

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: P457112

Luminaire Tested: **GALN-SA8B-830-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457112  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8B-830-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37211 lumens  
Efficiency: N/A  
Efficacy: 114.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 325  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

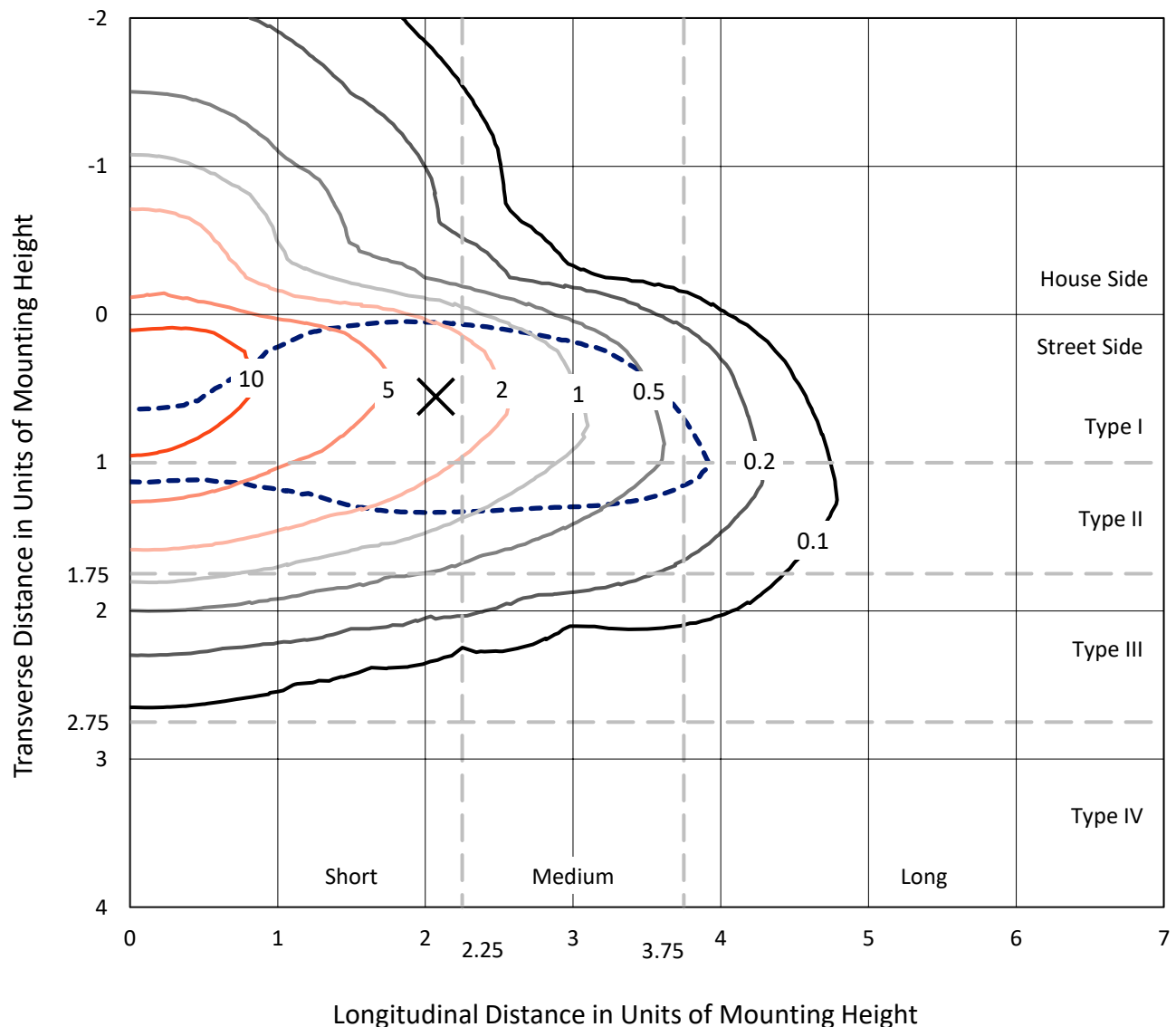


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

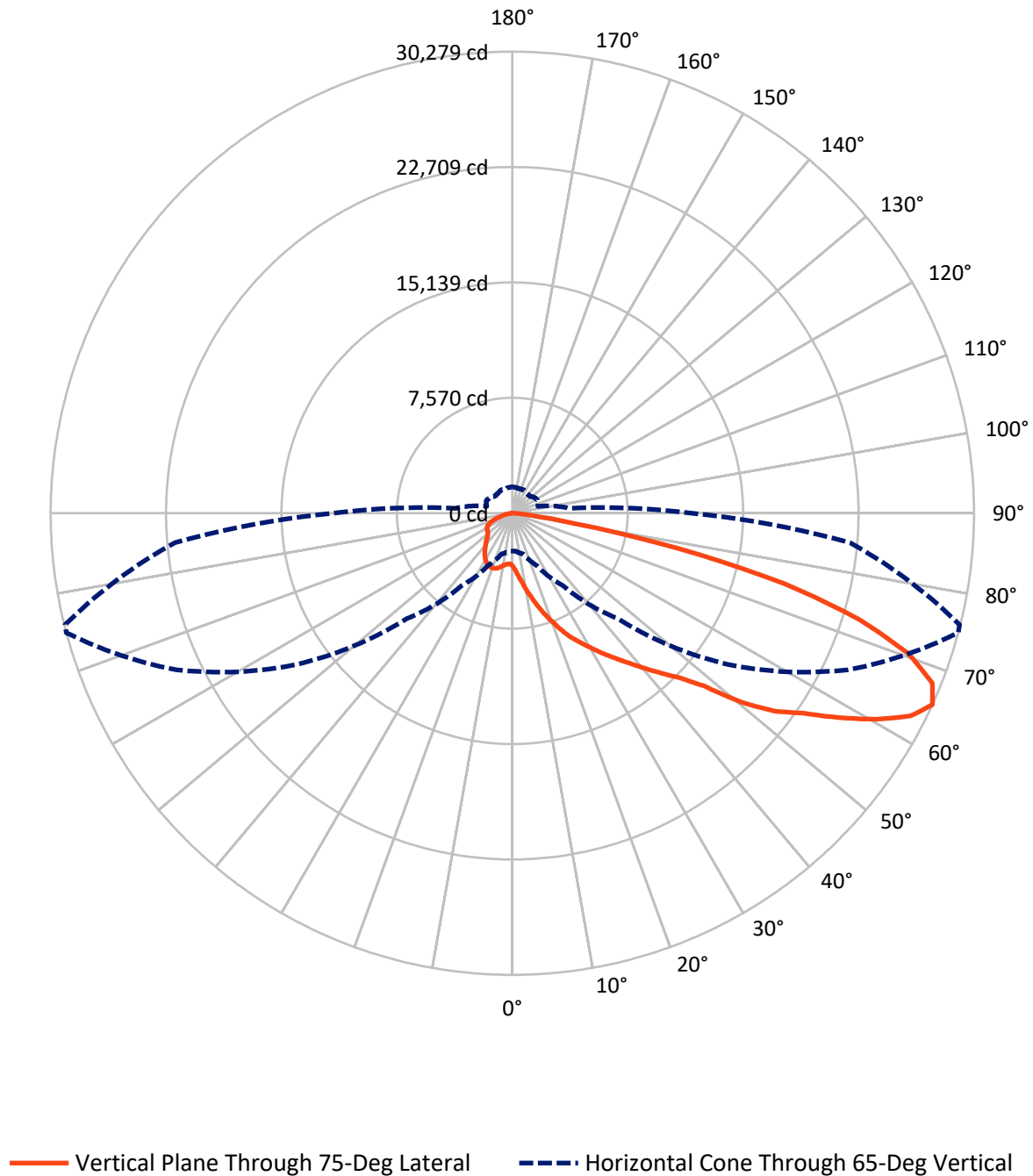


Based on 25 foot mounting height. Maximum calculated value = 14.4 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6255.7   | 0.0    | 6255.7  |
|                    | % Fixture | 16.8     | 0.0    | 16.8    |
| <b>Street Side</b> | Lumens    | 30955.4  | 0.0    | 30955.4 |
|                    | % Fixture | 83.2     | 0.0    | 83.2    |
| <b>Total</b>       | Lumens    | 37211.0  | 0.0    | 37211.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 420.1   | 1.1       |
| 10°-20°   | 1645.3  | 4.4       |
| 20°-30°   | 3178.2  | 8.5       |
| 30°-40°   | 5162.4  | 13.9      |
| 40°-50°   | 7101.3  | 19.1      |
| 50°-60°   | 8384.2  | 22.5      |
| 60°-70°   | 7345.9  | 19.7      |
| 70°-80°   | 3507.0  | 9.4       |
| 80°-90°   | 466.6   | 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°    | 37211.0 | 100.0     |
| 0°-180°   | 37211.0 | 100.0     |

