

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: P401395

Luminaire Tested: **ENC-SA1C-830-U-SL2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1C-830-U-SL2-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2898 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

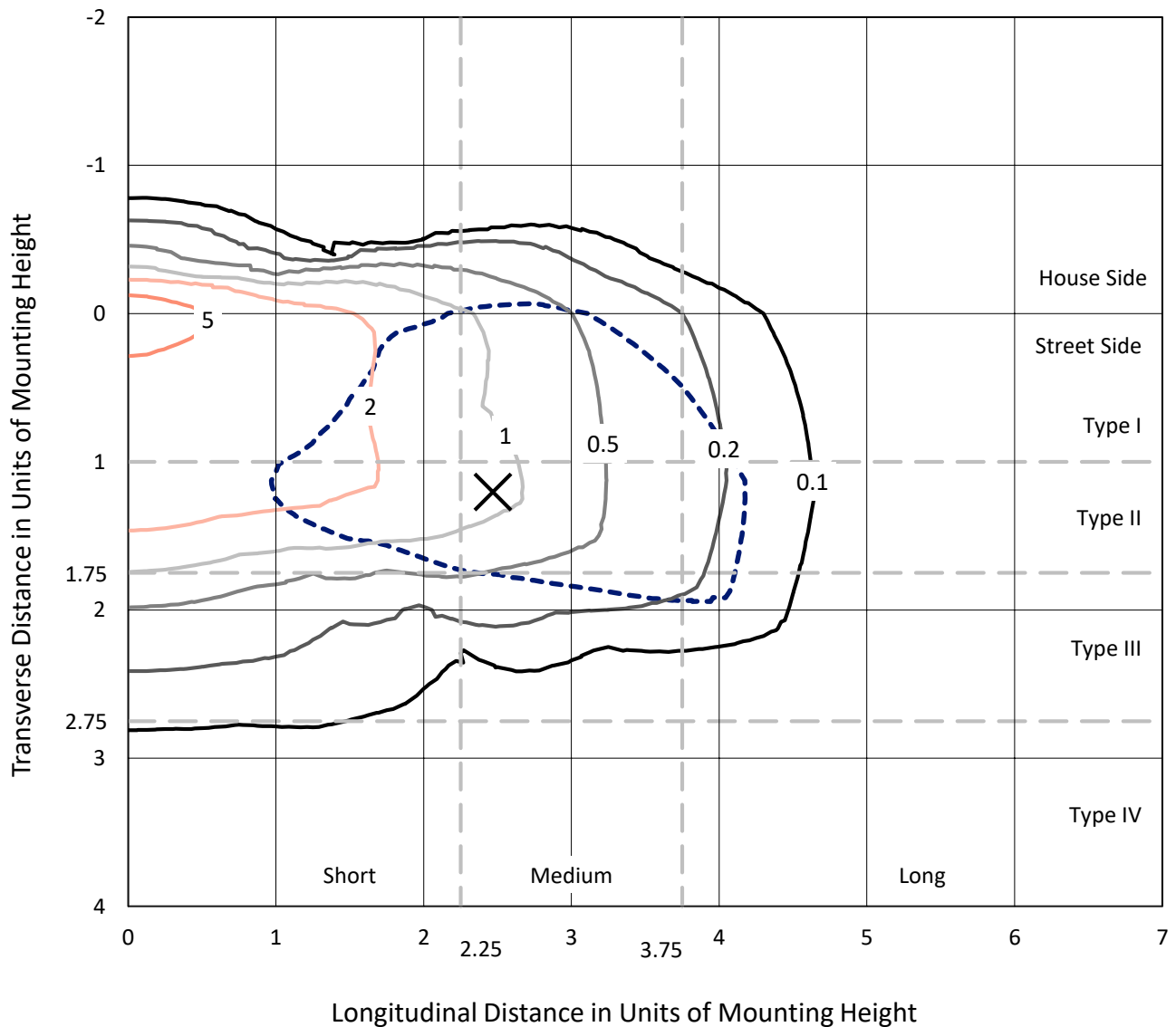
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

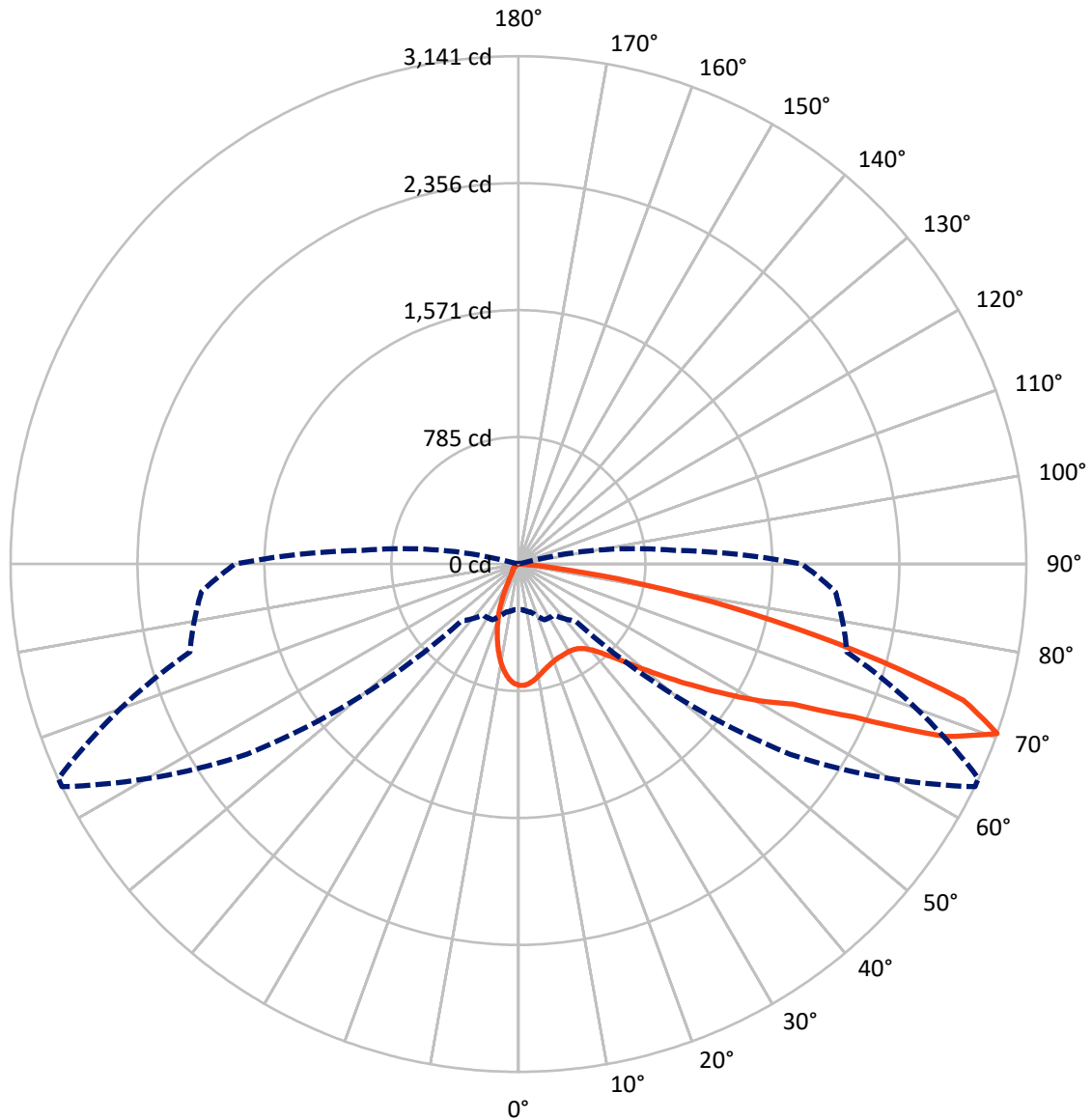
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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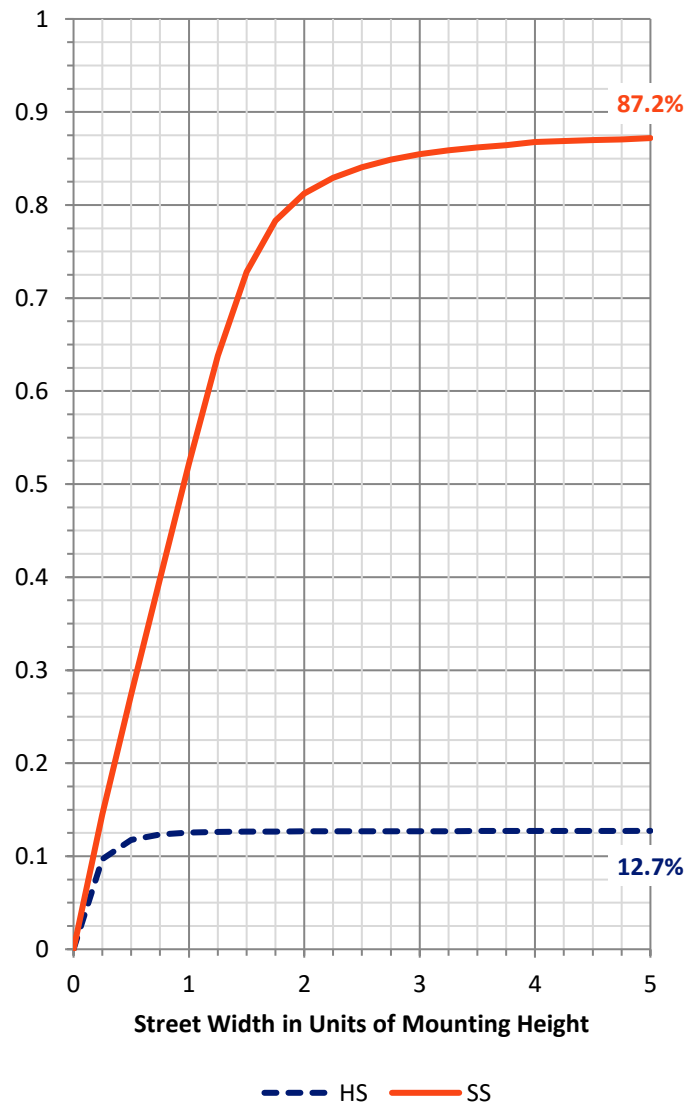
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 372.3 | 0.0 | 372.3 |
| | % Fixture | 12.8 | 0.0 | 12.8 |
| Street Side | Lumens | 2525.7 | 0.0 | 2525.7 |
| | % Fixture | 87.2 | 0.0 | 87.2 |
| Total | Lumens | 2898.0 | 0.0 | 2898.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.2 | 2.2 |
| 10°-20° | 140.3 | 4.8 |
| 20°-30° | 193.2 | 6.7 |
| 30°-40° | 266.0 | 9.2 |
| 40°-50° | 396.5 | 13.7 |
| 50°-60° | 626.4 | 21.6 |
| 60°-70° | 709.8 | 24.5 |
| 70°-80° | 466.0 | 16.1 |
| 80°-90° | 36.5 | 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° | 2898.0 | 100.0 |
| 0°-180° | 2898.0 | 100.0 |



