	148.1	145.5	143.9	141.4	137.0	126.0
64.5°	141.5	143.6	150.1	148.9	143.5	140.6	138.0	136.5	134.3	130.1	119.5
65°	134.3	136.0	142.5	141.4	136.1	133.2	131.1	129.4	127.3	123.3	113.3
65.5°	127.1	128.5	135.2	134.1	128.8	126.1	123.9	122.5	120.6	116.8	107.0
66°	119.9	121.5	127.8	126.8	121.7	119.2	117.1	115.8	113.9	110.5	101.1
66.5°	113.0	114.6	120.7	119.7	114.8	112.4	110.5	109.2	107.5	104.2	95.3
67°	106.2	107.7	113.9	112.9	108.1	105.9	104.1	102.7	101.1	98.3	89.9





TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	99.6	101.1	107.2	106.1	101.6	99.4	97.7	96.5	95.0	92.4	84.7
68°	93.4	94.8	100.6	99.7	95.2	93.2	91.8	90.6	89.2	87.0	79.5
68.5°	87.1	88.5	94.6	93.4	89.5	87.6	86.2	85.1	83.4	81.7	74.4
69°	81.0	82.6	88.4	87.4	83.7	82.0	80.6	79.5	77.6	76.4	69.2
69.5°	74.9	76.8	82.6	81.6	78.0	76.4	75.0	74.0	71.8	71.1	64.4
70°	69.2	71.4	76.8	75.8	72.2	70.8	69.5	68.5	66.0	65.8	60.1
70.5°	63.6	66.0	71.5	70.5	66.5	65.3	64.4	63.5	60.9	61.0	55.8
71°	58.5	60.9	66.3	65.3	61.4	60.5	59.6	58.6	56.0	56.5	51.7
71.5°	53.6	56.1	61.4	60.4	56.6	55.7	55.1	54.0	51.5	52.3	47.9
72°	49.1	51.6	56.8	55.7	52.2	51.2	50.8	49.6	47.2	48.2	44.3
72.5°	44.9	47.4	52.4	51.4	47.9	47.1	46.7	45.7	43.5	44.4	40.9
73°	41.3	43.6	48.3	47.3	44.0	43.3	43.0	41.9	39.9	41.0	37.7
73.5°	38.1	40.2	44.6	43.6	40.4	39.7	39.6	38.5	36.6	37.8	34.8
74°	35.0	37.1	41.0	40.1	37.2	36.6	36.4	35.4	33.6	34.8	32.3
74.5°	33.2	34.3	37.8	36.9	34.4	33.6	33.6	32.7	31.0	32.1	29.8
75°	31.5	32.5	34.9	34.0	31.7	31.2	30.9	30.1	28.4	29.5	27.7
75.5°	29.7	30.6	33.0	32.1	29.6	29.0	28.7	27.8	26.9	27.3	25.8
76°	28.0	28.8	31.1	30.2	28.0	27.3	26.7	25.8	25.2	25.3	24.5
76.5°	26.2	26.9	29.2	28.3	26.7	26.1	25.3	24.2	23.7	23.8	23.3
77°	24.9	25.1	27.3	26.5	25.4	24.8	24.1	23.0	22.5	22.6	22.2
77.5°	23.7	23.8	25.5	25.3	24.2	23.6	22.9	21.9	21.4	21.5	21.0
78°	22.4	22.6	24.2	24.0	23.0	22.4	21.7	20.7	20.2	20.3	19.8
78.5°	21.1	21.4	23.0	22.8	21.8	21.2	20.5	19.5	19.0	19.2	18.7
79°	19.9	20.2	21.7	21.6	20.6	20.1	19.4	18.4	17.9	18.0	17.6
79.5°	18.7	19.0	20.5	20.4	19.4	18.9	18.2	17.3	16.8	16.9	16.5
80°	17.4	17.7	19.3	19.2	18.3	17.8	17.1	16.1	15.6	15.8	15.4
80.5°	16.3	16.6	18.2	18.1	17.1	16.7	16.0	15.0	14.5	14.7	14.3
81°	15.1	15.4	17.0	17.0	16.1	15.6	14.9	13.9	13.4	13.6	13.3
81.5°	14.0	14.3	15.9	15.9	15.0	14.5	13.9	12.9	12.4	12.5	12.2
82°	12.8	13.2	14.8	14.8	13.9	13.4	12.8	11.8	11.3	11.5	11.2
82.5°	11.8	12.1	13.7	13.7	12.8	12.4	11.8	10.7	10.3	10.4	10.2
83°	10.7	11.0	12.7	12.7	11.8	11.4	10.8	9.7	9.3	9.4	9.2
83.5°	9.6	9.9	11.6	11.6	10.8	10.4	9.8	8.7	8.3	8.4	8.3
84°	8.6	8.9	10.6	10.6	9.8	9.4	8.8	7.8	7.3	7.4	7.3
84.5°	7.6	7.8	9.6	9.6	8.8	8.5	7.9	6.8	6.3	6.4	6.4
85°	6.5	6.8	8.6	8.6	7.9	7.5	6.9	5.9	5.3	5.4	5.4
85.5°	5.6	5.8	7.6	7.6	6.9	6.6	6.0	4.9	4.4	4.6	4.5
86°	4.6	5.0	6.7	6.7	6.0	5.6	5.1	4.1	3.7	3.9	3.6
86.5°	3.8	4.2	5.7	5.8	5.0	4.7	4.2	3.3	2.9	3.0	2.8
87°	3.1	3.3	4.8	4.8	4.1	3.8	3.3	2.5	2.2	2.3	1.9
87.5°	2.4	2.6	3.9	3.9	3.2	2.9	2.5	1.8	1.5	1.6	1.1
88°	1.6	1.9	3.2	3.2	2.4	2.1	1.7	1.2	0.9	0.9	0.4
88.5°	0.9	1.2	2.4	2.4	1.5	1.3	1.0	0.6	0.4	0.4	0.1
89°	0.4	0.5	1.7	1.6	0.7	0.5	0.3	0.2	0.1	0.1	0.1
89.5°	0.1	0.2	0.9	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
113°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
113.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
