

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: P318889

Luminaire Tested: **GAN-SA5C-830-U-T4FT**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P318889  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA5C-830-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 28261 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

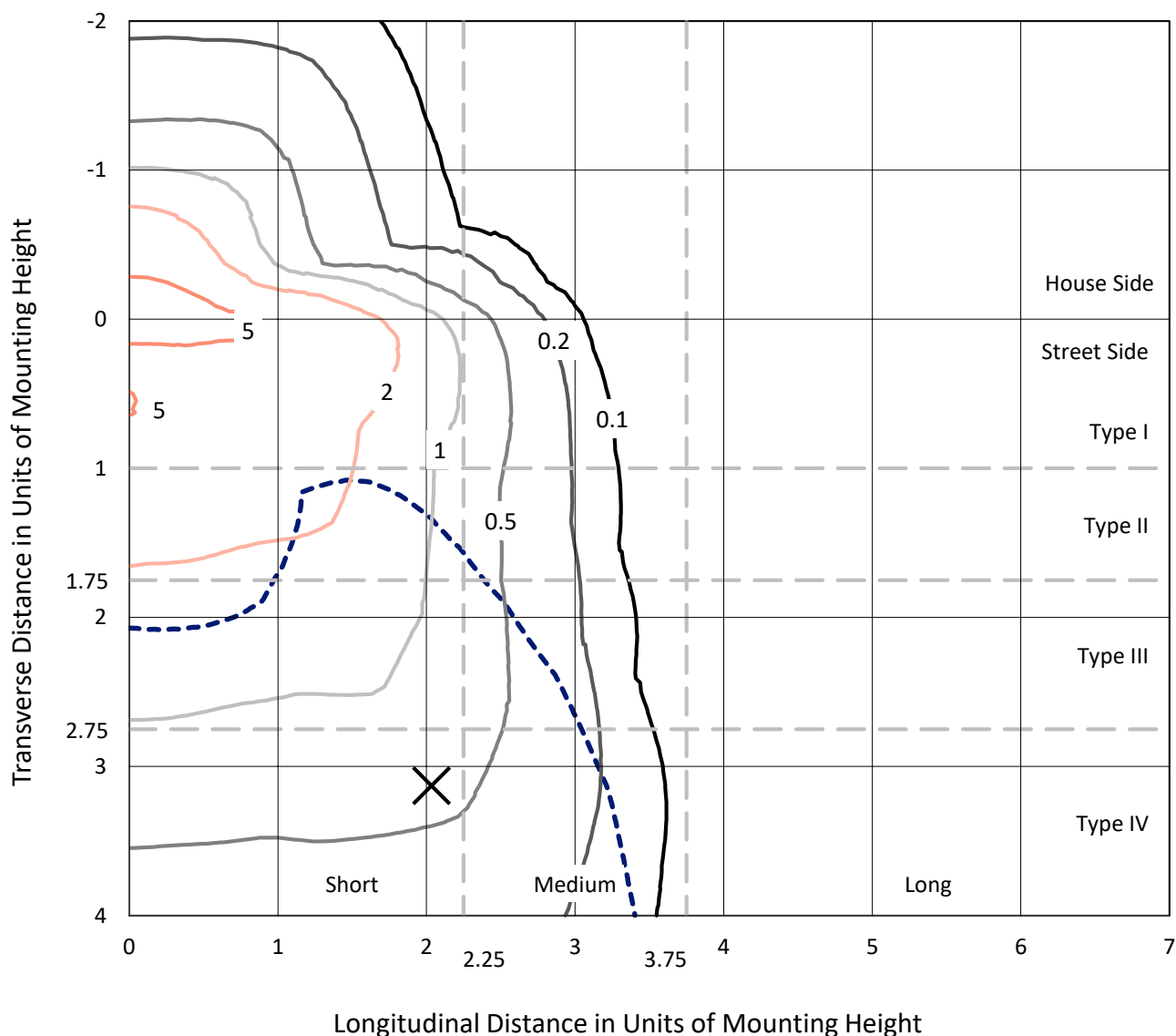
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

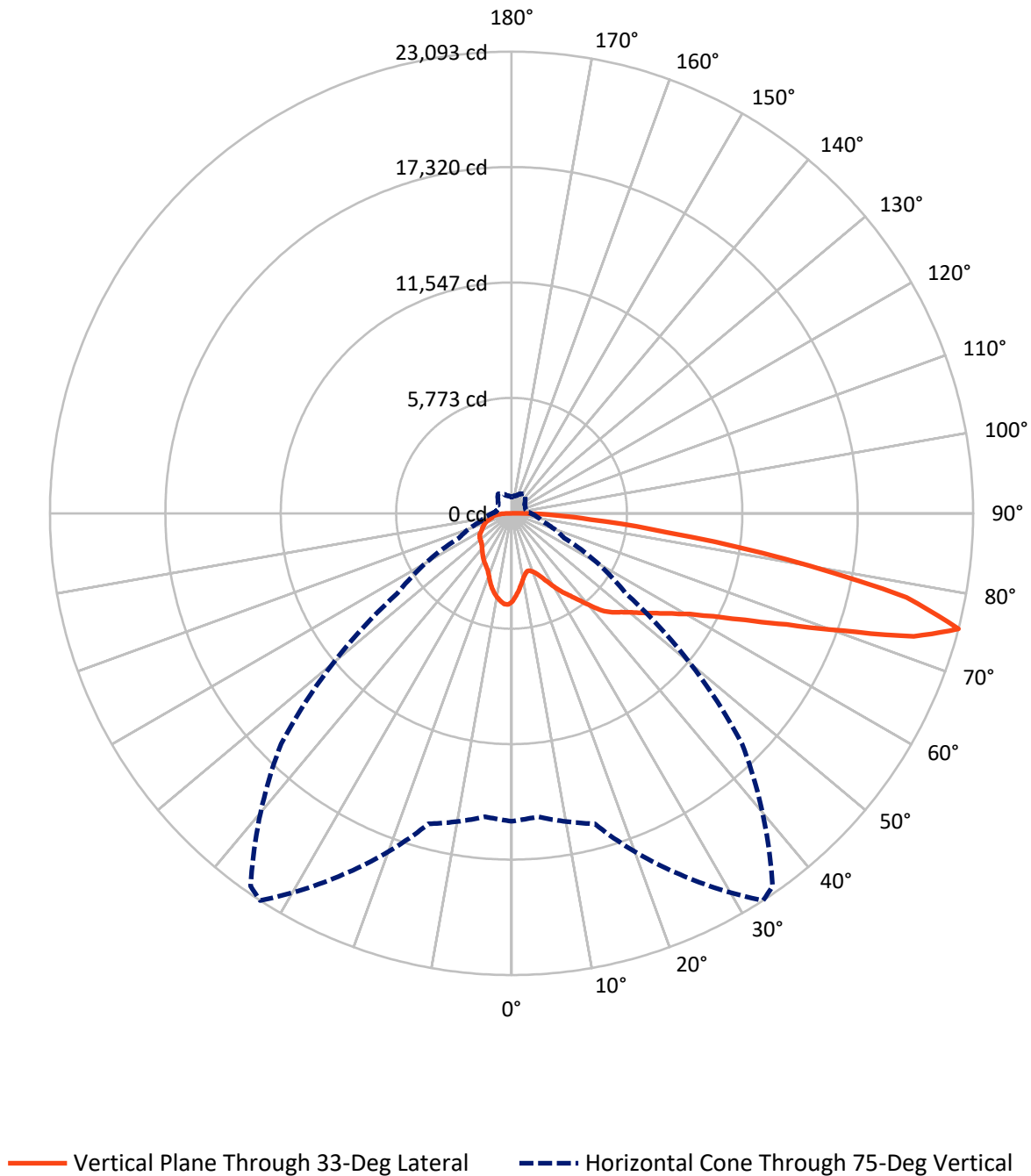
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type IV - 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    | 6068.4   | 0.0    | 6068.4  |
|                    | % Fixture | 21.5     | 0.0    | 21.5    |
| <b>Street Side</b> | Lumens    | 22192.6  | 0.0    | 22192.6 |
|                    | % Fixture | 78.5     | 0.0    | 78.5    |
| <b>Total</b>       | Lumens    | 28261.0  | 0.0    | 28261.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 399.5   | 1.4       |
| 10°-20°   | 1082.0  | 3.8       |
| 20°-30°   | 1767.1  | 6.3       |
| 30°-40°   | 2631.6  | 9.3       |
| 40°-50°   | 3774.4  | 13.4      |
| 50°-60°   | 5181.6  | 18.3      |
| 60°-70°   | 6487.2  | 23.0      |
| 70°-80°   | 5868.6  | 20.8      |
| 80°-90°   | 1069.0  | 3.8       |
| 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°    | 28261.0 | 100.0     |
| 0°-180°   | 28261.0 | 100.0     |

**Coefficient of Utilization**



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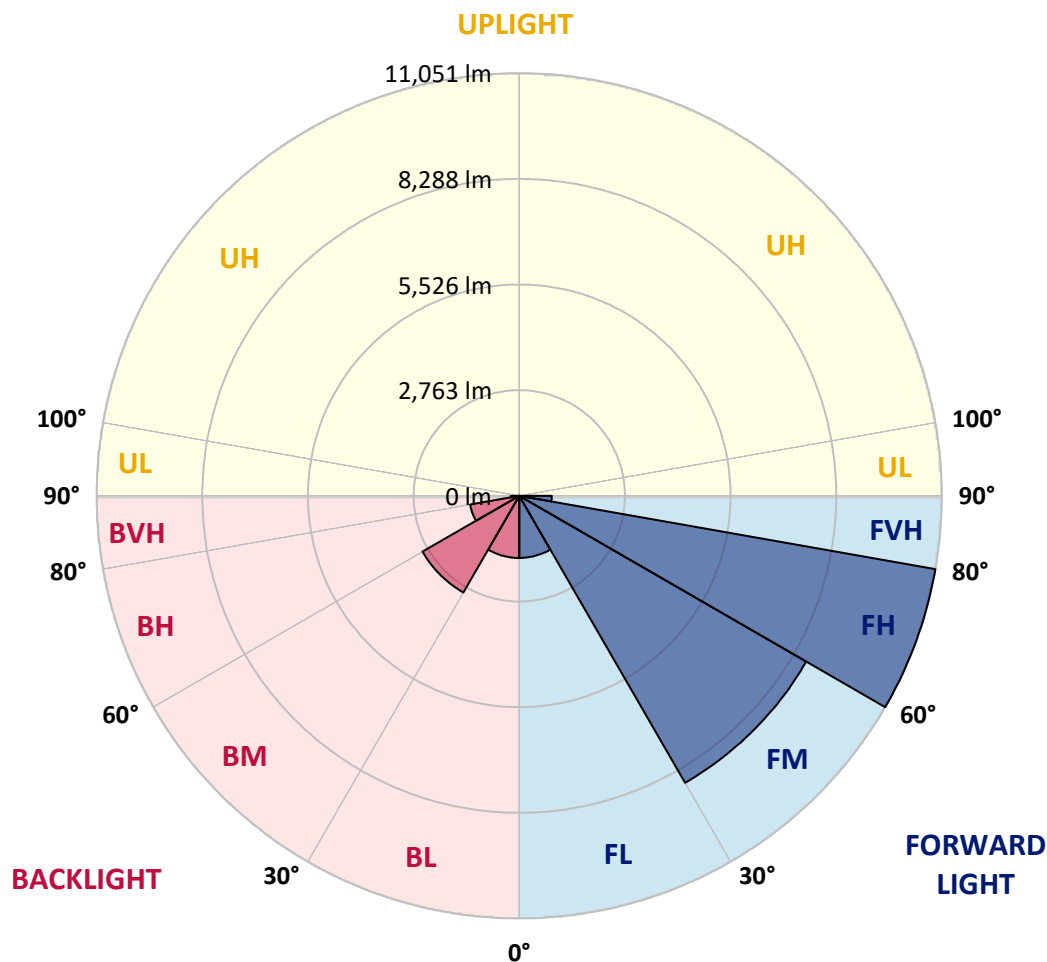
