

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: P836356

Luminaire Tested: **ARCH3-170-750-U-T3**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836356  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-170-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 24277 lumens  
Efficiency: N/A  
Efficacy: 142.3 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 170.6  
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

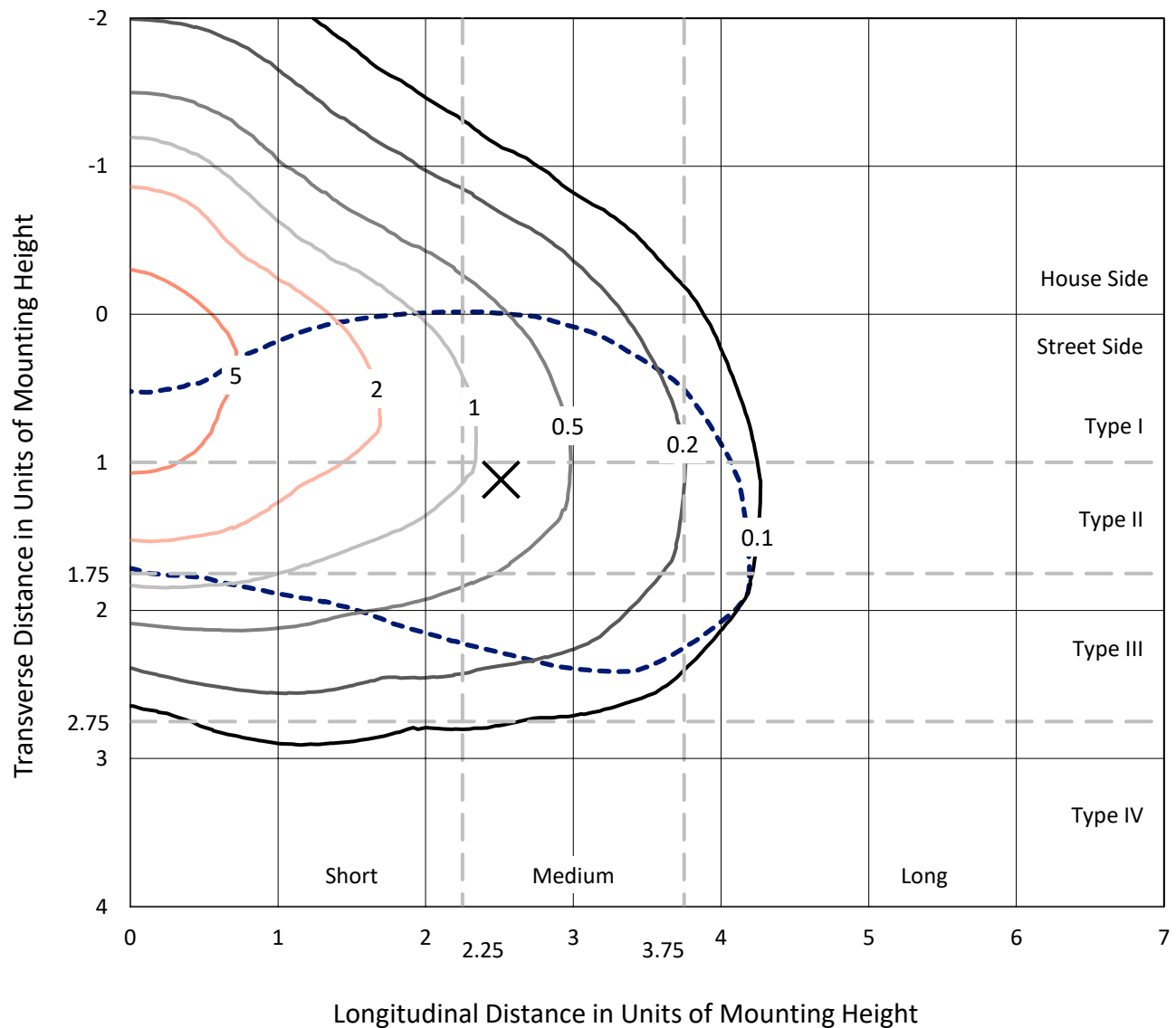


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## Iso-Footcandle Lines of Horizontal Illumination

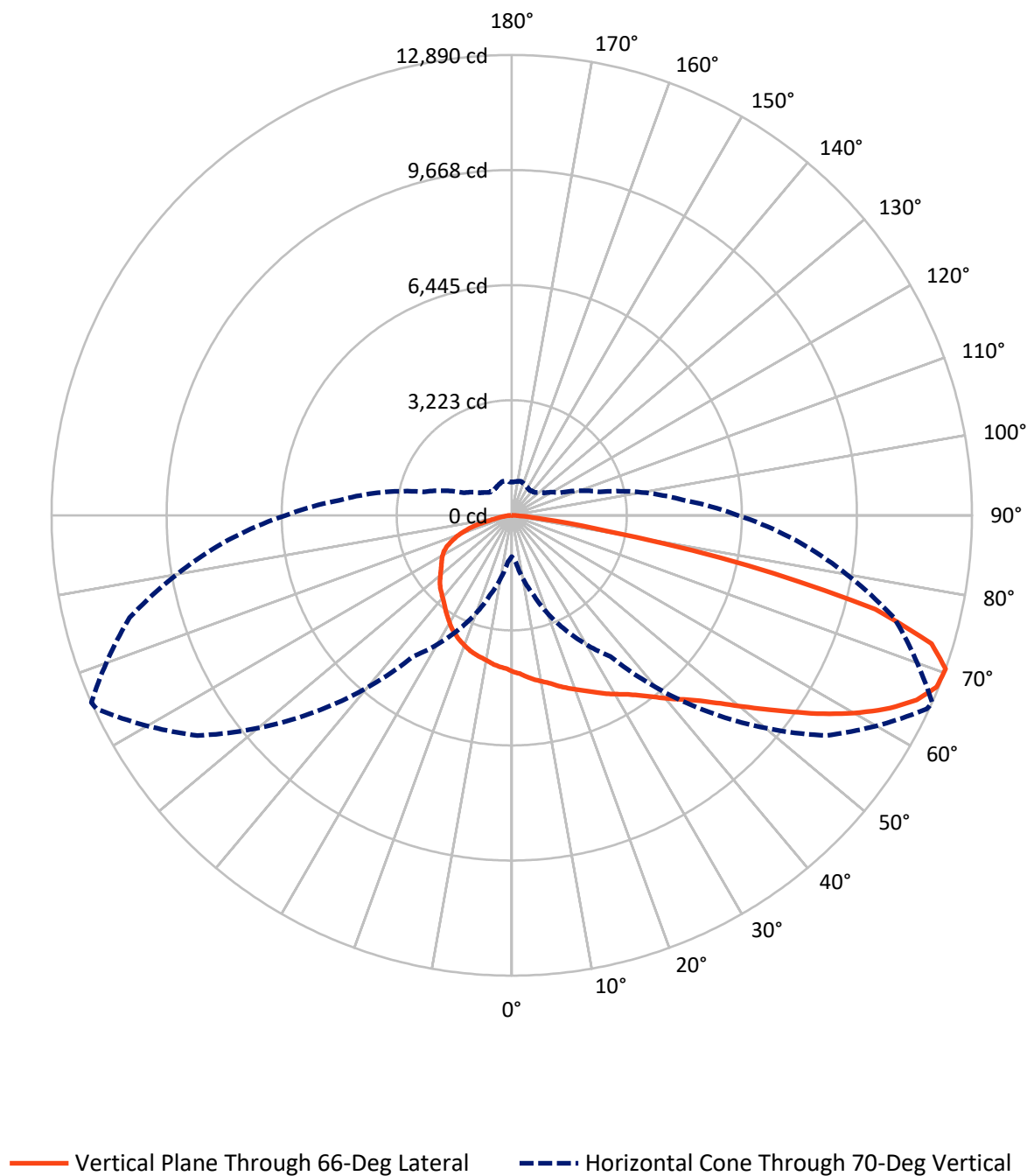
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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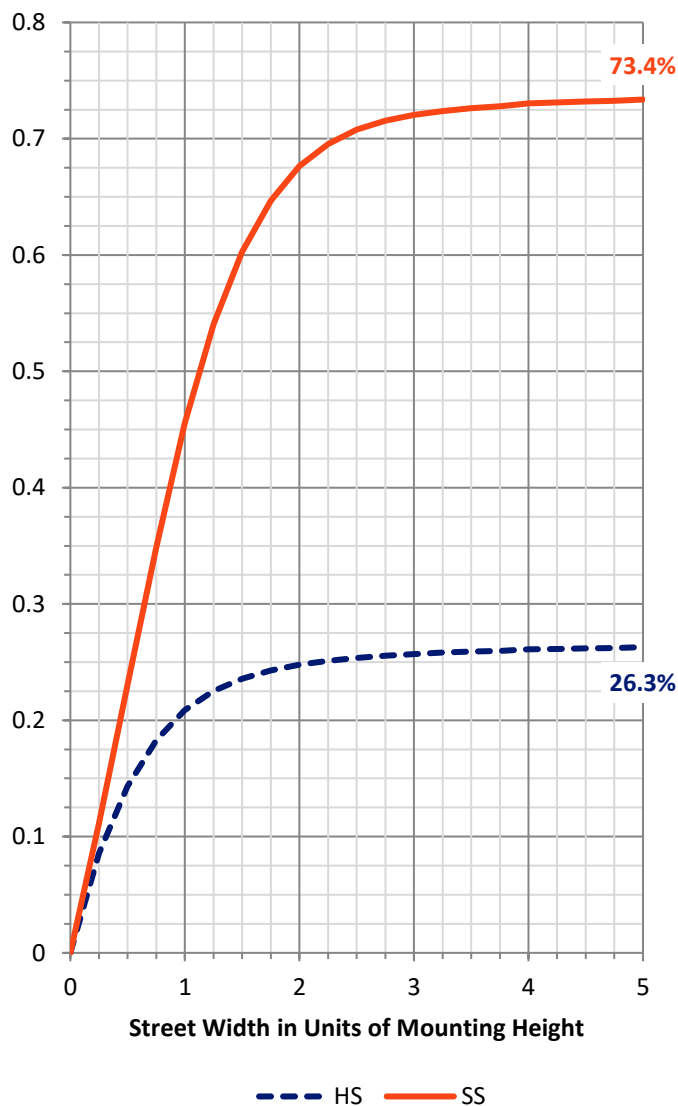
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6432.9   | 0.0    | 6432.9  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 17844.1  | 0.0    | 17844.1 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 24277.0  | 0.0    | 24277.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 421.0   | 1.7       |
| 10°-20°   | 1262.9  | 5.2       |
| 20°-30°   | 2117.0  | 8.7       |
| 30°-40°   | 3169.9  | 13.1      |
| 40°-50°   | 4238.1  | 17.5      |
| 50°-60°   | 4948.1  | 20.4      |
| 60°-70°   | 4920.1  | 20.3      |
| 70°-80°   | 2912.8  | 12.0      |
| 80°-90°   | 287.1   | 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°    | 24277.0 | 100.0     |
