

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: P450372

Luminaire Tested: **GALN-SA1A-830-U-SL3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1A-830-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3042 lumens  
Efficiency: N/A  
Efficacy: 92.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 33  
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: 24 FT

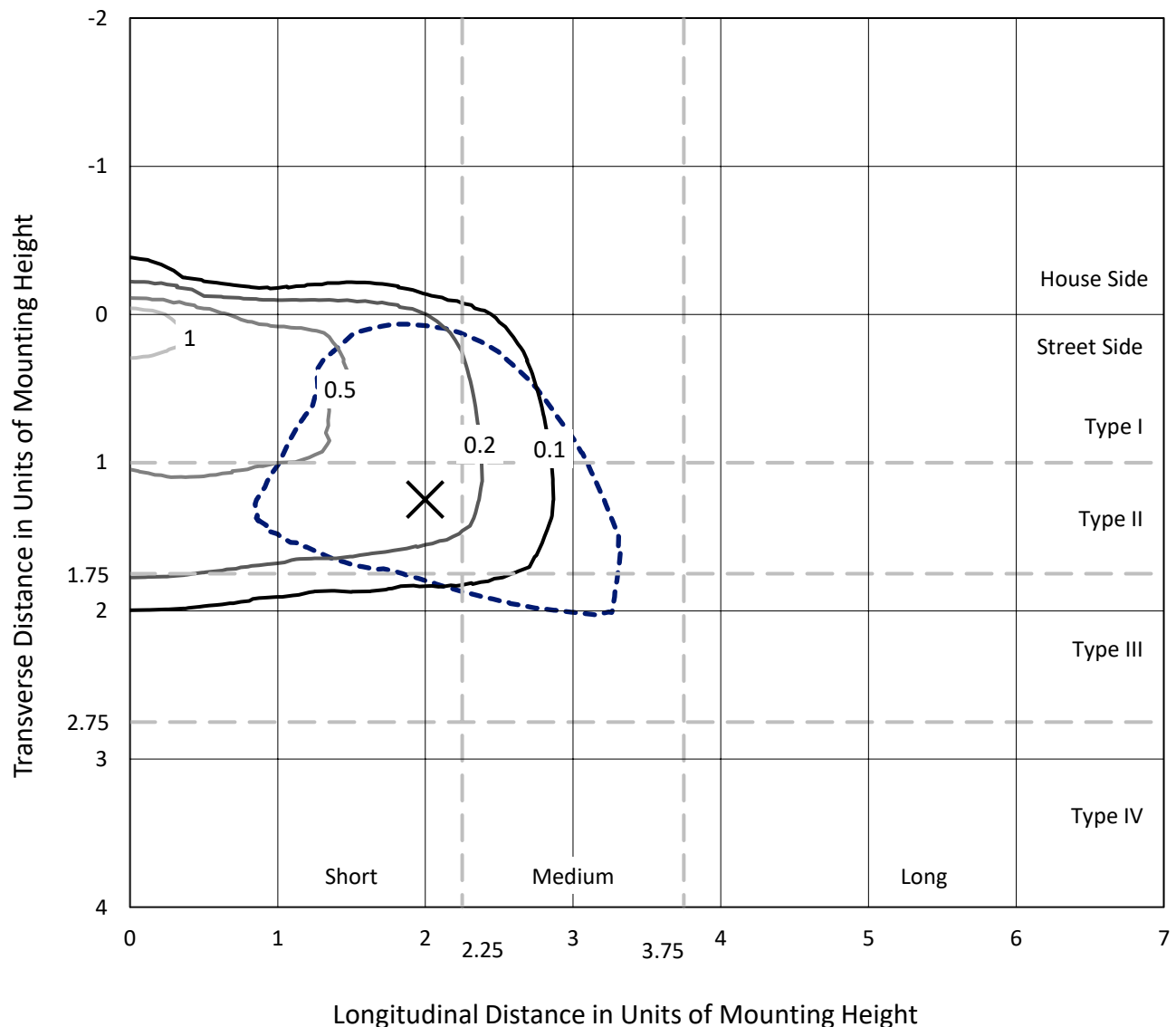


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## Iso-Footcandle Lines of Horizontal Illumination

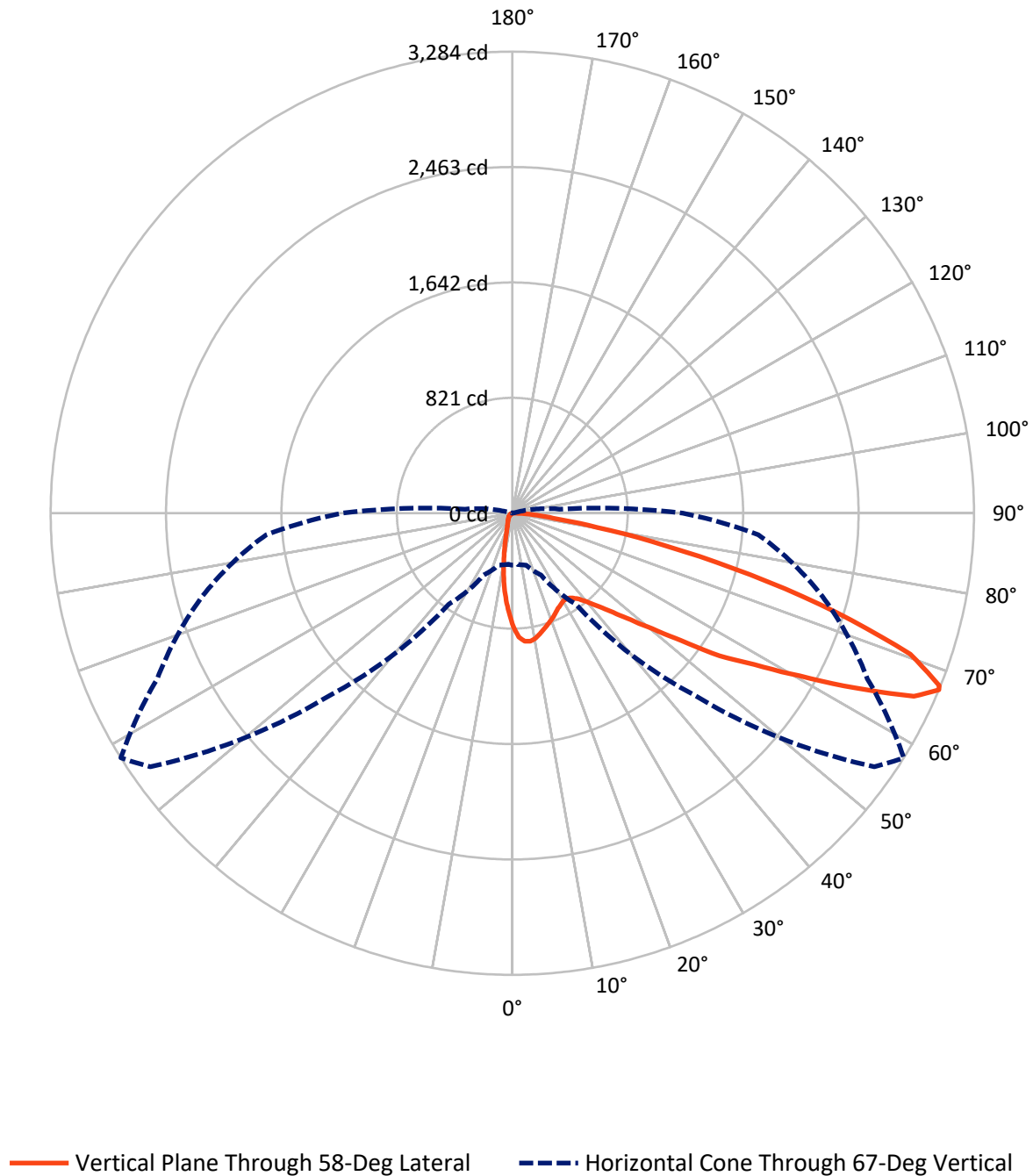
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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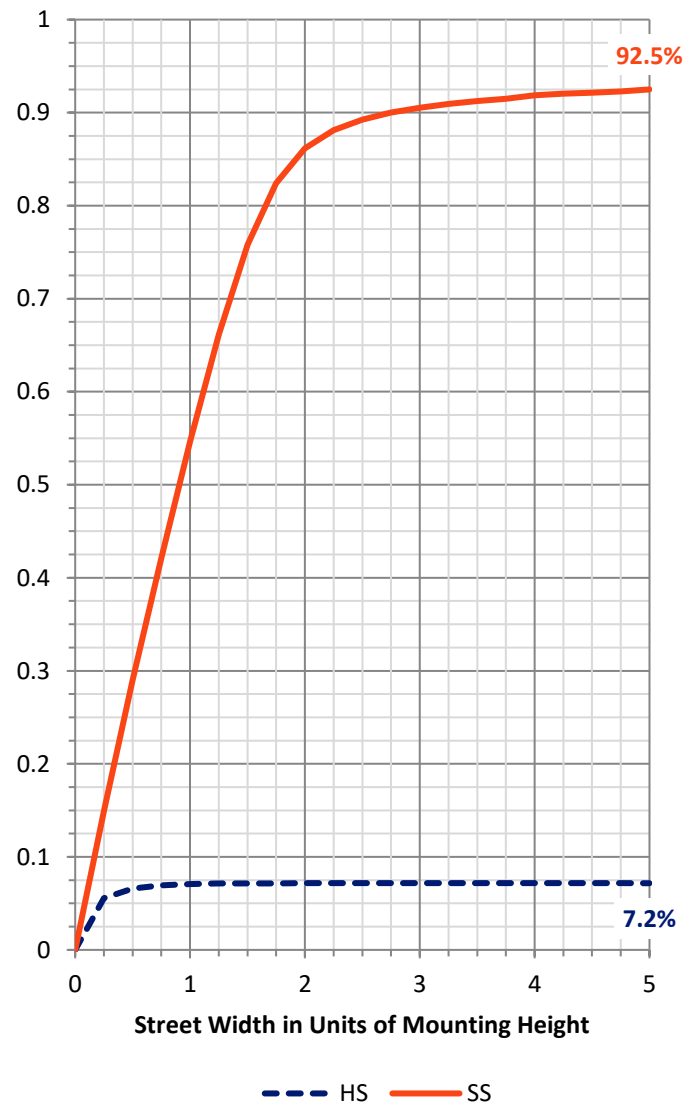
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 219.5    | 0.0    | 219.5  |
|                    | % Fixture | 7.2      | 0.0    | 7.2    |
| <b>Street Side</b> | Lumens    | 2822.5   | 0.0    | 2822.5 |
|                    | % Fixture | 92.8     | 0.0    | 92.8   |
| <b>Total</b>       | Lumens    | 3042.0   | 0.0    | 3042.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.4   | 2.2       |
| 10°-20°   | 141.3  | 4.6       |
| 20°-30°   | 191.5  | 6.3       |
| 30°-40°   | 265.6  | 8.7       |
| 40°-50°   | 423.6  | 13.9      |
| 50°-60°   | 732.3  | 24.1      |
| 60°-70°   | 836.5  | 27.5      |
| 70°-80°   | 348.7  | 11.5      |