114°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
114.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2
115°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
115.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
116°	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
116.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
117°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
117.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
118°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
118.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
119°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
119.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
120°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
120.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
121°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
121.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
122°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
122.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
123°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
123.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
124°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
124.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3
125.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3
126°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3
126.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
127°	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
127.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
128°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
128.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
129°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
129.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
130°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
130.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
131°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
131.5°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
132°	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
132.5°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
133°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
133.5°	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
134°	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
134.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4



TEST NUMBER: P640146  
 CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4
135.5°	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4
136°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4
136.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
137°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
137.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
138°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
138.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
139°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
139.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
140°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
140.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
141°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
141.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
142°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
142.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
143°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
143.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5
144°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
144.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
145°	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
145.5°	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
146°	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
146.5°	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
147°	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
147.5°	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
148°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
148.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
149°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
149.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
150°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
150.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
151°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
151.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
152°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
153°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
153.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
154°	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
154.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
156°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
156.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
157°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
158°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
158.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
159°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
159.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
160°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
160.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
161°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
161.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
162°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
162.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
163°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
163.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
164°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
164.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
165°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
165.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
166°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
166.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.6
167°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7
167.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7
168°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
168.5°	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
169°	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
169.5°	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7
170°	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7
170.5°	0.6	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.6
171°	0.6	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.6
171.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
172°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
172.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
173°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
173.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
174°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
174.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
175°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
175.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
176°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
176.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
177°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
177.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
178°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
178.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
179°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
179.5°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6



TEST NUMBER: P640146  
CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1064.2	1064.2	1064.2	1064.2	1064.2	1064.2
0.5°	1063.6	1063.8	1063.8	1063.9	1064.0	1064.2
1°	1062.8	1063.2	1063.2	1063.4	1063.8	1064.0
1.5°	1062.1	1062.5	1062.6	1062.8	1063.2	1063.5
2°	1061.0	1061.6	1061.6	1062.0	1062.7	1063.1
2.5°	1059.9	1060.6	1060.6	1060.9	1061.9	1062.4
3°	1058.5	1059.3	1059.3	1059.7	1060.8	1061.6
3.5°	1057.1	1057.8	1058.0	1058.4	1059.5	1060.7
4°	1055.5	1056.3	1056.7	1057.3	1058.2	1059.7
4.5°	1053.8	1054.5	1055.0	1055.8	1056.9	1058.7
5°	1051.9	1052.7	1053.3	1054.3	1055.6	1057.2
5.5°	1050.1	1050.6	1051.4	1052.5	1054.1	1055.8
6°	1047.7	1048.6	1049.5	1050.4	1052.4	1054.1
6.5°	1045.5	1046.3	1047.2	1048.4	1050.5	1052.3
7°	1042.8	1044.0	1044.9	1046.1	1048.4	1050.5
7.5°	1040.2	1041.5	1042.4	1044.0	1046.1	1048.4
8°	1037.5	1038.7	1039.8	1041.4	1043.6	1046.1
8.5°	1034.6	1036.0	1037.1	1038.7	1040.9	1043.8
9°	1031.7	1033.0	1034.1	1036.1	1038.4	1041.2
9.5°	1028.5	1030.0	1031.2	1033.1	1035.6	1038.5
10°	1025.3	1026.7	1028.1	1030.1	1032.7	1035.8
10.5°	1021.8	1023.2	1025.0	1026.9	1029.6	1032.9
11°	1018.1	1019.8	1021.4	1023.5	1026.5	1029.8
11.5°	1014.2	1016.2	1017.7	1020.0	1023.2	1026.6
12°	1010.3	1012.4	1013.9	1016.3	1019.7	1023.2
12.5°	1006.4	1008.4	1010.2	1012.6	1016.1	1019.8
13°	1002.3	1004.4	1006.2	1008.8	1012.3	1016.2
13.5°	997.9	1000.2	1001.9	1004.8	1008.3	1012.3
14°	993.4	995.8	997.7	1000.6	1004.3	1008.5
14.5°	988.9	991.2	993.3	996.2	1000.1	1004.4
15°	984.1	986.7	988.7	991.8	995.7	1000.4
15.5°	979.1	981.8	984.0	987.1	991.1	996.0
16°	974.0	976.8	979.2	982.4	986.6	991.5
16.5°	968.7	972.0	974.2	977.4	981.7	986.9
17°	963.3	966.7	969.0	972.4	976.8	981.9
17.5°	957.8	961.4	963.7	967.2	971.7	976.9
18°	952.4	955.7	958.1	961.8	966.5	971.9
18.5°	946.8	950.3	952.5	956.4	960.9	966.7
19°	940.9	944.4	947.1	951.0	955.5	961.4
19.5°	934.9	938.7	941.3	945.4	950.1	955.8
20°	928.9	932.6	935.5	939.5	944.3	950.3
20.5°	922.3	926.3	929.3	933.4	938.5	944.5
21°	915.9	920.0	922.9	927.2	932.4	938.5
21.5°	909.3	913.6	916.5	920.9	926.3	932.4
22°	902.8	907.0	910.0	914.5	919.9	926.1



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	895.9	900.3	903.4	908.0	913.4	919.9
