

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: P232796

Luminaire Tested: **CST-8-6-D-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-8-6-D-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 4000K LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 62543 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B4 - U0 - G5

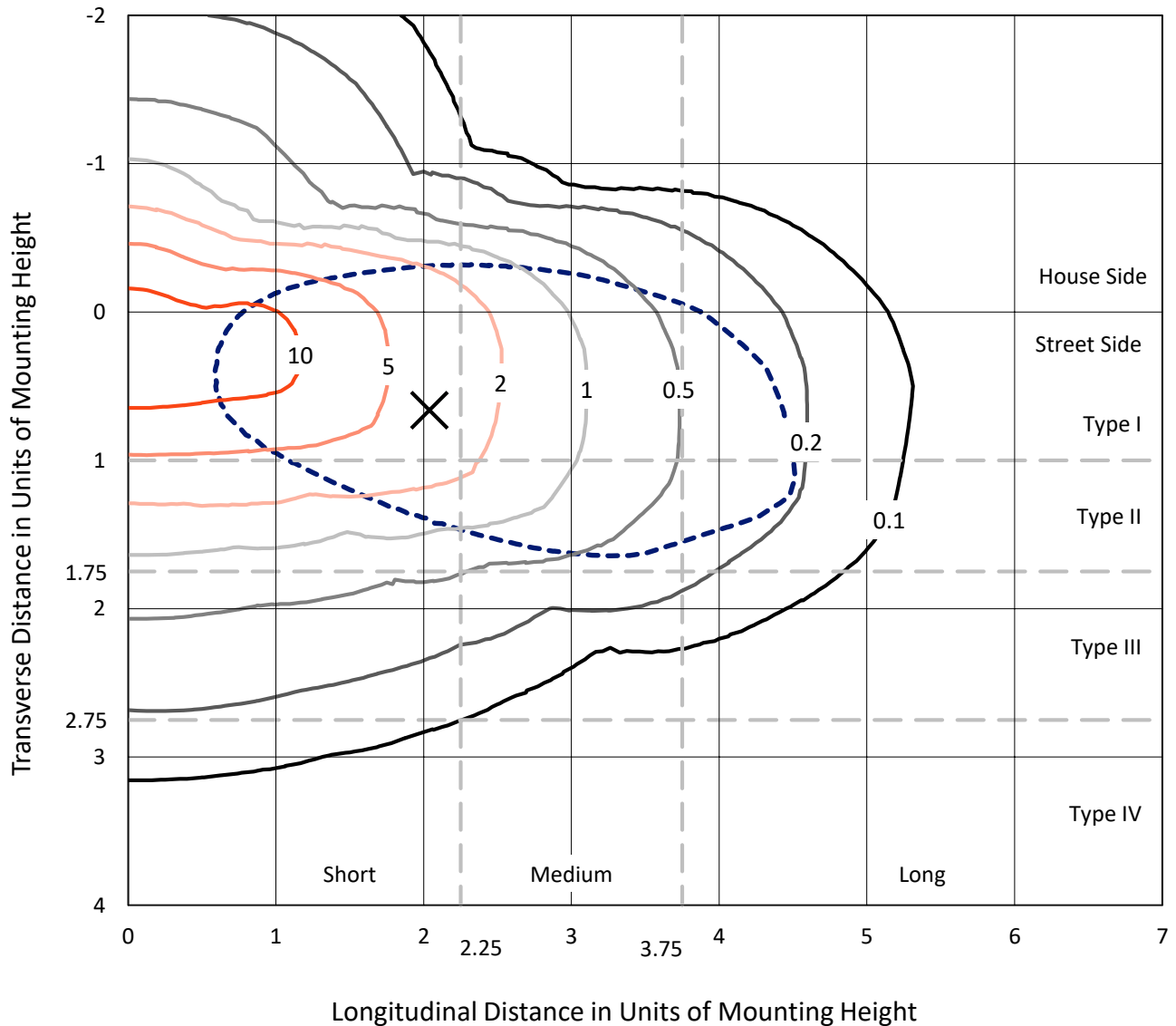
Input Watts (W): 477
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P232796
 CATALOG NUMBER: CST-8-6-D-U-T2

Iso-Footcandle Lines of Horizontal Illumination

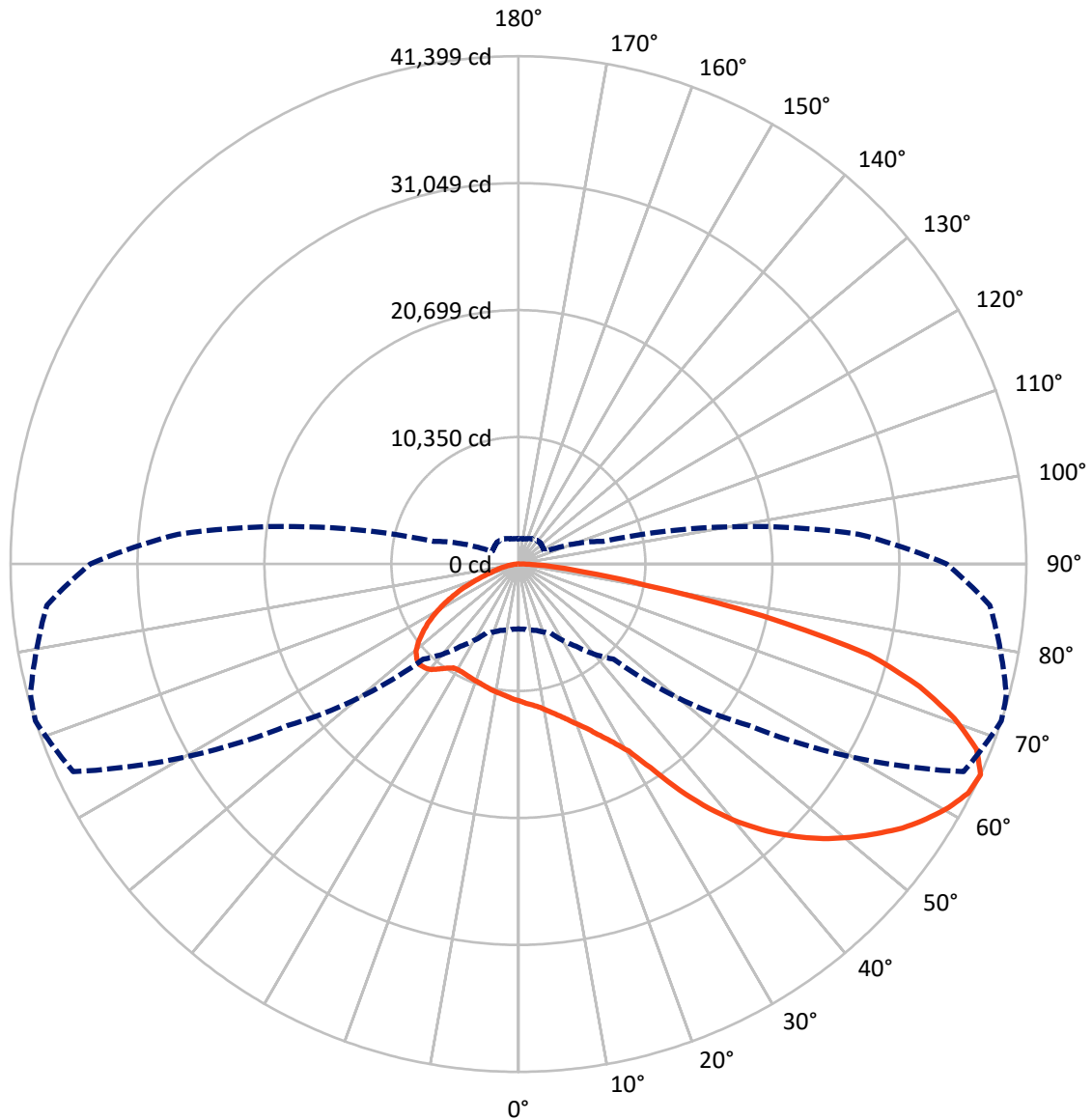
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.5 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P232796
CATALOG NUMBER: CST-8-6-D-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P232796

CATALOG NUMBER: CST-8-6-D-U-T2

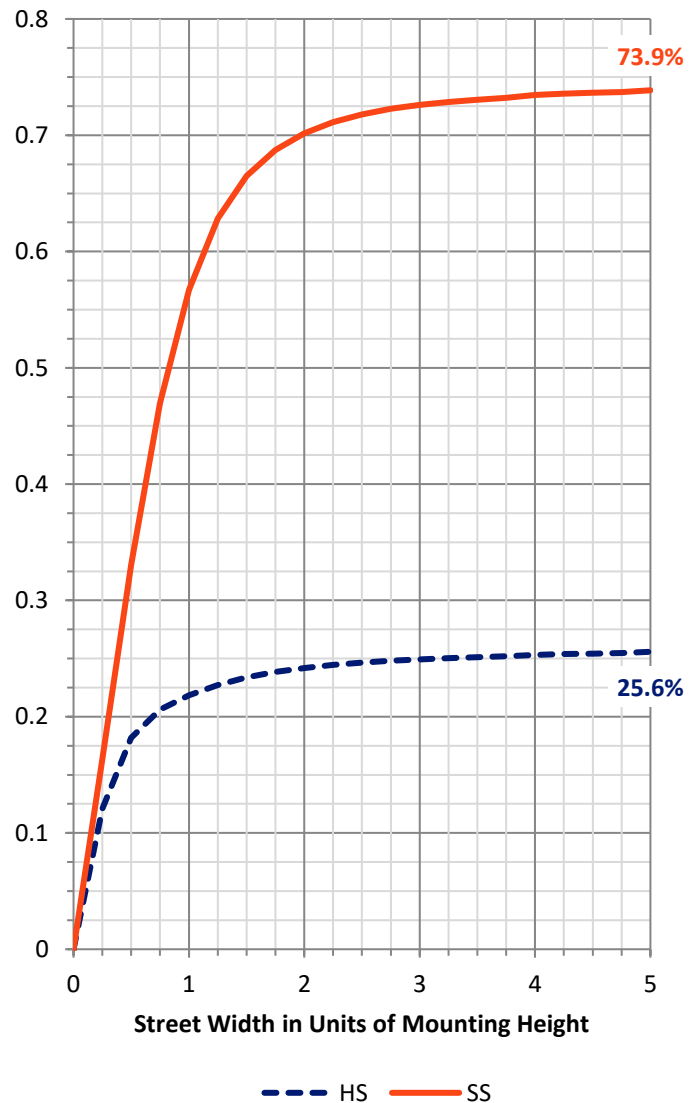
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 16291.9 | 0.0 | 16291.9 |
| | % Fixture | 26.0 | 0.0 | 26.0 |
| Street Side | Lumens | 46251.1 | 0.0 | 46251.1 |
| | % Fixture | 74.0 | 0.0 | 74.0 |
| Total | Lumens | 62543.0 | 0.0 | 62543.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1073.4 | 1.7 |
| 10°-20° | 3271.8 | 5.2 |
| 20°-30° | 5480.3 | 8.8 |
| 30°-40° | 7954.7 | 12.7 |
| 40°-50° | 10756.5 | 17.2 |
| 50°-60° | 12555.7 | 20.1 |
| 60°-70° | 12501.4 | 20.0 |
| 70°-80° | 7580.7 | 12.1 |
| 80°-90° | 1368.4 | 2.2 |
| 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° | 62543.0 | 100.0 |