| 80°-90°   | 37.0   | 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°    | 3042.0 | 100.0     |
| 0°-180°   | 3042.0 | 100.0     |

**Coefficient of Utilization**



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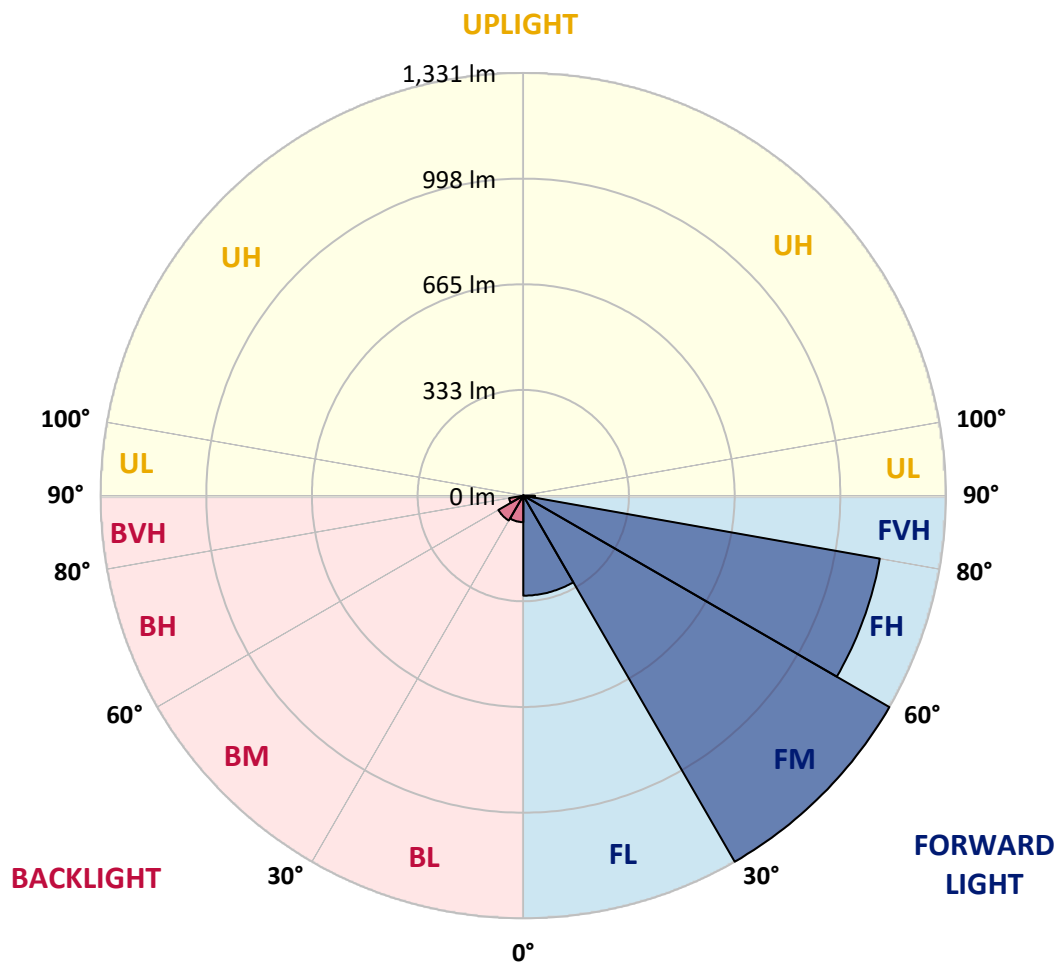
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 314.9  | 10.4      |                         |      |         |
| FM   | (30°-60°)   | 1331.0 | 43.8      |                         |      |         |
| FH   | (60°-80°)   | 1139.8 | 37.5      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 36.7   | 1.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 83.4   | 2.7       | B0/110                  |      |         |
| BM   | (30°-60°)   | 90.5   | 3.0       | B0/220                  |      |         |
| BH   | (60°-80°)   | 45.4   | 1.5       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 58°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  | 806.4  |
| 2.5°  | 935.9  | 937.3  | 932.0  | 927.8  | 916.8  | 905.0  | 889.3  | 881.0  | 866.8  | 842.2  | 814.9  |
| 5°    | 957.8  | 959.7  | 958.9  | 957.8  | 953.6  | 942.2  | 922.3  | 915.0  | 894.0  | 854.0  | 804.8  |
| 7.5°  | 909.1  | 915.8  | 916.6  | 924.5  | 932.0  | 933.0  | 925.5  | 920.0  | 900.7  | 853.8  | 786.7  |
| 10°   | 844.4  | 848.9  | 855.4  | 864.5  | 882.6  | 897.7  | 905.0  | 904.2  | 893.0  | 847.5  | 765.5  |
| 12.5° | 779.2  | 781.6  | 791.6  | 807.2  | 829.4  | 855.0  | 874.5  | 878.4  | 878.6  | 839.9  | 747.9  |
