

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: P836172

Luminaire Tested: **ARCH3-150-727-U-T2R**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-150-727-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1170mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 20679 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

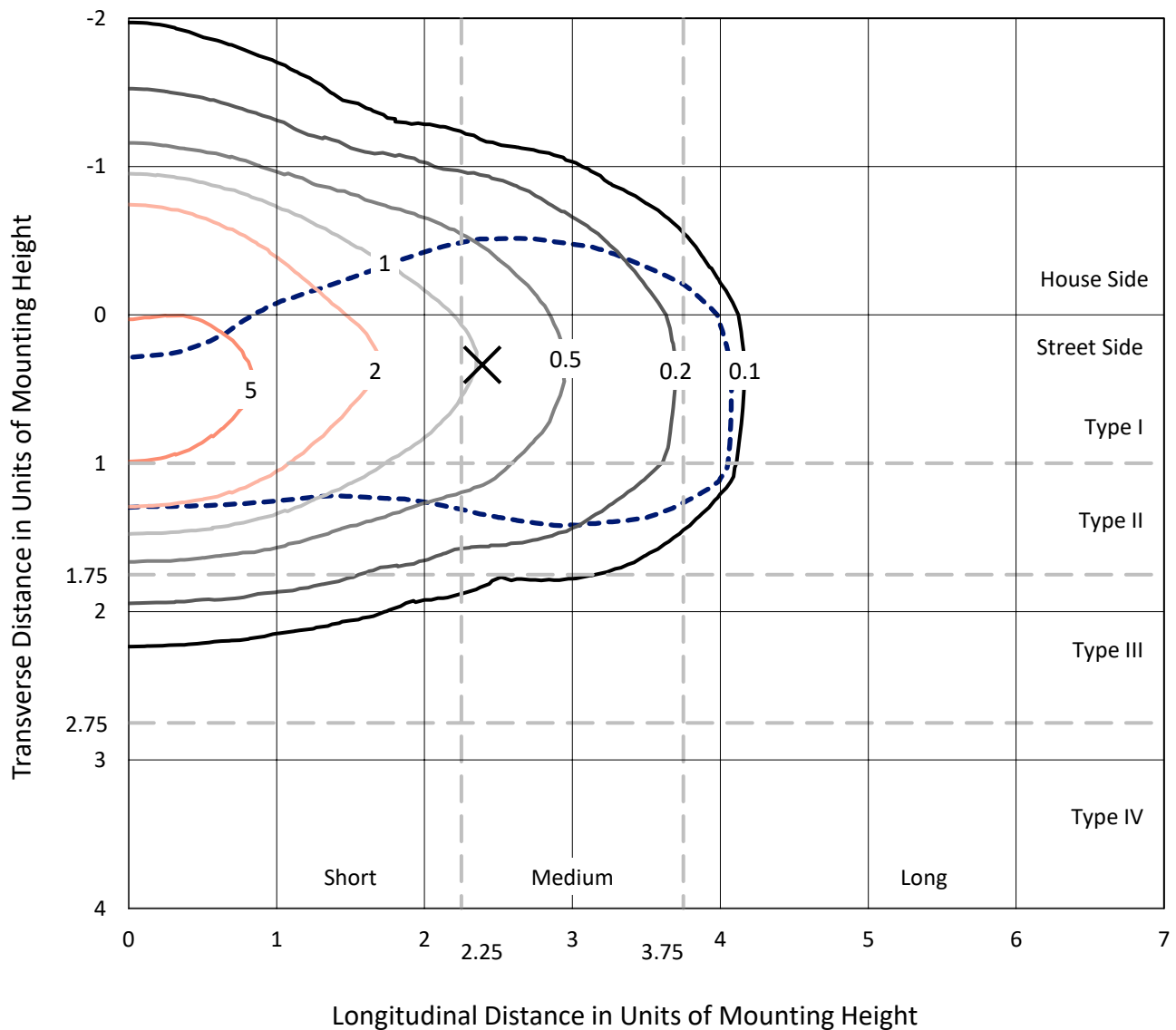
Input Watts (W): 150.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

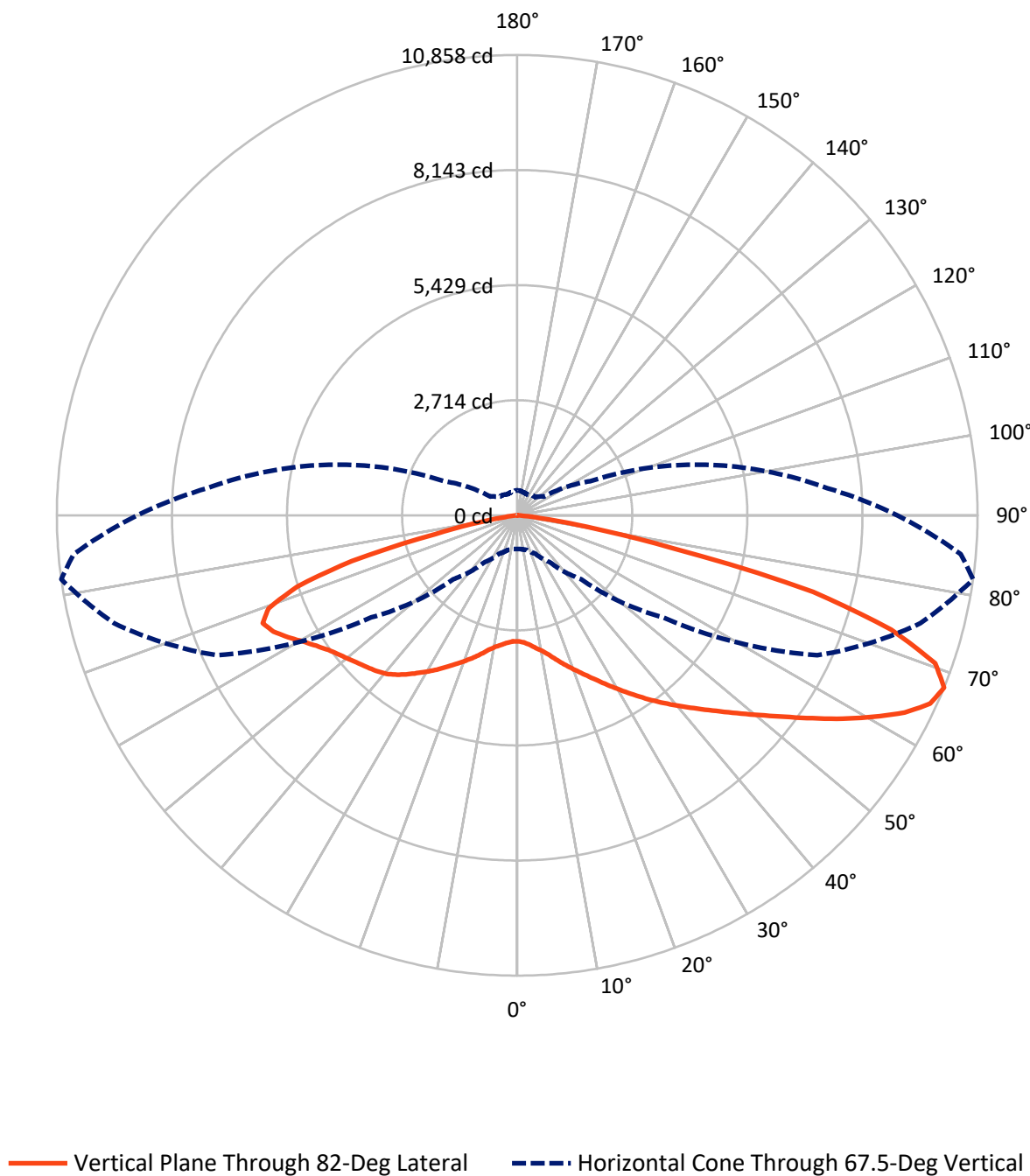
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc  
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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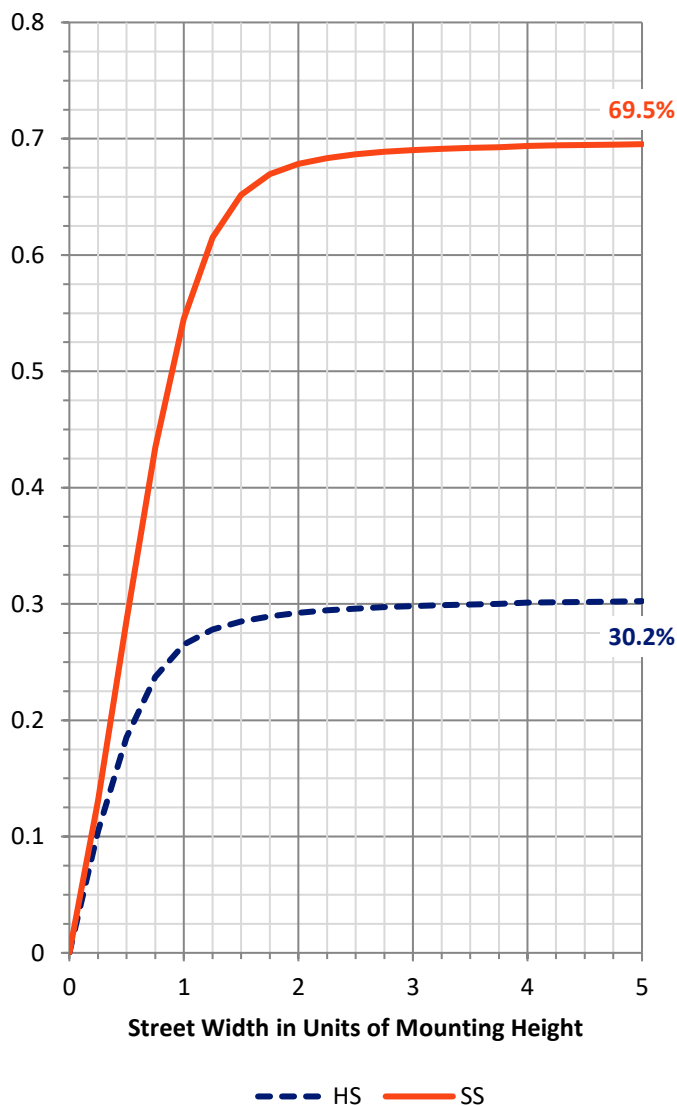
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6297.6   | 0.0    | 6297.6  |
|                    | % Fixture | 30.5     | 0.0    | 30.5    |
| <b>Street Side</b> | Lumens    | 14381.4  | 0.0    | 14381.4 |
|                    | % Fixture | 69.5     | 0.0    | 69.5    |
| <b>Total</b>       | Lumens    | 20679.0  | 0.0    | 20679.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 307.2   | 1.5       |
| 10°-20°   | 1106.6  | 5.4       |
| 20°-30°   | 2223.9  | 10.8      |
| 30°-40°   | 3493.5  | 16.9      |
| 40°-50°   | 4255.8  | 20.6      |
| 50°-60°   | 4021.2  | 19.4      |
| 60°-70°   | 3320.6  | 16.1      |
| 70°-80°   | 1808.2  | 8.7       |
| 80°-90°   | 142.2   | 0.7       |
| 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°    | 20679.0 | 100.0     |
