

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: P457795

Luminaire Tested: **GALN-SA9A-830-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457795  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA9A-830-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32884 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

Input Watts (W): 274  
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

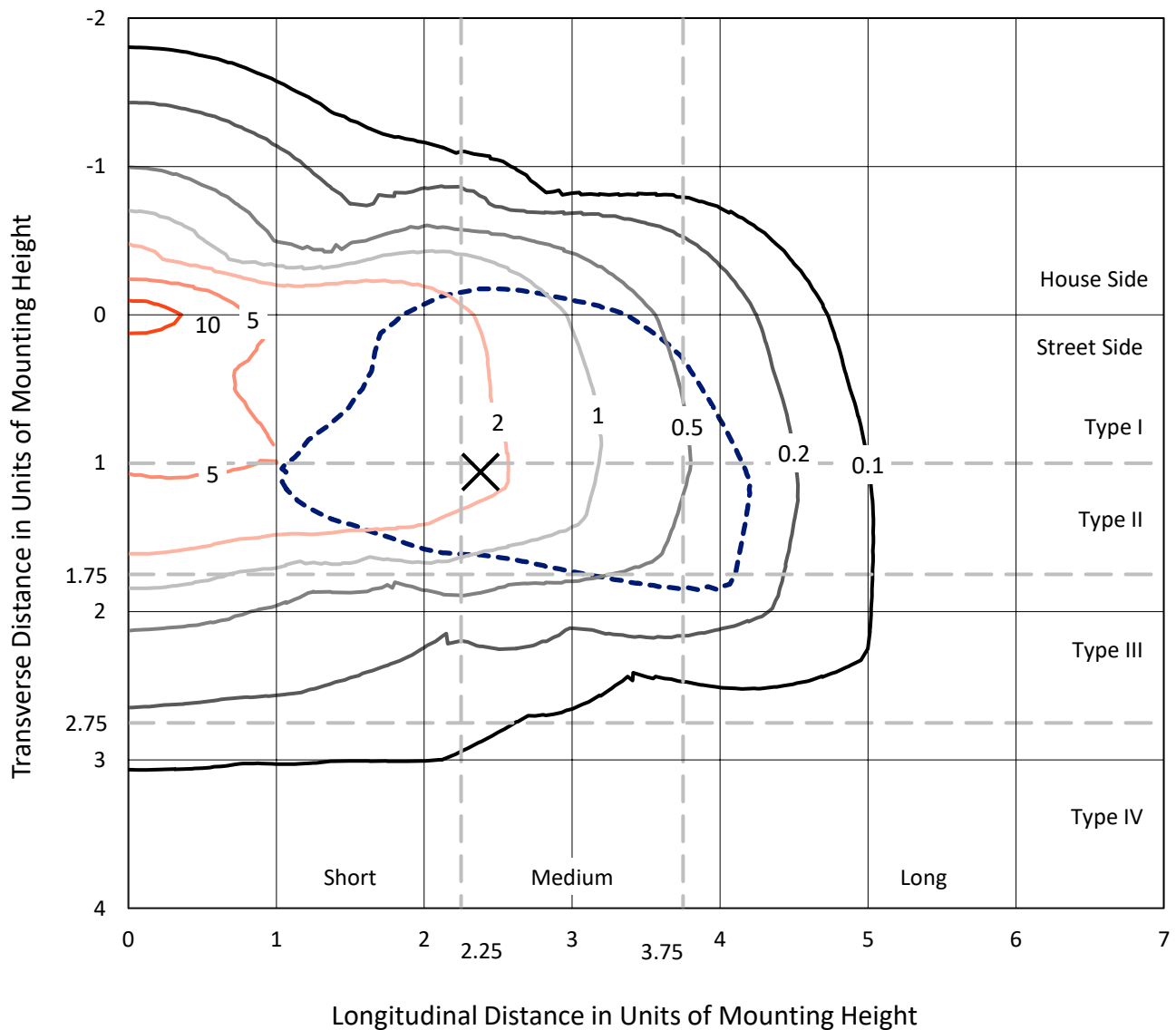


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

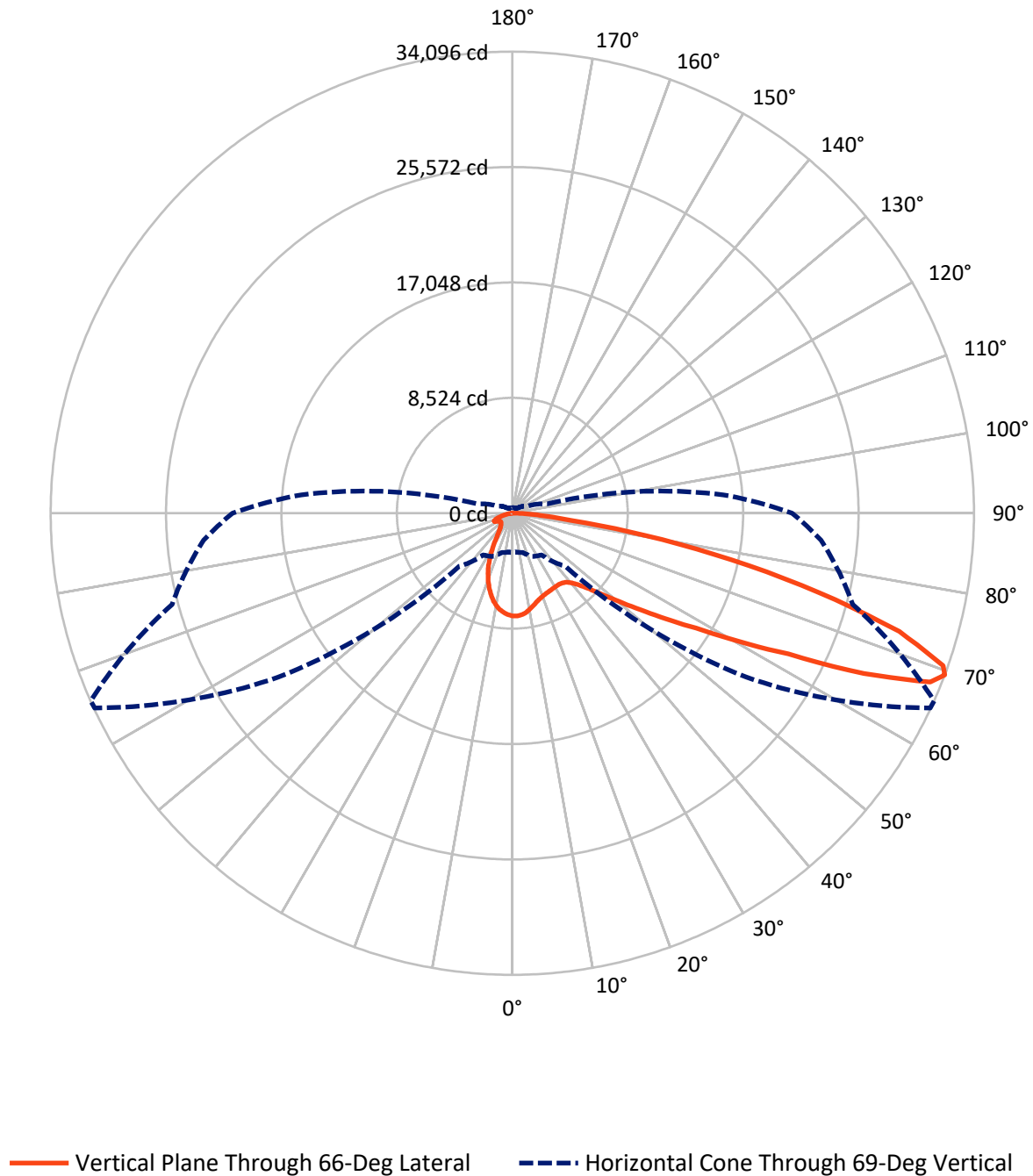


Based on 25 foot mounting height. Maximum calculated value = 12.2 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6184.2   | 0.0    | 6184.2  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 26699.8  | 0.0    | 26699.8 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 32884.0  | 0.0    | 32884.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 659.4   | 2.0       |
| 10°-20°   | 1564.1  | 4.8       |
| 20°-30°   | 2129.4  | 6.5       |
| 30°-40°   | 2861.4  | 8.7       |
| 40°-50°   | 4272.6  | 13.0      |
| 50°-60°   | 6796.2  | 20.7      |
| 60°-70°   | 8359.0  | 25.4      |
| 70°-80°   | 5438.7  | 16.5      |
| 80°-90°   | 803.1   | 2.4       |
| 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°    | 32884.0 | 100.0     |
| 0°-180°   | 32884.0 | 100.0     |

**Coefficient of Utilization**



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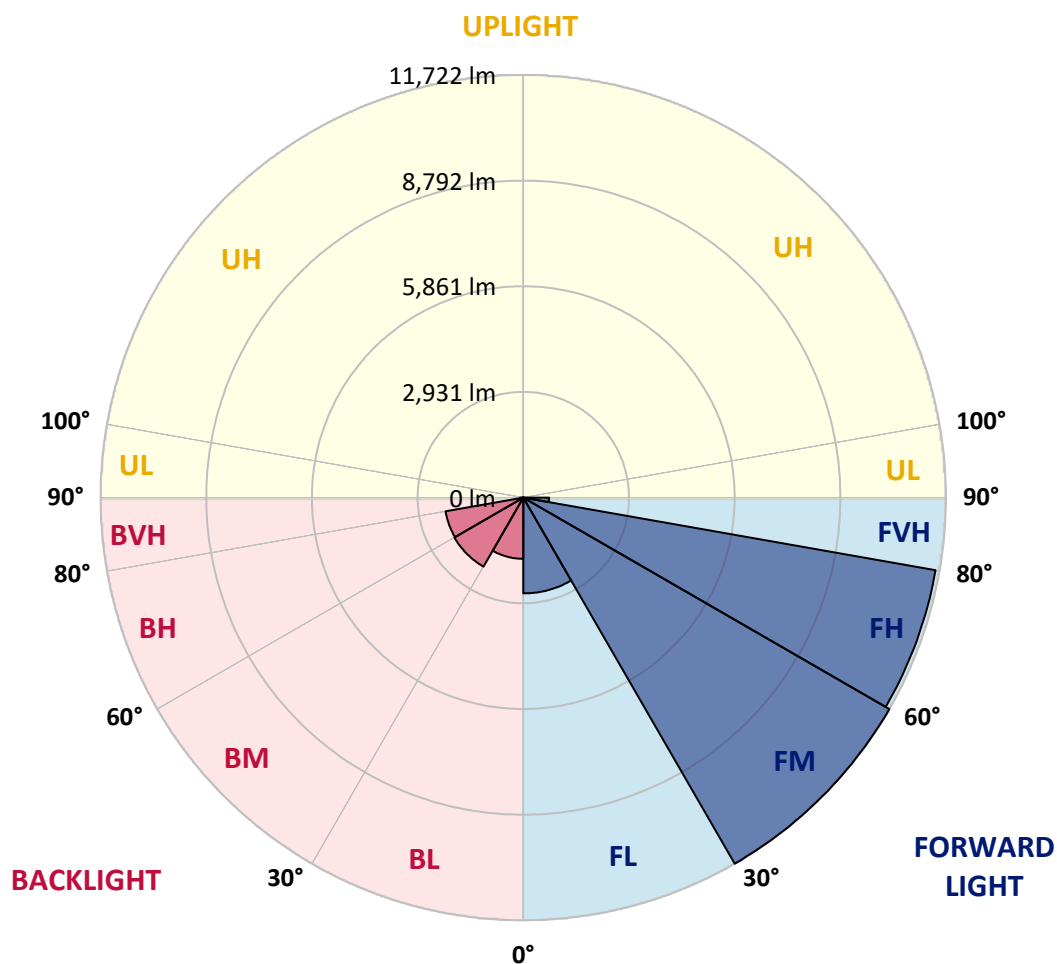
