

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: P510688

Luminaire Tested: **CST-CA6-230-760-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510688  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA6-230-760-U-T3-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32029 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

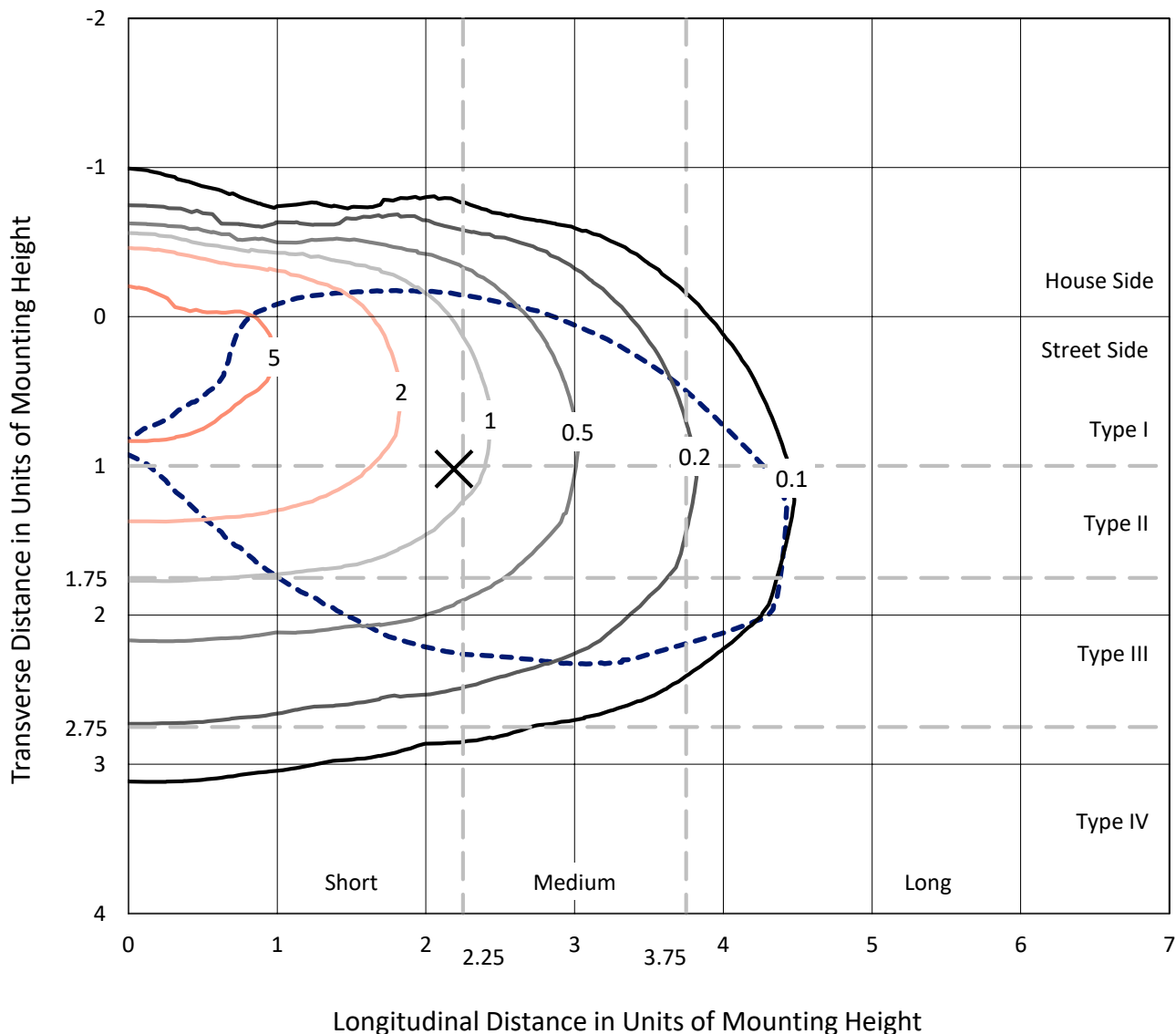
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510688  
 CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

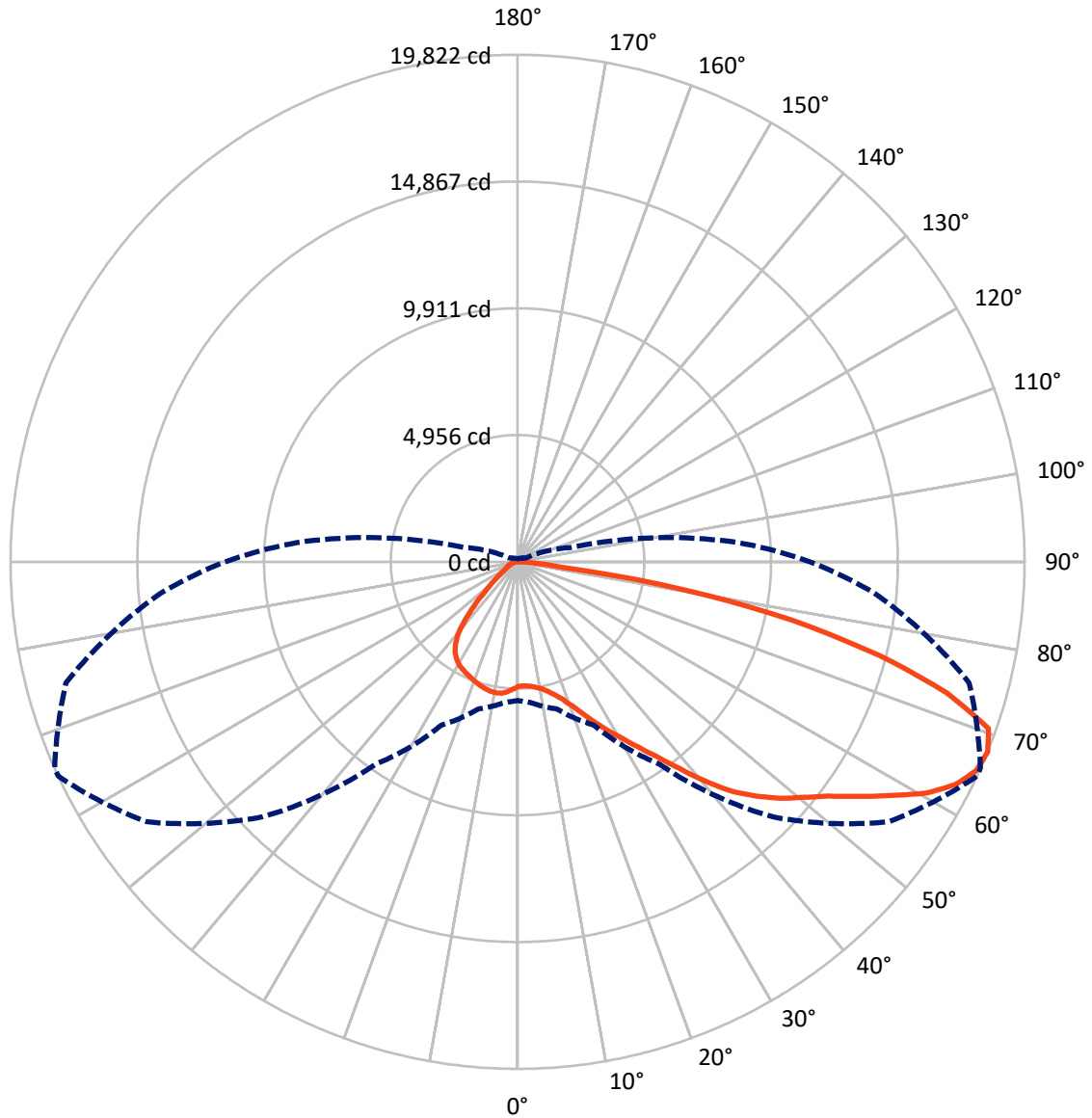
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P510688  
CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P510688  
 CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

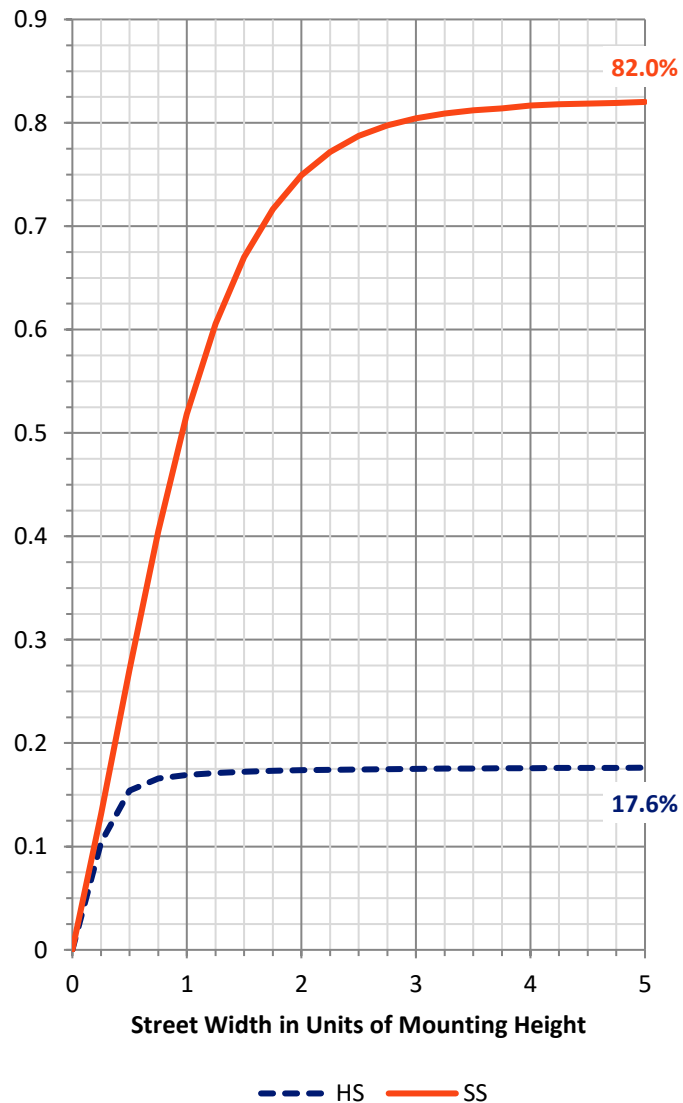
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5724.4   | 0.0    | 5724.4  |
|                    | % Fixture | 17.9     | 0.0    | 17.9    |
| <b>Street Side</b> | Lumens    | 26304.6  | 0.0    | 26304.6 |
|                    | % Fixture | 82.1     | 0.0    | 82.1    |
| <b>Total</b>       | Lumens    | 32029.0  | 0.0    | 32029.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 481.5   | 1.5       |
| 10°-20°   | 1486.6  | 4.6       |
| 20°-30°   | 2578.9  | 8.1       |
| 30°-40°   | 3890.3  | 12.1      |
| 40°-50°   | 5394.2  | 16.8      |
| 50°-60°   | 6658.4  | 20.8      |
| 60°-70°   | 7094.4  | 22.1      |
| 70°-80°   | 4059.5  | 12.7      |
| 80°-90°   | 385.2   | 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°    | 32029.0 | 100.0     |
| 0°-180°   | 32029.0 | 100.0     |

