

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: P300611

Luminaire Tested: **GAA-AF-02-LED-U-AFL-7060-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P300611  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-02-LED-U-AFL-7060-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 9056.9 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 113  
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

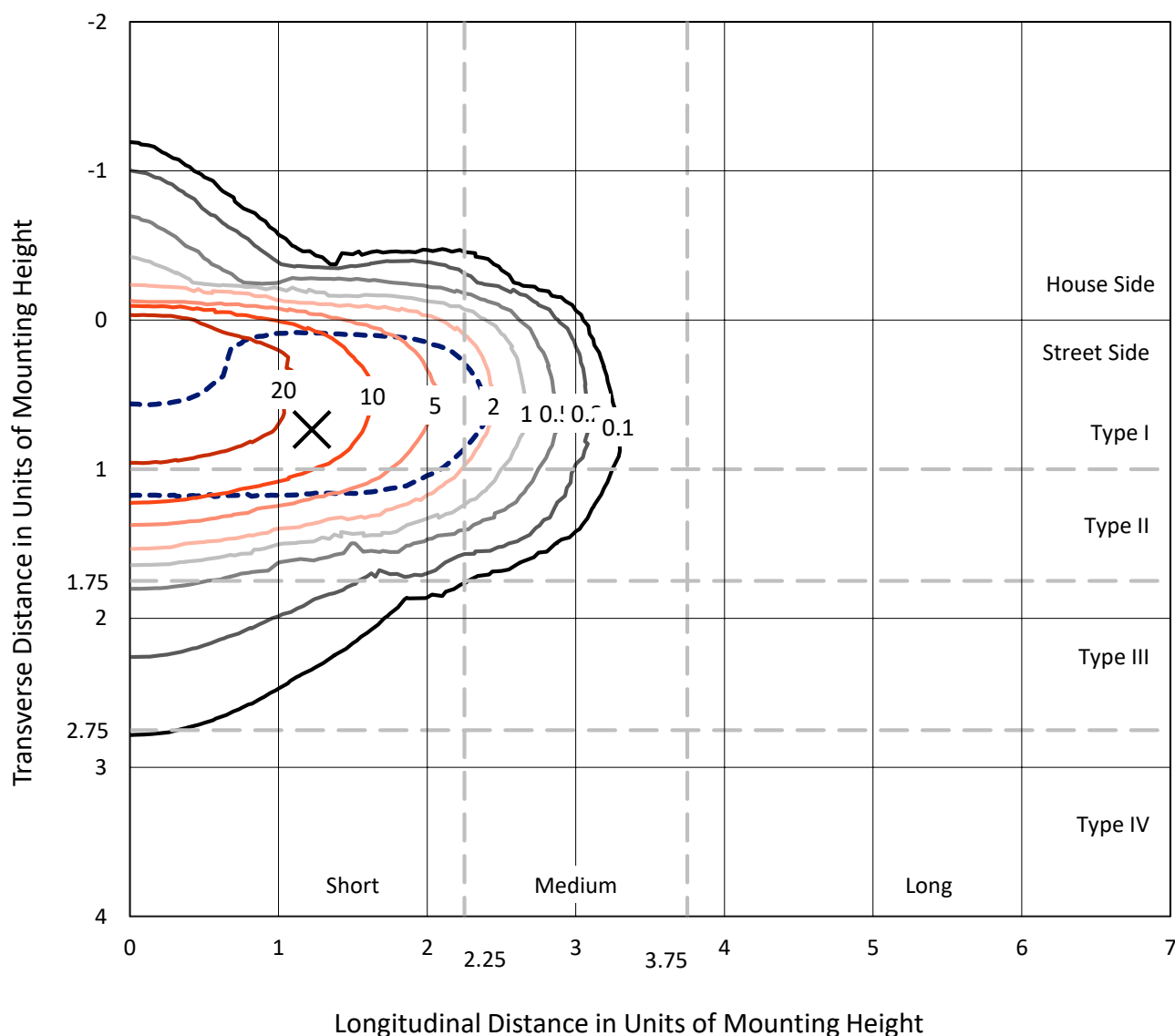


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

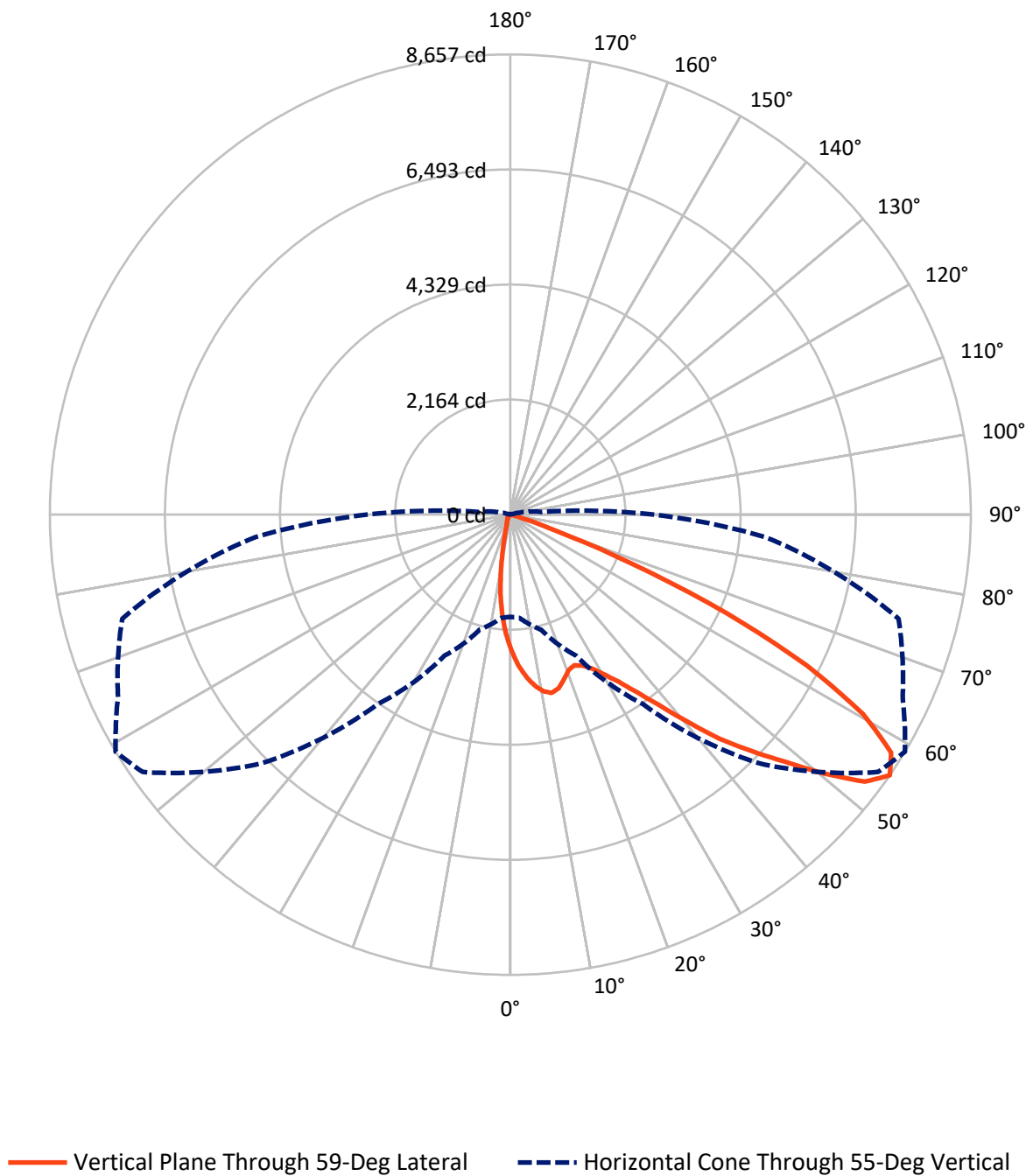


Based on 10 foot mounting height. Maximum calculated value = 31.7 fc  
 Type II - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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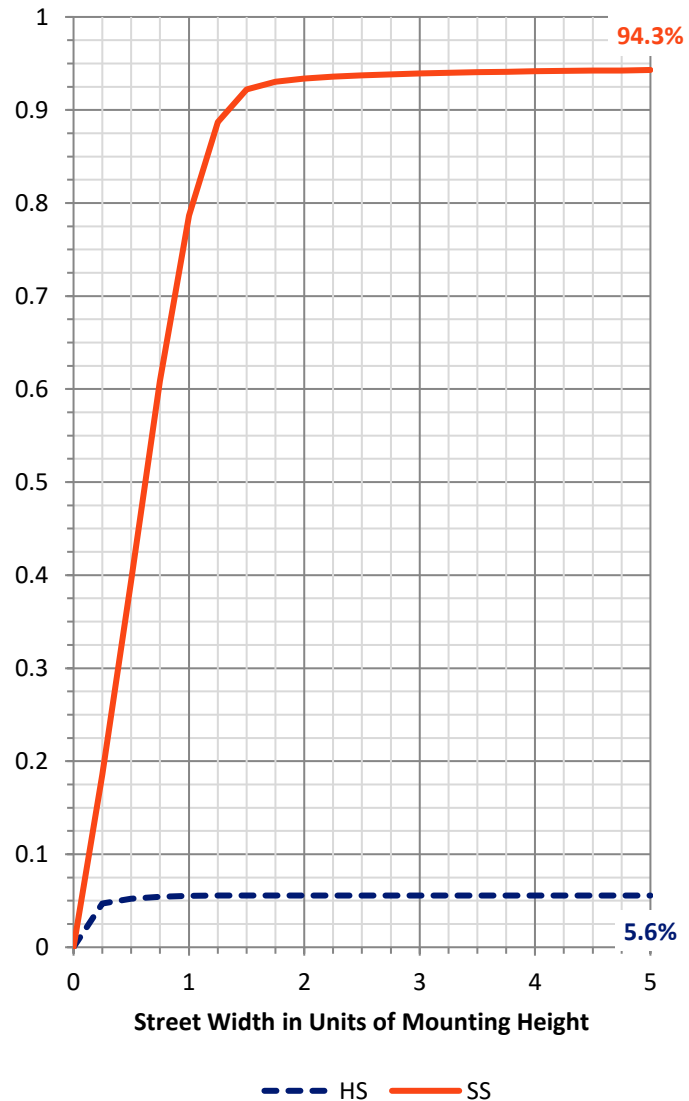
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 505.9    | 0.0    | 505.9  |
|                    | % Fixture | 5.6      | 0.0    | 5.6    |
| <b>Street Side</b> | Lumens    | 8551.1   | 0.0    | 8551.1 |
|                    | % Fixture | 94.4     | 0.0    | 94.4   |
| <b>Total</b>       | Lumens    | 9056.9   | 0.0    | 9056.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 213.5  | 2.4       |
| 10°-20°   | 511.3  | 5.6       |
| 20°-30°   | 870.0  | 9.6       |
| 30°-40°   | 1496.2 | 16.5      |
| 40°-50°   | 2310.0 | 25.5      |
| 50°-60°   | 2322.3 | 25.6      |
