

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: P836247

Luminaire Tested: **ARCH3-160-727-U-T3-HSS**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836247  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-160-727-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 14810 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 161  
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



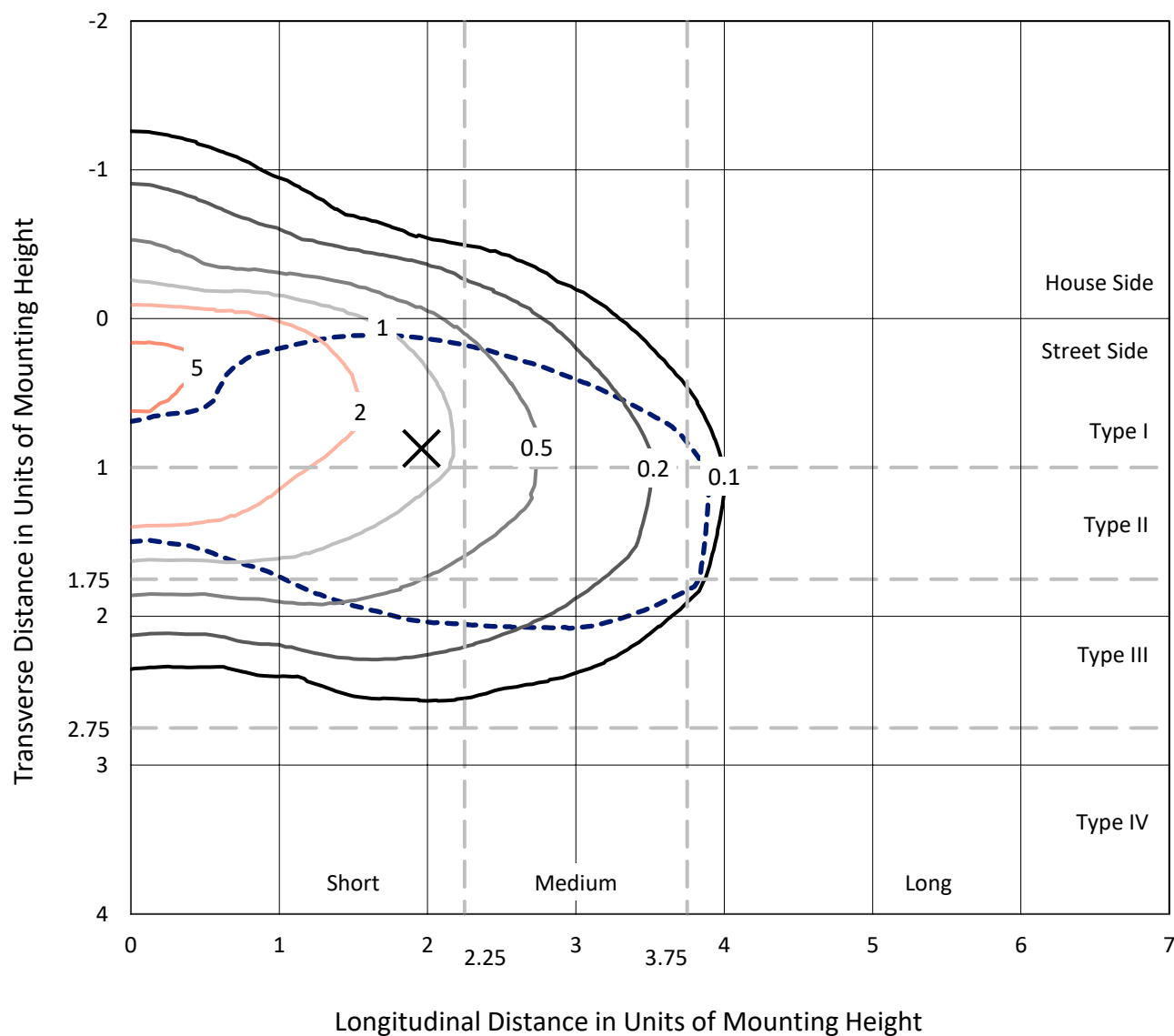
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

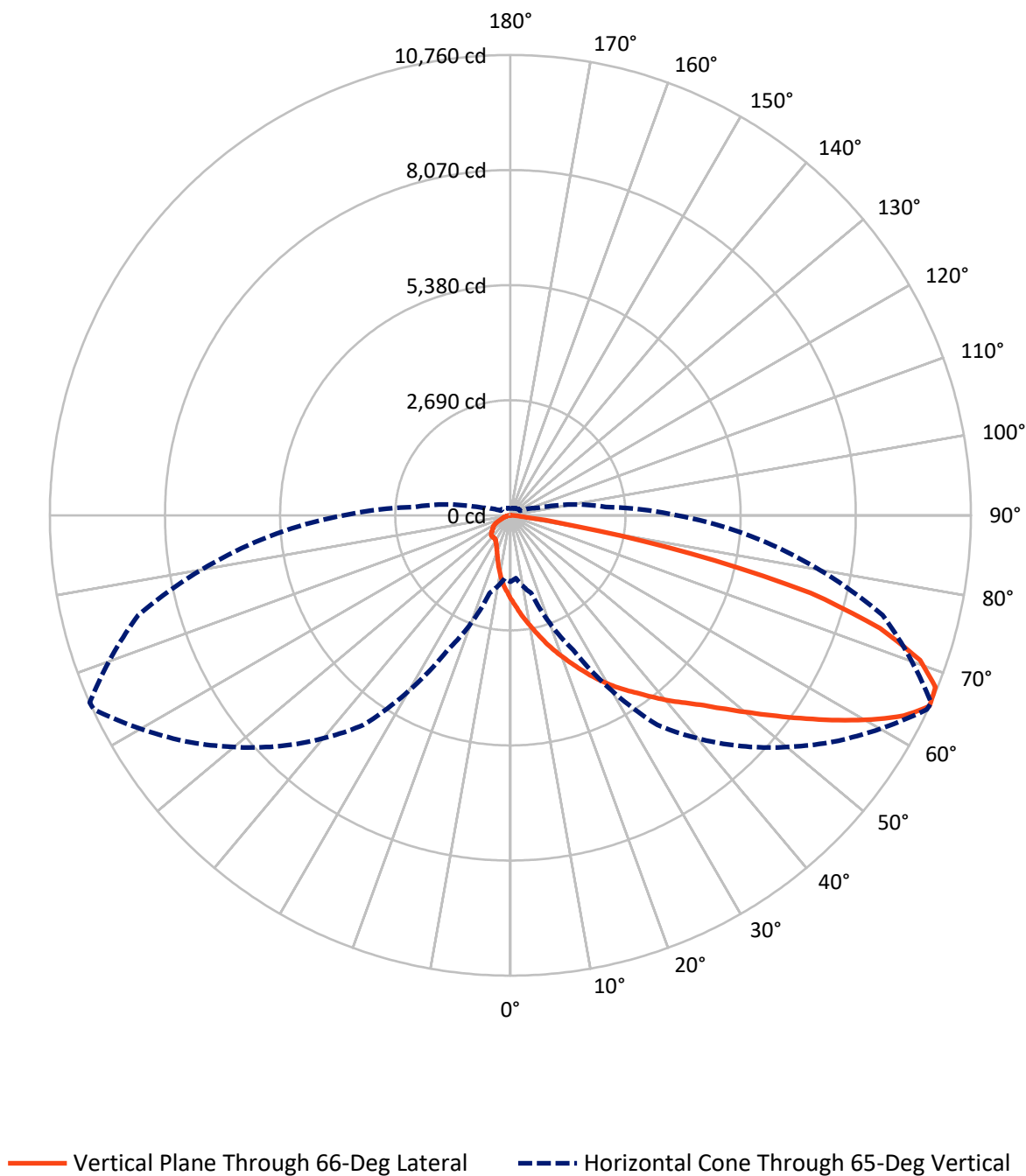


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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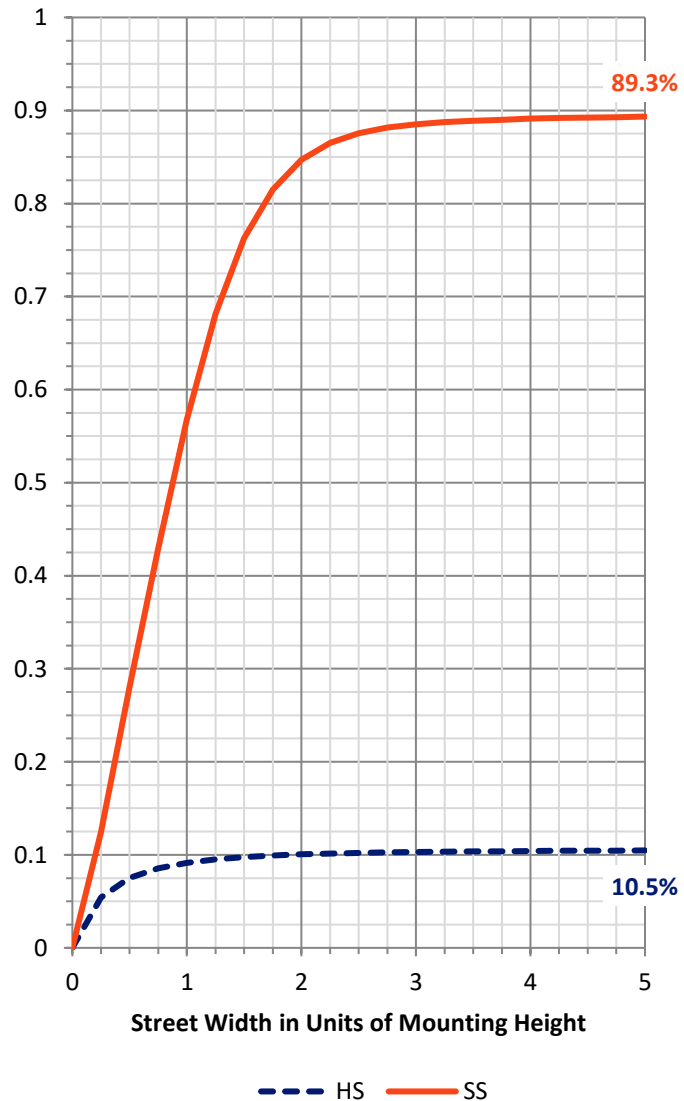
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1566.5   | 0.0    | 1566.5  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 13243.5  | 0.0    | 13243.5 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 14810.0  | 0.0    | 14810.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 193.5   | 1.3       |
| 10°-20°   | 630.5   | 4.3       |
| 20°-30°   | 1140.8  | 7.7       |
| 30°-40°   | 1783.9  | 12.0      |
| 40°-50°   | 2706.2  | 18.3      |
| 50°-60°   | 3438.3  | 23.2      |
| 60°-70°   | 3212.8  | 21.7      |
| 70°-80°   | 1596.7  | 10.8      |
| 80°-90°   | 107.3   | 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°    | 14810.0 | 100.0     |
| 0°-180°   | 14810.0 | 100.0     |