| 0°-180° | 62543.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P232796

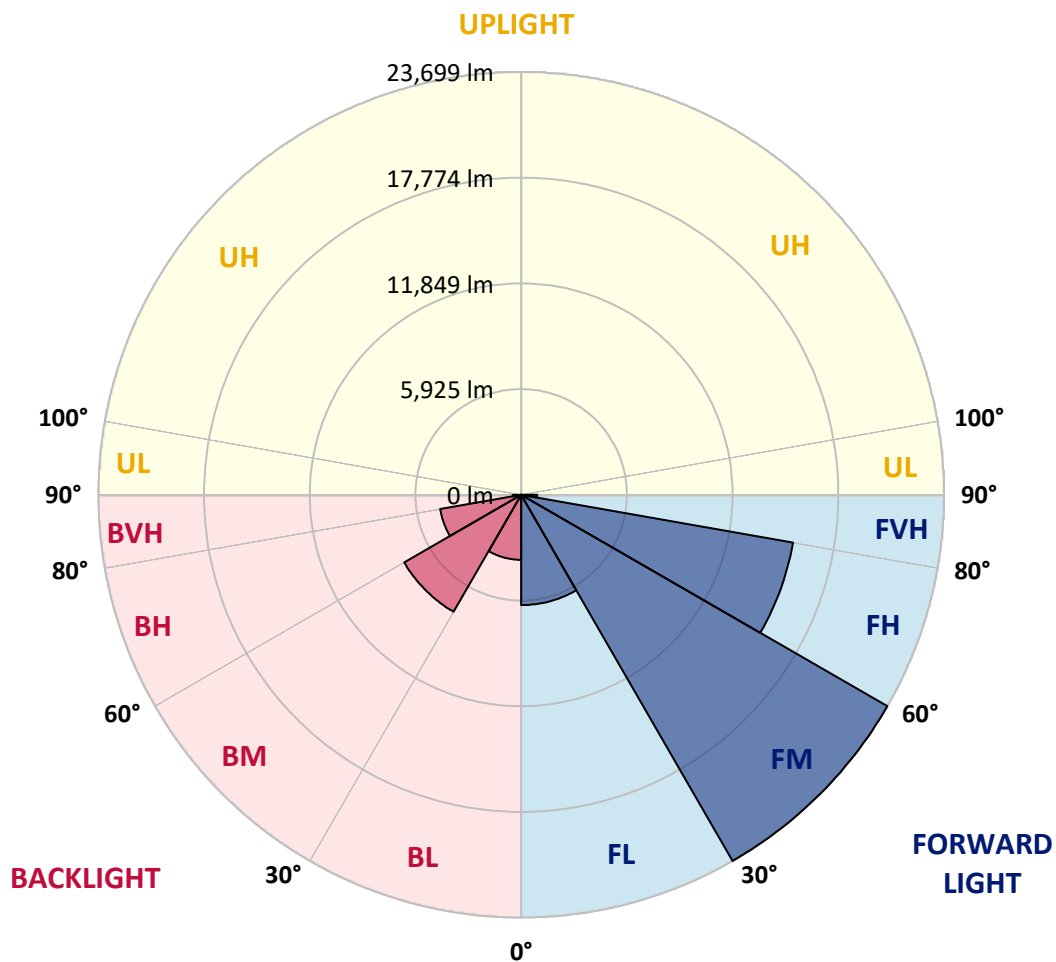
CATALOG NUMBER: CST-8-6-D-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 6181.5 | 9.9 | | | |
| FM | (30°-60°) | 23699.0 | 37.9 | | | |
| FH | (60°-80°) | 15470.5 | 24.7 | | | G5 |
| FVH | (80°-90°) | 900.2 | 1.4 | | | G5 |
| BL | (0°-30°) | 3644.1 | 5.8 | B4/5000 | | |
| BM | (30°-60°) | 7568.0 | 12.1 | B4/8500 | | |
| BH | (60°-80°) | 4611.5 | 7.4 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 468.3 | 0.7 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type II Short





REPORT NUMBER: P232796

CATALOG NUMBER: CST-8-6-D-U-T2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 72° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 |
| 2.5° | 11744.3 | 11721.9 | 11729.4 | 11740.2 | 11606.8 | 11584.5 | 11474.2 | 11418.0 | 11356.4 | 11313.1 | 11215.6 |
| 5° | 12348.7 | 12346.7 | 12298.6 | 12299.3 | 12090.2 | 12009.6 | 11805.9 | 11655.6 | 11524.9 | 11457.3 | 11254.2 |
| 7.5° | 12897.0 | 12840.2 | 12835.4 | 12821.9 | 12585.6 | 12457.0 | 12187.0 | 11958.8 | 11759.2 | 11654.9 | 11340.1 |
| 10° | 13412.1 | 13372.2 | 13372.9 | 13356.6 | 13114.3 | 12953.9 | 12629.0 | 12342.0 | 12075.3 | 11940.6 | 11482.3 |
| 12.5° | 13961.8 | 13916.4 | 13909.0 | 13852.1 | 13629.4 | 13475.1 | 13119.7 | 12767.1 | 12444.2 | 12291.9 | 11697.6 |
| 15° | 14525.7 | 14482.3 | 14460.7 | 14395.0 | 14146.6 | 13982.1 | 13684.3 | 13248.3 | 12880.8 | 12691.2 | 11980.5 |
