

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: P841156

Luminaire Tested: **ARCH4-140-727-U-T2U-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-140-727-U-T2U-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

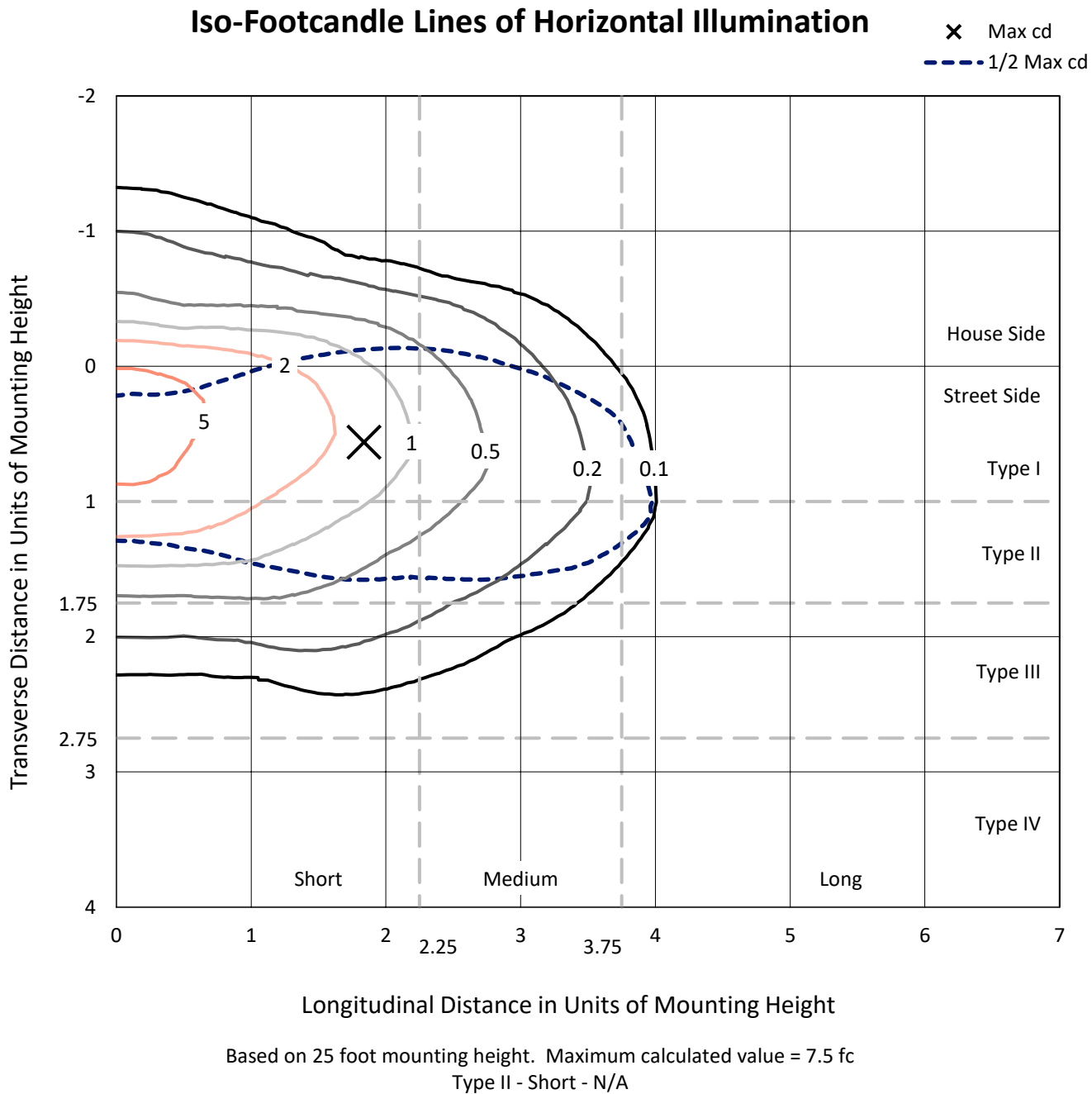
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 15757 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 141.3  
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

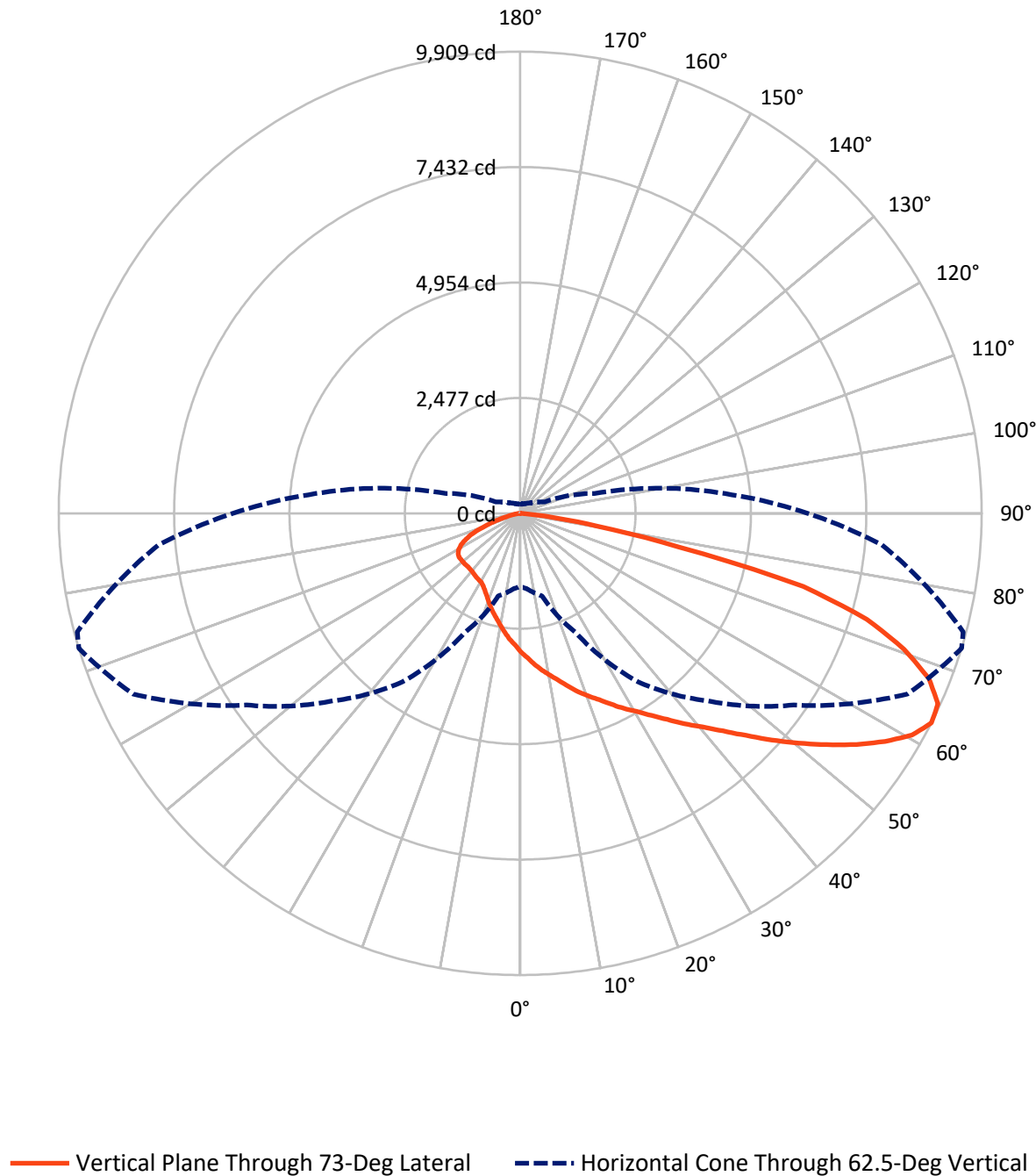


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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2442.6   | 0.0    | 2442.6  |
|                    | % Fixture | 15.5     | 0.0    | 15.5    |
| <b>Street Side</b> | Lumens    | 13314.4  | 0.0    | 13314.4 |
|                    | % Fixture | 84.5     | 0.0    | 84.5    |
| <b>Total</b>       | Lumens    | 15757.0  | 0.0    | 15757.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 288.2   | 1.8       |
| 10°-20°   | 869.8   | 5.5       |
| 20°-30°   | 1447.7  | 9.2       |
| 30°-40°   | 2184.4  | 13.9      |
| 40°-50°   | 3053.3  | 19.4      |
| 50°-60°   | 3372.5  | 21.4      |
| 60°-70°   | 2937.9  | 18.6      |
| 70°-80°   | 1484.1  | 9.4       |
| 80°-90°   | 119.1   | 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°    | 15757.0 | 100.0     |
| 0°-180°   | 15757.0 | 100.0     |

**Coefficient of Utilization**



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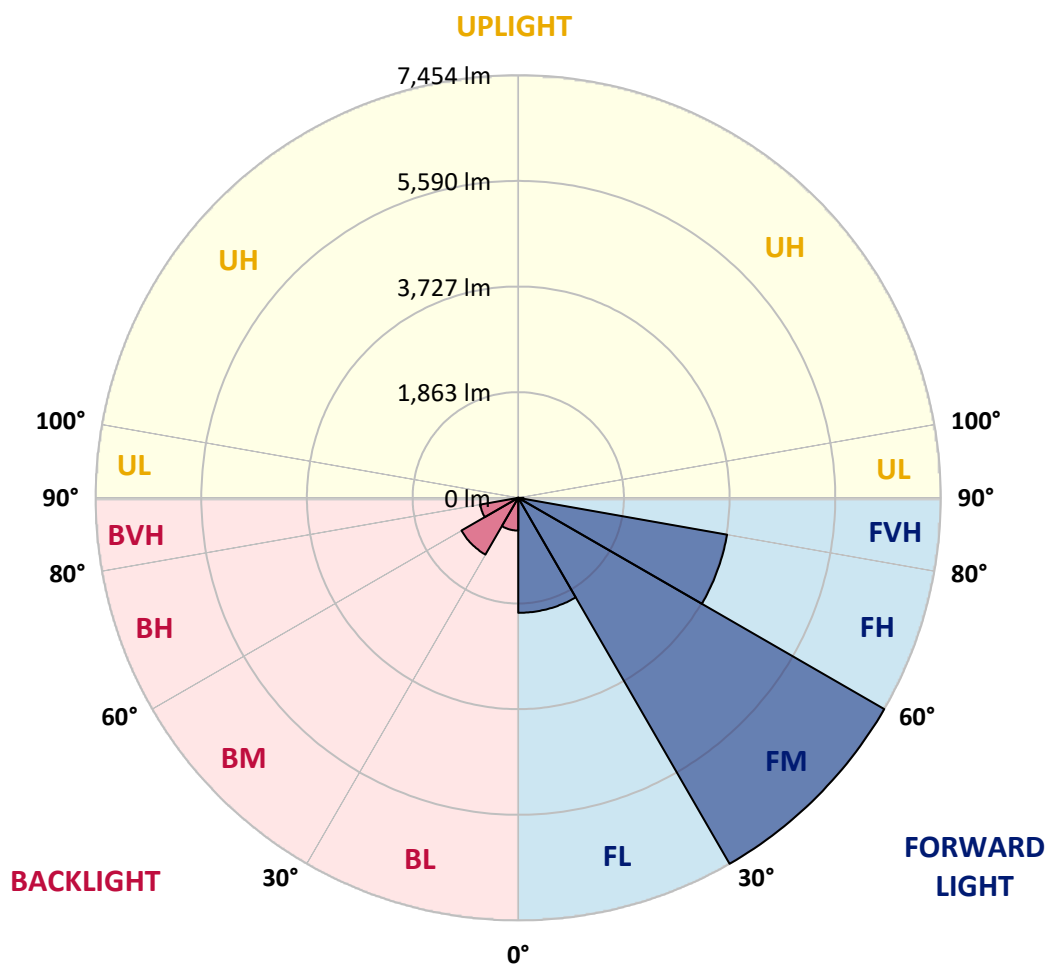
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2028.4 | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 7453.6 | 47.3      |                         |      |         |