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2655.3  | 8.1       |                         |      |          |
| FM   | (30°-60°)   | 11722.2 | 35.6      |                         |      |          |
| FH   | (60°-80°)   | 11608.2 | 35.3      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 714.0   | 2.2       |                         |      | G4/750   |
| BL   | (0°-30°)    | 1697.6  | 5.2       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2208.1  | 6.7       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 2189.5  | 6.7       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 89.1    | 0.3       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  | 7593.8  |
| 2.5°  | 7328.0  | 7357.1  | 7389.9  | 7426.3  | 7495.5  | 7533.7  | 7561.1  | 7592.0  | 7595.7  | 7612.0  | 7599.3  |
| 5°    | 6787.1  | 6821.7  | 6870.9  | 6940.1  | 7043.9  | 7205.9  | 7373.5  | 7510.1  | 7526.4  | 7602.9  | 7624.8  |
| 7.5°  | 6335.5  | 6355.5  | 6395.6  | 6506.7  | 6654.2  | 6834.4  | 7078.5  | 7355.3  | 7395.3  | 7577.4  | 7641.2  |
| 10°   | 5967.6  | 5987.7  | 6035.0  | 6149.7  | 6295.4  | 6521.2  | 6788.9  | 7153.1  | 7185.9  | 7499.1  | 7644.8  |
| 12.5° | 5692.6  | 5710.9  | 5761.8  | 5874.7  | 6042.3  | 6253.5  | 6548.5  | 6934.6  | 6982.0  | 7395.3  | 7610.2  |
| 15°   | 5483.2  | 5517.8  | 5559.7  | 5652.6  | 5829.2  | 6033.2  | 6319.1  | 6734.3  | 6772.5  | 7286.1  | 7586.5  |
| 17.5° | 5394.0  | 5410.4  | 5439.5  | 5525.1  | 5654.4  | 5854.7  | 6142.4  | 6577.7  | 6623.2  | 7209.6  | 7581.1  |