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1623.2  | 5.7       |                         |      |          |
| FM   | (30°-60°)   | 8667.1  | 30.7      |                         |      |          |
| FH   | (60°-80°)   | 11051.0 | 39.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 851.4   | 3.0       |                         |      | G5       |
| BL   | (0°-30°)    | 1625.4  | 5.8       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2920.5  | 10.3      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1304.8  | 4.6       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 217.6   | 0.8       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 33°     | 35°     | 45°     | 55°     | 65°    | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| 0°    | 4417.4  | 4417.4  | 4417.4  | 4417.4  | 4417.4  | 4417.4  | 4417.4  | 4417.4  | 4417.4 | 4417.4  | 4417.4  |
| 2.5°  | 4102.0  | 4086.4  | 4115.7  | 4119.6  | 4145.0  | 4154.8  | 4189.9  | 4244.6  | 4289.5 | 4341.2  | 4388.1  |
| 5°    | 3730.1  | 3719.4  | 3760.4  | 3789.6  | 3845.3  | 3868.7  | 3951.7  | 4067.9  | 4171.3 | 4288.5  | 4394.9  |
| 7.5°  | 3376.7  | 3370.9  | 3416.7  | 3483.1  | 3547.5  | 3579.8  | 3723.3  | 3892.2  | 4064.9 | 4254.3  | 4417.4  |
| 10°   | 3079.0  | 3077.0  | 3120.9  | 3186.4  | 3281.0  | 3317.2  | 3502.6  | 3725.2  | 3967.3 | 4228.0  | 4455.4  |
| 12.5° | 2912.0  | 2918.9  | 2939.4  | 2994.0  | 3081.9  | 3118.0  | 3324.0  | 3585.6  | 3885.3 | 4219.2  | 4511.1  |
