

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P177566

Luminaire Tested: **VAL-E02-LED-E-U-GL4-8030**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P177566  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33703)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VAL-E02-LED-E-U-GL4-8030  
Description: VALET TUNNEL LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE IV W/ GLARE CONTROL  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 4864.8 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 52.1  
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: 28.75 FT

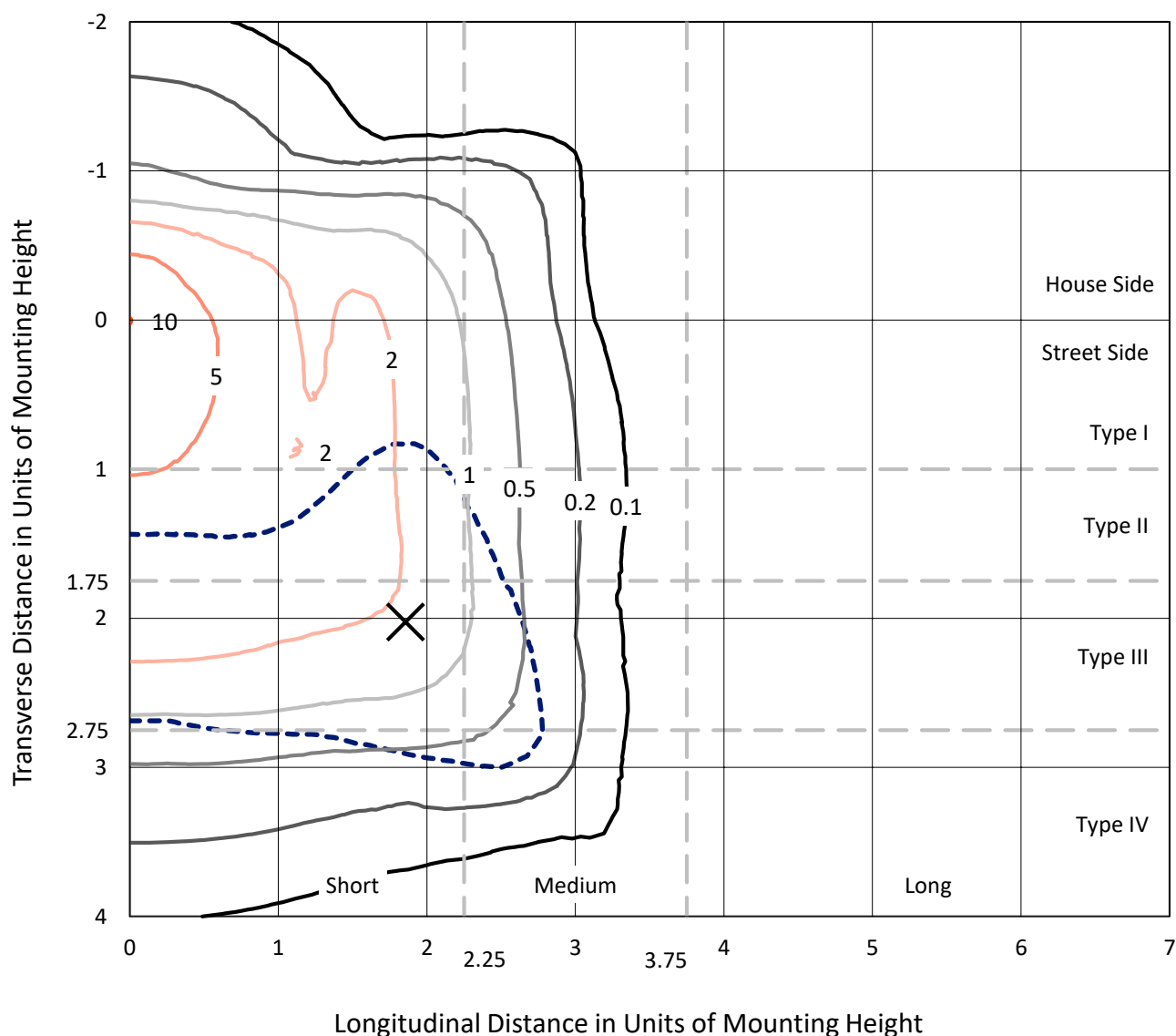


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

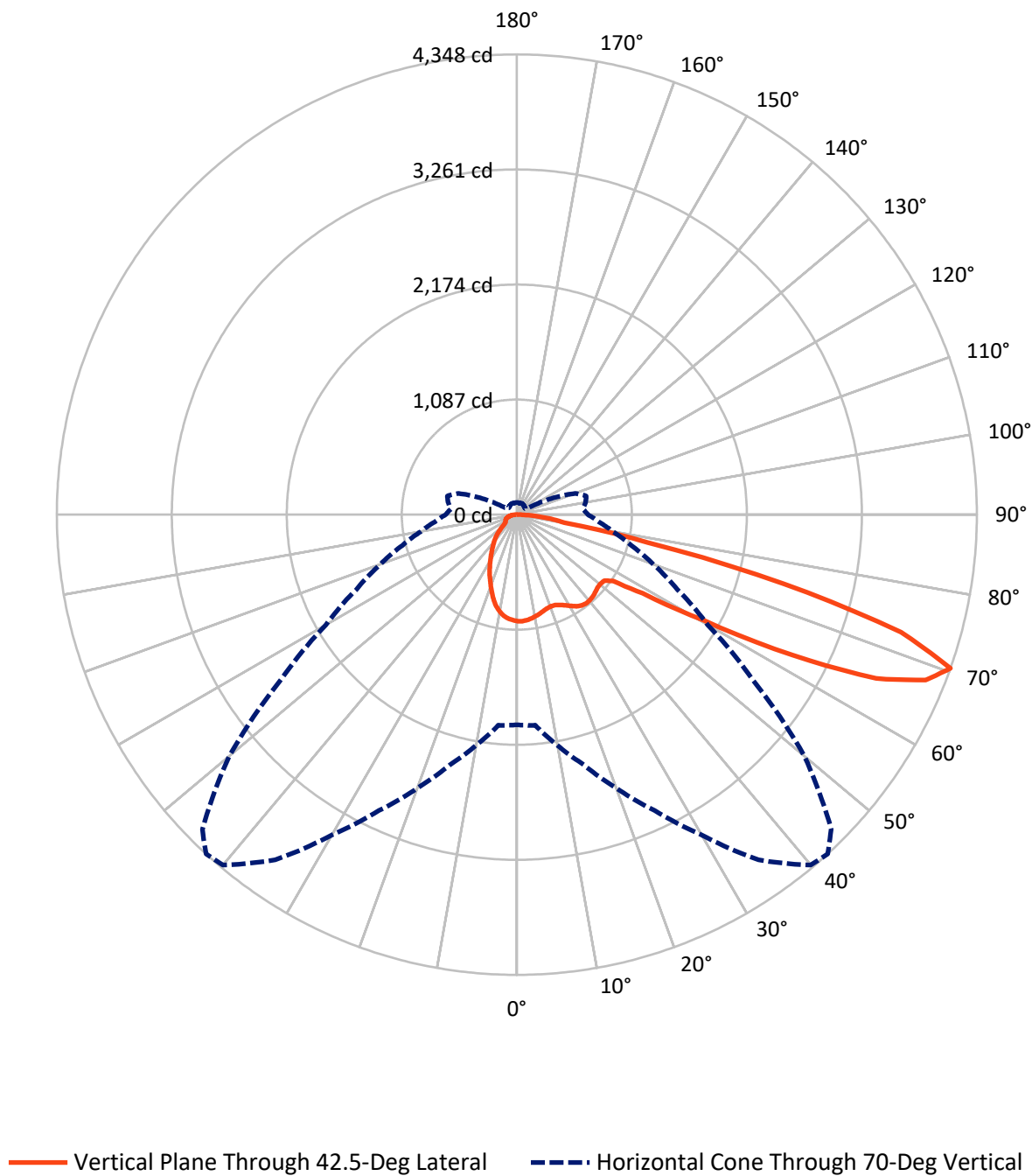


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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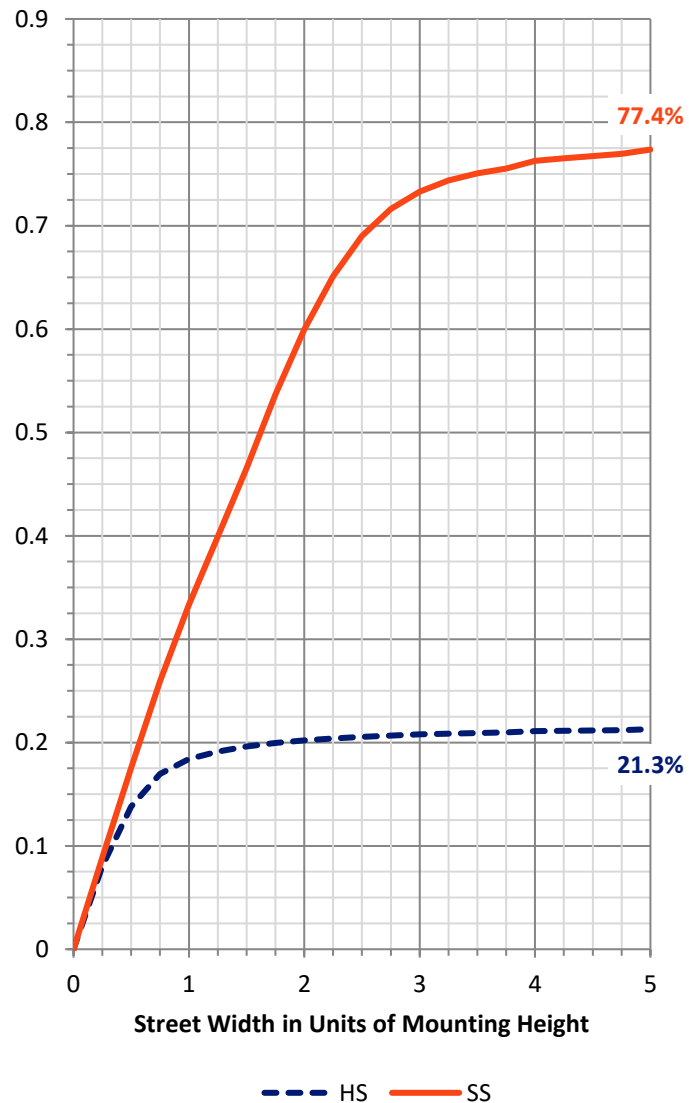
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1050.9   | 0.0    | 1050.9 |
|                    | % Fixture | 21.6     | 0.0    | 21.6   |
| <b>Street Side</b> | Lumens    | 3813.9   | 0.0    | 3813.9 |
|                    | % Fixture | 78.4     | 0.0    | 78.4   |
| <b>Total</b>       | Lumens    | 4864.8   | 0.0    | 4864.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 93.6   | 1.9       |
| 10°-20°   | 252.2  | 5.2       |
| 20°-30°   | 367.8  | 7.6       |
| 30°-40°   | 469.1  | 9.6       |
| 40°-50°   | 547.5  | 11.3      |
| 50°-60°   | 837.4  | 17.2      |
| 60°-70°   | 1517.9 | 31.2      |
| 70°-80°   | 674.9  | 13.9      |
| 80°-90°   | 104.4  | 2.1       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 4864.8 | 100.0     |
| 0°-180°   | 4864.8 | 100.0     |

**Coefficient of Utilization**



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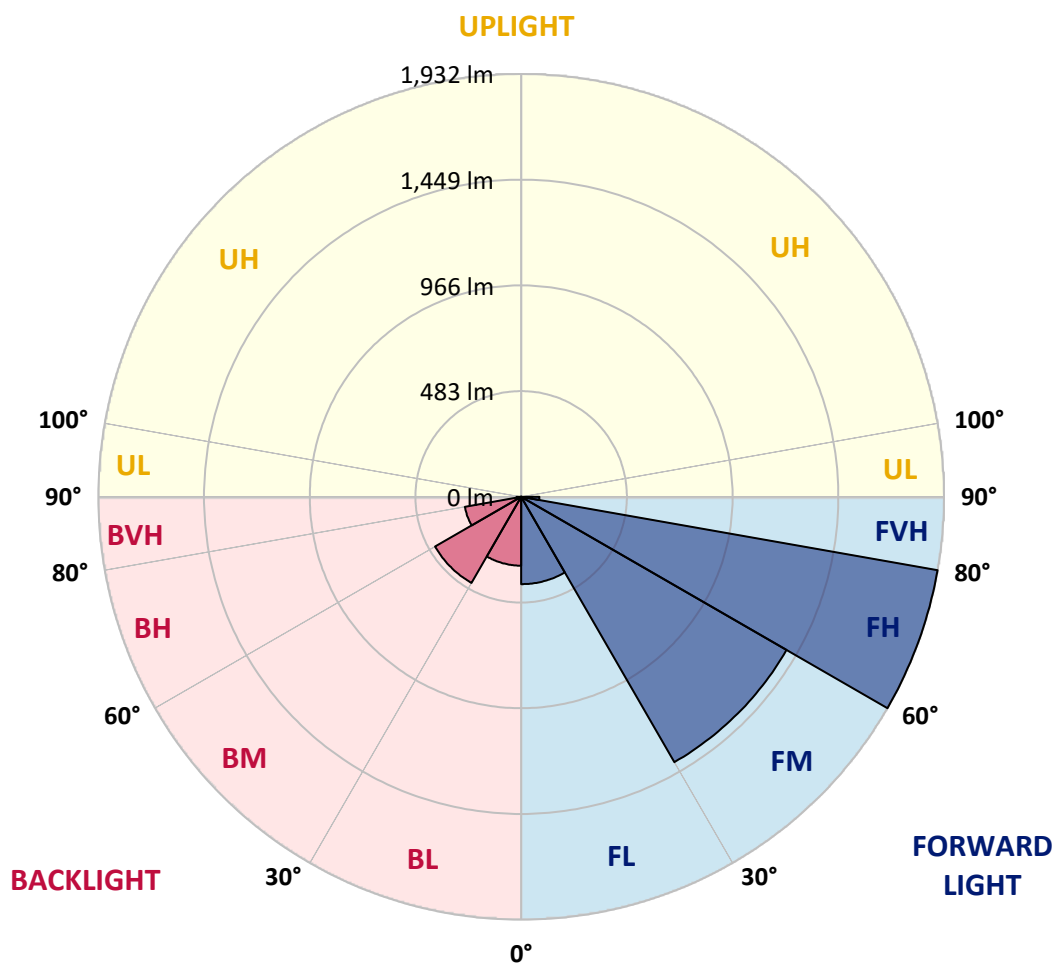
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 399.0  | 8.2       |                         |      |         |
| FM   | (30°-60°)   | 1399.7 | 28.8      |                         |      |         |
