

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: P836129

Luminaire Tested: **ARCH3-140-740-U-T2U**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836129  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-140-740-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 21631 lumens  
Efficiency: N/A  
Efficacy: 151.8 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

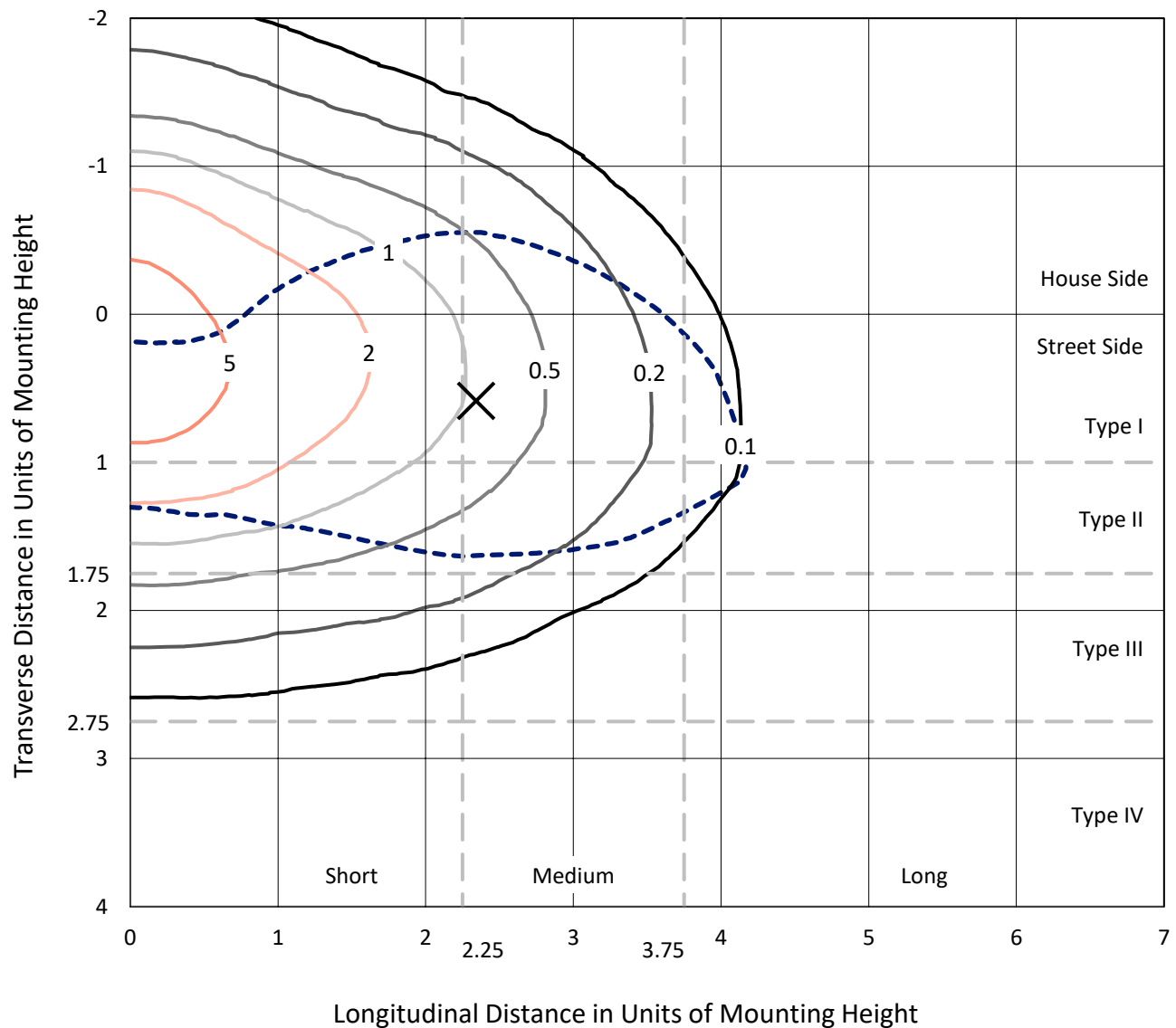
Input Watts (W): 142.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

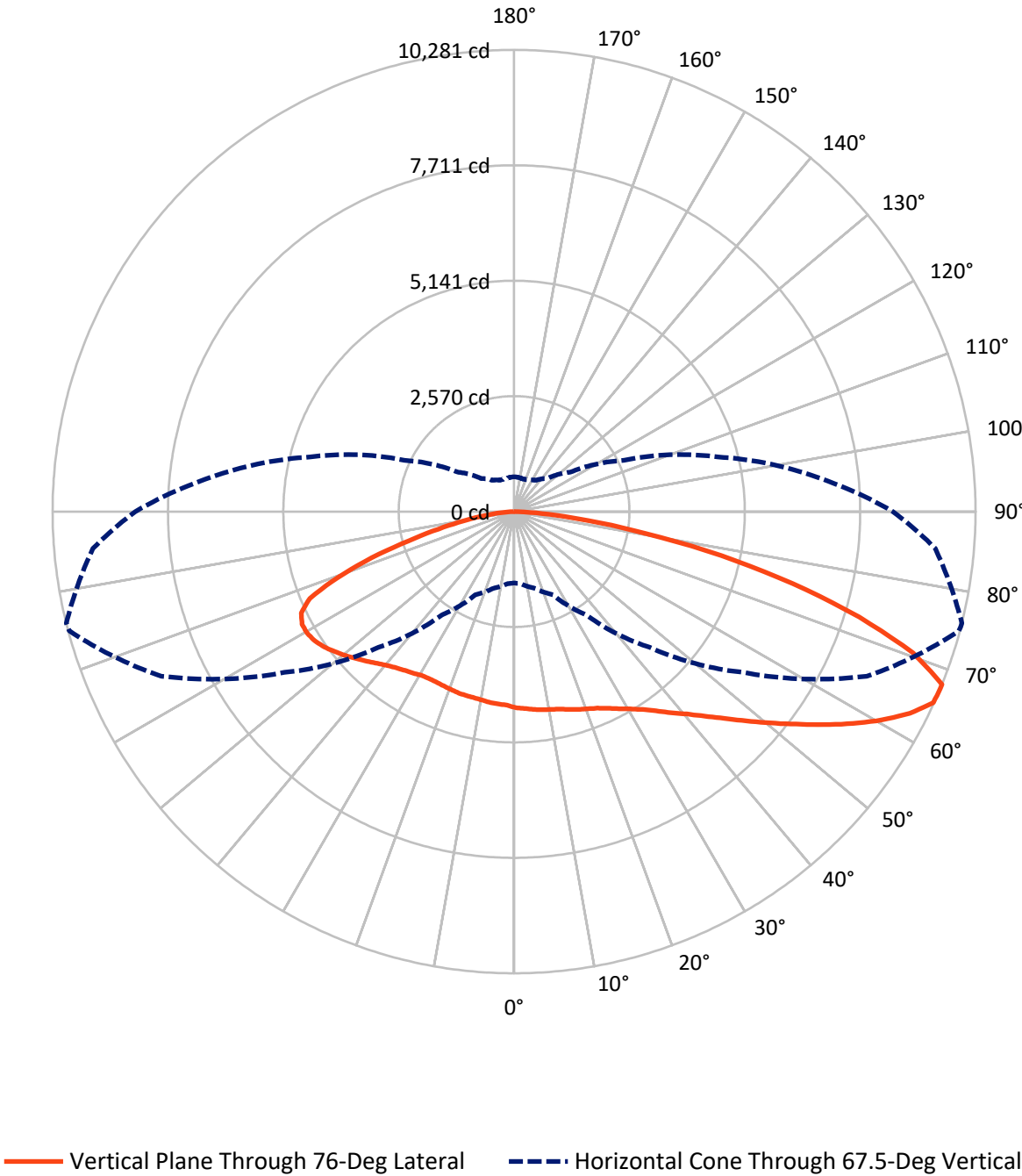
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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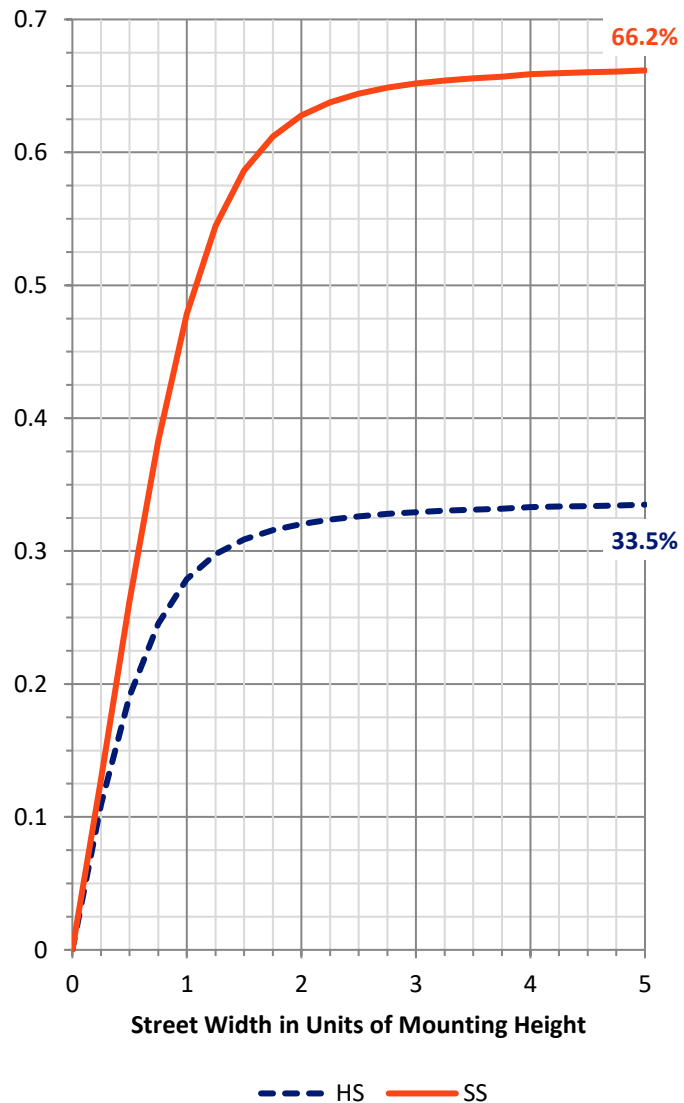
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7309.2   | 0.0    | 7309.2  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 14321.8  | 0.0    | 14321.8 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 21631.0  | 0.0    | 21631.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 421.3   | 1.9       |
| 10°-20°   | 1288.1  | 6.0       |
| 20°-30°   | 2188.5  | 10.1      |
| 30°-40°   | 3114.0  | 14.4      |
| 40°-50°   | 3932.8  | 18.2      |
| 50°-60°   | 4258.0  | 19.7      |
| 60°-70°   | 3960.4  | 18.3      |
| 70°-80°   | 2127.1  | 9.8       |
| 80°-90°   | 340.8   | 1.6       |
| 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°    | 21631.0 | 100.0     |
| 0°-180°   | 21631.0 | 100.0     |

