

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: 768736

Luminaire Tested: **CLB17MXX3311X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 768736  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CLB17MXX3311X  
Description: 175 WATT MH TYPE III REFRACTIVE GLOBE  
WITH CLEAR TOP & CAGE  
Light Source: 175 WATT MH CLEAR ED-28  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 14000 (1 lamp)  
Luminaire Lumens: 9701.1 lumens  
Efficiency: 69.3%  
Efficacy: 55.4 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B3 - U5 - G3

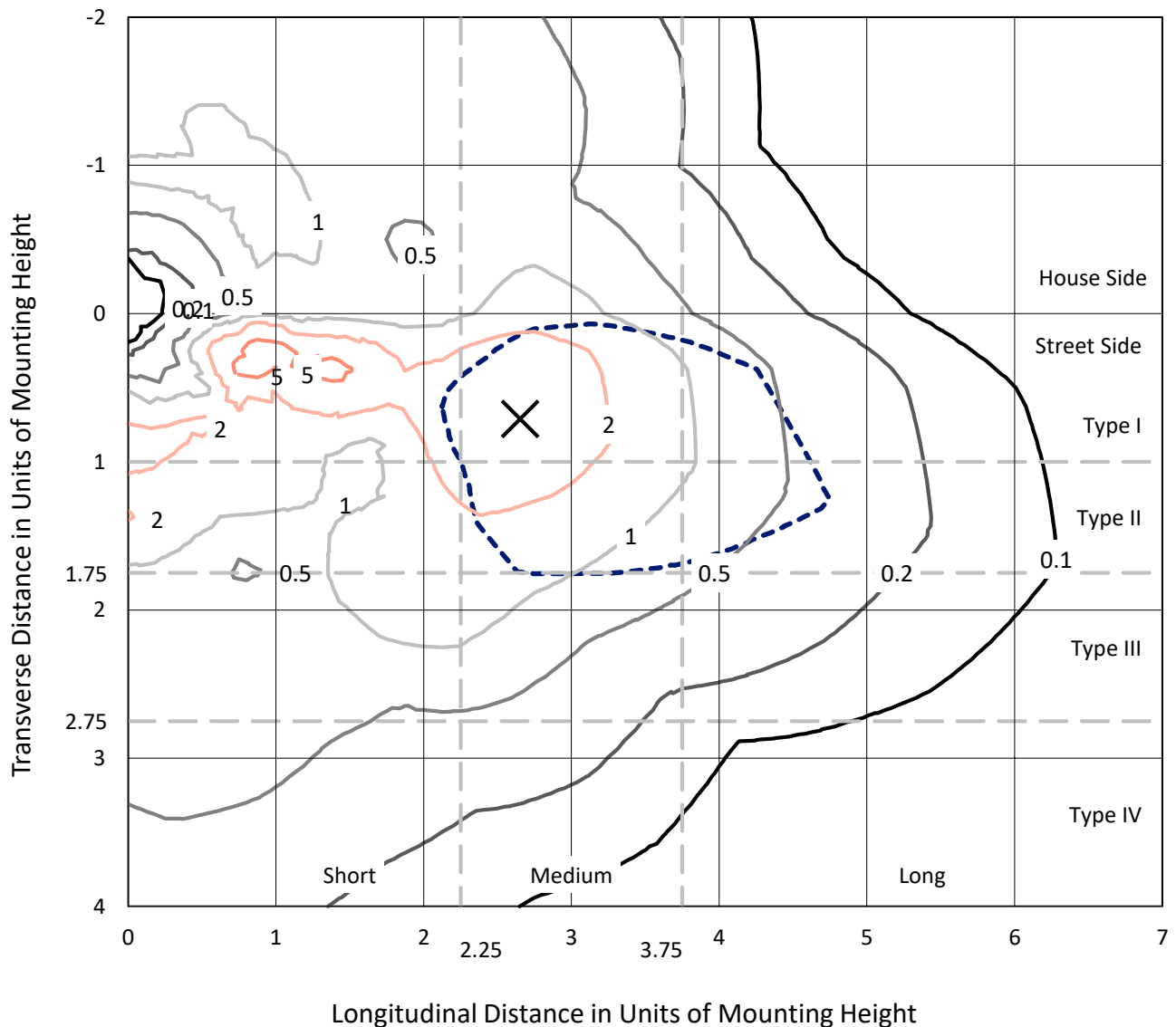
Input Watts (W): 175  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

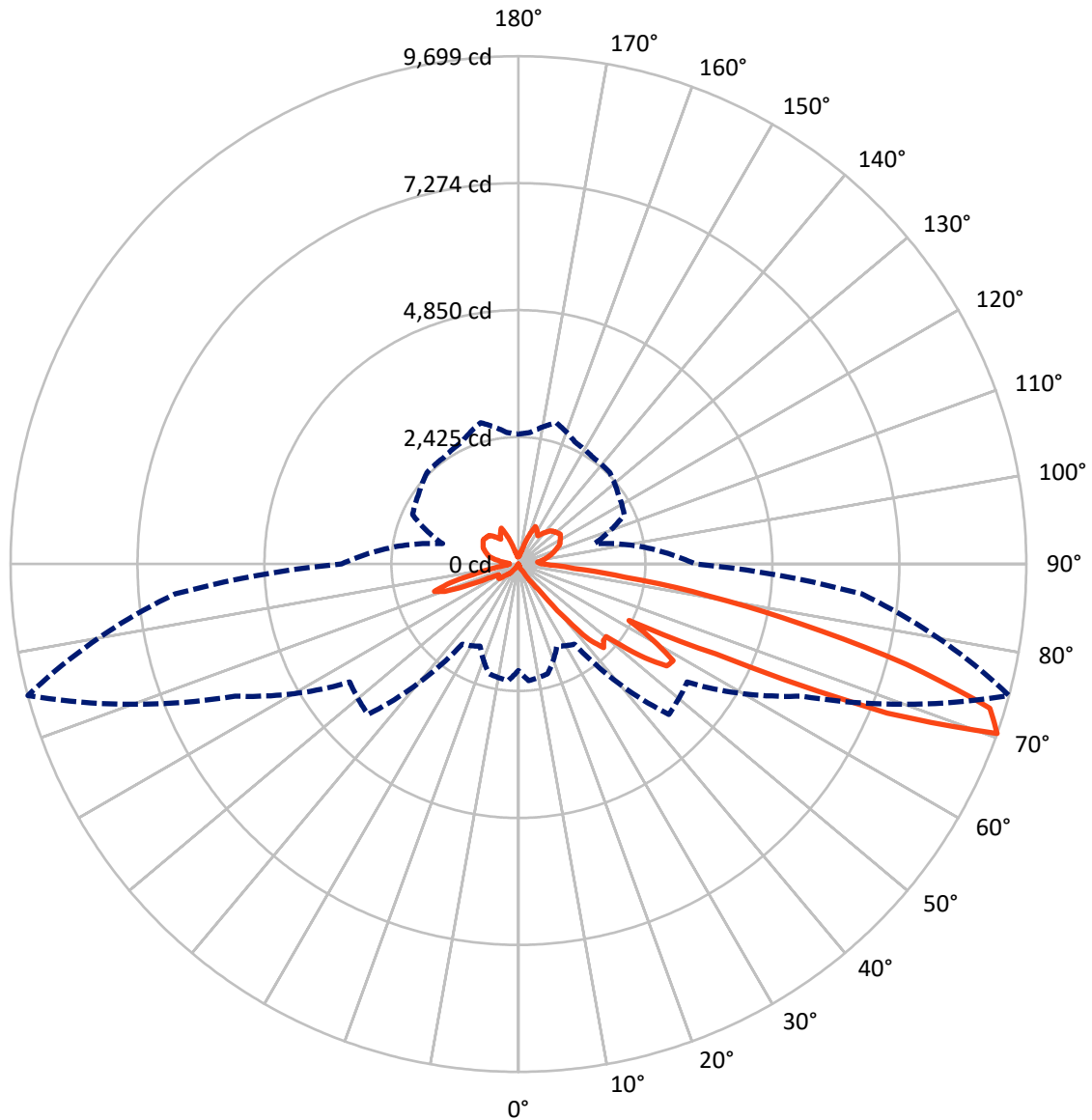
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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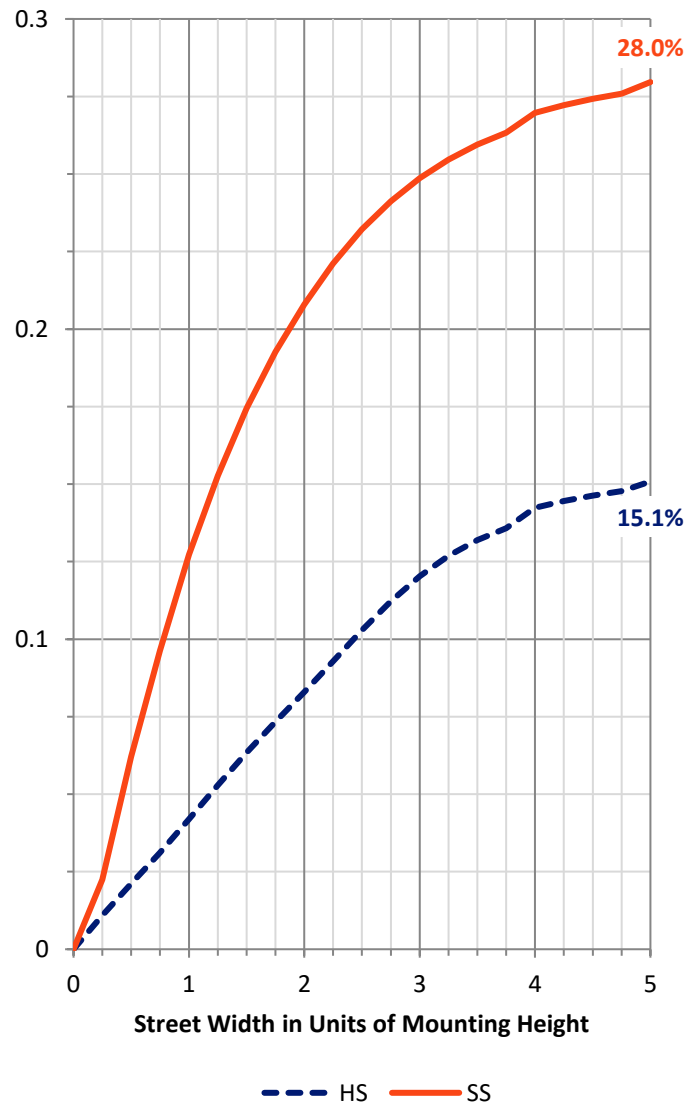
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total  |
|--------------------|--------|----------|--------|--------|
| <b>House Side</b>  | Lumens | 2152.8   | 1725.2 | 3878.0 |
|                    | % Lamp | 15.4     | 12.3   | 27.7   |
| <b>Street Side</b> | Lumens | 4018.3   | 1804.8 | 5823.1 |
|                    | % Lamp | 28.7     | 12.9   | 41.6   |
| <b>Total</b>       | Lumens | 6171.0   | 3530.1 | 9701.1 |
|                    | % Lamp | 44.1     | 25.2   | 69.3   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 0.1    | 0.0       | 0.0    |
| 10°-20°   | 5.1    | 0.1       | 0.0    |
| 20°-30°   | 27.8   | 0.3       | 0.2    |
| 30°-40°   | 134.2  | 1.4       | 1.0    |
| 40°-50°   | 404.5  | 4.2       | 2.9    |
| 50°-60°   | 690.5  | 7.1       | 4.9    |
| 60°-70°   | 1572.2 | 16.2      | 11.2   |