| 20°   | 5397.6  | 5414.0  | 5419.5  | 5466.8  | 5559.7  | 5732.7  | 6016.8  | 6453.8  | 6508.5  | 7142.2  | 7590.2  |
| 22.5° | 5521.5  | 5523.3  | 5503.2  | 5486.9  | 5523.3  | 5667.1  | 5927.6  | 6361.0  | 6424.7  | 7113.1  | 7597.5  |
| 25°   | 5712.7  | 5745.5  | 5716.3  | 5639.8  | 5572.5  | 5641.7  | 5893.0  | 6310.0  | 6370.1  | 7071.2  | 7588.4  |
| 27.5° | 6022.3  | 6027.7  | 6004.0  | 5900.2  | 5725.4  | 5674.4  | 5878.4  | 6271.7  | 6322.7  | 7040.2  | 7542.8  |
| 30°   | 6437.5  | 6421.1  | 6399.2  | 6284.5  | 6009.5  | 5800.1  | 5909.3  | 6237.1  | 6289.9  | 6994.7  | 7488.2  |
| 32.5° | 6858.1  | 6909.1  | 6889.1  | 6754.3  | 6397.4  | 6044.1  | 6009.5  | 6233.5  | 6277.2  | 6960.1  | 7428.1  |
| 35°   | 7304.3  | 7328.0  | 7422.6  | 7353.4  | 6987.4  | 6439.3  | 6197.1  | 6289.9  | 6324.5  | 6961.9  | 7386.2  |
| 37.5° | 7653.9  | 7717.7  | 7939.8  | 7999.9  | 7655.7  | 6961.9  | 6501.2  | 6450.2  | 6464.8  | 7051.2  | 7402.6  |
| 40°   | 8076.4  | 8185.7  | 8471.6  | 8717.4  | 8491.6  | 7641.2  | 7018.4  | 6747.0  | 6765.2  | 7266.0  | 7510.1  |
| 42.5° | 8611.8  | 8688.3  | 9072.5  | 9405.8  | 9369.4  | 8539.0  | 7644.8  | 7233.3  | 7242.4  | 7694.0  | 7810.5  |
| 45°   | 9238.2  | 9347.5  | 9779.1  | 10279.9 | 10365.5 | 9555.1  | 8549.9  | 7969.0  | 7963.5  | 8358.7  | 8371.4  |
| 47.5° | 10039.5 | 10106.9 | 10534.8 | 11081.2 | 11427.2 | 10831.7 | 9648.0  | 9025.2  | 8966.9  | 9327.5  | 9223.7  |
| 50°   | 10777.0 | 10882.7 | 11206.8 | 11804.1 | 12665.5 | 12326.8 | 11092.1 | 10394.6 | 10258.0 | 10594.9 | 10420.1 |
