

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: P317919

Luminaire Tested: **GAN-SA5B-830-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317919  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA5B-830-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23206 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

Input Watts (W): 210  
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

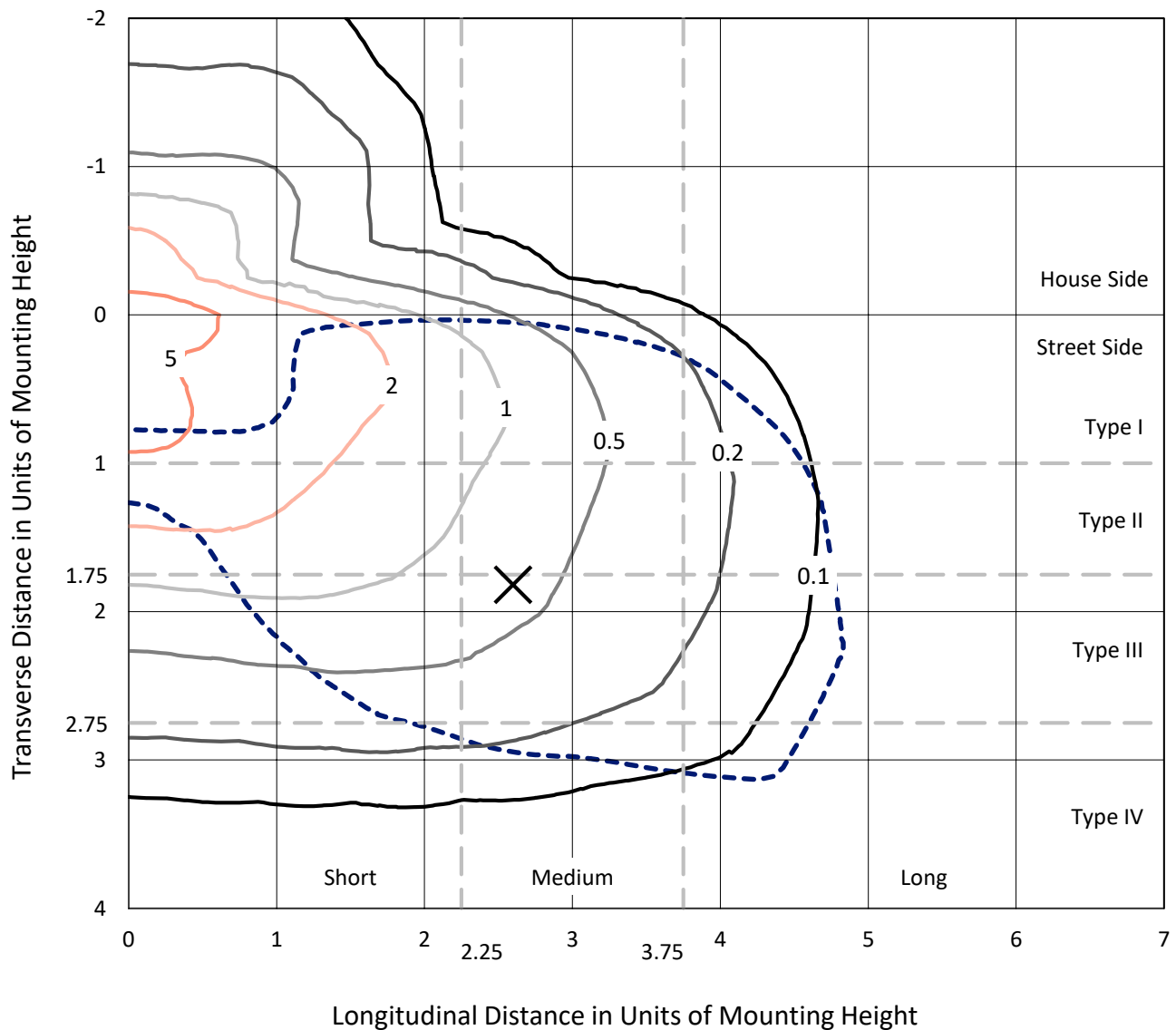


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## Iso-Footcandle Lines of Horizontal Illumination

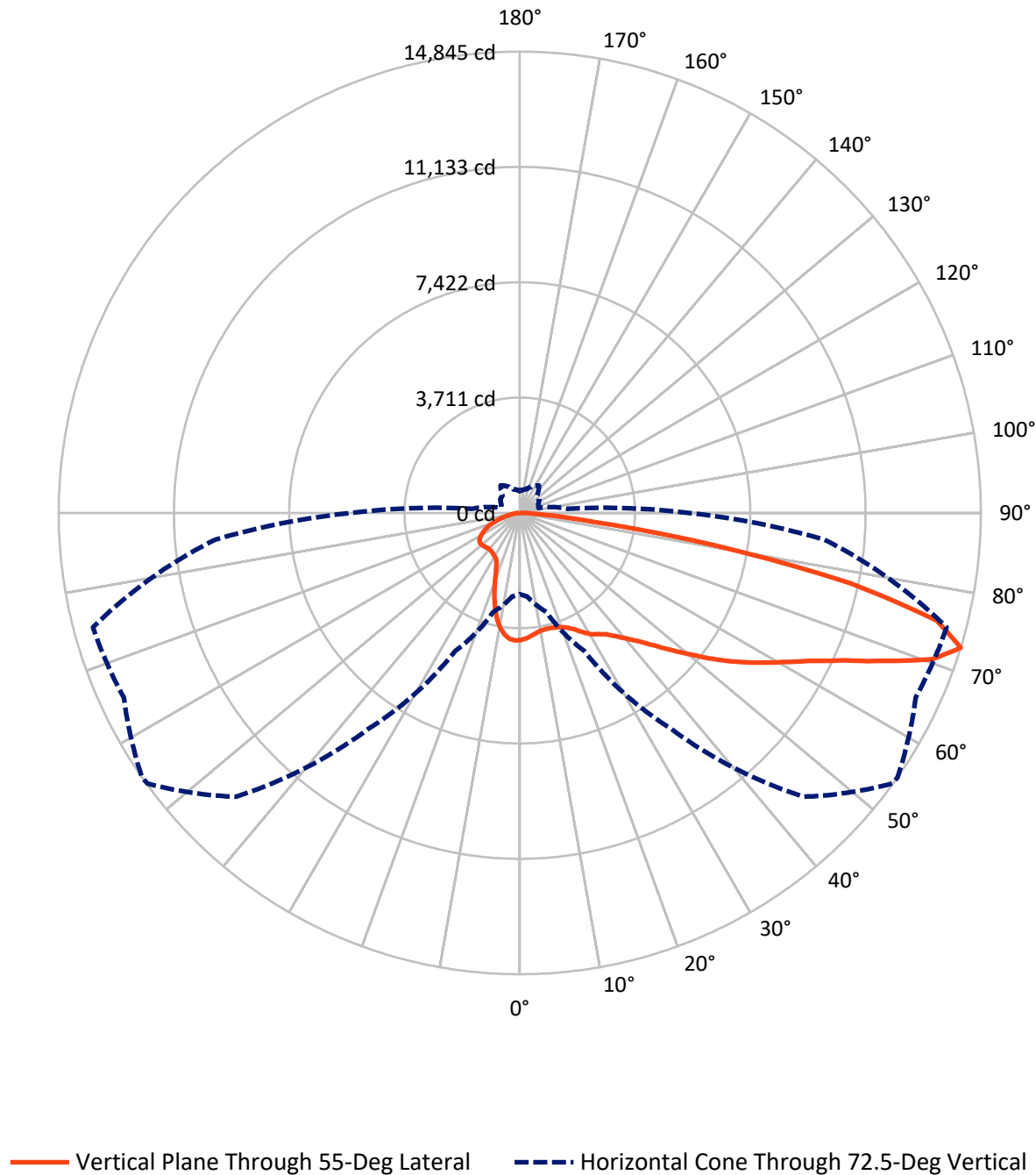
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type IV - 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    | 4313.2   | 0.0    | 4313.2  |
|                    | % Fixture | 18.6     | 0.0    | 18.6    |
| <b>Street Side</b> | Lumens    | 18892.8  | 0.0    | 18892.8 |
|                    | % Fixture | 81.4     | 0.0    | 81.4    |
| <b>Total</b>       | Lumens    | 23206.0  | 0.0    | 23206.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 370.4   | 1.6       |
| 10°-20°   | 986.1   | 4.2       |
| 20°-30°   | 1625.8  | 7.0       |
| 30°-40°   | 2404.9  | 10.4      |
| 40°-50°   | 3356.8  | 14.5      |
| 50°-60°   | 4370.6  | 18.8      |
| 60°-70°   | 5371.4  | 23.1      |
| 70°-80°   | 4210.5  | 18.1      |
| 80°-90°   | 509.5   | 2.2       |
| 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°    | 23206.0 | 100.0     |
| 0°-180°   | 23206.0 | 100.0     |