| FH   | (60°-80°)   | 1931.7 | 39.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 83.4   | 1.7       |                         |      | G1/100  |
| BL   | (0°-30°)    | 314.5  | 6.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 454.3  | 9.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 261.1  | 5.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 21.0   | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 42.5°  | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 |
| 2.5°  | 1010.8 | 1009.8 | 1010.4 | 1011.1 | 1011.1 | 1011.4 | 1008.4 | 1008.7 | 1007.4 | 1007.7 | 1008.1 |
| 5°    | 1007.0 | 1006.0 | 1006.7 | 1006.7 | 1006.7 | 1006.4 | 1002.3 | 1002.0 | 1000.3 | 1000.3 | 999.6  |
| 7.5°  | 1000.0 | 996.2  | 998.3  | 998.6  | 997.9  | 996.2  | 993.9  | 991.5  | 990.5  | 990.5  | 988.1  |
| 10°   | 989.2  | 985.1  | 986.1  | 986.8  | 986.5  | 983.1  | 982.1  | 979.7  | 977.0  | 976.0  | 973.3  |
| 12.5° | 975.3  | 972.6  | 974.0  | 973.6  | 973.6  | 970.6  | 968.9  | 965.5  | 962.1  | 960.5  | 957.1  |
| 15°   | 966.5  | 963.2  | 964.5  | 964.5  | 963.2  | 960.1  | 957.8  | 951.7  | 945.9  | 943.9  | 939.5  |
| 17.5° | 971.9  | 968.6  | 969.9  | 968.9  | 966.5  | 960.1  | 954.0  | 944.3  | 935.1  | 929.7  | 924.0  |
| 20°   | 993.5  | 990.2  | 991.2  | 990.5  | 987.1  | 976.7  | 965.5  | 948.6  | 931.8  | 923.7  | 914.9  |
| 22.5° | 1028.0 | 1025.3 | 1027.0 | 1026.0 | 1020.6 | 1007.0 | 990.5  | 966.2  | 940.9  | 928.7  | 916.2  |
| 25°   | 1079.0 | 1078.3 | 1081.0 | 1077.9 | 1070.2 | 1049.9 | 1026.0 | 993.2  | 960.1  | 944.9  | 927.4  |
| 27.5° | 1140.4 | 1134.7 | 1138.7 | 1136.0 | 1130.6 | 1105.0 | 1072.5 | 1031.0 | 988.8  | 968.9  | 948.0  |
| 30°   | 1195.8 | 1190.7 | 1198.1 | 1196.8 | 1188.7 | 1162.3 | 1121.5 | 1072.9 | 1025.3 | 1000.0 | 976.0  |
| 32.5° | 1259.9 | 1253.5 | 1259.2 | 1259.2 | 1247.1 | 1211.6 | 1165.0 | 1109.3 | 1059.4 | 1032.4 | 1003.7 |
| 35°   | 1327.1 | 1320.3 | 1325.7 | 1324.1 | 1302.4 | 1255.5 | 1197.1 | 1136.7 | 1081.7 | 1054.0 | 1024.6 |
