

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: P842248

Luminaire Tested: **ARCH4-290-730-U-T3**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-290-730-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 41023 lumens  
Efficiency: N/A  
Efficacy: 141.6 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7  
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

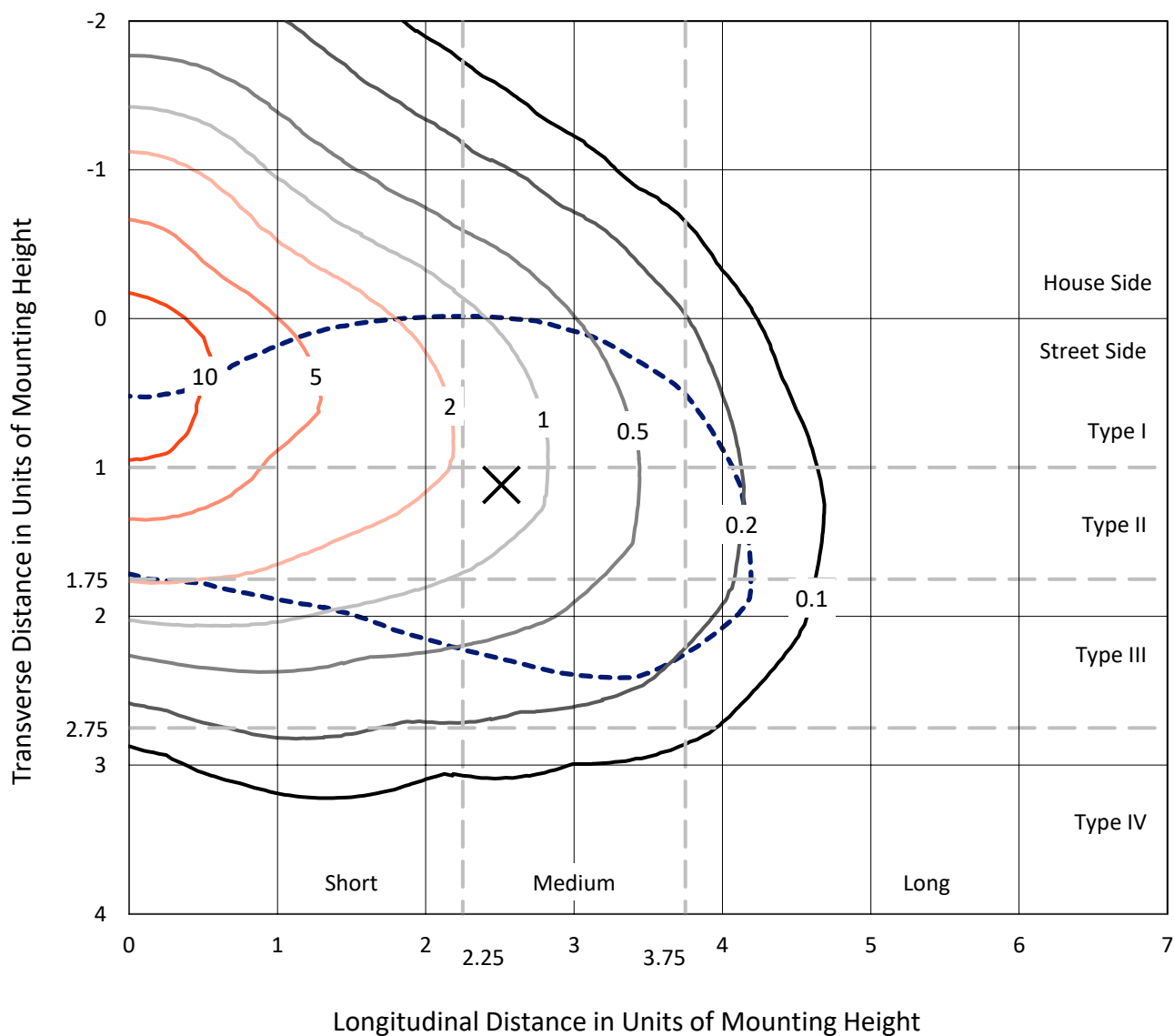


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## Iso-Footcandle Lines of Horizontal Illumination

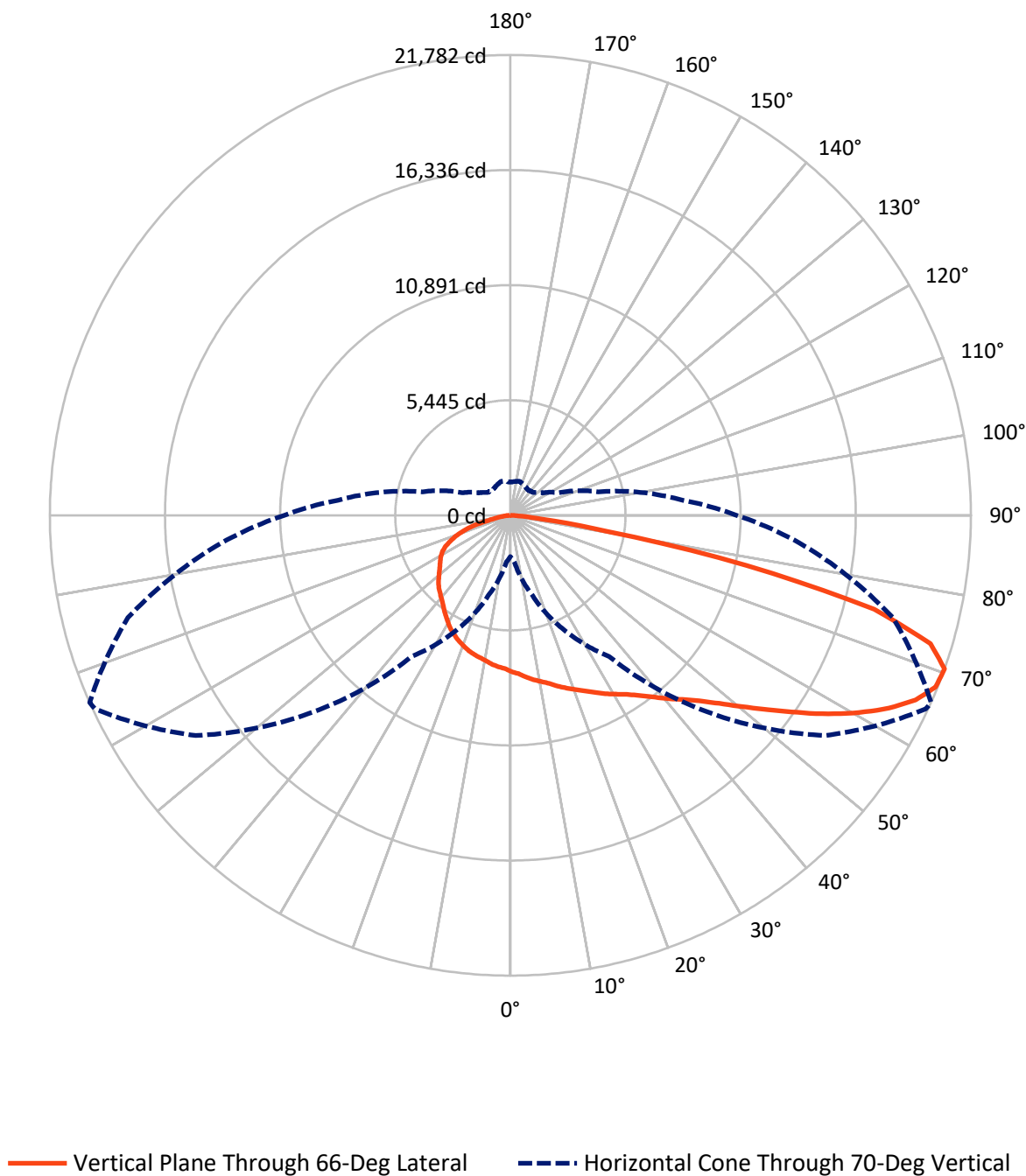
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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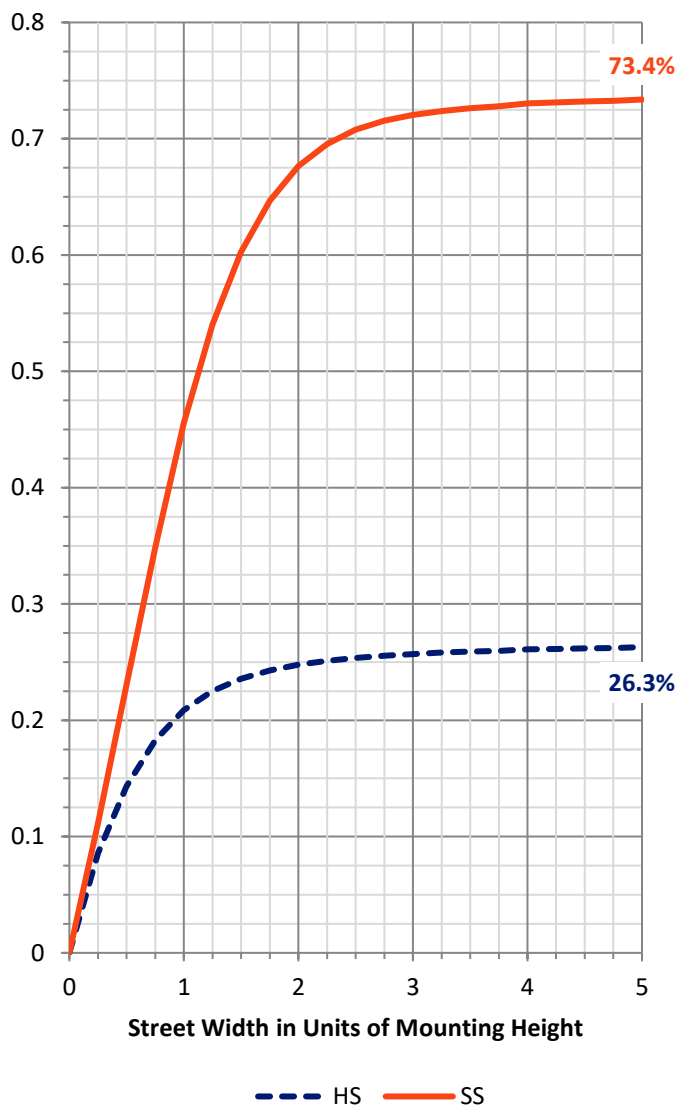
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10870.2  | 0.0    | 10870.2 |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 30152.9  | 0.0    | 30152.9 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 41023.0  | 0.0    | 41023.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 711.4   | 1.7       |
| 10°-20°   | 2134.0  | 5.2       |
| 20°-30°   | 3577.3  | 8.7       |
| 30°-40°   | 5356.4  | 13.1      |
| 40°-50°   | 7161.5  | 17.5      |
| 50°-60°   | 8361.3  | 20.4      |
| 60°-70°   | 8314.0  | 20.3      |
| 70°-80°   | 4922.0  | 12.0      |
| 80°-90°   | 485.1   | 1.2       |
| 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°    | 41023.0 | 100.0     |
| 0°-180°   | 41023.0 | 100.0     |

**Coefficient of Utilization**



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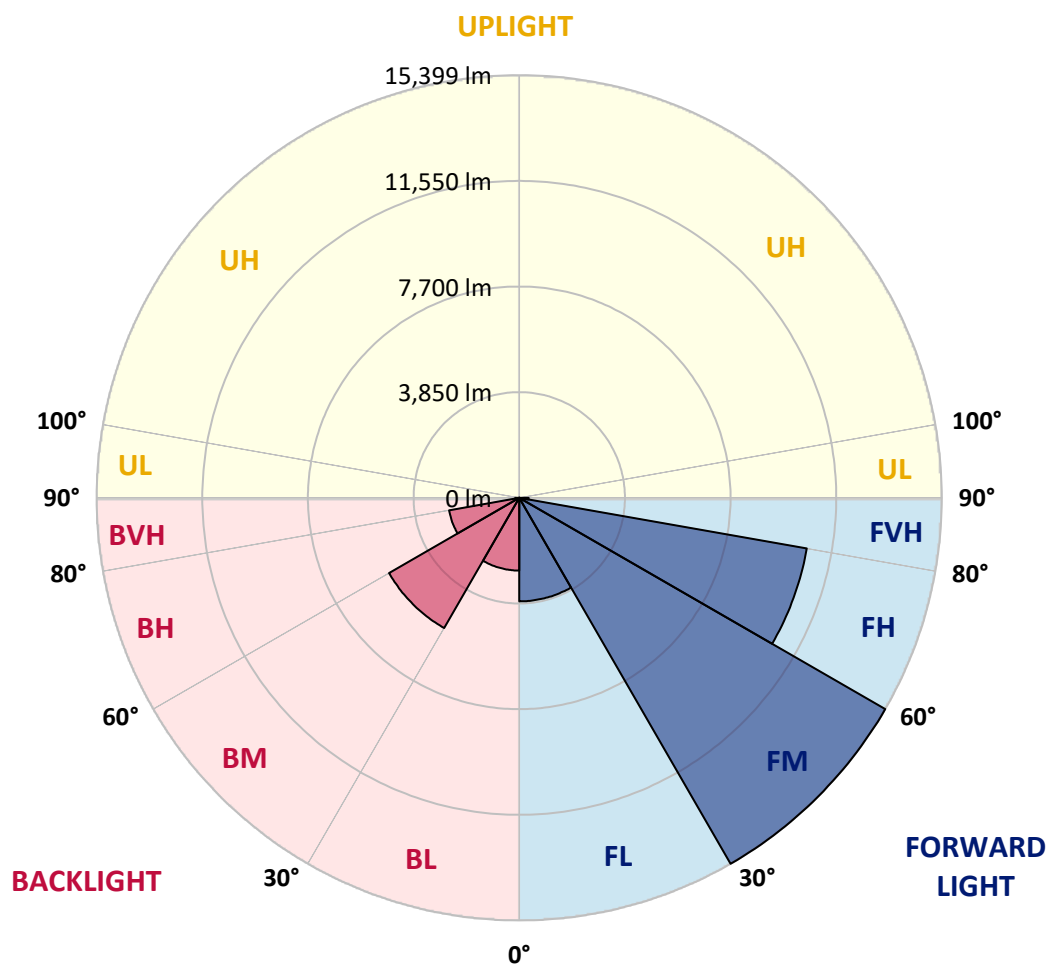
