

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: P324721

Luminaire Tested: **GAN-SA7B-727-U-AFL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P324721  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-30)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7B-727-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27670 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

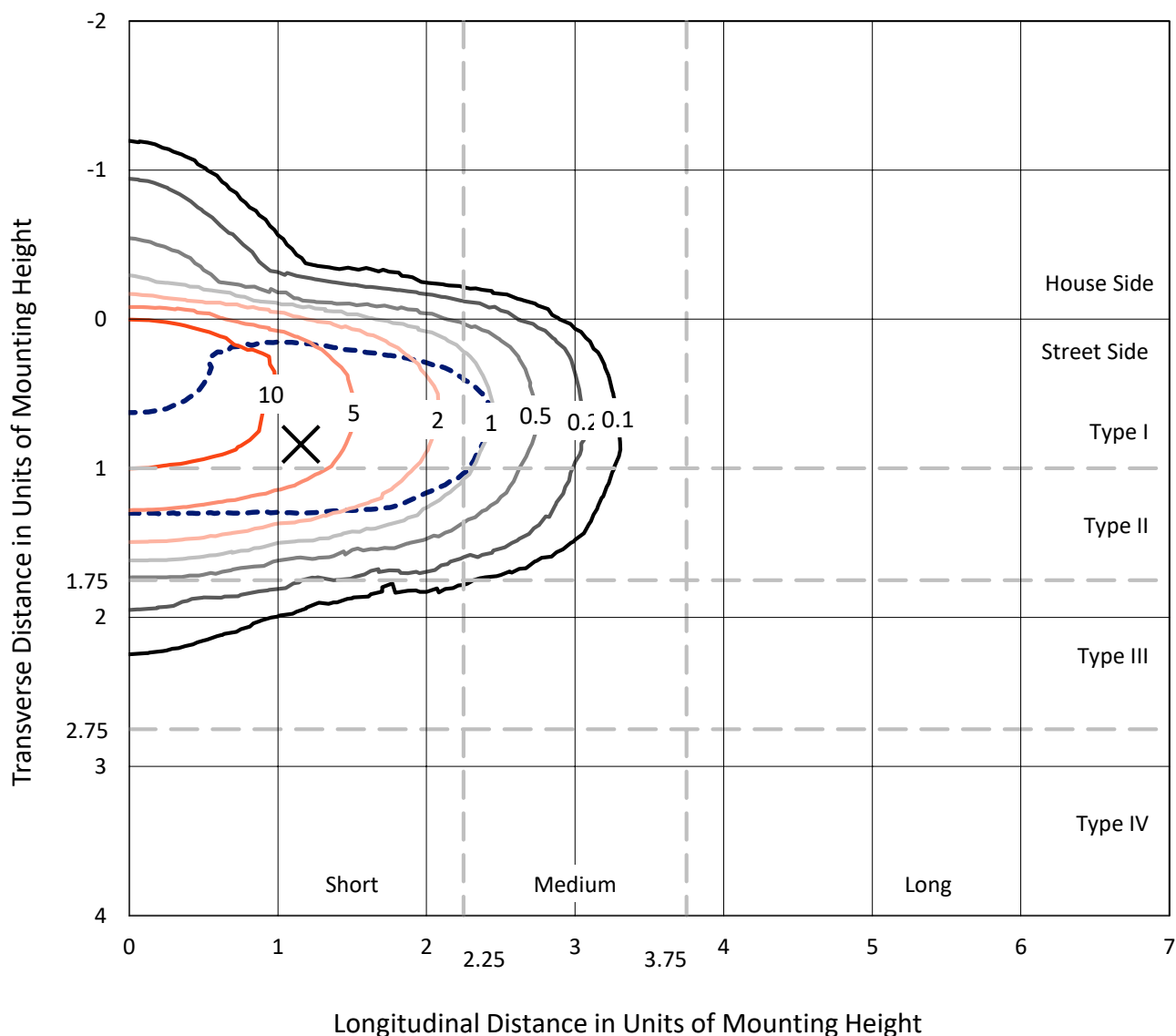
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

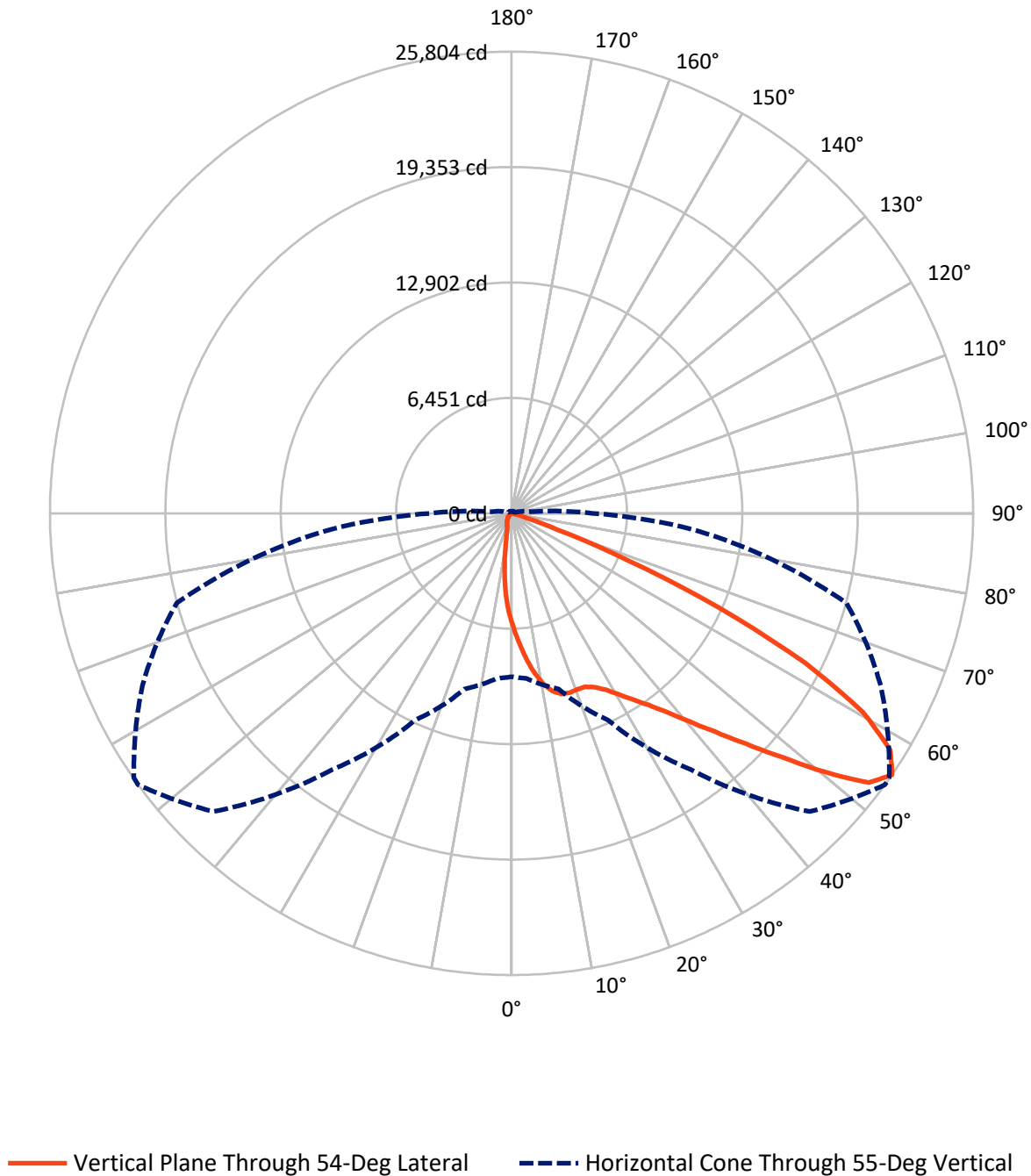
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.2 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    | 1380.5   | 0.0    | 1380.5  |
|                    | % Fixture | 5.0      | 0.0    | 5.0     |
| <b>Street Side</b> | Lumens    | 26289.5  | 0.0    | 26289.5 |
|                    | % Fixture | 95.0     | 0.0    | 95.0    |
| <b>Total</b>       | Lumens    | 27670.0  | 0.0    | 27670.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 570.7   | 2.1       |
| 10°-20°   | 1565.1  | 5.7       |
| 20°-30°   | 2672.1  | 9.7       |
| 30°-40°   | 4288.3  | 15.5      |
| 40°-50°   | 6852.7  | 24.8      |
| 50°-60°   | 7342.8  | 26.5      |
| 60°-70°   | 3770.0  | 13.6      |
| 70°-80°   | 571.1   | 2.1       |
| 80°-90°   | 37.2    | 0.1       |
| 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°    | 27670.0 | 100.0     |
| 0°-180°   | 27670.0 | 100.0     |

**Coefficient of Utilization**



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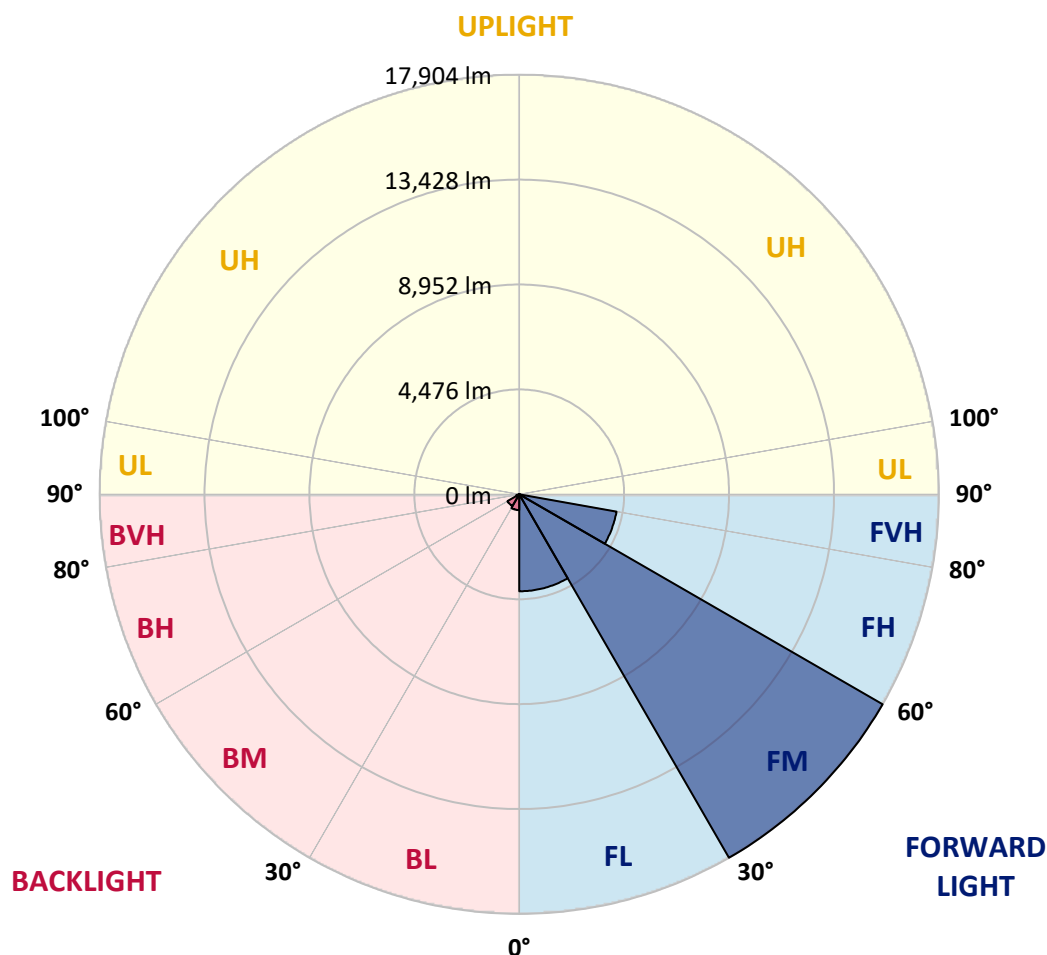
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4136.2  | 14.9      |                         |      |         |
| FM   | (30°-60°)   | 17903.7 | 64.7      |                         |      |         |