| 15°   | 2953.0  | 2963.8  | 2928.6  | 2926.7  | 2989.2  | 3017.5  | 3210.8  | 3486.0  | 3826.7 | 4233.8  | 4592.1  |
| 17.5° | 3127.8  | 3129.7  | 3037.0  | 2978.4  | 3016.5  | 3031.1  | 3175.6  | 3429.4  | 3792.6 | 4267.0  | 4693.6  |
| 20°   | 3373.8  | 3368.9  | 3204.9  | 3107.3  | 3127.8  | 3131.7  | 3225.4  | 3430.4  | 3789.6 | 4324.6  | 4825.4  |
| 22.5° | 3699.8  | 3663.7  | 3443.1  | 3310.3  | 3305.4  | 3299.6  | 3353.3  | 3502.6  | 3832.6 | 4418.3  | 4982.6  |
| 25°   | 4125.5  | 4091.3  | 3787.7  | 3606.1  | 3567.1  | 3552.4  | 3560.2  | 3656.9  | 3917.5 | 4518.9  | 5158.3  |
| 27.5° | 4598.9  | 4539.4  | 4246.5  | 3989.8  | 3908.7  | 3888.2  | 3841.4  | 3874.6  | 4010.3 | 4615.5  | 5367.2  |
| 30°   | 4995.3  | 4963.1  | 4707.3  | 4402.7  | 4307.0  | 4277.8  | 4154.8  | 4118.6  | 4144.0 | 4747.3  | 5630.8  |
| 32.5° | 5216.9  | 5195.4  | 5040.2  | 4794.2  | 4705.3  | 4664.3  | 4490.6  | 4418.3  | 4358.8 | 4955.2  | 5988.1  |
| 35°   | 5485.3  | 5471.7  | 5377.9  | 5199.3  | 5067.5  | 5024.6  | 4889.8  | 4814.7  | 4661.4 | 5241.3  | 6449.8  |
| 37.5° | 5827.0  | 5812.4  | 5814.3  | 5669.8  | 5512.7  | 5472.6  | 5383.8  | 5304.7  | 5053.8 | 5617.1  | 6951.6  |
| 40°   | 6213.6  | 6185.3  | 6174.5  | 6167.7  | 6068.1  | 6045.7  | 5998.8  | 5891.4  | 5545.9 | 6066.2  | 7446.5  |
| 42.5° | 6795.4  | 6694.9  | 6480.1  | 6561.1  | 6659.7  | 6648.0  | 6686.1  | 6531.8  | 6092.5 | 6597.2  | 7929.8  |
| 45°   | 7356.7  | 7191.7  | 6820.8  | 6838.4  | 7054.1  | 7119.5  | 7404.6  | 7295.2  | 6685.1 | 7179.1  | 8429.6  |
