

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: P318865

Luminaire Tested: **GAN-SA1A-830-U-T4FT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318865  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA1A-830-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3901 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

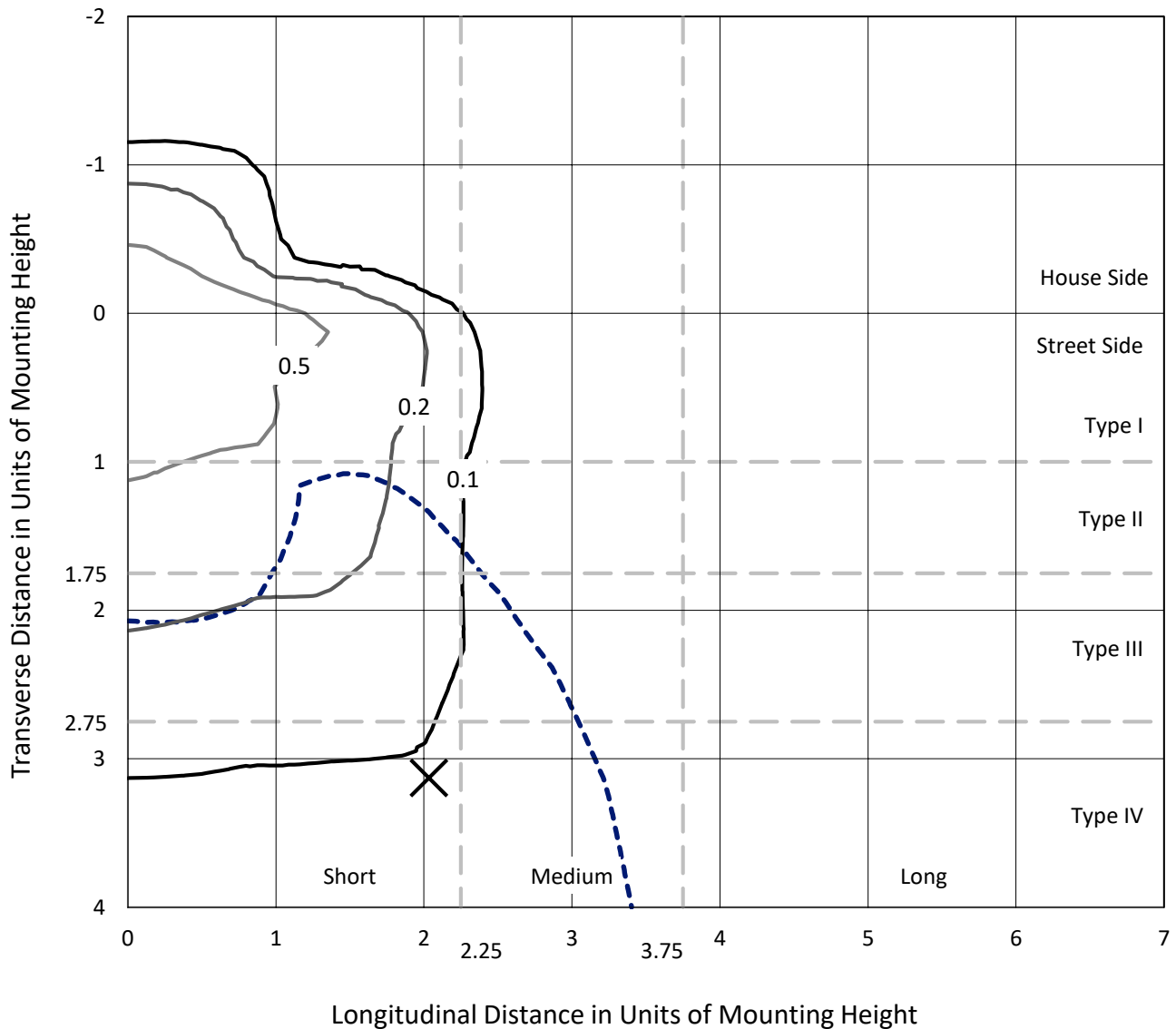
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

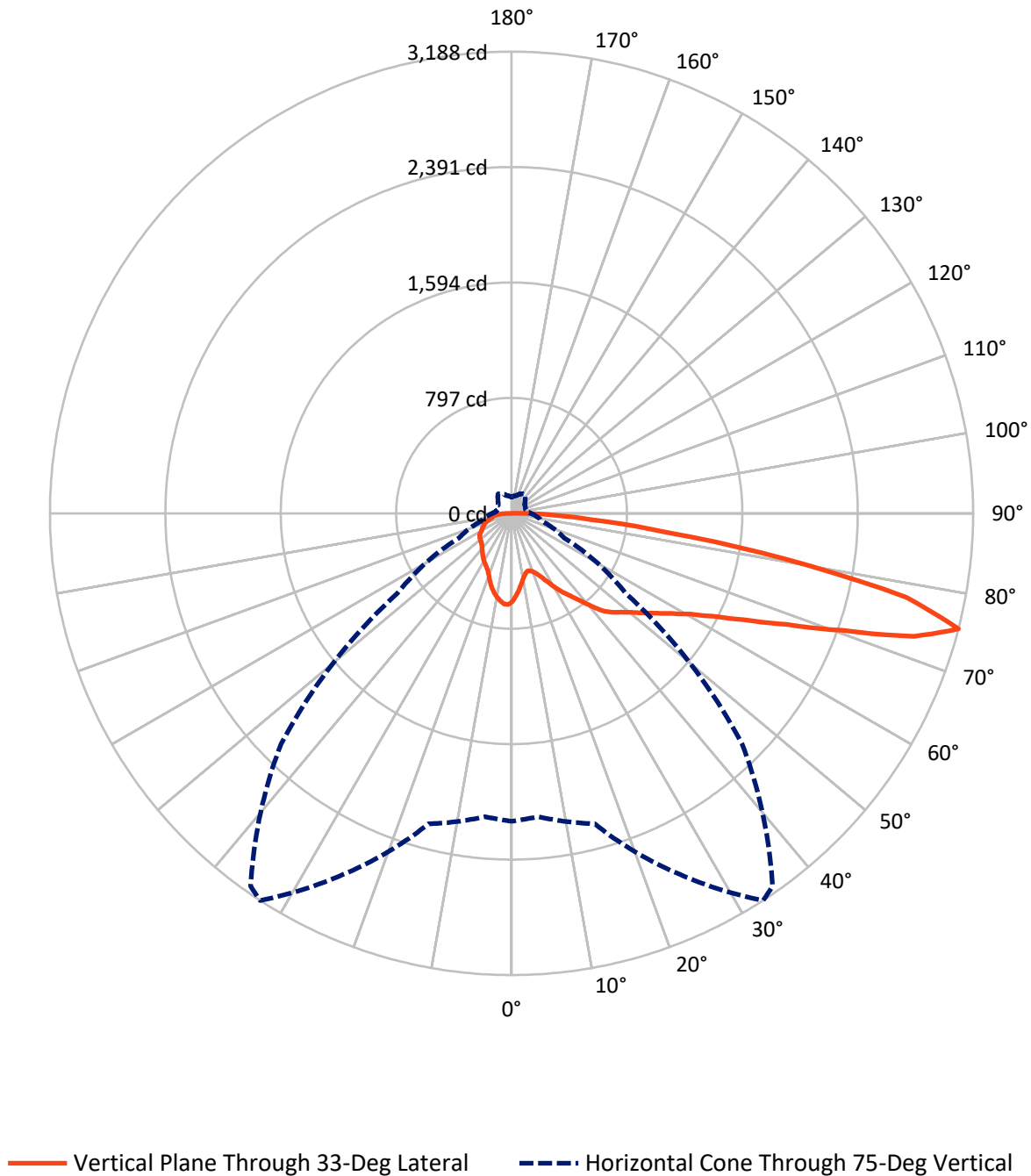
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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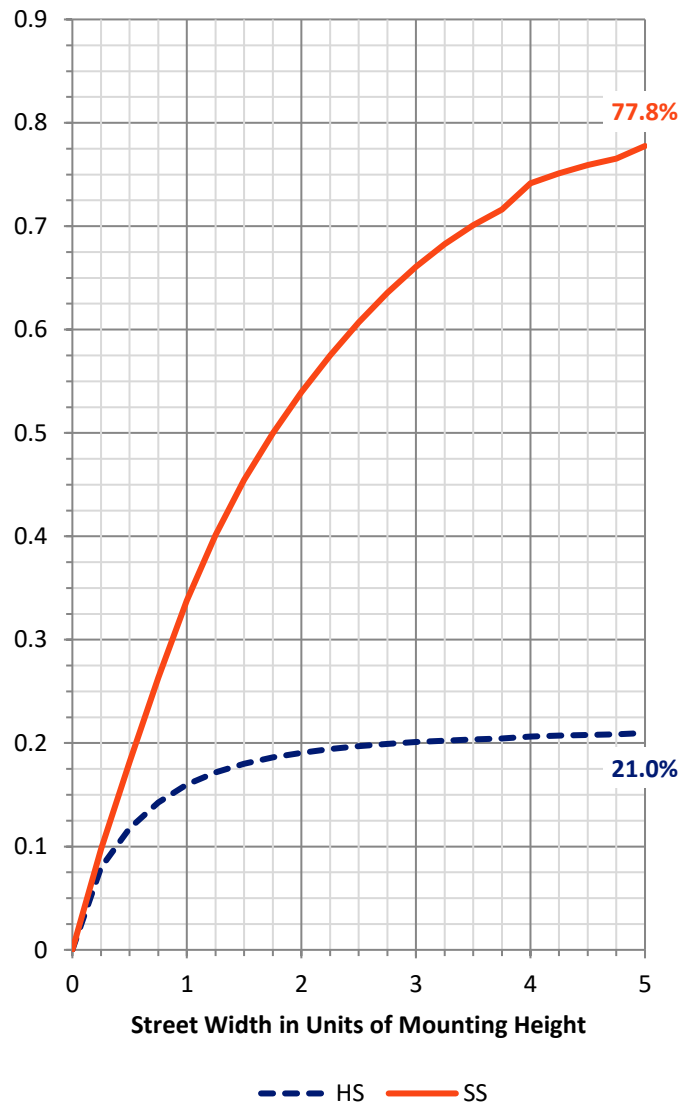
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 837.7    | 0.0    | 837.7  |
|                    | % Fixture | 21.5     | 0.0    | 21.5   |
| <b>Street Side</b> | Lumens    | 3063.3   | 0.0    | 3063.3 |
|                    | % Fixture | 78.5     | 0.0    | 78.5   |
| <b>Total</b>       | Lumens    | 3901.0   | 0.0    | 3901.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 55.1   | 1.4       |
| 10°-20°   | 149.4  | 3.8       |
| 20°-30°   | 243.9  | 6.3       |
| 30°-40°   | 363.2  | 9.3       |
| 40°-50°   | 521.0  | 13.4      |
| 50°-60°   | 715.2  | 18.3      |
| 60°-70°   | 895.5  | 23.0      |
| 70°-80°   | 810.1  | 20.8      |
| 80°-90°   | 147.6  | 3.8       |
| 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°    | 3901.0 | 100.0     |