**Coefficient of Utilization**



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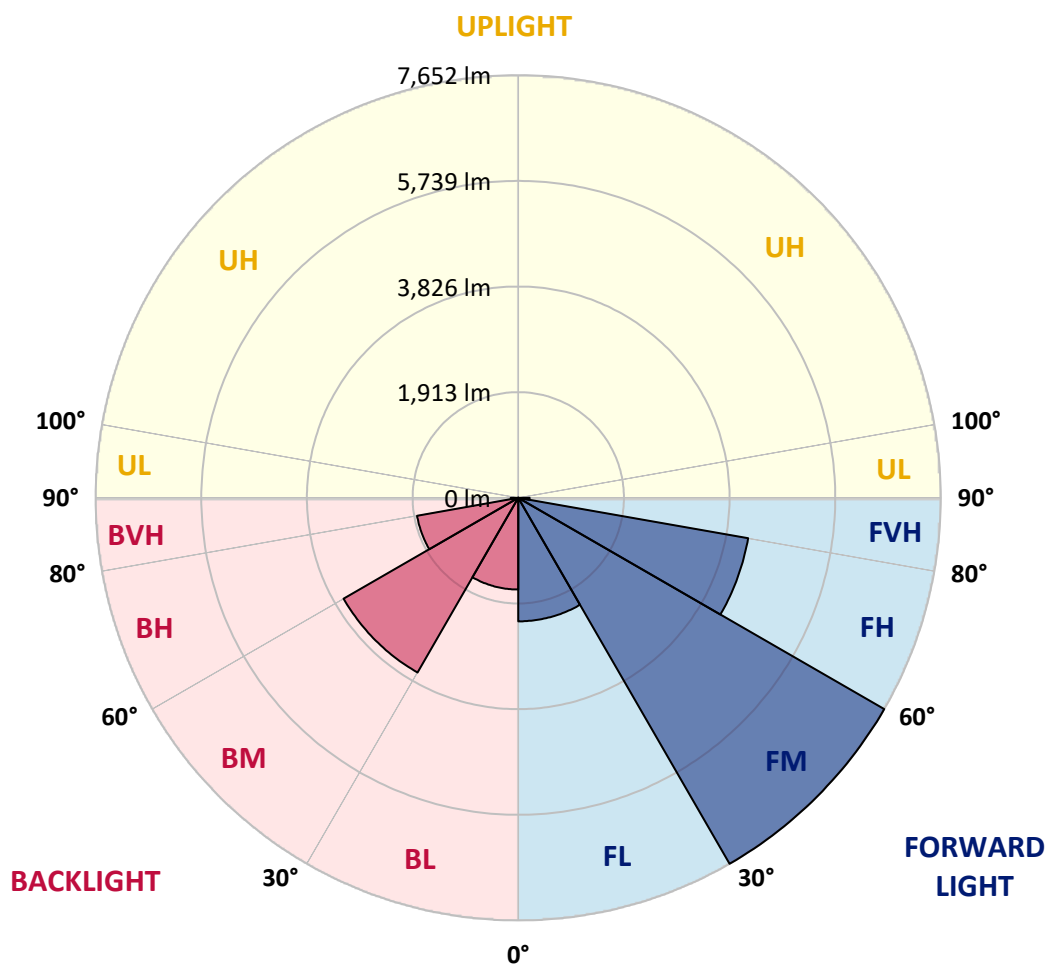
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2236.9 | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 7652.2 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 4226.5 | 19.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 206.2  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1661.0 | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3652.5 | 16.9      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1861.0 | 8.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 134.7  | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 76°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0°    | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4  | 4369.4  | 4369.4 |
| 2.5°  | 4501.9 | 4493.9 | 4461.8 | 4465.8 | 4465.8 | 4461.8 | 4413.6 | 4393.5 | 4393.5  | 4389.5  | 4345.3 |
| 5°    | 4662.6 | 4650.5 | 4614.4 | 4606.4 | 4590.3 | 4570.2 | 4493.9 | 4449.7 | 4429.7  | 4425.6  | 4365.4 |
| 7.5°  | 4851.3 | 4835.3 | 4791.1 | 4767.0 | 4726.8 | 4674.6 | 4578.2 | 4510.0 | 4461.8  | 4457.8  | 4373.4 |
| 10°   | 5040.1 | 5024.0 | 4971.8 | 4927.6 | 4871.4 | 4787.1 | 4662.6 | 4562.2 | 4485.9  | 4477.8  | 4377.4 |
| 12.5° | 5265.0 | 5248.9 | 5184.7 | 5128.4 | 5044.1 | 4931.7 | 4767.0 | 4630.5 | 4526.0  | 4514.0  | 4389.5 |
| 15°   | 5501.9 | 5477.8 | 5413.6 | 5349.3 | 5244.9 | 5100.3 | 4903.5 | 4722.8 | 4590.3  | 4570.2  | 4425.6 |