| FH   | (60°-80°)   | 3740.2 | 23.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 92.2   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 577.3  | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1156.5 | 7.3       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 681.8  | 4.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 26.9   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 73°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 |
| 2.5°  | 3395.6 | 3433.4 | 3412.8 | 3426.5 | 3357.9 | 3313.2 | 3261.7 | 3162.2 | 3107.2 | 3100.4 | 3035.1 |
| 5°    | 3893.5 | 3934.7 | 3900.3 | 3890.0 | 3769.9 | 3666.9 | 3550.1 | 3375.0 | 3258.3 | 3237.7 | 3093.5 |
| 7.5°  | 4391.3 | 4429.1 | 4387.9 | 4357.0 | 4195.6 | 4013.6 | 3842.0 | 3584.5 | 3402.5 | 3368.2 | 3141.6 |
| 10°   | 4741.5 | 4775.9 | 4745.0 | 4714.1 | 4545.8 | 4360.4 | 4116.6 | 3780.2 | 3533.0 | 3478.0 | 3172.5 |
| 12.5° | 5005.9 | 5026.5 | 5012.8 | 4985.3 | 4827.4 | 4628.2 | 4394.7 | 3999.9 | 3680.6 | 3611.9 | 3220.5 |
| 15°   | 5222.2 | 5256.5 | 5239.4 | 5218.8 | 5067.7 | 4868.6 | 4645.4 | 4229.9 | 3852.3 | 3766.4 | 3292.6 |
| 17.5° | 5366.4 | 5390.4 | 5393.9 | 5393.9 | 5260.0 | 5064.3 | 4848.0 | 4439.4 | 4023.9 | 3914.1 | 3361.3 |
| 20°   | 5431.6 | 5459.1 | 5476.3 | 5503.7 | 5393.9 | 5225.6 | 5005.9 | 4617.9 | 4185.3 | 4061.7 | 3426.5 |
| 22.5° | 5462.5 | 5486.6 | 5531.2 | 5593.0 | 5503.7 | 5363.0 | 5160.4 | 4782.7 | 4346.7 | 4216.2 | 3502.1 |
| 25°   | 5486.6 | 5517.5 | 5582.7 | 5699.4 | 5637.6 | 5517.5 | 5342.4 | 4971.6 | 4538.9 | 4405.0 | 3611.9 |
| 27.5° | 5551.8 | 5589.6 | 5651.4 | 5792.1 | 5716.6 | 5658.2 | 5534.6 | 5174.1 | 4741.5 | 4604.2 | 3745.8 |
