

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: INVUE

Report Number: P401480

Luminaire Tested: **ENC-SA1D-735-U-T3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1D-735-U-T3
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5400 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

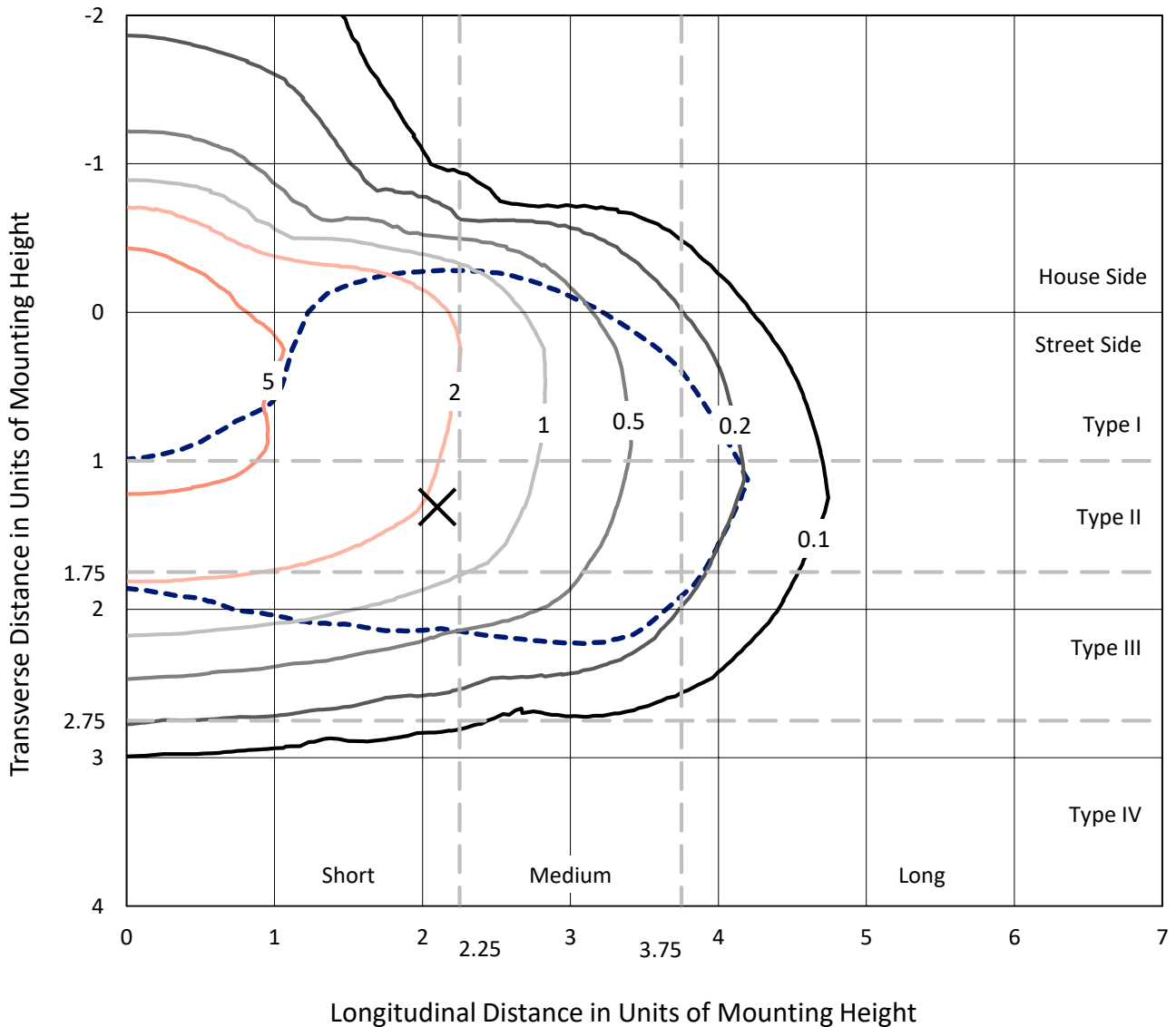
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

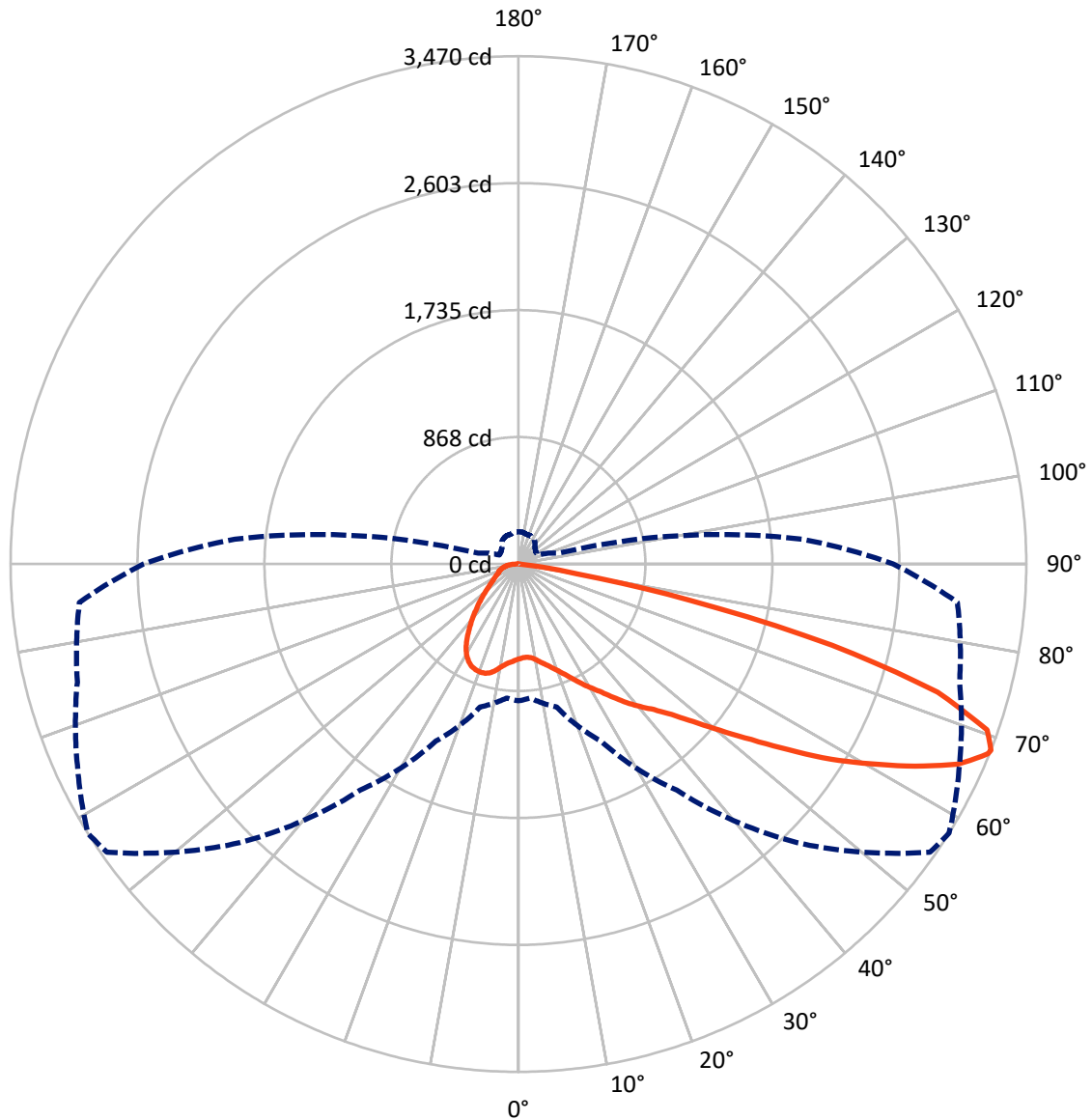
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1264.4 | 0.0 | 1264.4 |
| | % Fixture | 23.4 | 0.0 | 23.4 |
| Street Side | Lumens | 4135.6 | 0.0 | 4135.6 |
| | % Fixture | 76.6 | 0.0 | 76.6 |
| Total | Lumens | 5400.0 | 0.0 | 5400.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.9 | 1.2 |
| 10°-20° | 208.9 | 3.9 |
| 20°-30° | 375.7 | 7.0 |
| 30°-40° | 551.9 | 10.2 |
| 40°-50° | 809.4 | 15.0 |
| 50°-60° | 1209.9 | 22.4 |
| 60°-70° | 1414.7 | 26.2 |
| 70°-80° | 697.5 | 12.9 |
| 80°-90° | 68.1 | 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° | 5400.0 | 100.0 |
| 0°-180° | 5400.0 | 100.0 |



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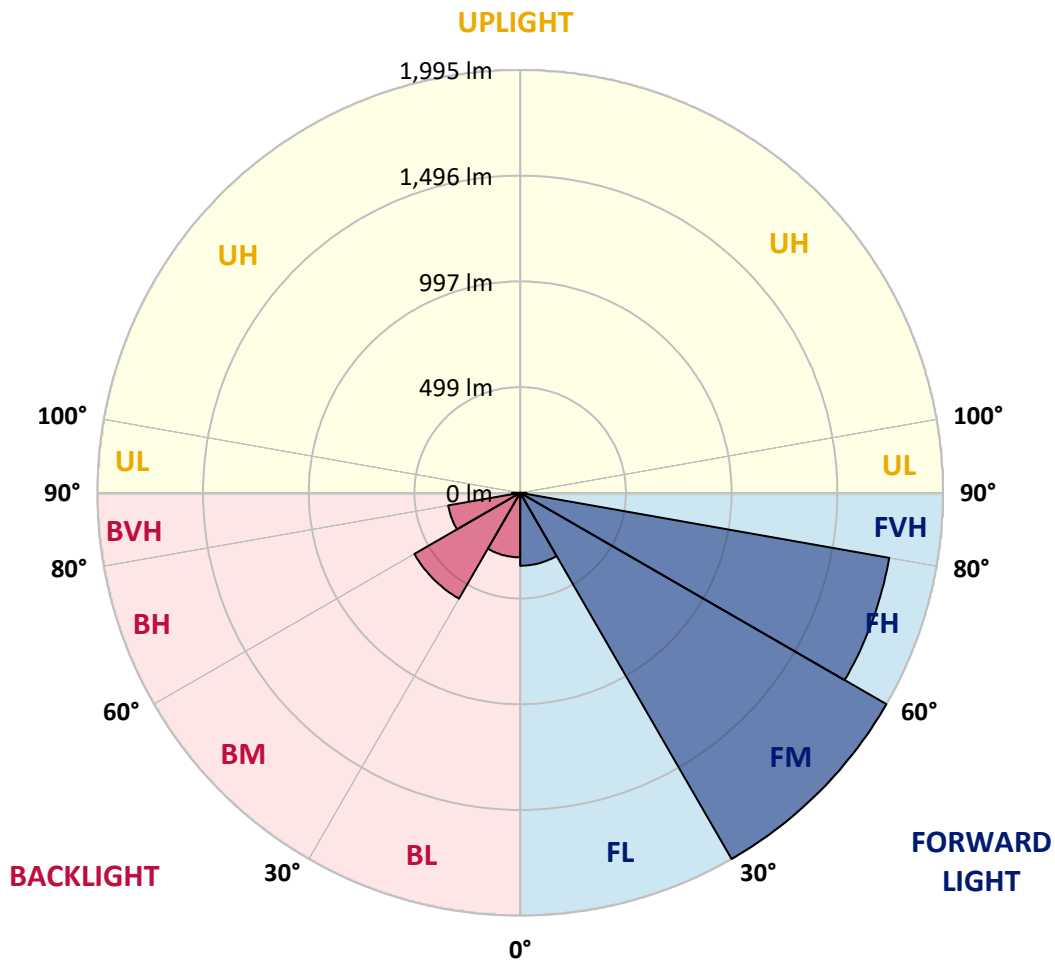
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 344.0 | 6.4 | | | |
| FM (30°-60°) | 1994.6 | 36.9 | | | |
| FH (60°-80°) | 1767.7 | 32.7 | | | G1/1800 |
| FVH (80°-90°) | 29.3 | 0.5 | | | G1/100 |
| BL (0°-30°) | 304.5 | 5.6 | B1/500 | | |
| BM (30°-60°) | 576.7 | 10.7 | B1/1000 | | |
