

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: P322405

Luminaire Tested: **GAN-SA1C-830-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA1C-830-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4289 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

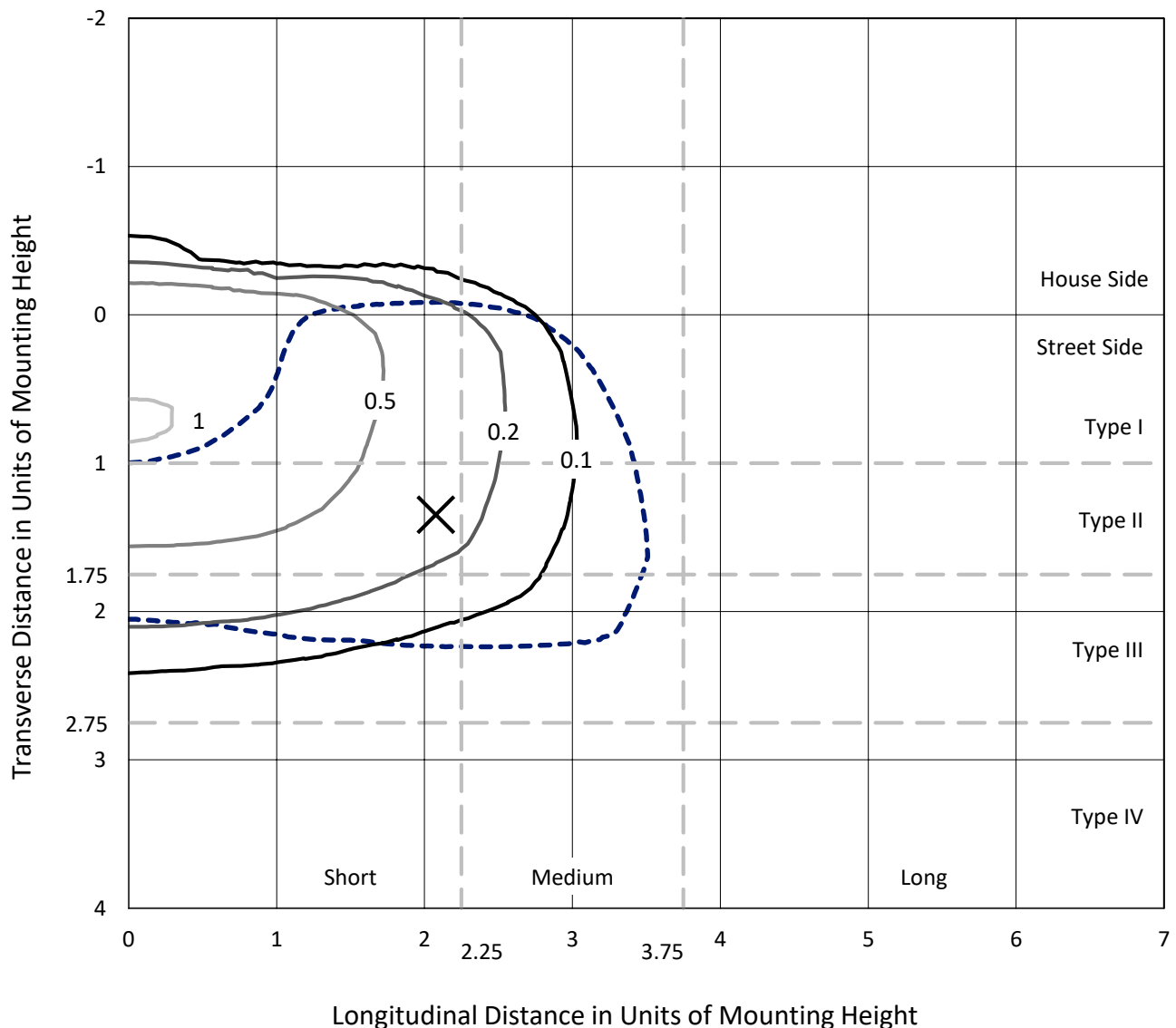
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

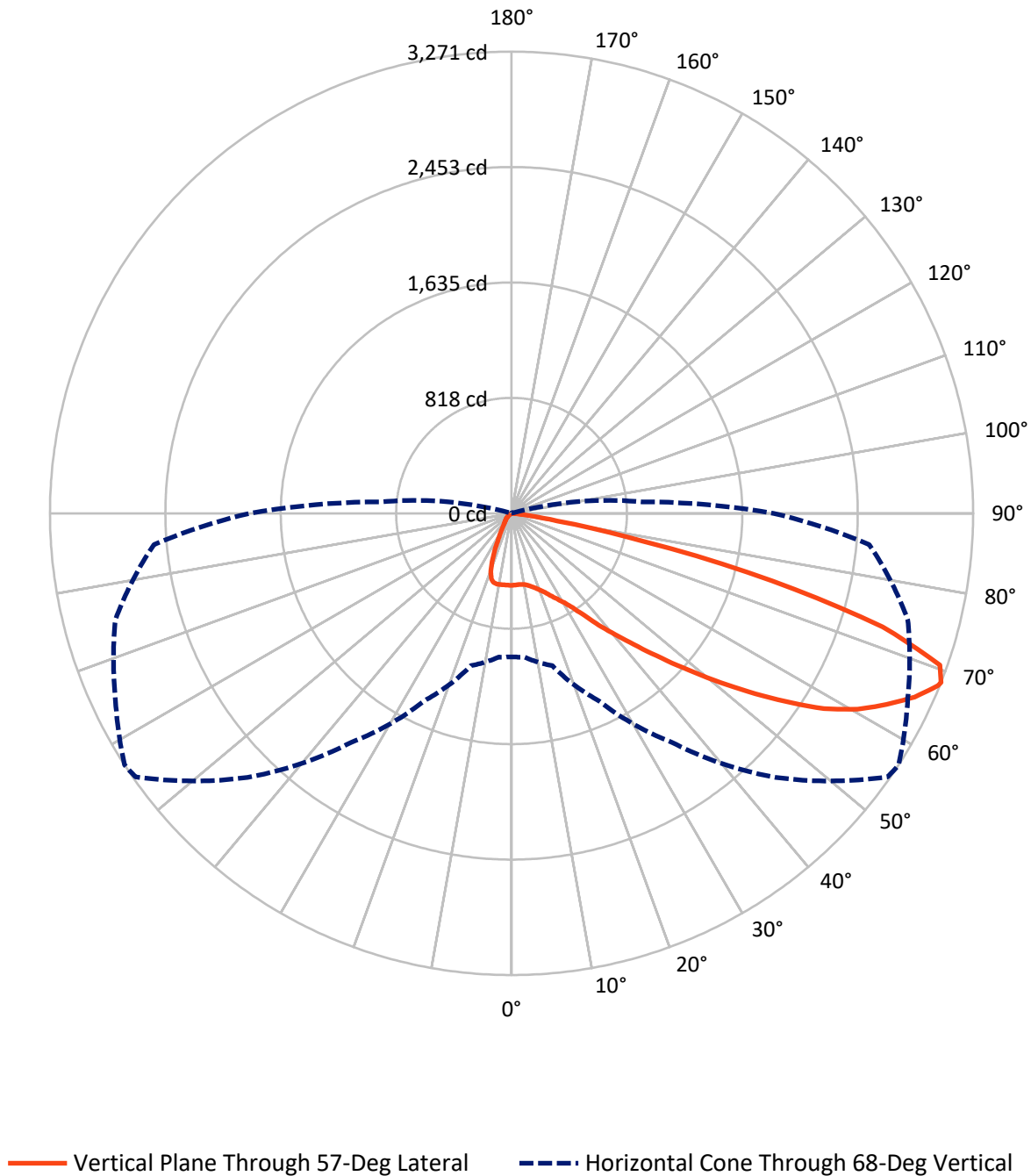
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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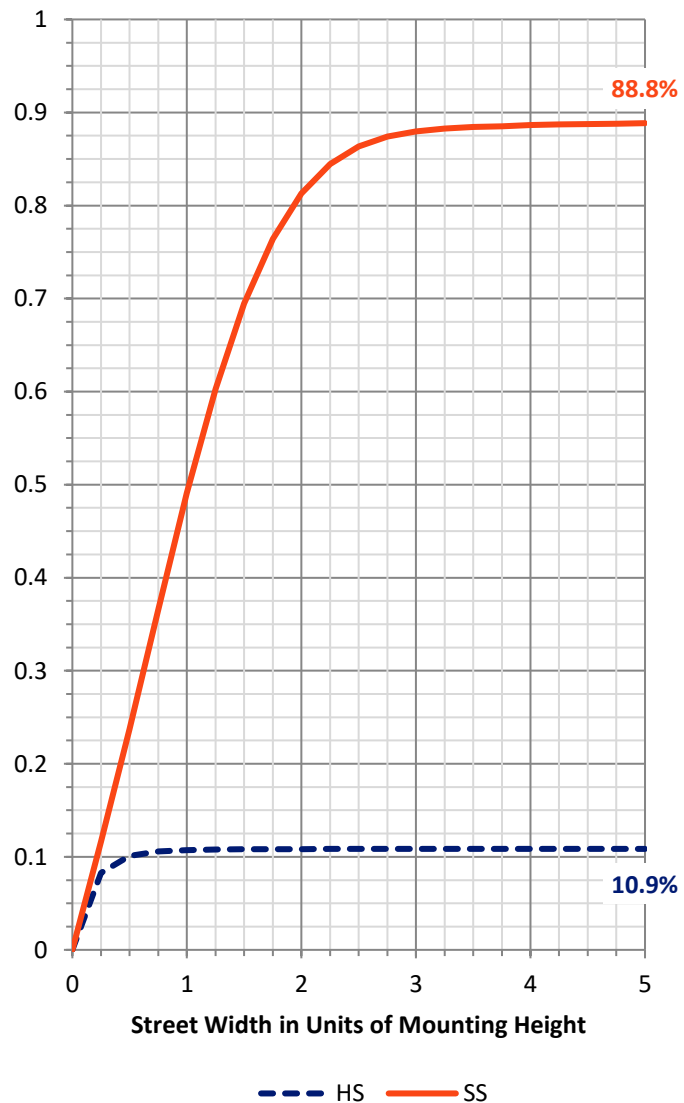
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 470.3    | 0.0    | 470.3  |
|                    | % Fixture | 11.0     | 0.0    | 11.0   |
| <b>Street Side</b> | Lumens    | 3818.7   | 0.0    | 3818.7 |
|                    | % Fixture | 89.0     | 0.0    | 89.0   |
| <b>Total</b>       | Lumens    | 4289.0   | 0.0    | 4289.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 47.7   | 1.1       |
| 10°-20°   | 132.2  | 3.1       |
| 20°-30°   | 228.0  | 5.3       |
| 30°-40°   | 393.5  | 9.2       |
| 40°-50°   | 673.1  | 15.7      |
| 50°-60°   | 1076.9 | 25.1      |
| 60°-70°   | 1244.3 | 29.0      |
| 70°-80°   | 475.4  | 11.1      |
| 80°-90°   | 17.8   | 0.4       |
| 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°    | 4289.0 | 100.0     |
| 0°-180°   | 4289.0 | 100.0     |