**Coefficient of Utilization**



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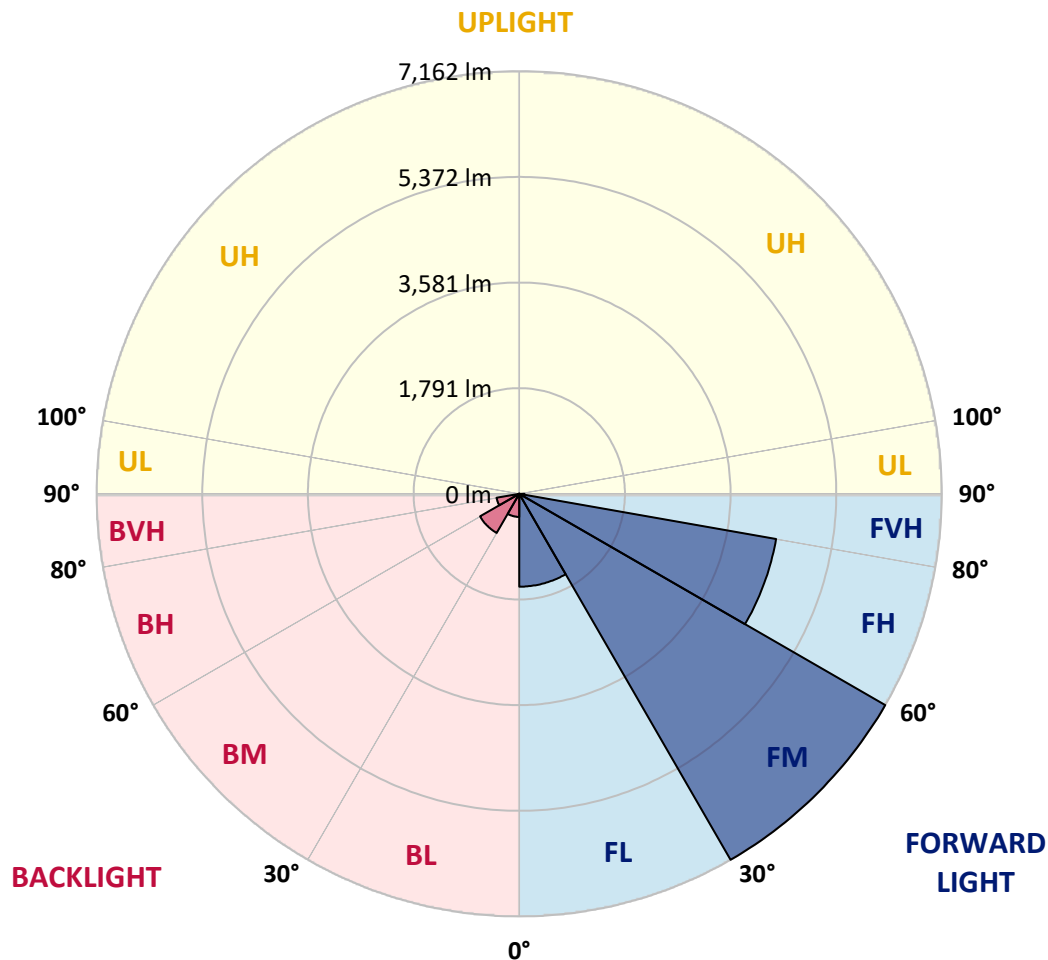
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1573.6 | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 7162.3 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 4419.4 | 29.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.3   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 391.2  | 2.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 766.2  | 5.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 390.1  | 2.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 19.0   | 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°    | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0  | 1960.0  | 1960.0 | 1960.0 |
| 2.5°  | 2289.3 | 2307.9 | 2317.2 | 2320.3 | 2248.9 | 2217.8 | 2186.8 | 2115.3  | 2099.8  | 2059.4 | 2006.6 |
| 5°    | 2693.1 | 2717.9 | 2711.7 | 2699.3 | 2612.3 | 2512.9 | 2432.2 | 2298.6  | 2276.9  | 2180.6 | 2062.5 |
| 7.5°  | 3090.7 | 3112.4 | 3106.2 | 3059.6 | 2963.3 | 2823.6 | 2690.0 | 2494.3  | 2463.2  | 2307.9 | 2118.4 |
| 10°   | 3423.0 | 3441.7 | 3438.6 | 3392.0 | 3277.1 | 3106.2 | 2944.7 | 2683.8  | 2646.5  | 2426.0 | 2165.0 |
| 12.5° | 3696.4 | 3721.2 | 3718.1 | 3687.1 | 3584.6 | 3398.2 | 3214.9 | 2901.2  | 2854.6  | 2568.8 | 2230.3 |
| 15°   | 3910.7 | 3941.8 | 3941.8 | 3929.4 | 3857.9 | 3702.6 | 3494.5 | 3140.4  | 3084.5  | 2733.5 | 2311.0 |
