

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: P193750

Luminaire Tested: **GAN-AF-02-LED-U-SL4-8030-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P193750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-02-LED-U-SL4-8030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 8065 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 113  
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

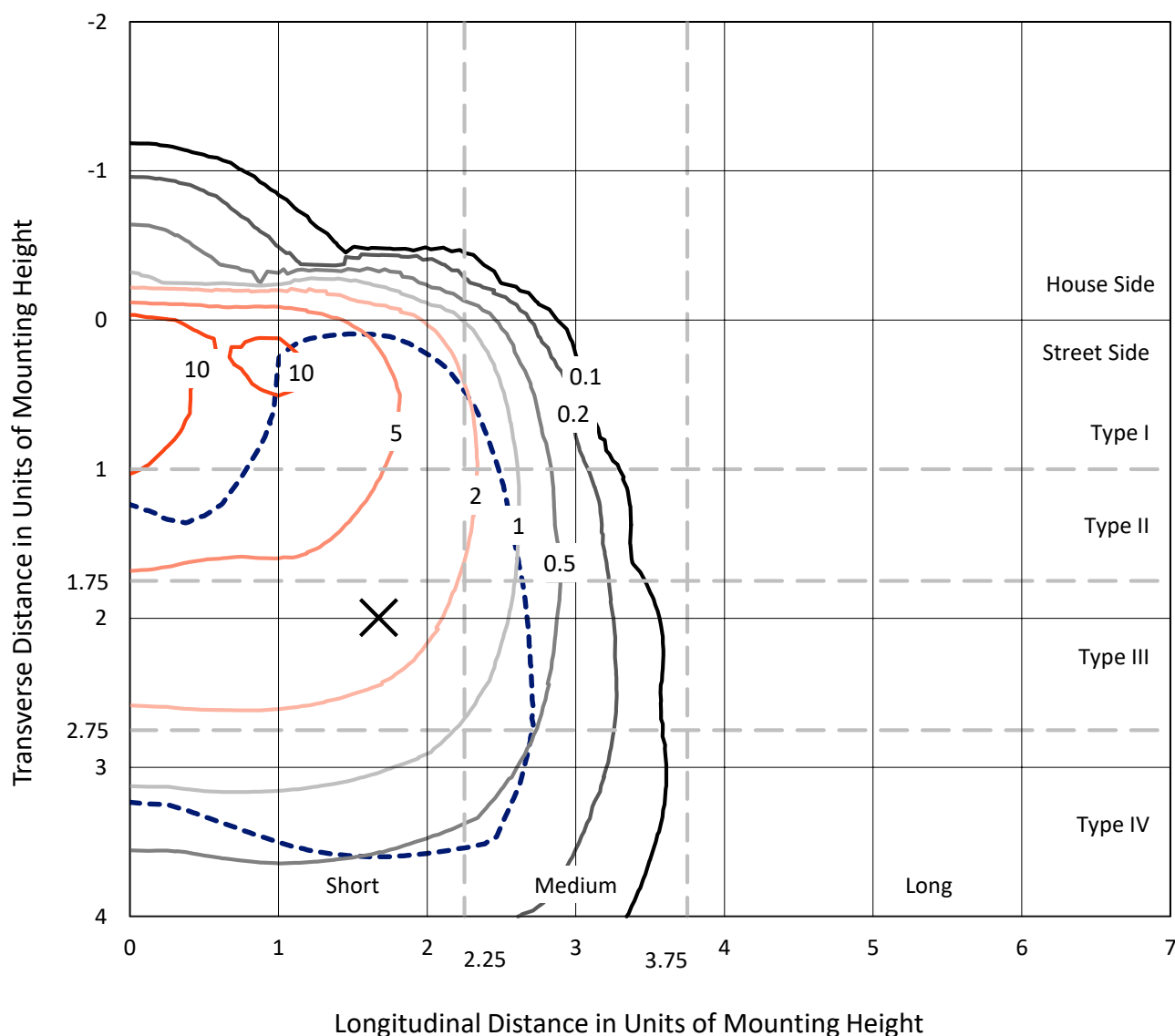


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

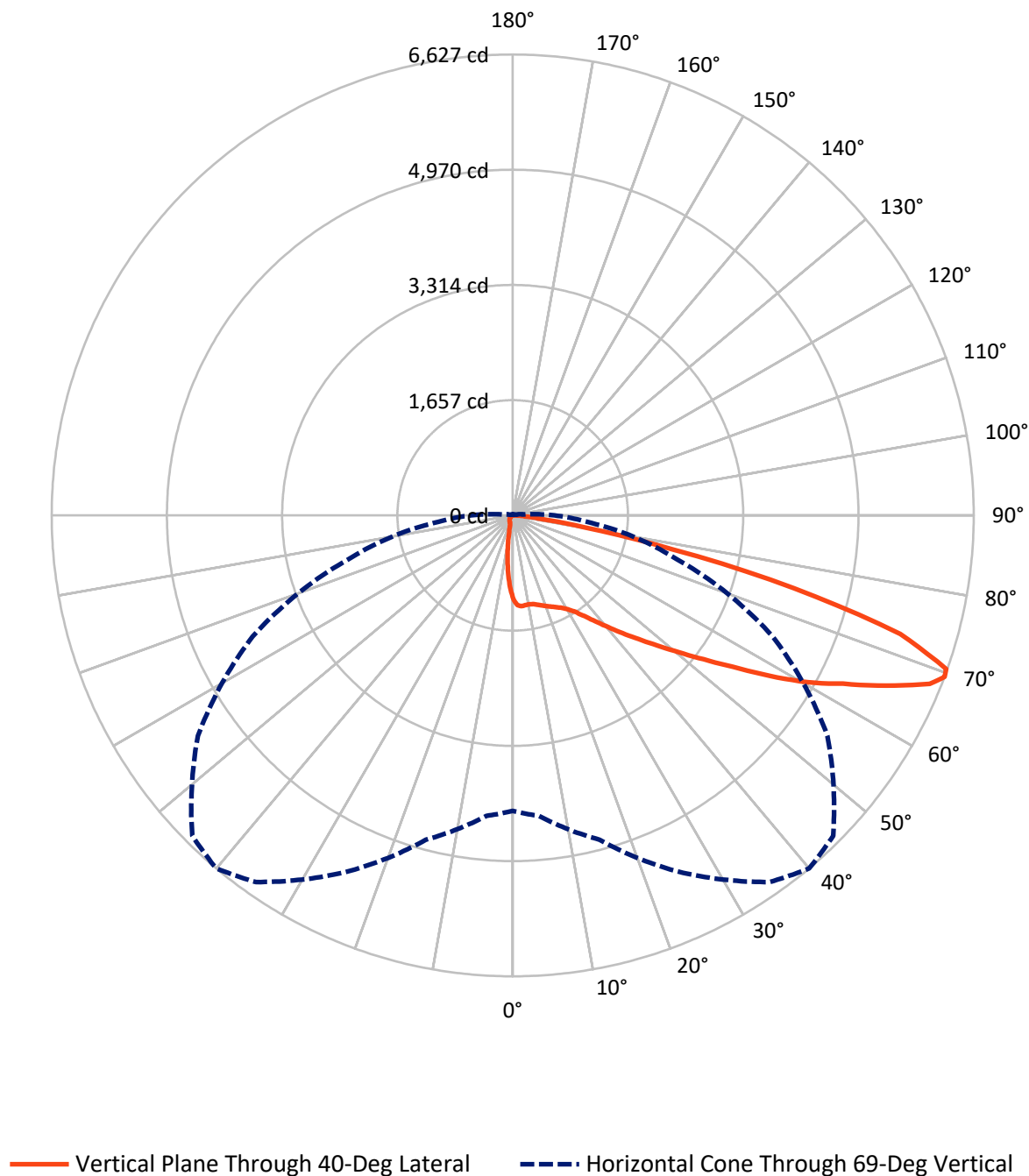


Based on 10 foot mounting height. Maximum calculated value = 13.2 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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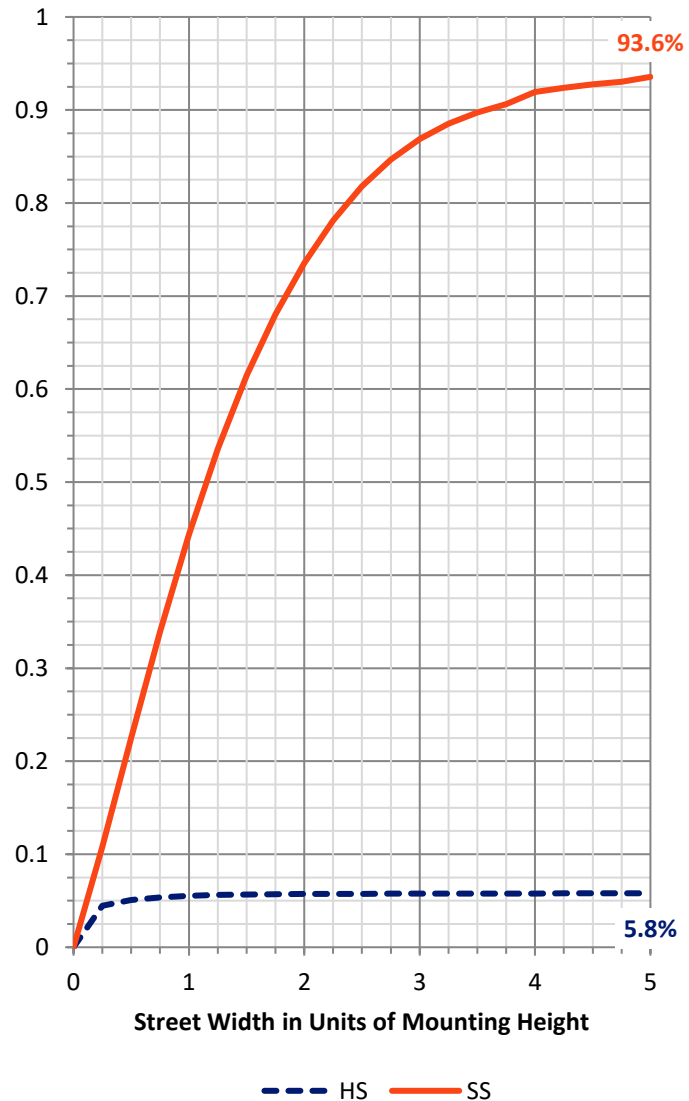
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 471.8    | 0.0    | 471.8  |
|                    | % Fixture | 5.9      | 0.0    | 5.9    |
| <b>Street Side</b> | Lumens    | 7593.2   | 0.0    | 7593.2 |
|                    | % Fixture | 94.1     | 0.0    | 94.1   |
| <b>Total</b>       | Lumens    | 8065.0   | 0.0    | 8065.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.7   | 1.2       |
| 10°-20°   | 240.3  | 3.0       |
| 20°-30°   | 404.7  | 5.0       |
| 30°-40°   | 662.5  | 8.2       |
| 40°-50°   | 1147.0 | 14.2      |
| 50°-60°   | 1806.7 | 22.4      |
| 60°-70°   | 2359.5 | 29.3      |
| 70°-80°   | 1215.2 | 15.1      |
| 80°-90°   | 131.5  | 1.6       |