| 15°   | 723.1  | 722.0  | 729.8  | 747.9  | 779.0  | 811.1  | 846.0  | 852.1  | 861.9  | 832.6  | 731.4  |
| 17.5° | 675.1  | 680.4  | 681.6  | 701.5  | 730.2  | 771.8  | 816.4  | 827.1  | 846.7  | 826.3  | 717.8  |
| 20°   | 645.4  | 648.3  | 650.9  | 662.1  | 687.9  | 731.8  | 788.5  | 803.4  | 832.4  | 820.6  | 702.5  |
| 22.5° | 636.7  | 638.5  | 636.3  | 639.7  | 658.0  | 697.0  | 758.2  | 777.9  | 818.8  | 815.4  | 690.1  |
| 25°   | 643.4  | 645.2  | 639.9  | 635.9  | 642.2  | 668.8  | 729.0  | 752.9  | 807.8  | 814.3  | 680.8  |
| 27.5° | 659.6  | 663.1  | 655.8  | 648.5  | 644.8  | 653.5  | 706.0  | 733.8  | 800.3  | 819.2  | 676.5  |
| 30°   | 685.0  | 687.1  | 681.6  | 672.6  | 664.3  | 655.6  | 694.0  | 720.6  | 798.3  | 830.6  | 676.1  |
| 32.5° | 712.7  | 717.0  | 713.9  | 708.0  | 697.2  | 676.5  | 697.4  | 721.0  | 803.2  | 847.1  | 681.2  |
| 35°   | 746.8  | 751.7  | 754.6  | 753.4  | 739.5  | 713.7  | 719.4  | 739.3  | 816.2  | 877.4  | 695.0  |
| 37.5° | 780.4  | 784.7  | 800.7  | 806.2  | 794.0  | 769.6  | 762.1  | 775.3  | 844.8  | 917.0  | 720.0  |
| 40°   | 818.8  | 824.5  | 847.1  | 868.0  | 862.1  | 836.5  | 822.7  | 833.6  | 888.7  | 976.8  | 767.4  |
| 42.5° | 855.6  | 865.8  | 900.1  | 937.1  | 942.6  | 913.9  | 904.8  | 908.5  | 953.8  | 1062.7 | 833.4  |
