

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: P836205

Luminaire Tested: **ARCH3-150-740-U-T4W**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836205  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-150-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1170mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 21826 lumens  
Efficiency: N/A  
Efficacy: 144.8 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
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

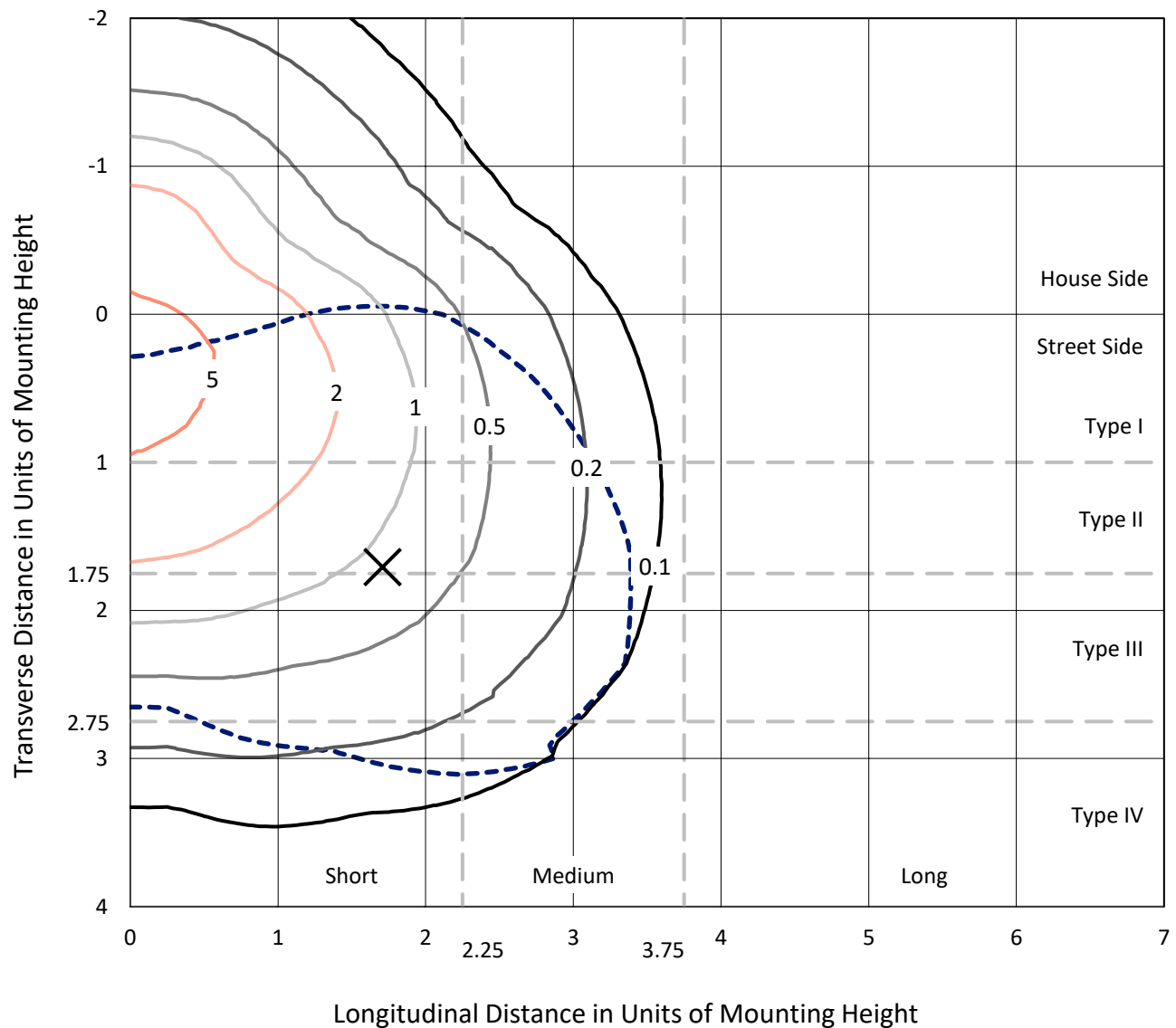


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

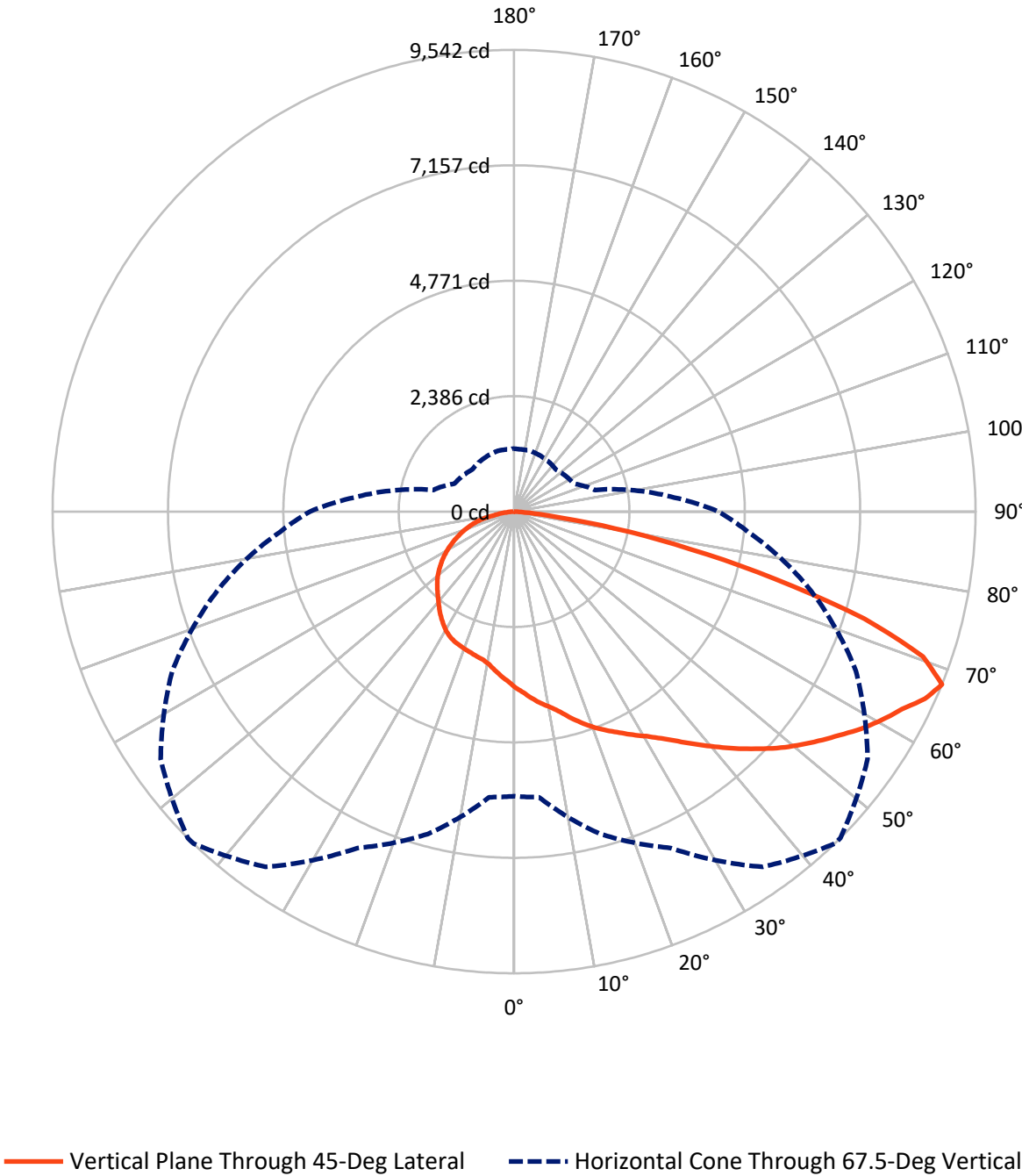


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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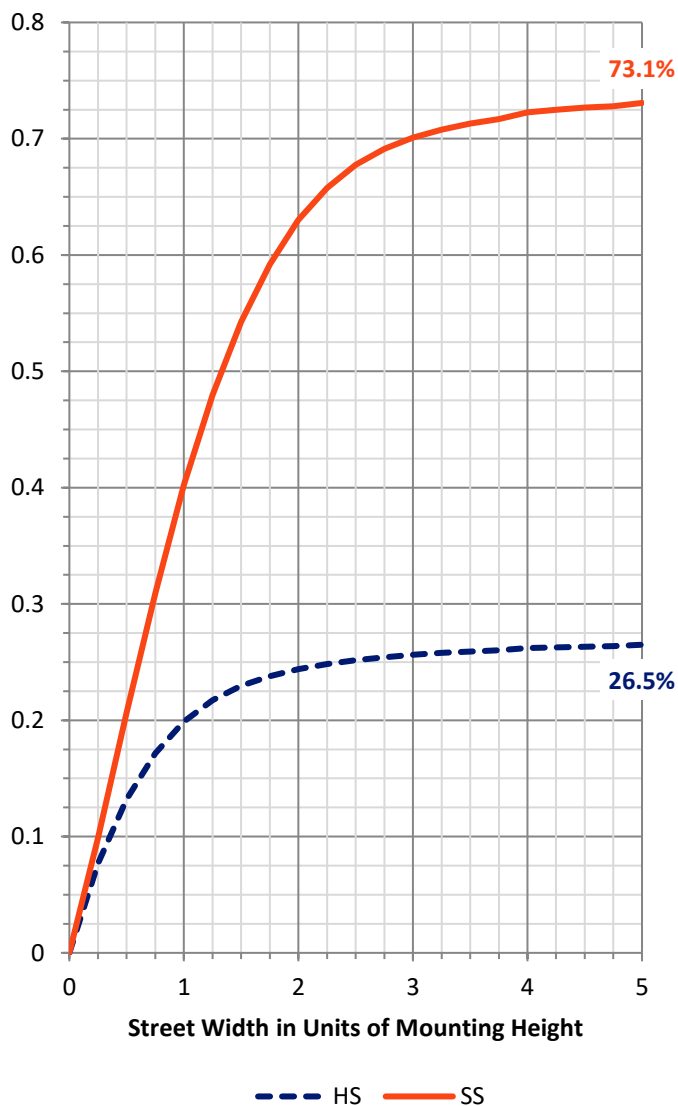
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5830.8   | 0.0    | 5830.8  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 15995.2  | 0.0    | 15995.2 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 21826.0  | 0.0    | 21826.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 348.5   | 1.6       |
| 10°-20°   | 1076.6  | 4.9       |
| 20°-30°   | 1858.4  | 8.5       |
| 30°-40°   | 2740.5  | 12.6      |
| 40°-50°   | 3712.9  | 17.0      |
| 50°-60°   | 4538.0  | 20.8      |
| 60°-70°   | 4680.3  | 21.4      |
| 70°-80°   | 2563.5  | 11.7      |
| 80°-90°   | 307.3   | 1.4       |
