

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: P510255

Luminaire Tested: **VERD-M-CA4-240-722-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-240-722-U-T3  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2200K, 1090mA LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27315 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

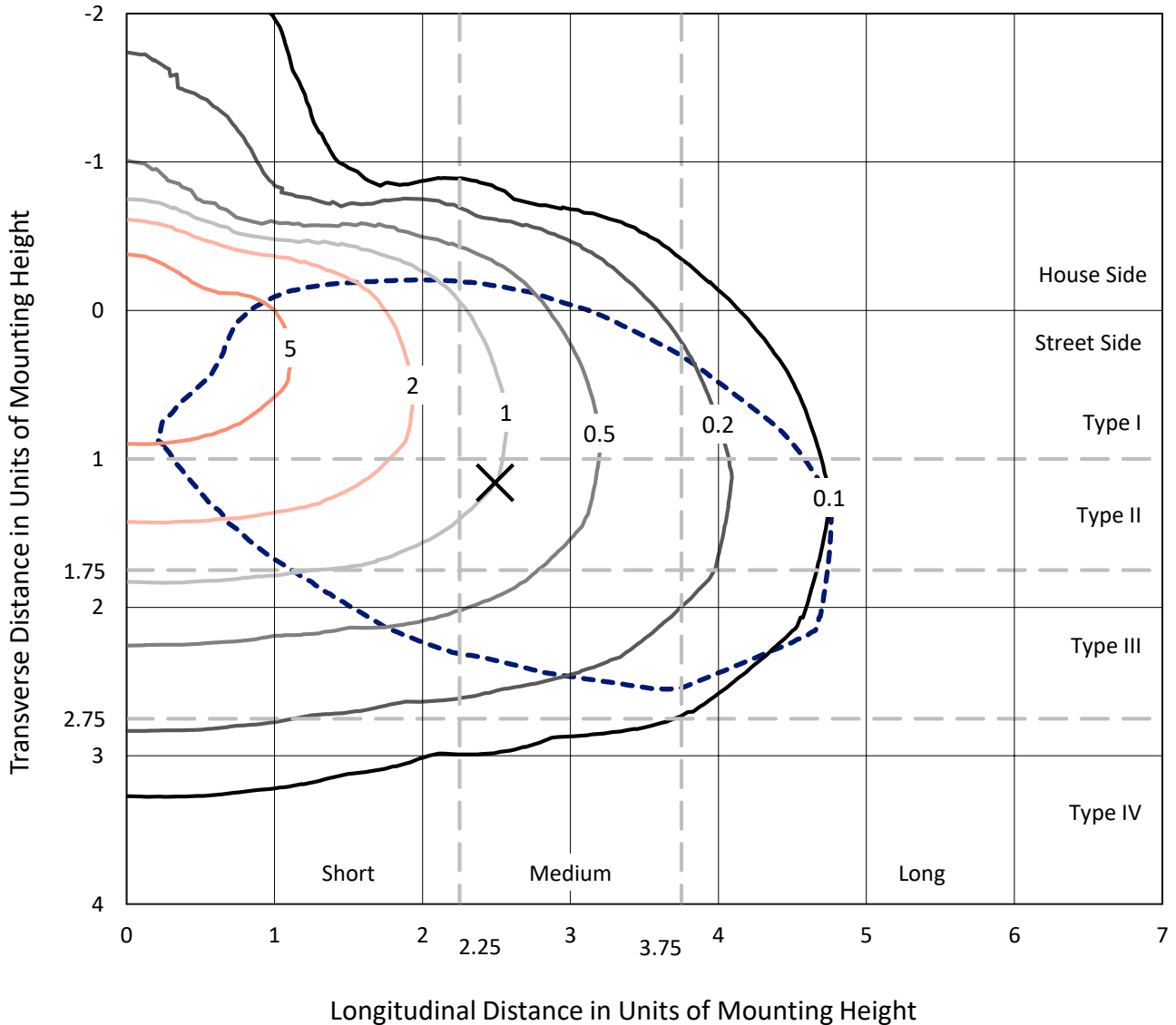
Input Watts (W): 242.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

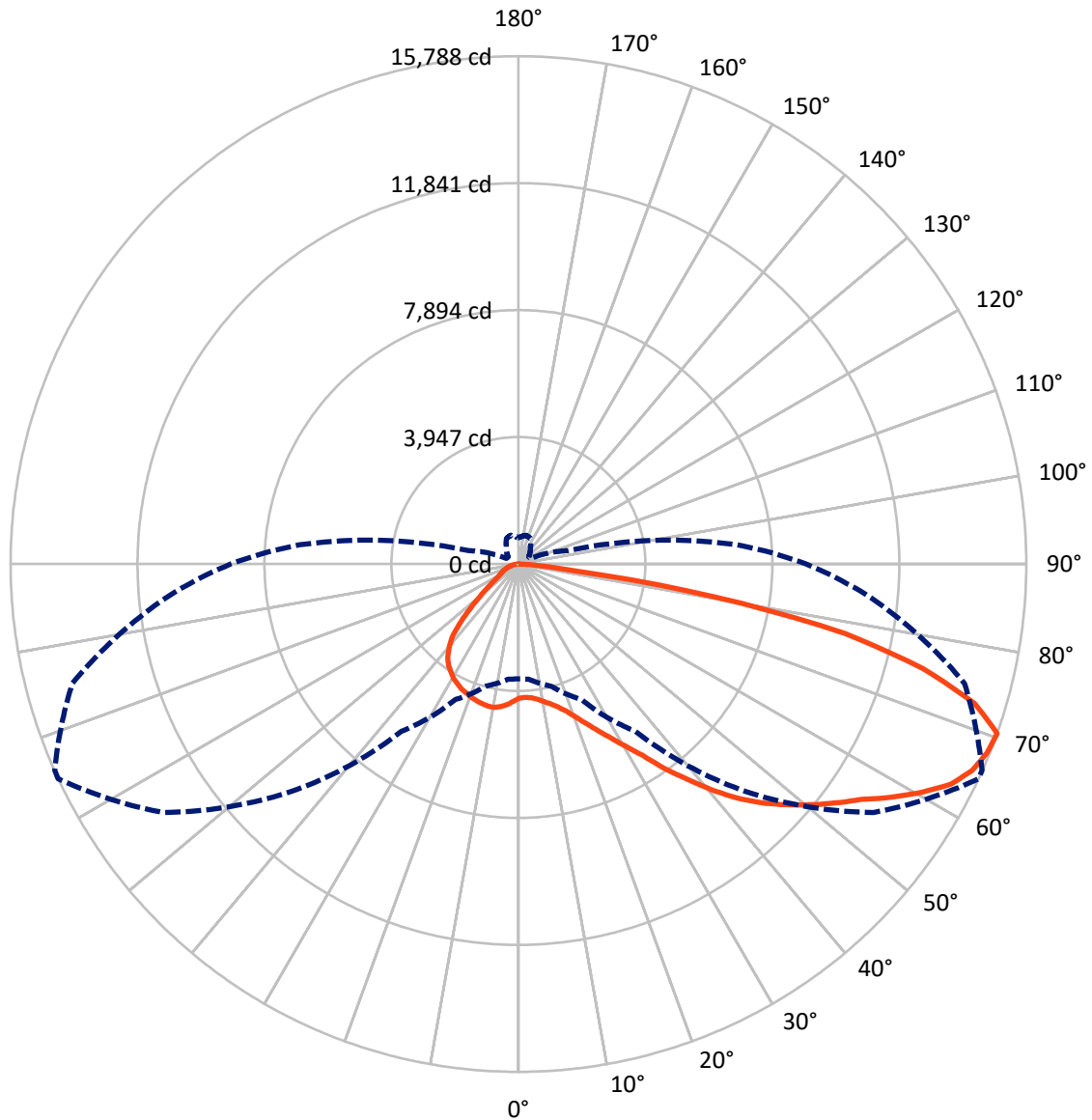
✕ Max cd  
 - - - 1/2 Max cd



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



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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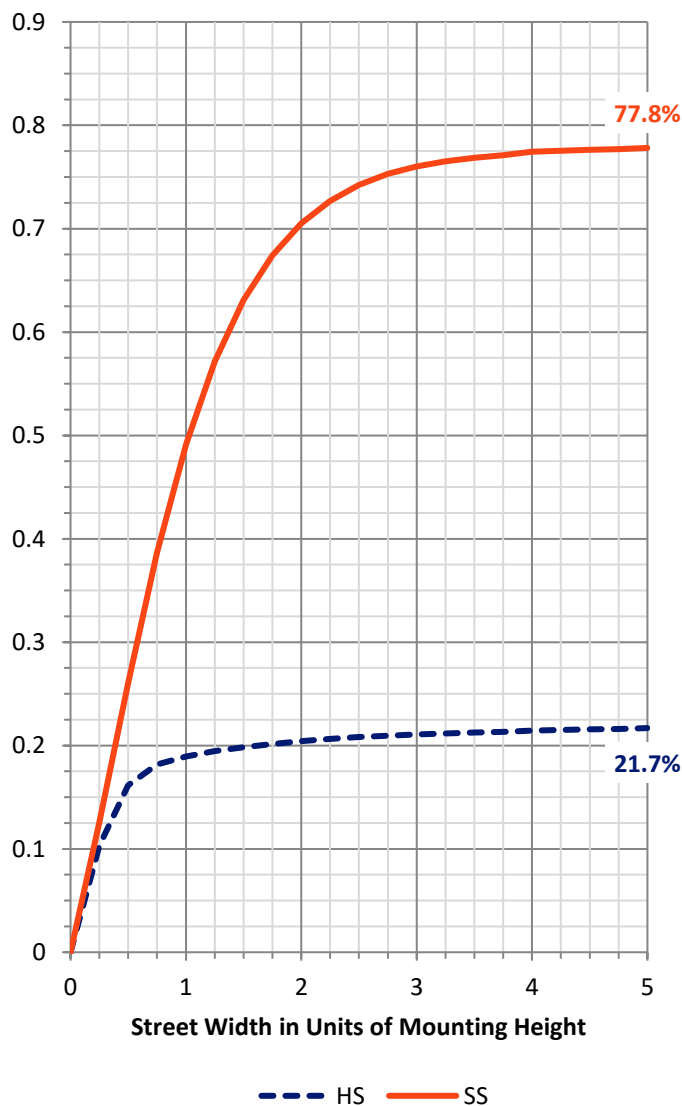
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6025.4   | 0.0    | 6025.4  |
|                    | % Fixture | 22.1     | 0.0    | 22.1    |
| <b>Street Side</b> | Lumens    | 21289.6  | 0.0    | 21289.6 |
|                    | % Fixture | 77.9     | 0.0    | 77.9    |
| <b>Total</b>       | Lumens    | 27315.0  | 0.0    | 27315.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 418.3   | 1.5       |
| 10°-20°   | 1322.2  | 4.8       |
| 20°-30°   | 2293.8  | 8.4       |
| 30°-40°   | 3335.0  | 12.2      |
| 40°-50°   | 4455.7  | 16.3      |
| 50°-60°   | 5427.4  | 19.9      |
| 60°-70°   | 5850.9  | 21.4      |
| 70°-80°   | 3793.3  | 13.9      |
| 80°-90°   | 418.4   | 1.5       |
| 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°    | 27315.0 | 100.0     |
