

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: P320117

Luminaire Tested: **GAN-SA3B-827-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA3B-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12186 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

Input Watts (W): 124  
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



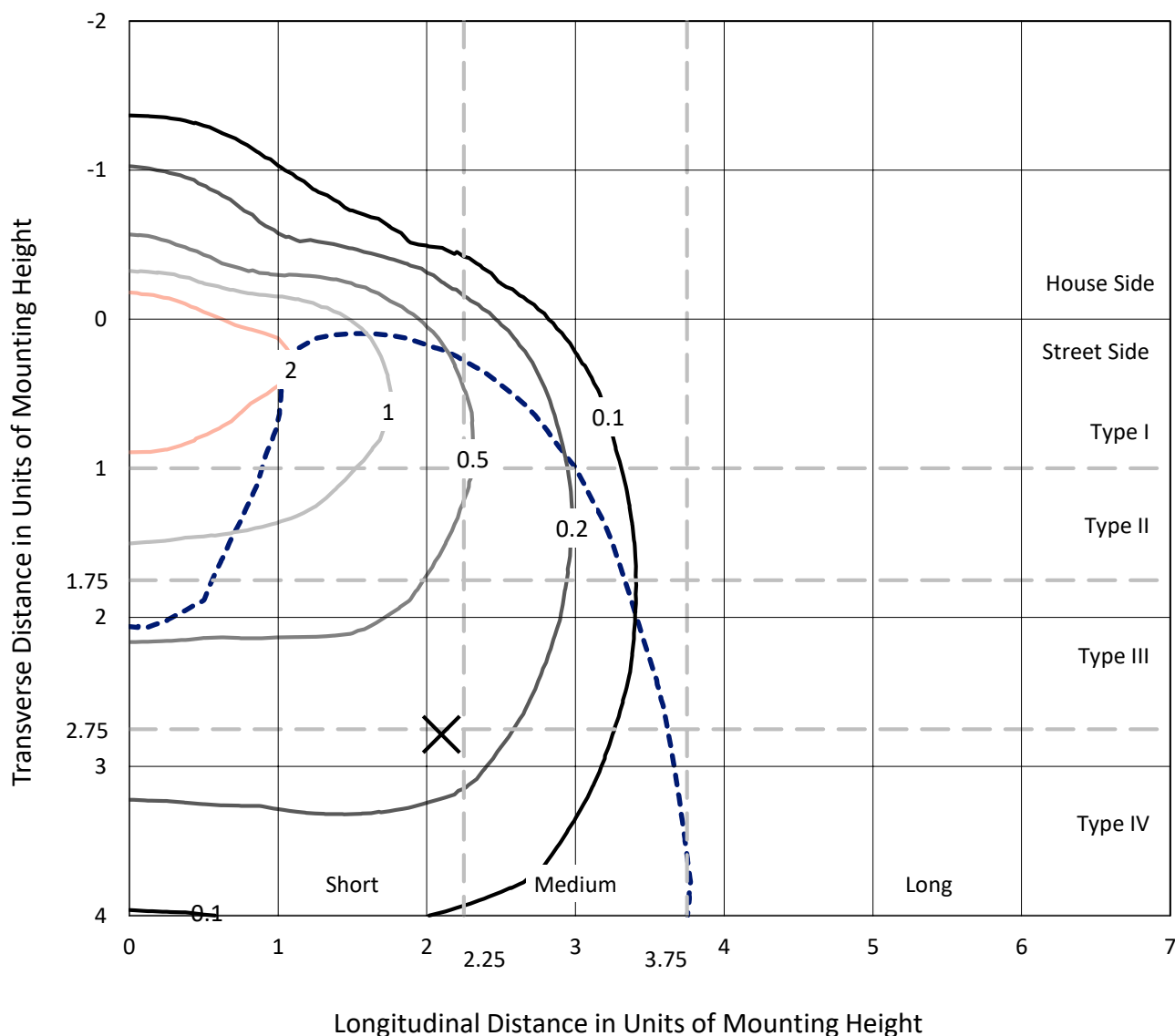
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

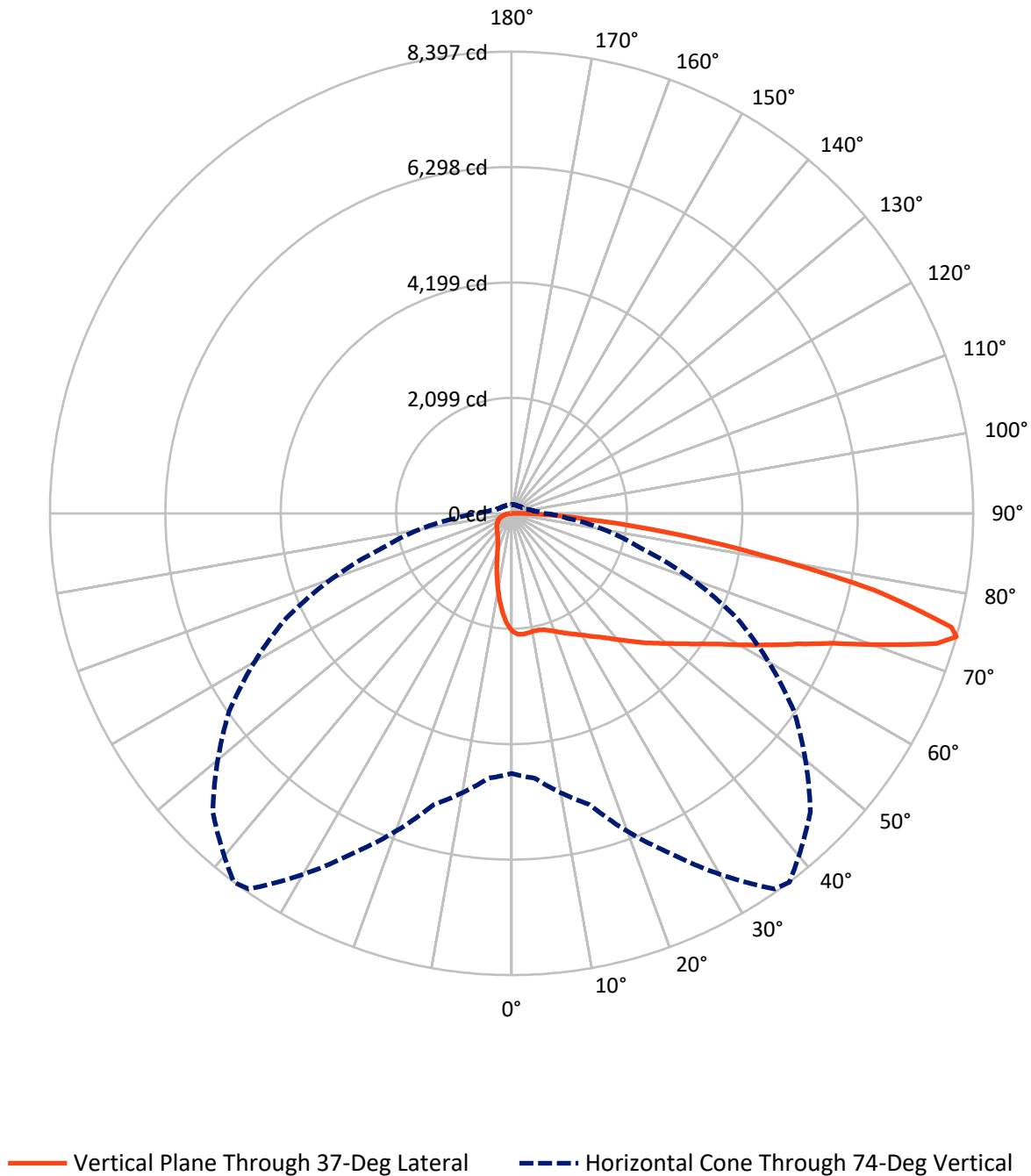


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc

Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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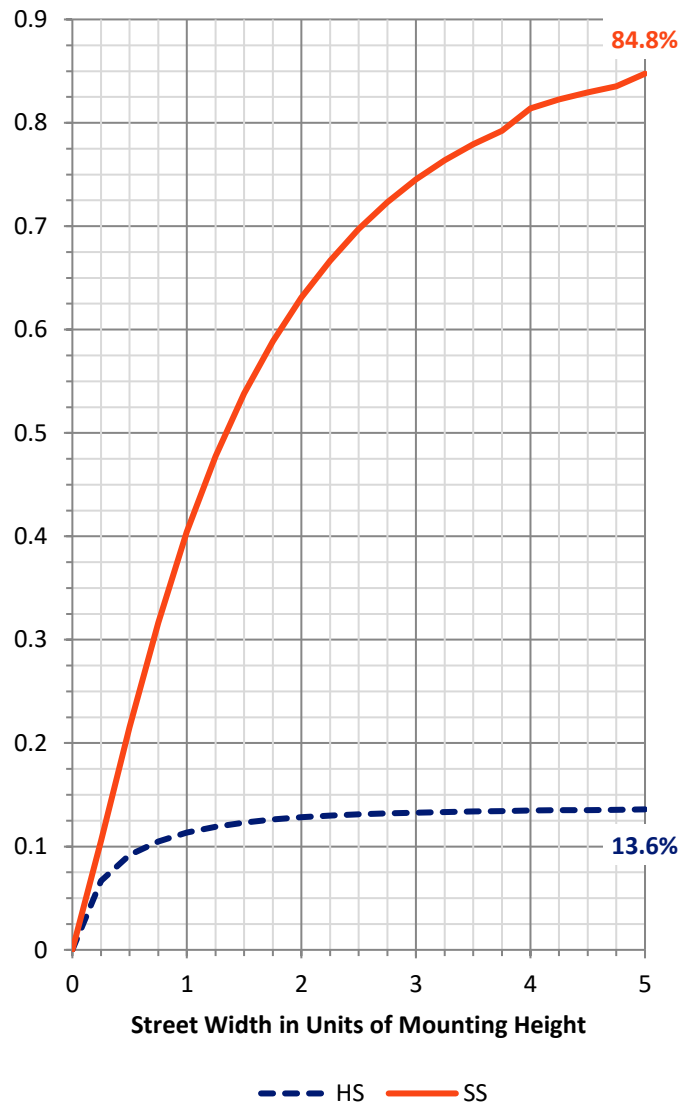
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1676.7   | 0.0    | 1676.7  |
|                    | % Fixture | 13.8     | 0.0    | 13.8    |
| <b>Street Side</b> | Lumens    | 10509.3  | 0.0    | 10509.3 |
|                    | % Fixture | 86.2     | 0.0    | 86.2    |
| <b>Total</b>       | Lumens    | 12186.0  | 0.0    | 12186.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 189.1   | 1.6       |
| 10°-20°   | 484.7   | 4.0       |
| 20°-30°   | 746.8   | 6.1       |
| 30°-40°   | 1085.9  | 8.9       |
| 40°-50°   | 1598.3  | 13.1      |
| 50°-60°   | 2244.5  | 18.4      |
| 60°-70°   | 2840.8  | 23.3      |
| 70°-80°   | 2501.4  | 20.5      |
| 80°-90°   | 494.6   | 4.1       |
| 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°    | 12186.0 | 100.0     |