| 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°    | 8065.0 | 100.0     |
| 0°-180°   | 8065.0 | 100.0     |



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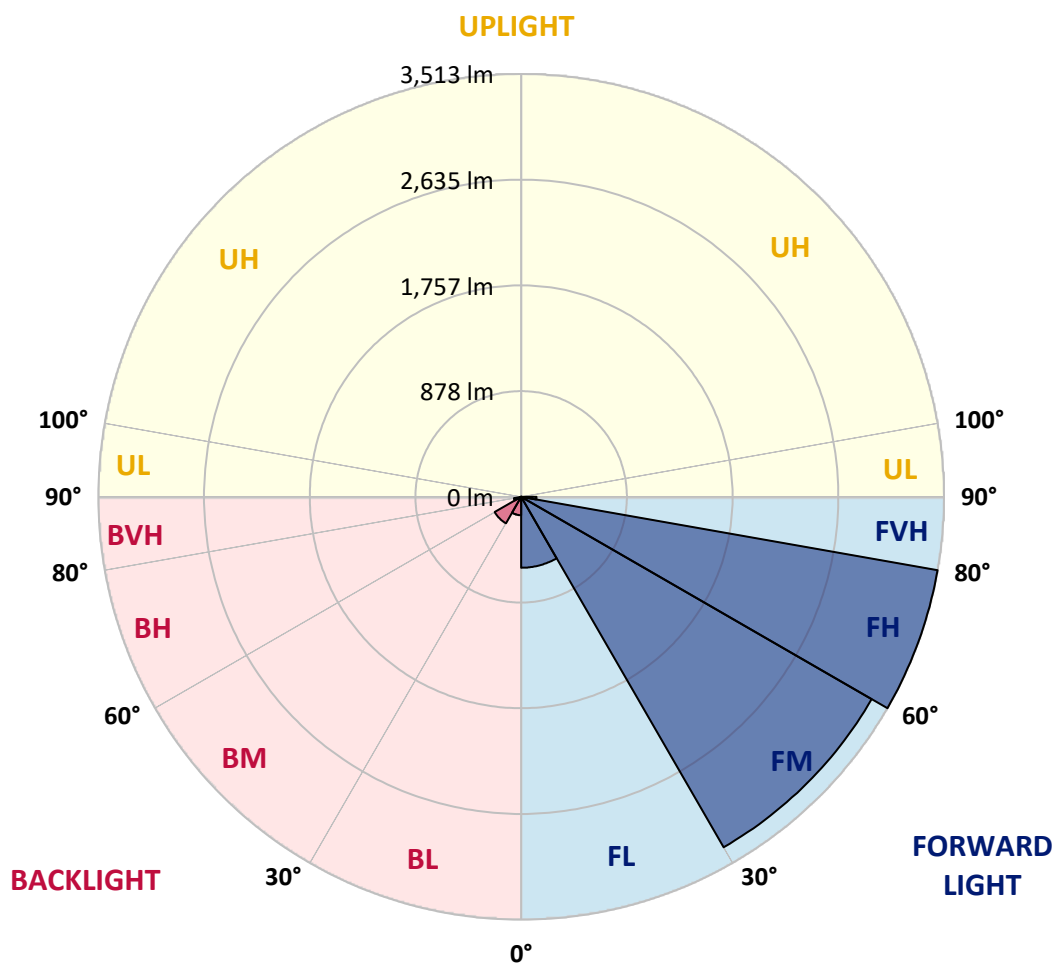
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 589.8  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 3362.6 | 41.7      |                         |      |         |
| FH   | (60°-80°)   | 3513.4 | 43.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 127.3  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 152.8  | 1.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 253.6  | 3.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 61.3   | 0.8       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 4.1    | 0.1       |                         |      | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 40°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 |
| 2.5°  | 1323.0 | 1315.8 | 1311.5 | 1305.8 | 1298.6 | 1292.3 | 1289.9 | 1272.2 | 1255.4 | 1232.3 | 1205.9 |
| 5°    | 1347.5 | 1345.1 | 1337.4 | 1329.8 | 1321.1 | 1311.5 | 1306.2 | 1285.1 | 1261.1 | 1227.5 | 1181.4 |
| 7.5°  | 1349.9 | 1347.1 | 1337.4 | 1326.9 | 1314.9 | 1303.4 | 1294.2 | 1273.1 | 1251.0 | 1217.0 | 1160.8 |
| 10°   | 1346.1 | 1342.7 | 1335.5 | 1324.0 | 1309.1 | 1298.1 | 1289.0 | 1268.8 | 1250.1 | 1219.4 | 1156.9 |
| 12.5° | 1341.8 | 1338.4 | 1335.0 | 1329.3 | 1316.3 | 1308.6 | 1301.0 | 1281.8 | 1265.0 | 1239.0 | 1170.9 |
| 15°   | 1346.1 | 1344.2 | 1348.0 | 1345.6 | 1338.4 | 1331.7 | 1324.0 | 1306.7 | 1291.4 | 1269.8 | 1196.3 |
