

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: P841293

Luminaire Tested: **ARCH4-160-722-U-T3-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841293  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-160-722-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 15427 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 160.7  
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

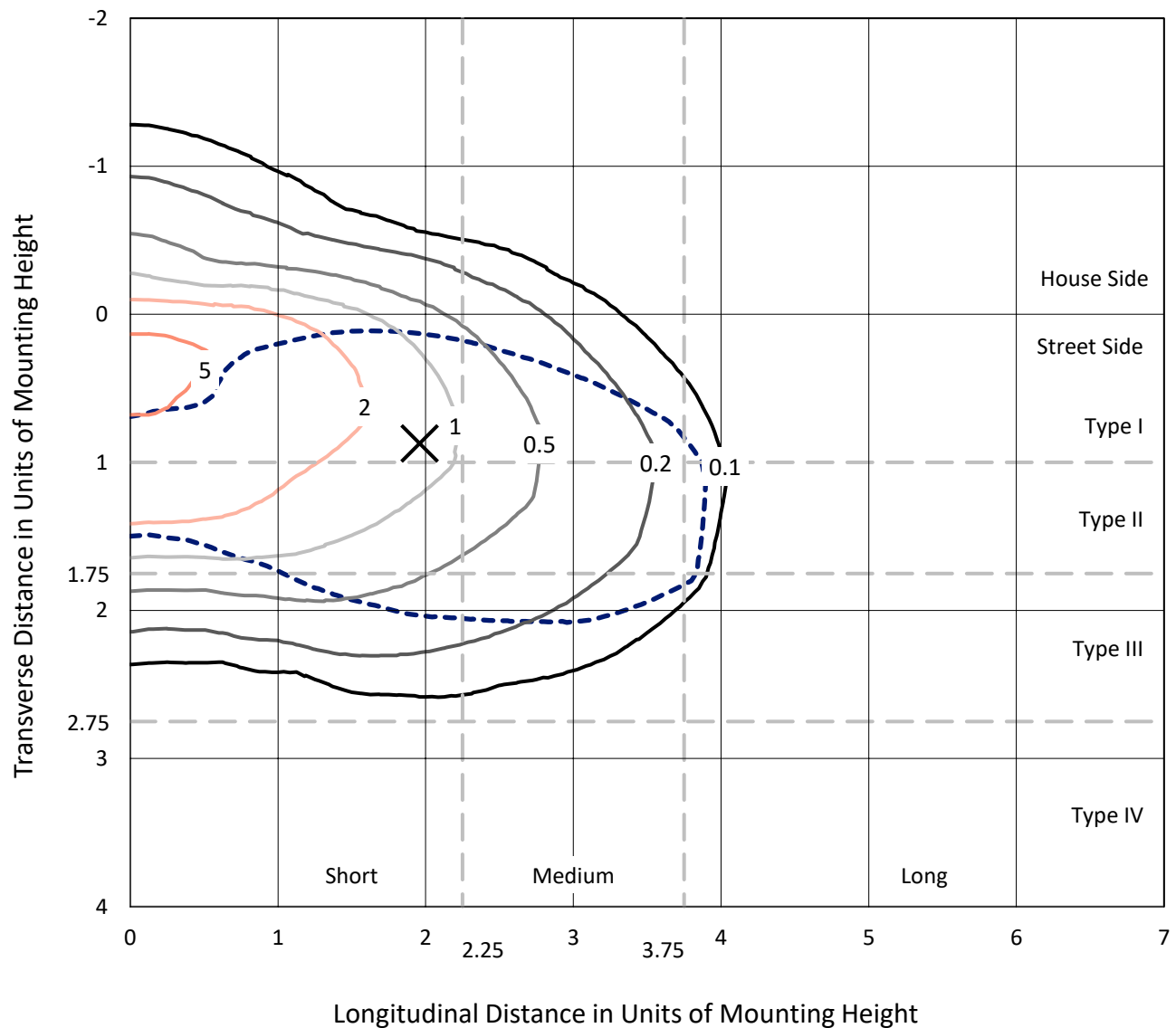


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## Iso-Footcandle Lines of Horizontal Illumination

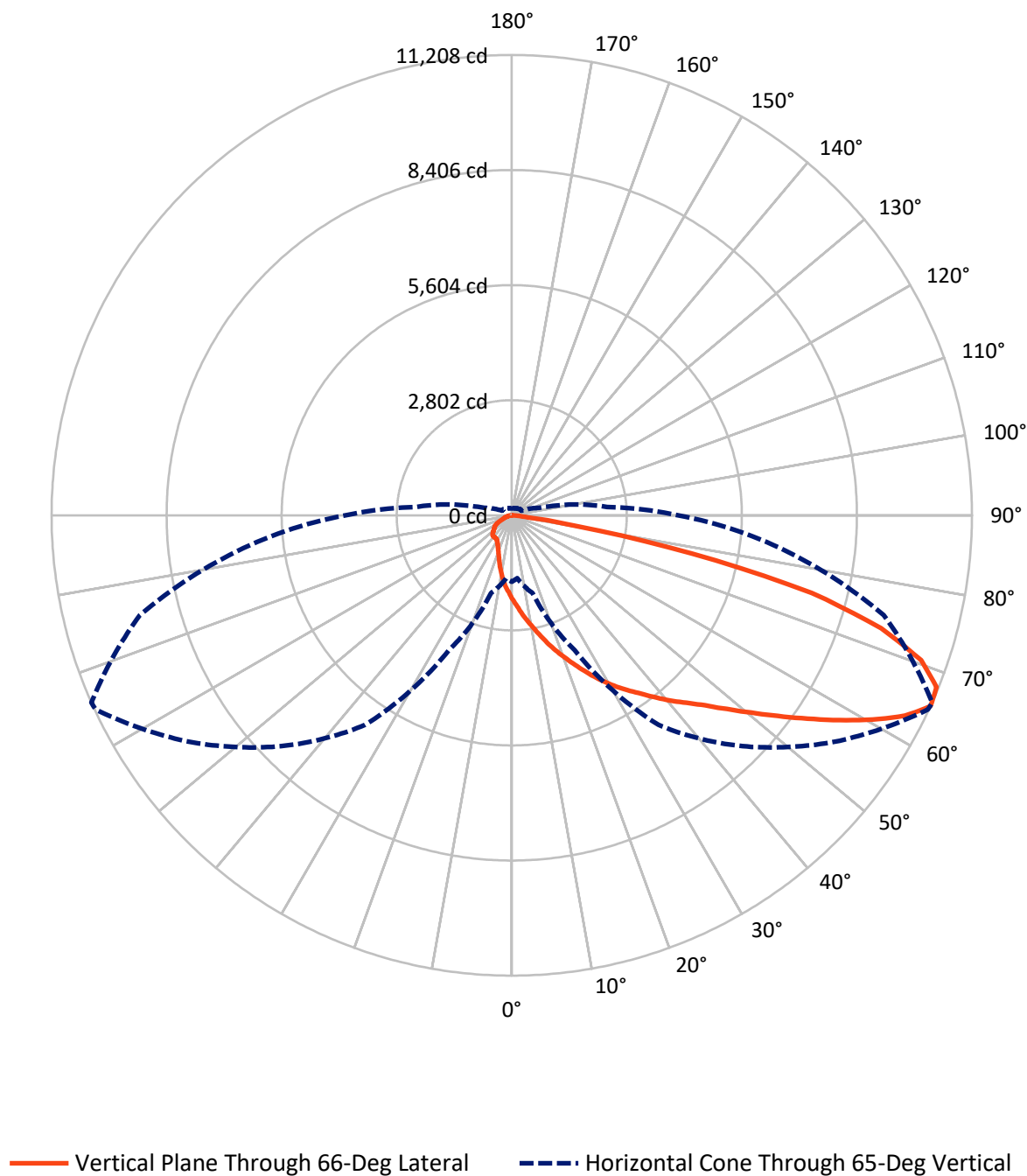
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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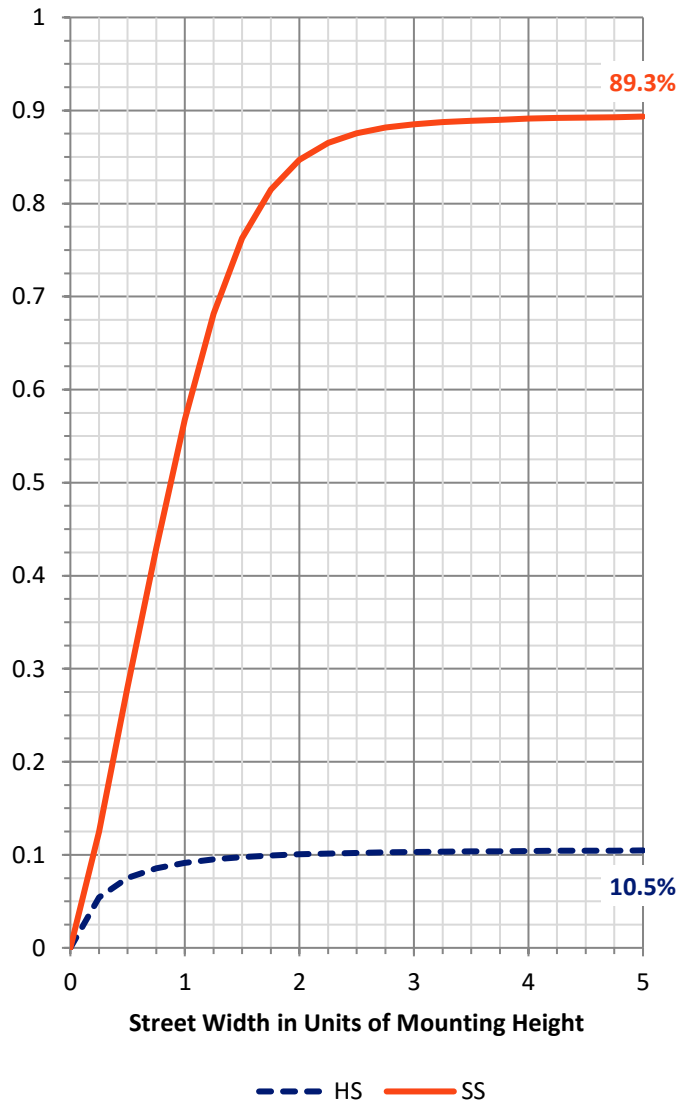
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1631.8   | 0.0    | 1631.8  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 13795.2  | 0.0    | 13795.2 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 15427.0  | 0.0    | 15427.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 201.5   | 1.3       |
| 10°-20°   | 656.8   | 4.3       |
| 20°-30°   | 1188.3  | 7.7       |
| 30°-40°   | 1858.2  | 12.0      |
| 40°-50°   | 2818.9  | 18.3      |
| 50°-60°   | 3581.6  | 23.2      |
| 60°-70°   | 3346.6  | 21.7      |
| 70°-80°   | 1663.2  | 10.8      |
| 80°-90°   | 111.7   | 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°    | 15427.0 | 100.0     |
| 0°-180°   | 15427.0 | 100.0     |

