

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: STREETWORKS

Report Number: P298895

Luminaire Tested: **GAA-AF-07-LED-U-T2-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298895  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-07-LED-U-T2-7050  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 41175 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G5

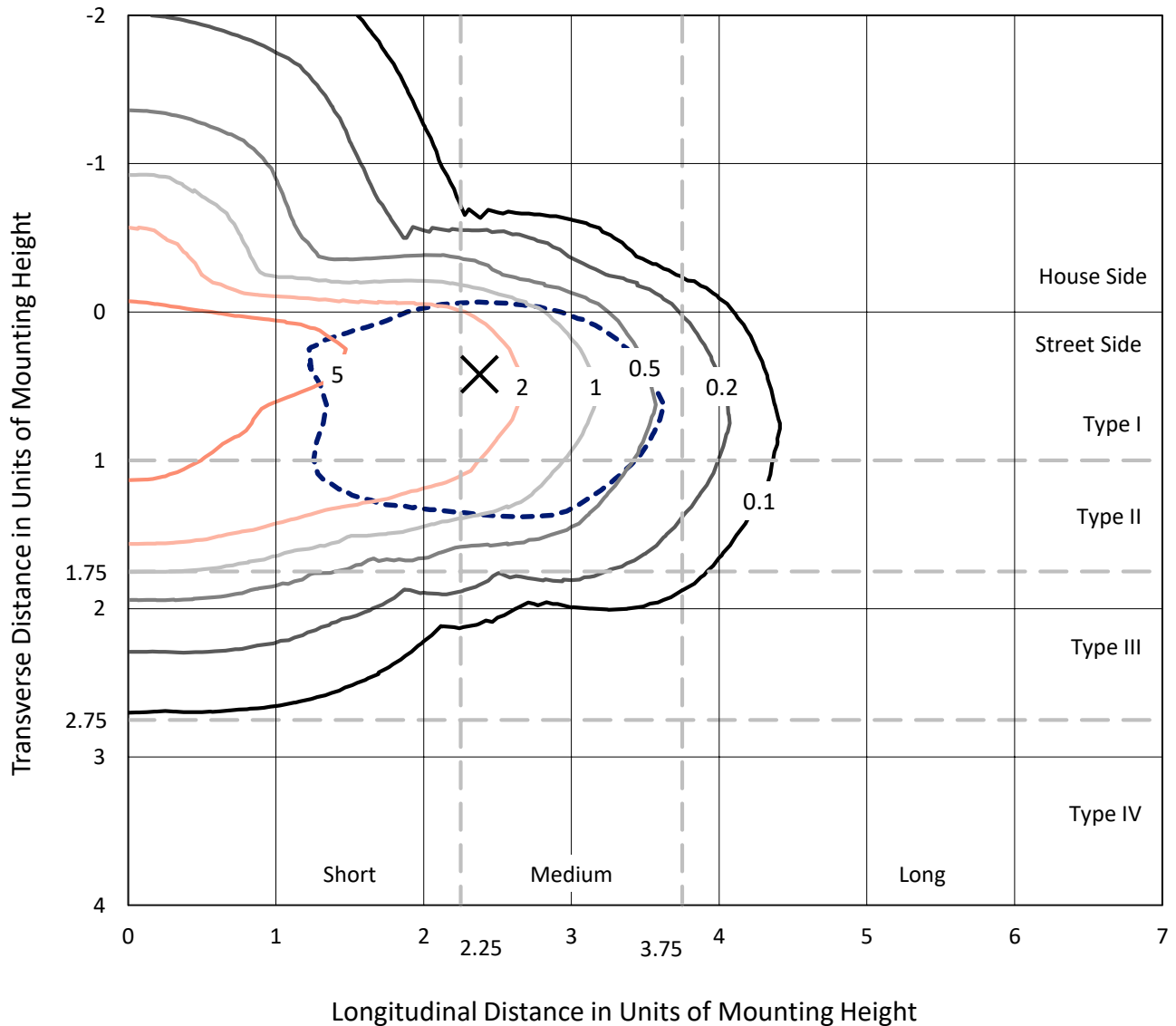
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

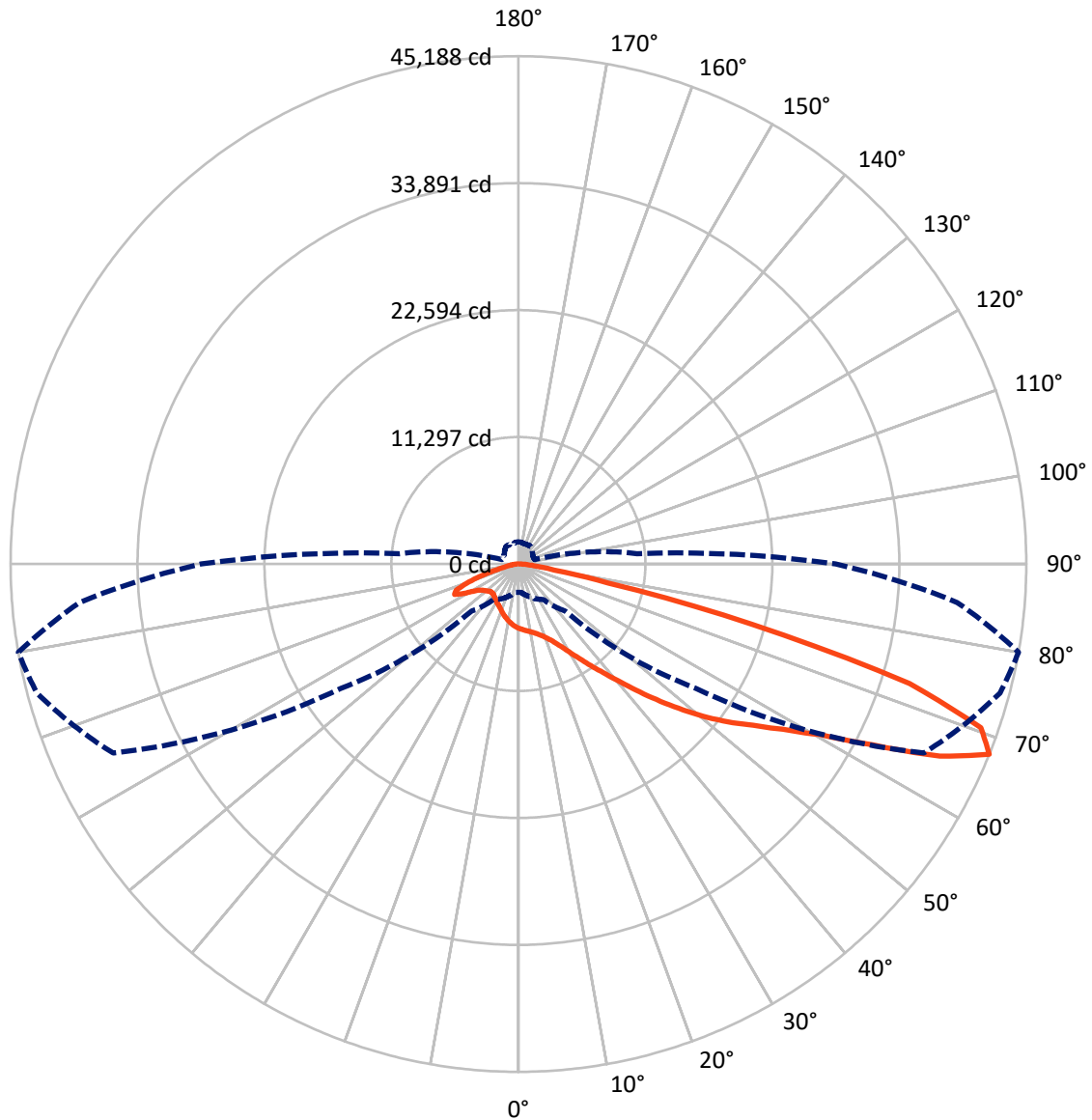
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7582.9   | 0.0    | 7582.9  |
|                    | % Fixture | 18.4     | 0.0    | 18.4    |
| <b>Street Side</b> | Lumens    | 33592.1  | 0.0    | 33592.1 |
|                    | % Fixture | 81.6     | 0.0    | 81.6    |
| <b>Total</b>       | Lumens    | 41175.0  | 0.0    | 41175.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 527.7   | 1.3       |
| 10°-20°   | 1520.1  | 3.7       |
| 20°-30°   | 2516.1  | 6.1       |
| 30°-40°   | 4115.7  | 10.0      |
| 40°-50°   | 6645.2  | 16.1      |
| 50°-60°   | 9593.7  | 23.3      |
| 60°-70°   | 10587.2 | 25.7      |
| 70°-80°   | 4880.0  | 11.9      |
| 80°-90°   | 789.3   | 1.9       |
| 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°    | 41175.0 | 100.0     |
| 0°-180°   | 41175.0 | 100.0     |



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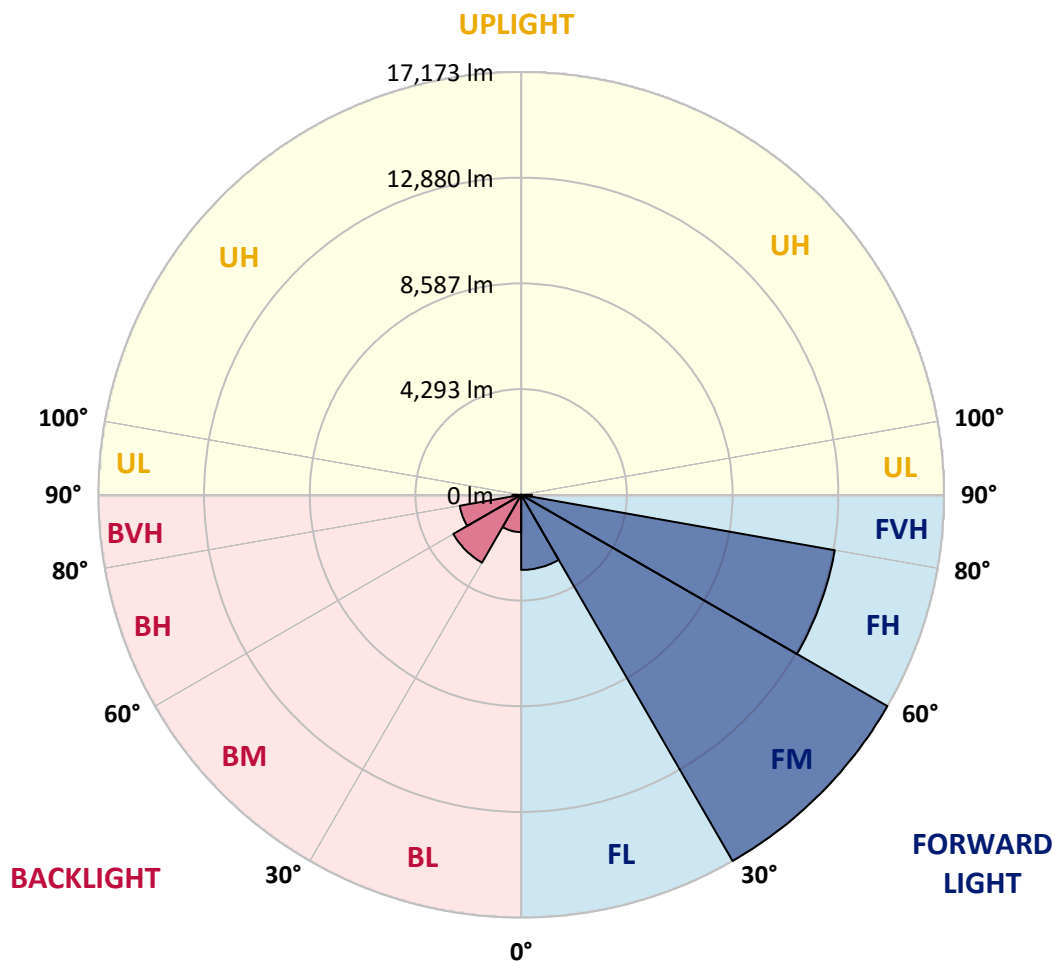
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3051.0  | 7.4       |                         |      |         |
