

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: P322048

Luminaire Tested: **GAN-SA4C-827-U-T2-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322048  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA4C-827-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14921 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

Input Watts (W): 225  
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

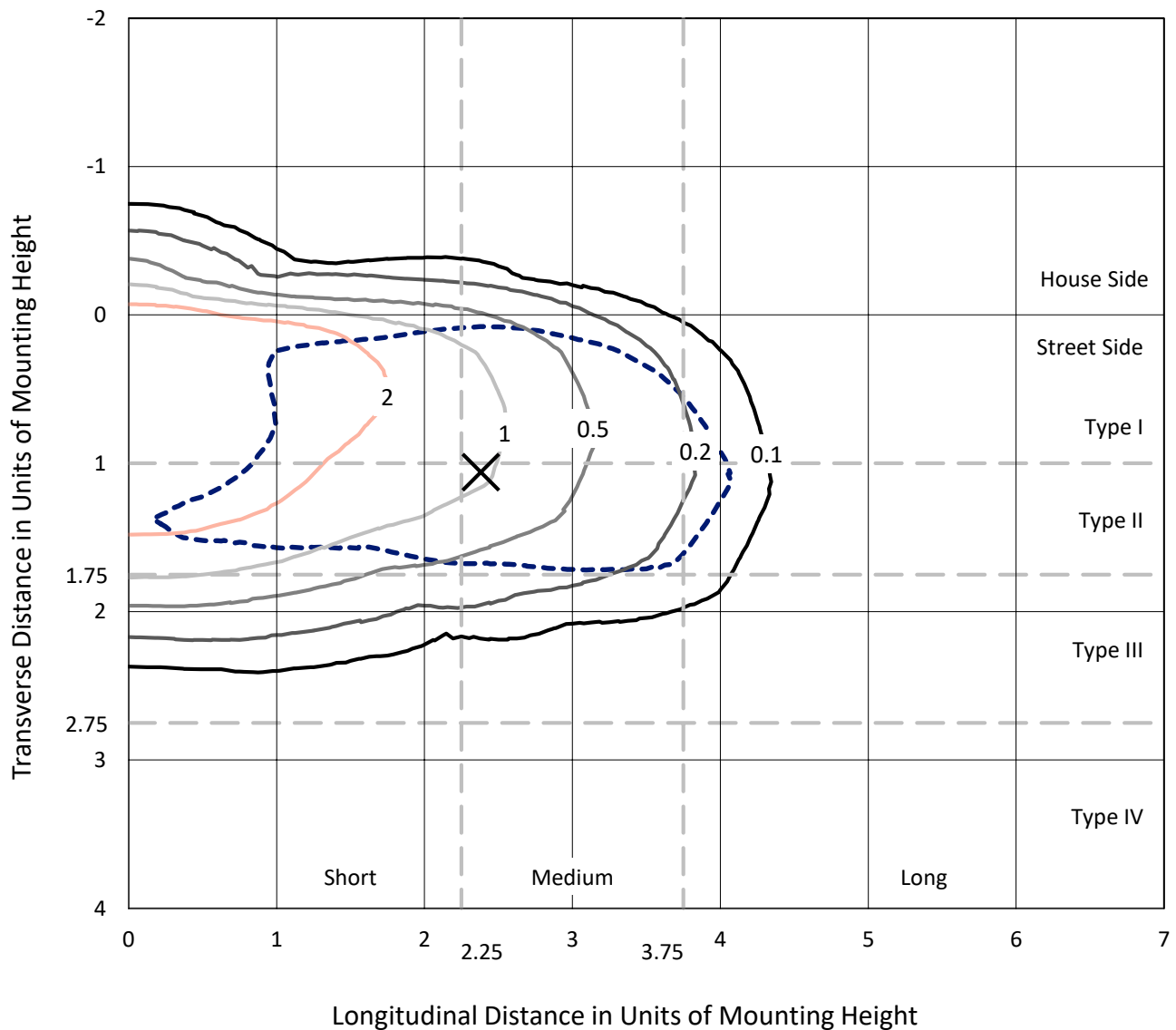


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## Iso-Footcandle Lines of Horizontal Illumination

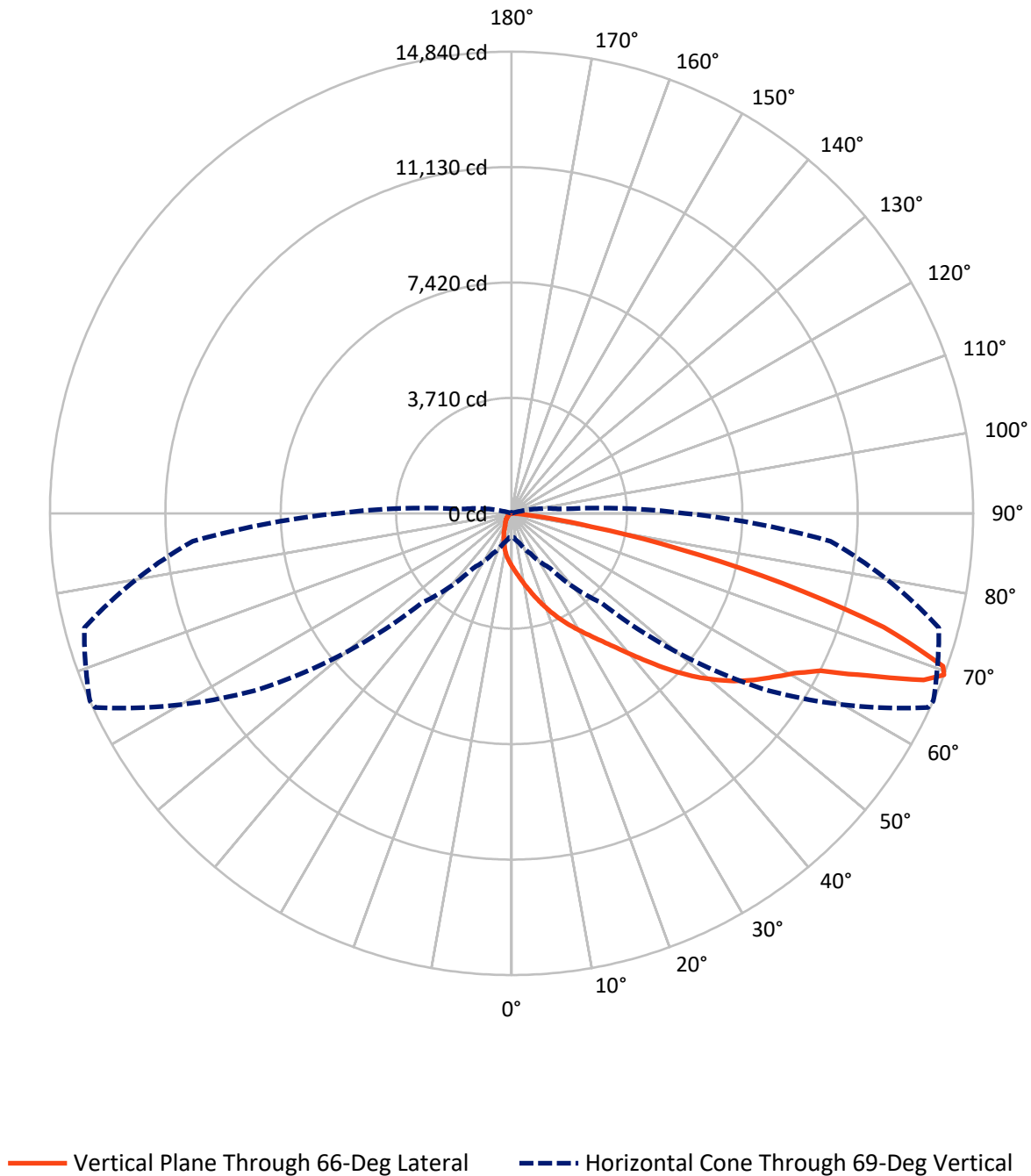
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 895.1    | 0.0    | 895.1   |
|                    | % Fixture | 6.0      | 0.0    | 6.0     |
| <b>Street Side</b> | Lumens    | 14026.0  | 0.0    | 14026.0 |
|                    | % Fixture | 94.0     | 0.0    | 94.0    |
| <b>Total</b>       | Lumens    | 14921.0  | 0.0    | 14921.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 164.1   | 1.1       |
| 10°-20°   | 488.5   | 3.3       |
| 20°-30°   | 850.7   | 5.7       |
| 30°-40°   | 1492.5  | 10.0      |
| 40°-50°   | 2498.2  | 16.7      |
| 50°-60°   | 3672.2  | 24.6      |
| 60°-70°   | 3770.4  | 25.3      |
| 70°-80°   | 1861.3  | 12.5      |
| 80°-90°   | 123.1   | 0.8       |
| 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°    | 14921.0 | 100.0     |
| 0°-180°   | 14921.0 | 100.0     |

**Coefficient of Utilization**



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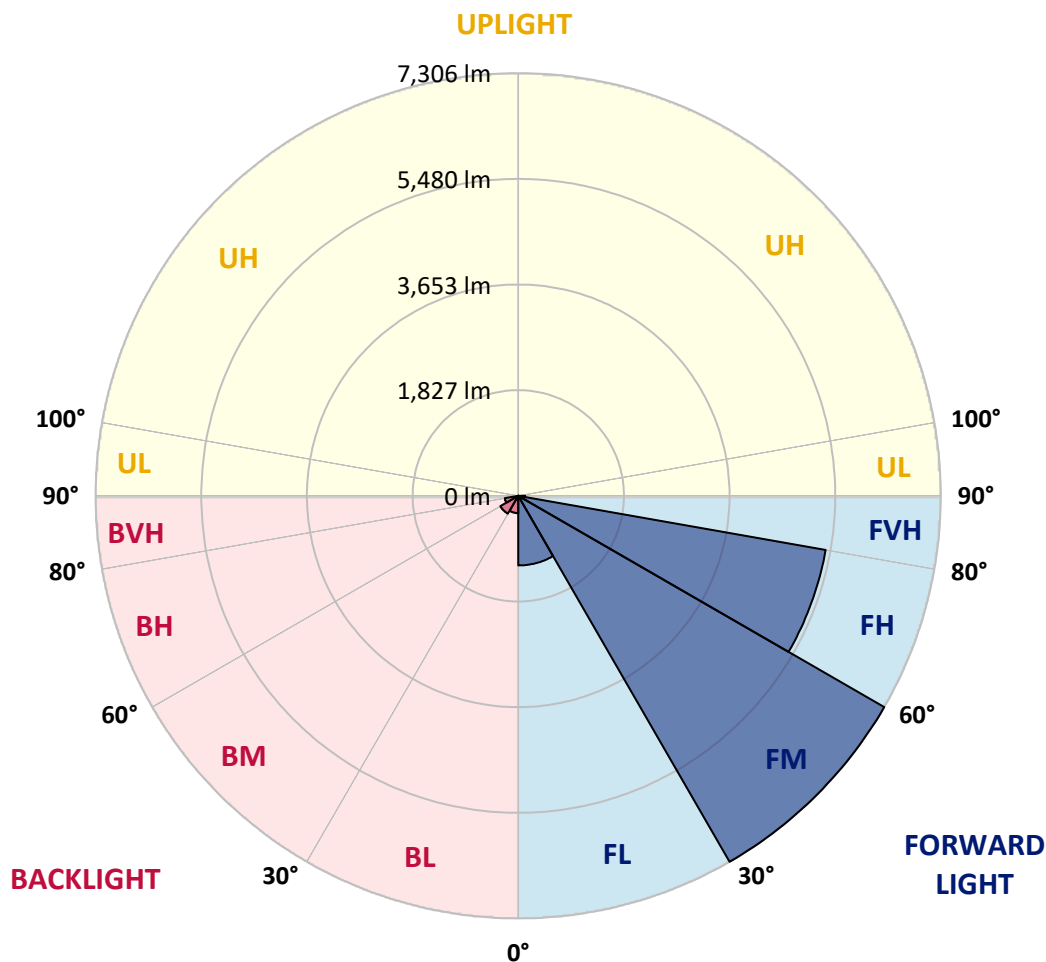
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1204.0 | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 7306.0 | 49.0      |                         |      |         |
