

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: P323503

Luminaire Tested: **GAN-SA9D-730-U-SL3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-23)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA9D-730-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53968 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G5

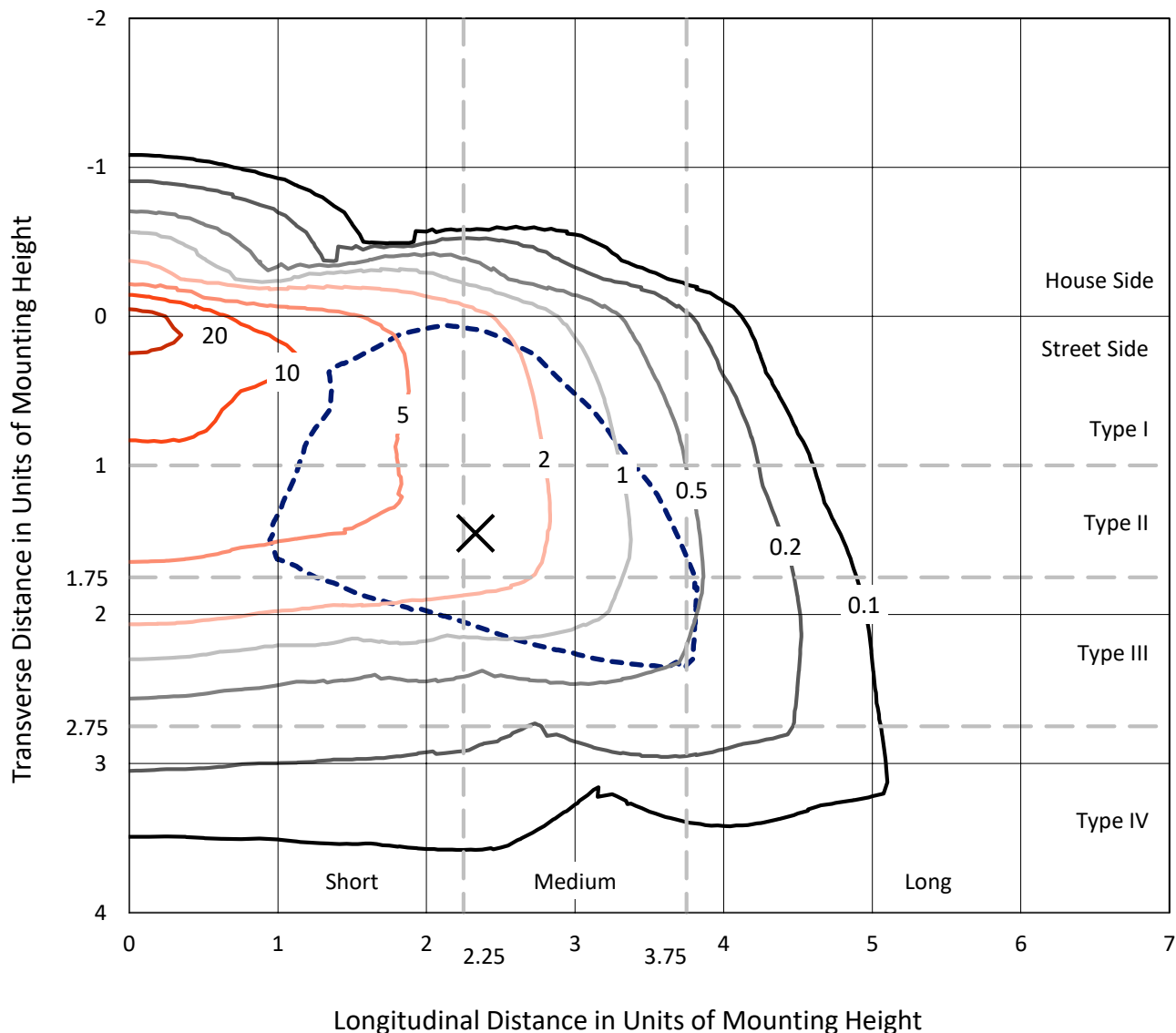
Input Watts (W): 575  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

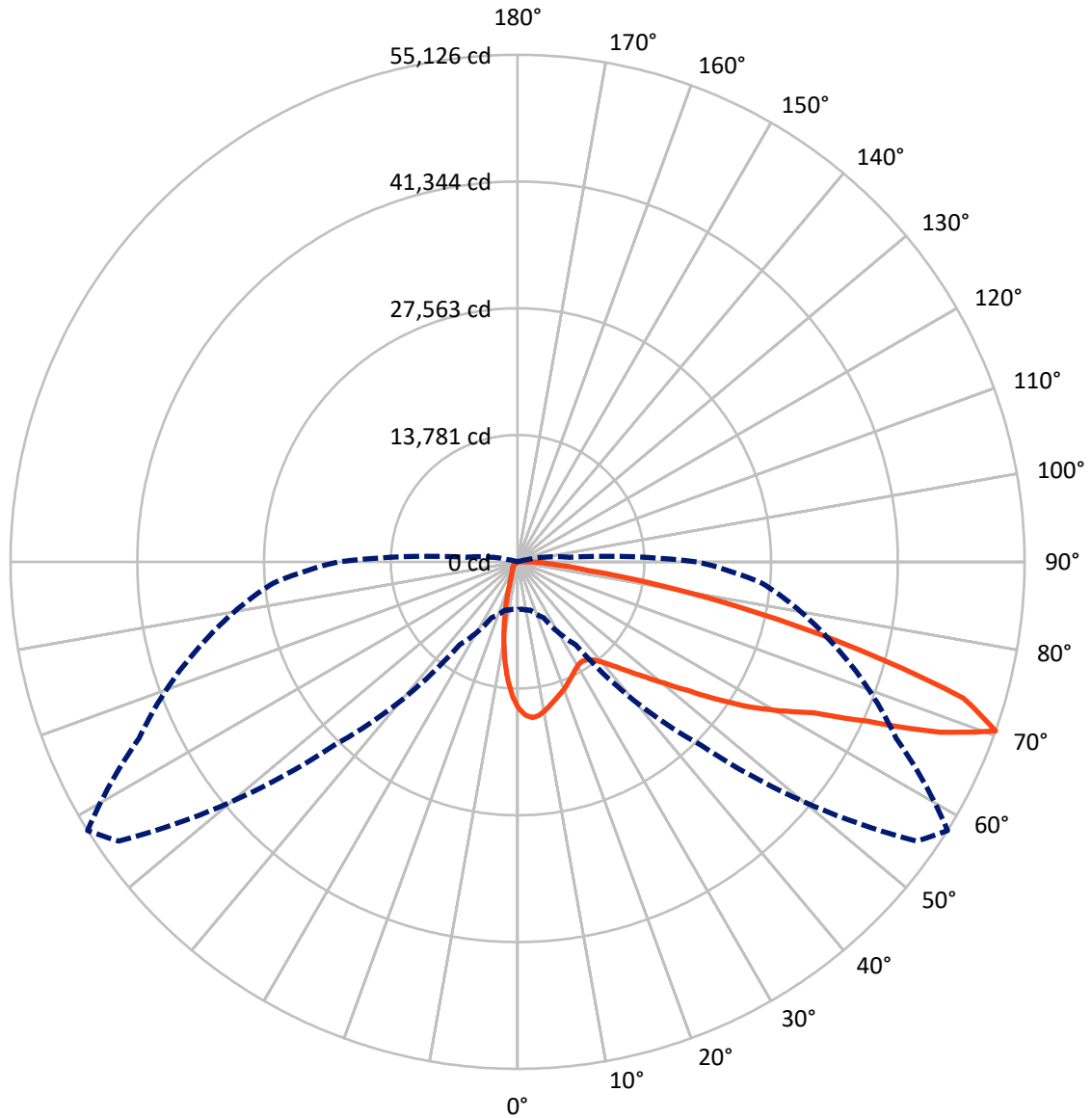
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 25.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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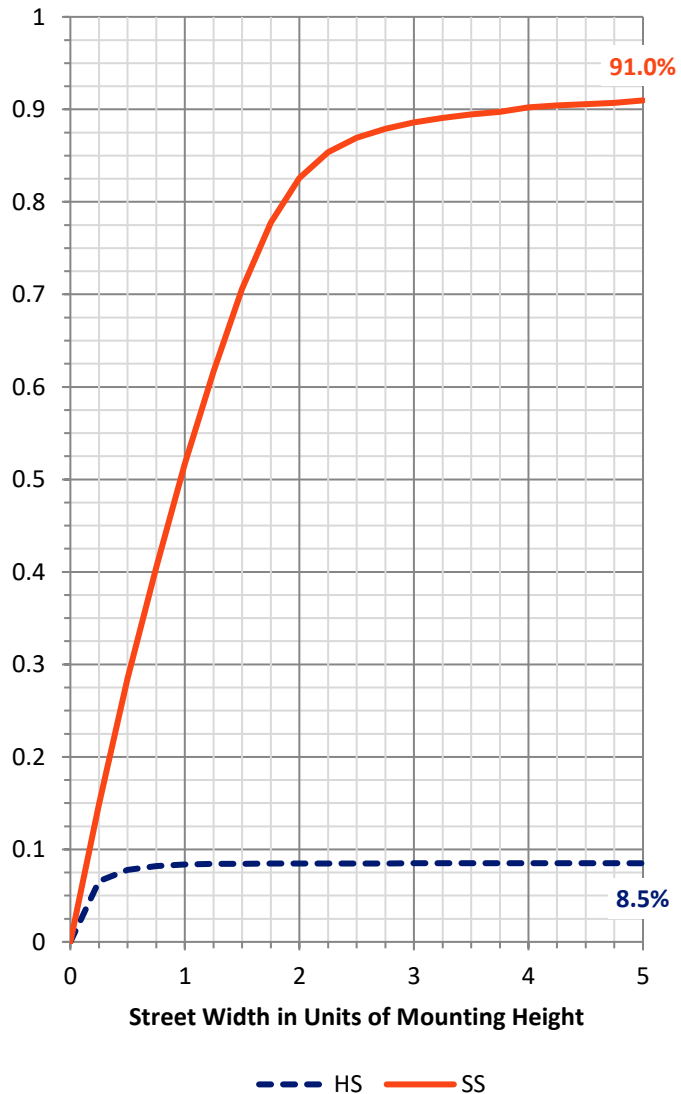
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4618.5   | 0.0    | 4618.5  |
|                    | % Fixture | 8.6      | 0.0    | 8.6     |
| <b>Street Side</b> | Lumens    | 49349.5  | 0.0    | 49349.5 |
|                    | % Fixture | 91.4     | 0.0    | 91.4    |
| <b>Total</b>       | Lumens    | 53968.0  | 0.0    | 53968.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1303.6  | 2.4       |
| 10°-20°   | 2736.0  | 5.1       |
| 20°-30°   | 3596.9  | 6.7       |
| 30°-40°   | 4763.7  | 8.8       |
| 40°-50°   | 7120.3  | 13.2      |
| 50°-60°   | 11406.5 | 21.1      |
| 60°-70°   | 14377.8 | 26.6      |
| 70°-80°   | 7755.3  | 14.4      |
| 80°-90°   | 907.8   | 1.7       |
| 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°    | 53968.0 | 100.0     |
| 0°-180°   | 53968.0 | 100.0     |

