

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: P721888

Luminaire Tested: **CST-CA8-430-722-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-430-722-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48371 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

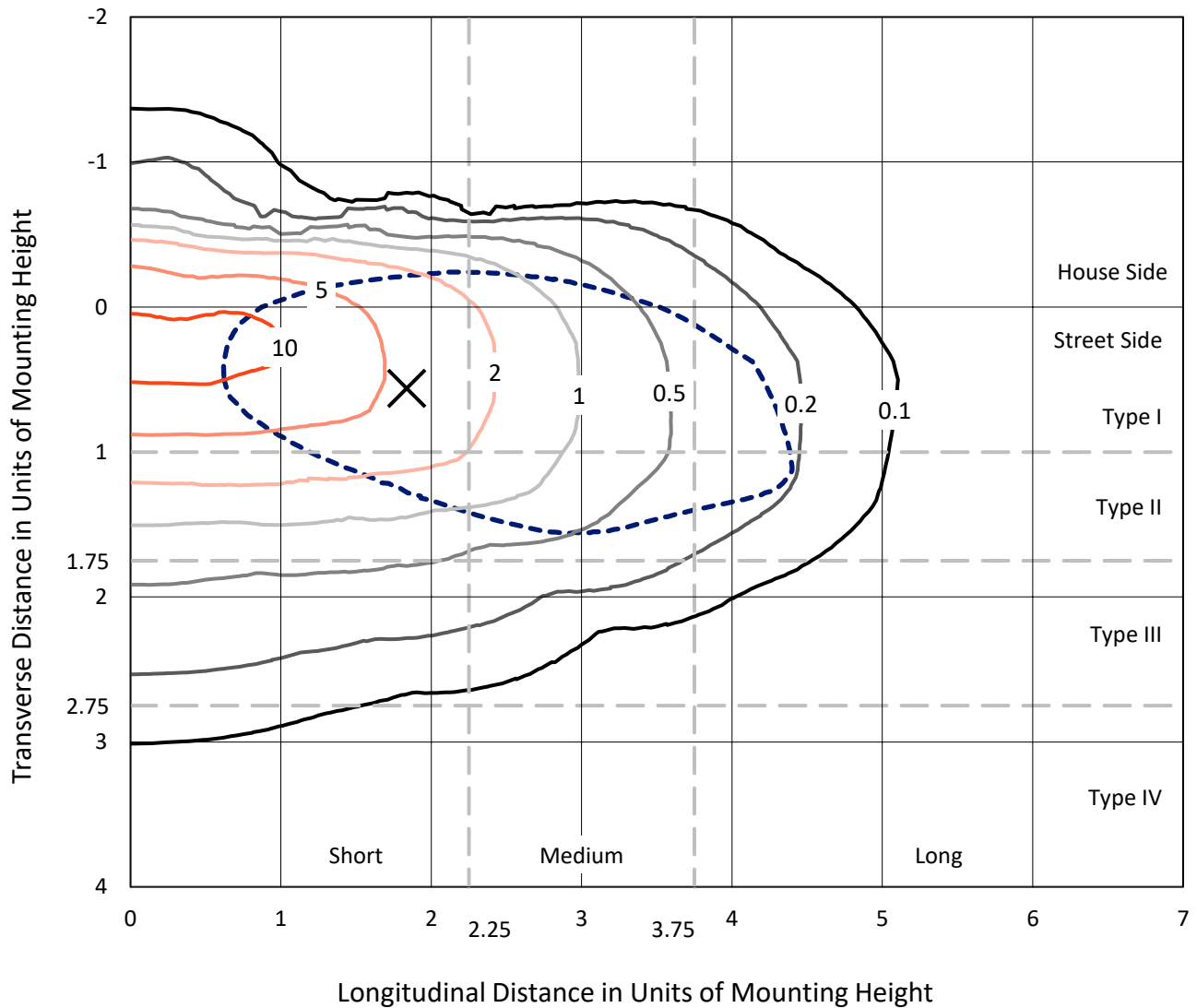
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P721888
 CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

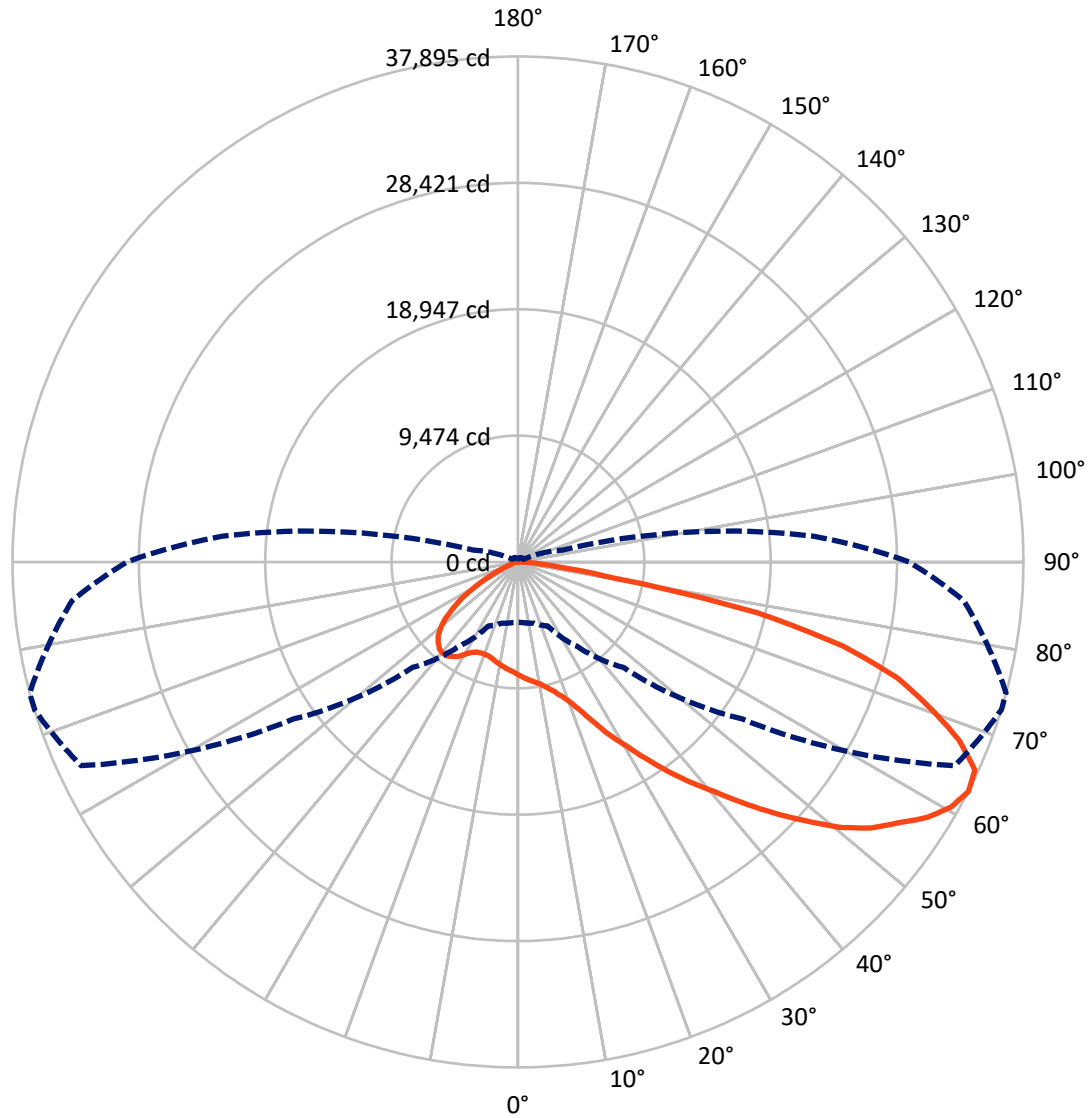
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Short - N/A

REPORT NUMBER: P721888
CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P721888
 CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

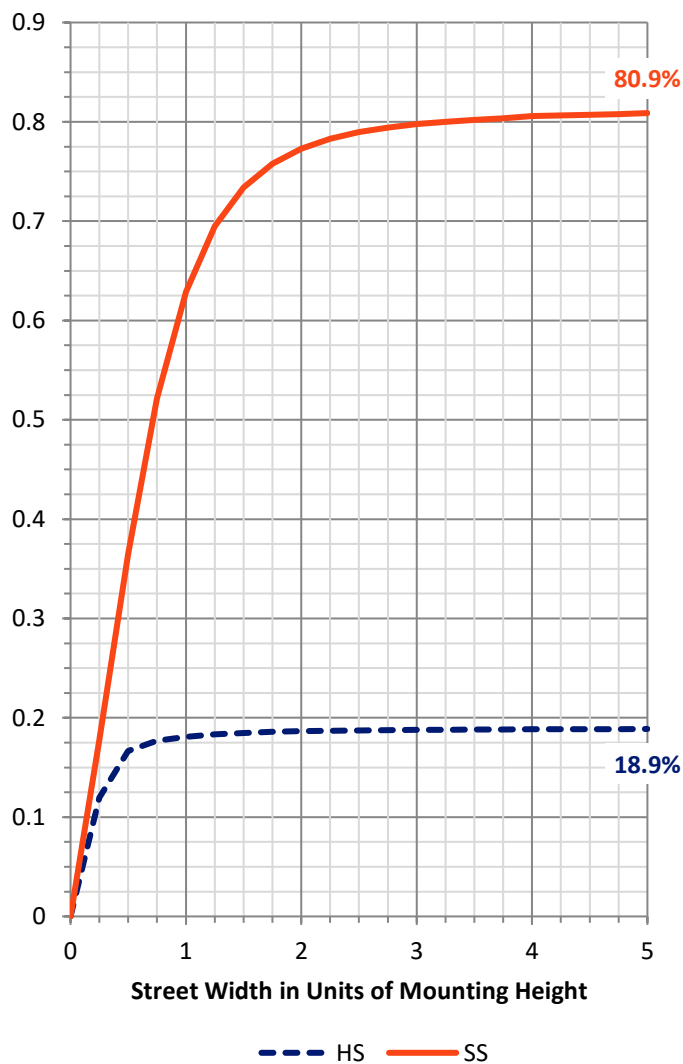
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9253.1 | 0.0 | 9253.1 |
| | % Fixture | 19.1 | 0.0 | 19.1 |
| Street Side | Lumens | 39117.9 | 0.0 | 39117.9 |
| | % Fixture | 80.9 | 0.0 | 80.9 |
| Total | Lumens | 48371.0 | 0.0 | 48371.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 810.2 | 1.7 |
| 10°-20° | 2437.1 | 5.0 |
| 20°-30° | 4210.7 | 8.7 |
| 30°-40° | 6331.9 | 13.1 |
| 40°-50° | 8443.0 | 17.5 |
| 50°-60° | 9943.3 | 20.6 |
| 60°-70° | 9885.4 | 20.4 |
| 70°-80° | 5675.4 | 11.7 |
| 80°-90° | 634.0 | 1.3 |
| 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° | 48371.0 | 100.0 |
| 0°-180° | 48371.0 | 100.0 |

Coefficient of Utilization