| FH   | (60°-80°)   | 5395.8 | 36.2      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 120.1  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 299.3  | 2.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 356.9  | 2.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 235.9  | 1.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 3.0    | 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-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1  | 1698.1  | 1698.1  | 1698.1  | 1698.1  |
| 2.5°  | 1998.5 | 1990.0 | 1986.5 | 1970.9 | 1944.0 | 1923.4 | 1883.7  | 1837.7  | 1829.2  | 1784.5  | 1729.9  |
| 5°    | 2257.9 | 2250.8 | 2245.9 | 2223.9 | 2196.3 | 2144.5 | 2072.3  | 1986.5  | 1970.2  | 1885.2  | 1776.0  |
| 7.5°  | 2438.7 | 2451.4 | 2451.4 | 2437.2 | 2402.5 | 2363.5 | 2274.9  | 2158.0  | 2137.5  | 2007.1  | 1837.7  |
| 10°   | 2544.3 | 2559.8 | 2571.9 | 2583.9 | 2579.0 | 2563.4 | 2479.8  | 2347.9  | 2323.1  | 2150.2  | 1909.3  |
| 12.5° | 2554.2 | 2569.8 | 2603.8 | 2654.1 | 2703.0 | 2738.4 | 2686.0  | 2558.4  | 2530.1  | 2316.0  | 1994.3  |
| 15°   | 2498.9 | 2515.2 | 2567.6 | 2665.4 | 2783.8 | 2887.3 | 2904.3  | 2791.6  | 2762.5  | 2513.8  | 2100.6  |
| 17.5° | 2402.5 | 2413.1 | 2488.3 | 2623.6 | 2809.3 | 2999.2 | 3102.0  | 3041.8  | 3014.8  | 2739.9  | 2219.0  |
| 20°   | 2330.9 | 2338.7 | 2404.6 | 2549.9 | 2793.7 | 3069.4 | 3289.1  | 3307.5  | 3279.2  | 2982.2  | 2347.2  |
| 22.5° | 2453.5 | 2467.7 | 2469.8 | 2538.6 | 2751.2 | 3104.1 | 3453.5  | 3569.0  | 3547.8  | 3239.5  | 2473.4  |
| 25°   | 2788.8 | 2805.1 | 2751.2 | 2708.7 | 2787.3 | 3119.7 | 3594.6  | 3836.9  | 3819.9  | 3516.6  | 2600.2  |
