

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: ITL52705

Luminaire Tested: **TRU40SXX3S**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-46-04  
Report Number: ITL52705  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: TRU40SXX3S  
Description: ARCHITECTURAL AREA LUMINAIRE - TYPE III DISTRIBUTION  
Light Source: 400-WATT CLEAR E-18 HIGH PRESSURE SODIUM  
Ballast/Driver: -

#### Summary

Lumens per Lamp: 50000 (1 lamp)  
Luminaire Lumens: 33237 lumens  
Efficiency: 66.5%  
Efficacy: 83.1 lumens/watt  
Luminous Opening: Rectangular (W 1.01' x L: 1.03' x H: 0')  
IES Classification: Type III - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4

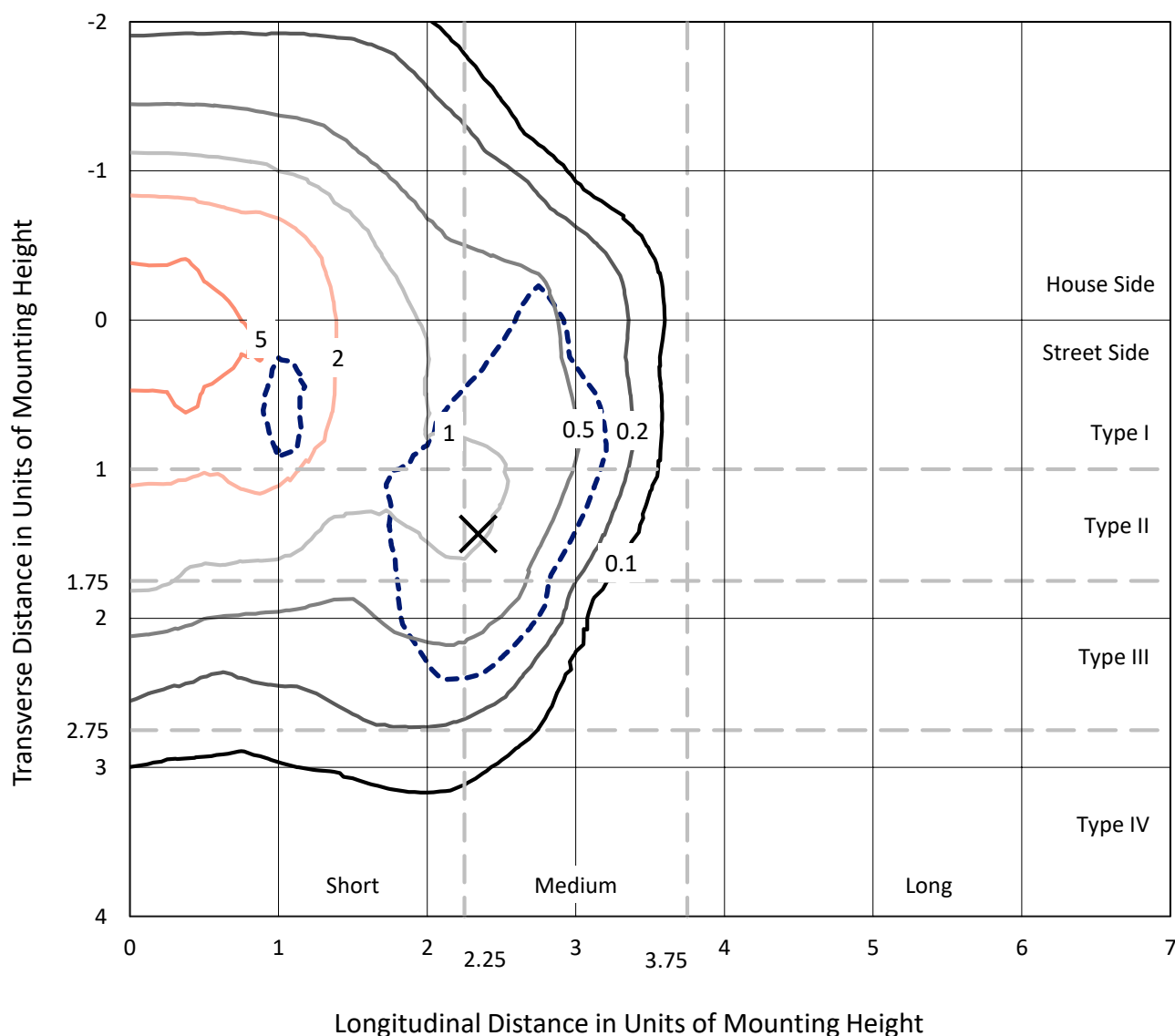
Input Watts (W): 400  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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## Iso-Footcandle Lines of Horizontal Illumination

