

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: P450373

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

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
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  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3645 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - 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



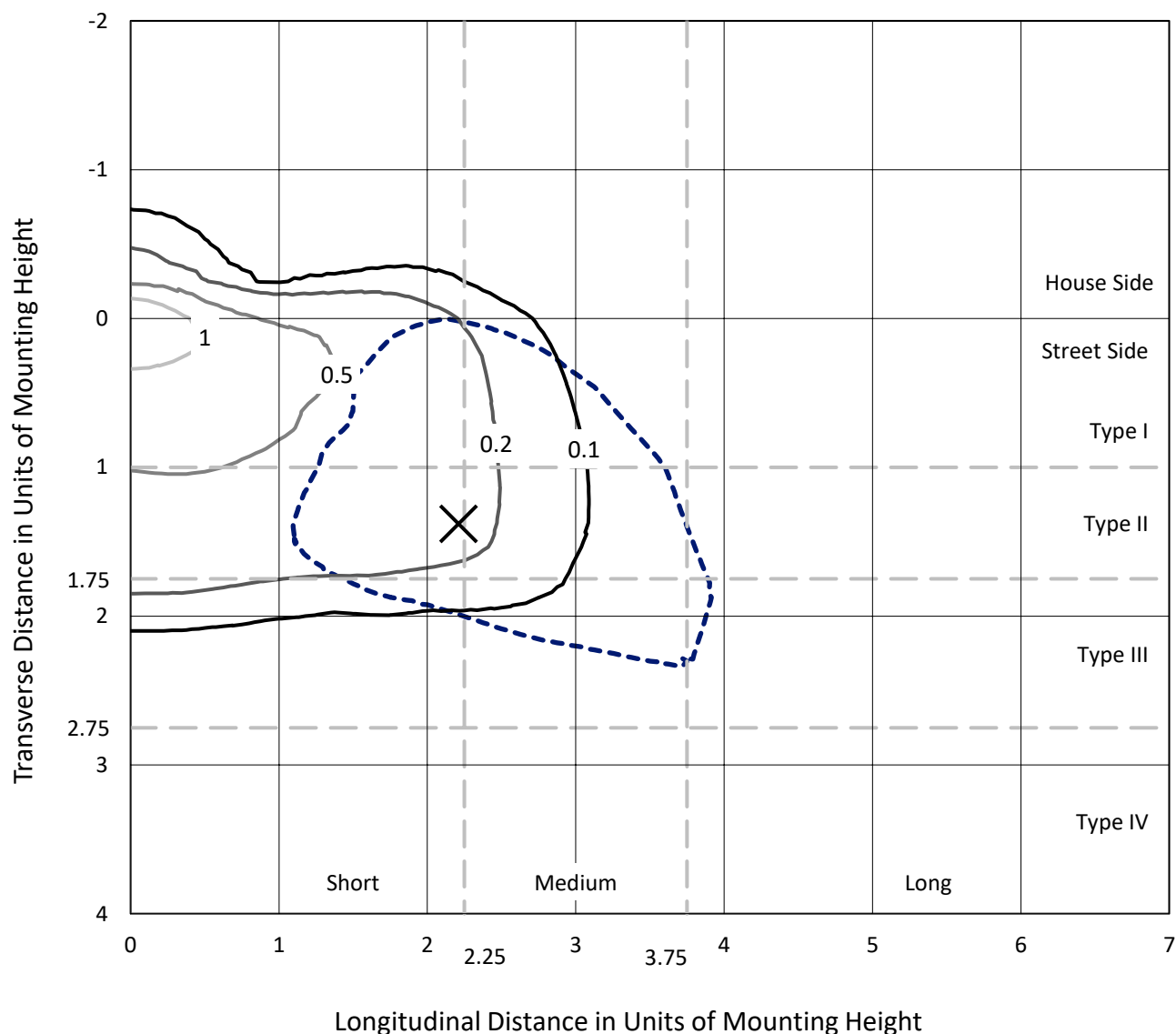
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

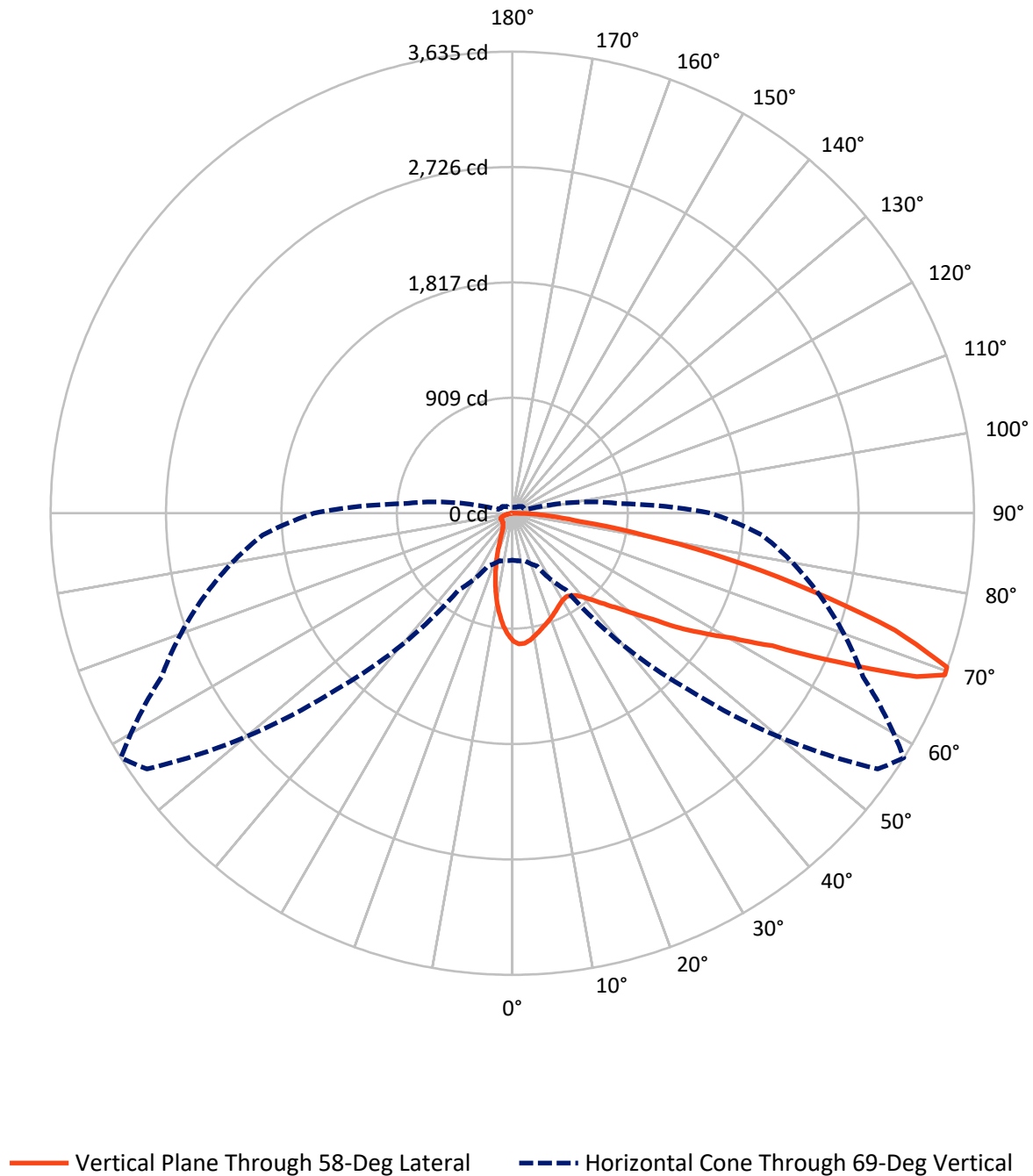


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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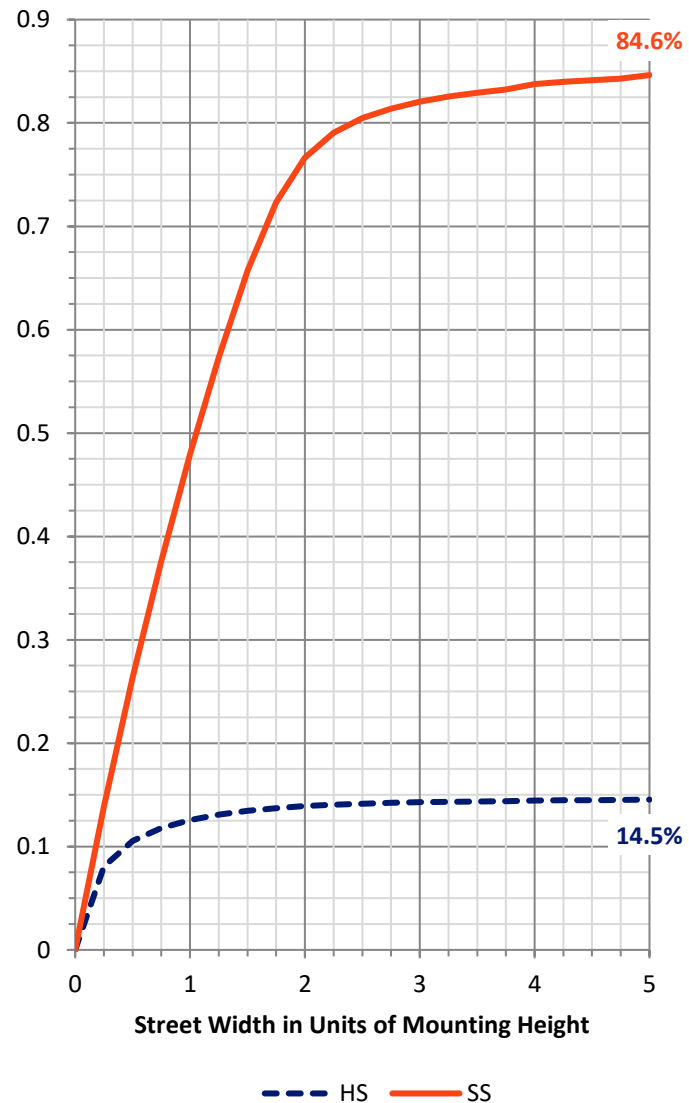
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 534.2    | 0.0    | 534.2  |
|                    | % Fixture | 14.7     | 0.0    | 14.7   |
| <b>Street Side</b> | Lumens    | 3110.8   | 0.0    | 3110.8 |
|                    | % Fixture | 85.3     | 0.0    | 85.3   |
| <b>Total</b>       | Lumens    | 3645.0   | 0.0    | 3645.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 85.5   | 2.3       |
| 10°-20°   | 187.8  | 5.2       |
| 20°-30°   | 242.7  | 6.7       |
| 30°-40°   | 315.2  | 8.6       |
| 40°-50°   | 458.3  | 12.6      |
| 50°-60°   | 731.2  | 20.1      |
| 60°-70°   | 976.8  | 26.8      |
| 70°-80°   | 563.1  | 15.4      |
| 80°-90°   | 84.3   | 2.3       |
| 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°    | 3645.0 | 100.0     |
