

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: McGRAW-EDISON

Report Number: P145310

Luminaire Tested: **VPL-E02-LED-E1-GL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P145310  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33702)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: VPL-E02-LED-E1-GL3  
Description: VALET LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ GLARE CONTROL  
Light Source: (42) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5937.4 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

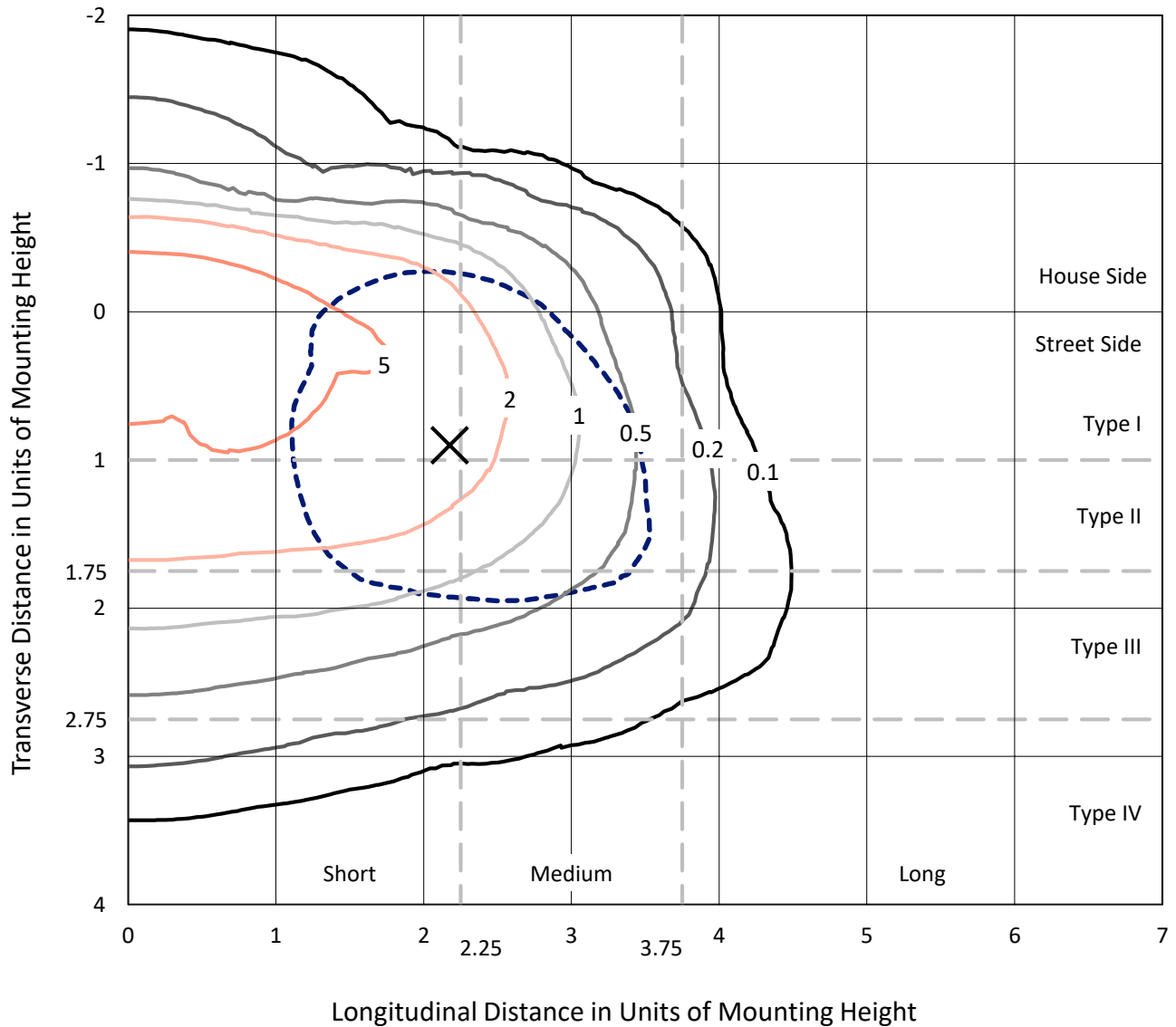
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