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3773.0  | 9.2       |                         |      |          |
| FM   | (30°-60°)   | 15399.5 | 37.5      |                         |      |          |
| FH   | (60°-80°)   | 10639.4 | 25.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 340.9   | 0.8       |                         |      | G3/500   |
| BL   | (0°-30°)    | 2649.7  | 6.5       | B4/5000                 |      |          |
| BM   | (30°-60°)   | 5479.7  | 13.4      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 2596.6  | 6.3       | B4/5000                 |      | G4/5000  |
| BVH  | (80°-90°)   | 144.2   | 0.4       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B4-U0-G4**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  | 7403.7  |
| 2.5°  | 7675.9  | 7663.8  | 7657.8  | 7633.6  | 7579.1  | 7603.3  | 7548.9  | 7512.6  | 7506.5  | 7421.9  | 7373.5  |
| 5°    | 7990.4  | 7984.4  | 7972.3  | 7936.0  | 7851.3  | 7863.4  | 7772.7  | 7706.2  | 7688.0  | 7554.9  | 7452.1  |
| 7.5°  | 8256.6  | 8244.5  | 8238.5  | 8190.1  | 8099.3  | 8093.3  | 7984.4  | 7887.6  | 7857.4  | 7675.9  | 7518.6  |
| 10°   | 8462.3  | 8444.1  | 8456.2  | 8407.8  | 8311.0  | 8292.9  | 8153.8  | 8026.7  | 7996.5  | 7766.6  | 7548.9  |
| 12.5° | 8637.7  | 8625.6  | 8643.7  | 8601.4  | 8522.7  | 8504.6  | 8365.5  | 8202.2  | 8165.9  | 7899.7  | 7615.4  |
| 15°   | 8831.2  | 8788.9  | 8825.2  | 8807.0  | 8752.6  | 8746.5  | 8619.5  | 8438.1  | 8389.7  | 8069.1  | 7718.3  |
