

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: P400377

Luminaire Tested: **ARCH-L-PA3-270-750-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-270-750-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25443 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G5

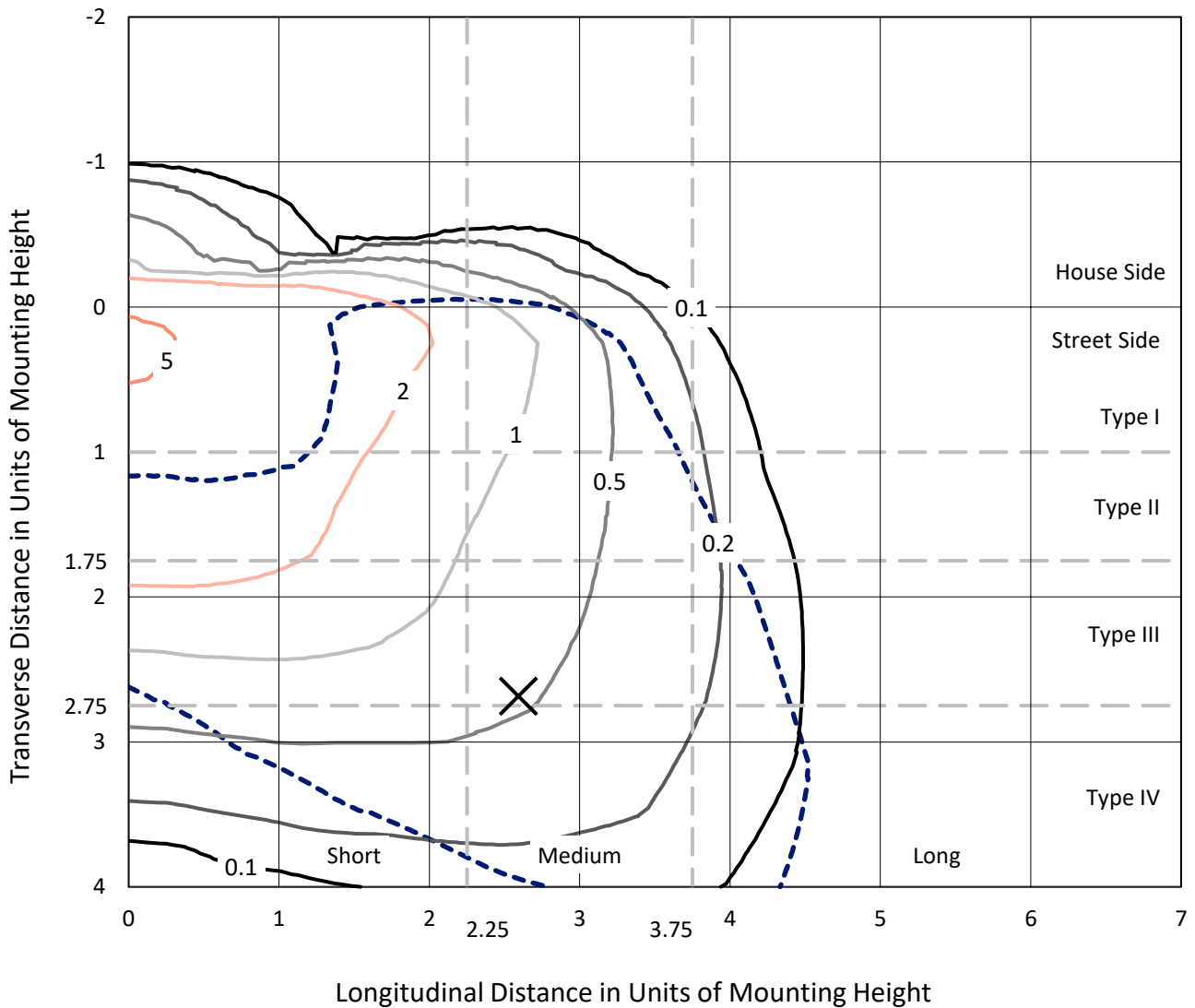
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

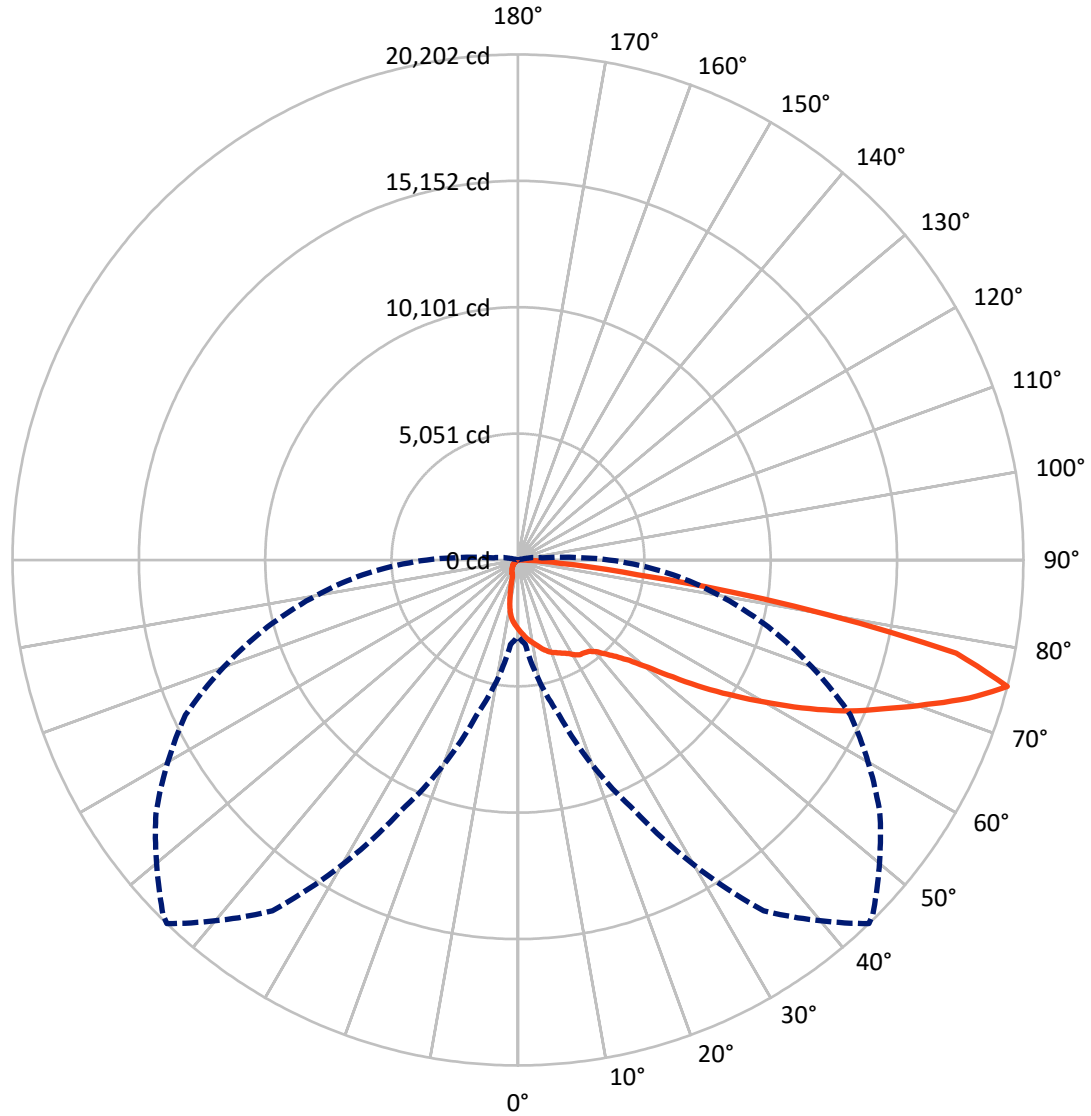
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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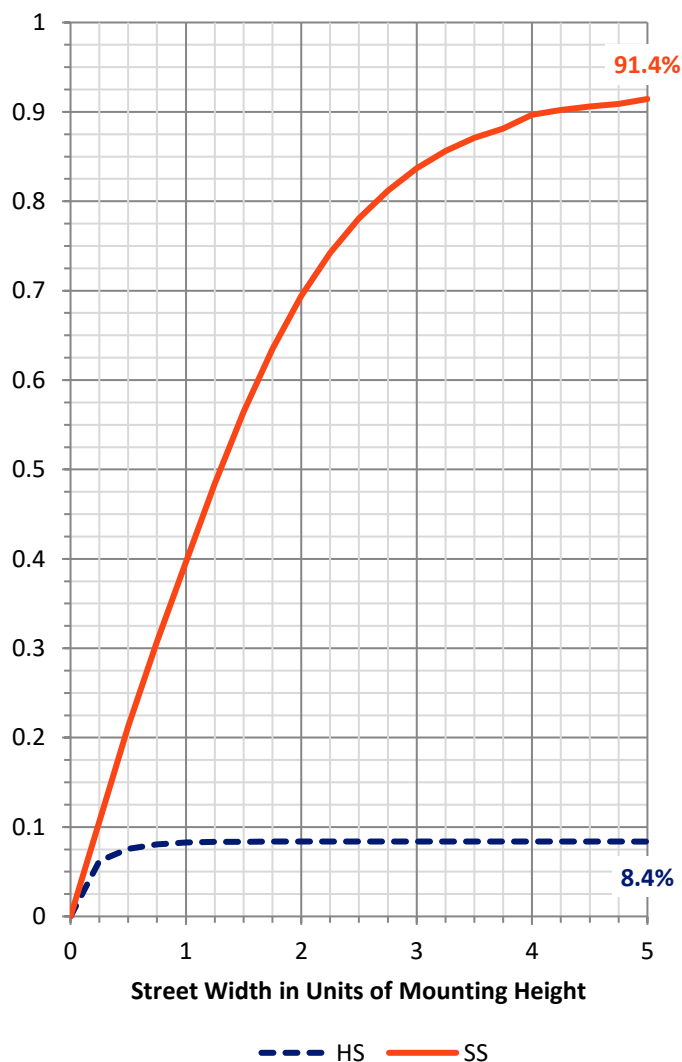
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2145.7   | 0.0    | 2145.7  |
|                    | % Fixture | 8.4      | 0.0    | 8.4     |
| <b>Street Side</b> | Lumens    | 23297.3  | 0.0    | 23297.3 |
|                    | % Fixture | 91.6     | 0.0    | 91.6    |
| <b>Total</b>       | Lumens    | 25443.0  | 0.0    | 25443.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 261.2   | 1.0       |
| 10°-20°   | 731.8   | 2.9       |
| 20°-30°   | 1207.7  | 4.7       |
| 30°-40°   | 1752.9  | 6.9       |
| 40°-50°   | 2849.5  | 11.2      |
| 50°-60°   | 5023.3  | 19.7      |
| 60°-70°   | 7219.5  | 28.4      |
| 70°-80°   | 5781.2  | 22.7      |
| 80°-90°   | 615.9   | 2.4       |
| 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°    | 25443.0 | 100.0     |
| 0°-180°   | 25443.0 | 100.0     |

**Coefficient of Utilization**



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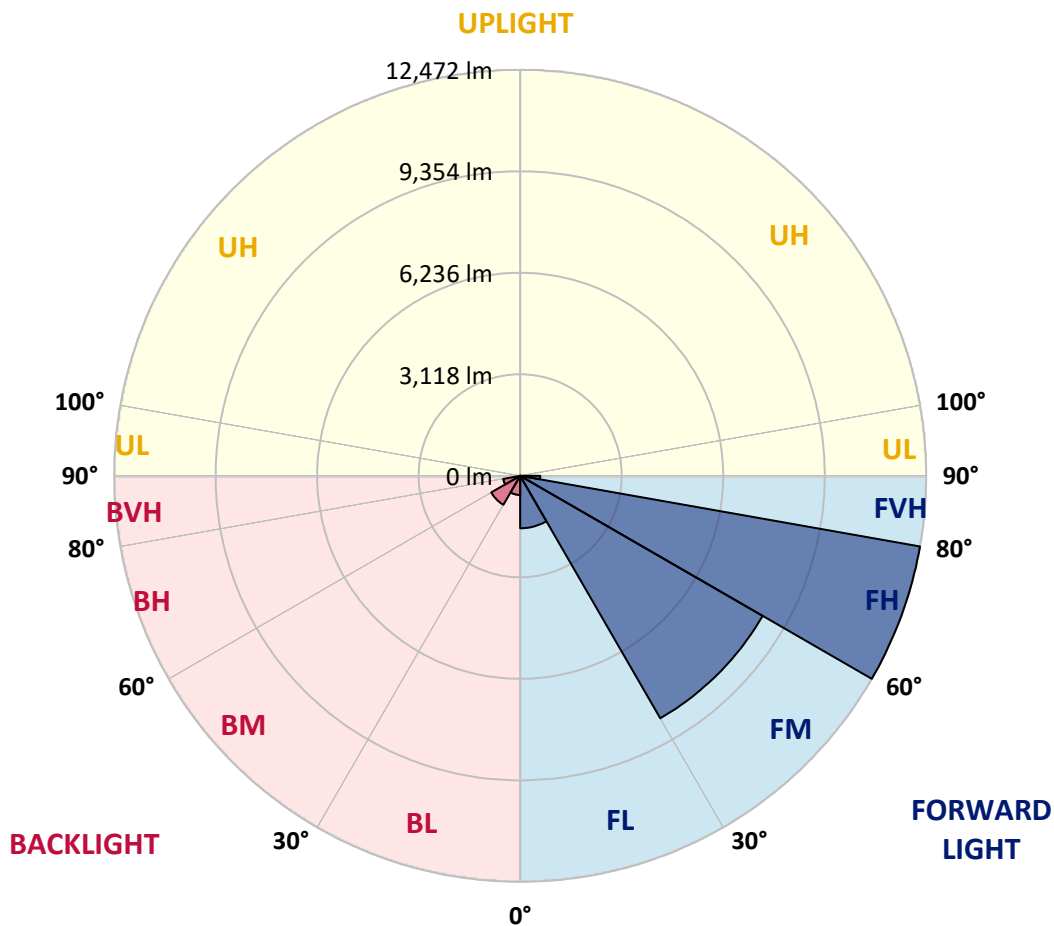
