Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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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: P841629

Luminaire Tested: **ARCH4-200-750-U-T4W**

Issue Date: 5/27/2024

Report Generated By 670246001

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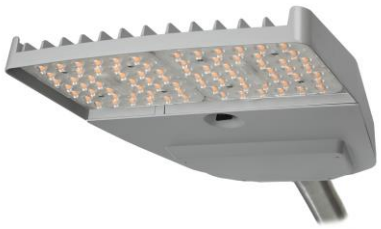
**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P841629 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 5/27/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | STREETWORKS |
| Catalog Number: | ARCH4-200-750-U-T4W |
| Description: | ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE |
| | (2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS |
| Light Source: | - |
| Ballast/Driver: | - |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 32063 lumens |
| Efficiency: | N/A |
| Efficacy: | 157.4 lumens/watt |
| Luminous Opening: | Rectangular (W 1.17' x L: 0.58' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B3 - U0 - G4 |

| | |
|---|---|
| Input Watts (W): | 203.7 |
| 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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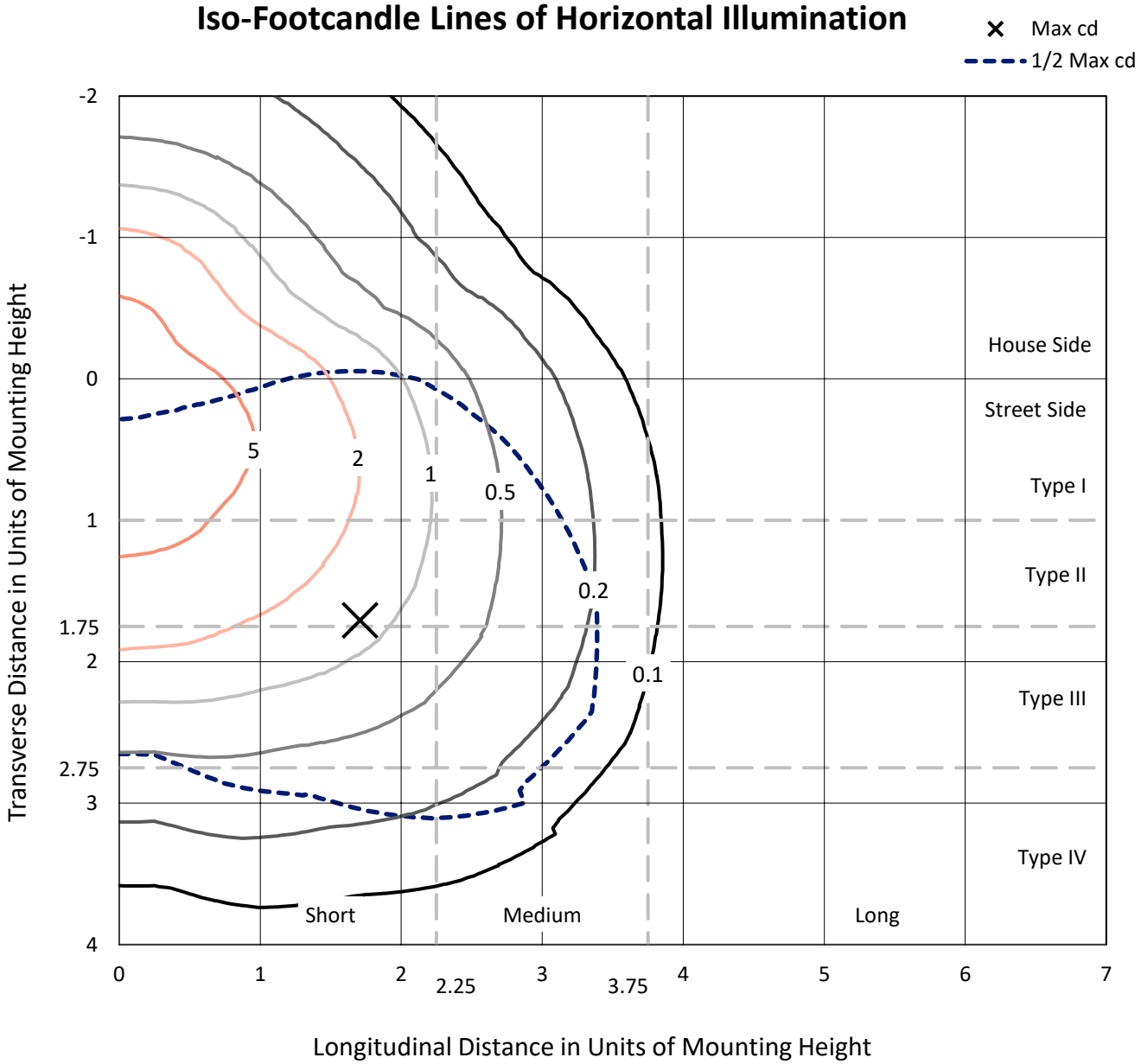
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 9.9 fc
Type IV - Short - N/A