**Coefficient of Utilization**



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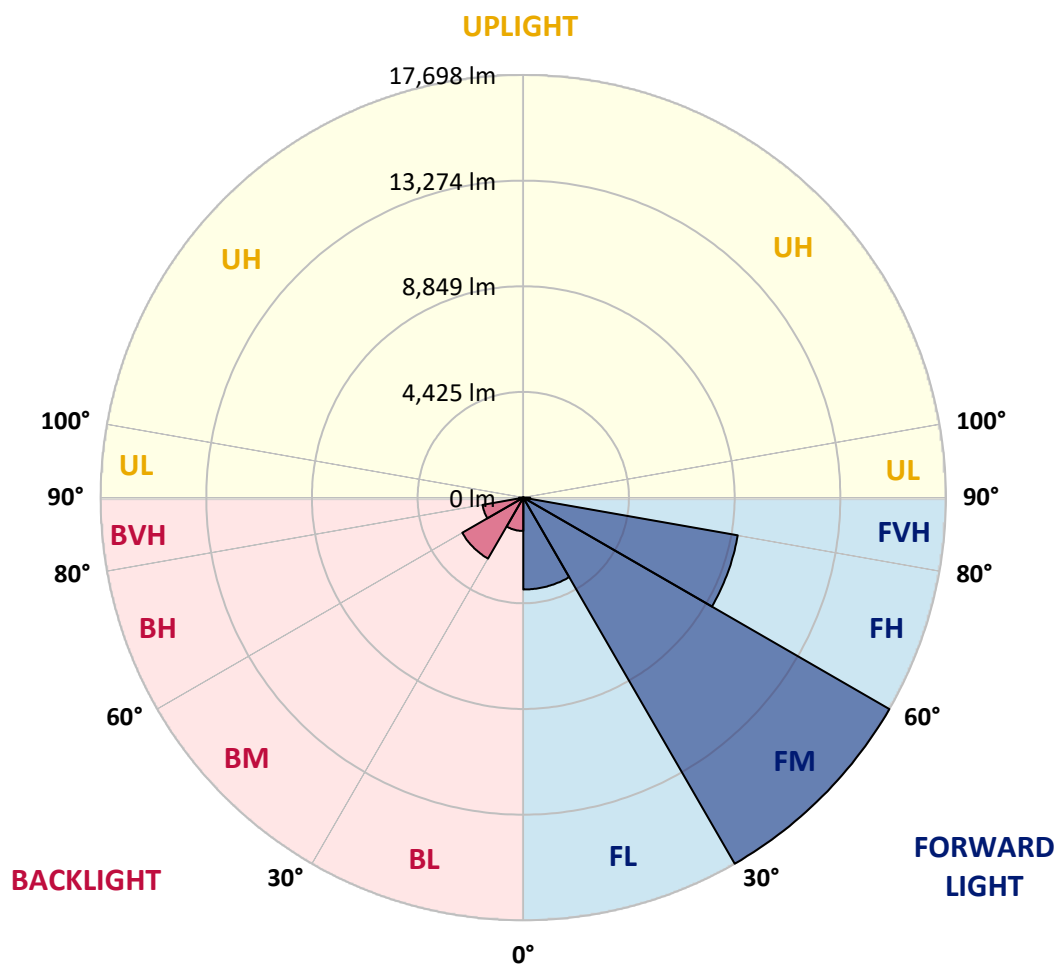
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3847.0  | 10.3      |                         |      |          |
| FM   | (30°-60°)   | 17698.3 | 47.6      |                         |      |          |
| FH   | (60°-80°)   | 9118.4  | 24.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 291.6   | 0.8       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1396.6  | 3.8       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2949.5  | 7.9       | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1734.6  | 4.7       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 175.0   | 0.5       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

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

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  | 3457.4  |
| 2.5°  | 4593.7  | 4563.4  | 4531.1  | 4442.3  | 4347.4  | 4240.5  | 4087.1  | 3939.7  | 3744.0  | 3737.9  | 3592.6  |
| 5°    | 5867.2  | 5847.1  | 5703.8  | 5621.0  | 5401.0  | 5108.4  | 4860.1  | 4474.6  | 4117.4  | 4075.0  | 3792.4  |
| 7.5°  | 7037.9  | 6959.1  | 6904.7  | 6755.3  | 6537.3  | 6161.9  | 5681.6  | 5160.8  | 4563.4  | 4506.9  | 4038.6  |
| 10°   | 7919.9  | 7911.8  | 7883.5  | 7754.4  | 7590.9  | 7217.5  | 6684.7  | 5937.9  | 5128.5  | 5017.5  | 4337.4  |
| 12.5° | 8579.9  | 8585.9  | 8581.9  | 8579.9  | 8462.8  | 8145.9  | 7568.7  | 6781.5  | 5699.7  | 5621.0  | 4682.5  |
| 15°   | 9013.8  | 9074.3  | 9098.6  | 9199.5  | 9209.6  | 8997.6  | 8501.1  | 7596.9  | 6343.6  | 6226.5  | 5053.9  |