| 0°-180°   | 12186.0 | 100.0     |

**Coefficient of Utilization**



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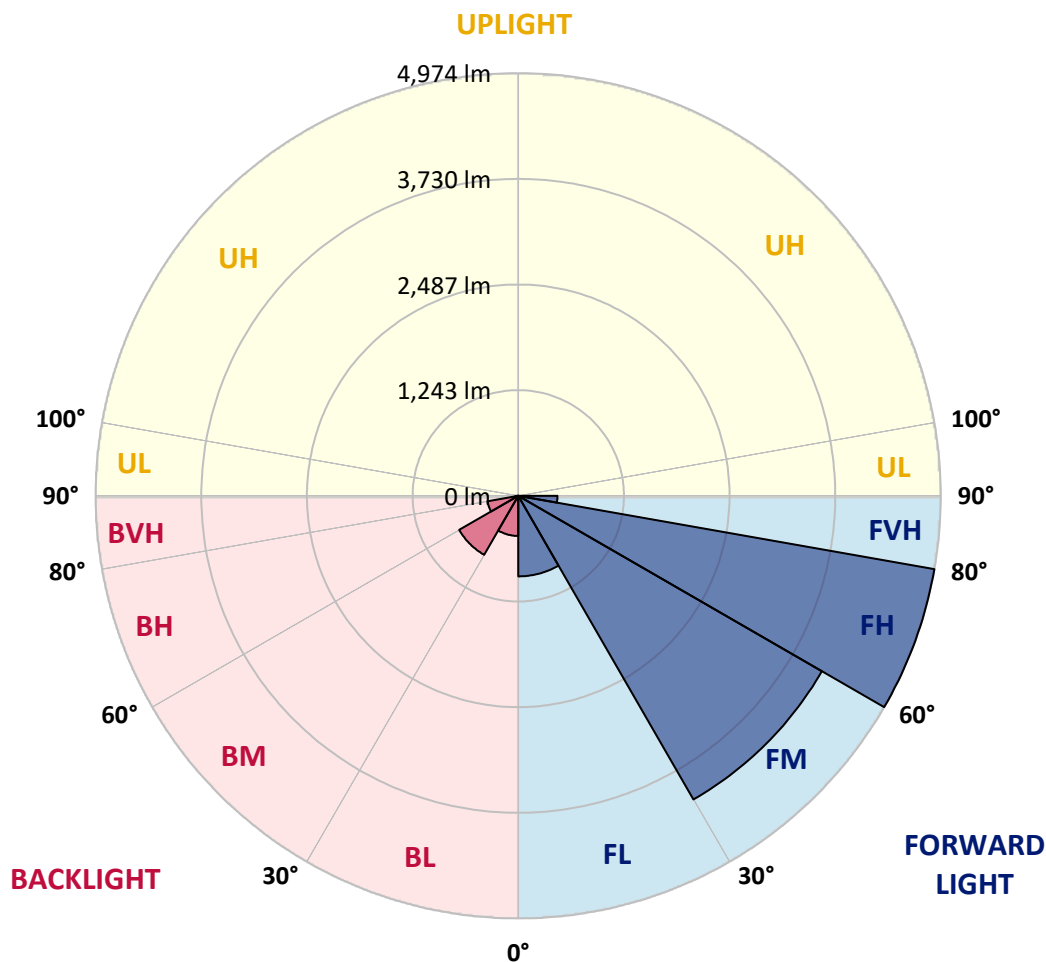
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 948.2  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 4126.3 | 33.9      |                         |      |         |
| FH   | (60°-80°)   | 4973.7 | 40.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 461.1  | 3.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 472.3  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 802.4  | 6.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 368.6  | 3.0       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 33.5   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 37°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 |
| 2.5°  | 2220.5 | 2221.0 | 2220.5 | 2217.1 | 2208.9 | 2202.1 | 2196.5 | 2188.3 | 2170.3 | 2156.6 | 2136.0 |
| 5°    | 2241.6 | 2239.0 | 2237.3 | 2230.8 | 2218.0 | 2210.2 | 2199.5 | 2184.0 | 2154.4 | 2127.0 | 2093.5 |
| 7.5°  | 2231.7 | 2228.7 | 2224.8 | 2217.1 | 2202.5 | 2196.1 | 2181.0 | 2160.9 | 2125.2 | 2089.2 | 2041.1 |
| 10°   | 2201.2 | 2200.4 | 2198.6 | 2196.9 | 2184.5 | 2179.3 | 2165.6 | 2144.1 | 2108.9 | 2065.1 | 2008.9 |
| 12.5° | 2167.3 | 2169.4 | 2176.3 | 2185.3 | 2179.7 | 2177.2 | 2168.6 | 2154.0 | 2117.9 | 2070.7 | 2002.9 |
| 15°   | 2145.8 | 2151.8 | 2170.3 | 2193.9 | 2198.6 | 2197.8 | 2195.6 | 2186.2 | 2148.0 | 2095.6 | 2016.6 |
