

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: P197148

Luminaire Tested: **NVN-AF-06-LED-U-SL4-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197148  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-06-LED-U-SL4-8030-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 80 CRI, 3000K, 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: 22656 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

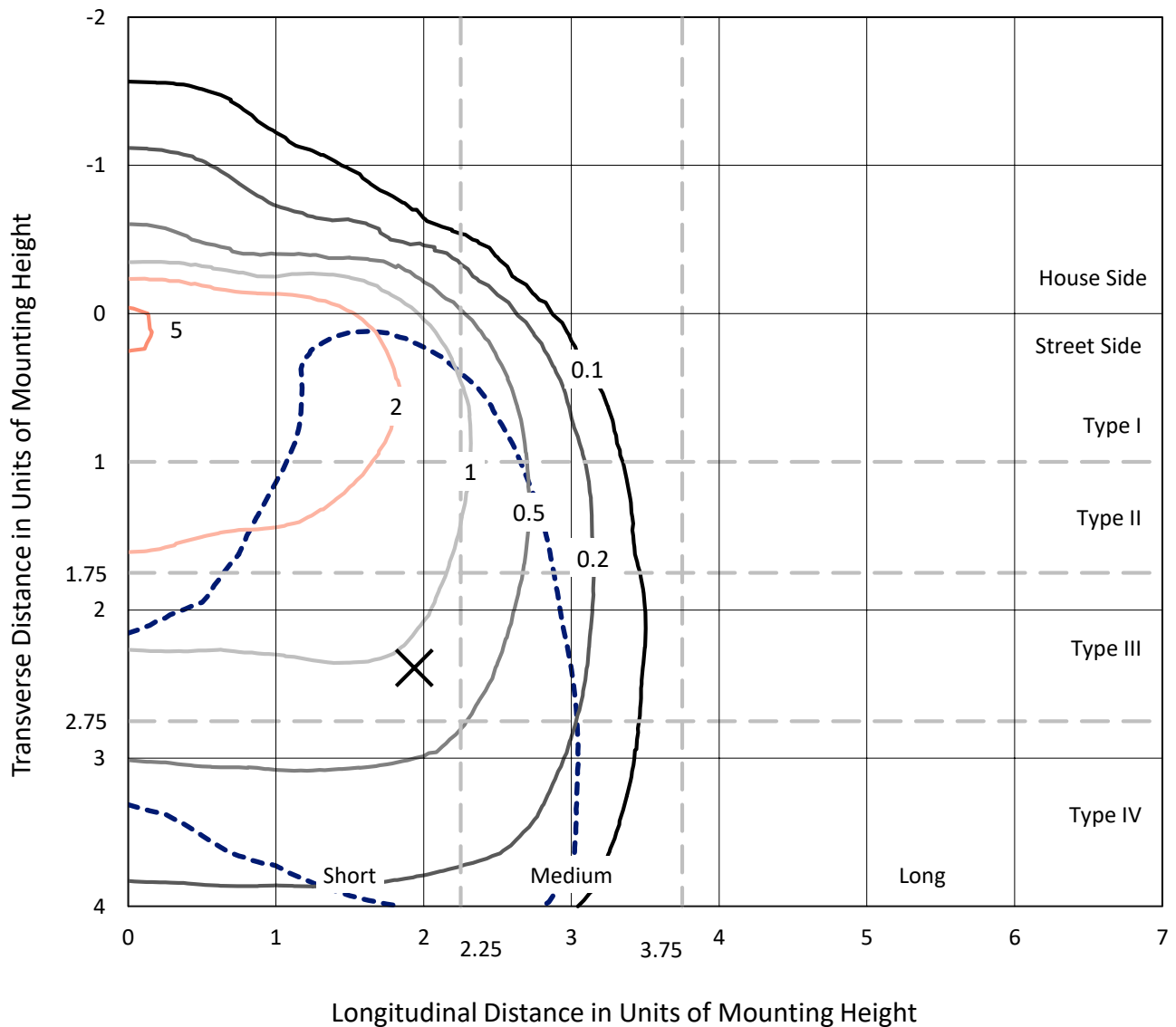
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

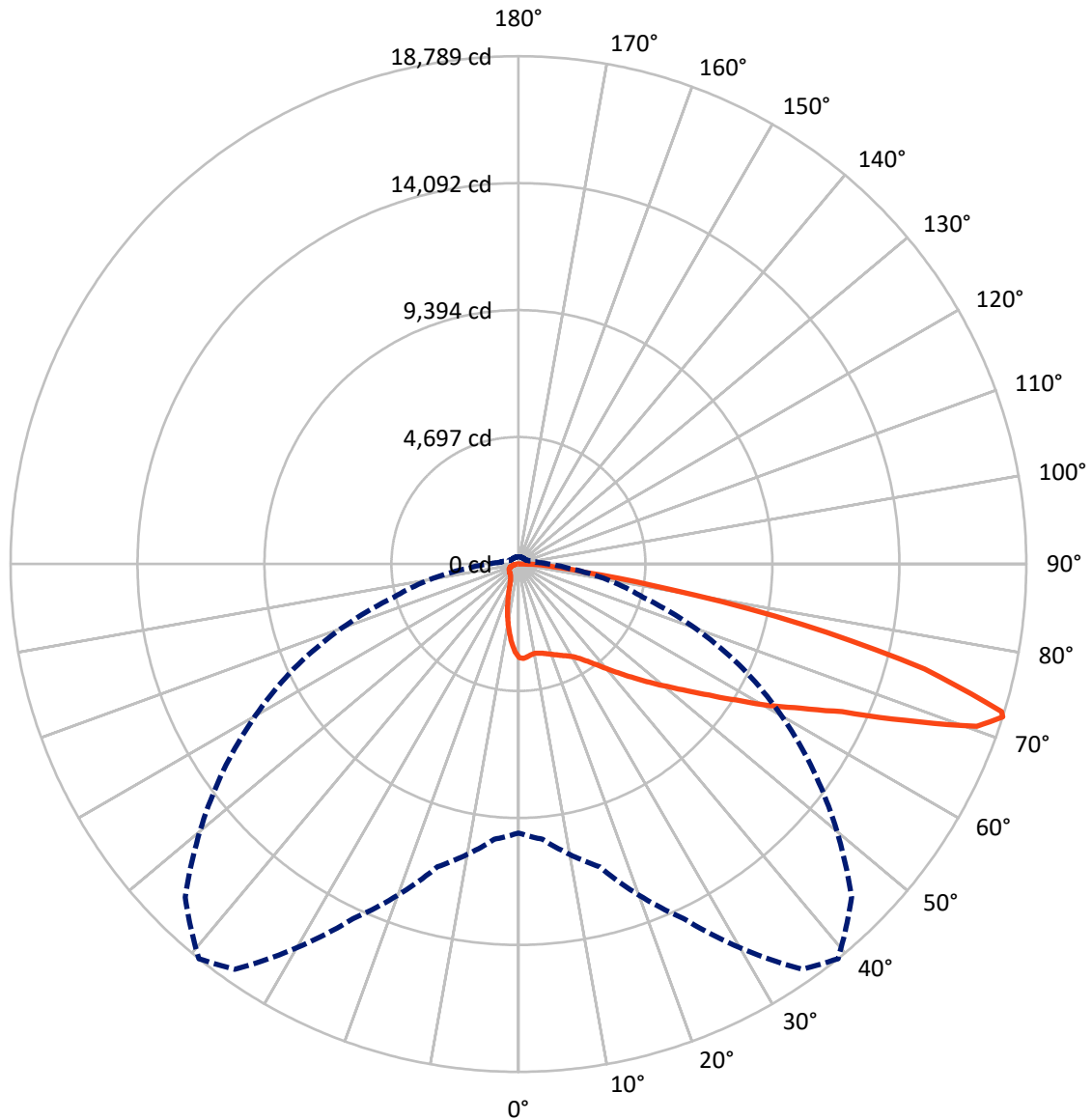
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2597.8   | 0.0    | 2597.8  |
|                    | % Fixture | 11.5     | 0.0    | 11.5    |
| <b>Street Side</b> | Lumens    | 20058.2  | 0.0    | 20058.2 |
|                    | % Fixture | 88.5     | 0.0    | 88.5    |
| <b>Total</b>       | Lumens    | 22656.0  | 0.0    | 22656.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 297.3   | 1.3       |
| 10°-20°   | 747.1   | 3.3       |
| 20°-30°   | 1164.3  | 5.1       |
| 30°-40°   | 1792.7  | 7.9       |
| 40°-50°   | 2922.5  | 12.9      |
| 50°-60°   | 4541.3  | 20.0      |
| 60°-70°   | 6078.4  | 26.8      |
| 70°-80°   | 4371.2  | 19.3      |
| 80°-90°   | 741.0   | 3.3       |
| 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°    | 22656.0 | 100.0     |
| 0°-180°   | 22656.0 | 100.0     |

**Coefficient of Utilization**



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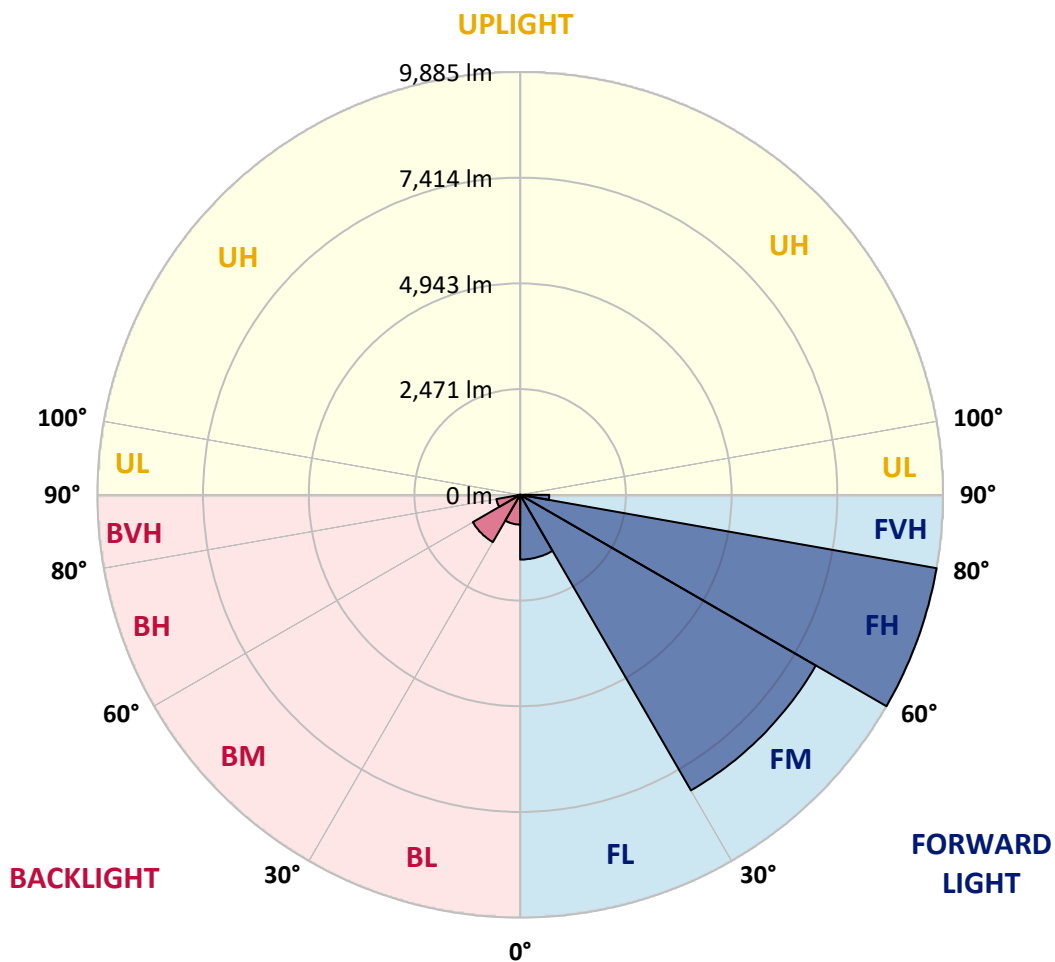
