

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: P191213

Luminaire Tested: **GAN-AF-05-LED-U-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191213  
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-05-LED-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 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: 24699.2 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4

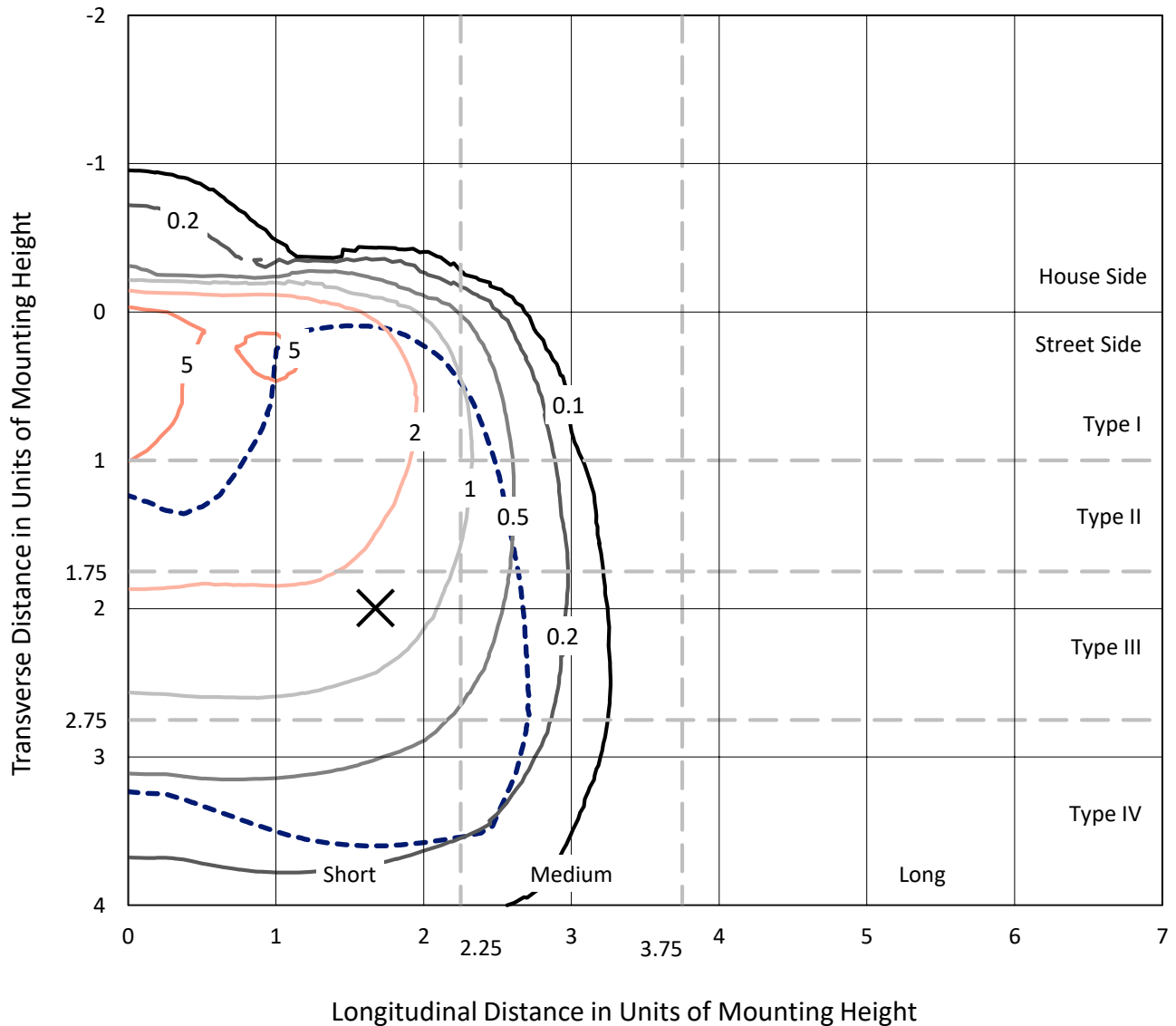
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

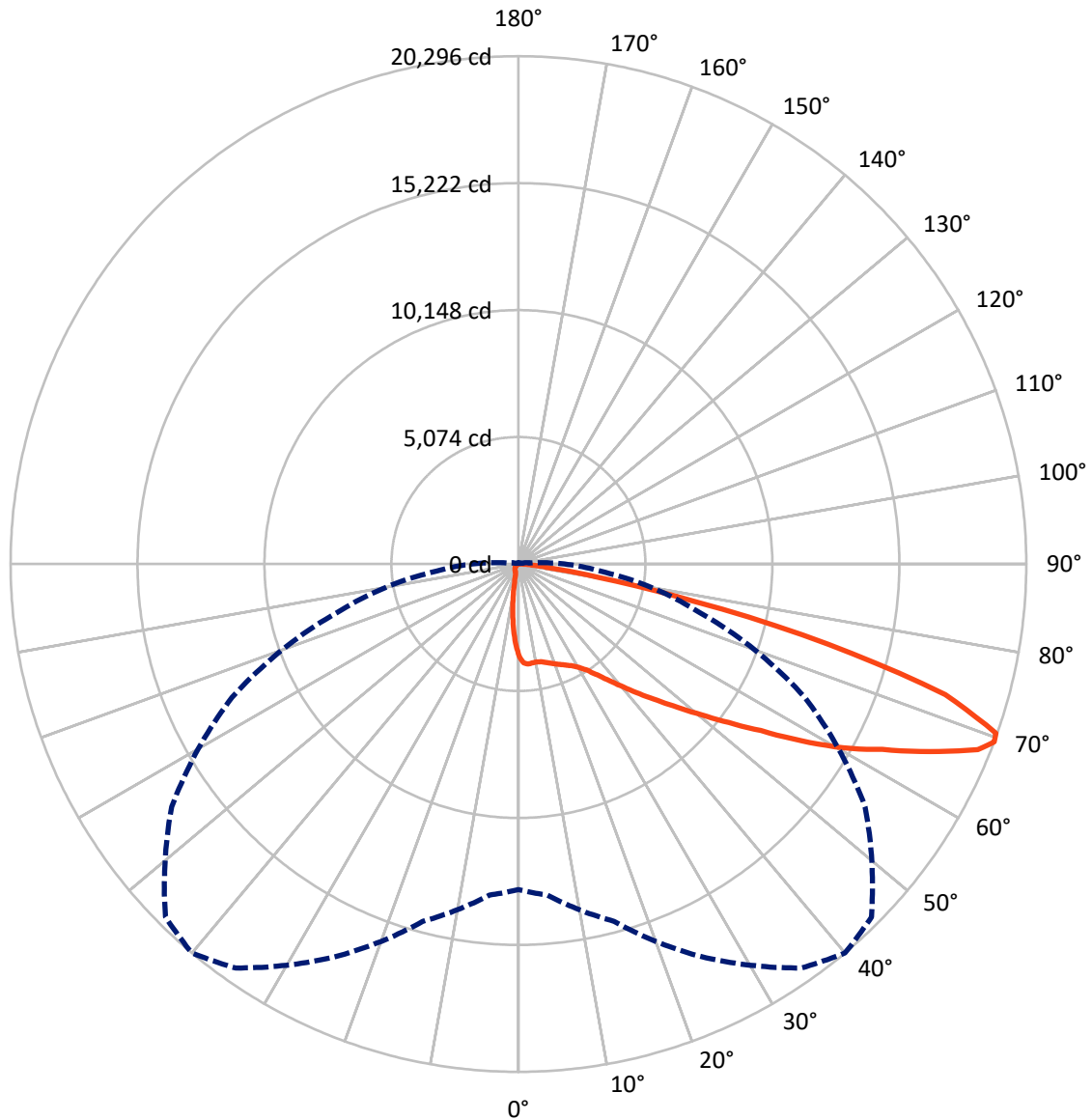
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1445.0   | 0.0    | 1445.0  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 23254.1  | 0.0    | 23254.1 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 24699.2  | 0.0    | 24699.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 299.2   | 1.2       |
| 10°-20°   | 735.8   | 3.0       |
| 20°-30°   | 1239.3  | 5.0       |
| 30°-40°   | 2028.8  | 8.2       |
| 40°-50°   | 3512.8  | 14.2      |
| 50°-60°   | 5533.0  | 22.4      |
| 60°-70°   | 7225.9  | 29.3      |
| 70°-80°   | 3721.7  | 15.1      |
| 80°-90°   | 402.6   | 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°    | 24699.2 | 100.0     |
| 0°-180°   | 24699.2 | 100.0     |

**Coefficient of Utilization**



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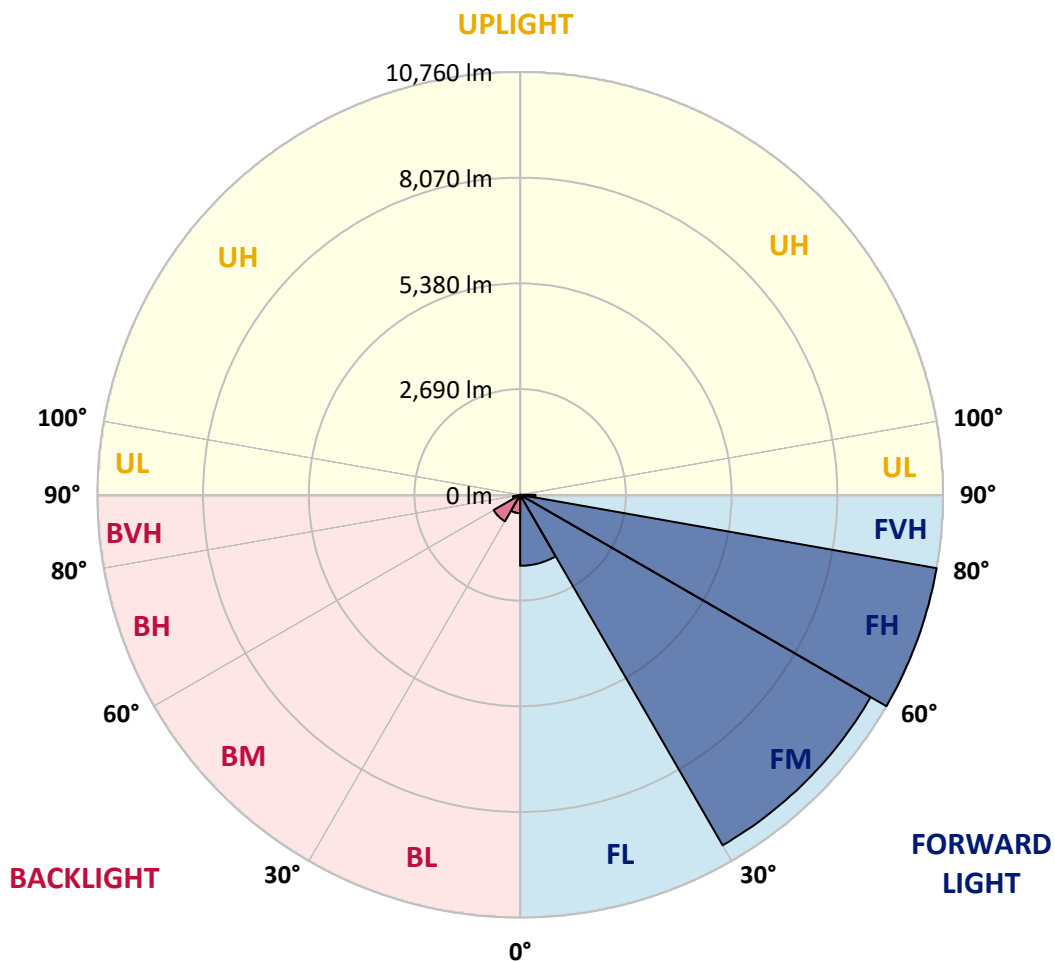
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 1806.2  | 7.3       |                         |      |          |