| 17.5° | 5698.7 | 5666.6 | 5614.4 | 5550.1 | 5433.7 | 5265.0 | 5040.1 | 4815.2 | 4650.5  | 4634.5  | 4461.8 |
| 20°   | 5867.4 | 5843.3 | 5787.1 | 5726.8 | 5602.3 | 5417.6 | 5168.6 | 4907.6 | 4706.8  | 4686.7  | 4489.9 |
| 22.5° | 6028.0 | 5995.9 | 5963.8 | 5919.6 | 5783.0 | 5578.2 | 5317.2 | 5020.0 | 4779.0  | 4755.0  | 4526.0 |
| 25°   | 6212.8 | 6176.6 | 6164.6 | 6140.5 | 5979.8 | 5771.0 | 5497.9 | 5160.6 | 4879.4  | 4851.3  | 4590.3 |
| 27.5° | 6441.7 | 6401.5 | 6377.4 | 6377.4 | 6184.6 | 5967.8 | 5690.7 | 5325.2 | 4995.9  | 4971.8  | 4670.6 |
| 30°   | 6682.6 | 6634.4 | 6598.3 | 6598.3 | 6381.4 | 6164.6 | 5879.4 | 5489.9 | 5128.4  | 5100.3  | 4775.0 |
| 32.5° | 6895.5 | 6847.3 | 6807.1 | 6803.1 | 6578.2 | 6361.4 | 6076.2 | 5670.6 | 5289.1  | 5252.9  | 4903.5 |
| 35°   | 7060.1 | 7016.0 | 6979.8 | 6987.8 | 6775.0 | 6562.2 | 6297.1 | 5911.6 | 5489.9  | 5449.7  | 5072.2 |
| 37.5° | 7160.5 | 7144.5 | 7124.4 | 7152.5 | 6955.7 | 6754.9 | 6526.0 | 6144.5 | 5718.8  | 5682.6  | 5281.0 |
| 40°   | 7212.7 | 7200.7 | 7281.0 | 7317.2 | 7108.3 | 6927.6 | 6754.9 | 6385.4 | 5967.8  | 5927.6  | 5522.0 |
| 42.5° | 7289.1 | 7389.5 | 7421.6 | 7413.5 | 7220.8 | 7060.1 | 6963.8 | 6646.5 | 6261.0  | 6224.8  | 5811.2 |
| 45°   | 7016.0 | 6991.9 | 7168.6 | 7265.0 | 7228.8 | 7144.5 | 7160.5 | 6959.7 | 6602.3  | 6566.2  | 6144.5 |
| 47.5° | 6650.5 | 6618.4 | 6718.8 | 6955.7 | 7096.3 | 7176.6 | 7337.2 | 7285.0 | 6995.9  | 6963.8  | 6534.0 |