| 52.5° | 11086.6 | 11197.7 | 11470.9 | 12212.0 | 13727.2 | 14260.7 | 12925.9 | 12028.1 | 11800.5 | 12059.1 | 11995.3 |
| 55°   | 10549.4 | 10693.3 | 10948.2 | 11849.7 | 14193.4 | 16491.5 | 15398.9 | 13916.6 | 13750.8 | 13639.8 | 13658.0 |
| 57.5° | 9105.3  | 9241.9  | 9586.1  | 10580.4 | 13636.1 | 18110.5 | 18929.9 | 16344.0 | 15988.9 | 15477.2 | 15564.6 |
| 60°   | 6931.0  | 7016.6  | 7195.0  | 8296.8  | 11984.4 | 18531.1 | 22939.9 | 19412.5 | 19186.7 | 17307.4 | 17369.3 |
| 62.5° | 4922.3  | 5018.8  | 5142.7  | 5692.6  | 8773.9  | 17345.6 | 26079.4 | 23697.5 | 22890.8 | 19203.1 | 19143.0 |
| 65°   | 3997.2  | 3931.7  | 4081.0  | 4337.8  | 5148.1  | 13443.1 | 26786.0 | 29645.1 | 28534.2 | 21699.8 | 20865.7 |
| 67.5° | 3287.0  | 3217.8  | 3365.3  | 3822.4  | 3915.3  | 7803.3  | 24240.2 | 33505.7 | 33283.6 | 24415.0 | 22615.8 |
| 69°   | 2910.1  | 2873.6  | 3002.9  | 3523.8  | 3758.7  | 5541.5  | 21117.0 | 34042.9 | 34095.7 | 26015.7 | 22885.3 |
| 70°   | 2622.3  | 2636.9  | 2762.6  | 3372.6  | 3687.7  | 4569.0  | 18048.5 | 33301.8 | 33749.7 | 26815.1 | 22593.9 |
| 72.5° | 1930.3  | 1961.3  | 2136.1  | 2793.5  | 3620.3  | 3877.0  | 10740.6 | 29087.8 | 29880.0 | 26862.5 | 20669.1 |
| 75°   | 1349.4  | 1334.8  | 1489.6  | 2103.3  | 3420.0  | 3842.4  | 6308.2  | 22495.6 | 23393.4 | 23218.5 | 17367.5 |
| 77.5° | 883.2   | 906.9   | 1030.7  | 1486.0  | 2877.3  | 3813.3  | 4112.0  | 15959.8 | 16542.5 | 15528.2 | 10272.6 |
| 80°   | 622.8   | 621.0   | 690.2   | 1014.3  | 2134.3  | 3664.0  | 3367.1  | 10059.5 | 9912.0  | 6102.4  | 3046.6  |
