

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: P836828

Luminaire Tested: **ARCH3-80-730-U-T2R-HSS**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836828  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-80-730-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

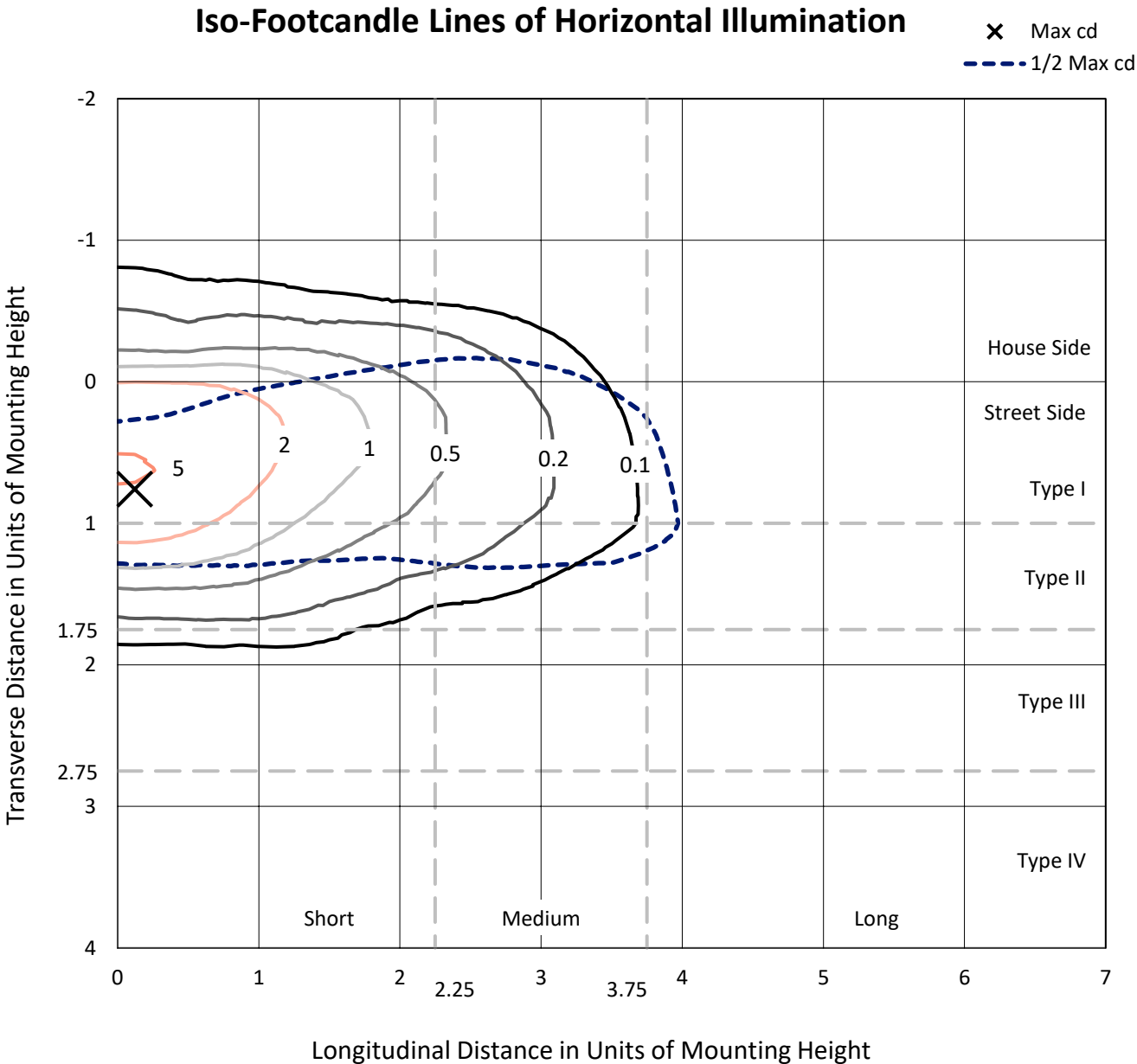
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 9217 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 81.9  
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



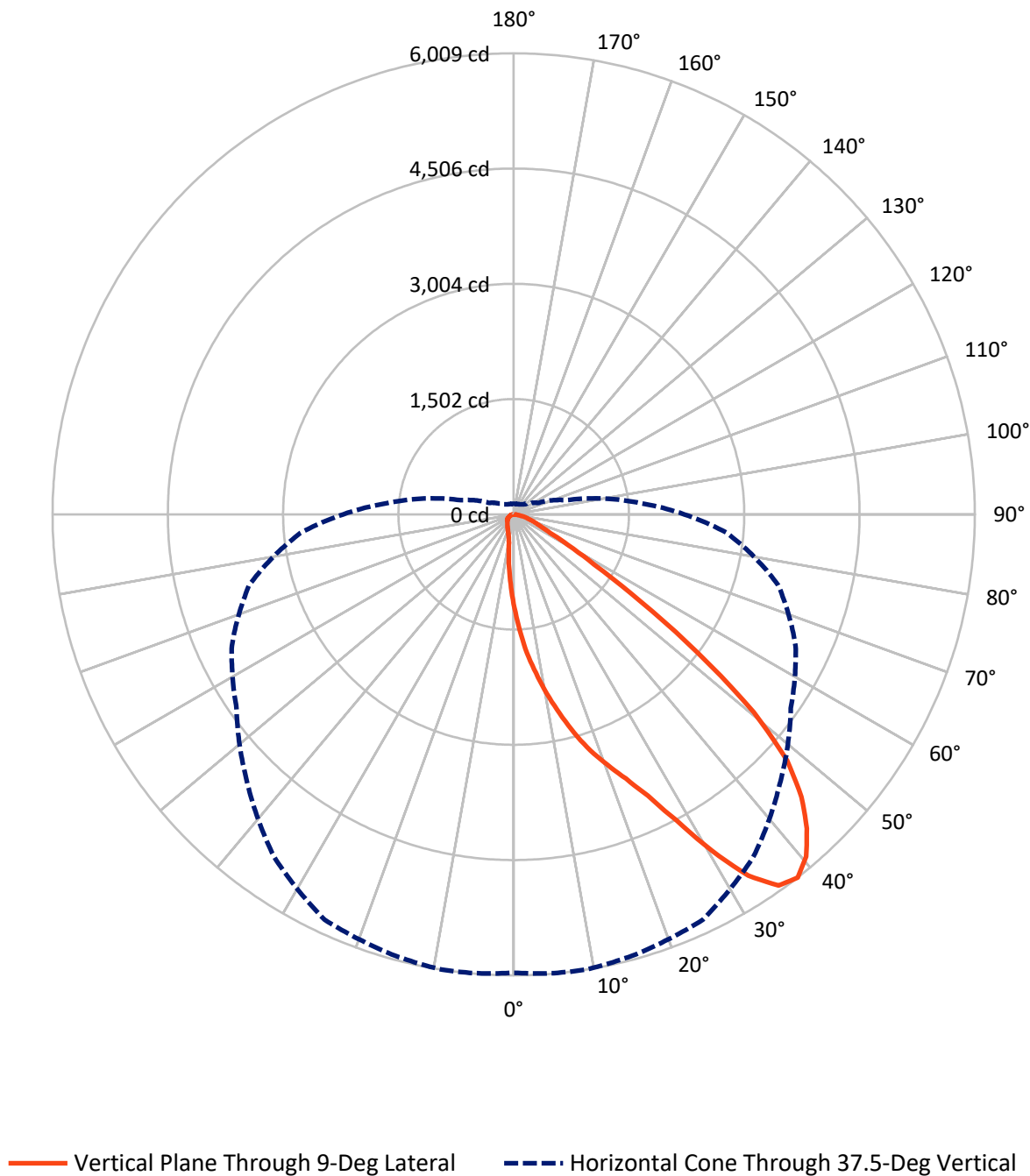
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Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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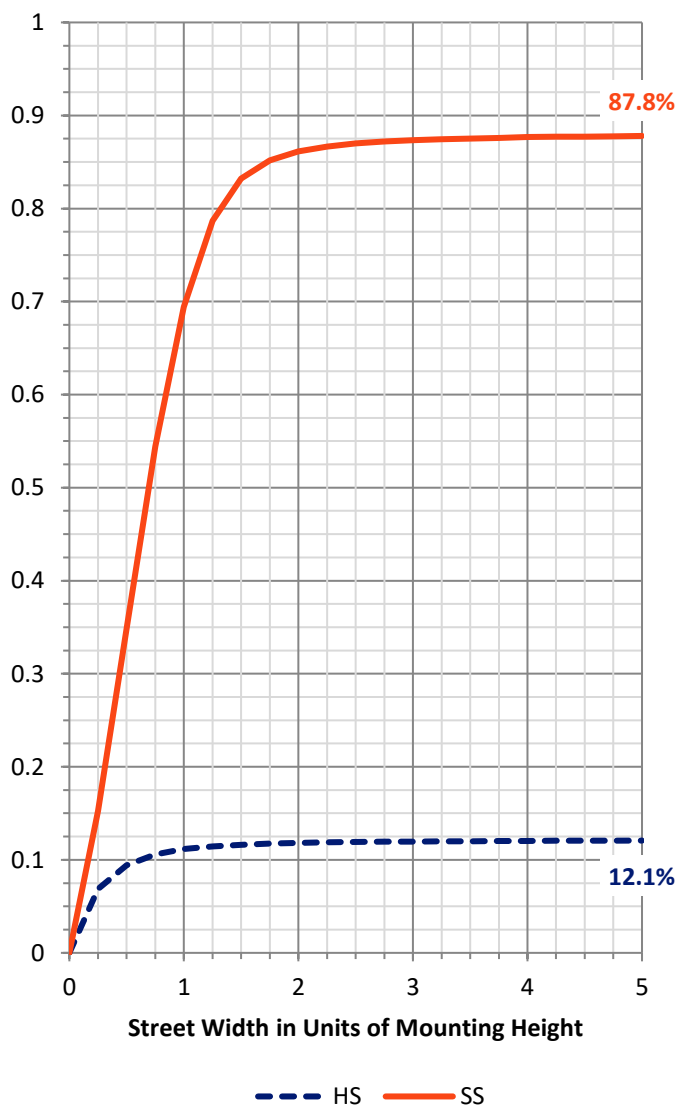
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1120.9   | 0.0    | 1120.9 |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 8096.1   | 0.0    | 8096.1 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 9217.0   | 0.0    | 9217.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 122.5  | 1.3       |
| 10°-20°   | 425.6  | 4.6       |
| 20°-30°   | 874.6  | 9.5       |
| 30°-40°   | 1545.9 | 16.8      |
| 40°-50°   | 2053.7 | 22.3      |
| 50°-60°   | 1947.8 | 21.1      |
| 60°-70°   | 1486.0 | 16.1      |
| 70°-80°   | 720.4  | 7.8       |
| 80°-90°   | 40.6   | 0.4       |
| 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°    | 9217.0 | 100.0     |