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 1611.3  | 6.3       |                         |      |         |
| FM (30°-60°)   | 8600.0  | 33.8      |                         |      |         |
| FH (60°-80°)   | 12471.7 | 49.0      |                         |      | G5      |
| FVH (80°-90°)  | 614.4   | 2.4       |                         |      | G4/750  |
| BL (0°-30°)    | 589.5   | 2.3       | B2/1000                 |      |         |
| BM (30°-60°)   | 1025.7  | 4.0       | B2/2500                 |      |         |
| BH (60°-80°)   | 529.0   | 2.1       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 1.6     | 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-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  | 2769.4  |
| 2.5°  | 3018.1  | 3013.5  | 2999.4  | 2975.9  | 2952.4  | 2929.0  | 2924.3  | 2886.7  | 2844.5  | 2811.6  | 2783.5  |
| 5°    | 3285.7  | 3281.0  | 3257.5  | 3205.9  | 3154.3  | 3093.3  | 3088.6  | 2999.4  | 2919.6  | 2830.4  | 2755.3  |
| 7.5°  | 3562.6  | 3553.2  | 3511.0  | 3431.2  | 3342.0  | 3248.1  | 3238.8  | 3107.3  | 2990.0  | 2872.6  | 2764.7  |
| 10°   | 3778.6  | 3769.2  | 3708.1  | 3614.3  | 3492.2  | 3374.9  | 3360.8  | 3224.7  | 3107.3  | 2957.1  | 2811.6  |
| 12.5° | 3989.8  | 3971.0  | 3891.2  | 3787.9  | 3637.7  | 3525.1  | 3511.0  | 3370.2  | 3229.4  | 3074.5  | 2896.1  |