| 47.5° | 7612.5  | 7487.5  | 7172.2  | 7173.2  | 7387.0  | 7522.7  | 8147.5  | 8069.4  | 7307.9 | 7839.9  | 9039.7  |
| 50°   | 7898.5  | 7773.6  | 7490.5  | 7596.9  | 7783.3  | 7927.8  | 8865.0  | 8824.9  | 7900.5 | 8563.3  | 9770.9  |
| 52.5° | 8210.9  | 7999.1  | 7819.4  | 8009.8  | 8271.4  | 8439.3  | 9583.5  | 9474.1  | 8444.2 | 9291.6  | 10611.4 |
| 55°   | 8214.8  | 8157.2  | 8293.9  | 8433.5  | 8824.9  | 9030.9  | 10336.1 | 10047.2 | 8887.4 | 10007.1 | 11295.7 |
| 57.5° | 8682.4  | 8588.7  | 8878.6  | 8943.1  | 9454.6  | 9686.9  | 11084.9 | 10546.0 | 9338.4 | 10555.8 | 11664.7 |
| 60°   | 9301.3  | 9221.3  | 9458.5  | 9628.4  | 10233.6 | 10544.1 | 11884.4 | 11058.5 | 9692.8 | 10969.7 | 11647.2 |
| 62.5° | 10370.3 | 10279.5 | 10276.6 | 10514.8 | 11329.9 | 11691.1 | 12781.5 | 11561.3 | 9833.4 | 11051.7 | 11150.3 |
| 65°   | 11935.2 | 11790.7 | 11518.3 | 11631.5 | 12844.0 | 13204.2 | 13784.1 | 11925.4 | 9647.9 | 10612.4 | 9870.5  |
| 67.5° | 13458.0 | 13453.2 | 13118.3 | 13350.7 | 14843.3 | 15132.2 | 14926.3 | 11961.5 | 9069.0 | 9082.7  | 7599.8  |
| 70°   | 14976.0 | 14995.6 | 14939.0 | 15747.3 | 17544.5 | 17845.1 | 16142.6 | 11476.3 | 7767.7 | 6559.2  | 4553.0  |
| 72.5° | 16178.7 | 16173.9 | 16458.9 | 18543.1 | 21050.0 | 20982.7 | 17167.6 | 10006.2 | 5577.1 | 3540.7  | 2176.0  |
| 75°   | 15399.7 | 15229.9 | 16079.2 | 19927.4 | 23093.2 | 22764.3 | 16295.9 | 6979.9  | 2894.5 | 1611.7  | 1171.5  |
| 77.5° | 10044.2 | 10205.3 | 11451.9 | 16461.8 | 20199.7 | 19799.5 | 11955.7 | 3256.6  | 1363.8 | 1057.2  | 849.3   |
