

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: P509141

Luminaire Tested: **VERD-CA2-110-760-U-T2**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509141  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-110-760-U-T2  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5700K, 1020mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15931 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

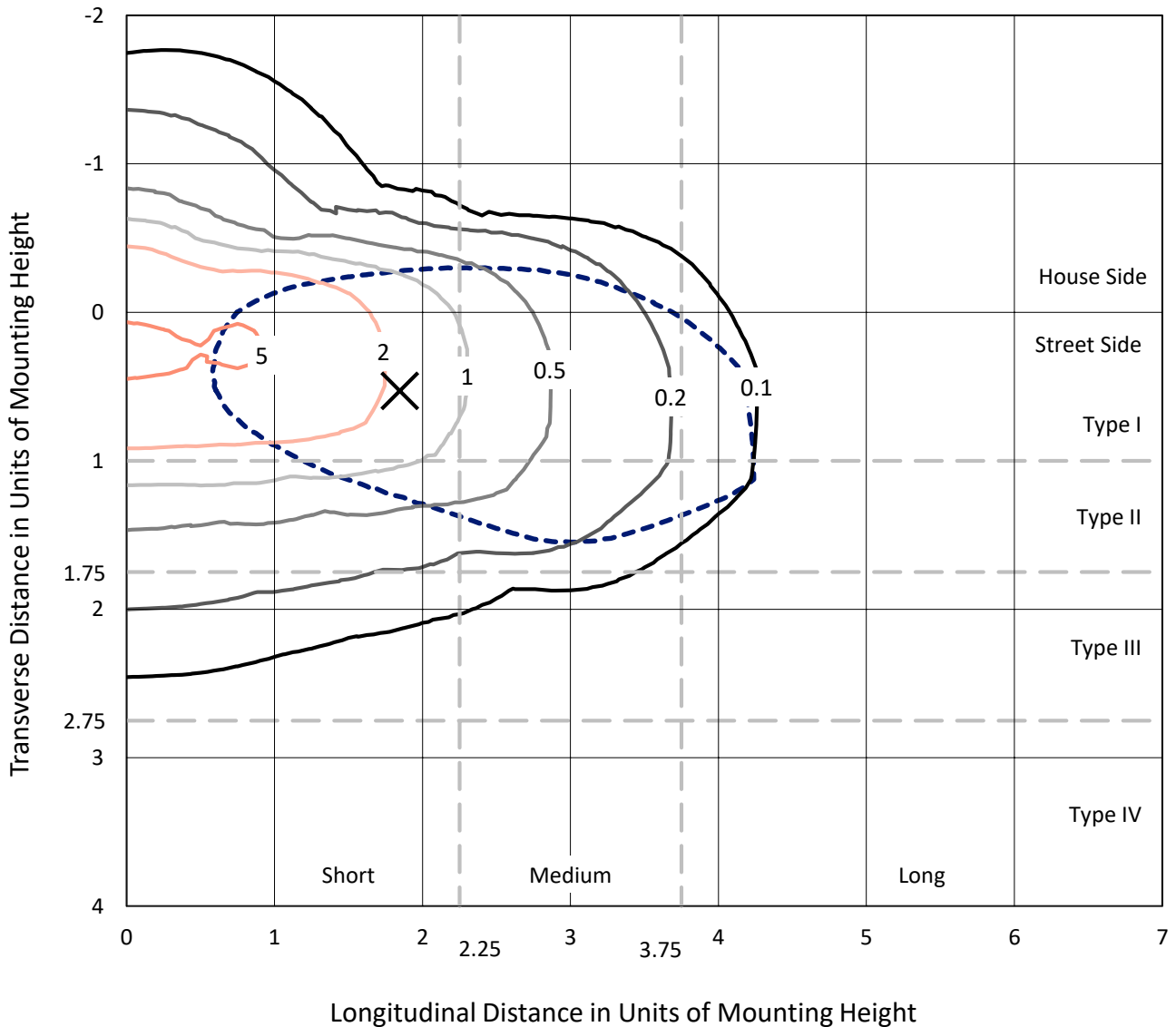
Input Watts (W): 113.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

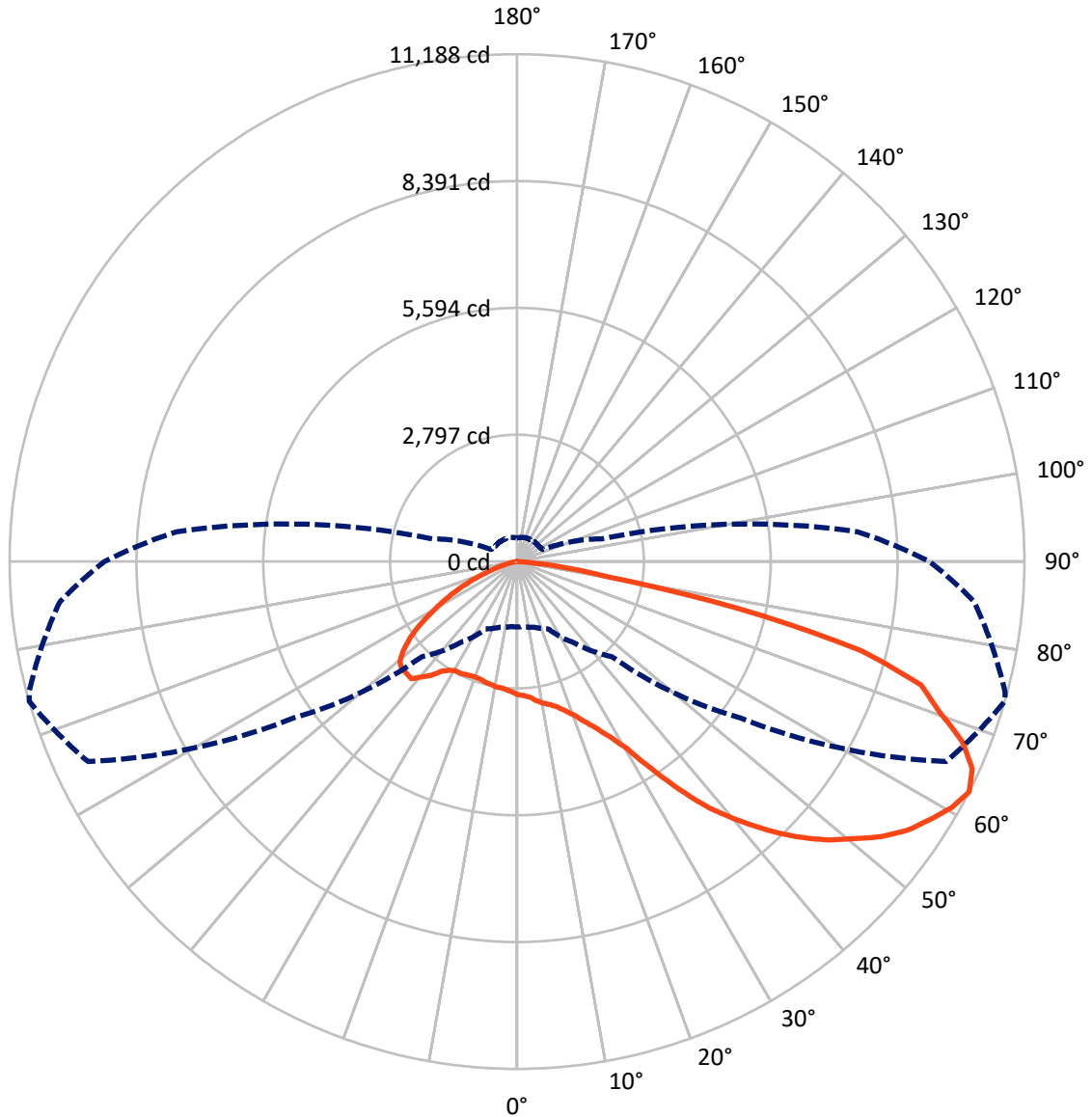
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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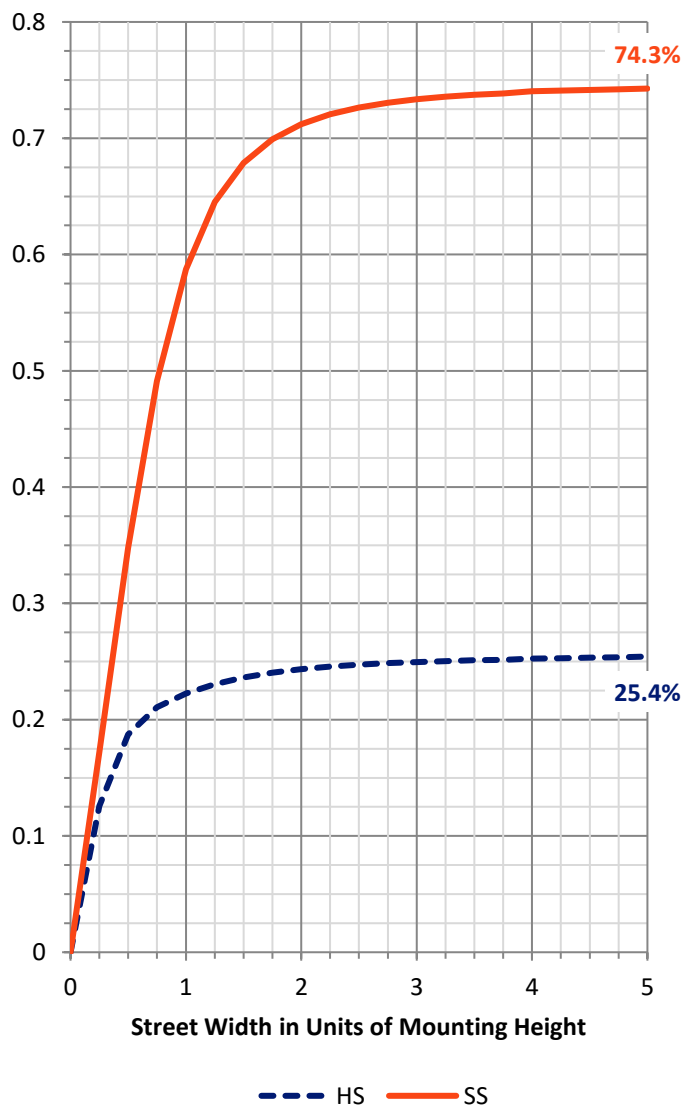
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4113.5   | 0.0    | 4113.5  |
|                    | % Fixture | 25.8     | 0.0    | 25.8    |
| <b>Street Side</b> | Lumens    | 11817.5  | 0.0    | 11817.5 |
|                    | % Fixture | 74.2     | 0.0    | 74.2    |
| <b>Total</b>       | Lumens    | 15931.0  | 0.0    | 15931.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 282.3   | 1.8       |
| 10°-20°   | 860.6   | 5.4       |
| 20°-30°   | 1451.2  | 9.1       |
| 30°-40°   | 2120.2  | 13.3      |
| 40°-50°   | 2823.1  | 17.7      |
| 50°-60°   | 3248.9  | 20.4      |
| 60°-70°   | 3139.6  | 19.7      |
| 70°-80°   | 1807.3  | 11.3      |
| 80°-90°   | 197.7   | 1.2       |
| 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°    | 15931.0 | 100.0     |