| FH   | (60°-80°)   | 4213.9  | 15.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 35.7    | 0.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 671.7   | 2.4       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 580.1   | 2.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 127.2   | 0.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.5     | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  | 6197.0  |
| 2.5°  | 7776.7  | 7660.8  | 7664.4  | 7611.8  | 7419.4  | 7268.8  | 7112.3  | 7075.3  | 6831.5  | 6575.8  | 6329.6  |
| 5°    | 9121.0  | 9036.2  | 9015.8  | 8914.3  | 8646.6  | 8363.4  | 8059.9  | 7989.4  | 7512.6  | 6989.2  | 6474.2  |
| 7.5°  | 9811.7  | 9812.9  | 9796.1  | 9759.1  | 9591.8  | 9317.0  | 8946.5  | 8872.4  | 8223.6  | 7438.5  | 6624.8  |
| 10°   | 9610.9  | 9656.3  | 9749.5  | 9872.6  | 10000.5 | 9965.8  | 9687.4  | 9620.5  | 8915.5  | 7914.1  | 6792.1  |
| 12.5° | 9142.5  | 9148.5  | 9252.4  | 9454.4  | 9822.4  | 10200.0 | 10204.8 | 10182.1 | 9576.3  | 8411.2  | 6976.1  |
| 15°   | 8909.5  | 8932.2  | 8970.4  | 9100.7  | 9449.6  | 10054.2 | 10486.8 | 10519.1 | 10182.1 | 8939.4  | 7172.0  |
| 17.5° | 9062.4  | 9094.7  | 9062.4  | 9078.0  | 9279.9  | 9823.6  | 10535.8 | 10618.3 | 10711.5 | 9461.6  | 7357.3  |
| 20°   | 9477.1  | 9507.0  | 9449.6  | 9386.3  | 9425.7  | 9756.7  | 10501.2 | 10612.3 | 11126.1 | 9925.2  | 7512.6  |
| 22.5° | 10036.3 | 10048.3 | 9961.0  | 9857.1  | 9828.4  | 9983.7  | 10529.8 | 10644.5 | 11458.3 | 10344.6 | 7610.6  |
| 25°   | 10651.7 | 10662.5 | 10553.7 | 10434.2 | 10366.1 | 10429.5 | 10765.2 | 10851.3 | 11751.1 | 10744.9 | 7666.7  |