| 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°    | 21826.0 | 100.0     |
| 0°-180°   | 21826.0 | 100.0     |

**Coefficient of Utilization**



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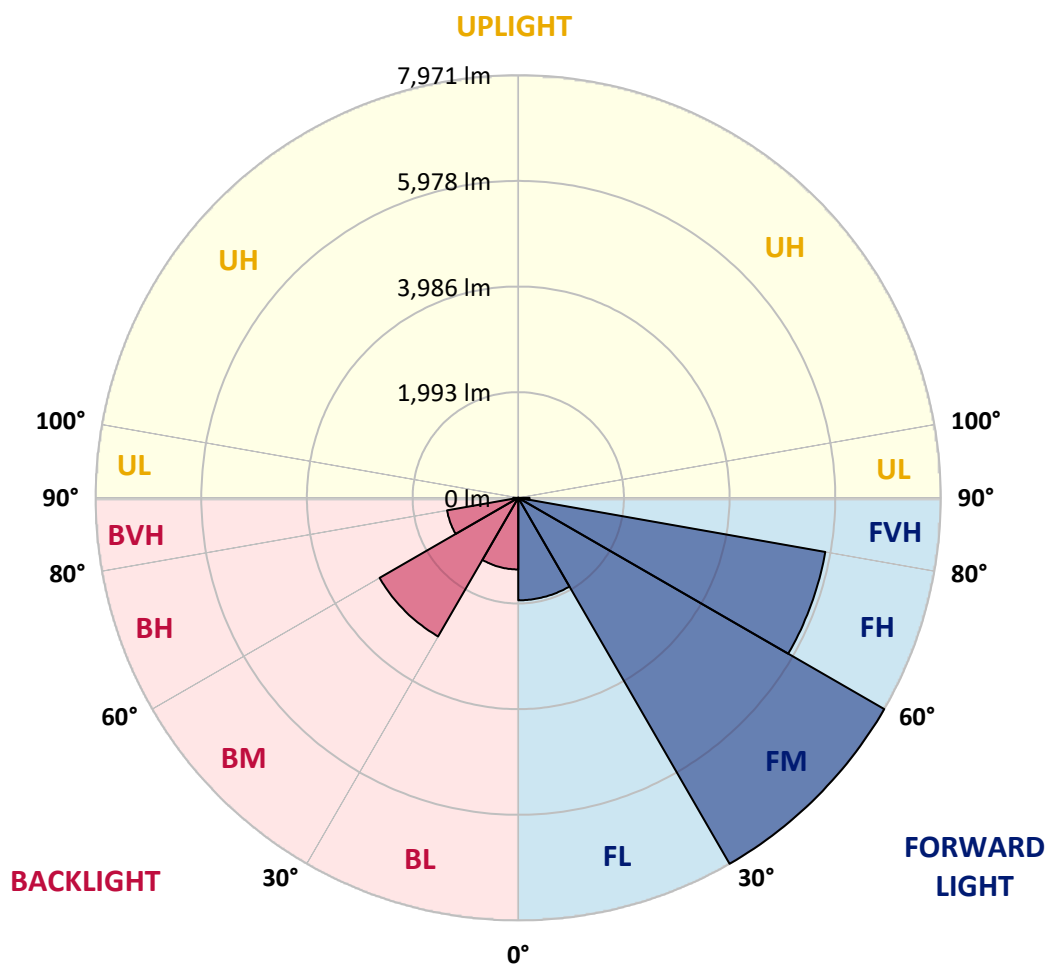
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1932.2 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 7971.1 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 5880.3 | 26.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 211.7  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1351.4 | 6.2       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3020.3 | 13.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1363.6 | 6.2       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 95.6   | 0.4       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 |
| 2.5°  | 3799.6 | 3796.3 | 3802.9 | 3779.7 | 3749.8 | 3746.4 | 3746.4 | 3726.5 | 3703.3 | 3656.8 | 3620.2 |
| 5°    | 3978.9 | 3972.3 | 3975.6 | 3942.4 | 3902.5 | 3882.6 | 3879.3 | 3836.1 | 3783.0 | 3709.9 | 3643.5 |
| 7.5°  | 4145.0 | 4138.4 | 4135.0 | 4098.5 | 4038.7 | 4005.5 | 4002.2 | 3939.1 | 3876.0 | 3763.1 | 3666.7 |
| 10°   | 4301.1 | 4294.5 | 4287.8 | 4238.0 | 4164.9 | 4115.1 | 4108.5 | 4028.8 | 3949.0 | 3809.5 | 3686.7 |
| 12.5° | 4500.4 | 4487.1 | 4480.5 | 4420.7 | 4314.4 | 4261.2 | 4251.3 | 4145.0 | 4045.4 | 3876.0 | 3726.5 |
| 15°   | 4709.6 | 4699.7 | 4689.7 | 4633.2 | 4513.7 | 4443.9 | 4427.3 | 4294.5 | 4158.3 | 3962.3 | 3786.3 |