| 15°   | 4186.9  | 4163.4  | 4088.3  | 3956.9  | 3797.3  | 3689.4  | 3680.0  | 3529.8  | 3384.3  | 3205.9  | 3008.8  |
| 17.5° | 4323.0  | 4313.7  | 4224.5  | 4079.0  | 3924.1  | 3834.9  | 3825.5  | 3670.6  | 3525.1  | 3337.3  | 3126.1  |
| 20°   | 4393.4  | 4393.4  | 4309.0  | 4149.4  | 4008.6  | 3947.5  | 3933.4  | 3787.9  | 3647.1  | 3468.8  | 3248.1  |
| 22.5° | 4407.5  | 4421.6  | 4355.9  | 4182.2  | 4079.0  | 4027.3  | 4017.9  | 3891.2  | 3755.1  | 3590.8  | 3384.3  |
| 25°   | 4435.7  | 4435.7  | 4402.8  | 4215.1  | 4140.0  | 4125.9  | 4121.2  | 4008.6  | 3886.5  | 3722.2  | 3520.4  |
| 27.5° | 4468.5  | 4468.5  | 4445.1  | 4262.0  | 4233.9  | 4229.2  | 4224.5  | 4172.8  | 4074.3  | 3881.8  | 3680.0  |
| 30°   | 4553.0  | 4557.7  | 4539.0  | 4355.9  | 4337.1  | 4388.8  | 4398.1  | 4370.0  | 4247.9  | 4008.6  | 3844.3  |
| 32.5° | 4764.3  | 4722.0  | 4670.4  | 4421.6  | 4454.5  | 4520.2  | 4524.9  | 4468.5  | 4337.1  | 4144.7  | 4041.4  |
| 35°   | 5294.7  | 5045.9  | 4811.2  | 4477.9  | 4492.0  | 4557.7  | 4567.1  | 4562.4  | 4482.6  | 4318.3  | 4266.7  |
| 37.5° | 5787.5  | 5435.5  | 5102.2  | 4609.4  | 4562.4  | 4632.8  | 4651.6  | 4731.4  | 4670.4  | 4557.7  | 4571.8  |
| 40°   | 6073.8  | 5937.7  | 5703.0  | 4970.8  | 4703.2  | 4811.2  | 4830.0  | 4952.0  | 4928.5  | 4881.6  | 4970.8  |
| 42.5° | 6956.3  | 6965.7  | 6712.2  | 5510.6  | 4961.4  | 5135.1  | 5158.5  | 5257.1  | 5290.0  | 5313.4  | 5529.4  |
| 45°   | 7979.6  | 8012.4  | 7951.4  | 6482.2  | 5449.6  | 5505.9  | 5538.7  | 5670.2  | 5792.2  | 5942.4  | 6336.7  |