| 82.5° | 356.9   | 382.4   | 462.5   | 713.9   | 1427.7  | 3225.1  | 3097.6  | 4811.2  | 4392.4  | 1739.1  | 1028.9  |
| 85°   | 198.5   | 207.6   | 275.0   | 431.6   | 834.0   | 2429.3  | 2704.3  | 2188.9  | 2065.1  | 726.6   | 442.5   |
| 87.5° | 63.7    | 69.2    | 114.7   | 218.5   | 378.8   | 1147.3  | 1531.5  | 1010.7  | 932.4   | 262.2   | 178.5   |
| 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°    | 7593.8  | 7593.8  | 7593.8 | 7593.8 | 7593.8 | 7593.8 | 7593.8 | 7593.8 | 7593.8 | 7593.8 | 7593.8 |
| 2.5°  | 7604.8  | 7626.6  | 7568.3 | 7511.9 | 7460.9 | 7389.9 | 7326.1 | 7273.3 | 7236.9 | 7231.4 | 7213.2 |
| 5°    | 7630.3  | 7632.1  | 7521.0 | 7371.7 | 7226.0 | 7065.7 | 6900.0 | 6781.6 | 6670.6 | 6608.6 | 6577.7 |
| 7.5°  | 7648.5  | 7632.1  | 7431.8 | 7189.6 | 6909.1 | 6617.7 | 6326.4 | 6093.3 | 5913.0 | 5842.0 | 5869.3 |
| 10°   | 7641.2  | 7590.2  | 7297.0 | 6909.1 | 6501.2 | 6066.0 | 5647.1 | 5319.3 | 5018.8 | 4864.1 | 4867.7 |
| 12.5° | 7601.1  | 7517.3  | 7096.7 | 6594.1 | 5994.9 | 5412.2 | 4771.2 | 4328.7 | 3980.8 | 3775.1 | 3711.3 |
| 15°   | 7566.5  | 7420.8  | 6861.8 | 6166.1 | 5421.3 | 4589.1 | 3807.8 | 3261.5 | 2970.2 | 2808.1 | 2806.3 |
| 17.5° | 7530.1  | 7328.0  | 6605.0 | 5712.7 | 4762.1 | 3691.3 | 2871.8 | 2454.8 | 2318.2 | 2334.6 | 2307.3 |
| 20°   | 7491.8  | 7218.7  | 6337.3 | 5208.2 | 3959.0 | 2753.4 | 2150.7 | 1981.3 | 2019.6 | 2094.2 | 2105.1 |
| 22.5° | 7448.1  | 7102.1  | 6049.6 | 4652.8 | 3114.0 | 2072.4 | 1744.6 | 1719.1 | 1817.4 | 1934.0 | 1950.4 |