| 37.5° | 1389.5 | 1388.5 | 1389.9 | 1378.7 | 1348.7 | 1288.6 | 1218.7 | 1151.2 | 1092.8 | 1063.8 | 1033.0 |
| 40°   | 1452.0 | 1449.6 | 1443.9 | 1424.3 | 1380.4 | 1308.2 | 1229.9 | 1156.3 | 1093.5 | 1063.1 | 1032.0 |
| 42.5° | 1491.2 | 1486.8 | 1477.0 | 1450.3 | 1395.3 | 1312.9 | 1226.5 | 1148.5 | 1085.4 | 1054.3 | 1023.9 |
| 45°   | 1504.7 | 1500.3 | 1488.5 | 1458.4 | 1395.6 | 1305.5 | 1213.3 | 1133.0 | 1070.2 | 1041.8 | 1011.1 |
| 47.5° | 1493.5 | 1490.8 | 1480.0 | 1450.0 | 1384.8 | 1291.6 | 1196.8 | 1117.4 | 1055.7 | 1028.0 | 999.3  |
| 50°   | 1474.6 | 1472.9 | 1463.5 | 1435.8 | 1374.7 | 1283.2 | 1189.0 | 1110.0 | 1051.6 | 1026.0 | 998.9  |
| 52.5° | 1521.9 | 1516.8 | 1499.9 | 1467.2 | 1396.0 | 1298.4 | 1201.2 | 1121.2 | 1061.1 | 1035.1 | 1007.4 |
| 55°   | 2102.9 | 2065.4 | 1981.7 | 1824.7 | 1604.9 | 1434.4 | 1291.0 | 1194.4 | 1129.6 | 1104.3 | 1077.9 |
| 57.5° | 2765.6 | 2726.4 | 2691.7 | 2571.8 | 2310.8 | 1988.8 | 1699.1 | 1529.6 | 1413.5 | 1402.4 | 1391.9 |
| 60°   | 3020.8 | 3033.3 | 3030.3 | 2985.7 | 2852.0 | 2699.1 | 2456.7 | 2256.5 | 2034.7 | 2025.6 | 2038.7 |
| 62.5° | 3196.7 | 3207.2 | 3208.5 | 3195.0 | 3151.5 | 3100.5 | 3049.8 | 2985.7 | 2943.5 | 2925.3 | 2807.5 |
| 65°   | 3269.3 | 3284.5 | 3317.9 | 3342.9 | 3350.0 | 3367.5 | 3413.4 | 3588.0 | 3733.5 | 3732.5 | 3594.4 |
| 67.5° | 2992.1 | 3010.3 | 3136.9 | 3261.2 | 3365.5 | 3486.4 | 3672.4 | 3956.3 | 4175.4 | 4168.6 | 4055.5 |
| 70°   | 1985.7 | 1997.2 | 2212.3 | 2446.2 | 2749.7 | 3085.3 | 3491.8 | 3981.3 | 4320.9 | 4347.6 | 4201.7 |
| 72.5° | 1218.0 | 1244.4 | 1314.6 | 1409.5 | 1571.5 | 1882.4 | 2486.7 | 3323.3 | 3821.6 | 3796.6 | 3680.5 |
| 75°   | 822.4  | 823.7  | 821.7  | 831.8  | 841.0  | 903.7  | 1147.2 | 1827.4 | 2588.7 | 2602.2 | 2552.2 |
| 77.5° | 562.1  | 569.5  | 573.6  | 570.9  | 580.0  | 577.3  | 591.5  | 626.2  | 992.2  | 1266.3 | 1163.7 |
| 80°   | 491.2  | 494.2  | 498.6  | 492.2  | 475.3  | 465.9  | 479.0  | 466.6  | 439.6  | 454.1  | 434.8  |
| 82.5° | 310.9  | 320.0  | 321.1  | 343.3  | 376.4  | 377.8  | 394.7  | 382.2  | 347.7  | 325.1  | 297.4  |