| BH (60°-80°) | 344.5 | 6.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 38.8 | 0.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 |
| 2.5° | 632.6 | 632.6 | 634.9 | 635.6 | 637.2 | 638.7 | 640.2 | 640.9 | 643.2 | 646.2 | 647.7 |
| 5° | 627.4 | 628.1 | 629.6 | 630.4 | 632.6 | 635.6 | 637.9 | 639.4 | 643.2 | 649.2 | 653.0 |
| 7.5° | 639.4 | 641.7 | 642.4 | 643.2 | 643.9 | 646.2 | 646.2 | 647.0 | 650.7 | 656.8 | 662.0 |
| 10° | 659.0 | 660.5 | 662.8 | 665.1 | 667.3 | 668.8 | 664.3 | 665.1 | 666.6 | 672.6 | 680.1 |
| 12.5° | 683.9 | 683.9 | 684.7 | 687.7 | 689.9 | 694.5 | 689.9 | 689.9 | 689.9 | 695.2 | 704.3 |
| 15° | 711.8 | 710.3 | 710.3 | 713.3 | 714.1 | 717.1 | 714.8 | 714.8 | 717.8 | 723.1 | 732.2 |
| 17.5° | 743.5 | 745.7 | 743.5 | 742.0 | 739.7 | 741.2 | 742.7 | 744.2 | 750.3 | 758.6 | 763.8 |
| 20° | 789.5 | 793.2 | 791.7 | 785.7 | 775.9 | 771.4 | 776.7 | 779.7 | 791.7 | 801.5 | 802.3 |
| 22.5° | 862.6 | 860.3 | 858.1 | 847.5 | 827.9 | 815.9 | 816.6 | 821.1 | 840.0 | 855.1 | 847.5 |
| 25° | 930.5 | 932.7 | 932.7 | 917.7 | 892.0 | 867.1 | 869.4 | 871.7 | 890.5 | 904.1 | 883.7 |
| 27.5° | 1012.7 | 1011.2 | 1010.4 | 990.0 | 959.1 | 935.0 | 922.2 | 928.2 | 941.8 | 947.1 | 907.9 |
| 30° | 1097.9 | 1103.9 | 1097.9 | 1069.2 | 1039.8 | 1008.9 | 983.3 | 981.7 | 988.5 | 987.8 | 936.5 |
| 32.5° | 1200.4 | 1195.1 | 1192.9 | 1159.7 | 1122.8 | 1082.0 | 1049.6 | 1044.3 | 1040.6 | 1035.3 | 970.4 |
| 35° | 1279.6 | 1286.4 | 1286.4 | 1257.7 | 1214.0 | 1174.0 | 1123.5 | 1119.0 | 1109.9 | 1092.6 | 1014.9 |