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1513.4 | 6.7       |                         |      |          |
| FM   | (30°-60°)   | 7979.9 | 35.2      |                         |      |          |
| FH   | (60°-80°)   | 9885.2 | 43.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 679.8  | 3.0       |                         |      | G4/750   |
| BL   | (0°-30°)    | 695.4  | 3.1       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1276.7 | 5.6       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 564.4  | 2.5       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 61.3   | 0.3       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 39°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0  | 3460.0 |
| 2.5°  | 3534.5  | 3536.0  | 3531.5  | 3517.8  | 3505.6  | 3499.5  | 3488.9  | 3470.6  | 3446.3  | 3429.6  | 3415.9 |
| 5°    | 3501.0  | 3505.6  | 3502.6  | 3479.7  | 3458.5  | 3446.3  | 3429.6  | 3403.7  | 3371.8  | 3358.1  | 3326.1 |
| 7.5°  | 3475.2  | 3478.2  | 3469.1  | 3443.2  | 3402.2  | 3387.0  | 3356.6  | 3323.1  | 3294.2  | 3274.4  | 3236.4 |
| 10°   | 3456.9  | 3460.0  | 3452.4  | 3426.5  | 3380.9  | 3362.6  | 3326.1  | 3289.6  | 3251.6  | 3227.3  | 3184.7 |
| 12.5° | 3431.1  | 3437.2  | 3437.2  | 3425.0  | 3394.6  | 3382.4  | 3345.9  | 3306.4  | 3271.4  | 3245.5  | 3192.3 |
| 15°   | 3426.5  | 3434.1  | 3447.8  | 3446.3  | 3437.2  | 3428.0  | 3399.1  | 3359.6  | 3329.2  | 3298.8  | 3233.4 |
| 17.5° | 3464.5  | 3481.3  | 3508.6  | 3517.8  | 3511.7  | 3491.9  | 3458.5  | 3422.0  | 3388.5  | 3359.6  | 3279.0 |