| 0°-180°   | 15931.0 | 100.0     |

**Coefficient of Utilization**



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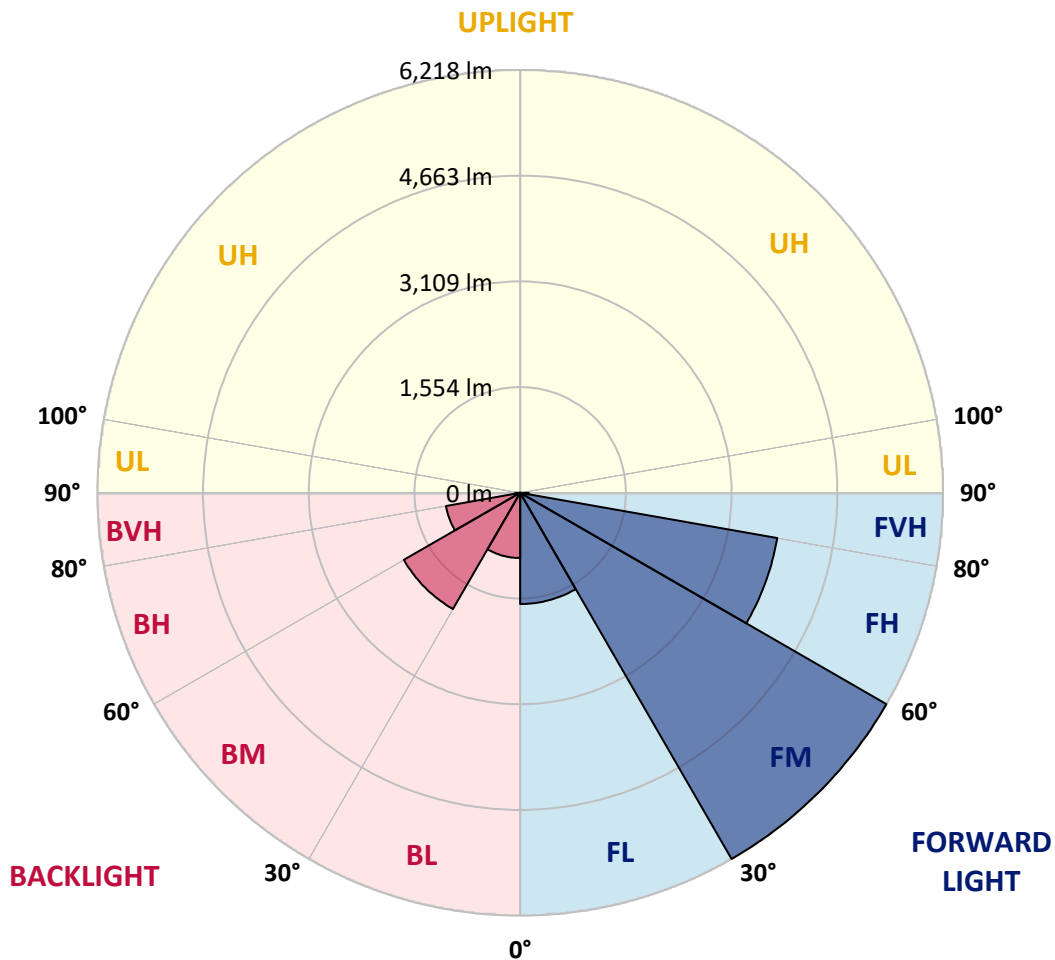
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1635.1 | 10.3      |                         |      |         |
| FM (30°-60°)   | 6217.9 | 39.0      |                         |      |         |
| FH (60°-80°)   | 3839.5 | 24.1      |                         |      | G2/5000 |
| FVH (80°-90°)  | 125.1  | 0.8       |                         |      | G2/225  |
| BL (0°-30°)    | 959.0  | 6.0       | B2/1000                 |      |         |
| BM (30°-60°)   | 1974.4 | 12.4      | B2/2500                 |      |         |
| BH (60°-80°)   | 1107.4 | 7.0       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 72.7   | 0.5       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 74°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6  | 2937.6  | 2937.6  | 2937.6  |
| 2.5°  | 3144.3 | 3121.7 | 3107.8 | 3092.2 | 3073.1 | 3066.1 | 3024.5 | 2988.0  | 2958.4  | 2960.2  | 2941.1  |
| 5°    | 3259.0 | 3234.7 | 3203.4 | 3198.2 | 3173.9 | 3168.6 | 3128.7 | 3071.4  | 3007.1  | 2998.4  | 2941.1  |
| 7.5°  | 3387.5 | 3373.6 | 3354.5 | 3330.2 | 3290.2 | 3264.2 | 3206.9 | 3161.7  | 3095.7  | 3087.0  | 2974.1  |
| 10°   | 3543.9 | 3533.4 | 3519.6 | 3519.6 | 3467.4 | 3411.8 | 3342.4 | 3229.4  | 3177.3  | 3168.6  | 3031.4  |
| 12.5° | 3728.0 | 3696.7 | 3651.6 | 3625.5 | 3576.9 | 3542.1 | 3467.4 | 3347.6  | 3234.7  | 3231.2  | 3085.3  |
