

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: METALUX

Report Number: P1214165

Luminaire Tested: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

Issue Date: 3/29/2018

**Test Information**

Test Method: LM-79-2019  
Report Number: P1214165  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)  
Test Lab: INNOVATIONS CENTER-P3  
Issue Date: 3/29/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

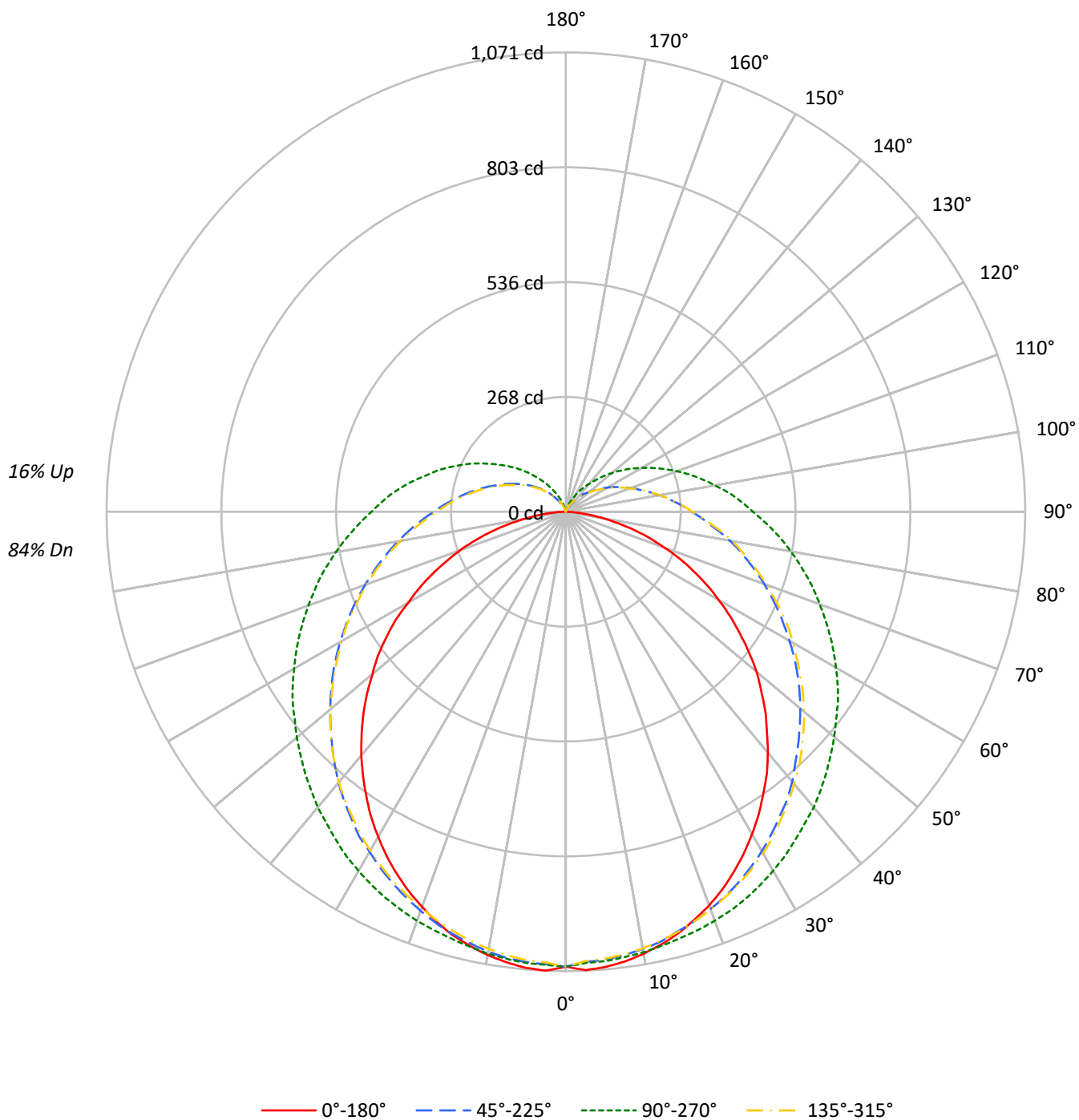
Lumens per Lamp: N/A  
Luminaire Lumens: 4608.0 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

### Luminous Intensity Polar Plot



TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |    | 20 |    |    |    | 20 |    |    |    |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |    | 30 |    |    |    | 10 |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 94 | 94 | 94 | 87 | 87 | 87 | 84 |    |    |
| 1   | 102 | 96  | 91  | 86  | 98  | 92  | 87  | 83  | 85  | 81  | 77  | 78 | 75 | 72 | 72 | 70 | 67 | 64 |    |    |
| 2   | 92  | 82  | 74  | 68  | 87  | 79  | 72  | 66  | 73  | 67  | 62  | 67 | 62 | 58 | 62 | 58 | 54 | 51 |    |    |
| 3   | 83  | 71  | 62  | 55  | 79  | 69  | 60  | 54  | 63  | 56  | 51  | 58 | 52 | 48 | 54 | 49 | 45 | 42 |    |    |
| 4   | 76  | 63  | 53  | 46  | 72  | 60  | 52  | 45  | 56  | 48  | 42  | 51 | 45 | 40 | 47 | 42 | 38 | 35 |    |    |
| 5   | 69  | 56  | 46  | 39  | 66  | 54  | 45  | 38  | 50  | 42  | 36  | 46 | 39 | 34 | 42 | 37 | 33 | 30 |    |    |
| 6   | 64  | 50  | 41  | 34  | 61  | 48  | 39  | 33  | 45  | 37  | 31  | 41 | 35 | 30 | 38 | 33 | 28 | 26 |    |    |
| 7   | 59  | 45  | 36  | 30  | 56  | 43  | 35  | 29  | 40  | 33  | 28  | 38 | 31 | 26 | 35 | 29 | 25 | 23 |    |    |
| 8   | 55  | 41  | 32  | 26  | 52  | 40  | 31  | 26  | 37  | 30  | 24  | 34 | 28 | 23 | 32 | 26 | 22 | 20 |    |    |
| 9   | 51  | 37  | 29  | 23  | 49  | 36  | 28  | 23  | 34  | 27  | 22  | 32 | 25 | 21 | 30 | 24 | 20 | 18 |    |    |
| 10  | 48  | 34  | 26  | 21  | 46  | 33  | 26  | 21  | 31  | 24  | 20  | 29 | 23 | 19 | 27 | 22 | 18 | 16 |    |    |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 8571 | 8571 | 8571 | 8571 |
| 5°  | 8616 | 8260 | 8634 | 8295 |
| 10° | 8537 | 8025 | 8564 | 8051 |
| 15° | 8438 | 7824 | 8475 | 7833 |
| 20° | 8305 | 7678 | 8334 | 7678 |
| 25° | 8142 | 7547 | 8191 | 7539 |
| 30° | 7958 | 7413 | 8019 | 7413 |
| 35° | 7744 | 7289 | 7830 | 7298 |
| 40° | 7533 | 7216 | 7625 | 7216 |
| 45° | 7291 | 7139 | 7402 | 7149 |
| 50° | 7038 | 7094 | 7133 | 7114 |
| 55° | 6684 | 7101 | 6896 | 7132 |
| 60° | 6312 | 7122 | 6518 | 7166 |
| 65° | 5894 | 7194 | 6156 | 7265 |
| 70° | 5307 | 7327 | 5720 | 7430 |
| 75° | 4630 | 7566 | 5067 | 7712 |
| 80° | 3581 | 7922 | 4068 | 8105 |
| 85° | 2138 | 8489 | 2678 | 8726 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 9754 cd/sqm

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.5  | 2.2       |
| 10°-20°   | 288.8  | 6.3       |
| 20°-30°   | 442.7  | 9.6       |
| 30°-40°   | 546.2  | 11.9      |
| 40°-50°   | 592.6  | 12.9      |
| 50°-60°   | 584.1  | 12.7      |
| 60°-70°   | 528.1  | 11.5      |
| 70°-80°   | 439.9  | 9.5       |
| 80°-90°   | 340.7  | 7.4       |
| 90°-100°  | 258.4  | 5.6       |
| 100°-110° | 191.2  | 4.1       |
| 110°-120° | 133.0  | 2.9       |
| 120°-130° | 84.9   | 1.8       |
| 130°-140° | 47.6   | 1.0       |
| 140°-150° | 21.7   | 0.5       |
| 150°-160° | 6.7    | 0.1       |
| 160°-170° | 0.8    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 832.0  | 18.1      |
| 0°-40°    | 1378.2 | 29.9      |
| 0°-60°    | 2554.8 | 55.4      |
| 0°-90°    | 3863.5 | 83.8      |
| 90°-120°  | 582.7  | 12.6      |
| 90°-150°  | 736.9  | 16.0      |
| 90°-180°  | 744.0  | 16.1      |
| 0°-180°   | 4608.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1061 | 1061 | 1061 | 1061 | 1061 |      |
| 5°   | 1065 | 1052 | 1067 | 1056 | 1065 | 101  |
| 15°  | 1017 | 1029 | 1022 | 1030 | 1017 | 287  |
| 25°  | 926  | 995  | 932  | 994  | 926  | 427  |
| 35°  | 802  | 933  | 811  | 934  | 802  | 502  |
| 45°  | 658  | 859  | 668  | 860  | 658  | 507  |
| 55°  | 496  | 774  | 511  | 778  | 496  | 444  |
| 65°  | 329  | 679  | 344  | 686  | 329  | 326  |
| 75°  | 166  | 582  | 181  | 593  | 166  | 175  |
| 85°  | 31   | 484  | 39   | 498  | 31   | 38   |
| 90°  | 1    | 436  | 2    | 453  | 1    | 2    |
| 95°  | 1    | 396  | 1    | 415  | 1    | 1    |
| 105° | 1    | 314  | 1    | 333  | 1    | 1    |
| 115° | 1    | 239  | 1    | 261  | 1    | 1    |
| 125° | 1    | 172  | 1    | 191  | 1    | 1    |
| 135° | 1    | 112  | 1    | 132  | 1    | 1    |
| 145° | 1    | 65   | 1    | 79   | 1    | 1    |
| 155° | 1    | 27   | 1    | 37   | 1    | 1    |
| 165° | 1    | 4    | 1    | 7    | 1    | 0    |
| 175° | 0    | 0    | 0    | 0    | 0    | 0    |
| 180° | 0    | 0    | 0    | 0    | 0    | 0    |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1069.6 | 1069.6 | 1068.5 | 1066.2 | 1067.3 | 1070.7 | 1068.5 | 1062.9 | 1059.5 | 1050.6 | 1052.8 |
| 5°     | 1065.1 | 1065.1 | 1064.0 | 1061.7 | 1062.9 | 1067.3 | 1065.1 | 1060.6 | 1056.2 | 1048.3 | 1051.7 |
| 7.5°   | 1057.3 | 1057.3 | 1056.2 | 1053.9 | 1056.2 | 1060.6 | 1058.4 | 1053.9 | 1050.6 | 1042.7 | 1046.1 |
| 10°    | 1046.1 | 1047.2 | 1046.1 | 1042.7 | 1047.2 | 1051.7 | 1050.6 | 1045.0 | 1041.6 | 1034.9 | 1038.3 |
| 12.5°  | 1032.7 | 1033.8 | 1032.7 | 1031.5 | 1033.8 | 1040.5 | 1038.3 | 1033.8 | 1031.5 | 1025.9 | 1029.3 |
| 15°    | 1017.0 | 1018.1 | 1015.9 | 1015.9 | 1018.1 | 1024.8 | 1024.8 | 1020.3 | 1018.1 | 1012.5 | 1019.2 |
| 17.5°  | 996.9  | 998.0  | 996.9  | 996.9  | 999.1  | 1005.8 | 1006.9 | 1004.7 | 1002.4 | 1000.2 | 1006.9 |
| 20°    | 976.7  | 975.6  | 975.6  | 974.5  | 979.0  | 989.0  | 987.9  | 987.9  | 985.7  | 985.7  | 993.5  |
| 22.5°  | 953.2  | 953.2  | 952.1  | 952.1  | 957.7  | 966.6  | 966.6  | 968.9  | 966.6  | 971.1  | 977.8  |
| 25°    | 926.4  | 927.5  | 926.4  | 928.6  | 933.1  | 943.2  | 944.3  | 947.6  | 948.7  | 953.2  | 961.1  |
| 27.5°  | 898.4  | 899.5  | 898.4  | 900.6  | 908.5  | 916.3  | 921.9  | 926.4  | 927.5  | 934.2  | 944.3  |
| 30°    | 868.2  | 868.2  | 869.3  | 871.5  | 880.5  | 892.8  | 897.3  | 902.9  | 902.9  | 914.1  | 924.1  |
| 32.5°  | 836.9  | 836.9  | 836.9  | 841.3  | 851.4  | 866.0  | 871.5  | 878.3  | 880.5  | 891.7  | 902.9  |
| 35°    | 802.2  | 803.3  | 803.3  | 806.7  | 820.1  | 834.6  | 842.5  | 850.3  | 854.8  | 868.2  | 879.4  |
| 37.5°  | 769.7  | 772.0  | 768.6  | 773.1  | 792.1  | 804.4  | 813.4  | 821.2  | 829.0  | 846.9  | 855.9  |
| 40°    | 732.8  | 735.1  | 733.9  | 742.9  | 758.5  | 774.2  | 784.3  | 792.1  | 803.3  | 821.2  | 831.3  |
