

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: P836466

Luminaire Tested: **ARCH3-190-727-U-T4W**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-190-727-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1440mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23205 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 189.4  
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



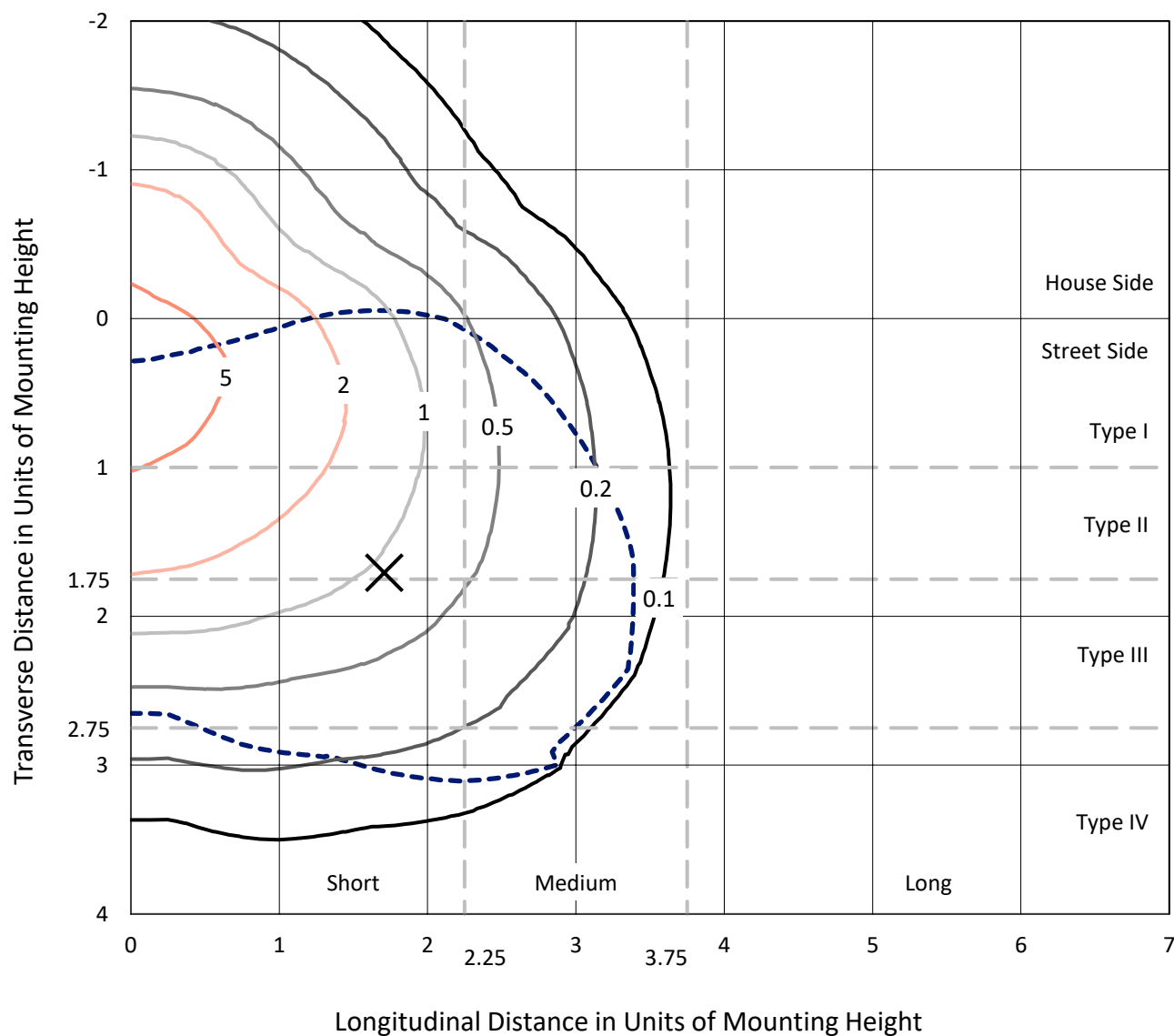
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



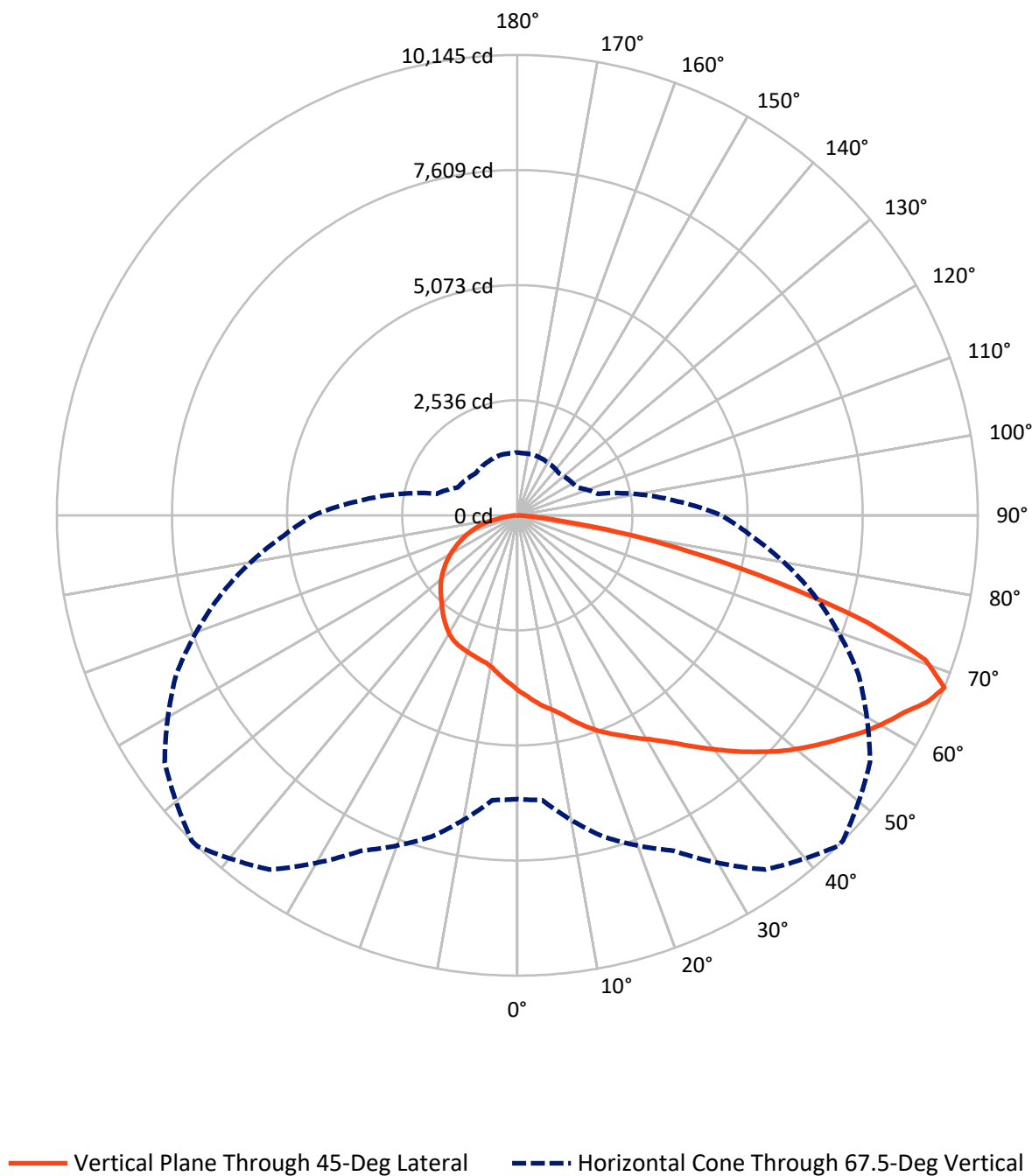
Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type IV - 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    | 6199.2   | 0.0    | 6199.2  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 17005.8  | 0.0    | 17005.8 |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 23205.0  | 0.0    | 23205.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 370.6   | 1.6       |
| 10°-20°   | 1144.7  | 4.9       |
| 20°-30°   | 1975.8  | 8.5       |
| 30°-40°   | 2913.7  | 12.6      |
| 40°-50°   | 3947.4  | 17.0      |
| 50°-60°   | 4824.7  | 20.8      |
| 60°-70°   | 4976.0  | 21.4      |
| 70°-80°   | 2725.5  | 11.7      |
| 80°-90°   | 326.7   | 1.4       |
| 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°    | 23205.0 | 100.0     |
| 0°-180°   | 23205.0 | 100.0     |

**Coefficient of Utilization**



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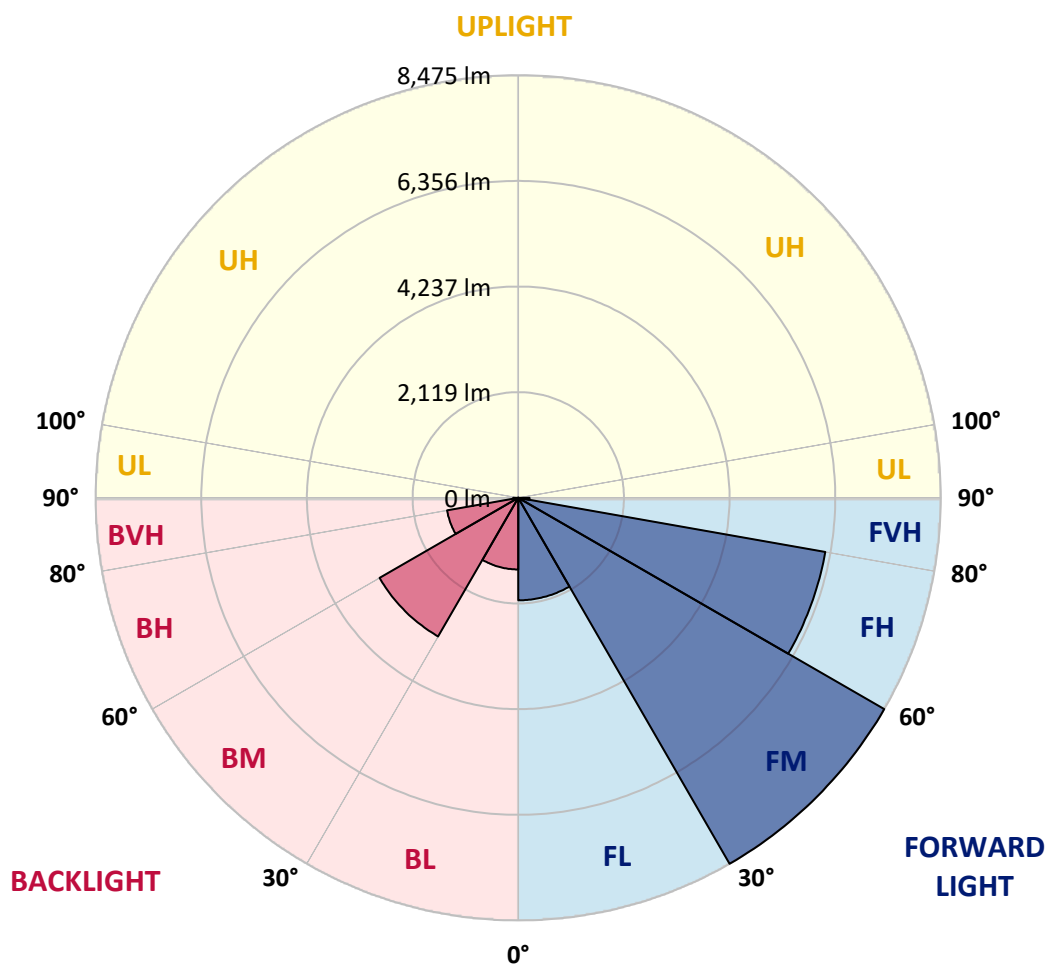