| 60°-70°   | 1190.9 | 13.1      |
| 70°-80°   | 129.1  | 1.4       |
| 80°-90°   | 13.5   | 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°    | 9056.9 | 100.0     |
| 0°-180°   | 9056.9 | 100.0     |

**Coefficient of Utilization**



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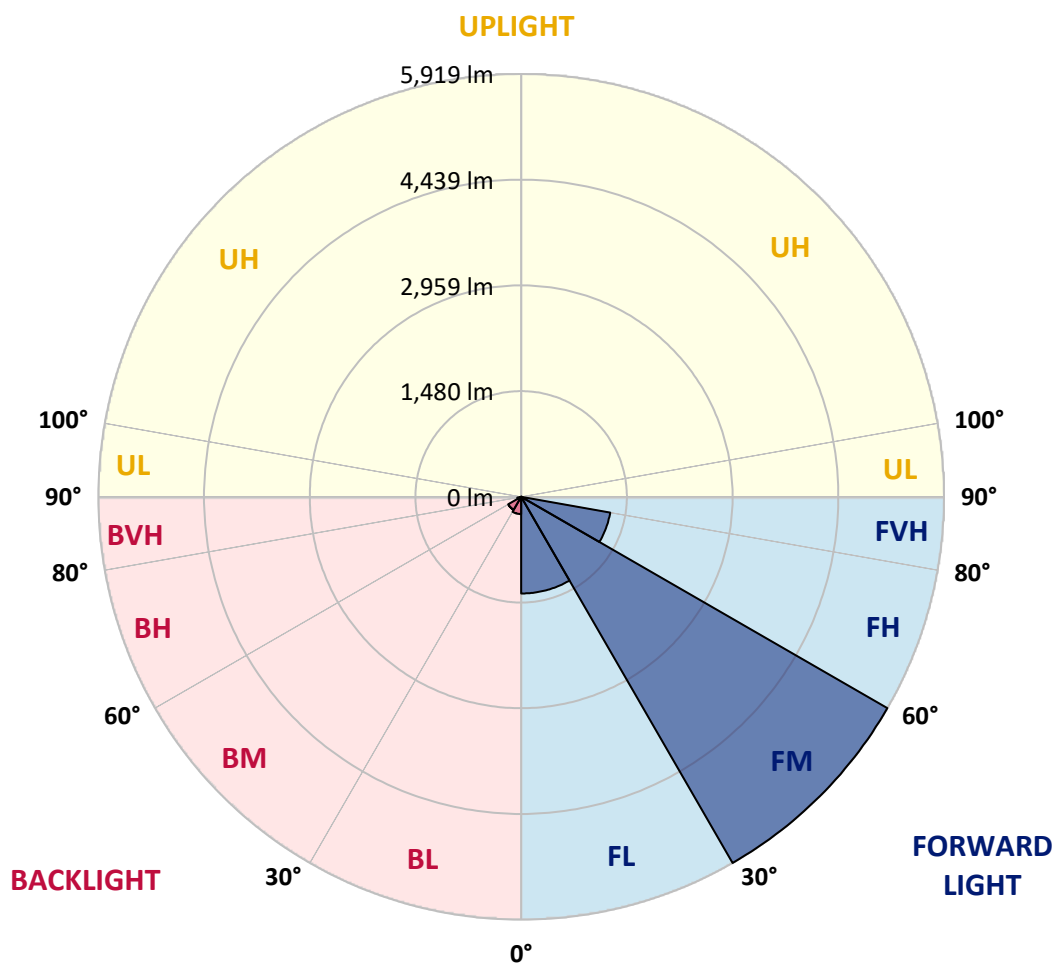
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1353.4 | 14.9      |                         |      |         |
| FM   | (30°-60°)   | 5918.7 | 65.3      |                         |      |         |
| FH   | (60°-80°)   | 1265.8 | 14.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 13.2   | 0.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 241.5  | 2.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 210.0  | 2.3       | B0/220                  |      |         |
| BH   | (60°-80°)   | 54.2   | 0.6       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 |
| 2.5°  | 3016.6 | 2984.6 | 2974.9 | 2968.5 | 2939.1 | 2902.3 | 2852.0 | 2828.5 | 2780.4 | 2702.9 | 2607.8 |
| 5°    | 3293.0 | 3287.1 | 3265.7 | 3254.0 | 3222.4 | 3170.0 | 3089.9 | 3051.4 | 2974.9 | 2844.5 | 2674.0 |
| 7.5°  | 3172.2 | 3209.1 | 3238.5 | 3287.6 | 3349.6 | 3347.5 | 3280.1 | 3240.1 | 3154.5 | 2982.4 | 2747.8 |
| 10°   | 2705.6 | 2735.5 | 2783.6 | 2895.3 | 3123.0 | 3324.0 | 3403.1 | 3374.2 | 3305.8 | 3109.1 | 2818.9 |
