

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: P177555

Luminaire Tested: **VAL-F04-LED-E-U-GL4-HSS-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P177555  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VAL-F04-LED-E-U-GL4-HSS-7060  
Description: VALET TUNNEL LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE IV W/ GLARE CONTROL AND HOUSE SIDE SHIELD  
Light Source: (28) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6687.6 lumens  
Efficiency: N/A  
Efficacy: 65.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G2  
  
Input Watts (W): 102.2  
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



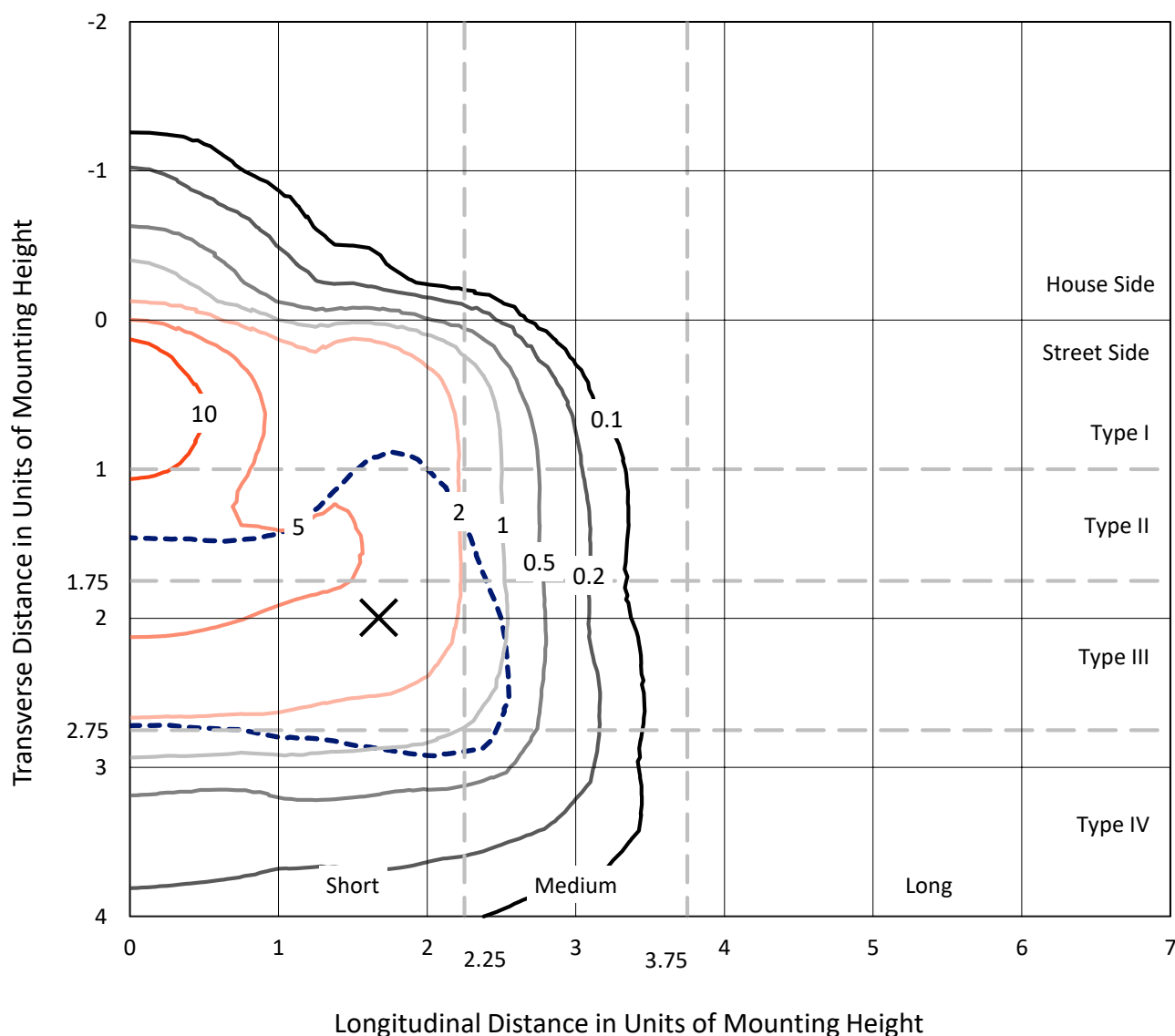
REPORT NUMBER: P177555

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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

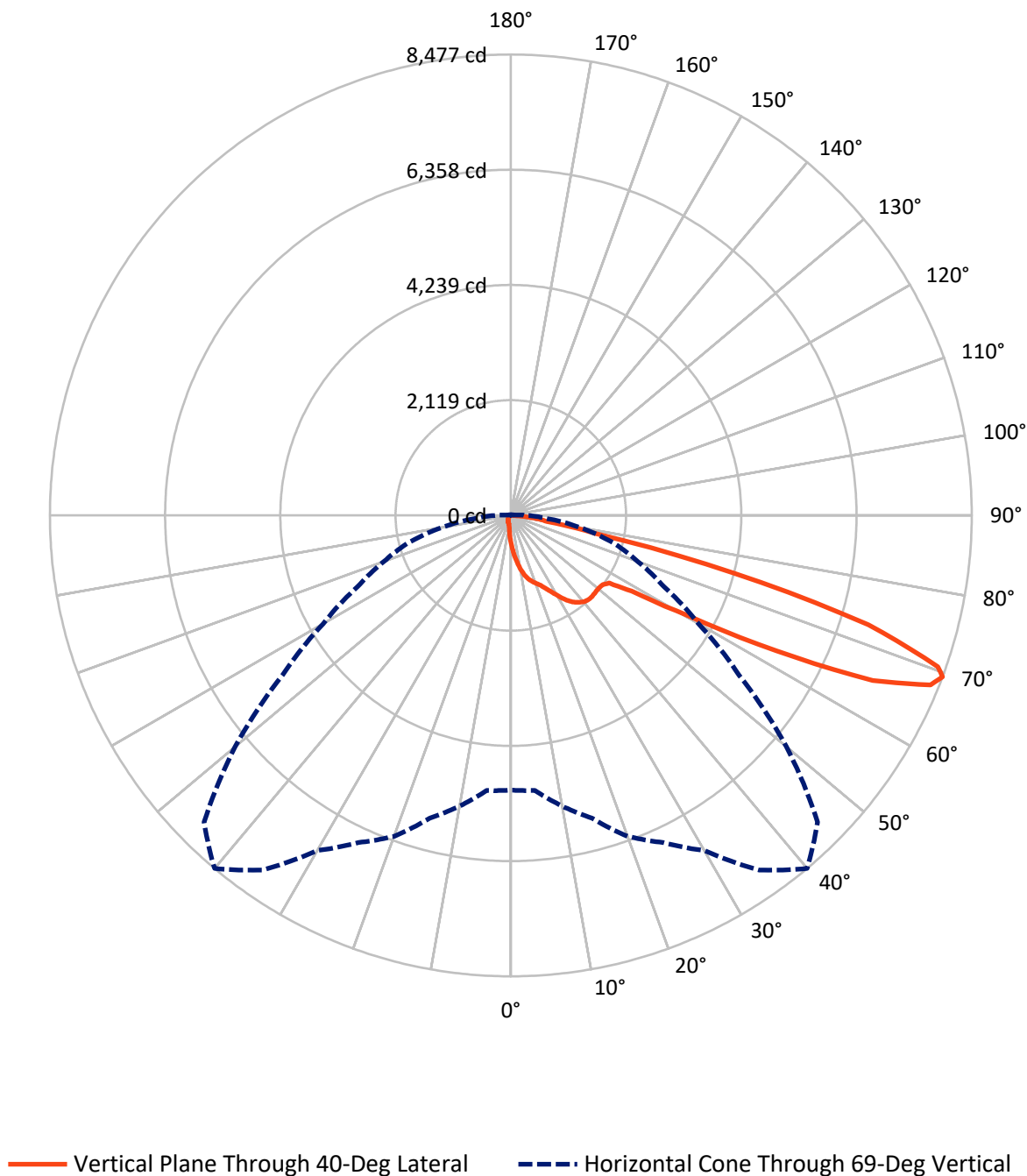


Based on 10 foot mounting height. Maximum calculated value = 15 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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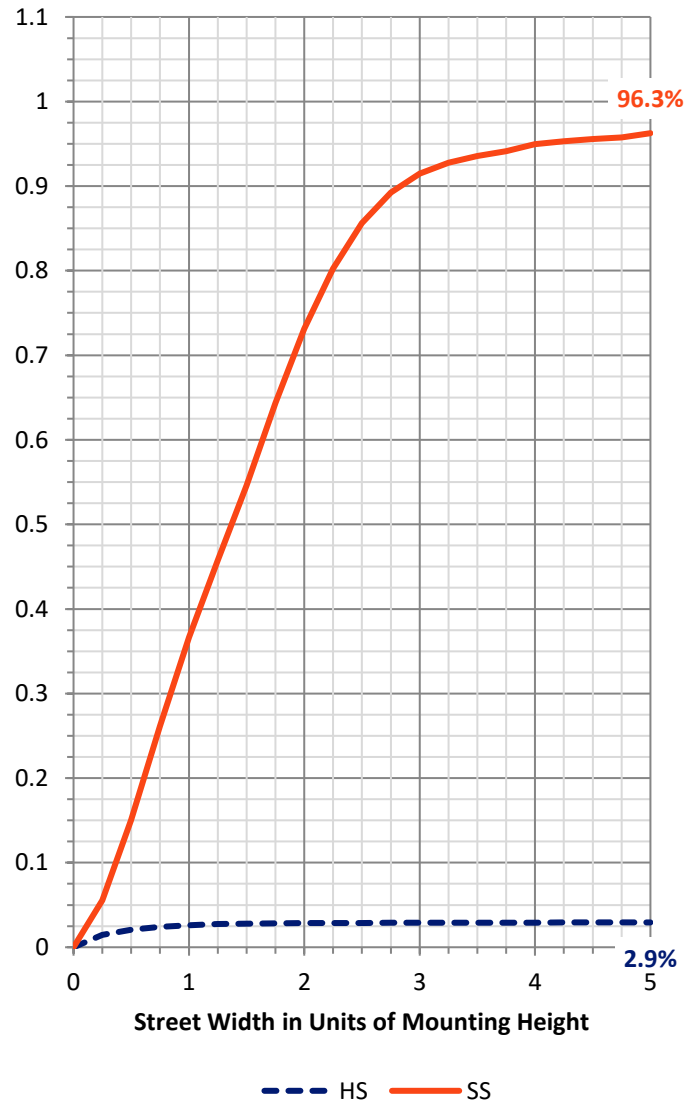
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 199.1    | 0.0    | 199.1  |
|                    | % Fixture | 3.0      | 0.0    | 3.0    |
| <b>Street Side</b> | Lumens    | 6488.5   | 0.0    | 6488.5 |
|                    | % Fixture | 97.0     | 0.0    | 97.0   |
| <b>Total</b>       | Lumens    | 6687.6   | 0.0    | 6687.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 51.9   | 0.8       |
| 10°-20°   | 179.0  | 2.7       |
| 20°-30°   | 342.5  | 5.1       |
| 30°-40°   | 569.7  | 8.5       |
| 40°-50°   | 770.9  | 11.5      |
| 50°-60°   | 1205.5 | 18.0      |
| 60°-70°   | 2478.6 | 37.1      |
| 70°-80°   | 997.3  | 14.9      |
| 80°-90°   | 92.3   | 1.4       |
| 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°    | 6687.6 | 100.0     |
| 0°-180°   | 6687.6 | 100.0     |

**Coefficient of Utilization**



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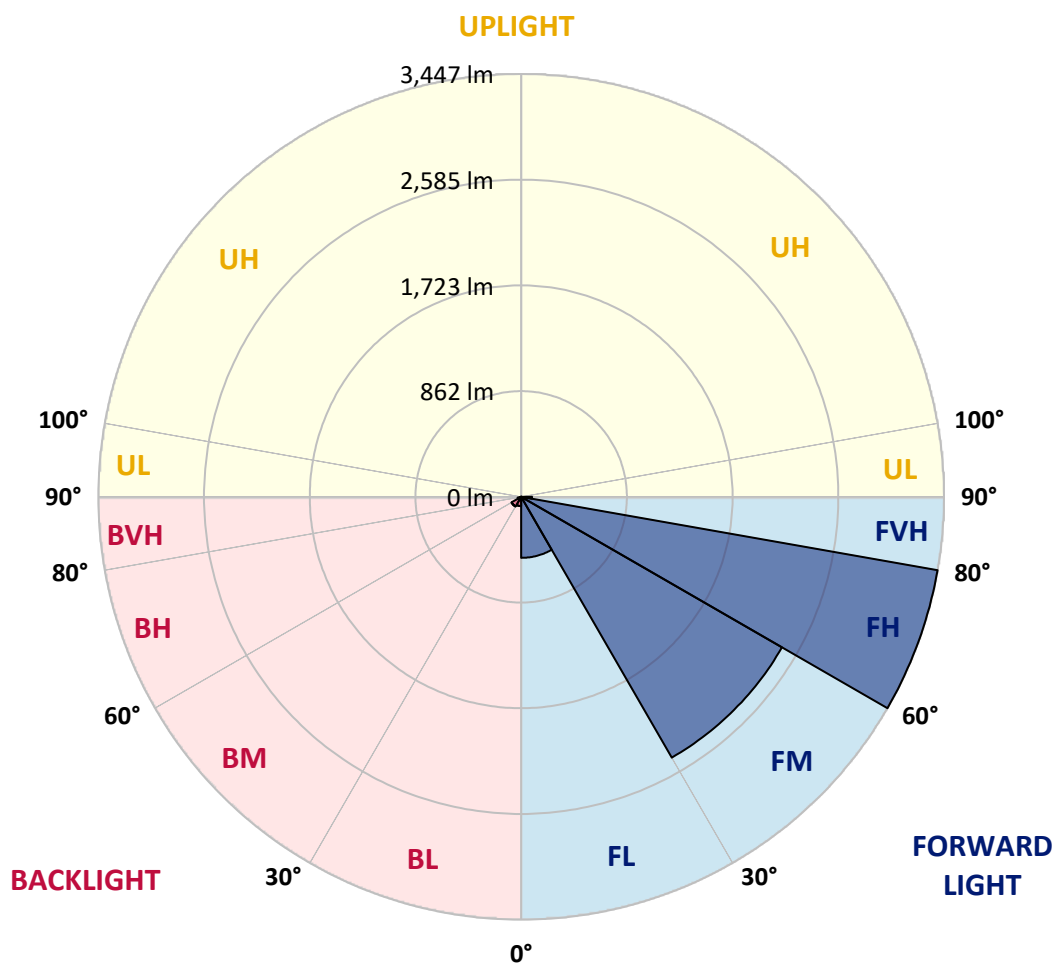