| 17.5° | 1364.3 | 1364.3 | 1376.3 | 1377.8 | 1371.1 | 1361.5 | 1350.4 | 1333.1 | 1320.2 | 1301.9 | 1226.6 |
| 20°   | 1407.1 | 1405.6 | 1421.0 | 1423.9 | 1407.5 | 1392.7 | 1376.3 | 1355.2 | 1345.1 | 1333.6 | 1256.3 |
| 22.5° | 1480.5 | 1473.8 | 1482.9 | 1480.0 | 1447.9 | 1424.8 | 1404.7 | 1378.7 | 1373.5 | 1368.2 | 1289.4 |
| 25°   | 1576.0 | 1572.2 | 1578.4 | 1550.1 | 1493.5 | 1462.3 | 1438.3 | 1409.0 | 1409.0 | 1414.3 | 1326.9 |
| 27.5° | 1714.8 | 1700.4 | 1679.3 | 1629.3 | 1544.4 | 1504.5 | 1478.6 | 1447.4 | 1455.5 | 1475.2 | 1376.3 |
| 30°   | 1856.9 | 1841.0 | 1792.5 | 1715.7 | 1606.3 | 1564.5 | 1534.3 | 1501.6 | 1520.8 | 1556.8 | 1442.6 |
| 32.5° | 1997.1 | 1979.3 | 1910.6 | 1813.7 | 1695.1 | 1653.3 | 1624.0 | 1588.0 | 1620.2 | 1680.7 | 1539.6 |
| 35°   | 2132.9 | 2117.1 | 2037.9 | 1923.6 | 1813.2 | 1778.6 | 1751.7 | 1720.5 | 1761.8 | 1846.3 | 1676.4 |
| 37.5° | 2285.6 | 2268.3 | 2171.8 | 2047.9 | 1956.7 | 1931.8 | 1912.1 | 1880.9 | 1952.9 | 2076.7 | 1867.0 |
| 40°   | 2473.3 | 2444.0 | 2313.9 | 2190.5 | 2122.8 | 2110.8 | 2097.4 | 2093.1 | 2204.9 | 2376.3 | 2120.9 |
| 42.5° | 2688.3 | 2640.3 | 2462.7 | 2340.8 | 2305.3 | 2313.9 | 2310.5 | 2329.7 | 2520.3 | 2748.8 | 2430.1 |
| 45°   | 2903.4 | 2841.5 | 2628.3 | 2501.1 | 2505.9 | 2536.2 | 2554.9 | 2631.7 | 2915.4 | 3176.1 | 2762.7 |
| 47.5° | 3085.8 | 3024.9 | 2787.2 | 2674.4 | 2732.0 | 2791.6 | 2842.4 | 2987.9 | 3321.5 | 3596.6 | 3021.5 |