**Coefficient of Utilization**



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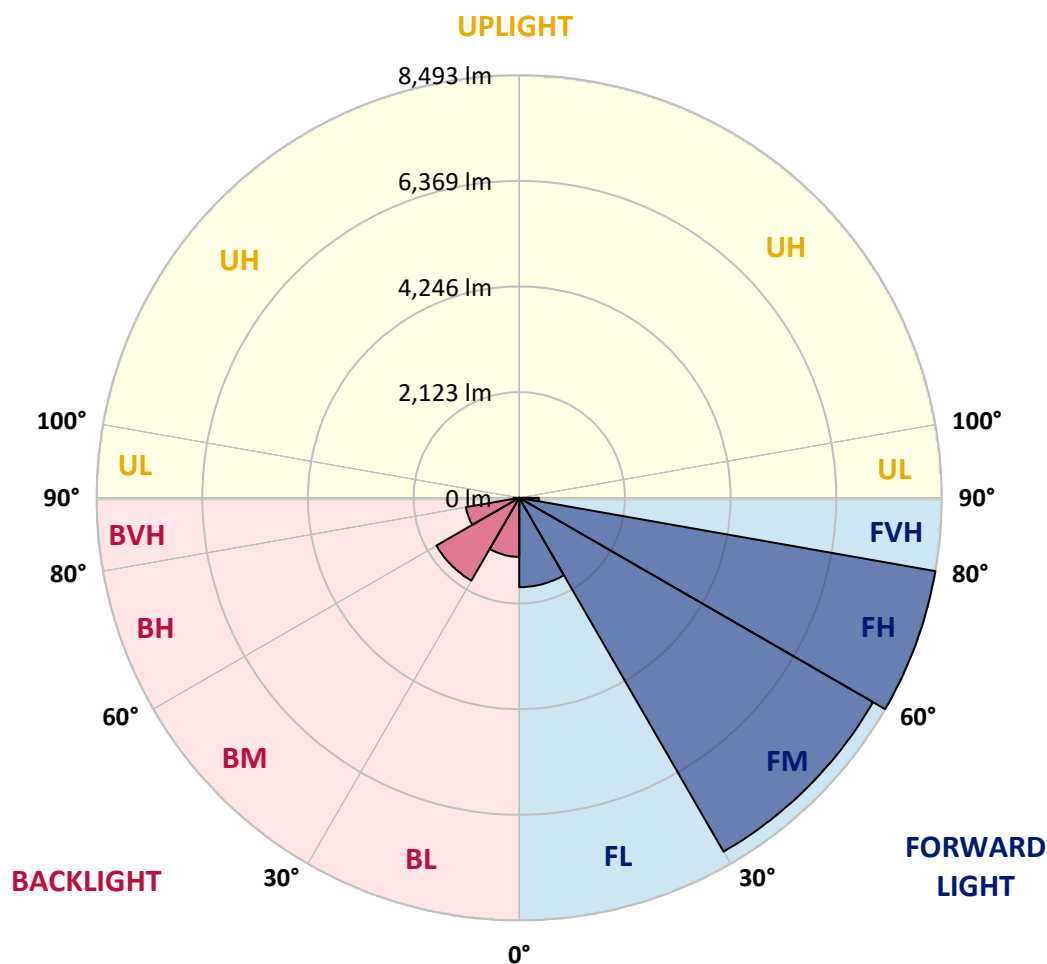
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1795.5 | 7.7       |                         |      |          |
| FM   | (30°-60°)   | 8210.7 | 35.4      |                         |      |          |
| FH   | (60°-80°)   | 8492.6 | 36.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 393.9  | 1.7       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1186.8 | 5.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 1921.6 | 8.3       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1089.3 | 4.7       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 115.6  | 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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0  | 4093.0  | 4093.0  | 4093.0  | 4093.0  | 4093.0  | 4093.0  |
| 2.5°  | 3959.8 | 3950.4 | 3962.1 | 3978.6 | 3996.6  | 4020.9  | 4035.0  | 4041.3  | 4065.6  | 4075.0  | 4095.4  |
| 5°    | 3776.4 | 3771.7 | 3791.3 | 3819.5 | 3859.5  | 3915.9  | 3961.4  | 3970.0  | 4034.3  | 4079.7  | 4121.3  |
| 7.5°  | 3643.1 | 3643.1 | 3665.9 | 3699.6 | 3744.2  | 3820.3  | 3884.5  | 3896.3  | 4005.3  | 4103.2  | 4180.0  |
| 10°   | 3537.3 | 3541.2 | 3567.9 | 3607.9 | 3660.4  | 3741.1  | 3826.5  | 3839.9  | 3997.4  | 4158.1  | 4280.4  |
| 12.5° | 3466.8 | 3476.2 | 3500.5 | 3536.5 | 3601.6  | 3699.6  | 3807.7  | 3825.8  | 4013.9  | 4236.5  | 4401.1  |
