

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: P144165

Luminaire Tested: **OVH-F03-LED-E-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144165  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: OVH-F03-LED-E-U-5WQ  
Description: OVH LED ROADWAY SMALL CUTOFF COBRAHEAD LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (21) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7592.1 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 78.3  
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

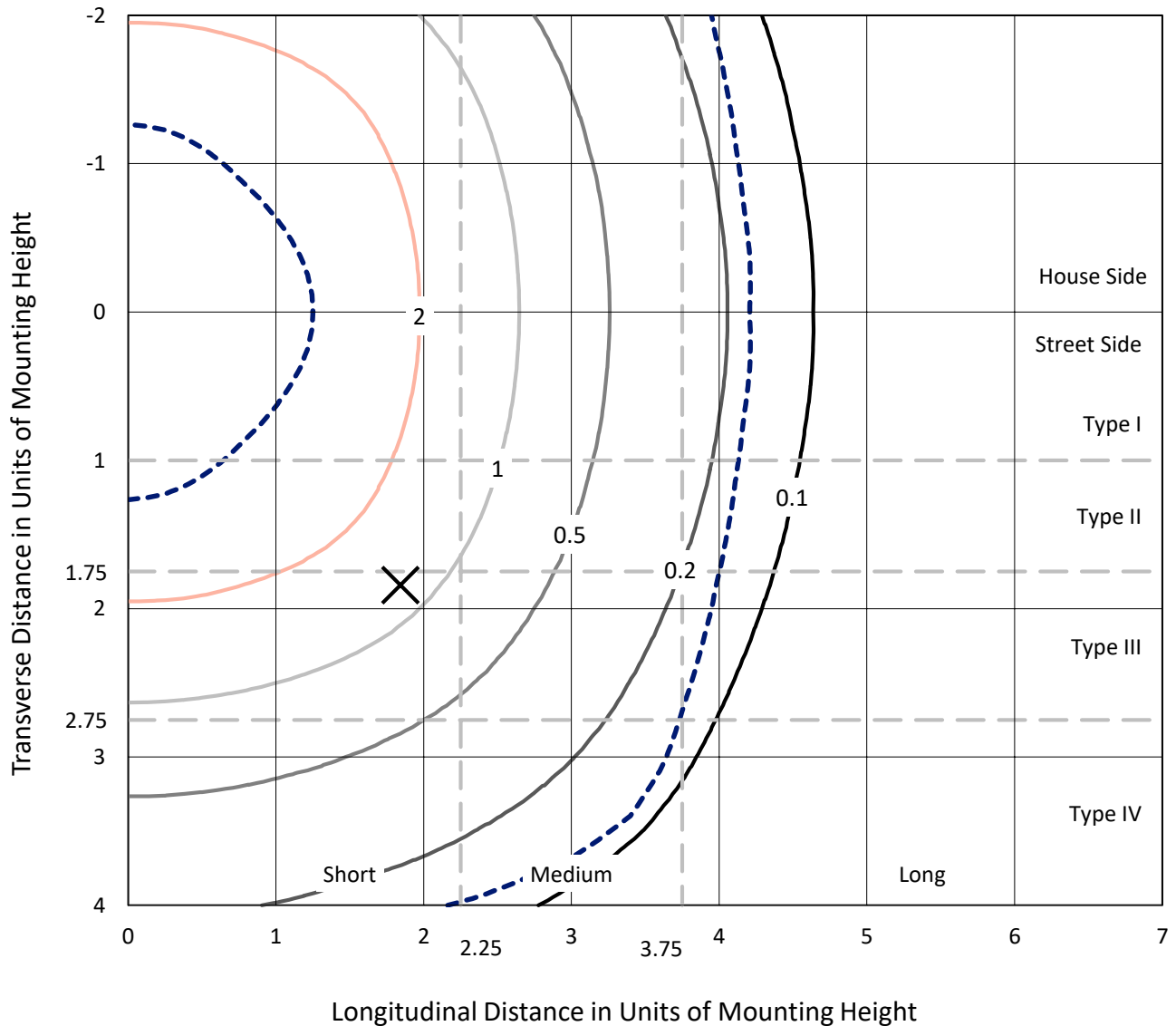


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

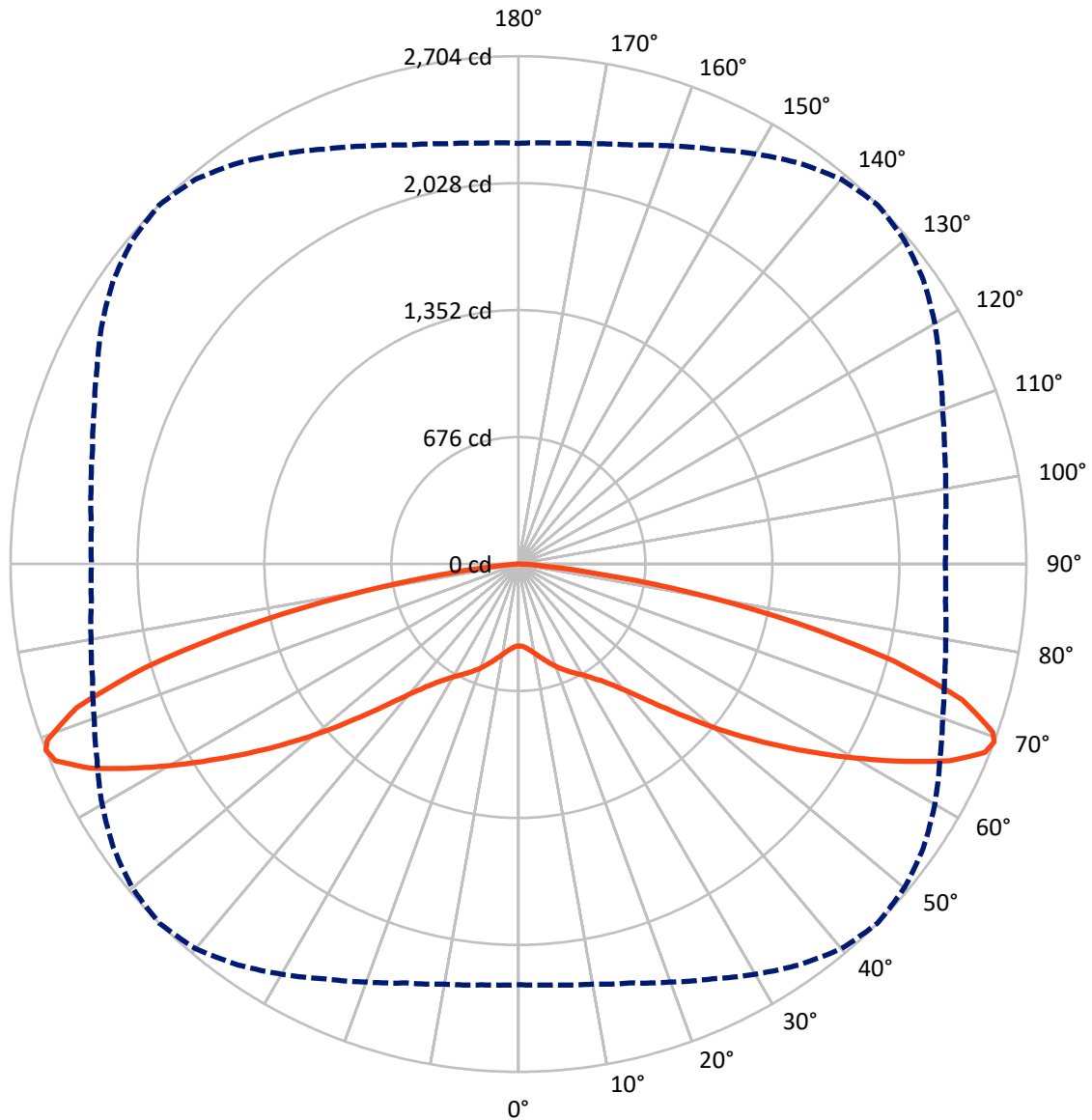


Based on 10 foot mounting height. Maximum calculated value = 4.9 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3796.1   | 0.0    | 3796.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 3796.1   | 0.0    | 3796.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 7592.1   | 0.0    | 7592.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 44.0   | 0.6       |
| 10°-20°   | 151.7  | 2.0       |
| 20°-30°   | 292.4  | 3.9       |
| 30°-40°   | 479.2  | 6.3       |
| 40°-50°   | 833.3  | 11.0      |
| 50°-60°   | 1480.2 | 19.5      |
| 60°-70°   | 2298.1 | 30.3      |
| 70°-80°   | 1831.0 | 24.1      |
| 80°-90°   | 182.1  | 2.4       |
| 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°    | 7592.1 | 100.0     |
| 0°-180°   | 7592.1 | 100.0     |



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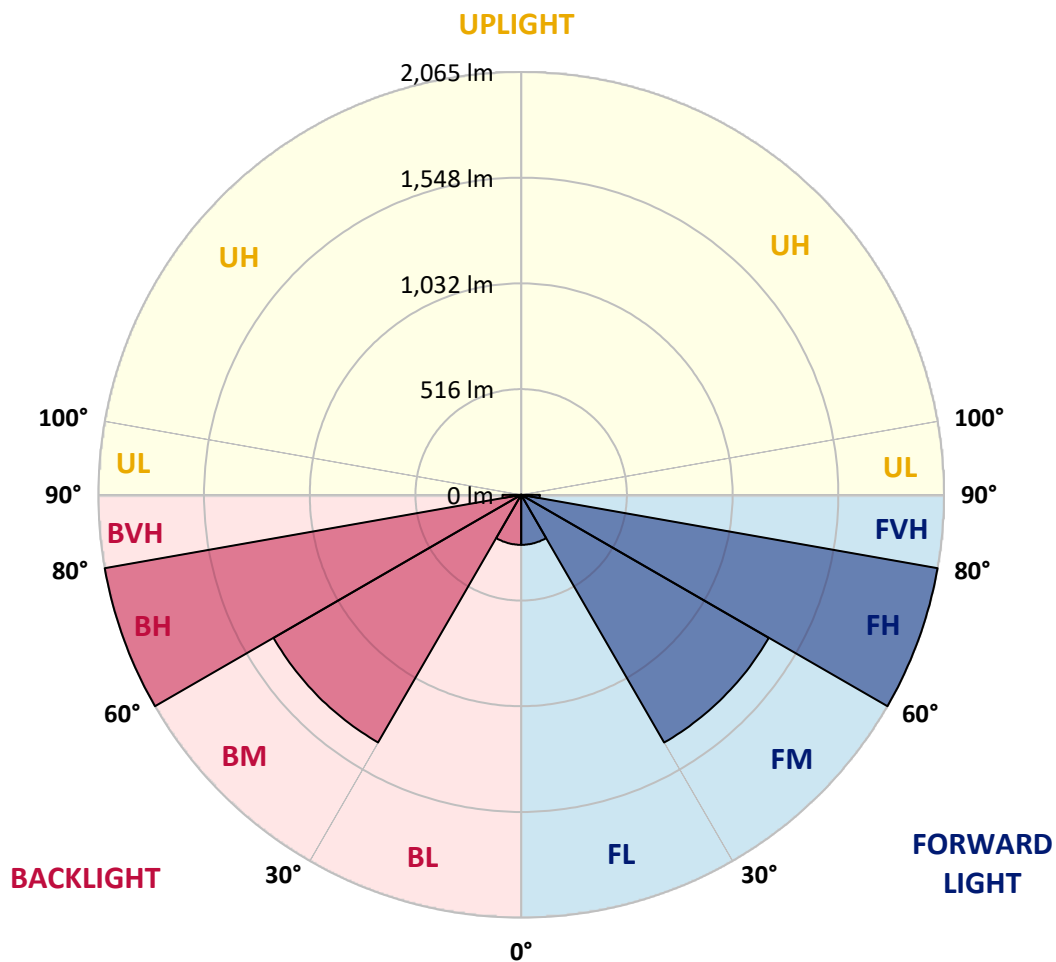