| 0°-180°   | 3645.0 | 100.0     |

**Coefficient of Utilization**



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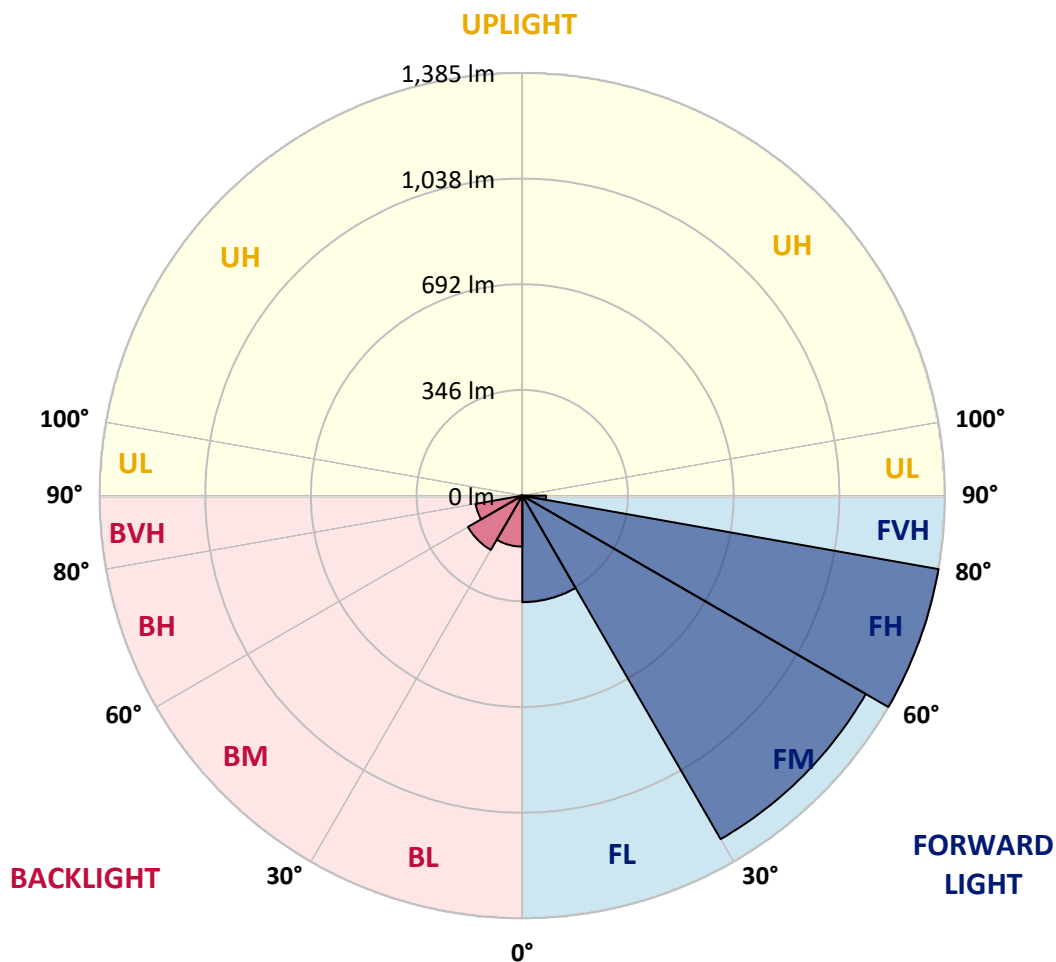
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 349.1  | 9.6       |                         |      |         |
| FM   | (30°-60°)   | 1299.3 | 35.6      |                         |      |         |
| FH   | (60°-80°)   | 1384.6 | 38.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 77.9   | 2.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 167.0  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 205.4  | 5.6       | B0/220                  |      |         |
| BH   | (60°-80°)   | 155.3  | 4.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 6.5    | 0.2       |                         |      | 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 58°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 |
| 2.5°  | 1044.7 | 1047.5 | 1046.7 | 1045.7 | 1044.1 | 1039.6 | 1032.3 | 1031.0 | 1026.4 | 1016.4 | 1004.0 |
| 5°    | 1028.6 | 1031.0 | 1031.3 | 1032.7 | 1034.7 | 1033.9 | 1028.6 | 1028.0 | 1021.1 | 1007.7 | 986.9  |
| 7.5°  | 973.5  | 976.8  | 983.9  | 991.8  | 998.9  | 1005.6 | 1007.3 | 1008.3 | 1004.0 | 988.6  | 960.9  |
| 10°   | 911.5  | 914.8  | 918.0  | 929.8  | 947.3  | 964.0  | 977.8  | 979.6  | 980.6  | 966.4  | 932.7  |
| 12.5° | 842.8  | 849.5  | 856.4  | 873.9  | 897.3  | 923.5  | 947.9  | 951.8  | 958.7  | 947.9  | 908.3  |