| 17.5° | 4865.7 | 4855.8 | 4855.8 | 4805.9 | 4696.3 | 4616.6 | 4603.3 | 4443.9 | 4274.5 | 4042.0 | 3832.8 |
| 20°   | 4962.0 | 4952.1 | 4962.0 | 4932.2 | 4849.1 | 4782.7 | 4769.4 | 4593.4 | 4390.8 | 4115.1 | 3872.7 |
| 22.5° | 5031.8 | 5021.8 | 5038.4 | 5025.2 | 4965.4 | 4925.5 | 4915.5 | 4742.8 | 4510.3 | 4191.5 | 3912.5 |
| 25°   | 5154.7 | 5154.7 | 5154.7 | 5131.4 | 5075.0 | 5061.7 | 5061.7 | 4912.2 | 4663.1 | 4291.1 | 3972.3 |
| 27.5° | 5400.5 | 5387.2 | 5370.6 | 5304.1 | 5207.8 | 5204.5 | 5224.4 | 5084.9 | 4839.2 | 4420.7 | 4045.4 |
| 30°   | 5762.5 | 5755.8 | 5692.7 | 5553.2 | 5390.5 | 5373.9 | 5387.2 | 5270.9 | 5028.5 | 4556.8 | 4128.4 |
| 32.5° | 6230.8 | 6207.5 | 6078.0 | 5868.8 | 5636.3 | 5559.9 | 5586.5 | 5463.6 | 5227.8 | 4696.3 | 4208.1 |
| 35°   | 6562.9 | 6569.6 | 6476.6 | 6287.3 | 6011.6 | 5809.0 | 5828.9 | 5679.5 | 5443.6 | 4852.4 | 4307.7 |
| 37.5° | 6944.9 | 6968.1 | 6828.6 | 6685.8 | 6430.1 | 6084.7 | 6104.6 | 5902.0 | 5659.5 | 5048.4 | 4414.0 |
| 40°   | 7473.0 | 7426.5 | 7190.7 | 7021.3 | 6739.0 | 6373.6 | 6390.2 | 6151.1 | 5908.6 | 5234.4 | 4536.9 |
| 42.5° | 7914.7 | 7831.7 | 7546.0 | 7330.1 | 6991.4 | 6679.2 | 6695.8 | 6420.1 | 6161.0 | 5440.3 | 4673.1 |
| 45°   | 8549.1 | 8319.9 | 7908.1 | 7801.8 | 7250.4 | 6978.1 | 6994.7 | 6705.7 | 6426.7 | 5659.5 | 4819.2 |
| 47.5° | 8917.7 | 8552.4 | 8290.0 | 8233.5 | 7536.1 | 7287.0 | 7306.9 | 7008.0 | 6712.4 | 5908.6 | 4972.0 |