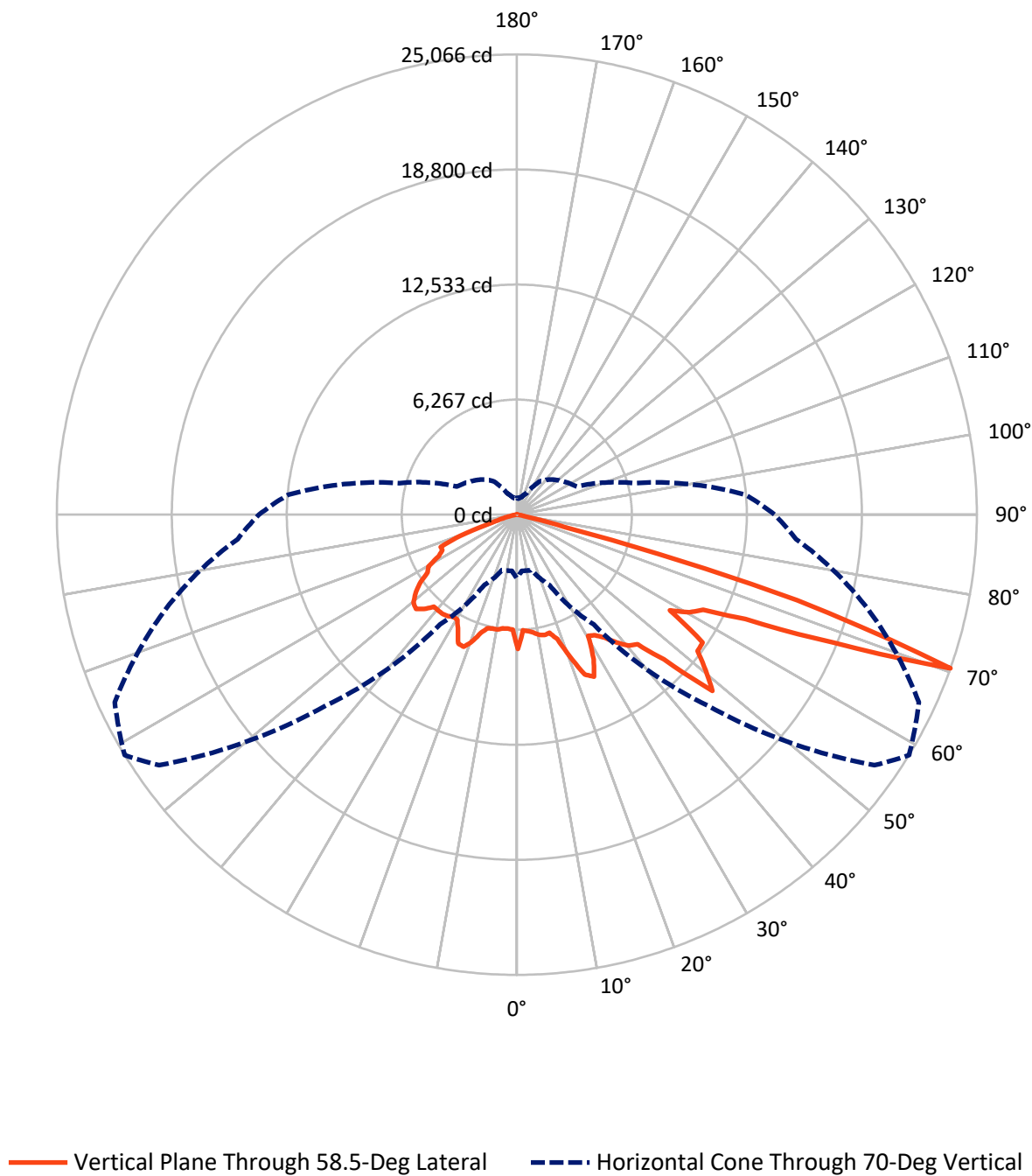
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 fc  
 Type III - Medium - Full Cutoff