| 27.5° | 3231.7 | 3248.7 | 3179.3 | 3052.4 | 2976.6 | 3178.5 | 3720.0  | 4109.1  | 4108.4  | 3810.0  | 2737.0  |
| 30°   | 3666.8 | 3683.8 | 3613.0 | 3486.1 | 3311.8 | 3345.1 | 3828.4  | 4394.0  | 4398.2  | 4112.6  | 2882.3  |
| 32.5° | 4123.2 | 4144.5 | 4071.5 | 3908.5 | 3726.4 | 3632.8 | 3980.8  | 4680.3  | 4704.4  | 4463.4  | 3046.0  |
| 35°   | 4642.0 | 4644.9 | 4542.1 | 4371.3 | 4161.5 | 4017.6 | 4225.3  | 5001.3  | 5058.7  | 4897.9  | 3253.7  |
| 37.5° | 5150.9 | 5171.4 | 5087.1 | 4817.8 | 4625.0 | 4462.0 | 4588.9  | 5402.5  | 5484.0  | 5428.7  | 3525.1  |
| 40°   | 5527.9 | 5571.1 | 5559.1 | 5268.5 | 5085.7 | 4969.4 | 5040.3  | 5879.4  | 5982.9  | 6046.7  | 3867.4  |
| 42.5° | 5764.6 | 5797.2 | 5852.5 | 5677.4 | 5511.6 | 5530.7 | 5573.3  | 6435.0  | 6562.6  | 6751.1  | 4260.7  |
| 45°   | 6036.0 | 6051.6 | 6097.7 | 6020.5 | 5908.5 | 6101.2 | 6138.8  | 7060.8  | 7194.8  | 7508.7  | 4697.3  |
| 47.5° | 6367.7 | 6404.6 | 6417.3 | 6346.5 | 6295.4 | 6605.8 | 6683.8  | 7629.9  | 7817.7  | 8320.2  | 5159.4  |
| 50°   | 6790.1 | 6800.0 | 6822.0 | 6775.9 | 6724.9 | 7039.6 | 7172.8  | 8227.4  | 8398.2  | 9134.5  | 5615.1  |
| 52.5° | 7203.3 | 7238.7 | 7315.3 | 7286.2 | 7265.6 | 7408.8 | 7608.7  | 8766.0  | 8956.6  | 9813.4  | 6070.1  |
| 55°   | 7322.3 | 7352.8 | 7617.2 | 7797.9 | 7965.1 | 7863.8 | 8025.4  | 9248.6  | 9454.8  | 10420.1 | 6508.0  |
| 57.5° | 6846.8 | 6908.5 | 7366.3 | 7836.9 | 8530.7 | 8571.1 | 8598.0  | 9744.0  | 9929.0  | 10885.0 | 6963.7  |
| 60°   | 5644.8 | 5656.9 | 6408.1 | 7215.3 | 8437.1 | 9188.4 | 9434.3  | 10276.2 | 10431.4 | 11318.0 | 7509.4  |
| 62.5° | 3590.3 | 3712.9 | 4537.1 | 5676.7 | 7447.8 | 9099.1 | 10445.6 | 11081.3 | 11138.0 | 11837.5 | 8291.9  |
| 65°   | 1710.1 | 1789.5 | 2383.4 | 3507.4 | 5394.7 | 7955.9 | 11143.7 | 12537.7 | 12563.2 | 12867.3 | 9337.2  |