| 17.5° | 8934.1  | 8909.9  | 8952.2  | 8958.3  | 8934.1  | 8976.4  | 8855.4  | 8637.7  | 8595.3  | 8226.4  | 7809.0  |
| 20°   | 9006.6  | 8970.4  | 9018.7  | 9055.0  | 9073.2  | 9157.9  | 9061.1  | 8849.4  | 8801.0  | 8377.6  | 7893.7  |
| 22.5° | 9254.6  | 9176.0  | 9182.1  | 9206.3  | 9218.4  | 9339.3  | 9278.8  | 9073.2  | 9024.8  | 8565.1  | 7996.5  |
| 25°   | 9877.7  | 9720.4  | 9617.6  | 9545.0  | 9460.3  | 9563.1  | 9526.8  | 9327.2  | 9284.9  | 8788.9  | 8123.5  |
| 27.5° | 10845.5 | 10645.9 | 10440.2 | 10228.5 | 9895.8  | 9853.5  | 9793.0  | 9611.5  | 9563.1  | 9012.7  | 8250.5  |
| 30°   | 11946.4 | 11746.7 | 11504.8 | 11166.1 | 10543.0 | 10216.4 | 10077.3 | 9877.7  | 9823.2  | 9212.3  | 8371.5  |
| 32.5° | 13041.2 | 12865.8 | 12623.8 | 12212.5 | 11323.3 | 10658.0 | 10361.6 | 10155.9 | 10101.5 | 9430.1  | 8516.7  |
| 35°   | 13894.1 | 13785.2 | 13627.9 | 13113.8 | 12097.6 | 11178.2 | 10772.9 | 10524.9 | 10464.4 | 9774.8  | 8782.8  |
| 37.5° | 14583.6 | 14505.0 | 14371.9 | 13833.6 | 12660.1 | 11698.4 | 11244.7 | 10960.4 | 10893.9 | 10149.9 | 9067.1  |
| 40°   | 15599.8 | 15394.2 | 15285.3 | 14505.0 | 13150.1 | 12170.2 | 11777.0 | 11480.6 | 11408.0 | 10549.1 | 9297.0  |
| 42.5° | 16464.8 | 16313.6 | 16180.5 | 15103.8 | 13615.8 | 12575.4 | 12279.0 | 12006.8 | 11910.1 | 10942.3 | 9545.0  |
| 45°   | 16610.0 | 16670.5 | 16603.9 | 15400.2 | 14353.8 | 12974.7 | 12787.1 | 12611.7 | 12521.0 | 11474.6 | 9920.0  |