| 17.5° | 4041.2 | 4066.0 | 4087.8 | 4109.5 | 4059.8 | 3941.8 | 3752.3 | 3379.6  | 3320.5  | 2895.0 | 2394.9 |
| 20°   | 4109.5 | 4134.4 | 4149.9 | 4196.5 | 4205.8 | 4146.8 | 3997.7 | 3615.6  | 3553.5  | 3078.3 | 2491.2 |
| 22.5° | 4221.3 | 4243.1 | 4246.2 | 4286.6 | 4305.2 | 4320.7 | 4227.6 | 3848.6  | 3798.9  | 3280.2 | 2599.9 |
| 25°   | 4407.7 | 4432.6 | 4423.3 | 4441.9 | 4445.0 | 4463.6 | 4454.3 | 4115.7  | 4066.0  | 3510.0 | 2730.4 |
| 27.5° | 4646.9 | 4678.0 | 4671.7 | 4653.1 | 4625.2 | 4609.6 | 4650.0 | 4386.0  | 4339.4  | 3739.9 | 2863.9 |
| 30°   | 4904.7 | 4942.0 | 4932.7 | 4895.4 | 4820.8 | 4755.6 | 4811.5 | 4640.7  | 4597.2  | 3976.0 | 3013.0 |
| 32.5° | 5165.6 | 5209.1 | 5206.0 | 5143.9 | 5016.5 | 4904.7 | 4988.6 | 4879.9  | 4848.8  | 4230.7 | 3174.6 |
| 35°   | 5336.5 | 5392.4 | 5386.2 | 5348.9 | 5184.3 | 5088.0 | 5190.5 | 5125.3  | 5103.5  | 4541.3 | 3407.5 |
| 37.5° | 5612.9 | 5672.0 | 5619.1 | 5526.0 | 5336.5 | 5286.8 | 5411.0 | 5401.7  | 5386.2  | 4870.5 | 3652.9 |
| 40°   | 6283.9 | 6370.8 | 6231.1 | 5849.0 | 5538.4 | 5494.9 | 5672.0 | 5709.2  | 5693.7  | 5196.7 | 3873.5 |
| 42.5° | 6985.9 | 7116.3 | 6898.9 | 6370.8 | 5904.9 | 5746.5 | 5957.7 | 6010.5  | 5991.9  | 5476.3 | 4072.2 |
| 45°   | 7411.4 | 7467.3 | 7249.9 | 6839.9 | 6554.1 | 6050.9 | 6262.1 | 6349.1  | 6333.6  | 5811.7 | 4327.0 |
| 47.5° | 7759.3 | 7737.6 | 7489.1 | 7212.6 | 7265.4 | 6479.6 | 6606.9 | 6777.8  | 6765.3  | 6181.4 | 4606.5 |