| 17.5° | 2138.5 | 2148.4 | 2183.6 | 2222.7 | 2236.4 | 2239.4 | 2240.3 | 2224.0 | 2181.5 | 2126.1 | 2030.8 |
| 20°   | 2151.8 | 2164.3 | 2215.8 | 2269.5 | 2291.4 | 2293.1 | 2289.2 | 2260.9 | 2213.2 | 2152.3 | 2038.5 |
| 22.5° | 2192.2 | 2203.4 | 2267.7 | 2328.3 | 2353.2 | 2355.7 | 2344.2 | 2301.2 | 2246.7 | 2183.2 | 2049.3 |
| 25°   | 2269.9 | 2283.6 | 2348.0 | 2408.5 | 2421.4 | 2421.8 | 2405.1 | 2351.9 | 2290.5 | 2226.5 | 2072.4 |
| 27.5° | 2371.2 | 2384.9 | 2442.9 | 2502.1 | 2495.3 | 2491.4 | 2468.6 | 2415.4 | 2347.6 | 2286.2 | 2113.6 |
| 30°   | 2484.1 | 2499.1 | 2554.1 | 2596.1 | 2579.8 | 2572.1 | 2553.6 | 2484.9 | 2427.0 | 2367.8 | 2176.7 |
| 32.5° | 2600.8 | 2614.6 | 2662.7 | 2691.4 | 2670.8 | 2667.4 | 2639.5 | 2576.8 | 2530.4 | 2492.2 | 2278.9 |
| 35°   | 2720.6 | 2730.5 | 2777.7 | 2794.0 | 2766.5 | 2765.7 | 2758.0 | 2700.4 | 2671.2 | 2689.3 | 2427.4 |
| 37.5° | 2842.9 | 2845.5 | 2885.9 | 2886.7 | 2878.6 | 2882.0 | 2890.2 | 2854.1 | 2862.3 | 2918.5 | 2620.6 |
| 40°   | 2952.0 | 2958.8 | 2988.0 | 2997.0 | 3011.2 | 3023.2 | 3064.0 | 3040.4 | 3103.5 | 3203.1 | 2861.0 |
| 42.5° | 3032.7 | 3046.0 | 3092.8 | 3116.0 | 3161.9 | 3180.8 | 3238.3 | 3260.2 | 3387.2 | 3536.6 | 3146.9 |
| 45°   | 3100.9 | 3121.5 | 3196.7 | 3244.3 | 3322.0 | 3355.0 | 3437.5 | 3510.9 | 3707.9 | 3898.5 | 3447.8 |
| 47.5° | 3174.8 | 3200.9 | 3294.9 | 3386.0 | 3491.5 | 3528.9 | 3678.7 | 3788.6 | 4050.0 | 4262.5 | 3731.5 |
| 50°   | 3283.4 | 3303.5 | 3395.4 | 3538.3 | 3670.1 | 3718.2 | 3925.5 | 4083.1 | 4397.7 | 4609.3 | 3977.5 |