| 47.5° | 16616.0 | 16616.0 | 16222.9 | 15569.6 | 15267.1 | 13422.3 | 13331.5 | 13392.0 | 13295.2 | 12152.0 | 10367.6 |
| 50°   | 16180.5 | 16259.1 | 16053.5 | 15611.9 | 15509.1 | 13869.9 | 13996.9 | 14323.5 | 14226.8 | 12871.8 | 10851.5 |
| 52.5° | 15279.2 | 15539.3 | 15533.3 | 15545.4 | 15158.3 | 14250.9 | 14698.6 | 15442.6 | 15279.2 | 13682.4 | 11365.7 |
| 55°   | 13688.4 | 14208.6 | 14674.4 | 15073.6 | 14855.8 | 14480.8 | 15557.5 | 16634.2 | 16464.8 | 14589.7 | 11885.9 |
| 57.5° | 12327.4 | 12660.1 | 13240.8 | 14371.9 | 14498.9 | 14680.4 | 16362.0 | 17880.2 | 17729.0 | 15593.8 | 12430.3 |
| 60°   | 10772.9 | 11232.6 | 11813.3 | 13422.3 | 14063.4 | 14940.5 | 17245.1 | 19096.0 | 18950.9 | 16610.0 | 12956.5 |
| 62.5° | 8383.6  | 8976.4  | 10137.8 | 11964.5 | 13428.3 | 15103.8 | 17940.7 | 20166.7 | 20100.1 | 17571.7 | 13428.3 |
| 65°   | 5843.1  | 6369.4  | 7996.5  | 10174.1 | 12418.2 | 15031.2 | 18497.2 | 21122.4 | 21061.9 | 18358.1 | 13761.0 |
| 67.5° | 3411.5  | 4022.4  | 5861.3  | 8190.1  | 10633.8 | 14529.2 | 18678.7 | 21684.9 | 21684.9 | 18835.9 | 13851.7 |
| 70°   | 1947.7  | 2232.0  | 3865.2  | 5970.2  | 8153.8  | 13144.0 | 18170.6 | 21678.9 | 21781.7 | 18727.0 | 13476.7 |
| 72.5° | 1361.0  | 1488.0  | 2601.0  | 4016.4  | 5528.6  | 10633.8 | 16839.8 | 20632.4 | 20771.5 | 17698.8 | 12194.4 |
| 75°   | 1058.5  | 1149.3  | 1832.8  | 2740.1  | 3484.1  | 7222.3  | 13930.4 | 17396.3 | 17765.3 | 15085.7 | 9859.5  |
| 77.5° | 804.5   | 871.0   | 1070.6  | 1711.8  | 2232.0  | 4149.5  | 9194.2  | 11408.0 | 11432.2 | 9236.5  | 5286.6  |