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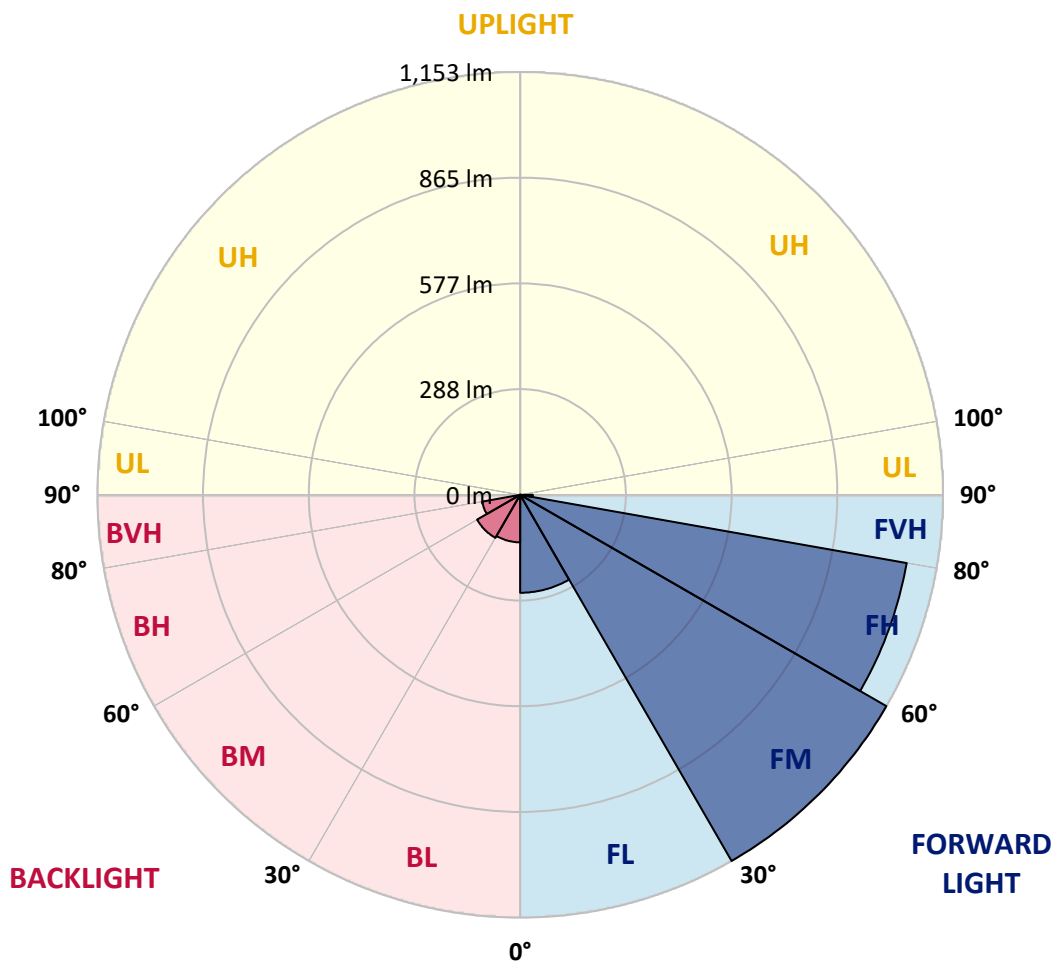
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 267.1 | 9.2 | | | |
| FM | (30°-60°) | 1153.4 | 39.8 | | | |
| FH | (60°-80°) | 1070.7 | 36.9 | | | G1/1800 |
| FVH | (80°-90°) | 34.5 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 129.6 | 4.5 | B1/500 | | |
| BM | (30°-60°) | 135.6 | 4.7 | B0/220 | | |
| BH | (60°-80°) | 105.1 | 3.6 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 2.0 | 0.1 | | | G0/10 |
| 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 Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 |
| 2.5° | 729.3 | 729.3 | 732.9 | 736.4 | 738.5 | 744.1 | 748.1 | 751.2 | 751.2 | 753.2 | 749.7 |
| 5° | 680.9 | 680.9 | 683.9 | 692.6 | 701.8 | 713.5 | 726.7 | 740.0 | 742.5 | 752.2 | 751.7 |
| 7.5° | 636.0 | 640.1 | 645.2 | 653.9 | 663.5 | 680.9 | 699.2 | 722.2 | 724.7 | 748.1 | 753.2 |
| 10° | 604.9 | 607.5 | 610.5 | 620.2 | 634.5 | 654.4 | 674.2 | 701.3 | 705.8 | 741.0 | 753.2 |
| 12.5° | 580.0 | 580.5 | 585.1 | 595.8 | 609.5 | 628.9 | 651.3 | 680.9 | 686.5 | 728.3 | 751.2 |
| 15° | 562.1 | 561.6 | 566.7 | 576.9 | 590.2 | 610.0 | 631.9 | 663.0 | 669.2 | 717.6 | 750.7 |