| 67.5° | 946.8  | 985.1  | 1267.9 | 1888.0 | 3153.7 | 5626.4 | 10861.6 | 14262.7 | 14286.8 | 13919.0 | 10254.3 |
| 69°   | 740.6  | 773.2  | 995.7  | 1423.1 | 2138.2 | 4043.9 | 9829.0  | 14768.0 | 14839.6 | 14220.2 | 10286.9 |
| 70°   | 628.6  | 660.5  | 857.5  | 1202.0 | 1719.3 | 3124.7 | 8749.0  | 14642.6 | 14718.4 | 14191.8 | 10043.8 |
| 72.5° | 384.8  | 403.3  | 571.2  | 846.2  | 1152.4 | 1571.9 | 5395.4  | 12383.2 | 12511.5 | 13018.2 | 8632.0  |
| 75°   | 259.4  | 269.3  | 357.2  | 584.0  | 824.2  | 809.3  | 2802.9  | 8728.4  | 9006.2  | 10126.7 | 6375.5  |
| 77.5° | 185.7  | 194.9  | 239.5  | 377.7  | 577.6  | 534.4  | 1269.3  | 5424.4  | 5484.0  | 6073.6  | 3476.9  |
| 80°   | 105.6  | 114.1  | 169.4  | 224.7  | 391.9  | 356.5  | 504.6   | 2591.0  | 2620.8  | 2604.5  | 1160.9  |
| 82.5° | 55.3   | 62.4   | 92.8   | 148.1  | 251.6  | 233.2  | 209.8   | 867.5   | 871.7   | 725.0   | 254.4   |
| 85°   | 10.6   | 12.8   | 46.1   | 101.3  | 129.7  | 101.3  | 85.8    | 203.4   | 207.7   | 183.6   | 63.1    |
| 87.5° | 0.0    | 0.7    | 18.4   | 22.7   | 25.5   | 26.2   | 27.6    | 39.7    | 42.5    | 57.4    | 17.0    |
| 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°    | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 | 1698.1 |
| 2.5°  | 1705.9 | 1680.3 | 1631.4 | 1574.7 | 1530.8 | 1487.6 | 1453.6 | 1418.1 | 1405.4 | 1399.0 | 1398.3 |
| 5°    | 1722.9 | 1669.0 | 1565.5 | 1459.2 | 1372.1 | 1289.8 | 1231.0 | 1175.0 | 1148.8 | 1136.8 | 1131.8 |
| 7.5°  | 1751.2 | 1664.7 | 1498.2 | 1335.9 | 1210.5 | 1107.7 | 1026.2 | 965.3  | 934.8  | 922.0  | 917.1  |
| 10°   | 1784.5 | 1659.1 | 1419.5 | 1205.5 | 1045.3 | 939.0  | 858.2  | 798.0  | 764.7  | 750.5  | 743.4  |