| 0°-180°   | 20679.0 | 100.0     |

**Coefficient of Utilization**



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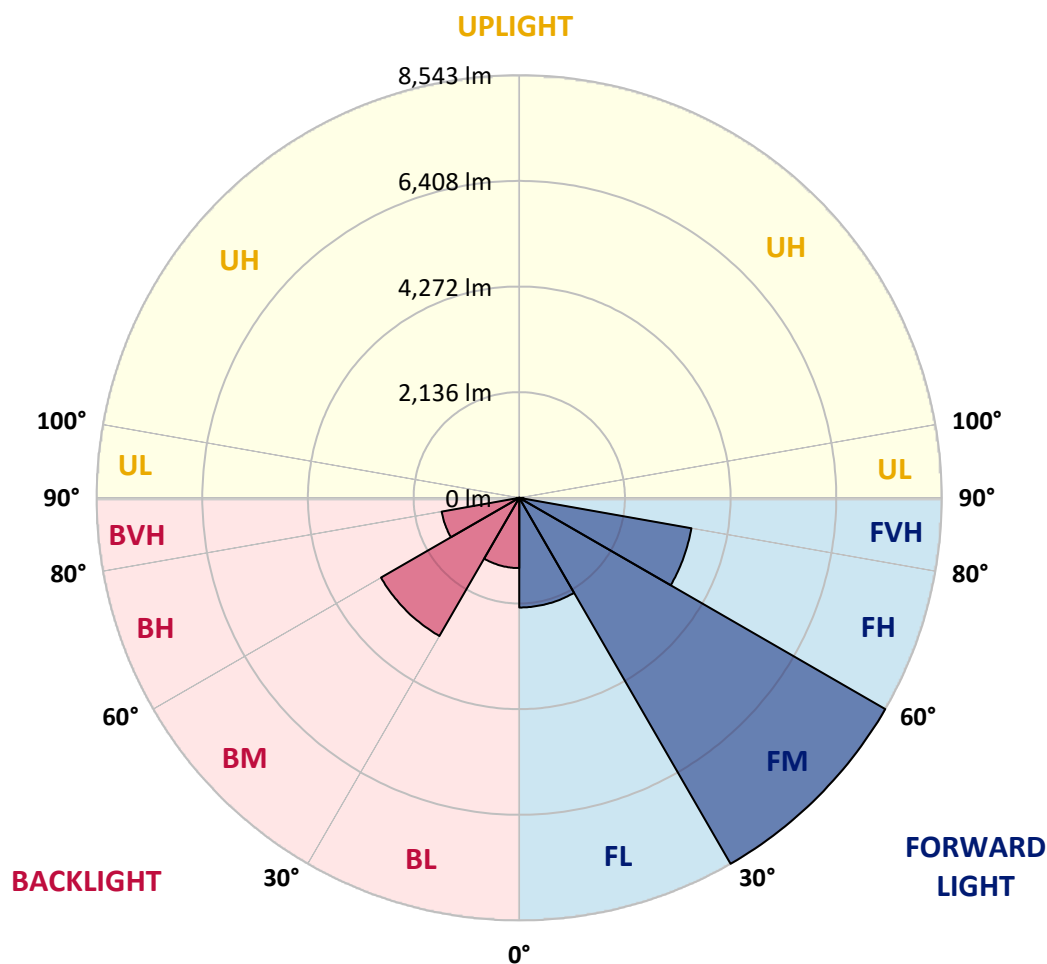
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2217.5 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 8543.4 | 41.3      |                         |      |         |
| FH   | (60°-80°)   | 3534.8 | 17.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 85.7   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1420.2 | 6.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3227.0 | 15.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1593.9 | 7.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 56.5   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 82°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0°    | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6  | 2972.6  |
| 2.5°  | 3107.7 | 3107.7 | 3131.7 | 3131.7 | 3110.7 | 3077.7 | 3068.7 | 3032.6 | 2999.6 | 2999.6  | 3002.6  |
| 5°    | 3405.0 | 3402.0 | 3420.0 | 3396.0 | 3344.9 | 3278.9 | 3233.8 | 3155.8 | 3089.7 | 3068.7  | 3065.7  |
| 7.5°  | 3768.3 | 3765.3 | 3774.3 | 3735.3 | 3639.2 | 3531.1 | 3441.0 | 3314.9 | 3206.8 | 3161.8  | 3149.8  |
| 10°   | 4173.6 | 4170.6 | 4161.6 | 4095.6 | 3966.5 | 3798.3 | 3663.2 | 3489.0 | 3326.9 | 3254.8  | 3239.8  |
| 12.5° | 4639.1 | 4633.0 | 4612.0 | 4515.9 | 4338.8 | 4122.6 | 3927.4 | 3702.2 | 3486.0 | 3387.0  | 3353.9  |