| 17.5° | 551.4 | 551.9 | 556.0 | 563.7 | 576.4 | 595.3 | 617.7 | 648.3 | 654.4 | 708.9 | 753.2 |
| 20° | 551.4 | 551.4 | 554.0 | 557.5 | 567.2 | 584.0 | 606.0 | 637.6 | 643.7 | 703.3 | 756.8 |
| 22.5° | 562.1 | 561.1 | 563.1 | 560.1 | 564.7 | 576.4 | 598.8 | 630.4 | 637.0 | 700.7 | 762.4 |
| 25° | 581.5 | 579.5 | 581.0 | 574.4 | 569.3 | 574.4 | 594.2 | 627.4 | 634.5 | 701.3 | 767.5 |
| 27.5° | 608.5 | 608.5 | 605.4 | 596.3 | 583.5 | 577.9 | 593.7 | 625.3 | 632.5 | 701.3 | 771.1 |
| 30° | 646.2 | 644.7 | 640.1 | 630.9 | 611.1 | 592.2 | 598.8 | 625.3 | 632.5 | 701.8 | 772.1 |
| 32.5° | 683.9 | 684.9 | 687.5 | 678.3 | 651.3 | 616.7 | 611.1 | 629.9 | 636.0 | 701.3 | 770.6 |
| 35° | 722.2 | 722.7 | 733.9 | 734.9 | 700.2 | 655.9 | 631.9 | 642.1 | 646.2 | 706.4 | 771.6 |
| 37.5° | 755.8 | 758.3 | 780.3 | 791.0 | 762.4 | 706.4 | 665.1 | 665.1 | 667.1 | 720.1 | 777.7 |
| 40° | 793.5 | 800.1 | 826.6 | 850.6 | 839.4 | 771.1 | 713.5 | 698.7 | 699.7 | 745.1 | 791.5 |
| 42.5° | 837.3 | 845.5 | 880.1 | 914.8 | 914.3 | 850.6 | 774.6 | 752.2 | 753.2 | 788.4 | 819.5 |
| 45° | 892.9 | 898.5 | 942.3 | 985.6 | 994.8 | 938.2 | 851.6 | 822.0 | 823.1 | 854.1 | 874.0 |
| 47.5° | 960.7 | 967.3 | 1009.6 | 1061.6 | 1085.0 | 1043.7 | 951.5 | 919.4 | 916.3 | 938.2 | 952.5 |