| 17.5° | 9300.4  | 9330.7  | 9443.7  | 9615.2  | 9754.5  | 9716.2  | 9274.2  | 8351.8  | 7001.5  | 6805.8  | 5439.4  |
| 20°   | 9574.9  | 9627.4  | 9714.1  | 9948.3  | 10194.5 | 10307.5 | 9996.7  | 9124.8  | 7653.4  | 7528.3  | 5865.2  |
| 22.5° | 10146.1 | 10220.7 | 10251.0 | 10370.1 | 10580.0 | 10779.8 | 10638.5 | 9865.5  | 8367.9  | 8198.4  | 6317.3  |
| 25°   | 11112.8 | 11191.6 | 11106.8 | 11078.5 | 11147.1 | 11246.0 | 11215.8 | 10563.9 | 9042.0  | 8799.8  | 6745.2  |
| 27.5° | 12372.3 | 12382.4 | 12216.9 | 12059.4 | 11889.9 | 11839.4 | 11746.6 | 11183.5 | 9627.4  | 9425.5  | 7175.1  |
| 30°   | 13724.5 | 13676.1 | 13401.6 | 13117.0 | 12830.4 | 12547.9 | 12281.4 | 11780.9 | 10279.3 | 10047.2 | 7596.9  |
| 32.5° | 14979.9 | 14953.7 | 14648.9 | 14206.9 | 13722.5 | 13456.1 | 12917.2 | 12384.4 | 10977.6 | 10753.6 | 8030.9  |
| 35°   | 15920.5 | 15958.8 | 15623.8 | 15141.4 | 14612.6 | 14376.5 | 13696.3 | 13018.1 | 11700.2 | 11456.0 | 8503.2  |
| 37.5° | 16588.5 | 16568.3 | 16271.6 | 15853.9 | 15389.6 | 15183.8 | 14606.5 | 13710.4 | 12477.2 | 12243.1 | 9019.8  |
| 40°   | 16826.7 | 16814.6 | 16594.6 | 16289.8 | 15995.1 | 15922.5 | 15559.2 | 14457.2 | 13367.3 | 13092.8 | 9641.5  |
| 42.5° | 16675.3 | 16701.5 | 16556.2 | 16473.5 | 16419.0 | 16471.5 | 16505.8 | 15436.1 | 14338.1 | 14085.8 | 10315.6 |
| 45°   | 16211.1 | 16197.0 | 16176.8 | 16312.0 | 16618.8 | 16963.9 | 17442.3 | 16360.5 | 15393.7 | 15191.8 | 11219.8 |