| 17.5° | 15045.5 | 15019.1 | 14982.6 | 14931.8 | 14714.5 | 14534.5 | 14236.6 | 13822.4 | 13383.0 | 13140.7 | 12306.1 |
| 20° | 15366.4 | 15343.4 | 15367.7 | 15367.7 | 15242.5 | 15111.8 | 14812.0 | 14456.6 | 13982.1 | 13682.2 | 12680.4 |
| 22.5° | 15612.1 | 15588.4 | 15696.7 | 15751.5 | 15764.4 | 15735.3 | 15440.8 | 15130.8 | 14636.7 | 14327.3 | 13143.4 |
| 25° | 15672.3 | 15675.0 | 15858.5 | 16104.9 | 16287.6 | 16372.9 | 16146.2 | 15918.0 | 15491.6 | 15104.4 | 13776.3 |
| 27.5° | 15654.7 | 15672.3 | 15907.2 | 16347.2 | 16785.2 | 16992.3 | 16910.4 | 16777.7 | 16439.9 | 16110.3 | 14621.8 |
| 30° | 15629.0 | 15675.0 | 15985.1 | 16525.9 | 17159.5 | 17569.7 | 17651.6 | 17852.6 | 17686.8 | 17462.1 | 15962.7 |
| 32.5° | 15309.5 | 15350.8 | 15794.8 | 16592.2 | 17478.3 | 18222.9 | 18663.6 | 19515.8 | 19785.9 | 19741.9 | 18038.1 |
| 35° | 14561.5 | 14642.8 | 15301.4 | 16418.3 | 17724.0 | 18888.3 | 19934.1 | 21718.4 | 22653.2 | 22578.1 | 20432.3 |
| 37.5° | 13799.3 | 13898.8 | 14688.8 | 16094.0 | 17835.0 | 19596.3 | 21324.5 | 24181.0 | 25310.7 | 25201.1 | 22733.1 |
| 40° | 13108.2 | 13222.6 | 14020.0 | 15608.0 | 17805.2 | 20258.3 | 22785.2 | 26495.3 | 27677.2 | 27482.2 | 24784.8 |
| 42.5° | 12309.5 | 12475.3 | 13201.6 | 14960.2 | 17573.1 | 20724.7 | 24230.4 | 28706.8 | 29776.9 | 29479.1 | 26651.7 |
| 45° | 11565.6 | 11698.9 | 12396.8 | 14072.8 | 17219.0 | 21067.9 | 25552.4 | 30755.7 | 31686.5 | 31339.2 | 28371.7 |