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2054.3 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 8474.7 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 6251.8 | 26.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 225.0  | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1436.8 | 6.2       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3211.1 | 13.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1449.7 | 6.2       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 101.6  | 0.4       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| 0°    | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2  | 3870.2  | 3870.2 | 3870.2 | 3870.2 | 3870.2 |
| 2.5°  | 4039.6 | 4036.1 | 4043.2 | 4018.5 | 3986.7 | 3983.2  | 3983.2  | 3962.0 | 3937.2 | 3887.8 | 3849.0 |
| 5°    | 4230.3 | 4223.3 | 4226.8 | 4191.5 | 4149.1 | 4127.9  | 4124.4  | 4078.5 | 4022.0 | 3944.3 | 3873.7 |
| 7.5°  | 4406.9 | 4399.8 | 4396.3 | 4357.5 | 4293.9 | 4258.6  | 4255.1  | 4188.0 | 4120.9 | 4000.8 | 3898.4 |
| 10°   | 4572.9 | 4565.8 | 4558.7 | 4505.8 | 4428.1 | 4375.1  | 4368.0  | 4283.3 | 4198.6 | 4050.2 | 3919.6 |
| 12.5° | 4784.7 | 4770.6 | 4763.5 | 4700.0 | 4587.0 | 4530.5  | 4519.9  | 4406.9 | 4301.0 | 4120.9 | 3962.0 |
| 15°   | 5007.2 | 4996.6 | 4986.0 | 4926.0 | 4798.8 | 4724.7  | 4707.0  | 4565.8 | 4421.0 | 4212.7 | 4025.5 |