| 50°   | 7833.9 | 7784.2 | 7684.8 | 7510.8 | 7650.6 | 6914.4 | 6970.3 | 7265.4  | 7253.0  | 6591.4 | 4889.2 |
| 52.5° | 7308.9 | 7243.7 | 7513.9 | 7659.9 | 7613.3 | 7231.3 | 7371.1 | 7799.7  | 7793.5  | 7035.6 | 5159.4 |
| 55°   | 5998.1 | 5945.3 | 6672.2 | 7427.0 | 7573.0 | 7454.9 | 7815.2 | 8355.7  | 8389.9  | 7507.7 | 5404.8 |
| 57.5° | 4718.3 | 4662.4 | 5376.9 | 6843.0 | 7423.9 | 7659.9 | 8334.0 | 8992.5  | 9036.0  | 8020.2 | 5637.8 |
| 60°   | 3761.6 | 3677.8 | 4224.5 | 5923.6 | 7144.3 | 7818.3 | 8834.1 | 9691.4  | 9697.6  | 8489.3 | 5780.7 |
| 62.5° | 2556.4 | 2463.2 | 3068.9 | 4758.7 | 6675.3 | 7843.2 | 9219.2 | 10294.0 | 10318.8 | 8840.3 | 5805.5 |
| 65°   | 1553.1 | 1475.5 | 1885.5 | 3475.9 | 5982.6 | 7632.0 | 9225.5 | 10738.2 | 10759.9 | 9001.8 | 5656.4 |
| 67.5° | 900.8  | 869.7  | 1077.9 | 2165.0 | 4833.3 | 7063.5 | 8837.2 | 10669.9 | 10710.2 | 8933.5 | 5317.8 |
| 70°   | 525.0  | 521.8  | 599.5  | 1071.6 | 3410.6 | 5936.0 | 7970.6 | 10095.2 | 10154.2 | 8576.3 | 4799.1 |
| 72.5° | 385.2  | 391.4  | 422.4  | 574.6  | 1975.6 | 4274.2 | 6749.8 | 8939.7  | 9029.8  | 7877.4 | 4059.8 |
| 75°   | 304.4  | 307.5  | 335.5  | 391.4  | 1037.5 | 2416.6 | 5056.9 | 7175.4  | 7246.8  | 6631.8 | 3171.4 |
| 77.5° | 226.8  | 233.0  | 254.7  | 276.5  | 481.5  | 1108.9 | 2845.3 | 4420.1  | 4302.1  | 3640.5 | 1531.4 |
| 80°   | 164.6  | 180.2  | 189.5  | 198.8  | 254.7  | 428.7  | 854.2  | 1540.7  | 1528.3  | 1590.4 | 723.7  |
