

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge  
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 768870

Luminaire Tested: **ARC25SXX33X4XR**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 768870  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARC25SXX33X4XR  
Description: GENERATIONS POST TOP  
W/TALL SPUN TOP  
Light Source: 250 WATT HPS CLEAR E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 27500 (1 lamp)  
Luminaire Lumens: 21186.8 lumens  
Efficiency: 77.0%  
Efficacy: 84.7 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B4 - U5 - G5

Input Watts (W): 250  
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

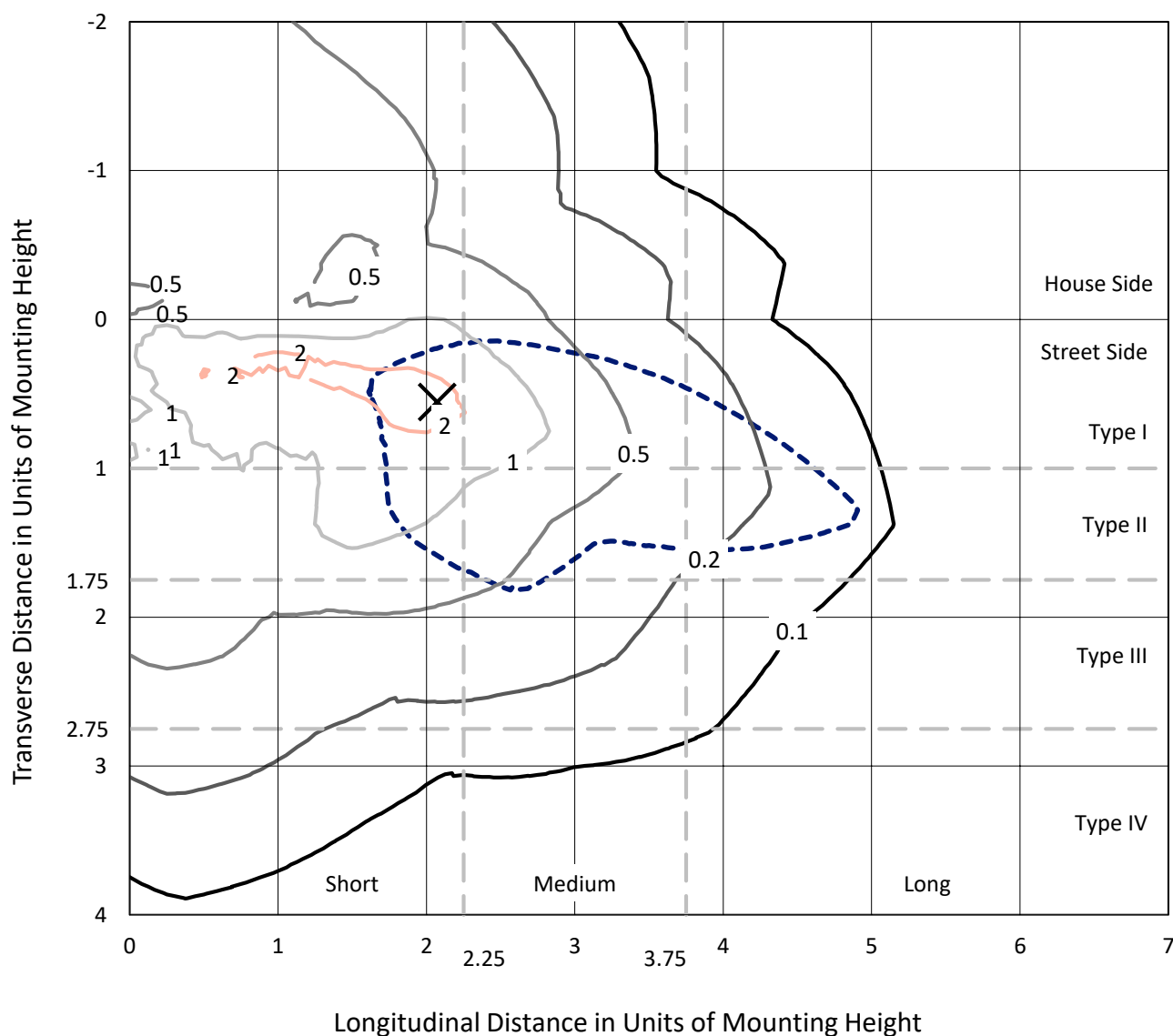


REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

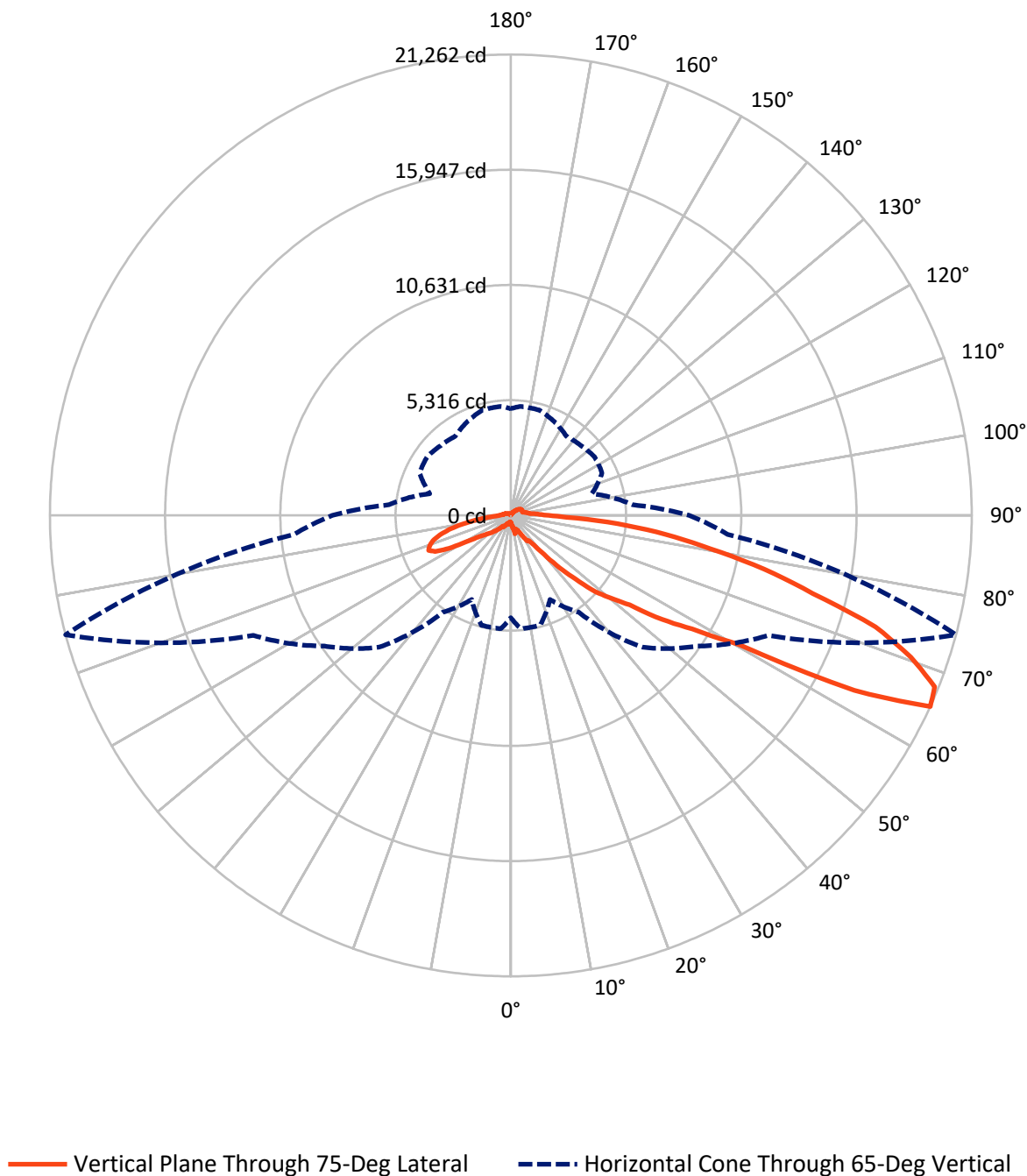


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