| 15°   | 3847.9 | 3821.8 | 3792.3 | 3781.9 | 3719.3 | 3662.0 | 3582.1 | 3486.5  | 3328.5  | 3316.3  | 3151.3  |
| 17.5° | 3981.6 | 3957.3 | 3922.6 | 3903.5 | 3863.5 | 3797.5 | 3726.3 | 3601.2  | 3460.5  | 3448.3  | 3226.0  |
| 20°   | 4056.3 | 4030.3 | 4019.9 | 4023.3 | 4009.4 | 3976.4 | 3891.3 | 3778.4  | 3616.8  | 3601.2  | 3328.5  |
| 22.5° | 4139.7 | 4122.4 | 4125.8 | 4151.9 | 4177.9 | 4165.8 | 4099.8 | 3974.7  | 3835.7  | 3811.4  | 3493.5  |
| 25°   | 4141.5 | 4127.6 | 4174.5 | 4275.2 | 4330.8 | 4358.6 | 4323.9 | 4221.4  | 4073.7  | 4051.1  | 3703.7  |
| 27.5° | 4171.0 | 4150.2 | 4200.5 | 4306.5 | 4475.0 | 4532.3 | 4544.5 | 4506.3  | 4379.5  | 4351.7  | 3955.6  |
| 30°   | 4094.6 | 4080.7 | 4157.1 | 4341.2 | 4539.3 | 4730.4 | 4799.9 | 4858.9  | 4787.7  | 4789.4  | 4344.7  |
| 32.5° | 3962.5 | 3938.2 | 4054.6 | 4280.4 | 4648.7 | 4909.3 | 5093.4 | 5331.4  | 5440.9  | 5430.5  | 5022.2  |
| 35°   | 3710.6 | 3724.5 | 3880.9 | 4226.6 | 4652.2 | 5091.7 | 5453.0 | 5878.7  | 6175.7  | 6168.8  | 5724.0  |
| 37.5° | 3531.7 | 3524.8 | 3708.9 | 4075.5 | 4650.5 | 5253.3 | 5802.2 | 6511.0  | 6894.9  | 6884.5  | 6326.9  |
| 40°   | 3316.3 | 3318.0 | 3502.2 | 3887.8 | 4568.8 | 5354.0 | 6163.6 | 7110.3  | 7501.2  | 7485.6  | 6903.6  |
| 42.5° | 3085.3 | 3092.2 | 3264.2 | 3658.5 | 4455.9 | 5430.5 | 6486.7 | 7716.6  | 8095.3  | 8109.2  | 7365.7  |
| 45°   | 2878.5 | 2882.0 | 3052.2 | 3413.6 | 4256.1 | 5439.2 | 6776.8 | 8289.9  | 8658.2  | 8625.2  | 7850.4  |