| 82.5° | 105.6  | 118.0  | 127.4  | 133.6  | 152.2  | 205.0  | 254.7  | 344.8   | 372.7   | 618.1  | 288.9  |
| 85°   | 46.6   | 52.8   | 59.0   | 71.4   | 65.2   | 71.4   | 105.6  | 68.3    | 59.0    | 93.2   | 52.8   |
| 87.5° | 0.0    | 0.0    | 9.3    | 15.5   | 12.4   | 6.2    | 18.6   | 12.4    | 9.3     | 9.3    | 9.3    |
| 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°    | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 | 1960.0 |
| 2.5°  | 1978.7 | 1944.5 | 1873.0 | 1804.7 | 1764.3 | 1711.5 | 1664.9 | 1621.4 | 1618.3 | 1605.9 | 1584.2 |
| 5°    | 2003.5 | 1938.3 | 1804.7 | 1677.4 | 1581.1 | 1478.6 | 1391.6 | 1323.2 | 1298.4 | 1279.8 | 1254.9 |
| 7.5°  | 2028.4 | 1925.9 | 1727.1 | 1540.7 | 1388.5 | 1245.6 | 1143.1 | 1049.9 | 1021.9 | 997.1  | 981.6  |
| 10°   | 2037.7 | 1904.1 | 1637.0 | 1388.5 | 1189.7 | 1037.5 | 928.8  | 860.4  | 835.6  | 823.1  | 813.8  |
| 12.5° | 2065.6 | 1891.7 | 1553.1 | 1245.6 | 1015.7 | 876.0  | 798.3  | 757.9  | 748.6  | 739.3  | 730.0  |
| 15°   | 2102.9 | 1891.7 | 1469.2 | 1105.8 | 879.1  | 767.2  | 720.6  | 692.7  | 686.5  | 683.4  | 677.2  |
| 17.5° | 2143.3 | 1891.7 | 1388.5 | 987.8  | 779.7  | 695.8  | 661.6  | 646.1  | 643.0  | 639.9  | 636.8  |
| 20°   | 2199.2 | 1894.8 | 1301.5 | 885.3  | 708.2  | 643.0  | 615.0  | 596.4  | 593.3  | 590.2  | 590.2  |
| 22.5° | 2255.1 | 1901.0 | 1217.6 | 807.6  | 661.6  | 602.6  | 568.4  | 549.8  | 543.6  | 543.6  | 543.6  |