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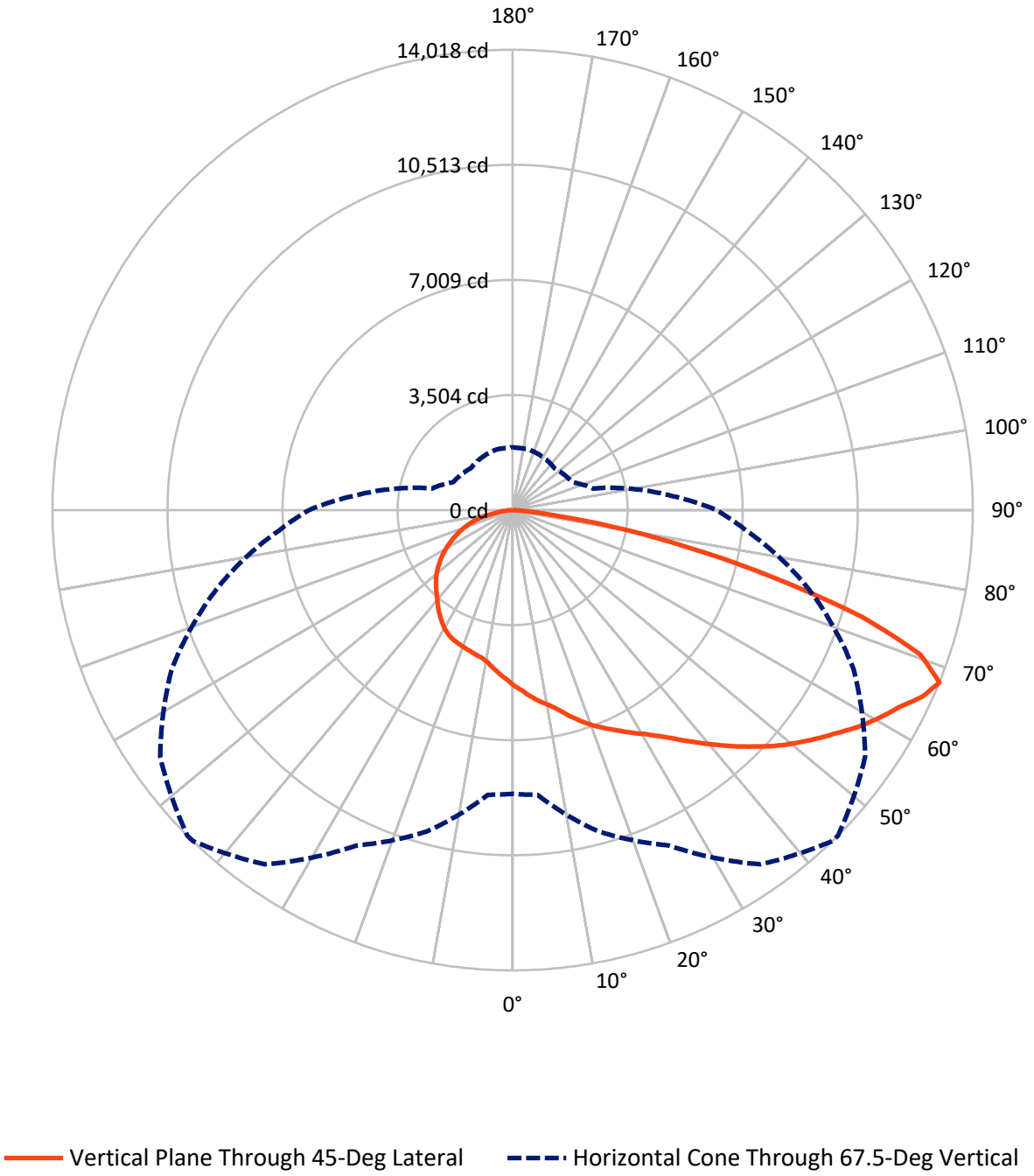
## Luminous Intensity Polar Plot



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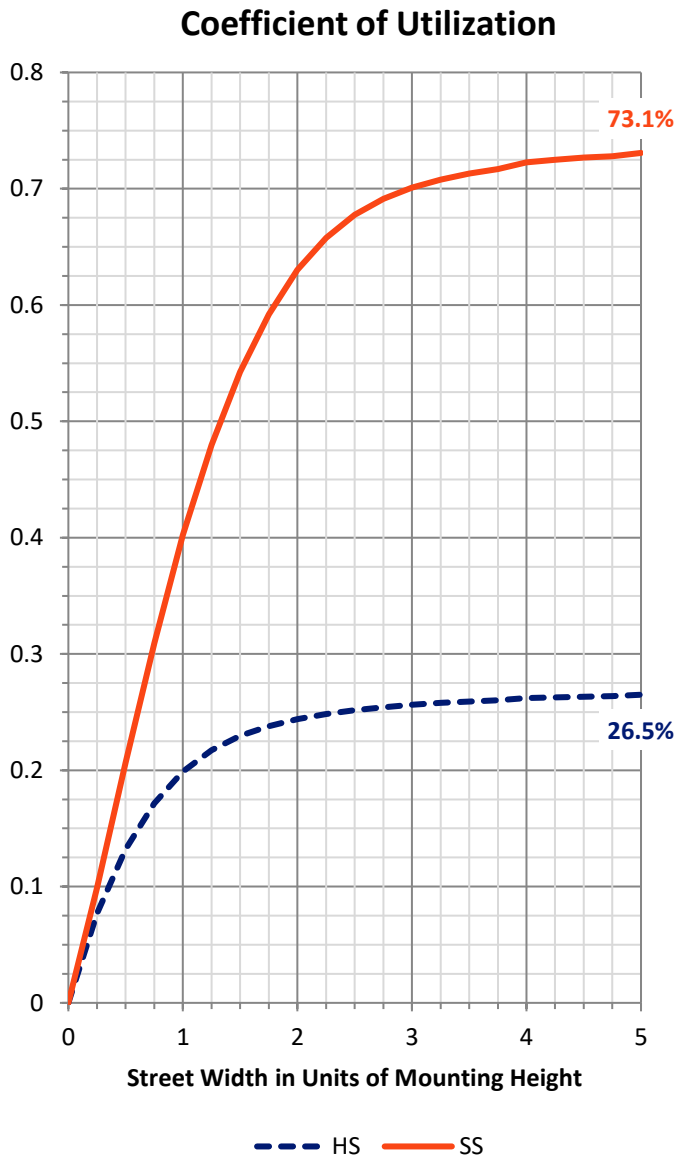
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 8565.7 | 0.0 | 8565.7 |
| | % Fixture | 26.7 | 0.0 | 26.7 |
| **Street Side** | Lumens | 23497.3 | 0.0 | 23497.3 |
| | % Fixture | 73.3 | 0.0 | 73.3 |
| **Total** | Lumens | 32063.0 | 0.0 | 32063.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 512.0 | 1.6 |
| 10°-20° | 1581.6 | 4.9 |
| 20°-30° | 2730.1 | 8.5 |
| 30°-40° | 4025.9 | 12.6 |
| 40°-50° | 5454.3 | 17.0 |
| 50°-60° | 6666.4 | 20.8 |
| 60°-70° | 6875.5 | 21.4 |
| 70°-80° | 3765.9 | 11.7 |
| 80°-90° | 451.4 | 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° | 32063.0 | 100.0 |
| 0°-180° | 32063.0 | 100.0 |



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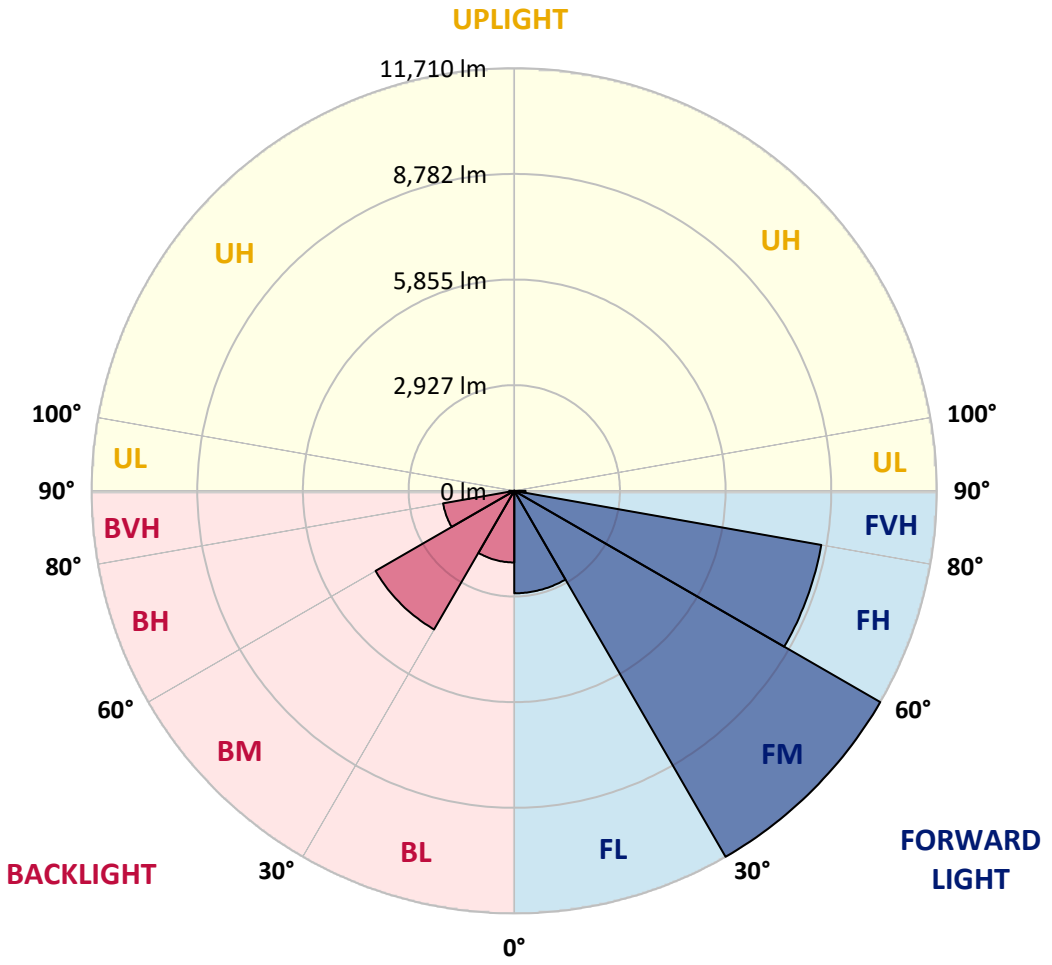
**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2838.4 | 8.9 | | | |
| FM | (30°-60°) | 11709.7 | 36.5 | | | |
| FH | (60°-80°) | 8638.2 | 26.9 | | | G4/12000 |
| FVH | (80°-90°) | 310.9 | 1.0 | | | G3/500 |
| BL | (0°-30°) | 1985.2 | 6.2 | B3/2500 | | |
| BM | (30°-60°) | 4436.9 | 13.8 | B3/5000 | | |
| BH | (60°-80°) | 2003.1 | 6.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 140.4 | 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-G4**
Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | *5347.5* | 5347.5 | 5347.5 | 5347.5 | 5347.5 |
| 2.5° | 5581.7 | 5576.8 | 5586.6 | 5552.4 | 5508.5 | 5503.6 | *5503.6* | 5474.4 | 5440.2 | 5371.9 | 5318.2 |
| 5° | 5845.2 | 5835.4 | 5840.3 | 5791.5 | 5732.9 | 5703.7 | *5698.8* | 5635.4 | 5557.3 | 5450.0 | 5352.4 |
| 7.5° | 6089.1 | 6079.4 | 6074.5 | 6020.8 | 5933.0 | 5884.2 | *5879.3* | 5786.6 | 5693.9 | 5528.0 | 5386.5 |
| 10° | 6318.4 | 6308.7 | 6298.9 | 6225.7 | 6118.4 | 6045.2 | *6035.5* | 5918.4 | 5801.3 | 5596.3 | 5415.8 |
| 12.5° | 6611.2 | 6591.7 | 6581.9 | 6494.1 | 6338.0 | 6259.9 | *6245.3* | 6089.1 | 5942.8 | 5693.9 | 5474.4 |
| 15° | 6918.6 | 6903.9 | 6889.3 | 6806.4 | 6630.7 | 6528.2 | *6503.8* | 6308.7 | 6108.6 | 5820.8 | 5562.2 |
| 17.5° | 7147.9 | 7133.3 | 7133.3 | 7060.1 | 6899.1 | 6782.0 | *6762.4* | 6528.2 | 6279.4 | 5937.9 | 5630.5 |
| 20° | 7289.4 | 7274.7 | 7289.4 | 7245.5 | 7123.5 | 7025.9 | *7006.4* | 6747.8 | 6450.2 | 6045.2 | 5689.0 |
| 22.5° | 7391.8 | 7377.2 | 7401.6 | 7382.1 | 7294.3 | 7235.7 | *7221.1* | 6967.4 | 6625.8 | 6157.4 | 5747.6 |
| 25° | 7572.4 | 7572.4 | 7572.4 | 7538.2 | 7455.3 | 7435.8 | *7435.8* | 7216.2 | 6850.3 | 6303.8 | 5835.4 |
| 27.5° | 7933.4 | 7913.9 | 7889.5 | 7791.9 | 7650.4 | 7645.6 | *7674.8* | 7469.9 | 7108.9 | 6494.1 | 5942.8 |