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 497.7  | 7.4       |                         |      |         |
| FM   | (30°-60°)   | 2455.1 | 36.7      |                         |      |         |
| FH   | (60°-80°)   | 3446.8 | 51.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.8   | 1.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 75.7   | 1.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 90.9   | 1.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 29.0   | 0.4       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 3.4    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  |
| 2.5°  | 673.7  | 666.1  | 657.3  | 657.3  | 646.4  | 646.4  | 639.8  | 622.3  | 620.1  | 610.2  | 600.3  |
| 5°    | 860.0  | 853.4  | 842.5  | 832.6  | 823.8  | 808.5  | 797.5  | 776.7  | 753.8  | 731.8  | 712.1  |
| 7.5°  | 1041.8 | 1038.6 | 1018.9 | 1015.5 | 1001.3 | 976.1  | 954.2  | 923.5  | 884.1  | 853.4  | 817.3  |
| 10°   | 1210.6 | 1202.9 | 1198.5 | 1179.9 | 1159.1 | 1131.7 | 1097.7 | 1060.5 | 1014.5 | 966.3  | 914.8  |
| 12.5° | 1344.2 | 1339.9 | 1320.2 | 1312.4 | 1290.5 | 1263.2 | 1220.4 | 1172.2 | 1126.2 | 1063.8 | 1003.5 |
| 15°   | 1443.9 | 1436.2 | 1423.1 | 1411.0 | 1384.7 | 1360.7 | 1321.2 | 1268.6 | 1212.7 | 1144.8 | 1072.5 |
| 17.5° | 1527.2 | 1512.9 | 1509.6 | 1491.1 | 1463.6 | 1435.1 | 1391.3 | 1343.1 | 1277.4 | 1209.5 | 1130.6 |
| 20°   | 1638.9 | 1619.2 | 1612.6 | 1585.3 | 1553.5 | 1514.0 | 1463.6 | 1403.4 | 1334.4 | 1259.8 | 1178.8 |
| 22.5° | 1770.4 | 1756.2 | 1741.9 | 1717.8 | 1677.3 | 1621.4 | 1548.0 | 1482.2 | 1394.6 | 1312.4 | 1224.8 |
| 25°   | 1956.6 | 1944.6 | 1921.6 | 1888.7 | 1838.3 | 1771.5 | 1682.8 | 1586.3 | 1483.3 | 1378.2 | 1275.2 |
| 27.5° | 2137.4 | 2126.4 | 2110.0 | 2084.8 | 2027.8 | 1954.4 | 1844.9 | 1722.2 | 1591.8 | 1464.8 | 1350.8 |
| 30°   | 2307.2 | 2297.3 | 2280.9 | 2255.7 | 2205.3 | 2133.0 | 2009.2 | 1877.7 | 1715.6 | 1567.7 | 1430.7 |
