

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: P529022

Luminaire Tested: **GLAN-SA4A-827-U-T2R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA4A-827-U-T2R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11686 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

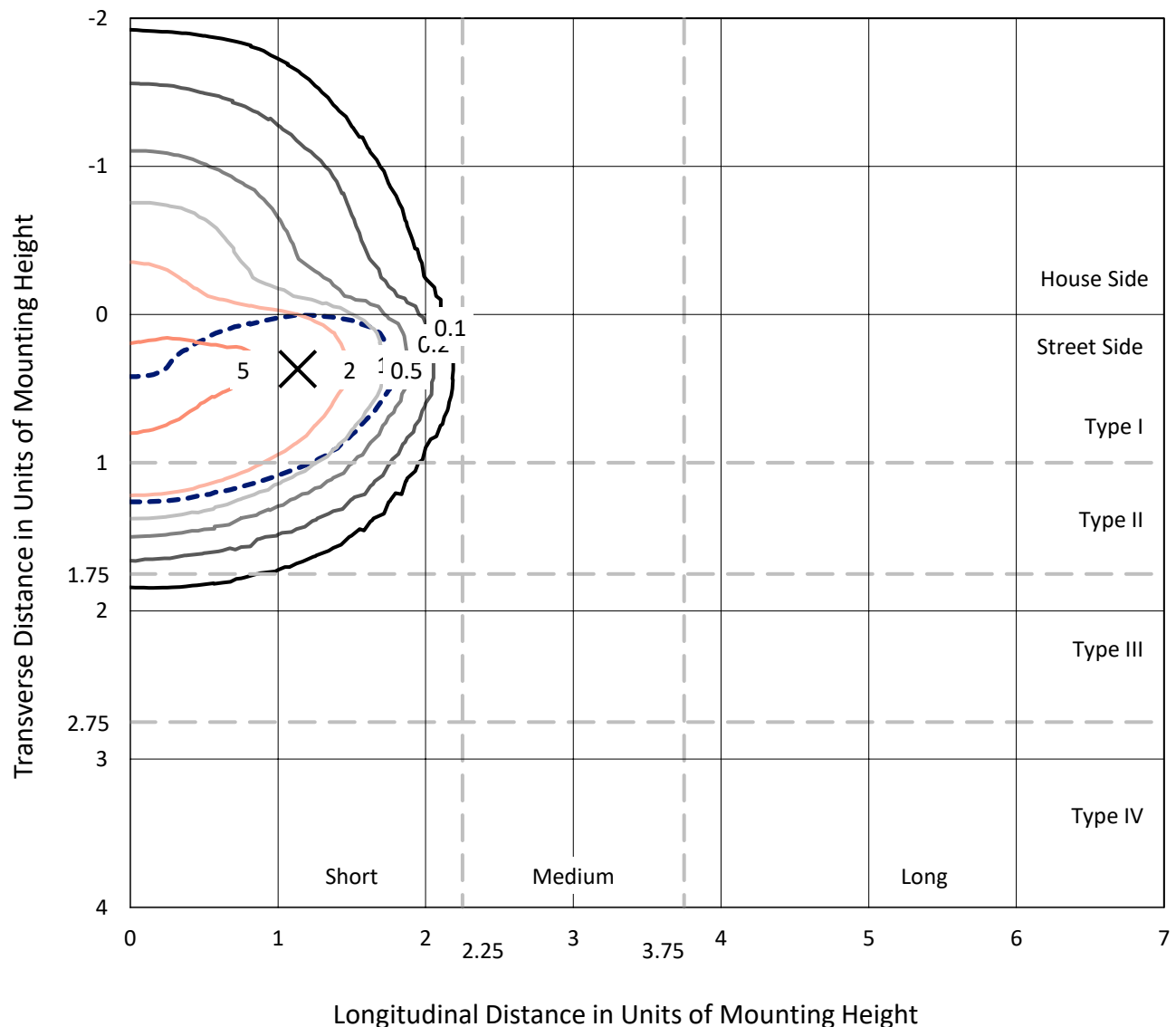
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

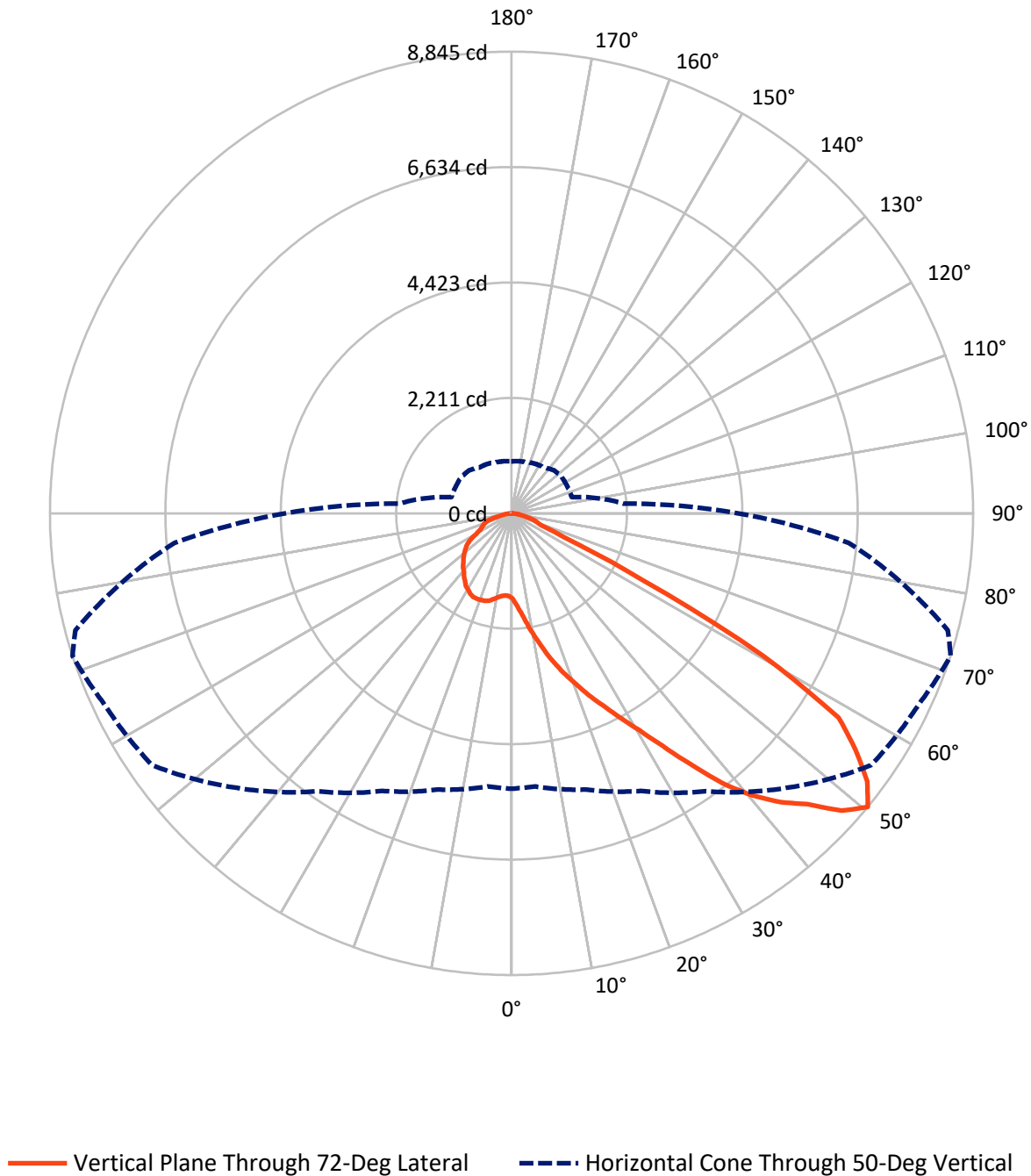
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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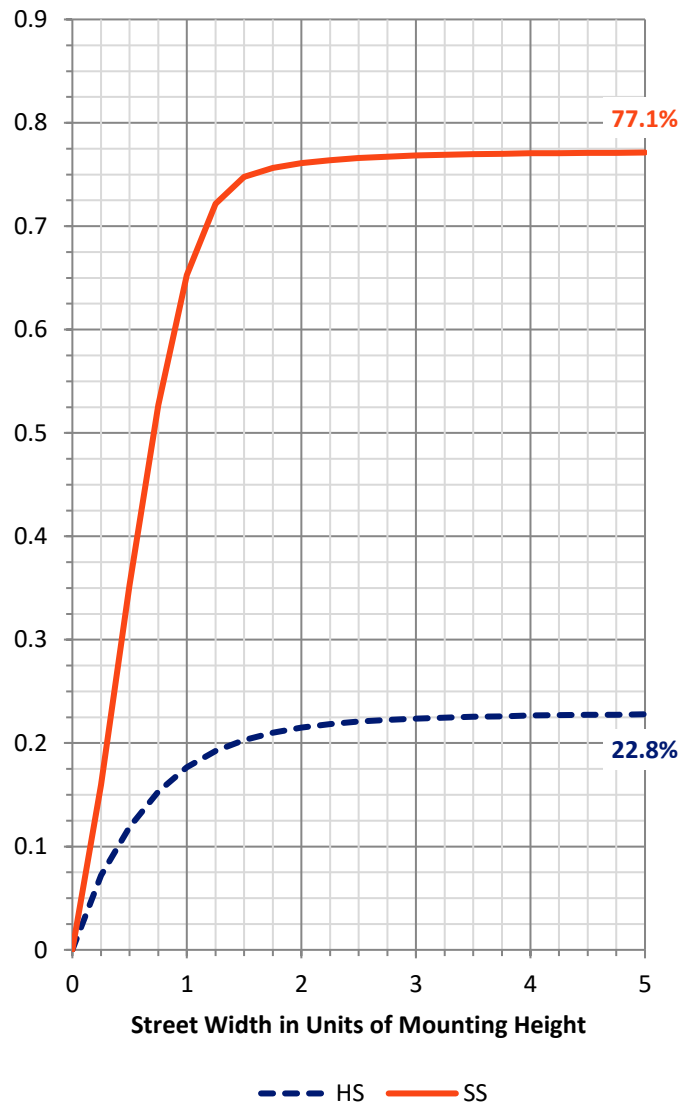
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2677.3   | 0.0    | 2677.3  |
|                    | % Fixture | 22.9     | 0.0    | 22.9    |
| <b>Street Side</b> | Lumens    | 9008.7   | 0.0    | 9008.7  |
|                    | % Fixture | 77.1     | 0.0    | 77.1    |
| <b>Total</b>       | Lumens    | 11686.0  | 0.0    | 11686.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 191.3   | 1.6       |
| 10°-20°   | 715.3   | 6.1       |
| 20°-30°   | 1387.0  | 11.9      |
| 30°-40°   | 2297.8  | 19.7      |
| 40°-50°   | 3215.1  | 27.5      |
| 50°-60°   | 2712.3  | 23.2      |
| 60°-70°   | 826.7   | 7.1       |
| 70°-80°   | 290.0   | 2.5       |
| 80°-90°   | 50.4    | 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°    | 11686.0 | 100.0     |
| 0°-180°   | 11686.0 | 100.0     |