| 50°   | 5879.4 | 5923.6 | 6297.1 | 6614.4 | 6891.5 | 7168.6 | 7485.8 | 7634.4 | 7429.6  | 7397.5  | 6951.7 |
| 52.5° | 5024.0 | 5068.2 | 5457.8 | 6188.7 | 6642.5 | 7108.3 | 7594.3 | 7983.8 | 7899.5  | 7863.3  | 7397.5 |
| 55°   | 4401.5 | 4497.9 | 4939.7 | 5469.8 | 6289.1 | 6919.6 | 7658.5 | 8341.2 | 8405.5  | 8373.4  | 7883.4 |
| 57.5° | 3783.1 | 3855.4 | 4188.7 | 4658.6 | 5807.1 | 6590.3 | 7654.5 | 8674.6 | 8935.6  | 8903.5  | 8377.4 |
| 60°   | 3056.2 | 3148.5 | 3413.6 | 3919.6 | 5164.6 | 6196.7 | 7542.1 | 8935.6 | 9445.6  | 9421.5  | 8855.3 |
| 62.5° | 2558.2 | 2586.3 | 2775.1 | 3212.8 | 4337.3 | 5698.7 | 7289.1 | 9076.2 | 9907.5  | 9891.4  | 9285.0 |
| 65°   | 2060.2 | 2064.2 | 2236.9 | 2602.4 | 3538.1 | 5080.2 | 6859.3 | 9024.0 | 10256.9 | 10264.9 | 9594.2 |
| 67.5° | 1590.3 | 1610.4 | 1767.0 | 2044.1 | 2811.2 | 4277.0 | 6244.9 | 8670.6 | 10260.9 | 10281.0 | 9417.5 |
| 70°   | 1100.4 | 1116.4 | 1353.4 | 1622.5 | 2172.7 | 3409.6 | 5413.6 | 7734.8 | 9417.5  | 9433.6  | 8441.6 |
| 72.5° | 775.1  | 783.1  | 1036.1 | 1297.2 | 1698.8 | 2570.2 | 4084.3 | 6397.5 | 8028.0  | 8040.0  | 7100.3 |
| 75°   | 578.3  | 586.3  | 730.9  | 983.9  | 1301.2 | 1779.1 | 2791.1 | 4899.5 | 6413.6  | 6413.6  | 5606.3 |
| 77.5° | 409.6  | 413.6  | 473.9  | 678.7  | 867.5  | 1200.8 | 1678.7 | 3208.8 | 4706.8  | 4714.8  | 4084.3 |
| 80°   | 277.1  | 281.1  | 309.2  | 457.8  | 542.2  | 650.6  | 911.6  | 1682.7 | 2967.8  | 2979.9  | 2594.3 |
