

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: P158648

Luminaire Tested: **VST-E03-LED-E-U-SL4-8030**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P158648  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-E03-LED-E-U-SL4-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL  
Light Source: (63) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7345.1 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 75.2  
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



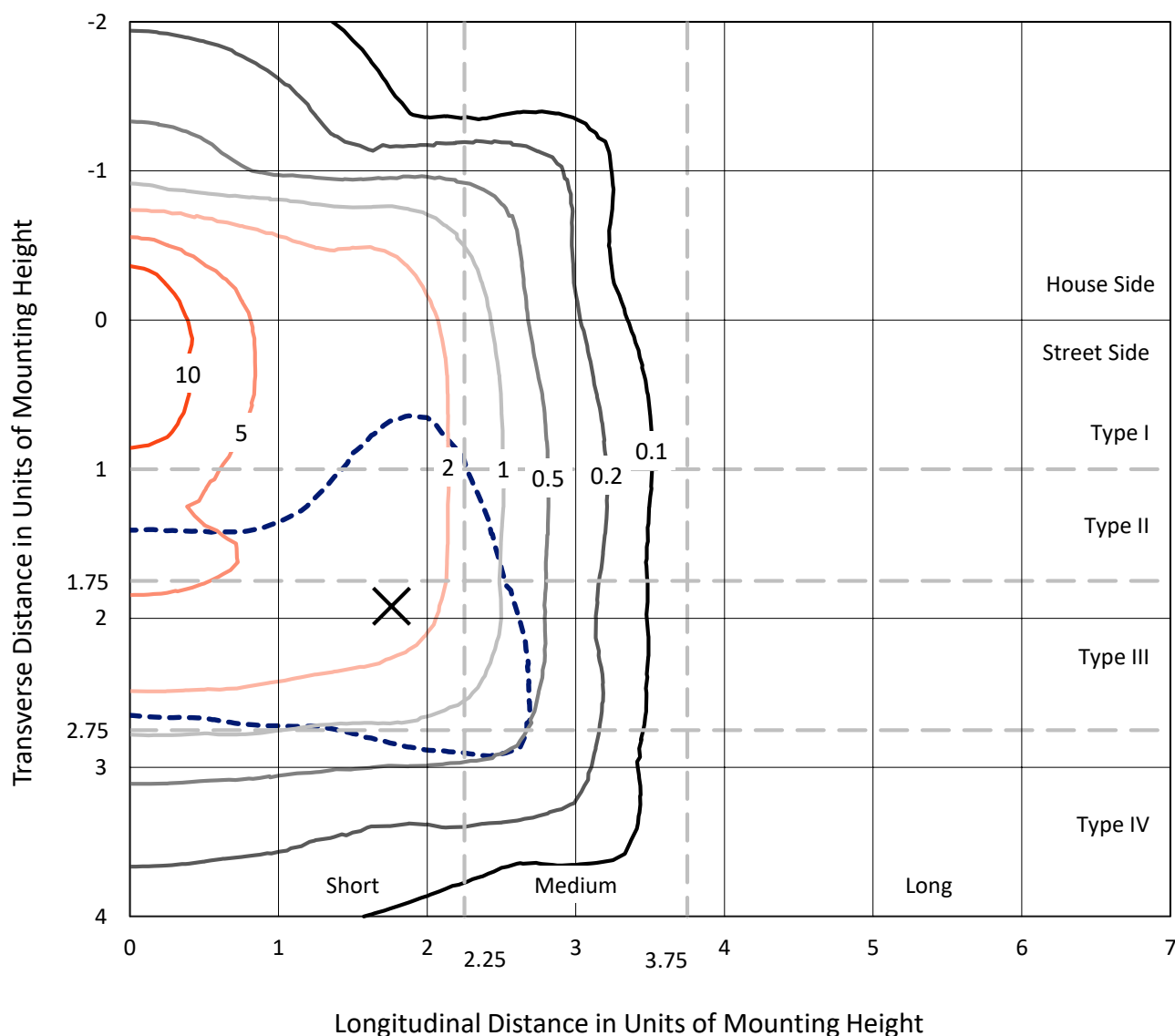
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

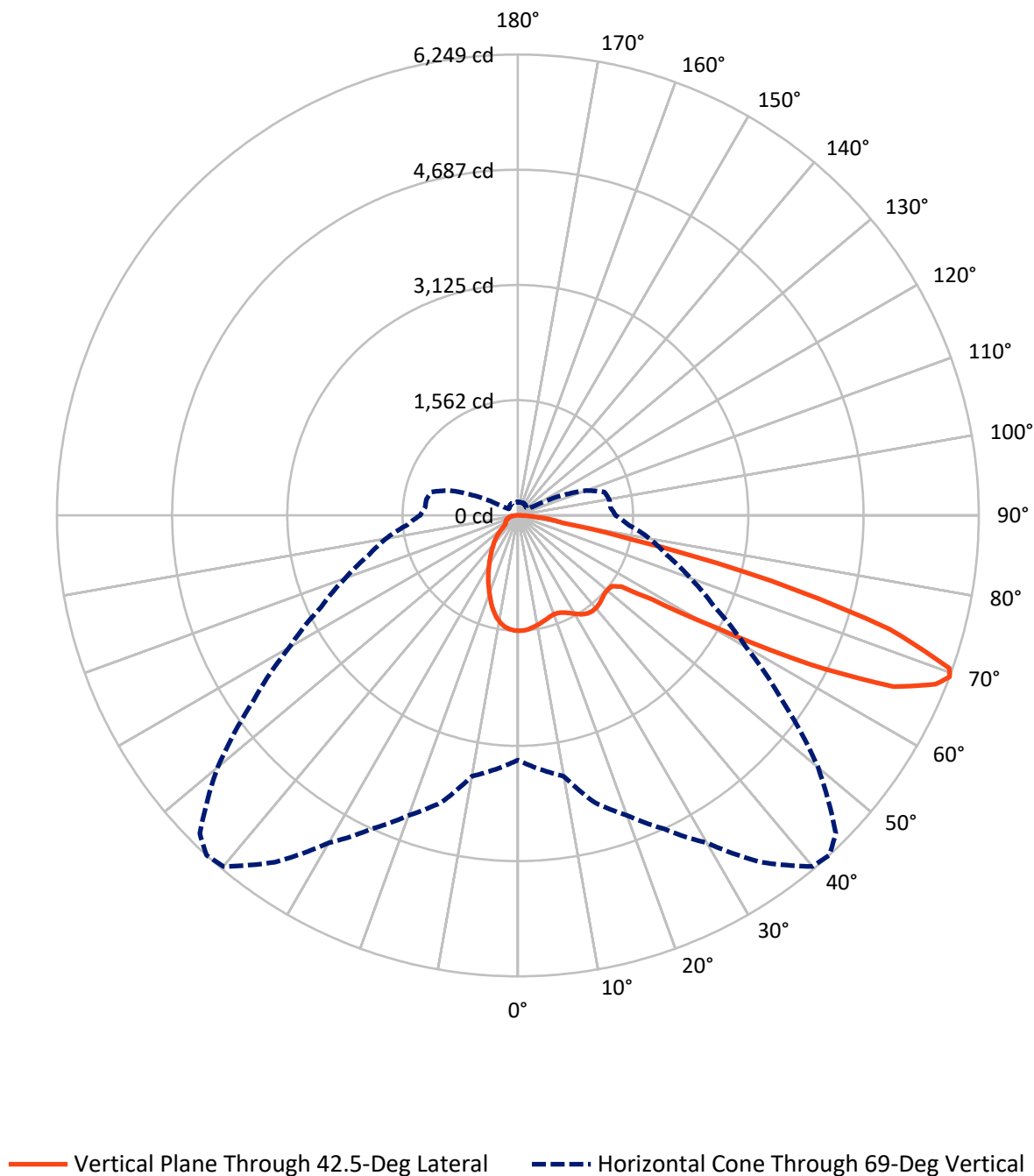


Based on 10 foot mounting height. Maximum calculated value = 15.6 fc  
 Type IV - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1632.9   | 0.0    | 1632.9 |
|                    | % Fixture | 22.2     | 0.0    | 22.2   |
| <b>Street Side</b> | Lumens    | 5712.2   | 0.0    | 5712.2 |
|                    | % Fixture | 77.8     | 0.0    | 77.8   |
| <b>Total</b>       | Lumens    | 7345.1   | 0.0    | 7345.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 145.6  | 2.0       |
| 10°-20°   | 392.4  | 5.3       |
| 20°-30°   | 572.3  | 7.8       |
| 30°-40°   | 729.5  | 9.9       |
| 40°-50°   | 848.8  | 11.6      |
| 50°-60°   | 1291.5 | 17.6      |
| 60°-70°   | 2281.4 | 31.1      |
| 70°-80°   | 941.4  | 12.8      |
| 80°-90°   | 142.1  | 1.9       |
| 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°    | 7345.1 | 100.0     |
| 0°-180°   | 7345.1 | 100.0     |

**Coefficient of Utilization**



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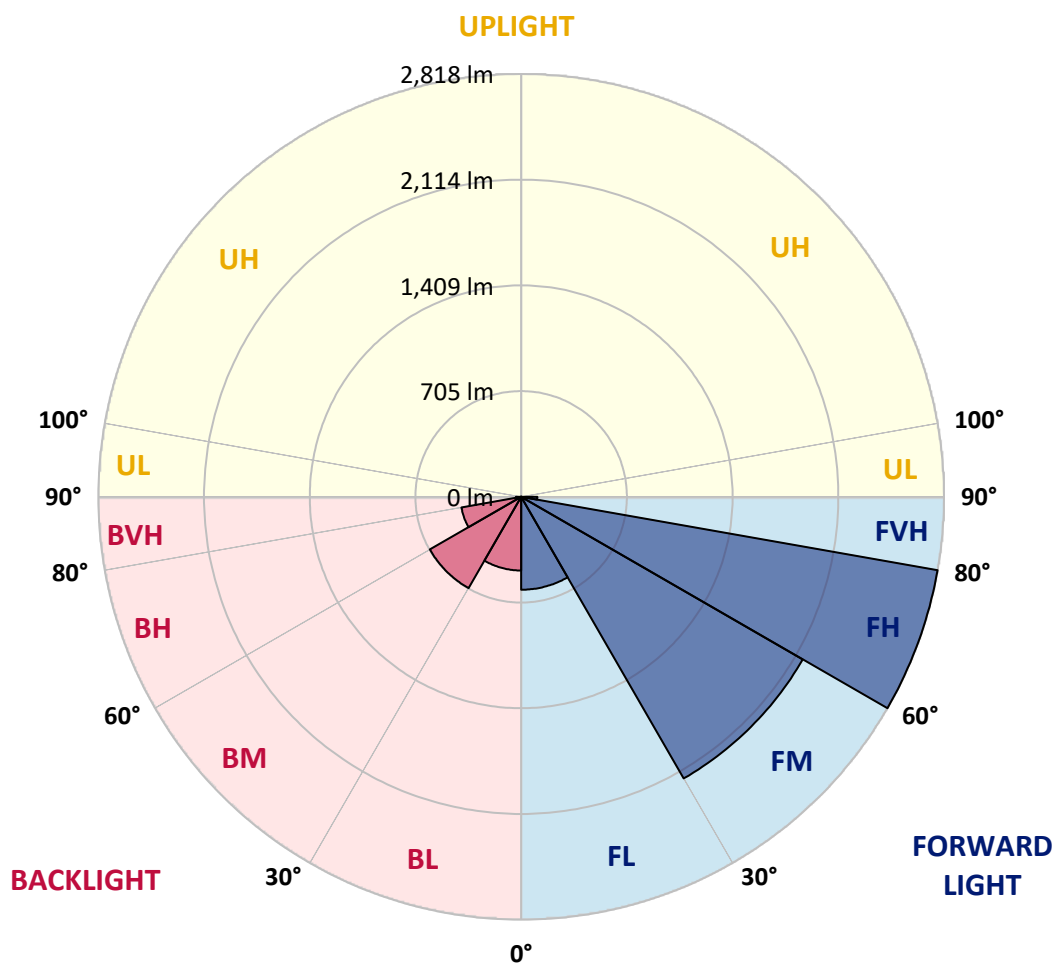
CATALOG NUMBER: VST-E03-LED-E-U-SL4-8030

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 619.4  | 8.4       |                         |      |         |
| FM   | (30°-60°)   | 2167.0 | 29.5      |                         |      |         |