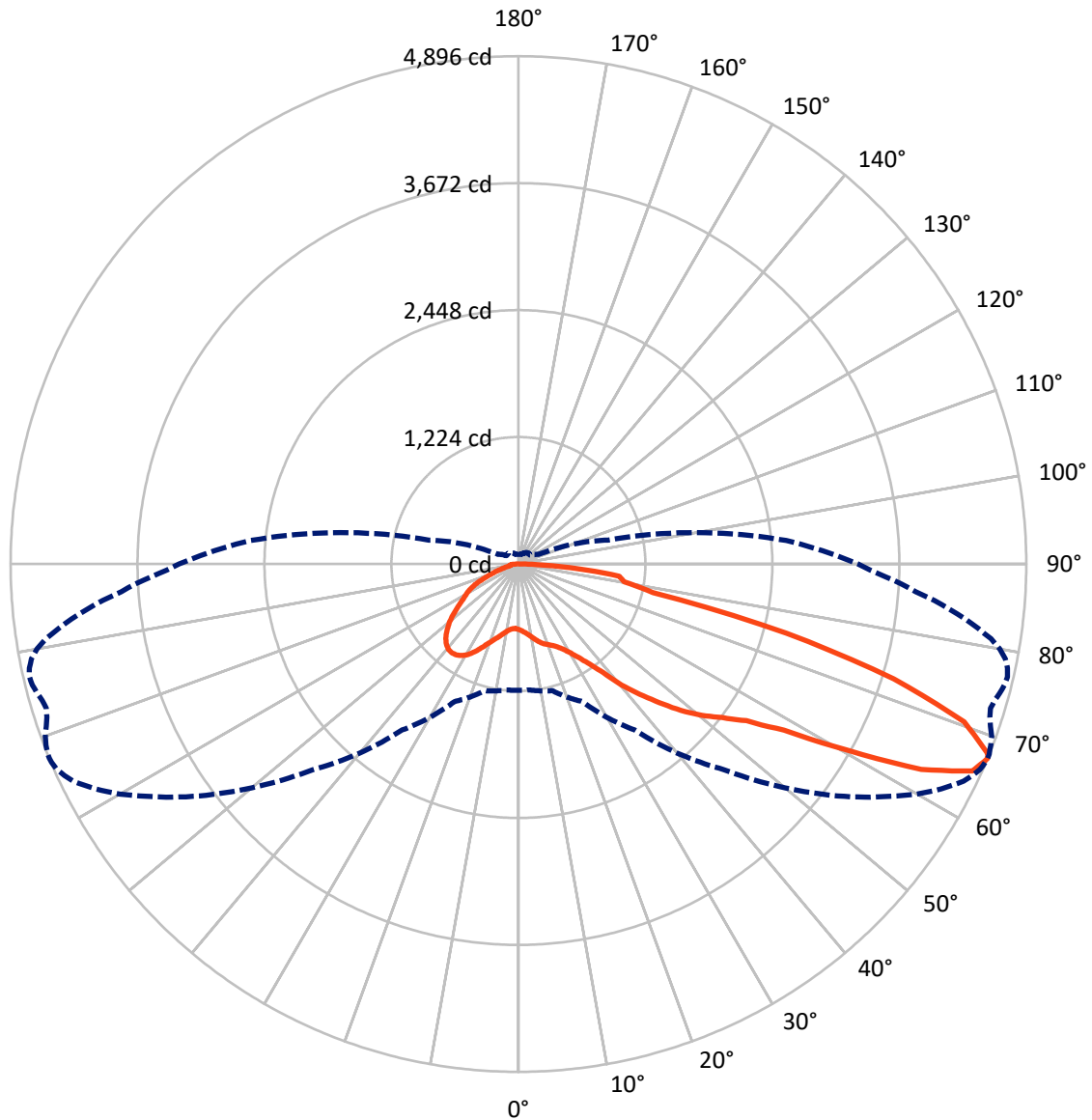
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1405.9   | 0.0    | 1405.9 |
|                    | % Fixture | 23.7     | 0.0    | 23.7   |
| <b>Street Side</b> | Lumens    | 4531.4   | 0.0    | 4531.4 |
|                    | % Fixture | 76.3     | 0.0    | 76.3   |
| <b>Total</b>       | Lumens    | 5937.4   | 0.0    | 5937.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.0   | 1.1       |
| 10°-20°   | 215.9  | 3.6       |