## Luminous Intensity Polar Plot



REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

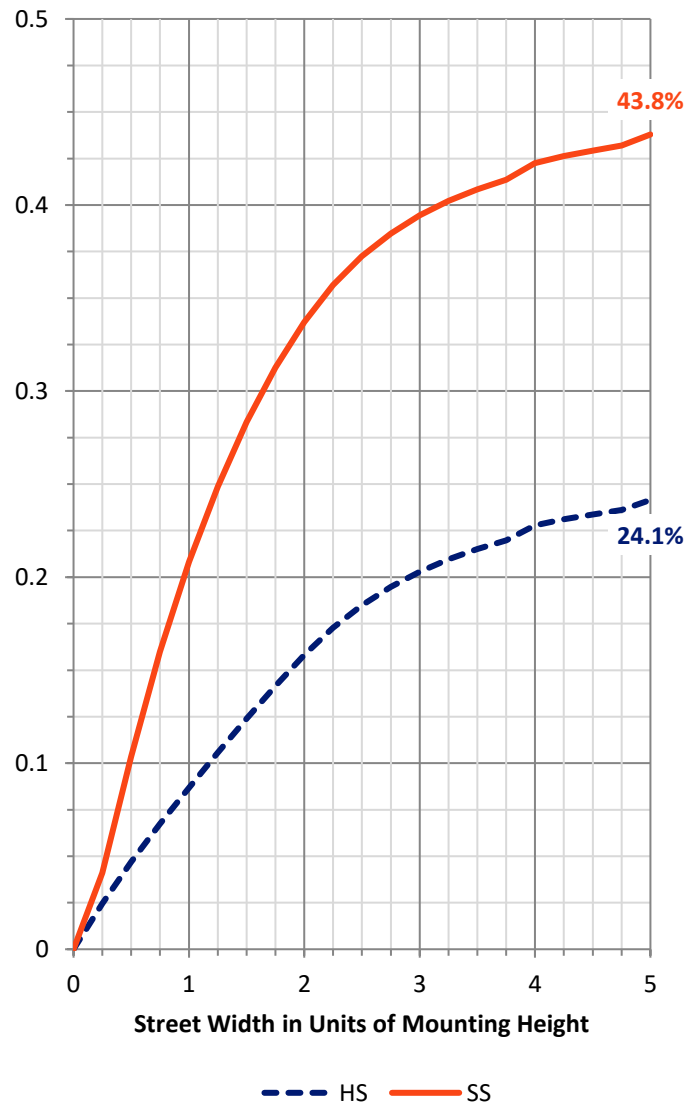
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total   |
|--------------------|--------|----------|--------|---------|
| <b>House Side</b>  | Lumens | 6947.3   | 745.8  | 7693.1  |
|                    | % Lamp | 25.3     | 2.7    | 28.0    |
| <b>Street Side</b> | Lumens | 12497.9  | 995.8  | 13493.7 |
|                    | % Lamp | 45.4     | 3.6    | 49.1    |
| <b>Total</b>       | Lumens | 19445.2  | 1741.6 | 21186.8 |
|                    | % Lamp | 70.7     | 6.3    | 77.0    |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture | % Lamp |
|-----------|---------|-----------|--------|
| 0°-10°    | 38.0    | 0.2       | 0.1    |