| 12.5° | 1823.5 | 1649.2 | 1328.8 | 1073.7 | 904.3  | 798.0  | 700.2  | 625.8  | 587.5  | 571.2  | 563.4  |
| 15°   | 1871.7 | 1639.2 | 1233.9 | 949.7  | 780.3  | 650.6  | 543.6  | 493.3  | 485.5  | 482.6  | 483.3  |
| 17.5° | 1919.2 | 1623.6 | 1130.4 | 827.1  | 649.9  | 508.1  | 453.6  | 450.7  | 452.2  | 452.2  | 452.2  |
| 20°   | 1961.7 | 1588.2 | 1017.7 | 722.2  | 525.9  | 428.8  | 417.4  | 412.5  | 408.9  | 406.1  | 402.5  |
| 22.5° | 1995.0 | 1540.7 | 909.3  | 618.0  | 429.5  | 392.6  | 374.9  | 359.3  | 346.6  | 338.1  | 333.8  |
| 25°   | 2017.7 | 1477.7 | 810.1  | 518.1  | 386.2  | 357.2  | 325.3  | 299.1  | 279.2  | 267.2  | 262.2  |
| 27.5° | 2034.7 | 1409.6 | 721.5  | 433.7  | 356.5  | 316.1  | 274.3  | 243.1  | 222.5  | 211.9  | 207.7  |
| 30°   | 2046.7 | 1332.4 | 643.5  | 381.3  | 323.2  | 272.9  | 228.2  | 197.7  | 182.8  | 177.2  | 174.3  |
| 32.5° | 2058.1 | 1246.6 | 569.8  | 356.5  | 292.0  | 233.2  | 191.4  | 168.0  | 158.7  | 151.7  | 149.5  |
| 35°   | 2086.4 | 1167.2 | 499.6  | 330.3  | 260.1  | 199.1  | 164.4  | 147.4  | 138.2  | 133.9  | 132.5  |
| 37.5° | 2153.8 | 1108.4 | 432.3  | 303.3  | 228.2  | 172.2  | 143.9  | 131.8  | 123.3  | 119.1  | 117.6  |
| 40°   | 2262.2 | 1078.6 | 375.6  | 274.3  | 197.0  | 151.7  | 130.4  | 119.1  | 109.8  | 103.5  | 102.1  |
| 42.5° | 2421.6 | 1082.9 | 335.9  | 245.2  | 172.2  | 135.4  | 117.6  | 104.2  | 94.3   | 88.6   | 87.2   |
| 45°   | 2615.1 | 1114.1 | 308.3  | 216.9  | 151.7  | 122.6  | 103.5  | 89.3   | 80.1   | 75.1   | 73.7   |
| 47.5° | 2824.9 | 1164.4 | 285.6  | 191.4  | 135.4  | 110.6  | 89.3   | 74.4   | 66.6   | 62.4   | 61.7   |
| 50°   | 3046.0 | 1213.3 | 262.2  | 166.5  | 121.2  | 98.5   | 75.1   | 61.7   | 55.3   | 51.7   | 50.3   |