| 30° | 8465.2 | 8455.5 | 8362.8 | 8157.9 | 7918.8 | 7894.4 | *7913.9* | 7743.1 | 7387.0 | 6694.1 | 6064.7 |
| 32.5° | 9153.2 | 9119.0 | 8928.8 | 8621.4 | 8279.8 | 8167.6 | *8206.7* | 8026.1 | 7679.7 | 6899.1 | 6181.8 |
| 35° | 9641.1 | 9650.9 | 9514.3 | 9236.1 | 8831.2 | 8533.6 | *8562.8* | 8343.3 | 7996.9 | 7128.4 | 6328.2 |
| 37.5° | 10202.2 | 10236.4 | 10031.4 | 9821.6 | 9445.9 | 8938.5 | *8967.8* | 8670.2 | 8314.0 | 7416.2 | 6484.3 |
| 40° | 10978.0 | 10909.7 | 10563.3 | 10314.4 | 9899.7 | 9363.0 | *9387.4* | 9036.1 | 8679.9 | 7689.5 | 6664.9 |
| 42.5° | 11626.9 | 11504.9 | 11085.3 | 10768.2 | 10270.5 | 9811.9 | *9836.3* | 9431.3 | 9050.7 | 7992.0 | 6864.9 |
| 45° | 12558.8 | 12222.2 | 11617.2 | 11461.0 | 10651.1 | 10251.0 | *10275.4* | 9850.9 | 9441.1 | 8314.0 | 7079.6 |
| 47.5° | 13100.4 | 12563.7 | 12178.2 | 12095.3 | 11070.7 | 10704.8 | *10734.0* | 10294.9 | 9860.7 | 8679.9 | 7304.0 |
| 50° | 13066.2 | 12719.8 | 12607.6 | 12402.7 | 11441.5 | 11129.2 | *11158.5* | 10753.5 | 10285.2 | 9041.0 | 7518.7 |
| 52.5° | 12841.8 | 12905.2 | 12846.7 | 12505.1 | 11812.3 | 11539.1 | *11573.2* | 11207.3 | 10719.4 | 9377.6 | 7718.7 |
| 55° | 13188.2 | 13232.1 | 13119.9 | 12671.0 | 12222.2 | 11948.9 | *11988.0* | 11685.5 | 11148.8 | 9675.3 | 7889.5 |