| 47.5° | 2574.5 | 2578.0 | 2829.9 | 3180.8 | 3992.1 | 5367.9 | 7016.5 | 8835.4  | 9172.4  | 9102.9  | 8260.4  |
| 50°   | 2016.9 | 2023.8 | 2322.6 | 2939.3 | 3670.7 | 5204.6 | 7205.9 | 9347.8  | 9608.4  | 9578.9  | 8680.8  |
| 52.5° | 1862.3 | 1857.1 | 1982.1 | 2651.0 | 3382.3 | 4909.3 | 7325.7 | 9808.2  | 10072.2 | 10068.8 | 9028.2  |
| 55°   | 1784.1 | 1778.9 | 1820.6 | 2148.9 | 3099.2 | 4471.5 | 7322.3 | 10166.1 | 10456.2 | 10384.9 | 9346.1  |
| 57.5° | 1645.1 | 1634.7 | 1742.4 | 1904.0 | 2783.0 | 3926.1 | 7148.5 | 10487.4 | 10734.1 | 10713.3 | 9632.7  |
| 60°   | 1546.1 | 1537.4 | 1610.4 | 1759.8 | 2446.0 | 3371.9 | 6702.1 | 10654.2 | 11013.8 | 11022.5 | 9874.2  |
| 62.5° | 1443.6 | 1438.4 | 1500.9 | 1639.9 | 2181.9 | 2967.1 | 6014.2 | 10435.3 | 11187.5 | 11140.6 | 10115.7 |
| 65°   | 1327.2 | 1323.7 | 1382.8 | 1495.7 | 1919.6 | 2659.6 | 5340.1 | 10044.4 | 11031.2 | 11085.0 | 10146.9 |
| 67.5° | 1188.2 | 1186.5 | 1243.8 | 1322.0 | 1633.0 | 2350.4 | 4308.2 | 9584.1  | 10584.7 | 10525.7 | 9745.7  |
| 70°   | 1018.0 | 1011.0 | 1082.3 | 1155.2 | 1367.2 | 1999.5 | 3352.8 | 8765.9  | 9858.6  | 10072.2 | 8946.5  |
| 72.5° | 856.4  | 853.0  | 920.7  | 974.6  | 1132.6 | 1633.0 | 2446.0 | 7581.1  | 9314.8  | 9007.3  | 8060.6  |
| 75°   | 670.6  | 653.2  | 724.4  | 774.8  | 892.9  | 1299.4 | 1667.7 | 5063.9  | 7840.0  | 7775.7  | 6771.6  |
| 77.5° | 271.0  | 314.4  | 375.2  | 420.4  | 498.6  | 736.6  | 872.1  | 2402.5  | 5001.4  | 5222.0  | 4709.5  |