**Coefficient of Utilization**



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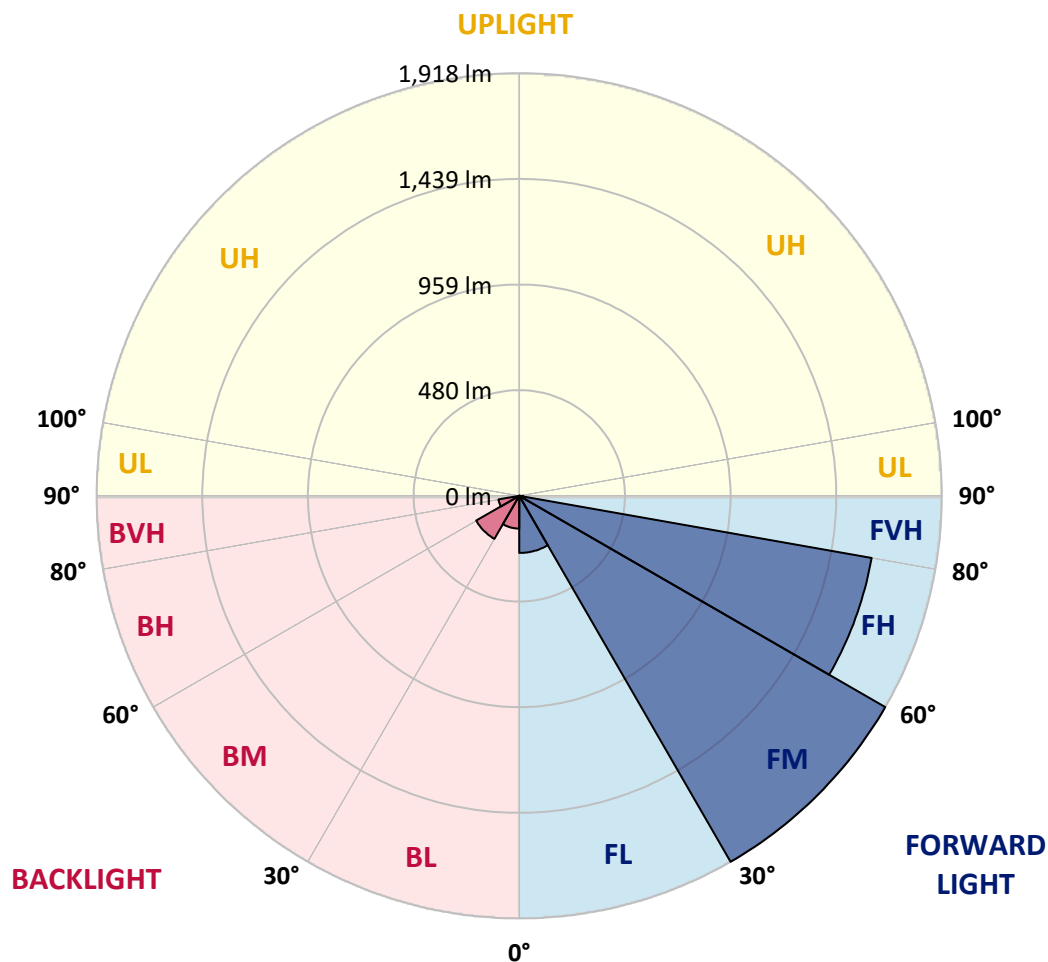
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 259.2  | 6.0       |                         |      |         |
| FM   | (30°-60°)   | 1918.0 | 44.7      |                         |      |         |
| FH   | (60°-80°)   | 1623.9 | 37.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 17.5   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 148.6  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 225.6  | 5.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 95.8   | 2.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 57°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  |
| 2.5°  | 497.7  | 499.9  | 501.5  | 502.5  | 503.8  | 506.4  | 507.2  | 508.4  | 509.0  | 509.0  | 510.5  |
| 5°    | 478.0  | 480.4  | 483.9  | 486.7  | 492.4  | 499.7  | 505.0  | 507.0  | 510.7  | 513.9  | 515.7  |
| 7.5°  | 459.8  | 462.6  | 466.7  | 473.3  | 483.1  | 494.8  | 505.8  | 508.6  | 515.7  | 522.6  | 526.1  |
| 10°   | 448.0  | 450.2  | 455.5  | 465.0  | 477.8  | 494.2  | 509.6  | 513.1  | 525.3  | 536.8  | 543.3  |
| 12.5° | 443.9  | 446.0  | 451.4  | 462.2  | 478.0  | 497.3  | 518.6  | 523.6  | 541.5  | 558.3  | 567.4  |
| 15°   | 449.8  | 450.2  | 456.1  | 466.2  | 481.9  | 504.8  | 533.4  | 539.5  | 562.0  | 583.9  | 595.2  |