| FM (30°-60°)   | 10298.0 | 41.7      |                         |      |          |
| FH (60°-80°)   | 10760.0 | 43.6      |                         |      | G4/12000 |
| FVH (80°-90°)  | 389.9   | 1.6       |                         |      | G3/500   |
| BL (0°-30°)    | 468.1   | 1.9       | B1/500                  |      |          |
| BM (30°-60°)   | 776.7   | 3.1       | B1/1000                 |      |          |
| BH (60°-80°)   | 187.6   | 0.8       | B1/500                  |      | G1/500   |
| BVH (80°-90°)  | 12.6    | 0.1       |                         |      | G1/100   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B1-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  | 3690.2  |
| 2.5°  | 4051.8  | 4029.8  | 4016.5  | 3998.9  | 3976.8  | 3957.8  | 3950.4  | 3896.0  | 3844.6  | 3774.0  | 3693.2  |
| 5°    | 4126.8  | 4119.5  | 4096.0  | 4072.5  | 4046.0  | 4016.5  | 4000.4  | 3935.7  | 3862.2  | 3759.2  | 3618.2  |
| 7.5°  | 4134.2  | 4125.4  | 4096.0  | 4063.6  | 4026.8  | 3991.6  | 3963.6  | 3899.0  | 3831.4  | 3726.9  | 3555.0  |
| 10°   | 4122.4  | 4112.2  | 4090.1  | 4054.8  | 4009.3  | 3975.4  | 3947.5  | 3885.7  | 3828.4  | 3734.3  | 3543.2  |
| 12.5° | 4109.2  | 4098.9  | 4088.6  | 4070.9  | 4031.2  | 4007.7  | 3984.2  | 3925.4  | 3873.9  | 3794.5  | 3585.7  |
| 15°   | 4122.4  | 4116.6  | 4128.3  | 4121.0  | 4098.9  | 4078.3  | 4054.8  | 4001.9  | 3954.8  | 3888.6  | 3663.7  |
| 17.5° | 4178.2  | 4178.2  | 4215.1  | 4219.5  | 4198.9  | 4169.4  | 4135.7  | 4082.7  | 4043.0  | 3987.2  | 3756.4  |