| 12.5° | 2614.2 | 2611.0 | 2619.5 | 2652.1 | 2771.3 | 3057.8 | 3382.2 | 3440.5 | 3426.6 | 3225.1 | 2886.2 |
| 15°   | 2662.8 | 2659.1 | 2658.0 | 2669.2 | 2698.1 | 2818.9 | 3225.6 | 3392.9 | 3500.3 | 3332.5 | 2943.4 |
| 17.5° | 2799.1 | 2783.1 | 2774.5 | 2765.4 | 2756.9 | 2786.8 | 3037.5 | 3259.8 | 3511.6 | 3426.6 | 2991.0 |
| 20°   | 3032.7 | 3005.9 | 2974.4 | 2923.1 | 2875.0 | 2860.0 | 2958.4 | 3123.0 | 3471.5 | 3498.2 | 3022.0 |
| 22.5° | 3326.1 | 3291.9 | 3237.4 | 3143.8 | 3046.0 | 2989.4 | 2997.4 | 3079.7 | 3411.6 | 3576.2 | 3036.4 |
| 25°   | 3655.9 | 3612.1 | 3539.4 | 3409.5 | 3265.7 | 3165.2 | 3112.8 | 3141.7 | 3384.4 | 3667.6 | 3053.0 |
| 27.5° | 4009.2 | 3960.5 | 3865.4 | 3688.5 | 3525.5 | 3389.7 | 3282.8 | 3279.1 | 3430.9 | 3787.4 | 3079.7 |
| 30°   | 4359.3 | 4351.8 | 4227.8 | 4040.7 | 3824.8 | 3659.6 | 3505.7 | 3485.9 | 3560.7 | 3953.1 | 3132.6 |
| 32.5° | 4826.4 | 4770.3 | 4618.5 | 4426.1 | 4177.0 | 3978.7 | 3796.5 | 3750.5 | 3760.1 | 4146.0 | 3214.4 |
| 35°   | 5415.4 | 5353.9 | 5140.2 | 4874.5 | 4596.0 | 4361.9 | 4160.4 | 4097.9 | 4074.4 | 4461.9 | 3352.3 |
| 37.5° | 5796.0 | 5794.9 | 5660.7 | 5390.3 | 5091.5 | 4833.4 | 4614.2 | 4541.0 | 4493.4 | 4843.5 | 3566.1 |
| 40°   | 5806.1 | 5831.2 | 5848.9 | 5846.2 | 5633.5 | 5395.6 | 5201.1 | 5110.8 | 5000.1 | 5353.4 | 3842.4 |
| 42.5° | 5494.5 | 5559.2 | 5714.7 | 5978.8 | 6104.9 | 6010.3 | 5846.2 | 5757.5 | 5592.9 | 5899.1 | 4179.1 |