| 17.5° | 472.5  | 470.7  | 473.7  | 478.2  | 490.6  | 514.7  | 549.0  | 558.1  | 588.1  | 613.9  | 624.6  |
| 20°   | 529.3  | 529.3  | 522.4  | 510.3  | 510.5  | 530.1  | 570.1  | 580.4  | 617.1  | 646.9  | 656.7  |
| 22.5° | 626.5  | 624.6  | 610.8  | 581.0  | 553.7  | 556.7  | 595.8  | 609.2  | 652.0  | 683.9  | 687.1  |
| 25°   | 743.3  | 741.0  | 719.8  | 677.8  | 630.3  | 599.7  | 630.7  | 646.1  | 693.6  | 721.8  | 715.1  |
| 27.5° | 867.0  | 865.2  | 844.1  | 791.9  | 724.4  | 668.2  | 672.3  | 686.9  | 736.0  | 763.8  | 742.5  |
| 30°   | 986.8  | 987.5  | 966.6  | 913.0  | 836.6  | 755.6  | 725.0  | 733.5  | 777.1  | 805.3  | 774.9  |
| 32.5° | 1100.8 | 1101.6 | 1083.6 | 1023.8 | 952.4  | 857.3  | 798.0  | 795.8  | 825.0  | 852.8  | 817.9  |
| 35°   | 1202.4 | 1204.5 | 1192.1 | 1145.6 | 1070.0 | 970.4  | 892.7  | 887.5  | 892.9  | 924.4  | 883.8  |
| 37.5° | 1300.4 | 1301.6 | 1292.3 | 1253.1 | 1189.9 | 1094.7 | 1012.4 | 1004.9 | 993.1  | 1017.3 | 970.8  |
| 40°   | 1407.7 | 1404.6 | 1393.9 | 1358.4 | 1304.0 | 1232.0 | 1141.0 | 1128.0 | 1107.5 | 1129.0 | 1085.2 |
| 42.5° | 1507.4 | 1504.0 | 1505.8 | 1465.7 | 1419.8 | 1373.2 | 1290.8 | 1268.5 | 1256.6 | 1281.3 | 1225.5 |
| 45°   | 1632.2 | 1630.3 | 1636.4 | 1601.5 | 1564.4 | 1530.6 | 1462.6 | 1438.3 | 1433.0 | 1462.0 | 1395.3 |
| 47.5° | 1755.3 | 1759.7 | 1778.6 | 1763.8 | 1748.8 | 1719.0 | 1644.5 | 1633.6 | 1636.8 | 1671.9 | 1574.4 |
