

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: P640150

Luminaire Tested: LCR621RD9FSE040-23W-3000K

Issue Date: 2/13/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640150  
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: LCR621RD9FSE040-23W-3000K  
Description: LCR 6  
Light Source: 3000K CCT, 93 CRI LEDS  
Ballast/Driver: -

**Summary**

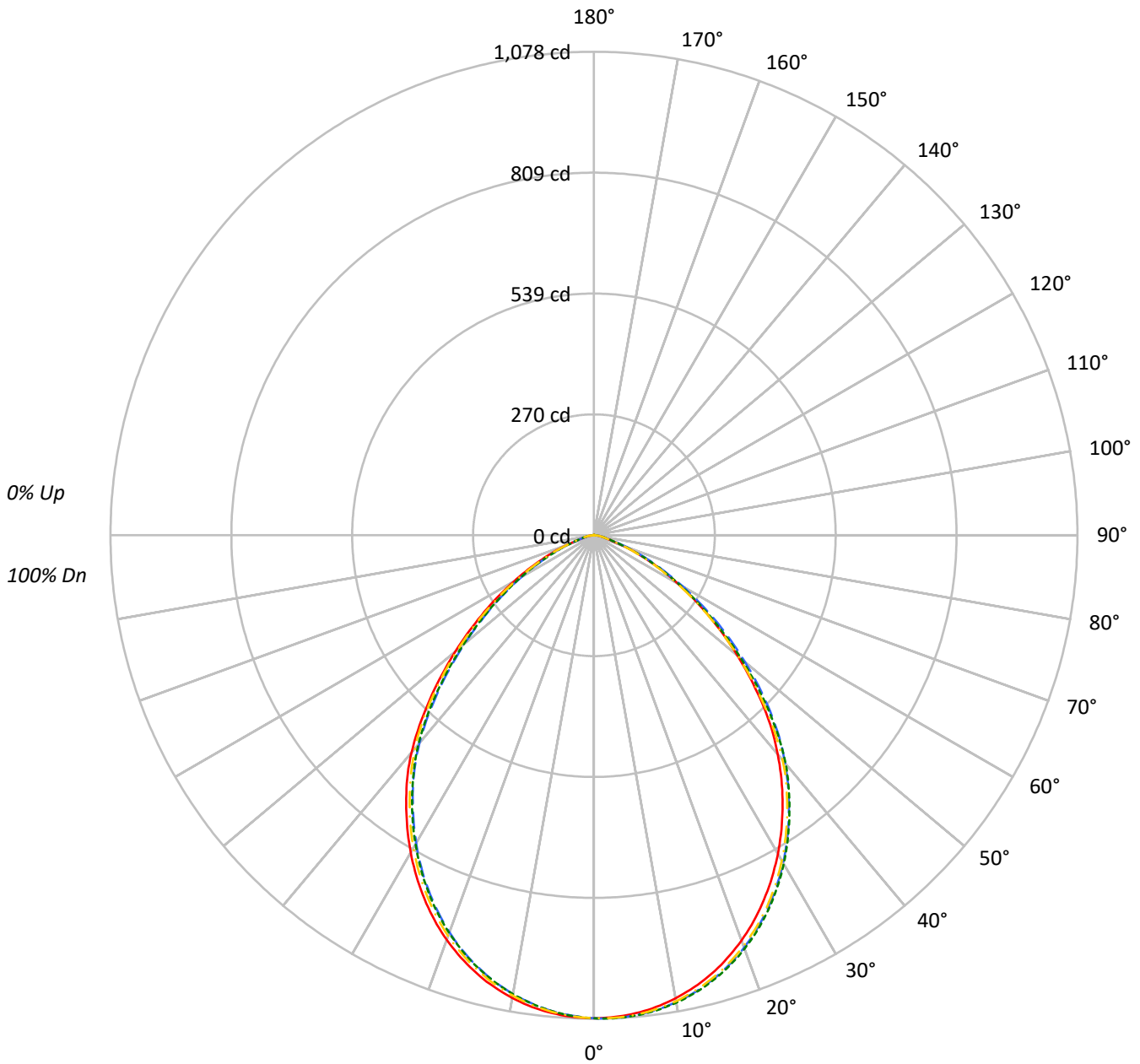
Lumens per Lamp: N/A  
Luminaire Lumens: 2105.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.15 / 1.22  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 22.9  
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: P640150  
CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

### 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°  | 59041 | 59041 | 59041 | 59041 |
| 5°  | 58876 | 59151 | 58860 | 58629 |
| 10° | 58349 | 58911 | 58321 | 57842 |
| 15° | 57458 | 58292 | 57378 | 56669 |
| 20° | 56110 | 57242 | 55993 | 55060 |
| 25° | 54251 | 55697 | 54106 | 52951 |
| 30° | 51919 | 53584 | 51704 | 50362 |
| 35° | 49061 | 50862 | 48834 | 47281 |
| 40° | 45621 | 47568 | 45285 | 43589 |
| 45° | 41136 | 42586 | 40105 | 38368 |
| 50° | 35615 | 36579 | 34404 | 32485 |
| 55° | 29839 | 30374 | 28520 | 26551 |
| 60° | 23814 | 24121 | 22619 | 20733 |
| 65° | 17628 | 17875 | 16707 | 15047 |
| 70° | 11220 | 11717 | 10707 | 9793  |
| 75° | 6736  | 6799  | 6100  | 6439  |
| 80° | 5588  | 5840  | 4988  | 5398  |
| 85° | 4151  | 5032  | 3397  | 4151  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 43152 cd/sqm



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 CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**ZONAL LUMENS:**

| Zone            | Lumens        | % Fixture    |
|-----------------|---------------|--------------|
| 0°-10°          | 101.4         | 4.8          |
| 10°-20°         | 284.9         | 13.5         |
| 20°-30°         | 412.1         | 19.6         |
| 30°-40°         | 456.9         | 21.7         |
| 40°-50°         | 402.2         | 19.1         |
| 50°-60°         | 270.4         | 12.8         |
| 60°-70°         | 130.1         | 6.2          |
| 70°-80°         | 37.3          | 1.8          |
| 80°-90°         | 8.0           | 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>798.5</b>  | <b>37.9</b>  |
| <b>0°-40°</b>   | <b>1255.4</b> | <b>59.6</b>  |
| <b>0°-60°</b>   | <b>1927.9</b> | <b>91.6</b>  |
| <b>0°-90°</b>   | <b>2103.3</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>2105.0</b> | <b>100.0</b> |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1077 | 1077 | 1077 | 1077 | 1077 |      |
| 5°   | 1070 | 1075 | 1070 | 1065 | 1070 | 101  |
| 15°  | 1012 | 1027 | 1011 | 998  | 1012 | 285  |
| 25°  | 897  | 921  | 894  | 875  | 897  | 412  |
| 35°  | 733  | 760  | 730  | 706  | 733  | 457  |
| 45°  | 531  | 549  | 517  | 495  | 531  | 408  |
| 55°  | 312  | 318  | 298  | 278  | 312  | 280  |
| 65°  | 136  | 138  | 129  | 116  | 136  | 136  |
| 75°  | 32   | 32   | 29   | 30   | 32   | 38   |
| 85°  | 7    | 8    | 5    | 7    | 7    | 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    |      |



TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 |
| 0.5°  | 1077.0 | 1077.3 | 1077.5 | 1077.6 | 1077.4 | 1077.4 | 1077.0 | 1077.0 | 1076.8 | 1076.7 | 1076.4 |
| 1°    | 1076.8 | 1077.1 | 1077.6 | 1078.0 | 1077.9 | 1077.6 | 1077.2 | 1076.9 | 1076.7 | 1076.1 | 1075.7 |
| 1.5°  | 1076.3 | 1076.9 | 1077.6 | 1078.1 | 1078.0 | 1077.6 | 1077.4 | 1076.8 | 1076.2 | 1075.5 | 1074.8 |
| 2°    | 1075.9 | 1076.5 | 1077.6 | 1078.1 | 1078.0 | 1077.5 | 1077.2 | 1076.4 | 1075.7 | 1074.9 | 1073.7 |
| 2.5°  | 1075.1 | 1076.1 | 1077.4 | 1078.0 | 1077.8 | 1077.4 | 1076.8 | 1076.1 | 1075.1 | 1074.1 | 1072.8 |
| 3°    | 1074.3 | 1075.5 | 1077.1 | 1077.7 | 1077.5 | 1076.9 | 1076.4 | 1075.5 | 1074.3 | 1073.2 | 1071.5 |
| 3.5°  | 1073.4 | 1074.7 | 1076.5 | 1077.2 | 1077.1 | 1076.3 | 1075.7 | 1074.8 | 1073.4 | 1072.2 | 1070.2 |
| 4°    | 1072.4 | 1073.7 | 1075.9 | 1076.7 | 1076.5 | 1075.7 | 1074.9 | 1073.7 | 1072.3 | 1071.0 | 1068.7 |
| 4.5°  | 1071.4 | 1072.7 | 1075.0 | 1076.1 | 1075.6 | 1075.1 | 1074.0 | 1072.5 | 1070.9 | 1069.5 | 1066.9 |
| 5°    | 1069.9 | 1071.5 | 1074.0 | 1075.2 | 1074.9 | 1074.3 | 1072.9 | 1071.3 | 1069.6 | 1067.9 | 1065.1 |
| 5.5°  | 1068.5 | 1070.2 | 1073.1 | 1074.4 | 1073.9 | 1073.4 | 1071.7 | 1070.0 | 1068.1 | 1066.1 | 1063.1 |
| 6°    | 1066.8 | 1068.8 | 1072.0 | 1073.3 | 1072.8 | 1072.2 | 1070.5 | 1068.7 | 1066.3 | 1064.2 | 1060.9 |
| 6.5°  | 1065.0 | 1067.2 | 1070.4 | 1072.1 | 1071.5 | 1070.8 | 1069.2 | 1067.1 | 1064.6 | 1062.2 | 1058.6 |
| 7°    | 1063.1 | 1065.4 | 1069.0 | 1070.6 | 1070.1 | 1069.4 | 1067.6 | 1065.3 | 1062.7 | 1059.9 | 1056.1 |
| 7.5°  | 1061.0 | 1063.3 | 1067.3 | 1069.2 | 1068.5 | 1067.7 | 1065.9 | 1063.4 | 1060.5 | 1057.6 | 1053.5 |
| 8°    | 1058.7 | 1061.2 | 1065.6 | 1067.5 | 1066.7 | 1065.9 | 1063.9 | 1061.2 | 1058.2 | 1055.2 | 1050.7 |
| 8.5°  | 1056.3 | 1058.9 | 1063.7 | 1065.6 | 1064.6 | 1063.8 | 1061.8 | 1058.9 | 1055.8 | 1052.6 | 1047.9 |
| 9°    | 1053.7 | 1056.5 | 1061.5 | 1063.6 | 1062.6 | 1061.8 | 1059.5 | 1056.7 | 1053.2 | 1049.9 | 1045.0 |
| 9.5°  | 1051.0 | 1054.1 | 1059.1 | 1061.3 | 1060.7 | 1059.5 | 1057.3 | 1054.2 | 1050.6 | 1046.9 | 1042.0 |
| 10°   | 1048.2 | 1051.4 | 1056.9 | 1059.2 | 1058.3 | 1057.4 | 1054.9 | 1051.5 | 1047.7 | 1044.0 | 1038.6 |
| 10.5° | 1045.4 | 1048.5 | 1054.4 | 1056.7 | 1055.9 | 1055.0 | 1052.3 | 1048.6 | 1044.7 | 1040.9 | 1035.1 |
| 11°   | 1042.2 | 1045.6 | 1051.9 | 1054.1 | 1053.3 | 1052.2 | 1049.5 | 1045.6 | 1041.5 | 1037.5 | 1031.4 |
| 11.5° | 1039.0 | 1042.5 | 1049.0 | 1051.3 | 1050.6 | 1049.5 | 1046.5 | 1042.5 | 1038.0 | 1034.2 | 1027.6 |
| 12°   | 1035.5 | 1039.3 | 1046.0 | 1048.5 | 1047.7 | 1046.5 | 1043.4 | 1039.4 | 1034.6 | 1030.6 | 1023.9 |
| 12.5° | 1032.1 | 1035.9 | 1043.0 | 1045.5 | 1044.8 | 1043.4 | 1040.3 | 1035.9 | 1031.1 | 1027.0 | 1020.0 |
| 13°   | 1028.4 | 1032.4 | 1039.8 | 1042.4 | 1041.5 | 1040.2 | 1037.1 | 1032.5 | 1027.4 | 1023.1 | 1015.8 |
| 13.5° | 1024.4 | 1028.5 | 1036.4 | 1039.2 | 1038.3 | 1036.8 | 1033.6 | 1028.7 | 1023.7 | 1019.0 | 1011.4 |
| 14°   | 1020.7 | 1024.7 | 1032.8 | 1035.8 | 1034.7 | 1033.4 | 1030.0 | 1024.9 | 1019.7 | 1014.7 | 1006.9 |
| 14.5° | 1016.5 | 1020.7 | 1029.0 | 1032.2 | 1030.8 | 1029.7 | 1026.2 | 1021.2 | 1015.5 | 1010.4 | 1002.2 |
| 15°   | 1012.4 | 1016.6 | 1025.2 | 1028.5 | 1027.1 | 1026.0 | 1022.3 | 1017.1 | 1011.0 | 1005.8 | 997.4  |
| 15.5° | 1008.0 | 1012.3 | 1021.4 | 1024.7 | 1023.3 | 1022.1 | 1018.2 | 1012.8 | 1006.5 | 1001.2 | 992.5  |
| 16°   | 1003.4 | 1008.0 | 1017.3 | 1020.6 | 1019.4 | 1018.0 | 1013.8 | 1008.3 | 1001.8 | 996.3  | 987.6  |
| 16.5° | 998.7  | 1003.3 | 1013.0 | 1016.3 | 1015.2 | 1013.5 | 1009.4 | 1003.7 | 997.2  | 991.5  | 982.3  |
| 17°   | 993.7  | 998.7  | 1008.3 | 1012.0 | 1010.7 | 1009.2 | 1005.0 | 999.0  | 992.3  | 986.3  | 976.8  |
| 17.5° | 988.6  | 993.7  | 1003.6 | 1007.5 | 1006.2 | 1004.5 | 1000.2 | 994.2  | 987.2  | 981.1  | 971.2  |
| 18°   | 983.5  | 988.7  | 999.0  | 1002.8 | 1001.3 | 999.7  | 995.5  | 989.1  | 982.0  | 975.8  | 965.7  |
| 18.5° | 978.3  | 983.7  | 994.1  | 998.1  | 996.7  | 994.9  | 990.6  | 983.9  | 976.6  | 970.3  | 960.1  |
| 19°   | 972.9  | 978.5  | 989.0  | 993.3  | 991.7  | 990.1  | 985.6  | 978.6  | 971.1  | 964.5  | 954.2  |
| 19.5° | 967.3  | 972.9  | 983.9  | 988.1  | 986.6  | 984.9  | 980.3  | 973.2  | 965.4  | 958.8  | 948.1  |
| 20°   | 961.8  | 967.4  | 978.6  | 983.0  | 981.2  | 979.7  | 974.9  | 967.6  | 959.8  | 953.0  | 941.9  |
| 20.5° | 955.9  | 961.8  | 973.1  | 977.6  | 975.8  | 974.1  | 969.4  | 962.0  | 954.0  | 946.8  | 935.5  |
| 21°   | 949.8  | 955.9  | 967.6  | 972.0  | 970.2  | 968.4  | 963.8  | 956.1  | 948.0  | 940.4  | 929.0  |
| 21.5° | 943.6  | 949.7  | 961.8  | 966.4  | 964.6  | 962.8  | 957.8  | 950.1  | 941.7  | 934.2  | 922.5  |
| 22°   | 937.3  | 943.7  | 955.9  | 960.7  | 958.9  | 957.1  | 951.8  | 943.9  | 935.3  | 927.7  | 915.8  |