| 20°   | 4309.2  | 4304.7  | 4351.7  | 4360.6  | 4310.6  | 4265.0  | 4215.1  | 4150.3  | 4119.5  | 4084.2  | 3847.5  |
| 22.5° | 4534.0  | 4513.5  | 4541.4  | 4532.6  | 4434.1  | 4363.5  | 4301.8  | 4222.4  | 4206.2  | 4190.0  | 3948.9  |
| 25°   | 4826.6  | 4814.8  | 4834.0  | 4747.2  | 4573.7  | 4478.2  | 4404.7  | 4315.0  | 4315.0  | 4331.2  | 4063.6  |
| 27.5° | 5251.5  | 5207.4  | 5142.7  | 4989.9  | 4729.6  | 4607.6  | 4528.2  | 4432.7  | 4457.6  | 4517.9  | 4215.1  |
| 30°   | 5686.7  | 5638.2  | 5489.7  | 5254.5  | 4919.3  | 4791.4  | 4698.7  | 4598.8  | 4657.6  | 4767.9  | 4417.9  |
| 32.5° | 6116.0  | 6061.6  | 5851.4  | 5554.4  | 5191.3  | 5063.3  | 4973.7  | 4863.4  | 4961.9  | 5147.2  | 4714.9  |
| 35°   | 6532.1  | 6483.6  | 6240.9  | 5891.1  | 5552.9  | 5447.0  | 5364.8  | 5269.1  | 5395.6  | 5654.4  | 5133.9  |
| 37.5° | 6999.5  | 6946.7  | 6651.1  | 6271.8  | 5992.5  | 5916.0  | 5855.8  | 5760.2  | 5980.8  | 6360.1  | 5717.6  |
| 40°   | 7574.4  | 7484.7  | 7086.3  | 6708.5  | 6501.2  | 6464.4  | 6423.3  | 6410.0  | 6752.6  | 7277.5  | 6495.3  |
| 42.5° | 8233.1  | 8086.0  | 7542.1  | 7168.6  | 7059.9  | 7086.3  | 7076.1  | 7134.9  | 7718.5  | 8418.3  | 7442.1  |
| 45°   | 8891.7  | 8702.0  | 8049.3  | 7659.7  | 7674.4  | 7767.1  | 7824.3  | 8059.6  | 8928.5  | 9726.8  | 8460.9  |
| 47.5° | 9450.4  | 9263.6  | 8535.9  | 8190.5  | 8366.8  | 8549.2  | 8705.0  | 9150.5  | 10172.2 | 11014.6 | 9253.4  |
| 50°   | 9928.2  | 9751.8  | 9052.0  | 8774.1  | 9171.1  | 9465.1  | 9717.9  | 10378.0 | 11510.1 | 11995.3 | 9809.1  |