| 0°-180°   | 24277.0 | 100.0     |

**Coefficient of Utilization**



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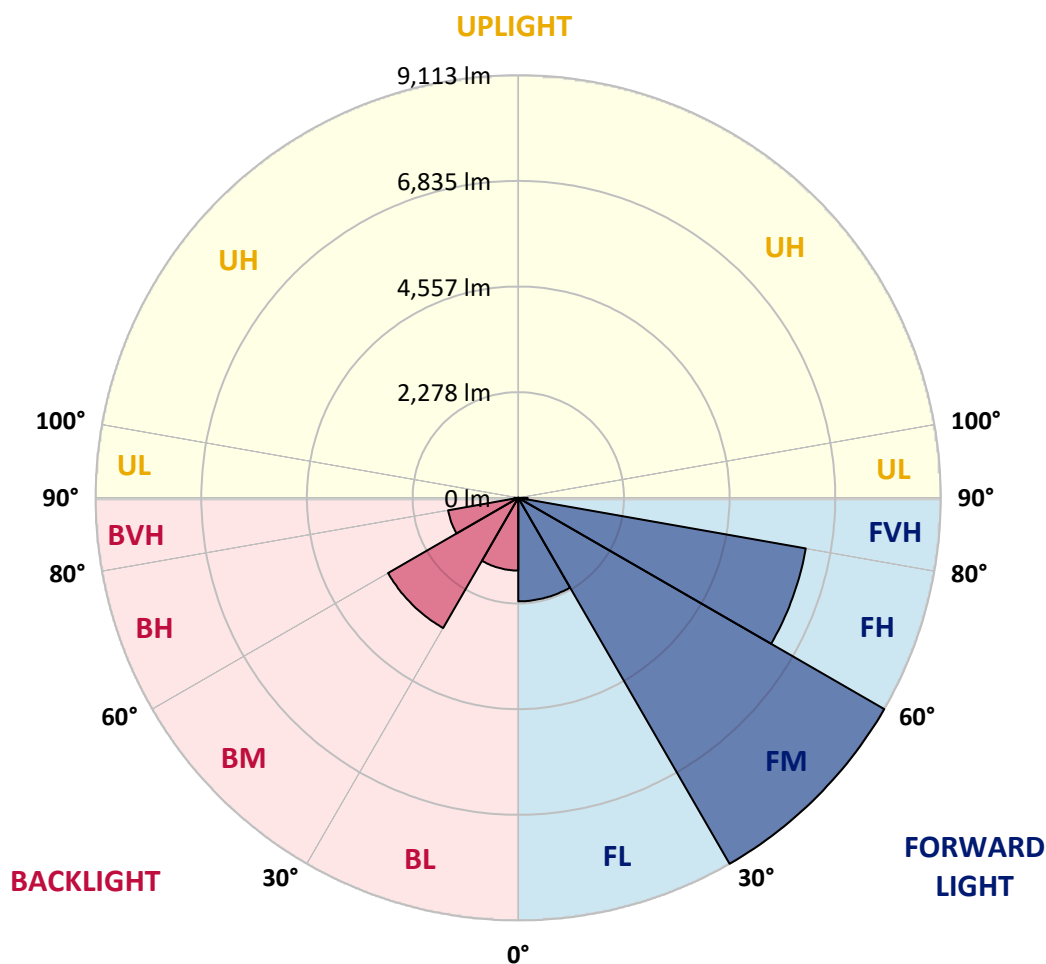
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2232.8 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 9113.3 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 6296.3 | 25.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 201.8  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1568.1 | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3242.8 | 13.4      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1536.6 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 85.3   | 0.4       |                         |      | 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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4  | 4381.4  | 4381.4  | 4381.4  | 4381.4 |
| 2.5°  | 4542.5 | 4535.4 | 4531.8 | 4517.5 | 4485.3 | 4499.6 | 4467.4  | 4445.9  | 4442.3  | 4392.2  | 4363.5 |
| 5°    | 4728.7 | 4725.1 | 4717.9 | 4696.5 | 4646.3 | 4653.5 | 4599.8  | 4560.4  | 4549.7  | 4470.9  | 4410.1 |
| 7.5°  | 4886.2 | 4879.0 | 4875.4 | 4846.8 | 4793.1 | 4789.5 | 4725.1  | 4667.8  | 4649.9  | 4542.5  | 4449.5 |
| 10°   | 5007.9 | 4997.1 | 5004.3 | 4975.7 | 4918.4 | 4907.6 | 4825.3  | 4750.1  | 4732.2  | 4596.2  | 4467.4 |
| 12.5° | 5111.7 | 5104.5 | 5115.3 | 5090.2 | 5043.7 | 5032.9 | 4950.6  | 4854.0  | 4832.5  | 4675.0  | 4506.7 |
