

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: P836415

Luminaire Tested: **ARCH3-180-740-U-T2R**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-180-740-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 25289 lumens  
Efficiency: N/A  
Efficacy: 140.1 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

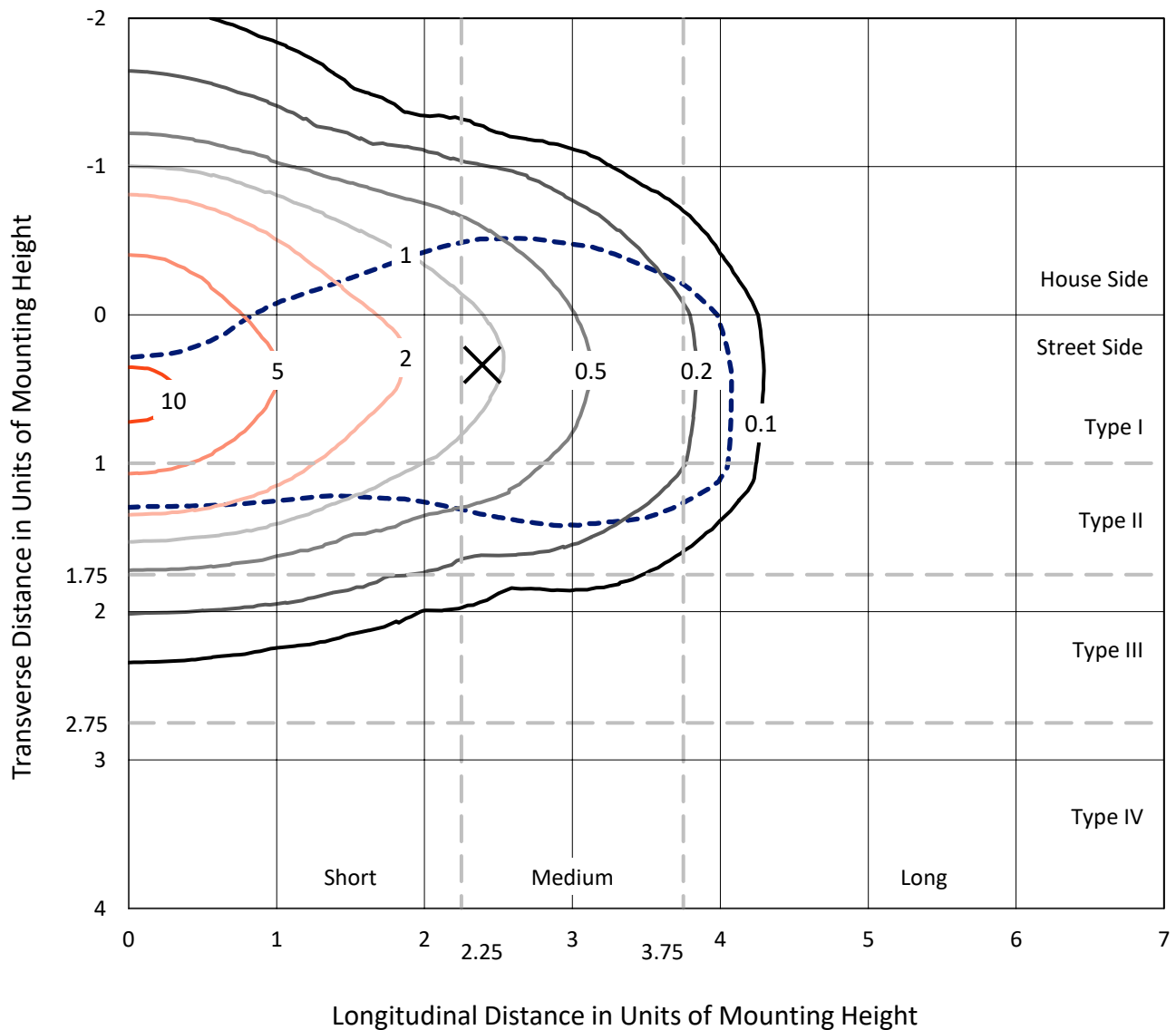
Input Watts (W): 180.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

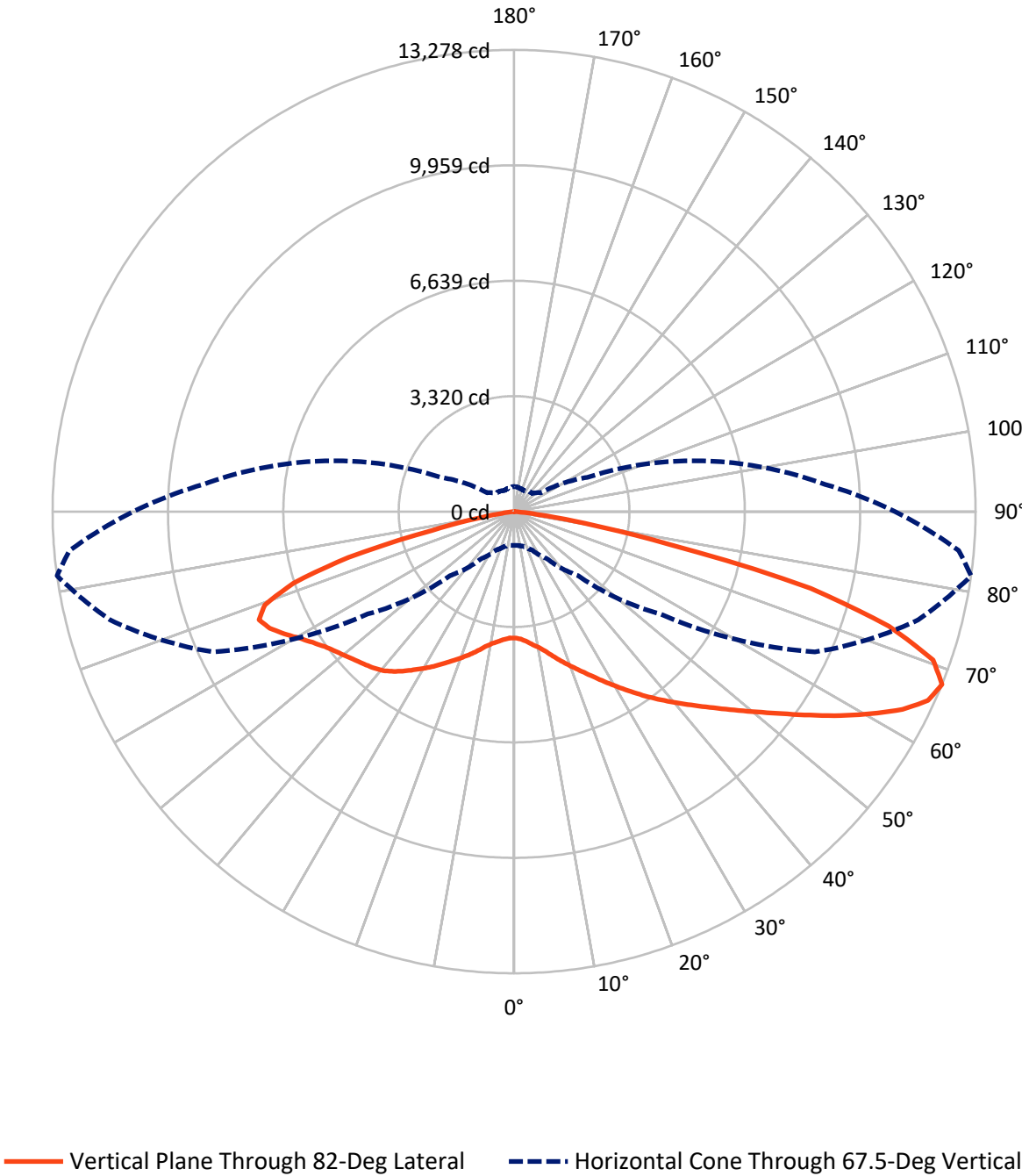
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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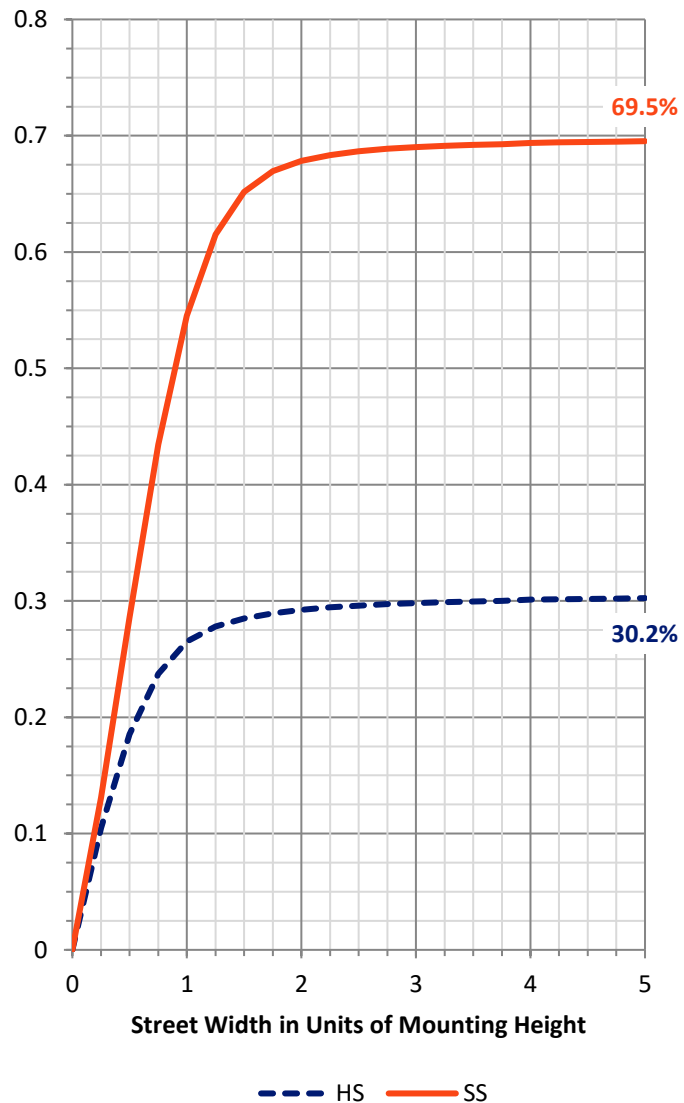
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7701.5   | 0.0    | 7701.5  |
|                    | % Fixture | 30.5     | 0.0    | 30.5    |
| <b>Street Side</b> | Lumens    | 17587.5  | 0.0    | 17587.5 |
|                    | % Fixture | 69.5     | 0.0    | 69.5    |
| <b>Total</b>       | Lumens    | 25289.0  | 0.0    | 25289.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 375.7   | 1.5       |
| 10°-20°   | 1353.2  | 5.4       |
| 20°-30°   | 2719.7  | 10.8      |
| 30°-40°   | 4272.3  | 16.9      |
| 40°-50°   | 5204.5  | 20.6      |
| 50°-60°   | 4917.6  | 19.4      |
| 60°-70°   | 4060.8  | 16.1      |
| 70°-80°   | 2211.3  | 8.7       |
| 80°-90°   | 173.9   | 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°    | 25289.0 | 100.0     |
| 0°-180°   | 25289.0 | 100.0     |

