

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: P653892

Luminaire Tested: **GLAN-SA5A-840-U-T2R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P653892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA5A-840-U-T2R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16925.1 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

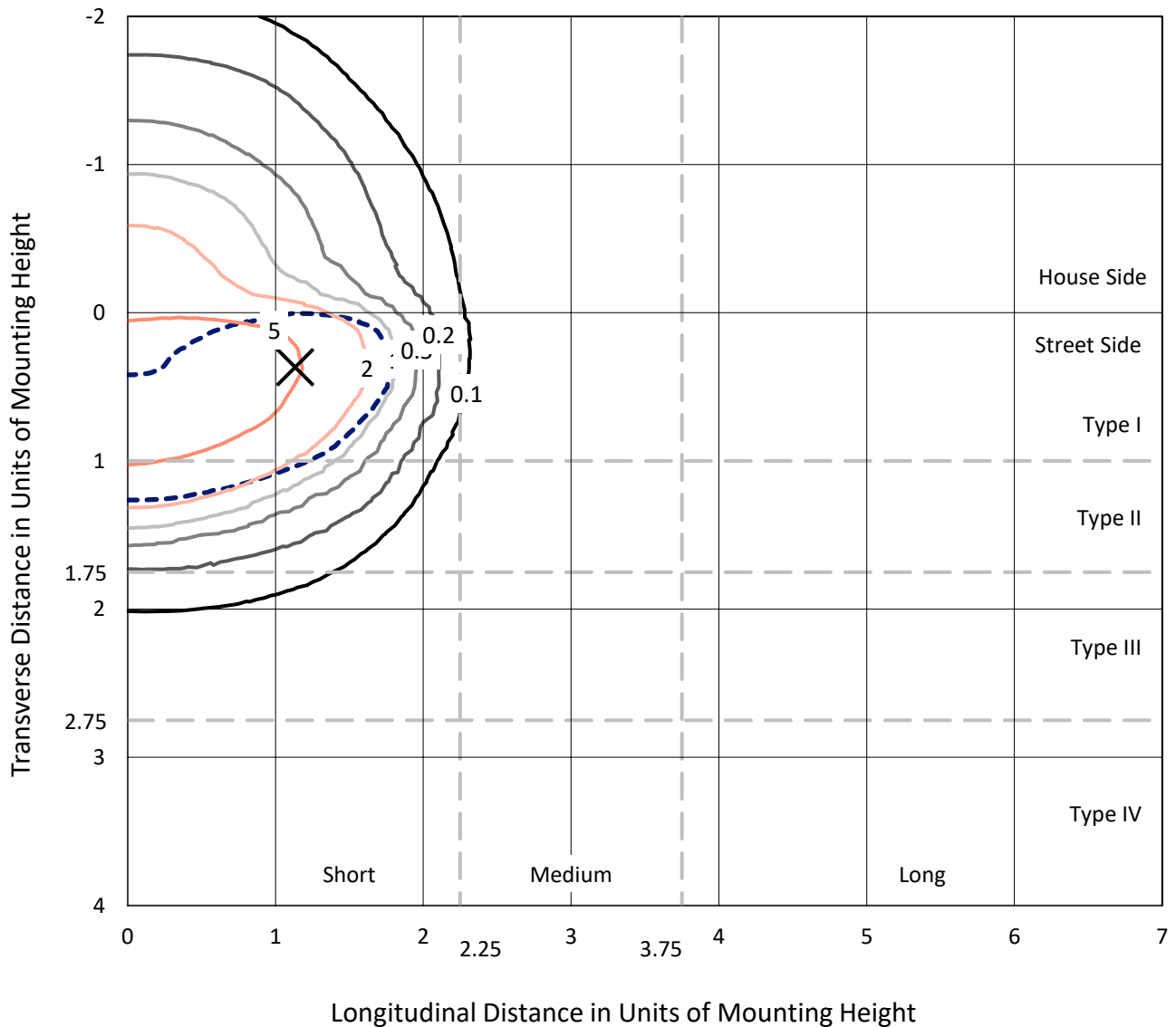
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

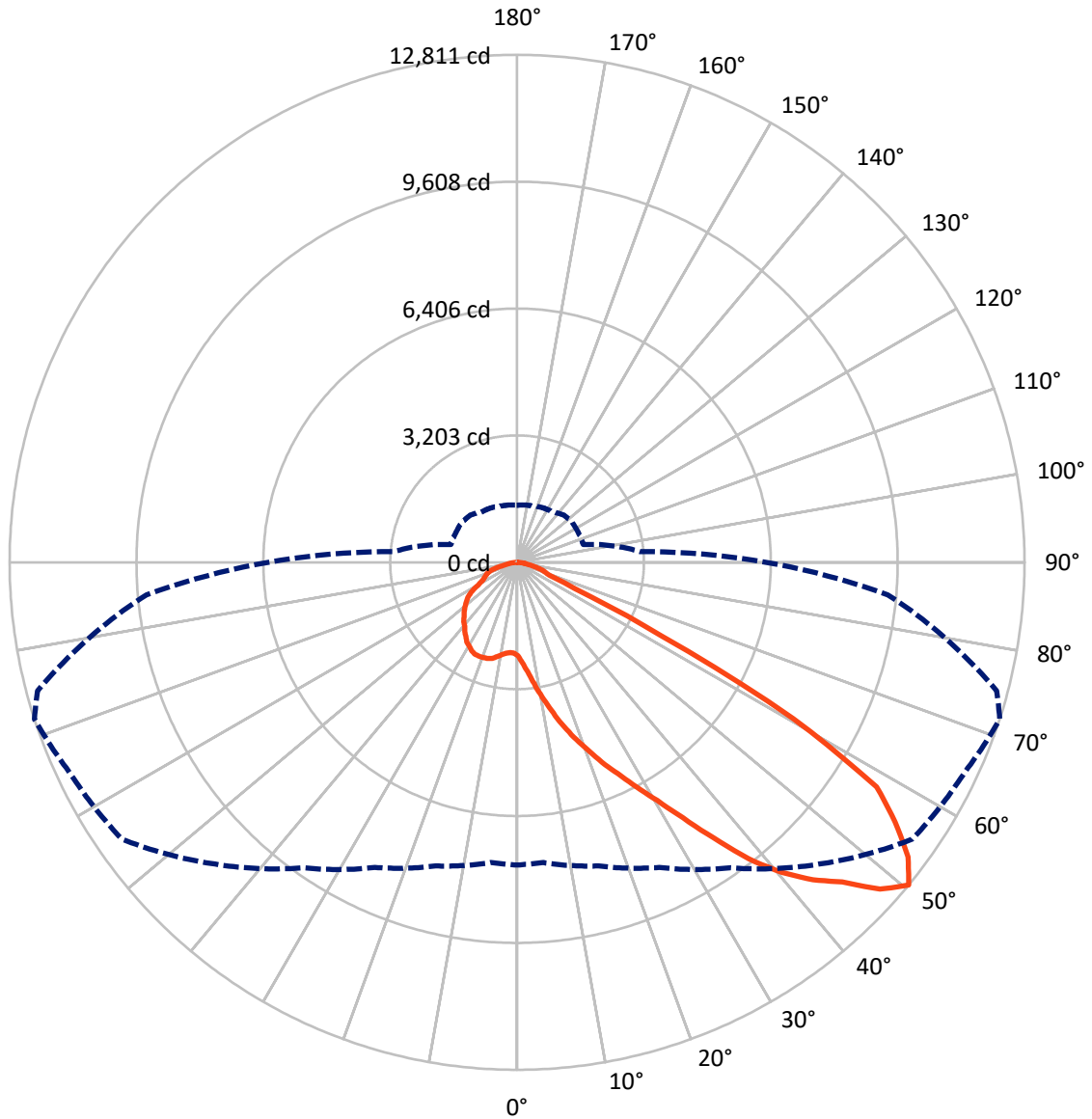
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral      - - - Horizontal Cone Through 50-Deg Vertical

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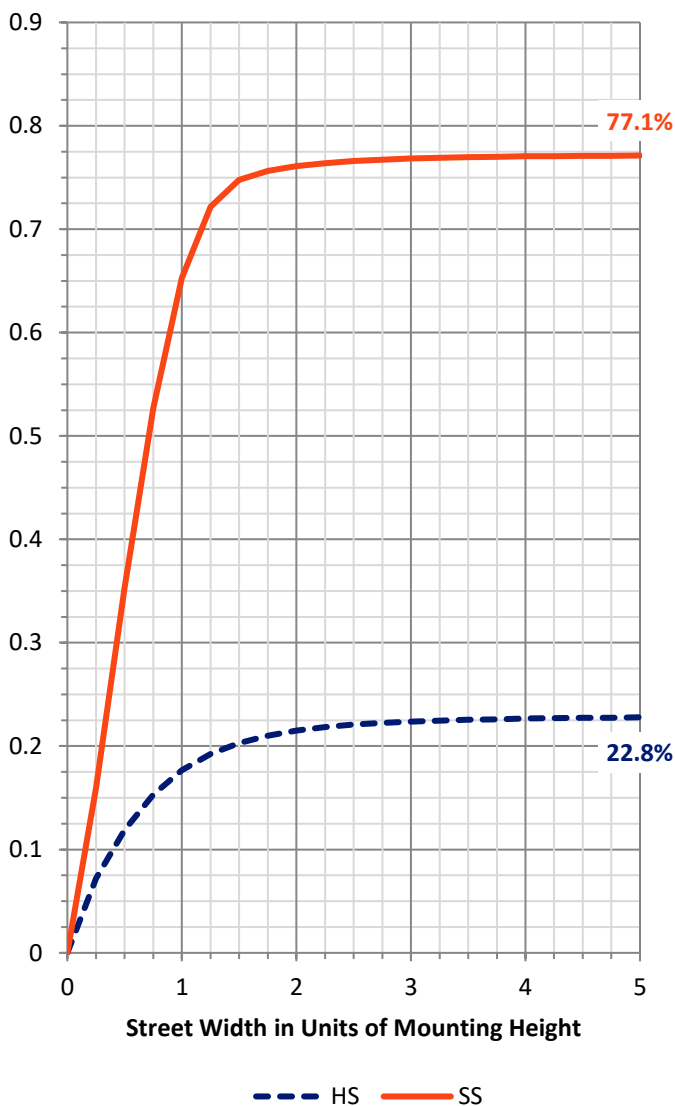
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3877.6   | 0.0    | 3877.6  |
|                    | % Fixture | 22.9     | 0.0    | 22.9    |
| <b>Street Side</b> | Lumens    | 13047.5  | 0.0    | 13047.5 |
|                    | % Fixture | 77.1     | 0.0    | 77.1    |
| <b>Total</b>       | Lumens    | 16925.1  | 0.0    | 16925.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 277.1   | 1.6       |
| 10°-20°   | 1036.0  | 6.1       |
| 20°-30°   | 2008.8  | 11.9      |
| 30°-40°   | 3327.9  | 19.7      |
| 40°-50°   | 4656.5  | 27.5      |
| 50°-60°   | 3928.3  | 23.2      |
| 60°-70°   | 1197.3  | 7.1       |
| 70°-80°   | 420.1   | 2.5       |
| 80°-90°   | 73.0    | 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°    | 16925.1 | 100.0     |
| 0°-180°   | 16925.1 | 100.0     |