**Coefficient of Utilization**



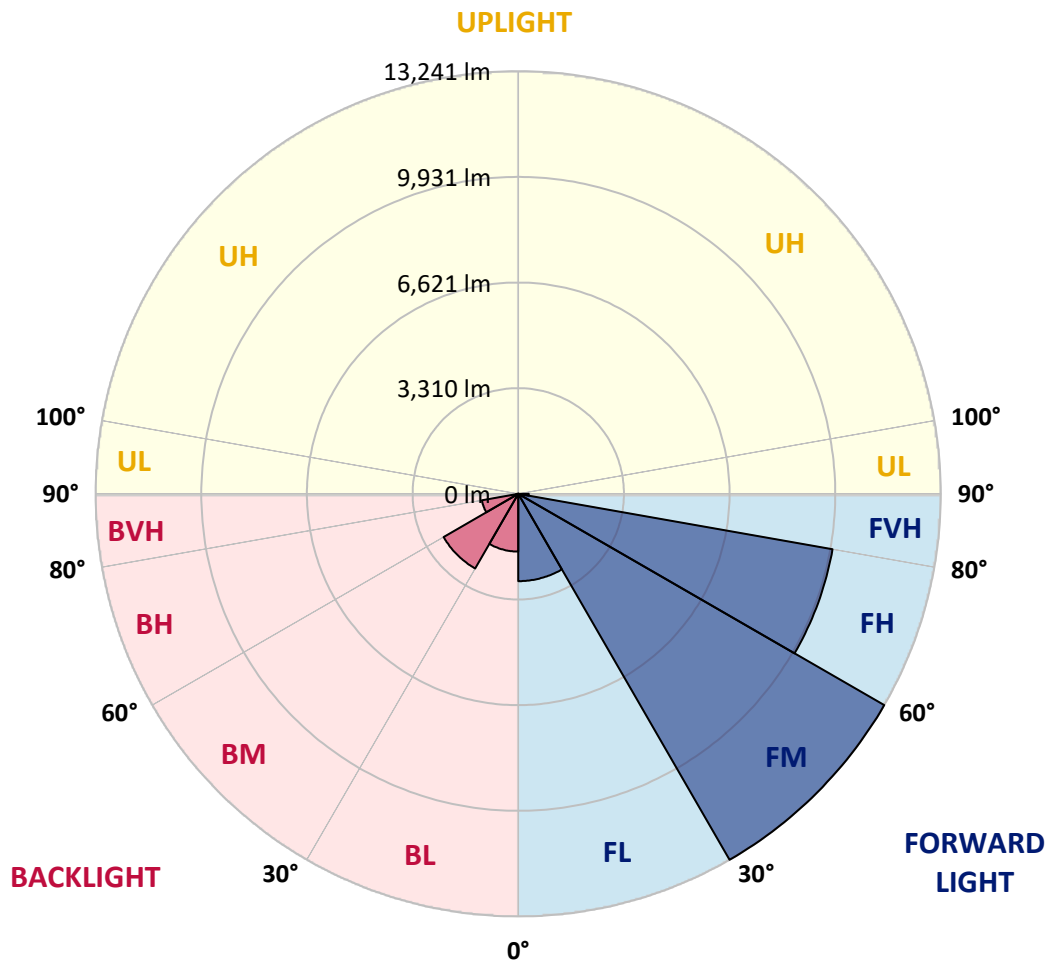
REPORT NUMBER: P510688  
 CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 2735.7  | 8.5       |                         |      |          |
| FM (30°-60°)   | 13241.2 | 41.3      |                         |      |          |
| FH (60°-80°)   | 9998.6  | 31.2      |                         |      | G4/12000 |
| FVH (80°-90°)  | 329.1   | 1.0       |                         |      | G3/500   |
| BL (0°-30°)    | 1811.3  | 5.7       | B3/2500                 |      |          |
| BM (30°-60°)   | 2701.6  | 8.4       | B3/5000                 |      |          |
| BH (60°-80°)   | 1155.4  | 3.6       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 56.1    | 0.2       |                         |      | G1/100   |
| 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 Short





REPORT NUMBER: P510688

CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  | 4867.0  |
| 2.5°  | 4820.0  | 4813.7  | 4808.1  | 4817.9  | 4823.5  | 4832.6  | 4846.0  | 4855.1  | 4857.9  | 4866.3  | 4876.8  |
| 5°    | 4897.2  | 4896.5  | 4888.8  | 4884.6  | 4872.6  | 4868.4  | 4871.2  | 4882.5  | 4883.2  | 4893.7  | 4926.7  |
| 7.5°  | 5048.7  | 5047.3  | 5028.4  | 5020.0  | 4994.7  | 4966.6  | 4945.6  | 4947.7  | 4947.0  | 4957.5  | 5001.7  |
| 10°   | 5277.5  | 5266.2  | 5239.6  | 5213.6  | 5164.5  | 5111.9  | 5073.3  | 5038.2  | 5038.2  | 5053.6  | 5102.8  |
| 12.5° | 5535.6  | 5551.1  | 5514.6  | 5475.3  | 5393.2  | 5298.5  | 5231.1  | 5191.9  | 5187.6  | 5195.4  | 5230.4  |