| 42.5°  | 693.7  | 695.9  | 698.1  | 708.2  | 725.0  | 740.6  | 753.0  | 763.0  | 776.5  | 792.1  | 808.9  |
| 45°    | 657.9  | 657.9  | 661.2  | 673.5  | 691.4  | 708.2  | 722.7  | 733.9  | 749.6  | 766.4  | 783.2  |
| 47.5°  | 617.6  | 618.7  | 623.2  | 637.7  | 656.7  | 676.9  | 690.3  | 704.8  | 721.6  | 739.5  | 758.5  |
| 50°    | 580.7  | 580.7  | 587.4  | 603.0  | 620.9  | 643.3  | 657.9  | 674.6  | 692.5  | 713.8  | 732.8  |
| 52.5°  | 538.1  | 540.4  | 550.5  | 565.0  | 588.5  | 608.6  | 625.4  | 643.3  | 664.6  | 686.9  | 708.2  |
| 55°    | 495.6  | 500.1  | 507.9  | 528.1  | 552.7  | 571.7  | 591.8  | 614.2  | 634.4  | 659.0  | 683.6  |
| 57.5°  | 454.2  | 457.6  | 469.9  | 490.0  | 515.8  | 539.3  | 560.5  | 581.8  | 606.4  | 631.0  | 656.7  |
| 60°    | 411.7  | 416.2  | 430.7  | 450.9  | 478.8  | 503.5  | 528.1  | 550.5  | 576.2  | 601.9  | 628.8  |
| 62.5°  | 371.4  | 374.8  | 391.6  | 415.1  | 443.0  | 469.9  | 494.5  | 521.4  | 549.3  | 573.9  | 600.8  |
| 65°    | 328.9  | 334.5  | 353.5  | 374.8  | 407.2  | 434.1  | 462.1  | 491.2  | 520.2  | 547.1  | 572.8  |
| 67.5°  | 289.8  | 293.1  | 313.3  | 337.9  | 370.3  | 400.5  | 429.6  | 460.9  | 491.2  | 519.1  | 544.9  |
| 70°    | 243.9  | 255.1  | 275.2  | 301.0  | 335.6  | 367.0  | 398.3  | 430.7  | 463.2  | 492.3  | 516.9  |
| 72.5°  | 205.9  | 214.8  | 237.2  | 265.2  | 298.7  | 335.6  | 368.1  | 402.8  | 435.2  | 465.4  | 491.2  |
| 75°    | 165.6  | 174.5  | 200.3  | 231.6  | 266.3  | 305.4  | 339.0  | 374.8  | 408.4  | 438.6  | 465.4  |
| 77.5°  | 126.4  | 137.6  | 165.6  | 198.0  | 236.1  | 276.3  | 311.0  | 346.8  | 381.5  | 414.0  | 440.8  |
| 80°    | 90.6   | 102.9  | 133.1  | 170.1  | 207.0  | 247.3  | 285.3  | 321.1  | 355.8  | 388.2  | 416.2  |
| 82.5°  | 58.2   | 71.6   | 104.0  | 141.0  | 180.1  | 220.4  | 259.6  | 295.4  | 330.0  | 362.5  | 391.6  |
| 85°    | 31.3   | 45.9   | 79.4   | 116.4  | 155.5  | 195.8  | 234.9  | 273.0  | 306.6  | 336.8  | 368.1  |
| 87.5°  | 9.0    | 26.9   | 59.3   | 96.2   | 136.5  | 173.4  | 211.5  | 249.5  | 283.1  | 315.5  | 343.5  |
| 90°    | 1.1    | 15.7   | 44.8   | 79.4   | 118.6  | 154.4  | 192.4  | 228.2  | 261.8  | 294.2  | 322.2  |
| 92.5°  | 1.1    | 10.1   | 34.7   | 66.0   | 101.8  | 138.7  | 176.8  | 211.5  | 242.8  | 275.2  | 303.2  |
| 95°    | 1.1    | 7.8    | 28.0   | 55.9   | 89.5   | 124.2  | 160.0  | 193.6  | 226.0  | 256.2  | 284.2  |
| 97.5°  | 1.1    | 5.6    | 22.4   | 48.1   | 78.3   | 110.8  | 145.4  | 179.0  | 210.3  | 239.4  | 265.2  |
| 100°   | 1.1    | 4.5    | 17.9   | 41.4   | 68.2   | 99.6   | 130.9  | 163.3  | 193.6  | 221.5  | 248.4  |
| 102.5° | 1.1    | 3.4    | 15.7   | 34.7   | 60.4   | 88.4   | 118.6  | 148.8  | 177.9  | 204.7  | 231.6  |
| 105°   | 1.1    | 3.4    | 13.4   | 30.2   | 53.7   | 79.4   | 107.4  | 136.5  | 163.3  | 189.1  | 213.7  |
| 107.5° | 1.1    | 2.2    | 11.2   | 25.7   | 47.0   | 71.6   | 97.3   | 125.3  | 149.9  | 174.5  | 198.0  |
| 110°   | 1.1    | 2.2    | 9.0    | 23.5   | 41.4   | 63.8   | 88.4   | 114.1  | 137.6  | 161.1  | 183.5  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 5°  | 10° | 15°  | 20°  | 25°  | 30°  | 35°   | 40°   | 45°   | 50°   |
|--------|-----|-----|-----|------|------|------|------|-------|-------|-------|-------|
| 112.5° | 1.1 | 2.2 | 7.8 | 20.1 | 35.8 | 57.1 | 79.4 | 102.9 | 125.3 | 148.8 | 168.9 |
| 115°   | 1.1 | 2.2 | 6.7 | 17.9 | 33.6 | 49.2 | 71.6 | 92.9  | 115.2 | 136.5 | 155.5 |
| 117.5° | 1.1 | 2.2 | 5.6 | 14.5 | 29.1 | 44.8 | 62.7 | 83.9  | 104.0 | 124.2 | 142.1 |
| 120°   | 1.1 | 2.2 | 4.5 | 13.4 | 25.7 | 40.3 | 55.9 | 75.0  | 94.0  | 113.0 | 132.0 |
| 122.5° | 1.1 | 1.1 | 4.5 | 11.2 | 22.4 | 35.8 | 51.5 | 66.0  | 83.9  | 101.8 | 118.6 |
| 125°   | 1.1 | 1.1 | 4.5 | 10.1 | 19.0 | 32.4 | 45.9 | 59.3  | 75.0  | 90.6  | 105.2 |
| 127.5° | 1.1 | 1.1 | 3.4 | 7.8  | 16.8 | 28.0 | 40.3 | 54.8  | 66.0  | 80.6  | 95.1  |
| 130°   | 1.1 | 1.1 | 3.4 | 6.7  | 14.5 | 23.5 | 35.8 | 48.1  | 61.5  | 71.6  | 83.9  |
| 132.5° | 1.1 | 1.1 | 3.4 | 5.6  | 11.2 | 19.0 | 30.2 | 41.4  | 53.7  | 64.9  | 75.0  |
| 135°   | 1.1 | 1.1 | 2.2 | 4.5  | 9.0  | 15.7 | 24.6 | 34.7  | 47.0  | 58.2  | 68.2  |
| 137.5° | 1.1 | 1.1 | 2.2 | 4.5  | 6.7  | 13.4 | 19.0 | 28.0  | 39.2  | 49.2  | 59.3  |
| 140°   | 1.1 | 1.1 | 2.2 | 3.4  | 5.6  | 10.1 | 15.7 | 22.4  | 31.3  | 40.3  | 51.5  |
| 142.5° | 1.1 | 1.1 | 1.1 | 3.4  | 4.5  | 7.8  | 12.3 | 17.9  | 24.6  | 32.4  | 41.4  |
| 145°   | 1.1 | 1.1 | 1.1 | 3.4  | 4.5  | 5.6  | 10.1 | 14.5  | 19.0  | 24.6  | 32.4  |
| 147.5° | 1.1 | 1.1 | 1.1 | 2.2  | 3.4  | 4.5  | 7.8  | 11.2  | 14.5  | 19.0  | 23.5  |
| 150°   | 1.1 | 1.1 | 1.1 | 2.2  | 3.4  | 4.5  | 5.6  | 7.8   | 11.2  | 15.7  | 19.0  |
| 152.5° | 1.1 | 1.1 | 1.1 | 2.2  | 2.2  | 3.4  | 4.5  | 5.6   | 7.8   | 11.2  | 13.4  |
| 155°   | 1.1 | 1.1 | 1.1 | 1.1  | 2.2  | 3.4  | 4.5  | 4.5   | 5.6   | 7.8   | 10.1  |
| 157.5° | 1.1 | 1.1 | 1.1 | 1.1  | 2.2  | 2.2  | 3.4  | 3.4   | 4.5   | 4.5   | 6.7   |
| 160°   | 1.1 | 1.1 | 1.1 | 1.1  | 1.1  | 2.2  | 2.2  | 3.4   | 3.4   | 3.4   | 3.4   |
| 162.5° | 1.1 | 1.1 | 1.1 | 1.1  | 1.1  | 1.1  | 2.2  | 2.2   | 2.2   | 3.4   | 3.4   |
| 165°   | 1.1 | 1.1 | 1.1 | 1.1  | 1.1  | 1.1  | 1.1  | 1.1   | 2.2   | 2.2   | 2.2   |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   | 105°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1052.8 | 1053.9 | 1057.3 | 1057.3 | 1055.0 | 1055.0 | 1053.9 | 1052.8 | 1053.9 | 1056.2 | 1056.2 |
| 5°     | 1050.6 | 1051.7 | 1055.0 | 1056.2 | 1053.9 | 1052.8 | 1052.8 | 1051.7 | 1052.8 | 1055.0 | 1055.0 |
| 7.5°   | 1046.1 | 1047.2 | 1050.6 | 1051.7 | 1049.4 | 1049.4 | 1048.3 | 1047.2 | 1049.4 | 1050.6 | 1050.6 |
| 10°    | 1039.4 | 1040.5 | 1045.0 | 1046.1 | 1045.0 | 1043.8 | 1043.8 | 1042.7 | 1043.8 | 1046.1 | 1046.1 |
| 12.5°  | 1030.4 | 1032.7 | 1038.3 | 1038.3 | 1038.3 | 1037.1 | 1037.1 | 1036.0 | 1037.1 | 1039.4 | 1038.3 |
| 15°    | 1020.3 | 1024.8 | 1029.3 | 1031.5 | 1031.5 | 1031.5 | 1030.4 | 1029.3 | 1031.5 | 1032.7 | 1031.5 |
| 17.5°  | 1009.2 | 1014.8 | 1021.5 | 1023.7 | 1023.7 | 1024.8 | 1023.7 | 1022.6 | 1024.8 | 1024.8 | 1023.7 |
| 20°    | 998.0  | 1003.6 | 1010.3 | 1012.5 | 1014.8 | 1015.9 | 1015.9 | 1014.8 | 1015.9 | 1017.0 | 1015.9 |
| 22.5°  | 983.4  | 990.1  | 998.0  | 1001.3 | 1003.6 | 1005.8 | 1005.8 | 1005.8 | 1006.9 | 1008.0 | 1005.8 |
| 25°    | 967.8  | 975.6  | 984.5  | 987.9  | 992.4  | 993.5  | 994.6  | 994.6  | 995.7  | 996.9  | 993.5  |
| 27.5°  | 951.0  | 959.9  | 968.9  | 974.5  | 977.8  | 980.1  | 980.1  | 981.2  | 982.3  | 983.4  | 980.1  |
| 30°    | 930.8  | 944.3  | 952.1  | 956.6  | 961.1  | 964.4  | 965.5  | 966.6  | 967.8  | 968.9  | 965.5  |