| 50°   | 1857.9 | 1863.2 | 1914.9 | 1931.9 | 1953.6 | 1936.2 | 1861.5 | 1854.8 | 1867.6 | 1899.3 | 1767.0 |
| 52.5° | 1932.1 | 1942.9 | 2007.2 | 2085.6 | 2164.7 | 2176.5 | 2102.1 | 2096.0 | 2113.2 | 2118.1 | 1915.9 |
| 55°   | 1983.6 | 1993.2 | 2066.0 | 2209.5 | 2370.6 | 2421.3 | 2375.0 | 2351.5 | 2348.3 | 2300.2 | 2072.5 |
| 57.5° | 1992.8 | 1991.7 | 2096.4 | 2289.7 | 2532.0 | 2662.8 | 2633.6 | 2610.5 | 2544.0 | 2468.5 | 2251.9 |
| 60°   | 1941.2 | 1947.1 | 2068.6 | 2317.4 | 2633.4 | 2845.5 | 2847.8 | 2817.8 | 2714.1 | 2632.2 | 2425.9 |
| 62.5° | 1782.6 | 1806.6 | 1929.3 | 2244.6 | 2632.2 | 2919.2 | 3004.7 | 2981.8 | 2857.9 | 2766.2 | 2602.4 |
| 65°   | 1525.5 | 1534.0 | 1651.0 | 1995.2 | 2454.3 | 2888.3 | 3146.1 | 3137.6 | 2987.5 | 2896.4 | 2693.0 |
| 67.5° | 1114.0 | 1095.5 | 1218.4 | 1571.1 | 2077.9 | 2708.6 | 3247.5 | 3258.2 | 3087.5 | 2923.2 | 2596.5 |
| 68°   | 1016.7 | 1022.1 | 1117.9 | 1466.3 | 1979.4 | 2645.2 | 3254.2 | 3270.6 | 3097.4 | 2905.8 | 2543.8 |
| 70°   | 606.0  | 616.5  | 701.9  | 1009.6 | 1505.8 | 2286.0 | 3182.0 | 3219.5 | 3038.2 | 2725.9 | 2200.2 |
| 72.5° | 154.7  | 167.3  | 248.0  | 451.8  | 860.1  | 1610.7 | 2686.1 | 2749.6 | 2637.9 | 2211.4 | 1485.3 |
| 75°   | 63.7   | 66.9   | 88.6   | 148.9  | 320.4  | 725.6  | 1770.5 | 1906.4 | 1828.7 | 1323.9 | 671.3  |
| 77.5° | 44.0   | 46.2   | 57.0   | 82.5   | 138.7  | 246.0  | 868.0  | 966.2  | 870.4  | 451.8  | 146.4  |