**Coefficient of Utilization**



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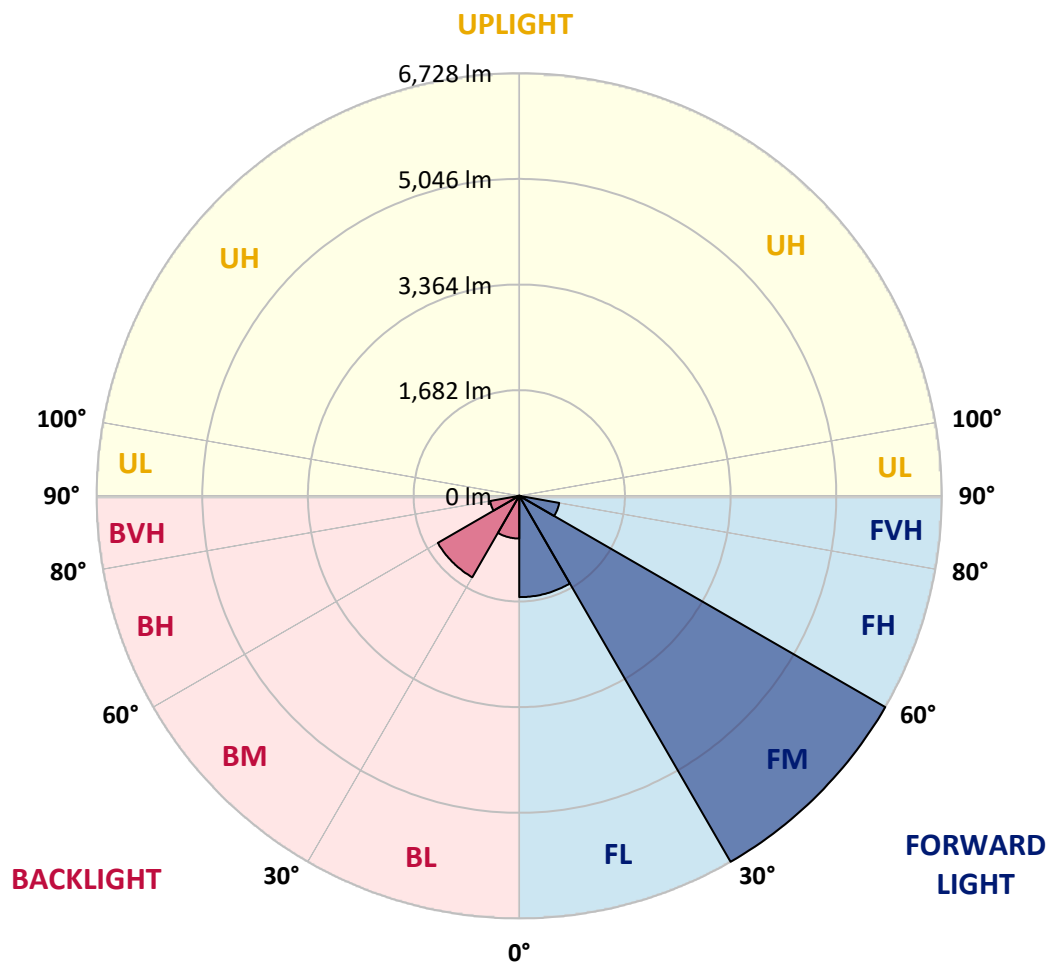
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 1613.1 | 13.8      |                         |      |        |
| FM   | (30°-60°)   | 6728.0 | 57.6      |                         |      |        |
| FH   | (60°-80°)   | 645.0  | 5.5       |                         |      | G0/660 |
| FVH  | (80°-90°)   | 22.6   | 0.2       |                         |      | G1/100 |
| BL   | (0°-30°)    | 680.6  | 5.8       | B2/1000                 |      |        |
| BM   | (30°-60°)   | 1497.2 | 12.8      | B2/2500                 |      |        |
| BH   | (60°-80°)   | 471.7  | 4.0       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 27.8   | 0.2       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 72°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 |
| 2.5°  | 2092.4 | 2079.4 | 2040.4 | 2027.3 | 1981.1 | 1897.2 | 1868.3 | 1783.0 | 1746.8 | 1713.6 | 1674.5 |
| 5°    | 2646.2 | 2585.5 | 2581.2 | 2507.4 | 2400.4 | 2338.2 | 2153.1 | 2028.8 | 1914.6 | 1856.7 | 1749.7 |
| 7.5°  | 2999.1 | 3000.5 | 3000.5 | 2939.8 | 2854.5 | 2696.9 | 2530.6 | 2306.4 | 2134.3 | 2049.0 | 1866.8 |
| 10°   | 3334.6 | 3305.6 | 3289.7 | 3283.9 | 3226.1 | 3072.8 | 2895.0 | 2617.3 | 2381.6 | 2281.8 | 1955.0 |
| 12.5° | 3571.7 | 3547.1 | 3583.3 | 3564.5 | 3522.5 | 3422.8 | 3255.0 | 2938.3 | 2643.4 | 2508.9 | 2096.8 |