| 0°-180°   | 9217.0 | 100.0     |

**Coefficient of Utilization**



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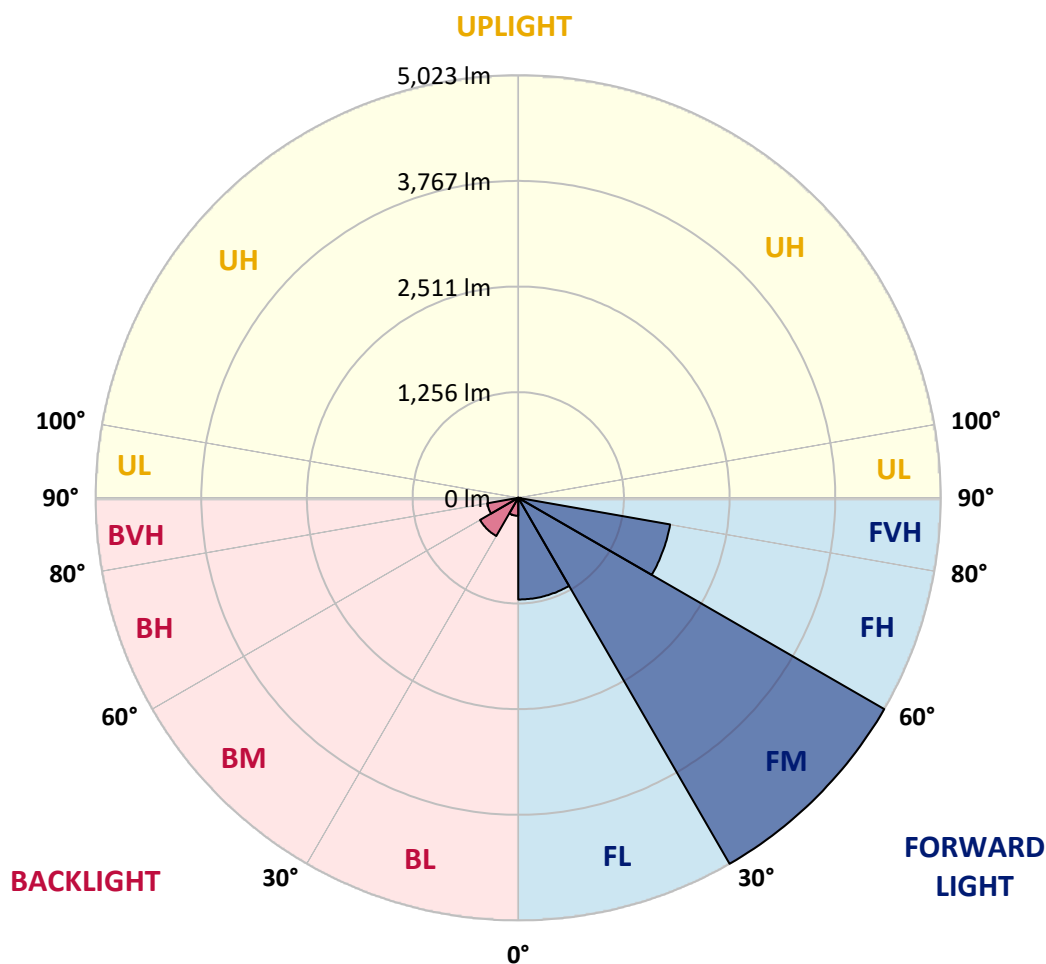
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1208.8 | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 5022.8 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 1832.3 | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 32.1   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 213.9  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 524.5  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 374.1  | 4.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 8.4    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 9°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 |
| 2.5°  | 1509.7 | 1483.2 | 1513.5 | 1509.7 | 1483.2 | 1466.2 | 1413.2 | 1396.2 | 1333.8 | 1288.4 | 1248.6 |
| 5°    | 1820.0 | 1793.5 | 1820.0 | 1812.4 | 1774.6 | 1733.0 | 1645.9 | 1589.2 | 1477.6 | 1379.2 | 1290.3 |
| 7.5°  | 2077.3 | 2077.3 | 2088.6 | 2090.5 | 2045.1 | 1980.8 | 1873.0 | 1787.8 | 1630.8 | 1479.5 | 1337.6 |
| 10°   | 2355.4 | 2357.3 | 2381.9 | 2364.9 | 2304.3 | 2217.3 | 2081.1 | 1973.2 | 1784.1 | 1585.4 | 1383.0 |
| 12.5° | 2652.4 | 2654.3 | 2661.9 | 2654.3 | 2582.4 | 2470.8 | 2306.2 | 2164.3 | 1946.8 | 1706.5 | 1445.4 |
| 15°   | 2949.5 | 2951.3 | 2960.8 | 2947.6 | 2868.1 | 2737.6 | 2550.3 | 2376.2 | 2118.9 | 1842.7 | 1521.1 |