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 244.1  | 3.2       |                         |      |         |
| FM   | (30°-60°)   | 1396.4 | 18.4      |                         |      |         |
| FH   | (60°-80°)   | 2064.6 | 27.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 91.0   | 1.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 244.1  | 3.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1396.4 | 18.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2064.6 | 27.2      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 91.0   | 1.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  |
| 2.5°  | 439.8  | 439.8  | 439.8  | 439.3  | 439.3  | 438.8  | 439.3  | 438.8  | 438.8  | 438.8  | 438.8  |
| 5°    | 451.2  | 450.2  | 450.2  | 449.7  | 450.7  | 450.7  | 449.7  | 450.2  | 449.7  | 450.2  | 450.2  |
| 7.5°  | 465.6  | 465.6  | 465.6  | 465.1  | 466.1  | 465.6  | 465.1  | 465.6  | 465.6  | 465.1  | 465.1  |
| 10°   | 483.4  | 483.9  | 483.4  | 483.4  | 484.9  | 484.4  | 484.9  | 484.9  | 485.4  | 484.9  | 484.9  |
| 12.5° | 504.2  | 504.2  | 504.7  | 505.2  | 505.7  | 506.2  | 507.7  | 507.2  | 508.2  | 507.2  | 507.2  |
| 15°   | 528.5  | 529.5  | 528.5  | 528.5  | 530.0  | 531.0  | 531.5  | 531.5  | 532.5  | 532.0  | 531.0  |
| 17.5° | 554.3  | 554.8  | 554.3  | 553.8  | 555.2  | 556.7  | 557.2  | 557.2  | 558.7  | 557.7  | 557.7  |
| 20°   | 580.5  | 581.0  | 580.0  | 579.5  | 581.5  | 581.5  | 582.5  | 583.0  | 584.5  | 585.0  | 583.5  |