| 15°   | 784.5  | 791.4  | 801.3  | 817.0  | 845.2  | 883.1  | 917.4  | 923.7  | 937.3  | 931.8  | 885.5  |
| 17.5° | 744.0  | 746.5  | 753.4  | 771.3  | 801.7  | 841.6  | 887.5  | 900.1  | 921.9  | 920.5  | 866.0  |
| 20°   | 712.1  | 715.1  | 719.4  | 730.4  | 762.1  | 804.2  | 859.7  | 875.9  | 905.4  | 910.3  | 846.7  |
| 22.5° | 698.7  | 700.9  | 700.3  | 706.2  | 727.8  | 770.0  | 831.4  | 850.7  | 890.8  | 903.4  | 828.8  |
| 25°   | 699.5  | 701.5  | 698.5  | 697.1  | 709.9  | 739.9  | 801.9  | 826.5  | 879.0  | 898.7  | 812.5  |
| 27.5° | 713.1  | 714.5  | 708.8  | 703.2  | 704.2  | 721.2  | 777.6  | 804.8  | 869.0  | 900.7  | 798.9  |
| 30°   | 731.4  | 734.1  | 730.4  | 723.5  | 716.0  | 716.8  | 761.9  | 788.7  | 864.4  | 907.9  | 792.4  |
| 32.5° | 755.0  | 757.4  | 755.8  | 750.3  | 740.6  | 729.8  | 758.0  | 782.8  | 864.8  | 922.3  | 791.0  |
| 35°   | 779.8  | 784.7  | 787.3  | 786.9  | 779.0  | 760.3  | 773.3  | 793.8  | 874.5  | 946.5  | 799.3  |
| 37.5° | 807.8  | 811.9  | 823.3  | 830.6  | 823.3  | 801.5  | 807.6  | 821.9  | 896.1  | 981.4  | 817.6  |
| 40°   | 835.1  | 841.2  | 857.9  | 880.6  | 877.8  | 858.7  | 860.1  | 869.4  | 934.1  | 1033.5 | 853.4  |
| 42.5° | 863.5  | 870.9  | 899.9  | 933.7  | 940.4  | 925.5  | 929.4  | 937.7  | 988.2  | 1105.7 | 914.8  |
| 45°   | 900.1  | 908.9  | 944.7  | 986.7  | 1013.2 | 1004.0 | 1015.0 | 1019.1 | 1060.5 | 1199.6 | 995.7  |
| 47.5° | 947.3  | 957.5  | 1001.6 | 1054.0 | 1091.4 | 1099.8 | 1118.9 | 1116.4 | 1150.2 | 1310.8 | 1100.6 |
