

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: McGRAW-EDISON

Report Number: P510658

Luminaire Tested: **CTN-CA6-230-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510658
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: McGRAW-EDISON
Catalog Number: CTN-CA6-230-730-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31552 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

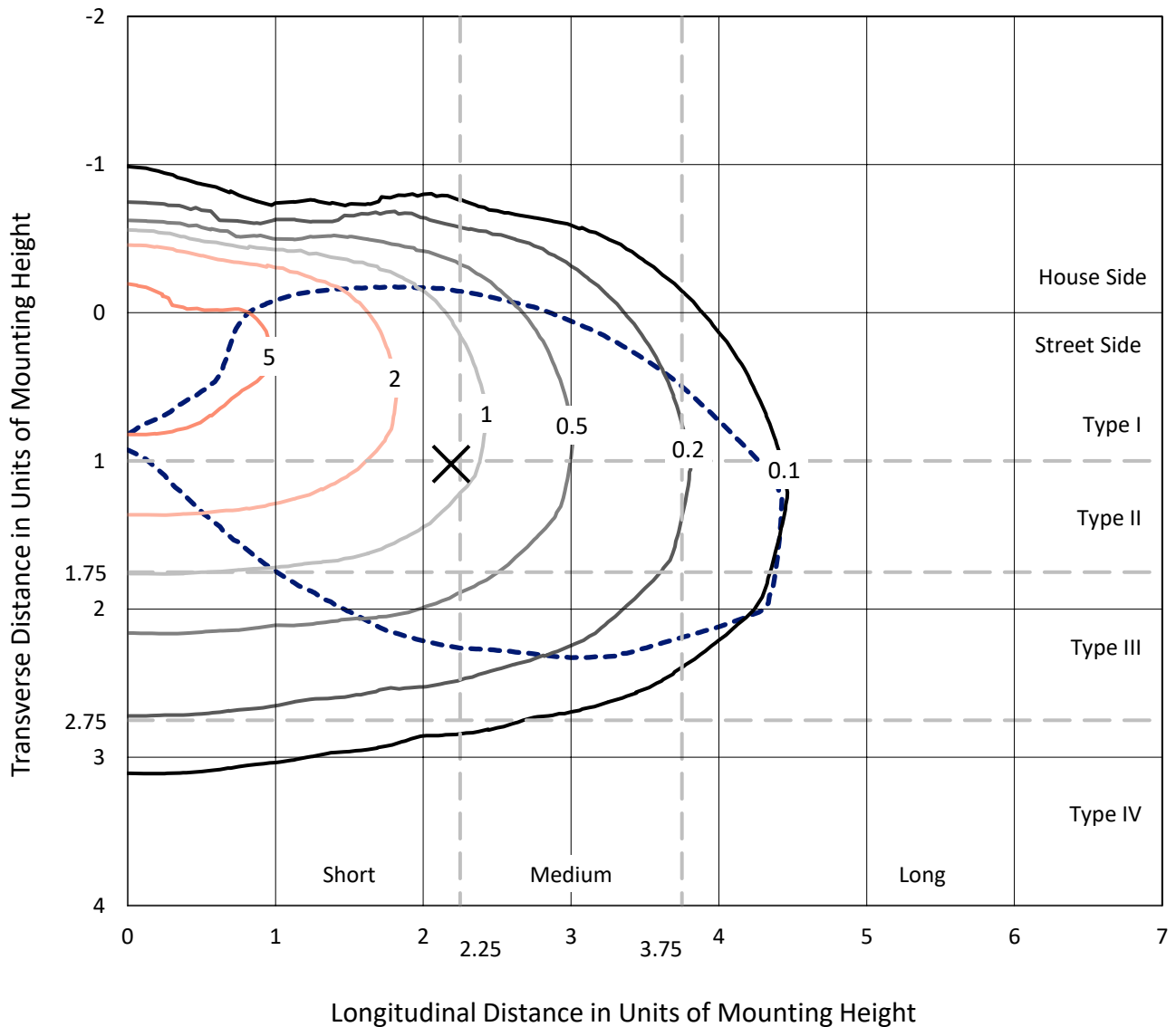
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P510658
 CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

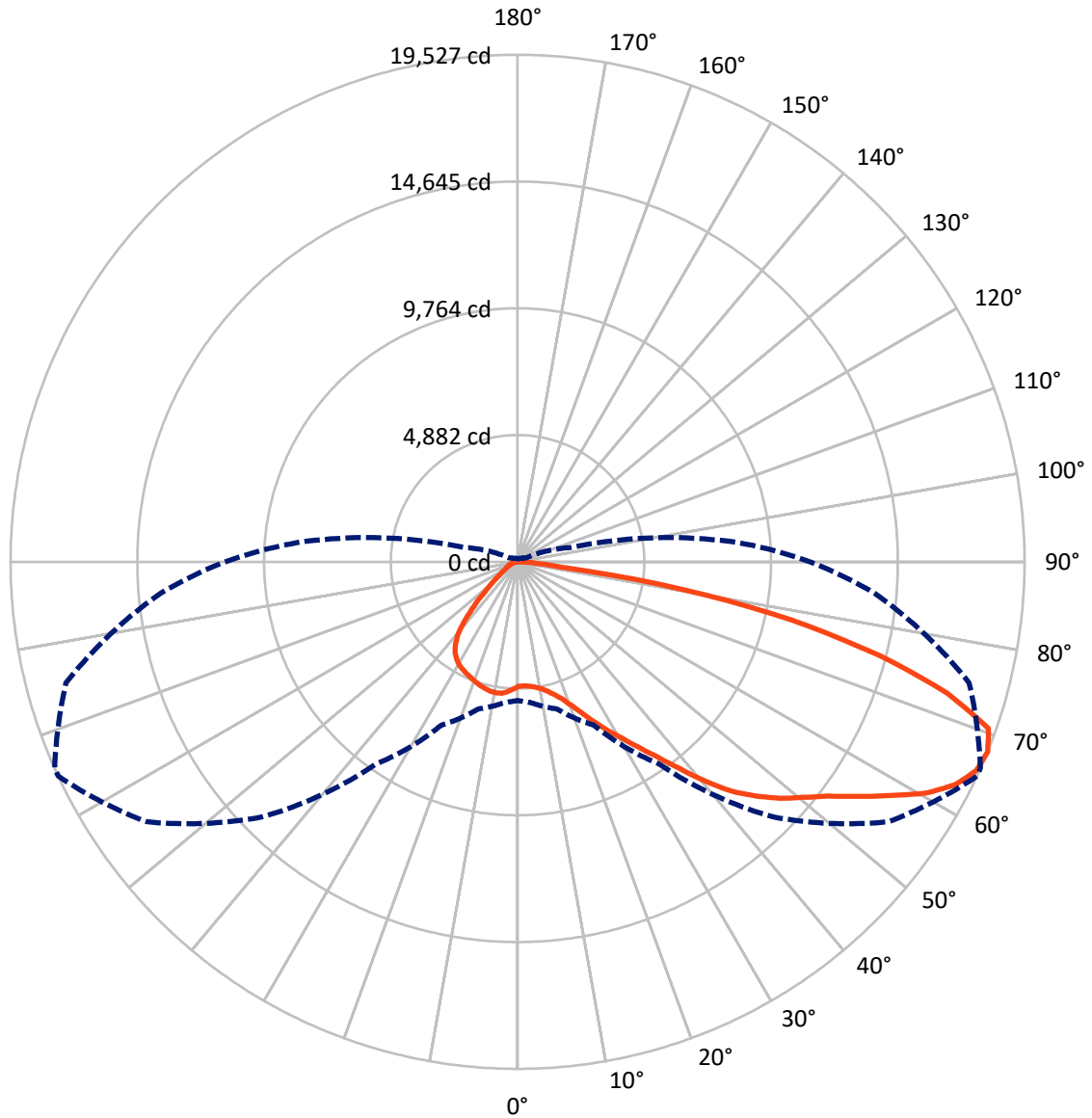
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.3 fc
 Type III - Short - N/A

REPORT NUMBER: P510658
CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510658
 CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

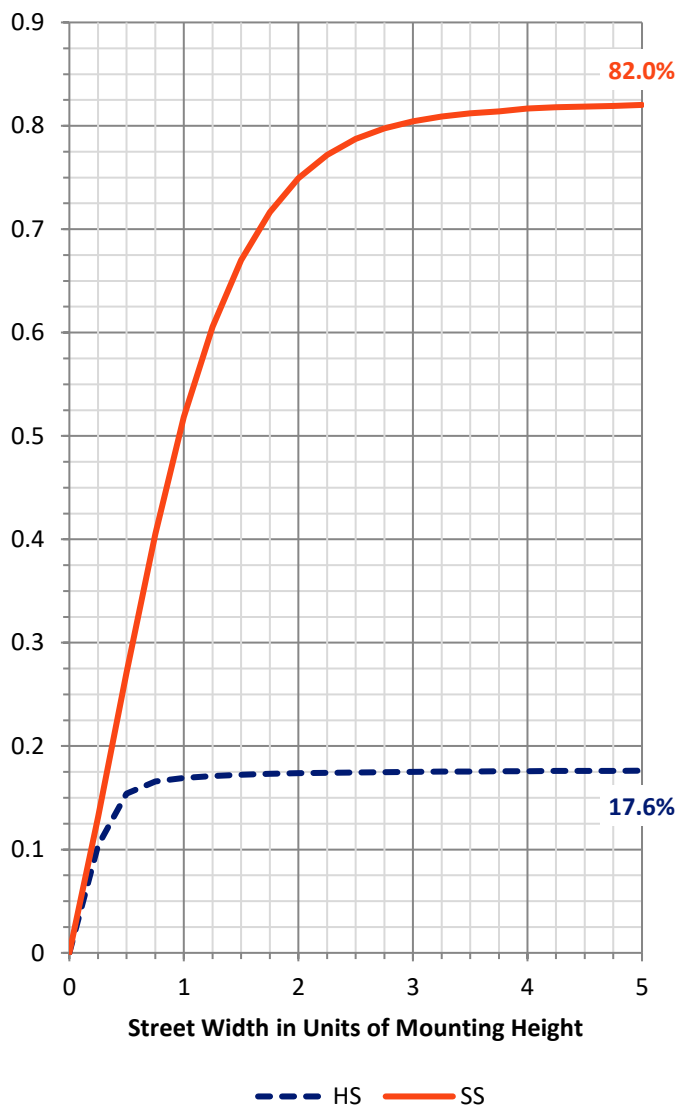
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5639.1 | 0.0 | 5639.1 |
| | % Fixture | 17.9 | 0.0 | 17.9 |
| Street Side | Lumens | 25912.9 | 0.0 | 25912.9 |
| | % Fixture | 82.1 | 0.0 | 82.1 |
| Total | Lumens | 31552.0 | 0.0 | 31552.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 474.3 | 1.5 |
| 10°-20° | 1464.5 | 4.6 |
| 20°-30° | 2540.5 | 8.1 |
| 30°-40° | 3832.4 | 12.1 |
| 40°-50° | 5313.8 | 16.8 |
| 50°-60° | 6559.2 | 20.8 |
| 60°-70° | 6988.8 | 22.1 |
| 70°-80° | 3999.1 | 12.7 |