| 50°   | 3241.9 | 3184.2 | 2955.7 | 2865.0 | 2994.6 | 3090.6 | 3173.2 | 3388.7 | 3758.4 | 3916.8 | 3203.0 |
| 52.5° | 3369.5 | 3331.1 | 3130.5 | 3083.4 | 3294.7 | 3435.3 | 3556.3 | 3814.6 | 4145.3 | 4177.0 | 3344.1 |
| 55°   | 3493.9 | 3466.5 | 3318.2 | 3343.1 | 3647.0 | 3838.6 | 3991.7 | 4266.3 | 4478.5 | 4394.0 | 3479.5 |
| 57.5° | 3636.9 | 3612.0 | 3532.3 | 3672.5 | 4110.3 | 4351.3 | 4518.3 | 4666.7 | 4771.8 | 4615.8 | 3607.2 |
| 60°   | 3782.9 | 3768.5 | 3770.4 | 4038.3 | 4642.2 | 4873.6 | 4965.7 | 5004.2 | 5059.8 | 4824.6 | 3614.4 |
| 62.5° | 3922.1 | 3949.5 | 4042.6 | 4445.4 | 5151.5 | 5329.2 | 5375.7 | 5413.6 | 5348.4 | 4857.7 | 3339.3 |
| 65°   | 4157.8 | 4202.5 | 4424.7 | 4990.2 | 5711.8 | 5901.9 | 5949.9 | 5819.8 | 5394.0 | 4429.5 | 2716.2 |
| 67.5° | 4273.0 | 4354.6 | 4751.2 | 5498.1 | 6255.2 | 6466.4 | 6448.7 | 5846.2 | 4840.5 | 3377.7 | 1743.1 |
| 69°   | 4249.0 | 4335.9 | 4826.5 | 5653.7 | 6435.7 | 6627.2 | 6514.4 | 5523.1 | 4123.7 | 2446.9 | 1070.1 |
| 70°   | 4154.0 | 4241.8 | 4787.6 | 5647.9 | 6458.7 | 6610.4 | 6392.5 | 5124.2 | 3486.7 | 1789.2 | 669.2  |
| 72.5° | 3468.9 | 3544.8 | 4250.5 | 5105.0 | 5949.9 | 5826.5 | 5347.9 | 3550.0 | 1698.9 | 487.3  | 150.7  |
| 75°   | 2135.3 | 2177.6 | 3049.8 | 3845.8 | 4493.8 | 4177.0 | 3563.0 | 1766.1 | 506.5  | 137.8  | 83.5   |
| 77.5° | 1128.1 | 1147.3 | 1669.7 | 2266.8 | 2848.7 | 2357.1 | 1826.2 | 688.9  | 233.3  | 86.4   | 60.5   |
| 80°   | 666.8  | 681.2  | 899.2  | 1036.5 | 1232.8 | 1029.7 | 730.2  | 422.9  | 167.1  | 54.2   | 53.8   |