**Coefficient of Utilization**



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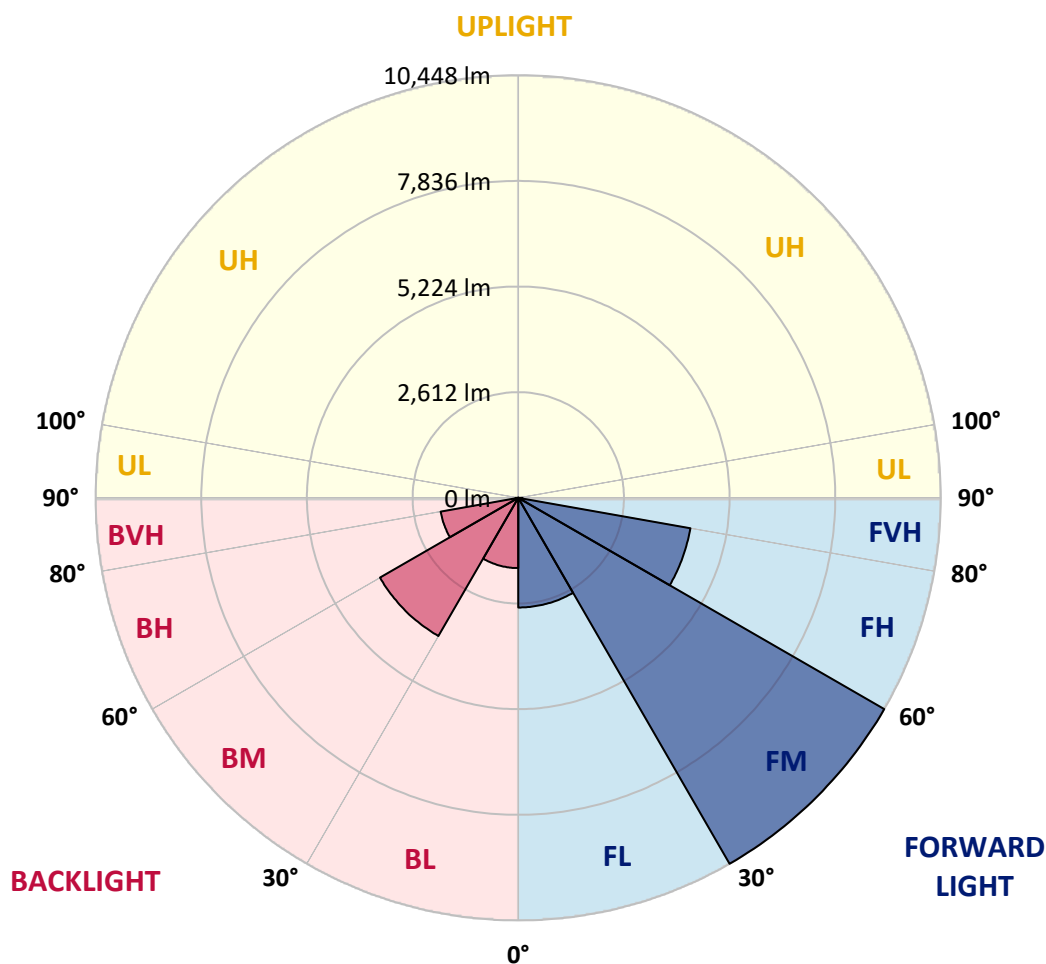
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2711.9  | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 10448.0 | 41.3      |                         |      |         |
| FH   | (60°-80°)   | 4322.8  | 17.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 104.8   | 0.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1736.8  | 6.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3946.4  | 15.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1949.3  | 7.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 69.1    | 0.3       |                         |      | G1/100  |
| 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°     | 82°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  | 3635.3  |
| 2.5°  | 3800.5  | 3800.5  | 3829.9  | 3829.9  | 3804.2  | 3763.8  | 3752.8  | 3708.7  | 3668.3  | 3668.3  | 3672.0  |
| 5°    | 4164.0  | 4160.4  | 4182.4  | 4153.0  | 4090.6  | 4009.8  | 3954.7  | 3859.3  | 3778.5  | 3752.8  | 3749.1  |
| 7.5°  | 4608.4  | 4604.7  | 4615.7  | 4568.0  | 4450.5  | 4318.3  | 4208.1  | 4053.9  | 3921.7  | 3866.6  | 3851.9  |
| 10°   | 5104.1  | 5100.4  | 5089.4  | 5008.6  | 4850.7  | 4645.1  | 4479.8  | 4266.9  | 4068.6  | 3980.4  | 3962.1  |
| 12.5° | 5673.2  | 5665.9  | 5640.2  | 5522.7  | 5306.0  | 5041.7  | 4803.0  | 4527.6  | 4263.2  | 4142.0  | 4101.6  |
| 15°   | 6308.5  | 6297.5  | 6249.7  | 6106.5  | 5816.4  | 5482.3  | 5173.8  | 4821.3  | 4498.2  | 4340.3  | 4285.2  |