| 82.5° | 144.6  | 152.6  | 172.7  | 232.9  | 273.1  | 361.4  | 469.9  | 855.4  | 1642.5  | 1674.7  | 1558.2 |
| 85°   | 56.2   | 56.2   | 64.3   | 76.3   | 100.4  | 140.6  | 216.9  | 325.3  | 743.0   | 767.1   | 686.7  |
| 87.5° | 20.1   | 20.1   | 24.1   | 24.1   | 28.1   | 32.1   | 36.1   | 48.2   | 84.3    | 84.3    | 80.3   |
| 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°    | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 | 4369.4 |
| 2.5°  | 4329.3 | 4329.3 | 4309.2 | 4317.2 | 4313.2 | 4305.2 | 4297.1 | 4309.2 | 4297.1 | 4269.0 | 4265.0 |
| 5°    | 4337.3 | 4329.3 | 4297.1 | 4293.1 | 4281.1 | 4265.0 | 4244.9 | 4253.0 | 4232.9 | 4208.8 | 4204.8 |
| 7.5°  | 4341.3 | 4325.2 | 4281.1 | 4265.0 | 4240.9 | 4208.8 | 4176.6 | 4176.6 | 4148.5 | 4124.4 | 4120.4 |
| 10°   | 4333.3 | 4313.2 | 4253.0 | 4220.8 | 4176.6 | 4128.5 | 4084.3 | 4072.2 | 4040.1 | 4012.0 | 4012.0 |
| 12.5° | 4337.3 | 4309.2 | 4232.9 | 4180.7 | 4120.4 | 4060.2 | 4004.0 | 3987.9 | 3959.8 | 3931.7 | 3927.7 |
| 15°   | 4361.4 | 4321.2 | 4224.8 | 4156.6 | 4068.2 | 3999.9 | 3939.7 | 3927.7 | 3903.6 | 3883.5 | 3883.5 |
| 17.5° | 4385.5 | 4333.3 | 4212.8 | 4116.4 | 4008.0 | 3931.7 | 3875.4 | 3875.4 | 3859.4 | 3847.3 | 3847.3 |
| 20°   | 4397.5 | 4337.3 | 4188.7 | 4060.2 | 3935.7 | 3855.4 | 3803.2 | 3811.2 | 3807.2 | 3803.2 | 3803.2 |
| 22.5° | 4425.6 | 4345.3 | 4168.6 | 4008.0 | 3859.4 | 3775.0 | 3726.9 | 3738.9 | 3734.9 | 3734.9 | 3738.9 |
