

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: P451777

Luminaire Tested: **GALN-SA2C-830-U-T3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2C-830-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8248 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 108  
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

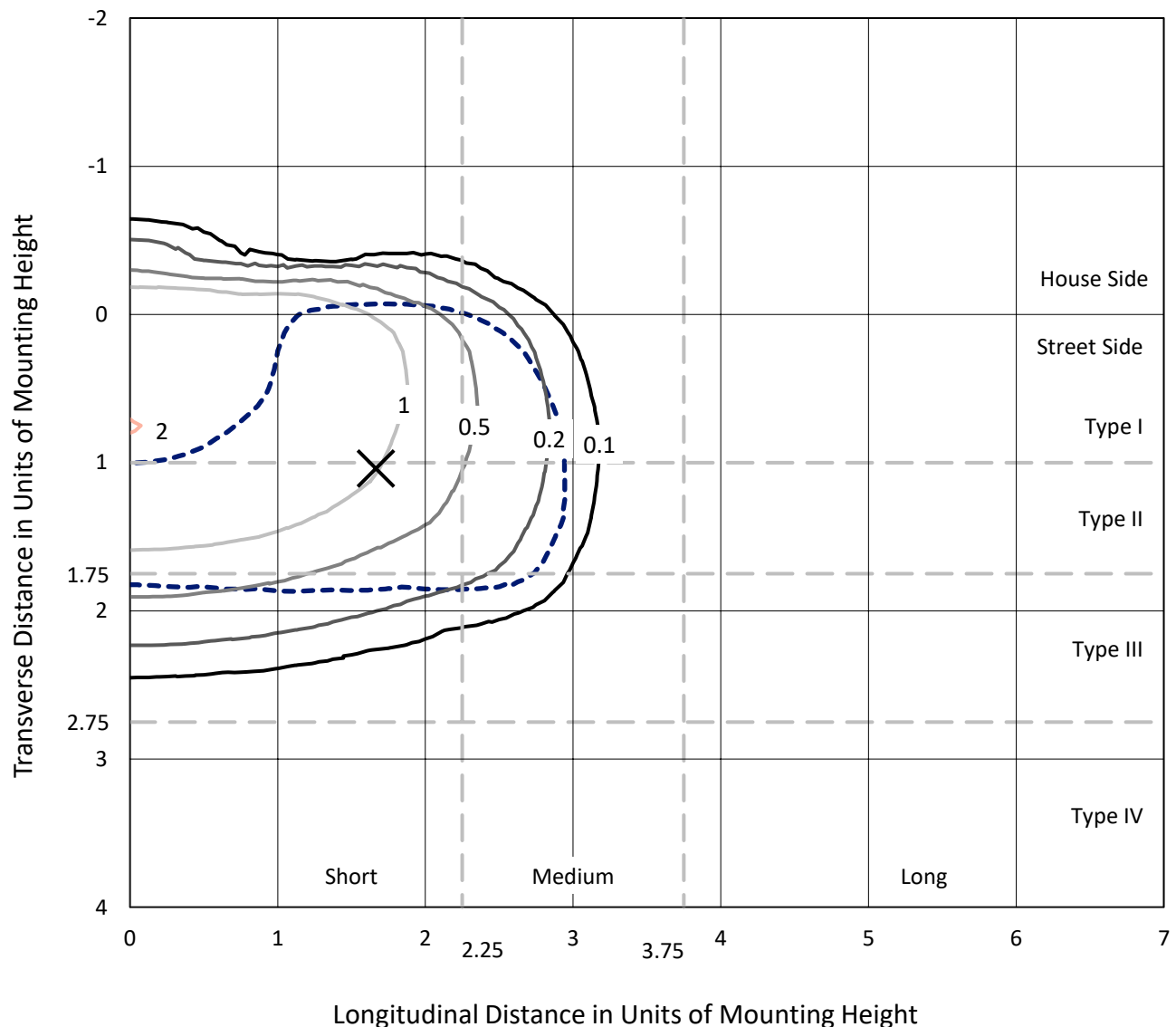


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

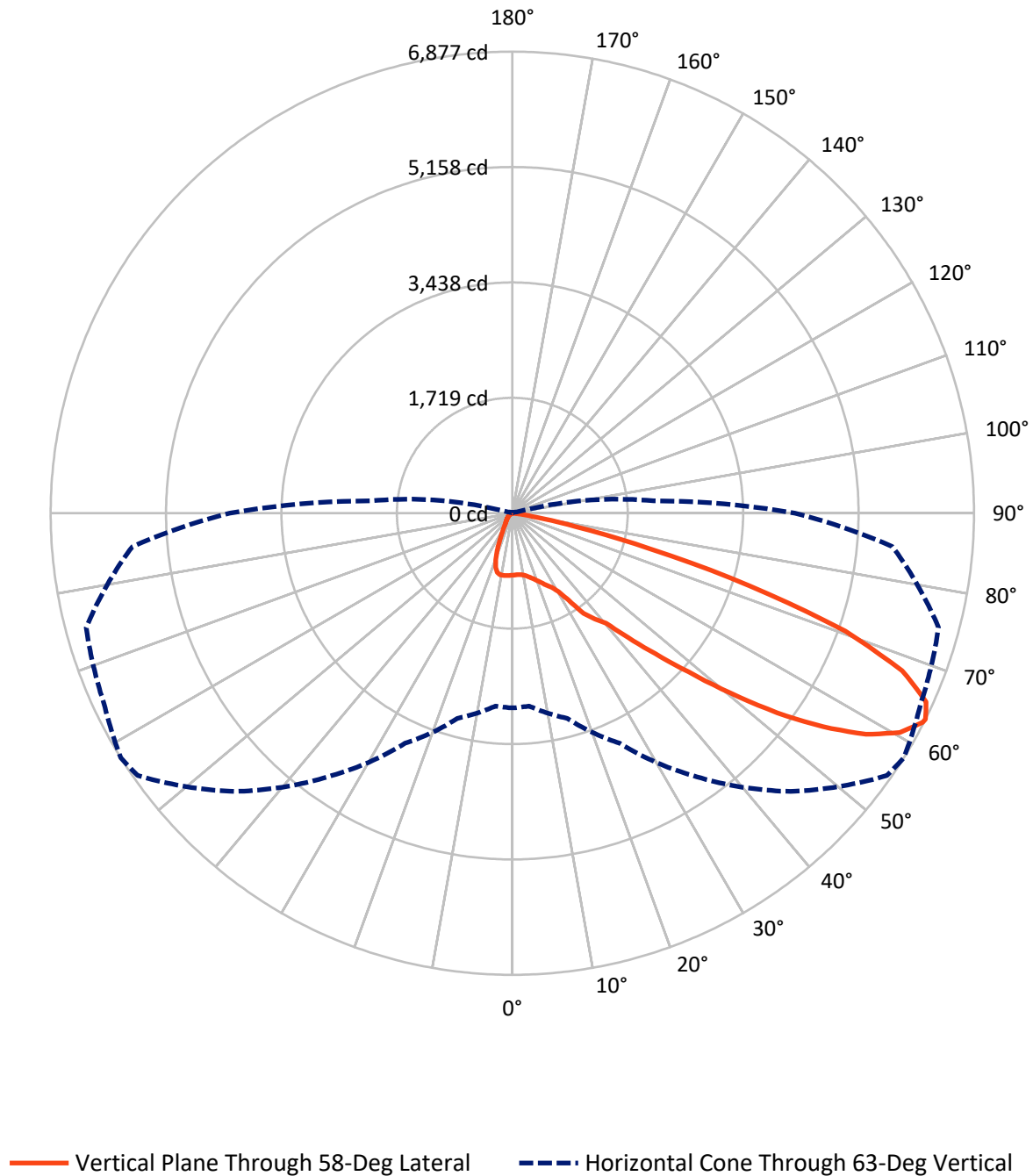


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 854.0    | 0.0    | 854.0  |
|                    | % Fixture | 10.4     | 0.0    | 10.4   |
| <b>Street Side</b> | Lumens    | 7394.0   | 0.0    | 7394.0 |
|                    | % Fixture | 89.6     | 0.0    | 89.6   |
| <b>Total</b>       | Lumens    | 8248.0   | 0.0    | 8248.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.4   | 1.0       |
| 10°-20°   | 235.4  | 2.9       |
| 20°-30°   | 408.6  | 5.0       |
| 30°-40°   | 750.9  | 9.1       |
| 40°-50°   | 1413.5 | 17.1      |
| 50°-60°   | 2417.7 | 29.3      |
| 60°-70°   | 2314.9 | 28.1      |
| 70°-80°   | 590.3  | 7.2       |
| 80°-90°   | 30.2   | 0.4       |
| 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°    | 8248.0 | 100.0     |
| 0°-180°   | 8248.0 | 100.0     |

**Coefficient of Utilization**



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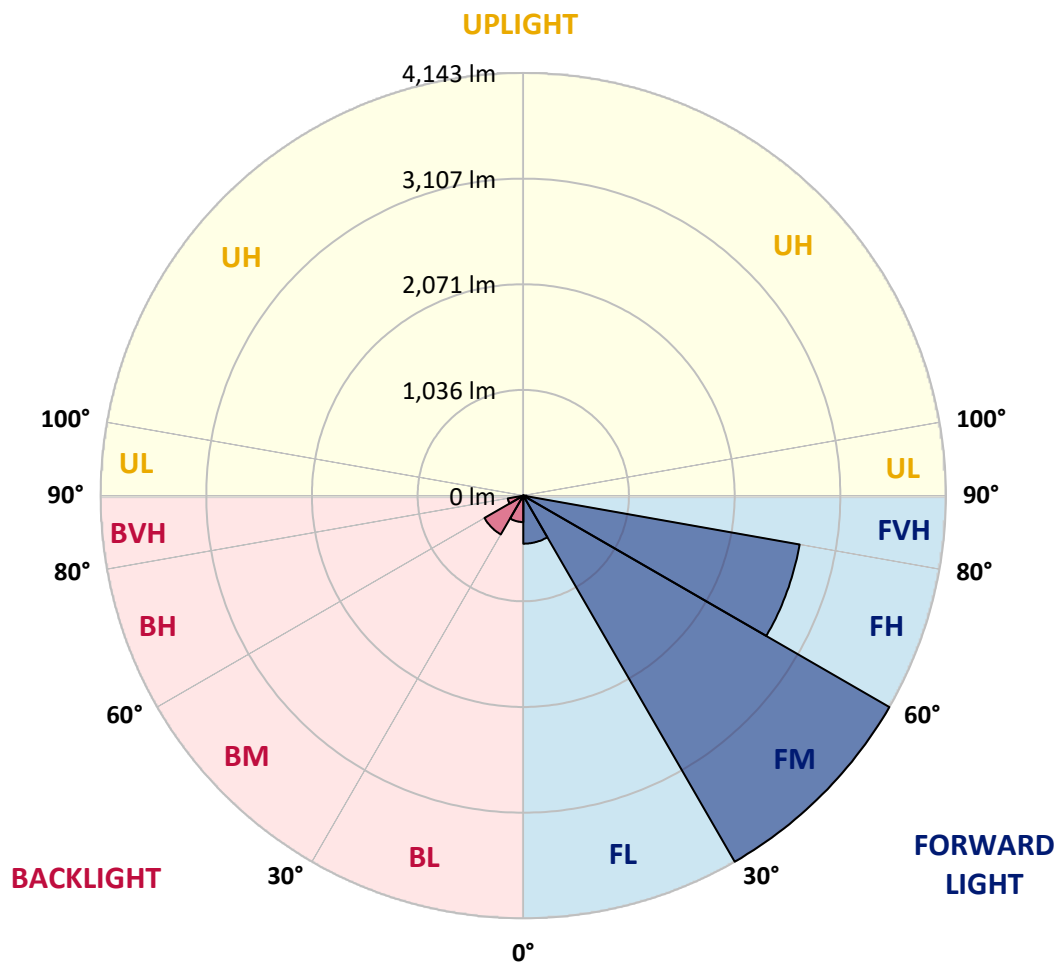
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 471.5  | 5.7       |                         |      |         |
| FM   | (30°-60°)   | 4142.8 | 50.2      |                         |      |         |