| 22.5° | 604.8  | 605.3  | 604.8  | 604.3  | 606.3  | 606.3  | 607.8  | 608.2  | 610.2  | 609.7  | 609.7  |
| 25°   | 628.6  | 628.6  | 628.1  | 628.1  | 630.0  | 630.5  | 632.0  | 633.0  | 635.0  | 635.0  | 635.0  |
| 27.5° | 650.3  | 650.8  | 649.9  | 649.4  | 653.3  | 654.8  | 655.8  | 657.8  | 659.3  | 660.3  | 659.8  |
| 30°   | 675.1  | 675.1  | 674.6  | 676.1  | 678.6  | 680.6  | 682.5  | 685.5  | 688.5  | 687.5  | 687.5  |
| 32.5° | 704.3  | 705.3  | 704.8  | 706.8  | 709.8  | 712.8  | 715.2  | 718.7  | 720.2  | 722.7  | 720.7  |
| 35°   | 743.5  | 745.4  | 744.5  | 746.4  | 748.9  | 750.9  | 756.3  | 759.8  | 762.3  | 763.8  | 762.8  |
| 37.5° | 792.5  | 791.5  | 793.5  | 794.0  | 798.9  | 801.4  | 807.9  | 812.8  | 816.8  | 818.3  | 817.3  |
| 40°   | 853.4  | 851.9  | 854.4  | 856.9  | 863.3  | 865.8  | 873.2  | 880.7  | 886.1  | 888.1  | 887.1  |
| 42.5° | 926.2  | 928.2  | 932.2  | 935.6  | 944.6  | 951.5  | 959.9  | 970.8  | 976.8  | 979.2  | 975.8  |
| 45°   | 1021.8 | 1018.4 | 1025.8 | 1034.7 | 1039.7 | 1055.0 | 1068.9 | 1080.3 | 1090.2 | 1094.2 | 1090.2 |
| 47.5° | 1130.8 | 1130.3 | 1139.2 | 1150.1 | 1163.0 | 1177.4 | 1193.7 | 1208.6 | 1225.9 | 1226.9 | 1221.9 |
| 50°   | 1251.2 | 1261.1 | 1266.0 | 1276.9 | 1300.7 | 1318.5 | 1339.3 | 1361.6 | 1377.5 | 1382.4 | 1373.5 |
| 52.5° | 1396.3 | 1403.7 | 1406.7 | 1425.0 | 1446.8 | 1468.6 | 1497.8 | 1524.6 | 1542.9 | 1544.9 | 1540.4 |
| 55°   | 1553.8 | 1559.7 | 1565.2 | 1587.5 | 1611.3 | 1630.6 | 1667.7 | 1694.0 | 1712.3 | 1719.2 | 1716.3 |