| 0°-180°   | 27315.0 | 100.0     |



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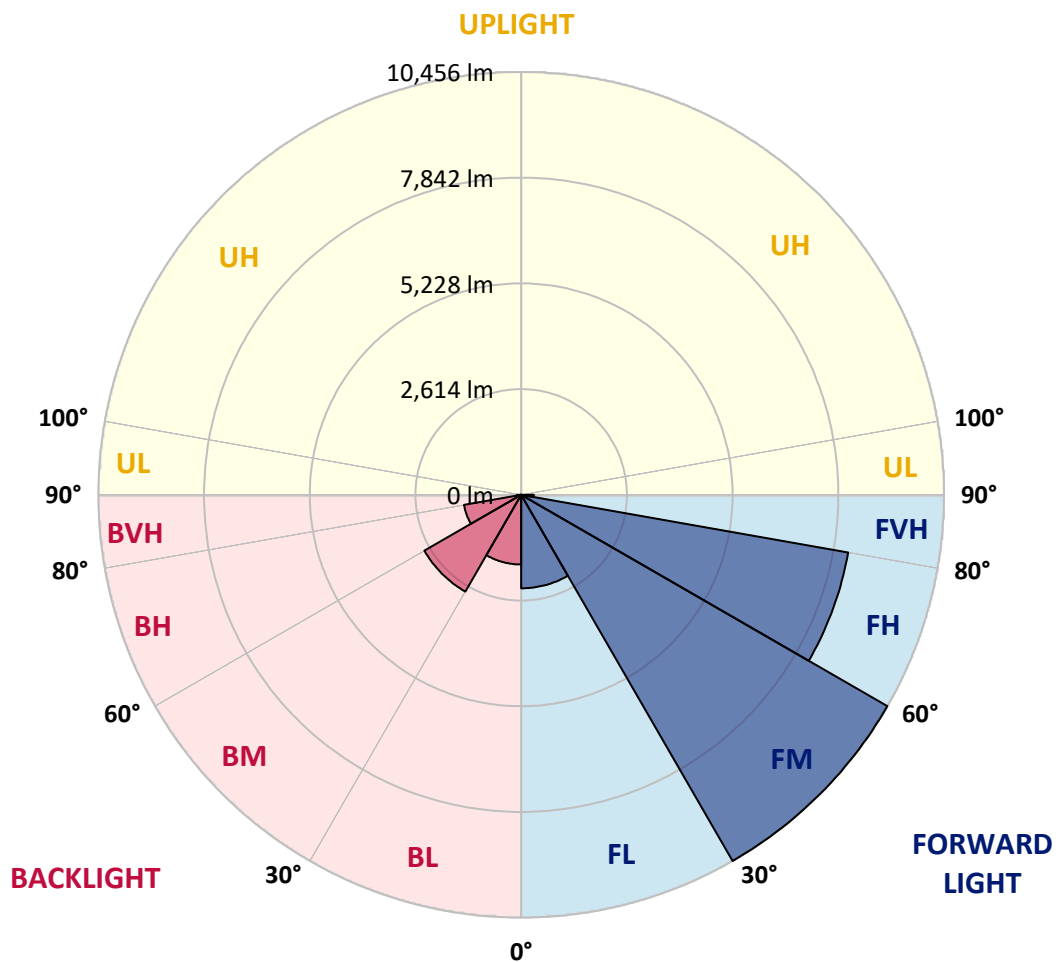
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 2311.6  | 8.5       |                         |      |          |
| FM (30°-60°)   | 10455.7 | 38.3      |                         |      |          |
| FH (60°-80°)   | 8210.2  | 30.1      |                         |      | G4/12000 |
| FVH (80°-90°)  | 312.0   | 1.1       |                         |      | G3/500   |
| BL (0°-30°)    | 1722.7  | 6.3       | B3/2500                 |      |          |
| BM (30°-60°)   | 2762.5  | 10.1      | B3/5000                 |      |          |
| BH (60°-80°)   | 1434.0  | 5.2       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 106.3   | 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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2  | 4170.2  | 4170.2  | 4170.2  | 4170.2  | 4170.2  |
| 2.5°  | 4108.6 | 4145.6 | 4125.9 | 4127.1 | 4155.4 | 4132.0  | 4148.1  | 4148.1  | 4146.8  | 4155.4  | 4181.3  |
| 5°    | 4209.6 | 4249.0 | 4225.6 | 4210.9 | 4217.0 | 4187.5  | 4181.3  | 4176.4  | 4172.7  | 4182.5  | 4225.6  |
| 7.5°  | 4357.4 | 4403.0 | 4377.1 | 4363.6 | 4356.2 | 4288.5  | 4276.1  | 4242.9  | 4239.2  | 4247.8  | 4287.2  |
| 10°   | 4553.3 | 4614.8 | 4584.0 | 4545.9 | 4520.0 | 4441.2  | 4378.4  | 4348.8  | 4340.2  | 4335.3  | 4375.9  |
| 12.5° | 4835.3 | 4889.5 | 4853.8 | 4782.3 | 4747.8 | 4621.0  | 4545.9  | 4462.1  | 4460.9  | 4443.6  | 4474.4  |