| 80°-90° | 379.4 | 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° | 31552.0 | 100.0 |
| 0°-180° | 31552.0 | 100.0 |

Coefficient of Utilization

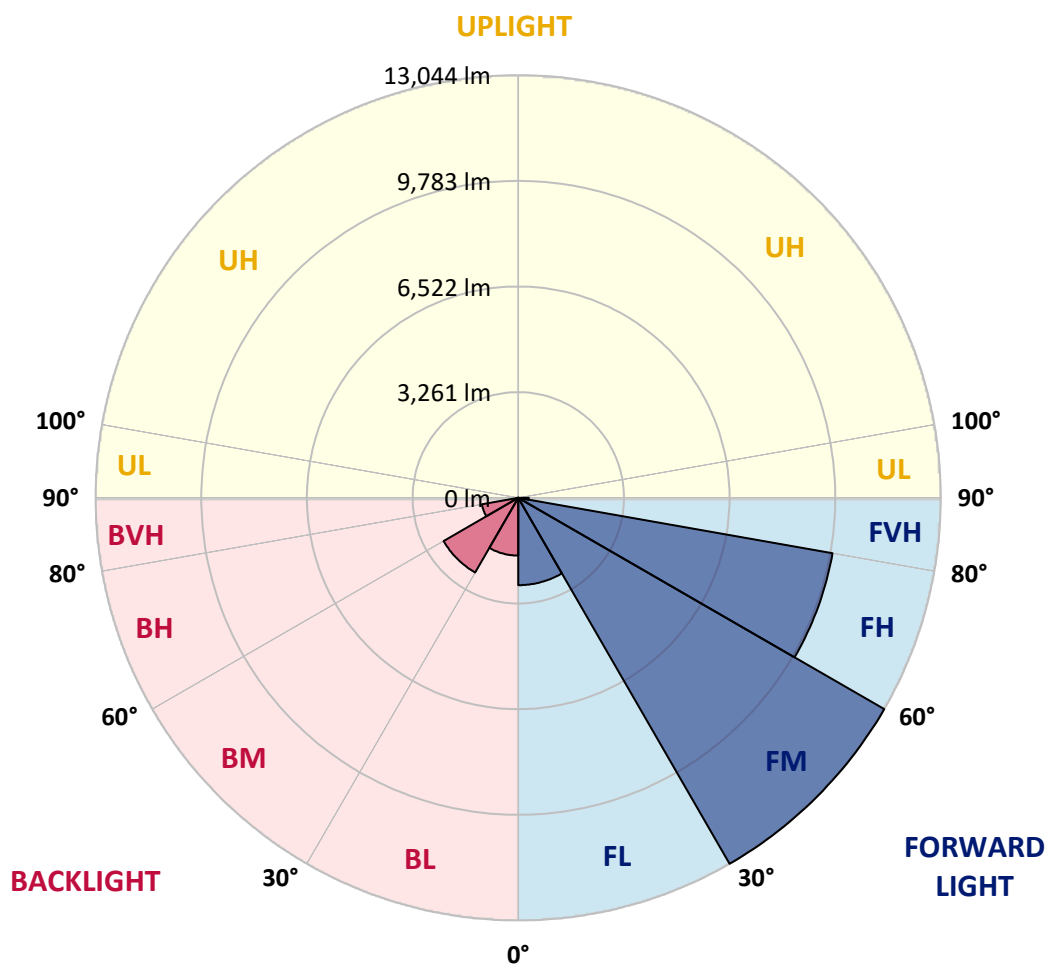


REPORT NUMBER: P510658
 CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2695.0 | 8.5 | | | |
| FM (30°-60°) | 13044.0 | 41.3 | | | |
| FH (60°-80°) | 9849.7 | 31.2 | | | G4/12000 |
| FVH (80°-90°) | 324.2 | 1.0 | | | G3/500 |
| BL (0°-30°) | 1784.4 | 5.7 | B3/2500 | | |
| BM (30°-60°) | 2661.4 | 8.4 | B3/5000 | | |
| BH (60°-80°) | 1138.2 | 3.6 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 55.2 | 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: P510658

CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 |
| 2.5° | 4748.2 | 4742.0 | 4736.5 | 4746.2 | 4751.7 | 4760.7 | 4773.8 | 4782.8 | 4785.5 | 4793.8 | 4804.2 |
| 5° | 4824.3 | 4823.6 | 4816.0 | 4811.8 | 4800.1 | 4795.9 | 4798.7 | 4809.7 | 4810.4 | 4820.8 | 4853.3 |
| 7.5° | 4973.5 | 4972.2 | 4953.5 | 4945.2 | 4920.3 | 4892.7 | 4871.9 | 4874.0 | 4873.3 | 4883.7 | 4927.2 |
| 10° | 5198.9 | 5187.8 | 5161.5 | 5136.0 | 5087.6 | 5035.7 | 4997.7 | 4963.2 | 4963.2 | 4978.4 | 5026.8 |
| 12.5° | 5453.2 | 5468.4 | 5432.5 | 5393.8 | 5312.9 | 5219.6 | 5153.2 | 5114.5 | 5110.4 | 5118.0 | 5152.5 |
| 15° | 5769.1 | 5769.1 | 5744.9 | 5689.6 | 5618.4 | 5488.5 | 5351.6 | 5302.5 | 5295.6 | 5311.5 | 5309.4 |