| 20°   | 3560.4  | 3569.5  | 3610.5  | 3628.8  | 3598.4  | 3569.5  | 3525.4  | 3478.2  | 3447.8  | 3425.0  | 3321.6 |
| 22.5° | 3704.8  | 3717.0  | 3750.5  | 3752.0  | 3688.1  | 3653.1  | 3596.9  | 3539.1  | 3510.2  | 3501.0  | 3379.4 |
| 25°   | 3936.0  | 3933.0  | 3942.1  | 3904.1  | 3788.5  | 3747.4  | 3679.0  | 3612.1  | 3592.3  | 3610.5  | 3464.5 |
| 27.5° | 4212.8  | 4205.2  | 4176.3  | 4077.5  | 3902.6  | 3849.3  | 3767.2  | 3707.9  | 3707.9  | 3750.5  | 3580.1 |
| 30°   | 4532.2  | 4524.6  | 4430.3  | 4264.5  | 4037.9  | 3977.1  | 3890.4  | 3828.0  | 3860.0  | 3942.1  | 3736.8 |
| 32.5° | 4869.8  | 4842.4  | 4710.1  | 4488.1  | 4231.1  | 4164.1  | 4080.5  | 4016.6  | 4077.5  | 4217.4  | 3961.9 |
| 35°   | 5187.7  | 5172.5  | 5009.7  | 4746.6  | 4480.5  | 4424.2  | 4366.4  | 4287.3  | 4384.7  | 4602.2  | 4279.7 |
| 37.5° | 5516.2  | 5504.0  | 5304.8  | 5025.0  | 4784.7  | 4746.6  | 4698.0  | 4643.2  | 4799.9  | 5085.8  | 4710.1 |
| 40°   | 5882.7  | 5858.4  | 5607.4  | 5327.6  | 5139.0  | 5120.8  | 5094.9  | 5079.7  | 5332.2  | 5758.0  | 5254.6 |
| 42.5° | 6297.9  | 6250.8  | 5926.8  | 5660.7  | 5525.3  | 5540.5  | 5526.8  | 5587.7  | 5974.0  | 6533.7  | 5902.5 |
| 45°   | 6772.4  | 6678.1  | 6244.7  | 6015.0  | 5952.7  | 6013.5  | 6042.4  | 6197.5  | 6732.9  | 7429.4  | 6626.4 |
| 47.5° | 7216.5  | 7094.9  | 6593.0  | 6399.8  | 6434.8  | 6539.7  | 6621.9  | 6895.6  | 7564.8  | 8314.6  | 7365.6 |