| 80°   | 586.7   | 653.3   | 713.8   | 1046.4  | 1185.6  | 1941.7  | 3472.0  | 4766.4  | 4633.4  | 4470.1  | 2861.1  |
| 82.5° | 350.8   | 417.4   | 435.5   | 568.6   | 580.7   | 828.7   | 1215.8  | 1536.4  | 1475.9  | 1965.9  | 1342.8  |
| 85°   | 151.2   | 211.7   | 223.8   | 260.1   | 248.0   | 338.7   | 483.9   | 405.3   | 362.9   | 417.4   | 290.3   |
| 87.5° | 36.3    | 60.5    | 60.5    | 66.5    | 54.4    | 84.7    | 90.7    | 66.5    | 60.5    | 72.6    | 72.6    |
| 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°    | 7403.7  | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 | 7403.7 |
| 2.5°  | 7361.4  | 7343.2 | 7349.3 | 7246.4 | 7216.2 | 7186.0 | 7167.8 | 7155.7 | 7143.6 | 7161.8 | 7179.9 |
| 5°    | 7415.8  | 7373.5 | 7325.1 | 7173.9 | 7113.4 | 7046.8 | 6998.4 | 6956.1 | 6938.0 | 6938.0 | 6956.1 |
| 7.5°  | 7458.2  | 7385.6 | 7282.7 | 7083.1 | 6974.3 | 6883.5 | 6804.9 | 6750.4 | 6720.2 | 6720.2 | 6738.4 |
| 10°   | 7464.2  | 7361.4 | 7198.1 | 6956.1 | 6810.9 | 6677.9 | 6587.1 | 6526.6 | 6484.3 | 6484.3 | 6496.4 |
| 12.5° | 7500.5  | 7361.4 | 7149.7 | 6859.3 | 6677.9 | 6514.5 | 6405.7 | 6314.9 | 6296.8 | 6296.8 | 6308.9 |
| 15°   | 7561.0  | 7391.6 | 7119.4 | 6774.6 | 6556.9 | 6369.4 | 6248.4 | 6151.6 | 6115.3 | 6139.5 | 6145.6 |
| 17.5° | 7615.4  | 7409.8 | 7065.0 | 6665.8 | 6405.7 | 6200.0 | 6066.9 | 5982.3 | 5933.9 | 5988.3 | 5988.3 |
| 20°   | 7651.7  | 7409.8 | 6986.4 | 6526.6 | 6242.3 | 6012.5 | 5885.5 | 5782.6 | 5746.3 | 5812.9 | 5818.9 |