| 15°   | 5102.5 | 5159.2 | 5113.6 | 5043.4 | 4997.9 | 4826.7  | 4715.8  | 4612.4  | 4600.1  | 4580.3  | 4590.2  |
| 17.5° | 5361.2 | 5430.2 | 5398.1 | 5334.1 | 5278.7 | 5087.8  | 4942.4  | 4809.4  | 4795.9  | 4765.1  | 4719.5  |
| 20°   | 5682.6 | 5745.4 | 5736.8 | 5678.9 | 5617.4 | 5400.6  | 5241.7  | 5070.5  | 5055.7  | 5000.3  | 4898.1  |
| 22.5° | 6004.1 | 6081.7 | 6033.6 | 6023.8 | 5989.3 | 5773.8  | 5552.1  | 5378.4  | 5363.6  | 5291.0  | 5103.8  |
| 25°   | 6307.1 | 6376.0 | 6393.3 | 6377.3 | 6381.0 | 6167.9  | 5947.4  | 5729.4  | 5714.7  | 5616.1  | 5345.2  |
| 27.5° | 6665.5 | 6730.7 | 6735.7 | 6739.4 | 6782.5 | 6605.1  | 6346.5  | 6122.3  | 6112.5  | 6001.6  | 5658.0  |
| 30°   | 6940.1 | 7048.5 | 7070.7 | 7091.6 | 7113.8 | 7018.9  | 6783.7  | 6574.3  | 6554.6  | 6433.9  | 6010.2  |
| 32.5° | 7191.4 | 7272.6 | 7351.5 | 7394.6 | 7494.3 | 7409.3  | 7216.0  | 7086.7  | 7087.9  | 7031.2  | 6571.9  |
| 35°   | 7385.9 | 7475.9 | 7575.6 | 7733.3 | 7878.6 | 7842.9  | 7782.5  | 7789.9  | 7791.1  | 7815.8  | 7329.3  |
| 37.5° | 7571.9 | 7653.2 | 7778.8 | 7967.3 | 8223.4 | 8270.2  | 8310.9  | 8464.8  | 8519.0  | 8634.8  | 8028.8  |
| 40°   | 7684.0 | 7770.2 | 7932.8 | 8193.9 | 8526.4 | 8695.1  | 8818.3  | 9213.7  | 9307.3  | 9308.5  | 8569.5  |
| 42.5° | 7520.2 | 7615.0 | 7905.7 | 8370.0 | 8799.8 | 9115.1  | 9439.0  | 9937.8  | 10005.6 | 9854.1  | 9031.4  |
| 45°   | 7373.6 | 7461.1 | 7773.9 | 8397.1 | 9014.1 | 9563.4  | 10014.2 | 10591.8 | 10641.1 | 10335.6 | 9457.5  |