| 15°   | 5226.2 | 5201.2 | 5222.7 | 5211.9 | 5179.7 | 5176.1 | 5100.9  | 4993.6  | 4964.9  | 4775.2  | 4567.6 |
| 17.5° | 5287.1 | 5272.8 | 5297.8 | 5301.4 | 5287.1 | 5312.1 | 5240.6  | 5111.7  | 5086.6  | 4868.3  | 4621.3 |
| 20°   | 5330.0 | 5308.6 | 5337.2 | 5358.7 | 5369.4 | 5419.5 | 5362.3  | 5237.0  | 5208.3  | 4957.8  | 4671.4 |
| 22.5° | 5476.8 | 5430.3 | 5433.9 | 5448.2 | 5455.3 | 5526.9 | 5491.1  | 5369.4  | 5340.8  | 5068.7  | 4732.2 |
| 25°   | 5845.5 | 5752.4 | 5691.6 | 5648.6 | 5598.5 | 5659.4 | 5637.9  | 5519.8  | 5494.7  | 5201.2  | 4807.4 |
| 27.5° | 6418.2 | 6300.1 | 6178.4 | 6053.1 | 5856.2 | 5831.2 | 5795.4  | 5688.0  | 5659.4  | 5333.6  | 4882.6 |
| 30°   | 7069.7 | 6951.6 | 6808.4 | 6608.0 | 6239.3 | 6046.0 | 5963.6  | 5845.5  | 5813.3  | 5451.7  | 4954.2 |
| 32.5° | 7717.6 | 7613.8 | 7470.7 | 7227.2 | 6701.0 | 6307.3 | 6131.9  | 6010.2  | 5978.0  | 5580.6  | 5040.1 |
| 35°   | 8222.4 | 8157.9 | 8064.9 | 7760.6 | 7159.2 | 6615.1 | 6375.3  | 6228.5  | 6192.7  | 5784.7  | 5197.6 |
| 37.5° | 8630.4 | 8583.9 | 8505.2 | 8186.6 | 7492.1 | 6923.0 | 6654.5  | 6486.3  | 6446.9  | 6006.6  | 5365.8 |
| 40°   | 9231.8 | 9110.1 | 9045.7 | 8583.9 | 7782.1 | 7202.2 | 6969.5  | 6794.1  | 6751.1  | 6242.8  | 5501.9 |
| 42.5° | 9743.7 | 9654.2 | 9575.5 | 8938.3 | 8057.7 | 7442.0 | 7266.6  | 7105.5  | 7048.3  | 6475.5  | 5648.6 |
| 45°   | 9829.6 | 9865.4 | 9826.0 | 9113.7 | 8494.4 | 7678.3 | 7567.3  | 7463.5  | 7409.8  | 6790.5  | 5870.6 |