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## Luminous Intensity Polar Plot



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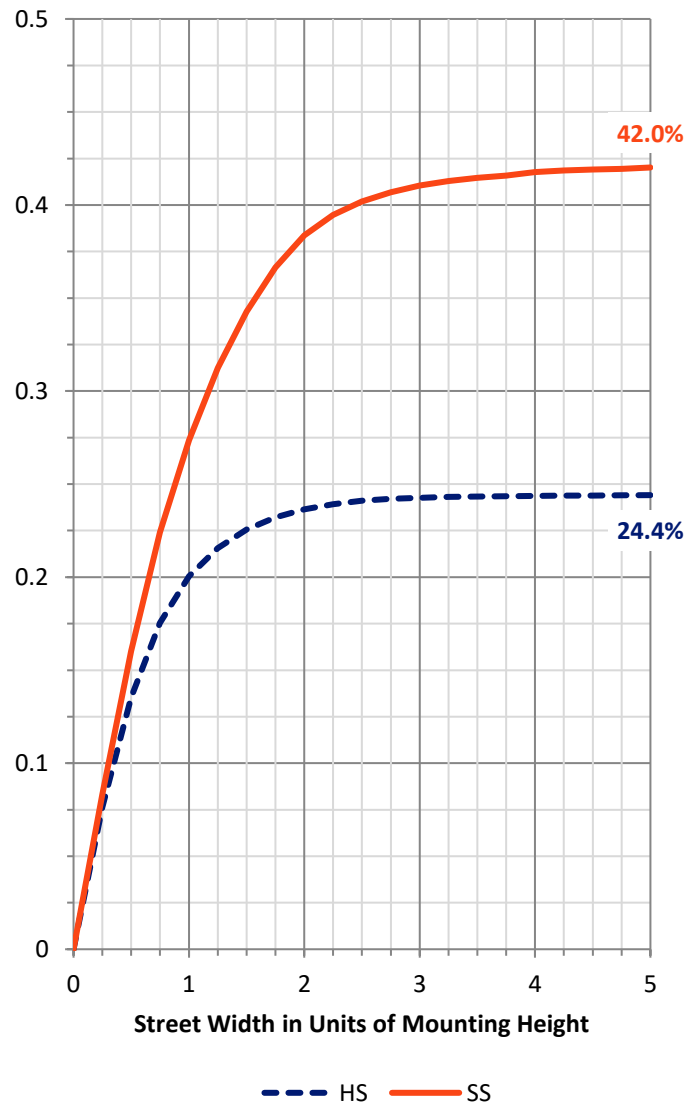
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total   |
|--------------------|--------|----------|--------|---------|
| <b>House Side</b>  | Lumens | 12263.5  | 0.0    | 12263.5 |
|                    | % Lamp | 24.5     | 0.0    | 24.5    |
| <b>Street Side</b> | Lumens | 20973.5  | 0.0    | 20973.5 |
|                    | % Lamp | 41.9     | 0.0    | 41.9    |
| <b>Total</b>       | Lumens | 33237.0  | 0.0    | 33237.0 |
|                    | % Lamp | 66.5     | 0.0    | 66.5    |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture | % Lamp |
|-----------|---------|-----------|--------|
| 0°-10°    | 607.4   | 1.8       | 1.2    |
| 10°-20°   | 1883.8  | 5.7       | 3.8    |
| 20°-30°   | 3318.2  | 10.0      | 6.6    |
| 30°-40°   | 4367.6  | 13.1      | 8.7    |
| 40°-50°   | 5872.0  | 17.7      | 11.7   |
| 50°-60°   | 6535.8  | 19.7      | 13.1   |
| 60°-70°   | 6912.0  | 20.8      | 13.8   |
| 70°-80°   | 3647.5  | 11.0      | 7.3    |
| 80°-90°   | 92.8    | 0.3       | 0.2    |
| 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°    | 33237.0 | 100.0     | 66.5   |
| 0°-180°   | 33237.0 | 100.0     | 66.5   |