| 32.5° | 2490.1 | 2486.9 | 2468.2 | 2432.1 | 2388.3 | 2290.8 | 2156.0 | 2014.7 | 1850.4 | 1679.4 | 1519.5 |
| 35°   | 2697.2 | 2672.0 | 2654.5 | 2618.3 | 2543.9 | 2439.8 | 2282.0 | 2127.5 | 1954.4 | 1779.1 | 1600.6 |
| 37.5° | 2872.5 | 2848.4 | 2826.5 | 2780.5 | 2689.6 | 2557.0 | 2378.4 | 2208.6 | 2030.1 | 1851.4 | 1669.6 |
| 40°   | 3000.7 | 2988.6 | 2962.3 | 2902.1 | 2800.2 | 2642.5 | 2449.6 | 2264.5 | 2084.8 | 1905.2 | 1725.5 |
| 42.5° | 3096.0 | 3077.4 | 3047.8 | 2985.4 | 2864.8 | 2685.2 | 2478.1 | 2287.5 | 2110.0 | 1938.0 | 1761.6 |
| 45°   | 3131.1 | 3115.7 | 3088.3 | 3020.4 | 2890.0 | 2697.2 | 2477.0 | 2280.9 | 2111.1 | 1947.9 | 1785.7 |
| 47.5° | 3110.3 | 3094.9 | 3070.8 | 3007.3 | 2879.1 | 2683.0 | 2457.3 | 2262.3 | 2100.1 | 1951.2 | 1807.7 |
| 50°   | 3041.2 | 3032.5 | 3013.8 | 2960.2 | 2845.1 | 2655.6 | 2439.8 | 2252.4 | 2098.0 | 1967.6 | 1838.3 |
| 52.5° | 3034.6 | 3029.1 | 3006.2 | 2952.5 | 2835.3 | 2646.8 | 2437.5 | 2257.9 | 2116.6 | 1988.4 | 1860.2 |
| 55°   | 3708.4 | 3630.6 | 3456.4 | 3308.5 | 3065.3 | 2776.1 | 2548.2 | 2346.7 | 2195.5 | 2070.6 | 1980.7 |
| 57.5° | 5270.6 | 5154.5 | 4925.6 | 4644.0 | 4085.3 | 3536.4 | 3097.1 | 2779.4 | 2622.7 | 2565.8 | 2599.7 |
| 60°   | 6002.4 | 5981.6 | 5945.5 | 5811.8 | 5525.9 | 5053.7 | 4527.9 | 3959.3 | 3731.4 | 3711.7 | 3780.7 |
| 62.5° | 6349.7 | 6336.6 | 6347.6 | 6331.1 | 6242.4 | 6104.4 | 5953.2 | 5707.7 | 5482.1 | 5336.4 | 5027.4 |
| 65°   | 6509.7 | 6518.5 | 6580.9 | 6630.2 | 6641.1 | 6677.3 | 6788.0 | 7093.6 | 7317.1 | 6941.3 | 6083.6 |
| 67.5° | 6103.3 | 6154.7 | 6298.2 | 6478.0 | 6688.2 | 6892.0 | 7220.7 | 7864.9 | 8323.9 | 7882.4 | 6664.2 |
| 69°   | 5052.6 | 5077.8 | 5428.4 | 5766.9 | 6280.8 | 6640.1 | 7116.7 | 7961.3 | 8477.3 | 7978.8 | 6618.2 |
| 70°   | 3977.9 | 4000.9 | 4376.7 | 4836.8 | 5705.6 | 6167.9 | 6791.2 | 7798.0 | 8333.8 | 7850.6 | 6381.5 |
| 72.5° | 1794.5 | 1761.6 | 1894.2 | 2140.7 | 3085.0 | 3819.0 | 4909.1 | 6318.0 | 6875.6 | 6289.5 | 4774.4 |
| 75°   | 1253.3 | 1239.0 | 1253.3 | 1254.4 | 1401.2 | 1807.7 | 2280.9 | 3424.6 | 4235.4 | 3654.7 | 2280.9 |