23°	889.1	893.6	896.6	901.2	906.9	913.4
23.5°	882.0	886.8	889.7	894.4	900.1	906.8
24°	874.7	879.8	882.8	887.4	893.1	900.1
24.5°	867.5	872.5	875.7	880.3	886.0	893.1
25°	860.1	865.0	868.5	873.2	879.2	886.2
25.5°	852.7	857.6	861.1	865.8	872.0	879.0
26°	845.2	850.1	853.7	858.5	864.8	872.0
26.5°	837.5	842.5	846.0	850.9	857.3	864.7
27°	829.9	834.7	838.3	843.5	849.9	857.3
27.5°	821.9	826.9	830.6	835.7	842.1	849.6
28°	813.8	818.8	822.5	827.8	834.3	842.3
28.5°	805.6	810.8	814.5	819.9	826.5	834.1
29°	797.3	802.6	806.4	811.7	818.6	826.6
29.5°	788.9	794.5	798.3	803.7	810.6	818.5
30°	780.6	786.2	789.7	795.4	802.5	810.4
30.5°	772.3	777.8	781.2	787.0	794.2	802.3
31°	763.9	769.3	772.8	778.5	785.7	794.1
31.5°	755.1	760.7	764.3	770.2	777.2	785.7
32°	746.6	752.2	755.8	761.6	768.9	777.3
32.5°	737.9	743.5	746.9	752.8	760.2	768.6
33°	729.1	734.4	738.1	744.0	751.2	760.1
33.5°	720.2	725.4	729.2	735.3	742.7	751.2
34°	711.2	716.5	720.2	726.4	734.0	742.5
34.5°	702.3	707.4	711.2	717.2	724.8	733.4
35°	693.3	698.1	702.1	708.1	715.4	724.4
35.5°	684.6	688.9	693.0	699.3	707.0	715.5
36°	675.3	679.8	683.9	689.9	698.0	706.5
36.5°	665.9	670.6	674.8	680.6	688.7	697.4
37°	656.3	661.0	665.3	671.3	679.1	688.1
37.5°	646.6	651.4	655.6	662.1	670.0	678.7
38°	636.8	641.9	646.0	652.2	660.5	669.0
38.5°	626.9	632.2	636.5	642.8	650.9	659.5
39°	617.1	622.5	627.0	633.1	640.9	650.0
39.5°	606.7	612.4	617.2	623.5	631.4	639.8
40°	596.0	601.9	606.8	613.5	621.5	629.9
40.5°	584.8	591.2	596.1	603.4	611.5	620.0
41°	573.8	580.2	585.3	592.9	601.6	610.1
41.5°	562.5	568.8	574.0	582.0	591.4	600.1
42°	551.0	557.9	563.1	571.1	581.0	590.2
42.5°	539.7	546.4	551.7	560.2	570.2	579.8
43°	527.9	535.0	540.3	548.6	559.0	569.1
43.5°	516.4	523.2	528.7	537.3	547.8	558.1
44°	505.0	512.0	517.4	525.7	536.7	546.7
44.5°	493.4	500.5	506.0	514.5	525.5	535.7



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	481.9	489.0	494.6	502.9	514.0	524.3
45.5°	470.4	477.5	482.7	491.6	503.0	513.3
46°	458.8	466.3	471.8	480.3	491.5	502.1
46.5°	447.4	454.5	460.2	469.3	480.2	490.4
47°	436.1	443.3	448.9	457.8	468.7	479.3
47.5°	424.9	431.7	437.3	446.6	457.7	468.3
48°	413.6	420.5	426.3	435.1	446.3	457.0
48.5°	402.6	409.5	415.1	424.1	435.3	446.0
49°	391.6	398.6	404.3	413.1	424.3	434.8
49.5°	380.7	387.7	393.1	402.2	413.4	423.8
50°	369.9	376.4	382.4	391.0	402.1	412.7
50.5°	359.1	365.6	371.3	380.1	391.6	402.0
51°	348.5	355.0	360.6	369.4	380.6	390.9
51.5°	338.1	343.6	350.0	359.0	370.0	380.4
52°	327.9	333.6	339.8	348.4	359.6	369.8
52.5°	317.6	323.6	329.6	338.2	349.1	359.3
53°	307.4	313.7	319.3	328.0	339.0	348.8
53.5°	297.7	303.8	309.1	317.8	328.9	338.7
54°	287.7	293.9	298.9	307.6	318.8	328.6
54.5°	278.1	284.2	289.3	297.4	308.7	318.6
55°	268.4	274.5	279.7	287.7	298.6	308.5
55.5°	259.0	265.1	270.0	278.0	288.6	298.4
56°	249.7	255.8	260.6	268.5	278.9	288.4
56.5°	240.8	246.5	251.4	258.9	269.5	278.8
57°	231.9	237.5	242.3	249.7	260.0	269.2
57.5°	223.0	228.7	233.1	240.5	250.8	259.8
58°	214.7	220.1	224.4	231.6	241.6	250.7
58.5°	206.1	211.6	215.7	222.6	232.6	241.4
59°	197.8	203.3	207.2	214.1	223.7	232.3
59.5°	189.7	194.9	198.9	205.4	215.0	223.4
60°	181.7	186.8	190.6	197.1	206.3	214.6
60.5°	174.0	178.8	182.6	188.8	197.8	206.0