**Coefficient of Utilization**

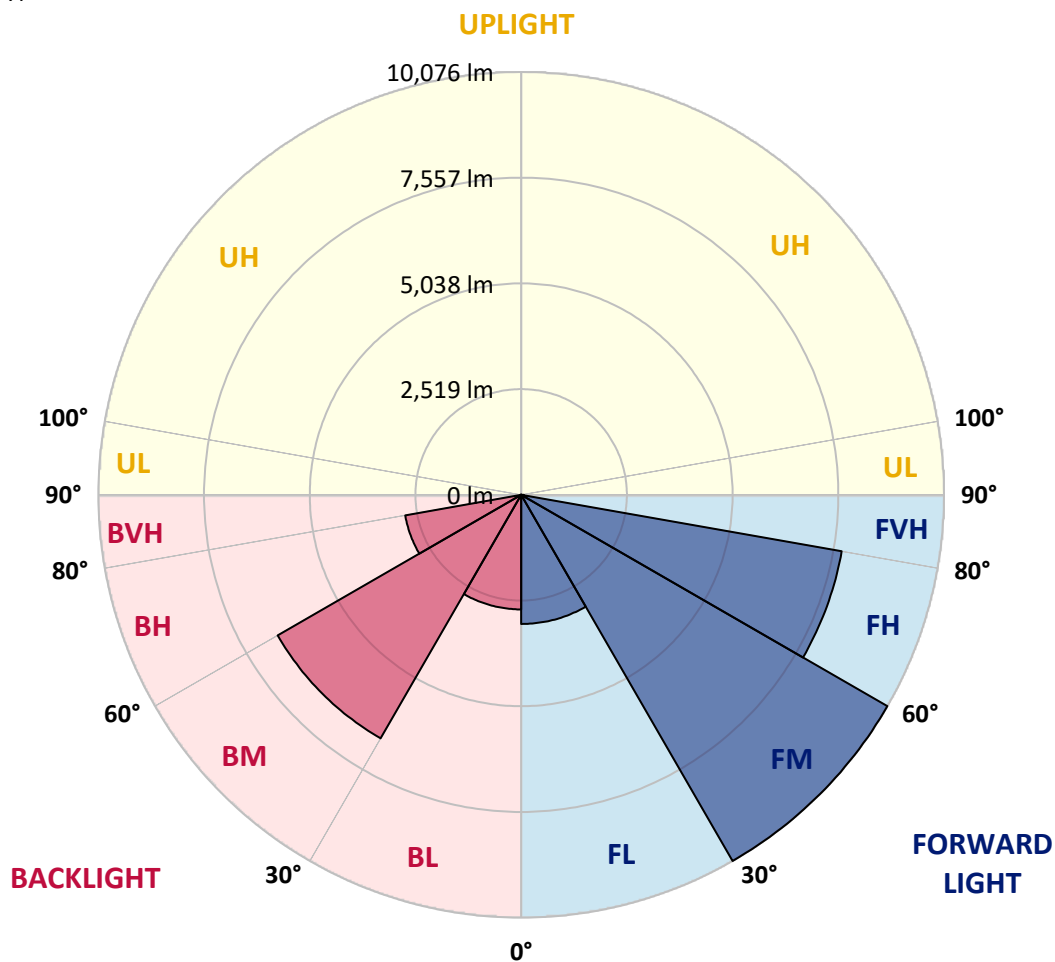


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone          |             | Lumens  | % Lamp | Zone Rating/Lumen Limit |      |          |
|---------------|-------------|---------|--------|-------------------------|------|----------|
|               |             |         |        | B                       | U    | G        |
| FL            | (0°-30°)    | 3078.3  | 6.2    |                         |      |          |
| FM            | (30°-60°)   | 10075.7 | 20.2   |                         |      |          |
| FH            | (60°-80°)   | 7754.4  | 15.5   |                         |      | G4/12000 |
| FVH           | (80°-90°)   | 65.1    | 0.1    |                         |      | G1/100   |
| BL            | (0°-30°)    | 2731.0  | 5.5    | B4/5000                 |      |          |
| BM            | (30°-60°)   | 6699.7  | 13.4   | B4/8500                 |      |          |
| BH            | (60°-80°)   | 2805.1  | 5.6    | B4/5000                 |      | G4/5000  |
| BVH           | (80°-90°)   | 27.7    | 0.1    |                         |      | G1/100   |
| UL            | (90°-100°)  | 0.0     | 0.0    |                         | U0/0 |          |
| UH            | (100°-180°) | 0.0     | 0.0    |                         | U0/0 |          |
| Trapped Light |             | 16763.0 | 33.5   |                         |      |          |