| 47.5° | 7232.0 | 7301.0 | 7663.1 | 8340.4 | 9233.4 | 10013.0 | 10504.4 | 11183.0 | 11218.7 | 10862.8 | 9873.8  |
| 50°   | 7036.2 | 7118.7 | 7502.9 | 8273.9 | 9365.1 | 10398.5 | 10984.7 | 11766.8 | 11761.8 | 11336.9 | 10250.7 |
| 52.5° | 6821.9 | 6903.2 | 7315.7 | 8152.0 | 9451.4 | 10697.7 | 11531.5 | 12338.2 | 12341.9 | 11881.3 | 10623.8 |
| 55°   | 6552.1 | 6651.9 | 7086.7 | 7987.0 | 9472.3 | 10933.0 | 12005.7 | 12924.5 | 12984.8 | 12436.8 | 10983.5 |
| 57.5° | 6229.5 | 6329.2 | 6804.6 | 7745.6 | 9347.9 | 11130.0 | 12511.9 | 13673.3 | 13705.3 | 13004.5 | 11252.0 |
| 60°   | 5853.8 | 5974.5 | 6429.0 | 7422.9 | 9110.2 | 11359.1 | 13125.2 | 14407.3 | 14418.4 | 13512.0 | 11476.1 |
| 62.5° | 5419.1 | 5505.3 | 5983.1 | 6954.9 | 8730.9 | 11450.2 | 13632.7 | 15081.0 | 15083.5 | 13895.0 | 11577.1 |
| 65°   | 4948.6 | 4981.8 | 5382.1 | 6318.1 | 8177.9 | 11301.2 | 13827.2 | 15491.2 | 15480.1 | 14231.2 | 11526.6 |
| 67.5° | 4388.2 | 4372.2 | 4799.6 | 5531.1 | 7478.3 | 10804.9 | 13732.4 | 15701.8 | 15735.0 | 14489.9 | 11364.0 |
| 70°   | 3568.0 | 3591.4 | 3931.3 | 4650.5 | 6348.9 | 10008.0 | 13471.3 | 15788.0 | 15779.3 | 14360.5 | 10840.6 |
| 72.5° | 2708.3 | 2750.2 | 2996.5 | 3535.9 | 4927.7 | 8416.8  | 12353.0 | 14834.7 | 14851.9 | 13449.1 | 9898.4  |
| 75°   | 1675.0 | 1795.7 | 2003.8 | 2332.7 | 3087.6 | 6029.9  | 10514.2 | 12994.7 | 13082.1 | 11866.5 | 8150.8  |
| 77.5° | 734.0  | 762.4  | 867.1  | 1124.5 | 1614.6 | 3027.3  | 7772.7  | 10377.5 | 10636.2 | 9596.7  | 5879.7  |