**Coefficient of Utilization**

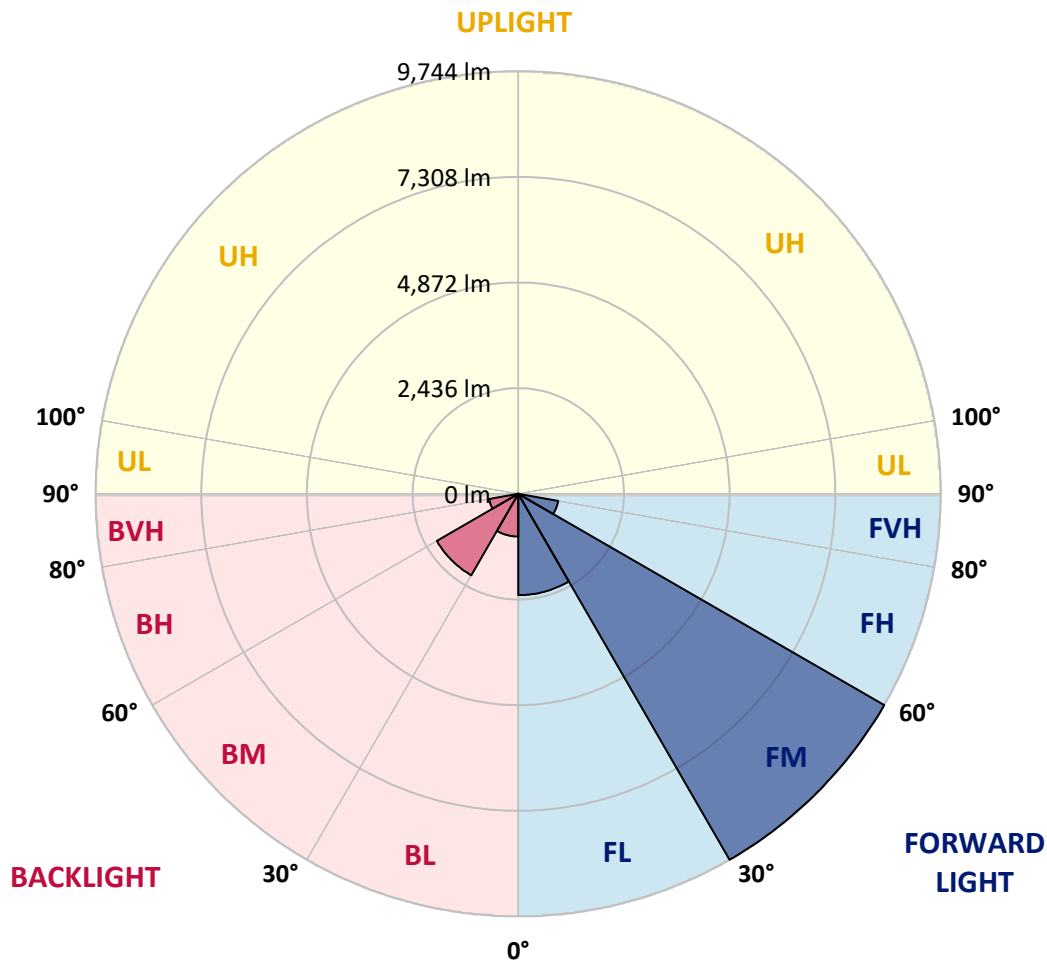


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 2336.3 | 13.8      |                         |      |         |
| FM (30°-60°)   | 9744.2 | 57.6      |                         |      |         |
| FH (60°-80°)   | 934.2  | 5.5       |                         |      | G1/1800 |
| FVH (80°-90°)  | 32.7   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 985.7  | 5.8       | B2/1000                 |      |         |
| BM (30°-60°)   | 2168.4 | 12.8      | B2/2500                 |      |         |
| BH (60°-80°)   | 683.2  | 4.0       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 40.3   | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°     | 72°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1  | 2356.1  | 2356.1  | 2356.1  | 2356.1  | 2356.1  | 2356.1 |
| 2.5°  | 3030.5 | 3011.6 | 2955.1 | 2936.3 | 2869.2  | 2747.8  | 2705.8  | 2582.3  | 2530.0  | 2481.8  | 2425.3 |
| 5°    | 3832.6 | 3744.6 | 3738.4 | 3631.6 | 3476.6  | 3386.5  | 3118.4  | 2938.4  | 2772.9  | 2689.1  | 2534.1 |
| 7.5°  | 4343.7 | 4345.7 | 4345.7 | 4257.8 | 4134.2  | 3905.9  | 3665.1  | 3340.5  | 3091.3  | 2967.6  | 2703.8 |
| 10°   | 4829.5 | 4787.6 | 4764.6 | 4756.2 | 4672.4  | 4450.5  | 4192.9  | 3790.7  | 3449.4  | 3304.9  | 2831.6 |
| 12.5° | 5173.0 | 5137.4 | 5189.7 | 5162.6 | 5101.8  | 4957.3  | 4714.3  | 4255.7  | 3828.4  | 3633.6  | 3036.8 |