| 85°   | 223.5  | 226.9  | 232.9  | 234.3  | 222.8  | 213.0  | 219.1  | 208.6  | 188.0  | 175.9  | 155.6  |
| 87.5° | 130.3  | 133.7  | 139.8  | 136.1  | 124.6  | 110.4  | 99.6   | 85.7   | 67.9   | 63.5   | 56.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 |
| 2.5°  | 1008.4 | 1006.7 | 1005.4 | 1004.7 | 1006.0 | 1004.7 | 1003.3 | 1002.7 | 1001.3 | 1001.6 | 1000.0 |
| 5°    | 998.9  | 996.6  | 994.6  | 992.9  | 994.2  | 991.9  | 989.8  | 988.5  | 986.8  | 986.5  | 984.8  |
| 7.5°  | 985.8  | 982.1  | 979.4  | 976.3  | 973.0  | 970.9  | 968.6  | 966.2  | 962.5  | 962.1  | 961.5  |
| 10°   | 968.6  | 965.5  | 960.1  | 955.4  | 950.7  | 945.6  | 940.5  | 936.8  | 932.4  | 930.8  | 928.4  |
| 12.5° | 951.3  | 945.3  | 938.9  | 931.4  | 925.7  | 917.6  | 910.8  | 903.7  | 897.3  | 893.3  | 888.9  |
| 15°   | 931.1  | 924.7  | 915.6  | 908.5  | 900.4  | 891.3  | 882.5  | 872.0  | 861.5  | 855.1  | 849.1  |
| 17.5° | 913.5  | 905.4  | 898.0  | 887.9  | 879.8  | 869.3  | 856.1  | 845.0  | 832.5  | 822.0  | 810.9  |
| 20°   | 900.0  | 890.9  | 882.1  | 873.0  | 863.2  | 851.4  | 836.9  | 821.0  | 805.2  | 790.3  | 773.8  |
| 22.5° | 894.6  | 880.1  | 870.3  | 861.9  | 851.8  | 838.3  | 822.0  | 802.5  | 782.9  | 764.0  | 744.7  |
| 25°   | 899.4  | 877.8  | 862.6  | 853.1  | 844.0  | 830.1  | 811.9  | 789.6  | 766.7  | 742.7  | 719.8  |
| 27.5° | 912.2  | 884.8  | 863.2  | 848.4  | 837.9  | 824.4  | 804.2  | 780.9  | 754.9  | 727.9  | 703.2  |
| 30°   | 930.8  | 896.7  | 869.6  | 848.4  | 832.9  | 817.3  | 795.4  | 769.0  | 741.7  | 713.3  | 685.7  |
| 32.5° | 951.0  | 909.8  | 877.4  | 849.4  | 825.4  | 805.8  | 782.9  | 757.2  | 728.2  | 698.1  | 668.4  |
| 35°   | 966.2  | 919.3  | 880.8  | 845.7  | 815.0  | 790.3  | 765.7  | 740.7  | 712.3  | 681.9  | 652.2  |
| 37.5° | 972.6  | 923.0  | 880.1  | 837.9  | 800.4  | 773.4  | 747.8  | 722.8  | 695.4  | 666.8  | 639.4  |
| 40°   | 973.0  | 923.0  | 876.1  | 827.4  | 785.2  | 755.9  | 728.9  | 705.6  | 679.9  | 655.3  | 631.0  |