| 50°   | 1026.8 | 1032.5 | 1074.1 | 1127.6 | 1179.0 | 1216.6 | 1237.4 | 1241.2 | 1261.4 | 1418.9 | 1217.9 |
| 52.5° | 1121.3 | 1126.4 | 1156.5 | 1203.2 | 1267.7 | 1347.4 | 1398.6 | 1386.0 | 1390.9 | 1550.6 | 1355.1 |
| 55°   | 1227.6 | 1236.2 | 1255.3 | 1286.4 | 1369.9 | 1487.2 | 1590.1 | 1593.1 | 1539.1 | 1676.7 | 1486.6 |
| 57.5° | 1310.0 | 1324.4 | 1357.1 | 1401.4 | 1507.3 | 1642.7 | 1781.0 | 1783.0 | 1713.9 | 1811.2 | 1631.7 |
| 60°   | 1268.5 | 1285.6 | 1360.4 | 1468.3 | 1687.7 | 1914.1 | 2009.0 | 1997.5 | 1884.0 | 1964.5 | 1808.8 |
| 62.5° | 1089.6 | 1092.6 | 1201.4 | 1370.1 | 1743.1 | 2277.2 | 2348.5 | 2299.5 | 2111.1 | 2158.9 | 1988.7 |
| 65°   | 705.2  | 725.1  | 811.3  | 1047.7 | 1560.8 | 2478.6 | 2943.3 | 2830.1 | 2429.4 | 2379.4 | 2139.3 |
| 67.5° | 445.2  | 440.1  | 475.9  | 598.3  | 1073.5 | 2301.2 | 3450.9 | 3433.0 | 2845.8 | 2518.7 | 2103.4 |
| 69°   | 369.2  | 374.9  | 387.0  | 458.6  | 738.7  | 1964.7 | 3510.9 | 3634.5 | 3047.6 | 2507.7 | 1972.7 |
| 70°   | 334.8  | 337.4  | 350.3  | 406.6  | 570.0  | 1645.6 | 3412.5 | 3629.0 | 3126.9 | 2461.8 | 1877.9 |
| 72.5° | 265.7  | 265.5  | 287.4  | 338.3  | 426.1  | 939.4  | 2802.0 | 3150.7 | 3038.3 | 2247.9 | 1551.7 |
| 75°   | 201.9  | 205.1  | 229.3  | 286.2  | 392.5  | 513.3  | 1955.4 | 2426.4 | 2426.6 | 1775.5 | 968.2  |
| 77.5° | 145.6  | 147.6  | 175.8  | 240.3  | 369.8  | 416.1  | 1302.4 | 1740.3 | 1636.0 | 813.5  | 304.3  |
| 80°   | 95.3   | 96.6   | 118.1  | 190.3  | 333.4  | 392.5  | 772.3  | 1065.2 | 771.7  | 215.9  | 100.6  |