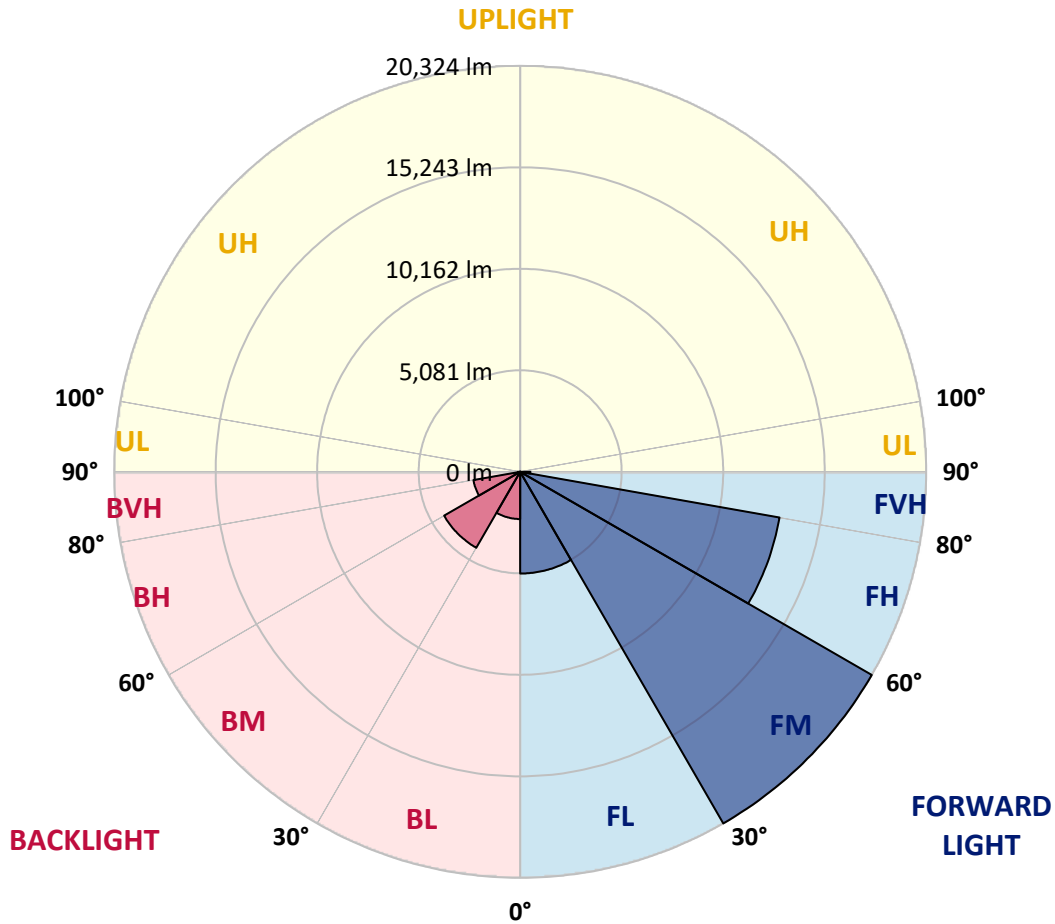


REPORT NUMBER: P721888
 CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 5093.4 | 10.5 | | | |
| FM (30°-60°) | 20324.3 | 42.0 | | | |
| FH (60°-80°) | 13185.2 | 27.3 | | | G5 |
| FVH (80°-90°) | 514.9 | 1.1 | | | G4/750 |
| BL (0°-30°) | 2364.6 | 4.9 | B3/2500 | | |
| BM (30°-60°) | 4393.8 | 9.1 | B3/5000 | | |
| BH (60°-80°) | 2375.6 | 4.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 119.1 | 0.2 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5
 Type II Short





REPORT NUMBER: P721888

CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 73° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 |
| 2.5° | 9076.0 | 9098.8 | 9071.7 | 9059.7 | 9046.7 | 8962.0 | 8863.2 | 8762.2 | 8680.8 | 8667.8 | 8561.3 |
| 5° | 9713.4 | 9725.3 | 9680.8 | 9629.8 | 9541.8 | 9401.7 | 9224.8 | 9049.9 | 8887.1 | 8843.6 | 8649.3 |
| 7.5° | 10203.0 | 10180.2 | 10169.4 | 10126.0 | 10048.9 | 9894.7 | 9626.5 | 9339.8 | 9087.9 | 9027.1 | 8731.8 |
| 10° | 10662.3 | 10652.6 | 10570.0 | 10515.7 | 10393.1 | 10250.8 | 10030.4 | 9666.7 | 9311.6 | 9213.9 | 8803.5 |
| 12.5° | 11159.6 | 11137.9 | 11104.2 | 10987.0 | 10887.1 | 10647.1 | 10381.1 | 10049.9 | 9654.7 | 9524.4 | 8926.2 |
| 15° | 11607.0 | 11548.3 | 11529.9 | 11407.2 | 11306.2 | 11122.7 | 10855.6 | 10471.2 | 10048.9 | 9937.0 | 9159.6 |
| 17.5° | 12032.6 | 12005.4 | 11964.2 | 11880.6 | 11767.6 | 11626.5 | 11412.6 | 11001.1 | 10564.6 | 10401.7 | 9555.9 |