| 20°-30°   | 384.3  | 6.5       |
| 30°-40°   | 559.8  | 9.4       |
| 40°-50°   | 862.5  | 14.5      |
| 50°-60°   | 1263.1 | 21.3      |
| 60°-70°   | 1677.3 | 28.3      |
| 70°-80°   | 790.6  | 13.3      |
| 80°-90°   | 120.9  | 2.0       |
| 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°    | 5937.4 | 100.0     |
| 0°-180°   | 5937.4 | 100.0     |



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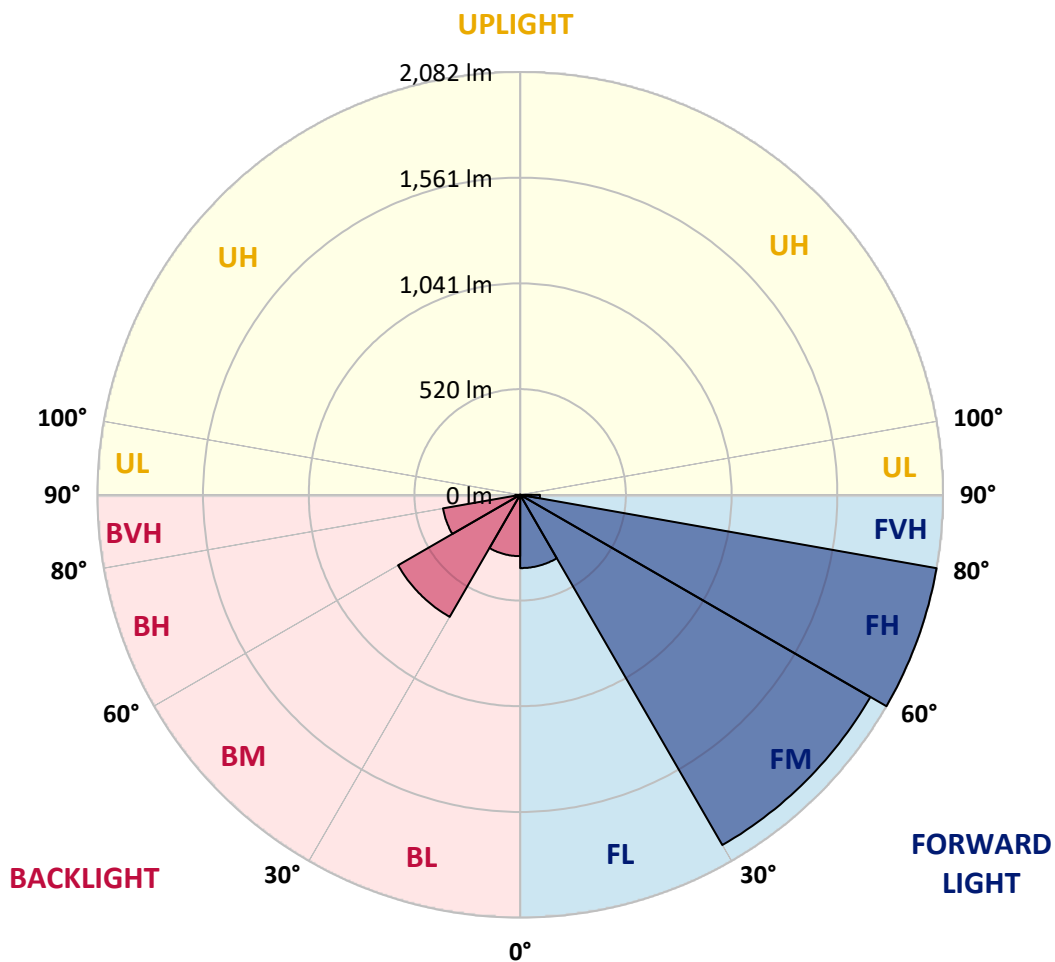
CATALOG NUMBER: VPL-E02-LED-E1-GL3