**Coefficient of Utilization**



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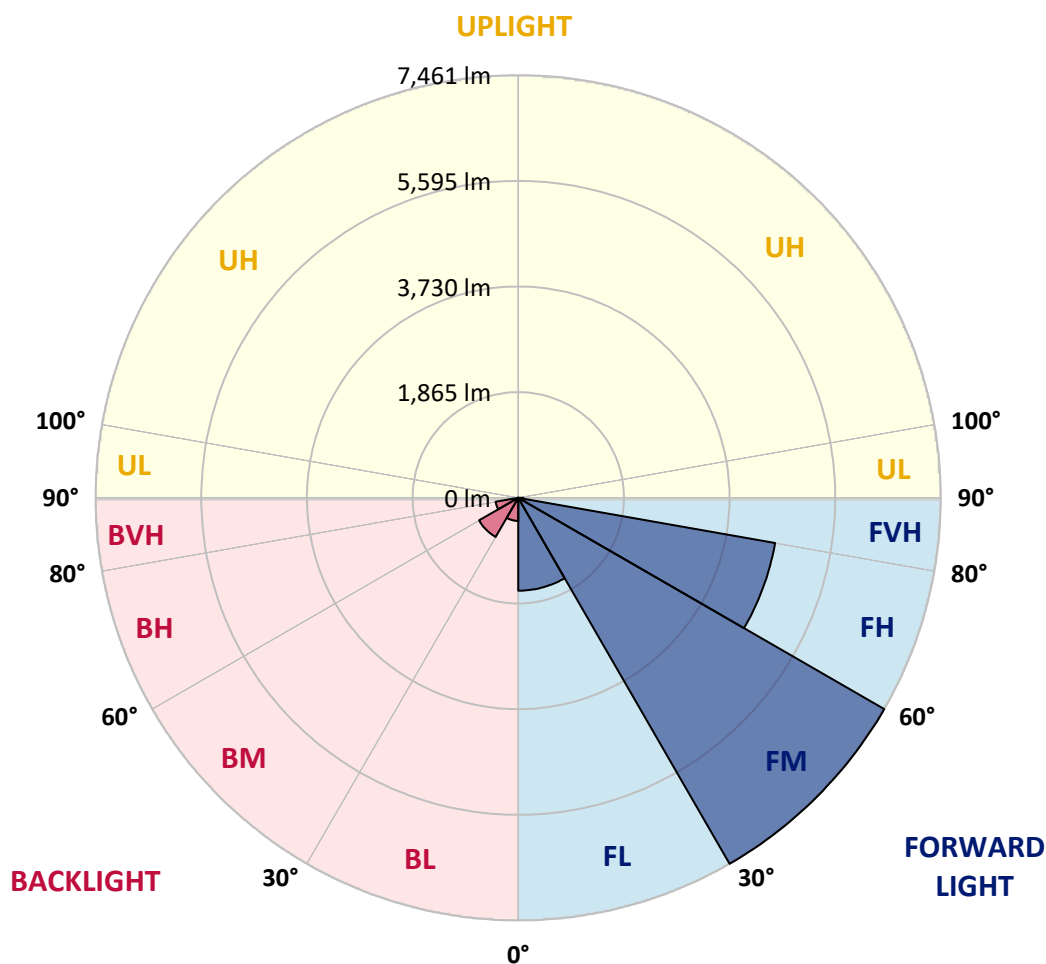
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1639.1 | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 7460.7 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 4603.5 | 29.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 92.0   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 407.5  | 2.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 798.1  | 5.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 406.4  | 2.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 19.8   | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 66°     | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| 0°    | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7  | 2041.7  | 2041.7 | 2041.7 |
| 2.5°  | 2384.7 | 2404.1 | 2413.8 | 2417.0 | 2342.6 | 2310.2 | 2277.9 | 2203.5  | 2187.3  | 2145.2 | 2090.2 |
| 5°    | 2805.3 | 2831.2 | 2824.7 | 2811.8 | 2721.2 | 2617.6 | 2533.5 | 2394.4  | 2371.7  | 2271.4 | 2148.5 |
| 7.5°  | 3219.4 | 3242.1 | 3235.6 | 3187.1 | 3086.8 | 2941.2 | 2802.1 | 2598.2  | 2565.8  | 2404.1 | 2206.7 |
| 10°   | 3565.7 | 3585.1 | 3581.8 | 3533.3 | 3413.6 | 3235.6 | 3067.4 | 2795.6  | 2756.8  | 2527.0 | 2255.2 |
| 12.5° | 3850.4 | 3876.3 | 3873.0 | 3840.7 | 3733.9 | 3539.8 | 3348.9 | 3022.1  | 2973.5  | 2675.9 | 2323.2 |