| 30°   | 5778.4 | 5809.3 | 5805.9 | 5895.1 | 5802.4 | 5785.3 | 5699.4 | 5369.8 | 4937.2 | 4799.9 | 3903.8 |
| 32.5° | 6190.4 | 6221.3 | 6145.8 | 6111.4 | 5908.9 | 5912.3 | 5878.0 | 5579.3 | 5170.7 | 5029.9 | 4085.7 |
| 35°   | 6633.3 | 6667.7 | 6568.1 | 6509.7 | 6169.8 | 6070.2 | 6087.4 | 5840.2 | 5431.6 | 5290.9 | 4312.3 |
| 37.5° | 7028.2 | 7069.4 | 6983.5 | 6897.7 | 6554.4 | 6324.3 | 6320.9 | 6132.0 | 5730.3 | 5586.1 | 4563.0 |
| 40°   | 7244.5 | 7292.5 | 7344.0 | 7296.0 | 6935.5 | 6681.4 | 6571.5 | 6430.8 | 6025.6 | 5878.0 | 4834.2 |
| 42.5° | 7347.5 | 7481.4 | 7574.1 | 7543.2 | 7247.9 | 6990.4 | 6859.9 | 6743.2 | 6386.1 | 6241.9 | 5157.0 |
| 45°   | 7059.1 | 7062.5 | 7258.2 | 7426.4 | 7371.5 | 7199.8 | 7175.8 | 7093.4 | 6798.1 | 6660.8 | 5520.9 |
| 47.5° | 6698.6 | 6671.1 | 6808.4 | 7107.1 | 7261.6 | 7306.3 | 7447.0 | 7481.4 | 7268.5 | 7131.2 | 5891.7 |
| 50°   | 5833.3 | 5850.5 | 6296.8 | 6726.0 | 7028.2 | 7316.6 | 7639.3 | 7879.6 | 7752.6 | 7622.1 | 6283.1 |
| 52.5° | 4745.0 | 4786.2 | 5297.7 | 6241.9 | 6719.2 | 7213.6 | 7752.6 | 8277.9 | 8247.0 | 8123.4 | 6674.5 |
| 55°   | 3804.2 | 3869.4 | 4411.9 | 5435.1 | 6324.3 | 6983.5 | 7800.7 | 8641.9 | 8758.6 | 8645.3 | 7059.1 |
| 57.5° | 2908.1 | 2976.8 | 3433.4 | 4484.0 | 5819.6 | 6609.3 | 7766.3 | 8961.2 | 9235.8 | 9163.7 | 7412.7 |
| 60°   | 2190.5 | 2259.2 | 2551.0 | 3636.0 | 5187.9 | 6190.4 | 7594.7 | 9170.6 | 9665.0 | 9589.5 | 7670.2 |
| 62.5° | 1569.1 | 1624.0 | 1840.3 | 2829.1 | 4418.8 | 5692.6 | 7172.4 | 9174.0 | 9908.8 | 9847.0 | 7793.8 |
| 65°   | 1129.6 | 1129.6 | 1304.7 | 2018.8 | 3697.8 | 5095.2 | 6533.8 | 8751.7 | 9857.3 | 9840.1 | 7708.0 |