| 47.5° | 9209.3  | 9181.2  | 8955.9  | 7669.8  | 6299.2  | 5984.7  | 6008.1  | 6261.6  | 6472.8  | 6801.4  | 7364.7  |
| 50°   | 10298.3 | 10368.7 | 9941.6  | 8777.5  | 7496.1  | 6740.4  | 6716.9  | 6965.7  | 7345.9  | 7805.9  | 8514.7  |
| 52.5° | 11396.7 | 11293.4 | 10716.1 | 9875.9  | 8913.6  | 7768.3  | 7697.9  | 7834.0  | 8369.1  | 8913.6  | 9641.2  |
| 55°   | 11687.7 | 11697.1 | 11499.9 | 11077.5 | 10096.5 | 9016.9  | 8899.5  | 8890.2  | 9556.7  | 9927.5  | 10824.0 |
| 57.5° | 12260.3 | 12283.8 | 12330.8 | 12415.2 | 11950.6 | 10265.5 | 10143.4 | 10012.0 | 10659.7 | 10875.7 | 12011.6 |
| 60°   | 12842.4 | 12870.5 | 13156.9 | 13612.2 | 13302.4 | 11612.6 | 11481.2 | 11171.4 | 11532.8 | 11823.8 | 13260.1 |
| 62.5° | 12767.3 | 12964.4 | 13795.2 | 14701.2 | 14663.6 | 13091.2 | 12926.9 | 12180.6 | 12410.6 | 12664.0 | 14405.4 |
| 65°   | 11528.1 | 11739.3 | 13607.5 | 15001.6 | 16029.5 | 14550.9 | 14283.4 | 13222.6 | 13236.7 | 13541.8 | 15508.5 |
| 67.5° | 10420.4 | 10650.4 | 12434.0 | 14874.8 | 16930.7 | 15860.5 | 15583.6 | 14269.3 | 14048.7 | 14555.6 | 16099.9 |
| 70°   | 9782.0  | 10012.0 | 11499.9 | 14480.5 | 17184.2 | 17310.9 | 17071.5 | 15466.3 | 15015.6 | 15480.3 | 15438.1 |
| 72.5° | 7655.7  | 8017.1  | 10307.7 | 13729.5 | 17456.4 | 18864.6 | 18676.8 | 16982.4 | 15837.1 | 14513.4 | 11753.4 |
| 75°   | 3051.0  | 3384.3  | 6435.3  | 11049.3 | 17113.8 | 20202.3 | 20056.8 | 17663.0 | 14658.9 | 10364.0 | 6017.5  |