| 17.5° | 6125.0 | 6135.4 | 6089.8 | 6062.1 | 5952.9 | 5809.1 | 5637.7 | 5552.7 | 5552.7 | 5542.4 | 5494.7 |
| 20° | 6579.1 | 6522.4 | 6527.3 | 6481.6 | 6401.5 | 6192.7 | 6018.6 | 5894.8 | 5893.5 | 5872.7 | 5738.6 |
| 22.5° | 7072.6 | 7041.5 | 7014.5 | 6974.4 | 6863.8 | 6677.2 | 6435.3 | 6313.0 | 6310.2 | 6259.1 | 6060.0 |
| 25° | 7559.1 | 7582.6 | 7552.9 | 7479.7 | 7398.8 | 7195.6 | 6928.8 | 6808.6 | 6807.9 | 6722.9 | 6440.9 |
| 27.5° | 8059.5 | 8085.1 | 8075.4 | 8009.1 | 7901.3 | 7742.3 | 7490.0 | 7333.1 | 7323.5 | 7268.2 | 6913.6 |
| 30° | 8612.5 | 8589.7 | 8619.4 | 8591.0 | 8537.1 | 8277.9 | 8049.9 | 7867.4 | 7890.9 | 7874.3 | 7450.6 |
| 32.5° | 9014.7 | 9029.2 | 9126.7 | 9129.4 | 9072.8 | 8880.6 | 8602.1 | 8490.1 | 8527.5 | 8505.3 | 8110.7 |
| 35° | 9378.3 | 9401.8 | 9527.6 | 9651.3 | 9692.7 | 9482.6 | 9199.3 | 9192.3 | 9240.7 | 9375.5 | 9020.2 |
| 37.5° | 9690.7 | 9707.3 | 9883.5 | 10044.5 | 10178.6 | 10034.9 | 9828.9 | 10074.3 | 10145.4 | 10421.2 | 9958.8 |
| 40° | 9878.0 | 9899.4 | 10127.5 | 10354.2 | 10593.3 | 10542.2 | 10522.8 | 11103.4 | 11170.4 | 11413.0 | 10643.8 |
| 42.5° | 9772.2 | 9814.4 | 10194.5 | 10609.2 | 10961.0 | 11063.3 | 11328.0 | 12074.5 | 12151.2 | 12171.9 | 11316.9 |
| 45° | 9583.5 | 9636.1 | 10061.1 | 10732.2 | 11305.9 | 11634.2 | 12138.0 | 12865.8 | 12908.0 | 12849.2 | 11874.7 |
| 47.5° | 9380.3 | 9436.3 | 9911.1 | 10695.6 | 11583.0 | 12298.4 | 12861.7 | 13610.9 | 13640.6 | 13460.2 | 12436.6 |