**BUG Rating: B4-U0-G4**  
Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°   | 5°   | 15°  | 25°  | 35°  | 45°   | 55°   | 58.5° | 65°   | 75°   | 85°   |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 0°    | 7312 | 7312 | 7312 | 7312 | 7312 | 7312  | 7312  | 7312  | 7312  | 7312  | 7312  |
| 2.5°  | 6410 | 6383 | 6419 | 6337 | 6328 | 6328  | 6356  | 6310  | 6346  | 6337  | 6319  |
| 5°    | 6429 | 6401 | 6365 | 6337 | 6346 | 6383  | 6401  | 6374  | 6410  | 6392  | 6365  |
| 7.5°  | 6447 | 6511 | 6356 | 6356 | 6401 | 6465  | 6492  | 6483  | 6511  | 6492  | 6492  |
| 10°   | 6483 | 6410 | 6401 | 6410 | 6492 | 6566  | 6675  | 6657  | 6693  | 6703  | 6648  |
| 12.5° | 6392 | 6365 | 6374 | 6401 | 6538 | 6657  | 6739  | 6730  | 6748  | 6730  | 6703  |
| 15°   | 6356 | 6346 | 6401 | 6547 | 6611 | 6703  | 6684  | 6675  | 6821  | 7040  | 7123  |
| 17.5° | 6410 | 6346 | 6410 | 6538 | 6648 | 6657  | 6903  | 7123  | 7506  | 8017  | 8127  |
| 20°   | 6356 | 6392 | 6392 | 6511 | 6629 | 6766  | 7734  | 8227  | 8730  | 9122  | 9214  |
| 22.5° | 6228 | 6282 | 6410 | 6520 | 6566 | 7643  | 9113  | 9460  | 9606  | 9524  | 9214  |
| 25°   | 6118 | 6136 | 6310 | 6511 | 6885 | 8885  | 9953  | 9771  | 9506  | 8730  | 8136  |
| 27.5° | 5972 | 6036 | 6145 | 6365 | 7734 | 10008 | 9670  | 8921  | 8191  | 7707  | 7579  |
| 30°   | 5844 | 5963 | 6054 | 6246 | 8648 | 10072 | 8282  | 7661  | 7652  | 7999  | 8017  |
| 32.5° | 5716 | 5780 | 5917 | 6392 | 9396 | 9232  | 7579  | 7826  | 8036  | 8419  | 8483  |
| 35°   | 5515 | 5488 | 5780 | 6849 | 9615 | 7762  | 7954  | 8227  | 8620  | 8949  | 8949  |
| 37.5° | 5260 | 5287 | 5689 | 7323 | 9086 | 7378  | 8520  | 8830  | 9131  | 9250  | 9049  |
| 40°   | 5187 | 5251 | 5570 | 7616 | 7652 | 7716  | 9040  | 9387  | 9451  | 9405  | 9460  |
| 42.5° | 5351 | 5397 | 5643 | 7497 | 6931 | 8100  | 9588  | 9652  | 9908  | 11524 | 11789 |
| 45°   | 5735 | 5707 | 5899 | 6894 | 6876 | 8739  | 10218 | 11250 | 12948 | 12802 | 11360 |
| 47.5° | 5990 | 5844 | 6109 | 6292 | 6867 | 9688  | 12711 | 14346 | 14008 | 11953 | 11250 |
| 50°   | 6155 | 6145 | 6346 | 5908 | 7579 | 10209 | 14327 | 13332 | 12574 | 12446 | 12556 |
| 52.5° | 6538 | 6639 | 6693 | 6027 | 8867 | 12419 | 13040 | 12337 | 12583 | 12172 | 10392 |
| 55°   | 7323 | 7396 | 5917 | 6009 | 9396 | 12035 | 12501 | 12291 | 11022 | 9478  | 8282  |