| 17.5° | 3227.6 | 3231.3 | 3238.9 | 3221.9 | 3138.6 | 2983.5 | 2792.4 | 2582.4 | 2302.4 | 1988.4 | 1606.2 |
| 20°   | 3477.3 | 3481.1 | 3486.7 | 3464.0 | 3380.8 | 3225.7 | 3019.5 | 2800.0 | 2489.7 | 2137.8 | 1698.9 |
| 22.5° | 3728.9 | 3732.7 | 3742.2 | 3711.9 | 3619.2 | 3441.3 | 3238.9 | 3011.9 | 2688.4 | 2302.4 | 1806.8 |
| 25°   | 4050.5 | 4054.3 | 4061.9 | 4018.4 | 3891.6 | 3683.5 | 3469.7 | 3237.0 | 2904.0 | 2487.8 | 1939.2 |
| 27.5° | 4521.6 | 4517.8 | 4517.8 | 4438.4 | 4220.8 | 3950.3 | 3702.4 | 3465.9 | 3136.8 | 2686.5 | 2084.9 |
| 30°   | 5104.3 | 5094.9 | 5089.2 | 4981.3 | 4671.1 | 4251.1 | 3940.8 | 3679.7 | 3360.0 | 2896.5 | 2241.9 |
| 32.5° | 5626.5 | 5626.5 | 5615.1 | 5501.6 | 5172.4 | 4655.9 | 4194.3 | 3887.8 | 3575.7 | 3108.4 | 2404.6 |
| 35°   | 5934.9 | 5948.1 | 5942.4 | 5857.3 | 5617.0 | 5091.1 | 4536.7 | 4137.6 | 3802.7 | 3329.7 | 2599.5 |
| 37.5° | 5976.5 | 6003.0 | 6008.6 | 5957.6 | 5830.8 | 5446.7 | 4917.0 | 4408.1 | 4052.4 | 3568.1 | 2788.6 |
| 40°   | 5808.1 | 5864.9 | 5864.9 | 5857.3 | 5811.9 | 5615.1 | 5236.7 | 4722.2 | 4309.7 | 3815.9 | 2979.7 |
| 42.5° | 5548.9 | 5607.6 | 5600.0 | 5628.4 | 5617.0 | 5575.4 | 5416.5 | 5015.4 | 4567.0 | 4071.3 | 3153.8 |
| 45°   | 5210.3 | 5270.8 | 5255.7 | 5306.7 | 5329.4 | 5374.9 | 5397.6 | 5219.7 | 4820.5 | 4349.5 | 3348.6 |
| 47.5° | 4667.3 | 4769.4 | 4792.2 | 4883.0 | 4977.6 | 5119.4 | 5227.3 | 5293.5 | 5057.0 | 4648.4 | 3560.5 |