| 15°   | 5336.3 | 5361.5 | 5403.3 | 5478.8 | 5451.5  | 5397.1  | 5129.0  | 4733.1  | 4236.8  | 4017.0  | 3219.0 |
| 17.5° | 5587.7 | 5518.6 | 5568.8 | 5663.0 | 5738.5  | 5713.3  | 5560.4  | 5078.7  | 4641.1  | 4370.8  | 3464.0 |
| 20°   | 5763.6 | 5723.8 | 5748.9 | 5857.8 | 5914.4  | 6056.8  | 5977.2  | 5531.1  | 5028.5  | 4743.7  | 3753.0 |
| 22.5° | 6266.2 | 6207.6 | 6125.9 | 6142.7 | 6163.6  | 6264.1  | 6283.0  | 6027.4  | 5478.8  | 5177.2  | 4027.4 |
| 25°   | 6886.2 | 6831.7 | 6735.4 | 6636.9 | 6576.2  | 6557.4  | 6622.3  | 6417.0  | 5910.2  | 5598.1  | 4322.7 |
| 27.5° | 7568.9 | 7476.7 | 7416.0 | 7212.8 | 7049.5  | 7024.4  | 6993.0  | 6882.0  | 6421.2  | 6084.0  | 4655.7 |
| 30°   | 8232.8 | 8159.6 | 8077.8 | 7753.2 | 7583.5  | 7556.4  | 7401.4  | 7432.8  | 6976.2  | 6601.3  | 5032.7 |
| 32.5° | 8735.5 | 8741.8 | 8555.3 | 8310.3 | 8151.1  | 8006.7  | 7950.1  | 8040.1  | 7688.3  | 7386.7  | 5453.6 |
| 35°   | 9141.8 | 9160.6 | 8982.6 | 8760.6 | 8588.9  | 8689.4  | 8664.2  | 8706.1  | 8538.6  | 8170.0  | 5943.7 |
| 37.5° | 9537.6 | 9443.3 | 9252.8 | 9146.0 | 9055.9  | 9221.3  | 9434.9  | 9470.6  | 9502.0  | 9068.4  | 6513.4 |
| 40°   | 9602.5 | 9610.9 | 9499.9 | 9575.3 | 9462.2  | 9711.4  | 10207.8 | 10161.7 | 10289.5 | 9910.3  | 7131.2 |
| 42.5° | 9510.4 | 9529.2 | 9573.2 | 9680.0 | 9952.2  | 10251.7 | 10988.9 | 10800.5 | 10955.5 | 10618.2 | 7732.2 |
| 45°   | 9359.6 | 9282.0 | 9336.5 | 9742.8 | 10214.0 | 10880.0 | 11703.1 | 11556.5 | 11506.2 | 11223.5 | 8448.5 |