| 50° | 1049.3 | 1062.1 | 1087.1 | 1137.0 | 1193.6 | 1166.0 | 1068.7 | 1036.6 | 1032.5 | 1049.8 | 1054.4 |
| 52.5° | 1133.9 | 1145.7 | 1155.9 | 1201.7 | 1311.3 | 1317.9 | 1212.4 | 1177.3 | 1173.2 | 1177.3 | 1182.9 |
| 55° | 1146.7 | 1153.3 | 1160.9 | 1223.1 | 1406.6 | 1511.1 | 1376.0 | 1334.2 | 1322.5 | 1314.9 | 1333.7 |
| 57.5° | 1045.3 | 1041.2 | 1066.7 | 1151.3 | 1422.4 | 1724.6 | 1597.2 | 1516.2 | 1505.0 | 1462.7 | 1443.8 |
| 60° | 827.6 | 822.0 | 846.0 | 961.7 | 1333.7 | 1830.6 | 1904.0 | 1717.5 | 1689.9 | 1548.3 | 1529.9 |
| 62.5° | 581.5 | 574.9 | 606.0 | 674.2 | 1034.6 | 1809.7 | 2250.0 | 1908.1 | 1853.5 | 1624.2 | 1599.2 |
| 65° | 448.0 | 444.9 | 461.7 | 477.0 | 631.4 | 1567.6 | 2440.6 | 2280.1 | 2167.5 | 1706.8 | 1674.7 |
| 67.5° | 351.1 | 355.2 | 376.1 | 420.4 | 407.7 | 977.0 | 2422.8 | 2847.8 | 2735.2 | 1858.6 | 1838.3 |
| 70° | 282.3 | 283.4 | 309.3 | 380.2 | 384.8 | 497.4 | 2051.3 | 3141.4 | 3139.9 | 2103.8 | 1968.2 |
| 72.5° | 170.7 | 175.3 | 217.6 | 328.7 | 388.3 | 380.7 | 1379.1 | 2878.4 | 2918.2 | 2160.9 | 1775.1 |
| 75° | 82.1 | 86.6 | 112.6 | 220.7 | 385.8 | 370.5 | 746.1 | 2179.2 | 2230.2 | 1937.6 | 1439.2 |