| 67.5° | 813.7  | 820.6  | 961.4  | 1411.1 | 2949.3 | 4370.7 | 5706.3 | 7999.8 | 9459.0 | 9544.8 | 7399.0 |
| 70°   | 576.8  | 594.0  | 659.2  | 985.4  | 2228.3 | 3450.6 | 4820.5 | 7014.4 | 8741.4 | 8892.5 | 6801.6 |
| 72.5° | 446.3  | 456.6  | 501.3  | 686.7  | 1627.4 | 2564.7 | 3842.0 | 5915.7 | 7783.5 | 7955.2 | 5987.8 |
| 75°   | 343.3  | 353.6  | 388.0  | 504.7  | 1167.4 | 1799.1 | 2729.6 | 4590.5 | 6276.2 | 6581.8 | 4810.2 |
| 77.5° | 250.6  | 264.4  | 288.4  | 367.4  | 679.8  | 1143.3 | 1654.9 | 2581.9 | 3464.3 | 3608.5 | 2520.1 |
| 80°   | 116.7  | 133.9  | 168.2  | 236.9  | 367.4  | 539.0  | 587.1  | 995.7  | 1665.2 | 1740.7 | 1366.5 |
| 82.5° | 65.2   | 82.4   | 96.1   | 144.2  | 185.4  | 192.3  | 199.1  | 250.6  | 628.3  | 693.5  | 573.4  |
| 85°   | 30.9   | 41.2   | 44.6   | 61.8   | 61.8   | 54.9   | 65.2   | 48.1   | 103.0  | 123.6  | 120.2  |
| 87.5° | 0.0    | 3.4    | 6.9    | 17.2   | 13.7   | 10.3   | 10.3   | 10.3   | 10.3   | 13.7   | 10.3   |
| 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°    | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 | 2983.6 |
| 2.5°  | 3004.2 | 2959.6 | 2856.6 | 2767.3 | 2708.9 | 2657.4 | 2588.8 | 2557.9 | 2502.9 | 2513.2 | 2482.3 |
| 5°    | 3021.4 | 2939.0 | 2757.0 | 2588.8 | 2465.2 | 2355.3 | 2235.1 | 2166.5 | 2090.9 | 2084.1 | 2060.0 |
| 7.5°  | 3031.7 | 2904.7 | 2643.7 | 2406.8 | 2218.0 | 2049.7 | 1888.4 | 1799.1 | 1706.4 | 1685.8 | 1665.2 |
| 10°   | 3021.4 | 2853.2 | 2527.0 | 2218.0 | 1967.3 | 1757.9 | 1575.9 | 1462.6 | 1366.5 | 1342.5 | 1321.9 |
| 12.5° | 3031.7 | 2825.7 | 2417.1 | 2042.9 | 1744.2 | 1507.3 | 1301.3 | 1184.5 | 1095.3 | 1071.2 | 1057.5 |
