

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: P240098

Luminaire Tested: **UTLD-AF24-90-D-U-5WQ-FP-7030**

Issue Date: 5/28/2020

### Test Information

Test Method: LM-79-08  
Report Number: P240098  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-24)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 5/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-90-D-U-5WQ-FP-7030  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS AND FROSTED LENS PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7438.4 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U4 - G3

Input Watts (W): 94  
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



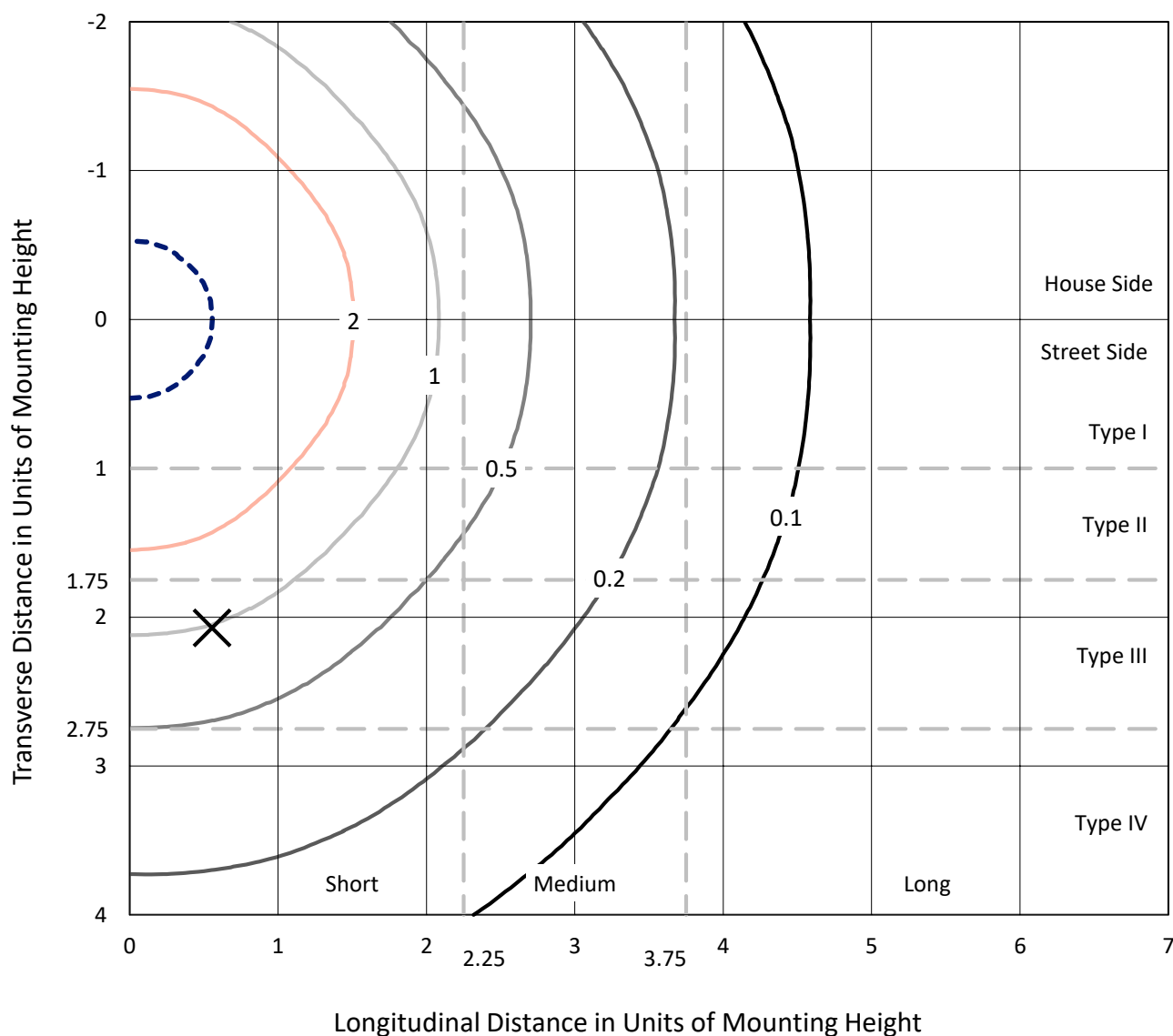
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

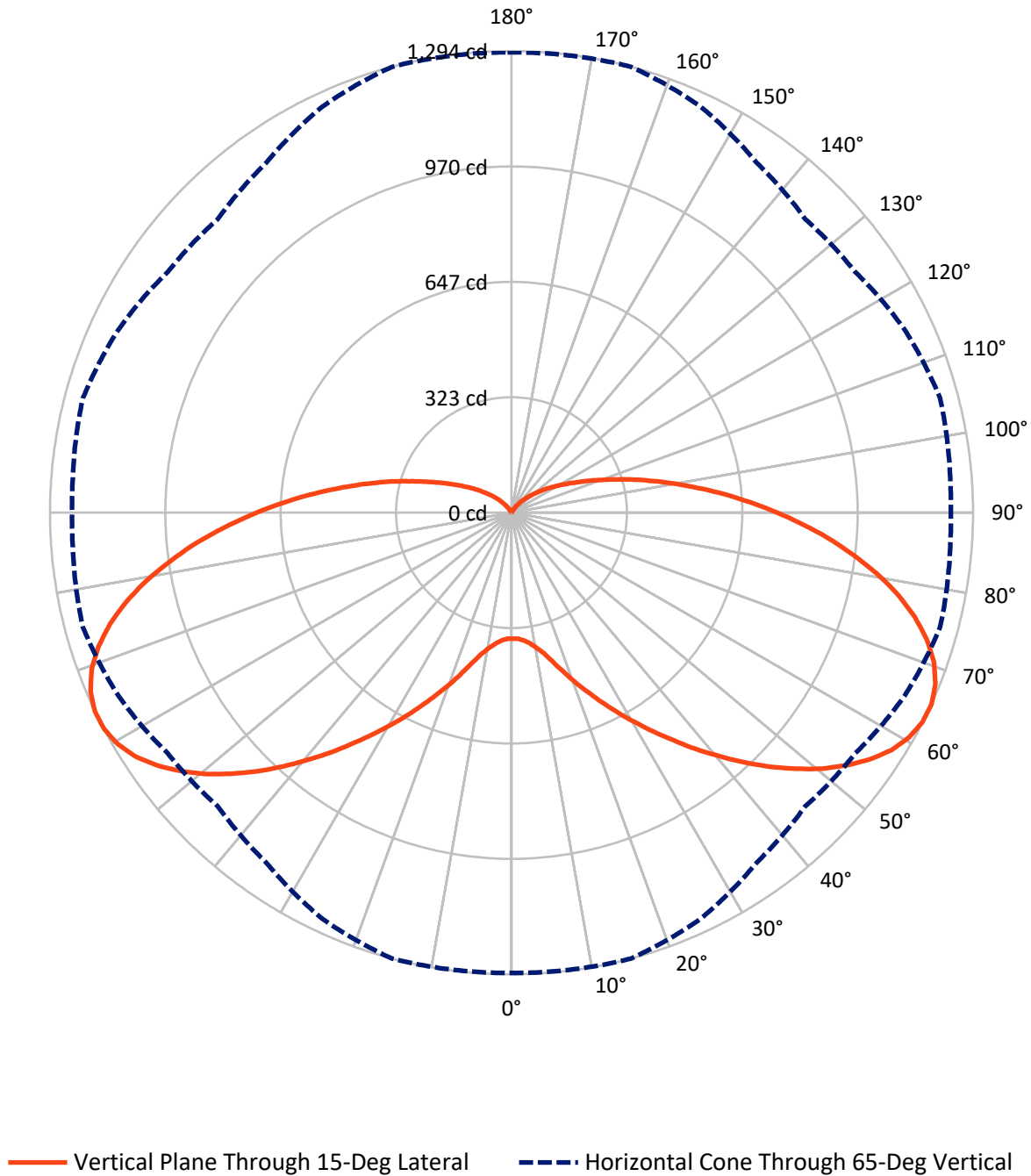


Based on 10 foot mounting height. Maximum calculated value = 4.4 fc  
 Type V - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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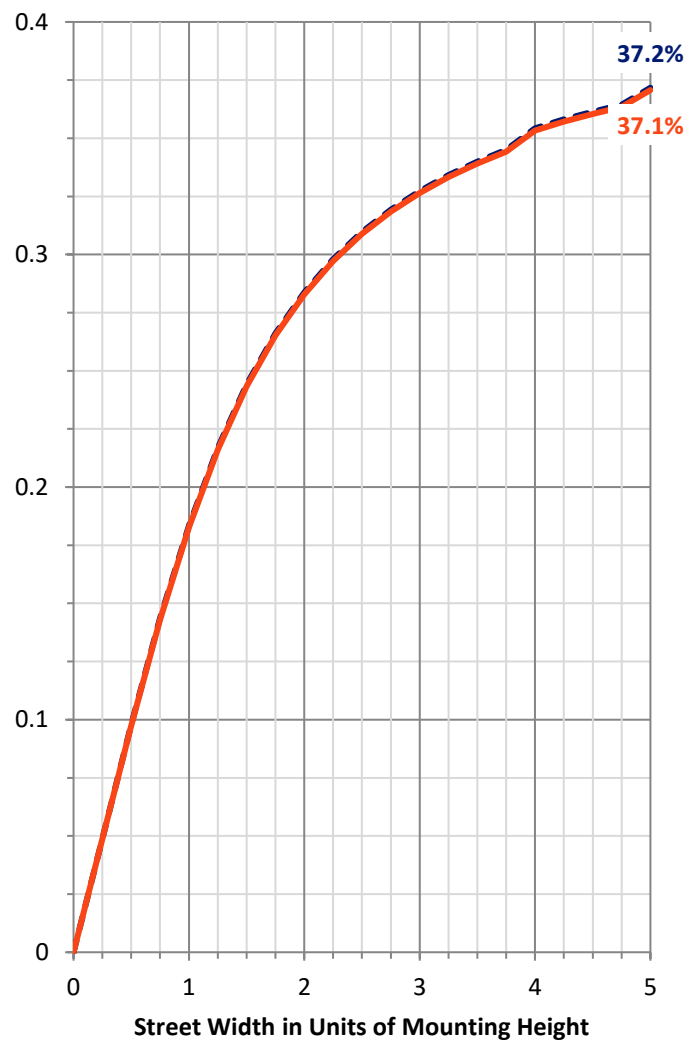
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3026.5   | 692.7  | 3719.2 |
|                    | % Fixture | 40.7     | 9.3    | 50.0   |
| <b>Street Side</b> | Lumens    | 3026.5   | 692.7  | 3719.2 |
|                    | % Fixture | 40.7     | 9.3    | 50.0   |
| <b>Total</b>       | Lumens    | 6053.0   | 1385.4 | 7438.4 |
|                    | % Fixture | 81.4     | 18.6   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 35.1   | 0.5       |