| 0°-180°   | 3901.0 | 100.0     |

**Coefficient of Utilization**



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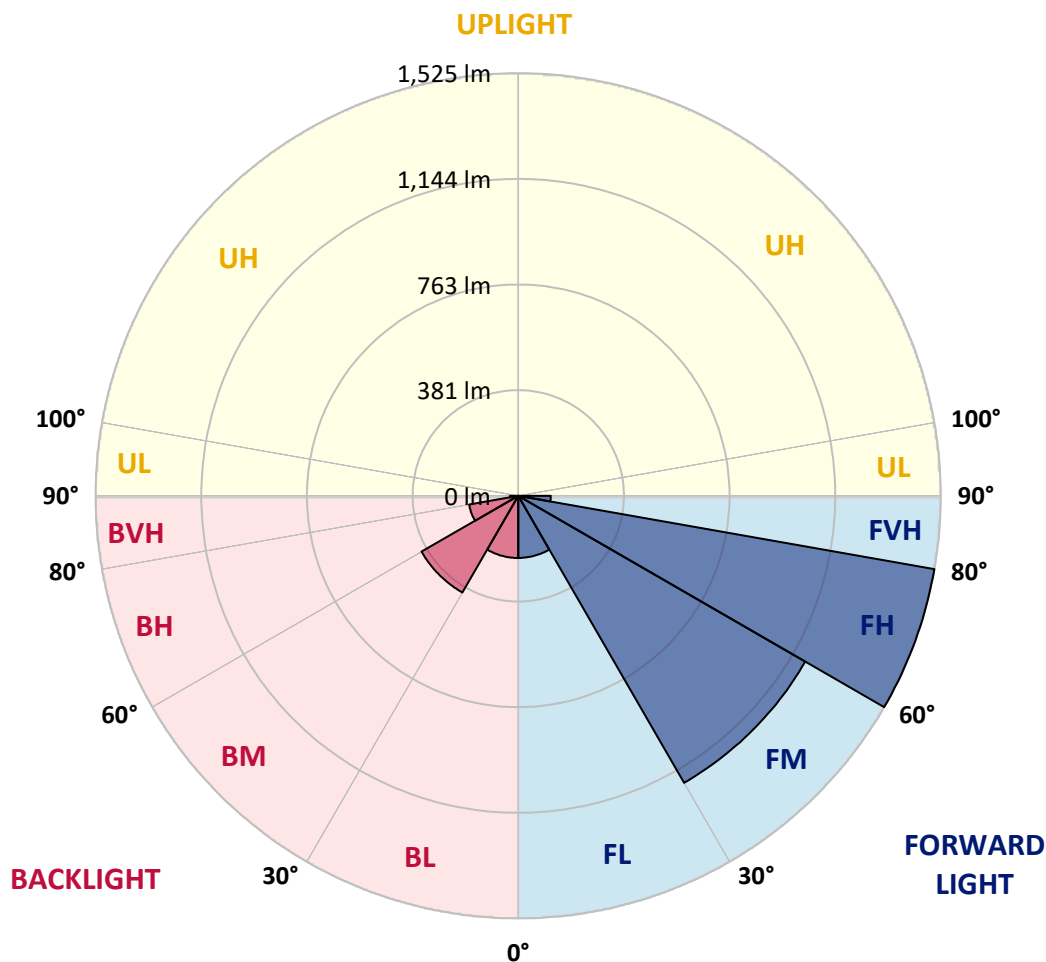
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 224.1  | 5.7       |                         |      |         |
| FM   | (30°-60°)   | 1196.4 | 30.7      |                         |      |         |
| FH   | (60°-80°)   | 1525.4 | 39.1      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 117.5  | 3.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 224.4  | 5.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 403.1  | 10.3      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 180.1  | 4.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 30.0   | 0.8       |                         |      | 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°     | 15°    | 25°    | 33°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  | 609.7  |
| 2.5°  | 566.2  | 564.1  | 568.1  | 568.6  | 572.2  | 573.5  | 578.4  | 585.9  | 592.1  | 599.2  | 605.7  |
| 5°    | 514.9  | 513.4  | 519.1  | 523.1  | 530.8  | 534.0  | 545.5  | 561.5  | 575.8  | 592.0  | 606.6  |
| 7.5°  | 466.1  | 465.3  | 471.6  | 480.8  | 489.7  | 494.1  | 513.9  | 537.3  | 561.1  | 587.2  | 609.7  |
| 10°   | 425.0  | 424.7  | 430.8  | 439.8  | 452.9  | 457.9  | 483.5  | 514.2  | 547.6  | 583.6  | 615.0  |
