

Scaled data based on original data using  
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires  
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 766641

Luminaire Tested: **OVF25SXX2D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-31-95  
Report Number: 766641  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: OVF25SXX2D  
Description: 250 WATT HPS TYPE II ROADWAY  
Light Source: 250W HPS CL E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 27500 (1 lamp)  
Luminaire Lumens: 21538.1 lumens  
Efficiency: 78.3%  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

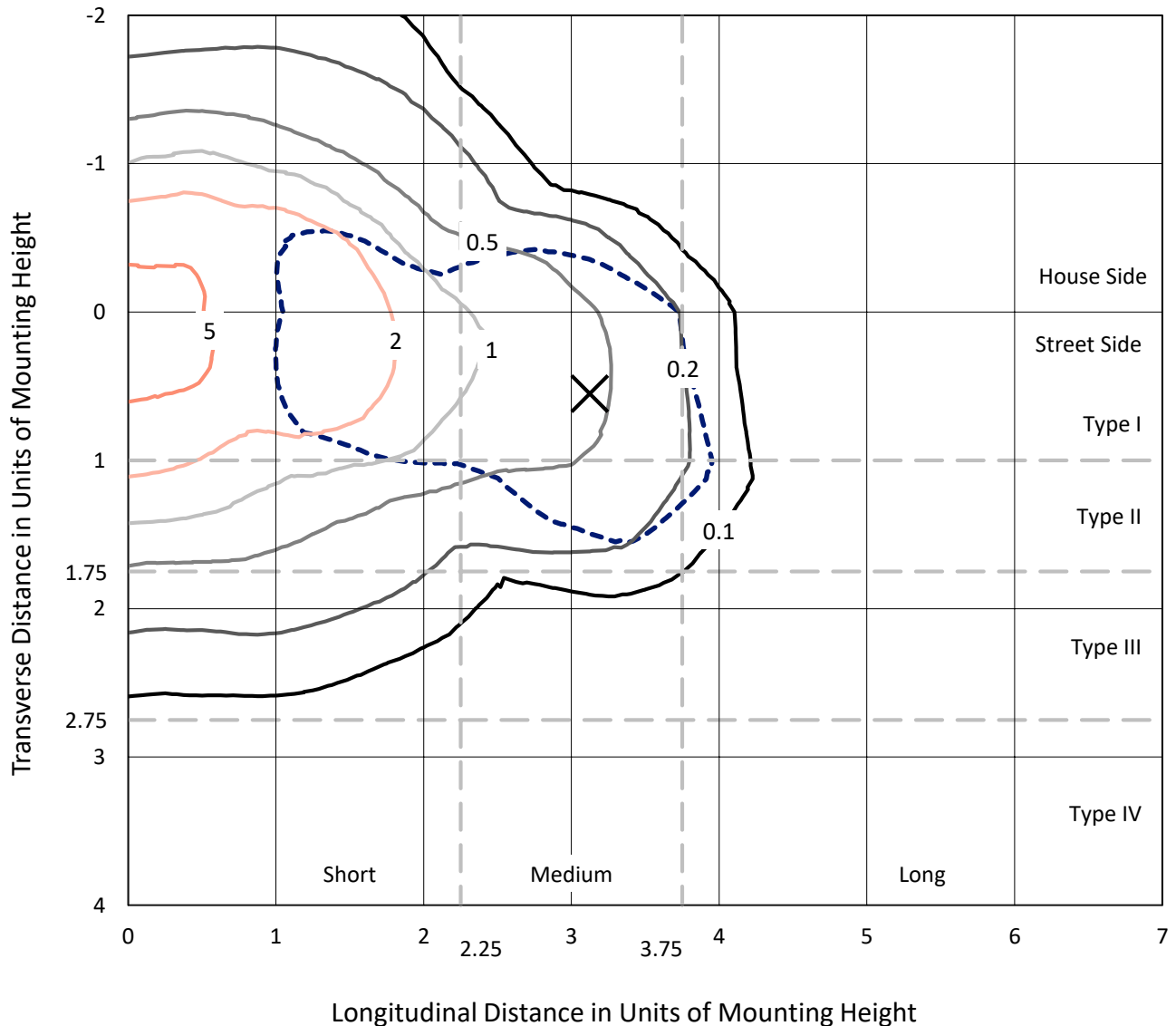
Input Watts (W): 250  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

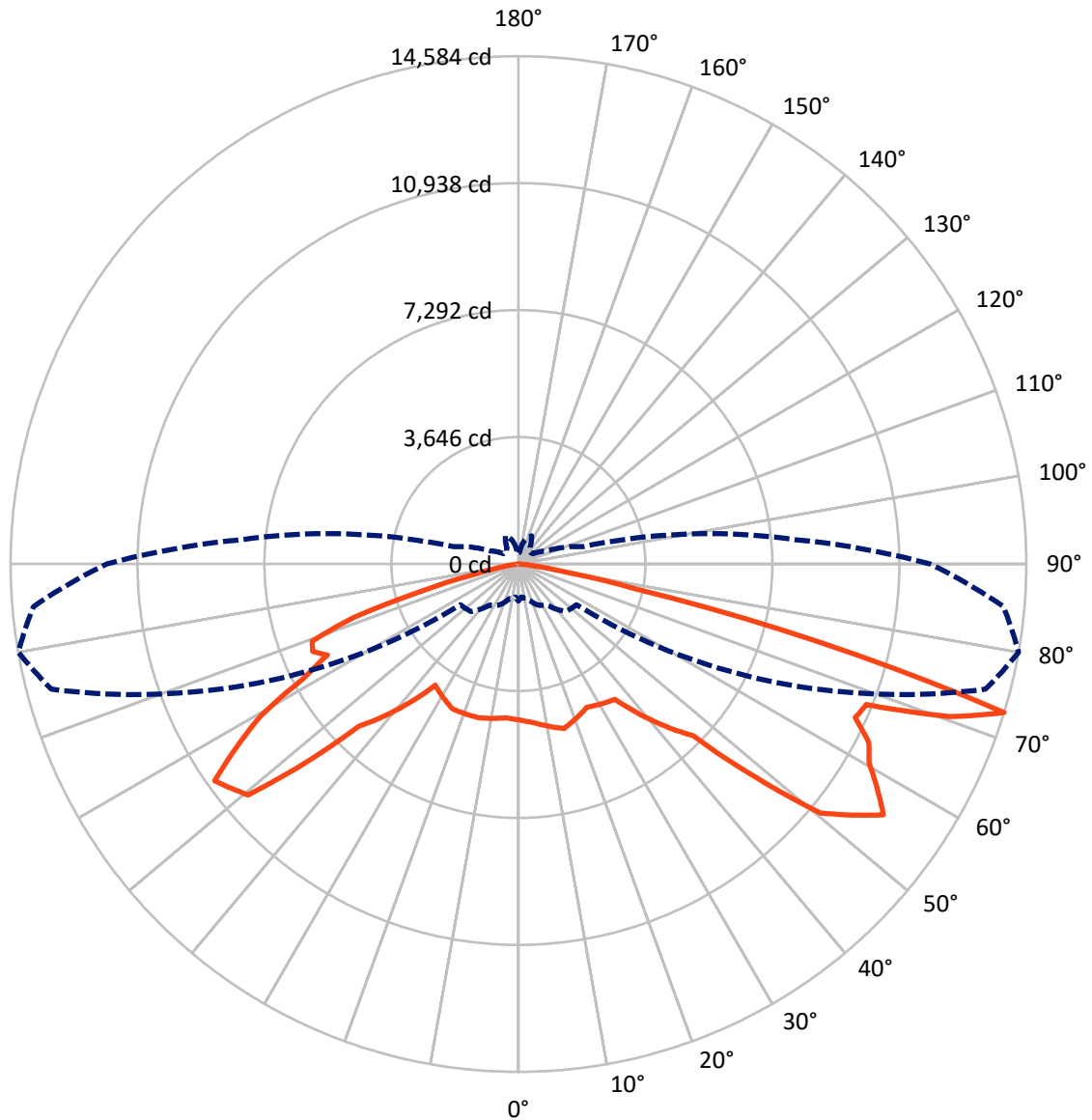
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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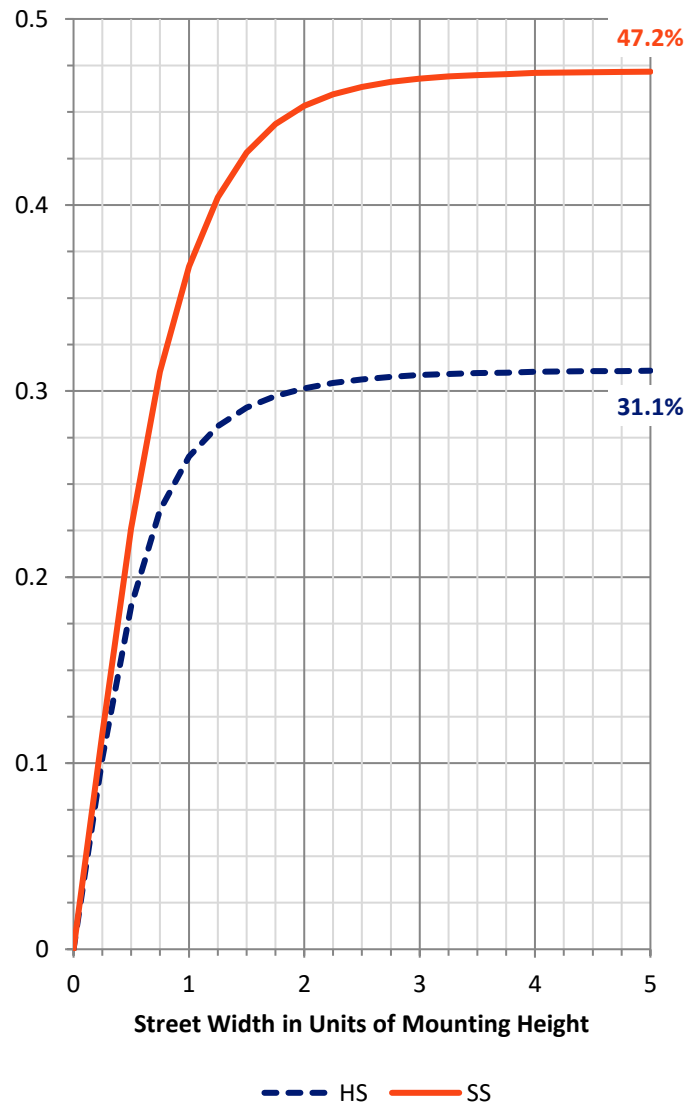
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total   |
|--------------------|--------|----------|--------|---------|
| <b>House Side</b>  | Lumens | 8597.4   | 0.0    | 8597.4  |
|                    | % Lamp | 31.3     | 0.0    | 31.3    |
| <b>Street Side</b> | Lumens | 12940.7  | 0.0    | 12940.7 |
|                    | % Lamp | 47.1     | 0.0    | 47.1    |
| <b>Total</b>       | Lumens | 21538.1  | 0.0    | 21538.1 |
|                    | % Lamp | 78.3     | 0.0    | 78.3    |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture | % Lamp |