| 17.5° | 6976.8  | 6976.8  | 6903.4  | 6690.4  | 6367.2  | 5952.3  | 5570.4  | 5122.4  | 4744.2  | 4549.6  | 4483.5  |
| 20°   | 7656.1  | 7652.4  | 7560.6  | 7303.6  | 6921.7  | 6444.4  | 5959.7  | 5467.6  | 4997.6  | 4762.6  | 4681.8  |
| 22.5° | 8372.2  | 8364.8  | 8251.0  | 7957.2  | 7501.9  | 6962.1  | 6396.6  | 5809.1  | 5276.7  | 4993.9  | 4891.1  |
| 25°   | 9194.7  | 9183.7  | 9044.1  | 8684.3  | 8144.5  | 7534.9  | 6888.7  | 6209.4  | 5596.1  | 5251.0  | 5129.8  |
| 27.5° | 10068.6 | 10053.9 | 9888.7  | 9470.1  | 8878.9  | 8144.5  | 7432.1  | 6672.0  | 5948.6  | 5537.4  | 5401.5  |
| 30°   | 10847.1 | 10836.1 | 10656.1 | 10226.5 | 9547.2  | 8750.4  | 7949.9  | 7134.7  | 6319.5  | 5842.2  | 5673.2  |
| 32.5° | 11434.6 | 11434.6 | 11273.0 | 10850.8 | 10145.7 | 9330.6  | 8471.3  | 7571.7  | 6705.1  | 6169.0  | 5970.7  |
| 35°   | 11790.8 | 11801.8 | 11662.3 | 11324.5 | 10659.8 | 9877.7  | 9011.1  | 8085.7  | 7116.3  | 6517.8  | 6304.8  |
| 37.5° | 11842.2 | 11878.9 | 11798.1 | 11570.5 | 11016.0 | 10333.0 | 9539.9  | 8581.5  | 7542.3  | 6870.3  | 6631.6  |
| 40°   | 11603.5 | 11629.2 | 11632.9 | 11544.8 | 11162.9 | 10659.8 | 10006.2 | 9106.6  | 7993.9  | 7241.2  | 6965.8  |
| 42.5° | 11126.2 | 11144.5 | 11177.6 | 11203.3 | 11056.4 | 10803.0 | 10362.4 | 9594.9  | 8475.0  | 7619.4  | 7296.3  |
| 45°   | 10509.3 | 10505.6 | 10560.7 | 10670.8 | 10663.5 | 10722.2 | 10560.7 | 10039.2 | 8974.4  | 8049.0  | 7663.5  |