| 15°   | 4073.7 | 4106.0 | 4106.0 | 4093.1 | 4018.6 | 3856.9 | 3640.1 | 3271.2  | 3213.0  | 2847.3 | 2407.3 |
| 17.5° | 4209.5 | 4235.4 | 4258.1 | 4280.7 | 4229.0 | 4106.0 | 3908.6 | 3520.4  | 3458.9  | 3015.6 | 2494.7 |
| 20°   | 4280.7 | 4306.6 | 4322.8 | 4371.3 | 4381.0 | 4319.6 | 4164.2 | 3766.3  | 3701.6  | 3206.5 | 2595.0 |
| 22.5° | 4397.2 | 4419.9 | 4423.1 | 4465.2 | 4484.6 | 4500.8 | 4403.7 | 4008.9  | 3957.2  | 3416.8 | 2708.2 |
| 25°   | 4591.4 | 4617.2 | 4607.5 | 4626.9 | 4630.2 | 4649.6 | 4639.9 | 4287.2  | 4235.4  | 3656.3 | 2844.1 |
| 27.5° | 4840.5 | 4872.8 | 4866.4 | 4847.0 | 4817.8 | 4801.7 | 4843.7 | 4568.7  | 4520.2  | 3895.7 | 2983.2 |
| 30°   | 5109.1 | 5147.9 | 5138.2 | 5099.3 | 5021.7 | 4953.7 | 5012.0 | 4834.0  | 4788.7  | 4141.6 | 3138.6 |
| 32.5° | 5380.8 | 5426.1 | 5422.9 | 5358.2 | 5225.5 | 5109.1 | 5196.4 | 5083.2  | 5050.8  | 4406.9 | 3306.8 |
| 35°   | 5558.8 | 5617.0 | 5610.6 | 5571.7 | 5400.3 | 5300.0 | 5406.7 | 5338.8  | 5316.1  | 4730.5 | 3549.5 |
| 37.5° | 5846.8 | 5908.2 | 5853.2 | 5756.2 | 5558.8 | 5507.0 | 5636.5 | 5626.8  | 5610.6  | 5073.5 | 3805.1 |
| 40°   | 6545.7 | 6636.3 | 6490.7 | 6092.7 | 5769.1 | 5723.8 | 5908.2 | 5947.1  | 5930.9  | 5413.2 | 4034.8 |
| 42.5° | 7276.9 | 7412.8 | 7186.3 | 6636.3 | 6150.9 | 5985.9 | 6205.9 | 6260.9  | 6241.5  | 5704.4 | 4241.9 |
| 45°   | 7720.2 | 7778.4 | 7551.9 | 7124.8 | 6827.2 | 6303.0 | 6523.0 | 6613.6  | 6597.4  | 6053.9 | 4507.2 |