| 57.5° | 13602.9 | 13446.8 | 13334.6 | 12963.8 | 12646.6 | 12392.9 | *12436.8* | 12173.4 | 11519.6 | 9914.3 | 8021.3 |
| 60° | 13583.4 | 13256.5 | 13368.8 | 12983.3 | 12934.5 | 12802.8 | *12841.8* | 12573.5 | 11802.6 | 10090.0 | 8074.9 |
| 62.5° | 12583.2 | 12407.6 | 12973.5 | 12841.8 | 13168.7 | 13168.7 | *13217.5* | 12817.4 | 11973.3 | 10163.2 | 8045.6 |
| 65° | 10846.3 | 10856.0 | 11851.3 | 12397.8 | 13446.8 | 13671.3 | *13710.3* | 12968.7 | 11875.7 | 9948.5 | 7772.4 |
| 67.5° | *8640.9* | *8704.3* | *10133.9* | *11270.7* | *13168.7* | *14012.8* | *14017.7* | *13105.3* | *11456.1* | *9343.5* | *7138.1* |
| 70° | 6323.3 | 6372.1 | 8060.3 | 9441.1 | 11856.2 | 13256.5 | *13178.5* | 12719.8 | 10543.7 | 8289.6 | 6147.7 |
| 72.5° | 4274.1 | 4318.0 | 6055.0 | 7250.4 | 9728.9 | 11290.3 | *11119.5* | 11241.5 | 8987.3 | 6811.2 | 4942.5 |
| 75° | 2873.8 | 2927.5 | 4308.3 | 5186.5 | 7157.6 | 8572.6 | *8192.0* | 8514.0 | 6952.7 | 5157.2 | 3605.7 |
| 77.5° | 1810.1 | 1844.3 | 2737.2 | 3400.7 | 4888.9 | 5835.4 | *5454.8* | 5459.7 | 4005.7 | 2776.2 | 1937.0 |
| 80° | 1151.5 | 1161.2 | 1658.9 | 1961.4 | 2829.9 | 3508.1 | *3103.1* | 2522.5 | 1805.3 | 1473.5 | 1156.3 |
| 82.5° | 668.4 | 653.8 | 990.5 | 1107.6 | 1346.6 | 1332.0 | *1102.7* | 1044.1 | 790.4 | 736.7 | 590.4 |
| 85° | 268.4 | 248.8 | 434.2 | 405.0 | 409.8 | 434.2 | *322.0* | 322.0 | 258.6 | 200.0 | 146.4 |