| 77.5° | 30.6 | 34.7 | 52.0 | 108.0 | 285.9 | 339.4 | 392.4 | 1469.3 | 1509.5 | 1418.3 | 974.9 |
| 80° | 9.7 | 11.2 | 20.4 | 49.4 | 145.2 | 280.3 | 252.8 | 828.7 | 855.7 | 620.7 | 327.7 |
| 82.5° | 1.0 | 1.5 | 5.6 | 16.8 | 56.1 | 142.7 | 148.3 | 311.9 | 325.7 | 121.3 | 66.3 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 36.7 | 59.6 | 48.9 | 11.7 | 19.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.0 | 1.5 | 1.5 | 1.5 | 2.0 |
| 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° | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 | 750.2 |
| 2.5° | 749.2 | 749.2 | 745.6 | 740.0 | 732.9 | 722.7 | 720.1 | 712.0 | 712.0 | 705.3 | 704.3 |
| 5° | 750.2 | 747.1 | 735.4 | 718.1 | 694.1 | 668.1 | 651.8 | 634.0 | 618.7 | 609.0 | 610.0 |
| 7.5° | 750.2 | 743.6 | 720.1 | 681.9 | 637.0 | 592.2 | 558.1 | 518.3 | 500.0 | 487.7 | 493.3 |
| 10° | 748.1 | 736.9 | 696.2 | 638.1 | 567.2 | 505.0 | 449.0 | 403.1 | 371.5 | 358.3 | 347.1 |
| 12.5° | 743.6 | 727.2 | 666.1 | 583.5 | 492.8 | 411.3 | 333.8 | 273.7 | 231.9 | 211.0 | 208.4 |
| 15° | 739.5 | 717.1 | 630.9 | 523.9 | 408.7 | 302.2 | 215.6 | 158.0 | 122.3 | 114.2 | 115.2 |
| 17.5° | 738.5 | 707.4 | 597.3 | 460.7 | 326.7 | 201.3 | 124.4 | 100.4 | 95.3 | 93.3 | 92.8 |