| 50°   | 7625.6  | 7488.8  | 6965.6  | 6798.3  | 6968.6  | 7117.7  | 7288.0  | 7674.3  | 8450.0  | 9225.6  | 8043.9 |
| 52.5° | 7928.3  | 7829.4  | 7338.2  | 7233.3  | 7581.5  | 7779.2  | 8051.5  | 8539.7  | 9344.2  | 10094.0 | 8649.2 |
| 55°   | 8162.5  | 8109.3  | 7701.7  | 7732.1  | 8275.1  | 8557.9  | 8888.0  | 9449.2  | 10290.2 | 10872.7 | 9135.9 |
| 57.5° | 8433.2  | 8393.7  | 8116.9  | 8334.4  | 9135.9  | 9491.7  | 9881.1  | 10504.6 | 11190.6 | 11558.6 | 9517.6 |
| 60°   | 8719.1  | 8719.1  | 8579.2  | 9059.8  | 10212.6 | 10620.2 | 11008.1 | 11493.2 | 12087.9 | 12176.1 | 9672.7 |
| 62.5° | 8935.1  | 8991.4  | 9041.6  | 9832.4  | 11234.7 | 11741.1 | 12167.0 | 12632.3 | 13017.1 | 12480.3 | 9307.7 |
| 65°   | 9248.4  | 9368.6  | 9651.4  | 10725.2 | 12500.0 | 13163.1 | 13738.0 | 14128.9 | 13770.0 | 12238.4 | 8116.9 |
| 67.5° | 9786.8  | 9964.7  | 10567.0 | 12054.4 | 14437.6 | 15430.7 | 15988.9 | 15313.6 | 13622.4 | 10716.0 | 6217.3 |
| 70°   | 10272.0 | 10522.9 | 11552.5 | 13741.1 | 16956.2 | 17987.3 | 17730.3 | 15038.4 | 11864.3 | 7855.3  | 3825.0 |
| 72°   | 9949.5  | 10223.3 | 11598.2 | 14475.6 | 18302.1 | 18788.8 | 17433.7 | 13327.4 | 9167.8  | 4793.8  | 1885.9 |
| 72.5° | 9738.1  | 10022.5 | 11450.6 | 14457.4 | 18338.6 | 18686.9 | 17021.6 | 12647.6 | 8322.2  | 4194.6  | 1525.4 |
| 75°   | 8135.1  | 8378.5  | 9846.1  | 12813.3 | 16160.8 | 15522.0 | 13283.3 | 8185.3  | 3825.0  | 1355.1  | 784.8  |
| 77.5° | 5312.4  | 5497.9  | 6789.2  | 8877.3  | 11319.8 | 10705.4 | 8084.9  | 3832.6  | 1434.2  | 822.8   | 590.1  |