| 27.5° | 11322.1 | 11331.6 | 11195.4 | 11048.4 | 10969.6 | 10972.0 | 11153.6 | 11245.6 | 12062.9 | 11201.4 | 7712.2  |
| 30°   | 12030.7 | 12025.9 | 11900.4 | 11696.1 | 11595.7 | 11593.3 | 11712.8 | 11806.0 | 12514.6 | 11786.9 | 7774.3  |
| 32.5° | 12826.5 | 12816.9 | 12638.9 | 12385.6 | 12272.1 | 12288.8 | 12395.1 | 12448.9 | 13075.1 | 12410.7 | 7885.4  |
| 35°   | 13874.5 | 13847.0 | 13578.1 | 13263.9 | 13054.7 | 13048.8 | 13138.4 | 13181.4 | 13789.6 | 13165.9 | 8070.6  |
| 37.5° | 15234.3 | 15209.2 | 14844.8 | 14388.3 | 14094.3 | 13984.4 | 14090.8 | 14145.7 | 14808.9 | 14135.0 | 8368.2  |
| 40°   | 16575.0 | 16549.9 | 16333.7 | 15915.4 | 15462.6 | 15198.5 | 15282.1 | 15340.7 | 16081.5 | 15310.8 | 8743.4  |
| 42.5° | 17499.9 | 17521.4 | 17596.7 | 17631.4 | 17207.2 | 16652.7 | 16691.0 | 16751.9 | 17418.7 | 16567.9 | 9172.4  |
| 45°   | 17743.7 | 17790.3 | 18215.7 | 19051.0 | 19209.9 | 18777.3 | 18377.0 | 18410.5 | 18777.3 | 17825.0 | 9601.4  |
| 47.5° | 17011.2 | 17097.2 | 17918.2 | 19471.6 | 20817.1 | 21123.0 | 20365.4 | 20321.2 | 20081.0 | 18841.8 | 9906.1  |
| 50°   | 15346.6 | 15425.5 | 16489.0 | 18786.9 | 21304.6 | 23362.3 | 22748.1 | 22617.9 | 21224.6 | 19450.1 | 10013.6 |
| 52.5° | 12937.6 | 13033.2 | 13897.2 | 16631.2 | 20385.7 | 24361.3 | 25004.2 | 24895.4 | 22063.4 | 19497.9 | 10031.5 |
| 55°   | 9136.5  | 9252.4  | 10166.6 | 12746.4 | 17473.6 | 23566.6 | 25803.6 | 25771.3 | 22760.1 | 19371.2 | 10069.8 |
| 57.5° | 5134.7  | 5218.3  | 6204.1  | 8171.0  | 12797.8 | 20526.7 | 24968.3 | 25182.2 | 23180.7 | 19151.3 | 10127.1 |
| 60°   | 2279.9  | 2302.7  | 2812.9  | 4067.6  | 7492.3  | 15687.2 | 22577.2 | 22938.1 | 22819.8 | 18857.4 | 10223.9 |
| 62.5° | 1264.2  | 1245.1  | 1245.1  | 1690.8  | 3256.2  | 9711.3  | 18410.5 | 19006.7 | 21279.5 | 18509.7 | 10228.7 |