| 32.5°  | 912.9  | 924.1  | 934.2  | 939.8  | 945.4  | 949.9  | 951.0  | 951.0  | 953.2  | 953.2  | 949.9  |
| 35°    | 891.7  | 905.1  | 915.2  | 920.8  | 927.5  | 930.8  | 933.1  | 933.1  | 935.3  | 935.3  | 932.0  |
| 37.5°  | 870.4  | 883.9  | 895.0  | 901.8  | 909.6  | 914.1  | 915.2  | 915.2  | 917.4  | 917.4  | 912.9  |
| 40°    | 848.1  | 862.6  | 874.9  | 882.7  | 889.4  | 895.0  | 896.2  | 899.5  | 899.5  | 898.4  | 893.9  |
| 42.5°  | 825.7  | 839.1  | 852.5  | 861.5  | 870.4  | 876.0  | 878.3  | 879.4  | 879.4  | 878.3  | 874.9  |
| 45°    | 801.1  | 816.7  | 829.0  | 840.2  | 849.2  | 854.8  | 858.1  | 859.2  | 859.2  | 857.0  | 853.6  |
| 47.5°  | 777.6  | 793.2  | 805.5  | 817.8  | 826.8  | 833.5  | 836.9  | 838.0  | 836.9  | 835.7  | 832.4  |
| 50°    | 753.0  | 770.9  | 783.2  | 795.5  | 804.4  | 810.0  | 815.6  | 816.7  | 815.6  | 814.5  | 807.8  |
| 52.5°  | 727.2  | 746.2  | 759.7  | 772.0  | 782.0  | 788.8  | 793.2  | 794.4  | 794.4  | 792.1  | 787.6  |
| 55°    | 701.5  | 718.3  | 735.1  | 748.5  | 759.7  | 766.4  | 772.0  | 774.2  | 772.0  | 769.7  | 764.1  |
| 57.5°  | 678.0  | 693.7  | 710.4  | 725.0  | 736.2  | 745.1  | 749.6  | 751.8  | 749.6  | 746.2  | 740.6  |
| 60°    | 650.0  | 666.8  | 685.8  | 699.3  | 711.6  | 720.5  | 722.7  | 727.2  | 725.0  | 721.6  | 716.0  |
| 62.5°  | 623.2  | 643.3  | 660.1  | 676.9  | 686.9  | 697.0  | 701.5  | 703.7  | 701.5  | 698.1  | 692.5  |
| 65°    | 595.2  | 617.6  | 634.4  | 651.1  | 662.3  | 672.4  | 678.0  | 679.1  | 676.9  | 673.5  | 667.9  |
| 67.5°  | 569.5  | 590.7  | 608.6  | 626.5  | 636.6  | 646.7  | 652.3  | 654.5  | 652.3  | 647.8  | 642.2  |
| 70°    | 543.7  | 565.0  | 586.3  | 599.7  | 612.0  | 623.2  | 626.5  | 629.9  | 627.6  | 623.2  | 616.5  |
| 72.5°  | 518.0  | 540.4  | 561.6  | 575.1  | 588.5  | 598.6  | 603.0  | 606.4  | 604.2  | 599.7  | 591.8  |
| 75°    | 491.2  | 514.6  | 535.9  | 550.5  | 563.9  | 573.9  | 578.4  | 581.8  | 579.5  | 575.1  | 566.1  |
| 77.5°  | 466.5  | 490.0  | 510.2  | 525.8  | 539.3  | 548.2  | 556.0  | 557.2  | 554.9  | 550.5  | 541.5  |
| 80°    | 440.8  | 464.3  | 485.6  | 501.2  | 514.6  | 523.6  | 529.2  | 532.6  | 530.3  | 525.8  | 516.9  |
| 82.5°  | 418.4  | 439.7  | 460.9  | 476.6  | 490.0  | 501.2  | 505.7  | 509.1  | 507.9  | 501.2  | 494.5  |
| 85°    | 393.8  | 418.4  | 435.2  | 452.0  | 465.4  | 476.6  | 480.0  | 484.4  | 483.3  | 477.7  | 468.8  |
| 87.5°  | 369.2  | 393.8  | 414.0  | 430.7  | 443.0  | 452.0  | 457.6  | 459.8  | 458.7  | 453.1  | 443.0  |
| 90°    | 349.1  | 371.4  | 391.6  | 409.5  | 419.6  | 429.6  | 435.2  | 436.3  | 436.3  | 429.6  | 421.8  |
| 92.5°  | 330.0  | 351.3  | 371.4  | 388.2  | 400.5  | 409.5  | 414.0  | 416.2  | 415.1  | 409.5  | 400.5  |
| 95°    | 308.8  | 332.3  | 351.3  | 368.1  | 380.4  | 389.3  | 393.8  | 396.1  | 394.9  | 389.3  | 380.4  |
| 97.5°  | 290.9  | 312.1  | 331.2  | 346.8  | 359.1  | 368.1  | 372.6  | 374.8  | 374.8  | 369.2  | 360.3  |
| 100°   | 273.0  | 294.2  | 312.1  | 327.8  | 339.0  | 347.9  | 352.4  | 353.5  | 352.4  | 347.9  | 339.0  |
| 102.5° | 255.1  | 275.2  | 293.1  | 307.7  | 320.0  | 327.8  | 332.3  | 333.4  | 333.4  | 327.8  | 318.9  |
| 105°   | 237.2  | 257.3  | 274.1  | 289.8  | 299.8  | 307.7  | 311.0  | 314.4  | 313.3  | 308.8  | 299.8  |
| 107.5° | 220.4  | 240.5  | 256.2  | 270.8  | 280.8  | 288.7  | 292.0  | 295.4  | 294.2  | 289.8  | 280.8  |
| 110°   | 204.7  | 223.8  | 238.3  | 252.8  | 261.8  | 269.6  | 275.2  | 276.3  | 274.1  | 269.6  | 261.8  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 190.2 | 207.0 | 221.5 | 234.9 | 245.0 | 250.6 | 255.1 | 257.3 | 255.1 | 250.6 | 245.0 |
| 115°   | 174.5 | 191.3 | 205.9 | 218.2 | 227.1 | 233.8 | 237.2 | 239.4 | 237.2 | 232.7 | 227.1 |
| 117.5° | 160.0 | 175.7 | 190.2 | 202.5 | 210.3 | 215.9 | 219.3 | 221.5 | 219.3 | 215.9 | 210.3 |
| 120°   | 147.7 | 161.1 | 174.5 | 185.7 | 194.7 | 199.1 | 202.5 | 204.7 | 203.6 | 199.1 | 193.6 |
| 122.5° | 133.1 | 147.7 | 160.0 | 171.2 | 179.0 | 183.5 | 185.7 | 188.0 | 186.8 | 183.5 | 177.9 |
| 125°   | 120.8 | 133.1 | 145.4 | 155.5 | 163.3 | 167.8 | 170.1 | 172.3 | 171.2 | 167.8 | 161.1 |
| 127.5° | 107.4 | 120.8 | 130.9 | 141.0 | 146.6 | 153.3 | 154.4 | 156.6 | 155.5 | 152.2 | 146.6 |
| 130°   | 97.3  | 107.4 | 117.5 | 126.4 | 133.1 | 137.6 | 139.9 | 141.0 | 138.7 | 136.5 | 130.9 |
| 132.5° | 85.0  | 96.2  | 105.2 | 113.0 | 117.5 | 121.9 | 124.2 | 125.3 | 125.3 | 121.9 | 117.5 |
| 135°   | 76.1  | 83.9  | 91.7  | 99.6  | 104.0 | 108.5 | 110.8 | 111.9 | 110.8 | 108.5 | 104.0 |
| 137.5° | 68.2  | 75.0  | 80.6  | 87.3  | 92.9  | 95.1  | 97.3  | 97.3  | 96.2  | 95.1  | 91.7  |
| 140°   | 59.3  | 67.1  | 72.7  | 77.2  | 81.7  | 82.8  | 85.0  | 85.0  | 83.9  | 82.8  | 80.6  |
| 142.5° | 50.3  | 57.1  | 62.7  | 68.2  | 71.6  | 73.8  | 75.0  | 76.1  | 75.0  | 73.8  | 70.5  |
| 145°   | 40.3  | 48.1  | 53.7  | 57.1  | 61.5  | 62.7  | 63.8  | 64.9  | 63.8  | 62.7  | 59.3  |
| 147.5° | 31.3  | 38.0  | 43.6  | 48.1  | 51.5  | 52.6  | 53.7  | 54.8  | 53.7  | 51.5  | 50.3  |
| 150°   | 22.4  | 28.0  | 34.7  | 39.2  | 41.4  | 43.6  | 43.6  | 43.6  | 44.8  | 42.5  | 40.3  |
| 152.5° | 17.9  | 20.1  | 24.6  | 29.1  | 32.4  | 33.6  | 34.7  | 34.7  | 33.6  | 33.6  | 31.3  |
| 155°   | 12.3  | 14.5  | 17.9  | 21.3  | 24.6  | 25.7  | 26.9  | 26.9  | 25.7  | 25.7  | 24.6  |
| 157.5° | 7.8   | 10.1  | 12.3  | 14.5  | 17.9  | 19.0  | 20.1  | 20.1  | 20.1  | 19.0  | 17.9  |
| 160°   | 4.5   | 5.6   | 6.7   | 9.0   | 11.2  | 12.3  | 13.4  | 13.4  | 13.4  | 13.4  | 12.3  |
| 162.5° | 3.4   | 3.4   | 3.4   | 4.5   | 5.6   | 6.7   | 7.8   | 7.8   | 7.8   | 7.8   | 6.7   |
| 165°   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 3.4   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1055.0 | 1055.0 | 1056.2 | 1053.9 | 1047.2 | 1048.3 | 1048.3 | 1052.8 | 1055.0 | 1056.2 | 1061.7 |
| 5°     | 1052.8 | 1052.8 | 1055.0 | 1051.7 | 1046.1 | 1046.1 | 1046.1 | 1050.6 | 1051.7 | 1053.9 | 1058.4 |
| 7.5°   | 1049.4 | 1049.4 | 1050.6 | 1047.2 | 1040.5 | 1040.5 | 1039.4 | 1043.8 | 1046.1 | 1047.2 | 1051.7 |
| 10°    | 1043.8 | 1043.8 | 1045.0 | 1041.6 | 1033.8 | 1033.8 | 1032.7 | 1036.0 | 1037.1 | 1039.4 | 1042.7 |
| 12.5°  | 1036.0 | 1036.0 | 1036.0 | 1032.7 | 1024.8 | 1023.7 | 1022.6 | 1025.9 | 1025.9 | 1027.1 | 1030.4 |
| 15°    | 1029.3 | 1027.1 | 1027.1 | 1023.7 | 1015.9 | 1013.6 | 1011.4 | 1012.5 | 1014.8 | 1013.6 | 1015.9 |
| 17.5°  | 1021.5 | 1019.2 | 1017.0 | 1013.6 | 1003.6 | 1000.2 | 998.0  | 999.1  | 998.0  | 996.9  | 999.1  |
| 20°    | 1012.5 | 1009.2 | 1008.0 | 1002.4 | 992.4  | 986.8  | 982.3  | 980.1  | 981.2  | 977.8  | 979.0  |
| 22.5°  | 1002.4 | 998.0  | 995.7  | 989.0  | 979.0  | 972.2  | 966.6  | 962.2  | 961.1  | 956.6  | 957.7  |