| 25°   | 2326.6 | 1919.6 | 1140.0 | 742.4  | 621.2  | 565.3  | 521.8  | 506.3  | 503.2  | 503.2  | 500.1  |
| 27.5° | 2410.4 | 1941.4 | 1071.6 | 692.7  | 580.9  | 521.8  | 478.4  | 462.8  | 456.6  | 456.6  | 453.5  |
| 30°   | 2500.5 | 1963.1 | 1015.7 | 655.4  | 540.5  | 478.4  | 438.0  | 419.3  | 413.1  | 416.2  | 413.1  |
| 32.5° | 2599.9 | 1994.2 | 972.2  | 630.6  | 503.2  | 441.1  | 403.8  | 382.1  | 379.0  | 379.0  | 375.9  |
| 35°   | 2767.6 | 2081.2 | 966.0  | 618.1  | 472.1  | 413.1  | 375.9  | 354.1  | 351.0  | 351.0  | 347.9  |
| 37.5° | 2947.8 | 2180.6 | 994.0  | 611.9  | 447.3  | 388.3  | 354.1  | 332.4  | 329.3  | 329.3  | 329.3  |
| 40°   | 3100.0 | 2255.1 | 1025.1 | 611.9  | 431.8  | 366.5  | 335.5  | 316.8  | 316.8  | 316.8  | 316.8  |
| 42.5° | 3202.5 | 2261.3 | 1018.8 | 611.9  | 419.3  | 351.0  | 323.0  | 304.4  | 304.4  | 307.5  | 304.4  |
| 45°   | 3354.7 | 2292.4 | 994.0  | 602.6  | 410.0  | 338.6  | 310.6  | 295.1  | 292.0  | 295.1  | 295.1  |
| 47.5° | 3534.9 | 2348.3 | 969.1  | 565.3  | 406.9  | 326.2  | 301.3  | 282.7  | 279.6  | 282.7  | 279.6  |
| 50°   | 3705.7 | 2398.0 | 956.7  | 515.6  | 400.7  | 313.7  | 288.9  | 270.2  | 267.1  | 270.2  | 267.1  |
| 52.5° | 3848.6 | 2419.7 | 935.0  | 481.5  | 385.2  | 301.3  | 276.5  | 257.8  | 251.6  | 254.7  | 254.7  |
| 55°   | 3963.5 | 2413.5 | 903.9  | 453.5  | 357.2  | 288.9  | 260.9  | 245.4  | 236.1  | 236.1  | 233.0  |