| 77.5° | 970.7  | 960.8  | 951.0  | 940.0  | 957.5  | 1072.5 | 1118.5 | 1215.0 | 1577.6 | 1492.1 | 869.8  |
| 80°   | 768.0  | 759.2  | 783.3  | 775.7  | 775.7  | 788.8  | 780.1  | 743.9  | 676.0  | 626.6  | 560.9  |
| 82.5° | 357.1  | 359.4  | 359.4  | 390.0  | 470.0  | 548.8  | 574.0  | 537.9  | 477.7  | 406.5  | 327.6  |
| 85°   | 34.0   | 38.4   | 64.6   | 99.7   | 198.3  | 223.5  | 224.6  | 186.2  | 186.2  | 146.8  | 118.3  |
| 87.5° | 0.0    | 1.1    | 1.1    | 1.1    | 9.8    | 27.4   | 23.0   | 6.6    | 3.3    | 3.3    | 5.5    |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°   | 95°   | 100°  | 105°  |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0°    | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1  | 505.1 | 505.1 | 505.1 | 505.1 |
| 2.5°  | 582.9  | 579.5  | 566.4  | 553.2  | 541.2  | 528.0  | 516.0  | 504.0 | 490.8 | 480.9 | 468.9 |
| 5°    | 681.5  | 657.3  | 630.0  | 603.7  | 577.4  | 550.0  | 521.5  | 496.3 | 470.0 | 445.9 | 422.9 |
| 7.5°  | 781.1  | 734.0  | 696.8  | 649.7  | 606.9  | 564.2  | 524.8  | 484.3 | 447.0 | 411.9 | 379.1 |
| 10°   | 865.5  | 808.5  | 750.4  | 690.2  | 628.9  | 571.9  | 517.1  | 468.9 | 419.6 | 376.8 | 336.3 |
| 12.5° | 934.5  | 862.2  | 791.0  | 715.4  | 646.4  | 574.0  | 506.1  | 448.1 | 390.0 | 341.8 | 300.2 |
| 15°   | 997.0  | 913.7  | 828.2  | 740.6  | 652.9  | 570.8  | 495.2  | 422.9 | 363.7 | 308.9 | 261.8 |
| 17.5° | 1047.3 | 952.0  | 855.6  | 757.0  | 662.8  | 566.4  | 480.9  | 405.4 | 336.3 | 279.3 | 233.3 |
| 20°   | 1091.2 | 991.5  | 887.4  | 776.7  | 669.4  | 565.3  | 468.9  | 383.4 | 312.2 | 252.0 | 207.0 |
| 22.5° | 1131.7 | 1032.0 | 920.3  | 801.9  | 679.2  | 564.2  | 458.0  | 367.0 | 291.4 | 231.1 | 186.2 |
| 25°   | 1177.7 | 1072.5 | 955.3  | 828.2  | 696.8  | 568.6  | 451.4  | 353.9 | 272.8 | 211.4 | 169.8 |
| 27.5° | 1229.2 | 1118.5 | 997.0  | 861.1  | 719.7  | 577.4  | 449.2  | 339.6 | 256.4 | 192.8 | 156.7 |