| 10°-20°   | 172.6   | 0.8       | 0.6    |
| 20°-30°   | 349.5   | 1.6       | 1.3    |
| 30°-40°   | 662.2   | 3.1       | 2.4    |
| 40°-50°   | 1219.2  | 5.8       | 4.4    |
| 50°-60°   | 2437.8  | 11.5      | 8.9    |
| 60°-70°   | 6381.8  | 30.1      | 23.2   |
| 70°-80°   | 5980.2  | 28.2      | 21.7   |
| 80°-90°   | 2203.8  | 10.4      | 8.0    |
| 90°-100°  | 619.7   | 2.9       | 2.3    |
| 100°-110° | 413.1   | 1.9       | 1.5    |
| 110°-120° | 293.8   | 1.4       | 1.1    |
| 120°-130° | 204.7   | 1.0       | 0.7    |
| 130°-140° | 129.1   | 0.6       | 0.5    |
| 140°-150° | 67.5    | 0.3       | 0.2    |
| 150°-160° | 23.7    | 0.1       | 0.1    |
| 160°-170° | 4.1     | 0.0       | 0.0    |
| 170°-180° | 0.2     | 0.0       | 0.0    |
| 0°-90°    | 19445.2 | 91.8      | 70.7   |
| 0°-180°   | 21186.8 | 100.0     | 77.0   |