| 10°-20°   | 124.4  | 1.7       |
| 20°-30°   | 272.1  | 3.7       |
| 30°-40°   | 490.2  | 6.6       |
| 40°-50°   | 766.8  | 10.3      |
| 50°-60°   | 1044.4 | 14.0      |
| 60°-70°   | 1212.0 | 16.3      |
| 70°-80°   | 1170.9 | 15.7      |
| 80°-90°   | 937.1  | 12.6      |
| 90°-100°  | 638.4  | 8.6       |
| 100°-110° | 385.2  | 5.2       |
| 110°-120° | 210.1  | 2.8       |
| 120°-130° | 101.8  | 1.4       |
| 130°-140° | 39.7   | 0.5       |
| 140°-150° | 9.4    | 0.1       |
| 150°-160° | 0.8    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 6053.0 | 81.4      |
| 0°-180°   | 7438.4 | 100.0     |

**Coefficient of Utilization**



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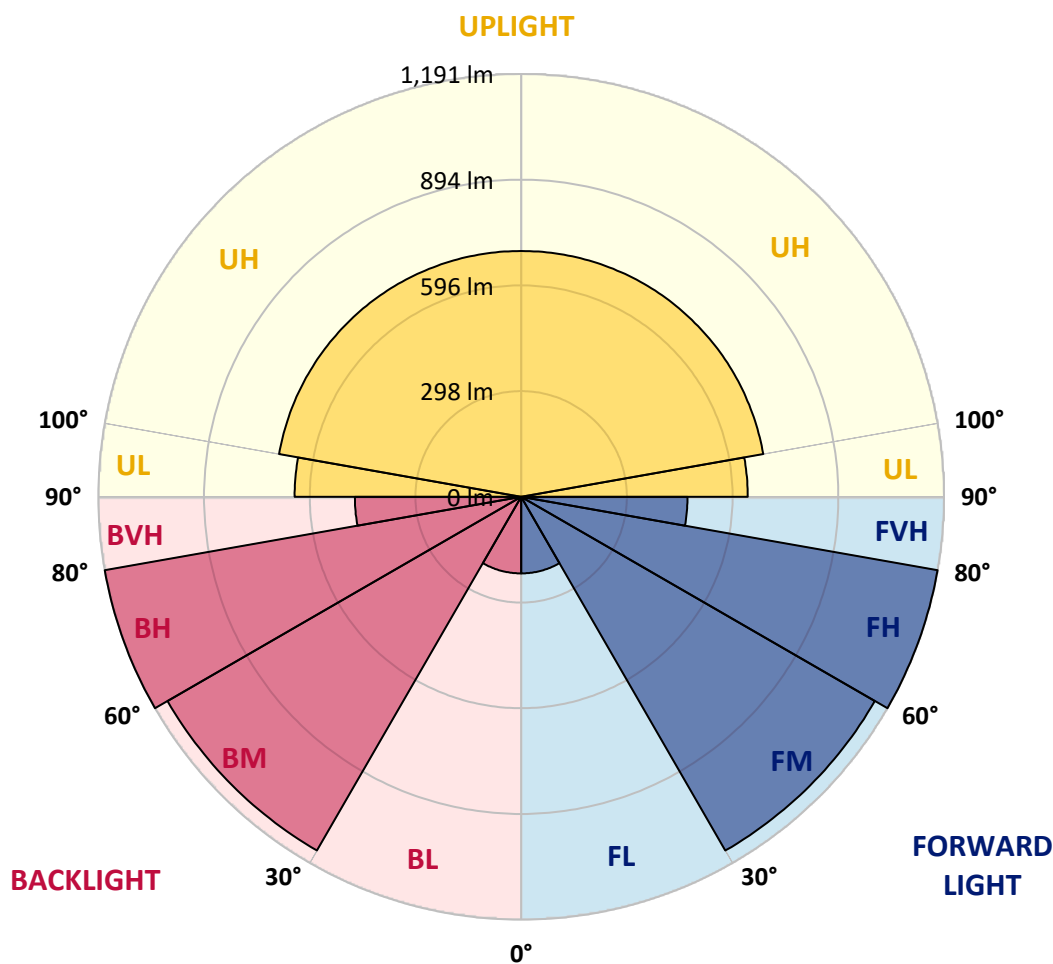
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |         |         |
|------|-------------|--------|-----------|-------------------------|---------|---------|
|      |             |        |           | B                       | U       | G       |
| FL   | (0°-30°)    | 215.8  | 2.9       |                         |         |         |
| FM   | (30°-60°)   | 1150.7 | 15.5      |                         |         |         |
| FH   | (60°-80°)   | 1191.5 | 16.0      |                         |         | G1/1800 |
| FVH  | (80°-90°)   | 468.6  | 6.3       |                         |         | G3/500  |
| BL   | (0°-30°)    | 215.8  | 2.9       | B1/500                  |         |         |