**Coefficient of Utilization**

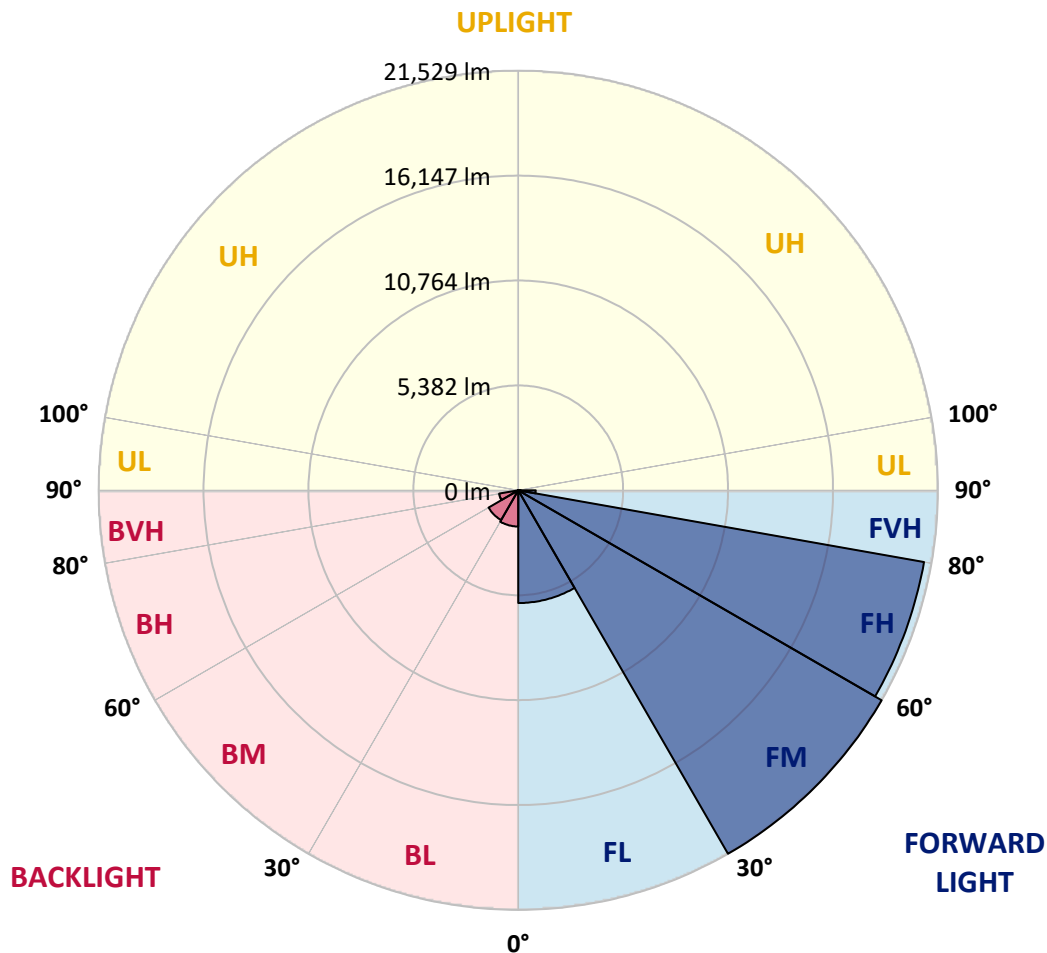


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 5781.1  | 10.7      |                         |      |         |
| FM (30°-60°)   | 21528.7 | 39.9      |                         |      |         |
| FH (60°-80°)   | 21139.8 | 39.2      |                         |      | G5      |
| FVH (80°-90°)  | 899.9   | 1.7       |                         |      | G5      |
| BL (0°-30°)    | 1855.5  | 3.4       | B3/2500                 |      |         |
| BM (30°-60°)   | 1761.9  | 3.3       | B2/2500                 |      |         |
| BH (60°-80°)   | 993.2   | 1.8       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 7.8     | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 |
| 2.5°  | 17263.7 | 17221.0 | 17205.3 | 17178.4 | 17075.1 | 16974.2 | 16774.4 | 16718.3 | 16592.7 | 16294.2 | 15977.8 |
| 5°    | 17277.1 | 17274.9 | 17322.0 | 17310.8 | 17274.9 | 17227.7 | 17084.1 | 17010.1 | 16796.9 | 16370.5 | 15791.5 |
| 7.5°  | 16444.6 | 16487.2 | 16592.7 | 16677.9 | 16776.7 | 16904.6 | 16922.6 | 16850.7 | 16675.7 | 16215.7 | 15448.2 |
| 10°   | 15327.0 | 15394.3 | 15542.4 | 15710.8 | 15968.8 | 16224.6 | 16453.5 | 16444.6 | 16384.0 | 15930.7 | 15035.3 |
| 12.5° | 14207.2 | 14285.8 | 14456.3 | 14705.4 | 15071.2 | 15488.6 | 15897.0 | 15953.1 | 16054.1 | 15674.8 | 14653.8 |
| 15°   | 13226.6 | 13293.9 | 13462.2 | 13767.4 | 14220.7 | 14781.7 | 15380.9 | 15484.1 | 15744.4 | 15475.1 | 14335.1 |
| 17.5° | 12394.0 | 12436.7 | 12560.1 | 12898.9 | 13424.0 | 14104.0 | 14882.7 | 15084.7 | 15472.9 | 15318.0 | 14059.1 |