| 15°   | 3055.7 | 2808.5 | 2324.4 | 1884.9 | 1545.0 | 1280.7 | 1078.1 | 978.5  | 906.4  | 882.4  | 875.5  |
| 17.5° | 3076.3 | 2791.4 | 2224.8 | 1730.4 | 1345.9 | 1081.5 | 906.4  | 824.0  | 762.2  | 738.2  | 731.3  |
| 20°   | 3103.8 | 2767.3 | 2125.3 | 1582.8 | 1170.8 | 923.6  | 769.1  | 697.0  | 648.9  | 631.7  | 628.3  |
| 22.5° | 3127.8 | 2750.2 | 2032.6 | 1435.2 | 1009.4 | 796.5  | 666.1  | 607.7  | 573.4  | 556.2  | 556.2  |
| 25°   | 3189.6 | 2757.0 | 1953.6 | 1297.8 | 889.2  | 697.0  | 587.1  | 542.5  | 515.0  | 504.7  | 504.7  |
| 27.5° | 3261.7 | 2784.5 | 1891.8 | 1181.1 | 786.2  | 621.4  | 532.2  | 494.4  | 480.7  | 466.9  | 470.4  |
| 30°   | 3364.7 | 2839.4 | 1850.6 | 1085.0 | 710.7  | 563.1  | 487.5  | 460.1  | 446.3  | 442.9  | 442.9  |
| 32.5° | 3495.2 | 2928.7 | 1847.2 | 1023.2 | 655.8  | 518.4  | 456.6  | 432.6  | 425.7  | 422.3  | 422.3  |
| 35°   | 3649.7 | 3007.7 | 1826.6 | 995.7  | 621.4  | 487.5  | 432.6  | 415.4  | 412.0  | 412.0  | 412.0  |
| 37.5° | 3835.1 | 3138.1 | 1812.8 | 957.9  | 604.3  | 470.4  | 415.4  | 401.7  | 401.7  | 401.7  | 401.7  |
| 40°   | 4027.4 | 3244.6 | 1792.2 | 923.6  | 597.4  | 460.1  | 405.1  | 388.0  | 388.0  | 388.0  | 388.0  |
| 42.5° | 4257.4 | 3399.1 | 1785.4 | 906.4  | 587.1  | 453.2  | 391.4  | 370.8  | 374.2  | 374.2  | 377.7  |
| 45°   | 4535.5 | 3574.2 | 1781.9 | 889.2  | 583.7  | 446.3  | 377.7  | 353.6  | 357.1  | 353.6  | 353.6  |
| 47.5° | 4817.1 | 3776.7 | 1792.2 | 878.9  | 580.2  | 439.5  | 367.4  | 336.5  | 336.5  | 333.0  | 333.0  |
| 50°   | 5112.3 | 3962.1 | 1799.1 | 868.6  | 573.4  | 425.7  | 350.2  | 322.7  | 315.9  | 309.0  | 312.4  |