| 37.5° | 1373.1 | 1371.6 | 1376.9 | 1343.7 | 1299.9 | 1261.5 | 1214.7 | 1201.9 | 1181.6 | 1155.9 | 1067.7 |
| 40° | 1464.3 | 1468.1 | 1480.2 | 1440.2 | 1400.2 | 1370.1 | 1303.7 | 1280.3 | 1249.4 | 1226.1 | 1144.6 |
| 42.5° | 1588.7 | 1594.0 | 1598.5 | 1565.4 | 1517.9 | 1490.7 | 1388.2 | 1358.8 | 1341.4 | 1336.9 | 1246.4 |
| 45° | 1739.5 | 1748.6 | 1752.4 | 1722.2 | 1695.1 | 1630.2 | 1494.5 | 1467.3 | 1448.5 | 1468.1 | 1385.2 |
| 47.5° | 1884.3 | 1879.8 | 1897.1 | 1896.4 | 1899.4 | 1821.7 | 1647.6 | 1606.8 | 1588.7 | 1638.5 | 1544.3 |
| 50° | 1965.8 | 1972.5 | 2010.2 | 2048.7 | 2102.2 | 2046.4 | 1824.8 | 1784.0 | 1762.9 | 1824.8 | 1731.3 |
| 52.5° | 2008.0 | 2017.0 | 2067.6 | 2175.4 | 2289.2 | 2262.8 | 2038.1 | 1992.9 | 1974.8 | 2035.1 | 1931.8 |
| 55° | 2011.8 | 2017.0 | 2084.9 | 2252.3 | 2431.8 | 2440.0 | 2281.7 | 2238.7 | 2213.8 | 2253.0 | 2150.5 |
| 57.5° | 1949.2 | 1933.3 | 2050.2 | 2263.6 | 2523.0 | 2624.8 | 2549.4 | 2518.5 | 2448.3 | 2490.6 | 2421.9 |
| 60° | 1837.6 | 1853.4 | 1968.0 | 2216.9 | 2561.4 | 2768.8 | 2817.8 | 2771.1 | 2689.6 | 2707.0 | 2714.5 |
| 62.5° | 1668.7 | 1689.0 | 1808.2 | 2108.3 | 2530.5 | 2891.0 | 3065.9 | 3042.5 | 2933.2 | 2924.1 | 2937.7 |
| 65° | 1428.1 | 1416.1 | 1548.8 | 1870.8 | 2384.2 | 2931.7 | 3309.4 | 3299.6 | 3169.2 | 3062.9 | 3068.2 |
| 67.5° | 1030.0 | 1018.7 | 1111.4 | 1444.0 | 1988.4 | 2780.1 | 3439.1 | 3461.0 | 3311.7 | 3124.0 | 3042.5 |
| 68° | 935.0 | 919.2 | 1011.9 | 1334.6 | 1886.6 | 2692.6 | 3432.4 | 3470.1 | 3322.3 | 3120.2 | 3010.8 |