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 360.9  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 1991.1 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 2082.0 | 35.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 97.4   | 1.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 302.2  | 5.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 694.3  | 11.7      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 386.0  | 6.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 23.5   | 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 III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 60°    | 61°    | 62°    | 64°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  |
| 2.5°  | 663.2  | 660.4  | 660.8  | 662.0  | 658.0  | 656.0  | 651.6  | 648.8  | 648.4  | 648.0  | 646.4  |
| 5°    | 702.0  | 699.2  | 700.4  | 697.2  | 689.6  | 684.4  | 675.2  | 670.4  | 669.6  | 668.8  | 666.8  |
| 7.5°  | 742.4  | 738.8  | 734.8  | 731.2  | 722.8  | 714.4  | 702.4  | 695.2  | 694.4  | 693.2  | 692.0  |
| 10°   | 790.4  | 785.2  | 782.0  | 770.8  | 756.4  | 744.8  | 732.8  | 725.2  | 724.8  | 723.6  | 721.2  |
| 12.5° | 844.4  | 838.8  | 832.8  | 818.0  | 795.6  | 778.4  | 764.4  | 760.0  | 756.4  | 756.8  | 754.4  |
| 15°   | 898.0  | 892.0  | 884.0  | 865.2  | 835.6  | 810.0  | 792.0  | 785.6  | 786.0  | 784.0  | 785.2  |
| 17.5° | 943.2  | 938.0  | 926.4  | 902.4  | 868.0  | 832.8  | 810.0  | 807.2  | 808.0  | 807.6  | 808.8  |
| 20°   | 972.8  | 969.6  | 952.0  | 923.2  | 884.4  | 845.6  | 822.4  | 822.4  | 822.8  | 824.4  | 827.2  |
| 22.5° | 990.8  | 986.0  | 962.8  | 922.4  | 884.0  | 851.6  | 833.6  | 837.6  | 840.0  | 841.2  | 845.6  |
| 25°   | 1000.8 | 994.8  | 963.2  | 909.6  | 870.4  | 856.0  | 850.4  | 860.4  | 864.4  | 866.4  | 873.6  |
| 27.5° | 1000.8 | 993.6  | 958.0  | 893.6  | 854.8  | 869.2  | 882.4  | 899.6  | 902.4  | 908.4  | 916.8  |
| 30°   | 989.6  | 984.0  | 950.0  | 881.6  | 850.8  | 894.0  | 934.0  | 953.6  | 960.4  | 967.2  | 978.0  |
| 32.5° | 977.6  | 972.8  | 946.0  | 888.0  | 873.2  | 946.0  | 1012.8 | 1039.6 | 1043.6 | 1049.2 | 1060.4 |
| 35°   | 976.8  | 975.2  | 963.6  | 928.8  | 940.8  | 1041.2 | 1131.6 | 1150.0 | 1161.2 | 1164.0 | 1168.8 |
| 37.5° | 985.2  | 988.4  | 998.4  | 994.8  | 1038.0 | 1182.8 | 1287.2 | 1324.0 | 1332.8 | 1328.0 | 1332.4 |
| 40°   | 1004.8 | 1012.8 | 1050.0 | 1096.0 | 1186.4 | 1354.0 | 1499.2 | 1541.6 | 1551.2 | 1548.4 | 1547.2 |
| 42.5° | 1066.8 | 1077.6 | 1132.4 | 1230.8 | 1340.8 | 1531.2 | 1696.0 | 1741.6 | 1744.8 | 1746.4 | 1736.0 |
| 45°   | 1164.0 | 1170.0 | 1242.8 | 1368.4 | 1508.0 | 1722.0 | 1892.4 | 1943.2 | 1941.2 | 1933.2 | 1925.6 |
| 47.5° | 1274.4 | 1286.8 | 1374.0 | 1526.0 | 1680.8 | 1898.4 | 2091.2 | 2140.8 | 2145.2 | 2138.0 | 2124.0 |
| 50°   | 1374.8 | 1384.4 | 1482.8 | 1663.2 | 1833.2 | 2045.2 | 2258.8 | 2308.8 | 2308.0 | 2312.0 | 2316.0 |
| 52.5° | 1454.0 | 1462.8 | 1556.4 | 1754.8 | 1945.2 | 2168.4 | 2385.2 | 2446.8 | 2456.4 | 2462.8 | 2470.8 |
| 55°   | 1494.8 | 1504.0 | 1590.4 | 1792.8 | 2013.2 | 2288.8 | 2531.2 | 2619.6 | 2636.0 | 2650.4 | 2663.6 |
| 57.5° | 1495.6 | 1507.6 | 1586.8 | 1790.0 | 2048.4 | 2396.4 | 2724.4 | 2883.2 | 2906.4 | 2943.2 | 2988.4 |
| 60°   | 1471.2 | 1488.0 | 1559.2 | 1764.0 | 2088.8 | 2532.8 | 3042.8 | 3346.8 | 3392.4 | 3456.8 | 3514.8 |
| 62.5° | 1407.6 | 1424.4 | 1488.0 | 1698.0 | 2136.0 | 2707.6 | 3502.8 | 3948.4 | 4045.6 | 4116.8 | 4231.6 |
| 65°   | 1307.2 | 1323.2 | 1376.8 | 1588.8 | 2098.4 | 2845.6 | 3845.6 | 4380.0 | 4479.2 | 4568.4 | 4703.2 |
| 67°   | 1217.6 | 1219.2 | 1264.4 | 1463.6 | 1952.0 | 2802.8 | 3914.4 | 4437.6 | 4529.2 | 4619.6 | 4776.0 |
| 67.5° | 1186.0 | 1194.8 | 1230.0 | 1422.0 | 1896.4 | 2771.2 | 3887.2 | 4406.4 | 4495.2 | 4591.6 | 4751.2 |
| 70°   | 958.8  | 961.2  | 995.2  | 1134.4 | 1504.8 | 2297.6 | 3491.6 | 4008.4 | 4069.2 | 4210.4 | 4367.2 |
| 72.5° | 584.8  | 580.8  | 591.6  | 694.8  | 990.4  | 1591.2 | 2795.6 | 3300.0 | 3383.2 | 3503.6 | 3609.6 |
| 75°   | 322.0  | 341.2  | 354.4  | 426.0  | 556.4  | 935.6  | 1903.6 | 2387.6 | 2509.6 | 2581.2 | 2602.4 |
| 77.5° | 196.8  | 195.2  | 201.2  | 274.8  | 456.4  | 640.0  | 1051.6 | 1400.8 | 1468.8 | 1489.2 | 1410.4 |
| 80°   | 93.6   | 97.2   | 96.0   | 113.2  | 221.2  | 540.0  | 735.2  | 899.6  | 934.0  | 953.6  | 979.2  |
| 82.5° | 51.2   | 53.2   | 60.4   | 67.6   | 87.2   | 232.4  | 634.4  | 829.6  | 852.8  | 886.4  | 924.0  |
| 85°   | 32.0   | 33.6   | 46.4   | 48.8   | 53.6   | 71.6   | 264.4  | 484.8  | 504.4  | 571.2  | 592.4  |
| 87.5° | 13.2   | 14.4   | 25.2   | 22.8   | 27.2   | 25.2   | 80.0   | 123.2  | 130.8  | 139.2  | 154.4  |
| 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):**