| 52.5° | 5390.4 | 4133.8 | 1802.5 | 851.5  | 552.8  | 405.1  | 336.5  | 305.6  | 295.3  | 285.0  | 288.4  |
| 55°   | 5668.5 | 4298.6 | 1809.4 | 830.9  | 525.3  | 384.5  | 319.3  | 288.4  | 274.7  | 260.9  | 260.9  |
| 57.5° | 5919.2 | 4442.8 | 1792.2 | 779.4  | 494.4  | 363.9  | 302.1  | 267.8  | 247.2  | 233.5  | 233.5  |
| 60°   | 6090.8 | 4545.8 | 1740.7 | 703.8  | 453.2  | 339.9  | 285.0  | 247.2  | 223.2  | 212.9  | 212.9  |
| 62.5° | 6173.2 | 4563.0 | 1648.0 | 580.2  | 401.7  | 315.9  | 264.4  | 226.6  | 206.0  | 199.1  | 199.1  |
| 65°   | 6094.3 | 4487.4 | 1503.8 | 436.0  | 346.8  | 288.4  | 243.8  | 209.4  | 188.8  | 171.7  | 171.7  |
| 67.5° | 5819.6 | 4274.6 | 1304.7 | 329.6  | 295.3  | 260.9  | 223.2  | 192.3  | 168.2  | 154.5  | 154.5  |
| 70°   | 5266.8 | 3831.7 | 1009.4 | 264.4  | 250.6  | 226.6  | 202.6  | 171.7  | 151.1  | 133.9  | 133.9  |
| 72.5° | 4542.4 | 3248.0 | 710.7  | 212.9  | 212.9  | 192.3  | 171.7  | 151.1  | 130.5  | 116.7  | 116.7  |
| 75°   | 3484.9 | 2403.4 | 477.2  | 171.7  | 175.1  | 161.4  | 140.8  | 123.6  | 109.9  | 99.6   | 99.6   |
| 77.5° | 1902.1 | 1188.0 | 291.8  | 127.0  | 130.5  | 123.6  | 109.9  | 99.6   | 92.7   | 82.4   | 82.4   |
| 80°   | 923.6  | 521.9  | 168.2  | 89.3   | 92.7   | 89.3   | 82.4   | 72.1   | 72.1   | 65.2   | 65.2   |
| 82.5° | 388.0  | 195.7  | 89.3   | 61.8   | 61.8   | 54.9   | 51.5   | 51.5   | 51.5   | 48.1   | 48.1   |
| 85°   | 96.1   | 37.8   | 37.8   | 34.3   | 34.3   | 34.3   | 30.9   | 30.9   | 30.9   | 24.0   | 27.5   |
| 87.5° | 13.7   | 13.7   | 13.7   | 13.7   | 13.7   | 13.7   | 10.3   | 3.4    | 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)