| 20°   | 11812.8 | 11819.5 | 11900.3 | 12138.2 | 12663.3 | 13424.0 | 14366.6 | 14656.0 | 15185.6 | 15183.4 | 13774.1 |
| 22.5° | 11525.6 | 11503.1 | 11518.8 | 11655.7 | 12041.7 | 12775.5 | 13850.4 | 14193.8 | 14927.6 | 15068.9 | 13484.6 |
| 25°   | 11471.7 | 11453.7 | 11408.9 | 11426.8 | 11660.2 | 12207.8 | 13329.8 | 13727.0 | 14700.9 | 14999.4 | 13233.3 |
| 27.5° | 11640.0 | 11658.0 | 11581.7 | 11500.9 | 11518.8 | 11839.7 | 12867.5 | 13327.5 | 14516.9 | 14999.4 | 13056.0 |
| 30°   | 11978.9 | 11987.8 | 11931.7 | 11826.3 | 11684.9 | 11736.5 | 12546.6 | 13006.6 | 14424.9 | 15102.6 | 12943.8 |
| 32.5° | 12353.6 | 12403.0 | 12396.3 | 12311.0 | 12109.0 | 11900.3 | 12470.3 | 12890.0 | 14418.2 | 15331.5 | 12932.6 |
| 35°   | 12818.1 | 12874.2 | 12968.5 | 12950.5 | 12739.6 | 12396.3 | 12730.6 | 13060.5 | 14550.6 | 15708.5 | 13053.8 |
| 37.5° | 13311.8 | 13397.1 | 13599.1 | 13695.6 | 13558.7 | 13170.5 | 13314.1 | 13549.7 | 14905.1 | 16318.9 | 13361.2 |
| 40°   | 13789.8 | 13886.3 | 14254.3 | 14633.6 | 14530.4 | 14130.9 | 14198.2 | 14386.7 | 15535.7 | 17196.3 | 13944.7 |
| 42.5° | 14258.8 | 14402.5 | 14943.3 | 15567.1 | 15690.6 | 15371.9 | 15407.8 | 15558.2 | 16471.5 | 18403.6 | 14898.4 |
| 45°   | 14819.9 | 14981.4 | 15782.6 | 16552.3 | 16882.2 | 16743.0 | 16895.6 | 16994.4 | 17694.5 | 19999.2 | 16184.3 |
| 47.5° | 15643.4 | 15829.7 | 16812.6 | 17690.0 | 18269.0 | 18358.8 | 18666.2 | 18731.3 | 19240.7 | 21857.3 | 17860.6 |