| 17.5° | 5173.2 | 5162.6 | 5162.6 | 5109.6 | 4993.1 | 4908.3  | 4894.2  | 4724.7 | 4544.6 | 4297.4 | 4075.0 |
| 20°   | 5275.6 | 5265.0 | 5275.6 | 5243.8 | 5155.5 | 5084.9  | 5070.7  | 4883.6 | 4668.2 | 4375.1 | 4117.3 |
| 22.5° | 5349.7 | 5339.1 | 5356.8 | 5342.6 | 5279.1 | 5236.7  | 5226.1  | 5042.5 | 4795.3 | 4456.3 | 4159.7 |
| 25°   | 5480.4 | 5480.4 | 5480.4 | 5455.6 | 5395.6 | 5381.5  | 5381.5  | 5222.6 | 4957.8 | 4562.3 | 4223.3 |
| 27.5° | 5741.7 | 5727.5 | 5709.9 | 5639.3 | 5536.9 | 5533.3  | 5554.5  | 5406.2 | 5144.9 | 4700.0 | 4301.0 |
| 30°   | 6126.6 | 6119.5 | 6052.4 | 5904.1 | 5731.1 | 5713.4  | 5727.5  | 5604.0 | 5346.2 | 4844.8 | 4389.2 |
| 32.5° | 6624.5 | 6599.7 | 6462.0 | 6239.6 | 5992.4 | 5911.2  | 5939.4  | 5808.8 | 5558.0 | 4993.1 | 4474.0 |
| 35°   | 6977.6 | 6984.6 | 6885.8 | 6684.5 | 6391.4 | 6176.0  | 6197.2  | 6038.3 | 5787.6 | 5159.0 | 4579.9 |
| 37.5° | 7383.7 | 7408.4 | 7260.1 | 7108.2 | 6836.3 | 6469.1  | 6490.3  | 6274.9 | 6017.1 | 5367.4 | 4692.9 |
| 40°   | 7945.1 | 7895.7 | 7645.0 | 7464.9 | 7164.7 | 6776.3  | 6794.0  | 6539.7 | 6281.9 | 5565.1 | 4823.6 |
| 42.5° | 8414.8 | 8326.5 | 8022.8 | 7793.3 | 7433.1 | 7101.2  | 7118.8  | 6825.7 | 6550.3 | 5784.0 | 4968.3 |
| 45°   | 9089.2 | 8845.6 | 8407.7 | 8294.7 | 7708.5 | 7419.0  | 7436.6  | 7129.4 | 6832.8 | 6017.1 | 5123.7 |
| 47.5° | 9481.2 | 9092.7 | 8813.8 | 8753.8 | 8012.2 | 7747.4  | 7768.6  | 7450.8 | 7136.5 | 6281.9 | 5286.1 |