| 77.5° | 920.0   | 985.7   | 1788.4  | 5463.6  | 12546.7 | 17911.7 | 17864.8 | 14851.4 | 10373.4 | 4811.2  | 1642.8  |
| 80°   | 305.1   | 338.0   | 549.2   | 1506.7  | 5726.5  | 11190.1 | 11401.4 | 9462.8  | 4712.6  | 1103.1  | 333.3   |
| 82.5° | 126.7   | 140.8   | 276.9   | 605.5   | 2027.7  | 4820.6  | 4750.2  | 4238.6  | 1642.8  | 685.3   | 122.0   |
| 85°   | 32.9    | 42.2    | 126.7   | 347.3   | 741.6   | 1661.6  | 1746.1  | 1422.2  | 929.4   | 568.0   | 37.6    |
| 87.5° | 0.0     | 0.0     | 61.0    | 140.8   | 333.3   | 502.2   | 525.7   | 431.8   | 525.7   | 427.1   | 18.8    |
| 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°    | 2769.4  | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 | 2769.4 |
| 2.5°  | 2760.0  | 2736.5 | 2694.3 | 2666.1 | 2628.6 | 2619.2 | 2600.4 | 2576.9 | 2572.2 | 2548.8 | 2553.5 |
| 5°    | 2713.0  | 2675.5 | 2600.4 | 2548.8 | 2487.7 | 2469.0 | 2436.1 | 2412.6 | 2393.9 | 2361.0 | 2365.7 |
| 7.5°  | 2703.7  | 2647.3 | 2544.1 | 2445.5 | 2346.9 | 2276.5 | 2177.9 | 2098.2 | 2032.4 | 1962.0 | 1976.1 |
| 10°   | 2736.5  | 2666.1 | 2520.6 | 2384.5 | 2206.1 | 1980.8 | 1722.6 | 1553.7 | 1469.2 | 1384.7 | 1394.1 |
| 12.5° | 2802.2  | 2717.7 | 2530.0 | 2323.5 | 1962.0 | 1577.1 | 1220.4 | 990.4  | 929.4  | 891.8  | 896.5  |
| 15°   | 2900.8  | 2797.5 | 2558.2 | 2206.1 | 1633.5 | 1140.6 | 812.0  | 713.5  | 736.9  | 751.0  | 751.0  |