| 80°   | 31.6   | 33.5   | 40.8   | 55.0   | 79.7   | 87.8   | 282.9  | 327.1  | 259.8  | 99.2   | 36.3   |
| 82.5° | 18.9   | 20.3   | 30.4   | 39.1   | 48.5   | 42.0   | 70.4   | 79.9   | 75.2   | 49.3   | 16.2   |
| 85°   | 9.3    | 11.0   | 20.5   | 28.0   | 26.2   | 17.6   | 21.5   | 23.9   | 29.6   | 30.0   | 8.7    |
| 87.5° | 0.6    | 1.2    | 12.0   | 16.8   | 7.3    | 4.1    | 6.3    | 7.7    | 10.5   | 14.8   | 3.7    |
| 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):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 509.6  | 509.6  | 509.6 | 509.6 | 509.6 | 509.6 | 509.6 | 509.6 | 509.6 | 509.6 | 509.6 |
| 2.5°  | 511.1  | 511.3  | 509.8 | 509.2 | 509.6 | 507.2 | 506.2 | 506.6 | 506.6 | 507.2 | 506.2 |
| 5°    | 516.1  | 516.1  | 513.7 | 510.5 | 508.6 | 504.0 | 500.9 | 500.1 | 499.5 | 499.1 | 498.3 |
| 7.5°  | 527.1  | 525.9  | 521.6 | 514.5 | 508.4 | 498.3 | 490.6 | 486.5 | 484.5 | 483.7 | 483.1 |
| 10°   | 544.7  | 542.5  | 535.4 | 522.2 | 508.2 | 490.2 | 473.3 | 461.4 | 451.4 | 447.4 | 445.0 |
| 12.5° | 568.5  | 565.2  | 553.2 | 531.3 | 506.8 | 473.5 | 437.0 | 402.0 | 369.3 | 355.9 | 349.2 |
| 15°   | 595.8  | 591.2  | 572.3 | 539.1 | 498.5 | 436.0 | 356.7 | 295.3 | 250.1 | 233.0 | 225.7 |
| 17.5° | 623.6  | 617.5  | 588.9 | 543.9 | 473.5 | 358.4 | 250.3 | 189.0 | 158.8 | 150.7 | 147.8 |
| 20°   | 651.6  | 642.7  | 603.3 | 540.3 | 417.2 | 258.4 | 165.1 | 138.1 | 129.4 | 127.0 | 126.1 |