| 12.5° | 402.0  | 402.9  | 405.7  | 413.3  | 425.4  | 430.4  | 458.8  | 494.9  | 536.3  | 582.4  | 622.7  |
| 15°   | 407.6  | 409.1  | 404.3  | 404.0  | 412.6  | 416.5  | 443.2  | 481.2  | 528.2  | 584.4  | 633.9  |
| 17.5° | 431.7  | 432.0  | 419.2  | 411.1  | 416.4  | 418.4  | 438.3  | 473.4  | 523.5  | 589.0  | 647.9  |
| 20°   | 465.7  | 465.0  | 442.4  | 428.9  | 431.7  | 432.3  | 445.2  | 473.5  | 523.1  | 596.9  | 666.1  |
| 22.5° | 510.7  | 505.7  | 475.3  | 456.9  | 456.3  | 455.5  | 462.9  | 483.5  | 529.0  | 609.9  | 687.8  |
| 25°   | 569.5  | 564.7  | 522.8  | 497.8  | 492.4  | 490.4  | 491.4  | 504.8  | 540.8  | 623.8  | 712.0  |
| 27.5° | 634.8  | 626.6  | 586.2  | 550.7  | 539.5  | 536.7  | 530.2  | 534.8  | 553.6  | 637.1  | 740.9  |
| 30°   | 689.5  | 685.1  | 649.8  | 607.7  | 594.5  | 590.5  | 573.5  | 568.5  | 572.0  | 655.3  | 777.2  |
| 32.5° | 720.1  | 717.1  | 695.7  | 661.8  | 649.5  | 643.8  | 619.9  | 609.9  | 601.7  | 684.0  | 826.6  |
| 35°   | 757.2  | 755.3  | 742.3  | 717.7  | 699.5  | 693.6  | 675.0  | 664.6  | 643.4  | 723.5  | 890.3  |
| 37.5° | 804.3  | 802.3  | 802.6  | 782.6  | 760.9  | 755.4  | 743.2  | 732.2  | 697.6  | 775.4  | 959.6  |
| 40°   | 857.7  | 853.8  | 852.3  | 851.4  | 837.6  | 834.5  | 828.0  | 813.2  | 765.5  | 837.3  | 1027.9 |
| 42.5° | 938.0  | 924.1  | 894.5  | 905.7  | 919.3  | 917.7  | 922.9  | 901.6  | 841.0  | 910.6  | 1094.6 |