| 80°   | 2669.1  | 2801.4  | 3633.4  | 4667.5  | 6109.3  | 5621.1  | 3732.2  | 1853.9  | 959.7   | 594.7   | 463.9  |
| 82.5° | 1857.0  | 1978.7  | 2501.8  | 2383.2  | 2553.5  | 2471.4  | 1755.1  | 1546.7  | 717.9   | 375.7   | 243.3  |
| 85°   | 1557.4  | 1683.6  | 2069.9  | 1698.8  | 1390.1  | 1266.9  | 1257.8  | 1461.6  | 474.5   | 185.5   | 205.3  |
| 87.5° | 1358.1  | 1549.8  | 1707.9  | 1241.0  | 953.6   | 841.0   | 926.2   | 1339.9  | 150.6   | 101.9   | 62.4   |
| 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°    | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 | 3460.0 |
| 2.5°  | 3393.1 | 3388.5 | 3365.7 | 3330.7 | 3304.8 | 3288.1 | 3256.2 | 3254.7 | 3257.7 | 3230.3 | 3241.0 |
| 5°    | 3297.2 | 3279.0 | 3219.7 | 3139.1 | 3073.7 | 3011.3 | 2942.9 | 2920.1 | 2900.3 | 2859.2 | 2863.8 |
| 7.5°  | 3196.9 | 3164.9 | 3061.5 | 2929.2 | 2803.0 | 2687.4 | 2573.3 | 2517.0 | 2474.5 | 2421.2 | 2421.2 |
| 10°   | 3137.6 | 3087.4 | 2929.2 | 2736.0 | 2535.3 | 2366.5 | 2196.1 | 2094.2 | 2019.7 | 1951.3 | 1946.7 |
| 12.5° | 3134.5 | 3058.5 | 2837.9 | 2571.8 | 2296.5 | 2059.3 | 1826.6 | 1669.9 | 1558.9 | 1478.3 | 1470.7 |
| 15°   | 3158.8 | 3052.4 | 2761.9 | 2418.2 | 2071.4 | 1762.7 | 1475.2 | 1276.0 | 1134.6 | 1044.8 | 1035.7 |
| 17.5° | 3180.1 | 3044.8 | 2679.8 | 2257.0 | 1852.4 | 1476.8 | 1157.4 | 950.5  | 816.7  | 743.7  | 736.1  |
| 20°   | 3199.9 | 3028.1 | 2574.8 | 2086.6 | 1610.6 | 1209.1 | 904.9  | 737.6  | 649.4  | 608.3  | 603.8  |
| 22.5° | 3228.8 | 3012.8 | 2465.3 | 1895.0 | 1373.3 | 984.0  | 746.7  | 626.6  | 579.5  | 559.7  | 556.6  |