| 80°   | 104.2  | 111.2  | 267.5  | 302.3  | 335.3  | 423.9  | 335.3  | 1012.8  | 1973.5  | 2152.4  | 2727.4  |
| 82.5° | 59.1   | 66.0   | 132.0  | 126.8  | 125.1  | 107.7  | 125.1  | 496.8   | 1030.2  | 1129.2  | 1316.8  |
| 85°   | 33.0   | 36.5   | 53.9   | 59.1   | 50.4   | 43.4   | 38.2   | 130.3   | 257.1   | 243.2   | 272.7   |
| 87.5° | 5.2    | 6.9    | 8.7    | 8.7    | 5.2    | 5.2    | 5.2    | 6.9     | 6.9     | 6.9     | 8.7     |
| 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°    | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 | 2937.6 |
| 2.5°  | 2922.0 | 2902.8 | 2883.7 | 2861.2 | 2833.4 | 2816.0 | 2809.0 | 2817.7 | 2842.0 | 2812.5 | 2788.2 |
| 5°    | 2911.5 | 2885.5 | 2842.0 | 2798.6 | 2763.9 | 2734.3 | 2694.4 | 2690.9 | 2697.9 | 2685.7 | 2654.4 |
| 7.5°  | 2934.1 | 2895.9 | 2807.3 | 2777.8 | 2704.8 | 2635.3 | 2612.7 | 2604.1 | 2583.2 | 2558.9 | 2529.4 |
| 10°   | 2979.3 | 2901.1 | 2810.8 | 2723.9 | 2656.2 | 2581.5 | 2494.6 | 2496.3 | 2487.7 | 2459.9 | 2432.1 |
| 12.5° | 3001.9 | 2909.8 | 2777.8 | 2685.7 | 2581.5 | 2489.4 | 2404.3 | 2366.1 | 2381.7 | 2359.1 | 2329.6 |
| 15°   | 3043.6 | 2946.3 | 2765.6 | 2630.1 | 2487.7 | 2383.4 | 2319.2 | 2263.6 | 2228.8 | 2234.0 | 2216.7 |
| 17.5° | 3121.7 | 2979.3 | 2734.3 | 2569.3 | 2414.7 | 2291.4 | 2168.0 | 2162.8 | 2110.7 | 2081.2 | 2055.1 |
| 20°   | 3203.4 | 3038.4 | 2730.9 | 2503.3 | 2296.6 | 2143.7 | 2044.7 | 1989.1 | 1957.8 | 1933.5 | 1914.4 |