| 15°   | 5158.5 | 5149.5 | 5110.5 | 4993.4 | 4756.2 | 4482.9 | 4230.7 | 3942.4 | 3678.2 | 3549.1  | 3504.1  |
| 17.5° | 5705.0 | 5705.0 | 5644.9 | 5470.8 | 5206.5 | 4867.2 | 4555.0 | 4188.7 | 3879.4 | 3720.2  | 3666.2  |
| 20°   | 6260.5 | 6257.5 | 6182.4 | 5972.2 | 5659.9 | 5269.6 | 4873.3 | 4470.9 | 4086.6 | 3894.4  | 3828.3  |
| 22.5° | 6846.0 | 6840.0 | 6746.9 | 6506.7 | 6134.4 | 5693.0 | 5230.6 | 4750.1 | 4314.8 | 4083.6  | 3999.5  |
| 25°   | 7518.6 | 7509.6 | 7395.5 | 7101.2 | 6659.8 | 6161.4 | 5632.9 | 5077.4 | 4576.0 | 4293.7  | 4194.7  |
| 27.5° | 8233.2 | 8221.2 | 8086.1 | 7743.8 | 7260.3 | 6659.8 | 6077.3 | 5455.8 | 4864.2 | 4528.0  | 4416.9  |
| 30°   | 8869.7 | 8860.7 | 8713.6 | 8362.3 | 7806.8 | 7155.2 | 6500.7 | 5834.1 | 5167.5 | 4777.2  | 4639.1  |
| 32.5° | 9350.2 | 9350.2 | 9218.0 | 8872.7 | 8296.2 | 7629.7 | 6927.0 | 6191.4 | 5482.8 | 5044.4  | 4882.3  |
| 35°   | 9641.4 | 9650.4 | 9536.3 | 9260.1 | 8716.6 | 8077.1 | 7368.4 | 6611.8 | 5819.1 | 5329.7  | 5155.5  |
| 37.5° | 9683.5 | 9713.5 | 9647.4 | 9461.3 | 9007.9 | 8449.4 | 7800.8 | 7017.1 | 6167.4 | 5617.9  | 5422.7  |
| 40°   | 9488.3 | 9509.3 | 9512.3 | 9440.2 | 9128.0 | 8716.6 | 8182.1 | 7446.5 | 6536.7 | 5921.2  | 5696.0  |
| 42.5° | 9097.9 | 9113.0 | 9140.0 | 9161.0 | 9040.9 | 8833.7 | 8473.4 | 7845.9 | 6930.1 | 6230.4  | 5966.2  |
| 45°   | 8593.5 | 8590.5 | 8635.5 | 8725.6 | 8719.6 | 8767.7 | 8635.5 | 8209.2 | 7338.4 | 6581.7  | 6266.5  |