| 25°   | 4469.8 | 4365.4 | 4152.5 | 3959.8 | 3787.1 | 3694.7 | 3642.5 | 3650.5 | 3650.5 | 3650.5 | 3650.5 |
| 27.5° | 4530.1 | 4405.6 | 4148.5 | 3915.6 | 3714.8 | 3610.4 | 3546.1 | 3546.1 | 3530.1 | 3534.1 | 3538.1 |
| 30°   | 4622.4 | 4481.9 | 4156.6 | 3875.4 | 3638.5 | 3506.0 | 3429.7 | 3417.6 | 3413.6 | 3421.6 | 3425.7 |
| 32.5° | 4734.9 | 4586.3 | 4204.8 | 3847.3 | 3558.2 | 3389.5 | 3293.1 | 3289.1 | 3277.1 | 3277.1 | 3277.1 |
| 35°   | 4875.4 | 4686.7 | 4248.9 | 3843.3 | 3477.9 | 3265.0 | 3160.6 | 3148.5 | 3120.4 | 3108.4 | 3108.4 |
| 37.5° | 5056.2 | 4843.3 | 4301.1 | 3815.2 | 3409.6 | 3144.5 | 3020.0 | 2979.9 | 2947.7 | 2943.7 | 2943.7 |
| 40°   | 5277.0 | 5020.0 | 4377.4 | 3783.1 | 3337.3 | 3020.0 | 2855.4 | 2787.1 | 2791.1 | 2807.2 | 2807.2 |
| 42.5° | 5538.1 | 5236.9 | 4473.8 | 3767.0 | 3232.9 | 2891.5 | 2662.6 | 2582.3 | 2610.4 | 2626.5 | 2630.5 |
| 45°   | 5843.3 | 5493.9 | 4582.3 | 3746.9 | 3136.5 | 2746.9 | 2457.8 | 2357.4 | 2369.4 | 2373.5 | 2377.5 |
| 47.5° | 6196.7 | 5779.0 | 4694.7 | 3730.9 | 3028.1 | 2566.2 | 2232.9 | 2100.4 | 2096.4 | 2072.3 | 2080.3 |
| 50°   | 6566.2 | 6080.2 | 4811.2 | 3702.8 | 2895.5 | 2353.4 | 1996.0 | 1839.3 | 1807.2 | 1771.1 | 1775.1 |
| 52.5° | 6959.7 | 6389.5 | 4919.6 | 3658.6 | 2730.9 | 2136.5 | 1771.1 | 1602.4 | 1538.1 | 1498.0 | 1506.0 |
| 55°   | 7393.5 | 6706.7 | 5024.0 | 3590.3 | 2558.2 | 1919.7 | 1570.3 | 1397.6 | 1317.2 | 1285.1 | 1289.1 |