|       | 65°    | 66°    | 67°    | 67.5°  | 68°    | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  |
| 2.5°  | 646.8  | 646.4  | 644.8  | 644.4  | 645.2  | 645.2  | 644.4  | 643.2  | 642.8  | 642.4  | 641.6  |
| 5°    | 666.0  | 665.2  | 664.0  | 663.2  | 662.8  | 662.8  | 661.6  | 660.4  | 659.2  | 657.6  | 657.2  |
| 7.5°  | 688.8  | 688.8  | 688.4  | 687.2  | 686.0  | 684.4  | 683.2  | 682.0  | 680.8  | 680.0  | 678.8  |
| 10°   | 718.8  | 720.4  | 717.6  | 716.8  | 716.4  | 714.0  | 713.6  | 712.4  | 711.6  | 709.6  | 709.6  |
| 12.5° | 754.4  | 752.8  | 752.4  | 750.8  | 750.8  | 749.6  | 749.2  | 748.8  | 748.0  | 746.4  | 746.0  |
| 15°   | 784.0  | 784.0  | 783.6  | 782.8  | 783.6  | 782.8  | 781.6  | 782.4  | 781.2  | 781.6  | 780.4  |
| 17.5° | 808.0  | 809.6  | 809.2  | 809.6  | 809.2  | 809.2  | 810.0  | 810.0  | 810.8  | 809.2  | 809.6  |
| 20°   | 828.0  | 830.4  | 831.6  | 830.8  | 831.6  | 832.0  | 834.0  | 834.8  | 836.0  | 836.8  | 836.8  |
| 22.5° | 848.8  | 852.0  | 854.4  | 854.4  | 856.0  | 857.6  | 861.2  | 862.0  | 864.8  | 864.4  | 866.4  |
| 25°   | 878.0  | 883.2  | 884.8  | 887.2  | 889.2  | 892.0  | 896.4  | 898.4  | 899.6  | 902.4  | 905.6  |
| 27.5° | 922.8  | 929.2  | 930.4  | 933.2  | 938.4  | 940.0  | 944.8  | 946.8  | 951.2  | 957.2  | 958.4  |
| 30°   | 984.0  | 992.0  | 992.4  | 995.6  | 1001.6 | 1003.6 | 1007.6 | 1012.8 | 1016.4 | 1022.4 | 1022.8 |
| 32.5° | 1067.2 | 1075.2 | 1074.0 | 1080.0 | 1079.6 | 1085.6 | 1084.4 | 1092.4 | 1095.6 | 1098.8 | 1107.6 |
| 35°   | 1178.0 | 1177.2 | 1183.2 | 1185.2 | 1184.0 | 1188.8 | 1188.0 | 1191.6 | 1194.8 | 1194.8 | 1204.4 |
| 37.5° | 1337.6 | 1336.4 | 1335.6 | 1327.2 | 1325.2 | 1325.6 | 1324.0 | 1327.2 | 1322.0 | 1322.0 | 1332.4 |
| 40°   | 1551.6 | 1544.4 | 1538.8 | 1533.2 | 1527.6 | 1520.0 | 1513.6 | 1512.0 | 1503.2 | 1502.8 | 1498.8 |
| 42.5° | 1737.6 | 1730.8 | 1726.8 | 1716.0 | 1710.4 | 1709.2 | 1693.6 | 1689.2 | 1686.8 | 1688.4 | 1684.4 |
| 45°   | 1932.8 | 1925.6 | 1910.4 | 1905.6 | 1904.0 | 1895.6 | 1893.2 | 1882.4 | 1879.2 | 1884.8 | 1882.8 |
| 47.5° | 2134.0 | 2123.6 | 2115.2 | 2109.6 | 2107.6 | 2100.4 | 2090.0 | 2098.8 | 2094.4 | 2091.2 | 2085.2 |
| 50°   | 2314.8 | 2303.2 | 2303.2 | 2293.2 | 2294.8 | 2290.0 | 2279.2 | 2281.6 | 2269.2 | 2274.0 | 2270.8 |
| 52.5° | 2466.4 | 2467.2 | 2471.2 | 2460.0 | 2462.0 | 2462.0 | 2458.4 | 2446.8 | 2450.0 | 2448.4 | 2456.0 |
| 55°   | 2659.2 | 2672.4 | 2665.2 | 2667.2 | 2669.6 | 2680.8 | 2688.8 | 2682.0 | 2670.8 | 2679.6 | 2704.0 |
| 57.5° | 2996.4 | 3008.4 | 3015.6 | 3021.2 | 3030.4 | 3035.6 | 3078.8 | 3084.8 | 3072.0 | 3098.4 | 3152.8 |
| 60°   | 3582.8 | 3597.2 | 3618.8 | 3647.2 | 3653.2 | 3689.6 | 3712.0 | 3738.4 | 3748.0 | 3770.8 | 3829.2 |
| 62.5° | 4288.0 | 4320.4 | 4324.4 | 4360.4 | 4388.4 | 4354.4 | 4363.2 | 4395.6 | 4358.8 | 4409.2 | 4411.6 |
| 65°   | 4749.6 | 4796.8 | 4798.4 | 4811.6 | 4822.0 | 4790.0 | 4775.6 | 4761.2 | 4726.4 | 4724.4 | 4759.2 |
| 67°   | 4828.8 | 4872.0 | 4890.0 | 4896.4 | 4894.8 | 4878.4 | 4854.8 | 4813.2 | 4779.6 | 4760.4 | 4774.8 |
| 67.5° | 4806.4 | 4848.8 | 4874.0 | 4880.0 | 4880.4 | 4864.4 | 4842.8 | 4797.6 | 4766.0 | 4744.4 | 4759.6 |
| 70°   | 4438.4 | 4537.6 | 4580.8 | 4558.4 | 4571.2 | 4571.2 | 4570.4 | 4528.8 | 4513.2 | 4492.4 | 4484.4 |
| 72.5° | 3690.4 | 3759.2 | 3814.0 | 3784.8 | 3788.4 | 3815.6 | 3809.2 | 3813.6 | 3768.8 | 3764.0 | 3690.0 |
| 75°   | 2643.6 | 2665.6 | 2647.2 | 2668.0 | 2556.0 | 2516.0 | 2448.0 | 2348.8 | 2322.8 | 2281.6 | 2158.4 |
| 77.5° | 1404.4 | 1379.6 | 1330.4 | 1326.4 | 1280.4 | 1244.8 | 1200.8 | 1172.0 | 1099.2 | 1058.8 | 966.4  |
| 80°   | 992.0  | 1004.0 | 1022.8 | 1034.0 | 1044.4 | 1052.4 | 1036.0 | 990.0  | 929.2  | 861.2  | 796.8  |
| 82.5° | 947.6  | 964.0  | 975.2  | 980.8  | 976.8  | 964.0  | 926.4  | 882.4  | 801.2  | 742.4  | 672.8  |
| 85°   | 597.6  | 610.8  | 588.0  | 583.2  | 593.2  | 512.4  | 468.0  | 432.0  | 350.0  | 325.6  | 287.6  |
| 87.5° | 160.4  | 169.2  | 169.6  | 164.4  | 161.2  | 142.0  | 125.6  | 111.2  | 92.0   | 86.4   | 70.0   |
| 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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CATALOG NUMBER: VPL-E02-LED-E1-GL3