|-----------|---------|-----------|--------|
| 0°-10°    | 435.0   | 2.0       | 1.6    |
| 10°-20°   | 1322.3  | 6.1       | 4.8    |
| 20°-30°   | 2127.6  | 9.9       | 7.7    |
| 30°-40°   | 2818.2  | 13.1      | 10.2   |
| 40°-50°   | 3872.9  | 18.0      | 14.1   |
| 50°-60°   | 4838.5  | 22.5      | 17.6   |
| 60°-70°   | 4008.8  | 18.6      | 14.6   |
| 70°-80°   | 2189.5  | 10.2      | 8.0    |
| 80°-90°   | 98.0    | 0.5       | 0.4    |
| 90°-100°  | 0.0     | 0.0       | 0.0    |
| 100°-110° | 0.0     | 0.0       | 0.0    |
| 110°-120° | 0.0     | 0.0       | 0.0    |
| 120°-130° | 0.0     | 0.0       | 0.0    |
| 130°-140° | 0.0     | 0.0       | 0.0    |
| 140°-150° | 0.0     | 0.0       | 0.0    |
| 150°-160° | 0.0     | 0.0       | 0.0    |
| 160°-170° | 0.0     | 0.0       | 0.0    |
| 170°-180° | 0.0     | 0.0       | 0.0    |
| 0°-90°    | 21538.1 | 100.0     | 78.3   |
| 0°-180°   | 21538.1 | 100.0     | 78.3   |

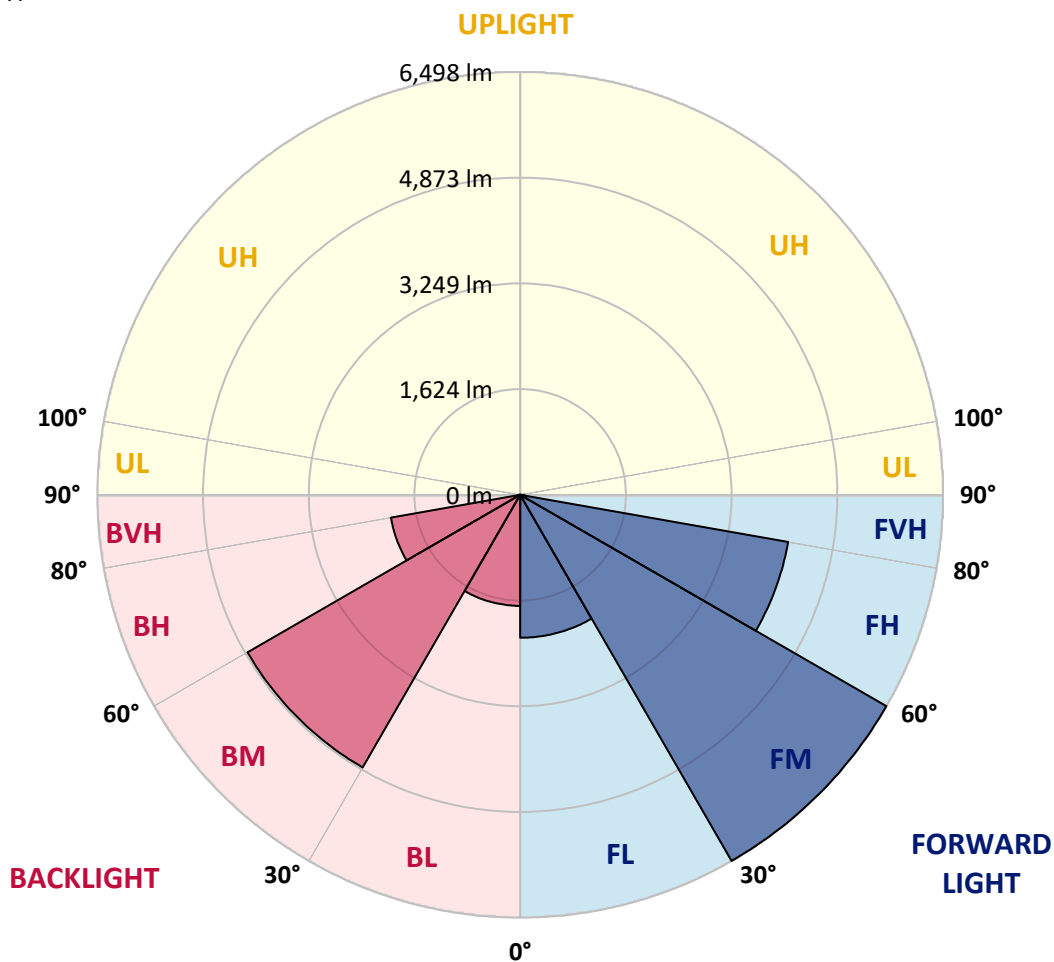


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Lamp | Zone Rating/Lumen Limit |      |         |
|----------------|--------|--------|-------------------------|------|---------|
|                |        |        | B                       | U    | G       |
| FL (0°-30°)    | 2196.5 | 8.0    |                         |      |         |
| FM (30°-60°)   | 6497.6 | 23.6   |                         |      |         |