| 50°   | 17250.2 | 17301.8 | 18190.5 | 18987.1 | 19821.9 | 20360.5 | 20710.5 | 20759.9 | 21112.2 | 23888.2 | 19954.3 |
| 52.5° | 19272.1 | 19305.8 | 19808.4 | 20342.5 | 21291.8 | 22391.4 | 23210.4 | 23280.0 | 23354.1 | 25867.4 | 22021.1 |
| 55°   | 21280.5 | 21276.1 | 21608.2 | 21922.3 | 23008.5 | 24606.3 | 26383.6 | 26426.2 | 25894.4 | 27745.7 | 23600.9 |
| 57.5° | 22535.0 | 22656.2 | 23161.1 | 23565.0 | 25082.0 | 27130.8 | 29597.1 | 29754.2 | 28562.6 | 29137.0 | 25162.8 |
| 60°   | 22135.5 | 22193.9 | 23313.7 | 24808.2 | 27664.9 | 30719.1 | 32848.7 | 32889.1 | 30568.8 | 30526.1 | 27137.6 |
| 62.5° | 18859.2 | 18890.6 | 20650.0 | 23731.1 | 28973.2 | 35373.3 | 36771.4 | 36113.9 | 32875.7 | 32453.8 | 29500.6 |
| 65°   | 12925.9 | 13130.1 | 14599.9 | 18408.1 | 26569.8 | 38292.9 | 42843.8 | 41755.5 | 36392.1 | 35231.9 | 31636.9 |
| 67.5° | 7611.9  | 7569.3  | 8296.3  | 11101.4 | 19514.5 | 36354.0 | 50525.3 | 49443.7 | 41187.7 | 37092.3 | 31010.8 |
| 70°   | 5199.5  | 5170.3  | 5448.6  | 6721.0  | 11016.2 | 28201.3 | 52942.2 | 55125.6 | 45422.3 | 35840.1 | 26688.8 |
| 72.5° | 3711.7  | 3727.4  | 4138.1  | 5222.0  | 6916.2  | 16431.1 | 45527.7 | 50695.8 | 44096.0 | 31244.2 | 20286.4 |
| 75°   | 2520.1  | 2562.7  | 3150.7  | 4283.9  | 6063.5  | 8359.2  | 32307.9 | 38537.5 | 35907.4 | 22707.8 | 11660.2 |
| 77.5° | 1355.4  | 1402.5  | 2096.0  | 3451.4  | 5482.3  | 5807.7  | 20782.4 | 26522.7 | 22555.2 | 10208.3 | 3379.6  |
| 80°   | 565.5   | 592.4   | 980.7   | 2508.9  | 4737.2  | 5100.8  | 12228.0 | 16083.3 | 9611.4  | 2012.9  | 754.0   |