| 17.5° | 3004.1  | 2886.7 | 2581.6 | 1994.9 | 1262.6 | 798.0  | 661.8  | 652.4  | 685.3  | 718.2  | 718.2  |
| 20°   | 3130.8  | 2980.6 | 2586.3 | 1727.3 | 910.6  | 647.8  | 624.3  | 624.3  | 647.8  | 685.3  | 685.3  |
| 22.5° | 3252.8  | 3083.9 | 2544.1 | 1422.2 | 694.7  | 600.8  | 600.8  | 600.8  | 614.9  | 652.4  | 657.1  |
| 25°   | 3398.4  | 3210.6 | 2454.9 | 1098.4 | 596.1  | 572.7  | 572.7  | 577.3  | 586.7  | 619.6  | 624.3  |
| 27.5° | 3553.2  | 3342.0 | 2304.7 | 802.6  | 544.5  | 539.8  | 544.5  | 549.2  | 553.9  | 586.7  | 596.1  |
| 30°   | 3731.6  | 3487.5 | 2112.2 | 600.8  | 497.5  | 497.5  | 511.6  | 521.0  | 521.0  | 549.2  | 558.6  |
| 32.5° | 3938.1  | 3680.0 | 1882.2 | 497.5  | 450.6  | 445.9  | 469.4  | 483.5  | 483.5  | 506.9  | 516.3  |
| 35°   | 4196.3  | 3877.1 | 1605.3 | 441.2  | 413.1  | 403.7  | 413.1  | 436.5  | 445.9  | 464.7  | 469.4  |
| 37.5° | 4539.0  | 4111.8 | 1309.6 | 408.4  | 384.9  | 366.1  | 366.1  | 370.8  | 389.6  | 408.4  | 413.1  |
| 40°   | 4975.5  | 4370.0 | 1018.6 | 384.9  | 356.7  | 338.0  | 323.9  | 319.2  | 314.5  | 328.6  | 338.0  |
| 42.5° | 5524.7  | 4661.0 | 760.4  | 361.4  | 333.3  | 305.1  | 286.3  | 267.5  | 244.1  | 239.4  | 244.1  |
| 45°   | 6228.7  | 5017.7 | 563.3  | 342.7  | 319.2  | 276.9  | 244.1  | 211.2  | 169.0  | 154.9  | 159.6  |
| 47.5° | 7059.6  | 5388.5 | 441.2  | 323.9  | 309.8  | 244.1  | 201.8  | 145.5  | 103.3  | 93.9   | 98.6   |
| 50°   | 7942.0  | 5745.3 | 375.5  | 300.4  | 291.0  | 211.2  | 145.5  | 89.2   | 61.0   | 61.0   | 65.7   |