| 82.5° | 381.6  | 390.8  | 651.9  | 576.1  | 485.8  | 414.8  | 363.4  | 400.9  | 100.3  | 36.5   | 55.7   |
| 85°   | 140.2  | 142.1  | 366.8  | 438.3  | 289.0  | 171.9  | 180.5  | 332.2  | 26.9   | 23.0   | 43.7   |
| 87.5° | 65.3   | 63.8   | 188.7  | 268.4  | 169.0  | 109.0  | 140.7  | 73.0   | 10.6   | 14.9   | 12.0   |
| 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°    | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 | 1205.0 |
| 2.5°  | 1190.6 | 1172.8 | 1140.6 | 1107.5 | 1073.9 | 1048.0 | 1022.5 | 1002.4 | 995.6  | 983.2  | 984.1  |
| 5°    | 1154.1 | 1121.4 | 1054.2 | 986.0  | 915.0  | 856.4  | 801.2  | 756.6  | 735.0  | 712.9  | 712.9  |
| 7.5°  | 1122.4 | 1074.9 | 969.7  | 858.8  | 744.1  | 647.6  | 560.7  | 495.4  | 459.4  | 430.6  | 430.1  |
| 10°   | 1110.4 | 1046.1 | 899.2  | 740.3  | 580.4  | 448.9  | 345.6  | 279.4  | 245.3  | 223.2  | 222.3  |
| 12.5° | 1115.7 | 1036.0 | 844.9  | 630.8  | 430.1  | 288.5  | 200.2  | 157.5  | 143.1  | 136.3  | 136.3  |
| 15°   | 1131.0 | 1033.1 | 790.7  | 523.7  | 303.9  | 180.5  | 133.0  | 121.5  | 120.5  | 120.5  | 120.5  |
| 17.5° | 1149.7 | 1034.1 | 735.0  | 419.6  | 206.9  | 129.1  | 114.7  | 113.3  | 114.3  | 114.3  | 114.3  |
| 20°   | 1168.9 | 1034.5 | 675.0  | 323.1  | 145.9  | 112.3  | 108.0  | 107.5  | 108.5  | 108.5  | 109.0  |
| 22.5° | 1192.5 | 1036.9 | 615.0  | 241.5  | 120.5  | 106.1  | 102.7  | 102.7  | 103.2  | 103.2  | 102.7  |