| 47.5° | 7839.8 | 7824.8 | 7984.0 | 8188.1 | 8290.2 | 8515.4 | 8638.5 | 8494.4 | 7782.8 | 6969.1  | 6608.8  |
| 50°   | 6659.8 | 6644.8 | 6993.1 | 7473.5 | 7773.8 | 8116.1 | 8473.4 | 8665.6 | 8248.2 | 7404.5  | 6981.1  |
| 52.5° | 5224.6 | 5209.5 | 5650.9 | 6491.7 | 7146.2 | 7644.7 | 8140.1 | 8704.6 | 8689.6 | 7890.9  | 7401.5  |
| 55°   | 3885.4 | 3873.4 | 4302.8 | 5212.6 | 6272.5 | 7098.2 | 7731.8 | 8602.5 | 9103.9 | 8449.4  | 7911.9  |
| 57.5° | 2738.4 | 2732.4 | 3104.7 | 3858.4 | 5149.5 | 6431.6 | 7338.4 | 8404.3 | 9485.3 | 9055.9  | 8488.4  |
| 60°   | 1921.7 | 1912.7 | 2182.9 | 2765.4 | 3894.4 | 5425.7 | 6948.1 | 8140.1 | 9770.5 | 9653.4  | 9100.9  |
| 62.5° | 1294.1 | 1288.1 | 1480.3 | 1966.7 | 2765.4 | 4176.6 | 6356.6 | 7963.0 | 9932.7 | 10254.0 | 9719.5  |
| 65°   | 981.9  | 978.9  | 1065.9 | 1333.2 | 1957.7 | 2999.6 | 5416.7 | 7941.9 | 9953.7 | 10704.3 | 10244.9 |
| 67.5° | 792.7  | 795.7  | 843.7  | 996.9  | 1354.2 | 2131.9 | 4200.7 | 7809.8 | 9842.6 | 10857.5 | 10500.2 |
| 70°   | 648.6  | 648.6  | 669.6  | 771.7  | 999.9  | 1438.3 | 2933.6 | 7209.3 | 9533.3 | 10458.1 | 10196.9 |
| 72.5° | 495.4  | 498.4  | 564.5  | 624.5  | 753.7  | 1008.9 | 1879.6 | 5966.2 | 8803.7 | 9221.1  | 9022.9  |
| 75°   | 393.3  | 390.3  | 429.4  | 513.4  | 585.5  | 720.6  | 1153.0 | 4278.7 | 7491.5 | 7206.3  | 7080.2  |
| 77.5° | 282.2  | 279.2  | 309.3  | 381.3  | 444.4  | 510.4  | 687.6  | 2158.9 | 4074.6 | 3744.3  | 3651.2  |