| 70° | 538.4 | 512.7 | 602.5 | 870.9 | 1388.9 | 2266.6 | 3293.6 | 3397.7 | 3297.4 | 3047.0 | 2803.5 |
| 72.5° | 168.9 | 168.9 | 233.0 | 352.1 | 681.6 | 1434.2 | 2817.8 | 2995.0 | 3016.1 | 2769.6 | 2330.0 |
| 75° | 105.6 | 105.6 | 121.4 | 166.6 | 271.5 | 608.5 | 1943.9 | 2213.8 | 2396.3 | 2331.5 | 1698.8 |
| 77.5° | 71.6 | 70.1 | 80.7 | 103.3 | 151.6 | 195.3 | 975.7 | 1198.9 | 1465.8 | 1591.8 | 993.8 |
| 80° | 39.2 | 40.0 | 49.8 | 61.8 | 86.0 | 90.5 | 286.5 | 404.9 | 645.5 | 756.3 | 377.0 |
| 82.5° | 22.6 | 21.9 | 24.1 | 27.1 | 37.7 | 39.2 | 82.2 | 101.0 | 168.9 | 156.8 | 101.0 |
| 85° | 0.0 | 0.8 | 0.8 | 0.8 | 1.5 | 3.8 | 10.6 | 15.8 | 25.6 | 35.4 | 24.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 1.5 | 1.5 | 1.5 | 1.5 | 2.3 |
| 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° | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 | 648.5 |
| 2.5° | 649.2 | 651.5 | 655.3 | 658.3 | 659.8 | 658.3 | 663.5 | 662.8 | 664.3 | 664.3 | 665.8 |
| 5° | 656.0 | 659.0 | 665.8 | 669.6 | 673.3 | 674.9 | 680.9 | 682.4 | 685.4 | 686.9 | 686.2 |
| 7.5° | 665.8 | 669.6 | 677.9 | 684.7 | 689.9 | 693.7 | 703.5 | 708.0 | 712.6 | 714.1 | 715.6 |
| 10° | 683.9 | 689.2 | 698.2 | 706.5 | 714.1 | 719.3 | 727.6 | 733.7 | 738.2 | 739.7 | 741.2 |
| 12.5° | 708.0 | 714.1 | 725.4 | 736.7 | 745.0 | 748.0 | 747.2 | 745.7 | 745.7 | 745.0 | 745.7 |
| 15° | 735.9 | 742.0 | 756.3 | 766.8 | 767.6 | 757.8 | 744.2 | 737.4 | 735.9 | 735.9 | 736.7 |