| 25°   | 3276.0 | 3014.4 | 2358.9 | 1698.8 | 1155.9 | 819.7  | 646.4  | 571.8  | 546.0  | 532.3  | 532.3  |
| 27.5° | 3344.4 | 3032.6 | 2253.9 | 1499.6 | 971.8  | 707.2  | 587.1  | 543.0  | 526.2  | 515.6  | 512.5  |
| 30°   | 3444.8 | 3066.1 | 2142.9 | 1311.0 | 825.8  | 629.6  | 552.1  | 524.7  | 511.0  | 501.9  | 500.4  |
| 32.5° | 3590.8 | 3125.4 | 2025.8 | 1139.1 | 714.8  | 574.9  | 526.2  | 509.5  | 498.8  | 491.2  | 489.7  |
| 35°   | 3808.3 | 3230.3 | 1911.7 | 993.1  | 635.7  | 535.3  | 504.9  | 491.2  | 485.2  | 482.1  | 480.6  |
| 37.5° | 4127.6 | 3399.1 | 1803.8 | 879.1  | 584.0  | 509.5  | 483.6  | 476.0  | 473.0  | 473.0  | 473.0  |
| 40°   | 4529.1 | 3621.2 | 1706.4 | 798.5  | 555.1  | 489.7  | 468.4  | 462.3  | 462.3  | 463.9  | 463.9  |
| 42.5° | 5017.3 | 3899.5 | 1622.8 | 743.7  | 538.4  | 476.0  | 457.8  | 454.7  | 453.2  | 453.2  | 454.7  |
| 45°   | 5584.6 | 4228.0 | 1571.1 | 701.1  | 526.2  | 468.4  | 450.2  | 448.7  | 442.6  | 439.5  | 439.5  |
| 47.5° | 6155.0 | 4579.3 | 1568.0 | 676.8  | 511.0  | 459.3  | 442.6  | 442.6  | 430.4  | 424.3  | 425.8  |
| 50°   | 6687.3 | 4894.2 | 1601.5 | 670.7  | 501.9  | 445.6  | 435.0  | 436.5  | 419.8  | 412.2  | 410.6  |
| 52.5° | 7116.1 | 5134.5 | 1642.5 | 678.3  | 501.9  | 433.4  | 421.3  | 428.9  | 410.6  | 401.5  | 400.0  |
| 55°   | 7447.7 | 5301.8 | 1657.7 | 695.0  | 508.0  | 422.8  | 409.1  | 421.3  | 407.6  | 395.4  | 395.4  |
| 57.5° | 7685.0 | 5355.0 | 1592.4 | 702.6  | 517.1  | 421.3  | 396.9  | 419.8  | 412.2  | 396.9  | 396.9  |