| FH   | (60°-80°)   | 2818.3 | 38.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 107.5  | 1.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 491.0  | 6.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 702.8  | 9.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 404.5  | 5.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 34.7   | 0.5       |                         |      | 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°    | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 |
| 2.5°  | 1559.2 | 1564.7 | 1562.8 | 1562.8 | 1564.3 | 1561.7 | 1561.7 | 1562.8 | 1560.2 | 1561.7 | 1561.2 |
| 5°    | 1553.6 | 1556.6 | 1555.6 | 1555.6 | 1555.6 | 1553.6 | 1552.6 | 1552.1 | 1548.5 | 1548.5 | 1547.0 |
| 7.5°  | 1541.5 | 1542.5 | 1544.0 | 1542.0 | 1541.5 | 1541.0 | 1537.4 | 1535.4 | 1531.3 | 1527.8 | 1528.8 |
| 10°   | 1525.3 | 1524.8 | 1527.3 | 1525.7 | 1523.8 | 1522.2 | 1519.2 | 1515.7 | 1511.1 | 1506.5 | 1506.0 |
| 12.5° | 1507.0 | 1506.5 | 1508.5 | 1507.6 | 1506.0 | 1503.0 | 1500.4 | 1494.4 | 1487.3 | 1481.7 | 1481.2 |
| 15°   | 1495.4 | 1493.9 | 1495.9 | 1493.9 | 1491.4 | 1488.3 | 1483.7 | 1476.1 | 1463.5 | 1457.9 | 1453.4 |
| 17.5° | 1506.5 | 1504.0 | 1505.0 | 1502.5 | 1498.9 | 1490.8 | 1480.2 | 1464.0 | 1445.8 | 1436.2 | 1429.0 |
| 20°   | 1545.5 | 1541.0 | 1542.0 | 1539.4 | 1531.3 | 1520.7 | 1500.4 | 1472.1 | 1441.2 | 1425.5 | 1414.4 |
| 22.5° | 1601.2 | 1597.7 | 1599.2 | 1596.7 | 1588.6 | 1572.4 | 1542.0 | 1501.4 | 1457.4 | 1434.6 | 1416.9 |
| 25°   | 1685.8 | 1688.8 | 1689.8 | 1678.2 | 1673.6 | 1643.8 | 1601.7 | 1545.5 | 1486.8 | 1459.9 | 1435.6 |
| 27.5° | 1781.0 | 1781.0 | 1785.5 | 1781.0 | 1771.9 | 1736.9 | 1677.7 | 1609.8 | 1534.4 | 1497.9 | 1468.6 |
| 30°   | 1873.7 | 1872.7 | 1881.2 | 1880.2 | 1865.6 | 1826.0 | 1758.7 | 1676.2 | 1590.1 | 1549.1 | 1511.6 |
| 32.5° | 1971.9 | 1975.0 | 1980.5 | 1978.5 | 1959.2 | 1904.5 | 1823.5 | 1733.9 | 1643.3 | 1598.2 | 1556.2 |
| 35°   | 2078.2 | 2079.8 | 2081.8 | 2080.8 | 2041.8 | 1972.9 | 1871.1 | 1770.8 | 1676.7 | 1632.1 | 1588.6 |
| 37.5° | 2184.6 | 2183.0 | 2180.5 | 2158.7 | 2114.2 | 2018.5 | 1900.0 | 1792.1 | 1693.4 | 1645.3 | 1600.2 |
| 40°   | 2279.8 | 2271.2 | 2263.1 | 2229.1 | 2160.8 | 2044.3 | 1911.1 | 1797.2 | 1691.9 | 1642.3 | 1598.2 |