| 57.5° | 7762 | 7762 | 5908 | 6602 | 9341 | 9908  | 9825  | 9835  | 9844  | 9186  | 9807  |
| 60°   | 8328 | 8374 | 7031 | 7771 | 9314 | 9049  | 9488  | 10803 | 11076 | 9862  | 10382 |
| 62.5° | 7524 | 7533 | 6639 | 7607 | 9250 | 8648  | 10839 | 11396 | 11588 | 9415  | 11013 |
| 65°   | 5607 | 5360 | 4703 | 6109 | 8282 | 9214  | 12355 | 13697 | 11798 | 11634 | 9570  |
| 67.5° | 3908 | 3506 | 3260 | 4894 | 6264 | 10519 | 16838 | 18601 | 18053 | 14355 | 11798 |
| 70°   | 3452 | 3068 | 3123 | 4246 | 7296 | 14702 | 23787 | 25066 | 24171 | 19788 | 15268 |
| 72.5° | 2465 | 2411 | 2602 | 4127 | 8200 | 15524 | 18519 | 15971 | 15688 | 15953 | 10145 |
| 75°   | 1772 | 1735 | 1982 | 3223 | 6082 | 6931  | 4666  | 2712  | 4274  | 4064  | 2502  |
| 77.5° | 1205 | 1214 | 1214 | 2164 | 3223 | 1881  | 767   | 438   | 594   | 447   | 548   |
| 80°   | 256  | 347  | 557  | 941  | 1479 | 1050  | 484   | 237   | 265   | 219   | 283   |
| 82.5° | 73   | 37   | 91   | 164  | 256  | 210   | 146   | 82    | 128   | 100   | 128   |
| 85°   | 18   | 9    | 9    | 27   | 27   | 27    | 46    | 27    | 55    | 37    | 46    |
| 87.5° | 0    | 0    | 0    | 0    | 0    | 9     | 9     | 9     | 9     | 9     | 9     |
| 90°   | 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°    | 7312  | 7312  | 7312  | 7312 | 7312 | 7312 | 7312 | 7312 | 7312 | 7312 | 7312 |
| 2.5°  | 6319  | 6310  | 6292  | 6282 | 6264 | 6237 | 6228 | 6209 | 6228 | 6246 | 6282 |
| 5°    | 6337  | 6319  | 6282  | 6246 | 6219 | 6182 | 6155 | 6136 | 6127 | 6164 | 6209 |
| 7.5°  | 6465  | 6438  | 6365  | 6292 | 6209 | 6136 | 6091 | 6072 | 6063 | 6155 | 6465 |
| 10°   | 6629  | 6584  | 6511  | 6410 | 6301 | 6173 | 6082 | 6027 | 6018 | 6072 | 6082 |
| 12.5° | 6684  | 6620  | 6529  | 6429 | 6301 | 6173 | 6036 | 5972 | 5926 | 5899 | 5935 |
| 15°   | 7104  | 7004  | 6794  | 6547 | 6301 | 6182 | 6009 | 5908 | 5844 | 5817 | 5844 |
| 17.5° | 8127  | 8008  | 7625  | 7049 | 6566 | 6173 | 5981 | 5808 | 5725 | 5680 | 5716 |
| 20°   | 9086  | 8912  | 8437  | 7817 | 7095 | 6346 | 5908 | 5689 | 5588 | 5534 | 5570 |
| 22.5° | 9013  | 8821  | 8520  | 8145 | 7552 | 6675 | 5862 | 5561 | 5424 | 5388 | 5497 |
| 25°   | 7926  | 7817  | 7762  | 7826 | 7643 | 6967 | 5972 | 5451 | 5260 | 5214 | 5241 |