**CANDELA DISTRIBUTION (continued):**

|       | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  |
| 2.5°  | 641.6  | 641.2  | 641.2  | 640.0  | 639.2  | 638.8  | 638.4  | 637.2  | 636.4  | 636.4  | 636.0  |
| 5°    | 656.8  | 656.0  | 654.8  | 654.4  | 652.8  | 652.0  | 650.4  | 649.6  | 648.4  | 647.6  | 647.2  |
| 7.5°  | 678.4  | 676.4  | 674.0  | 674.4  | 672.0  | 670.8  | 670.0  | 668.4  | 667.2  | 666.0  | 665.6  |
| 10°   | 707.2  | 706.8  | 704.4  | 705.2  | 700.8  | 702.8  | 698.8  | 699.2  | 696.8  | 694.4  | 694.0  |
| 12.5° | 744.0  | 743.6  | 741.2  | 738.4  | 737.6  | 738.0  | 735.6  | 736.0  | 733.2  | 732.4  | 731.6  |
| 15°   | 779.2  | 778.4  | 777.2  | 775.2  | 774.0  | 773.6  | 772.8  | 772.0  | 769.6  | 769.6  | 766.8  |
| 17.5° | 809.6  | 810.0  | 808.4  | 806.8  | 806.0  | 804.8  | 804.4  | 804.4  | 802.4  | 800.4  | 800.8  |
| 20°   | 836.4  | 837.2  | 837.2  | 836.0  | 836.4  | 835.6  | 835.2  | 836.0  | 834.0  | 833.2  | 832.0  |
| 22.5° | 866.4  | 866.4  | 866.8  | 867.6  | 868.8  | 869.2  | 869.2  | 868.4  | 867.2  | 866.8  | 864.4  |
| 25°   | 908.0  | 906.4  | 908.4  | 909.2  | 909.2  | 911.2  | 910.4  | 910.8  | 911.2  | 910.0  | 908.8  |
| 27.5° | 960.4  | 958.8  | 962.8  | 965.6  | 965.2  | 966.4  | 968.8  | 966.0  | 967.6  | 968.8  | 966.0  |
| 30°   | 1024.8 | 1028.8 | 1031.6 | 1033.6 | 1032.8 | 1036.4 | 1037.6 | 1037.2 | 1036.0 | 1038.0 | 1038.0 |
| 32.5° | 1106.8 | 1104.8 | 1112.0 | 1116.4 | 1116.8 | 1116.0 | 1118.0 | 1120.4 | 1118.4 | 1121.6 | 1120.0 |
| 35°   | 1204.4 | 1205.6 | 1207.2 | 1212.0 | 1214.0 | 1210.8 | 1214.0 | 1216.8 | 1216.0 | 1216.4 | 1218.0 |
| 37.5° | 1330.4 | 1332.4 | 1330.8 | 1331.2 | 1330.4 | 1345.6 | 1348.0 | 1350.4 | 1347.6 | 1345.2 | 1352.4 |
| 40°   | 1505.2 | 1505.2 | 1504.8 | 1510.0 | 1501.2 | 1510.8 | 1508.0 | 1514.8 | 1522.0 | 1518.0 | 1528.8 |
| 42.5° | 1677.2 | 1686.8 | 1687.6 | 1680.0 | 1686.4 | 1696.8 | 1696.8 | 1701.2 | 1707.6 | 1701.2 | 1711.6 |
| 45°   | 1874.4 | 1886.4 | 1884.4 | 1897.2 | 1887.6 | 1899.6 | 1901.6 | 1896.0 | 1910.0 | 1911.6 | 1907.6 |
| 47.5° | 2089.6 | 2092.0 | 2092.4 | 2096.8 | 2098.8 | 2108.4 | 2108.0 | 2118.4 | 2115.2 | 2099.2 | 2104.8 |
| 50°   | 2274.0 | 2280.0 | 2283.2 | 2286.0 | 2296.0 | 2302.8 | 2312.0 | 2313.6 | 2311.2 | 2306.4 | 2302.0 |
| 52.5° | 2458.4 | 2472.8 | 2482.0 | 2506.8 | 2522.4 | 2534.8 | 2550.0 | 2555.6 | 2552.8 | 2551.6 | 2534.0 |
| 55°   | 2705.2 | 2739.6 | 2792.8 | 2827.2 | 2864.8 | 2886.8 | 2904.4 | 2913.2 | 2906.8 | 2910.0 | 2873.6 |
| 57.5° | 3170.0 | 3250.8 | 3297.2 | 3356.0 | 3422.4 | 3450.0 | 3457.6 | 3488.8 | 3454.4 | 3420.0 | 3392.4 |
| 60°   | 3860.8 | 3935.2 | 4019.6 | 4080.0 | 4102.4 | 4178.8 | 4142.8 | 4102.4 | 4065.6 | 3994.4 | 3914.0 |
| 62.5° | 4484.4 | 4580.4 | 4623.6 | 4680.0 | 4664.8 | 4658.4 | 4634.4 | 4570.0 | 4491.2 | 4385.2 | 4278.0 |
| 65°   | 4792.0 | 4846.0 | 4872.8 | 4891.2 | 4874.0 | 4829.6 | 4750.4 | 4655.2 | 4542.4 | 4405.2 | 4264.4 |
| 67°   | 4804.4 | 4829.2 | 4838.0 | 4820.4 | 4782.0 | 4712.8 | 4612.8 | 4478.0 | 4339.2 | 4182.0 | 4023.6 |
| 67.5° | 4784.0 | 4800.4 | 4804.8 | 4777.2 | 4731.6 | 4656.8 | 4550.0 | 4406.0 | 4258.4 | 4095.2 | 3936.0 |
| 70°   | 4505.6 | 4493.6 | 4454.8 | 4416.8 | 4274.4 | 4174.0 | 3988.0 | 3834.4 | 3629.6 | 3479.6 | 3309.6 |
| 72.5° | 3660.4 | 3605.6 | 3568.0 | 3400.0 | 3228.0 | 3128.4 | 2928.4 | 2744.8 | 2558.0 | 2415.2 | 2310.8 |
| 75°   | 2054.8 | 2014.8 | 1910.4 | 1821.6 | 1679.6 | 1549.6 | 1456.4 | 1339.6 | 1227.6 | 1161.2 | 1112.4 |
| 77.5° | 928.4  | 814.0  | 735.2  | 635.6  | 513.6  | 412.8  | 306.4  | 283.2  | 241.6  | 231.2  | 208.4  |
| 80°   | 724.4  | 642.4  | 539.2  | 425.2  | 300.0  | 201.6  | 148.0  | 125.6  | 118.0  | 113.2  | 110.8  |
| 82.5° | 604.4  | 498.0  | 419.2  | 297.6  | 190.4  | 128.0  | 96.4   | 87.2   | 81.6   | 77.6   | 74.0   |
| 85°   | 258.4  | 204.4  | 168.4  | 120.4  | 85.6   | 67.6   | 59.2   | 54.0   | 48.8   | 44.4   | 41.6   |
| 87.5° | 60.4   | 46.4   | 42.4   | 36.0   | 34.0   | 33.6   | 33.2   | 31.6   | 29.6   | 27.2   | 24.4   |
| 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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CATALOG NUMBER: VPL-E02-LED-E1-GL3