| 52.5° | 10319.2 | 10201.7 | 9587.1  | 9443.1  | 10089.9 | 10520.6 | 10891.2 | 11682.1 | 12695.1 | 12792.1 | 10241.4 |
| 55°   | 10700.1 | 10616.3 | 10162.0 | 10238.4 | 11169.1 | 11755.6 | 12224.7 | 13065.6 | 13715.4 | 13456.6 | 10656.0 |
| 57.5° | 11138.2 | 11061.7 | 10817.7 | 11246.9 | 12587.8 | 13325.8 | 13837.5 | 14291.7 | 14613.7 | 14135.9 | 11047.1 |
| 60°   | 11585.1 | 11541.0 | 11546.9 | 12367.3 | 14216.8 | 14925.4 | 15207.7 | 15325.2 | 15495.9 | 14775.4 | 11069.0 |
| 62.5° | 12011.5 | 12095.3 | 12380.5 | 13613.9 | 15776.7 | 16320.6 | 16463.2 | 16579.4 | 16379.4 | 14876.9 | 10226.6 |
| 65°   | 12733.3 | 12870.1 | 13550.7 | 15282.7 | 17492.4 | 18074.5 | 18221.5 | 17823.1 | 16519.0 | 13565.5 | 8318.3  |
| 67.5° | 13086.2 | 13336.1 | 14550.5 | 16838.1 | 19156.6 | 19803.5 | 19749.1 | 17904.0 | 14823.9 | 10344.3 | 5338.3  |
| 69°   | 13012.7 | 13278.7 | 14781.3 | 17314.5 | 19709.4 | 20296.0 | 19950.5 | 16914.6 | 12628.9 | 7493.5  | 3277.0  |
| 70°   | 12721.5 | 12990.7 | 14662.3 | 17296.8 | 19780.0 | 20244.5 | 19577.0 | 15692.8 | 10678.0 | 5479.4  | 2049.5  |
| 72.5° | 10623.7 | 10855.9 | 13017.0 | 15634.0 | 18221.5 | 17843.7 | 16378.0 | 10872.0 | 5203.0  | 1492.3  | 461.7   |
| 75°   | 6539.4  | 6668.8  | 9340.2  | 11777.7 | 13762.5 | 12792.1 | 10911.7 | 5408.9  | 1551.1  | 422.0   | 255.8   |
| 77.5° | 3454.9  | 3513.7  | 5113.3  | 6942.3  | 8724.1  | 7218.7  | 5592.6  | 2109.7  | 714.5   | 264.6   | 185.3   |