| 47.5° | 15381.6 | 15482.5 | 15532.9 | 15906.3 | 16576.4 | 17393.8 | 18520.0 | 17599.7 | 16925.6 | 16750.0 | 12598.3 |
| 50°   | 14221.0 | 14301.8 | 14600.5 | 15264.5 | 16263.6 | 17555.3 | 19573.6 | 19626.1 | 19480.8 | 19151.8 | 14095.9 |
| 52.5° | 12408.6 | 12533.7 | 13149.3 | 14366.4 | 15621.8 | 17488.7 | 20211.4 | 21363.9 | 21555.6 | 21309.4 | 15571.3 |
| 55°   | 10380.2 | 10555.8 | 11205.7 | 12802.2 | 14737.7 | 17125.4 | 20651.4 | 22371.0 | 23135.9 | 22907.9 | 16992.2 |
| 57.5° | 8394.2  | 8579.9  | 9247.9  | 10793.9 | 13195.7 | 16322.1 | 20940.0 | 23493.2 | 25287.5 | 24990.8 | 18760.2 |
| 60°   | 6291.1  | 6484.8  | 7058.0  | 8650.5  | 10999.8 | 14751.9 | 20744.2 | 24466.0 | 27437.0 | 27309.8 | 20530.3 |
| 62.5° | 4058.8  | 4272.8  | 4771.3  | 6089.3  | 8454.7  | 12606.4 | 19696.7 | 25002.9 | 29297.8 | 29144.5 | 21822.0 |
| 65°   | 2472.4  | 2496.7  | 2771.1  | 3780.3  | 5786.5  | 9760.6  | 17301.0 | 24290.4 | 30278.7 | 30232.3 | 22215.6 |
| 67.5° | 1598.5  | 1636.9  | 1762.0  | 2264.5  | 3469.5  | 6779.5  | 13833.5 | 21939.1 | 29705.5 | 29689.4 | 21402.2 |
| 70°   | 1350.3  | 1362.4  | 1418.9  | 1527.9  | 2016.3  | 4111.3  | 9714.1  | 18191.1 | 27527.8 | 27527.8 | 19446.5 |
| 72.5° | 1207.0  | 1223.1  | 1243.3  | 1277.6  | 1439.1  | 2329.1  | 5796.6  | 14160.5 | 23767.7 | 23925.1 | 16552.2 |
| 75°   | 1095.9  | 1091.9  | 1104.0  | 1110.1  | 1227.1  | 1521.8  | 2997.2  | 10473.0 | 18386.8 | 18072.0 | 11986.8 |
| 77.5° | 938.5   | 944.6   | 938.5   | 964.8   | 1083.8  | 1158.5  | 1521.8  | 7027.8  | 11143.1 | 10735.4 | 6016.6  |