| 15°   | 5856.3  | 5856.3  | 5831.7  | 5775.6  | 5703.3  | 5571.4  | 5432.5  | 5382.7  | 5375.7  | 5391.8  | 5389.7  |
| 17.5° | 6217.6  | 6228.1  | 6181.8  | 6153.8  | 6042.9  | 5897.0  | 5723.0  | 5636.7  | 5636.7  | 5626.1  | 5577.7  |
| 20°   | 6678.6  | 6621.0  | 6625.9  | 6579.6  | 6498.2  | 6286.4  | 6109.6  | 5984.0  | 5982.6  | 5961.5  | 5825.4  |
| 22.5° | 7179.5  | 7147.9  | 7120.6  | 7079.9  | 6967.6  | 6778.2  | 6532.6  | 6408.4  | 6405.6  | 6353.7  | 6151.6  |
| 25°   | 7673.4  | 7697.3  | 7667.1  | 7592.7  | 7510.7  | 7304.4  | 7033.6  | 6911.5  | 6910.8  | 6824.5  | 6538.2  |
| 27.5° | 8181.4  | 8207.3  | 8197.5  | 8130.2  | 8020.7  | 7859.3  | 7603.3  | 7444.0  | 7434.2  | 7378.1  | 7018.1  |
| 30°   | 8742.7  | 8719.5  | 8749.7  | 8720.9  | 8666.2  | 8403.1  | 8171.6  | 7986.3  | 8010.2  | 7993.4  | 7563.3  |
| 32.5° | 9151.0  | 9165.7  | 9264.7  | 9267.5  | 9209.9  | 9014.9  | 8732.1  | 8618.5  | 8656.4  | 8633.9  | 8233.3  |
| 35°   | 9520.0  | 9543.9  | 9671.6  | 9797.2  | 9839.3  | 9626.0  | 9338.3  | 9331.3  | 9380.4  | 9517.2  | 9156.6  |
| 37.5° | 9837.2  | 9854.0  | 10032.9 | 10196.4 | 10332.5 | 10186.6 | 9977.5  | 10226.6 | 10298.8 | 10578.8 | 10109.4 |
| 40°   | 10027.3 | 10049.1 | 10280.6 | 10510.7 | 10753.5 | 10701.5 | 10681.9 | 11271.2 | 11339.3 | 11585.6 | 10804.7 |
| 42.5° | 9920.0  | 9962.8  | 10348.6 | 10769.6 | 11126.7 | 11230.5 | 11499.3 | 12257.0 | 12334.9 | 12355.9 | 11488.0 |
| 45°   | 9728.4  | 9781.7  | 10213.2 | 10894.5 | 11476.8 | 11810.1 | 12321.5 | 13060.3 | 13103.1 | 13043.5 | 12054.2 |