| 47.5° | 9587.6  | 9569.2  | 9763.8  | 10013.5 | 10138.4 | 10413.8 | 10564.3 | 10388.1 | 9517.8  | 8522.7  | 8082.1  |
| 50°   | 8144.5  | 8126.1  | 8552.1  | 9139.6  | 9506.8  | 9925.4  | 10362.4 | 10597.4 | 10087.0 | 9055.2  | 8537.4  |
| 52.5° | 6389.3  | 6370.9  | 6910.7  | 7938.9  | 8739.4  | 9348.9  | 9954.8  | 10645.1 | 10626.8 | 9650.0  | 9051.5  |
| 55°   | 4751.6  | 4736.9  | 5262.0  | 6374.6  | 7670.8  | 8680.6  | 9455.4  | 10520.3 | 11133.5 | 10333.0 | 9675.7  |
| 57.5° | 3348.9  | 3341.5  | 3796.8  | 4718.5  | 6297.5  | 7865.4  | 8974.4  | 10277.9 | 11599.9 | 11074.8 | 10380.7 |
| 60°   | 2350.1  | 2339.1  | 2669.5  | 3381.9  | 4762.6  | 6635.3  | 8497.0  | 9954.8  | 11948.7 | 11805.5 | 11129.8 |
| 62.5° | 1582.6  | 1575.3  | 1810.3  | 2405.2  | 3381.9  | 5107.8  | 7773.6  | 9738.1  | 12147.0 | 12539.9 | 11886.3 |
| 65°   | 1200.7  | 1197.1  | 1303.6  | 1630.4  | 2394.1  | 3668.3  | 6624.3  | 9712.4  | 12172.7 | 13090.7 | 12528.9 |
| 67.5° | 969.4   | 973.1   | 1031.8  | 1219.1  | 1656.1  | 2607.1  | 5137.1  | 9550.9  | 12036.8 | 13278.0 | 12841.0 |
| 70°   | 793.2   | 793.2   | 818.9   | 943.7   | 1222.8  | 1758.9  | 3587.5  | 8816.5  | 11658.6 | 12789.6 | 12470.1 |
| 72.5° | 605.9   | 609.6   | 690.3   | 763.8   | 921.7   | 1233.8  | 2298.7  | 7296.3  | 10766.3 | 11276.7 | 11034.4 |
| 75°   | 481.0   | 477.4   | 525.1   | 627.9   | 716.0   | 881.3   | 1410.0  | 5232.6  | 9161.6  | 8812.8  | 8658.6  |
| 77.5° | 345.2   | 341.5   | 378.2   | 466.3   | 543.5   | 624.2   | 840.9   | 2640.2  | 4982.9  | 4579.0  | 4465.2  |