| FH   | (60°-80°)   | 2750.7 | 33.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 29.0   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 259.0  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 439.3  | 5.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 154.6  | 1.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.2    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 58°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  | 923.4  |
| 2.5°  | 900.4  | 903.5  | 906.6  | 907.9  | 912.2  | 916.6  | 919.7  | 919.0  | 924.0  | 926.5  | 926.5  |
| 5°    | 864.4  | 864.4  | 872.5  | 879.9  | 892.3  | 904.8  | 916.6  | 919.0  | 928.4  | 937.1  | 940.2  |
| 7.5°  | 834.0  | 835.8  | 842.0  | 855.7  | 872.5  | 894.2  | 917.8  | 923.4  | 939.5  | 958.8  | 966.9  |
| 10°   | 819.7  | 820.9  | 829.0  | 843.3  | 864.4  | 894.2  | 927.1  | 937.7  | 962.5  | 992.9  | 1004.1 |
| 12.5° | 816.6  | 818.5  | 826.5  | 842.7  | 866.9  | 902.9  | 947.6  | 958.8  | 994.8  | 1033.9 | 1050.7 |
| 15°   | 822.2  | 823.4  | 831.5  | 848.9  | 875.6  | 918.4  | 974.9  | 990.5  | 1033.3 | 1078.6 | 1100.4 |
| 17.5° | 842.0  | 840.8  | 846.4  | 860.7  | 890.5  | 937.7  | 1007.8 | 1026.5 | 1076.8 | 1138.9 | 1153.2 |
| 20°   | 926.5  | 918.4  | 913.5  | 901.0  | 912.8  | 965.0  | 1047.6 | 1074.9 | 1137.0 | 1200.4 | 1210.3 |
| 22.5° | 1108.4 | 1090.4 | 1055.0 | 1006.6 | 969.3  | 1002.3 | 1095.4 | 1127.1 | 1207.2 | 1269.3 | 1269.3 |
| 25°   | 1340.1 | 1317.1 | 1281.7 | 1176.1 | 1084.8 | 1063.7 | 1149.4 | 1189.2 | 1283.6 | 1346.3 | 1325.8 |
| 27.5° | 1630.1 | 1612.1 | 1543.1 | 1420.2 | 1280.5 | 1171.2 | 1212.2 | 1248.8 | 1351.2 | 1427.0 | 1384.2 |