| 87.5° | 53.7 | 53.7 | 58.5 | 53.7 | 53.7 | 58.5 | *43.9* | 43.9 | 39.0 | 39.0 | 39.0 |
| 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° | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 | 5347.5 |
| 2.5° | 5308.5 | 5298.7 | 5274.3 | 5210.9 | 5176.7 | 5157.2 | 5127.9 | 5118.2 | 5113.3 | 5118.2 | 5132.8 |
| 5° | 5323.1 | 5289.0 | 5220.6 | 5118.2 | 5049.9 | 5006.0 | 4957.2 | 4937.7 | 4923.0 | 4923.0 | 4937.7 |
| 7.5° | 5332.9 | 5279.2 | 5162.1 | 5010.8 | 4913.3 | 4845.0 | 4786.4 | 4762.0 | 4757.1 | 4771.8 | 4776.6 |
| 10° | 5337.7 | 5259.7 | 5093.8 | 4903.5 | 4776.6 | 4688.8 | 4630.3 | 4615.6 | 4630.3 | 4659.5 | 4664.4 |
| 12.5° | 5371.9 | 5264.6 | 5054.8 | 4830.3 | 4679.1 | 4591.2 | 4547.3 | 4547.3 | 4586.4 | 4640.0 | 4644.9 |
| 15° | 5430.4 | 5298.7 | 5035.2 | 4771.8 | 4615.6 | 4537.6 | 4522.9 | 4547.3 | 4605.9 | 4688.8 | 4698.6 |
| 17.5° | 5474.4 | 5318.2 | 4991.3 | 4693.7 | 4532.7 | 4483.9 | 4508.3 | 4566.8 | 4649.8 | 4762.0 | 4771.8 |
| 20° | 5503.6 | 5318.2 | 4927.9 | 4601.0 | 4449.7 | 4440.0 | 4508.3 | 4601.0 | 4688.8 | 4820.6 | 4835.2 |
| 22.5° | 5532.9 | 5308.5 | 4854.7 | 4488.8 | 4357.0 | 4386.3 | 4513.2 | 4630.3 | 4718.1 | 4859.6 | 4884.0 |
| 25° | 5586.6 | 5323.1 | 4781.5 | 4376.6 | 4259.5 | 4342.4 | 4508.3 | 4649.8 | 4742.5 | 4888.9 | 4927.9 |