| 25°   | 7380.8  | 6956.5  | 5687.2 | 4071.9 | 2402.0 | 1669.9 | 1527.9 | 1546.1 | 1642.6 | 1740.9 | 1751.9 |
| 27.5° | 7286.1  | 6776.2  | 5321.1 | 3347.1 | 1804.7 | 1433.2 | 1396.8 | 1420.4 | 1467.8 | 1527.9 | 1542.4 |
| 30°   | 7158.6  | 6572.2  | 4900.5 | 2720.7 | 1445.9 | 1314.8 | 1300.2 | 1313.0 | 1340.3 | 1365.8 | 1373.1 |
| 32.5° | 7031.1  | 6375.5  | 4476.2 | 2083.3 | 1289.3 | 1236.5 | 1221.9 | 1221.9 | 1221.9 | 1225.6 | 1227.4 |
| 35°   | 6912.8  | 6189.8  | 4020.9 | 1622.6 | 1207.4 | 1174.6 | 1154.6 | 1132.7 | 1129.1 | 1116.3 | 1116.3 |
| 37.5° | 6847.2  | 6020.4  | 3536.5 | 1358.5 | 1147.3 | 1123.6 | 1096.3 | 1059.9 | 1039.8 | 1041.6 | 1038.0 |
| 40°   | 6859.9  | 5909.3  | 3095.8 | 1209.2 | 1098.1 | 1072.6 | 1030.7 | 988.8  | 976.1  | 976.1  | 972.4  |
| 42.5° | 7003.8  | 5872.9  | 2673.3 | 1130.9 | 1050.8 | 1021.6 | 968.8  | 930.6  | 923.3  | 921.5  | 925.1  |
| 45°   | 7335.2  | 5962.2  | 2294.5 | 1079.9 | 1010.7 | 967.0  | 914.2  | 879.6  | 872.3  | 872.3  | 870.5  |
| 47.5° | 7981.7  | 6251.7  | 2023.2 | 1047.1 | 981.6  | 925.1  | 870.5  | 835.9  | 823.1  | 819.5  | 819.5  |
| 50°   | 8986.9  | 6880.0  | 1821.1 | 1018.0 | 945.1  | 886.9  | 830.4  | 790.3  | 770.3  | 768.5  | 766.7  |
| 52.5° | 10383.7 | 7859.7  | 1742.8 | 996.1  | 905.1  | 846.8  | 784.9  | 746.6  | 721.1  | 715.7  | 712.0  |
| 55°   | 12017.2 | 9227.3  | 1850.2 | 979.7  | 863.2  | 801.3  | 737.5  | 697.5  | 673.8  | 662.9  | 661.0  |
| 57.5° | 13909.3 | 10869.9 | 2258.1 | 957.9  | 824.9  | 752.1  | 690.2  | 650.1  | 624.6  | 611.9  | 608.2  |