| 80°   | 771.0   | 781.1   | 791.2   | 807.3   | 926.4   | 880.0   | 914.3   | 3203.1  | 4121.4  | 4034.6  | 1858.9  |
| 82.5° | 579.3   | 593.4   | 609.5   | 647.9   | 728.6   | 581.3   | 577.2   | 1368.4  | 1487.5  | 1362.4  | 684.2   |
| 85°   | 234.1   | 276.5   | 417.8   | 456.1   | 458.2   | 318.9   | 355.2   | 571.2   | 607.5   | 593.4   | 268.4   |
| 87.5° | 54.5    | 64.6    | 135.2   | 203.8   | 187.7   | 119.1   | 131.2   | 185.7   | 211.9   | 195.8   | 90.8    |
| 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°    | 3457.4  | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 | 3457.4 |
| 2.5°  | 3526.0  | 3455.4 | 3334.3 | 3241.4 | 3174.8 | 3116.3 | 3079.9 | 3057.7 | 3049.7 | 3047.7 | 3049.7 |
| 5°    | 3645.1  | 3519.9 | 3328.2 | 3207.1 | 3140.5 | 3102.1 | 3079.9 | 3077.9 | 3079.9 | 3082.0 | 3075.9 |
| 7.5°  | 3808.6  | 3628.9 | 3378.7 | 3265.6 | 3215.2 | 3186.9 | 3176.8 | 3172.8 | 3174.8 | 3172.8 | 3172.8 |
| 10°   | 4026.5  | 3780.3 | 3477.6 | 3360.5 | 3318.1 | 3285.8 | 3269.7 | 3259.6 | 3251.5 | 3243.4 | 3239.4 |
| 12.5° | 4266.7  | 3947.8 | 3584.5 | 3471.5 | 3411.0 | 3360.5 | 3324.2 | 3297.9 | 3279.8 | 3261.6 | 3257.6 |
| 15°   | 4535.2  | 4125.4 | 3703.6 | 3546.2 | 3459.4 | 3384.7 | 3322.1 | 3279.8 | 3247.5 | 3221.2 | 3219.2 |
| 17.5° | 4791.5  | 4293.0 | 3784.3 | 3580.5 | 3453.3 | 3348.4 | 3265.6 | 3207.1 | 3166.7 | 3132.4 | 3128.4 |
| 20°   | 5066.0  | 4452.4 | 3820.7 | 3558.3 | 3392.8 | 3265.6 | 3156.6 | 3086.0 | 3039.6 | 3001.2 | 2995.2 |