| 22.5° | 678.2  | 664.4  | 616.3 | 526.1 | 330.4 | 173.4 | 130.6 | 122.1 | 119.2 | 117.8 | 117.4 |
| 25°   | 701.3  | 682.0  | 627.7 | 482.3 | 233.8 | 131.0 | 117.6 | 114.8 | 111.1 | 108.5 | 108.7 |
| 27.5° | 723.0  | 699.7  | 634.6 | 410.1 | 156.0 | 111.9 | 108.9 | 105.1 | 98.4  | 94.5  | 94.5  |
| 30°   | 749.2  | 723.2  | 639.6 | 315.6 | 114.8 | 99.0  | 96.5  | 90.7  | 81.5  | 76.5  | 76.5  |
| 32.5° | 788.5  | 758.9  | 636.4 | 221.5 | 95.1  | 87.0  | 81.3  | 73.2  | 63.3  | 58.4  | 58.2  |
| 35°   | 848.7  | 814.1  | 613.3 | 145.2 | 84.0  | 75.6  | 66.5  | 56.6  | 47.9  | 43.8  | 43.6  |
| 37.5° | 929.9  | 887.9  | 561.4 | 103.8 | 75.2  | 65.1  | 54.1  | 43.2  | 36.7  | 34.1  | 33.9  |
| 40°   | 1035.1 | 973.7  | 487.1 | 84.2  | 67.1  | 55.0  | 41.8  | 33.5  | 29.0  | 27.0  | 27.2  |
| 42.5° | 1161.5 | 1065.5 | 398.1 | 72.6  | 59.2  | 45.2  | 32.7  | 26.4  | 23.5  | 22.1  | 21.7  |
| 45°   | 1301.8 | 1156.2 | 304.8 | 64.7  | 51.3  | 36.5  | 25.6  | 20.9  | 18.7  | 17.8  | 17.8  |
| 47.5° | 1456.1 | 1244.4 | 223.1 | 57.8  | 42.8  | 28.2  | 20.5  | 17.0  | 15.2  | 14.6  | 14.4  |
| 50°   | 1596.3 | 1305.7 | 160.8 | 50.5  | 35.1  | 22.3  | 16.6  | 14.2  | 13.0  | 12.2  | 12.2  |
| 52.5° | 1713.1 | 1324.9 | 118.4 | 42.6  | 28.4  | 17.8  | 13.8  | 12.2  | 11.0  | 10.3  | 10.3  |
| 55°   | 1815.9 | 1317.0 | 88.0  | 35.1  | 22.9  | 14.6  | 11.8  | 10.3  | 9.3   | 8.7   | 8.7   |