| 45°   | 1015.5 | 992.7  | 941.5  | 943.9  | 973.7  | 982.7  | 1022.1 | 1007.0 | 922.8  | 991.0  | 1163.6 |
| 47.5° | 1050.8 | 1033.5 | 990.0  | 990.2  | 1019.7 | 1038.4 | 1124.6 | 1113.9 | 1008.7 | 1082.2 | 1247.8 |
| 50°   | 1090.3 | 1073.0 | 1033.9 | 1048.6 | 1074.4 | 1094.3 | 1223.7 | 1218.1 | 1090.5 | 1182.0 | 1348.7 |
| 52.5° | 1133.4 | 1104.1 | 1079.4 | 1105.6 | 1141.7 | 1164.9 | 1322.9 | 1307.8 | 1165.6 | 1282.6 | 1464.7 |
| 55°   | 1133.9 | 1126.0 | 1144.8 | 1164.1 | 1218.1 | 1246.6 | 1426.7 | 1386.9 | 1226.8 | 1381.3 | 1559.2 |
| 57.5° | 1198.5 | 1185.5 | 1225.6 | 1234.5 | 1305.1 | 1337.1 | 1530.1 | 1455.7 | 1289.0 | 1457.1 | 1610.1 |
| 60°   | 1283.9 | 1272.9 | 1305.6 | 1329.0 | 1412.6 | 1455.4 | 1640.5 | 1526.5 | 1337.9 | 1514.2 | 1607.7 |
| 62.5° | 1431.5 | 1418.9 | 1418.5 | 1451.4 | 1563.9 | 1613.8 | 1764.3 | 1595.9 | 1357.3 | 1525.5 | 1539.1 |
| 65°   | 1647.5 | 1627.5 | 1589.9 | 1605.6 | 1772.9 | 1822.6 | 1902.7 | 1646.1 | 1331.7 | 1464.9 | 1362.5 |
| 67.5° | 1857.7 | 1857.0 | 1810.8 | 1842.9 | 2048.9 | 2088.8 | 2060.3 | 1651.1 | 1251.8 | 1253.7 | 1049.0 |
| 70°   | 2067.2 | 2069.9 | 2062.1 | 2173.7 | 2421.7 | 2463.2 | 2228.2 | 1584.1 | 1072.2 | 905.4  | 628.5  |
| 72.5° | 2233.2 | 2232.6 | 2271.9 | 2559.6 | 2905.6 | 2896.3 | 2369.7 | 1381.2 | 769.8  | 488.7  | 300.4  |
| 75°   | 2125.7 | 2102.2 | 2219.5 | 2750.7 | 3187.7 | 3142.3 | 2249.4 | 963.5  | 399.5  | 222.5  | 161.7  |