| 27.5° | 5659.8 | 5357.3 | 4727.9 | 4274.1 | 4161.9 | 4274.1 | 4474.1 | 4644.9 | 4742.5 | 4884.0 | 4927.9 |
| 30° | 5737.8 | 5396.3 | 4664.4 | 4161.9 | 4049.7 | 4176.5 | 4401.0 | 4591.2 | 4703.5 | 4835.2 | 4888.9 |
| 32.5° | 5820.8 | 5440.2 | 4610.8 | 4039.9 | 3913.0 | 4044.8 | 4293.6 | 4508.3 | 4630.3 | 4752.2 | 4810.8 |
| 35° | 5933.0 | 5518.3 | 4581.5 | 3942.3 | 3791.1 | 3908.2 | 4157.0 | 4401.0 | 4532.7 | 4644.9 | 4713.2 |
| 37.5° | 6069.6 | 5615.9 | 4566.8 | 3844.7 | 3659.3 | 3756.9 | 4010.6 | 4269.2 | 4410.7 | 4503.4 | 4566.8 |
| 40° | 6225.7 | 5737.8 | 4562.0 | 3752.0 | 3527.6 | 3600.8 | 3859.4 | 4118.0 | 4254.6 | 4327.8 | 4381.4 |
| 42.5° | 6401.4 | 5874.4 | 4552.2 | 3659.3 | 3395.9 | 3454.4 | 3713.0 | 3966.7 | 4083.8 | 4147.2 | 4196.0 |
| 45° | 6586.8 | 6011.1 | 4532.7 | 3547.1 | 3254.4 | 3322.7 | 3561.7 | 3786.2 | 3908.2 | 3961.8 | 4015.5 |
| 47.5° | 6772.2 | 6147.7 | 4493.7 | 3420.3 | 3127.5 | 3190.9 | 3400.7 | 3595.9 | 3693.5 | 3742.3 | 3795.9 |
| 50° | 6952.7 | 6269.7 | 4401.0 | 3273.9 | 2995.8 | 3054.3 | 3215.3 | 3347.1 | 3420.3 | 3459.3 | 3513.0 |
| 52.5° | 7113.7 | 6352.6 | 4269.2 | 3103.1 | 2864.0 | 2893.3 | 3000.7 | 3112.9 | 3171.4 | 3176.3 | 3225.1 |
| 55° | 7250.4 | 6396.5 | 4078.9 | 2927.5 | 2722.5 | 2727.4 | 2786.0 | 2873.8 | 2898.2 | 2878.7 | 2912.8 |
| 57.5° | 7328.4 | 6372.1 | 3869.1 | 2746.9 | 2576.2 | 2556.7 | 2600.6 | 2644.5 | 2649.4 | 2600.6 | 2634.7 |