| 80°   | 192.2  | 186.2  | 213.2  | 264.2  | 294.3  | 300.3  | 336.3  | 828.7  | 1777.6 | 1675.5  | 1654.4  |
| 82.5° | 99.1   | 99.1   | 114.1  | 150.1  | 153.1  | 156.1  | 150.1  | 267.2  | 588.5  | 549.5   | 525.5   |
| 85°   | 39.0   | 39.0   | 42.0   | 51.0   | 51.0   | 54.0   | 54.0   | 69.1   | 63.1   | 60.1    | 57.0    |
| 87.5° | 3.0    | 3.0    | 6.0    | 6.0    | 9.0    | 9.0    | 9.0    | 12.0   | 15.0   | 15.0    | 15.0    |
| 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°    | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 | 2972.6 |
| 2.5°  | 2996.6 | 2984.6 | 2945.6 | 2936.6 | 2930.6 | 2921.6 | 2924.6 | 2903.5 | 2894.5 | 2897.5 | 2885.5 |
| 5°    | 3050.7 | 3029.6 | 2981.6 | 2960.6 | 2954.6 | 2945.6 | 2954.6 | 2939.6 | 2924.6 | 2930.6 | 2924.6 |
| 7.5°  | 3125.7 | 3095.7 | 3035.7 | 3014.6 | 3011.6 | 3002.6 | 3014.6 | 3002.6 | 2990.6 | 2996.6 | 2984.6 |
| 10°   | 3203.8 | 3164.8 | 3098.7 | 3077.7 | 3077.7 | 3074.7 | 3086.7 | 3068.7 | 3056.7 | 3059.7 | 3053.7 |
| 12.5° | 3317.9 | 3266.9 | 3194.8 | 3176.8 | 3167.8 | 3176.8 | 3179.8 | 3155.8 | 3134.7 | 3137.7 | 3128.7 |
| 15°   | 3456.0 | 3399.0 | 3320.9 | 3293.9 | 3287.9 | 3284.9 | 3272.9 | 3242.8 | 3215.8 | 3212.8 | 3203.8 |
| 17.5° | 3606.1 | 3534.1 | 3441.0 | 3414.0 | 3387.0 | 3377.9 | 3347.9 | 3308.9 | 3266.9 | 3266.9 | 3254.8 |
| 20°   | 3750.3 | 3669.2 | 3558.1 | 3519.1 | 3480.0 | 3444.0 | 3393.0 | 3329.9 | 3275.9 | 3266.9 | 3254.8 |