| BM   | (30°-60°)   | 1150.7 | 15.5      | B2/2500                 |         |         |
| BH   | (60°-80°)   | 1191.5 | 16.0      | B3/2500                 |         | G1/1800 |
| BVH  | (80°-90°)   | 468.6  | 6.3       |                         |         | G3/500  |
| UL   | (90°-100°)  | 638.4  | 8.6       |                         | U4/1000 |         |
| UH   | (100°-180°) | 692.7  | 9.3       |                         | U4/1000 |         |

**BUG Rating: B3-U4-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  | 352.8  |
| 2.5°   | 354.6  | 354.6  | 353.7  | 353.7  | 353.7  | 353.7  | 353.7  | 354.6  | 353.7  | 354.6  | 354.6  |
| 5°     | 359.4  | 360.2  | 359.4  | 359.4  | 360.2  | 359.4  | 359.4  | 360.2  | 359.4  | 359.4  | 359.4  |
| 7.5°   | 370.5  | 370.5  | 369.7  | 369.7  | 369.7  | 368.6  | 368.6  | 369.7  | 368.6  | 368.6  | 368.6  |
| 10°    | 385.4  | 385.4  | 384.5  | 384.5  | 383.6  | 382.6  | 382.6  | 382.6  | 383.6  | 383.6  | 383.6  |
| 12.5°  | 405.1  | 406.0  | 404.2  | 403.1  | 402.3  | 401.3  | 401.3  | 401.3  | 401.3  | 402.3  | 401.3  |
| 15°    | 435.0  | 435.0  | 433.0  | 429.3  | 426.5  | 425.6  | 423.7  | 425.6  | 427.4  | 428.4  | 430.3  |
| 17.5°  | 471.4  | 469.5  | 467.5  | 463.8  | 458.3  | 452.7  | 455.4  | 458.3  | 461.1  | 461.9  | 461.9  |
| 20°    | 508.6  | 508.6  | 505.9  | 500.2  | 495.6  | 490.9  | 491.8  | 493.8  | 495.6  | 497.4  | 496.5  |
| 22.5°  | 547.0  | 548.8  | 544.9  | 541.3  | 537.5  | 536.7  | 532.0  | 532.0  | 532.8  | 534.9  | 534.9  |