| 57.5° | 1716.8 | 1722.2 | 1729.1 | 1753.4 | 1777.7 | 1804.9 | 1840.1 | 1870.8 | 1892.1 | 1905.0 | 1901.5 |
| 60°   | 1897.6 | 1897.6 | 1913.4 | 1937.7 | 1957.5 | 1989.7 | 2026.3 | 2062.0 | 2085.3 | 2105.6 | 2100.1 |
| 62.5° | 2087.8 | 2093.2 | 2108.6 | 2128.4 | 2149.2 | 2178.9 | 2220.5 | 2263.1 | 2298.8 | 2314.1 | 2313.6 |
| 65°   | 2231.9 | 2241.8 | 2262.1 | 2284.9 | 2319.6 | 2354.7 | 2407.2 | 2460.2 | 2503.3 | 2525.6 | 2525.6 |
| 67.5° | 2274.0 | 2280.4 | 2305.7 | 2340.4 | 2390.4 | 2446.4 | 2517.7 | 2591.5 | 2650.4 | 2679.7 | 2661.3 |
| 69°   | 2240.3 | 2249.7 | 2272.0 | 2309.7 | 2369.1 | 2437.4 | 2522.1 | 2605.9 | 2674.2 | 2704.4 | 2683.1 |
| 70°   | 2201.2 | 2211.6 | 2233.9 | 2271.0 | 2332.4 | 2405.2 | 2489.9 | 2580.1 | 2653.4 | 2679.2 | 2654.9 |
| 72.5° | 2041.7 | 2054.6 | 2070.4 | 2102.6 | 2158.1 | 2226.4 | 2302.7 | 2382.0 | 2452.3 | 2472.6 | 2442.4 |
| 75°   | 1769.8 | 1772.2 | 1780.2 | 1803.9 | 1823.7 | 1872.3 | 1937.2 | 2000.1 | 2053.1 | 2065.0 | 2032.8 |
| 77.5° | 1252.7 | 1239.3 | 1225.9 | 1246.2 | 1262.1 | 1324.5 | 1394.8 | 1446.3 | 1501.8 | 1518.6 | 1485.9 |
| 80°   | 549.3  | 544.4  | 563.2  | 589.9  | 659.8  | 701.4  | 770.2  | 844.0  | 891.1  | 946.1  | 887.1  |
| 82.5° | 108.5  | 114.4  | 132.2  | 163.5  | 201.6  | 253.6  | 298.7  | 349.7  | 395.8  | 416.6  | 395.3  |
| 85°   | 44.1   | 48.0   | 54.5   | 60.9   | 65.4   | 73.3   | 86.2   | 107.0  | 117.9  | 119.4  | 113.4  |
| 87.5° | 18.3   | 21.3   | 28.7   | 34.2   | 34.7   | 33.2   | 34.2   | 35.2   | 28.7   | 23.3   | 29.2   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  | 436.4  |