| 20° | 12394.1 | 12360.5 | 12324.6 | 12347.5 | 12322.5 | 12232.4 | 12097.7 | 11747.0 | 11213.9 | 11056.5 | 10038.0 |
| 22.5° | 12646.0 | 12645.0 | 12788.3 | 12871.9 | 12919.7 | 12916.4 | 12883.8 | 12685.1 | 12148.8 | 11989.1 | 10759.0 |
| 25° | 12855.6 | 12871.9 | 13053.2 | 13371.3 | 13655.8 | 13681.9 | 13912.1 | 13817.6 | 13361.6 | 13195.4 | 11843.7 |
| 27.5° | 12917.5 | 12950.1 | 13279.0 | 13779.6 | 14211.7 | 14626.5 | 14964.2 | 15136.8 | 14714.4 | 14515.7 | 13009.8 |
| 30° | 12962.0 | 12975.0 | 13297.5 | 13896.9 | 14807.8 | 15464.7 | 16068.4 | 16360.5 | 15996.7 | 15851.3 | 14309.4 |
| 32.5° | 12648.2 | 12652.6 | 13146.6 | 14054.3 | 15245.4 | 16384.4 | 17098.8 | 17649.3 | 17553.7 | 17361.6 | 15730.7 |
| 35° | 12216.1 | 12296.4 | 12863.2 | 13902.3 | 15605.9 | 17229.1 | 18202.0 | 19022.8 | 19213.9 | 19076.0 | 17150.9 |
| 37.5° | 11681.9 | 11744.8 | 12351.8 | 13676.4 | 15685.1 | 17810.0 | 19059.7 | 20419.1 | 20918.6 | 20895.8 | 18865.4 |
| 40° | 11025.0 | 11102.1 | 11828.4 | 13190.0 | 15646.0 | 18232.4 | 20066.2 | 21965.3 | 22599.4 | 22527.7 | 20565.7 |
| 42.5° | 10248.6 | 10361.6 | 11066.2 | 12564.6 | 15360.5 | 18490.8 | 20890.3 | 23539.6 | 24680.8 | 24634.1 | 22070.6 |
| 45° | 9481.0 | 9541.8 | 10184.6 | 11693.8 | 14835.0 | 18574.4 | 21665.6 | 25709.0 | 26815.4 | 26763.3 | 23883.8 |
| 47.5° | 8689.5 | 8742.7 | 9413.7 | 10776.3 | 13922.9 | 18406.1 | 22279.0 | 27572.2 | 28990.2 | 28938.1 | 25685.1 |