| 25°    | 592.6  | 590.8  | 588.0  | 584.2  | 583.3  | 583.3  | 576.8  | 573.1  | 573.9  | 574.9  | 574.9  |
| 27.5°  | 639.2  | 637.4  | 633.7  | 630.0  | 630.9  | 629.0  | 624.4  | 617.9  | 615.0  | 617.9  | 616.0  |
| 30°    | 685.9  | 685.0  | 681.3  | 678.5  | 680.3  | 678.5  | 672.9  | 662.6  | 660.8  | 661.7  | 662.6  |
| 32.5°  | 735.5  | 736.4  | 731.7  | 730.7  | 731.7  | 727.0  | 722.3  | 714.9  | 708.3  | 711.2  | 711.2  |
| 35°    | 790.5  | 790.5  | 783.9  | 784.9  | 782.1  | 777.4  | 771.8  | 766.2  | 759.7  | 762.5  | 760.7  |
| 37.5°  | 846.4  | 845.5  | 840.9  | 839.9  | 834.3  | 825.0  | 822.1  | 819.5  | 811.9  | 813.9  | 814.7  |
| 40°    | 906.2  | 903.5  | 896.9  | 895.9  | 884.8  | 874.5  | 872.7  | 872.7  | 864.2  | 868.8  | 869.8  |
| 42.5°  | 964.1  | 962.2  | 956.6  | 951.9  | 935.1  | 923.0  | 920.2  | 926.7  | 921.2  | 923.9  | 923.9  |
| 45°    | 1021.9 | 1017.3 | 1015.4 | 1007.1 | 984.7  | 968.7  | 969.6  | 978.1  | 979.0  | 979.0  | 977.1  |
| 47.5°  | 1077.0 | 1076.1 | 1072.4 | 1056.4 | 1031.3 | 1013.5 | 1015.4 | 1028.4 | 1033.1 | 1032.2 | 1033.1 |
| 50°    | 1131.2 | 1128.3 | 1127.4 | 1106.9 | 1073.3 | 1052.7 | 1057.4 | 1074.2 | 1084.5 | 1081.6 | 1082.6 |
| 52.5°  | 1182.5 | 1177.9 | 1175.9 | 1151.7 | 1112.5 | 1089.1 | 1093.8 | 1118.0 | 1130.2 | 1129.3 | 1129.3 |
| 55°    | 1222.6 | 1220.8 | 1219.8 | 1190.0 | 1145.1 | 1119.9 | 1126.5 | 1153.6 | 1172.3 | 1168.4 | 1167.6 |
| 57.5°  | 1256.2 | 1254.3 | 1255.3 | 1220.8 | 1171.3 | 1142.3 | 1150.7 | 1184.4 | 1205.7 | 1200.2 | 1200.2 |