| 42.5° | 2332.0 | 2322.3 | 2305.6 | 2263.1 | 2180.0 | 2046.8 | 1903.6 | 1782.0 | 1676.2 | 1627.0 | 1583.5 |
| 45°   | 2341.6 | 2334.5 | 2318.3 | 2270.7 | 2175.5 | 2030.6 | 1880.2 | 1757.2 | 1652.9 | 1603.7 | 1562.8 |
| 47.5° | 2318.8 | 2313.2 | 2297.5 | 2250.4 | 2155.7 | 2006.3 | 1853.4 | 1730.9 | 1630.1 | 1584.0 | 1544.5 |
| 50°   | 2283.8 | 2278.8 | 2266.6 | 2223.6 | 2133.4 | 1989.6 | 1839.7 | 1717.2 | 1622.5 | 1580.5 | 1544.0 |
| 52.5° | 2340.5 | 2344.6 | 2309.2 | 2262.1 | 2157.2 | 2004.3 | 1854.9 | 1731.4 | 1636.1 | 1594.6 | 1556.6 |
| 55°   | 3222.2 | 3216.6 | 3003.4 | 2824.7 | 2505.1 | 2215.5 | 1999.3 | 1843.8 | 1742.0 | 1700.5 | 1665.0 |
| 57.5° | 4186.9 | 4167.6 | 4080.0 | 3912.9 | 3569.6 | 3111.3 | 2694.5 | 2340.1 | 2200.3 | 2140.5 | 2144.6 |
| 60°   | 4501.9 | 4508.9 | 4490.2 | 4430.9 | 4307.9 | 4069.4 | 3752.4 | 3486.0 | 3223.7 | 3095.6 | 3110.3 |
| 62.5° | 4676.6 | 4689.2 | 4705.4 | 4692.2 | 4652.2 | 4597.0 | 4557.1 | 4581.4 | 4544.9 | 4452.7 | 4379.3 |
| 65°   | 4700.9 | 4726.7 | 4780.4 | 4822.9 | 4843.7 | 4895.8 | 5018.4 | 5312.1 | 5580.5 | 5598.2 | 5469.1 |
| 67.5° | 4219.8 | 4291.2 | 4407.7 | 4604.6 | 4773.3 | 4958.6 | 5254.3 | 5701.0 | 6097.0 | 6110.2 | 5989.6 |
| 69°   | 3317.9 | 3455.2 | 3591.4 | 4031.4 | 4327.6 | 4690.7 | 5128.3 | 5738.5 | 6212.9 | 6249.4 | 6097.5 |
| 70°   | 2658.6 | 2740.1 | 2857.6 | 3299.6 | 3742.3 | 4205.1 | 4839.1 | 5614.9 | 6133.4 | 6206.9 | 6039.2 |
| 72.5° | 1596.2 | 1627.6 | 1668.1 | 1826.6 | 2054.5 | 2466.7 | 3307.3 | 4577.8 | 5173.9 | 5272.1 | 5058.9 |
| 75°   | 1032.1 | 1030.0 | 1033.6 | 1077.6 | 1090.8 | 1169.8 | 1434.6 | 2355.2 | 3375.1 | 3553.4 | 3298.1 |
| 77.5° | 777.3  | 784.4  | 773.3  | 777.3  | 773.8  | 795.1  | 803.2  | 843.1  | 1332.3 | 1641.2 | 1467.5 |
| 80°   | 686.2  | 689.7  | 690.2  | 688.2  | 663.4  | 661.4  | 674.5  | 651.7  | 605.6  | 614.8  | 589.0  |
| 82.5° | 391.4  | 391.0  | 395.5  | 429.9  | 444.1  | 490.7  | 509.9  | 520.6  | 480.5  | 450.7  | 407.6  |
| 85°   | 253.7  | 255.7  | 260.8  | 271.4  | 260.8  | 264.8  | 260.3  | 269.4  | 247.1  | 229.4  | 205.1  |