| 80°   | 454.5  | 454.5  | 484.0  | 564.1  | 720.5  | 1125.7  | 3114.7  | 6196.2  | 5933.9  | 5489.3  | 2593.8  |
| 82.5° | 378.1  | 378.1  | 392.9  | 406.4  | 369.5  | 476.6   | 1041.9  | 1736.6  | 1861.0  | 1506.3  | 796.8   |
| 85°   | 205.7  | 210.6  | 211.8  | 215.5  | 211.8  | 257.4   | 410.1   | 513.6   | 519.7   | 470.5   | 283.3   |
| 87.5° | 75.1   | 80.1   | 77.6   | 72.7   | 65.3   | 61.6    | 78.8    | 80.1    | 82.5    | 76.4    | 41.9    |
| 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°    | 4170.2  | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 | 4170.2 |
| 2.5°  | 4198.5  | 4215.8 | 4261.4 | 4265.1 | 4282.3 | 4288.5 | 4303.2 | 4324.2 | 4361.1 | 4342.6 | 4321.7 |
| 5°    | 4246.6  | 4268.7 | 4341.4 | 4378.4 | 4426.4 | 4454.7 | 4501.5 | 4524.9 | 4581.6 | 4563.1 | 4560.6 |
| 7.5°  | 4319.2  | 4366.0 | 4431.3 | 4467.0 | 4529.8 | 4548.3 | 4582.8 | 4582.8 | 4629.6 | 4606.2 | 4600.1 |
| 10°   | 4417.8  | 4448.6 | 4517.5 | 4520.0 | 4555.7 | 4555.7 | 4596.4 | 4570.5 | 4616.1 | 4589.0 | 4587.7 |
| 12.5° | 4496.6  | 4513.8 | 4539.7 | 4518.8 | 4537.2 | 4516.3 | 4537.2 | 4506.4 | 4534.8 | 4500.3 | 4492.9 |
| 15°   | 4585.3  | 4561.9 | 4536.0 | 4486.7 | 4470.7 | 4437.5 | 4420.2 | 4388.2 | 4390.7 | 4351.3 | 4345.1 |
| 17.5° | 4685.0  | 4624.7 | 4549.6 | 4442.4 | 4383.3 | 4298.3 | 4262.6 | 4217.0 | 4191.2 | 4155.4 | 4171.5 |
| 20°   | 4805.7  | 4715.8 | 4559.4 | 4393.1 | 4267.5 | 4138.2 | 4054.4 | 3980.6 | 3974.4 | 3942.4 | 3925.1 |