| 22.5° | 5342.5  | 4587.6 | 3816.6 | 3487.6 | 3287.8 | 3138.5 | 3023.4 | 2948.8 | 2894.3 | 2855.9 | 2841.8 |
| 25°   | 5606.9  | 4696.6 | 3766.2 | 3374.6 | 3142.5 | 2987.1 | 2870.0 | 2801.4 | 2753.0 | 2706.6 | 2706.6 |
| 27.5° | 5845.0  | 4761.2 | 3671.3 | 3237.4 | 2993.2 | 2829.7 | 2736.8 | 2674.3 | 2629.9 | 2599.6 | 2581.4 |
| 30°   | 6079.2  | 4791.5 | 3542.1 | 3063.8 | 2835.7 | 2696.5 | 2621.8 | 2585.5 | 2545.1 | 2510.8 | 2506.7 |
| 32.5° | 6289.1  | 4785.4 | 3380.7 | 2894.3 | 2686.4 | 2587.5 | 2557.2 | 2528.9 | 2486.6 | 2438.1 | 2426.0 |
| 35°   | 6492.9  | 4745.1 | 3188.9 | 2708.6 | 2561.2 | 2522.9 | 2531.0 | 2490.6 | 2413.9 | 2353.4 | 2343.3 |
| 37.5° | 6714.9  | 4672.4 | 2979.0 | 2557.2 | 2456.3 | 2492.6 | 2512.8 | 2424.0 | 2298.9 | 2204.0 | 2181.8 |
| 40°   | 6971.3  | 4589.6 | 2761.1 | 2405.8 | 2373.5 | 2464.4 | 2464.4 | 2300.9 | 2129.3 | 2070.8 | 2054.6 |
| 42.5° | 7272.0  | 4521.0 | 2579.4 | 2278.7 | 2304.9 | 2395.7 | 2385.6 | 2137.4 | 2066.8 | 2036.5 | 2028.4 |
| 45°   | 7748.3  | 4496.8 | 2391.7 | 2167.7 | 2248.4 | 2315.0 | 2232.3 | 2080.9 | 2040.5 | 2016.3 | 2008.2 |
| 47.5° | 8501.1  | 4525.1 | 2226.2 | 2084.9 | 2183.8 | 2234.3 | 2060.7 | 2042.5 | 2014.3 | 1980.0 | 1975.9 |
| 50°   | 9199.5  | 4498.8 | 2109.1 | 2038.5 | 2127.3 | 2137.4 | 1990.1 | 1996.1 | 1980.0 | 1941.6 | 1933.5 |
| 52.5° | 9770.7  | 4416.1 | 2034.5 | 2014.3 | 2078.9 | 1967.9 | 1923.5 | 1945.7 | 1939.6 | 1891.2 | 1883.1 |
| 55°   | 10398.4 | 4365.6 | 1998.1 | 2014.3 | 2046.6 | 1820.5 | 1860.9 | 1893.2 | 1885.1 | 1850.8 | 1848.8 |