| 47.5° | 8082.6 | 8059.9 | 7801.1 | 7513.1 | 7568.1 | 6749.5 | 6882.2 | 7060.1  | 7047.2  | 6438.9 | 4798.4 |
| 50°   | 8160.2 | 8108.5 | 8004.9 | 7823.7 | 7969.3 | 7202.5 | 7260.7 | 7568.1  | 7555.2  | 6866.0 | 5092.9 |
| 52.5° | 7613.4 | 7545.5 | 7827.0 | 7979.0 | 7930.5 | 7532.5 | 7678.1 | 8124.7  | 8118.2  | 7328.7 | 5374.4 |
| 55°   | 6248.0 | 6193.0 | 6950.1 | 7736.4 | 7888.5 | 7765.5 | 8140.8 | 8703.8  | 8739.4  | 7820.5 | 5630.0 |
| 57.5° | 4914.9 | 4856.7 | 5600.9 | 7128.1 | 7733.1 | 7979.0 | 8681.2 | 9367.1  | 9412.4  | 8354.4 | 5872.7 |
| 60°   | 3918.3 | 3831.0 | 4400.4 | 6170.3 | 7441.9 | 8144.1 | 9202.1 | 10095.1 | 10101.6 | 8843.0 | 6021.5 |
| 62.5° | 2662.9 | 2565.8 | 3196.8 | 4957.0 | 6953.4 | 8170.0 | 9603.3 | 10722.9 | 10748.7 | 9208.6 | 6047.4 |
| 65°   | 1617.8 | 1536.9 | 1964.0 | 3620.7 | 6231.8 | 7949.9 | 9609.8 | 11185.6 | 11208.2 | 9376.8 | 5892.1 |
| 67.5° | 938.3  | 906.0  | 1122.8 | 2255.2 | 5034.6 | 7357.8 | 9205.4 | 11114.4 | 11156.4 | 9305.7 | 5539.4 |
| 70°   | 546.8  | 543.6  | 624.5  | 1116.3 | 3552.7 | 6183.3 | 8302.6 | 10515.8 | 10577.3 | 8933.6 | 4999.0 |
| 72.5° | 401.2  | 407.7  | 440.0  | 598.6  | 2057.9 | 4452.2 | 7031.0 | 9312.1  | 9406.0  | 8205.5 | 4229.0 |
| 75°   | 317.1  | 320.3  | 349.4  | 407.7  | 1080.7 | 2517.3 | 5267.6 | 7474.3  | 7548.7  | 6908.1 | 3303.6 |
| 77.5° | 236.2  | 242.7  | 265.3  | 288.0  | 501.5  | 1155.1 | 2963.8 | 4604.3  | 4481.3  | 3792.2 | 1595.2 |
| 80°   | 171.5  | 187.7  | 197.4  | 207.1  | 265.3  | 446.5  | 889.8  | 1604.9  | 1591.9  | 1656.6 | 753.9  |