| 20° | 739.0 | 698.7 | 560.6 | 398.0 | 231.4 | 125.4 | 94.3 | 88.7 | 86.6 | 85.6 | 85.1 |
| 22.5° | 741.0 | 689.0 | 524.4 | 332.3 | 158.0 | 91.7 | 84.1 | 80.5 | 78.0 | 76.4 | 75.9 |
| 25° | 741.0 | 678.3 | 484.2 | 262.5 | 103.5 | 80.5 | 75.4 | 70.8 | 67.3 | 65.2 | 65.2 |
| 27.5° | 739.5 | 666.1 | 442.4 | 199.3 | 82.1 | 71.9 | 66.3 | 60.1 | 55.6 | 53.0 | 53.0 |
| 30° | 734.9 | 651.3 | 402.1 | 139.1 | 71.9 | 64.2 | 57.1 | 49.4 | 43.8 | 41.3 | 40.3 |
| 32.5° | 728.3 | 635.5 | 355.7 | 97.8 | 64.7 | 56.1 | 47.9 | 39.8 | 34.7 | 31.6 | 31.6 |
| 35° | 721.1 | 619.7 | 305.8 | 74.9 | 58.6 | 49.4 | 40.3 | 32.1 | 27.5 | 25.5 | 25.0 |
| 37.5° | 717.6 | 602.9 | 256.9 | 64.7 | 52.5 | 42.3 | 32.6 | 26.0 | 22.4 | 20.9 | 20.4 |
| 40° | 720.1 | 590.2 | 209.0 | 58.1 | 46.9 | 35.7 | 27.0 | 21.9 | 18.9 | 16.8 | 16.8 |
| 42.5° | 735.4 | 583.0 | 163.6 | 53.0 | 41.8 | 30.1 | 22.4 | 17.8 | 14.8 | 13.3 | 13.3 |
| 45° | 766.5 | 588.1 | 124.4 | 48.4 | 35.7 | 25.0 | 18.9 | 14.3 | 11.2 | 9.7 | 9.7 |
| 47.5° | 818.5 | 608.5 | 94.3 | 44.3 | 30.6 | 20.4 | 15.3 | 11.2 | 8.7 | 7.6 | 7.1 |
| 50° | 894.4 | 648.8 | 73.9 | 40.3 | 25.5 | 17.3 | 12.7 | 8.7 | 6.6 | 5.6 | 5.6 |
| 52.5° | 1004.0 | 718.6 | 63.2 | 35.7 | 20.9 | 14.3 | 10.2 | 6.6 | 5.1 | 4.1 | 4.1 |