| 65°   | 990.6   | 972.7   | 921.3   | 928.5   | 1240.3  | 4310.2  | 12748.8 | 13808.8 | 18354.3 | 17490.4 | 9884.6  |
| 67.5° | 840.0   | 824.5   | 773.1   | 752.8   | 770.7   | 1422.0  | 7004.8  | 8105.3  | 13927.0 | 14841.2 | 8561.8  |
| 70°   | 709.8   | 699.0   | 672.8   | 647.7   | 602.3   | 702.6   | 2680.3  | 3428.3  | 8582.1  | 9872.6  | 5844.5  |
| 72.5° | 571.2   | 566.4   | 576.0   | 554.5   | 499.5   | 468.4   | 916.5   | 1110.1  | 3854.9  | 4405.8  | 2407.8  |
| 75°   | 492.3   | 489.9   | 494.7   | 473.2   | 411.1   | 326.2   | 466.0   | 509.0   | 1087.4  | 1077.8  | 487.5   |
| 77.5° | 320.2   | 323.8   | 409.9   | 400.3   | 353.7   | 217.5   | 241.4   | 260.5   | 329.8   | 247.4   | 148.2   |
| 80°   | 204.3   | 201.9   | 207.9   | 332.2   | 317.9   | 166.1   | 120.7   | 126.7   | 158.9   | 121.9   | 71.7    |
| 82.5° | 124.3   | 121.9   | 136.2   | 155.3   | 160.1   | 115.9   | 74.1    | 75.3    | 99.2    | 78.9    | 38.2    |
| 85°   | 10.8    | 14.3    | 82.5    | 76.5    | 55.0    | 35.8    | 35.8    | 38.2    | 52.6    | 46.6    | 21.5    |
| 87.5° | 0.0     | 0.0     | 14.3    | 21.5    | 11.9    | 13.1    | 13.1    | 14.3    | 20.3    | 20.3    | 10.8    |
| 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°    | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 | 6197.0 |
| 2.5°  | 6201.7 | 6077.5 | 5826.5 | 5585.2 | 5380.8 | 5183.7 | 4959.0 | 4736.8 | 4632.8 | 4591.0 | 4547.9 |
| 5°    | 6212.5 | 5956.8 | 5439.4 | 4918.4 | 4378.3 | 3891.9 | 3477.3 | 3051.9 | 2839.2 | 2746.0 | 2703.0 |
| 7.5°  | 6226.8 | 5837.3 | 5000.8 | 4126.1 | 3256.2 | 2596.6 | 2020.6 | 1650.2 | 1490.1 | 1465.0 | 1402.9 |