| 50° | 9149.5 | 9201.3 | 9712.1 | 10609.9 | 11791.8 | 12925.3 | 13605.4 | 14255.0 | 14366.3 | 14009.7 | 12873.4 |
| 52.5° | 8868.9 | 8924.2 | 9466.0 | 10475.8 | 11974.9 | 13390.4 | 14261.3 | 14982.8 | 14990.4 | 14696.7 | 13365.5 |
| 55° | 8505.3 | 8601.4 | 9157.1 | 10243.6 | 12071.0 | 13789.9 | 14832.8 | 15945.6 | 15994.7 | 15710.6 | 13777.5 |
| 57.5° | 8101.0 | 8184.6 | 8785.3 | 9934.0 | 11984.6 | 14093.3 | 15752.1 | 16978.2 | 16972.0 | 16401.8 | 14137.5 |
| 60° | 7566.7 | 7626.2 | 8300.8 | 9528.9 | 11706.1 | 14460.3 | 16709.3 | 18084.7 | 18073.7 | 17079.1 | 14369.1 |
| 62.5° | 6881.1 | 6940.6 | 7575.0 | 8893.8 | 11296.9 | 14706.4 | 17359.0 | 18913.4 | 18881.6 | 17571.9 | 14440.3 |
| 65° | 6086.3 | 6192.7 | 6743.6 | 8069.2 | 10573.3 | 14544.6 | 17672.8 | 19401.4 | 19350.2 | 17947.9 | 14270.2 |
| 67.5° | 5341.2 | 5431.8 | 5867.9 | 6934.3 | 9505.4 | 13888.7 | 17451.6 | 19527.2 | 19512.0 | 18002.5 | 13789.9 |
| 70° | 4286.5 | 4319.7 | 4719.2 | 5632.2 | 7908.9 | 12484.3 | 16687.2 | 19236.9 | 19243.8 | 17499.3 | 12825.0 |
| 72.5° | 2933.9 | 3014.8 | 3192.4 | 3913.3 | 5755.2 | 9928.4 | 14382.9 | 17312.7 | 17314.1 | 15691.3 | 11173.9 |
| 75° | 1577.9 | 1703.0 | 1910.3 | 2267.7 | 3217.3 | 6371.1 | 11550.6 | 14365.6 | 14392.6 | 13082.8 | 8881.3 |
| 77.5° | 782.4 | 827.3 | 947.6 | 1213.0 | 1474.9 | 3005.8 | 7428.5 | 10783.4 | 10847.7 | 10042.5 | 6057.3 |