| 55° | 1138.5 | 807.3 | 57.1 | 31.6 | 16.8 | 11.7 | 8.2 | 5.1 | 3.6 | 3.1 | 2.5 |
| 57.5° | 1247.6 | 877.6 | 53.5 | 27.5 | 14.3 | 10.2 | 6.1 | 4.1 | 3.1 | 2.0 | 2.0 |
| 60° | 1343.9 | 922.9 | 47.4 | 22.9 | 12.2 | 8.2 | 5.1 | 3.1 | 2.0 | 1.5 | 1.5 |
| 62.5° | 1421.9 | 952.5 | 39.2 | 18.3 | 10.2 | 6.6 | 4.1 | 2.5 | 2.0 | 1.5 | 1.5 |
| 65° | 1510.6 | 976.5 | 32.1 | 14.3 | 8.7 | 5.6 | 3.6 | 2.0 | 1.5 | 1.5 | 1.5 |
| 67.5° | 1684.3 | 1030.0 | 24.0 | 11.2 | 6.6 | 4.6 | 3.1 | 2.0 | 1.5 | 1.0 | 1.0 |
| 70° | 1752.1 | 967.3 | 18.9 | 9.2 | 5.1 | 4.1 | 3.1 | 2.0 | 1.0 | 1.0 | 1.0 |
| 72.5° | 1491.2 | 724.2 | 14.8 | 7.6 | 4.6 | 3.6 | 3.1 | 2.0 | 1.5 | 1.5 | 1.0 |
| 75° | 1182.9 | 489.2 | 11.7 | 6.1 | 4.6 | 4.1 | 3.1 | 3.1 | 2.5 | 2.0 | 2.0 |
| 77.5° | 755.3 | 216.6 | 9.2 | 5.1 | 4.6 | 5.1 | 4.6 | 3.1 | 3.1 | 2.5 | 2.5 |
| 80° | 225.3 | 52.0 | 6.6 | 4.1 | 3.6 | 4.1 | 4.6 | 3.1 | 2.0 | 1.5 | 1.5 |
| 82.5° | 48.9 | 12.2 | 4.1 | 2.0 | 2.5 | 2.0 | 3.1 | 3.1 | 2.0 | 1.5 | 1.5 |
| 85° | 16.3 | 4.6 | 2.5 | 2.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 |
| 87.5° | 1.0 | 1.5 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 1.0 | 1.0 |
| 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)