| 47.5° | 10759.4 | 10928.6 | 11629.9 | 13159.7 | 16515.7 | 21145.1 | 26762.7 | 32575.9 | 33451.8 | 33090.4 | 29976.0 |
| 50° | 8632.5 | 8905.3 | 10489.3 | 12266.2 | 15423.9 | 20864.8 | 27837.6 | 34283.1 | 35038.5 | 34752.9 | 31635.7 |
| 52.5° | 7526.5 | 7580.0 | 8381.4 | 11240.6 | 14094.5 | 20131.8 | 28613.3 | 35957.7 | 36530.4 | 36239.3 | 33104.6 |
| 55° | 7031.7 | 7046.6 | 7405.3 | 9513.9 | 12805.0 | 18735.3 | 28989.0 | 37561.3 | 37991.8 | 37588.4 | 34495.0 |
| 57.5° | 6523.3 | 6606.6 | 6967.4 | 8028.7 | 11592.6 | 16720.2 | 28728.4 | 38963.9 | 39220.4 | 38766.2 | 35771.6 |
| 60° | 6103.0 | 6170.6 | 6530.8 | 7251.7 | 10262.5 | 14377.4 | 27514.1 | 40081.4 | 40307.5 | 39843.8 | 36969.7 |
| 62.5° | 5721.9 | 5771.3 | 6050.2 | 6725.7 | 9061.0 | 12300.0 | 25247.8 | 40380.6 | 41139.4 | 40770.5 | 38077.1 |
| 65° | 5289.3 | 5334.7 | 5593.2 | 6195.7 | 8181.7 | 10970.6 | 22968.0 | 40044.2 | 41398.7 | 41175.3 | 38575.3 |
| 67.5° | 4775.5 | 4836.5 | 5070.0 | 5589.2 | 7276.0 | 9825.9 | 20276.6 | 39190.6 | 40292.6 | 39949.4 | 37501.1 |
| 70° | 4100.7 | 4200.2 | 4464.8 | 4915.0 | 6218.0 | 8350.9 | 16175.3 | 36384.9 | 37694.0 | 37302.1 | 34632.4 |
| 72.5° | 3232.9 | 3254.5 | 3446.1 | 3820.4 | 4924.5 | 6643.1 | 10916.4 | 30787.6 | 34206.6 | 34095.6 | 30635.3 |
| 75° | 2410.4 | 2484.2 | 2791.5 | 3079.9 | 3597.7 | 4766.1 | 6635.7 | 22439.3 | 29532.6 | 29532.6 | 25818.4 |
| 77.5° | 1967.1 | 2005.7 | 2210.1 | 2452.4 | 2805.8 | 3344.6 | 4218.5 | 12679.1 | 20355.8 | 22420.4 | 19406.1 |