| 42.5° | 966.5  | 918.3  | 868.6  | 817.7  | 774.1  | 741.0  | 713.3  | 689.4  | 668.8  | 646.8  | 626.2  |
| 45°   | 955.1  | 908.8  | 861.9  | 812.3  | 770.1  | 737.3  | 707.6  | 685.0  | 666.4  | 646.8  | 628.9  |
| 47.5° | 946.3  | 903.4  | 862.2  | 820.0  | 779.8  | 746.1  | 714.0  | 690.0  | 674.2  | 658.7  | 645.8  |
| 50°   | 948.0  | 905.4  | 866.3  | 826.1  | 786.6  | 752.5  | 721.4  | 700.9  | 691.4  | 686.3  | 683.3  |
| 52.5° | 956.7  | 913.5  | 883.8  | 857.2  | 844.3  | 823.4  | 806.2  | 790.7  | 793.0  | 780.9  | 765.3  |
| 55°   | 1047.2 | 1032.7 | 1066.8 | 1091.4 | 1103.6 | 1124.9 | 1155.6 | 1126.2 | 1122.2 | 1084.7 | 973.3  |
| 57.5° | 1406.1 | 1440.5 | 1492.9 | 1530.0 | 1533.7 | 1527.3 | 1502.0 | 1477.7 | 1438.2 | 1381.8 | 1225.8 |
| 60°   | 2008.0 | 1999.9 | 1951.3 | 1886.2 | 1835.5 | 1769.0 | 1702.2 | 1645.8 | 1582.3 | 1495.9 | 1329.8 |
| 62.5° | 2641.0 | 2445.9 | 2272.7 | 2125.2 | 1999.9 | 1888.9 | 1787.9 | 1703.2 | 1616.1 | 1491.8 | 1314.9 |
| 65°   | 3152.1 | 2776.7 | 2471.5 | 2234.2 | 2047.9 | 1890.9 | 1760.6 | 1643.8 | 1527.3 | 1383.5 | 1212.0 |
| 67.5° | 3517.4 | 2921.9 | 2461.4 | 2127.5 | 1866.2 | 1650.2 | 1460.4 | 1327.4 | 1207.9 | 1094.8 | 1017.5 |
| 70°   | 3546.4 | 2721.0 | 2082.3 | 1673.8 | 1372.3 | 1118.5 | 921.6  | 776.5  | 672.5  | 625.6  | 659.0  |
| 72.5° | 3030.6 | 2013.1 | 1384.5 | 1024.6 | 813.3  | 632.0  | 508.1  | 406.1  | 322.4  | 281.2  | 287.0  |
| 75°   | 1784.9 | 966.5  | 623.5  | 464.5  | 379.5  | 303.2  | 262.3  | 221.5  | 195.5  | 156.6  | 125.2  |
| 77.5° | 679.6  | 420.3  | 314.6  | 261.3  | 186.4  | 134.0  | 105.7  | 91.2   | 83.7   | 82.7   | 78.3   |
| 80°   | 391.6  | 308.2  | 215.7  | 141.1  | 103.3  | 87.4   | 74.9   | 64.1   | 59.8   | 58.7   | 60.4   |
| 82.5° | 247.5  | 192.1  | 118.5  | 90.8   | 75.3   | 64.8   | 54.0   | 46.9   | 43.2   | 41.9   | 44.2   |
| 85°   | 127.9  | 96.2   | 72.2   | 62.1   | 57.7   | 52.7   | 43.2   | 36.1   | 35.8   | 37.5   | 43.2   |
| 87.5° | 47.3   | 41.2   | 32.4   | 28.0   | 30.0   | 28.0   | 20.3   | 17.6   | 15.9   | 20.9   | 30.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |





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**CANDELA DISTRIBUTION (continued):**

|       | 105°   | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 |
| 2.5°  | 1000.0 | 999.3  | 999.6  | 998.9  | 998.9  | 1000.0 | 998.6  | 997.6  | 999.3  | 999.3  | 1000.3 |
| 5°    | 984.4  | 985.1  | 985.1  | 984.8  | 985.4  | 987.1  | 986.8  | 986.8  | 989.5  | 990.5  | 991.9  |
| 7.5°  | 959.8  | 960.8  | 961.1  | 962.1  | 962.5  | 964.9  | 966.5  | 968.6  | 972.6  | 973.6  | 976.7  |
| 10°   | 926.4  | 925.7  | 928.1  | 927.7  | 930.8  | 932.8  | 934.1  | 938.5  | 944.6  | 948.0  | 951.0  |
| 12.5° | 886.9  | 886.9  | 888.2  | 888.6  | 891.3  | 894.0  | 895.6  | 901.0  | 906.1  | 910.5  | 917.2  |
| 15°   | 845.0  | 843.7  | 840.6  | 840.3  | 841.3  | 844.0  | 847.7  | 851.8  | 859.5  | 865.9  | 871.7  |
| 17.5° | 801.1  | 797.1  | 793.4  | 788.6  | 788.3  | 787.9  | 790.0  | 793.0  | 805.2  | 811.6  | 819.7  |
| 20°   | 762.3  | 753.5  | 744.7  | 734.9  | 729.2  | 726.5  | 727.5  | 731.6  | 743.0  | 751.5  | 759.9  |
| 22.5° | 727.5  | 714.4  | 700.5  | 685.0  | 675.5  | 669.8  | 670.5  | 672.2  | 680.6  | 685.7  | 690.0  |
| 25°   | 697.8  | 679.6  | 660.3  | 640.4  | 627.3  | 618.5  | 618.1  | 618.1  | 614.4  | 615.1  | 612.7  |
| 27.5° | 677.6  | 652.2  | 627.6  | 604.3  | 587.1  | 578.3  | 566.5  | 558.0  | 550.6  | 540.5  | 536.1  |
| 30°   | 658.0  | 632.0  | 604.0  | 578.3  | 557.7  | 540.5  | 518.5  | 500.3  | 485.8  | 472.0  | 460.1  |
| 32.5° | 640.4  | 613.4  | 586.7  | 558.7  | 530.4  | 500.7  | 472.0  | 451.0  | 430.4  | 409.2  | 395.0  |
| 35°   | 624.9  | 599.6  | 572.9  | 541.2  | 501.3  | 462.5  | 430.1  | 401.7  | 377.4  | 351.8  | 331.2  |
| 37.5° | 616.1  | 593.2  | 565.5  | 522.3  | 472.3  | 428.1  | 391.9  | 360.2  | 327.8  | 297.1  | 271.8  |
| 40°   | 611.7  | 591.5  | 557.7  | 503.0  | 446.3  | 399.0  | 358.9  | 320.7  | 282.6  | 246.4  | 220.1  |
| 42.5° | 611.0  | 591.5  | 546.2  | 483.4  | 424.0  | 373.4  | 328.5  | 282.6  | 236.3  | 201.2  | 177.9  |