| 80° | 358.0 | 365.6 | 374.6 | 372.5 | 564.7 | 1318.7 | 3189.0 | 6476.1 | 6495.5 | 5972.9 | 2765.3 |
| 82.5° | 279.9 | 278.5 | 282.7 | 257.1 | 258.5 | 508.7 | 1103.8 | 1696.1 | 1808.7 | 1423.8 | 877.1 |
| 85° | 169.3 | 168.6 | 181.8 | 141.0 | 173.5 | 275.1 | 557.1 | 676.6 | 684.9 | 557.1 | 454.1 |
| 87.5° | 64.3 | 62.2 | 57.4 | 50.5 | 58.1 | 77.4 | 192.8 | 248.8 | 243.3 | 172.8 | 156.9 |
| 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: P510658

CATALOG NUMBER: CTN-CA6-230-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 | 4794.5 |
| 2.5° | 4813.2 | 4835.3 | 4876.1 | 4907.2 | 4917.6 | 4950.7 | 4982.5 | 4988.1 | 5010.9 | 5019.8 | 5049.6 |
| 5° | 4873.3 | 4910.6 | 4974.2 | 5016.4 | 5035.1 | 5090.3 | 5126.3 | 5144.3 | 5138.0 | 5141.5 | 5174.7 |
| 7.5° | 4961.1 | 4996.3 | 5047.5 | 5098.6 | 5107.6 | 5117.3 | 5113.8 | 5111.1 | 5086.9 | 5066.2 | 5097.3 |
| 10° | 5041.3 | 5074.4 | 5106.2 | 5113.8 | 5068.2 | 5042.7 | 4997.0 | 4961.8 | 4914.8 | 4893.4 | 4918.2 |
| 12.5° | 5153.9 | 5160.8 | 5129.7 | 5088.3 | 4990.1 | 4898.9 | 4824.9 | 4760.7 | 4702.6 | 4662.5 | 4695.7 |
| 15° | 5272.8 | 5245.9 | 5155.3 | 5034.4 | 4882.3 | 4751.7 | 4630.7 | 4523.6 | 4427.5 | 4404.0 | 4413.0 |
| 17.5° | 5430.4 | 5357.1 | 5174.7 | 4971.5 | 4735.1 | 4531.9 | 4376.4 | 4240.9 | 4115.1 | 4062.6 | 4057.8 |
| 20° | 5622.5 | 5504.3 | 5214.1 | 4892.0 | 4560.9 | 4290.7 | 4050.2 | 3847.7 | 3674.2 | 3531.8 | 3535.3 |