| 87.5° | 103.8  | 103.8  | 110.4  | 120.0  | 111.9  | 109.9  | 94.2   | 93.2   | 79.0   | 71.4   | 55.7   |
| 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):**

|       | 50°    | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 |
| 2.5°  | 1558.2 | 1561.2 | 1559.7 | 1561.7 | 1560.2 | 1560.2 | 1558.2 | 1557.7 | 1559.2 | 1557.2 | 1557.7 |
| 5°    | 1544.5 | 1545.0 | 1542.5 | 1543.5 | 1540.4 | 1539.4 | 1537.9 | 1533.8 | 1536.4 | 1533.8 | 1534.9 |
| 7.5°  | 1524.8 | 1523.2 | 1519.7 | 1514.6 | 1511.1 | 1509.5 | 1506.5 | 1501.0 | 1502.0 | 1497.4 | 1499.9 |
| 10°   | 1499.5 | 1494.4 | 1488.3 | 1480.7 | 1475.6 | 1471.1 | 1464.5 | 1457.9 | 1454.3 | 1450.3 | 1449.8 |
| 12.5° | 1471.1 | 1465.0 | 1456.9 | 1445.3 | 1434.1 | 1426.5 | 1416.4 | 1404.7 | 1401.2 | 1394.6 | 1391.0 |
| 15°   | 1440.2 | 1430.6 | 1420.9 | 1407.8 | 1395.6 | 1384.0 | 1370.3 | 1355.6 | 1346.0 | 1335.8 | 1328.3 |
| 17.5° | 1412.3 | 1401.2 | 1388.5 | 1375.9 | 1362.7 | 1348.5 | 1331.3 | 1313.1 | 1298.9 | 1280.2 | 1265.0 |
| 20°   | 1390.6 | 1376.4 | 1363.7 | 1350.5 | 1335.8 | 1318.7 | 1297.9 | 1274.6 | 1250.8 | 1230.1 | 1212.3 |
| 22.5° | 1382.0 | 1359.7 | 1344.5 | 1331.3 | 1316.6 | 1296.4 | 1271.0 | 1243.7 | 1214.8 | 1186.0 | 1162.7 |
| 25°   | 1389.1 | 1356.1 | 1332.3 | 1316.6 | 1304.0 | 1283.2 | 1254.8 | 1221.4 | 1188.0 | 1153.6 | 1122.2 |
| 27.5° | 1409.8 | 1367.8 | 1333.3 | 1308.5 | 1293.8 | 1273.1 | 1243.2 | 1207.7 | 1168.3 | 1129.7 | 1091.3 |
| 30°   | 1442.2 | 1387.5 | 1344.0 | 1309.0 | 1286.2 | 1262.5 | 1231.0 | 1190.0 | 1150.0 | 1106.0 | 1063.9 |
| 32.5° | 1473.6 | 1408.3 | 1356.1 | 1311.1 | 1276.1 | 1245.2 | 1210.3 | 1169.8 | 1126.7 | 1080.7 | 1037.1 |
| 35°   | 1495.9 | 1421.9 | 1360.7 | 1306.5 | 1260.4 | 1222.0 | 1184.5 | 1144.0 | 1101.9 | 1054.8 | 1010.3 |
| 37.5° | 1506.5 | 1429.6 | 1361.2 | 1294.3 | 1239.7 | 1197.1 | 1157.1 | 1117.1 | 1077.6 | 1033.0 | 991.0  |
| 40°   | 1506.0 | 1429.0 | 1354.1 | 1278.7 | 1214.8 | 1169.8 | 1130.3 | 1091.3 | 1054.3 | 1015.3 | 977.3  |
| 42.5° | 1494.9 | 1420.9 | 1344.0 | 1263.5 | 1197.1 | 1147.0 | 1106.0 | 1068.5 | 1037.1 | 1002.7 | 970.7  |