| 70°-80°   | 2781.8 | 28.7      | 19.9   |
| 80°-90°   | 554.8  | 5.7       | 4.0    |
| 90°-100°  | 271.9  | 2.8       | 1.9    |
| 100°-110° | 499.7  | 5.2       | 3.6    |
| 110°-120° | 675.3  | 7.0       | 4.8    |
| 120°-130° | 693.5  | 7.1       | 5.0    |
| 130°-140° | 559.0  | 5.8       | 4.0    |
| 140°-150° | 406.6  | 4.2       | 2.9    |
| 150°-160° | 260.0  | 2.7       | 1.9    |
| 160°-170° | 99.9   | 1.0       | 0.7    |
| 170°-180° | 18.1   | 0.2       | 0.1    |
| 0°-90°    | 6171.0 | 63.6      | 44.1   |
| 0°-180°   | 9701.1 | 100.0     | 69.3   |



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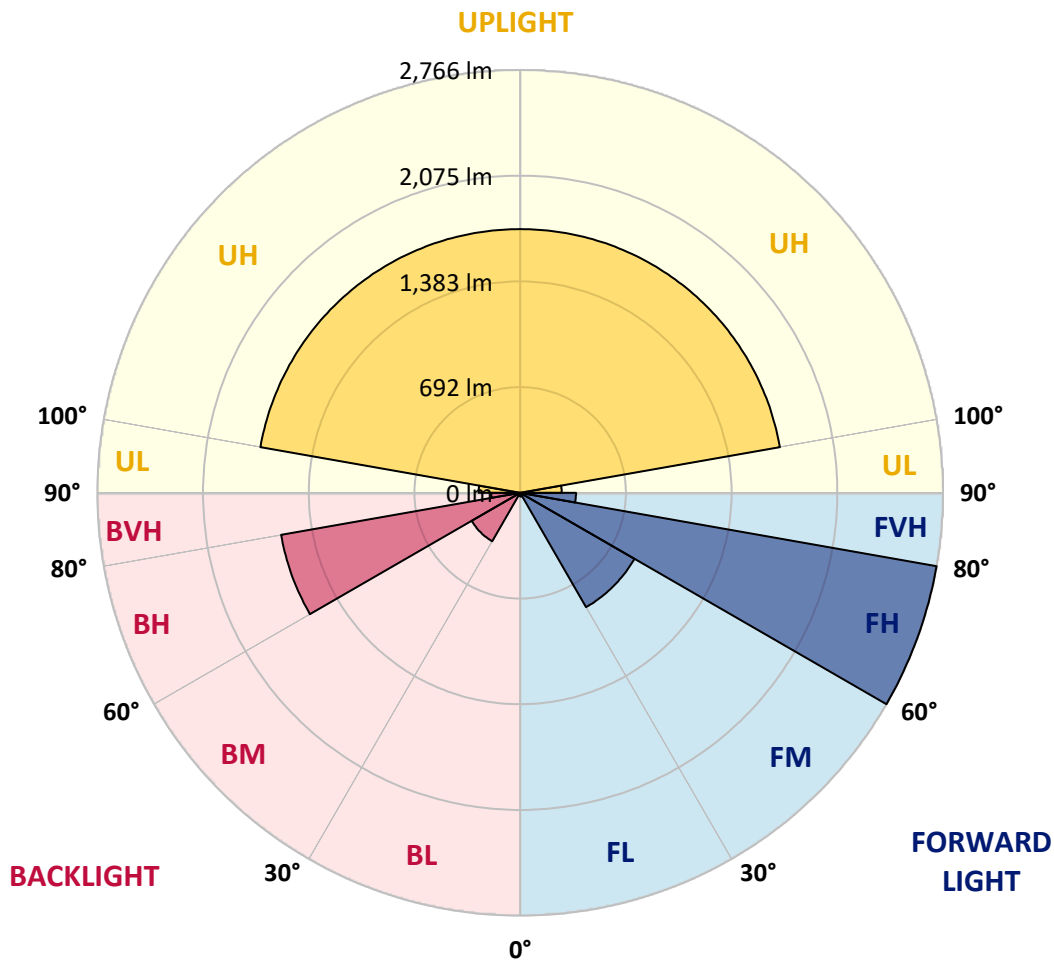
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Lamp | Zone Rating/Lumen Limit |        |         |
|----------------|--------|--------|-------------------------|--------|---------|
|                |        |        | B                       | U      | G       |
| FL (0°-30°)    | 23.9   | 0.2    |                         |        |         |
| FM (30°-60°)   | 863.2  | 6.2    |                         |        |         |
| FH (60°-80°)   | 2766.1 | 19.8   |                         |        | G2/5000 |
| FVH (80°-90°)  | 365.1  | 2.6    |                         |        | G3/500  |
| BL (0°-30°)    | 9.1    | 0.1    | B0/110                  |        |         |
| BM (30°-60°)   | 366.0  | 2.6    | B1/1000                 |        |         |
| BH (60°-80°)   | 1587.9 | 11.3   | B3/2500                 |        | G3/2500 |
| BVH (80°-90°)  | 189.7  | 1.4    |                         |        | G2/225  |
| UL (90°-100°)  | 271.9  | 1.9    |                         | U3/500 |         |
| UH (100°-180°) | 1725.2 | 12.3   |                         | U5     |         |