| 50° | 6848.0 | 7048.9 | 8424.5 | 9969.6 | 12883.8 | 17929.4 | 22857.8 | 29893.6 | 31266.0 | 31044.5 | 27262.8 |
| 52.5° | 5858.9 | 5931.6 | 6645.0 | 9156.4 | 11846.9 | 17116.2 | 23244.3 | 32044.5 | 33137.9 | 32818.7 | 28876.2 |
| 55° | 5476.7 | 5525.5 | 5875.1 | 7656.9 | 10873.0 | 15886.0 | 23699.2 | 34200.9 | 34541.8 | 34460.4 | 30192.2 |
| 57.5° | 5186.8 | 5241.0 | 5490.8 | 6395.2 | 9846.9 | 14161.8 | 23557.0 | 35717.7 | 36144.4 | 35883.8 | 31589.6 |
| 60° | 4776.3 | 4842.6 | 5173.7 | 5741.6 | 8680.8 | 12411.5 | 22305.1 | 36338.8 | 37309.5 | 37016.3 | 32652.6 |
| 62.5° | 4517.9 | 4561.3 | 4751.4 | 5301.8 | 7714.4 | 11180.2 | 20523.3 | 36139.0 | 37894.7 | 37883.8 | 33574.4 |
| 65° | 4167.2 | 4231.3 | 4434.3 | 4880.6 | 6854.5 | 10225.8 | 18842.6 | 35152.0 | 37642.8 | 37652.6 | 33764.4 |
| 67.5° | 3800.2 | 3826.3 | 4039.1 | 4397.4 | 5841.5 | 9351.8 | 16667.8 | 33463.6 | 35680.8 | 35904.5 | 32449.5 |
| 70° | 3342.0 | 3329.0 | 3559.2 | 3820.8 | 4774.2 | 7940.3 | 13415.9 | 30460.4 | 32781.8 | 32874.1 | 29790.5 |
| 72.5° | 2629.8 | 2641.7 | 2705.8 | 2887.1 | 3624.3 | 6248.6 | 9735.1 | 25735.1 | 29751.4 | 29915.3 | 26392.0 |
| 75° | 1767.6 | 1787.2 | 2085.8 | 2262.8 | 2606.9 | 4490.8 | 6121.6 | 17371.3 | 25150.9 | 25613.5 | 21600.4 |
| 77.5° | 1348.5 | 1360.5 | 1447.3 | 1640.6 | 1886.0 | 3200.9 | 3318.1 | 9465.8 | 18310.5 | 19408.3 | 16897.9 |