| FH (60°-80°)   | 4181.1 | 15.2   |                         |      | G2/5000 |
| FVH (80°-90°)  | 64.0   | 0.2    |                         |      | G1/100  |
| BL (0°-30°)    | 1706.7 | 6.2    | B3/2500                 |      |         |
| BM (30°-60°)   | 4838.2 | 17.6   | B3/5000                 |      |         |
| BH (60°-80°)   | 2017.2 | 7.3    | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 33.9   | 0.1    |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0    |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0    |                         | U0/0 |         |
| Trapped Light  | 5961.9 | 21.7   |                         |      |         |

**BUG Rating: B3-U0-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°   | 5°   | 15°  | 25°  | 35°  | 45°  | 55°  | 65°   | 75°   | 80°   | 85°   |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 0°    | 4478 | 4478 | 4478 | 4478 | 4478 | 4478 | 4478 | 4478  | 4478  | 4478  | 4478  |
| 5°    | 4963 | 4942 | 4914 | 4860 | 4852 | 4769 | 4750 | 4655  | 4595  | 4575  | 4548  |
| 15°   | 6000 | 5941 | 5885 | 5804 | 5662 | 5466 | 5326 | 5184  | 5007  | 4901  | 4818  |
| 25°   | 5527 | 5479 | 5606 | 5469 | 5508 | 5472 | 5379 | 5057  | 4719  | 4559  | 4477  |
| 35°   | 4629 | 4517 | 4448 | 4699 | 5242 | 5518 | 5502 | 5215  | 4929  | 4771  | 4617  |
| 45°   | 4331 | 4237 | 4193 | 4220 | 4224 | 4540 | 5108 | 5775  | 6452  | 7040  | 6774  |