| 30°   | 1866.0 | 1857.3 | 1800.8 | 1690.9 | 1536.9 | 1377.3 | 1328.9 | 1353.1 | 1441.3 | 1528.8 | 1484.8 |
| 32.5° | 2065.4 | 2065.4 | 2007.6 | 1905.2 | 1761.1 | 1619.5 | 1527.0 | 1544.4 | 1628.8 | 1730.0 | 1648.1 |
| 35°   | 2284.6 | 2277.1 | 2230.6 | 2133.1 | 1971.6 | 1846.8 | 1808.9 | 1832.5 | 1908.9 | 1984.0 | 1782.2 |
| 37.5° | 2515.0 | 2512.5 | 2464.0 | 2369.7 | 2238.0 | 2080.9 | 1992.1 | 1998.3 | 2037.4 | 2083.4 | 1939.3 |
| 40°   | 2765.2 | 2768.9 | 2705.6 | 2647.2 | 2523.0 | 2362.2 | 2192.1 | 2152.9 | 2189.6 | 2319.4 | 2229.3 |
| 42.5° | 3060.8 | 3052.1 | 3024.8 | 2945.3 | 2845.3 | 2749.1 | 2544.8 | 2530.5 | 2562.8 | 2701.9 | 2604.4 |
| 45°   | 3404.2 | 3416.6 | 3369.4 | 3325.3 | 3258.3 | 3178.2 | 3007.4 | 2982.6 | 3018.0 | 3234.1 | 3095.6 |
| 47.5° | 3748.2 | 3736.4 | 3766.9 | 3758.8 | 3794.8 | 3735.2 | 3584.3 | 3533.4 | 3618.4 | 3823.4 | 3619.7 |
| 50°   | 4010.3 | 4023.3 | 4086.7 | 4179.2 | 4333.8 | 4367.3 | 4222.7 | 4205.3 | 4243.1 | 4374.8 | 4088.5 |
| 52.5° | 4180.4 | 4223.9 | 4323.3 | 4561.1 | 4839.9 | 5056.6 | 4946.7 | 4937.4 | 4921.9 | 4957.3 | 4536.9 |
| 55°   | 4291.6 | 4335.7 | 4465.5 | 4815.7 | 5295.7 | 5647.8 | 5653.4 | 5613.6 | 5511.2 | 5485.7 | 4956.0 |
| 57.5° | 4223.3 | 4232.0 | 4417.0 | 4885.2 | 5548.4 | 6069.4 | 6252.0 | 6212.3 | 6022.9 | 5926.6 | 5326.1 |
| 60°   | 3796.0 | 3814.1 | 4071.8 | 4621.9 | 5438.5 | 6207.3 | 6648.8 | 6630.8 | 6423.4 | 6314.7 | 5614.3 |
| 62.5° | 3039.1 | 3091.2 | 3356.4 | 3969.9 | 4927.5 | 5975.1 | 6809.7 | 6860.6 | 6699.1 | 6549.5 | 5704.9 |
| 63°   | 2900.0 | 2883.2 | 3163.3 | 3779.9 | 4792.1 | 5860.2 | 6812.1 | 6876.7 | 6711.5 | 6571.8 | 5680.1 |