| 57.5° | 1914.5 | 1291.5 | 65.7  | 28.6  | 18.5  | 11.8  | 9.9   | 8.7   | 7.7   | 7.3   | 7.3   |
| 60°   | 1995.0 | 1248.9 | 48.9  | 23.1  | 14.8  | 9.5   | 8.3   | 7.1   | 6.3   | 5.7   | 5.7   |
| 62.5° | 2060.3 | 1201.8 | 35.9  | 19.1  | 11.8  | 7.5   | 6.5   | 5.9   | 4.7   | 4.1   | 4.1   |
| 65°   | 2060.7 | 1123.7 | 27.0  | 15.8  | 9.1   | 5.9   | 4.9   | 4.7   | 3.0   | 2.4   | 2.2   |
| 67.5° | 1911.6 | 968.8  | 20.7  | 13.6  | 7.1   | 4.5   | 3.7   | 3.9   | 1.6   | 1.0   | 0.8   |
| 68°   | 1857.5 | 929.5  | 19.5  | 13.4  | 6.7   | 4.3   | 3.4   | 3.9   | 1.4   | 0.8   | 0.6   |
| 70°   | 1566.1 | 739.4  | 15.6  | 13.0  | 5.9   | 3.2   | 2.8   | 3.9   | 1.2   | 0.6   | 0.4   |
| 72.5° | 1001.6 | 429.1  | 11.6  | 10.3  | 4.5   | 2.4   | 1.8   | 3.4   | 1.2   | 0.4   | 0.2   |
| 75°   | 426.3  | 133.0  | 7.9   | 7.3   | 2.6   | 1.8   | 1.2   | 2.2   | 0.8   | 0.2   | 0.0   |
| 77.5° | 89.8   | 30.0   | 4.7   | 4.5   | 1.8   | 1.2   | 0.8   | 0.6   | 0.2   | 0.0   | 0.0   |
| 80°   | 23.1   | 8.7    | 2.4   | 2.2   | 1.0   | 0.6   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 7.3    | 3.4    | 1.4   | 1.0   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 3.7    | 2.0    | 0.8   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 2.0    | 0.6    | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)