| 45°   | 5073.3 | 5118.2 | 5390.3 | 5876.7 | 6360.4 | 6619.6 | 6494.5 | 6335.8 | 6118.8 | 6468.3 | 4481.1 |
| 47.5° | 4884.7 | 4892.7 | 5068.5 | 5602.5 | 6379.6 | 7118.8 | 7194.7 | 6936.6 | 6596.6 | 6926.9 | 4717.4 |
| 50°   | 4320.8 | 4335.2 | 4577.9 | 5127.3 | 6154.1 | 7354.5 | 7898.1 | 7653.3 | 7117.7 | 7280.2 | 4803.4 |
| 52.5° | 3256.6 | 3276.9 | 3584.8 | 4346.4 | 5534.1 | 7254.0 | 8401.6 | 8342.3 | 7688.6 | 7452.9 | 4808.2 |
| 55°   | 1921.5 | 1948.2 | 2242.2 | 2925.8 | 4352.9 | 6614.8 | 8439.0 | 8657.1 | 8139.2 | 7555.0 | 4800.8 |
| 57.5° | 897.4  | 916.1  | 1084.5 | 1507.3 | 2707.2 | 5227.8 | 7875.7 | 8441.1 | 8387.7 | 7608.9 | 4853.7 |
| 60°   | 476.8  | 482.1  | 522.7  | 652.6  | 1223.4 | 3314.9 | 6776.2 | 7622.3 | 8161.1 | 7683.8 | 4918.3 |
| 62.5° | 364.5  | 366.1  | 364.0  | 379.5  | 514.2  | 1471.4 | 5122.0 | 6266.3 | 7248.7 | 7627.6 | 4846.7 |
| 65°   | 315.9  | 318.6  | 303.6  | 299.8  | 329.8  | 524.9  | 3042.8 | 4466.7 | 5696.0 | 6870.3 | 4358.7 |
| 67.5° | 283.3  | 284.3  | 266.2  | 250.7  | 256.0  | 283.8  | 1200.5 | 2445.3 | 3770.3 | 5035.9 | 3159.3 |
| 70°   | 260.8  | 259.8  | 240.0  | 215.4  | 208.4  | 194.0  | 381.6  | 896.3  | 1801.8 | 2553.8 | 1469.3 |
| 72.5° | 230.9  | 231.4  | 221.8  | 189.7  | 173.2  | 135.8  | 176.9  | 261.4  | 537.7  | 695.9  | 344.2  |