| 50°   | 4065 | 3975 | 3962 | 4054 | 3993 | 4207 | 5874 | 8072  | 10424 | 11235 | 10348 |
| 55°   | 3260 | 3260 | 3410 | 3622 | 3601 | 4116 | 6941 | 10819 | 12771 | 12716 | 12088 |
| 60°   | 2362 | 2216 | 2525 | 3046 | 3374 | 3801 | 5564 | 9894  | 11499 | 11567 | 11460 |
| 62.5° | 1952 | 1871 | 2151 | 2720 | 3114 | 3553 | 5040 | 9694  | 11290 | 11293 | 11001 |
| 65°   | 1695 | 1637 | 1852 | 2470 | 2844 | 3328 | 4471 | 8486  | 10234 | 10629 | 10590 |
| 67.5° | 1475 | 1434 | 1654 | 2135 | 2544 | 3056 | 3726 | 7188  | 9962  | 10773 | 11387 |
| 70°   | 1224 | 1203 | 1387 | 1777 | 2166 | 2695 | 2990 | 6839  | 11231 | 13131 | 14171 |
| 72.5° | 1063 | 949  | 1037 | 1299 | 1441 | 1932 | 2034 | 7950  | 13887 | 14584 | 13979 |
| 75°   | 598  | 521  | 567  | 670  | 653  | 899  | 1054 | 7295  | 9772  | 8841  | 7591  |
| 77.5° | 208  | 180  | 182  | 186  | 193  | 323  | 551  | 3056  | 4952  | 3413  | 2558  |
| 80°   | 64   | 62   | 64   | 78   | 98   | 172  | 253  | 878   | 1743  | 1286  | 980   |
| 82.5° | 32   | 32   | 32   | 39   | 45   | 82   | 104  | 266   | 508   | 429   | 357   |
| 85°   | 12   | 14   | 13   | 14   | 19   | 27   | 33   | 114   | 163   | 172   | 159   |
| 87.5° | 3    | 3    | 1    | 0    | 3    | 1    | 0    | 23    | 40    | 32    | 51    |
| 90°   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 95°   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 105°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 115°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 