| 82.5° | 244.6   | 258.1   | 408.4   | 1496.8  | 3541.1  | 4306.4  | 6474.1  | 7737.6  | 2912.8  | 442.1   | 379.2   |
| 85°   | 47.1    | 49.4    | 168.3   | 792.2   | 2259.8  | 2430.3  | 4196.4  | 4113.4  | 1308.3  | 190.7   | 276.0   |
| 87.5° | 0.0     | 0.0     | 40.4    | 249.1   | 664.2   | 1324.0  | 2560.5  | 2529.1  | 444.3   | 92.0    | 103.2   |
| 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°    | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 | 15941.9 |
| 2.5°  | 15816.2 | 15661.4 | 15336.0 | 14934.3 | 14626.9 | 14288.0 | 14018.7 | 13677.6 | 13529.5 | 13536.2 | 13455.5 |
| 5°    | 15461.7 | 15143.0 | 14422.7 | 13513.8 | 12813.7 | 12091.1 | 11469.5 | 10850.1 | 10484.3 | 10365.4 | 10253.2 |
| 7.5°  | 14954.5 | 14449.6 | 13300.6 | 11900.3 | 10715.4 | 9557.5  | 8549.9  | 7663.5  | 7102.5  | 6828.7  | 6727.7  |
| 10°   | 14382.3 | 13673.1 | 12010.3 | 10165.6 | 8473.6  | 6907.3  | 5601.2  | 4465.7  | 4012.4  | 3705.0  | 3626.4  |
| 12.5° | 13879.6 | 12919.1 | 10749.1 | 8386.1  | 6377.7  | 4488.1  | 3242.7  | 2535.8  | 2228.4  | 2107.2  | 2087.0  |
| 15°   | 13406.1 | 12214.5 | 9535.1  | 6774.9  | 4416.3  | 2762.5  | 2062.3  | 1822.2  | 1750.4  | 1730.2  | 1730.2  |
| 17.5° | 12959.5 | 11543.5 | 8348.0  | 5188.3  | 2921.8  | 1936.6  | 1707.7  | 1653.9  | 1631.4  | 1629.2  | 1631.4  |
| 20°   | 12492.8 | 10872.5 | 7181.0  | 3801.5  | 2039.9  | 1640.4  | 1577.6  | 1548.4  | 1541.7  | 1541.7  | 1541.7  |
| 22.5° | 12046.2 | 10201.6 | 6045.5  | 2715.3  | 1635.9  | 1496.8  | 1465.4  | 1445.2  | 1438.5  | 1436.2  | 1431.7  |