**Coefficient of Utilization**



REPORT NUMBER: 768870

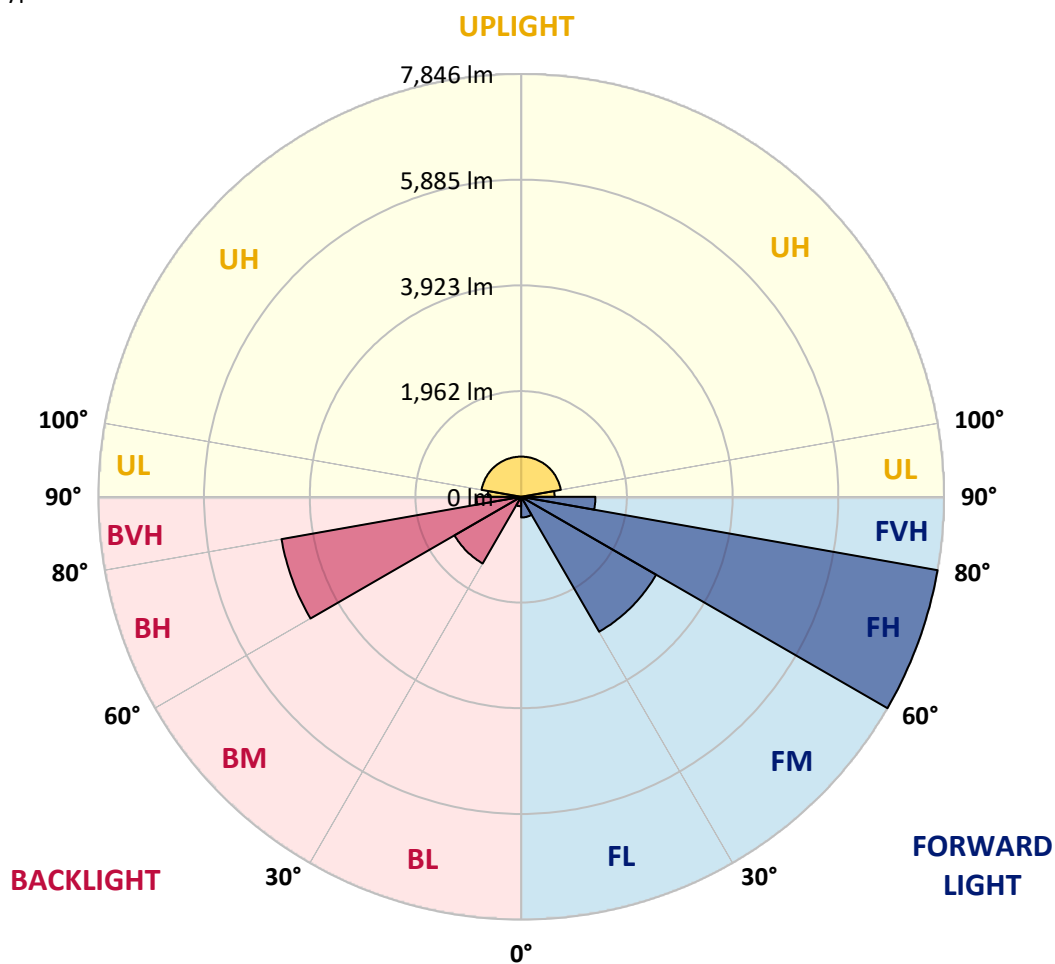
CATALOG NUMBER: ARC25SXX33X4XR

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

| Zone          |             | Lumens | % Lamp | Zone Rating/Lumen Limit |         |          |
|---------------|-------------|--------|--------|-------------------------|---------|----------|
|               |             |        |        | B                       | U       | G        |
| FL            | (0°-30°)    | 384.4  | 1.4    |                         |         |          |
| FM            | (30°-60°)   | 2891.2 | 10.5   |                         |         |          |
| FH            | (60°-80°)   | 7846.0 | 28.5   |                         |         | G4/12000 |
| FVH           | (80°-90°)   | 1376.3 | 5.0    |                         |         | G5       |
| BL            | (0°-30°)    | 175.7  | 0.6    | B1/500                  |         |          |
| BM            | (30°-60°)   | 1428.0 | 5.2    | B2/2500                 |         |          |
| BH            | (60°-80°)   | 4516.1 | 16.4   | B4/5000                 |         | G4/5000  |
| BVH           | (80°-90°)   | 827.5  | 3.0    |                         |         | G5       |
| UL            | (90°-100°)  | 619.7  | 2.3    |                         | U4/1000 |          |
| UH            | (100°-180°) | 745.8  | 2.7    |                         | U4/1000 |          |
| Trapped Light |             | 6313.2 | 23.0   |                         |         |          |