| 47.5° | 9522.1  | 9579.0  | 10061.0 | 10857.3 | 11758.2 | 12484.3 | 13056.1 | 13816.7 | 13846.8 | 13663.7 | 12624.6 |
| 50°   | 9287.8  | 9340.4  | 9858.9  | 10770.3 | 11970.0 | 13120.7 | 13811.0 | 14470.5 | 14583.5 | 14221.5 | 13068.0 |
| 52.5° | 9003.0  | 9059.1  | 9609.1  | 10634.2 | 12156.0 | 13592.8 | 14476.9 | 15209.3 | 15217.1 | 14918.9 | 13567.6 |
| 55°   | 8633.9  | 8731.4  | 9295.5  | 10398.4 | 12253.5 | 13998.4 | 15057.1 | 16186.7 | 16236.5 | 15948.1 | 13985.7 |
| 57.5° | 8223.5  | 8308.4  | 8918.1  | 10084.1 | 12165.8 | 14306.4 | 15990.2 | 17234.9 | 17228.5 | 16649.7 | 14351.3 |
| 60°   | 7681.1  | 7741.5  | 8426.2  | 9673.0  | 11883.0 | 14678.9 | 16961.9 | 18358.1 | 18346.9 | 17337.3 | 14586.3 |
| 62.5° | 6985.2  | 7045.5  | 7689.6  | 9028.2  | 11467.7 | 14928.7 | 17621.4 | 19199.3 | 19167.1 | 17837.5 | 14658.6 |
| 65°   | 6178.3  | 6286.4  | 6845.5  | 8191.2  | 10733.1 | 14764.5 | 17940.0 | 19694.7 | 19642.8 | 18219.2 | 14486.0 |
| 67.5° | 5422.0  | 5513.9  | 5956.6  | 7039.2  | 9649.1  | 14098.7 | 17715.5 | 19822.4 | 19806.9 | 18274.6 | 13998.4 |
| 70°   | 4351.3  | 4385.0  | 4790.5  | 5717.4  | 8028.4  | 12673.0 | 16939.5 | 19527.7 | 19534.7 | 17763.9 | 13018.9 |
| 72.5° | 2978.3  | 3060.4  | 3240.7  | 3972.5  | 5842.2  | 10078.5 | 14600.3 | 17574.4 | 17575.8 | 15928.5 | 11342.8 |
| 75°   | 1601.8  | 1728.7  | 1939.2  | 2302.0  | 3266.0  | 6467.4  | 11725.2 | 14582.8 | 14610.2 | 13280.6 | 9015.6  |
| 77.5° | 794.2   | 839.8   | 961.9   | 1231.3  | 1497.2  | 3051.3  | 7540.8  | 10946.4 | 11011.6 | 10194.3 | 6148.8  |