| 82.5° | 52.2   | 58.3   | 72.2   | 123.2  | 267.5  | 362.7  | 469.4  | 539.1  | 289.5  | 96.2   | 52.4   |
| 85°   | 26.2   | 27.8   | 40.7   | 72.0   | 174.8  | 300.0  | 326.9  | 309.2  | 149.4  | 47.8   | 27.2   |
| 87.5° | 7.7    | 9.8    | 16.9   | 27.8   | 70.9   | 156.3  | 181.9  | 163.2  | 57.5   | 17.3   | 5.7    |
| 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°    | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 | 1007.3 |
| 2.5°  | 998.9  | 995.3  | 979.0  | 964.4  | 951.0  | 936.7  | 924.7  | 914.2  | 915.2  | 915.4  | 904.6  |
| 5°    | 976.2  | 967.8  | 936.9  | 908.1  | 883.7  | 852.8  | 826.3  | 809.3  | 800.7  | 789.3  | 793.4  |
| 7.5°  | 945.3  | 929.2  | 886.3  | 838.3  | 793.4  | 753.4  | 709.9  | 680.0  | 660.9  | 642.4  | 644.8  |
| 10°   | 913.3  | 887.5  | 825.1  | 761.7  | 703.6  | 639.5  | 584.0  | 536.5  | 501.1  | 487.9  | 479.1  |
| 12.5° | 880.6  | 846.7  | 767.4  | 683.0  | 602.7  | 526.1  | 447.4  | 396.4  | 357.4  | 336.6  | 339.3  |
| 15°   | 850.7  | 809.5  | 707.2  | 604.4  | 500.1  | 408.8  | 330.3  | 281.7  | 254.5  | 248.8  | 252.1  |
| 17.5° | 823.1  | 769.0  | 650.9  | 527.9  | 406.2  | 306.5  | 248.2  | 220.8  | 209.8  | 206.7  | 206.5  |
| 20°   | 794.6  | 734.7  | 587.7  | 446.2  | 316.5  | 237.6  | 203.7  | 190.9  | 188.8  | 190.1  | 190.3  |
| 22.5° | 765.8  | 692.2  | 522.6  | 365.1  | 252.1  | 194.3  | 178.1  | 174.6  | 176.2  | 179.1  | 179.5  |