**BUG Rating: B4-U5-G5**

Type II Short





REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

**CANDELA DISTRIBUTION (FULL):**

|       | 0°   | 5°   | 15°  | 25°  | 35°  | 45°  | 55°   | 65°   | 75°   | 85°   | 90°  |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 0°    | 346  | 346  | 346  | 346  | 346  | 346  | 346   | 346   | 346   | 346   | 346  |
| 2.5°  | 382  | 386  | 386  | 386  | 382  | 386  | 382   | 377   | 364   | 364   | 359  |
| 5°    | 500  | 496  | 505  | 509  | 500  | 496  | 500   | 496   | 459   | 405   | 373  |
| 7.5°  | 536  | 546  | 600  | 646  | 655  | 650  | 641   | 627   | 568   | 477   | 441  |
| 10°   | 482  | 491  | 527  | 582  | 646  | 691  | 691   | 614   | 514   | 436   | 396  |
| 12.5° | 618  | 655  | 782  | 946  | 1196 | 1359 | 1359  | 1168  | 877   | 632   | 536  |
| 15°   | 591  | 618  | 705  | 873  | 1100 | 1250 | 1268  | 1055  | 800   | 605   | 527  |
| 17.5° | 546  | 550  | 586  | 791  | 987  | 1096 | 1096  | 923   | 705   | 541   | 486  |
| 20°   | 536  | 536  | 582  | 764  | 973  | 1123 | 1055  | 873   | 668   | 523   | 468  |
| 22.5° | 646  | 627  | 664  | 818  | 1046 | 1241 | 1218  | 1041  | 741   | 564   | 496  |
| 25°   | 755  | 727  | 746  | 877  | 1168 | 1414 | 1432  | 1246  | 800   | 577   | 514  |
| 27.5° | 918  | 873  | 836  | 918  | 1287 | 1541 | 1614  | 1509  | 950   | 655   | 564  |
| 30°   | 1100 | 1055 | 973  | 1027 | 1487 | 1759 | 1850  | 1918  | 1177  | 705   | 586  |
| 32.5° | 1137 | 1100 | 973  | 1055 | 1577 | 1887 | 2228  | 2478  | 1418  | 809   | 691  |
| 35°   | 991  | 964  | 850  | 859  | 1318 | 1437 | 1723  | 2250  | 1423  | 841   | 700  |
| 37.5° | 1127 | 1109 | 991  | 914  | 1500 | 1477 | 1596  | 2541  | 1718  | 814   | 677  |
| 40°   | 1437 | 1387 | 1255 | 1100 | 1900 | 1773 | 1905  | 3069  | 2359  | 868   | 727  |
| 42.5° | 1682 | 1637 | 1473 | 1255 | 2168 | 1987 | 2150  | 3273  | 3305  | 1023  | 836  |
| 45°   | 1691 | 1655 | 1468 | 1237 | 2100 | 1982 | 2118  | 2832  | 4187  | 1223  | 955  |
| 47.5° | 1782 | 1714 | 1532 | 1291 | 2209 | 2123 | 2282  | 2655  | 5278  | 1559  | 1087 |
| 50°   | 1937 | 1846 | 1668 | 1405 | 2405 | 2314 | 2469  | 2650  | 5987  | 2009  | 1323 |