| 2.5°  | 438.8  | 439.3  | 438.8  | 439.3  | 438.8  | 438.8  | 439.3  | 438.8  |
| 5°    | 449.7  | 450.2  | 449.7  | 449.3  | 448.8  | 449.3  | 449.3  | 449.3  |
| 7.5°  | 465.1  | 464.6  | 464.1  | 464.1  | 463.6  | 463.1  | 464.1  | 464.1  |
| 10°   | 483.9  | 483.4  | 482.4  | 482.4  | 481.9  | 481.9  | 481.9  | 481.9  |
| 12.5° | 506.7  | 505.2  | 504.7  | 503.2  | 502.7  | 502.2  | 502.2  | 502.7  |
| 15°   | 530.5  | 529.0  | 528.5  | 526.0  | 526.0  | 525.5  | 525.5  | 525.5  |
| 17.5° | 555.7  | 554.3  | 552.3  | 552.3  | 550.8  | 549.8  | 550.3  | 549.3  |
| 20°   | 581.5  | 579.5  | 578.5  | 578.0  | 576.1  | 576.1  | 576.1  | 575.6  |
| 22.5° | 606.8  | 605.3  | 603.8  | 601.8  | 599.8  | 599.3  | 599.3  | 598.8  |
| 25°   | 632.5  | 630.0  | 627.1  | 625.1  | 623.1  | 621.6  | 621.6  | 621.6  |
| 27.5° | 658.3  | 655.3  | 650.8  | 648.4  | 645.4  | 643.9  | 643.9  | 643.4  |
| 30°   | 685.5  | 682.0  | 678.1  | 674.6  | 670.7  | 669.2  | 668.7  | 667.7  |
| 32.5° | 718.2  | 714.7  | 710.8  | 705.8  | 701.9  | 699.4  | 699.4  | 697.9  |
| 35°   | 759.8  | 755.9  | 752.9  | 746.4  | 741.5  | 737.5  | 738.0  | 739.0  |
| 37.5° | 814.3  | 809.3  | 806.9  | 798.9  | 792.5  | 788.5  | 788.5  | 788.0  |
| 40°   | 883.6  | 878.7  | 873.2  | 865.8  | 857.9  | 852.4  | 851.0  | 851.0  |
| 42.5° | 971.8  | 967.4  | 959.9  | 949.5  | 940.1  | 934.2  | 929.2  | 929.7  |
| 45°   | 1082.3 | 1076.8 | 1066.4 | 1053.5 | 1042.1 | 1033.7 | 1026.8 | 1026.8 |