| 60°   | 15608.3 | 12558.0 | 2970.2 | 945.1  | 792.2  | 699.3  | 635.6  | 599.1  | 575.5  | 562.7  | 560.9  |
| 62.5° | 17474.9 | 14167.9 | 3820.6 | 979.7  | 777.6  | 648.3  | 584.6  | 551.8  | 531.8  | 519.0  | 519.0  |
| 65°   | 19469.0 | 15779.5 | 4383.3 | 1096.3 | 799.4  | 608.2  | 529.9  | 502.6  | 484.4  | 475.3  | 473.5  |
| 67.5° | 20812.9 | 16336.7 | 3611.2 | 1216.5 | 854.1  | 564.5  | 477.1  | 455.3  | 444.3  | 435.2  | 435.2  |
| 69°   | 20667.2 | 15632.0 | 2664.2 | 1247.4 | 870.5  | 542.7  | 448.0  | 431.6  | 417.0  | 413.4  | 409.7  |
| 70°   | 20206.5 | 14828.9 | 2232.6 | 1227.4 | 857.7  | 522.6  | 429.8  | 409.7  | 397.0  | 393.3  | 391.5  |
| 72.5° | 17997.6 | 12860.3 | 1662.6 | 1067.1 | 730.2  | 453.4  | 380.6  | 362.4  | 351.5  | 346.0  | 346.0  |
| 75°   | 14952.7 | 10511.2 | 1298.4 | 848.6  | 571.8  | 382.4  | 326.0  | 311.4  | 302.3  | 298.7  | 296.8  |
| 77.5° | 8380.5  | 5869.3  | 932.4  | 664.7  | 433.4  | 309.6  | 273.2  | 260.4  | 251.3  | 247.7  | 247.7  |
| 80°   | 2334.6  | 1677.2  | 548.1  | 438.9  | 295.0  | 234.9  | 216.7  | 207.6  | 194.9  | 185.7  | 191.2  |
| 82.5° | 879.6   | 726.6   | 313.2  | 264.1  | 187.6  | 156.6  | 151.1  | 143.9  | 138.4  | 125.7  | 125.7  |
| 85°   | 427.9   | 353.3   | 200.3  | 140.2  | 103.8  | 81.9   | 78.3   | 74.7   | 71.0   | 61.9   | 63.7   |
| 87.5° | 147.5   | 156.6   | 87.4   | 51.0   | 31.0   | 20.0   | 16.4   | 9.1    | 9.1    | 9.1    | 9.1    |
| 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)