| 50°   | 3865.1 | 4008.9 | 4054.3 | 4245.4 | 4504.6 | 4797.8 | 4971.9 | 5202.7 | 5223.5 | 4954.9 | 3789.5 |
| 52.5° | 2767.8 | 2934.3 | 3004.3 | 3318.4 | 3851.9 | 4362.7 | 4676.7 | 5002.2 | 5287.8 | 5248.1 | 4037.3 |
| 55°   | 1789.7 | 1931.6 | 1999.7 | 2294.9 | 3004.3 | 3806.5 | 4328.6 | 4743.0 | 5251.9 | 5516.7 | 4321.1 |
| 57.5° | 1103.0 | 1184.3 | 1229.7 | 1483.2 | 2135.9 | 3093.2 | 3872.7 | 4504.6 | 5142.2 | 5749.4 | 4616.2 |
| 60°   | 743.5  | 790.8  | 813.5  | 932.7  | 1451.1 | 2311.9 | 3246.5 | 4254.9 | 4998.4 | 5906.5 | 4884.9 |
| 62.5° | 493.8  | 508.9  | 531.6  | 605.4  | 957.3  | 1623.2 | 2493.5 | 3808.4 | 4890.5 | 5915.9 | 5083.5 |
| 65°   | 382.2  | 389.7  | 399.2  | 431.4  | 590.3  | 1135.1 | 1753.8 | 3085.7 | 4729.7 | 5715.4 | 5145.9 |
| 67.5° | 300.8  | 308.4  | 319.7  | 336.8  | 427.6  | 770.0  | 1193.8 | 2260.8 | 4400.5 | 5401.3 | 5043.8 |
| 70°   | 236.5  | 242.2  | 249.7  | 264.9  | 333.0  | 558.1  | 788.9  | 1502.2 | 3736.5 | 5102.4 | 4722.2 |
| 72.5° | 187.3  | 193.0  | 200.5  | 215.7  | 270.5  | 408.6  | 541.1  | 936.5  | 2881.3 | 4737.3 | 4103.5 |
| 75°   | 147.6  | 151.4  | 157.0  | 172.2  | 217.6  | 317.8  | 367.0  | 560.0  | 1958.1 | 4069.5 | 3197.3 |
| 77.5° | 73.8   | 90.8   | 104.1  | 119.2  | 158.9  | 219.5  | 244.1  | 310.3  | 826.8  | 2088.6 | 1524.9 |
| 80°   | 43.5   | 53.0   | 56.8   | 66.2   | 104.1  | 132.4  | 132.4  | 124.9  | 261.1  | 802.2  | 622.4  |