| 45°   | 617.1  | 590.8  | 534.1  | 465.9  | 404.1  | 350.4  | 296.4  | 242.4  | 194.8  | 164.1  | 151.2  |
| 47.5° | 634.7  | 593.2  | 524.6  | 451.0  | 385.2  | 325.1  | 259.9  | 197.8  | 157.3  | 143.5  | 143.1  |
| 50°   | 663.0  | 604.0  | 522.6  | 440.2  | 366.6  | 293.4  | 217.1  | 158.3  | 138.8  | 138.1  | 141.8  |
| 52.5° | 707.9  | 624.2  | 527.7  | 432.8  | 344.3  | 252.2  | 171.8  | 136.7  | 133.0  | 136.7  | 141.5  |
| 55°   | 806.9  | 660.3  | 534.4  | 419.6  | 308.2  | 199.9  | 141.5  | 129.6  | 131.3  | 135.7  | 140.1  |
| 57.5° | 986.8  | 735.3  | 541.5  | 389.9  | 249.8  | 153.6  | 127.3  | 126.9  | 130.0  | 133.7  | 137.7  |
| 60°   | 1100.9 | 827.8  | 558.7  | 346.0  | 188.7  | 126.9  | 121.9  | 125.2  | 129.0  | 131.7  | 135.0  |
| 62.5° | 1104.6 | 852.1  | 567.8  | 299.1  | 140.4  | 116.1  | 117.1  | 123.6  | 127.9  | 129.0  | 130.6  |
| 65°   | 1033.4 | 806.2  | 526.7  | 243.4  | 116.5  | 110.1  | 113.8  | 119.5  | 123.9  | 124.6  | 125.9  |
| 67.5° | 902.7  | 711.0  | 446.3  | 183.7  | 106.0  | 105.3  | 109.4  | 113.8  | 116.8  | 119.5  | 121.5  |
| 70°   | 679.9  | 586.7  | 358.9  | 142.5  | 99.6   | 98.9   | 103.0  | 106.7  | 109.4  | 112.8  | 116.1  |
| 72.5° | 344.7  | 406.1  | 272.1  | 116.5  | 90.8   | 91.5   | 95.9   | 99.3   | 101.3  | 104.3  | 107.7  |
| 75°   | 117.5  | 177.2  | 172.2  | 94.2   | 81.0   | 83.7   | 85.7   | 89.5   | 92.5   | 94.5   | 96.2   |
| 77.5° | 73.6   | 77.0   | 88.8   | 76.0   | 71.6   | 72.2   | 75.6   | 79.0   | 82.4   | 83.7   | 84.4   |
| 80°   | 61.4   | 61.8   | 62.1   | 60.8   | 61.1   | 63.1   | 65.2   | 68.9   | 72.2   | 72.9   | 73.3   |
| 82.5° | 48.6   | 52.0   | 51.7   | 51.3   | 53.0   | 55.0   | 56.4   | 57.7   | 59.1   | 59.8   | 60.8   |
| 85°   | 42.9   | 42.2   | 42.5   | 43.5   | 42.2   | 40.8   | 40.5   | 40.5   | 42.5   | 44.9   | 45.9   |
| 87.5° | 39.2   | 33.4   | 25.0   | 23.6   | 23.6   | 23.0   | 21.6   | 21.6   | 23.6   | 25.7   | 26.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1006.0 | 1006.0 | 1006.0 | 1006.0 | 1006.0 |