| 60°    | 1280.4 | 1278.6 | 1279.5 | 1243.2 | 1190.0 | 1158.1 | 1168.4 | 1203.9 | 1229.1 | 1222.6 | 1221.6 |
| 62.5°  | 1291.7 | 1290.7 | 1292.6 | 1254.3 | 1198.3 | 1165.7 | 1176.8 | 1215.2 | 1242.2 | 1233.7 | 1231.9 |
| 65°    | 1289.8 | 1290.7 | 1293.5 | 1255.3 | 1197.4 | 1163.8 | 1175.9 | 1215.2 | 1243.2 | 1233.7 | 1231.1 |
| 67.5°  | 1274.8 | 1277.7 | 1281.4 | 1244.0 | 1186.2 | 1153.6 | 1164.7 | 1203.9 | 1231.9 | 1221.6 | 1217.0 |
| 70°    | 1246.8 | 1249.7 | 1256.2 | 1220.8 | 1165.7 | 1133.0 | 1143.3 | 1181.5 | 1206.8 | 1194.6 | 1189.0 |
| 72.5°  | 1203.0 | 1209.5 | 1217.0 | 1186.2 | 1133.9 | 1103.2 | 1113.4 | 1148.9 | 1172.3 | 1156.3 | 1149.9 |
| 75°    | 1148.0 | 1157.3 | 1167.6 | 1141.4 | 1092.9 | 1064.8 | 1075.1 | 1106.9 | 1122.7 | 1107.8 | 1095.7 |
| 77.5°  | 1086.4 | 1095.7 | 1107.8 | 1086.4 | 1043.4 | 1019.2 | 1025.7 | 1051.8 | 1065.9 | 1047.1 | 1037.9 |
| 80°    | 1011.6 | 1021.9 | 1038.7 | 1024.8 | 990.2  | 966.0  | 973.4  | 992.1  | 998.6  | 979.0  | 966.8  |
| 82.5°  | 938.0  | 947.3  | 963.1  | 957.5  | 928.6  | 909.0  | 912.8  | 926.7  | 929.6  | 906.2  | 895.9  |
| 85°    | 858.7  | 867.0  | 887.5  | 886.6  | 865.2  | 849.3  | 852.1  | 860.5  | 854.0  | 828.7  | 817.6  |
| 87.5°  | 779.2  | 783.9  | 807.3  | 811.0  | 799.8  | 788.7  | 787.6  | 787.6  | 778.4  | 753.2  | 744.7  |
| 90°    | 701.8  | 706.5  | 728.9  | 741.0  | 734.4  | 725.2  | 723.3  | 719.6  | 700.9  | 677.5  | 672.0  |