| 75°   | 204.7  | 202.0  | 190.3  | 170.0  | 142.7  | 89.3   | 87.7   | 116.5  | 165.7  | 164.6  | 74.3   |
| 77.5° | 148.1  | 145.4  | 149.1  | 139.5  | 109.6  | 57.7   | 43.8   | 56.1   | 67.3   | 65.2   | 20.8   |
| 80°   | 108.5  | 106.9  | 96.2   | 116.0  | 96.7   | 39.6   | 27.3   | 29.9   | 34.7   | 29.4   | 6.4    |
| 82.5° | 74.3   | 73.8   | 67.9   | 64.1   | 55.1   | 24.1   | 17.1   | 18.7   | 22.4   | 16.6   | 3.2    |
| 85°   | 11.8   | 13.4   | 49.2   | 39.0   | 32.6   | 10.7   | 11.8   | 12.8   | 15.0   | 9.1    | 1.1    |
| 87.5° | 0.0    | 0.0    | 23.0   | 20.3   | 6.4    | 4.3    | 6.9    | 7.5    | 7.5    | 4.8    | 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    |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 | 2549.5 |
| 2.5°  | 2559.1 | 2505.7 | 2406.8 | 2304.7 | 2210.1 | 2097.3 | 2019.8 | 1961.6 | 1894.2 | 1876.0 | 1915.6 |
| 5°    | 2576.8 | 2475.7 | 2263.0 | 2031.6 | 1814.0 | 1573.0 | 1388.6 | 1242.7 | 1110.7 | 1065.8 | 1106.4 |
| 7.5°  | 2604.6 | 2454.4 | 2107.5 | 1726.4 | 1348.0 | 971.7  | 714.1  | 544.6  | 436.7  | 404.6  | 421.7  |
| 10°   | 2632.3 | 2423.4 | 1927.4 | 1365.1 | 847.7  | 473.0  | 307.9  | 245.9  | 222.9  | 218.1  | 220.7  |
| 12.5° | 2655.3 | 2381.7 | 1707.7 | 970.6  | 453.2  | 253.3  | 201.5  | 191.3  | 188.1  | 188.1  | 189.2  |
| 15°   | 2669.2 | 2318.6 | 1447.4 | 617.3  | 260.8  | 191.3  | 175.8  | 172.6  | 172.6  | 173.2  | 174.2  |