| 57.5° | 11159.3 | 4375.7 | 1971.9 | 2020.3 | 2014.3 | 1745.8 | 1798.3 | 1836.7 | 1834.6 | 1824.6 | 1824.6 |
| 60°   | 11938.3 | 4379.7 | 1931.5 | 2018.3 | 1975.9 | 1687.3 | 1733.7 | 1788.2 | 1792.3 | 1798.3 | 1798.3 |
| 62.5° | 12196.7 | 4204.1 | 1852.8 | 1982.0 | 1891.2 | 1630.8 | 1673.2 | 1747.9 | 1743.8 | 1760.0 | 1762.0 |
| 65°   | 11714.3 | 3717.7 | 1735.8 | 1899.2 | 1782.2 | 1590.4 | 1626.8 | 1695.4 | 1673.2 | 1715.6 | 1723.6 |
| 67.5° | 10662.8 | 3075.9 | 1554.1 | 1749.9 | 1661.1 | 1548.0 | 1596.5 | 1622.7 | 1582.4 | 1665.1 | 1667.1 |
| 70°   | 9215.6  | 2401.8 | 1324.0 | 1538.0 | 1523.8 | 1503.6 | 1572.3 | 1531.9 | 1475.4 | 1576.3 | 1556.1 |
| 72.5° | 7705.9  | 1834.6 | 1057.6 | 1257.4 | 1340.2 | 1437.0 | 1529.9 | 1414.8 | 1336.1 | 1366.4 | 1330.1 |
| 75°   | 5788.5  | 1356.3 | 849.7  | 984.9  | 1116.1 | 1342.2 | 1491.5 | 1273.6 | 1152.5 | 1124.2 | 1116.1 |
| 77.5° | 2950.8  | 886.0  | 635.8  | 736.7  | 837.6  | 1213.0 | 1439.1 | 1108.1 | 954.7  | 910.3  | 890.1  |
| 80°   | 1053.6  | 551.0  | 448.1  | 508.6  | 565.1  | 1043.5 | 1257.4 | 916.3  | 740.7  | 732.6  | 740.7  |
| 82.5° | 488.4   | 355.2  | 300.7  | 333.0  | 335.0  | 696.3  | 958.7  | 684.2  | 563.1  | 855.8  | 722.6  |
| 85°   | 209.9   | 177.6  | 169.5  | 165.5  | 153.4  | 310.8  | 538.9  | 367.3  | 573.2  | 256.3  | 236.1  |
| 87.5° | 62.6    | 70.6   | 62.6   | 46.4   | 34.3   | 34.3   | 54.5   | 20.2   | 14.1   | 10.1   | 10.1   |
| 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)