| 25°   | 739.1  | 654.8  | 460.0  | 293.9  | 201.2  | 170.8  | 162.8  | 162.8  | 166.5  | 170.8  | 171.0  |
| 27.5° | 717.2  | 618.6  | 397.6  | 233.4  | 168.5  | 153.7  | 151.0  | 152.5  | 157.5  | 160.8  | 161.0  |
| 30°   | 699.1  | 584.8  | 338.7  | 187.0  | 148.2  | 140.1  | 139.5  | 141.9  | 145.6  | 148.6  | 148.8  |
| 32.5° | 685.5  | 555.2  | 283.6  | 157.1  | 134.2  | 129.7  | 129.5  | 131.3  | 133.4  | 134.2  | 135.0  |
| 35°   | 680.2  | 530.6  | 233.2  | 138.2  | 124.8  | 122.0  | 122.0  | 121.8  | 122.6  | 123.0  | 123.4  |
| 37.5° | 684.5  | 511.7  | 194.1  | 126.0  | 117.9  | 115.9  | 114.7  | 113.4  | 113.0  | 113.0  | 113.2  |
| 40°   | 702.5  | 501.7  | 165.1  | 118.1  | 113.0  | 110.0  | 107.7  | 106.3  | 104.9  | 105.3  | 105.7  |
| 42.5° | 741.0  | 503.5  | 145.3  | 112.8  | 108.8  | 104.5  | 101.2  | 99.6   | 98.6   | 99.8   | 99.6   |
| 45°   | 802.2  | 521.8  | 132.7  | 109.2  | 104.5  | 99.0   | 95.9   | 94.3   | 94.3   | 96.2   | 96.8   |
| 47.5° | 887.7  | 556.8  | 126.0  | 106.3  | 101.2  | 94.7   | 91.7   | 90.5   | 90.9   | 93.9   | 94.1   |
| 50°   | 992.2  | 617.6  | 124.8  | 104.9  | 99.6   | 91.7   | 88.2   | 87.0   | 88.0   | 91.3   | 91.7   |
| 52.5° | 1107.5 | 695.8  | 130.7  | 105.1  | 98.2   | 89.9   | 85.4   | 83.5   | 84.6   | 87.2   | 88.0   |
| 55°   | 1244.1 | 793.8  | 146.0  | 105.9  | 96.2   | 88.8   | 83.3   | 79.3   | 80.5   | 82.3   | 82.5   |