| 50°   | 8894.5 | 8658.7 | 8582.3 | 8442.8 | 7788.5 | 7575.9 | 7595.9 | 7320.2 | 7001.3 | 6154.4 | 5118.1 |
| 52.5° | 8741.7 | 8784.9 | 8745.0 | 8512.5 | 8040.9 | 7854.9 | 7878.2 | 7629.1 | 7296.9 | 6383.6 | 5254.3 |
| 55°   | 8977.5 | 9007.4 | 8931.0 | 8625.5 | 8319.9 | 8133.9 | 8160.5 | 7954.6 | 7589.2 | 6586.2 | 5370.6 |
| 57.5° | 9259.8 | 9153.5 | 9077.2 | 8824.7 | 8608.9 | 8436.1 | 8466.0 | 8286.7 | 7841.6 | 6748.9 | 5460.2 |
| 60°   | 9246.5 | 9024.0 | 9100.4 | 8838.0 | 8804.8 | 8715.1 | 8741.7 | 8559.0 | 8034.3 | 6868.5 | 5496.8 |
| 62.5° | 8565.7 | 8446.1 | 8831.4 | 8741.7 | 8964.2 | 8964.2 | 8997.4 | 8725.1 | 8150.5 | 6918.3 | 5476.9 |
| 65°   | 7383.3 | 7389.9 | 8067.5 | 8439.5 | 9153.5 | 9306.3 | 9332.9 | 8828.1 | 8084.1 | 6772.2 | 5290.9 |
| 67.5° | 5882.1 | 5925.2 | 6898.4 | 7672.2 | 8964.2 | 9538.8 | 9542.1 | 8921.1 | 7798.5 | 6360.3 | 4859.1 |
| 70°   | 4304.4 | 4337.6 | 5486.8 | 6426.7 | 8070.8 | 9024.0 | 8970.9 | 8658.7 | 7177.4 | 5642.9 | 4184.9 |
| 72.5° | 2909.5 | 2939.4 | 4121.8 | 4935.5 | 6622.7 | 7685.5 | 7569.3 | 7652.3 | 6117.9 | 4636.6 | 3364.5 |
| 75°   | 1956.3 | 1992.8 | 2932.7 | 3530.6 | 4872.4 | 5835.6 | 5576.5 | 5795.7 | 4732.9 | 3510.6 | 2454.5 |
| 77.5° | 1232.2 | 1255.5 | 1863.3 | 2315.0 | 3328.0 | 3972.3 | 3713.2 | 3716.6 | 2726.8 | 1889.8 | 1318.6 |
| 80°   | 783.8  | 790.5  | 1129.2 | 1335.2 | 1926.4 | 2388.0 | 2112.4 | 1717.1 | 1228.9 | 1003.0 | 787.2  |