| 80°   | 3637.4  | 3807.2  | 5362.3  | 9324.8  | 13916.9 | 13851.5 | 5887.5  | 1338.4  | 922.5  | 798.5   | 618.9   |
| 82.5° | 1251.5  | 1314.0  | 2115.4  | 4141.1  | 7857.5  | 8150.4  | 2215.0  | 760.5   | 670.7  | 566.2   | 423.7   |
| 85°   | 491.0   | 562.3   | 967.4   | 1992.4  | 3963.4  | 3992.7  | 897.1   | 454.9   | 466.6  | 371.0   | 232.3   |
| 87.5° | 186.5   | 226.5   | 462.7   | 925.4   | 1809.9  | 1662.5  | 321.2   | 216.7   | 265.5  | 220.6   | 110.3   |
| 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°    | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 | 4417.4 |
| 2.5°  | 4424.2 | 4444.7 | 4487.6 | 4516.9 | 4548.2 | 4557.0 | 4560.9 | 4568.7 | 4576.5 | 4573.5 | 4574.5 |
| 5°    | 4451.5 | 4491.5 | 4560.9 | 4590.1 | 4603.8 | 4588.2 | 4557.9 | 4533.5 | 4516.0 | 4506.2 | 4503.3 |
| 7.5°  | 4496.4 | 4553.0 | 4627.2 | 4622.4 | 4591.1 | 4521.8 | 4443.7 | 4385.1 | 4336.3 | 4318.8 | 4309.0 |
| 10°   | 4556.0 | 4622.4 | 4674.1 | 4618.5 | 4527.7 | 4407.6 | 4290.4 | 4199.7 | 4126.4 | 4098.1 | 4093.3 |
| 12.5° | 4632.1 | 4699.5 | 4709.2 | 4591.1 | 4440.8 | 4276.8 | 4117.7 | 3997.6 | 3888.2 | 3853.1 | 3845.3 |
| 15°   | 4730.7 | 4794.2 | 4733.6 | 4543.3 | 4333.4 | 4112.8 | 3906.8 | 3743.8 | 3628.6 | 3585.6 | 3570.0 |
| 17.5° | 4834.2 | 4894.7 | 4738.5 | 4464.2 | 4192.8 | 3918.5 | 3659.8 | 3492.9 | 3361.1 | 3311.3 | 3305.4 |
| 20°   | 4958.2 | 4985.5 | 4718.0 | 4351.0 | 3999.5 | 3666.6 | 3394.3 | 3237.1 | 3166.8 | 3131.7 | 3127.8 |