| 47.5° | 9833.2 | 9833.2 | 9600.5 | 9213.9 | 9034.9 | 7943.2 | 7889.5  | 7925.3  | 7868.0  | 7191.4  | 6135.5 |
| 50°   | 9575.5 | 9622.0 | 9500.3 | 9239.0 | 9178.1 | 8208.1 | 8283.2  | 8476.5  | 8419.2  | 7617.4  | 6421.8 |
| 52.5° | 9042.1 | 9196.0 | 9192.4 | 9199.6 | 8970.5 | 8433.6 | 8698.5  | 9138.8  | 9042.1  | 8097.1  | 6726.1 |
| 55°   | 8100.7 | 8408.5 | 8684.1 | 8920.4 | 8791.5 | 8569.6 | 9206.8  | 9843.9  | 9743.7  | 8634.0  | 7033.9 |
| 57.5° | 7295.3 | 7492.1 | 7835.8 | 8505.2 | 8580.3 | 8687.7 | 9682.9  | 10581.3 | 10491.8 | 9228.2  | 7356.1 |
| 60°   | 6375.3 | 6647.3 | 6991.0 | 7943.2 | 8322.6 | 8841.6 | 10205.5 | 11300.8 | 11214.9 | 9829.6  | 7667.5 |
| 62.5° | 4961.3 | 5312.1 | 5999.4 | 7080.5 | 7946.7 | 8938.3 | 10617.1 | 11934.4 | 11895.1 | 10398.8 | 7946.7 |
| 65°   | 3457.9 | 3769.3 | 4732.2 | 6020.9 | 7348.9 | 8895.3 | 10946.5 | 12500.0 | 12464.2 | 10864.1 | 8143.6 |
| 67.5° | 2018.9 | 2380.4 | 3468.6 | 4846.8 | 6293.0 | 8598.2 | 11053.8 | 12832.9 | 12832.9 | 11146.9 | 8197.3 |
| 70°   | 1152.6 | 1320.9 | 2287.4 | 3533.1 | 4825.3 | 7778.5 | 10753.2 | 12829.3 | 12890.2 | 11082.5 | 7975.4 |
| 72.5° | 805.4  | 880.6  | 1539.2 | 2376.9 | 3271.8 | 6293.0 | 9965.6  | 12210.1 | 12292.4 | 10473.9 | 7216.5 |
| 75°   | 626.4  | 680.1  | 1084.6 | 1621.6 | 2061.9 | 4274.1 | 8243.8  | 10295.0 | 10513.3 | 8927.6  | 5834.8 |
| 77.5° | 476.1  | 515.5  | 633.6  | 1013.0 | 1320.9 | 2455.6 | 5441.0  | 6751.1  | 6765.5  | 5466.1  | 3128.6 |