| 82.5° | 455.0  | 445.1  | 674.2  | 753.9  | 916.7  | 906.7  | 750.6  | 710.8  | 538.1  | 501.5  | 401.9  |
| 85°   | 182.7  | 169.4  | 295.6  | 275.7  | 279.0  | 295.6  | 219.2  | 219.2  | 176.0  | 136.2  | 99.6   |
| 87.5° | 36.5   | 36.5   | 39.9   | 36.5   | 36.5   | 39.9   | 29.9   | 29.9   | 26.6   | 26.6   | 26.6   |
| 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°    | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 | 3640.2 |
| 2.5°  | 3613.6 | 3606.9 | 3590.3 | 3547.2 | 3523.9 | 3510.6 | 3490.7 | 3484.1 | 3480.7 | 3484.1 | 3494.0 |
| 5°    | 3623.6 | 3600.3 | 3553.8 | 3484.1 | 3437.6 | 3407.7 | 3374.5 | 3361.2 | 3351.2 | 3351.2 | 3361.2 |
| 7.5°  | 3630.2 | 3593.7 | 3514.0 | 3411.0 | 3344.6 | 3298.1 | 3258.2 | 3241.6 | 3238.3 | 3248.2 | 3251.6 |
| 10°   | 3633.5 | 3580.4 | 3467.5 | 3337.9 | 3251.6 | 3191.8 | 3151.9 | 3142.0 | 3151.9 | 3171.9 | 3175.2 |
| 12.5° | 3656.8 | 3583.7 | 3440.9 | 3288.1 | 3185.1 | 3125.4 | 3095.5 | 3095.5 | 3122.0 | 3158.6 | 3161.9 |
| 15°   | 3696.6 | 3606.9 | 3427.6 | 3248.2 | 3142.0 | 3088.8 | 3078.9 | 3095.5 | 3135.3 | 3191.8 | 3198.4 |
| 17.5° | 3726.5 | 3620.2 | 3397.7 | 3195.1 | 3085.5 | 3052.3 | 3068.9 | 3108.8 | 3165.2 | 3241.6 | 3248.2 |
| 20°   | 3746.4 | 3620.2 | 3354.5 | 3132.0 | 3029.0 | 3022.4 | 3068.9 | 3132.0 | 3191.8 | 3281.5 | 3291.4 |
| 22.5° | 3766.4 | 3613.6 | 3304.7 | 3055.6 | 2965.9 | 2985.9 | 3072.2 | 3151.9 | 3211.7 | 3308.0 | 3324.6 |