| 15°   | 3684.5 | 3701.9 | 3730.8 | 3782.8 | 3764.0 | 3726.4 | 3541.3 | 3268.0 | 2925.3 | 2773.5 | 2222.6 |
| 17.5° | 3858.0 | 3810.3 | 3845.0 | 3910.1 | 3962.1 | 3944.8 | 3839.2 | 3506.6 | 3204.4 | 3017.9 | 2391.7 |
| 20°   | 3979.5 | 3952.0 | 3969.4 | 4044.6 | 4083.6 | 4181.9 | 4127.0 | 3819.0 | 3471.9 | 3275.3 | 2591.3 |
| 22.5° | 4326.5 | 4286.1 | 4229.7 | 4241.2 | 4255.7 | 4325.1 | 4338.1 | 4161.7 | 3782.8 | 3574.6 | 2780.7 |
| 25°   | 4754.6 | 4717.0 | 4650.5 | 4582.5 | 4540.6 | 4527.5 | 4572.4 | 4430.7 | 4080.7 | 3865.3 | 2984.6 |
| 27.5° | 5226.0 | 5162.3 | 5120.4 | 4980.1 | 4867.4 | 4850.0 | 4828.3 | 4751.7 | 4433.5 | 4200.7 | 3214.5 |
| 30°   | 5684.4 | 5633.8 | 5577.4 | 5353.2 | 5236.1 | 5217.3 | 5110.3 | 5132.0 | 4816.7 | 4557.9 | 3474.8 |
| 32.5° | 6031.4 | 6035.8 | 5907.1 | 5737.9 | 5628.0 | 5528.2 | 5489.2 | 5551.3 | 5308.4 | 5100.2 | 3765.5 |
| 35°   | 6311.9 | 6325.0 | 6202.0 | 6048.8 | 5930.2 | 5999.6 | 5982.3 | 6011.2 | 5895.5 | 5641.0 | 4103.9 |
| 37.5° | 6585.2 | 6520.2 | 6388.6 | 6314.8 | 6252.7 | 6366.9 | 6514.4 | 6539.0 | 6560.7 | 6261.3 | 4497.2 |
| 40°   | 6630.1 | 6635.9 | 6559.2 | 6611.3 | 6533.2 | 6705.3 | 7048.0 | 7016.2 | 7104.4 | 6842.6 | 4923.8 |
| 42.5° | 6566.5 | 6579.5 | 6609.8 | 6683.6 | 6871.6 | 7078.3 | 7587.4 | 7457.2 | 7564.2 | 7331.4 | 5338.8 |
| 45°   | 6462.3 | 6408.8 | 6446.4 | 6727.0 | 7052.3 | 7512.2 | 8080.5 | 7979.2 | 7944.5 | 7749.3 | 5833.3 |
| 47.5° | 5964.9 | 6019.8 | 6137.0 | 6482.6 | 6971.3 | 7587.4 | 8430.4 | 8407.3 | 8511.4 | 8374.0 | 6283.0 |