| 15°   | 3511.5 | 3527.1 | 3529.5 | 3544.4 | 3580.4  | 3687.0  | 3818.7  | 3837.5  | 4049.1  | 4316.4  | 4538.2  |
| 17.5° | 3707.4 | 3712.9 | 3688.6 | 3657.2 | 3640.0  | 3708.2  | 3851.6  | 3871.2  | 4091.5  | 4395.6  | 4669.9  |
| 20°   | 4005.3 | 4002.1 | 3949.6 | 3865.0 | 3777.2  | 3788.1  | 3905.7  | 3926.1  | 4148.7  | 4465.3  | 4801.6  |
| 22.5° | 4381.5 | 4370.5 | 4289.8 | 4133.8 | 3984.1  | 3921.4  | 4000.5  | 4017.8  | 4234.9  | 4564.9  | 4942.7  |
| 25°   | 4837.7 | 4813.4 | 4706.8 | 4497.5 | 4277.2  | 4115.8  | 4143.2  | 4159.7  | 4360.3  | 4676.2  | 5072.0  |
| 27.5° | 5318.9 | 5294.6 | 5159.0 | 4905.8 | 4612.7  | 4361.1  | 4339.9  | 4354.0  | 4503.0  | 4758.5  | 5167.6  |
| 30°   | 5822.1 | 5796.3 | 5672.4 | 5388.7 | 4968.6  | 4615.1  | 4523.3  | 4528.8  | 4603.3  | 4803.2  | 5246.0  |
| 32.5° | 6327.7 | 6303.4 | 6164.6 | 5835.4 | 5355.0  | 4887.8  | 4655.8  | 4648.8  | 4663.7  | 4849.4  | 5334.6  |
| 35°   | 6840.3 | 6849.7 | 6687.4 | 6323.0 | 5782.9  | 5191.2  | 4812.6  | 4797.7  | 4764.8  | 4944.3  | 5460.0  |
| 37.5° | 7388.9 | 7382.7 | 7172.6 | 6791.7 | 6230.5  | 5520.4  | 5037.5  | 5035.2  | 4921.5  | 5123.7  | 5656.7  |
| 40°   | 7755.8 | 7759.7 | 7631.9 | 7271.4 | 6682.7  | 5884.8  | 5326.0  | 5320.5  | 5171.6  | 5392.6  | 5914.6  |
| 42.5° | 7899.2 | 7925.1 | 7958.0 | 7729.1 | 7156.2  | 6307.3  | 5670.1  | 5662.2  | 5520.4  | 5778.2  | 6217.9  |
| 45°   | 7909.4 | 7961.1 | 8164.9 | 8135.9 | 7635.8  | 6790.9  | 6109.8  | 6087.8  | 5985.9  | 6290.8  | 6580.1  |