| 52.5° | 8693.0  | 5947.1 | 342.7  | 281.6  | 262.9  | 173.7  | 93.9   | 51.6   | 37.6   | 37.6   | 42.2   |
| 55°   | 9420.6  | 6055.1 | 319.2  | 262.9  | 225.3  | 122.0  | 51.6   | 32.9   | 23.5   | 23.5   | 23.5   |
| 57.5° | 10171.6 | 6102.0 | 291.0  | 239.4  | 178.4  | 75.1   | 28.2   | 18.8   | 14.1   | 14.1   | 14.1   |
| 60°   | 10838.1 | 6012.8 | 248.8  | 197.1  | 117.3  | 37.6   | 14.1   | 14.1   | 9.4    | 4.7    | 4.7    |
| 62.5° | 11396.7 | 5843.8 | 173.7  | 140.8  | 70.4   | 18.8   | 9.4    | 4.7    | 0.0    | 0.0    | 0.0    |
| 65°   | 11739.3 | 5571.6 | 112.7  | 93.9   | 42.2   | 14.1   | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 11640.8 | 5060.0 | 70.4   | 61.0   | 18.8   | 9.4    | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 10504.8 | 4149.4 | 51.6   | 37.6   | 14.1   | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 7571.2  | 2806.9 | 37.6   | 23.5   | 9.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 3642.4  | 999.8  | 23.5   | 18.8   | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 891.8   | 220.6  | 14.1   | 9.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 197.1   | 42.2   | 9.4    | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 65.7    | 18.8   | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 23.5    | 9.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 14.1    | 4.7    | 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)