| 25°    | 990.1  | 984.5  | 981.2  | 975.6  | 964.4  | 956.6  | 949.9  | 943.2  | 939.8  | 934.2  | 933.1  |
| 27.5°  | 975.6  | 970.0  | 965.5  | 959.9  | 948.7  | 938.7  | 930.8  | 921.9  | 917.4  | 910.7  | 907.4  |
| 30°    | 961.1  | 954.3  | 947.6  | 943.2  | 930.8  | 919.7  | 907.4  | 899.5  | 892.8  | 885.0  | 879.4  |
| 32.5°  | 943.2  | 936.4  | 929.7  | 923.0  | 911.8  | 898.4  | 888.3  | 876.0  | 868.2  | 859.2  | 852.5  |
| 35°    | 925.3  | 916.3  | 909.6  | 900.6  | 890.6  | 874.9  | 862.6  | 850.3  | 840.2  | 830.2  | 822.3  |
| 37.5°  | 905.1  | 898.4  | 888.3  | 880.5  | 868.2  | 852.5  | 839.1  | 823.4  | 814.5  | 801.1  | 791.0  |
| 40°    | 886.1  | 878.3  | 868.2  | 858.1  | 845.8  | 827.9  | 813.4  | 795.5  | 785.4  | 769.7  | 759.7  |
| 42.5°  | 867.1  | 855.9  | 845.8  | 834.6  | 821.2  | 804.4  | 786.5  | 768.6  | 755.2  | 740.6  | 726.1  |
| 45°    | 845.8  | 833.5  | 821.2  | 808.9  | 795.5  | 778.7  | 759.7  | 740.6  | 723.9  | 710.4  | 692.5  |
| 47.5°  | 823.4  | 811.1  | 796.6  | 783.2  | 768.6  | 751.8  | 731.7  | 711.6  | 693.7  | 678.0  | 659.0  |
| 50°    | 801.1  | 788.8  | 773.1  | 758.5  | 741.8  | 725.0  | 703.7  | 680.2  | 661.2  | 641.1  | 624.3  |
| 52.5°  | 777.6  | 765.3  | 750.7  | 731.7  | 713.8  | 697.0  | 674.6  | 650.0  | 628.8  | 612.0  | 590.7  |
| 55°    | 754.1  | 741.8  | 725.0  | 706.0  | 688.1  | 666.8  | 645.6  | 620.9  | 597.4  | 577.3  | 556.0  |
| 57.5°  | 729.5  | 718.3  | 699.3  | 683.6  | 661.2  | 638.8  | 616.5  | 593.0  | 567.2  | 543.7  | 519.1  |
| 60°    | 704.8  | 692.5  | 674.6  | 655.6  | 633.2  | 610.9  | 587.4  | 561.6  | 534.8  | 509.1  | 486.7  |
| 62.5°  | 682.5  | 666.8  | 650.0  | 629.9  | 606.4  | 585.1  | 558.3  | 530.3  | 503.5  | 476.6  | 449.8  |
| 65°    | 656.7  | 640.0  | 624.3  | 604.2  | 579.5  | 554.9  | 528.1  | 500.1  | 471.0  | 441.9  | 415.1  |
| 67.5°  | 631.0  | 614.2  | 597.4  | 577.3  | 551.6  | 525.8  | 497.9  | 469.9  | 437.5  | 409.5  | 378.2  |
| 70°    | 605.3  | 591.8  | 570.6  | 549.3  | 525.8  | 497.9  | 469.9  | 439.7  | 406.1  | 375.9  | 343.5  |
| 72.5°  | 579.5  | 566.1  | 544.9  | 522.5  | 500.1  | 471.0  | 440.8  | 410.6  | 379.3  | 344.6  | 309.9  |
| 75°    | 554.9  | 538.1  | 519.1  | 497.9  | 474.4  | 444.2  | 414.0  | 382.6  | 345.7  | 313.3  | 277.5  |
| 77.5°  | 531.4  | 515.8  | 496.7  | 473.3  | 447.5  | 418.4  | 387.1  | 354.7  | 317.7  | 283.1  | 243.9  |
| 80°    | 505.7  | 490.0  | 471.0  | 447.5  | 421.8  | 393.8  | 360.3  | 326.7  | 290.9  | 252.8  | 212.6  |
| 82.5°  | 481.1  | 466.5  | 445.3  | 424.0  | 396.1  | 368.1  | 334.5  | 301.0  | 262.9  | 226.0  | 186.8  |
| 85°    | 455.4  | 440.8  | 420.7  | 398.3  | 371.4  | 341.2  | 309.9  | 276.3  | 238.3  | 200.3  | 161.1  |
| 87.5°  | 433.0  | 416.2  | 396.1  | 373.7  | 346.8  | 317.7  | 287.5  | 251.7  | 214.8  | 177.9  | 137.6  |
| 90°    | 409.5  | 393.8  | 373.7  | 351.3  | 324.5  | 295.4  | 264.0  | 230.5  | 194.7  | 156.6  | 118.6  |
| 92.5°  | 389.3  | 372.6  | 353.5  | 331.2  | 304.3  | 276.3  | 245.0  | 211.5  | 176.8  | 139.9  | 102.9  |
| 95°    | 369.2  | 352.4  | 334.5  | 312.1  | 285.3  | 257.3  | 226.0  | 193.6  | 160.0  | 124.2  | 89.5   |
| 97.5°  | 346.8  | 332.3  | 314.4  | 293.1  | 266.3  | 239.4  | 209.2  | 177.9  | 145.4  | 110.8  | 78.3   |
| 100°   | 328.9  | 312.1  | 295.4  | 273.0  | 248.4  | 222.6  | 192.4  | 162.2  | 130.9  | 98.5   | 68.2   |
| 102.5° | 308.8  | 293.1  | 276.3  | 255.1  | 230.5  | 204.7  | 176.8  | 147.7  | 118.6  | 88.4   | 59.3   |
| 105°   | 289.8  | 275.2  | 257.3  | 237.2  | 213.7  | 189.1  | 162.2  | 135.4  | 107.4  | 78.3   | 52.6   |
| 107.5° | 270.8  | 256.2  | 239.4  | 220.4  | 198.0  | 173.4  | 148.8  | 121.9  | 96.2   | 70.5   | 47.0   |
| 110°   | 251.7  | 238.3  | 222.6  | 203.6  | 182.4  | 160.0  | 136.5  | 111.9  | 86.1   | 62.7   | 41.4   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150° | 155° | 160° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 112.5° | 234.9 | 221.5 | 205.9 | 188.0 | 167.8 | 146.6 | 124.2 | 100.7 | 77.2 | 55.9 | 35.8 |
| 115°   | 218.2 | 205.9 | 190.2 | 174.5 | 154.4 | 134.3 | 113.0 | 90.6  | 69.4 | 50.3 | 31.3 |
| 117.5° | 201.4 | 189.1 | 174.5 | 158.9 | 141.0 | 121.9 | 101.8 | 80.6  | 62.7 | 44.8 | 28.0 |
| 120°   | 184.6 | 173.4 | 160.0 | 145.4 | 129.8 | 110.8 | 90.6  | 72.7  | 55.9 | 39.2 | 24.6 |
| 122.5° | 168.9 | 158.9 | 146.6 | 133.1 | 116.4 | 98.5  | 81.7  | 66.0  | 50.3 | 34.7 | 20.1 |
| 125°   | 154.4 | 144.3 | 133.1 | 119.7 | 104.0 | 88.4  | 73.8  | 59.3  | 43.6 | 30.2 | 16.8 |
| 127.5° | 139.9 | 129.8 | 118.6 | 106.3 | 94.0  | 79.4  | 66.0  | 52.6  | 39.2 | 26.9 | 14.5 |
| 130°   | 125.3 | 116.4 | 106.3 | 96.2  | 83.9  | 70.5  | 59.3  | 45.9  | 33.6 | 21.3 | 12.3 |
| 132.5° | 110.8 | 104.0 | 95.1  | 85.0  | 73.8  | 63.8  | 51.5  | 40.3  | 29.1 | 19.0 | 11.2 |
| 135°   | 98.5  | 91.7  | 83.9  | 75.0  | 66.0  | 55.9  | 44.8  | 34.7  | 24.6 | 15.7 | 9.0  |
| 137.5° | 87.3  | 81.7  | 73.8  | 66.0  | 58.2  | 48.1  | 39.2  | 29.1  | 20.1 | 13.4 | 6.7  |
| 140°   | 77.2  | 71.6  | 64.9  | 57.1  | 50.3  | 41.4  | 32.4  | 23.5  | 17.9 | 11.2 | 5.6  |
| 142.5° | 67.1  | 61.5  | 55.9  | 49.2  | 42.5  | 34.7  | 26.9  | 20.1  | 14.5 | 9.0  | 5.6  |
| 145°   | 57.1  | 52.6  | 47.0  | 41.4  | 34.7  | 28.0  | 22.4  | 16.8  | 11.2 | 6.7  | 4.5  |
| 147.5° | 47.0  | 43.6  | 38.0  | 33.6  | 28.0  | 22.4  | 17.9  | 13.4  | 9.0  | 5.6  | 3.4  |
| 150°   | 38.0  | 34.7  | 30.2  | 25.7  | 22.4  | 17.9  | 14.5  | 10.1  | 6.7  | 5.6  | 3.4  |
| 152.5° | 29.1  | 26.9  | 23.5  | 21.3  | 17.9  | 13.4  | 10.1  | 7.8   | 5.6  | 4.5  | 2.2  |
| 155°   | 23.5  | 21.3  | 19.0  | 15.7  | 13.4  | 10.1  | 7.8   | 5.6   | 4.5  | 3.4  | 2.2  |
| 157.5° | 16.8  | 15.7  | 13.4  | 11.2  | 9.0   | 6.7   | 5.6   | 5.6   | 3.4  | 2.2  | 1.1  |
| 160°   | 11.2  | 10.1  | 9.0   | 6.7   | 5.6   | 5.6   | 4.5   | 3.4   | 2.2  | 2.2  | 1.1  |
| 162.5° | 6.7   | 5.6   | 5.6   | 5.6   | 4.5   | 4.5   | 3.4   | 2.2   | 2.2  | 1.1  | 1.1  |
| 165°   | 4.5   | 4.5   | 4.5   | 3.4   | 3.4   | 3.4   | 2.2   | 1.1   | 1.1  | 1.1  | 1.1  |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 165°   | 170°   | 175°   | 180°   | 185°   | 190°   | 195°   | 200°   | 205°   | 210°   | 215°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1061.7 | 1058.4 | 1062.9 | 1070.7 | 1071.8 | 1070.7 | 1068.5 | 1071.8 | 1076.3 | 1075.2 | 1067.3 |
| 5°     | 1059.5 | 1055.0 | 1059.5 | 1067.3 | 1067.3 | 1066.2 | 1065.1 | 1068.5 | 1072.9 | 1071.8 | 1065.1 |
| 7.5°   | 1052.8 | 1048.3 | 1052.8 | 1059.5 | 1060.6 | 1058.4 | 1058.4 | 1061.7 | 1066.2 | 1065.1 | 1059.5 |
| 10°    | 1043.8 | 1039.4 | 1041.6 | 1049.4 | 1051.7 | 1049.4 | 1049.4 | 1052.8 | 1058.4 | 1057.3 | 1050.6 |