| 52.5° | 3434.9 | 3427.2 | 3504.9 | 3705.3 | 3882.2 | 3941.4 | 4189.1 | 4396.4 | 4750.1 | 4923.1 | 4185.2 |
| 55°   | 3587.3 | 3574.4 | 3628.9 | 3880.0 | 4129.4 | 4191.7 | 4479.3 | 4711.1 | 5085.4 | 5205.6 | 4344.5 |
| 57.5° | 3756.8 | 3732.4 | 3778.3 | 4077.0 | 4411.0 | 4485.3 | 4804.2 | 5045.4 | 5415.0 | 5433.9 | 4445.8 |
| 60°   | 3931.5 | 3898.5 | 3950.0 | 4321.3 | 4768.6 | 4856.1 | 5184.5 | 5371.7 | 5725.8 | 5616.8 | 4478.4 |
| 62.5° | 4084.3 | 4061.2 | 4140.6 | 4593.9 | 5171.6 | 5267.8 | 5558.0 | 5718.5 | 6032.3 | 5692.8 | 4360.8 |
| 65°   | 4217.8 | 4221.7 | 4359.1 | 4900.4 | 5621.1 | 5723.7 | 5986.4 | 6146.1 | 6273.5 | 5647.7 | 4085.6 |
| 67.5° | 4377.1 | 4399.0 | 4633.4 | 5303.9 | 6186.8 | 6299.3 | 6609.6 | 6612.2 | 6408.3 | 5383.3 | 3543.9 |
| 70°   | 4609.3 | 4654.4 | 5010.7 | 5863.6 | 6991.3 | 7145.8 | 7385.3 | 6886.1 | 6219.0 | 4666.4 | 2788.4 |
| 72.5° | 4815.4 | 4899.5 | 5412.0 | 6504.0 | 7971.7 | 8088.9 | 7839.0 | 6728.1 | 5427.9 | 3497.1 | 1737.2 |
| 74°   | 4731.7 | 4836.0 | 5485.0 | 6819.6 | 8340.8 | 8397.1 | 7685.8 | 6267.1 | 4525.6 | 2421.8 | 1009.6 |
| 75°   | 4551.4 | 4664.7 | 5378.5 | 6816.5 | 8294.0 | 8262.7 | 7315.8 | 5740.4 | 3727.2 | 1651.8 | 671.8  |
| 77.5° | 3673.1 | 3792.9 | 4532.1 | 5842.1 | 6800.7 | 6771.0 | 5619.8 | 3850.8 | 1632.5 | 541.7  | 341.3  |
| 80°   | 2135.5 | 2227.0 | 2813.3 | 3710.0 | 4585.7 | 4639.4 | 3695.9 | 1905.5 | 642.2  | 304.3  | 231.4  |