| 47.5° | 8639.1 | 8718.7 | 8888.4 | 9388.9 | 10096.8 | 10988.9 | 12210.0 | 12176.4 | 12327.2 | 12128.2 | 9099.9 |
| 50°   | 7640.1 | 7608.7 | 7935.4 | 8498.8 | 9411.9  | 10775.3 | 12182.7 | 12486.4 | 12811.0 | 12534.6 | 9390.9 |
| 52.5° | 5721.7 | 5889.3 | 6169.9 | 6869.4 | 8172.1  | 9610.9  | 11588.0 | 12094.8 | 12358.7 | 12300.0 | 9156.4 |
| 55°   | 3616.9 | 3667.2 | 3836.8 | 4668.2 | 5841.1  | 7713.4  | 9933.4  | 11108.3 | 11579.6 | 11799.5 | 8940.7 |
| 57.5° | 1757.1 | 1662.9 | 1870.2 | 2538.3 | 3374.0  | 5187.6  | 7661.1  | 9675.8  | 10700.0 | 11097.8 | 8471.6 |
| 60°   | 917.3  | 952.9  | 1034.6 | 1273.4 | 1744.6  | 2693.3  | 4775.1  | 6448.5  | 8012.9  | 8624.5  | 6421.2 |
| 62.5° | 760.3  | 772.8  | 827.3  | 946.6  | 1160.2  | 1549.8  | 2437.8  | 3143.6  | 4086.0  | 4636.9  | 3652.5 |
| 65°   | 645.0  | 651.4  | 710.0  | 789.5  | 925.7   | 1091.1  | 1254.5  | 1313.1  | 1589.6  | 1631.5  | 1298.5 |
| 67.5° | 538.2  | 544.5  | 607.4  | 682.7  | 770.7   | 814.7   | 856.6   | 852.4   | 883.8   | 871.3   | 869.2  |
| 70°   | 414.7  | 420.9  | 485.8  | 565.5  | 609.5   | 584.3   | 714.2   | 743.5   | 756.1   | 766.5   | 783.3  |
| 72.5° | 299.5  | 312.1  | 362.3  | 418.9  | 395.9   | 454.5   | 588.5   | 632.5   | 649.3   | 655.6   | 676.5  |
| 75°   | 217.8  | 222.0  | 234.6  | 217.8  | 251.3   | 316.2   | 414.7   | 469.1   | 490.1   | 496.4   | 527.8  |
| 77.5° | 96.4   | 98.4   | 100.5  | 125.6  | 161.3   | 196.9   | 247.2   | 291.1   | 320.4   | 328.8   | 337.2  |