| Trapped Light  | 4298.9 | 30.7   |                         |        |         |

**BUG Rating: B3-U5-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°   | 5°   | 15°  | 25°  | 35°  | 45°  | 55°  | 65°  | 75°  | 85°  | 90°  |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0°    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 2.5°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 5°    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 7.5°  | 0    | 5    | 5    | 0    | 5    | 0    | 5    | 0    | 0    | 0    | 0    |
| 10°   | 0    | 10   | 10   | 10   | 15   | 15   | 10   | 15   | 0    | 5    | 0    |
| 12.5° | 20   | 20   | 10   | 20   | 20   | 20   | 25   | 15   | 15   | 10   | 10   |
| 15°   | 20   | 25   | 20   | 30   | 20   | 36   | 30   | 25   | 25   | 20   | 15   |
| 17.5° | 30   | 30   | 30   | 25   | 30   | 36   | 36   | 36   | 36   | 25   | 25   |
| 20°   | 30   | 25   | 25   | 20   | 25   | 36   | 46   | 36   | 30   | 25   | 20   |
| 22.5° | 41   | 36   | 36   | 36   | 51   | 41   | 56   | 81   | 51   | 30   | 30   |
| 25°   | 81   | 81   | 61   | 56   | 76   | 66   | 107  | 198  | 112  | 61   | 46   |
| 27.5° | 163  | 142  | 112  | 97   | 107  | 86   | 137  | 229  | 132  | 66   | 46   |
| 30°   | 142  | 127  | 102  | 86   | 97   | 71   | 152  | 264  | 147  | 66   | 46   |
| 32.5° | 224  | 208  | 163  | 152  | 163  | 86   | 213  | 447  | 300  | 117  | 66   |
| 35°   | 356  | 335  | 264  | 234  | 244  | 122  | 239  | 681  | 427  | 157  | 102  |
| 37.5° | 417  | 391  | 335  | 274  | 269  | 137  | 295  | 848  | 630  | 183  | 117  |
| 40°   | 772  | 706  | 615  | 483  | 518  | 224  | 488  | 1478 | 1290 | 295  | 178  |