| 17.5° | 2667.6 | 2238.4 | 1162.5 | 373.6  | 195.1  | 169.4  | 160.3  | 157.7  | 157.1  | 158.2  | 158.7  |
| 20°   | 2647.8 | 2133.7 | 876.6  | 246.4  | 170.0  | 154.5  | 145.4  | 140.6  | 140.0  | 141.1  | 142.2  |
| 22.5° | 2610.4 | 2004.3 | 627.0  | 189.7  | 153.4  | 140.0  | 128.8  | 124.5  | 124.5  | 125.6  | 126.7  |
| 25°   | 2565.0 | 1846.1 | 428.7  | 160.9  | 138.4  | 124.5  | 113.8  | 110.1  | 111.2  | 113.8  | 114.4  |
| 27.5° | 2508.3 | 1668.1 | 291.3  | 137.9  | 120.3  | 109.0  | 101.0  | 98.3   | 101.0  | 104.8  | 105.8  |
| 30°   | 2459.7 | 1482.7 | 207.9  | 119.2  | 102.1  | 94.1   | 89.3   | 89.3   | 93.0   | 99.9   | 101.6  |
| 32.5° | 2422.3 | 1303.1 | 160.3  | 105.3  | 88.7   | 81.8   | 79.1   | 81.8   | 87.7   | 94.6   | 96.2   |
| 35°   | 2417.5 | 1155.0 | 135.8  | 94.1   | 79.1   | 72.2   | 71.1   | 75.9   | 81.8   | 87.1   | 88.2   |
| 37.5° | 2454.4 | 1018.2 | 122.4  | 85.0   | 70.6   | 64.1   | 63.1   | 68.9   | 74.8   | 81.2   | 82.8   |
| 40°   | 2524.4 | 910.8  | 112.8  | 76.4   | 63.6   | 56.7   | 54.5   | 58.8   | 66.8   | 75.4   | 77.5   |
| 42.5° | 2615.2 | 822.0  | 102.1  | 67.9   | 56.7   | 47.0   | 44.4   | 49.2   | 57.7   | 66.8   | 69.5   |
| 45°   | 2701.8 | 745.6  | 90.3   | 58.3   | 47.6   | 36.3   | 35.3   | 41.7   | 46.0   | 55.1   | 57.2   |
| 47.5° | 2749.4 | 678.3  | 80.2   | 47.6   | 36.9   | 29.4   | 29.4   | 31.0   | 35.3   | 46.0   | 48.1   |