| 22.5° | 3309.4 | 3120.0 | 2743.0 | 2465.1 | 2190.6 | 2018.6 | 1891.8 | 1817.1 | 1766.7 | 1749.4 | 1735.5 |
| 25°   | 3458.8 | 3222.5 | 2776.0 | 2397.3 | 2079.4 | 1881.4 | 1709.4 | 1631.2 | 1573.9 | 1560.0 | 1549.6 |
| 27.5° | 3663.7 | 3352.8 | 2809.0 | 2324.4 | 1949.1 | 1688.6 | 1506.1 | 1429.7 | 1365.4 | 1363.7 | 1344.6 |
| 30°   | 3986.9 | 3552.6 | 2821.2 | 2260.1 | 1810.2 | 1481.8 | 1299.4 | 1228.2 | 1179.6 | 1160.4 | 1174.3 |
| 32.5° | 4589.7 | 3993.8 | 2897.6 | 2161.1 | 1634.7 | 1280.3 | 1125.7 | 1068.4 | 1014.5 | 993.7  | 1007.6 |
| 35°   | 5241.1 | 4521.9 | 3026.2 | 2093.3 | 1441.9 | 1089.2 | 983.3  | 915.5  | 849.5  | 839.1  | 833.9  |
| 37.5° | 5718.8 | 5003.1 | 3269.4 | 1982.1 | 1259.5 | 972.8  | 833.9  | 778.3  | 740.0  | 719.2  | 738.3  |
| 40°   | 6260.8 | 5402.7 | 3453.5 | 1864.0 | 1073.6 | 849.5  | 694.9  | 677.5  | 660.1  | 646.2  | 667.1  |
| 42.5° | 6689.9 | 5814.4 | 3672.4 | 1707.7 | 924.2  | 720.9  | 618.4  | 632.3  | 641.0  | 634.1  | 635.8  |
| 45°   | 7084.3 | 6120.1 | 3686.3 | 1469.7 | 788.7  | 625.4  | 595.9  | 623.7  | 644.5  | 641.0  | 639.3  |
| 47.5° | 7469.9 | 6484.9 | 3719.3 | 1217.8 | 691.4  | 601.1  | 597.6  | 618.4  | 646.2  | 651.4  | 651.4  |
| 50°   | 7867.7 | 6762.9 | 3669.0 | 979.8  | 654.9  | 604.5  | 602.8  | 601.1  | 635.8  | 637.5  | 642.8  |
| 52.5° | 8166.5 | 6988.7 | 3431.0 | 809.5  | 653.2  | 615.0  | 611.5  | 594.1  | 609.8  | 621.9  | 613.2  |
| 55°   | 8482.7 | 7270.2 | 3130.4 | 745.3  | 649.7  | 618.4  | 632.3  | 602.8  | 592.4  | 582.0  | 592.4  |