| 45°   | 907.8  | 917.4  | 961.7  | 1011.9 | 1037.7 | 1015.4 | 1006.0 | 1005.4 | 1043.0 | 1183.7 | 940.6  |
| 47.5° | 983.3  | 991.8  | 1044.0 | 1093.6 | 1139.6 | 1142.6 | 1124.9 | 1131.0 | 1155.2 | 1325.2 | 1071.9 |
| 50°   | 1075.8 | 1095.9 | 1130.2 | 1181.9 | 1243.3 | 1292.9 | 1298.3 | 1290.2 | 1310.9 | 1489.0 | 1229.6 |
| 52.5° | 1210.1 | 1217.8 | 1249.4 | 1291.8 | 1363.8 | 1448.0 | 1513.2 | 1502.0 | 1495.5 | 1645.1 | 1389.0 |
| 55°   | 1310.3 | 1320.7 | 1369.7 | 1428.0 | 1533.5 | 1644.5 | 1786.0 | 1789.9 | 1707.7 | 1795.2 | 1544.9 |
| 57.5° | 1280.0 | 1295.9 | 1370.1 | 1487.4 | 1719.3 | 1922.2 | 2027.5 | 2030.1 | 1904.1 | 1940.9 | 1721.0 |
| 60°   | 1124.5 | 1132.1 | 1238.4 | 1394.9 | 1735.2 | 2223.1 | 2370.0 | 2348.7 | 2103.9 | 2103.9 | 1876.5 |
| 62.5° | 797.5  | 809.3  | 895.4  | 1125.8 | 1567.1 | 2327.5 | 2780.2 | 2736.1 | 2379.2 | 2259.8 | 1969.2 |
| 65°   | 509.6  | 498.2  | 555.4  | 710.7  | 1167.4 | 2173.3 | 3137.4 | 3140.0 | 2638.1 | 2322.3 | 1918.5 |
| 67°   | 369.2  | 364.7  | 381.1  | 485.8  | 791.6  | 1826.9 | 3144.9 | 3284.2 | 2786.9 | 2282.8 | 1756.7 |
| 67.5° | 337.6  | 341.1  | 353.1  | 438.3  | 719.2  | 1662.4 | 3110.8 | 3275.6 | 2820.5 | 2259.0 | 1698.2 |
| 70°   | 255.9  | 250.0  | 263.0  | 310.0  | 431.2  | 1048.7 | 2676.0 | 3004.3 | 2778.8 | 2023.0 | 1356.9 |
| 72.5° | 188.2  | 187.6  | 205.7  | 253.5  | 332.0  | 558.6  | 2008.8 | 2408.9 | 2270.2 | 1540.4 | 854.4  |