| 45°   | 1477.7 | 1407.3 | 1333.3 | 1256.3 | 1192.1 | 1141.9 | 1098.4 | 1061.9 | 1034.0 | 1002.7 | 975.3  |
| 47.5° | 1464.5 | 1399.7 | 1334.9 | 1269.0 | 1207.7 | 1155.6 | 1109.5 | 1069.5 | 1045.7 | 1020.4 | 1001.2 |
| 50°   | 1466.5 | 1403.2 | 1339.9 | 1276.6 | 1218.9 | 1166.2 | 1121.6 | 1085.2 | 1068.0 | 1061.4 | 1056.8 |
| 52.5° | 1477.1 | 1408.8 | 1355.1 | 1317.1 | 1297.4 | 1257.9 | 1231.6 | 1208.8 | 1221.4 | 1196.6 | 1167.2 |
| 55°   | 1612.9 | 1590.6 | 1642.7 | 1691.9 | 1754.2 | 1777.4 | 1755.2 | 1751.1 | 1771.4 | 1687.3 | 1494.4 |
| 57.5° | 2173.4 | 2231.2 | 2311.7 | 2354.2 | 2405.9 | 2392.2 | 2340.5 | 2297.5 | 2246.9 | 2148.7 | 1908.1 |
| 60°   | 3127.0 | 3083.5 | 3047.0 | 2944.2 | 2860.1 | 2761.9 | 2652.5 | 2558.8 | 2469.2 | 2327.9 | 2067.6 |
| 62.5° | 4109.4 | 3807.1 | 3554.4 | 3310.3 | 3113.8 | 2950.7 | 2792.3 | 2651.5 | 2515.7 | 2318.8 | 2038.7 |
| 65°   | 4959.1 | 4322.6 | 3848.1 | 3490.1 | 3202.9 | 2955.3 | 2751.7 | 2557.3 | 2384.6 | 2153.7 | 1876.7 |
| 67.5° | 5341.0 | 4543.4 | 3853.1 | 3340.2 | 2942.6 | 2606.4 | 2343.1 | 2049.4 | 1855.9 | 1708.1 | 1552.1 |
| 69°   | 5312.6 | 4374.7 | 3578.2 | 2946.7 | 2489.9 | 2098.0 | 1815.4 | 1509.1 | 1323.7 | 1260.9 | 1257.4 |
| 70°   | 5177.9 | 4089.1 | 3257.1 | 2627.2 | 2104.6 | 1715.2 | 1444.3 | 1169.3 | 996.6  | 953.5  | 1030.0 |
| 72.5° | 4227.4 | 2889.5 | 2041.3 | 1558.7 | 1198.6 | 947.5  | 772.7  | 613.3  | 489.7  | 424.4  | 438.5  |
| 75°   | 2387.6 | 1337.9 | 864.9  | 653.8  | 552.5  | 456.8  | 391.9  | 334.2  | 302.3  | 245.6  | 194.5  |
| 77.5° | 868.0  | 574.3  | 456.8  | 395.0  | 280.0  | 193.0  | 161.5  | 141.3  | 128.1  | 128.1  | 122.0  |
| 80°   | 548.9  | 432.5  | 301.8  | 206.6  | 152.9  | 133.2  | 116.5  | 102.3  | 94.2   | 92.2   | 94.2   |
| 82.5° | 342.8  | 264.8  | 169.1  | 129.7  | 108.9  | 97.7   | 85.1   | 74.5   | 67.9   | 66.4   | 69.4   |
| 85°   | 169.1  | 131.2  | 102.8  | 91.7   | 86.1   | 80.0   | 70.4   | 60.2   | 58.3   | 62.3   | 72.9   |
| 87.5° | 50.6   | 45.1   | 37.0   | 38.5   | 40.5   | 39.5   | 31.4   | 27.4   | 25.8   | 33.9   | 53.2   |