| 80°   | 347.2  | 386.6  | 422.4  | 619.3  | 701.6  | 1149.1 | 2054.7  | 2820.7  | 2742.0  | 2645.3  | 1693.2 |
| 82.5° | 207.6  | 247.0  | 257.7  | 336.5  | 343.6  | 490.4  | 719.5   | 909.2   | 873.4   | 1163.4  | 794.7  |
| 85°   | 89.5   | 125.3  | 132.4  | 153.9  | 146.8  | 200.5  | 286.4   | 239.8   | 214.8   | 247.0   | 171.8  |
| 87.5° | 21.5   | 35.8   | 35.8   | 39.4   | 32.2   | 50.1   | 53.7    | 39.4    | 35.8    | 43.0    | 43.0   |
| 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°    | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 | 4381.4 |
| 2.5°  | 4356.4 | 4345.6 | 4349.2 | 4288.4 | 4270.5 | 4252.6 | 4241.8 | 4234.7 | 4227.5 | 4238.3 | 4249.0 |
| 5°    | 4388.6 | 4363.5 | 4334.9 | 4245.4 | 4209.6 | 4170.2 | 4141.6 | 4116.6 | 4105.8 | 4105.8 | 4116.6 |
| 7.5°  | 4413.7 | 4370.7 | 4309.9 | 4191.7 | 4127.3 | 4073.6 | 4027.1 | 3994.8 | 3976.9 | 3976.9 | 3987.7 |
| 10°   | 4417.2 | 4356.4 | 4259.7 | 4116.6 | 4030.6 | 3951.9 | 3898.2 | 3862.4 | 3837.3 | 3837.3 | 3844.5 |
| 12.5° | 4438.7 | 4356.4 | 4231.1 | 4059.3 | 3951.9 | 3855.2 | 3790.8 | 3737.1 | 3726.4 | 3726.4 | 3733.5 |
| 15°   | 4474.5 | 4374.3 | 4213.2 | 4009.2 | 3880.3 | 3769.3 | 3697.7 | 3640.5 | 3619.0 | 3633.3 | 3636.9 |
| 17.5° | 4506.7 | 4385.0 | 4181.0 | 3944.7 | 3790.8 | 3669.1 | 3590.4 | 3540.2 | 3511.6 | 3543.8 | 3543.8 |
| 20°   | 4528.2 | 4385.0 | 4134.5 | 3862.4 | 3694.2 | 3558.1 | 3483.0 | 3422.1 | 3400.6 | 3440.0 | 3443.6 |
| 22.5° | 4560.4 | 4381.4 | 4084.3 | 3780.1 | 3590.4 | 3447.2 | 3372.0 | 3325.5 | 3314.7 | 3357.7 | 3372.0 |