| 10°   | 6229.2 | 5692.7 | 4491.8 | 3251.4 | 2183.2 | 1565.4 | 1204.5 | 1013.3 | 942.8  | 930.9  | 910.5  |
| 12.5° | 6234.0 | 5521.8 | 3926.6 | 2407.8 | 1455.4 | 1046.8 | 871.1  | 807.8  | 788.7  | 787.5  | 787.5  |
| 15°   | 6248.4 | 5342.6 | 3339.9 | 1735.1 | 1045.6 | 829.3  | 764.8  | 739.7  | 732.5  | 736.1  | 734.9  |
| 17.5° | 6248.4 | 5131.1 | 2763.9 | 1292.9 | 844.8  | 745.6  | 709.8  | 693.1  | 690.7  | 694.3  | 695.5  |
| 20°   | 6202.9 | 4874.2 | 2235.7 | 1006.1 | 749.2  | 691.9  | 659.6  | 644.1  | 638.1  | 640.5  | 641.7  |
| 22.5° | 6094.2 | 4558.7 | 1805.6 | 832.9  | 685.9  | 642.9  | 608.2  | 584.3  | 574.8  | 576.0  | 576.0  |
| 25°   | 5924.5 | 4184.7 | 1412.4 | 720.6  | 634.5  | 590.3  | 549.7  | 522.2  | 516.2  | 515.0  | 517.4  |
| 27.5° | 5707.0 | 3771.2 | 1124.4 | 634.5  | 573.6  | 531.7  | 491.1  | 468.4  | 463.6  | 464.8  | 466.0  |
| 30°   | 5493.1 | 3342.3 | 886.6  | 561.6  | 505.5  | 466.0  | 435.0  | 424.2  | 424.2  | 427.8  | 429.0  |
| 32.5° | 5297.2 | 2930.0 | 701.4  | 498.3  | 444.5  | 408.7  | 390.7  | 389.6  | 395.5  | 397.9  | 399.1  |
| 35°   | 5128.7 | 2548.8 | 580.7  | 449.3  | 396.7  | 365.7  | 359.7  | 364.5  | 371.6  | 376.4  | 377.6  |
| 37.5° | 5009.2 | 2208.3 | 507.9  | 408.7  | 359.7  | 334.6  | 333.4  | 342.9  | 352.5  | 363.3  | 365.7  |
| 40°   | 4959.0 | 1920.3 | 457.7  | 372.8  | 329.8  | 310.7  | 307.1  | 320.2  | 338.2  | 353.7  | 356.1  |
| 42.5° | 4917.2 | 1684.9 | 414.6  | 338.2  | 305.9  | 278.4  | 277.2  | 294.0  | 315.5  | 331.0  | 334.6  |
| 45°   | 4881.3 | 1496.1 | 375.2  | 301.1  | 274.8  | 239.0  | 242.6  | 264.1  | 280.8  | 297.5  | 301.1  |
| 47.5° | 4807.3 | 1340.7 | 332.2  | 261.7  | 227.0  | 204.3  | 211.5  | 230.6  | 243.8  | 268.9  | 272.4  |