| 57.5° | 4069.1 | 2416.6 | 876.0  | 425.6  | 326.2  | 270.2  | 248.5  | 229.9  | 217.4  | 214.3  | 211.2  |
| 60°   | 4109.5 | 2401.1 | 826.3  | 388.3  | 295.1  | 254.7  | 233.0  | 211.2  | 198.8  | 195.7  | 192.6  |
| 62.5° | 4053.6 | 2345.2 | 761.0  | 323.0  | 267.1  | 236.1  | 217.4  | 195.7  | 183.3  | 180.2  | 177.1  |
| 65°   | 3895.2 | 2239.6 | 661.6  | 254.7  | 242.3  | 214.3  | 198.8  | 183.3  | 167.7  | 161.5  | 158.4  |
| 67.5° | 3625.0 | 2087.4 | 537.4  | 205.0  | 214.3  | 195.7  | 186.4  | 167.7  | 149.1  | 142.9  | 139.8  |
| 70°   | 3239.8 | 1885.5 | 403.8  | 173.9  | 189.5  | 173.9  | 167.7  | 149.1  | 133.6  | 127.4  | 124.2  |
| 72.5° | 2699.3 | 1559.3 | 282.7  | 149.1  | 164.6  | 152.2  | 146.0  | 133.6  | 118.0  | 108.7  | 108.7  |
| 75°   | 2040.8 | 1118.2 | 186.4  | 127.4  | 136.7  | 130.5  | 121.1  | 111.8  | 102.5  | 96.3   | 93.2   |
| 77.5° | 879.1  | 434.9  | 114.9  | 96.3   | 111.8  | 108.7  | 96.3   | 90.1   | 87.0   | 80.8   | 80.8   |
| 80°   | 379.0  | 177.1  | 71.4   | 71.4   | 80.8   | 77.7   | 74.5   | 68.3   | 68.3   | 65.2   | 62.1   |
| 82.5° | 139.8  | 71.4   | 43.5   | 52.8   | 59.0   | 52.8   | 52.8   | 52.8   | 52.8   | 49.7   | 49.7   |
| 85°   | 34.2   | 21.7   | 21.7   | 31.1   | 34.2   | 31.1   | 34.2   | 31.1   | 31.1   | 31.1   | 28.0   |
| 87.5° | 9.3    | 9.3    | 12.4   | 12.4   | 12.4   | 12.4   | 12.4   | 9.3    | 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)