| 2.5°  | 1000.0 | 1000.3 | 1000.0 | 1000.0 | 1001.6 |
| 5°    | 992.5  | 993.9  | 993.2  | 994.2  | 995.2  |
| 7.5°  | 977.3  | 980.7  | 981.4  | 984.1  | 983.1  |
| 10°   | 955.4  | 957.8  | 961.1  | 963.8  | 962.8  |
| 12.5° | 920.6  | 926.4  | 931.4  | 934.5  | 933.8  |
| 15°   | 876.4  | 884.5  | 891.3  | 893.6  | 890.9  |
| 17.5° | 829.1  | 834.2  | 842.3  | 844.0  | 846.7  |
| 20°   | 769.4  | 769.0  | 776.1  | 776.1  | 774.8  |
| 22.5° | 691.4  | 696.5  | 696.5  | 691.7  | 689.4  |
| 25°   | 611.7  | 613.4  | 608.3  | 609.4  | 602.9  |
| 27.5° | 531.7  | 527.3  | 523.3  | 525.0  | 520.2  |
| 30°   | 455.4  | 446.0  | 441.9  | 442.6  | 437.5  |
| 32.5° | 382.2  | 371.0  | 367.0  | 361.6  | 357.2  |
| 35°   | 315.7  | 298.1  | 287.6  | 284.9  | 288.0  |
| 37.5° | 250.5  | 238.0  | 225.5  | 216.4  | 217.4  |
| 40°   | 198.2  | 185.3  | 177.2  | 173.5  | 172.8  |
| 42.5° | 163.7  | 156.3  | 154.6  | 155.0  | 155.0  |
| 45°   | 148.5  | 148.9  | 150.2  | 151.6  | 151.9  |
| 47.5° | 145.5  | 147.5  | 149.9  | 151.6  | 151.9  |
| 50°   | 145.2  | 147.2  | 148.9  | 150.9  | 151.6  |
| 52.5° | 144.8  | 146.2  | 147.2  | 148.2  | 149.2  |
| 55°   | 143.5  | 144.2  | 143.8  | 144.5  | 145.5  |
| 57.5° | 140.1  | 140.4  | 139.8  | 140.1  | 142.1  |
| 60°   | 137.1  | 137.4  | 136.1  | 137.7  | 138.1  |
| 62.5° | 133.4  | 133.0  | 132.3  | 133.4  | 133.4  |
| 65°   | 127.9  | 125.9  | 126.6  | 127.6  | 127.9  |
| 67.5° | 121.5  | 119.5  | 119.5  | 120.2  | 121.2  |
| 70°   | 113.4  | 112.4  | 112.4  | 113.8  | 115.1  |
| 72.5° | 104.3  | 105.0  | 107.0  | 109.0  | 111.1  |
| 75°   | 96.9   | 98.6   | 100.6  | 105.7  | 108.7  |
| 77.5° | 87.4   | 87.8   | 89.5   | 94.5   | 99.9   |
| 80°   | 74.3   | 73.9   | 74.3   | 74.9   | 76.0   |
| 82.5° | 58.7   | 58.1   | 56.0   | 56.7   | 55.4   |
| 85°   | 43.2   | 42.2   | 39.8   | 38.1   | 37.8   |
| 87.5° | 25.0   | 25.0   | 24.0   | 22.6   | 21.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)