| 22.5° | 5872.7 | 5701.3 | 5273.5 | 4809.0 | 4368.1 | 4008.0 | 3658.3 | 3314.1 | 3028.6 | 2905.6 | 2875.2 |
| 25° | 6203.1 | 5947.4 | 5357.8 | 4733.7 | 4152.5 | 3648.6 | 3154.4 | 2668.5 | 2366.5 | 2246.9 | 2233.8 |
| 27.5° | 6614.3 | 6277.7 | 5486.4 | 4650.1 | 3921.6 | 3222.2 | 2511.7 | 2035.4 | 1758.3 | 1632.5 | 1590.3 |
| 30° | 7081.6 | 6684.8 | 5618.4 | 4563.0 | 3642.4 | 2674.1 | 1915.2 | 1448.7 | 1164.6 | 1051.9 | 1037.4 |
| 32.5° | 7686.3 | 7200.4 | 5814.7 | 4426.1 | 3234.6 | 2101.8 | 1336.0 | 904.0 | 711.2 | 662.8 | 649.0 |
| 35° | 8545.4 | 7897.8 | 6057.3 | 4253.4 | 2710.7 | 1468.0 | 828.0 | 529.4 | 426.4 | 402.3 | 397.4 |
| 37.5° | 9346.5 | 8582.1 | 6301.9 | 3966.5 | 2058.3 | 916.5 | 473.4 | 339.4 | 316.5 | 317.2 | 318.6 |
| 40° | 9981.6 | 9050.0 | 6499.6 | 3589.2 | 1354.0 | 520.4 | 329.0 | 282.0 | 282.7 | 280.6 | 279.2 |
| 42.5° | 10547.0 | 9423.2 | 6588.8 | 3031.4 | 784.5 | 348.3 | 285.4 | 259.9 | 253.7 | 255.7 | 254.3 |
| 45° | 11014.9 | 9804.0 | 6416.0 | 2404.5 | 462.4 | 312.4 | 269.5 | 241.2 | 234.3 | 245.4 | 246.7 |
| 47.5° | 11507.0 | 10165.5 | 6151.3 | 1811.5 | 375.3 | 297.2 | 255.0 | 227.4 | 223.9 | 237.8 | 239.1 |
| 50° | 11921.0 | 10427.4 | 5699.9 | 1365.0 | 358.0 | 280.6 | 241.9 | 213.6 | 212.9 | 225.3 | 225.3 |
| 52.5° | 12267.3 | 10585.7 | 5164.3 | 1054.0 | 346.3 | 266.1 | 228.8 | 200.4 | 200.4 | 204.6 | 205.3 |