| 82.5° | 948.7  | 1011.8 | 1359.0 | 1893.9 | 2767.4 | 2836.5 | 1935.5 | 998.4  | 396.6  | 185.0  | 139.1  |
| 85°   | 622.4  | 669.2  | 825.0  | 901.9  | 1317.8 | 1365.0 | 947.4  | 777.4  | 261.8  | 101.7  | 102.2  |
| 87.5° | 447.7  | 492.8  | 613.0  | 535.3  | 604.8  | 572.6  | 515.5  | 719.4  | 105.2  | 57.9   | 34.3   |
| 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°    | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 | 2147.1 |
| 2.5°  | 2127.0 | 2120.1 | 2104.6 | 2075.4 | 2059.1 | 2045.4 | 2022.6 | 2009.3 | 2003.3 | 2002.9 | 2005.5 |
| 5°    | 2074.2 | 2058.3 | 2018.3 | 1969.4 | 1930.4 | 1894.7 | 1850.5 | 1823.9 | 1805.0 | 1793.9 | 1796.9 |
| 7.5°  | 2012.8 | 1987.9 | 1925.2 | 1847.1 | 1784.4 | 1715.3 | 1647.0 | 1606.3 | 1574.5 | 1550.9 | 1555.2 |
| 10°   | 1970.7 | 1936.4 | 1844.9 | 1732.5 | 1628.2 | 1527.7 | 1433.7 | 1377.5 | 1332.8 | 1298.5 | 1301.1 |
| 12.5° | 1956.5 | 1910.2 | 1783.5 | 1633.3 | 1486.9 | 1349.6 | 1226.8 | 1140.5 | 1094.6 | 1055.5 | 1058.5 |
| 15°   | 1958.7 | 1896.4 | 1732.0 | 1544.0 | 1359.9 | 1186.9 | 1037.9 | 937.1  | 874.8  | 847.8  | 848.2  |
| 17.5° | 1960.4 | 1880.6 | 1678.0 | 1448.3 | 1234.1 | 1034.9 | 873.1  | 770.9  | 712.1  | 687.2  | 687.7  |
| 20°   | 1954.8 | 1854.8 | 1611.0 | 1338.4 | 1102.8 | 895.4  | 738.7  | 652.0  | 607.4  | 588.1  | 588.1  |
| 22.5° | 1947.5 | 1824.3 | 1535.4 | 1228.1 | 973.1  | 774.4  | 642.6  | 576.5  | 550.7  | 537.9  | 537.4  |