| 52.5° | 2237 | 2096 | 1850 | 1555 | 2746 | 2682 | 2859  | 2964  | 6860  | 2578  | 1646 |
| 55°   | 2682 | 2505 | 2168 | 1809 | 3237 | 3191 | 3441  | 3601  | 8469  | 3196  | 2055 |
| 57.5° | 2846 | 2759 | 2450 | 2009 | 3455 | 3628 | 3982  | 4419  | 9870  | 4105  | 2846 |
| 60°   | 3210 | 3305 | 3100 | 2496 | 3946 | 4705 | 5514  | 6533  | 12093 | 5683  | 4378 |
| 62.5° | 4164 | 4510 | 4446 | 3560 | 4969 | 7096 | 8515  | 10783 | 17780 | 8028  | 6469 |
| 65°   | 4719 | 5246 | 5242 | 4273 | 5451 | 8601 | 10506 | 13102 | 21262 | 10038 | 8224 |
| 67.5° | 4655 | 5255 | 5228 | 4428 | 5292 | 8492 | 11133 | 13011 | 21085 | 11015 | 8915 |
| 70°   | 4464 | 5096 | 4964 | 4323 | 4851 | 7906 | 11029 | 12138 | 19580 | 11015 | 8474 |
| 72.5° | 4137 | 4787 | 4564 | 4010 | 4201 | 7151 | 10461 | 11211 | 17593 | 10592 | 7615 |
| 75°   | 3655 | 4251 | 3978 | 3596 | 3505 | 5978 | 9138  | 9815  | 14384 | 9483  | 6455 |
| 77.5° | 3210 | 3732 | 3450 | 3169 | 3005 | 4882 | 7897  | 8674  | 11952 | 8042  | 5228 |
| 80°   | 2564 | 2982 | 2737 | 2555 | 2423 | 3660 | 6192  | 6874  | 9324  | 6351  | 4051 |
| 82.5° | 1973 | 2300 | 2091 | 1987 | 1850 | 2728 | 4560  | 5287  | 7196  | 4623  | 2873 |
| 85°   | 1337 | 1537 | 1423 | 1377 | 1282 | 1805 | 2991  | 3541  | 4960  | 2873  | 1782 |
| 87.5° | 809  | 900  | 868  | 836  | 791  | 1055 | 1691  | 1923  | 2559  | 1618  | 1091 |
| 90°   | 618  | 668  | 655  | 636  | 618  | 764  | 1137  | 1223  | 1541  | 1127  | 796  |
| 95°   | 446  | 477  | 473  | 464  | 450  | 518  | 709   | 750   | 891   | 723   | 509  |
| 105°  | 346  | 350  | 350  | 327  | 327  | 350  | 432   | 464   | 555   | 436   | 341  |
| 115°  | 227  | 245  | 250  | 232  | 218  | 255  | 377   | 509   | 573   | 309   | 273  |
| 125°  | 182  | 186  | 191  | 182  | 177  | 214  | 268   | 482   | 509   | 255   | 195  |
| 135°  | 155  | 155  | 141  | 127  | 127  | 145  | 195   | 450   | 305   | 136   | 114  |
| 145°  | 109  | 109  | 100  | 91   | 91   | 91   | 150   | 359   | 159   | 86    | 73   |
| 155°  | 45   | 45   | 45   | 41   | 36   | 50   | 73    | 95    | 82    | 41    | 36   |
| 165°  | 9    | 14   | 14   | 9    | 5    | 9    | 14    | 9     | 9     | 5     | 0    |



REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

**CANDELA DISTRIBUTION (continued):**

|      | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 175° | 9  | 14 | 14  | 0   | 0   | 5   | 14  | 5   | 5   | 0   | 0   |
| 180° | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |



REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

**CANDELA DISTRIBUTION (continued):**

|       | 95°  | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0°    | 346  | 346  | 346  | 346  | 346  | 346  | 346  | 346  | 346  | 346  |
| 2.5°  | 346  | 314  | 295  | 282  | 277  | 277  | 277  | 273  | 259  | 264  |
| 5°    | 350  | 291  | 250  | 218  | 195  | 186  | 191  | 209  | 223  | 227  |
| 7.5°  | 400  | 332  | 286  | 255  | 227  | 214  | 214  | 223  | 227  | 227  |
| 10°   | 368  | 327  | 291  | 268  | 259  | 250  | 250  | 250  | 259  | 264  |
| 12.5° | 468  | 373  | 332  | 323  | 318  | 314  | 314  | 314  | 314  | 309  |
| 15°   | 482  | 418  | 377  | 355  | 359  | 368  | 368  | 373  | 373  | 373  |
| 17.5° | 455  | 405  | 373  | 364  | 364  | 368  | 386  | 391  | 396  | 391  |
| 20°   | 436  | 382  | 364  | 368  | 377  | 382  | 396  | 400  | 400  | 400  |
| 22.5° | 450  | 400  | 405  | 405  | 414  | 427  | 427  | 423  | 427  | 418  |
| 25°   | 477  | 446  | 441  | 450  | 459  | 473  | 464  | 464  | 464  | 455  |
| 27.5° | 523  | 505  | 505  | 523  | 536  | 541  | 536  | 532  | 523  | 509  |
| 30°   | 541  | 550  | 555  | 582  | 586  | 600  | 596  | 582  | 573  | 564  |
| 32.5° | 641  | 632  | 659  | 691  | 705  | 696  | 686  | 673  | 668  | 673  |
| 35°   | 623  | 600  | 627  | 664  | 686  | 696  | 691  | 686  | 682  | 673  |
| 37.5° | 627  | 632  | 664  | 682  | 696  | 691  | 696  | 696  | 696  | 691  |
| 40°   | 700  | 732  | 777  | 791  | 786  | 777  | 786  | 786  | 764  | 755  |
| 42.5° | 809  | 873  | 909  | 914  | 914  | 909  | 909  | 914  | 886  | 882  |
| 45°   | 918  | 987  | 1009 | 1000 | 1014 | 1009 | 1018 | 1009 | 1009 | 1000 |
| 47.5° | 1005 | 1109 | 1127 | 1105 | 1096 | 1137 | 1150 | 1114 | 1132 | 1118 |
| 50°   | 1127 | 1259 | 1296 | 1264 | 1255 | 1282 | 1318 | 1277 | 1273 | 1282 |
| 52.5° | 1318 | 1391 | 1496 | 1468 | 1482 | 1464 | 1564 | 1459 | 1423 | 1464 |
| 55°   | 1573 | 1591 | 1741 | 1718 | 1750 | 1714 | 1868 | 1796 | 1723 | 1746 |
| 57.5° | 1973 | 1878 | 2055 | 2041 | 2091 | 2028 | 2228 | 2241 | 2100 | 2091 |
| 60°   | 2814 | 2423 | 2673 | 2678 | 2696 | 2614 | 2837 | 2955 | 2764 | 2700 |
| 62.5° | 4219 | 3237 | 3769 | 3828 | 3769 | 3628 | 3932 | 4105 | 3964 | 3837 |
| 65°   | 5633 | 3869 | 4642 | 4714 | 4564 | 4460 | 4764 | 5033 | 5046 | 4928 |
| 67.5° | 6633 | 4119 | 4992 | 5046 | 4851 | 4837 | 5101 | 5455 | 5592 | 5464 |
| 70°   | 7037 | 3996 | 4878 | 4887 | 4746 | 4787 | 5019 | 5446 | 5705 | 5528 |
| 72.5° | 7187 | 3773 | 4582 | 4578 | 4510 | 4523 | 4778 | 5210 | 5619 | 5428 |
| 75°   | 6815 | 3400 | 4082 | 4055 | 3969 | 3987 | 4255 | 4632 | 5096 | 4946 |
| 77.5° | 5769 | 2932 | 3473 | 3419 | 3350 | 3378 | 3610 | 3932 | 4360 | 4301 |
| 80°   | 4446 | 2337 | 2714 | 2682 | 2623 | 2628 | 2796 | 3046 | 3387 | 3410 |
| 82.5° | 3000 | 1691 | 1937 | 1937 | 1882 | 1846 | 1964 | 2123 | 2355 | 2428 |
| 85°   | 1778 | 1141 | 1287 | 1296 | 1273 | 1241 | 1287 | 1377 | 1500 | 1555 |
| 87.5° | 1087 | 741  | 823  | 823  | 814  | 796  | 823  | 855  | 923  | 946  |
| 90°   | 805  | 555  | 600  | 591  | 586  | 582  | 600  | 636  | 682  | 700  |
| 95°   | 518  | 386  | 427  | 432  | 427  | 432  | 446  | 468  | 509  | 518  |
| 105°  | 355  | 282  | 309  | 323  | 359  | 377  | 373  | 386  | 400  | 400  |
| 115°  | 236  | 227  | 245  | 259  | 264  | 255  | 255  | 259  | 259  | 264  |
| 125°  | 164  | 173  | 186  | 191  | 195  | 195  | 195  | 195  | 191  | 182  |
| 135°  | 114  | 114  | 127  | 132  | 141  | 136  | 132  | 127  | 127  | 127  |
| 145°  | 77   | 82   | 86   | 86   | 91   | 95   | 91   | 86   | 86   | 82   |
| 155°  | 27   | 27   | 32   | 27   | 36   | 36   | 36   | 32   | 27   | 27   |
| 165°  | 0    | 0    | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 0    |



REPORT NUMBER: 768870

CATALOG NUMBER: ARC25SXX33X4XR

**CANDELA DISTRIBUTION (continued):**

|      | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|------|-----|------|------|------|------|------|------|------|------|------|
| 175° | 0   | 0    | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 0    |
| 180° | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

(END OF REPORT)