| 50°   | 5275.1 | 5253.4 | 5479.0 | 5868.0 | 6498.5 | 7439.9 | 8411.6 | 8621.3 | 8845.4 | 8654.5 | 6484.0 |
| 52.5° | 3950.6 | 4066.3 | 4260.0 | 4743.0 | 5642.4 | 6635.9 | 8000.9 | 8350.9 | 8533.1 | 8492.6 | 6322.1 |
| 55°   | 2497.3 | 2532.0 | 2649.1 | 3223.2 | 4033.0 | 5325.8 | 6858.6 | 7669.8 | 7995.1 | 8147.0 | 6173.1 |
| 57.5° | 1213.2 | 1148.2 | 1291.3 | 1752.6 | 2329.6 | 3581.8 | 5289.6 | 6680.7 | 7387.8 | 7662.5 | 5849.2 |
| 60°   | 633.4  | 657.9  | 714.3  | 879.2  | 1204.5 | 1859.6 | 3297.0 | 4452.3 | 5532.5 | 5954.8 | 4433.5 |
| 62.5° | 524.9  | 533.6  | 571.2  | 653.6  | 801.1  | 1070.1 | 1683.2 | 2170.5 | 2821.2 | 3201.5 | 2521.9 |
| 65°   | 445.4  | 449.7  | 490.2  | 545.2  | 639.1  | 753.4  | 866.2  | 906.7  | 1097.5 | 1126.5 | 896.5  |
| 67.5° | 371.6  | 376.0  | 419.4  | 471.4  | 532.1  | 562.5  | 591.4  | 588.5  | 610.2  | 601.6  | 600.1  |
| 70°   | 286.3  | 290.7  | 335.5  | 390.4  | 420.8  | 403.4  | 493.1  | 513.3  | 522.0  | 529.2  | 540.8  |
| 72.5° | 206.8  | 215.5  | 250.2  | 289.2  | 273.3  | 313.8  | 406.3  | 436.7  | 448.3  | 452.6  | 467.1  |
| 75°   | 150.4  | 153.3  | 162.0  | 150.4  | 173.5  | 218.4  | 286.3  | 323.9  | 338.4  | 342.7  | 364.4  |
| 77.5° | 66.5   | 68.0   | 69.4   | 86.8   | 111.3  | 135.9  | 170.6  | 201.0  | 221.2  | 227.0  | 232.8  |
| 80°   | 34.7   | 36.2   | 44.8   | 59.3   | 79.5   | 99.8   | 124.4  | 141.7  | 154.7  | 156.2  | 162.0  |