| 50°   | 2733.4 | 624.3  | 69.5   | 35.3   | 25.7   | 22.4   | 22.4   | 21.9   | 28.3   | 36.9   | 38.5   |
| 52.5° | 2701.3 | 593.3  | 59.9   | 27.3   | 17.6   | 16.0   | 14.4   | 16.0   | 19.8   | 23.5   | 24.1   |
| 55°   | 2696.5 | 587.9  | 50.2   | 21.9   | 12.3   | 10.7   | 8.0    | 8.0    | 8.0    | 7.5    | 6.4    |
| 57.5° | 2733.9 | 596.5  | 42.2   | 17.6   | 9.1    | 6.9    | 4.3    | 0.0    | 0.0    | 0.0    | 0.0    |
| 60°   | 2772.4 | 605.6  | 36.3   | 12.3   | 6.4    | 3.7    | 0.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5° | 2708.2 | 585.3  | 30.5   | 7.5    | 4.8    | 1.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°   | 2379.0 | 498.1  | 24.1   | 5.3    | 3.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 1692.2 | 333.5  | 16.0   | 3.2    | 0.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 772.3  | 139.5  | 10.2   | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 165.2  | 43.3   | 6.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 33.7   | 31.5   | 2.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 10.7   | 49.7   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 6.4    | 35.8   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 1.1    | 5.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 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)