| 47.5° | 7821.6 | 7874.9 | 8213.5 | 8378.1 | 8064.6  | 7301.2  | 6624.0  | 6606.7  | 6518.9  | 6932.0  | 6972.0  |
| 50°   | 7629.6 | 7680.5 | 8113.2 | 8496.5 | 8417.3  | 7791.8  | 7216.5  | 7171.0  | 7124.0  | 7672.7  | 7420.3  |
| 52.5° | 7269.8 | 7367.8 | 7979.2 | 8524.7 | 8628.1  | 8227.6  | 7839.6  | 7809.9  | 7835.7  | 8454.1  | 7869.4  |
| 55°   | 6417.8 | 6527.5 | 7633.5 | 8501.2 | 8784.1  | 8593.7  | 8462.8  | 8461.2  | 8595.2  | 9274.0  | 8351.5  |
| 57.5° | 5940.5 | 6018.1 | 6929.6 | 8461.2 | 8969.1  | 8957.3  | 9079.6  | 9094.5  | 9355.5  | 10166.8 | 8856.2  |
| 60°   | 5670.8 | 5752.4 | 6573.0 | 8313.1 | 9256.0  | 9427.6  | 9709.0  | 9738.8  | 10128.4 | 11155.1 | 9463.7  |
| 62.5° | 5425.5 | 5514.9 | 6352.0 | 8011.3 | 9593.8  | 10100.1 | 10463.0 | 10489.7 | 10946.6 | 12171.0 | 10050.8 |
| 65°   | 5006.2 | 5107.3 | 6028.3 | 7813.0 | 9901.0  | 10977.2 | 11421.6 | 11439.7 | 11886.4 | 13235.4 | 10499.9 |
| 67.5° | 4413.6 | 4506.1 | 5417.7 | 7374.8 | 10128.4 | 12042.4 | 12696.1 | 12706.3 | 12818.4 | 13987.0 | 10729.5 |
| 70°   | 3721.5 | 3756.8 | 4547.6 | 6470.3 | 9859.5  | 13038.6 | 14092.8 | 14095.2 | 13668.0 | 14468.3 | 10691.9 |
| 72.5° | 2614.8 | 2697.9 | 3301.4 | 4898.0 | 8473.0  | 12917.1 | 14817.9 | 14844.5 | 14063.1 | 14225.3 | 9837.6  |
| 75°   | 1603.7 | 1691.5 | 2070.8 | 2968.3 | 5375.3  | 10158.9 | 13690.8 | 13875.7 | 13322.4 | 12683.6 | 8036.4  |
| 77.5° | 1072.2 | 1105.2 | 1351.3 | 1730.6 | 2435.3  | 5844.8  | 10525.7 | 10873.8 | 11067.4 | 9249.7  | 5139.4  |