| 80° | 955.5 | 959.8 | 874.1 | 777.4 | 1004.3 | 2171.6 | 1959.8 | 4031.5 | 7296.4 | 8622.2 | 9925.1 |
| 82.5° | 427.8 | 421.3 | 496.2 | 412.6 | 578.7 | 840.4 | 925.1 | 1956.6 | 3030.4 | 3257.3 | 3546.1 |
| 85° | 198.7 | 222.6 | 255.2 | 213.9 | 344.2 | 324.6 | 360.5 | 833.9 | 1420.2 | 1567.9 | 1559.2 |
| 87.5° | 48.9 | 53.2 | 67.3 | 85.8 | 124.9 | 110.7 | 108.6 | 245.4 | 317.0 | 316.0 | 485.3 |
| 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: P721888

CATALOG NUMBER: CST-CA8-430-722-U-T2-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 | 8483.2 |
| 2.5° | 8488.6 | 8432.1 | 8298.6 | 8169.4 | 8046.7 | 7965.3 | 7874.1 | 7778.5 | 7721.0 | 7693.8 | 7752.4 |
| 5° | 8530.9 | 8423.5 | 8168.3 | 7912.1 | 7694.9 | 7509.2 | 7378.9 | 7268.2 | 7208.5 | 7213.9 | 7217.2 |
| 7.5° | 8566.8 | 8415.9 | 8058.6 | 7697.1 | 7358.3 | 7128.1 | 6957.7 | 6838.2 | 6769.8 | 6717.7 | 6756.8 |
| 10° | 8598.3 | 8384.4 | 7930.5 | 7448.4 | 7080.3 | 6739.4 | 6508.1 | 6363.7 | 6237.8 | 6167.2 | 6222.6 |
| 12.5° | 8631.9 | 8372.4 | 7787.2 | 7225.8 | 6749.2 | 6368.1 | 6051.0 | 5907.7 | 5783.9 | 5730.7 | 5764.4 |
| 15° | 8778.5 | 8418.0 | 7653.6 | 6964.2 | 6422.4 | 5929.4 | 5587.4 | 5411.5 | 5313.8 | 5249.7 | 5263.8 |
| 17.5° | 9030.4 | 8538.5 | 7567.9 | 6690.6 | 6057.5 | 5536.4 | 5093.4 | 4888.2 | 4726.4 | 4680.8 | 4668.8 |
| 20° | 9388.7 | 8767.6 | 7567.9 | 6459.3 | 5643.9 | 5099.9 | 4589.6 | 4243.2 | 3991.3 | 3896.9 | 3969.6 |