| 25°   | 11617.6 | 9564.2  | 4937.0  | 1918.7  | 1436.2  | 1371.1  | 1344.2  | 1317.3  | 1297.1  | 1285.9  | 1279.1  |
| 27.5° | 11265.2 | 8996.5  | 3904.7  | 1539.4  | 1297.1  | 1241.0  | 1207.3  | 1166.9  | 1117.5  | 1095.1  | 1086.1  |
| 30°   | 10984.7 | 8478.1  | 3009.3  | 1299.3  | 1166.9  | 1110.8  | 1059.2  | 989.6   | 917.8   | 879.7   | 877.4   |
| 32.5° | 10764.8 | 7968.7  | 2284.5  | 1149.0  | 1050.2  | 980.7   | 906.6   | 819.1   | 736.1   | 693.4   | 691.2   |
| 35°   | 10657.1 | 7519.9  | 1745.9  | 1039.0  | 947.0   | 859.5   | 767.5   | 671.0   | 590.2   | 549.8   | 545.3   |
| 37.5° | 10728.9 | 7140.6  | 1362.2  | 947.0   | 859.5   | 758.5   | 650.8   | 549.8   | 478.0   | 442.1   | 439.8   |
| 40°   | 10991.5 | 6898.3  | 1106.3  | 868.5   | 785.4   | 662.0   | 545.3   | 451.1   | 390.5   | 361.3   | 359.1   |
| 42.5° | 11550.2 | 6808.5  | 944.8   | 803.4   | 713.6   | 572.2   | 453.3   | 372.5   | 316.4   | 296.2   | 291.7   |
| 45°   | 12483.8 | 6940.9  | 834.8   | 740.5   | 639.6   | 487.0   | 374.8   | 305.2   | 255.8   | 240.1   | 237.9   |
| 47.5° | 13727.0 | 7288.7  | 756.3   | 680.0   | 572.2   | 410.7   | 311.9   | 246.8   | 208.7   | 193.0   | 190.7   |
| 50°   | 15329.3 | 7840.8  | 691.2   | 619.4   | 509.4   | 347.8   | 258.1   | 195.2   | 161.6   | 150.4   | 150.4   |
| 52.5° | 17072.9 | 8498.3  | 632.8   | 563.3   | 446.6   | 289.5   | 208.7   | 150.4   | 127.9   | 114.4   | 114.4   |
| 55°   | 18513.6 | 9072.8  | 570.0   | 520.6   | 370.3   | 240.1   | 159.3   | 114.4   | 94.3    | 87.5    | 87.5    |