| 80°   | 235.0   | 227.7   | 260.7   | 323.1   | 359.9   | 367.2   | 411.3   | 1013.5  | 2173.8  | 2049.0  | 2023.3  |
| 82.5° | 121.2   | 121.2   | 139.5   | 183.6   | 187.3   | 190.9   | 183.6   | 326.8   | 719.7   | 672.0   | 642.6   |
| 85°   | 47.7    | 47.7    | 51.4    | 62.4    | 62.4    | 66.1    | 66.1    | 84.5    | 77.1    | 73.4    | 69.8    |
| 87.5° | 3.7     | 3.7     | 7.3     | 7.3     | 11.0    | 11.0    | 11.0    | 14.7    | 18.4    | 18.4    | 18.4    |
| 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°    | 3635.3  | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 | 3635.3 |
| 2.5°  | 3664.7  | 3650.0 | 3602.2 | 3591.2 | 3583.9 | 3572.9 | 3576.5 | 3550.8 | 3539.8 | 3543.5 | 3528.8 |
| 5°    | 3730.8  | 3705.0 | 3646.3 | 3620.6 | 3613.2 | 3602.2 | 3613.2 | 3594.9 | 3576.5 | 3583.9 | 3576.5 |
| 7.5°  | 3822.6  | 3785.8 | 3712.4 | 3686.7 | 3683.0 | 3672.0 | 3686.7 | 3672.0 | 3657.3 | 3664.7 | 3650.0 |
| 10°   | 3918.0  | 3870.3 | 3789.5 | 3763.8 | 3763.8 | 3760.1 | 3774.8 | 3752.8 | 3738.1 | 3741.8 | 3734.4 |
| 12.5° | 4057.6  | 3995.1 | 3907.0 | 3885.0 | 3874.0 | 3885.0 | 3888.6 | 3859.3 | 3833.6 | 3837.2 | 3826.2 |
| 15°   | 4226.5  | 4156.7 | 4061.2 | 4028.2 | 4020.8 | 4017.2 | 4002.5 | 3965.8 | 3932.7 | 3929.0 | 3918.0 |
| 17.5° | 4410.1  | 4321.9 | 4208.1 | 4175.1 | 4142.0 | 4131.0 | 4094.3 | 4046.5 | 3995.1 | 3995.1 | 3980.4 |
| 20°   | 4586.3  | 4487.2 | 4351.3 | 4303.6 | 4255.8 | 4211.8 | 4149.4 | 4072.2 | 4006.2 | 3995.1 | 3980.4 |