| FM (30°-60°)   | 17173.0 | 41.7      |                         |      |         |
| FH (60°-80°)   | 12934.1 | 31.4      |                         |      | G5      |
| FVH (80°-90°)  | 434.0   | 1.1       |                         |      | G3/500  |
| BL (0°-30°)    | 1512.9  | 3.7       | B3/2500                 |      |         |
| BM (30°-60°)   | 3181.5  | 7.7       | B3/5000                 |      |         |
| BH (60°-80°)   | 2533.1  | 6.2       | B4/5000                 |      | G4/5000 |
| BVH (80°-90°)  | 355.4   | 0.9       |                         |      | G3/500  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 80°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  | 5720.4  |
| 2.5°  | 6257.6  | 6221.1  | 6227.2  | 6217.0  | 6186.6  | 6133.9  | 6077.2  | 5973.8  | 5866.3  | 5809.6  | 5765.0  |
| 5°    | 6780.6  | 6770.4  | 6756.2  | 6723.8  | 6646.8  | 6537.3  | 6401.5  | 6219.1  | 6022.4  | 5919.1  | 5819.7  |
| 7.5°  | 7171.8  | 7165.7  | 7147.5  | 7127.2  | 7052.2  | 6920.4  | 6715.7  | 6456.2  | 6170.4  | 6028.5  | 5874.5  |
| 10°   | 7204.2  | 7214.4  | 7228.5  | 7283.3  | 7293.4  | 7222.5  | 7013.7  | 6699.5  | 6324.5  | 6142.0  | 5945.4  |
| 12.5° | 6928.5  | 6950.8  | 7005.6  | 7145.4  | 7293.4  | 7380.6  | 7273.1  | 6954.9  | 6504.9  | 6283.9  | 6034.6  |
| 15°   | 6563.7  | 6575.8  | 6642.7  | 6835.3  | 7100.8  | 7370.4  | 7471.8  | 7236.6  | 6738.0  | 6466.4  | 6168.4  |