| 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°    | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 |
| 2.5°  | 1558.7 | 1558.2 | 1559.2 | 1557.7 | 1558.7 | 1559.2 | 1558.2 | 1562.8 | 1559.7 | 1560.2 | 1562.2 |
| 5°    | 1535.9 | 1534.9 | 1538.9 | 1537.9 | 1540.0 | 1542.0 | 1541.0 | 1547.5 | 1545.0 | 1547.0 | 1551.1 |
| 7.5°  | 1497.9 | 1499.9 | 1500.4 | 1500.4 | 1504.5 | 1511.1 | 1512.6 | 1516.7 | 1516.7 | 1522.2 | 1526.3 |
| 10°   | 1447.3 | 1447.8 | 1450.8 | 1450.3 | 1455.4 | 1462.4 | 1463.5 | 1470.5 | 1473.1 | 1482.2 | 1487.8 |
| 12.5° | 1388.5 | 1386.0 | 1385.5 | 1385.0 | 1391.6 | 1399.1 | 1400.2 | 1412.3 | 1417.4 | 1425.5 | 1434.6 |
| 15°   | 1322.7 | 1316.1 | 1314.1 | 1318.1 | 1316.6 | 1321.2 | 1325.8 | 1332.3 | 1339.4 | 1355.6 | 1363.7 |
| 17.5° | 1258.4 | 1245.2 | 1241.7 | 1237.1 | 1232.6 | 1232.6 | 1234.6 | 1242.7 | 1257.4 | 1266.0 | 1284.2 |
| 20°   | 1192.6 | 1176.8 | 1164.2 | 1152.1 | 1141.4 | 1137.4 | 1137.8 | 1148.0 | 1158.7 | 1172.8 | 1190.0 |
| 22.5° | 1137.4 | 1113.5 | 1091.8 | 1075.6 | 1053.8 | 1053.3 | 1050.2 | 1053.3 | 1064.9 | 1068.5 | 1078.1 |
| 25°   | 1089.8 | 1057.9 | 1028.5 | 1002.2 | 980.9  | 969.7  | 966.7  | 965.7  | 960.1  | 958.6  | 951.5  |
| 27.5° | 1052.8 | 1014.3 | 976.3  | 944.4  | 918.1  | 902.9  | 883.7  | 870.0  | 850.3  | 845.2  | 832.5  |
| 30°   | 1022.4 | 980.9  | 939.4  | 897.8  | 868.0  | 840.6  | 808.2  | 784.4  | 754.0  | 734.3  | 717.1  |
| 32.5° | 993.1  | 951.0  | 909.0  | 868.0  | 821.9  | 779.3  | 736.8  | 699.8  | 665.9  | 635.5  | 610.2  |
| 35°   | 968.8  | 928.7  | 886.2  | 836.6  | 777.8  | 716.5  | 665.4  | 623.4  | 576.8  | 544.9  | 513.0  |
| 37.5° | 953.0  | 916.6  | 874.0  | 805.7  | 730.2  | 664.4  | 606.2  | 555.0  | 507.4  | 459.3  | 423.4  |
| 40°   | 946.0  | 914.0  | 860.9  | 777.3  | 688.7  | 615.8  | 551.5  | 494.8  | 434.0  | 379.8  | 341.3  |
| 42.5° | 945.4  | 913.0  | 842.6  | 745.9  | 654.2  | 574.7  | 503.3  | 435.5  | 368.2  | 312.4  | 274.4  |
| 45°   | 954.5  | 911.5  | 823.4  | 719.6  | 623.9  | 540.8  | 455.8  | 373.2  | 297.8  | 256.3  | 236.0  |