| 80° | 1537.2 | 1523.7 | 1537.9 | 1646.9 | 1980.6 | 2211.4 | 2804.4 | 6516.5 | 10516.4 | 11954.1 | 12712.2 |
| 82.5° | 842.1 | 842.7 | 934.8 | 881.3 | 1092.5 | 1242.8 | 1701.1 | 3665.4 | 5495.1 | 6101.6 | 6810.3 |
| 85° | 426.4 | 416.3 | 463.7 | 432.5 | 505.6 | 567.2 | 772.3 | 1820.9 | 2804.4 | 3040.0 | 3209.2 |
| 87.5° | 152.3 | 144.9 | 166.5 | 199.7 | 186.8 | 198.3 | 266.7 | 654.6 | 1083.7 | 1159.5 | 1136.5 |
| 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: P232796

CATALOG NUMBER: CST-8-6-D-U-T2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 | 11163.5 |
| 2.5° | 11187.8 | 11122.9 | 11044.3 | 10978.7 | 10839.9 | 10767.5 | 10710.0 | 10726.2 | 10663.9 | 10573.9 | 10572.5 |
| 5° | 11180.4 | 11056.5 | 10888.0 | 10748.5 | 10525.2 | 10410.1 | 10301.8 | 10273.3 | 10180.6 | 10091.3 | 10086.5 |
| 7.5° | 11206.1 | 11041.6 | 10768.2 | 10545.5 | 10254.4 | 10075.0 | 9907.1 | 9841.5 | 9732.5 | 9638.4 | 9633.7 |
| 10° | 11277.2 | 11059.9 | 10685.6 | 10376.9 | 10012.7 | 9767.0 | 9549.7 | 9417.7 | 9291.8 | 9195.0 | 9193.7 |
| 12.5° | 11404.5 | 11114.1 | 10613.2 | 10210.4 | 9777.9 | 9452.3 | 9174.7 | 9004.2 | 8828.2 | 8756.4 | 8752.3 |
| 15° | 11583.8 | 11193.3 | 10519.1 | 9989.1 | 9488.8 | 9117.9 | 8774.7 | 8549.3 | 8354.3 | 8285.3 | 8300.2 |
| 17.5° | 11814.0 | 11322.5 | 10443.3 | 9744.7 | 9170.0 | 8722.6 | 8365.8 | 8139.1 | 7852.1 | 7788.4 | 7806.0 |
| 20° | 12099.6 | 11522.2 | 10427.0 | 9521.3 | 8820.7 | 8288.0 | 7850.0 | 7689.6 | 7326.1 | 7240.8 | 7229.3 |