| 30°   | 1301.5 | 1173.3 | 1038.6 | 894.0  | 740.6  | 587.2  | 447.0  | 330.8 | 239.9 | 178.6 | 143.5 |
| 32.5° | 1365.0 | 1227.0 | 1084.6 | 927.9  | 763.6  | 597.1  | 445.9  | 318.8 | 224.6 | 164.3 | 133.6 |
| 35°   | 1431.9 | 1276.3 | 1124.0 | 960.8  | 783.3  | 608.0  | 444.8  | 310.0 | 210.3 | 150.1 | 123.8 |
| 37.5° | 1489.9 | 1317.9 | 1154.7 | 989.2  | 805.2  | 617.9  | 445.9  | 302.4 | 197.2 | 138.0 | 115.0 |
| 40°   | 1539.2 | 1360.7 | 1188.7 | 1015.5 | 828.2  | 633.2  | 447.0  | 294.7 | 184.1 | 127.1 | 107.3 |
| 42.5° | 1583.1 | 1401.2 | 1224.8 | 1045.2 | 854.5  | 650.8  | 453.6  | 288.1 | 173.1 | 117.2 | 99.7  |
| 45°   | 1617.0 | 1438.5 | 1264.2 | 1086.8 | 897.2  | 679.2  | 465.6  | 283.7 | 162.2 | 108.4 | 93.1  |
| 47.5° | 1652.1 | 1493.2 | 1331.1 | 1152.5 | 959.7  | 724.1  | 486.4  | 282.7 | 153.4 | 101.9 | 87.6  |
| 50°   | 1700.3 | 1548.0 | 1390.2 | 1219.3 | 1016.7 | 770.2  | 511.6  | 283.7 | 142.4 | 95.3  | 82.1  |
| 52.5° | 1735.4 | 1603.9 | 1466.9 | 1335.5 | 1152.5 | 910.4  | 609.1  | 303.5 | 137.0 | 89.9  | 75.6  |
| 55°   | 1942.4 | 1919.4 | 1922.7 | 1944.6 | 1803.3 | 1549.1 | 1018.9 | 438.2 | 161.0 | 101.9 | 74.5  |
| 57.5° | 2738.8 | 2819.9 | 2867.0 | 2866.0 | 2632.6 | 2183.4 | 1368.3 | 563.1 | 179.6 | 118.3 | 88.7  |
| 60°   | 3786.2 | 3724.8 | 3638.3 | 3424.6 | 3114.6 | 2492.4 | 1530.5 | 605.8 | 155.6 | 94.2  | 81.0  |
| 62.5° | 4711.9 | 4352.6 | 4033.8 | 3687.6 | 3281.2 | 2599.7 | 1563.4 | 602.6 | 135.9 | 71.2  | 57.0  |
| 65°   | 5289.3 | 4642.9 | 4128.0 | 3694.1 | 3215.4 | 2509.9 | 1479.0 | 553.2 | 115.0 | 58.1  | 47.1  |
| 67.5° | 5427.3 | 4486.2 | 3757.7 | 3204.5 | 2686.2 | 1953.4 | 1085.7 | 416.3 | 89.9  | 48.2  | 41.6  |
| 69°   | 5126.0 | 3987.8 | 3113.5 | 2485.8 | 1954.4 | 1296.0 | 671.6  | 262.9 | 69.0  | 43.8  | 38.4  |
| 70°   | 4715.2 | 3468.5 | 2536.1 | 1995.0 | 1447.2 | 910.4  | 470.0  | 185.1 | 55.8  | 40.5  | 35.0  |
| 72.5° | 3033.5 | 1821.9 | 1246.7 | 867.7  | 597.1  | 362.6  | 184.1  | 83.3  | 42.7  | 34.0  | 28.5  |