| 82.5° | 110.0  | 123.0  | 132.7  | 139.1  | 158.5  | 213.6  | 265.3  | 359.2   | 388.3   | 643.9  | 300.9  |
| 85°   | 48.5   | 55.0   | 61.5   | 74.4   | 67.9   | 74.4   | 110.0  | 71.2    | 61.5    | 97.1   | 55.0   |
| 87.5° | 0.0    | 0.0    | 9.7    | 16.2   | 12.9   | 6.5    | 19.4   | 12.9    | 9.7     | 9.7    | 9.7    |
| 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°    | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 | 2041.7 |
| 2.5°  | 2061.1 | 2025.5 | 1951.1 | 1879.9 | 1837.8 | 1782.8 | 1734.3 | 1689.0 | 1685.8 | 1672.8 | 1650.2 |
| 5°    | 2087.0 | 2019.0 | 1879.9 | 1747.2 | 1646.9 | 1540.2 | 1449.6 | 1378.4 | 1352.5 | 1333.1 | 1307.2 |
| 7.5°  | 2112.9 | 2006.1 | 1799.0 | 1604.9 | 1446.3 | 1297.5 | 1190.7 | 1093.6 | 1064.5 | 1038.6 | 1022.5 |
| 10°   | 2122.6 | 1983.4 | 1705.2 | 1446.3 | 1239.2 | 1080.7 | 967.5  | 896.3  | 870.4  | 857.4  | 847.7  |
| 12.5° | 2151.7 | 1970.5 | 1617.8 | 1297.5 | 1058.0 | 912.4  | 831.6  | 789.5  | 779.8  | 770.1  | 760.4  |
| 15°   | 2190.5 | 1970.5 | 1530.5 | 1151.9 | 915.7  | 799.2  | 750.7  | 721.5  | 715.1  | 711.8  | 705.4  |
| 17.5° | 2232.6 | 1970.5 | 1446.3 | 1028.9 | 812.1  | 724.8  | 689.2  | 673.0  | 669.8  | 666.5  | 663.3  |
| 20°   | 2290.8 | 1973.7 | 1355.7 | 922.2  | 737.7  | 669.8  | 640.7  | 621.2  | 618.0  | 614.8  | 614.8  |
| 22.5° | 2349.1 | 1980.2 | 1268.4 | 841.3  | 689.2  | 627.7  | 592.1  | 572.7  | 566.2  | 566.2  | 566.2  |