| 82.5° | 21.7   | 23.1   | 31.8   | 41.9   | 56.4   | 73.7   | 91.1   | 105.6  | 115.7  | 117.1  | 118.6  |
| 85°   | 10.1   | 13.0   | 18.8   | 26.0   | 37.6   | 47.7   | 49.2   | 41.9   | 44.8   | 46.3   | 43.4   |
| 87.5° | 2.9    | 4.3    | 5.8    | 4.3    | 5.8    | 5.8    | 7.2    | 8.7    | 8.7    | 8.7    | 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    |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 | 1626.8 |
| 2.5°  | 1652.8 | 1639.8 | 1589.2 | 1570.4 | 1521.2 | 1529.9 | 1503.9 | 1502.4 | 1496.6 | 1495.2 | 1493.8 |
| 5°    | 1693.3 | 1652.8 | 1592.1 | 1545.8 | 1518.3 | 1515.4 | 1496.6 | 1496.6 | 1502.4 | 1506.8 | 1496.6 |
| 7.5°  | 1759.8 | 1713.6 | 1610.9 | 1567.5 | 1542.9 | 1538.6 | 1525.6 | 1515.4 | 1528.5 | 1524.1 | 1512.6 |
| 10°   | 1836.5 | 1755.5 | 1647.0 | 1609.4 | 1568.9 | 1558.8 | 1558.8 | 1563.2 | 1541.5 | 1548.7 | 1537.1 |
| 12.5° | 1921.8 | 1813.3 | 1693.3 | 1649.9 | 1602.2 | 1596.4 | 1593.5 | 1561.7 | 1573.3 | 1567.5 | 1538.6 |
| 15°   | 2030.2 | 1879.8 | 1752.6 | 1678.8 | 1638.4 | 1612.3 | 1574.7 | 1568.9 | 1561.7 | 1547.3 | 1534.2 |
| 17.5° | 2147.4 | 1952.1 | 1780.1 | 1687.5 | 1626.8 | 1608.0 | 1579.1 | 1548.7 | 1527.0 | 1529.9 | 1519.8 |
| 20°   | 2247.1 | 2018.7 | 1790.2 | 1696.2 | 1618.1 | 1582.0 | 1537.1 | 1518.3 | 1495.2 | 1493.8 | 1492.3 |
| 22.5° | 2365.7 | 2108.3 | 1804.7 | 1673.1 | 1592.1 | 1554.5 | 1524.1 | 1490.9 | 1475.0 | 1454.7 | 1464.8 |