| 75°   | 127.0  | 132.7  | 161.6  | 211.8  | 300.9  | 362.2  | 1369.5 | 1747.6 | 1576.0 | 874.7  | 349.2  |
| 77.5° | 72.4   | 72.8   | 104.1  | 170.1  | 270.2  | 291.5  | 811.5  | 1113.4 | 834.3  | 290.9  | 103.7  |
| 80°   | 31.3   | 34.4   | 51.6   | 123.6  | 224.0  | 258.2  | 465.3  | 611.9  | 337.4  | 61.6   | 33.5   |
| 82.5° | 11.6   | 13.6   | 22.8   | 76.0   | 163.4  | 212.6  | 281.1  | 292.1  | 114.4  | 21.8   | 20.9   |
| 85°   | 0.0    | 0.4    | 8.3    | 35.6   | 85.2   | 94.9   | 187.8  | 173.2  | 50.6   | 10.4   | 13.6   |
| 87.5° | 0.0    | 0.0    | 0.0    | 3.7    | 11.2   | 35.4   | 58.3   | 65.0   | 12.2   | 3.7    | 3.3    |
| 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°    | 806.4  | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 | 806.4 |
| 2.5°  | 800.3  | 787.1 | 754.0 | 720.8 | 696.2 | 675.7 | 644.8 | 627.9 | 619.0 | 605.8 | 606.6 |
| 5°    | 780.2  | 753.4 | 695.0 | 634.6 | 585.8 | 538.3 | 481.4 | 458.4 | 439.1 | 428.1 | 420.8 |
| 7.5°  | 750.3  | 710.7 | 624.3 | 543.8 | 468.8 | 385.6 | 323.2 | 281.5 | 253.5 | 243.1 | 233.2 |
| 10°   | 717.6  | 664.9 | 552.5 | 440.9 | 336.8 | 251.0 | 198.2 | 160.0 | 146.4 | 133.8 | 135.0 |
| 12.5° | 687.3  | 623.3 | 486.6 | 348.0 | 236.0 | 159.6 | 124.4 | 108.8 | 104.3 | 102.9 | 102.9 |
| 15°   | 662.5  | 583.4 | 415.9 | 261.6 | 161.8 | 114.6 | 99.6  | 95.3  | 93.7  | 93.3  | 93.3  |
| 17.5° | 636.1  | 545.6 | 352.1 | 193.3 | 117.7 | 95.9  | 90.9  | 88.0  | 87.4  | 87.0  | 87.0  |