| 25°   | 2423.5 | 1999.6 | 1187.5 | 773.3  | 647.1  | 588.9  | 543.6  | 527.4  | 524.2  | 524.2  | 520.9  |
| 27.5° | 2510.8 | 2022.3 | 1116.3 | 721.5  | 605.1  | 543.6  | 498.3  | 482.1  | 475.6  | 475.6  | 472.4  |
| 30°   | 2604.7 | 2044.9 | 1058.0 | 682.7  | 563.0  | 498.3  | 456.2  | 436.8  | 430.3  | 433.6  | 430.3  |
| 32.5° | 2708.2 | 2077.3 | 1012.8 | 656.8  | 524.2  | 459.5  | 420.6  | 398.0  | 394.7  | 394.7  | 391.5  |
| 35°   | 2882.9 | 2167.9 | 1006.3 | 643.9  | 491.8  | 430.3  | 391.5  | 368.9  | 365.6  | 365.6  | 362.4  |
| 37.5° | 3070.6 | 2271.4 | 1035.4 | 637.4  | 465.9  | 404.5  | 368.9  | 346.2  | 343.0  | 343.0  | 343.0  |
| 40°   | 3229.2 | 2349.1 | 1067.8 | 637.4  | 449.8  | 381.8  | 349.4  | 330.0  | 330.0  | 330.0  | 330.0  |
| 42.5° | 3335.9 | 2355.5 | 1061.3 | 637.4  | 436.8  | 365.6  | 336.5  | 317.1  | 317.1  | 320.3  | 317.1  |
| 45°   | 3494.5 | 2387.9 | 1035.4 | 627.7  | 427.1  | 352.7  | 323.6  | 307.4  | 304.1  | 307.4  | 307.4  |
| 47.5° | 3682.1 | 2446.1 | 1009.5 | 588.9  | 423.9  | 339.7  | 313.9  | 294.4  | 291.2  | 294.4  | 291.2  |
| 50°   | 3860.1 | 2497.9 | 996.6  | 537.1  | 417.4  | 326.8  | 300.9  | 281.5  | 278.3  | 281.5  | 278.3  |
| 52.5° | 4008.9 | 2520.6 | 973.9  | 501.5  | 401.2  | 313.9  | 288.0  | 268.6  | 262.1  | 265.3  | 265.3  |
| 55°   | 4128.7 | 2514.1 | 941.6  | 472.4  | 372.1  | 300.9  | 271.8  | 255.6  | 245.9  | 245.9  | 242.7  |