| 65°   | 2146.7 | 2197.0 | 2379.0 | 2980.7 | 3987.9 | 5325.5 | 6658.8 | 6773.0 | 6665.6 | 6473.1 | 5405.0 |
| 67.5° | 1205.3 | 1202.8 | 1404.0 | 1950.5 | 2791.3 | 4177.3 | 6021.0 | 6262.6 | 6240.2 | 5808.6 | 4480.4 |
| 70°   | 589.9  | 599.2  | 681.8  | 1011.0 | 1618.9 | 2882.0 | 5003.2 | 5264.0 | 5272.1 | 4562.3 | 3098.1 |
| 72.5° | 267.0  | 271.4  | 330.4  | 492.4  | 832.1  | 1534.4 | 3447.7 | 3696.7 | 3650.7 | 2907.4 | 1710.8 |
| 75°   | 141.0  | 150.3  | 181.9  | 247.8  | 401.2  | 632.8  | 1875.4 | 2116.3 | 2020.0 | 1328.3 | 629.7  |
| 77.5° | 104.3  | 107.4  | 123.6  | 157.7  | 214.9  | 246.5  | 809.1  | 962.5  | 901.7  | 480.6  | 208.6  |
| 80°   | 76.4   | 78.9   | 91.9   | 111.8  | 135.4  | 125.4  | 304.9  | 349.6  | 313.6  | 163.3  | 64.0   |
| 82.5° | 46.6   | 47.2   | 67.1   | 83.2   | 85.1   | 70.2   | 100.6  | 108.1  | 113.0  | 91.9   | 34.8   |
| 85°   | 16.8   | 21.1   | 45.3   | 60.2   | 50.3   | 35.4   | 42.2   | 46.6   | 50.9   | 58.4   | 20.5   |
| 87.5° | 1.9    | 2.5    | 21.7   | 29.2   | 14.3   | 13.0   | 15.5   | 17.4   | 18.6   | 21.7   | 9.9    |
| 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°    | 923.4  | 923.4  | 923.4  | 923.4 | 923.4 | 923.4 | 923.4 | 923.4 | 923.4 | 923.4 | 923.4 |
| 2.5°  | 929.0  | 931.5  | 929.6  | 926.5 | 925.9 | 924.0 | 920.3 | 920.3 | 920.3 | 921.5 | 920.3 |
| 5°    | 942.6  | 944.5  | 940.2  | 934.0 | 927.1 | 918.4 | 909.1 | 903.5 | 902.9 | 901.7 | 898.6 |
| 7.5°  | 968.7  | 971.2  | 961.3  | 946.4 | 927.7 | 906.6 | 886.8 | 868.1 | 859.4 | 852.6 | 852.6 |
| 10°   | 1006.6 | 1009.1 | 989.2  | 962.5 | 925.3 | 882.4 | 835.2 | 792.4 | 758.8 | 743.3 | 739.6 |