125°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 135°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 145°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 155°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 165°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 175°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     |
| 180°  | 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°    | 4478  | 4478  | 4478  | 4478 | 4478 | 4478 | 4478 | 4478 | 4478 | 4478 | 4478 |
| 5°    | 4512  | 4468  | 4389  | 4341 | 4262 | 4243 | 4197 | 4216 | 4159 | 4155 | 4158 |
| 15°   | 4706  | 4636  | 4480  | 4226 | 4041 | 4031 | 3842 | 3757 | 3719 | 3720 | 3765 |
| 25°   | 4431  | 4441  | 4701  | 4730 | 4520 | 4175 | 3703 | 3456 | 3321 | 3227 | 3222 |
| 35°   | 4461  | 4275  | 4168  | 4229 | 4333 | 4191 | 3990 | 3235 | 2805 | 2623 | 2576 |
| 45°   | 6465  | 6657  | 6406  | 5382 | 4712 | 3645 | 3150 | 2844 | 2131 | 1956 | 1782 |
| 50°   | 9461  | 9755  | 10665 | 7298 | 4985 | 3287 | 2659 | 2389 | 1823 | 1621 | 1513 |
| 55°   | 10974 | 11017 | 10413 | 6238 | 4164 | 2706 | 2231 | 1832 | 1562 | 1256 | 1218 |
| 60°   | 10766 | 10012 | 7154  | 4185 | 2912 | 2219 | 1826 | 1447 | 1201 | 1016 | 976  |
| 62.5° | 9941  | 8626  | 5319  | 3559 | 2685 | 2067 | 1701 | 1347 | 1054 | 863  | 814  |
| 65°   | 9318  | 7847  | 4311  | 3007 | 2345 | 1927 | 1591 | 1324 | 993  | 725  | 650  |