| 22.5° | 7706.2  | 7403.7 | 6901.7 | 6387.5 | 6066.9 | 5825.0 | 5698.0 | 5619.3 | 5601.2 | 5673.8 | 5698.0 |
| 25°   | 7766.6  | 7415.8 | 6810.9 | 6230.3 | 5873.4 | 5637.5 | 5540.7 | 5504.4 | 5516.5 | 5607.2 | 5637.5 |
| 27.5° | 7833.2  | 7440.0 | 6720.2 | 6054.8 | 5661.7 | 5450.0 | 5395.5 | 5413.7 | 5462.1 | 5577.0 | 5613.3 |
| 30°   | 7893.7  | 7446.1 | 6593.2 | 5849.2 | 5419.7 | 5220.1 | 5244.3 | 5322.9 | 5395.5 | 5510.4 | 5552.8 |
| 32.5° | 7972.3  | 7452.1 | 6460.1 | 5625.4 | 5159.6 | 5014.4 | 5123.3 | 5250.3 | 5322.9 | 5431.8 | 5480.2 |
| 35°   | 8165.9  | 7554.9 | 6357.3 | 5407.6 | 4917.7 | 4839.0 | 5020.5 | 5183.8 | 5226.2 | 5322.9 | 5365.3 |
| 37.5° | 8389.7  | 7724.3 | 6302.8 | 5183.8 | 4681.8 | 4663.6 | 4893.5 | 5056.8 | 5068.9 | 5129.4 | 5171.7 |
| 40°   | 8528.8  | 7796.9 | 6242.3 | 4996.3 | 4470.1 | 4482.2 | 4718.1 | 4845.1 | 4820.9 | 4863.2 | 4893.5 |
| 42.5° | 8667.9  | 7821.1 | 6115.3 | 4839.0 | 4270.4 | 4282.5 | 4464.0 | 4554.7 | 4566.8 | 4657.6 | 4699.9 |
| 45°   | 8903.8  | 7887.6 | 5976.2 | 4693.9 | 4089.0 | 4046.6 | 4155.5 | 4276.5 | 4433.8 | 4609.2 | 4657.6 |
| 47.5° | 9218.4  | 8026.7 | 5831.0 | 4518.4 | 3913.6 | 3774.4 | 3816.8 | 4028.5 | 4191.8 | 4355.1 | 4385.4 |
| 50°   | 9538.9  | 8165.9 | 5698.0 | 4306.7 | 3738.2 | 3484.1 | 3502.2 | 3695.8 | 3828.9 | 3955.9 | 3974.1 |
| 52.5° | 9853.5  | 8286.8 | 5583.0 | 4107.1 | 3538.5 | 3139.3 | 3211.9 | 3411.5 | 3502.2 | 3562.7 | 3580.9 |
| 55°   | 10168.0 | 8389.7 | 5480.2 | 3937.8 | 3308.7 | 2867.1 | 2933.7 | 3121.2 | 3211.9 | 3242.2 | 3254.2 |