| 57.5° | 1383.5 | 917.4  | 172.8  | 106.1  | 94.5   | 87.0   | 79.9   | 74.6   | 74.6   | 75.8   | 76.4   |
| 60°   | 1553.9 | 1052.0 | 208.2  | 106.3  | 94.7   | 84.4   | 75.2   | 69.3   | 68.5   | 69.1   | 69.3   |
| 62.5° | 1723.0 | 1164.6 | 214.1  | 105.7  | 96.8   | 81.7   | 70.1   | 64.0   | 62.6   | 62.4   | 62.0   |
| 65°   | 1797.6 | 1143.7 | 175.4  | 102.9  | 99.0   | 80.1   | 66.1   | 59.0   | 56.5   | 55.7   | 55.7   |
| 67.5° | 1676.1 | 967.4  | 131.9  | 99.0   | 97.6   | 78.5   | 62.2   | 54.7   | 51.8   | 50.2   | 50.2   |
| 69°   | 1561.8 | 860.5  | 118.5  | 96.4   | 93.9   | 75.8   | 59.8   | 52.4   | 49.0   | 47.2   | 46.6   |
| 70°   | 1473.6 | 786.9  | 112.8  | 94.1   | 90.5   | 72.8   | 57.9   | 50.8   | 47.0   | 44.9   | 44.5   |
| 72.5° | 1176.0 | 617.4  | 98.8   | 85.6   | 77.0   | 61.2   | 51.4   | 45.7   | 42.1   | 39.8   | 39.2   |
| 75°   | 677.7  | 334.6  | 81.9   | 74.4   | 62.0   | 47.6   | 43.5   | 39.8   | 37.0   | 35.0   | 34.4   |
| 77.5° | 208.6  | 129.3  | 59.4   | 58.7   | 45.5   | 36.8   | 34.8   | 33.3   | 31.3   | 29.1   | 28.7   |
| 80°   | 87.8   | 65.9   | 40.2   | 39.6   | 30.3   | 25.6   | 25.0   | 24.8   | 24.0   | 22.2   | 21.5   |
| 82.5° | 48.2   | 37.2   | 28.1   | 24.4   | 18.3   | 14.8   | 15.4   | 15.7   | 15.0   | 13.2   | 12.0   |
| 85°   | 23.6   | 20.3   | 13.6   | 11.0   | 8.3    | 5.3    | 5.1    | 6.1    | 5.7    | 4.1    | 4.5    |
| 87.5° | 4.7    | 5.7    | 3.7    | 1.6    | 0.8    | 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)