| 17.5° | 6407.6  | 6413.7  | 6460.3  | 6588.0  | 6835.3  | 7220.4  | 7583.3  | 7542.7  | 7023.8  | 6693.4  | 6332.6  |
| 20°   | 6328.5  | 6342.7  | 6409.6  | 6535.3  | 6691.4  | 7027.9  | 7599.5  | 7873.1  | 7364.4  | 6977.2  | 6539.3  |
| 22.5° | 6553.5  | 6547.4  | 6571.8  | 6634.6  | 6766.4  | 6969.1  | 7587.3  | 8213.7  | 7798.1  | 7342.1  | 6808.9  |
| 25°   | 7078.5  | 7100.8  | 7058.3  | 6987.3  | 7029.9  | 7171.8  | 7652.2  | 8582.6  | 8341.4  | 7810.3  | 7161.6  |
| 27.5° | 7826.5  | 7804.2  | 7741.4  | 7575.2  | 7488.0  | 7548.8  | 7867.1  | 8979.9  | 9016.4  | 8426.5  | 7627.9  |
| 30°   | 8572.5  | 8554.2  | 8493.4  | 8290.7  | 8112.3  | 8061.7  | 8284.6  | 9436.0  | 9821.2  | 9166.4  | 8199.5  |
| 32.5° | 9346.8  | 9326.6  | 9269.8  | 9067.1  | 8852.2  | 8734.7  | 8878.6  | 9963.1  | 10769.8 | 10050.2 | 8872.5  |
| 35°   | 10301.6 | 10263.1 | 10143.5 | 9861.7  | 9650.9  | 9559.7  | 9626.6  | 10625.9 | 11864.5 | 11096.2 | 9689.4  |
| 37.5° | 11199.6 | 11258.4 | 11136.7 | 10747.5 | 10473.9 | 10441.5 | 10516.5 | 11434.7 | 13044.2 | 12265.8 | 10627.9 |
| 40°   | 12101.6 | 12111.8 | 12002.3 | 11684.0 | 11402.3 | 11349.6 | 11538.1 | 12415.8 | 14436.8 | 13664.5 | 11769.2 |
| 42.5° | 13034.1 | 13054.3 | 12869.9 | 12576.0 | 12369.2 | 12379.3 | 12594.2 | 13565.2 | 16034.1 | 15312.5 | 13082.7 |
| 45°   | 14138.8 | 14169.2 | 13966.5 | 13581.4 | 13392.9 | 13771.9 | 13682.7 | 14854.4 | 17785.5 | 17185.5 | 14590.9 |
| 47.5° | 15294.3 | 15340.9 | 15186.8 | 14826.0 | 14590.9 | 15111.8 | 14771.3 | 16283.5 | 19670.7 | 19194.3 | 16247.0 |