| 47.5° | 978.8  | 914.0  | 807.7  | 695.3  | 595.0  | 499.8  | 401.0  | 304.9  | 242.6  | 223.3  | 223.3  |
| 50°   | 1022.4 | 928.7  | 803.6  | 678.1  | 566.2  | 452.2  | 334.2  | 246.1  | 214.7  | 214.7  | 220.8  |
| 52.5° | 1089.2 | 959.6  | 810.7  | 665.9  | 530.2  | 389.4  | 263.3  | 212.2  | 206.1  | 211.7  | 219.8  |
| 55°   | 1243.2 | 1014.3 | 820.4  | 645.1  | 475.5  | 308.9  | 217.3  | 200.5  | 203.0  | 209.6  | 217.3  |
| 57.5° | 1525.7 | 1131.3 | 830.5  | 599.6  | 387.4  | 238.0  | 197.0  | 196.0  | 200.5  | 206.6  | 213.2  |
| 60°   | 1711.6 | 1280.2 | 856.3  | 530.7  | 293.2  | 196.5  | 186.8  | 193.0  | 198.5  | 203.6  | 208.6  |
| 62.5° | 1711.6 | 1322.2 | 875.6  | 453.7  | 220.3  | 178.7  | 180.3  | 189.9  | 196.5  | 199.0  | 202.1  |
| 65°   | 1602.2 | 1245.2 | 810.2  | 369.7  | 179.3  | 168.6  | 174.2  | 183.8  | 189.9  | 191.9  | 194.5  |
| 67.5° | 1400.2 | 1099.9 | 682.6  | 278.5  | 160.0  | 160.0  | 167.1  | 174.2  | 179.3  | 183.3  | 187.4  |
| 69°   | 1217.4 | 986.9  | 601.1  | 236.0  | 152.4  | 153.4  | 160.5  | 166.6  | 172.7  | 177.7  | 182.8  |
| 70°   | 1085.7 | 902.4  | 544.4  | 214.2  | 147.8  | 148.4  | 155.5  | 162.1  | 167.6  | 173.2  | 179.3  |
| 72.5° | 581.3  | 623.4  | 413.7  | 175.7  | 136.2  | 137.8  | 144.3  | 150.4  | 155.5  | 161.0  | 166.6  |
| 75°   | 198.0  | 267.9  | 263.3  | 143.8  | 123.1  | 127.1  | 131.2  | 136.7  | 143.3  | 146.9  | 149.9  |
| 77.5° | 116.0  | 120.0  | 140.3  | 117.0  | 110.9  | 112.9  | 117.5  | 122.0  | 127.6  | 131.2  | 133.7  |
| 80°   | 97.2   | 96.7   | 97.2   | 95.2   | 96.7   | 101.3  | 104.3  | 110.4  | 115.4  | 116.5  | 116.0  |
| 82.5° | 79.0   | 83.0   | 83.6   | 82.6   | 87.1   | 90.7   | 93.2   | 96.7   | 96.2   | 97.2   | 99.2   |
| 85°   | 70.4   | 69.9   | 73.4   | 73.9   | 73.9   | 71.4   | 71.9   | 71.9   | 71.9   | 73.4   | 73.9   |
| 87.5° | 70.4   | 58.7   | 45.6   | 41.0   | 43.0   | 40.5   | 38.5   | 38.0   | 42.1   | 46.1   | 45.1   |
| 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°    | 1564.3 | 1564.3 | 1564.3 | 1564.3 | 1564.3 |