| 77.5° | 1386.5 | 1408.7 | 1580.8 | 2272.3 | 2788.3 | 2733.0 | 1650.3 | 449.5  | 188.2  | 145.9  | 117.2  |
| 80°   | 502.1  | 525.5  | 740.2  | 1287.1 | 1921.0 | 1912.0 | 812.7  | 184.7  | 127.3  | 110.2  | 85.4   |
| 82.5° | 172.8  | 181.4  | 292.0  | 571.6  | 1084.6 | 1125.0 | 305.7  | 105.0  | 92.6   | 78.2   | 58.5   |
| 85°   | 67.8   | 77.6   | 133.5  | 275.0  | 547.1  | 551.1  | 123.8  | 62.8   | 64.4   | 51.2   | 32.1   |
| 87.5° | 25.7   | 31.3   | 63.9   | 127.7  | 249.8  | 229.5  | 44.3   | 29.9   | 36.7   | 30.5   | 15.2   |
| 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):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 609.7  | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 | 609.7 |
| 2.5°  | 610.7  | 613.5 | 619.5 | 623.5 | 627.8 | 629.0 | 629.6 | 630.6 | 631.7 | 631.3 | 631.4 |
| 5°    | 614.5  | 620.0 | 629.6 | 633.6 | 635.5 | 633.3 | 629.2 | 625.8 | 623.4 | 622.0 | 621.6 |
| 7.5°  | 620.7  | 628.5 | 638.7 | 638.0 | 633.7 | 624.2 | 613.4 | 605.3 | 598.6 | 596.1 | 594.8 |
| 10°   | 628.9  | 638.0 | 645.2 | 637.5 | 625.0 | 608.4 | 592.2 | 579.7 | 569.6 | 565.7 | 565.0 |
| 12.5° | 639.4  | 648.7 | 650.0 | 633.7 | 613.0 | 590.3 | 568.4 | 551.8 | 536.7 | 531.9 | 530.8 |
| 15°   | 653.0  | 661.8 | 653.4 | 627.1 | 598.2 | 567.7 | 539.3 | 516.8 | 500.9 | 494.9 | 492.8 |
| 17.5° | 667.3  | 675.6 | 654.1 | 616.2 | 578.8 | 540.9 | 505.2 | 482.1 | 463.9 | 457.1 | 456.3 |