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CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 22.5° | 930.9 | 937.3 | 949.8 | 954.8 | 953.1 | 951.1  | 945.8 | 937.4  | 928.7 | 921.1  | 908.8 |
| 23°   | 924.4 | 930.7 | 943.6 | 948.7 | 946.9 | 944.9  | 939.7 | 931.1  | 922.1 | 914.3  | 902.1 |
| 23.5° | 917.7 | 924.3 | 937.4 | 942.4 | 940.6 | 938.8  | 933.1 | 924.7  | 915.4 | 907.5  | 894.8 |
| 24°   | 910.9 | 917.6 | 931.0 | 936.1 | 934.1 | 932.3  | 926.5 | 918.1  | 908.6 | 900.6  | 887.7 |
| 24.5° | 903.9 | 910.8 | 924.2 | 929.5 | 927.4 | 925.6  | 920.0 | 911.2  | 901.7 | 893.6  | 880.3 |
| 25°   | 896.9 | 903.9 | 917.4 | 922.6 | 920.8 | 918.9  | 913.4 | 904.1  | 894.5 | 886.1  | 873.0 |
| 25.5° | 889.6 | 896.9 | 910.7 | 915.8 | 913.9 | 912.0  | 906.3 | 897.2  | 887.3 | 878.7  | 865.4 |
| 26°   | 882.4 | 889.6 | 903.5 | 909.0 | 906.9 | 905.1  | 899.2 | 890.0  | 879.9 | 871.1  | 857.8 |
| 26.5° | 875.1 | 882.2 | 896.5 | 902.1 | 900.1 | 897.9  | 892.0 | 882.6  | 872.4 | 863.7  | 850.0 |
| 27°   | 867.6 | 875.0 | 889.2 | 894.8 | 892.6 | 890.7  | 884.9 | 875.1  | 864.7 | 855.8  | 842.1 |
| 27.5° | 859.8 | 867.3 | 882.0 | 887.7 | 885.1 | 883.4  | 877.2 | 867.6  | 857.2 | 848.1  | 834.0 |
| 28°   | 852.4 | 859.8 | 874.4 | 880.0 | 877.7 | 875.8  | 869.5 | 859.8  | 849.5 | 840.1  | 825.9 |
| 28.5° | 844.1 | 852.1 | 867.0 | 872.5 | 870.0 | 868.1  | 861.9 | 852.2  | 841.4 | 832.2  | 817.9 |
| 29°   | 836.6 | 844.1 | 859.4 | 864.6 | 862.3 | 860.5  | 854.3 | 844.1  | 833.6 | 824.0  | 809.6 |
| 29.5° | 828.3 | 836.1 | 851.3 | 857.1 | 854.4 | 852.6  | 846.2 | 836.2  | 825.2 | 815.9  | 801.0 |
| 30°   | 820.2 | 828.0 | 843.2 | 849.0 | 846.5 | 844.6  | 838.1 | 827.9  | 816.8 | 807.3  | 792.5 |
| 30.5° | 812.0 | 819.9 | 835.4 | 841.1 | 838.3 | 836.3  | 829.7 | 819.7  | 808.6 | 798.9  | 783.9 |
| 31°   | 803.6 | 811.5 | 827.3 | 832.7 | 830.0 | 828.3  | 821.8 | 811.1  | 800.0 | 790.2  | 775.4 |
| 31.5° | 795.2 | 803.1 | 818.7 | 824.6 | 821.5 | 819.7  | 813.2 | 802.8  | 791.5 | 781.7  | 766.5 |
| 32°   | 786.6 | 794.7 | 810.2 | 815.9 | 813.0 | 811.2  | 804.5 | 794.0  | 782.7 | 773.0  | 757.8 |
| 32.5° | 777.8 | 786.0 | 801.9 | 807.4 | 804.5 | 802.4  | 796.0 | 785.6  | 774.3 | 764.2  | 749.1 |
| 33°   | 769.2 | 777.3 | 793.6 | 798.8 | 795.7 | 794.0  | 787.1 | 776.6  | 765.2 | 755.4  | 740.2 |
| 33.5° | 760.3 | 768.5 | 784.9 | 789.9 | 786.6 | 785.0  | 778.3 | 767.8  | 756.6 | 746.8  | 731.2 |
| 34°   | 751.4 | 759.8 | 776.0 | 780.9 | 778.0 | 776.0  | 769.3 | 759.1  | 747.6 | 737.7  | 722.3 |
| 34.5° | 742.2 | 750.7 | 766.9 | 772.1 | 768.9 | 766.8  | 760.2 | 750.1  | 738.9 | 728.4  | 713.3 |
| 35°   | 733.1 | 741.4 | 757.8 | 762.9 | 760.0 | 757.7  | 751.4 | 741.2  | 729.7 | 719.1  | 704.3 |
| 35.5° | 724.1 | 732.2 | 748.7 | 753.7 | 750.7 | 748.8  | 742.3 | 732.0  | 720.6 | 709.8  | 695.4 |
| 36°   | 715.0 | 723.0 | 739.6 | 744.7 | 741.8 | 739.7  | 733.0 | 722.8  | 711.5 | 700.5  | 686.1 |
| 36.5° | 705.8 | 713.8 | 730.4 | 735.6 | 732.4 | 730.3  | 723.7 | 713.7  | 702.4 | 692.6  | 676.2 |
| 37°   | 696.3 | 704.4 | 721.1 | 726.1 | 723.0 | 720.9  | 714.4 | 704.5  | 693.2 | 683.0  | 666.5 |
| 37.5° | 686.9 | 694.6 | 711.9 | 716.6 | 713.6 | 711.5  | 705.1 | 695.3  | 683.8 | 673.4  | 656.6 |
| 38°   | 677.1 | 684.8 | 702.3 | 706.9 | 704.2 | 702.1  | 695.8 | 685.8  | 674.2 | 663.5  | 646.6 |
| 38.5° | 667.4 | 675.1 | 692.5 | 697.2 | 694.7 | 692.7  | 686.2 | 675.9  | 664.6 | 653.6  | 636.7 |
| 39°   | 657.8 | 665.6 | 682.5 | 687.3 | 685.0 | 682.8  | 676.1 | 665.8  | 654.2 | 643.9  | 626.8 |
| 39.5° | 647.5 | 655.7 | 672.6 | 677.6 | 675.0 | 672.4  | 665.5 | 654.9  | 643.9 | 633.8  | 616.0 |
| 40°   | 637.5 | 645.5 | 662.7 | 667.3 | 664.7 | 661.6  | 654.4 | 644.2  | 632.8 | 623.0  | 605.1 |
| 40.5° | 627.4 | 635.7 | 652.7 | 657.4 | 653.9 | 650.6  | 643.1 | 632.7  | 621.8 | 611.8  | 594.0 |
| 41°   | 617.4 | 625.4 | 642.6 | 647.3 | 643.1 | 639.3  | 631.8 | 621.5  | 610.3 | 600.4  | 582.8 |
| 41.5° | 607.3 | 615.5 | 632.6 | 636.7 | 631.8 | 627.9  | 620.3 | 610.1  | 598.9 | 589.0  | 571.1 |
| 42°   | 597.3 | 605.5 | 622.1 | 625.9 | 620.4 | 616.2  | 608.7 | 598.5  | 587.1 | 577.5  | 559.6 |
| 42.5° | 586.7 | 594.6 | 611.5 | 614.6 | 609.0 | 604.1  | 597.2 | 586.8  | 575.7 | 566.0  | 548.0 |
| 43°   | 576.0 | 583.7 | 600.7 | 603.4 | 597.0 | 592.4  | 585.0 | 575.2  | 564.2 | 554.5  | 536.4 |
| 43.5° | 564.8 | 572.6 | 589.5 | 591.8 | 585.1 | 580.5  | 573.4 | 563.5  | 552.5 | 542.7  | 524.6 |
| 44°   | 553.3 | 561.1 | 578.0 | 580.2 | 573.3 | 568.4  | 561.5 | 551.8  | 540.5 | 530.9  | 512.9 |
| 44.5° | 542.2 | 550.2 | 566.3 | 568.5 | 561.3 | 556.3  | 549.6 | 539.9  | 528.9 | 519.3  | 501.3 |



TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 45°   | 530.6 | 538.7 | 555.3 | 556.6 | 549.3 | 544.4  | 537.6 | 528.1  | 517.3 | 507.8  | 489.6 |
| 45.5° | 519.5 | 527.5 | 543.8 | 544.8 | 537.2 | 532.3  | 525.7 | 516.3  | 505.7 | 496.0  | 478.0 |
| 46°   | 508.1 | 515.9 | 532.4 | 533.1 | 525.0 | 520.2  | 513.7 | 504.5  | 494.1 | 484.5  | 466.5 |
| 46.5° | 496.3 | 504.5 | 520.8 | 521.0 | 513.0 | 508.2  | 502.0 | 492.9  | 482.4 | 472.9  | 454.8 |
| 47°   | 485.0 | 493.0 | 509.0 | 509.0 | 500.9 | 495.8  | 490.1 | 481.1  | 470.8 | 461.4  | 443.3 |
| 47.5° | 473.9 | 481.6 | 497.5 | 497.1 | 488.6 | 483.7  | 477.9 | 469.4  | 459.3 | 449.9  | 432.1 |
| 48°   | 462.5 | 470.5 | 486.0 | 485.2 | 476.6 | 471.6  | 466.1 | 458.0  | 447.9 | 438.4  | 420.6 |
| 48.5° | 451.4 | 459.3 | 474.4 | 473.4 | 464.7 | 459.8  | 454.5 | 446.6  | 436.6 | 427.4  | 409.5 |
| 49°   | 440.0 | 447.8 | 462.9 | 461.8 | 452.7 | 448.0  | 442.8 | 435.0  | 425.3 | 416.3  | 398.3 |
| 49.5° | 428.9 | 436.9 | 451.4 | 449.8 | 440.8 | 436.2  | 431.2 | 423.9  | 414.2 | 405.2  | 387.5 |
| 50°   | 417.6 | 425.4 | 439.9 | 438.3 | 428.9 | 424.4  | 419.5 | 412.4  | 403.4 | 394.3  | 376.4 |
| 50.5° | 406.8 | 414.3 | 428.3 | 426.5 | 417.3 | 412.8  | 408.0 | 401.2  | 392.5 | 383.3  | 365.6 |
| 51°   | 395.6 | 403.1 | 417.0 | 415.1 | 405.7 | 401.3  | 396.5 | 390.2  | 381.2 | 372.5  | 355.0 |
| 51.5° | 384.9 | 392.3 | 405.8 | 403.5 | 394.4 | 389.9  | 385.4 | 379.2  | 370.5 | 362.0  | 344.4 |
| 52°   | 374.2 | 381.5 | 394.5 | 392.5 | 383.1 | 378.7  | 374.0 | 368.4  | 360.1 | 351.5  | 333.7 |
| 52.5° | 363.7 | 370.5 | 383.4 | 381.0 | 371.7 | 367.3  | 362.9 | 357.3  | 349.2 | 340.9  | 323.8 |
| 53°   | 353.0 | 359.5 | 372.6 | 369.8 | 360.6 | 356.4  | 352.0 | 346.7  | 338.9 | 330.6  | 313.5 |
| 53.5° | 342.8 | 349.7 | 361.4 | 358.5 | 349.7 | 345.7  | 341.2 | 336.0  | 328.5 | 320.4  | 303.4 |
| 54°   | 332.6 | 339.3 | 350.9 | 346.0 | 338.8 | 334.6  | 330.6 | 325.6  | 318.5 | 310.2  | 293.5 |
| 54.5° | 322.4 | 328.8 | 340.3 | 335.8 | 328.2 | 324.0  | 319.8 | 315.0  | 308.3 | 300.4  | 284.1 |
| 55°   | 312.2 | 318.4 | 329.6 | 325.6 | 317.8 | 313.5  | 309.6 | 305.2  | 298.4 | 290.7  | 274.0 |
| 55.5° | 302.0 | 307.9 | 318.9 | 315.4 | 307.2 | 303.2  | 299.2 | 294.9  | 288.6 | 281.0  | 264.7 |
| 56°   | 291.8 | 297.5 | 308.3 | 305.3 | 296.9 | 292.7  | 289.0 | 285.0  | 279.0 | 271.2  | 255.3 |
| 56.5° | 282.2 | 287.5 | 297.6 | 295.0 | 286.9 | 282.6  | 279.0 | 275.2  | 269.3 | 261.8  | 246.2 |
| 57°   | 272.5 | 277.6 | 287.5 | 284.9 | 276.8 | 272.7  | 268.9 | 265.5  | 259.8 | 252.6  | 237.1 |
| 57.5° | 262.9 | 267.7 | 277.3 | 274.7 | 267.0 | 262.9  | 259.3 | 255.9  | 250.6 | 243.6  | 228.3 |
| 58°   | 253.7 | 258.1 | 267.3 | 264.9 | 257.1 | 253.2  | 249.8 | 246.7  | 241.6 | 234.5  | 219.6 |
| 58.5° | 244.3 | 248.6 | 257.8 | 255.3 | 247.9 | 243.8  | 240.4 | 237.4  | 232.5 | 225.8  | 211.1 |
| 59°   | 235.1 | 239.3 | 248.0 | 245.7 | 238.3 | 234.4  | 231.1 | 228.3  | 223.7 | 217.1  | 202.5 |
| 59.5° | 226.1 | 230.1 | 238.4 | 236.4 | 229.1 | 225.2  | 221.9 | 219.3  | 215.0 | 208.5  | 194.2 |
| 60°   | 217.2 | 220.8 | 228.9 | 227.0 | 220.0 | 216.0  | 212.9 | 210.3  | 206.3 | 200.1  | 186.3 |
| 60.5° | 208.5 | 211.8 | 219.9 | 218.0 | 211.1 | 207.2  | 204.1 | 201.8  | 197.9 | 191.7  | 178.5 |
| 61°   | 199.9 | 203.0 | 210.6 | 208.9 | 202.2 | 198.6  | 195.7 | 193.4  | 189.6 | 183.8  | 170.7 |
| 61.5° | 191.3 | 194.5 | 201.7 | 200.2 | 193.8 | 190.1  | 187.1 | 185.0  | 181.5 | 175.9  | 162.9 |
| 62°   | 183.0 | 185.7 | 193.0 | 191.6 | 185.3 | 181.9  | 178.7 | 176.8  | 173.6 | 168.2  | 155.5 |
| 62.5° | 174.7 | 177.3 | 184.6 | 183.0 | 176.9 | 173.6  | 170.6 | 168.7  | 165.8 | 160.5  | 148.2 |
| 63°   | 166.7 | 169.1 | 176.2 | 174.8 | 168.5 | 165.5  | 162.7 | 160.8  | 158.0 | 152.9  | 141.3 |
| 63.5° | 158.8 | 161.0 | 168.0 | 166.6 | 160.7 | 157.4  | 154.8 | 153.1  | 150.4 | 145.6  | 134.3 |
| 64°   | 150.9 | 153.1 | 159.6 | 158.6 | 152.8 | 149.9  | 147.3 | 145.6  | 143.1 | 138.7  | 127.5 |
| 64.5° | 143.2 | 145.3 | 151.9 | 150.7 | 145.2 | 142.3  | 139.7 | 138.2  | 135.9 | 131.7  | 121.0 |
| 65°   | 135.9 | 137.6 | 144.2 | 143.1 | 137.8 | 134.8  | 132.6 | 131.0  | 128.8 | 124.8  | 114.7 |
| 65.5° | 128.6 | 130.0 | 136.8 | 135.7 | 130.4 | 127.6  | 125.4 | 124.0  | 122.0 | 118.2  | 108.3 |
| 66°   | 121.3 | 123.0 | 129.3 | 128.3 | 123.1 | 120.6  | 118.5 | 117.1  | 115.3 | 111.8  | 102.3 |
| 66.5° | 114.3 | 116.0 | 122.2 | 121.2 | 116.2 | 113.7  | 111.8 | 110.5  | 108.8 | 105.5  | 96.4  |
| 67°   | 107.5 | 108.9 | 115.3 | 114.3 | 109.4 | 107.2  | 105.3 | 103.9  | 102.3 | 99.5   | 90.9  |





TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|------|--------|------|--------|------|
| 67.5° | 100.8 | 102.3 | 108.5 | 107.4 | 102.9 | 100.6  | 98.9 | 97.7   | 96.2 | 93.5   | 85.7 |
| 68°   | 94.6  | 95.9  | 101.8 | 100.9 | 96.3  | 94.4   | 92.9 | 91.7   | 90.3 | 88.1   | 80.5 |
| 68.5° | 88.2  | 89.6  | 95.7  | 94.6  | 90.5  | 88.7   | 87.3 | 86.1   | 84.4 | 82.7   | 75.3 |
| 69°   | 82.0  | 83.6  | 89.5  | 88.5  | 84.7  | 83.0   | 81.6 | 80.5   | 78.5 | 77.3   | 70.1 |
| 69.5° | 75.8  | 77.8  | 83.6  | 82.5  | 78.9  | 77.3   | 75.9 | 74.9   | 72.7 | 72.0   | 65.2 |
| 70°   | 70.0  | 72.2  | 77.7  | 76.7  | 73.1  | 71.7   | 70.3 | 69.3   | 66.8 | 66.6   | 60.8 |
| 70.5° | 64.4  | 66.8  | 72.4  | 71.3  | 67.3  | 66.0   | 65.2 | 64.3   | 61.7 | 61.8   | 56.5 |
| 71°   | 59.2  | 61.7  | 67.1  | 66.1  | 62.2  | 61.2   | 60.3 | 59.3   | 56.6 | 57.2   | 52.3 |
| 71.5° | 54.2  | 56.8  | 62.1  | 61.2  | 57.3  | 56.4   | 55.8 | 54.7   | 52.1 | 52.9   | 48.4 |
| 72°   | 49.7  | 52.2  | 57.5  | 56.4  | 52.9  | 51.8   | 51.4 | 50.2   | 47.8 | 48.8   | 44.9 |
| 72.5° | 45.4  | 48.0  | 53.1  | 52.0  | 48.5  | 47.7   | 47.3 | 46.2   | 44.0 | 45.0   | 41.4 |
| 73°   | 41.8  | 44.1  | 48.9  | 47.9  | 44.5  | 43.8   | 43.5 | 42.4   | 40.3 | 41.5   | 38.2 |
| 73.5° | 38.5  | 40.7  | 45.1  | 44.1  | 40.9  | 40.2   | 40.0 | 39.0   | 37.1 | 38.3   | 35.2 |
| 74°   | 35.4  | 37.5  | 41.5  | 40.6  | 37.7  | 37.0   | 36.8 | 35.8   | 34.1 | 35.2   | 32.6 |
| 74.5° | 33.6  | 34.7  | 38.3  | 37.4  | 34.8  | 34.1   | 34.0 | 33.1   | 31.3 | 32.5   | 30.2 |
| 75°   | 31.8  | 32.9  | 35.3  | 34.4  | 32.1  | 31.5   | 31.3 | 30.4   | 28.8 | 29.9   | 28.0 |
| 75.5° | 30.1  | 31.0  | 33.4  | 32.5  | 30.0  | 29.3   | 29.0 | 28.2   | 27.2 | 27.7   | 26.1 |
| 76°   | 28.3  | 29.1  | 31.5  | 30.6  | 28.3  | 27.6   | 27.0 | 26.1   | 25.5 | 25.6   | 24.8 |
| 76.5° | 26.5  | 27.3  | 29.6  | 28.7  | 27.0  | 26.4   | 25.6 | 24.5   | 24.0 | 24.1   | 23.6 |
| 77°   | 25.2  | 25.4  | 27.7  | 26.8  | 25.7  | 25.1   | 24.4 | 23.3   | 22.8 | 22.9   | 22.4 |
| 77.5° | 23.9  | 24.1  | 25.8  | 25.6  | 24.5  | 23.9   | 23.2 | 22.2   | 21.6 | 21.7   | 21.3 |
| 78°   | 22.7  | 22.9  | 24.5  | 24.3  | 23.3  | 22.7   | 22.0 | 21.0   | 20.5 | 20.6   | 20.1 |
| 78.5° | 21.4  | 21.6  | 23.3  | 23.1  | 22.0  | 21.5   | 20.8 | 19.8   | 19.3 | 19.4   | 18.9 |
| 79°   | 20.1  | 20.4  | 22.0  | 21.8  | 20.9  | 20.3   | 19.6 | 18.6   | 18.1 | 18.3   | 17.8 |
| 79.5° | 18.9  | 19.2  | 20.8  | 20.7  | 19.7  | 19.1   | 18.4 | 17.5   | 17.0 | 17.1   | 16.7 |
| 80°   | 17.7  | 18.0  | 19.6  | 19.5  | 18.5  | 18.0   | 17.3 | 16.3   | 15.8 | 16.0   | 15.6 |
| 80.5° | 16.5  | 16.8  | 18.4  | 18.3  | 17.3  | 16.9   | 16.2 | 15.2   | 14.7 | 14.9   | 14.5 |
| 81°   | 15.3  | 15.6  | 17.3  | 17.2  | 16.2  | 15.8   | 15.1 | 14.1   | 13.6 | 13.8   | 13.4 |
| 81.5° | 14.1  | 14.4  | 16.1  | 16.1  | 15.2  | 14.7   | 14.0 | 13.0   | 12.5 | 12.7   | 12.4 |
| 82°   | 13.0  | 13.3  | 15.0  | 15.0  | 14.1  | 13.6   | 13.0 | 11.9   | 11.5 | 11.6   | 11.3 |
| 82.5° | 11.9  | 12.2  | 13.9  | 13.9  | 13.0  | 12.6   | 11.9 | 10.8   | 10.4 | 10.5   | 10.3 |
| 83°   | 10.8  | 11.1  | 12.8  | 12.8  | 12.0  | 11.5   | 10.9 | 9.8    | 9.4  | 9.5    | 9.3  |
| 83.5° | 9.7   | 10.0  | 11.7  | 11.8  | 10.9  | 10.5   | 9.9  | 8.8    | 8.4  | 8.5    | 8.4  |
| 84°   | 8.7   | 9.0   | 10.7  | 10.7  | 9.9   | 9.5    | 8.9  | 7.9    | 7.4  | 7.5    | 7.4  |
| 84.5° | 7.7   | 7.9   | 9.7   | 9.7   | 8.9   | 8.6    | 8.0  | 6.9    | 6.4  | 6.5    | 6.4  |
| 85°   | 6.6   | 6.9   | 8.7   | 8.7   | 8.0   | 7.6    | 7.0  | 5.9    | 5.4  | 5.5    | 5.5  |
| 85.5° | 5.6   | 5.9   | 7.7   | 7.7   | 7.0   | 6.7    | 6.1  | 5.0    | 4.5  | 4.7    | 4.5  |
| 86°   | 4.6   | 5.0   | 6.7   | 6.8   | 6.0   | 5.7    | 5.1  | 4.1    | 3.7  | 3.9    | 3.7  |
| 86.5° | 3.8   | 4.2   | 5.8   | 5.8   | 5.1   | 4.7    | 4.2  | 3.3    | 3.0  | 3.0    | 2.8  |
| 87°   | 3.1   | 3.3   | 4.9   | 4.9   | 4.2   | 3.9    | 3.4  | 2.5    | 2.2  | 2.3    | 2.0  |
| 87.5° | 2.4   | 2.6   | 4.0   | 4.0   | 3.3   | 3.0    | 2.6  | 1.9    | 1.5  | 1.6    | 1.1  |
| 88°   | 1.7   | 1.9   | 3.2   | 3.2   | 2.4   | 2.1    | 1.8  | 1.2    | 0.9  | 1.0    | 0.4  |
| 88.5° | 0.9   | 1.2   | 2.5   | 2.4   | 1.5   | 1.3    | 1.0  | 0.6    | 0.4  | 0.4    | 0.1  |
| 89°   | 0.4   | 0.5   | 1.7   | 1.7   | 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: P640150  
 CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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 | 0.2   | 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   | 0.2 | 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: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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  | 0.2    | 0.2  |
| 115°   | 0.2 | 0.2   | 0.2 | 0.2   | 0.1 | 0.1    | 0.1  | 0.2    | 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°   | 0.3 | 0.2   | 0.2 | 0.2   | 0.2 | 0.2    | 0.2  | 0.2    | 0.2  | 0.2    | 0.2  |
| 121.5° | 0.3 | 0.3   | 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 | 0.3   | 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    | 0.3  |
| 125°   | 0.3 | 0.3   | 0.3 | 0.3   | 0.2 | 0.2    | 0.2  | 0.2    | 0.3  | 0.3    | 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   | 0.3 | 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    | 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°   | 0.4 | 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 | 0.4   | 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   | 0.4 | 0.3   | 0.3 | 0.3    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 134°   | 0.4 | 0.4   | 0.4 | 0.4   | 0.3 | 0.3    | 0.3  | 0.3    | 0.4  | 0.4    | 0.4  |
| 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: P640150  
 CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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    | 0.4  | 0.4    | 0.4  | 0.4    | 0.4  |
| 136°   | 0.4 | 0.4   | 0.4 | 0.4   | 0.4 | 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    | 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    | 0.5  |
| 143°   | 0.4 | 0.4   | 0.4 | 0.4   | 0.4 | 0.4    | 0.4  | 0.4    | 0.5  | 0.4    | 0.5  |
| 143.5° | 0.4 | 0.4   | 0.4 | 0.4   | 0.4 | 0.4    | 0.4  | 0.4    | 0.5  | 0.5    | 0.5  |
| 144°   | 0.4 | 0.4   | 0.4 | 0.4   | 0.4 | 0.4    | 0.4  | 0.5    | 0.5  | 0.5    | 0.5  |
| 144.5° | 0.5 | 0.4   | 0.4 | 0.4   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 145°   | 0.5 | 0.5   | 0.4 | 0.4   | 0.5 | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 145.5° | 0.5 | 0.5   | 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   | 0.5 | 0.4   | 0.5 | 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    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 147.5° | 0.5 | 0.5   | 0.5 | 0.5   | 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    | 0.6  |
| 152°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.5    | 0.6  | 0.6    | 0.6  |
| 152.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.6    | 0.6  | 0.6    | 0.6  |
| 153°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.5 | 0.5    | 0.5  | 0.6    | 0.6  | 0.6    | 0.6  |
| 153.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.6    | 0.6  | 0.6    | 0.6  |
| 154°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 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: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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    | 0.7  | 0.6    | 0.6  |
| 164.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.6    | 0.7  | 0.6    | 0.7  |
| 165°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.6    | 0.7  | 0.7    | 0.7  |
| 165.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.7    | 0.7  | 0.7    | 0.7  |
| 166°   | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.7    | 0.7  | 0.7    | 0.7  |
| 166.5° | 0.5 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.7    | 0.7  | 0.7    | 0.7  |
| 167°   | 0.6 | 0.5   | 0.5 | 0.5   | 0.6 | 0.6    | 0.6  | 0.7    | 0.7  | 0.7    | 0.7  |
| 167.5° | 0.6 | 0.6   | 0.5 | 0.5   | 0.7 | 0.6    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 168°   | 0.6 | 0.6   | 0.5 | 0.5   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 168.5° | 0.6 | 0.6   | 0.5 | 0.5   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 169°   | 0.6 | 0.6   | 0.6 | 0.5   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 169.5° | 0.6 | 0.6   | 0.6 | 0.5   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 170°   | 0.6 | 0.6   | 0.6 | 0.5   | 0.7 | 0.7    | 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    | 0.7  |
| 171°   | 0.6 | 0.6   | 0.6 | 0.6   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 171.5° | 0.6 | 0.6   | 0.6 | 0.6   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 172°   | 0.6 | 0.6   | 0.6 | 0.6   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |
| 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    | 0.7  |
| 179.5° | 0.7 | 0.6   | 0.6 | 0.6   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |



TEST NUMBER: P640150  
CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 180° | 0.7 | 0.7   | 0.7 | 0.7   | 0.7 | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |



TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|-------|--------|--------|--------|--------|--------|--------|
| 0°    | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 | 1077.0 |
| 0.5°  | 1076.4 | 1076.6 | 1076.6 | 1076.7 | 1076.8 | 1077.0 |
| 1°    | 1075.6 | 1076.0 | 1076.0 | 1076.2 | 1076.6 | 1076.8 |
| 1.5°  | 1074.8 | 1075.2 | 1075.3 | 1075.5 | 1076.0 | 1076.3 |
| 2°    | 1073.7 | 1074.3 | 1074.3 | 1074.7 | 1075.4 | 1075.9 |
| 2.5°  | 1072.6 | 1073.3 | 1073.3 | 1073.6 | 1074.6 | 1075.1 |
| 3°    | 1071.2 | 1072.0 | 1072.0 | 1072.4 | 1073.5 | 1074.3 |
| 3.5°  | 1069.8 | 1070.5 | 1070.7 | 1071.1 | 1072.2 | 1073.4 |
| 4°    | 1068.2 | 1069.0 | 1069.4 | 1070.0 | 1070.9 | 1072.4 |
| 4.5°  | 1066.5 | 1067.2 | 1067.7 | 1068.5 | 1069.6 | 1071.4 |
| 5°    | 1064.6 | 1065.4 | 1066.0 | 1067.0 | 1068.3 | 1069.9 |
| 5.5°  | 1062.7 | 1063.3 | 1064.1 | 1065.2 | 1066.8 | 1068.5 |
| 6°    | 1060.3 | 1061.2 | 1062.1 | 1063.0 | 1065.1 | 1066.8 |
| 6.5°  | 1058.1 | 1058.9 | 1059.8 | 1061.0 | 1063.2 | 1065.0 |
| 7°    | 1055.3 | 1056.5 | 1057.5 | 1058.7 | 1061.0 | 1063.1 |
| 7.5°  | 1052.7 | 1054.0 | 1054.9 | 1056.5 | 1058.7 | 1061.0 |
| 8°    | 1049.9 | 1051.2 | 1052.3 | 1053.9 | 1056.1 | 1058.7 |
| 8.5°  | 1047.0 | 1048.4 | 1049.5 | 1051.2 | 1053.4 | 1056.3 |
| 9°    | 1044.1 | 1045.4 | 1046.5 | 1048.5 | 1050.9 | 1053.7 |
| 9.5°  | 1040.9 | 1042.4 | 1043.6 | 1045.5 | 1048.0 | 1051.0 |
| 10°   | 1037.6 | 1039.1 | 1040.5 | 1042.5 | 1045.2 | 1048.2 |
| 10.5° | 1034.1 | 1035.5 | 1037.3 | 1039.3 | 1042.0 | 1045.4 |
| 11°   | 1030.3 | 1032.1 | 1033.7 | 1035.8 | 1038.9 | 1042.2 |
| 11.5° | 1026.4 | 1028.4 | 1029.9 | 1032.3 | 1035.5 | 1039.0 |
| 12°   | 1022.4 | 1024.5 | 1026.1 | 1028.5 | 1031.9 | 1035.5 |
| 12.5° | 1018.5 | 1020.6 | 1022.3 | 1024.7 | 1028.3 | 1032.1 |
| 13°   | 1014.4 | 1016.5 | 1018.3 | 1021.0 | 1024.4 | 1028.4 |
| 13.5° | 1009.9 | 1012.2 | 1014.0 | 1016.9 | 1020.5 | 1024.4 |
| 14°   | 1005.3 | 1007.8 | 1009.7 | 1012.6 | 1016.4 | 1020.7 |
| 14.5° | 1000.7 | 1003.1 | 1005.2 | 1008.2 | 1012.1 | 1016.5 |
| 15°   | 996.0  | 998.5  | 1000.5 | 1003.7 | 1007.7 | 1012.4 |
| 15.5° | 990.9  | 993.6  | 995.8  | 998.9  | 1003.0 | 1008.0 |
| 16°   | 985.7  | 988.6  | 990.9  | 994.2  | 998.4  | 1003.4 |
| 16.5° | 980.4  | 983.6  | 985.9  | 989.2  | 993.5  | 998.7  |
| 17°   | 974.9  | 978.3  | 980.6  | 984.1  | 988.5  | 993.7  |
| 17.5° | 969.3  | 973.0  | 975.3  | 978.8  | 983.4  | 988.6  |
| 18°   | 963.8  | 967.2  | 969.7  | 973.4  | 978.1  | 983.5  |
| 18.5° | 958.2  | 961.7  | 963.9  | 967.9  | 972.4  | 978.3  |
| 19°   | 952.2  | 955.8  | 958.5  | 962.4  | 967.0  | 972.9  |
| 19.5° | 946.2  | 950.0  | 952.6  | 956.7  | 961.6  | 967.3  |
| 20°   | 940.0  | 943.8  | 946.7  | 950.8  | 955.7  | 961.8  |
| 20.5° | 933.4  | 937.5  | 940.5  | 944.6  | 949.7  | 955.9  |
| 21°   | 926.9  | 931.0  | 934.0  | 938.3  | 943.6  | 949.8  |
| 21.5° | 920.2  | 924.5  | 927.5  | 932.0  | 937.4  | 943.6  |
| 22°   | 913.7  | 917.9  | 920.9  | 925.4  | 931.0  | 937.3  |



TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|-------|--------|-------|--------|-------|--------|-------|
| 22.5° | 906.7  | 911.1 | 914.3  | 918.9 | 924.4  | 930.9 |
| 23°   | 899.8  | 904.4 | 907.4  | 912.1 | 917.8  | 924.4 |
| 23.5° | 892.6  | 897.4 | 900.4  | 905.1 | 910.9  | 917.7 |
| 24°   | 885.3  | 890.3 | 893.4  | 898.1 | 903.8  | 910.9 |
| 24.5° | 877.9  | 883.0 | 886.2  | 890.9 | 896.7  | 903.9 |
| 25°   | 870.5  | 875.4 | 879.0  | 883.7 | 889.8  | 896.9 |
| 25.5° | 862.9  | 867.9 | 871.4  | 876.2 | 882.4  | 889.6 |
| 26°   | 855.4  | 860.3 | 863.9  | 868.8 | 875.2  | 882.4 |
| 26.5° | 847.5  | 852.7 | 856.2  | 861.2 | 867.6  | 875.1 |
| 27°   | 839.9  | 844.7 | 848.4  | 853.6 | 860.1  | 867.6 |
| 27.5° | 831.8  | 836.8 | 840.6  | 845.7 | 852.2  | 859.8 |
| 28°   | 823.6  | 828.6 | 832.4  | 837.7 | 844.4  | 852.4 |
| 28.5° | 815.3  | 820.5 | 824.3  | 829.8 | 836.4  | 844.1 |
| 29°   | 806.9  | 812.2 | 816.1  | 821.5 | 828.4  | 836.6 |
| 29.5° | 798.4  | 804.1 | 807.9  | 813.3 | 820.4  | 828.3 |
| 30°   | 790.0  | 795.6 | 799.2  | 805.0 | 812.2  | 820.2 |
| 30.5° | 781.6  | 787.2 | 790.6  | 796.5 | 803.7  | 812.0 |
| 31°   | 773.1  | 778.6 | 782.1  | 787.9 | 795.2  | 803.6 |
| 31.5° | 764.2  | 769.8 | 773.5  | 779.4 | 786.6  | 795.2 |
| 32°   | 755.6  | 761.2 | 764.9  | 770.8 | 778.1  | 786.6 |
| 32.5° | 746.7  | 752.4 | 755.9  | 761.9 | 769.4  | 777.8 |
| 33°   | 737.9  | 743.3 | 747.0  | 753.0 | 760.2  | 769.2 |
| 33.5° | 728.8  | 734.1 | 738.0  | 744.1 | 751.7  | 760.3 |
| 34°   | 719.8  | 725.1 | 728.9  | 735.1 | 742.8  | 751.4 |
| 34.5° | 710.7  | 715.9 | 719.8  | 725.8 | 733.5  | 742.2 |
| 35°   | 701.6  | 706.5 | 710.6  | 716.6 | 724.0  | 733.1 |
| 35.5° | 692.8  | 697.2 | 701.3  | 707.7 | 715.5  | 724.1 |
| 36°   | 683.4  | 688.0 | 692.1  | 698.2 | 706.4  | 715.0 |
| 36.5° | 673.9  | 678.6 | 682.9  | 688.8 | 697.0  | 705.8 |
| 37°   | 664.2  | 668.9 | 673.3  | 679.3 | 687.3  | 696.3 |
| 37.5° | 654.4  | 659.3 | 663.5  | 670.0 | 678.1  | 686.9 |
| 38°   | 644.4  | 649.6 | 653.8  | 660.1 | 668.4  | 677.1 |
| 38.5° | 634.4  | 639.8 | 644.2  | 650.6 | 658.7  | 667.4 |
| 39°   | 624.5  | 630.0 | 634.5  | 640.7 | 648.6  | 657.8 |
| 39.5° | 614.0  | 619.7 | 624.6  | 631.0 | 639.0  | 647.5 |
| 40°   | 603.2  | 609.1 | 614.1  | 620.8 | 629.0  | 637.5 |
| 40.5° | 591.8  | 598.3 | 603.3  | 610.6 | 618.9  | 627.4 |
| 41°   | 580.7  | 587.1 | 592.3  | 600.1 | 608.8  | 617.4 |
| 41.5° | 569.2  | 575.7 | 580.9  | 589.0 | 598.5  | 607.3 |
| 42°   | 557.6  | 564.6 | 569.8  | 577.9 | 588.0  | 597.3 |
| 42.5° | 546.2  | 553.0 | 558.4  | 566.9 | 577.1  | 586.7 |
| 43°   | 534.2  | 541.4 | 546.8  | 555.2 | 565.7  | 576.0 |
| 43.5° | 522.6  | 529.5 | 535.0  | 543.7 | 554.4  | 564.8 |
| 44°   | 511.0  | 518.2 | 523.6  | 532.0 | 543.1  | 553.3 |
| 44.5° | 499.4  | 506.5 | 512.1  | 520.7 | 531.8  | 542.2 |



TEST NUMBER: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|-------|--------|-------|--------|-------|--------|-------|
| 45°   | 487.7  | 494.9 | 500.6  | 508.9 | 520.2  | 530.6 |
| 45.5° | 476.0  | 483.2 | 488.5  | 497.5 | 509.1  | 519.5 |
| 46°   | 464.3  | 471.9 | 477.4  | 486.1 | 497.4  | 508.1 |
| 46.5° | 452.8  | 460.0 | 465.7  | 474.9 | 486.0  | 496.3 |
| 47°   | 441.3  | 448.6 | 454.3  | 463.3 | 474.4  | 485.0 |
| 47.5° | 430.0  | 436.9 | 442.6  | 452.0 | 463.2  | 473.9 |
| 48°   | 418.6  | 425.6 | 431.4  | 440.4 | 451.7  | 462.5 |
| 48.5° | 407.4  | 414.4 | 420.1  | 429.2 | 440.5  | 451.4 |
| 49°   | 396.3  | 403.4 | 409.1  | 418.1 | 429.4  | 440.0 |
| 49.5° | 385.3  | 392.3 | 397.8  | 407.1 | 418.3  | 428.9 |
| 50°   | 374.4  | 380.9 | 387.0  | 395.7 | 407.0  | 417.6 |
| 50.5° | 363.4  | 370.0 | 375.8  | 384.7 | 396.3  | 406.8 |
| 51°   | 352.7  | 359.3 | 365.0  | 373.9 | 385.2  | 395.6 |
| 51.5° | 342.2  | 347.7 | 354.2  | 363.3 | 374.4  | 384.9 |
| 52°   | 331.8  | 337.6 | 343.8  | 352.6 | 363.9  | 374.2 |
| 52.5° | 321.5  | 327.5 | 333.5  | 342.2 | 353.3  | 363.7 |
| 53°   | 311.1  | 317.5 | 323.2  | 331.9 | 343.1  | 353.0 |
| 53.5° | 301.3  | 307.4 | 312.8  | 321.6 | 332.8  | 342.8 |
| 54°   | 291.2  | 297.4 | 302.5  | 311.3 | 322.6  | 332.6 |
| 54.5° | 281.4  | 287.6 | 292.7  | 301.0 | 312.4  | 322.4 |
| 55°   | 271.6  | 277.8 | 283.1  | 291.2 | 302.2  | 312.2 |
| 55.5° | 262.1  | 268.3 | 273.2  | 281.4 | 292.1  | 302.0 |
| 56°   | 252.7  | 258.8 | 263.8  | 271.7 | 282.3  | 291.8 |
| 56.5° | 243.7  | 249.5 | 254.4  | 262.0 | 272.7  | 282.2 |
| 57°   | 234.7  | 240.4 | 245.2  | 252.7 | 263.1  | 272.5 |
| 57.5° | 225.7  | 231.4 | 235.9  | 243.4 | 253.8  | 262.9 |
| 58°   | 217.3  | 222.8 | 227.1  | 234.3 | 244.5  | 253.7 |
| 58.5° | 208.6  | 214.2 | 218.3  | 225.3 | 235.4  | 244.3 |
| 59°   | 200.2  | 205.7 | 209.7  | 216.6 | 226.4  | 235.1 |
| 59.5° | 192.0  | 197.2 | 201.3  | 207.9 | 217.5  | 226.1 |
| 60°   | 183.9  | 189.1 | 192.9  | 199.5 | 208.8  | 217.2 |
| 60.5° | 176.1  | 181.0 | 184.8  | 191.1 | 200.1  | 208.5 |
| 61°   | 168.4  | 172.9 | 176.8  | 182.9 | 191.7  | 199.9 |
| 61.5° | 160.9  | 165.5 | 169.0  | 174.8 | 183.6  | 191.3 |
| 62°   | 153.5  | 157.8 | 161.3  | 167.1 | 175.4  | 183.0 |
| 62.5° | 146.3  | 150.4 | 153.6  | 159.2 | 167.3  | 174.7 |
| 63°   | 139.1  | 143.2 | 146.3  | 151.7 | 159.5  | 166.7 |
| 63.5° | 132.3  | 136.1 | 139.1  | 144.2 | 151.8  | 158.8 |
| 64°   | 125.6  | 129.1 | 132.1  | 137.1 | 144.3  | 150.9 |
| 64.5° | 119.1  | 122.6 | 125.2  | 130.1 | 136.8  | 143.2 |
| 65°   | 112.8  | 116.0 | 118.5  | 123.3 | 129.8  | 135.9 |
| 65.5° | 106.5  | 109.6 | 112.0  | 116.2 | 122.7  | 128.6 |
| 66°   | 100.5  | 103.2 | 105.6  | 109.9 | 115.8  | 121.3 |
| 66.5° | 94.7   | 97.4  | 99.5   | 103.5 | 109.0  | 114.3 |
| 67°   | 89.5   | 91.6  | 93.6   | 97.4  | 102.7  | 107.5 |