| 25°   | 3802.9 | 3623.6 | 3254.9 | 2979.2 | 2899.5 | 2956.0 | 3068.9 | 3165.2 | 3228.3 | 3328.0 | 3354.5 |
| 27.5° | 3852.7 | 3646.8 | 3218.4 | 2909.5 | 2833.1 | 2909.5 | 3045.6 | 3161.9 | 3228.3 | 3324.6 | 3354.5 |
| 30°   | 3905.9 | 3673.4 | 3175.2 | 2833.1 | 2756.7 | 2843.0 | 2995.8 | 3125.4 | 3201.7 | 3291.4 | 3328.0 |
| 32.5° | 3962.3 | 3703.3 | 3138.6 | 2750.1 | 2663.7 | 2753.4 | 2922.8 | 3068.9 | 3151.9 | 3235.0 | 3274.8 |
| 35°   | 4038.7 | 3756.4 | 3118.7 | 2683.6 | 2580.7 | 2660.4 | 2829.8 | 2995.8 | 3085.5 | 3161.9 | 3208.4 |
| 37.5° | 4131.7 | 3822.8 | 3108.8 | 2617.2 | 2491.0 | 2557.4 | 2730.1 | 2906.2 | 3002.5 | 3065.6 | 3108.8 |
| 40°   | 4238.0 | 3905.9 | 3105.4 | 2554.1 | 2401.3 | 2451.1 | 2627.2 | 2803.2 | 2896.2 | 2946.0 | 2982.5 |
| 42.5° | 4357.6 | 3998.9 | 3098.8 | 2491.0 | 2311.6 | 2351.5 | 2527.5 | 2700.2 | 2779.9 | 2823.1 | 2856.3 |
| 45°   | 4483.8 | 4091.9 | 3085.5 | 2414.6 | 2215.3 | 2261.8 | 2424.6 | 2577.3 | 2660.4 | 2696.9 | 2733.4 |
| 47.5° | 4610.0 | 4184.9 | 3058.9 | 2328.2 | 2129.0 | 2172.1 | 2315.0 | 2447.8 | 2514.2 | 2547.4 | 2584.0 |
| 50°   | 4732.9 | 4267.9 | 2995.8 | 2228.6 | 2039.3 | 2079.1 | 2188.7 | 2278.4 | 2328.2 | 2354.8 | 2391.3 |
| 52.5° | 4842.5 | 4324.4 | 2906.2 | 2112.4 | 1949.6 | 1969.5 | 2042.6 | 2119.0 | 2158.9 | 2162.2 | 2195.4 |
| 55°   | 4935.5 | 4354.2 | 2776.6 | 1992.8 | 1853.3 | 1856.6 | 1896.5 | 1956.3 | 1972.9 | 1959.6 | 1982.8 |