| 80°   | 2042.1  | 2086.2  | 2753.7  | 3174.1  | 3775.4  | 3153.6  | 2236.2  | 1295.3  | 511.6   | 166.1   | 164.7   |
| 82.5° | 1168.8  | 1196.8  | 1996.5  | 1764.2  | 1487.9  | 1270.2  | 1113.0  | 1227.6  | 307.3   | 111.7   | 170.5   |
| 85°   | 429.3   | 435.2   | 1123.2  | 1342.3  | 885.1   | 526.3   | 552.8   | 1017.3  | 82.3    | 70.6    | 133.8   |
| 87.5° | 200.0   | 195.5   | 577.8   | 821.8   | 517.5   | 333.7   | 430.8   | 223.5   | 32.3    | 45.6    | 36.7    |
| 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°    | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 | 3690.2 |
| 2.5°  | 3646.1 | 3591.7 | 3493.2 | 3391.7 | 3288.8 | 3209.4 | 3131.5 | 3069.8 | 3049.2 | 3011.0 | 3013.9 |
| 5°    | 3534.3 | 3434.4 | 3228.5 | 3019.8 | 2802.2 | 2622.8 | 2453.8 | 2317.0 | 2250.9 | 2183.3 | 2183.3 |
| 7.5°  | 3437.3 | 3291.8 | 2969.8 | 2630.2 | 2278.8 | 1983.3 | 1717.2 | 1517.2 | 1407.0 | 1318.8 | 1317.3 |
| 10°   | 3400.6 | 3203.6 | 2753.7 | 2267.1 | 1777.5 | 1374.6 | 1058.5 | 855.7  | 751.3  | 683.6  | 680.7  |
| 12.5° | 3416.8 | 3172.7 | 2587.6 | 1931.8 | 1317.3 | 883.6  | 613.1  | 482.2  | 438.1  | 417.6  | 417.6  |
| 15°   | 3463.8 | 3163.9 | 2421.4 | 1604.0 | 930.7  | 552.8  | 407.2  | 371.9  | 369.0  | 369.0  | 369.0  |
| 17.5° | 3521.1 | 3166.7 | 2250.9 | 1284.9 | 633.6  | 395.5  | 351.4  | 347.0  | 350.0  | 350.0  | 350.0  |
| 20°   | 3579.9 | 3168.3 | 2067.1 | 989.4  | 446.9  | 344.0  | 330.8  | 329.3  | 332.3  | 332.3  | 333.7  |
| 22.5° | 3651.9 | 3175.6 | 1883.4 | 739.5  | 369.0  | 324.9  | 314.7  | 314.7  | 316.1  | 316.1  | 314.7  |