| 57.5° | 4238.7 | 2517.3 | 912.4  | 443.3  | 339.7  | 281.5  | 258.8  | 239.4  | 226.5  | 223.3  | 220.0  |
| 60°   | 4280.7 | 2501.1 | 860.7  | 404.5  | 307.4  | 265.3  | 242.7  | 220.0  | 207.1  | 203.8  | 200.6  |
| 62.5° | 4222.5 | 2442.9 | 792.7  | 336.5  | 278.3  | 245.9  | 226.5  | 203.8  | 190.9  | 187.7  | 184.4  |
| 65°   | 4057.5 | 2332.9 | 689.2  | 265.3  | 252.4  | 223.3  | 207.1  | 190.9  | 174.7  | 168.3  | 165.0  |
| 67.5° | 3776.0 | 2174.3 | 559.8  | 213.6  | 223.3  | 203.8  | 194.1  | 174.7  | 155.3  | 148.8  | 145.6  |
| 70°   | 3374.8 | 1964.0 | 420.6  | 181.2  | 197.4  | 181.2  | 174.7  | 155.3  | 139.1  | 132.7  | 129.4  |
| 72.5° | 2811.8 | 1624.3 | 294.4  | 155.3  | 171.5  | 158.5  | 152.1  | 139.1  | 123.0  | 113.2  | 113.2  |
| 75°   | 2125.8 | 1164.8 | 194.1  | 132.7  | 142.4  | 135.9  | 126.2  | 116.5  | 106.8  | 100.3  | 97.1   |
| 77.5° | 915.7  | 453.0  | 119.7  | 100.3  | 116.5  | 113.2  | 100.3  | 93.8   | 90.6   | 84.1   | 84.1   |
| 80°   | 394.7  | 184.4  | 74.4   | 74.4   | 84.1   | 80.9   | 77.7   | 71.2   | 71.2   | 67.9   | 64.7   |
| 82.5° | 145.6  | 74.4   | 45.3   | 55.0   | 61.5   | 55.0   | 55.0   | 55.0   | 55.0   | 51.8   | 51.8   |
| 85°   | 35.6   | 22.6   | 22.6   | 32.4   | 35.6   | 32.4   | 35.6   | 32.4   | 32.4   | 32.4   | 29.1   |
| 87.5° | 9.7    | 9.7    | 12.9   | 12.9   | 12.9   | 12.9   | 12.9   | 9.7    | 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)