| 55° | 12511.3 | 10553.9 | 4845.0 | 829.4 | 333.8 | 252.3 | 214.9 | 188.0 | 179.7 | 176.9 | 178.3 |
| 57.5° | 12555.5 | 10469.6 | 4474.5 | 646.9 | 319.3 | 239.1 | 202.5 | 173.5 | 158.3 | 156.2 | 155.5 |
| 60° | 12527.2 | 10284.4 | 4051.5 | 540.5 | 302.7 | 226.7 | 190.1 | 158.3 | 143.1 | 138.2 | 139.6 |
| 62.5° | 12409.0 | 9956.1 | 3562.9 | 474.1 | 286.1 | 217.0 | 176.2 | 147.9 | 134.1 | 127.9 | 127.9 |
| 65° | 12052.3 | 9486.1 | 2837.2 | 415.4 | 265.4 | 206.7 | 165.2 | 143.8 | 128.6 | 121.6 | 120.3 |
| 67.5° | 11268.6 | 8510.9 | 2132.2 | 364.2 | 245.4 | 195.6 | 163.8 | 143.1 | 125.8 | 116.1 | 114.7 |
| 70° | 10217.3 | 7311.0 | 1455.6 | 320.0 | 223.2 | 185.2 | 163.1 | 143.8 | 123.0 | 110.6 | 109.2 |
| 72.5° | 8529.5 | 5763.5 | 838.4 | 278.5 | 201.1 | 175.6 | 160.3 | 144.5 | 118.2 | 103.0 | 100.9 |
| 75° | 6409.1 | 4042.6 | 492.1 | 239.1 | 179.7 | 161.0 | 152.7 | 140.3 | 110.6 | 94.0 | 91.9 |
| 77.5° | 3854.6 | 1887.5 | 370.5 | 198.4 | 154.1 | 141.7 | 136.2 | 128.6 | 100.9 | 87.1 | 85.0 |
| 80° | 1414.1 | 716.7 | 291.0 | 159.0 | 122.3 | 123.0 | 117.5 | 112.7 | 91.9 | 80.2 | 78.8 |
| 82.5° | 616.5 | 438.2 | 214.9 | 121.0 | 96.1 | 109.9 | 96.8 | 92.6 | 78.8 | 71.9 | 69.1 |
| 85° | 373.9 | 261.3 | 138.2 | 82.2 | 66.4 | 74.6 | 67.7 | 71.2 | 60.8 | 56.7 | 54.6 |
| 87.5° | 123.7 | 78.1 | 61.5 | 40.1 | 33.2 | 31.1 | 30.4 | 36.6 | 34.6 | 31.8 | 31.8 |
| 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)