| 47.5° | 1216.5 | 1205.1 | 1190.7 | 1179.3 | 1160.0 | 1147.1 | 1142.2 | 1141.2 |
| 50°   | 1369.5 | 1348.2 | 1330.4 | 1314.1 | 1293.8 | 1280.4 | 1273.0 | 1271.0 |
| 52.5° | 1530.0 | 1507.7 | 1485.4 | 1464.2 | 1439.4 | 1425.5 | 1413.6 | 1412.6 |
| 55°   | 1704.4 | 1676.1 | 1647.9 | 1627.1 | 1597.9 | 1583.5 | 1571.6 | 1564.7 |
| 57.5° | 1882.2 | 1850.5 | 1830.2 | 1800.5 | 1769.8 | 1759.4 | 1748.0 | 1739.5 |
| 60°   | 2082.3 | 2047.6 | 2020.9 | 1989.7 | 1969.9 | 1947.6 | 1936.7 | 1930.2 |
| 62.5° | 2286.9 | 2254.7 | 2220.5 | 2190.8 | 2163.0 | 2147.7 | 2132.8 | 2125.4 |
| 65°   | 2494.9 | 2441.9 | 2401.3 | 2360.2 | 2327.5 | 2299.7 | 2276.5 | 2273.5 |
| 67.5° | 2622.7 | 2555.8 | 2488.0 | 2428.0 | 2380.0 | 2340.9 | 2317.1 | 2308.7 |
| 69°   | 2633.1 | 2560.3 | 2475.6 | 2403.8 | 2348.3 | 2310.6 | 2282.4 | 2273.5 |
| 70°   | 2604.4 | 2531.1 | 2441.9 | 2364.6 | 2307.2 | 2266.1 | 2242.8 | 2227.9 |
| 72.5° | 2394.4 | 2330.0 | 2244.3 | 2168.0 | 2116.0 | 2067.9 | 2044.7 | 2038.7 |
| 75°   | 1975.3 | 1907.0 | 1828.2 | 1791.6 | 1755.4 | 1725.2 | 1709.3 | 1707.8 |
| 77.5° | 1402.7 | 1332.9 | 1273.0 | 1224.9 | 1185.8 | 1166.5 | 1170.9 | 1154.6 |
| 80°   | 802.9  | 711.8  | 639.5  | 596.9  | 538.9  | 504.2  | 465.1  | 493.3  |
| 82.5° | 345.2  | 278.9  | 212.5  | 172.9  | 131.8  | 104.5  | 86.2   | 80.2   |
| 85°   | 96.6   | 78.8   | 65.9   | 60.4   | 54.5   | 48.5   | 41.1   | 38.1   |
| 87.5° | 32.7   | 31.2   | 27.7   | 27.7   | 25.3   | 21.3   | 14.9   | 13.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)