| 80°   | 598.0  | 660.7  | 895.9  | 1075.4 | 1083.2  | 2322.4  | 6311.2  | 6392.7  | 6157.6  | 3683.1  | 1585.6  |
| 82.5° | 316.7  | 351.1  | 598.0  | 631.7  | 591.0   | 777.5   | 2352.2  | 2354.6  | 1967.4  | 987.6   | 471.1   |
| 85°   | 245.3  | 274.3  | 409.9  | 385.6  | 301.8   | 344.9   | 776.0   | 818.3   | 669.4   | 404.4   | 153.6   |
| 87.5° | 122.3  | 152.1  | 278.3  | 244.5  | 118.4   | 98.8    | 277.5   | 296.3   | 264.1   | 158.3   | 55.7    |
| 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°    | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 | 4093.0 |
| 2.5°  | 4103.2 | 4110.3 | 4118.9 | 4109.5 | 4106.4 | 4093.8 | 4072.7 | 4068.0 | 4057.0 | 4057.8 | 4064.0 |
| 5°    | 4139.3 | 4151.0 | 4146.3 | 4110.3 | 4067.2 | 4006.8 | 3944.1 | 3890.8 | 3855.5 | 3853.2 | 3850.8 |
| 7.5°  | 4208.3 | 4216.1 | 4179.3 | 4076.6 | 3955.9 | 3816.4 | 3684.7 | 3569.5 | 3499.7 | 3482.5 | 3478.5 |
| 10°   | 4316.4 | 4314.9 | 4213.7 | 4006.8 | 3766.2 | 3516.9 | 3305.3 | 3145.4 | 3052.1 | 3024.7 | 3017.7 |
| 12.5° | 4437.1 | 4419.1 | 4225.5 | 3879.8 | 3498.1 | 3152.5 | 2884.4 | 2706.5 | 2609.3 | 2577.9 | 2570.1 |
| 15°   | 4561.8 | 4517.1 | 4196.5 | 3690.2 | 3168.9 | 2759.8 | 2478.4 | 2313.8 | 2261.3 | 2244.0 | 2240.9 |
| 17.5° | 4677.8 | 4591.5 | 4113.4 | 3433.1 | 2793.5 | 2368.7 | 2149.2 | 2083.4 | 2095.9 | 2118.6 | 2119.4 |
| 20°   | 4791.4 | 4641.7 | 3980.2 | 3108.6 | 2397.7 | 2046.5 | 1972.1 | 2020.7 | 2080.2 | 2126.5 | 2132.7 |