| 25°   | 2507.4 | 2143.0 | 1807.5 | 1660.0 | 1573.3 | 1506.8 | 1490.9 | 1454.7 | 1448.9 | 1420.0 | 1425.8 |
| 27.5° | 2610.1 | 2161.8 | 1784.4 | 1619.6 | 1529.9 | 1479.3 | 1450.4 | 1424.3 | 1414.2 | 1392.5 | 1386.7 |
| 30°   | 2747.5 | 2190.7 | 1735.2 | 1568.9 | 1486.5 | 1430.1 | 1412.8 | 1407.0 | 1378.1 | 1354.9 | 1352.0 |
| 32.5° | 2903.6 | 2209.5 | 1703.4 | 1516.9 | 1441.7 | 1398.3 | 1407.0 | 1379.5 | 1343.4 | 1323.1 | 1317.3 |
| 35°   | 3028.0 | 2216.8 | 1623.9 | 1457.6 | 1411.3 | 1383.9 | 1373.7 | 1368.0 | 1315.9 | 1297.1 | 1282.6 |
| 37.5° | 3217.4 | 2200.9 | 1557.4 | 1415.7 | 1378.1 | 1368.0 | 1359.3 | 1320.2 | 1260.9 | 1233.5 | 1213.2 |
| 40°   | 3438.7 | 2196.5 | 1472.1 | 1356.4 | 1346.3 | 1357.8 | 1331.8 | 1271.1 | 1188.6 | 1158.3 | 1143.8 |
| 42.5° | 3651.2 | 2226.9 | 1418.6 | 1324.6 | 1311.6 | 1315.9 | 1279.7 | 1188.6 | 1148.2 | 1130.8 | 1107.7 |
| 45°   | 4007.0 | 2290.5 | 1330.4 | 1275.4 | 1269.6 | 1266.7 | 1223.3 | 1127.9 | 1104.8 | 1083.1 | 1078.7 |
| 47.5° | 4328.0 | 2248.6 | 1274.0 | 1224.8 | 1230.6 | 1214.7 | 1122.1 | 1091.8 | 1065.7 | 1044.0 | 1036.8 |
| 50°   | 4346.8 | 2148.8 | 1194.4 | 1185.7 | 1187.2 | 1159.7 | 1071.5 | 1051.3 | 1018.0 | 1003.5 | 993.4  |
| 52.5° | 4248.5 | 1985.4 | 1120.7 | 1123.6 | 1127.9 | 1083.1 | 1009.3 | 994.9  | 967.4  | 947.2  | 941.4  |
| 55°   | 3972.3 | 1730.9 | 1048.4 | 1059.9 | 1071.5 | 986.2  | 963.1  | 926.9  | 905.2  | 876.3  | 877.7  |