| 22.5° | 3906.4 | 3810.3 | 3681.2 | 3624.2 | 3555.1 | 3483.0 | 3396.0 | 3311.9 | 3242.8 | 3227.8 | 3218.8 |
| 25°   | 4080.6 | 3960.5 | 3807.3 | 3723.3 | 3612.2 | 3501.1 | 3371.9 | 3263.8 | 3182.8 | 3158.8 | 3152.8 |
| 27.5° | 4272.7 | 4128.6 | 3942.4 | 3819.3 | 3657.2 | 3483.0 | 3317.9 | 3188.8 | 3089.7 | 3059.7 | 3050.7 |
| 30°   | 4467.9 | 4296.8 | 4065.5 | 3885.4 | 3657.2 | 3426.0 | 3218.8 | 3068.7 | 2954.6 | 2912.5 | 2906.5 |
| 32.5° | 4663.1 | 4470.9 | 4176.6 | 3921.4 | 3621.2 | 3329.9 | 3089.7 | 2912.5 | 2783.4 | 2732.4 | 2744.4 |
| 35°   | 4897.3 | 4663.1 | 4278.7 | 3936.4 | 3561.1 | 3212.8 | 2942.6 | 2735.4 | 2603.3 | 2558.2 | 2567.2 |
| 37.5° | 5140.5 | 4855.2 | 4359.8 | 3924.4 | 3477.0 | 3080.7 | 2777.4 | 2576.2 | 2411.1 | 2333.0 | 2342.0 |
| 40°   | 5350.7 | 5029.4 | 4416.9 | 3882.4 | 3368.9 | 2930.6 | 2615.3 | 2351.1 | 2122.9 | 2047.8 | 2038.8 |
| 42.5° | 5548.8 | 5158.5 | 4446.9 | 3819.3 | 3245.8 | 2756.4 | 2384.1 | 2044.8 | 1816.6 | 1723.5 | 1726.5 |
| 45°   | 5756.0 | 5284.6 | 4434.9 | 3735.3 | 3092.7 | 2552.2 | 2086.8 | 1744.5 | 1543.3 | 1459.3 | 1462.3 |
| 47.5° | 5993.2 | 5419.7 | 4422.9 | 3645.2 | 2906.5 | 2288.0 | 1801.6 | 1480.3 | 1306.1 | 1246.1 | 1240.1 |
| 50°   | 6245.5 | 5569.9 | 4407.8 | 3534.1 | 2699.4 | 1993.7 | 1519.3 | 1234.1 | 1086.9 | 1047.9 | 1038.9 |
| 52.5° | 6530.7 | 5732.0 | 4398.8 | 3402.0 | 2450.1 | 1681.5 | 1267.1 | 1017.9 | 918.8  | 891.8  | 888.8  |
| 55°   | 6873.0 | 5921.2 | 4410.9 | 3242.8 | 2149.9 | 1387.2 | 1053.9 | 876.8  | 810.7  | 795.7  | 792.7  |