| 52.5° | 3270.0 | 1270.0 | 241.0  | 143.9  | 109.1  | 84.3   | 62.4   | 50.3   | 45.4   | 42.5   | 41.1   |
| 55°   | 3510.9 | 1312.5 | 220.4  | 126.1  | 97.1   | 71.6   | 51.7   | 41.8   | 37.6   | 34.0   | 33.3   |
| 57.5° | 3794.4 | 1378.4 | 199.1  | 109.1  | 82.9   | 59.5   | 42.5   | 33.3   | 29.8   | 26.2   | 25.5   |
| 60°   | 4177.1 | 1455.7 | 176.5  | 96.4   | 68.0   | 48.9   | 34.7   | 26.9   | 22.7   | 19.8   | 19.1   |
| 62.5° | 4681.7 | 1541.4 | 148.1  | 84.3   | 55.3   | 39.7   | 27.6   | 21.3   | 16.3   | 12.8   | 12.8   |
| 65°   | 5321.7 | 1681.0 | 121.2  | 70.9   | 45.4   | 32.6   | 21.3   | 15.6   | 9.2    | 5.7    | 5.7    |
| 67.5° | 5695.2 | 1705.1 | 97.8   | 58.1   | 36.9   | 27.6   | 17.7   | 10.6   | 2.8    | 0.7    | 0.0    |
| 69°   | 5575.4 | 1565.5 | 82.9   | 49.6   | 31.9   | 26.2   | 16.3   | 7.8    | 1.4    | 0.0    | 0.0    |
| 70°   | 5350.0 | 1431.6 | 73.0   | 43.9   | 29.1   | 24.8   | 15.6   | 5.7    | 1.4    | 0.0    | 0.0    |
| 72.5° | 4420.9 | 1019.1 | 55.3   | 32.6   | 21.3   | 22.0   | 14.2   | 3.5    | 1.4    | 0.0    | 0.0    |
| 75°   | 3220.4 | 619.4  | 39.7   | 22.7   | 13.5   | 16.3   | 9.9    | 1.4    | 0.7    | 0.0    | 0.0    |
| 77.5° | 1791.6 | 292.0  | 24.8   | 12.8   | 8.5    | 9.9    | 5.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 581.8  | 79.4   | 11.3   | 7.1    | 5.0    | 5.7    | 2.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 107.7  | 22.7   | 6.4    | 3.5    | 1.4    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 23.4   | 9.2    | 3.5    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.8    | 2.8    | 0.7    | 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)