| 75°   | 1176.6 | 673.7  | 488.6  | 371.4  | 290.3  | 201.6  | 111.7  | 53.7  | 36.1  | 28.5  | 21.9  |
| 77.5° | 579.5  | 443.7  | 362.6  | 248.7  | 144.6  | 89.9   | 60.2   | 41.6  | 29.5  | 20.8  | 14.2  |
| 80°   | 458.0  | 304.5  | 181.9  | 112.8  | 85.5   | 64.6   | 46.0   | 34.0  | 21.9  | 13.1  | 9.8   |
| 82.5° | 234.5  | 128.1  | 94.2   | 76.7   | 63.6   | 50.4   | 37.3   | 24.1  | 14.2  | 8.7   | 7.7   |
| 85°   | 73.4   | 53.7   | 48.2   | 47.1   | 43.8   | 36.1   | 26.3   | 15.3  | 8.7   | 5.5   | 5.5   |
| 87.5° | 5.5    | 7.7    | 9.8    | 7.7    | 8.7    | 7.7    | 9.8    | 6.6   | 4.4   | 4.4   | 3.3   |
| 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):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 | 505.1 |
| 2.5°  | 460.1 | 447.0 | 434.9 | 427.3 | 413.0 | 407.5 | 402.1 | 399.9 | 390.0 | 392.2 | 383.4 |
| 5°    | 402.1 | 379.1 | 361.5 | 344.0 | 327.6 | 315.5 | 305.6 | 293.6 | 283.7 | 279.3 | 270.6 |
| 7.5°  | 349.5 | 319.9 | 296.9 | 278.2 | 258.5 | 243.2 | 230.1 | 221.3 | 212.5 | 203.8 | 199.4 |
| 10°   | 303.5 | 271.7 | 245.4 | 226.7 | 208.2 | 195.0 | 185.1 | 178.6 | 173.1 | 169.8 | 168.7 |
| 12.5° | 260.8 | 230.1 | 205.9 | 189.5 | 175.3 | 168.7 | 164.3 | 161.0 | 159.9 | 158.8 | 158.8 |
| 15°   | 227.9 | 197.2 | 178.6 | 166.5 | 159.9 | 156.7 | 155.6 | 153.4 | 151.2 | 150.1 | 150.1 |
| 17.5° | 197.2 | 174.2 | 161.0 | 154.4 | 151.2 | 149.0 | 146.8 | 144.6 | 142.4 | 141.3 | 141.3 |
| 20°   | 176.4 | 157.8 | 151.2 | 146.8 | 143.5 | 141.3 | 138.0 | 135.9 | 134.7 | 133.6 | 132.6 |
| 22.5° | 159.9 | 147.9 | 143.5 | 140.2 | 135.9 | 132.6 | 130.4 | 128.1 | 126.0 | 124.9 | 123.8 |
| 25°   | 147.9 | 140.2 | 137.0 | 132.6 | 128.1 | 124.9 | 121.6 | 118.3 | 116.2 | 115.0 | 112.8 |
| 27.5° | 139.1 | 133.6 | 129.3 | 123.8 | 119.4 | 116.2 | 112.8 | 109.6 | 107.3 | 105.2 | 104.1 |
| 30°   | 131.5 | 126.0 | 120.5 | 116.2 | 110.7 | 107.3 | 103.0 | 99.7  | 98.6  | 96.4  | 94.2  |
| 32.5° | 123.8 | 118.3 | 112.8 | 107.3 | 101.9 | 97.5  | 95.3  | 90.9  | 88.7  | 87.6  | 85.5  |