| 57.5° | 7290.4 | 6164.4 | 4446.9 | 3056.7 | 1834.6 | 1132.0 | 897.8  | 789.7  | 747.7  | 735.6  | 735.6  |
| 60°   | 7743.8 | 6440.6 | 4512.9 | 2846.5 | 1519.3 | 933.8  | 795.7  | 720.6  | 702.6  | 717.6  | 717.6  |
| 62.5° | 8233.2 | 6764.9 | 4630.0 | 2591.3 | 1225.1 | 789.7  | 714.6  | 663.6  | 651.6  | 681.6  | 684.6  |
| 65°   | 8686.6 | 7080.2 | 4705.1 | 2285.0 | 972.8  | 684.6  | 651.6  | 606.5  | 612.5  | 642.6  | 639.6  |
| 67.5° | 8965.8 | 7341.4 | 4600.0 | 1900.7 | 771.7  | 606.5  | 585.5  | 546.5  | 561.5  | 585.5  | 588.5  |
| 70°   | 8794.7 | 7194.3 | 4080.6 | 1435.3 | 603.5  | 528.5  | 513.4  | 489.4  | 501.4  | 531.5  | 543.5  |
| 72.5° | 7956.9 | 6443.6 | 3173.8 | 969.8  | 486.4  | 444.4  | 450.4  | 438.4  | 453.4  | 480.4  | 507.4  |
| 75°   | 6458.6 | 4870.3 | 2128.9 | 621.5  | 384.3  | 378.3  | 387.3  | 378.3  | 384.3  | 411.4  | 426.4  |
| 77.5° | 3371.9 | 2375.1 | 1059.9 | 387.3  | 285.2  | 294.3  | 309.3  | 312.3  | 330.3  | 336.3  | 342.3  |
| 80°   | 1573.4 | 1068.9 | 441.4  | 216.2  | 189.2  | 207.2  | 237.2  | 240.2  | 246.2  | 255.2  | 258.2  |
| 82.5° | 513.4  | 321.3  | 204.2  | 117.1  | 108.1  | 117.1  | 153.1  | 183.2  | 186.2  | 204.2  | 204.2  |
| 85°   | 54.0   | 33.0   | 45.0   | 48.0   | 42.0   | 51.0   | 69.1   | 66.1   | 30.0   | 18.0   | 18.0   |
| 87.5° | 15.0   | 12.0   | 15.0   | 15.0   | 12.0   | 12.0   | 9.0    | 3.0    | 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)