| 22.5° | 4777.3  | 4659.8 | 4501.9 | 4432.1 | 4347.6 | 4259.5 | 4153.0 | 4050.2 | 3965.8 | 3947.4 | 3936.4 |
| 25°   | 4990.2  | 4843.4 | 4656.1 | 4553.3 | 4417.4 | 4281.6 | 4123.7 | 3991.5 | 3892.3 | 3862.9 | 3855.6 |
| 27.5° | 5225.3  | 5049.0 | 4821.3 | 4670.8 | 4472.5 | 4259.5 | 4057.6 | 3899.7 | 3778.5 | 3741.8 | 3730.8 |
| 30°   | 5463.9  | 5254.6 | 4971.9 | 4751.6 | 4472.5 | 4189.8 | 3936.4 | 3752.8 | 3613.2 | 3561.8 | 3554.5 |
| 32.5° | 5702.6  | 5467.6 | 5107.8 | 4795.6 | 4428.4 | 4072.2 | 3778.5 | 3561.8 | 3403.9 | 3341.5 | 3356.2 |
| 35°   | 5989.0  | 5702.6 | 5232.6 | 4814.0 | 4355.0 | 3929.0 | 3598.6 | 3345.2 | 3183.6 | 3128.5 | 3139.6 |
| 37.5° | 6286.5  | 5937.6 | 5331.7 | 4799.3 | 4252.2 | 3767.5 | 3396.6 | 3150.6 | 2948.6 | 2853.1 | 2864.2 |
| 40°   | 6543.5  | 6150.6 | 5401.5 | 4747.9 | 4120.0 | 3583.9 | 3198.3 | 2875.2 | 2596.1 | 2504.3 | 2493.3 |
| 42.5° | 6785.9  | 6308.5 | 5438.2 | 4670.8 | 3969.4 | 3370.9 | 2915.6 | 2500.6 | 2221.6 | 2107.7 | 2111.4 |
| 45°   | 7039.2  | 6462.7 | 5423.5 | 4568.0 | 3782.2 | 3121.2 | 2552.0 | 2133.4 | 1887.4 | 1784.6 | 1788.3 |
| 47.5° | 7329.3  | 6628.0 | 5408.9 | 4457.8 | 3554.5 | 2798.1 | 2203.2 | 1810.3 | 1597.3 | 1523.9 | 1516.5 |
| 50°   | 7637.8  | 6811.6 | 5390.5 | 4321.9 | 3301.1 | 2438.2 | 1858.0 | 1509.2 | 1329.3 | 1281.5 | 1270.5 |
| 52.5° | 7986.6  | 7009.8 | 5379.5 | 4160.4 | 2996.4 | 2056.3 | 1549.6 | 1244.8 | 1123.6 | 1090.6 | 1086.9 |
| 55°   | 8405.2  | 7241.2 | 5394.2 | 3965.8 | 2629.2 | 1696.5 | 1288.9 | 1072.2 | 991.4  | 973.1  | 969.4  |