| 22.5° | 12469.2 | 11757.8 | 10420.2 | 9282.4 | 8411.2 | 7788.4 | 7269.3 | 7065.5 | 6760.2 | 6616.7 | 6584.2 |
| 25° | 12926.8 | 12030.6 | 10408.7 | 9043.4 | 7955.0 | 7219.2 | 6587.6 | 6301.3 | 6110.4 | 5893.1 | 5888.4 |
| 27.5° | 13529.3 | 12396.8 | 10435.8 | 8806.5 | 7457.4 | 6555.1 | 5855.9 | 5508.6 | 5399.0 | 5258.2 | 5185.1 |
| 30° | 14567.6 | 13049.3 | 10509.6 | 8520.2 | 6913.2 | 5790.9 | 5054.4 | 4791.1 | 4656.4 | 4513.6 | 4489.2 |
| 32.5° | 16310.6 | 14461.3 | 10737.7 | 8210.2 | 6307.4 | 4964.4 | 4398.5 | 4123.0 | 3899.6 | 3825.9 | 3806.2 |
| 35° | 18493.7 | 16138.0 | 11323.9 | 7878.5 | 5652.1 | 4309.8 | 3858.3 | 3494.8 | 3281.6 | 3264.0 | 3262.7 |
| 37.5° | 20454.6 | 17926.4 | 12088.1 | 7469.6 | 4929.9 | 3842.8 | 3322.2 | 3008.8 | 2848.4 | 2864.7 | 2907.3 |
| 40° | 22351.3 | 19513.1 | 12898.4 | 7062.1 | 4228.6 | 3348.6 | 2801.7 | 2651.4 | 2579.7 | 2637.9 | 2666.3 |
| 42.5° | 24132.9 | 20962.3 | 13481.9 | 6509.1 | 3621.4 | 2817.9 | 2442.9 | 2531.6 | 2557.3 | 2605.4 | 2625.0 |
| 45° | 25798.1 | 22447.4 | 13915.8 | 5843.0 | 3075.2 | 2443.6 | 2391.5 | 2544.5 | 2617.6 | 2654.8 | 2652.8 |
| 47.5° | 27409.1 | 23866.9 | 14045.7 | 4962.4 | 2652.8 | 2402.3 | 2438.9 | 2526.2 | 2640.6 | 2709.0 | 2704.2 |
| 50° | 29016.8 | 25158.4 | 13936.7 | 4067.5 | 2567.5 | 2482.2 | 2484.2 | 2470.0 | 2603.4 | 2658.9 | 2637.9 |
| 52.5° | 30457.9 | 26364.7 | 13320.8 | 3404.1 | 2624.4 | 2566.1 | 2537.7 | 2466.0 | 2503.9 | 2542.4 | 2523.5 |
| 55° | 31753.5 | 27371.2 | 12354.8 | 3077.2 | 2673.1 | 2620.3 | 2658.2 | 2518.8 | 2443.6 | 2411.1 | 2417.2 |