| 20°   | 684.4  | 688.2 | 651.3 | 600.6 | 552.1 | 506.1 | 468.5 | 446.8 | 437.1 | 432.3 | 431.7 |
| 22.5° | 705.6  | 701.5 | 644.8 | 579.4 | 518.3 | 466.0 | 435.4 | 425.3 | 422.8 | 421.8 | 422.2 |
| 25°   | 727.9  | 715.5 | 635.2 | 551.8 | 475.5 | 425.8 | 411.1 | 414.0 | 417.2 | 416.8 | 416.8 |
| 27.5° | 752.6  | 729.8 | 620.5 | 515.2 | 428.2 | 392.9 | 394.7 | 405.1 | 409.9 | 409.8 | 409.6 |
| 30°   | 784.3  | 746.0 | 601.8 | 471.1 | 384.0 | 369.8 | 380.4 | 393.1 | 399.7 | 399.4 | 399.5 |
| 32.5° | 823.2  | 763.8 | 576.3 | 421.9 | 352.1 | 352.6 | 364.9 | 377.4 | 385.1 | 384.4 | 384.6 |
| 35°   | 868.7  | 783.7 | 541.8 | 373.4 | 330.9 | 339.0 | 348.7 | 357.5 | 364.8 | 363.8 | 362.9 |
| 37.5° | 918.3  | 803.3 | 496.0 | 330.0 | 313.7 | 326.4 | 334.5 | 335.9 | 339.3 | 336.9 | 335.1 |
| 40°   | 965.5  | 818.2 | 437.0 | 294.4 | 296.3 | 315.6 | 320.8 | 314.9 | 308.8 | 308.0 | 305.6 |
| 42.5° | 1006.6 | 823.2 | 377.3 | 266.0 | 278.0 | 304.3 | 307.5 | 295.1 | 284.2 | 279.1 | 276.9 |
| 45°   | 1050.0 | 824.9 | 321.7 | 242.1 | 260.3 | 294.2 | 297.7 | 281.1 | 265.7 | 254.7 | 251.0 |
| 47.5° | 1106.7 | 837.6 | 278.4 | 224.5 | 246.9 | 287.4 | 292.4 | 269.9 | 250.0 | 234.2 | 230.8 |
| 50°   | 1181.0 | 862.7 | 243.2 | 211.0 | 238.1 | 283.0 | 288.6 | 259.0 | 237.0 | 218.0 | 214.7 |
| 52.5° | 1263.4 | 885.7 | 214.8 | 200.1 | 229.6 | 275.2 | 283.8 | 251.2 | 224.9 | 203.1 | 199.4 |