| 25°   | 1951.0 | 1801.6 | 1458.2 | 1114.8 | 853.8  | 677.8  | 578.6  | 534.8  | 517.7  | 509.5  | 509.1  |
| 27.5° | 1969.4 | 1790.8 | 1386.9 | 1001.9 | 749.5  | 605.2  | 535.7  | 504.8  | 493.6  | 488.5  | 488.5  |
| 30°   | 2002.9 | 1790.8 | 1312.7 | 905.7  | 662.8  | 551.6  | 502.7  | 481.6  | 473.9  | 470.5  | 470.5  |
| 32.5° | 2061.3 | 1800.7 | 1241.0 | 810.4  | 593.7  | 509.5  | 475.2  | 461.0  | 455.0  | 453.3  | 453.3  |
| 35°   | 2161.7 | 1834.2 | 1171.0 | 720.3  | 537.9  | 475.2  | 449.0  | 440.8  | 436.6  | 436.1  | 437.4  |
| 37.5° | 2302.9 | 1902.5 | 1105.3 | 653.8  | 498.4  | 447.3  | 427.1  | 420.7  | 418.1  | 420.2  | 422.0  |
| 40°   | 2480.7 | 1995.2 | 1045.7 | 593.7  | 468.3  | 425.0  | 406.9  | 402.6  | 401.4  | 404.4  | 406.9  |
| 42.5° | 2695.3 | 2120.5 | 996.7  | 550.3  | 445.1  | 406.1  | 389.8  | 384.6  | 383.3  | 386.8  | 390.2  |
| 45°   | 2927.5 | 2255.3 | 962.4  | 518.1  | 427.1  | 391.9  | 374.7  | 369.2  | 366.6  | 368.3  | 372.2  |
| 47.5° | 3138.7 | 2382.8 | 948.7  | 495.4  | 409.9  | 379.9  | 361.4  | 354.6  | 350.3  | 349.4  | 352.4  |
| 50°   | 3316.8 | 2477.7 | 955.1  | 481.6  | 396.2  | 366.6  | 348.6  | 340.8  | 334.4  | 330.5  | 332.7  |
| 52.5° | 3446.5 | 2537.3 | 961.1  | 475.6  | 385.5  | 352.0  | 334.4  | 327.1  | 318.5  | 312.1  | 312.1  |
| 55°   | 3540.5 | 2551.1 | 947.8  | 470.9  | 377.3  | 336.1  | 318.5  | 311.6  | 303.1  | 295.8  | 294.9  |
| 57.5° | 3577.4 | 2512.4 | 898.4  | 464.0  | 371.7  | 321.1  | 301.8  | 296.6  | 289.3  | 280.7  | 280.3  |