| 50°   | 15924.7 | 15991.6 | 16141.6 | 16115.2 | 16064.5 | 15977.4 | 15985.5 | 17815.9 | 21614.7 | 21286.3 | 17949.7 |
| 52.5° | 15586.2 | 15584.1 | 16131.4 | 16796.3 | 17505.8 | 17558.5 | 17465.3 | 19431.5 | 23430.9 | 23331.6 | 19553.1 |
| 55°   | 14037.5 | 14142.9 | 14972.0 | 16259.1 | 18197.0 | 19407.2 | 19682.9 | 21282.2 | 25214.8 | 25330.3 | 21180.9 |
| 57.5° | 11459.0 | 11546.2 | 12665.1 | 14459.1 | 17264.6 | 20505.9 | 22837.0 | 23972.2 | 27209.4 | 27748.6 | 23347.8 |
| 60°   | 7771.8  | 7877.2  | 9063.0  | 11217.8 | 14755.1 | 19893.7 | 25839.1 | 28772.3 | 29597.3 | 30823.7 | 26388.4 |
| 62.5° | 4567.0  | 4662.3  | 5629.2  | 7076.5  | 10388.7 | 17049.7 | 27156.7 | 35601.5 | 33389.9 | 35463.6 | 31026.4 |
| 65°   | 3144.0  | 3208.9  | 3679.1  | 4404.8  | 5969.7  | 11483.4 | 25522.9 | 40316.4 | 39225.9 | 41212.4 | 36404.2 |
| 67.5° | 2529.8  | 2521.7  | 2894.7  | 3389.3  | 3843.3  | 5921.1  | 19299.8 | 39783.3 | 44358.4 | 45187.5 | 39195.5 |
| 70°   | 2083.8  | 2075.7  | 2329.1  | 2738.6  | 3071.0  | 3334.5  | 10512.4 | 33572.4 | 43312.5 | 43649.0 | 36625.1 |
| 72.5° | 1743.3  | 1751.4  | 1913.6  | 2217.6  | 2519.7  | 2511.5  | 4619.7  | 23617.4 | 34073.1 | 36400.1 | 29195.9 |
| 75°   | 1471.7  | 1475.7  | 1583.1  | 1798.0  | 2045.3  | 2023.0  | 2505.5  | 12794.9 | 19806.5 | 21426.2 | 16184.1 |
| 77.5° | 1252.7  | 1256.8  | 1325.7  | 1445.3  | 1621.7  | 1613.5  | 1828.4  | 5527.8  | 8262.3  | 8161.0  | 5535.9  |