| 60°   | 7598.3 | 5046.2 | 1349.0 | 673.7  | 515.6  | 418.2  | 387.8  | 422.8  | 427.4  | 410.6  | 410.6  |
| 62.5° | 6921.5 | 4221.9 | 1082.9 | 608.3  | 489.7  | 407.6  | 377.2  | 419.8  | 438.0  | 431.9  | 428.9  |
| 65°   | 5634.8 | 3096.5 | 839.5  | 530.8  | 445.6  | 384.8  | 354.4  | 392.4  | 413.7  | 419.8  | 421.3  |
| 67.5° | 3971.0 | 1960.4 | 652.5  | 451.7  | 390.9  | 351.3  | 328.5  | 346.8  | 354.4  | 357.4  | 363.5  |
| 70°   | 2171.8 | 1061.6 | 518.6  | 380.2  | 334.6  | 317.9  | 301.1  | 302.7  | 299.6  | 296.6  | 299.6  |
| 72°   | 1090.5 | 693.5  | 438.0  | 330.0  | 296.6  | 285.9  | 278.3  | 273.8  | 273.8  | 269.2  | 270.7  |
| 72.5° | 938.4  | 644.8  | 422.8  | 317.9  | 287.4  | 278.3  | 272.2  | 267.7  | 266.2  | 263.1  | 264.6  |
| 75°   | 625.1  | 511.0  | 352.8  | 266.2  | 244.9  | 238.8  | 241.8  | 237.3  | 238.8  | 235.7  | 237.3  |
| 77.5° | 504.9  | 439.5  | 299.6  | 225.1  | 209.9  | 200.8  | 206.8  | 208.4  | 211.4  | 208.4  | 206.8  |
| 80°   | 422.8  | 374.1  | 250.9  | 185.5  | 174.9  | 167.3  | 170.3  | 181.0  | 182.5  | 173.4  | 171.9  |
| 82.5° | 273.8  | 301.1  | 197.7  | 144.5  | 133.8  | 130.8  | 138.4  | 149.0  | 152.1  | 139.9  | 136.9  |
| 85°   | 229.7  | 241.8  | 143.0  | 98.9   | 88.2   | 85.2   | 100.4  | 111.0  | 118.6  | 106.5  | 103.4  |
| 87.5° | 63.9   | 118.6  | 70.0   | 47.1   | 39.5   | 39.5   | 48.7   | 57.8   | 68.4   | 70.0   | 70.0   |
| 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)