| 25°   | 3734.3 | 3190.3 | 1692.2 | 548.4  | 336.7  | 311.7  | 302.9  | 301.4  | 302.9  | 301.4  | 299.9  |
| 27.5° | 3837.2 | 3210.9 | 1479.0 | 429.3  | 321.9  | 298.5  | 291.1  | 291.1  | 289.6  | 288.2  | 286.7  |
| 30°   | 3966.6 | 3234.5 | 1239.4 | 364.6  | 307.3  | 286.7  | 279.4  | 277.8  | 276.4  | 273.4  | 273.4  |
| 32.5° | 4163.6 | 3285.9 | 1002.7 | 330.8  | 291.1  | 270.5  | 264.6  | 264.6  | 261.7  | 258.7  | 257.3  |
| 35°   | 4466.4 | 3387.3 | 790.9  | 310.3  | 273.4  | 252.9  | 245.5  | 245.5  | 242.5  | 241.1  | 239.7  |
| 37.5° | 4885.4 | 3541.7 | 614.6  | 291.1  | 255.8  | 233.7  | 226.4  | 224.9  | 222.0  | 219.0  | 217.6  |
| 40°   | 5442.6 | 3732.8 | 483.7  | 273.4  | 238.1  | 214.6  | 208.8  | 205.8  | 200.0  | 195.5  | 195.5  |
| 42.5° | 6142.4 | 3950.4 | 392.5  | 254.3  | 217.6  | 197.0  | 192.6  | 188.2  | 177.9  | 173.5  | 172.1  |
| 45°   | 6874.6 | 4145.9 | 332.3  | 232.3  | 197.0  | 179.3  | 176.5  | 169.1  | 155.8  | 151.4  | 151.4  |
| 47.5° | 7402.4 | 4191.5 | 292.6  | 211.8  | 177.9  | 160.3  | 158.8  | 145.6  | 133.8  | 130.8  | 129.4  |
| 50°   | 7731.8 | 4101.8 | 260.2  | 191.1  | 160.3  | 142.6  | 138.2  | 122.0  | 114.7  | 111.7  | 110.3  |
| 52.5° | 7953.7 | 3941.5 | 233.7  | 173.5  | 144.0  | 126.4  | 116.1  | 104.3  | 98.5   | 95.5   | 95.5   |
| 55°   | 8131.6 | 3715.2 | 207.2  | 157.3  | 130.8  | 113.2  | 98.5   | 89.7   | 83.8   | 80.8   | 80.8   |
| 57.5° | 8181.7 | 3407.9 | 180.9  | 144.0  | 117.6  | 99.9   | 83.8   | 77.9   | 70.6   | 69.0   | 69.0   |