| 35°   | 115.0 | 109.6 | 103.0 | 98.6  | 93.1  | 88.7  | 85.5  | 82.1  | 80.0  | 77.8  | 76.7  |
| 37.5° | 107.3 | 100.8 | 94.2  | 88.7  | 84.4  | 80.0  | 76.7  | 73.4  | 71.2  | 69.0  | 67.9  |
| 40°   | 98.6  | 92.0  | 85.5  | 80.0  | 75.6  | 72.3  | 69.0  | 65.7  | 63.6  | 62.4  | 62.4  |
| 42.5° | 90.9  | 83.3  | 76.7  | 72.3  | 69.0  | 64.6  | 61.3  | 58.1  | 57.0  | 55.8  | 57.0  |
| 45°   | 83.3  | 75.6  | 70.1  | 65.7  | 62.4  | 58.1  | 54.8  | 52.6  | 51.5  | 52.6  | 53.7  |
| 47.5° | 76.7  | 69.0  | 63.6  | 60.2  | 57.0  | 53.7  | 50.4  | 48.2  | 48.2  | 50.4  | 52.6  |
| 50°   | 70.1  | 62.4  | 58.1  | 55.8  | 52.6  | 49.3  | 44.9  | 43.8  | 44.9  | 47.1  | 49.3  |
| 52.5° | 63.6  | 54.8  | 51.5  | 50.4  | 47.1  | 43.8  | 40.5  | 39.4  | 40.5  | 42.7  | 41.6  |
| 55°   | 57.0  | 48.2  | 47.1  | 46.0  | 42.7  | 38.4  | 35.0  | 35.0  | 35.0  | 34.0  | 31.8  |
| 57.5° | 54.8  | 42.7  | 41.6  | 40.5  | 37.3  | 32.9  | 30.7  | 28.5  | 27.4  | 24.1  | 23.0  |
| 60°   | 57.0  | 38.4  | 38.4  | 36.1  | 32.9  | 28.5  | 25.2  | 21.9  | 19.7  | 17.6  | 17.6  |
| 62.5° | 46.0  | 35.0  | 34.0  | 31.8  | 27.4  | 23.0  | 19.7  | 16.4  | 15.3  | 14.2  | 14.2  |
| 65°   | 37.3  | 31.8  | 29.5  | 26.3  | 23.0  | 18.6  | 15.3  | 13.1  | 12.1  | 12.1  | 13.1  |
| 67.5° | 34.0  | 28.5  | 25.2  | 21.9  | 18.6  | 14.2  | 12.1  | 11.0  | 11.0  | 12.1  | 12.1  |
| 69°   | 31.8  | 26.3  | 23.0  | 19.7  | 16.4  | 13.1  | 11.0  | 11.0  | 11.0  | 11.0  | 12.1  |
| 70°   | 29.5  | 25.2  | 21.9  | 18.6  | 14.2  | 11.0  | 9.8   | 9.8   | 11.0  | 11.0  | 12.1  |
| 72.5° | 23.0  | 19.7  | 18.6  | 15.3  | 11.0  | 9.8   | 8.7   | 9.8   | 9.8   | 11.0  | 11.0  |
| 75°   | 17.6  | 14.2  | 14.2  | 12.1  | 8.7   | 7.7   | 7.7   | 8.7   | 8.7   | 9.8   | 9.8   |
| 77.5° | 12.1  | 9.8   | 9.8   | 8.7   | 7.7   | 6.6   | 6.6   | 7.7   | 8.7   | 8.7   | 9.8   |
| 80°   | 8.7   | 7.7   | 6.6   | 7.7   | 6.6   | 5.5   | 6.6   | 7.7   | 7.7   | 8.7   | 8.7   |