| 80°   | 1116.9  | 1116.9  | 1149.4  | 1171.6  | 1268.9  | 1232.5  | 1356.1  | 2655.5  | 3492.6  | 3225.1  | 2209.5  |
| 82.5° | 875.7   | 879.7   | 1078.4  | 1070.3  | 999.3   | 952.7   | 952.7   | 1564.9  | 1850.7  | 1710.8  | 1293.3  |
| 85°   | 492.6   | 490.6   | 695.3   | 839.2   | 879.7   | 671.0   | 664.9   | 875.7   | 1007.5  | 887.9   | 626.4   |
| 87.5° | 210.8   | 214.9   | 322.3   | 373.0   | 498.7   | 417.6   | 411.5   | 452.0   | 512.8   | 443.9   | 289.9   |
| 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°    | 5720.4  | 5720.4  | 5720.4 | 5720.4 | 5720.4 | 5720.4 | 5720.4 | 5720.4 | 5720.4 | 5720.4 | 5720.4 |
| 2.5°  | 5722.4  | 5669.7  | 5554.2 | 5410.3 | 5280.5 | 5195.4 | 5118.4 | 5006.9 | 5013.0 | 4935.9 | 4879.2 |
| 5°    | 5718.4  | 5608.9  | 5341.3 | 5023.1 | 4717.0 | 4496.0 | 4329.8 | 4179.8 | 4143.3 | 4072.4 | 4029.8 |
| 7.5°  | 5722.4  | 5544.0  | 5094.0 | 4585.2 | 4206.2 | 3926.4 | 3784.5 | 3705.5 | 3687.2 | 3662.9 | 3664.9 |
| 10°   | 5736.6  | 5485.3  | 4822.4 | 4175.8 | 3778.5 | 3594.0 | 3559.5 | 3583.9 | 3612.2 | 3620.4 | 3622.4 |
| 12.5° | 5769.0  | 5432.6  | 4524.4 | 3810.9 | 3510.9 | 3454.1 | 3512.9 | 3596.0 | 3650.8 | 3677.1 | 3675.1 |
| 15°   | 5842.0  | 5392.0  | 4238.6 | 3525.1 | 3362.9 | 3393.3 | 3502.8 | 3620.4 | 3699.4 | 3735.9 | 3737.9 |
| 17.5° | 5921.1  | 5333.2  | 3944.7 | 3306.2 | 3253.5 | 3330.5 | 3466.3 | 3604.1 | 3701.4 | 3742.0 | 3750.1 |
| 20°   | 6024.5  | 5260.3  | 3636.6 | 3142.0 | 3150.1 | 3237.2 | 3364.9 | 3502.8 | 3610.2 | 3644.7 | 3660.9 |