| 57.5° | 19952.0 | 9685.4  | 498.2   | 446.6   | 296.2   | 195.2   | 121.2   | 85.3    | 69.6    | 65.1    | 65.1    |
| 60°   | 21816.9 | 10434.9 | 428.6   | 363.5   | 233.4   | 148.1   | 89.8    | 60.6    | 51.6    | 49.4    | 49.4    |
| 62.5° | 23868.0 | 10874.8 | 365.8   | 291.7   | 181.8   | 110.0   | 65.1    | 40.4    | 38.1    | 38.1    | 35.9    |
| 65°   | 25122.4 | 10253.2 | 307.4   | 233.4   | 141.4   | 83.0    | 42.6    | 29.2    | 33.7    | 31.4    | 26.9    |
| 67.5° | 23522.4 | 8027.0  | 251.3   | 181.8   | 110.0   | 62.8    | 26.9    | 20.2    | 35.9    | 29.2    | 22.4    |
| 70°   | 19476.3 | 5619.2  | 195.2   | 127.9   | 87.5    | 53.9    | 18.0    | 13.5    | 38.1    | 29.2    | 18.0    |
| 72.5° | 14575.3 | 3761.1  | 154.8   | 85.3    | 65.1    | 47.1    | 15.7    | 6.7     | 33.7    | 24.7    | 15.7    |
| 75°   | 7964.2  | 1514.7  | 123.4   | 53.9    | 40.4    | 33.7    | 11.2    | 4.5     | 22.4    | 18.0    | 11.2    |
| 77.5° | 2096.0  | 399.4   | 89.8    | 35.9    | 22.4    | 13.5    | 6.7     | 2.2     | 11.2    | 9.0     | 4.5     |
| 80°   | 534.1   | 154.8   | 58.3    | 24.7    | 15.7    | 6.7     | 0.0     | 0.0     | 2.2     | 0.0     | 0.0     |
| 82.5° | 285.0   | 65.1    | 35.9    | 18.0    | 9.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 85°   | 215.4   | 42.6    | 20.2    | 11.2    | 2.2     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 87.5° | 83.0    | 13.5    | 6.7     | 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)