| 92.5°  | 627.1  | 629.0  | 654.3  | 671.1  | 669.2  | 662.6  | 659.8  | 652.4  | 630.9  | 603.8  | 600.1  |
| 95°    | 557.2  | 559.1  | 583.3  | 602.0  | 606.6  | 604.8  | 599.2  | 588.9  | 560.9  | 533.8  | 532.8  |
| 97.5°  | 492.8  | 491.8  | 515.1  | 538.5  | 547.8  | 547.8  | 539.4  | 525.4  | 498.3  | 471.4  | 470.4  |
| 100°   | 434.0  | 432.1  | 453.5  | 481.7  | 491.8  | 493.8  | 486.2  | 467.5  | 436.8  | 415.3  | 416.3  |
| 102.5° | 380.8  | 378.9  | 397.6  | 424.7  | 439.6  | 443.3  | 435.0  | 412.6  | 383.6  | 364.0  | 364.9  |
| 105°   | 334.2  | 332.2  | 348.1  | 374.2  | 391.0  | 394.8  | 385.4  | 364.0  | 332.2  | 318.3  | 320.1  |
| 107.5° | 290.3  | 289.3  | 300.5  | 326.6  | 345.3  | 350.9  | 341.6  | 318.3  | 288.3  | 278.1  | 279.0  |
| 110°   | 255.6  | 254.8  | 260.4  | 284.6  | 305.2  | 310.8  | 299.6  | 275.4  | 250.1  | 243.5  | 244.5  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 225.0 | 222.2 | 225.8 | 247.4 | 265.9 | 272.5 | 261.3 | 236.1 | 216.6 | 213.7 | 214.7 |
| 115°   | 196.0 | 196.0 | 195.0 | 211.9 | 231.4 | 237.1 | 225.8 | 203.4 | 187.6 | 186.7 | 186.7 |
| 117.5° | 172.6 | 170.8 | 169.9 | 180.2 | 197.9 | 204.5 | 194.2 | 173.6 | 163.4 | 164.2 | 165.2 |
| 120°   | 150.2 | 150.2 | 147.5 | 152.1 | 168.0 | 172.6 | 164.2 | 148.4 | 141.8 | 143.6 | 144.7 |
| 122.5° | 131.5 | 130.7 | 127.9 | 128.8 | 140.0 | 145.7 | 137.2 | 125.1 | 123.3 | 127.0 | 127.0 |
| 125°   | 113.8 | 113.0 | 110.2 | 108.2 | 113.8 | 118.5 | 113.0 | 105.4 | 106.4 | 110.2 | 111.0 |