| 57.5° | 3499.4 | 1394.0 | 947.2  | 966.0  | 990.5  | 896.5  | 879.2  | 834.4  | 802.6  | 779.4  | 776.5  |
| 60°   | 2345.5 | 992.0  | 795.3  | 802.6  | 857.5  | 819.9  | 818.5  | 773.6  | 730.2  | 710.0  | 698.4  |
| 62.5° | 1383.9 | 757.7  | 686.9  | 679.6  | 678.2  | 699.9  | 736.0  | 720.1  | 663.7  | 624.7  | 636.3  |
| 65°   | 724.5  | 655.1  | 639.1  | 614.6  | 600.1  | 594.3  | 621.8  | 629.0  | 591.4  | 549.5  | 546.6  |
| 67.5° | 608.8  | 608.8  | 595.8  | 587.1  | 566.8  | 542.3  | 524.9  | 501.8  | 496.0  | 484.4  | 470.0  |
| 70°   | 553.8  | 568.3  | 564.0  | 543.7  | 526.4  | 498.9  | 454.1  | 416.5  | 380.3  | 367.3  | 376.0  |
| 72.5° | 483.0  | 497.4  | 497.4  | 487.3  | 464.2  | 422.2  | 378.9  | 335.5  | 305.1  | 282.0  | 279.1  |
| 75°   | 371.6  | 378.9  | 396.2  | 384.6  | 354.3  | 328.3  | 283.4  | 238.6  | 209.7  | 188.0  | 183.6  |
| 77.5° | 237.1  | 248.7  | 248.7  | 247.3  | 225.6  | 201.0  | 172.1  | 140.3  | 118.6  | 102.7  | 98.3   |
| 80°   | 157.6  | 164.8  | 170.6  | 164.8  | 150.4  | 131.6  | 109.9  | 88.2   | 72.3   | 59.3   | 56.4   |
| 82.5° | 115.7  | 124.4  | 128.7  | 122.9  | 108.5  | 94.0   | 78.1   | 62.2   | 46.3   | 36.2   | 33.3   |
| 85°   | 44.8   | 46.3   | 52.1   | 62.2   | 60.7   | 59.3   | 47.7   | 34.7   | 26.0   | 18.8   | 17.4   |
| 87.5° | 11.6   | 10.1   | 11.6   | 11.6   | 10.1   | 8.7    | 8.7    | 8.7    | 8.7    | 4.3    | 5.8    |
| 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)