| 20°   | 612.5  | 507.6 | 291.5 | 143.9 | 95.1  | 86.4  | 83.1  | 81.3  | 80.7  | 80.3  | 80.5  |
| 22.5° | 590.1  | 473.8 | 234.6 | 108.8 | 83.8  | 78.7  | 75.4  | 73.6  | 72.4  | 71.4  | 71.6  |
| 25°   | 570.2  | 441.3 | 188.6 | 89.0  | 75.4  | 70.9  | 67.7  | 65.0  | 62.4  | 61.2  | 61.0  |
| 27.5° | 556.2  | 412.9 | 147.0 | 76.2  | 67.9  | 63.0  | 59.0  | 55.7  | 52.2  | 50.4  | 50.0  |
| 30°   | 544.6  | 384.0 | 116.3 | 67.3  | 60.4  | 55.7  | 50.6  | 45.9  | 42.3  | 40.5  | 39.6  |
| 32.5° | 537.1  | 356.6 | 91.7  | 60.0  | 54.1  | 48.4  | 42.7  | 38.0  | 33.9  | 32.1  | 31.7  |
| 35°   | 535.8  | 333.6 | 75.0  | 53.9  | 48.4  | 42.3  | 36.4  | 31.3  | 27.8  | 26.0  | 25.6  |
| 37.5° | 544.6  | 315.9 | 62.8  | 49.0  | 43.7  | 37.0  | 30.5  | 25.8  | 22.8  | 21.3  | 21.1  |
| 40°   | 568.0  | 304.7 | 54.5  | 44.9  | 39.4  | 32.1  | 26.0  | 22.0  | 18.9  | 17.5  | 17.5  |
| 42.5° | 612.5  | 305.1 | 49.0  | 41.1  | 35.2  | 27.4  | 22.2  | 18.3  | 15.7  | 14.4  | 14.0  |
| 45°   | 682.0  | 318.9 | 44.3  | 37.2  | 31.1  | 23.8  | 18.9  | 15.0  | 12.4  | 11.4  | 11.4  |
| 47.5° | 775.1  | 346.4 | 40.2  | 33.3  | 27.4  | 20.3  | 16.1  | 12.2  | 10.0  | 8.9   | 8.9   |
| 50°   | 896.9  | 390.5 | 36.8  | 30.1  | 24.4  | 17.5  | 13.0  | 10.0  | 7.7   | 6.9   | 6.7   |
| 52.5° | 1024.1 | 445.0 | 32.7  | 27.2  | 20.9  | 14.8  | 10.6  | 7.7   | 5.9   | 5.3   | 5.1   |