| 42.5° | 874  | 803  | 696  | 539  | 599  | 498  | 544  | 1743 | 1961 | 366  | 234  |
| 45°   | 762  | 716  | 620  | 483  | 569  | 640  | 544  | 1387 | 2281 | 376  | 224  |
| 47.5° | 518  | 488  | 417  | 335  | 412  | 467  | 340  | 772  | 2185 | 335  | 193  |
| 50°   | 620  | 589  | 508  | 386  | 554  | 676  | 508  | 879  | 2174 | 371  | 249  |
| 52.5° | 914  | 833  | 762  | 579  | 787  | 930  | 660  | 1102 | 2901 | 528  | 376  |
| 55°   | 1077 | 981  | 833  | 635  | 823  | 1031 | 706  | 1204 | 3439 | 732  | 447  |
| 57.5° | 914  | 859  | 655  | 539  | 737  | 1031 | 772  | 1285 | 3485 | 899  | 518  |
| 60°   | 711  | 732  | 605  | 447  | 640  | 874  | 630  | 1026 | 2957 | 1082 | 589  |
| 62.5° | 549  | 574  | 615  | 422  | 620  | 859  | 605  | 960  | 2373 | 1229 | 696  |
| 65°   | 945  | 1016 | 1057 | 798  | 1057 | 1687 | 1341 | 2149 | 4141 | 1804 | 975  |
| 67.5° | 1555 | 1682 | 1692 | 1311 | 1565 | 3048 | 2545 | 4064 | 7600 | 3765 | 1890 |
| 70°   | 2032 | 2235 | 2169 | 1732 | 1870 | 4064 | 3932 | 5969 | 9699 | 6584 | 3378 |
| 72.5° | 2134 | 2403 | 2307 | 1885 | 1910 | 3693 | 4471 | 6559 | 9414 | 7443 | 3917 |
| 75°   | 1870 | 2179 | 2052 | 1702 | 1692 | 2632 | 3267 | 5416 | 7651 | 6173 | 3196 |
| 77.5° | 1463 | 1758 | 1605 | 1296 | 1306 | 1748 | 1783 | 3912 | 5512 | 4237 | 2159 |
| 80°   | 1006 | 1204 | 1108 | 848  | 869  | 1026 | 909  | 2489 | 3693 | 2611 | 1331 |
| 82.5° | 569  | 686  | 640  | 483  | 508  | 549  | 523  | 1412 | 2052 | 1443 | 793  |
| 85°   | 325  | 386  | 376  | 295  | 300  | 340  | 340  | 762  | 1072 | 869  | 503  |
| 87.5° | 234  | 279  | 264  | 218  | 208  | 239  | 239  | 457  | 620  | 569  | 366  |
| 90°   | 193  | 229  | 218  | 193  | 183  | 198  | 198  | 335  | 437  | 422  | 290  |