| 80°   | 50.3   | 52.4   | 64.9   | 85.9   | 115.2   | 144.5   | 180.1   | 205.2   | 224.1   | 226.2   | 234.6  |
| 82.5° | 31.5   | 33.5   | 46.1   | 60.7   | 81.7    | 106.8   | 132.0   | 152.9   | 167.5   | 169.6   | 171.7  |
| 85°   | 14.6   | 18.8   | 27.2   | 37.7   | 54.4    | 69.1    | 71.2    | 60.7    | 64.9    | 67.0    | 62.8   |
| 87.5° | 4.2    | 6.3    | 8.4    | 6.3    | 8.4     | 8.4     | 10.5    | 12.5    | 12.5    | 12.5    | 14.6   |
| 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°    | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 | 2356.1 |
| 2.5°  | 2393.8 | 2375.0 | 2301.6 | 2274.5 | 2203.3 | 2215.8 | 2178.1 | 2176.0 | 2167.6 | 2165.6 | 2163.5 |
| 5°    | 2452.4 | 2393.8 | 2305.9 | 2238.8 | 2199.0 | 2194.8 | 2167.6 | 2167.6 | 2176.0 | 2182.3 | 2167.6 |
| 7.5°  | 2548.8 | 2481.8 | 2333.1 | 2270.3 | 2234.6 | 2228.4 | 2209.6 | 2194.8 | 2213.7 | 2207.5 | 2190.6 |
| 10°   | 2659.8 | 2542.5 | 2385.4 | 2331.0 | 2272.4 | 2257.7 | 2257.7 | 2264.0 | 2232.5 | 2243.0 | 2226.3 |
| 12.5° | 2783.4 | 2626.3 | 2452.4 | 2389.6 | 2320.5 | 2312.2 | 2308.0 | 2261.9 | 2278.6 | 2270.3 | 2228.4 |
| 15°   | 2940.5 | 2722.7 | 2538.3 | 2431.5 | 2372.9 | 2335.2 | 2280.7 | 2272.4 | 2261.9 | 2240.9 | 2222.1 |
| 17.5° | 3110.1 | 2827.4 | 2578.1 | 2444.1 | 2356.1 | 2328.9 | 2287.0 | 2243.0 | 2211.6 | 2215.8 | 2201.1 |
| 20°   | 3254.6 | 2923.7 | 2592.8 | 2456.6 | 2343.5 | 2291.2 | 2226.3 | 2199.0 | 2165.6 | 2163.5 | 2161.4 |