| 22.5° | 6160.3  | 5181.2  | 3367.0 | 3008.2 | 3032.5 | 3099.4 | 3198.7 | 3318.3 | 3411.6 | 3427.8 | 3442.0 |
| 25°   | 6342.7  | 5096.1  | 3152.1 | 2886.6 | 2896.7 | 2935.2 | 3002.1 | 3073.0 | 3137.9 | 3119.7 | 3133.9 |
| 27.5° | 6588.0  | 5023.1  | 2992.0 | 2775.1 | 2756.8 | 2764.9 | 2799.4 | 2821.7 | 2856.1 | 2805.5 | 2811.5 |
| 30°   | 6875.8  | 4944.0  | 2868.3 | 2677.8 | 2627.1 | 2612.9 | 2621.0 | 2633.2 | 2659.5 | 2590.6 | 2580.5 |
| 32.5° | 7210.3  | 4848.8  | 2752.8 | 2592.6 | 2521.7 | 2493.3 | 2497.4 | 2529.8 | 2631.1 | 2588.6 | 2566.3 |
| 35°   | 7599.5  | 4741.3  | 2631.1 | 2499.4 | 2450.7 | 2410.2 | 2406.1 | 2507.5 | 2809.5 | 2783.2 | 2762.9 |
| 37.5° | 8055.6  | 4633.9  | 2509.5 | 2394.0 | 2398.0 | 2353.4 | 2339.2 | 2454.8 | 2844.0 | 2740.6 | 2726.4 |
| 40°   | 8635.3  | 4577.1  | 2406.1 | 2282.5 | 2333.2 | 2327.1 | 2298.7 | 2357.5 | 2617.0 | 2428.4 | 2404.1 |
| 42.5° | 9352.9  | 4585.2  | 2329.1 | 2162.9 | 2256.1 | 2321.0 | 2276.4 | 2278.4 | 2371.7 | 2229.8 | 2207.5 |
| 45°   | 10238.7 | 4680.5  | 2274.4 | 2067.6 | 2169.0 | 2314.9 | 2268.3 | 2235.9 | 2244.0 | 2169.0 | 2156.8 |
| 47.5° | 11272.6 | 4877.1  | 2235.9 | 1988.6 | 2085.9 | 2292.6 | 2266.3 | 2223.7 | 2205.5 | 2164.9 | 2154.8 |
| 50°   | 12421.9 | 5163.0  | 2207.5 | 1913.6 | 2010.9 | 2256.1 | 2268.3 | 2211.5 | 2191.3 | 2175.0 | 2169.0 |
| 52.5° | 13551.0 | 5489.3  | 2164.9 | 1848.7 | 1952.1 | 2211.5 | 2274.4 | 2199.4 | 2177.1 | 2164.9 | 2158.8 |
| 55°   | 14809.8 | 5896.8  | 2100.0 | 1794.0 | 1903.4 | 2154.8 | 2274.4 | 2181.1 | 2156.8 | 2158.8 | 2156.8 |