| 12.5°  | 1030.4 | 1027.1 | 1029.3 | 1036.0 | 1038.3 | 1037.1 | 1036.0 | 1040.5 | 1046.1 | 1046.1 | 1039.4 |
| 15°    | 1015.9 | 1011.4 | 1013.6 | 1021.5 | 1022.6 | 1020.3 | 1021.5 | 1024.8 | 1031.5 | 1031.5 | 1025.9 |
| 17.5°  | 999.1  | 993.5  | 996.9  | 1002.4 | 1003.6 | 1003.6 | 1003.6 | 1008.0 | 1015.9 | 1014.8 | 1010.3 |
| 20°    | 980.1  | 972.2  | 974.5  | 980.1  | 982.3  | 982.3  | 982.3  | 990.1  | 995.7  | 995.7  | 991.3  |
| 22.5°  | 957.7  | 952.1  | 952.1  | 957.7  | 961.1  | 959.9  | 959.9  | 966.6  | 974.5  | 973.4  | 973.4  |
| 25°    | 932.0  | 927.5  | 925.3  | 932.0  | 933.1  | 934.2  | 936.4  | 943.2  | 952.1  | 952.1  | 953.2  |
| 27.5°  | 905.1  | 900.6  | 899.5  | 905.1  | 906.2  | 907.4  | 909.6  | 917.4  | 926.4  | 927.5  | 929.7  |
| 30°    | 879.4  | 872.7  | 870.4  | 874.9  | 877.1  | 878.3  | 878.3  | 890.6  | 898.4  | 901.8  | 906.2  |
| 32.5°  | 849.2  | 842.5  | 836.9  | 844.7  | 845.8  | 848.1  | 849.2  | 861.5  | 870.4  | 876.0  | 882.7  |
| 35°    | 819.0  | 807.8  | 805.5  | 811.1  | 813.4  | 814.5  | 816.7  | 830.2  | 842.5  | 846.9  | 855.9  |
| 37.5°  | 785.4  | 777.6  | 770.9  | 776.5  | 778.7  | 779.8  | 786.5  | 798.8  | 811.1  | 817.8  | 826.8  |
| 40°    | 754.1  | 744.0  | 738.4  | 741.8  | 744.0  | 745.1  | 753.0  | 766.4  | 780.9  | 788.8  | 799.9  |
| 42.5°  | 719.4  | 706.0  | 701.5  | 704.8  | 706.0  | 709.3  | 716.0  | 733.9  | 748.5  | 759.7  | 768.6  |
| 45°    | 684.7  | 674.6  | 664.6  | 667.9  | 669.0  | 671.3  | 681.4  | 700.4  | 716.0  | 729.5  | 739.5  |
| 47.5°  | 648.9  | 636.6  | 626.5  | 628.8  | 633.2  | 634.4  | 645.6  | 667.9  | 682.5  | 697.0  | 710.4  |
| 50°    | 613.1  | 596.3  | 588.5  | 588.5  | 590.7  | 596.3  | 610.9  | 633.2  | 648.9  | 665.7  | 680.2  |
| 52.5°  | 576.2  | 560.5  | 551.6  | 552.7  | 554.9  | 561.6  | 575.1  | 597.4  | 615.3  | 633.2  | 651.1  |
| 55°    | 539.3  | 522.5  | 513.5  | 511.3  | 513.5  | 522.5  | 538.1  | 561.6  | 579.5  | 600.8  | 619.8  |
| 57.5°  | 502.3  | 482.2  | 474.4  | 471.0  | 473.3  | 484.4  | 500.1  | 524.7  | 547.1  | 567.2  | 589.6  |
| 60°    | 462.1  | 446.4  | 433.0  | 425.1  | 430.7  | 445.3  | 462.1  | 487.8  | 511.3  | 533.7  | 558.3  |
| 62.5°  | 427.4  | 407.2  | 392.7  | 384.9  | 390.5  | 402.8  | 426.3  | 450.9  | 476.6  | 502.3  | 527.0  |
| 65°    | 388.2  | 368.1  | 351.3  | 343.5  | 349.1  | 363.6  | 387.1  | 414.0  | 441.9  | 467.7  | 496.7  |
| 67.5°  | 350.2  | 328.9  | 308.8  | 301.0  | 307.7  | 323.3  | 349.1  | 379.3  | 409.5  | 436.3  | 467.7  |
| 70°    | 313.3  | 289.8  | 268.5  | 262.9  | 267.4  | 288.7  | 313.3  | 343.5  | 374.8  | 406.1  | 438.6  |
| 72.5°  | 279.7  | 250.6  | 228.2  | 221.5  | 227.1  | 250.6  | 278.6  | 309.9  | 343.5  | 377.0  | 411.7  |
| 75°    | 240.5  | 213.7  | 189.1  | 181.2  | 188.0  | 209.2  | 243.9  | 277.5  | 313.3  | 349.1  | 381.5  |
| 77.5°  | 209.2  | 177.9  | 152.2  | 139.9  | 151.0  | 177.9  | 211.5  | 247.3  | 284.2  | 321.1  | 358.0  |
| 80°    | 176.8  | 144.3  | 116.4  | 102.9  | 115.2  | 144.3  | 177.9  | 217.0  | 258.4  | 295.4  | 328.9  |
| 82.5°  | 147.7  | 113.0  | 83.9   | 69.4   | 82.8   | 115.2  | 152.2  | 191.3  | 231.6  | 268.5  | 307.7  |
| 85°    | 120.8  | 85.0   | 54.8   | 39.2   | 58.2   | 87.3   | 126.4  | 166.7  | 208.1  | 246.1  | 284.2  |
| 87.5°  | 98.5   | 63.8   | 33.6   | 16.8   | 35.8   | 68.2   | 105.2  | 145.4  | 186.8  | 224.9  | 260.7  |
| 90°    | 80.6   | 45.9   | 17.9   | 2.2    | 21.3   | 51.5   | 87.3   | 126.4  | 165.6  | 204.7  | 240.5  |
| 92.5°  | 66.0   | 34.7   | 10.1   | 1.1    | 13.4   | 41.4   | 75.0   | 111.9  | 149.9  | 188.0  | 222.6  |
| 95°    | 54.8   | 26.9   | 6.7    | 1.1    | 10.1   | 32.4   | 63.8   | 99.6   | 135.4  | 172.3  | 207.0  |
| 97.5°  | 47.0   | 22.4   | 5.6    | 1.1    | 7.8    | 28.0   | 54.8   | 88.4   | 123.1  | 157.8  | 191.3  |
| 100°   | 40.3   | 17.9   | 4.5    | 1.1    | 6.7    | 23.5   | 48.1   | 78.3   | 110.8  | 144.3  | 176.8  |
| 102.5° | 34.7   | 14.5   | 3.4    | 1.1    | 5.6    | 20.1   | 42.5   | 70.5   | 99.6   | 132.0  | 163.3  |
| 105°   | 30.2   | 12.3   | 3.4    | 1.1    | 4.5    | 17.9   | 38.0   | 62.7   | 91.7   | 120.8  | 151.0  |
| 107.5° | 25.7   | 10.1   | 2.2    | 1.1    | 3.4    | 14.5   | 33.6   | 57.1   | 82.8   | 110.8  | 138.7  |
| 110°   | 22.4   | 9.0    | 2.2    | 1.1    | 3.4    | 13.4   | 29.1   | 51.5   | 75.0   | 100.7  | 127.5  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 165° | 170° | 175° | 180° | 185° | 190° | 195° | 200° | 205° | 210° | 215°  |
|--------|------|------|------|------|------|------|------|------|------|------|-------|
| 112.5° | 19.0 | 6.7  | 2.2  | 1.1  | 2.2  | 11.2 | 25.7 | 45.9 | 68.2 | 91.7 | 117.5 |
| 115°   | 16.8 | 5.6  | 1.1  | 1.1  | 2.2  | 10.1 | 23.5 | 41.4 | 61.5 | 83.9 | 107.4 |
| 117.5° | 13.4 | 4.5  | 1.1  | 1.1  | 1.1  | 7.8  | 20.1 | 36.9 | 55.9 | 77.2 | 98.5  |
| 120°   | 11.2 | 4.5  | 1.1  | 1.1  | 1.1  | 6.7  | 17.9 | 32.4 | 50.3 | 69.4 | 89.5  |
| 122.5° | 10.1 | 3.4  | 1.1  | 1.1  | 1.1  | 5.6  | 15.7 | 29.1 | 44.8 | 62.7 | 81.7  |
| 125°   | 9.0  | 3.4  | 1.1  | 1.1  | 1.1  | 4.5  | 13.4 | 25.7 | 40.3 | 55.9 | 73.8  |
| 127.5° | 6.7  | 3.4  | 1.1  | 1.1  | 1.1  | 3.4  | 12.3 | 22.4 | 35.8 | 50.3 | 66.0  |
| 130°   | 5.6  | 2.2  | 1.1  | 1.1  | 1.1  | 3.4  | 10.1 | 20.1 | 31.3 | 44.8 | 59.3  |
| 132.5° | 4.5  | 2.2  | 1.1  | 1.1  | 1.1  | 2.2  | 7.8  | 15.7 | 26.9 | 39.2 | 52.6  |
| 135°   | 4.5  | 2.2  | 1.1  | 1.1  | 1.1  | 2.2  | 5.6  | 13.4 | 22.4 | 33.6 | 44.8  |
| 137.5° | 4.5  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 4.5  | 10.1 | 17.9 | 26.9 | 36.9  |
| 140°   | 3.4  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 3.4  | 7.8  | 14.5 | 22.4 | 31.3  |
| 142.5° | 3.4  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 3.4  | 5.6  | 11.2 | 17.9 | 24.6  |
| 145°   | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 4.5  | 9.0  | 13.4 | 20.1  |
| 147.5° | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 3.4  | 6.7  | 11.2 | 15.7  |
| 150°   | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 3.4  | 4.5  | 7.8  | 12.3  |
| 152.5° | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 2.2  | 3.4  | 5.6  | 7.8   |
| 155°   | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 3.4  | 4.5  | 5.6   |
| 157.5° | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 2.2  | 3.4  | 4.5   |
| 160°   | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 2.2  | 3.4   |
| 162.5° | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 2.2  | 2.2   |
| 165°   | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1   |
| 167.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |
| 170°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |
| 172.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |
| 175°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |
| 177.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |
| 180°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 220°   | 225°   | 230°   | 235°   | 240°   | 245°   | 250°   | 255°   | 260°   | 265°   | 270°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1064.0 | 1056.2 | 1058.4 | 1057.3 | 1059.5 | 1062.9 | 1062.9 | 1061.7 | 1061.7 | 1059.5 | 1057.3 |
| 5°     | 1061.7 | 1053.9 | 1057.3 | 1056.2 | 1058.4 | 1061.7 | 1061.7 | 1060.6 | 1060.6 | 1057.3 | 1056.2 |
| 7.5°   | 1055.0 | 1049.4 | 1051.7 | 1051.7 | 1053.9 | 1057.3 | 1057.3 | 1056.2 | 1056.2 | 1052.8 | 1051.7 |
| 10°    | 1048.3 | 1041.6 | 1045.0 | 1045.0 | 1047.2 | 1051.7 | 1051.7 | 1050.6 | 1050.6 | 1047.2 | 1046.1 |
| 12.5°  | 1037.1 | 1030.4 | 1036.0 | 1037.1 | 1039.4 | 1043.8 | 1042.7 | 1042.7 | 1042.7 | 1039.4 | 1038.3 |
| 15°    | 1023.7 | 1019.2 | 1024.8 | 1025.9 | 1029.3 | 1034.9 | 1034.9 | 1034.9 | 1034.9 | 1031.5 | 1030.4 |
| 17.5°  | 1009.2 | 1005.8 | 1011.4 | 1013.6 | 1018.1 | 1023.7 | 1023.7 | 1024.8 | 1025.9 | 1023.7 | 1022.6 |
| 20°    | 992.4  | 990.1  | 995.7  | 1000.2 | 1006.9 | 1012.5 | 1014.8 | 1015.9 | 1018.1 | 1015.9 | 1014.8 |
| 22.5°  | 973.4  | 973.4  | 981.2  | 985.7  | 993.5  | 999.1  | 1002.4 | 1005.8 | 1008.0 | 1005.8 | 1004.7 |
| 25°    | 952.1  | 955.5  | 963.3  | 971.1  | 980.1  | 985.7  | 989.0  | 993.5  | 995.7  | 994.6  | 993.5  |
| 27.5°  | 932.0  | 936.4  | 946.5  | 954.3  | 962.2  | 971.1  | 974.5  | 980.1  | 982.3  | 982.3  | 981.2  |
| 30°    | 908.5  | 915.2  | 926.4  | 935.3  | 945.4  | 954.3  | 958.8  | 964.4  | 967.8  | 965.5  | 966.6  |
| 32.5°  | 886.1  | 897.3  | 906.2  | 916.3  | 927.5  | 936.4  | 942.0  | 948.7  | 952.1  | 951.0  | 952.1  |
| 35°    | 861.5  | 872.7  | 885.0  | 895.0  | 908.5  | 917.4  | 925.3  | 930.8  | 935.3  | 934.2  | 934.2  |
| 37.5°  | 834.6  | 849.2  | 861.5  | 874.9  | 887.2  | 897.3  | 905.1  | 911.8  | 916.3  | 916.3  | 916.3  |
| 40°    | 808.9  | 824.6  | 836.9  | 852.5  | 868.2  | 877.1  | 886.1  | 892.8  | 897.3  | 898.4  | 899.5  |
| 42.5°  | 780.9  | 797.7  | 812.3  | 829.0  | 844.7  | 855.9  | 866.0  | 873.8  | 878.3  | 880.5  | 879.4  |
| 45°    | 755.2  | 770.9  | 787.6  | 806.7  | 821.2  | 832.4  | 844.7  | 853.6  | 858.1  | 859.2  | 860.4  |
| 47.5°  | 726.1  | 744.0  | 763.0  | 782.0  | 796.6  | 811.1  | 822.3  | 831.3  | 835.7  | 839.1  | 839.1  |
| 50°    | 698.1  | 717.2  | 738.4  | 758.5  | 774.2  | 788.8  | 799.9  | 810.0  | 815.6  | 817.8  | 819.0  |
| 52.5°  | 672.4  | 690.3  | 712.7  | 732.8  | 748.5  | 763.0  | 777.6  | 788.8  | 794.4  | 796.6  | 796.6  |
| 55°    | 641.1  | 663.5  | 688.1  | 707.1  | 723.9  | 740.6  | 755.2  | 766.4  | 772.0  | 775.3  | 777.6  |
| 57.5°  | 612.0  | 635.5  | 661.2  | 681.4  | 701.5  | 717.2  | 730.6  | 745.1  | 749.6  | 754.1  | 755.2  |
| 60°    | 584.0  | 607.5  | 632.1  | 654.5  | 674.6  | 691.4  | 707.1  | 719.4  | 727.2  | 729.5  | 731.7  |
| 62.5°  | 554.9  | 579.5  | 605.3  | 627.6  | 648.9  | 669.0  | 683.6  | 694.8  | 703.7  | 707.1  | 709.3  |
| 65°    | 527.0  | 552.7  | 578.4  | 601.9  | 624.3  | 644.4  | 659.0  | 670.2  | 679.1  | 684.7  | 685.8  |
| 67.5°  | 496.7  | 524.7  | 551.6  | 576.2  | 598.6  | 619.8  | 634.4  | 645.6  | 654.5  | 661.2  | 662.3  |
| 70°    | 468.8  | 497.9  | 524.7  | 551.6  | 573.9  | 595.2  | 610.9  | 622.1  | 632.1  | 636.6  | 638.8  |
| 72.5°  | 441.9  | 472.1  | 500.1  | 527.0  | 549.3  | 570.6  | 587.4  | 598.6  | 608.6  | 614.2  | 615.3  |
| 75°    | 416.2  | 446.4  | 476.6  | 502.3  | 525.8  | 547.1  | 563.9  | 576.2  | 585.1  | 590.7  | 593.0  |
| 77.5°  | 390.5  | 421.8  | 452.0  | 477.7  | 502.3  | 523.6  | 538.1  | 552.7  | 561.6  | 568.4  | 568.4  |
| 80°    | 364.7  | 397.2  | 428.5  | 454.2  | 478.8  | 497.9  | 514.6  | 529.2  | 538.1  | 544.9  | 544.9  |
| 82.5°  | 342.4  | 373.7  | 403.9  | 429.6  | 454.2  | 475.5  | 492.3  | 505.7  | 515.8  | 520.2  | 521.4  |
| 85°    | 316.6  | 351.3  | 379.3  | 407.2  | 430.7  | 450.9  | 467.7  | 482.2  | 491.2  | 495.6  | 497.9  |
| 87.5°  | 295.4  | 328.9  | 359.1  | 383.7  | 407.2  | 427.4  | 446.4  | 458.7  | 467.7  | 473.3  | 475.5  |
| 90°    | 275.2  | 307.7  | 337.9  | 362.5  | 387.1  | 406.1  | 424.0  | 436.3  | 446.4  | 450.9  | 453.1  |
| 92.5°  | 257.3  | 289.8  | 318.9  | 343.5  | 367.0  | 388.2  | 405.0  | 417.3  | 426.3  | 430.7  | 434.1  |
| 95°    | 240.5  | 271.9  | 299.8  | 326.7  | 349.1  | 368.1  | 386.0  | 398.3  | 408.4  | 411.7  | 415.1  |
| 97.5°  | 223.8  | 254.0  | 281.9  | 307.7  | 331.2  | 349.1  | 365.8  | 378.2  | 386.0  | 391.6  | 394.9  |
| 100°   | 209.2  | 238.3  | 265.2  | 289.8  | 312.1  | 328.9  | 346.8  | 358.0  | 365.8  | 370.3  | 374.8  |
| 102.5° | 193.6  | 222.6  | 248.4  | 271.9  | 295.4  | 311.0  | 327.8  | 339.0  | 345.7  | 353.5  | 353.5  |
| 105°   | 180.1  | 207.0  | 232.7  | 255.1  | 275.2  | 294.2  | 308.8  | 320.0  | 327.8  | 333.4  | 333.4  |
| 107.5° | 165.6  | 192.4  | 217.0  | 240.5  | 259.6  | 277.5  | 290.9  | 301.0  | 309.9  | 313.3  | 316.6  |
| 110°   | 154.4  | 177.9  | 202.5  | 224.9  | 242.8  | 259.6  | 273.0  | 284.2  | 292.0  | 295.4  | 297.6  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  | 250°  | 255°  | 260°  | 265°  | 270°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 141.0 | 165.6 | 188.0 | 209.2 | 227.1 | 242.8 | 256.2 | 265.2 | 273.0 | 277.5 | 278.6 |
| 115°   | 129.8 | 153.3 | 173.4 | 193.6 | 212.6 | 226.0 | 238.3 | 247.3 | 255.1 | 258.4 | 260.7 |
| 117.5° | 119.7 | 141.0 | 161.1 | 177.9 | 195.8 | 210.3 | 222.6 | 230.5 | 237.2 | 241.7 | 243.9 |
| 120°   | 109.6 | 129.8 | 147.7 | 164.5 | 181.2 | 194.7 | 205.9 | 213.7 | 221.5 | 224.9 | 224.9 |
| 122.5° | 99.6  | 118.6 | 135.4 | 151.0 | 166.7 | 179.0 | 191.3 | 198.0 | 204.7 | 208.1 | 208.1 |
| 125°   | 90.6  | 108.5 | 124.2 | 138.7 | 153.3 | 164.5 | 174.5 | 182.4 | 189.1 | 191.3 | 191.3 |
| 127.5° | 81.7  | 98.5  | 113.0 | 126.4 | 138.7 | 149.9 | 160.0 | 167.8 | 173.4 | 175.7 | 175.7 |
| 130°   | 73.8  | 88.4  | 101.8 | 115.2 | 127.5 | 136.5 | 146.6 | 153.3 | 156.6 | 160.0 | 161.1 |
| 132.5° | 66.0  | 79.4  | 91.7  | 102.9 | 115.2 | 124.2 | 132.0 | 138.7 | 142.1 | 145.4 | 146.6 |
| 135°   | 58.2  | 70.5  | 81.7  | 92.9  | 102.9 | 111.9 | 118.6 | 124.2 | 128.7 | 130.9 | 132.0 |
| 137.5° | 49.2  | 62.7  | 72.7  | 81.7  | 92.9  | 99.6  | 107.4 | 110.8 | 115.2 | 117.5 | 117.5 |
| 140°   | 41.4  | 51.5  | 62.7  | 71.6  | 80.6  | 87.3  | 94.0  | 99.6  | 102.9 | 104.0 | 104.0 |
| 142.5° | 33.6  | 42.5  | 51.5  | 62.7  | 70.5  | 76.1  | 82.8  | 87.3  | 89.5  | 90.6  | 91.7  |