| 55°   | 1164.6 | 498.2 | 28.9  | 24.4  | 17.1  | 12.4  | 8.3   | 6.1   | 4.3   | 3.7   | 3.7   |
| 57.5° | 1306.3 | 550.5 | 24.2  | 20.3  | 13.4  | 9.1   | 6.5   | 4.5   | 2.8   | 2.2   | 2.2   |
| 60°   | 1426.2 | 567.4 | 20.5  | 16.5  | 10.2  | 6.5   | 4.7   | 2.8   | 1.6   | 1.0   | 1.0   |
| 62.5° | 1442.7 | 510.4 | 17.3  | 12.6  | 7.3   | 4.5   | 2.4   | 1.6   | 0.6   | 0.4   | 0.4   |
| 65°   | 1353.2 | 414.7 | 14.4  | 9.6   | 4.9   | 2.2   | 1.0   | 0.6   | 0.2   | 0.0   | 0.0   |
| 67°   | 1212.6 | 336.2 | 11.8  | 7.1   | 3.5   | 1.4   | 0.6   | 0.2   | 0.0   | 0.0   | 0.0   |
| 67.5° | 1176.6 | 320.6 | 11.4  | 6.7   | 3.0   | 1.2   | 0.4   | 0.2   | 0.0   | 0.0   | 0.0   |
| 70°   | 923.3  | 240.1 | 8.1   | 4.1   | 1.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 573.9  | 135.8 | 5.9   | 2.4   | 1.2   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 216.9  | 47.6  | 4.1   | 1.6   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 67.5   | 18.1  | 2.4   | 1.2   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 22.8   | 6.9   | 1.6   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 14.0   | 2.8   | 1.0   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 8.7    | 1.2   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.6    | 0.4   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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)