**CANDELA DISTRIBUTION (continued):**

|       | 86°    | 87°    | 88°    | 89°    | 90°    | 95°    | 105°   | 115°   | 125°  | 135°  | 145°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6  | 631.6 | 631.6 | 631.6 |
| 2.5°  | 635.6  | 635.2  | 634.4  | 633.2  | 633.2  | 631.6  | 626.4  | 622.8  | 618.8 | 616.4 | 614.0 |
| 5°    | 646.4  | 646.0  | 644.0  | 642.8  | 642.0  | 638.8  | 630.0  | 623.2  | 616.0 | 610.8 | 606.8 |
| 7.5°  | 664.4  | 663.2  | 661.6  | 660.8  | 658.4  | 654.4  | 641.6  | 632.0  | 621.6 | 613.2 | 606.4 |
| 10°   | 693.6  | 691.6  | 689.2  | 686.8  | 687.6  | 681.2  | 666.4  | 652.4  | 637.2 | 624.0 | 614.8 |
| 12.5° | 729.2  | 729.2  | 728.0  | 726.4  | 723.6  | 716.4  | 696.4  | 680.0  | 661.6 | 645.2 | 638.4 |
| 15°   | 766.8  | 764.8  | 762.8  | 760.4  | 760.0  | 750.4  | 732.4  | 713.6  | 694.4 | 680.4 | 672.4 |
| 17.5° | 797.6  | 798.4  | 795.6  | 794.8  | 794.0  | 784.4  | 765.2  | 748.4  | 734.4 | 719.6 | 706.8 |
| 20°   | 830.4  | 828.8  | 828.0  | 826.8  | 826.4  | 818.4  | 803.2  | 792.8  | 780.4 | 758.0 | 724.4 |
| 22.5° | 865.6  | 863.6  | 864.4  | 862.0  | 861.6  | 856.0  | 844.8  | 841.6  | 823.2 | 776.0 | 717.6 |
| 25°   | 911.2  | 907.6  | 908.8  | 908.8  | 909.2  | 904.0  | 902.8  | 897.2  | 850.8 | 771.6 | 690.4 |
| 27.5° | 965.6  | 967.2  | 967.2  | 966.8  | 964.0  | 965.6  | 971.2  | 952.0  | 860.4 | 748.4 | 649.6 |
| 30°   | 1036.4 | 1037.2 | 1038.0 | 1040.8 | 1034.8 | 1045.2 | 1052.0 | 990.8  | 853.2 | 716.4 | 598.4 |
| 32.5° | 1122.4 | 1119.2 | 1120.8 | 1122.4 | 1124.4 | 1135.2 | 1131.2 | 1010.4 | 832.0 | 672.8 | 534.8 |
| 35°   | 1217.2 | 1223.2 | 1224.8 | 1228.4 | 1232.4 | 1248.8 | 1202.8 | 1014.4 | 799.6 | 614.4 | 453.6 |
| 37.5° | 1358.4 | 1368.0 | 1368.0 | 1380.8 | 1373.2 | 1393.2 | 1266.8 | 1004.8 | 750.4 | 533.2 | 362.0 |
| 40°   | 1536.4 | 1540.8 | 1545.2 | 1546.8 | 1542.8 | 1540.4 | 1308.8 | 981.2  | 681.2 | 431.2 | 264.8 |
| 42.5° | 1718.0 | 1716.4 | 1716.8 | 1719.6 | 1708.8 | 1663.6 | 1334.8 | 940.0  | 595.2 | 322.0 | 190.0 |
| 45°   | 1913.6 | 1906.8 | 1904.8 | 1899.2 | 1889.6 | 1794.4 | 1349.6 | 882.0  | 482.0 | 226.4 | 149.2 |
| 47.5° | 2104.0 | 2095.6 | 2082.8 | 2067.2 | 2048.8 | 1899.6 | 1348.0 | 806.8  | 369.6 | 162.0 | 131.6 |
| 50°   | 2299.2 | 2284.4 | 2256.8 | 2241.6 | 2210.4 | 2004.0 | 1338.8 | 723.2  | 266.0 | 134.0 | 123.2 |
| 52.5° | 2522.4 | 2496.0 | 2470.4 | 2440.0 | 2388.4 | 2132.4 | 1324.8 | 629.2  | 194.0 | 122.8 | 117.6 |
| 55°   | 2855.2 | 2812.0 | 2770.0 | 2706.8 | 2656.8 | 2304.4 | 1301.2 | 528.0  | 153.2 | 118.4 | 114.4 |
| 57.5° | 3314.0 | 3240.4 | 3187.2 | 3102.0 | 3022.0 | 2542.4 | 1276.0 | 436.0  | 136.8 | 117.2 | 112.8 |
| 60°   | 3830.4 | 3719.6 | 3620.4 | 3515.6 | 3424.4 | 2839.6 | 1262.8 | 364.0  | 133.2 | 118.4 | 113.2 |
| 62.5° | 4154.4 | 4023.6 | 3899.6 | 3771.6 | 3640.4 | 2981.6 | 1205.6 | 314.4  | 134.8 | 123.6 | 116.4 |
| 65°   | 4113.6 | 3969.2 | 3834.4 | 3678.4 | 3554.8 | 2847.6 | 1060.0 | 266.0  | 137.6 | 132.8 | 125.2 |
| 67°   | 3838.4 | 3698.4 | 3544.8 | 3392.0 | 3272.0 | 2592.8 | 894.8  | 224.0  | 140.8 | 143.2 | 134.8 |
| 67.5° | 3764.8 | 3607.2 | 3452.4 | 3312.0 | 3182.0 | 2514.0 | 851.6  | 213.6  | 141.6 | 146.0 | 138.0 |
| 70°   | 3139.6 | 3014.8 | 2833.6 | 2729.6 | 2635.6 | 2038.0 | 635.2  | 166.0  | 144.0 | 158.4 | 153.2 |
| 72.5° | 2196.8 | 2076.0 | 1981.2 | 1924.4 | 1869.6 | 1480.8 | 446.8  | 132.4  | 140.4 | 165.2 | 160.0 |
| 75°   | 1109.6 | 1082.0 | 1048.8 | 1030.4 | 1031.2 | 860.8  | 269.2  | 112.8  | 132.0 | 158.4 | 145.2 |
| 77.5° | 219.2  | 213.6  | 216.0  | 236.4  | 232.8  | 265.2  | 133.6  | 95.6   | 112.4 | 122.0 | 104.4 |
| 80°   | 106.0  | 102.4  | 99.2   | 98.4   | 96.4   | 92.4   | 84.0   | 79.6   | 91.2  | 80.4  | 69.2  |
| 82.5° | 68.8   | 64.8   | 63.2   | 60.0   | 60.4   | 65.6   | 73.2   | 76.4   | 74.0  | 55.6  | 46.8  |
| 85°   | 38.8   | 38.4   | 37.6   | 38.4   | 40.0   | 52.4   | 78.4   | 71.6   | 59.6  | 39.2  | 35.2  |
| 87.5° | 23.2   | 22.0   | 22.4   | 22.8   | 23.6   | 38.8   | 62.0   | 51.6   | 38.0  | 20.4  | 20.8  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   |