| 25°   | 4596.2 | 4388.6 | 4030.6 | 3687.0 | 3475.8 | 3336.2 | 3278.9 | 3257.4 | 3264.6 | 3318.3 | 3336.2 |
| 27.5° | 4635.6 | 4402.9 | 3976.9 | 3583.2 | 3350.5 | 3225.2 | 3193.0 | 3203.8 | 3232.4 | 3300.4 | 3321.9 |
| 30°   | 4671.4 | 4406.5 | 3901.8 | 3461.5 | 3207.3 | 3089.2 | 3103.5 | 3150.1 | 3193.0 | 3261.0 | 3286.1 |
| 32.5° | 4717.9 | 4410.1 | 3823.0 | 3329.0 | 3053.4 | 2967.5 | 3031.9 | 3107.1 | 3150.1 | 3214.5 | 3243.1 |
| 35°   | 4832.5 | 4470.9 | 3762.2 | 3200.2 | 2910.2 | 2863.7 | 2971.1 | 3067.7 | 3092.8 | 3150.1 | 3175.1 |
| 37.5° | 4964.9 | 4571.2 | 3730.0 | 3067.7 | 2770.6 | 2759.9 | 2895.9 | 2992.6 | 2999.7 | 3035.5 | 3060.6 |
| 40°   | 5047.3 | 4614.1 | 3694.2 | 2956.8 | 2645.3 | 2652.5 | 2792.1 | 2867.3 | 2853.0 | 2878.0 | 2895.9 |
| 42.5° | 5129.6 | 4628.4 | 3619.0 | 2863.7 | 2527.2 | 2534.4 | 2641.8 | 2695.4 | 2702.6 | 2756.3 | 2781.4 |
| 45°   | 5269.2 | 4667.8 | 3536.7 | 2777.8 | 2419.8 | 2394.8 | 2459.2 | 2530.8 | 2623.9 | 2727.7 | 2756.3 |
| 47.5° | 5455.3 | 4750.1 | 3450.7 | 2674.0 | 2316.0 | 2233.7 | 2258.7 | 2384.0 | 2480.7 | 2577.3 | 2595.2 |
| 50°   | 5645.0 | 4832.5 | 3372.0 | 2548.7 | 2212.2 | 2061.9 | 2072.6 | 2187.1 | 2265.9 | 2341.1 | 2351.8 |
| 52.5° | 5831.2 | 4904.1 | 3304.0 | 2430.6 | 2094.1 | 1857.8 | 1900.8 | 2018.9 | 2072.6 | 2108.4 | 2119.1 |
| 55°   | 6017.3 | 4964.9 | 3243.1 | 2330.3 | 1958.0 | 1696.7 | 1736.1 | 1847.1 | 1900.8 | 1918.7 | 1925.8 |