| 57.5° | 4988.6 | 4337.6 | 2633.8 | 1869.9 | 1753.7 | 1740.4 | 1770.3 | 1800.2 | 1803.5 | 1770.3 | 1793.5 |
| 60°   | 5001.9 | 4261.2 | 2447.8 | 1747.0 | 1654.0 | 1617.5 | 1627.4 | 1620.8 | 1614.2 | 1600.9 | 1620.8 |
| 62.5° | 4935.5 | 4098.5 | 2241.9 | 1627.4 | 1547.7 | 1491.3 | 1487.9 | 1484.6 | 1494.6 | 1497.9 | 1501.2 |
| 65°   | 4693.0 | 3792.9 | 1996.1 | 1504.6 | 1434.8 | 1358.4 | 1355.1 | 1395.0 | 1408.2 | 1388.3 | 1395.0 |
| 67.5° | 4224.7 | 3324.6 | 1727.1 | 1361.7 | 1292.0 | 1225.6 | 1252.1 | 1275.4 | 1298.6 | 1292.0 | 1298.6 |
| 70°   | 3560.5 | 2730.1 | 1481.3 | 1202.3 | 1135.9 | 1099.4 | 1129.2 | 1149.2 | 1152.5 | 1145.9 | 1152.5 |
| 72.5° | 2799.9 | 2132.3 | 1252.1 | 1039.6 | 979.8  | 963.2  | 999.7  | 1016.3 | 1046.2 | 1059.5 | 1062.8 |
| 75°   | 2022.7 | 1574.3 | 1026.3 | 863.5  | 813.7  | 813.7  | 846.9  | 876.8  | 903.4  | 886.8  | 876.8  |
| 77.5° | 1129.2 | 939.9  | 737.3  | 594.5  | 604.5  | 651.0  | 664.3  | 697.5  | 724.0  | 720.7  | 714.1  |
| 80°   | 684.2  | 587.9  | 498.2  | 385.3  | 382.0  | 418.5  | 504.8  | 561.3  | 574.6  | 544.7  | 541.4  |
| 82.5° | 355.4  | 308.9  | 265.7  | 215.9  | 239.1  | 279.0  | 292.3  | 352.1  | 388.6  | 375.3  | 391.9  |
| 85°   | 89.7   | 86.4   | 96.3   | 99.6   | 122.9  | 136.2  | 149.5  | 176.0  | 116.2  | 56.5   | 56.5   |
| 87.5° | 26.6   | 26.6   | 33.2   | 33.2   | 43.2   | 53.1   | 49.8   | 49.8   | 26.6   | 3.3    | 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)