| 57.5° | 7791.1 | 7011.9 | 5100.3 | 3506.0 | 2369.4 | 1722.9 | 1393.6 | 1224.9 | 1172.7 | 1168.7 | 1172.7 |
| 60°   | 8176.6 | 7269.0 | 5132.5 | 3389.5 | 2176.7 | 1542.1 | 1228.9 | 1100.4 | 1064.2 | 1084.3 | 1088.3 |
| 62.5° | 8501.9 | 7433.6 | 5116.4 | 3232.9 | 1979.9 | 1369.5 | 1096.4 | 1004.0 | 979.9  | 1020.1 | 1024.1 |
| 65°   | 8690.6 | 7485.8 | 5003.9 | 3008.0 | 1767.0 | 1200.8 | 971.9  | 871.5  | 859.4  | 883.5  | 895.6  |
| 67.5° | 8441.6 | 7160.5 | 4698.7 | 2698.8 | 1530.1 | 1044.2 | 851.4  | 771.1  | 751.0  | 771.1  | 771.1  |
| 70°   | 7481.8 | 6204.7 | 3975.8 | 2208.8 | 1269.1 | 891.6  | 738.9  | 682.7  | 666.7  | 682.7  | 678.7  |
| 72.5° | 6232.8 | 5160.6 | 3132.5 | 1722.9 | 1000.0 | 751.0  | 642.6  | 590.4  | 574.3  | 558.2  | 550.2  |
| 75°   | 4835.3 | 3919.6 | 2273.1 | 1265.0 | 755.0  | 602.4  | 538.1  | 490.0  | 449.8  | 465.9  | 457.8  |
| 77.5° | 3542.1 | 2751.0 | 1610.4 | 875.5  | 542.2  | 465.9  | 421.7  | 385.5  | 357.4  | 389.6  | 385.5  |
| 80°   | 2281.1 | 1779.1 | 1076.3 | 586.3  | 373.5  | 325.3  | 309.2  | 289.2  | 317.3  | 413.6  | 421.7  |
| 82.5° | 1393.6 | 1128.5 | 642.6  | 381.5  | 245.0  | 216.9  | 200.8  | 200.8  | 325.3  | 357.4  | 361.4  |
| 85°   | 622.5  | 598.4  | 349.4  | 196.8  | 136.5  | 124.5  | 112.4  | 144.6  | 132.5  | 96.4   | 100.4  |
| 87.5° | 100.4  | 104.4  | 76.3   | 68.3   | 52.2   | 52.2   | 40.2   | 28.1   | 20.1   | 12.0   | 12.0   |
| 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)