| 50°   | 9456.5 | 9205.7 | 9124.5 | 8976.2 | 8280.6 | 8054.6  | 8075.8  | 7782.7 | 7443.7 | 6543.2 | 5441.5 |
| 52.5° | 9294.0 | 9339.9 | 9297.6 | 9050.4 | 8548.9 | 8351.2  | 8375.9  | 8111.1 | 7758.0 | 6786.9 | 5586.3 |
| 55°   | 9544.7 | 9576.5 | 9495.3 | 9170.4 | 8845.6 | 8647.8  | 8676.1  | 8457.1 | 8068.7 | 7002.3 | 5709.9 |
| 57.5° | 9844.9 | 9731.9 | 9650.7 | 9382.3 | 9152.8 | 8969.2  | 9000.9  | 8810.2 | 8337.1 | 7175.3 | 5805.2 |
| 60°   | 9830.8 | 9594.2 | 9675.4 | 9396.4 | 9361.1 | 9265.8  | 9294.0  | 9099.8 | 8541.9 | 7302.4 | 5844.1 |
| 62.5° | 9106.9 | 8979.7 | 9389.4 | 9294.0 | 9530.6 | 9530.6  | 9565.9  | 9276.4 | 8665.5 | 7355.4 | 5822.9 |
| 65°   | 7849.8 | 7856.8 | 8577.2 | 8972.7 | 9731.9 | 9894.3  | 9922.6  | 9385.8 | 8594.8 | 7200.0 | 5625.1 |
| 67.5° | 6253.7 | 6299.6 | 7334.2 | 8157.0 | 9530.6 | 10141.5 | 10145.0 | 9484.7 | 8291.2 | 6762.2 | 5166.1 |
| 70°   | 4576.4 | 4611.7 | 5833.5 | 6832.8 | 8580.7 | 9594.2  | 9537.7  | 9205.7 | 7630.8 | 5999.4 | 4449.3 |
| 72.5° | 3093.3 | 3125.1 | 4382.2 | 5247.3 | 7041.1 | 8171.1  | 8047.5  | 8135.8 | 6504.4 | 4929.5 | 3577.1 |
| 75°   | 2079.9 | 2118.7 | 3118.0 | 3753.6 | 5180.2 | 6204.3  | 5928.8  | 6161.9 | 5031.9 | 3732.4 | 2609.5 |
| 77.5° | 1310.1 | 1334.8 | 1981.0 | 2461.2 | 3538.2 | 4223.3  | 3947.8  | 3951.4 | 2899.1 | 2009.2 | 1401.9 |
| 80°   | 833.4  | 840.4  | 1200.6 | 1419.5 | 2048.1 | 2538.9  | 2245.8  | 1825.6 | 1306.5 | 1066.4 | 836.9  |