| 22.5° | 4962.1  | 4818.0 | 4602.5 | 4322.9 | 4121.0 | 3936.2 | 3811.8 | 3688.7 | 3676.3 | 3611.1 | 3586.4 |
| 25°   | 5155.5  | 4953.5 | 4624.7 | 4268.7 | 3949.8 | 3696.1 | 3500.2 | 3329.0 | 3246.5 | 3177.5 | 3161.5 |
| 27.5° | 5415.4  | 5153.0 | 4669.0 | 4171.5 | 3747.8 | 3398.0 | 3117.2 | 2890.6 | 2792.1 | 2757.6 | 2721.9 |
| 30°   | 5719.6  | 5396.9 | 4751.5 | 4090.2 | 3508.8 | 3017.4 | 2675.0 | 2405.3 | 2298.2 | 2244.0 | 2226.7 |
| 32.5° | 6167.9  | 5704.8 | 4827.9 | 3955.9 | 3219.4 | 2598.7 | 2152.8 | 1854.8 | 1789.5 | 1779.7 | 1803.1 |
| 35°   | 6820.6  | 6283.7 | 4938.7 | 3831.5 | 2879.5 | 2133.1 | 1640.5 | 1445.9 | 1432.4 | 1434.8 | 1434.8 |
| 37.5° | 7500.5  | 6835.4 | 5267.6 | 3648.0 | 2463.2 | 1606.0 | 1248.8 | 1142.9 | 1147.9 | 1147.9 | 1146.6 |
| 40°   | 7943.9  | 7278.8 | 5506.5 | 3388.2 | 1945.9 | 1151.6 | 926.2  | 846.1  | 880.6  | 927.4  | 952.0  |
| 42.5° | 8432.8  | 7681.5 | 5671.5 | 3088.9 | 1353.5 | 814.1  | 673.7  | 702.0  | 803.0  | 874.4  | 884.3  |
| 45°   | 8849.1  | 8023.9 | 5690.0 | 2623.3 | 872.0  | 618.3  | 614.6  | 695.9  | 812.9  | 890.5  | 896.6  |
| 47.5° | 9206.3  | 8335.5 | 5574.3 | 2091.3 | 635.5  | 577.6  | 614.6  | 716.8  | 822.7  | 870.7  | 875.7  |
| 50°   | 9552.3  | 8583.1 | 5302.1 | 1607.2 | 578.9  | 562.8  | 622.0  | 720.5  | 787.0  | 820.3  | 815.3  |
| 52.5° | 9860.2  | 8808.5 | 4908.0 | 1253.8 | 556.7  | 553.0  | 628.1  | 716.8  | 758.7  | 756.2  | 752.5  |
| 55°   | 10094.2 | 8875.0 | 4600.1 | 977.9  | 538.2  | 546.8  | 631.8  | 720.5  | 751.3  | 729.1  | 724.2  |