| 57.5° | 10494.6 | 8510.6 | 5401.6 | 3792.6 | 3048.6 | 2625.2 | 2667.5 | 2800.6 | 2885.3 | 2921.6 | 2909.5 |
| 60°   | 10766.8 | 8613.5 | 5359.2 | 3641.4 | 2788.5 | 2401.4 | 2389.3 | 2510.2 | 2631.2 | 2667.5 | 2655.4 |
| 62.5° | 10978.6 | 8680.0 | 5292.7 | 3447.8 | 2558.6 | 2177.6 | 2117.1 | 2274.3 | 2401.4 | 2425.6 | 2443.7 |
| 65°   | 11093.5 | 8686.1 | 5129.4 | 3199.8 | 2322.7 | 1935.6 | 1893.3 | 2050.5 | 2129.2 | 2153.4 | 2153.4 |
| 67.5° | 11075.3 | 8589.3 | 4808.8 | 2867.1 | 2105.0 | 1717.9 | 1681.6 | 1778.3 | 1893.3 | 1911.4 | 1893.3 |
| 70°   | 10700.3 | 8190.1 | 4294.6 | 2516.3 | 1844.9 | 1524.3 | 1457.8 | 1554.5 | 1663.4 | 1596.9 | 1566.6 |
| 72.5° | 9635.7  | 7155.7 | 3538.5 | 2129.2 | 1554.5 | 1282.3 | 1252.1 | 1348.9 | 1354.9 | 1367.0 | 1336.8 |
| 75°   | 7603.3  | 5329.0 | 2649.4 | 1657.4 | 1258.1 | 1076.7 | 1070.6 | 1052.5 | 1076.7 | 1125.1 | 1088.8 |
| 77.5° | 3992.2  | 2661.5 | 1433.6 | 1016.2 | 913.4  | 865.0  | 822.6  | 816.6  | 889.2  | 919.4  | 883.1  |
| 80°   | 2165.5  | 1494.1 | 822.6  | 610.9  | 556.5  | 562.5  | 617.0  | 604.9  | 683.5  | 701.7  | 671.4  |
| 82.5° | 943.6   | 707.7  | 405.3  | 369.0  | 369.0  | 362.9  | 381.1  | 423.4  | 508.1  | 508.1  | 405.3  |
| 85°   | 205.7   | 175.4  | 157.3  | 181.5  | 205.7  | 205.7  | 205.7  | 205.7  | 145.2  | 78.6   | 54.4   |
| 87.5° | 66.5    | 66.5   | 66.5   | 72.6   | 78.6   | 78.6   | 66.5   | 48.4   | 30.2   | 6.0    | 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)