| 60°   | 3527.6 | 2393.1 | 803.1  | 449.4  | 364.4  | 308.6  | 285.0  | 281.6  | 278.2  | 270.0  | 269.6  |
| 62.5° | 3327.6 | 2131.2 | 679.9  | 419.8  | 349.8  | 295.3  | 269.6  | 271.3  | 271.7  | 266.1  | 265.3  |
| 65°   | 2964.9 | 1771.5 | 559.7  | 381.2  | 327.9  | 279.4  | 253.7  | 261.8  | 266.6  | 265.7  | 264.4  |
| 67.5° | 2437.7 | 1378.8 | 474.3  | 340.4  | 299.2  | 257.6  | 236.5  | 246.0  | 249.8  | 252.8  | 252.0  |
| 70°   | 1809.3 | 972.3  | 392.3  | 297.5  | 264.4  | 231.8  | 214.2  | 218.9  | 216.3  | 219.8  | 221.1  |
| 72.5° | 1008.7 | 583.4  | 319.8  | 254.5  | 228.4  | 201.7  | 189.3  | 188.4  | 182.9  | 182.9  | 182.9  |
| 74°   | 605.2  | 428.0  | 281.2  | 227.9  | 206.5  | 182.0  | 171.3  | 167.4  | 162.3  | 162.7  | 162.3  |
| 75°   | 486.8  | 367.9  | 258.0  | 210.3  | 191.0  | 170.4  | 159.7  | 154.5  | 150.7  | 150.7  | 150.2  |
| 77.5° | 307.3  | 279.4  | 207.8  | 167.4  | 152.8  | 140.4  | 133.1  | 126.2  | 126.2  | 125.8  | 125.3  |
| 80°   | 232.2  | 222.4  | 161.8  | 126.6  | 117.2  | 107.7  | 103.0  | 100.0  | 100.0  | 101.3  | 100.9  |
| 82.5° | 159.3  | 167.4  | 113.8  | 88.4   | 83.7   | 76.8   | 76.0   | 76.4   | 75.1   | 73.4   | 73.0   |
| 85°   | 116.3  | 125.8  | 76.8   | 55.8   | 51.1   | 46.8   | 50.2   | 51.9   | 49.8   | 45.9   | 44.2   |
| 87.5° | 44.6   | 82.4   | 41.2   | 23.2   | 21.5   | 18.5   | 21.5   | 22.3   | 24.0   | 18.9   | 19.3   |
| 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)