| 57.5° | 10214.9 | 8792.4 | 4341.4 | 777.1  | 518.5  | 540.7  | 641.7  | 719.3  | 773.4  | 815.3  | 812.9  |
| 60°   | 10212.5 | 8698.8 | 4022.4 | 670.0  | 498.8  | 535.7  | 657.7  | 780.8  | 976.7  | 1016.1 | 1017.3 |
| 62.5° | 10173.1 | 8538.7 | 3585.2 | 606.0  | 476.6  | 538.2  | 668.8  | 886.8  | 1112.1 | 1080.1 | 1054.3 |
| 65°   | 10042.5 | 8238.2 | 2999.0 | 537.0  | 448.3  | 540.7  | 663.8  | 959.4  | 1019.8 | 905.2  | 889.2  |
| 67.5° | 9679.2  | 7656.9 | 2354.8 | 480.3  | 422.4  | 527.1  | 672.5  | 891.7  | 937.3  | 864.6  | 841.2  |
| 70°   | 8941.5  | 6837.9 | 1596.2 | 413.8  | 392.9  | 507.4  | 652.8  | 876.9  | 924.9  | 851.0  | 816.6  |
| 72.5° | 7772.7  | 5488.0 | 933.6  | 355.9  | 349.8  | 466.8  | 642.9  | 886.8  | 939.7  | 857.2  | 812.9  |
| 75°   | 6049.7  | 3847.5 | 539.4  | 288.2  | 291.9  | 431.1  | 589.9  | 836.3  | 931.1  | 867.1  | 809.2  |
| 77.5° | 3905.4  | 1868.3 | 380.6  | 230.3  | 227.8  | 339.9  | 479.1  | 731.6  | 896.6  | 875.7  | 827.6  |
| 80°   | 1397.9  | 682.3  | 267.3  | 171.2  | 166.3  | 230.3  | 368.3  | 588.7  | 758.7  | 785.8  | 785.8  |
| 82.5° | 502.5   | 342.4  | 171.2  | 104.7  | 103.5  | 146.6  | 274.6  | 447.1  | 550.5  | 620.7  | 638.0  |
| 85°   | 210.6   | 149.0  | 83.7   | 53.0   | 43.1   | 56.7   | 141.6  | 277.1  | 373.2  | 401.5  | 437.2  |
| 87.5° | 30.8    | 27.1   | 22.2   | 17.2   | 14.8   | 14.8   | 18.5   | 80.1   | 133.0  | 190.9  | 236.5  |
| 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)