| 127.5° | 98.0  | 97.0  | 93.3  | 89.6  | 92.5  | 95.2  | 91.4  | 87.7  | 92.5  | 95.2  | 96.1  |
| 130°   | 84.0  | 83.0  | 79.3  | 73.8  | 72.7  | 74.7  | 71.9  | 72.7  | 78.4  | 83.0  | 83.0  |
| 132.5° | 70.9  | 70.9  | 66.2  | 59.8  | 56.0  | 56.0  | 56.0  | 59.8  | 66.2  | 70.0  | 70.9  |
| 135°   | 58.8  | 58.8  | 55.0  | 47.6  | 41.1  | 40.1  | 41.1  | 47.6  | 55.0  | 57.9  | 58.8  |
| 137.5° | 48.5  | 47.6  | 43.8  | 37.3  | 29.0  | 27.1  | 29.0  | 36.4  | 43.8  | 47.6  | 47.6  |
| 140°   | 38.2  | 37.3  | 33.7  | 28.0  | 20.5  | 16.8  | 20.5  | 27.1  | 33.7  | 37.3  | 37.3  |
| 142.5° | 28.0  | 28.0  | 24.2  | 19.5  | 13.1  | 10.3  | 13.1  | 19.5  | 25.2  | 27.1  | 28.0  |
| 145°   | 19.5  | 19.5  | 16.8  | 12.1  | 7.4   | 5.6   | 7.4   | 13.1  | 16.8  | 19.5  | 19.5  |
| 147.5° | 13.1  | 13.1  | 11.3  | 7.4   | 4.7   | 2.8   | 4.7   | 8.4   | 11.3  | 13.1  | 13.1  |
| 150°   | 7.4   | 7.4   | 6.5   | 4.7   | 1.8   | 1.0   | 1.8   | 4.7   | 6.5   | 7.4   | 7.4   |
| 152.5° | 3.8   | 3.8   | 2.8   | 1.8   | 1.0   | 1.0   | 1.0   | 1.8   | 3.8   | 3.8   | 4.7   |
| 155°   | 1.8   | 1.8   | 1.8   | 1.0   | 0.0   | 0.0   | 0.0   | 1.0   | 1.8   | 1.8   | 1.8   |
| 157.5° | 1.0   | 1.0   | 1.0   | 0.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| 160°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 162.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 165°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 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)