| 80°   | 363.4   | 371.1   | 380.3   | 378.2   | 573.2   | 1338.7  | 3237.2  | 6574.0  | 6593.7  | 6063.2  | 2807.1  |
| 82.5° | 284.1   | 282.7   | 287.0   | 261.0   | 262.4   | 516.4   | 1120.5  | 1721.7  | 1836.1  | 1445.3  | 890.3   |
| 85°   | 171.9   | 171.2   | 184.5   | 143.1   | 176.1   | 279.2   | 565.5   | 686.9   | 695.3   | 565.5   | 461.0   |
| 87.5° | 65.2    | 63.1    | 58.2    | 51.2    | 58.9    | 78.6    | 195.7   | 252.6   | 247.0   | 175.4   | 159.3   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



REPORT NUMBER: P510688

CATALOG NUMBER: CST-CA6-230-760-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4867.0  | 4867.0  | 4867.0 | 4867.0 | 4867.0 | 4867.0 | 4867.0 | 4867.0 | 4867.0 | 4867.0 | 4867.0 |
| 2.5°  | 4886.0  | 4908.4  | 4949.8 | 4981.4 | 4991.9 | 5025.6 | 5057.9 | 5063.5 | 5086.6 | 5095.7 | 5125.9 |
| 5°    | 4947.0  | 4984.9  | 5049.4 | 5092.2 | 5111.2 | 5167.3 | 5203.8 | 5222.0 | 5215.7 | 5219.2 | 5252.9 |
| 7.5°  | 5036.1  | 5071.9  | 5123.8 | 5175.7 | 5184.8 | 5194.7 | 5191.2 | 5188.3 | 5163.8 | 5142.7 | 5174.3 |
| 10°   | 5117.5  | 5151.2  | 5183.4 | 5191.2 | 5144.9 | 5118.9 | 5072.6 | 5036.8 | 4989.1 | 4967.3 | 4992.6 |
| 12.5° | 5231.8  | 5238.9  | 5207.3 | 5165.2 | 5065.6 | 4973.0 | 4897.9 | 4832.6 | 4773.7 | 4733.0 | 4766.7 |
| 15°   | 5352.5  | 5325.2  | 5233.3 | 5110.5 | 4956.1 | 4823.5 | 4700.7 | 4592.0 | 4494.5 | 4470.6 | 4479.7 |
| 17.5° | 5512.5  | 5438.1  | 5252.9 | 5046.6 | 4806.7 | 4600.4 | 4442.5 | 4305.0 | 4177.3 | 4124.0 | 4119.1 |