61°	166.4	170.9	174.7	180.7	189.5	197.5
61.5°	159.0	163.5	167.0	172.7	181.4	189.0
62°	151.7	155.9	159.4	165.1	173.3	180.8
62.5°	144.5	148.6	151.8	157.3	165.4	172.7
63°	137.4	141.5	144.5	149.9	157.6	164.7
63.5°	130.7	134.5	137.5	142.5	150.0	156.9
64°	124.1	127.6	130.6	135.5	142.6	149.1
64.5°	117.7	121.1	123.8	128.5	135.2	141.5
65°	111.4	114.6	117.1	121.8	128.2	134.3
65.5°	105.3	108.3	110.7	114.8	121.2	127.1
66°	99.3	102.0	104.3	108.6	114.5	119.9
66.5°	93.6	96.2	98.3	102.3	107.7	113.0
67°	88.4	90.5	92.5	96.2	101.5	106.2



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	83.3	84.9	86.8	90.4	95.2	99.6
68°	78.1	79.5	81.2	84.7	89.3	93.4
68.5°	72.9	74.5	76.1	79.2	83.5	87.1
69°	67.7	69.6	70.9	73.9	77.9	81.0
69.5°	63.2	64.8	66.1	68.8	72.3	74.9
70°	58.8	60.3	61.5	64.1	67.4	69.2
70.5°	54.6	56.1	57.1	59.4	62.4	63.6
71°	50.8	52.0	52.9	55.1	57.7	58.5
71.5°	47.0	48.3	49.1	51.1	53.3	53.6
72°	43.5	44.7	45.5	47.4	49.1	49.1
72.5°	40.2	41.4	42.1	43.8	45.3	44.9
73°	37.2	38.3	39.0	40.6	41.7	41.3
73.5°	34.4	35.6	36.3	37.7	38.6	38.1
74°	32.0	33.7	33.9	35.1	35.7	35.0
74.5°	29.7	31.9	32.2	33.3	33.8	33.2
75°	27.8	30.0	30.5	31.6	31.9	31.5
75.5°	26.3	28.2	28.8	29.8	30.0	29.7
76°	25.1	26.4	27.1	28.1	28.1	28.0
76.5°	23.9	25.1	25.8	26.4	26.2	26.2
77°	22.7	23.9	24.6	25.1	24.9	24.9
77.5°	21.6	22.7	23.3	23.8	23.7	23.7
78°	20.4	21.5	22.1	22.5	22.4	22.4
78.5°	19.3	20.3	20.9	21.3	21.2	21.1
79°	18.1	19.2	19.7	20.1	19.9	19.9
79.5°	17.0	18.0	18.5	18.9	18.7	18.7
80°	15.9	16.9	17.4	17.7	17.5	17.4
80.5°	14.8	15.8	16.3	16.6	16.3	16.3
81°	13.8	14.7	15.2	15.4	15.1	15.1
81.5°	12.7	13.6	14.1	14.3	14.0	14.0
82°	11.7	12.5	13.0	13.2	12.9	12.8
82.5°	10.6	11.5	11.9	12.2	11.7	11.8
83°	9.6	10.5	10.9	11.1	10.6	10.7
83.5°	8.7	9.4	9.9	10.0	9.6	9.6
84°	7.7	8.5	8.9	9.0	8.5	8.6
84.5°	6.7	7.4	7.9	8.0	7.5	7.6
85°	5.7	6.5	6.8	7.0	6.4	6.5
85.5°	4.8	5.5	5.9	6.1	5.5	5.6
86°	3.9	4.6	4.9	5.1	4.7	4.6
86.5°	3.0	3.6	4.0	4.2	3.8	3.8
87°	2.1	2.8	3.2	3.3	3.1	3.1
87.5°	1.2	2.0	2.4	2.5	2.3	2.4
88°	0.5	1.2	1.7	1.8	1.6	1.6
88.5°	0.1	0.3	0.9	1.0	0.9	0.9
89°	0.1	0.1	0.1	0.2	0.3	0.4
89.5°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.1	0.2	0.2	0.2	0.2	0.2
113°	0.1	0.2	0.2	0.2	0.2	0.2
113.5°	0.1	0.2	0.2	0.2	0.2	0.2
114°	0.1	0.2	0.2	0.2	0.2	0.2
114.5°	0.1	0.2	0.2	0.2	0.2	0.2
115°	0.2	0.2	0.2	0.2	0.2	0.2
115.5°	0.2	0.2	0.2	0.2	0.2	0.2
116°	0.2	0.2	0.2	0.2	0.2	0.2
116.5°	0.2	0.2	0.2	0.2	0.2	0.2
117°	0.2	0.2	0.2	0.2	0.2	0.2
117.5°	0.2	0.2	0.2	0.2	0.2	0.2
118°	0.2	0.2	0.2	0.2	0.2	0.2
118.5°	0.2	0.2	0.2	0.2	0.2	0.2
119°	0.2	0.2	0.2	0.2	0.2	0.2
119.5°	0.2	0.2	0.2	0.2	0.2	0.2
120°	0.2	0.2	0.2	0.2	0.2	0.2
120.5°	0.2	0.2	0.2	0.2	0.2	0.2
121°	0.2	0.3	0.2	0.2	0.2	0.2
121.5°	0.2	0.3	0.3	0.3	0.3	0.3
122°	0.2	0.3	0.3	0.3	0.3	0.3
122.5°	0.2	0.3	0.3	0.3	0.3	0.3
123°	0.2	0.3	0.3	0.3	0.3	0.3
123.5°	0.2	0.3	0.3	0.3	0.3	0.3
124°	0.2	0.3	0.3	0.3	0.3	0.3
124.5°	0.2	0.3	0.3	0.3	0.3	0.3
125°	0.2	0.3	0.3	0.3	0.3	0.3
125.5°	0.3	0.3	0.3	0.3	0.3	0.3
126°	0.3	0.3	0.3	0.3	0.3	0.3
126.5°	0.3	0.3	0.3	0.3	0.3	0.3
127°	0.3	0.3	0.3	0.3	0.3	0.3
127.5°	0.3	0.3	0.3	0.3	0.3	0.3
128°	0.3	0.3	0.3	0.3	0.3	0.3
128.5°	0.3	0.3	0.3	0.3	0.3	0.3
129°	0.3	0.3	0.3	0.3	0.3	0.3
129.5°	0.3	0.3	0.3	0.3	0.3	0.3
130°	0.3	0.3	0.3	0.3	0.3	0.3
130.5°	0.3	0.3	0.3	0.3	0.3	0.3
131°	0.3	0.3	0.3	0.3	0.3	0.3