| 95°   | 193  | 229  | 218  | 203  | 147  | 157  | 163  | 295  | 366  | 356  | 254  |
| 105°  | 599  | 640  | 625  | 594  | 218  | 193  | 198  | 559  | 635  | 620  | 544  |
| 115°  | 681  | 681  | 666  | 660  | 625  | 630  | 666  | 823  | 874  | 818  | 767  |
| 125°  | 833  | 838  | 772  | 742  | 767  | 787  | 828  | 909  | 981  | 884  | 838  |
| 135°  | 823  | 813  | 747  | 706  | 726  | 747  | 777  | 869  | 889  | 808  | 777  |
| 145°  | 539  | 554  | 559  | 518  | 533  | 554  | 584  | 676  | 655  | 615  | 594  |
| 155°  | 742  | 747  | 691  | 660  | 655  | 691  | 742  | 777  | 787  | 772  | 757  |
| 165°  | 264  | 264  | 259  | 269  | 269  | 269  | 279  | 279  | 274  | 269  | 269  |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°  | 5°  | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 175° | 163 | 163 | 147 | 152 | 152 | 147 | 152 | 147 | 142 | 142 | 142 |
| 180° | 163 | 163 | 163 | 163 | 163 | 163 | 163 | 163 | 163 | 163 | 163 |





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**CANDELA DISTRIBUTION (continued):**

|       | 95°  | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|------|------|------|------|------|------|------|------|------|------|
| 0°    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 2.5°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 5°    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 7.5°  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 10°   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 12.5° | 5    | 0    | 0    | 5    | 5    | 0    | 0    | 0    | 0    | 0    |
| 15°   | 5    | 15   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   |