| 25°   | 1219.4 | 1041.7 | 552.5  | 179.1  | 109.9  | 101.8  | 98.9   | 98.4   | 98.9   | 98.4   | 97.9   |
| 27.5° | 1253.0 | 1048.5 | 482.9  | 140.2  | 105.1  | 97.5   | 95.1   | 95.1   | 94.6   | 94.1   | 93.6   |
| 30°   | 1295.2 | 1056.1 | 404.7  | 119.1  | 100.3  | 93.6   | 91.2   | 90.7   | 90.3   | 89.3   | 89.3   |
| 32.5° | 1359.5 | 1072.9 | 327.4  | 108.0  | 95.1   | 88.3   | 86.4   | 86.4   | 85.5   | 84.5   | 84.0   |
| 35°   | 1458.4 | 1106.1 | 258.3  | 101.3  | 89.3   | 82.6   | 80.2   | 80.2   | 79.2   | 78.7   | 78.2   |
| 37.5° | 1595.2 | 1156.5 | 200.7  | 95.1   | 83.5   | 76.3   | 73.9   | 73.4   | 72.5   | 71.5   | 71.0   |
| 40°   | 1777.2 | 1218.9 | 157.9  | 89.3   | 77.8   | 70.1   | 68.2   | 67.2   | 65.3   | 63.8   | 63.8   |
| 42.5° | 2005.7 | 1289.9 | 128.2  | 83.1   | 71.0   | 64.3   | 62.9   | 61.4   | 58.1   | 56.6   | 56.2   |
| 45°   | 2244.8 | 1353.8 | 108.5  | 75.8   | 64.3   | 58.6   | 57.6   | 55.2   | 50.9   | 49.4   | 49.4   |
| 47.5° | 2417.1 | 1368.7 | 95.5   | 69.1   | 58.1   | 52.3   | 51.8   | 47.5   | 43.7   | 42.7   | 42.2   |
| 50°   | 2524.6 | 1339.4 | 85.0   | 62.4   | 52.3   | 46.6   | 45.1   | 39.8   | 37.4   | 36.5   | 36.0   |
| 52.5° | 2597.1 | 1287.0 | 76.3   | 56.6   | 47.0   | 41.3   | 37.9   | 34.1   | 32.2   | 31.2   | 31.2   |
| 55°   | 2655.2 | 1213.1 | 67.7   | 51.4   | 42.7   | 37.0   | 32.2   | 29.3   | 27.4   | 26.4   | 26.4   |
| 57.5° | 2671.5 | 1112.8 | 59.0   | 47.0   | 38.4   | 32.6   | 27.4   | 25.4   | 23.0   | 22.6   | 22.6   |