| 67.5° | 10335 | 8984  | 3853  | 2821 | 2252 | 1878 | 1494 | 1390 | 1006 | 588  | 497  |
| 70°   | 12198 | 10338 | 2300  | 1913 | 1347 | 1549 | 1385 | 1412 | 1024 | 439  | 370  |
| 72.5° | 11820 | 8002  | 1926  | 891  | 518  | 479  | 582  | 891  | 719  | 342  | 323  |
| 75°   | 7181  | 4286  | 1172  | 673  | 406  | 284  | 269  | 510  | 342  | 244  | 292  |
| 77.5° | 2424  | 1823  | 655   | 439  | 276  | 185  | 165  | 215  | 170  | 136  | 179  |
| 80°   | 777   | 702   | 387   | 231  | 144  | 124  | 94   | 105  | 84   | 84   | 92   |
| 82.5° | 305   | 293   | 183   | 101  | 61   | 62   | 45   | 51   | 39   | 48   | 43   |
| 85°   | 169   | 110   | 62    | 30   | 23   | 20   | 23   | 19   | 14   | 20   | 17   |
| 87.5° | 36    | 13    | 3     | 0    | 4    | 3    | 3    | 3    | 1    | 4    | 3    |
| 90°   | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 95°   | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 105°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 115°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 125°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 135°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 145°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 155°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 165°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 175°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 180°  | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

(END OF REPORT)