| 22.5° | 9990.2 | 9157.4 | 7642.8 | 6249.7 | 5287.7 | 4647.1 | 4039.1 | 3510.3 | 3170.5 | 3032.6 | 3112.9 |
| 25° | 10831.7 | 9760.0 | 7764.4 | 6066.2 | 4963.1 | 4126.0 | 3340.9 | 2732.9 | 2358.3 | 2194.4 | 2192.2 |
| 27.5° | 11930.5 | 10681.9 | 8009.8 | 5916.4 | 4574.4 | 3451.7 | 2612.4 | 2027.1 | 1675.4 | 1576.5 | 1590.7 |
| 30° | 13148.8 | 11680.8 | 8473.4 | 5699.2 | 4102.1 | 2697.1 | 1902.3 | 1489.7 | 1242.1 | 1111.8 | 1114.0 |
| 32.5° | 14323.6 | 12715.5 | 9023.9 | 5558.1 | 3488.6 | 2033.7 | 1356.1 | 1063.0 | 908.8 | 831.7 | 843.6 |
| 35° | 15583.1 | 13608.0 | 9433.2 | 5321.4 | 2768.7 | 1470.1 | 958.7 | 797.0 | 732.9 | 692.7 | 694.9 |
| 37.5° | 16943.5 | 14589.6 | 9769.8 | 5004.3 | 2093.4 | 1009.8 | 707.9 | 683.0 | 655.8 | 604.8 | 600.4 |
| 40° | 18364.8 | 15726.4 | 9970.7 | 4491.9 | 1454.9 | 699.2 | 601.5 | 629.8 | 614.5 | 548.3 | 542.9 |
| 42.5° | 19570.0 | 16603.7 | 10020.6 | 3813.2 | 941.4 | 566.8 | 545.1 | 588.5 | 591.7 | 524.4 | 515.7 |
| 45° | 20727.5 | 17385.5 | 9922.9 | 2919.7 | 652.6 | 533.1 | 510.3 | 570.0 | 574.4 | 513.6 | 499.5 |
| 47.5° | 22022.8 | 18454.9 | 9745.9 | 1947.9 | 539.6 | 503.8 | 498.4 | 539.6 | 554.8 | 504.9 | 487.5 |
| 50° | 23596.1 | 19324.7 | 9221.5 | 1196.5 | 509.2 | 485.3 | 485.3 | 510.3 | 530.9 | 487.5 | 478.8 |
| 52.5° | 25209.6 | 20082.5 | 8445.2 | 820.8 | 490.8 | 465.8 | 479.9 | 490.8 | 498.4 | 459.3 | 466.9 |