| 22.5° | 3426.3 | 3053.5 | 2613.7 | 2423.2 | 2305.9 | 2251.4 | 2207.5 | 2159.3 | 2136.2 | 2106.9 | 2121.6 |
| 25°   | 3631.6 | 3103.8 | 2617.9 | 2404.3 | 2278.6 | 2182.3 | 2159.3 | 2106.9 | 2098.5 | 2056.7 | 2065.0 |
| 27.5° | 3780.3 | 3131.0 | 2584.4 | 2345.6 | 2215.8 | 2142.5 | 2100.6 | 2062.9 | 2048.3 | 2016.8 | 2008.5 |
| 30°   | 3979.2 | 3172.9 | 2513.2 | 2272.4 | 2153.0 | 2071.3 | 2046.2 | 2037.7 | 1995.9 | 1962.4 | 1958.2 |
| 32.5° | 4205.4 | 3200.2 | 2467.2 | 2196.9 | 2088.0 | 2025.2 | 2037.7 | 1998.0 | 1945.7 | 1916.3 | 1908.0 |
| 35°   | 4385.6 | 3210.6 | 2351.9 | 2111.1 | 2044.1 | 2004.3 | 1989.6 | 1981.2 | 1905.9 | 1878.6 | 1857.7 |
| 37.5° | 4659.9 | 3187.6 | 2255.6 | 2050.4 | 1995.9 | 1981.2 | 1968.7 | 1912.1 | 1826.2 | 1786.5 | 1757.1 |
| 40°   | 4980.3 | 3181.3 | 2132.0 | 1964.5 | 1949.9 | 1966.6 | 1928.9 | 1840.9 | 1721.5 | 1677.5 | 1656.6 |
| 42.5° | 5288.2 | 3225.2 | 2054.6 | 1918.4 | 1899.6 | 1905.9 | 1853.5 | 1721.5 | 1662.9 | 1637.8 | 1604.3 |
| 45°   | 5803.4 | 3317.4 | 1926.8 | 1847.2 | 1838.8 | 1834.6 | 1771.8 | 1633.6 | 1600.1 | 1568.6 | 1562.4 |
| 47.5° | 6268.3 | 3256.7 | 1845.1 | 1773.9 | 1782.2 | 1759.2 | 1625.2 | 1581.2 | 1543.5 | 1512.1 | 1501.6 |
| 50°   | 6295.6 | 3112.2 | 1729.9 | 1717.3 | 1719.4 | 1679.6 | 1551.9 | 1522.5 | 1474.4 | 1453.5 | 1438.8 |
| 52.5° | 6153.2 | 2875.5 | 1623.1 | 1627.3 | 1633.6 | 1568.6 | 1461.8 | 1440.9 | 1401.1 | 1371.8 | 1363.4 |
| 55°   | 5753.1 | 2506.9 | 1518.4 | 1535.2 | 1551.9 | 1428.4 | 1394.8 | 1342.5 | 1311.0 | 1269.2 | 1271.3 |