| 82.5° | 24.6   | 34.1   | 35.9   | 37.8   | 62.4   | 75.7   | 60.5   | 45.4   | 53.0   | 268.6  | 181.6  |
| 85°   | 7.6    | 11.4   | 13.2   | 15.1   | 20.8   | 22.7   | 20.8   | 18.9   | 15.1   | 26.5   | 17.0   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.9    | 3.8    | 3.8    | 3.8    | 5.7    | 5.7    | 5.7    |
| 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°    | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 | 1218.4 |
| 2.5°  | 1225.9 | 1201.3 | 1154.1 | 1110.5 | 1068.9 | 1038.6 | 1010.3 | 983.8  | 964.9  | 949.7  | 947.8  |
| 5°    | 1243.0 | 1193.8 | 1103.0 | 1017.8 | 940.3  | 875.9  | 821.1  | 777.6  | 745.4  | 722.7  | 720.8  |
| 7.5°  | 1265.7 | 1190.0 | 1051.9 | 925.1  | 809.7  | 717.0  | 637.6  | 578.9  | 537.3  | 520.3  | 507.0  |
| 10°   | 1284.6 | 1186.2 | 1000.8 | 832.4  | 681.1  | 563.8  | 469.2  | 410.5  | 380.3  | 368.9  | 363.2  |
| 12.5° | 1316.8 | 1190.0 | 957.3  | 747.3  | 569.5  | 431.4  | 359.5  | 327.3  | 314.1  | 304.6  | 302.7  |
| 15°   | 1364.1 | 1207.0 | 915.7  | 664.1  | 455.9  | 348.1  | 306.5  | 285.7  | 272.4  | 270.5  | 268.6  |
| 17.5° | 1411.3 | 1222.2 | 877.8  | 578.9  | 378.4  | 302.7  | 274.3  | 257.3  | 247.8  | 245.9  | 245.9  |
| 20°   | 1466.2 | 1241.1 | 836.2  | 497.6  | 323.5  | 272.4  | 249.7  | 236.5  | 225.1  | 223.2  | 223.2  |
| 22.5° | 1530.5 | 1267.6 | 796.5  | 425.7  | 287.6  | 249.7  | 230.8  | 215.7  | 206.2  | 204.3  | 204.3  |