| 55° | 26365.9 | 20754.6 | 7287.7 | 660.2 | 479.9 | 452.8 | 486.4 | 464.7 | 453.9 | 420.2 | 412.6 |
| 57.5° | 27649.3 | 21553.7 | 6104.2 | 585.2 | 465.8 | 460.4 | 464.7 | 423.5 | 393.1 | 358.3 | 350.7 |
| 60° | 28545.1 | 21983.7 | 4655.8 | 550.5 | 449.5 | 452.8 | 428.9 | 373.5 | 318.1 | 293.2 | 287.7 |
| 62.5° | 29326.8 | 22229.1 | 3412.6 | 506.0 | 434.3 | 433.2 | 388.7 | 319.2 | 261.7 | 234.5 | 230.2 |
| 65° | 29208.5 | 21845.8 | 2211.7 | 470.1 | 422.4 | 408.3 | 348.5 | 273.6 | 218.2 | 197.6 | 195.4 |
| 67.5° | 27906.6 | 20149.8 | 1393.1 | 433.2 | 401.7 | 376.8 | 312.7 | 244.3 | 200.9 | 177.0 | 174.8 |
| 70° | 25173.7 | 17807.8 | 852.3 | 385.5 | 357.2 | 333.3 | 276.9 | 229.1 | 190.0 | 161.8 | 156.4 |
| 72.5° | 21396.3 | 15251.9 | 602.6 | 339.8 | 311.6 | 283.4 | 234.5 | 218.2 | 181.3 | 145.5 | 141.2 |
| 75° | 17578.7 | 11234.5 | 504.9 | 296.4 | 266.0 | 228.0 | 199.8 | 203.0 | 170.5 | 132.5 | 129.2 |
| 77.5° | 12378.9 | 7004.3 | 470.1 | 242.1 | 209.6 | 181.3 | 172.6 | 185.7 | 156.4 | 121.6 | 118.3 |
| 80° | 7224.8 | 3933.8 | 388.7 | 191.1 | 157.4 | 140.1 | 144.4 | 157.4 | 136.8 | 109.7 | 105.3 |
| 82.5° | 2916.4 | 1557.0 | 273.6 | 148.8 | 115.1 | 111.8 | 118.3 | 128.1 | 112.9 | 92.3 | 90.1 |
| 85° | 1041.3 | 486.4 | 155.3 | 97.7 | 73.8 | 77.1 | 76.0 | 91.2 | 81.4 | 67.3 | 66.2 |
| 87.5° | 273.6 | 96.6 | 69.5 | 39.1 | 31.5 | 31.5 | 29.3 | 42.3 | 39.1 | 30.4 | 33.7 |
| 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)