| 22.5° | 5111.4 | 5082.2 | 4671.2 | 4197.7 | 3754.5 | 3375.7 | 3154.1 | 3080.9 | 3063.3 | 3055.5 | 3058.5 |
| 25°   | 5273.5 | 5183.7 | 4601.9 | 3997.6 | 3445.0 | 3084.8 | 2978.4 | 2998.9 | 3022.3 | 3019.4 | 3019.4 |
| 27.5° | 5452.1 | 5287.2 | 4495.4 | 3732.1 | 3102.4 | 2846.6 | 2859.3 | 2934.5 | 2969.6 | 2968.7 | 2967.7 |
| 30°   | 5681.5 | 5404.3 | 4359.8 | 3412.8 | 2782.2 | 2678.7 | 2755.8 | 2847.6 | 2895.4 | 2893.5 | 2894.5 |
| 32.5° | 5963.7 | 5533.2 | 4175.3 | 3056.5 | 2550.8 | 2554.7 | 2643.6 | 2734.4 | 2790.0 | 2785.1 | 2786.1 |
| 35°   | 6293.6 | 5677.6 | 3925.3 | 2705.1 | 2397.6 | 2456.1 | 2526.4 | 2589.9 | 2642.6 | 2635.8 | 2628.9 |
| 37.5° | 6652.9 | 5819.2 | 3593.4 | 2390.7 | 2272.6 | 2364.4 | 2423.0 | 2433.7 | 2458.1 | 2440.5 | 2427.8 |
| 40°   | 6994.5 | 5927.6 | 3165.9 | 2133.0 | 2146.7 | 2286.3 | 2324.4 | 2281.4 | 2237.5 | 2231.6 | 2214.0 |
| 42.5° | 7292.3 | 5963.7 | 2733.4 | 1927.0 | 2013.9 | 2204.3 | 2227.7 | 2137.9 | 2058.8 | 2021.7 | 2006.1 |
| 45°   | 7606.6 | 5976.4 | 2330.2 | 1754.3 | 1886.0 | 2131.1 | 2156.4 | 2036.4 | 1925.1 | 1845.0 | 1818.7 |
| 47.5° | 8017.6 | 6068.1 | 2016.9 | 1626.4 | 1788.4 | 2082.3 | 2118.4 | 1955.3 | 1810.9 | 1696.7 | 1672.2 |
| 50°   | 8555.5 | 6249.7 | 1762.1 | 1528.7 | 1725.0 | 2050.0 | 2091.0 | 1876.3 | 1717.2 | 1579.5 | 1555.1 |
| 52.5° | 9153.0 | 6416.6 | 1556.1 | 1449.7 | 1663.5 | 1993.4 | 2055.9 | 1819.7 | 1629.3 | 1471.1 | 1444.8 |
| 55°   | 9570.8 | 6288.7 | 1390.1 | 1367.7 | 1583.4 | 1912.4 | 2007.1 | 1771.8 | 1503.4 | 1365.7 | 1342.3 |