| 57.5° | 8915.6  | 7538.6 | 5438.2 | 3738.1 | 2243.6 | 1384.3 | 1097.9 | 965.7  | 914.3  | 899.6  | 899.6  |
| 60°   | 9470.1  | 7876.4 | 5519.0 | 3481.1 | 1858.0 | 1142.0 | 973.1  | 881.3  | 859.2  | 877.6  | 877.6  |
| 62.5° | 10068.6 | 8273.0 | 5662.2 | 3168.9 | 1498.2 | 965.7  | 873.9  | 811.5  | 796.8  | 833.5  | 837.2  |
| 65°   | 10623.1 | 8658.6 | 5754.0 | 2794.4 | 1189.7 | 837.2  | 796.8  | 741.7  | 749.1  | 785.8  | 782.1  |
| 67.5° | 10964.6 | 8978.0 | 5625.5 | 2324.4 | 943.7  | 741.7  | 716.0  | 668.3  | 686.7  | 716.0  | 719.7  |
| 70°   | 10755.3 | 8798.1 | 4990.2 | 1755.2 | 738.1  | 646.3  | 627.9  | 598.5  | 613.2  | 649.9  | 664.6  |
| 72.5° | 9730.8  | 7880.1 | 3881.3 | 1186.1 | 594.9  | 543.5  | 550.8  | 536.1  | 554.5  | 587.5  | 620.6  |
| 75°   | 7898.5  | 5956.0 | 2603.4 | 760.1  | 470.0  | 462.7  | 473.7  | 462.7  | 470.0  | 503.1  | 521.4  |
| 77.5° | 4123.7  | 2904.6 | 1296.2 | 473.7  | 348.8  | 359.9  | 378.2  | 381.9  | 403.9  | 411.3  | 418.6  |
| 80°   | 1924.1  | 1307.2 | 539.8  | 264.4  | 231.3  | 253.4  | 290.1  | 293.8  | 301.1  | 312.1  | 315.8  |
| 82.5° | 627.9   | 392.9  | 249.7  | 143.2  | 132.2  | 143.2  | 187.3  | 224.0  | 227.7  | 249.7  | 249.7  |
| 85°   | 66.1    | 40.4   | 55.1   | 58.8   | 51.4   | 62.4   | 84.5   | 80.8   | 36.7   | 22.0   | 22.0   |
| 87.5° | 18.4    | 14.7   | 18.4   | 18.4   | 14.7   | 14.7   | 11.0   | 3.7    | 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)