| 17.5° | 25   | 20   | 15   | 20   | 20   | 20   | 20   | 15   | 20   | 20   |
| 20°   | 20   | 10   | 15   | 15   | 15   | 15   | 15   | 20   | 20   | 10   |
| 22.5° | 25   | 20   | 20   | 20   | 25   | 20   | 20   | 20   | 20   | 20   |
| 25°   | 36   | 30   | 30   | 30   | 30   | 36   | 30   | 41   | 36   | 41   |
| 27.5° | 36   | 36   | 36   | 41   | 41   | 41   | 41   | 46   | 51   | 51   |
| 30°   | 36   | 41   | 41   | 46   | 51   | 41   | 51   | 46   | 51   | 51   |
| 32.5° | 66   | 66   | 66   | 71   | 66   | 66   | 61   | 71   | 66   | 71   |
| 35°   | 86   | 91   | 97   | 91   | 91   | 86   | 86   | 97   | 97   | 91   |
| 37.5° | 102  | 102  | 122  | 117  | 122  | 117  | 122  | 122  | 127  | 132  |
| 40°   | 157  | 183  | 193  | 168  | 163  | 168  | 183  | 188  | 198  | 193  |
| 42.5° | 203  | 239  | 259  | 254  | 244  | 244  | 259  | 279  | 274  | 274  |
| 45°   | 208  | 269  | 305  | 315  | 315  | 325  | 335  | 325  | 330  | 325  |
| 47.5° | 188  | 285  | 335  | 345  | 330  | 351  | 351  | 335  | 300  | 295  |
| 50°   | 229  | 356  | 406  | 396  | 391  | 381  | 391  | 330  | 285  | 274  |
| 52.5° | 325  | 452  | 533  | 523  | 533  | 498  | 533  | 427  | 406  | 406  |
| 55°   | 396  | 462  | 533  | 554  | 599  | 564  | 650  | 513  | 518  | 518  |
| 57.5° | 422  | 437  | 513  | 559  | 584  | 539  | 610  | 544  | 533  | 539  |
| 60°   | 478  | 437  | 544  | 594  | 630  | 594  | 645  | 589  | 554  | 539  |
| 62.5° | 549  | 432  | 584  | 620  | 635  | 599  | 655  | 599  | 518  | 508  |
| 65°   | 793  | 620  | 859  | 869  | 879  | 874  | 950  | 960  | 833  | 833  |
| 67.5° | 1504 | 1011 | 1417 | 1458 | 1529 | 1550 | 1641 | 1768 | 1656 | 1636 |
| 70°   | 2743 | 1499 | 2230 | 2327 | 2469 | 2484 | 2566 | 2794 | 2520 | 2479 |