| 55°   | 1321.1 | 868.1 | 191.9 | 188.8 | 218.6 | 264.0 | 277.0 | 244.6 | 207.5 | 188.5 | 185.3 |
| 57.5° | 1332.1 | 807.7 | 174.5 | 177.1 | 205.2 | 250.0 | 266.7 | 229.9 | 198.1 | 182.2 | 178.8 |
| 60°   | 1302.0 | 723.6 | 161.6 | 166.3 | 190.9 | 232.3 | 247.3 | 219.5 | 189.1 | 175.4 | 172.6 |
| 62.5° | 1226.1 | 637.5 | 152.0 | 156.6 | 177.6 | 214.4 | 235.1 | 208.6 | 179.9 | 167.8 | 164.9 |
| 65°   | 1072.9 | 535.2 | 142.8 | 148.0 | 165.2 | 198.9 | 224.2 | 198.5 | 170.9 | 161.6 | 158.9 |
| 67.5° | 809.9  | 400.9 | 134.2 | 138.8 | 154.2 | 185.4 | 212.4 | 188.5 | 162.1 | 156.2 | 152.9 |
| 70°   | 476.9  | 251.0 | 124.4 | 129.2 | 142.6 | 171.4 | 199.7 | 177.6 | 151.2 | 148.5 | 144.3 |
| 72.5° | 221.9  | 151.1 | 113.2 | 117.9 | 128.0 | 152.7 | 183.4 | 163.3 | 138.3 | 132.3 | 126.7 |
| 75°   | 132.5  | 110.5 | 100.0 | 104.2 | 111.3 | 132.7 | 162.9 | 148.8 | 126.0 | 118.2 | 112.2 |
| 77.5° | 99.0   | 84.5  | 85.4  | 89.9  | 95.7  | 116.2 | 144.3 | 137.3 | 116.6 | 110.5 | 106.5 |
| 80°   | 71.3   | 64.1  | 69.7  | 74.5  | 80.6  | 105.6 | 138.3 | 126.9 | 105.4 | 97.3  | 93.5  |
| 82.5° | 47.6   | 46.1  | 52.4  | 57.4  | 63.3  | 92.4  | 129.9 | 111.2 | 90.0  | 79.8  | 71.4  |
| 85°   | 26.3   | 27.8  | 35.3  | 37.5  | 42.6  | 65.1  | 106.5 | 89.3  | 67.8  | 54.6  | 52.1  |
| 87.5° | 10.9   | 12.8  | 19.0  | 18.3  | 22.6  | 38.8  | 70.1  | 53.9  | 43.1  | 32.2  | 25.1  |
| 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)