| 57.5° | 6210.6 | 5036.5 | 3196.6 | 2244.4 | 1804.1 | 1553.6 | 1578.6 | 1657.4 | 1707.5 | 1729.0 | 1721.8 |
| 60°   | 6371.7 | 5097.4 | 3171.5 | 2154.9 | 1650.2 | 1421.1 | 1413.9 | 1485.5 | 1557.1 | 1578.6 | 1571.4 |
| 62.5° | 6497.0 | 5136.7 | 3132.2 | 2040.4 | 1514.2 | 1288.7 | 1252.9 | 1345.9 | 1421.1 | 1435.4 | 1446.2 |
| 65°   | 6565.0 | 5140.3 | 3035.5 | 1893.6 | 1374.6 | 1145.5 | 1120.4 | 1213.5 | 1260.0 | 1274.3 | 1274.3 |
| 67.5° | 6554.3 | 5083.0 | 2845.8 | 1696.7 | 1245.7 | 1016.6 | 995.1  | 1052.4 | 1120.4 | 1131.2 | 1120.4 |
| 70°   | 6332.3 | 4846.8 | 2541.5 | 1489.1 | 1091.8 | 902.1  | 862.7  | 920.0  | 984.4  | 945.0  | 927.1  |
| 72.5° | 5702.3 | 4234.7 | 2094.1 | 1260.0 | 920.0  | 758.9  | 741.0  | 798.3  | 801.8  | 809.0  | 791.1  |
| 75°   | 4499.6 | 3153.6 | 1567.9 | 980.8  | 744.6  | 637.2  | 633.6  | 622.9  | 637.2  | 665.8  | 644.3  |
| 77.5° | 2362.5 | 1575.0 | 848.4  | 601.4  | 540.5  | 511.9  | 486.8  | 483.2  | 526.2  | 544.1  | 522.6  |
| 80°   | 1281.5 | 884.2  | 486.8  | 361.5  | 329.3  | 332.9  | 365.1  | 358.0  | 404.5  | 415.2  | 397.3  |
| 82.5° | 558.4  | 418.8  | 239.8  | 218.4  | 218.4  | 214.8  | 225.5  | 250.6  | 300.7  | 300.7  | 239.8  |
| 85°   | 121.7  | 103.8  | 93.1   | 107.4  | 121.7  | 121.7  | 121.7  | 121.7  | 85.9   | 46.5   | 32.2   |
| 87.5° | 39.4   | 39.4   | 39.4   | 43.0   | 46.5   | 46.5   | 39.4   | 28.6   | 17.9   | 3.6    | 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)