| 72.5° | 3089 | 1687 | 2540 | 2647 | 2891 | 2906 | 3003 | 3292 | 2891 | 2865 |
| 75°   | 2322 | 1351 | 1941 | 1981 | 2159 | 2205 | 2352 | 2621 | 2398 | 2428 |
| 77.5° | 1341 | 874  | 1168 | 1123 | 1189 | 1235 | 1382 | 1575 | 1544 | 1585 |
| 80°   | 762  | 554  | 671  | 579  | 599  | 635  | 752  | 859  | 894  | 914  |
| 82.5° | 488  | 366  | 417  | 351  | 356  | 381  | 447  | 493  | 503  | 498  |
| 85°   | 320  | 244  | 274  | 244  | 249  | 264  | 300  | 325  | 320  | 325  |
| 87.5° | 254  | 198  | 208  | 188  | 198  | 208  | 229  | 249  | 234  | 234  |
| 90°   | 208  | 173  | 188  | 163  | 178  | 173  | 198  | 208  | 208  | 203  |
| 95°   | 208  | 193  | 203  | 147  | 152  | 157  | 213  | 218  | 213  | 213  |
| 105°  | 554  | 579  | 569  | 239  | 218  | 244  | 650  | 666  | 686  | 650  |
| 115°  | 752  | 737  | 747  | 696  | 676  | 660  | 716  | 726  | 757  | 752  |
| 125°  | 823  | 813  | 818  | 793  | 782  | 757  | 787  | 787  | 681  | 660  |
| 135°  | 767  | 777  | 767  | 737  | 721  | 691  | 721  | 737  | 691  | 691  |
| 145°  | 584  | 584  | 569  | 549  | 513  | 503  | 493  | 493  | 528  | 518  |
| 155°  | 757  | 762  | 732  | 706  | 681  | 645  | 625  | 666  | 696  | 742  |
| 165°  | 264  | 264  | 269  | 269  | 264  | 259  | 254  | 259  | 259  | 254  |



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**CANDELA DISTRIBUTION (continued):**

|      | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|------|-----|------|------|------|------|------|------|------|------|------|
| 175° | 142 | 137  | 137  | 137  | 193  | 157  | 224  | 259  | 249  | 254  |
| 180° | 163 | 163  | 163  | 163  | 163  | 163  | 163  | 163  | 163  | 163  |

(END OF REPORT)