| 2.5°  | 1563.2 | 1564.7 | 1563.7 | 1563.7 | 1564.7 |
| 5°    | 1552.6 | 1555.1 | 1554.1 | 1555.1 | 1555.1 |
| 7.5°  | 1528.3 | 1531.9 | 1534.4 | 1536.9 | 1535.4 |
| 10°   | 1493.3 | 1499.5 | 1503.5 | 1506.5 | 1505.0 |
| 12.5° | 1441.2 | 1446.8 | 1455.4 | 1460.5 | 1456.4 |
| 15°   | 1369.8 | 1385.5 | 1390.6 | 1397.6 | 1393.6 |
| 17.5° | 1295.3 | 1305.0 | 1311.1 | 1317.7 | 1321.7 |
| 20°   | 1196.1 | 1203.7 | 1211.8 | 1214.8 | 1210.3 |
| 22.5° | 1076.6 | 1080.7 | 1079.1 | 1083.7 | 1074.5 |
| 25°   | 945.4  | 948.0  | 946.4  | 950.5  | 942.9  |
| 27.5° | 821.4  | 820.9  | 821.4  | 816.3  | 811.3  |
| 30°   | 701.9  | 697.3  | 695.3  | 687.7  | 686.2  |
| 32.5° | 595.0  | 579.3  | 571.2  | 560.1  | 557.5  |
| 35°   | 488.2  | 465.9  | 451.2  | 438.5  | 433.0  |
| 37.5° | 392.5  | 365.6  | 348.4  | 337.3  | 335.8  |
| 40°   | 310.4  | 285.6  | 273.5  | 267.4  | 266.3  |
| 42.5° | 253.2  | 242.6  | 239.5  | 239.5  | 239.5  |
| 45°   | 230.9  | 230.4  | 232.9  | 235.0  | 235.5  |
| 47.5° | 226.4  | 229.4  | 232.9  | 236.0  | 237.0  |
| 50°   | 226.4  | 229.4  | 231.9  | 235.0  | 236.0  |
| 52.5° | 225.4  | 227.9  | 228.9  | 230.9  | 231.9  |
| 55°   | 222.3  | 223.8  | 223.8  | 224.8  | 225.8  |
| 57.5° | 217.3  | 218.3  | 216.7  | 217.7  | 220.3  |
| 60°   | 212.2  | 213.2  | 210.7  | 213.2  | 214.7  |
| 62.5° | 206.6  | 207.1  | 206.1  | 208.1  | 208.1  |
| 65°   | 197.5  | 196.5  | 198.0  | 199.5  | 200.0  |
| 67.5° | 188.4  | 185.8  | 187.4  | 187.9  | 188.9  |
| 69°   | 181.3  | 179.8  | 180.3  | 181.3  | 182.3  |
| 70°   | 176.2  | 175.2  | 176.2  | 177.7  | 179.3  |
| 72.5° | 163.6  | 164.1  | 167.6  | 170.6  | 173.7  |
| 75°   | 151.9  | 155.5  | 160.0  | 166.6  | 170.2  |
| 77.5° | 137.8  | 140.3  | 143.8  | 150.9  | 157.5  |
| 80°   | 119.0  | 120.5  | 121.0  | 123.5  | 123.1  |
| 82.5° | 96.7   | 95.2   | 94.2   | 93.2   | 92.7   |
| 85°   | 69.4   | 68.9   | 64.8   | 61.8   | 61.8   |
| 87.5° | 41.5   | 39.5   | 37.5   | 34.9   | 33.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)