| 57.5° | 5068.3 | 2018.9 | 1371.8 | 1399.0 | 1434.6 | 1298.5 | 1273.4 | 1208.4 | 1162.3 | 1128.9 | 1124.7 |
| 60°   | 3397.0 | 1436.7 | 1151.9 | 1162.3 | 1241.9 | 1187.5 | 1185.4 | 1120.5 | 1057.6 | 1028.3 | 1011.6 |
| 62.5° | 2004.3 | 1097.4 | 994.8  | 984.3  | 982.2  | 1013.7 | 1066.1 | 1043.0 | 961.3  | 904.7  | 921.5  |
| 65°   | 1049.2 | 948.7  | 925.7  | 890.1  | 869.2  | 860.8  | 900.5  | 911.1  | 856.6  | 795.8  | 791.6  |
| 67.5° | 881.7  | 881.7  | 862.9  | 850.3  | 821.0  | 785.4  | 760.3  | 726.7  | 718.4  | 701.6  | 680.6  |
| 70°   | 802.1  | 823.1  | 816.8  | 787.4  | 762.4  | 722.5  | 657.6  | 603.2  | 550.8  | 531.9  | 544.5  |
| 72.5° | 699.5  | 720.5  | 720.5  | 705.8  | 672.3  | 611.6  | 548.8  | 485.8  | 441.9  | 408.4  | 404.2  |
| 75°   | 538.2  | 548.8  | 573.8  | 557.1  | 513.1  | 475.4  | 410.5  | 345.6  | 303.7  | 272.2  | 266.0  |
| 77.5° | 343.5  | 360.2  | 360.2  | 358.1  | 326.7  | 291.1  | 249.2  | 203.2  | 171.7  | 148.7  | 142.4  |
| 80°   | 228.2  | 238.8  | 247.2  | 238.8  | 217.8  | 190.6  | 159.2  | 127.7  | 104.7  | 85.9   | 81.7   |
| 82.5° | 167.5  | 180.1  | 186.4  | 178.0  | 157.1  | 136.2  | 113.1  | 90.1   | 67.0   | 52.4   | 48.2   |
| 85°   | 64.9   | 67.0   | 75.4   | 90.1   | 88.0   | 85.9   | 69.1   | 50.3   | 37.7   | 27.2   | 25.1   |
| 87.5° | 16.7   | 14.6   | 16.7   | 16.7   | 14.6   | 12.5   | 12.5   | 12.5   | 12.5   | 6.3    | 8.4    |
| 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)