| 17.5° | 768.4 | 775.9 | 784.9 | 791.0 | 776.7 | 752.5 | 736.7 | 729.9 | 728.4 | 727.6 | 726.1 |
| 20° | 805.3 | 809.8 | 812.8 | 805.3 | 773.6 | 745.7 | 727.6 | 717.8 | 710.3 | 709.5 | 706.5 |
| 22.5° | 844.5 | 843.0 | 839.2 | 812.1 | 765.3 | 729.9 | 705.0 | 686.9 | 677.1 | 676.4 | 673.3 |
| 25° | 873.2 | 867.1 | 855.8 | 813.6 | 750.3 | 704.3 | 668.8 | 640.2 | 627.4 | 621.3 | 622.8 |
| 27.5° | 892.0 | 879.2 | 859.6 | 806.1 | 723.9 | 665.1 | 615.3 | 577.6 | 558.7 | 555.7 | 558.0 |
| 30° | 914.6 | 894.3 | 862.6 | 787.2 | 686.2 | 610.0 | 545.2 | 507.5 | 496.9 | 491.6 | 493.1 |
| 32.5° | 941.8 | 915.4 | 872.4 | 758.6 | 638.7 | 545.9 | 475.8 | 449.4 | 437.3 | 427.5 | 430.6 |
| 35° | 977.2 | 944.0 | 888.2 | 717.8 | 578.3 | 478.1 | 426.0 | 401.9 | 380.0 | 369.5 | 370.2 |
| 37.5° | 1018.7 | 981.0 | 901.8 | 670.3 | 512.7 | 426.8 | 383.0 | 354.4 | 327.2 | 306.9 | 303.1 |
| 40° | 1085.1 | 1054.1 | 913.1 | 617.6 | 450.2 | 384.6 | 340.8 | 308.4 | 282.8 | 262.4 | 260.1 |
| 42.5° | 1195.9 | 1142.4 | 913.9 | 554.2 | 396.6 | 348.4 | 306.1 | 270.7 | 242.0 | 224.7 | 223.9 |
| 45° | 1326.3 | 1243.4 | 898.1 | 486.4 | 349.9 | 312.2 | 275.2 | 235.3 | 218.7 | 207.4 | 205.9 |
| 47.5° | 1480.9 | 1359.5 | 863.4 | 423.0 | 309.9 | 276.7 | 243.6 | 219.4 | 207.4 | 199.1 | 199.1 |
| 50° | 1657.4 | 1496.0 | 828.7 | 368.7 | 271.5 | 248.1 | 225.5 | 212.6 | 203.6 | 196.0 | 195.3 |
| 52.5° | 1856.4 | 1657.4 | 817.4 | 313.7 | 239.8 | 221.7 | 219.4 | 207.4 | 199.8 | 194.5 | 193.0 |