| 25°   | 1617.6 | 1307.3 | 764.3  | 372.7  | 263.0  | 230.8  | 213.8  | 200.5  | 193.0  | 189.2  | 189.2  |
| 27.5° | 1714.1 | 1362.2 | 741.6  | 340.5  | 245.9  | 215.7  | 198.6  | 187.3  | 179.7  | 175.9  | 175.9  |
| 30°   | 1821.9 | 1422.7 | 726.5  | 327.3  | 236.5  | 202.4  | 187.3  | 175.9  | 166.5  | 164.6  | 164.6  |
| 32.5° | 1941.1 | 1492.7 | 717.0  | 329.2  | 234.6  | 193.0  | 175.9  | 164.6  | 157.0  | 153.2  | 153.2  |
| 35°   | 2073.5 | 1570.3 | 711.3  | 340.5  | 238.4  | 185.4  | 166.5  | 155.1  | 147.6  | 143.8  | 143.8  |
| 37.5° | 2221.1 | 1661.1 | 711.3  | 351.9  | 247.8  | 183.5  | 157.0  | 145.7  | 140.0  | 136.2  | 136.2  |
| 40°   | 2359.2 | 1757.6 | 718.9  | 365.1  | 257.3  | 183.5  | 149.5  | 140.0  | 132.4  | 128.6  | 128.6  |
| 42.5° | 2467.0 | 1812.4 | 724.6  | 378.4  | 263.0  | 181.6  | 141.9  | 132.4  | 126.8  | 123.0  | 123.0  |
| 45°   | 2590.0 | 1871.1 | 713.2  | 384.1  | 263.0  | 177.8  | 136.2  | 126.8  | 121.1  | 117.3  | 117.3  |
| 47.5° | 2726.2 | 1943.0 | 711.3  | 387.8  | 257.3  | 170.3  | 130.5  | 121.1  | 117.3  | 113.5  | 113.5  |
| 50°   | 2864.3 | 2022.4 | 715.1  | 385.9  | 249.7  | 158.9  | 123.0  | 117.3  | 111.6  | 107.8  | 107.8  |
| 52.5° | 3021.3 | 2105.7 | 722.7  | 382.2  | 232.7  | 145.7  | 117.3  | 111.6  | 105.9  | 102.2  | 100.3  |
| 55°   | 3195.4 | 2196.5 | 737.8  | 374.6  | 210.0  | 132.4  | 111.6  | 105.9  | 98.4   | 94.6   | 92.7   |