| 20°   | 5707.5  | 5587.6  | 5292.9 | 4965.9 | 4629.9 | 4355.5 | 4111.4 | 3905.8 | 3729.7 | 3585.2 | 3588.7 |
| 22.5° | 5961.5  | 5787.5  | 5353.2 | 4881.7 | 4434.1 | 4068.6 | 3713.6 | 3364.2 | 3074.4 | 2949.5 | 2918.7 |
| 25°   | 6296.9  | 6037.3  | 5438.8 | 4805.3 | 4215.2 | 3703.8 | 3202.1 | 2708.9 | 2402.3 | 2280.9 | 2267.6 |
| 27.5° | 6714.3  | 6372.7  | 5569.3 | 4720.4 | 3980.9 | 3270.9 | 2549.6 | 2066.2 | 1784.9 | 1657.2 | 1614.4 |
| 30°   | 7188.6  | 6785.9  | 5703.3 | 4632.0 | 3697.4 | 2714.5 | 1944.1 | 1470.6 | 1182.2 | 1067.8 | 1053.1 |
| 32.5° | 7802.5  | 7309.3  | 5902.6 | 4493.1 | 3283.5 | 2133.6 | 1356.2 | 917.7  | 721.9  | 672.8  | 658.8  |
| 35°   | 8674.6  | 8017.2  | 6148.8 | 4317.7 | 2751.7 | 1490.2 | 840.5  | 537.4  | 432.9  | 408.3  | 403.4  |
| 37.5° | 9487.8  | 8711.8  | 6397.2 | 4026.5 | 2089.4 | 930.3  | 480.6  | 344.5  | 321.3  | 322.0  | 323.4  |
| 40°   | 10132.5 | 9186.8  | 6597.9 | 3643.4 | 1374.4 | 528.3  | 334.0  | 286.3  | 287.0  | 284.9  | 283.4  |
| 42.5° | 10706.5 | 9565.6  | 6688.4 | 3077.2 | 796.3  | 353.6  | 289.8  | 263.8  | 257.5  | 259.6  | 258.2  |
| 45°   | 11181.4 | 9952.2  | 6513.0 | 2440.9 | 469.4  | 317.1  | 273.6  | 244.9  | 237.8  | 249.1  | 250.5  |
| 47.5° | 11681.0 | 10319.2 | 6244.3 | 1838.9 | 381.0  | 301.7  | 258.9  | 230.8  | 227.3  | 241.4  | 242.8  |
| 50°   | 12101.2 | 10585.1 | 5786.1 | 1385.7 | 363.4  | 284.9  | 245.6  | 216.8  | 216.1  | 228.7  | 228.7  |
| 52.5° | 12452.7 | 10745.7 | 5242.4 | 1069.9 | 351.5  | 270.1  | 232.2  | 203.5  | 203.5  | 207.7  | 208.4  |