| 145°   | 26.9  | 33.6  | 41.4  | 51.5  | 60.4  | 67.1  | 70.5  | 75.0  | 77.2  | 78.3  | 79.4  |
| 147.5° | 20.1  | 26.9  | 33.6  | 40.3  | 49.2  | 55.9  | 59.3  | 63.8  | 66.0  | 67.1  | 67.1  |
| 150°   | 15.7  | 20.1  | 24.6  | 31.3  | 38.0  | 45.9  | 50.3  | 53.7  | 54.8  | 55.9  | 55.9  |
| 152.5° | 11.2  | 15.7  | 19.0  | 23.5  | 28.0  | 34.7  | 41.4  | 43.6  | 44.8  | 45.9  | 45.9  |
| 155°   | 7.8   | 11.2  | 13.4  | 16.8  | 20.1  | 25.7  | 31.3  | 34.7  | 35.8  | 36.9  | 36.9  |
| 157.5° | 5.6   | 7.8   | 9.0   | 12.3  | 14.5  | 16.8  | 21.3  | 26.9  | 28.0  | 28.0  | 28.0  |
| 160°   | 3.4   | 4.5   | 5.6   | 7.8   | 9.0   | 11.2  | 13.4  | 16.8  | 20.1  | 20.1  | 20.1  |
| 162.5° | 2.2   | 3.4   | 3.4   | 4.5   | 4.5   | 6.7   | 7.8   | 9.0   | 12.3  | 13.4  | 13.4  |
| 165°   | 1.1   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 3.4   | 3.4   | 5.6   | 6.7   | 6.7   |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 275°   | 280°   | 285°   | 290°   | 295°   | 300°   | 305°   | 310°   | 315°   | 320°   | 325°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1058.4 | 1060.6 | 1059.5 | 1059.5 | 1059.5 | 1061.7 | 1059.5 | 1049.4 | 1051.7 | 1053.9 | 1056.2 |
| 5°     | 1057.3 | 1058.4 | 1058.4 | 1057.3 | 1057.3 | 1059.5 | 1057.3 | 1047.2 | 1049.4 | 1051.7 | 1052.8 |
| 7.5°   | 1052.8 | 1053.9 | 1053.9 | 1053.9 | 1052.8 | 1055.0 | 1051.7 | 1042.7 | 1042.7 | 1045.0 | 1046.1 |
| 10°    | 1047.2 | 1049.4 | 1048.3 | 1047.2 | 1047.2 | 1047.2 | 1045.0 | 1034.9 | 1034.9 | 1036.0 | 1037.1 |
| 12.5°  | 1040.5 | 1040.5 | 1040.5 | 1039.4 | 1038.3 | 1038.3 | 1036.0 | 1025.9 | 1024.8 | 1027.1 | 1025.9 |
| 15°    | 1031.5 | 1033.8 | 1031.5 | 1030.4 | 1028.2 | 1028.2 | 1024.8 | 1014.8 | 1012.5 | 1013.6 | 1012.5 |
| 17.5°  | 1023.7 | 1024.8 | 1022.6 | 1020.3 | 1018.1 | 1017.0 | 1013.6 | 1002.4 | 999.1  | 1000.2 | 998.0  |
| 20°    | 1015.9 | 1015.9 | 1013.6 | 1011.4 | 1008.0 | 1004.7 | 1000.2 | 989.0  | 983.4  | 983.4  | 979.0  |
| 22.5°  | 1005.8 | 1005.8 | 1003.6 | 1000.2 | 996.9  | 992.4  | 987.9  | 976.7  | 967.8  | 965.5  | 962.2  |
| 25°    | 994.6  | 993.5  | 992.4  | 989.0  | 982.3  | 977.8  | 973.4  | 961.1  | 951.0  | 946.5  | 940.9  |
| 27.5°  | 981.2  | 981.2  | 977.8  | 974.5  | 967.8  | 962.2  | 956.6  | 945.4  | 932.0  | 926.4  | 918.5  |
| 30°    | 966.6  | 966.6  | 963.3  | 958.8  | 952.1  | 945.4  | 938.7  | 925.3  | 911.8  | 904.0  | 895.0  |
| 32.5°  | 952.1  | 951.0  | 947.6  | 943.2  | 936.4  | 926.4  | 920.8  | 907.4  | 891.7  | 882.7  | 870.4  |
| 35°    | 934.2  | 933.1  | 929.7  | 924.1  | 915.2  | 907.4  | 898.4  | 886.1  | 868.2  | 857.0  | 843.6  |
| 37.5°  | 916.3  | 915.2  | 912.9  | 905.1  | 896.2  | 887.2  | 876.0  | 863.7  | 846.9  | 832.4  | 819.0  |
| 40°    | 898.4  | 897.3  | 892.8  | 887.2  | 876.0  | 864.8  | 853.6  | 841.3  | 823.4  | 806.7  | 792.1  |
| 42.5°  | 879.4  | 878.3  | 872.7  | 866.0  | 853.6  | 842.5  | 829.0  | 815.6  | 797.7  | 777.6  | 763.0  |
| 45°    | 860.4  | 858.1  | 852.5  | 844.7  | 831.3  | 819.0  | 805.5  | 789.9  | 772.0  | 753.0  | 733.9  |
| 47.5°  | 840.2  | 836.9  | 831.3  | 820.1  | 808.9  | 795.5  | 779.8  | 763.0  | 745.1  | 723.9  | 703.7  |
| 50°    | 817.8  | 815.6  | 808.9  | 798.8  | 785.4  | 772.0  | 754.1  | 737.3  | 716.0  | 695.9  | 671.3  |
| 52.5°  | 796.6  | 792.1  | 786.5  | 775.3  | 761.9  | 747.4  | 728.3  | 708.2  | 686.9  | 667.9  | 642.2  |
| 55°    | 774.2  | 772.0  | 764.1  | 755.2  | 738.4  | 721.6  | 703.7  | 682.5  | 659.0  | 636.6  | 612.0  |
| 57.5°  | 753.0  | 748.5  | 741.8  | 729.5  | 714.9  | 698.1  | 679.1  | 656.7  | 631.0  | 607.5  | 580.7  |
| 60°    | 731.7  | 725.0  | 717.2  | 706.0  | 690.3  | 672.4  | 652.3  | 628.8  | 603.0  | 577.3  | 549.3  |
| 62.5°  | 708.2  | 702.6  | 693.7  | 682.5  | 666.8  | 647.8  | 626.5  | 601.9  | 577.3  | 550.5  | 520.2  |
| 65°    | 684.7  | 679.1  | 670.2  | 659.0  | 643.3  | 622.1  | 599.7  | 575.1  | 547.1  | 521.4  | 488.9  |
| 67.5°  | 661.2  | 655.6  | 645.6  | 633.2  | 617.6  | 597.4  | 573.9  | 548.2  | 520.2  | 492.3  | 458.7  |
| 70°    | 637.7  | 631.0  | 622.1  | 608.6  | 593.0  | 571.7  | 548.2  | 521.4  | 493.4  | 463.2  | 429.6  |
| 72.5°  | 614.2  | 608.6  | 597.4  | 585.1  | 568.4  | 547.1  | 523.6  | 496.7  | 467.7  | 436.3  | 402.8  |
| 75°    | 590.7  | 584.0  | 576.2  | 561.6  | 543.7  | 523.6  | 499.0  | 472.1  | 440.8  | 410.6  | 375.9  |
| 77.5°  | 567.2  | 561.6  | 551.6  | 537.0  | 520.2  | 499.0  | 474.4  | 447.5  | 416.2  | 384.9  | 347.9  |
| 80°    | 543.7  | 537.0  | 529.2  | 515.8  | 496.7  | 475.5  | 449.8  | 422.9  | 391.6  | 359.1  | 322.2  |
| 82.5°  | 520.2  | 513.5  | 504.6  | 491.2  | 473.3  | 452.0  | 427.4  | 398.3  | 367.0  | 333.4  | 298.7  |
| 85°    | 496.7  | 491.2  | 481.1  | 467.7  | 448.6  | 427.4  | 402.8  | 377.0  | 343.5  | 309.9  | 275.2  |
| 87.5°  | 473.3  | 467.7  | 457.6  | 444.2  | 426.3  | 405.0  | 380.4  | 353.5  | 321.1  | 289.8  | 251.7  |
| 90°    | 450.9  | 446.4  | 436.3  | 422.9  | 405.0  | 383.7  | 361.4  | 332.3  | 301.0  | 269.6  | 233.8  |
| 92.5°  | 430.7  | 426.3  | 417.3  | 403.9  | 388.2  | 364.7  | 342.4  | 314.4  | 283.1  | 250.6  | 215.9  |
| 95°    | 412.8  | 407.2  | 398.3  | 386.0  | 367.0  | 346.8  | 324.5  | 296.5  | 266.3  | 233.8  | 200.3  |
| 97.5°  | 392.7  | 387.1  | 378.2  | 364.7  | 349.1  | 327.8  | 305.4  | 278.6  | 248.4  | 218.2  | 184.6  |
| 100°   | 372.6  | 367.0  | 356.9  | 345.7  | 330.0  | 308.8  | 287.5  | 260.7  | 232.7  | 203.6  | 171.2  |
| 102.5° | 352.4  | 346.8  | 337.9  | 326.7  | 311.0  | 292.0  | 270.8  | 245.0  | 217.0  | 188.0  | 157.8  |
| 105°   | 333.4  | 327.8  | 318.9  | 307.7  | 293.1  | 274.1  | 251.7  | 229.4  | 202.5  | 174.5  | 145.4  |
| 107.5° | 314.4  | 308.8  | 301.0  | 289.8  | 275.2  | 257.3  | 236.1  | 212.6  | 188.0  | 161.1  | 133.1  |
| 110°   | 295.4  | 290.9  | 281.9  | 271.9  | 257.3  | 239.4  | 220.4  | 198.0  | 173.4  | 148.8  | 121.9  |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 275°  | 280°  | 285°  | 290°  | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 277.5 | 273.0 | 264.0 | 252.8 | 240.5 | 223.8 | 204.7 | 183.5 | 160.0 | 136.5 | 110.8 |
| 115°   | 259.6 | 254.0 | 246.1 | 236.1 | 223.8 | 208.1 | 190.2 | 171.2 | 147.7 | 125.3 | 101.8 |
| 117.5° | 241.7 | 237.2 | 229.4 | 219.3 | 208.1 | 192.4 | 175.7 | 157.8 | 135.4 | 114.1 | 92.9  |
| 120°   | 223.8 | 220.4 | 212.6 | 203.6 | 192.4 | 177.9 | 162.2 | 144.3 | 124.2 | 104.0 | 83.9  |
| 122.5° | 207.0 | 203.6 | 195.8 | 188.0 | 176.8 | 163.3 | 148.8 | 132.0 | 114.1 | 95.1  | 77.2  |
| 125°   | 191.3 | 186.8 | 180.1 | 172.3 | 162.2 | 149.9 | 135.4 | 119.7 | 102.9 | 86.1  | 69.4  |