| 57.5° | 3395.9 | 2308.1 | 754.9  | 359.5  | 185.4  | 121.1  | 105.9  | 98.4   | 87.0   | 81.4   | 79.5   |
| 60°   | 3587.0 | 2434.9 | 773.8  | 323.5  | 160.8  | 109.7  | 100.3  | 88.9   | 77.6   | 73.8   | 71.9   |
| 62.5° | 3766.7 | 2559.7 | 783.2  | 259.2  | 136.2  | 100.3  | 94.6   | 81.4   | 70.0   | 66.2   | 64.3   |
| 65°   | 3882.2 | 2695.9 | 762.4  | 175.9  | 111.6  | 92.7   | 87.0   | 75.7   | 64.3   | 58.6   | 58.6   |
| 67.5° | 3889.7 | 2760.3 | 690.5  | 115.4  | 90.8   | 83.2   | 79.5   | 68.1   | 56.8   | 53.0   | 51.1   |
| 70°   | 3698.6 | 2663.8 | 527.8  | 90.8   | 75.7   | 71.9   | 71.9   | 60.5   | 49.2   | 45.4   | 43.5   |
| 72.5° | 3259.7 | 2359.2 | 336.8  | 73.8   | 64.3   | 60.5   | 60.5   | 51.1   | 43.5   | 37.8   | 35.9   |
| 75°   | 2573.0 | 1820.0 | 179.7  | 60.5   | 53.0   | 51.1   | 47.3   | 41.6   | 35.9   | 32.2   | 30.3   |
| 77.5° | 1182.4 | 802.2  | 83.2   | 43.5   | 39.7   | 39.7   | 35.9   | 30.3   | 28.4   | 24.6   | 24.6   |
| 80°   | 467.3  | 272.4  | 41.6   | 28.4   | 26.5   | 26.5   | 26.5   | 20.8   | 20.8   | 17.0   | 15.1   |
| 82.5° | 128.6  | 56.8   | 20.8   | 17.0   | 17.0   | 17.0   | 15.1   | 13.2   | 13.2   | 11.4   | 11.4   |
| 85°   | 13.2   | 9.5    | 9.5    | 9.5    | 9.5    | 7.6    | 7.6    | 5.7    | 3.8    | 3.8    | 3.8    |
| 87.5° | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 3.8    | 1.9    | 0.0    | 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)