| 55°   | 12700.4 | 10713.5 | 4918.2 | 841.9  | 338.9  | 256.1  | 218.2  | 190.8  | 182.4  | 179.6  | 181.0  |
| 57.5° | 12745.3 | 10627.9 | 4542.2 | 656.7  | 324.1  | 242.8  | 205.6  | 176.1  | 160.7  | 158.6  | 157.9  |
| 60°   | 12716.5 | 10439.8 | 4112.8 | 548.7  | 307.3  | 230.1  | 192.9  | 160.7  | 145.2  | 140.3  | 141.7  |
| 62.5° | 12596.6 | 10106.6 | 3616.8 | 481.3  | 290.5  | 220.3  | 178.9  | 150.1  | 136.1  | 129.8  | 129.8  |
| 65°   | 12234.5 | 9629.5  | 2880.1 | 421.7  | 269.4  | 209.8  | 167.7  | 145.9  | 130.5  | 123.5  | 122.1  |
| 67.5° | 11438.9 | 8639.5  | 2164.4 | 369.7  | 249.1  | 198.6  | 166.3  | 145.2  | 127.7  | 117.9  | 116.5  |
| 70°   | 10371.8 | 7421.5  | 1477.6 | 324.8  | 226.6  | 188.0  | 165.6  | 145.9  | 124.9  | 112.3  | 110.9  |
| 72.5° | 8658.5  | 5850.7  | 851.0  | 282.7  | 204.2  | 178.2  | 162.8  | 146.6  | 120.0  | 104.5  | 102.4  |
| 75°   | 6506.0  | 4103.7  | 499.5  | 242.8  | 182.4  | 163.5  | 155.1  | 142.4  | 112.3  | 95.4   | 93.3   |
| 77.5° | 3912.8  | 1916.1  | 376.1  | 201.4  | 156.5  | 143.8  | 138.2  | 130.5  | 102.4  | 88.4   | 86.3   |
| 80°   | 1435.5  | 727.6   | 295.4  | 161.4  | 124.2  | 124.9  | 119.3  | 114.4  | 93.3   | 81.4   | 80.0   |
| 82.5° | 625.8   | 444.8   | 218.2  | 122.8  | 97.5   | 111.6  | 98.2   | 94.0   | 80.0   | 73.0   | 70.2   |
| 85°   | 379.6   | 265.2   | 140.3  | 83.5   | 67.4   | 75.8   | 68.8   | 72.3   | 61.7   | 57.5   | 55.4   |
| 87.5° | 125.6   | 79.3    | 62.4   | 40.7   | 33.7   | 31.6   | 30.9   | 37.2   | 35.1   | 32.3   | 32.3   |
| 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)