| 50°   | 4674.6 | 1214.1 | 288.0  | 213.9  | 185.2  | 176.9  | 187.6  | 200.8  | 217.5  | 239.0  | 241.4  |
| 52.5° | 4585.0 | 1118.5 | 249.7  | 179.2  | 153.0  | 155.3  | 166.1  | 170.9  | 180.4  | 188.8  | 186.4  |
| 55°   | 4533.6 | 1065.9 | 218.7  | 155.3  | 130.2  | 137.4  | 139.8  | 133.8  | 129.1  | 120.7  | 117.1  |
| 57.5° | 4527.6 | 1018.1 | 194.8  | 135.0  | 114.7  | 118.3  | 109.9  | 89.6   | 72.9   | 63.3   | 60.9   |
| 60°   | 4518.1 | 959.5  | 175.7  | 113.5  | 101.6  | 96.8   | 78.9   | 49.0   | 34.7   | 32.3   | 32.3   |
| 62.5° | 4414.1 | 868.7  | 161.3  | 95.6   | 86.0   | 72.9   | 45.4   | 22.7   | 19.1   | 20.3   | 20.3   |
| 65°   | 4083.1 | 742.1  | 147.0  | 77.7   | 68.1   | 52.6   | 22.7   | 13.1   | 7.2    | 8.4    | 8.4    |
| 67.5° | 3471.3 | 591.5  | 131.4  | 59.7   | 51.4   | 33.5   | 13.1   | 6.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 2324.2 | 366.8  | 111.1  | 41.8   | 33.5   | 20.3   | 9.6    | 1.2    | 0.0    | 0.0    | 0.0    |
| 72.5° | 891.4  | 198.4  | 89.6   | 25.1   | 21.5   | 14.3   | 6.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 200.8  | 130.2  | 62.1   | 17.9   | 15.5   | 9.6    | 2.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 76.5   | 94.4   | 35.8   | 11.9   | 10.8   | 6.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 37.0   | 56.2   | 16.7   | 7.2    | 6.0    | 2.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 19.1   | 21.5   | 7.2    | 3.6    | 2.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 10.8   | 10.8   | 3.6    | 2.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 6.0    | 3.6    | 1.2    | 1.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)