| 60°   | 2553.0 | 931.8  | 52.3   | 41.8   | 34.6   | 28.3   | 24.0   | 21.6   | 19.2   | 18.7   | 18.2   |
| 62.5° | 2240.4 | 721.1  | 46.1   | 37.0   | 30.2   | 24.5   | 20.6   | 17.8   | 15.8   | 15.8   | 15.8   |
| 65°   | 1709.0 | 483.4  | 40.3   | 32.2   | 26.4   | 20.6   | 17.8   | 14.4   | 13.4   | 13.4   | 13.9   |
| 67.5° | 1023.0 | 263.1  | 34.6   | 27.4   | 22.6   | 17.3   | 14.9   | 12.5   | 12.0   | 12.5   | 12.5   |
| 69°   | 599.6  | 154.6  | 31.2   | 24.5   | 19.7   | 15.4   | 13.0   | 11.0   | 12.0   | 12.5   | 12.5   |
| 70°   | 370.1  | 104.2  | 28.8   | 22.1   | 17.8   | 13.9   | 12.0   | 10.6   | 11.5   | 12.0   | 12.0   |
| 72.5° | 103.2  | 53.8   | 23.0   | 17.3   | 14.4   | 11.5   | 9.6    | 9.6    | 11.0   | 11.5   | 11.5   |
| 75°   | 67.2   | 39.8   | 17.8   | 13.0   | 11.0   | 9.1    | 8.2    | 9.1    | 10.6   | 11.0   | 11.0   |
| 77.5° | 55.7   | 32.6   | 14.4   | 10.6   | 9.1    | 8.6    | 7.7    | 8.2    | 9.6    | 10.1   | 10.1   |
| 80°   | 50.9   | 23.0   | 11.5   | 9.6    | 8.2    | 7.7    | 7.2    | 6.7    | 8.6    | 9.1    | 9.1    |
| 82.5° | 48.5   | 18.2   | 10.1   | 8.6    | 7.7    | 6.7    | 6.2    | 6.7    | 7.7    | 8.2    | 8.6    |
| 85°   | 30.2   | 12.0   | 9.1    | 8.2    | 6.7    | 6.2    | 6.2    | 6.2    | 7.2    | 7.7    | 7.7    |
| 87.5° | 11.0   | 9.6    | 8.2    | 6.7    | 5.8    | 5.8    | 5.8    | 5.8    | 6.2    | 7.2    | 7.2    |
| 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)