131.5°	0.3	0.4	0.3	0.3	0.3	0.4
132°	0.3	0.4	0.4	0.4	0.4	0.4
132.5°	0.3	0.4	0.4	0.4	0.4	0.4
133°	0.3	0.4	0.4	0.4	0.4	0.4
133.5°	0.3	0.4	0.4	0.4	0.4	0.4
134°	0.3	0.4	0.4	0.4	0.4	0.4
134.5°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.4	0.4	0.4	0.4	0.4	0.4
135.5°	0.4	0.4	0.4	0.4	0.4	0.4
136°	0.4	0.4	0.4	0.4	0.4	0.4
136.5°	0.4	0.4	0.4	0.4	0.4	0.4
137°	0.4	0.4	0.4	0.4	0.4	0.4
137.5°	0.4	0.4	0.4	0.4	0.4	0.4
138°	0.4	0.4	0.4	0.4	0.4	0.4
138.5°	0.4	0.4	0.4	0.4	0.4	0.4
139°	0.4	0.4	0.4	0.4	0.4	0.4
139.5°	0.4	0.4	0.4	0.4	0.4	0.4
140°	0.4	0.4	0.4	0.4	0.4	0.4
140.5°	0.4	0.4	0.4	0.4	0.4	0.4
141°	0.4	0.4	0.4	0.4	0.4	0.4
141.5°	0.4	0.4	0.4	0.4	0.4	0.4
142°	0.4	0.4	0.4	0.4	0.4	0.4
142.5°	0.4	0.4	0.4	0.4	0.4	0.4
143°	0.5	0.4	0.4	0.4	0.4	0.4
143.5°	0.5	0.4	0.4	0.4	0.4	0.4
144°	0.5	0.4	0.4	0.4	0.4	0.4
144.5°	0.5	0.5	0.4	0.4	0.4	0.4
145°	0.5	0.5	0.5	0.4	0.4	0.5
145.5°	0.5	0.5	0.5	0.5	0.5	0.5
146°	0.5	0.5	0.5	0.5	0.5	0.5
146.5°	0.5	0.5	0.5	0.5	0.5	0.5
147°	0.5	0.5	0.5	0.5	0.5	0.5
147.5°	0.5	0.5	0.5	0.5	0.5	0.5
148°	0.5	0.5	0.5	0.5	0.5	0.5
148.5°	0.5	0.5	0.5	0.5	0.5	0.5
149°	0.5	0.5	0.5	0.5	0.5	0.5
149.5°	0.5	0.5	0.5	0.5	0.5	0.5
150°	0.5	0.5	0.5	0.5	0.5	0.5
150.5°	0.5	0.5	0.5	0.5	0.5	0.5
151°	0.5	0.5	0.5	0.5	0.5	0.5
151.5°	0.5	0.5	0.5	0.5	0.5	0.5
152°	0.6	0.5	0.5	0.5	0.5	0.5
152.5°	0.6	0.5	0.5	0.5	0.5	0.5
153°	0.6	0.5	0.5	0.5	0.5	0.5
153.5°	0.6	0.5	0.5	0.5	0.5	0.5
154°	0.6	0.5	0.5	0.5	0.5	0.5
154.5°	0.6	0.5	0.5	0.5	0.5	0.5
155°	0.6	0.5	0.5	0.5	0.5	0.5
155.5°	0.6	0.5	0.5	0.5	0.5	0.5
156°	0.6	0.5	0.5	0.5	0.5	0.5
156.5°	0.6	0.5	0.5	0.5	0.5	0.5
157°	0.6	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P640146

CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.6	0.5	0.5	0.5	0.5	0.5
158°	0.6	0.5	0.5	0.5	0.5	0.5
158.5°	0.6	0.5	0.5	0.5	0.5	0.5
159°	0.6	0.5	0.5	0.5	0.5	0.5
159.5°	0.6	0.5	0.5	0.5	0.5	0.5
160°	0.6	0.5	0.5	0.5	0.5	0.5
160.5°	0.6	0.5	0.5	0.5	0.5	0.5
161°	0.6	0.5	0.5	0.5	0.5	0.5
161.5°	0.6	0.5	0.5	0.5	0.5	0.5
162°	0.6	0.5	0.5	0.5	0.5	0.5
162.5°	0.6	0.5	0.5	0.5	0.5	0.5
163°	0.6	0.5	0.5	0.5	0.5	0.5
163.5°	0.6	0.5	0.5	0.5	0.5	0.5
164°	0.6	0.5	0.5	0.5	0.5	0.5
164.5°	0.6	0.5	0.5	0.5	0.5	0.5
165°	0.6	0.5	0.5	0.5	0.5	0.5
165.5°	0.6	0.5	0.5	0.5	0.5	0.5
166°	0.6	0.5	0.5	0.5	0.5	0.5
166.5°	0.6	0.5	0.5	0.5	0.5	0.5
167°	0.7	0.5	0.5	0.5	0.5	0.5
167.5°	0.7	0.5	0.5	0.5	0.5	0.5
168°	0.7	0.5	0.5	0.6	0.6	0.5
168.5°	0.7	0.5	0.5	0.6	0.6	0.6
169°	0.7	0.5	0.5	0.6	0.6	0.6
169.5°	0.7	0.5	0.5	0.6	0.6	0.6
170°	0.7	0.5	0.6	0.6	0.6	0.6
170.5°	0.7	0.6	0.6	0.6	0.6	0.6
171°	0.7	0.6	0.6	0.6	0.6	0.6
171.5°	0.7	0.6	0.6	0.6	0.6	0.6
172°	0.7	0.6	0.6	0.6	0.6	0.6
172.5°	0.7	0.6	0.6	0.6	0.6	0.6
173°	0.7	0.6	0.6	0.6	0.6	0.6
173.5°	0.7	0.6	0.6	0.6	0.6	0.6
174°	0.7	0.6	0.6	0.6	0.6	0.6
174.5°	0.7	0.6	0.6	0.6	0.6	0.6
175°	0.7	0.6	0.6	0.6	0.6	0.6
175.5°	0.7	0.6	0.6	0.6	0.6	0.6
176°	0.7	0.6	0.6	0.6	0.6	0.6
176.5°	0.7	0.6	0.6	0.6	0.6	0.6
177°	0.7	0.6	0.6	0.6	0.6	0.6
177.5°	0.7	0.6	0.6	0.6	0.6	0.6
178°	0.7	0.6	0.6	0.6	0.6	0.6
178.5°	0.7	0.6	0.6	0.6	0.6	0.6
179°	0.7	0.6	0.6	0.6	0.6	0.6
179.5°	0.6	0.7	0.7	0.7	0.6	0.6



TEST NUMBER: P640146  
CATALOG NUMBER: LCR621RD9FSE020-23W-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.6	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)