| 57.5° | 9650.8 | 5851.4 | 1264.2 | 1282.7 | 1486.8 | 1810.9 | 1931.9 | 1665.4 | 1435.0 | 1319.8 | 1295.4 |
| 60°   | 9432.1 | 5242.3 | 1170.5 | 1204.6 | 1383.3 | 1683.0 | 1791.3 | 1590.2 | 1369.6 | 1271.0 | 1250.5 |
| 62.5° | 8882.5 | 4618.5 | 1101.2 | 1134.4 | 1286.6 | 1553.2 | 1703.5 | 1511.2 | 1303.2 | 1215.4 | 1194.9 |
| 65°   | 7772.6 | 3877.5 | 1034.8 | 1071.9 | 1196.8 | 1440.9 | 1624.4 | 1438.0 | 1237.8 | 1170.5 | 1151.0 |
| 67.5° | 5867.0 | 2904.2 | 972.3  | 1005.5 | 1116.8 | 1343.3 | 1538.5 | 1365.7 | 1174.4 | 1131.4 | 1108.0 |
| 70°   | 3454.8 | 1818.7 | 901.0  | 936.2  | 1032.8 | 1241.7 | 1446.7 | 1286.6 | 1095.3 | 1075.8 | 1045.5 |
| 72.5° | 1607.8 | 1094.3 | 820.0  | 854.2  | 927.4  | 1106.0 | 1328.6 | 1183.2 | 1001.6 | 958.6  | 917.6  |
| 75°   | 959.6  | 800.5  | 724.3  | 754.6  | 806.3  | 961.6  | 1180.2 | 1077.7 | 912.8  | 856.1  | 813.2  |
| 77.5° | 717.5  | 612.1  | 618.9  | 651.1  | 693.1  | 841.5  | 1045.5 | 994.8  | 844.4  | 800.5  | 771.2  |
| 80°   | 516.4  | 464.7  | 504.7  | 539.8  | 583.8  | 765.3  | 1001.6 | 919.6  | 763.4  | 704.8  | 677.5  |
| 82.5° | 344.6  | 333.9  | 379.7  | 415.9  | 458.8  | 669.7  | 941.1  | 805.4  | 652.1  | 577.9  | 517.4  |
| 85°   | 190.4  | 201.1  | 255.8  | 271.4  | 308.5  | 471.5  | 771.2  | 647.2  | 491.0  | 395.4  | 377.8  |
| 87.5° | 79.1   | 92.7   | 137.6  | 132.8  | 164.0  | 281.1  | 507.6  | 390.5  | 312.4  | 233.3  | 181.6  |
| 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)