| 22.5° | 4903.5 | 4677.0 | 3808.5 | 2733.9 | 2043.4 | 1865.5 | 1918.0 | 2006.5 | 2074.7 | 2124.9 | 2133.5 |
| 25°   | 4997.6 | 4685.6 | 3571.8 | 2334.2 | 1797.3 | 1797.3 | 1892.1 | 1976.0 | 2043.4 | 2092.8 | 2101.4 |
| 27.5° | 5032.0 | 4627.6 | 3237.9 | 1964.2 | 1673.4 | 1765.9 | 1856.1 | 1925.8 | 1983.0 | 2035.5 | 2045.0 |
| 30°   | 5045.4 | 4520.2 | 2852.3 | 1667.2 | 1622.5 | 1732.2 | 1807.5 | 1867.0 | 1921.1 | 1970.5 | 1979.1 |
| 32.5° | 5047.7 | 4390.9 | 2443.1 | 1498.6 | 1587.2 | 1696.9 | 1747.1 | 1799.6 | 1857.6 | 1877.2 | 1880.4 |
| 35°   | 5062.6 | 4238.0 | 2012.0 | 1412.4 | 1554.3 | 1664.0 | 1704.0 | 1741.6 | 1647.6 | 1654.6 | 1660.9 |
| 37.5° | 5105.7 | 4086.8 | 1651.5 | 1363.8 | 1533.1 | 1646.8 | 1694.6 | 1558.2 | 1484.5 | 1467.3 | 1464.9 |
| 40°   | 5186.4 | 3925.3 | 1384.2 | 1324.6 | 1525.3 | 1655.4 | 1634.2 | 1454.7 | 1327.8 | 1232.9 | 1218.8 |
| 42.5° | 5298.5 | 3751.3 | 1213.3 | 1298.8 | 1530.8 | 1696.9 | 1550.4 | 1355.2 | 1144.4 | 1083.2 | 1075.4 |
| 45°   | 5424.7 | 3568.7 | 1120.8 | 1280.7 | 1549.6 | 1729.1 | 1533.1 | 1222.7 | 1058.9 | 1012.7 | 1008.8 |
| 47.5° | 5547.0 | 3345.3 | 1073.0 | 1272.9 | 1575.5 | 1703.2 | 1460.2 | 1182.0 | 1018.2 | 993.9  | 996.2  |
| 50°   | 5687.3 | 3143.8 | 1044.0 | 1264.3 | 1598.2 | 1686.8 | 1377.9 | 1160.8 | 1002.5 | 1032.3 | 1063.6 |
| 52.5° | 5805.7 | 2935.4 | 1018.2 | 1247.0 | 1606.8 | 1657.8 | 1356.8 | 1164.7 | 1002.5 | 1059.7 | 1089.5 |
| 55°   | 5946.0 | 2777.8 | 988.4  | 1211.0 | 1590.3 | 1575.5 | 1341.9 | 1188.3 | 1014.2 | 978.2  | 981.3  |