| 27.5° | 7451  | 7314  | 7086  | 6922 | 7123 | 7013 | 6127 | 5342 | 5104 | 5004 | 5059 |
| 30°   | 7862  | 7680  | 7296  | 6830 | 6438 | 6639 | 6191 | 5251 | 4940 | 4812 | 4840 |
| 32.5° | 8282  | 8063  | 7579  | 6976 | 6328 | 6100 | 6054 | 5159 | 4739 | 4602 | 4639 |
| 35°   | 8702  | 8428  | 7771  | 7205 | 6419 | 5735 | 5689 | 5068 | 4547 | 4383 | 4420 |
| 37.5° | 8803  | 8556  | 8017  | 7250 | 6483 | 5735 | 5241 | 4885 | 4347 | 4155 | 4182 |
| 40°   | 9241  | 8921  | 8036  | 7323 | 6447 | 5616 | 4876 | 4621 | 4109 | 3917 | 3945 |
| 42.5° | 11378 | 10803 | 9232  | 7479 | 6346 | 5488 | 4739 | 4274 | 3844 | 3662 | 3671 |
| 45°   | 10921 | 10483 | 9862  | 8602 | 6456 | 5315 | 4584 | 3936 | 3580 | 3388 | 3397 |
| 47.5° | 10821 | 10346 | 9478  | 8629 | 6922 | 5232 | 4374 | 3726 | 3342 | 3123 | 3141 |
| 50°   | 12081 | 11606 | 10282 | 7944 | 7104 | 5278 | 4137 | 3497 | 3123 | 2895 | 2886 |
| 52.5° | 9917  | 9570  | 9186  | 8401 | 6264 | 5223 | 3936 | 3278 | 2904 | 2685 | 2666 |
| 55°   | 8374  | 8355  | 7415  | 7314 | 6109 | 4602 | 3735 | 3096 | 2703 | 2484 | 2465 |
| 57.5° | 9816  | 9177  | 8200  | 6301 | 5534 | 4383 | 3479 | 2904 | 2493 | 2246 | 2228 |
| 60°   | 9488  | 9068  | 7196  | 6666 | 5013 | 4292 | 3306 | 2703 | 2283 | 2027 | 2009 |
| 62.5° | 9460  | 8237  | 6438  | 5433 | 4493 | 3972 | 3141 | 2493 | 2045 | 1799 | 1772 |
| 65°   | 8474  | 7396  | 6072  | 5050 | 4191 | 3936 | 3114 | 2265 | 1790 | 1552 | 1516 |
| 67.5° | 10291 | 9725  | 6931  | 5251 | 4100 | 3963 | 2785 | 1872 | 1452 | 1269 | 1260 |
| 70°   | 14044 | 12492 | 6620  | 3607 | 3132 | 2703 | 2228 | 1306 | 995  | 877  | 913  |
| 72.5° | 10246 | 9177  | 3424  | 1589 | 1333 | 1881 | 1160 | 721  | 548  | 502  | 566  |
| 75°   | 3169  | 3187  | 1662  | 1004 | 794  | 749  | 457  | 265  | 219  | 219  | 274  |
| 77.5° | 922   | 1041  | 502   | 502  | 484  | 402  | 310  | 155  | 146  | 128  | 128  |
| 80°   | 347   | 283   | 219   | 256  | 247  | 173  | 210  | 91   | 82   | 82   | 91   |
| 82.5° | 110   | 110   | 91    | 110  | 100  | 73   | 82   | 37   | 46   | 37   | 37   |
| 85°   | 46    | 55    | 37    | 37   | 37   | 18   | 27   | 18   | 18   | 9    | 18   |
| 87.5° | 9     | 18    | 18    | 18   | 9    | 0    | 0    | 0    | 0    | 0    | 0    |
| 90°   | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

(END OF REPORT)