| 82.5° | 483.8  | 473.2  | 716.8  | 801.6  | 974.6  | 964.0   | 798.0   | 755.7  | 572.0  | 533.2  | 427.3  |
| 85°   | 194.2  | 180.1  | 314.3  | 293.1  | 296.6  | 314.3   | 233.1   | 233.1  | 187.2  | 144.8  | 105.9  |
| 87.5° | 38.8   | 38.8   | 42.4   | 38.8   | 38.8   | 42.4    | 31.8    | 31.8   | 28.2   | 28.2   | 28.2   |
| 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°    | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 | 3870.2 |
| 2.5°  | 3841.9 | 3834.8 | 3817.2 | 3771.3 | 3746.6 | 3732.4 | 3711.3 | 3704.2 | 3700.7 | 3704.2 | 3714.8 |
| 5°    | 3852.5 | 3827.8 | 3778.3 | 3704.2 | 3654.8 | 3623.0 | 3587.7 | 3573.5 | 3562.9 | 3562.9 | 3573.5 |
| 7.5°  | 3859.6 | 3820.7 | 3736.0 | 3626.5 | 3555.9 | 3506.4 | 3464.1 | 3446.4 | 3442.9 | 3453.5 | 3457.0 |
| 10°   | 3863.1 | 3806.6 | 3686.5 | 3548.8 | 3457.0 | 3393.4 | 3351.1 | 3340.5 | 3351.1 | 3372.3 | 3375.8 |
| 12.5° | 3887.8 | 3810.1 | 3658.3 | 3495.9 | 3386.4 | 3322.8 | 3291.0 | 3291.0 | 3319.3 | 3358.1 | 3361.7 |
| 15°   | 3930.2 | 3834.8 | 3644.2 | 3453.5 | 3340.5 | 3284.0 | 3273.4 | 3291.0 | 3333.4 | 3393.4 | 3400.5 |
| 17.5° | 3962.0 | 3849.0 | 3612.4 | 3397.0 | 3280.4 | 3245.1 | 3262.8 | 3305.2 | 3365.2 | 3446.4 | 3453.5 |
| 20°   | 3983.2 | 3849.0 | 3566.5 | 3329.9 | 3220.4 | 3213.4 | 3262.8 | 3329.9 | 3393.4 | 3488.8 | 3499.4 |
| 22.5° | 4004.3 | 3841.9 | 3513.5 | 3248.7 | 3153.3 | 3174.5 | 3266.3 | 3351.1 | 3414.6 | 3517.0 | 3534.7 |