| 57.5° | 8783.2 | 7466.5 | 2736.1 | 707.0  | 635.8  | 613.2  | 641.0  | 601.1  | 578.5  | 549.0  | 538.5  |
| 60°   | 9014.3 | 7511.6 | 2296.6 | 667.1  | 618.4  | 601.1  | 602.8  | 588.9  | 559.4  | 522.9  | 507.3  |
| 62.5° | 9092.5 | 7537.7 | 1931.8 | 628.9  | 583.7  | 582.0  | 568.1  | 562.9  | 550.7  | 528.1  | 521.2  |
| 65°   | 9026.5 | 7242.4 | 1542.6 | 582.0  | 554.2  | 555.9  | 535.1  | 517.7  | 489.9  | 453.4  | 449.9  |
| 67.5° | 8573.0 | 6722.9 | 1183.0 | 522.9  | 509.0  | 526.4  | 503.8  | 474.3  | 443.0  | 418.7  | 422.1  |
| 70°   | 7796.5 | 6108.0 | 830.4  | 441.2  | 456.9  | 488.2  | 479.5  | 441.2  | 406.5  | 385.7  | 389.1  |
| 72.5° | 6933.1 | 5175.1 | 564.6  | 344.0  | 371.8  | 437.8  | 437.8  | 411.7  | 377.0  | 349.2  | 342.2  |
| 75°   | 5468.7 | 4065.0 | 364.8  | 227.6  | 244.9  | 357.9  | 387.4  | 347.4  | 309.2  | 291.8  | 284.9  |
| 77.5° | 3712.4 | 2647.5 | 232.8  | 130.3  | 163.3  | 234.5  | 305.7  | 311.0  | 366.5  | 368.3  | 352.7  |
| 80°   | 2181.9 | 1514.8 | 142.4  | 76.4   | 81.6   | 135.5  | 244.9  | 307.5  | 389.1  | 274.5  | 251.9  |
| 82.5° | 1085.7 | 646.2  | 64.3   | 46.9   | 48.6   | 67.8   | 132.0  | 352.7  | 300.5  | 172.0  | 165.0  |
| 85°   | 241.5  | 106.0  | 26.1   | 24.3   | 27.8   | 34.7   | 67.8   | 291.8  | 184.1  | 139.0  | 135.5  |
| 87.5° | 8.7    | 6.9    | 6.9    | 6.9    | 5.2    | 5.2    | 13.9   | 95.5   | 73.0   | 60.8   | 57.3   |
| 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)