| 82.5° | 6.6   | 6.6   | 6.6   | 6.6   | 5.5   | 5.5   | 6.6   | 6.6   | 7.7   | 8.7   | 8.7   |
| 85°   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 6.6   | 6.6   | 7.7   | 7.7   |
| 87.5° | 3.3   | 3.3   | 3.3   | 4.4   | 4.4   | 5.5   | 5.5   | 5.5   | 5.5   | 6.6   | 6.6   |
| 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):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 505.1 | 505.1 | 505.1 | 505.1 |
| 2.5°  | 381.3 | 380.2 | 375.8 | 376.8 |
| 5°    | 267.3 | 260.8 | 265.1 | 264.0 |
| 7.5°  | 196.1 | 195.0 | 193.9 | 196.1 |
| 10°   | 167.6 | 167.6 | 166.5 | 167.6 |
| 12.5° | 157.8 | 157.8 | 157.8 | 157.8 |
| 15°   | 150.1 | 150.1 | 149.0 | 149.0 |
| 17.5° | 141.3 | 141.3 | 141.3 | 140.2 |
| 20°   | 132.6 | 131.5 | 131.5 | 131.5 |
| 22.5° | 122.7 | 121.6 | 121.6 | 121.6 |
| 25°   | 112.8 | 111.7 | 111.7 | 111.7 |
| 27.5° | 103.0 | 101.9 | 100.8 | 100.8 |
| 30°   | 93.1  | 92.0  | 90.9  | 90.9  |
| 32.5° | 83.3  | 82.1  | 81.0  | 81.0  |
| 35°   | 74.5  | 74.5  | 73.4  | 72.3  |
| 37.5° | 66.8  | 66.8  | 66.8  | 66.8  |
| 40°   | 61.3  | 62.4  | 62.4  | 62.4  |
| 42.5° | 58.1  | 59.2  | 60.2  | 61.3  |
| 45°   | 55.8  | 58.1  | 59.2  | 59.2  |
| 47.5° | 54.8  | 55.8  | 57.0  | 57.0  |
| 50°   | 50.4  | 49.3  | 49.3  | 49.3  |
| 52.5° | 40.5  | 38.4  | 37.3  | 36.1  |
| 55°   | 29.5  | 28.5  | 26.3  | 26.3  |
| 57.5° | 20.8  | 20.8  | 19.7  | 19.7  |
| 60°   | 16.4  | 16.4  | 15.3  | 16.4  |
| 62.5° | 14.2  | 14.2  | 14.2  | 14.2  |
| 65°   | 13.1  | 13.1  | 13.1  | 13.1  |
| 67.5° | 13.1  | 13.1  | 13.1  | 13.1  |
| 69°   | 12.1  | 12.1  | 12.1  | 12.1  |
| 70°   | 12.1  | 12.1  | 12.1  | 12.1  |
| 72.5° | 11.0  | 11.0  | 11.0  | 11.0  |
| 75°   | 9.8   | 11.0  | 11.0  | 11.0  |
| 77.5° | 9.8   | 9.8   | 9.8   | 9.8   |
| 80°   | 8.7   | 8.7   | 9.8   | 9.8   |
| 82.5° | 8.7   | 8.7   | 8.7   | 8.7   |
| 85°   | 7.7   | 7.7   | 8.7   | 8.7   |
| 87.5° | 6.6   | 6.6   | 7.7   | 7.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)