| 25°   | 4043.2 | 3852.5 | 3460.5 | 3167.5 | 3082.7 | 3142.7 | 3262.8 | 3365.2 | 3432.3 | 3538.2 | 3566.5 |
| 27.5° | 4096.1 | 3877.2 | 3421.7 | 3093.3 | 3012.1 | 3093.3 | 3238.1 | 3361.7 | 3432.3 | 3534.7 | 3566.5 |
| 30°   | 4152.6 | 3905.5 | 3375.8 | 3012.1 | 2930.9 | 3022.7 | 3185.1 | 3322.8 | 3404.0 | 3499.4 | 3538.2 |
| 32.5° | 4212.7 | 3937.2 | 3336.9 | 2923.8 | 2832.0 | 2927.3 | 3107.4 | 3262.8 | 3351.1 | 3439.4 | 3481.7 |
| 35°   | 4293.9 | 3993.7 | 3315.8 | 2853.2 | 2743.7 | 2828.5 | 3008.6 | 3185.1 | 3280.4 | 3361.7 | 3411.1 |
| 37.5° | 4392.8 | 4064.4 | 3305.2 | 2782.6 | 2648.4 | 2719.0 | 2902.6 | 3089.8 | 3192.2 | 3259.3 | 3305.2 |
| 40°   | 4505.8 | 4152.6 | 3301.6 | 2715.5 | 2553.0 | 2606.0 | 2793.1 | 2980.3 | 3079.2 | 3132.1 | 3171.0 |
| 42.5° | 4632.9 | 4251.5 | 3294.6 | 2648.4 | 2457.7 | 2500.1 | 2687.2 | 2870.8 | 2955.6 | 3001.5 | 3036.8 |
| 45°   | 4767.1 | 4350.4 | 3280.4 | 2567.2 | 2355.3 | 2404.7 | 2577.7 | 2740.2 | 2828.5 | 2867.3 | 2906.1 |
| 47.5° | 4901.3 | 4449.3 | 3252.2 | 2475.3 | 2263.5 | 2309.4 | 2461.2 | 2602.5 | 2673.1 | 2708.4 | 2747.2 |
| 50°   | 5031.9 | 4537.5 | 3185.1 | 2369.4 | 2168.1 | 2210.5 | 2327.0 | 2422.4 | 2475.3 | 2503.6 | 2542.4 |
| 52.5° | 5148.4 | 4597.6 | 3089.8 | 2245.8 | 2072.8 | 2094.0 | 2171.7 | 2252.9 | 2295.3 | 2298.8 | 2334.1 |
| 55°   | 5247.3 | 4629.4 | 2952.1 | 2118.7 | 1970.4 | 1973.9 | 2016.3 | 2079.9 | 2097.5 | 2083.4 | 2108.1 |