| 57.5° | 32959.1 | 28147.6 | 11244.7 | 2874.1 | 2662.9 | 2607.4 | 2706.3 | 2504.5 | 2394.9 | 2258.1 | 2231.7 |
| 60° | 34102.4 | 28657.3 | 9994.5 | 2698.8 | 2614.9 | 2588.5 | 2602.0 | 2505.2 | 2349.5 | 2172.2 | 2128.9 |
| 62.5° | 34910.6 | 28684.4 | 8559.4 | 2542.4 | 2522.1 | 2559.4 | 2520.1 | 2485.6 | 2361.7 | 2227.0 | 2199.9 |
| 65° | 34894.3 | 27841.7 | 7140.0 | 2363.1 | 2406.4 | 2481.5 | 2413.8 | 2299.4 | 2111.9 | 2072.0 | 2058.5 |
| 67.5° | 33380.1 | 25708.8 | 5763.1 | 2097.0 | 2218.9 | 2376.6 | 2261.5 | 2075.4 | 1913.6 | 1866.2 | 1875.0 |
| 70° | 30087.6 | 22693.2 | 4256.4 | 1699.7 | 1937.3 | 2197.9 | 2126.2 | 1919.0 | 1741.7 | 1704.4 | 1744.4 |
| 72.5° | 26185.3 | 19494.1 | 3025.8 | 1347.7 | 1609.0 | 1944.7 | 1916.3 | 1737.6 | 1581.9 | 1597.5 | 1633.4 |
| 75° | 21861.2 | 15518.0 | 2219.6 | 1159.5 | 1263.1 | 1657.7 | 1729.5 | 1615.1 | 1516.3 | 1565.7 | 1564.3 |
| 77.5° | 16293.0 | 11460.0 | 1690.2 | 972.7 | 1045.8 | 1290.2 | 1524.4 | 1481.1 | 1750.5 | 2127.5 | 2139.7 |
| 80° | 10706.6 | 7440.5 | 1140.6 | 798.7 | 855.6 | 968.0 | 1244.1 | 1426.9 | 1792.4 | 1553.5 | 1534.5 |
| 82.5° | 5932.4 | 3949.0 | 707.4 | 621.4 | 642.4 | 701.9 | 901.6 | 1489.9 | 1316.6 | 1221.8 | 1226.5 |
| 85° | 2630.4 | 1529.1 | 417.6 | 417.0 | 418.3 | 425.8 | 578.8 | 1129.8 | 926.0 | 896.9 | 911.8 |
| 87.5° | 911.1 | 402.8 | 131.3 | 104.2 | 117.8 | 147.6 | 301.2 | 689.1 | 483.3 | 400.7 | 402.1 |
| 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)