| 60°   | 7818.5 | 2853.6 | 160.3  | 127.9  | 105.9  | 86.7   | 73.6   | 66.2   | 58.8   | 57.4   | 55.9   |
| 62.5° | 6861.3 | 2208.2 | 141.2  | 113.2  | 92.6   | 75.0   | 63.2   | 54.4   | 48.5   | 48.5   | 48.5   |
| 65°   | 5233.9 | 1480.5 | 123.5  | 98.5   | 80.8   | 63.2   | 54.4   | 44.1   | 41.1   | 41.1   | 42.7   |
| 67.5° | 3133.0 | 805.7  | 105.9  | 83.8   | 69.0   | 52.9   | 45.6   | 38.3   | 36.7   | 38.3   | 38.3   |
| 69°   | 1836.3 | 473.4  | 95.5   | 75.0   | 60.3   | 47.1   | 39.7   | 33.9   | 36.7   | 38.3   | 38.3   |
| 70°   | 1133.5 | 319.1  | 88.2   | 67.6   | 54.4   | 42.7   | 36.7   | 32.3   | 35.3   | 36.7   | 36.7   |
| 72.5° | 316.1  | 164.7  | 70.6   | 52.9   | 44.1   | 35.3   | 29.4   | 29.4   | 33.9   | 35.3   | 35.3   |
| 75°   | 205.8  | 122.0  | 54.4   | 39.7   | 33.9   | 27.9   | 25.0   | 27.9   | 32.3   | 33.9   | 33.9   |
| 77.5° | 170.5  | 99.9   | 44.1   | 32.3   | 27.9   | 26.5   | 23.5   | 25.0   | 29.4   | 30.9   | 30.9   |
| 80°   | 155.8  | 70.6   | 35.3   | 29.4   | 25.0   | 23.5   | 22.1   | 20.6   | 26.5   | 27.9   | 27.9   |
| 82.5° | 148.5  | 55.9   | 30.9   | 26.5   | 23.5   | 20.6   | 19.1   | 20.6   | 23.5   | 25.0   | 26.5   |
| 85°   | 92.6   | 36.7   | 27.9   | 25.0   | 20.6   | 19.1   | 19.1   | 19.1   | 22.1   | 23.5   | 23.5   |
| 87.5° | 33.9   | 29.4   | 25.0   | 20.6   | 17.6   | 17.6   | 17.6   | 17.6   | 19.1   | 22.1   | 22.1   |
| 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)