| 55° | 2093.9 | 1838.3 | 827.9 | 270.7 | 214.9 | 211.1 | 215.7 | 205.9 | 200.6 | 192.3 | 190.0 |
| 57.5° | 2368.4 | 2014.8 | 816.6 | 234.5 | 197.6 | 201.3 | 211.1 | 205.9 | 201.3 | 190.8 | 187.8 |
| 60° | 2627.0 | 2172.4 | 739.7 | 204.3 | 181.0 | 189.3 | 205.1 | 199.1 | 192.3 | 190.0 | 188.5 |
| 62.5° | 2765.8 | 2223.6 | 589.7 | 181.0 | 168.1 | 177.2 | 195.3 | 187.8 | 183.2 | 188.5 | 189.3 |
| 65° | 2767.3 | 2165.6 | 433.6 | 163.6 | 157.6 | 166.6 | 185.5 | 183.2 | 186.2 | 198.3 | 200.6 |
| 67.5° | 2613.5 | 1989.1 | 306.1 | 147.8 | 147.0 | 158.3 | 190.0 | 205.1 | 207.4 | 219.4 | 219.4 |
| 68° | 2560.7 | 1945.4 | 284.3 | 145.5 | 144.8 | 158.3 | 193.8 | 208.9 | 210.4 | 221.7 | 220.9 |
| 70° | 2271.1 | 1644.5 | 205.9 | 136.5 | 141.0 | 169.7 | 214.1 | 219.4 | 210.4 | 223.2 | 222.4 |
| 72.5° | 1775.0 | 1216.3 | 153.8 | 126.7 | 134.2 | 167.4 | 215.7 | 210.4 | 196.8 | 199.8 | 196.0 |
| 75° | 1199.7 | 775.1 | 126.7 | 116.1 | 119.1 | 141.8 | 196.0 | 198.3 | 182.5 | 179.5 | 174.9 |
| 77.5° | 628.1 | 363.4 | 102.5 | 103.3 | 106.3 | 122.9 | 174.9 | 180.2 | 165.9 | 156.8 | 155.3 |
| 80° | 231.5 | 144.0 | 83.7 | 91.2 | 92.7 | 107.8 | 150.1 | 158.3 | 144.8 | 138.0 | 136.5 |
| 82.5° | 84.5 | 71.6 | 69.4 | 79.9 | 78.4 | 92.0 | 131.2 | 137.2 | 122.9 | 116.1 | 112.4 |
| 85° | 23.4 | 26.4 | 43.7 | 62.6 | 61.1 | 71.6 | 105.6 | 110.8 | 98.8 | 81.4 | 79.2 |
| 87.5° | 1.5 | 5.3 | 17.3 | 36.9 | 38.5 | 44.5 | 76.2 | 83.7 | 73.1 | 60.3 | 59.6 |
| 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)