| 57.5° | 5303.8 | 4611.7 | 2800.2 | 1988.0 | 1864.5 | 1850.3 | 1882.1 | 1913.9 | 1917.4 | 1882.1 | 1906.8 |
| 60°   | 5317.9 | 4530.5 | 2602.5 | 1857.4 | 1758.5 | 1719.7 | 1730.3 | 1723.2 | 1716.1 | 1702.0 | 1723.2 |
| 62.5° | 5247.3 | 4357.5 | 2383.5 | 1730.3 | 1645.5 | 1585.5 | 1582.0 | 1578.4 | 1589.0 | 1592.6 | 1596.1 |
| 65°   | 4989.5 | 4032.6 | 2122.2 | 1599.6 | 1525.5 | 1444.2 | 1440.7 | 1483.1 | 1497.2 | 1476.0 | 1483.1 |
| 67.5° | 4491.6 | 3534.7 | 1836.2 | 1447.8 | 1373.6 | 1303.0 | 1331.2 | 1356.0 | 1380.7 | 1373.6 | 1380.7 |
| 70°   | 3785.4 | 2902.6 | 1574.9 | 1278.3 | 1207.7 | 1168.8 | 1200.6 | 1221.8 | 1225.3 | 1218.3 | 1225.3 |
| 72.5° | 2976.8 | 2267.0 | 1331.2 | 1105.3 | 1041.7 | 1024.0 | 1062.9 | 1080.5 | 1112.3 | 1126.4 | 1130.0 |
| 75°   | 2150.5 | 1673.8 | 1091.1 | 918.1  | 865.1  | 865.1  | 900.4  | 932.2  | 960.5  | 942.8  | 932.2  |
| 77.5° | 1200.6 | 999.3  | 783.9  | 632.1  | 642.7  | 692.1  | 706.2  | 741.5  | 769.8  | 766.3  | 759.2  |
| 80°   | 727.4  | 625.0  | 529.7  | 409.6  | 406.1  | 444.9  | 536.7  | 596.8  | 610.9  | 579.1  | 575.6  |
| 82.5° | 377.8  | 328.4  | 282.5  | 229.5  | 254.2  | 296.6  | 310.7  | 374.3  | 413.1  | 399.0  | 416.7  |
| 85°   | 95.3   | 91.8   | 102.4  | 105.9  | 130.7  | 144.8  | 158.9  | 187.2  | 123.6  | 60.0   | 60.0   |
| 87.5° | 28.2   | 28.2   | 35.3   | 35.3   | 45.9   | 56.5   | 53.0   | 53.0   | 28.2   | 3.5    | 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)