TEST NUMBER: P640150  
 CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|       | 247.5° | 270° | 292.5° | 315° | 337.5° | 360°  |
|-------|--------|------|--------|------|--------|-------|
| 67.5° | 84.3   | 85.9 | 87.8   | 91.5 | 96.4   | 100.8 |
| 68°   | 79.0   | 80.5 | 82.2   | 85.7 | 90.3   | 94.6  |
| 68.5° | 73.8   | 75.4 | 77.0   | 80.2 | 84.5   | 88.2  |
| 69°   | 68.6   | 70.4 | 71.7   | 74.8 | 78.8   | 82.0  |
| 69.5° | 63.9   | 65.6 | 66.9   | 69.6 | 73.2   | 75.8  |
| 70°   | 59.6   | 61.1 | 62.2   | 64.9 | 68.2   | 70.0  |
| 70.5° | 55.3   | 56.7 | 57.8   | 60.2 | 63.2   | 64.4  |
| 71°   | 51.4   | 52.7 | 53.5   | 55.8 | 58.4   | 59.2  |
| 71.5° | 47.5   | 48.8 | 49.7   | 51.7 | 53.9   | 54.2  |
| 72°   | 44.0   | 45.3 | 46.1   | 48.0 | 49.7   | 49.7  |
| 72.5° | 40.7   | 41.9 | 42.6   | 44.3 | 45.8   | 45.4  |
| 73°   | 37.7   | 38.8 | 39.4   | 41.1 | 42.2   | 41.8  |
| 73.5° | 34.9   | 36.0 | 36.7   | 38.2 | 39.0   | 38.5  |
| 74°   | 32.3   | 34.1 | 34.3   | 35.5 | 36.1   | 35.4  |
| 74.5° | 30.1   | 32.3 | 32.6   | 33.7 | 34.2   | 33.6  |
| 75°   | 28.1   | 30.4 | 30.9   | 32.0 | 32.3   | 31.8  |
| 75.5° | 26.6   | 28.6 | 29.1   | 30.2 | 30.4   | 30.1  |
| 76°   | 25.4   | 26.7 | 27.4   | 28.4 | 28.5   | 28.3  |
| 76.5° | 24.2   | 25.4 | 26.1   | 26.7 | 26.6   | 26.5  |
| 77°   | 23.0   | 24.2 | 24.9   | 25.4 | 25.2   | 25.2  |
| 77.5° | 21.8   | 23.0 | 23.6   | 24.1 | 24.0   | 23.9  |
| 78°   | 20.6   | 21.8 | 22.4   | 22.8 | 22.7   | 22.7  |
| 78.5° | 19.5   | 20.6 | 21.2   | 21.5 | 21.4   | 21.4  |
| 79°   | 18.3   | 19.4 | 20.0   | 20.3 | 20.2   | 20.1  |
| 79.5° | 17.2   | 18.2 | 18.8   | 19.1 | 18.9   | 18.9  |
| 80°   | 16.1   | 17.1 | 17.6   | 17.9 | 17.7   | 17.7  |
| 80.5° | 15.0   | 16.0 | 16.5   | 16.8 | 16.5   | 16.5  |
| 81°   | 13.9   | 14.9 | 15.4   | 15.6 | 15.3   | 15.3  |
| 81.5° | 12.9   | 13.8 | 14.2   | 14.5 | 14.2   | 14.1  |
| 82°   | 11.8   | 12.7 | 13.2   | 13.4 | 13.0   | 13.0  |
| 82.5° | 10.8   | 11.6 | 12.1   | 12.3 | 11.9   | 11.9  |
| 83°   | 9.7    | 10.6 | 11.0   | 11.2 | 10.8   | 10.8  |
| 83.5° | 8.8    | 9.6  | 10.0   | 10.2 | 9.7    | 9.7   |
| 84°   | 7.8    | 8.6  | 9.0    | 9.1  | 8.6    | 8.7   |
| 84.5° | 6.8    | 7.5  | 7.9    | 8.1  | 7.6    | 7.7   |
| 85°   | 5.8    | 6.6  | 6.9    | 7.1  | 6.5    | 6.6   |
| 85.5° | 4.8    | 5.6  | 6.0    | 6.1  | 5.6    | 5.6   |
| 86°   | 3.9    | 4.6  | 5.0    | 5.2  | 4.7    | 4.6   |
| 86.5° | 3.0    | 3.7  | 4.0    | 4.3  | 3.9    | 3.8   |
| 87°   | 2.1    | 2.8  | 3.3    | 3.3  | 3.1    | 3.1   |
| 87.5° | 1.3    | 2.0  | 2.5    | 2.6  | 2.4    | 2.4   |
| 88°   | 0.5    | 1.2  | 1.7    | 1.8  | 1.6    | 1.7   |
| 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: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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    | 0.2  | 0.1    | 0.1  | 0.1    | 0.1  |
| 108°   | 0.1    | 0.2  | 0.2    | 0.1  | 0.1    | 0.1  |
| 108.5° | 0.1    | 0.2  | 0.2    | 0.2  | 0.2    | 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: P640150  
 CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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° | 0.2    | 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    | 0.3  | 0.2    | 0.2  | 0.2    | 0.2  |
| 121°   | 0.2    | 0.3  | 0.3    | 0.3  | 0.3    | 0.3  |
| 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°   | 0.3    | 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    | 0.4  | 0.3    | 0.3  | 0.3    | 0.4  |
| 131.5° | 0.3    | 0.4  | 0.4    | 0.3  | 0.4    | 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°   | 0.4    | 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: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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° | 0.5    | 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    | 0.5  | 0.5    | 0.4  | 0.4    | 0.4  |
| 144.5° | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 145°   | 0.5    | 0.5  | 0.5    | 0.5  | 0.5    | 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° | 0.6    | 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: P640150

CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**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° | 0.7    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 166°   | 0.7    | 0.5  | 0.5    | 0.5  | 0.5    | 0.5  |
| 166.5° | 0.7    | 0.5  | 0.5    | 0.5  | 0.6    | 0.5  |
| 167°   | 0.7    | 0.5  | 0.5    | 0.6  | 0.6    | 0.6  |
| 167.5° | 0.7    | 0.5  | 0.5    | 0.6  | 0.6    | 0.6  |
| 168°   | 0.7    | 0.5  | 0.5    | 0.6  | 0.6    | 0.6  |
| 168.5° | 0.7    | 0.5  | 0.6    | 0.6  | 0.6    | 0.6  |
| 169°   | 0.7    | 0.5  | 0.6    | 0.6  | 0.6    | 0.6  |
| 169.5° | 0.7    | 0.6  | 0.6    | 0.6  | 0.6    | 0.6  |
| 170°   | 0.7    | 0.6  | 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    | 0.7  | 0.7    | 0.7  | 0.6    | 0.6  |
| 179.5° | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |



TEST NUMBER: P640150  
CATALOG NUMBER: LCR621RD9FSE040-23W-3000K

**CANDELA DISTRIBUTION (continued):**

|      |        |      |        |      |        |      |
|------|--------|------|--------|------|--------|------|
|      | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
| 180° | 0.7    | 0.7  | 0.7    | 0.7  | 0.7    | 0.7  |

(END OF REPORT)