| 127.5° | 174.5 | 171.2 | 166.7 | 157.8 | 147.7 | 136.5 | 123.1 | 109.6 | 94.0  | 78.3  | 62.7  |
| 130°   | 161.1 | 156.6 | 151.0 | 144.3 | 135.4 | 124.2 | 111.9 | 98.5  | 85.0  | 70.5  | 54.8  |
| 132.5° | 145.4 | 141.0 | 136.5 | 129.8 | 121.9 | 111.9 | 100.7 | 88.4  | 76.1  | 62.7  | 49.2  |
| 135°   | 130.9 | 127.5 | 123.1 | 116.4 | 108.5 | 100.7 | 89.5  | 78.3  | 67.1  | 54.8  | 43.6  |
| 137.5° | 117.5 | 114.1 | 109.6 | 105.2 | 97.3  | 89.5  | 79.4  | 69.4  | 59.3  | 48.1  | 38.0  |
| 140°   | 104.0 | 101.8 | 97.3  | 92.9  | 86.1  | 78.3  | 69.4  | 60.4  | 51.5  | 41.4  | 32.4  |
| 142.5° | 90.6  | 88.4  | 85.0  | 80.6  | 75.0  | 68.2  | 60.4  | 52.6  | 43.6  | 35.8  | 28.0  |
| 145°   | 78.3  | 77.2  | 73.8  | 69.4  | 64.9  | 58.2  | 51.5  | 44.8  | 36.9  | 30.2  | 22.4  |
| 147.5° | 66.0  | 64.9  | 62.7  | 59.3  | 54.8  | 49.2  | 43.6  | 36.9  | 31.3  | 24.6  | 17.9  |
| 150°   | 54.8  | 53.7  | 52.6  | 48.1  | 45.9  | 40.3  | 35.8  | 30.2  | 25.7  | 19.0  | 14.5  |
| 152.5° | 44.8  | 44.8  | 42.5  | 39.2  | 36.9  | 32.4  | 29.1  | 24.6  | 20.1  | 15.7  | 11.2  |
| 155°   | 35.8  | 34.7  | 33.6  | 31.3  | 29.1  | 25.7  | 22.4  | 19.0  | 15.7  | 11.2  | 7.8   |
| 157.5° | 28.0  | 26.9  | 25.7  | 23.5  | 21.3  | 20.1  | 16.8  | 13.4  | 10.1  | 7.8   | 5.6   |
| 160°   | 20.1  | 19.0  | 17.9  | 16.8  | 15.7  | 13.4  | 11.2  | 9.0   | 6.7   | 4.5   | 3.4   |
| 162.5° | 13.4  | 12.3  | 12.3  | 11.2  | 10.1  | 7.8   | 6.7   | 5.6   | 4.5   | 3.4   | 2.2   |
| 165°   | 6.7   | 6.7   | 5.6   | 5.6   | 4.5   | 3.4   | 3.4   | 3.4   | 2.2   | 2.2   | 1.1   |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 330°   | 335°   | 340°   | 345°   | 350°   | 355°   | 360°   |
|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 | 1060.6 |
| 2.5°   | 1055.0 | 1055.0 | 1059.5 | 1058.4 | 1055.0 | 1061.7 | 1069.6 |
| 5°     | 1051.7 | 1051.7 | 1055.0 | 1055.0 | 1051.7 | 1058.4 | 1065.1 |
| 7.5°   | 1046.1 | 1045.0 | 1048.3 | 1048.3 | 1043.8 | 1049.4 | 1057.3 |
| 10°    | 1036.0 | 1034.9 | 1038.3 | 1038.3 | 1033.8 | 1039.4 | 1046.1 |
| 12.5°  | 1024.8 | 1022.6 | 1025.9 | 1024.8 | 1020.3 | 1025.9 | 1032.7 |
| 15°    | 1010.3 | 1009.2 | 1011.4 | 1009.2 | 1004.7 | 1010.3 | 1017.0 |
| 17.5°  | 995.7  | 992.4  | 993.5  | 993.5  | 985.7  | 991.3  | 996.9  |
| 20°    | 976.7  | 972.2  | 973.4  | 972.2  | 966.6  | 970.0  | 976.7  |
| 22.5°  | 957.7  | 951.0  | 951.0  | 949.9  | 943.2  | 947.6  | 953.2  |
| 25°    | 934.2  | 926.4  | 926.4  | 925.3  | 917.4  | 920.8  | 926.4  |
| 27.5°  | 910.7  | 902.9  | 899.5  | 898.4  | 890.6  | 890.6  | 898.4  |
| 30°    | 886.1  | 874.9  | 872.7  | 869.3  | 861.5  | 861.5  | 868.2  |
| 32.5°  | 862.6  | 846.9  | 842.5  | 838.0  | 830.2  | 829.0  | 836.9  |
| 35°    | 831.3  | 819.0  | 811.1  | 806.7  | 797.7  | 795.5  | 802.2  |
| 37.5°  | 805.5  | 789.9  | 778.7  | 773.1  | 764.1  | 760.8  | 769.7  |
| 40°    | 777.6  | 760.8  | 746.2  | 742.9  | 729.5  | 725.0  | 732.8  |
| 42.5°  | 746.2  | 728.3  | 713.8  | 707.1  | 697.0  | 692.5  | 693.7  |
| 45°    | 714.9  | 695.9  | 680.2  | 671.3  | 661.2  | 653.4  | 657.9  |
| 47.5°  | 682.5  | 665.7  | 646.7  | 633.2  | 620.9  | 615.3  | 617.6  |
| 50°    | 650.0  | 629.9  | 612.0  | 597.4  | 582.9  | 576.2  | 580.7  |
| 52.5°  | 617.6  | 596.3  | 576.2  | 560.5  | 543.7  | 537.0  | 538.1  |
| 55°    | 586.3  | 563.9  | 540.4  | 523.6  | 507.9  | 497.9  | 495.6  |
| 57.5°  | 554.9  | 530.3  | 505.7  | 486.7  | 466.5  | 457.6  | 454.2  |
| 60°    | 521.4  | 495.6  | 469.9  | 447.5  | 426.3  | 416.2  | 411.7  |
| 62.5°  | 490.0  | 462.1  | 433.0  | 409.5  | 388.2  | 374.8  | 371.4  |
| 65°    | 459.8  | 427.4  | 398.3  | 371.4  | 347.9  | 333.4  | 328.9  |
| 67.5°  | 427.4  | 393.8  | 362.5  | 333.4  | 311.0  | 292.0  | 289.8  |
| 70°    | 397.2  | 361.4  | 326.7  | 296.5  | 271.9  | 252.8  | 243.9  |
| 72.5°  | 367.0  | 330.0  | 294.2  | 261.8  | 230.5  | 212.6  | 205.9  |
| 75°    | 337.9  | 299.8  | 261.8  | 228.2  | 193.6  | 172.3  | 165.6  |
| 77.5°  | 311.0  | 271.9  | 231.6  | 194.7  | 162.2  | 135.4  | 126.4  |
| 80°    | 285.3  | 245.0  | 202.5  | 164.5  | 129.8  | 100.7  | 90.6   |
| 82.5°  | 258.4  | 220.4  | 176.8  | 136.5  | 100.7  | 70.5   | 58.2   |
| 85°    | 234.9  | 196.9  | 153.3  | 113.0  | 77.2   | 44.8   | 31.3   |
| 87.5°  | 215.9  | 174.5  | 135.4  | 95.1   | 58.2   | 25.7   | 9.0    |
| 90°    | 196.9  | 156.6  | 117.5  | 78.3   | 43.6   | 14.5   | 1.1    |
| 92.5°  | 180.1  | 142.1  | 102.9  | 67.1   | 33.6   | 10.1   | 1.1    |
| 95°    | 164.5  | 127.5  | 90.6   | 55.9   | 26.9   | 6.7    | 1.1    |
| 97.5°  | 149.9  | 115.2  | 80.6   | 48.1   | 22.4   | 5.6    | 1.1    |
| 100°   | 137.6  | 104.0  | 71.6   | 42.5   | 19.0   | 4.5    | 1.1    |
| 102.5° | 125.3  | 94.0   | 63.8   | 36.9   | 16.8   | 3.4    | 1.1    |
| 105°   | 115.2  | 85.0   | 57.1   | 33.6   | 14.5   | 3.4    | 1.1    |
| 107.5° | 105.2  | 77.2   | 51.5   | 29.1   | 12.3   | 2.2    | 1.1    |
| 110°   | 95.1   | 70.5   | 45.9   | 25.7   | 11.2   | 2.2    | 1.1    |

TEST NUMBER: P1214165

CATALOG NUMBER: 4SNLED-LD5-54HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 330° | 335° | 340° | 345° | 350° | 355° | 360° |
|--------|------|------|------|------|------|------|------|
| 112.5° | 87.3 | 63.8 | 41.4 | 23.5 | 9.0  | 2.2  | 1.1  |
| 115°   | 79.4 | 57.1 | 36.9 | 20.1 | 7.8  | 1.1  | 1.1  |
| 117.5° | 71.6 | 51.5 | 32.4 | 17.9 | 6.7  | 1.1  | 1.1  |
| 120°   | 64.9 | 45.9 | 29.1 | 15.7 | 5.6  | 1.1  | 1.1  |
| 122.5° | 58.2 | 41.4 | 25.7 | 13.4 | 4.5  | 1.1  | 1.1  |
| 125°   | 52.6 | 36.9 | 22.4 | 11.2 | 3.4  | 1.1  | 1.1  |
| 127.5° | 47.0 | 32.4 | 20.1 | 10.1 | 3.4  | 1.1  | 1.1  |
| 130°   | 41.4 | 29.1 | 16.8 | 7.8  | 2.2  | 1.1  | 1.1  |
| 132.5° | 36.9 | 24.6 | 14.5 | 6.7  | 2.2  | 1.1  | 1.1  |
| 135°   | 32.4 | 21.3 | 12.3 | 4.5  | 2.2  | 1.1  | 1.1  |
| 137.5° | 28.0 | 17.9 | 10.1 | 3.4  | 1.1  | 1.1  | 1.1  |
| 140°   | 23.5 | 15.7 | 7.8  | 3.4  | 1.1  | 1.1  | 1.1  |
| 142.5° | 20.1 | 12.3 | 5.6  | 2.2  | 1.1  | 1.1  | 1.1  |
| 145°   | 15.7 | 10.1 | 4.5  | 2.2  | 1.1  | 1.1  | 1.1  |
| 147.5° | 12.3 | 7.8  | 3.4  | 2.2  | 1.1  | 1.1  | 1.1  |
| 150°   | 9.0  | 5.6  | 3.4  | 1.1  | 1.1  | 1.1  | 1.1  |
| 152.5° | 6.7  | 4.5  | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  |
| 155°   | 4.5  | 3.4  | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  |
| 157.5° | 3.4  | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  |
| 160°   | 2.2  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  |
| 162.5° | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  |
| 165°   | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  | 1.1  |
| 167.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

(END OF REPORT)