| 12.5° | 1051.9 | 1053.2 | 1020.3 | 973.7 | 912.2 | 829.6 | 729.0 | 635.3 | 570.1 | 540.3 | 537.1 |
| 15°   | 1101.6 | 1092.9 | 1049.5 | 978.0 | 875.0 | 721.0 | 547.1 | 432.2 | 364.5 | 344.6 | 352.1 |
| 17.5° | 1151.9 | 1135.8 | 1071.8 | 971.2 | 791.1 | 547.1 | 367.6 | 295.0 | 273.9 | 268.3 | 268.3 |
| 20°   | 1199.1 | 1176.8 | 1088.0 | 941.4 | 645.8 | 376.9 | 272.6 | 255.2 | 251.5 | 247.8 | 248.4 |
| 22.5° | 1246.3 | 1212.2 | 1102.2 | 875.0 | 481.3 | 269.5 | 244.0 | 238.5 | 233.5 | 228.5 | 227.9 |
| 25°   | 1292.3 | 1245.1 | 1107.8 | 752.0 | 327.9 | 231.6 | 222.9 | 215.5 | 205.5 | 200.0 | 198.7 |
| 27.5° | 1340.1 | 1284.8 | 1104.1 | 596.8 | 239.1 | 207.4 | 198.7 | 188.2 | 176.4 | 166.4 | 166.4 |
| 30°   | 1432.0 | 1360.6 | 1091.1 | 429.1 | 201.2 | 182.6 | 171.4 | 154.6 | 141.6 | 131.6 | 131.0 |
| 32.5° | 1557.4 | 1459.3 | 1046.3 | 301.8 | 178.8 | 160.8 | 144.1 | 125.4 | 111.8 | 104.3 | 104.3 |
| 35°   | 1669.2 | 1558.7 | 962.5  | 222.3 | 160.8 | 139.7 | 119.2 | 101.2 | 90.7  | 85.7  | 83.8  |
| 37.5° | 1839.3 | 1704.0 | 847.0  | 180.7 | 143.4 | 121.1 | 100.0 | 83.2  | 74.5  | 70.8  | 70.8  |
| 40°   | 2094.6 | 1881.6 | 705.4  | 158.3 | 126.7 | 103.1 | 83.2  | 70.2  | 63.3  | 59.0  | 59.0  |
| 42.5° | 2411.3 | 2098.9 | 562.0  | 142.2 | 111.2 | 88.8  | 69.5  | 59.6  | 53.4  | 50.3  | 49.7  |
| 45°   | 2809.9 | 2328.0 | 432.8  | 127.3 | 98.7  | 75.8  | 59.0  | 50.3  | 44.1  | 42.2  | 42.8  |
| 47.5° | 3226.0 | 2529.9 | 335.3  | 114.3 | 85.7  | 64.0  | 50.3  | 43.5  | 39.1  | 36.6  | 36.6  |
| 50°   | 3581.2 | 2669.0 | 254.6  | 99.4  | 75.8  | 54.0  | 44.1  | 39.1  | 35.4  | 34.2  | 33.5  |