| 60° | 7347.9 | 6259.9 | 3595.9 | 2566.4 | 2429.8 | 2376.1 | 2390.8 | 2381.0 | 2371.2 | 2351.7 | 2381.0 |
| 62.5° | 7250.4 | 6020.8 | 3293.4 | 2390.8 | 2273.7 | 2190.7 | 2185.8 | 2181.0 | 2195.6 | 2200.5 | 2205.4 |
| 65° | 6894.2 | 5571.9 | 2932.3 | 2210.2 | 2107.8 | 1995.6 | 1990.7 | 2049.2 | 2068.7 | 2039.5 | 2049.2 |
| 67.5° | *6206.2* | *4884.0* | *2537.1* | *2000.4* | *1898.0* | *1800.4* | *1839.4* | *1873.6* | *1907.7* | *1898.0* | *1907.7* |
| 70° | 5230.4 | 4010.6 | 2176.1 | 1766.2 | 1668.7 | 1615.0 | 1658.9 | 1688.2 | 1693.0 | 1683.3 | 1693.0 |
| 72.5° | 4113.1 | 3132.4 | 1839.4 | 1527.2 | 1439.3 | 1414.9 | 1468.6 | 1493.0 | 1536.9 | 1556.4 | 1561.3 |
| 75° | 2971.4 | 2312.7 | 1507.6 | 1268.6 | 1195.4 | 1195.4 | 1244.2 | 1288.1 | 1327.1 | 1302.7 | 1288.1 |
| 77.5° | 1658.9 | 1380.8 | 1083.2 | 873.4 | 888.0 | 956.3 | 975.8 | 1024.6 | 1063.6 | 1058.8 | 1049.0 |
| 80° | 1005.1 | 863.6 | 731.9 | 566.0 | 561.1 | 614.8 | 741.6 | 824.6 | 844.1 | 800.2 | 795.3 |
| 82.5° | 522.1 | 453.8 | 390.3 | 317.1 | 351.3 | 409.8 | 429.4 | 517.2 | 570.9 | 551.3 | 575.7 |
| 85° | 131.7 | 126.9 | 141.5 | 146.4 | 180.5 | 200.0 | 219.6 | 258.6 | 170.8 | 82.9 | 82.9 |
| 87.5° | 39.0 | 39.0 | 48.8 | 48.8 | 63.4 | 78.1 | 73.2 | 73.2 | 39.0 | 4.9 | 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)