| 57.5° | 6127.0 | 2726.1 | 955.5  | 1154.5 | 1535.5 | 1455.5 | 1334.8 | 1211.0 | 1007.2 | 984.5  | 992.3  |
| 60°   | 6377.8 | 2780.9 | 942.1  | 1080.9 | 1450.0 | 1361.5 | 1335.6 | 1199.2 | 957.8  | 918.6  | 919.4  |
| 62.5° | 6616.9 | 2842.1 | 941.4  | 1034.6 | 1345.0 | 1277.6 | 1317.6 | 1160.8 | 932.7  | 910.0  | 918.6  |
| 65°   | 6695.3 | 2780.2 | 903.7  | 982.9  | 1226.7 | 1177.3 | 1284.7 | 1120.1 | 913.9  | 879.4  | 877.9  |
| 67.5° | 6590.2 | 2588.1 | 827.7  | 899.0  | 1091.1 | 1060.5 | 1241.5 | 1071.5 | 884.1  | 855.9  | 851.2  |
| 70°   | 6278.3 | 2159.4 | 733.6  | 788.5  | 936.6  | 928.8  | 1173.4 | 1015.0 | 844.2  | 819.9  | 799.5  |
| 72.5° | 5438.8 | 1538.6 | 618.4  | 656.0  | 762.6  | 787.7  | 1079.3 | 941.4  | 787.7  | 735.2  | 703.9  |
| 75°   | 4466.9 | 1138.9 | 507.9  | 515.7  | 579.2  | 647.4  | 950.0  | 855.1  | 721.1  | 631.7  | 607.5  |
| 77.5° | 2735.5 | 696.8  | 404.4  | 407.6  | 415.4  | 516.5  | 782.2  | 758.7  | 636.5  | 526.7  | 509.5  |
| 80°   | 885.7  | 380.1  | 292.4  | 307.3  | 283.7  | 378.6  | 605.1  | 645.9  | 546.3  | 440.5  | 421.7  |
| 82.5° | 337.0  | 221.8  | 197.5  | 207.7  | 196.7  | 254.0  | 441.3  | 517.3  | 447.6  | 362.1  | 294.7  |
| 85°   | 163.0  | 125.4  | 116.8  | 130.9  | 121.5  | 130.1  | 282.2  | 380.9  | 339.4  | 235.9  | 219.5  |
| 87.5° | 58.0   | 55.7   | 44.7   | 60.4   | 51.7   | 46.2   | 86.2   | 192.0  | 224.2  | 162.2  | 145.0  |
| 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)