| 52.5° | 3878.0 | 2709.3 | 195.0  | 86.3  | 66.4  | 46.6  | 39.1  | 35.4  | 32.3  | 30.4  | 30.4  |
| 55°   | 4130.8 | 2673.9 | 152.8  | 72.7  | 55.9  | 40.4  | 34.8  | 31.7  | 27.9  | 26.1  | 25.5  |
| 57.5° | 4278.5 | 2560.3 | 116.7  | 60.2  | 45.3  | 33.5  | 30.4  | 26.7  | 22.4  | 19.3  | 19.3  |
| 60°   | 4353.1 | 2395.1 | 89.4   | 49.7  | 34.8  | 26.7  | 24.8  | 19.9  | 15.5  | 13.0  | 12.4  |
| 62.5° | 4263.6 | 2175.9 | 67.7   | 39.1  | 26.1  | 19.9  | 16.8  | 14.3  | 9.9   | 7.5   | 7.5   |
| 63°   | 4208.4 | 2112.6 | 65.2   | 37.3  | 24.2  | 18.6  | 15.5  | 13.0  | 8.7   | 6.8   | 6.2   |
| 65°   | 3836.4 | 1836.2 | 53.4   | 29.8  | 19.3  | 13.0  | 10.6  | 9.3   | 6.2   | 3.1   | 2.5   |
| 67.5° | 3046.5 | 1404.7 | 42.2   | 22.4  | 13.7  | 9.3   | 6.2   | 5.6   | 1.9   | 0.0   | 0.0   |
| 70°   | 2059.8 | 907.3  | 32.9   | 16.1  | 9.3   | 5.6   | 3.1   | 2.5   | 0.6   | 0.0   | 0.0   |
| 72.5° | 1074.3 | 465.1  | 25.5   | 11.8  | 5.6   | 3.7   | 1.9   | 0.6   | 0.0   | 0.0   | 0.0   |
| 75°   | 380.0  | 158.3  | 18.6   | 7.5   | 3.7   | 1.9   | 0.6   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 114.9  | 59.0   | 11.8   | 5.6   | 2.5   | 1.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 40.4   | 21.7   | 6.8    | 3.7   | 1.9   | 0.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 19.9   | 10.6   | 4.3    | 3.1   | 1.9   | 0.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 11.2   | 6.8    | 3.7    | 3.1   | 1.9   | 1.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 8.1    | 5.0    | 3.7    | 3.1   | 2.5   | 1.2   | 0.6   | 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)