REPORT NUMBER: P145310

CATALOG NUMBER: VPL-E02-LED-E1-GL3

**CANDELA DISTRIBUTION (continued):**

|       | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 631.6 | 631.6 | 631.6 | 631.6 |
| 2.5°  | 613.6 | 612.0 | 612.0 | 611.6 |
| 5°    | 603.6 | 601.2 | 600.8 | 600.8 |
| 7.5°  | 602.0 | 598.8 | 598.4 | 597.2 |
| 10°   | 609.2 | 608.0 | 608.4 | 607.2 |
| 12.5° | 632.0 | 633.6 | 635.2 | 635.2 |
| 15°   | 666.8 | 665.6 | 667.6 | 665.6 |
| 17.5° | 692.4 | 682.0 | 679.6 | 678.4 |
| 20°   | 693.2 | 671.6 | 664.4 | 663.2 |
| 22.5° | 668.4 | 636.4 | 624.4 | 622.4 |
| 25°   | 626.4 | 586.0 | 570.8 | 569.2 |
| 27.5° | 573.6 | 528.4 | 506.0 | 505.2 |
| 30°   | 510.0 | 456.4 | 428.0 | 423.6 |
| 32.5° | 432.4 | 368.8 | 338.8 | 329.2 |
| 35°   | 342.8 | 277.6 | 249.6 | 248.8 |
| 37.5° | 256.0 | 205.2 | 187.2 | 186.4 |
| 40°   | 187.6 | 161.2 | 154.4 | 153.2 |
| 42.5° | 153.2 | 142.4 | 139.6 | 138.4 |
| 45°   | 137.2 | 132.8 | 131.2 | 130.0 |
| 47.5° | 127.6 | 124.8 | 123.6 | 123.6 |
| 50°   | 120.0 | 119.2 | 118.4 | 118.4 |
| 52.5° | 114.8 | 114.4 | 113.6 | 113.2 |
| 55°   | 110.4 | 108.8 | 109.2 | 108.8 |
| 57.5° | 107.6 | 105.2 | 105.2 | 105.2 |
| 60°   | 106.0 | 101.6 | 101.6 | 102.0 |
| 62.5° | 106.4 | 99.6  | 99.2  | 99.2  |
| 65°   | 109.6 | 98.4  | 96.0  | 96.4  |
| 67°   | 113.6 | 97.2  | 92.4  | 92.0  |
| 67.5° | 114.8 | 96.4  | 91.2  | 90.8  |
| 70°   | 119.6 | 94.0  | 85.2  | 84.4  |
| 72.5° | 120.4 | 90.4  | 79.2  | 78.4  |
| 75°   | 112.0 | 85.6  | 74.4  | 72.4  |
| 77.5° | 87.2  | 73.6  | 67.2  | 67.2  |
| 80°   | 61.2  | 56.4  | 48.0  | 47.6  |
| 82.5° | 44.8  | 42.4  | 35.2  | 34.4  |
| 85°   | 32.8  | 30.8  | 26.0  | 26.0  |
| 87.5° | 20.4  | 19.6  | 16.8  | 16.0  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)