| 57.5° | 16510.5 | 6555.6  | 2023.0 | 1747.3 | 1844.6 | 2085.9 | 2235.9 | 2160.9 | 2130.5 | 2132.5 | 2134.5 |
| 60°   | 19168.0 | 7717.1  | 1929.8 | 1700.7 | 1771.7 | 2004.8 | 2183.2 | 2116.3 | 2085.9 | 2094.0 | 2096.0 |
| 62.5° | 23076.2 | 9421.8  | 1808.1 | 1631.8 | 1694.6 | 1917.6 | 2110.2 | 2059.5 | 2029.1 | 2049.4 | 2049.4 |
| 65°   | 27138.4 | 10925.9 | 1658.1 | 1544.6 | 1613.5 | 1822.3 | 2019.0 | 1988.6 | 1958.2 | 2004.8 | 2002.7 |
| 67.5° | 28231.0 | 10589.4 | 1508.1 | 1449.4 | 1532.5 | 1716.9 | 1909.5 | 1893.3 | 1877.1 | 1958.2 | 1954.1 |
| 70°   | 25078.9 | 8501.5  | 1370.3 | 1352.1 | 1443.3 | 1603.4 | 1791.9 | 1791.9 | 1781.8 | 1842.6 | 1828.4 |
| 72.5° | 19107.2 | 6028.5  | 1238.5 | 1248.7 | 1341.9 | 1479.8 | 1664.2 | 1678.4 | 1662.2 | 1692.6 | 1680.4 |
| 75°   | 10228.6 | 3450.1  | 1106.8 | 1135.2 | 1216.2 | 1354.1 | 1522.3 | 1536.5 | 1526.4 | 1524.4 | 1530.4 |
| 77.5° | 3399.4  | 1686.5  | 968.9  | 1013.5 | 1084.5 | 1224.4 | 1374.4 | 1396.7 | 1372.3 | 1368.3 | 1366.2 |
| 80°   | 1514.2  | 1060.2  | 816.9  | 875.7  | 938.5  | 1076.4 | 1218.3 | 1236.5 | 1210.2 | 1246.6 | 1200.0 |
| 82.5° | 973.0   | 697.3   | 654.7  | 719.6  | 780.4  | 928.4  | 1062.2 | 1066.2 | 1041.9 | 1210.2 | 1031.8 |
| 85°   | 472.3   | 431.8   | 492.6  | 551.4  | 604.1  | 729.7  | 879.7  | 881.8  | 821.0  | 748.0  | 721.6  |
| 87.5° | 235.1   | 251.4   | 328.4  | 381.1  | 407.4  | 500.7  | 640.6  | 628.4  | 602.0  | 547.3  | 504.7  |
| 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)