

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: McGRAW-EDISON

Report Number: P197921

Luminaire Tested: **TT-C2-LED-E1-WQ-SG-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115543)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C2-LED-E1-WQ-SG-8030  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
WIDE DISTRIBUTION WITH SOFTENING GLASS LENS  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3559 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G1

Input Watts (W): 34  
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: 25 FT

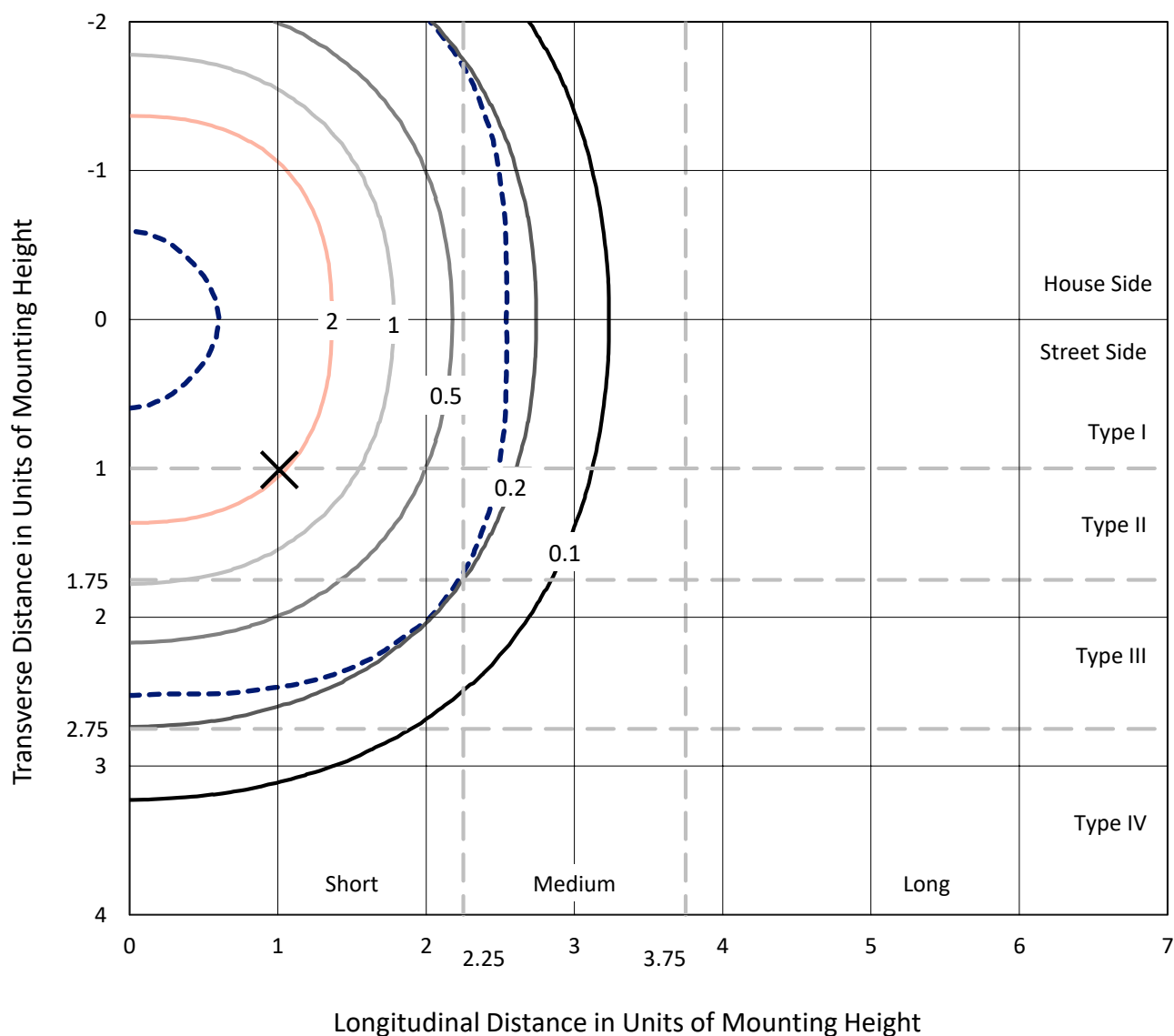


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

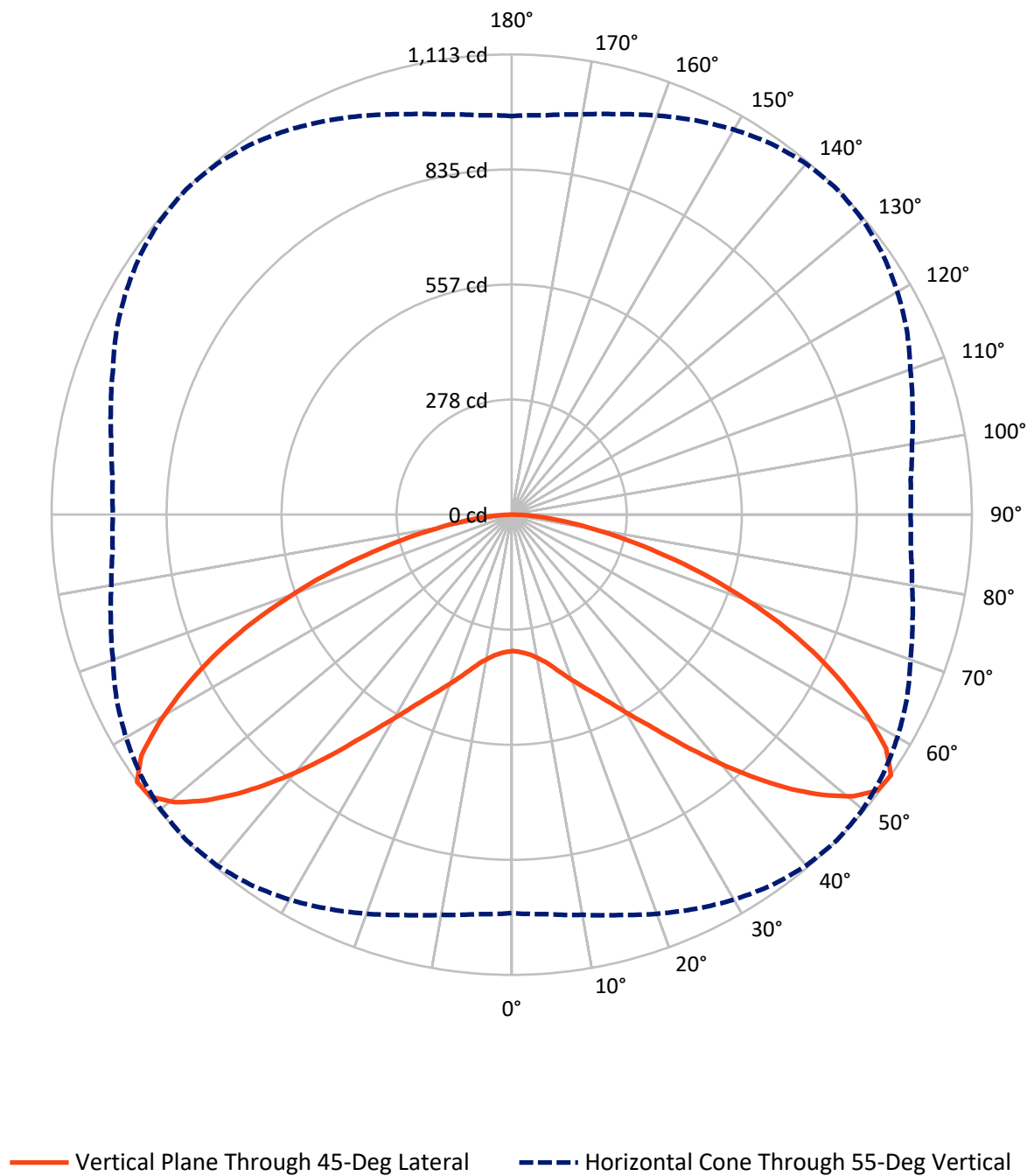


Based on 10 foot mounting height. Maximum calculated value = 3.6 fc  
Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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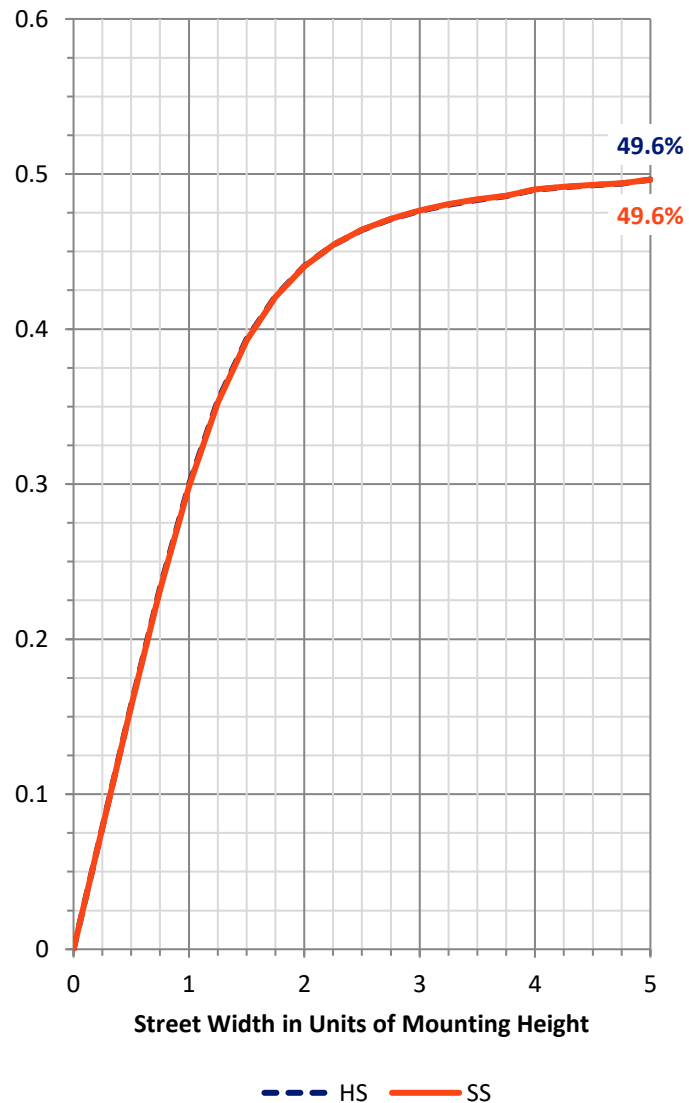
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1779.5   | 0.0    | 1779.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 1779.5   | 0.0    | 1779.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 3559.0   | 0.0    | 3559.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 32.6   | 0.9       |
| 10°-20°   | 110.5  | 3.1       |
| 20°-30°   | 225.0  | 6.3       |
| 30°-40°   | 410.8  | 11.5      |
| 40°-50°   | 697.6  | 19.6      |
| 50°-60°   | 908.5  | 25.5      |
| 60°-70°   | 734.8  | 20.6      |
| 70°-80°   | 361.1  | 10.1      |
| 80°-90°   | 78.2   | 2.2       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 3559.0 | 100.0     |
| 0°-180°   | 3559.0 | 100.0     |

**Coefficient of Utilization**



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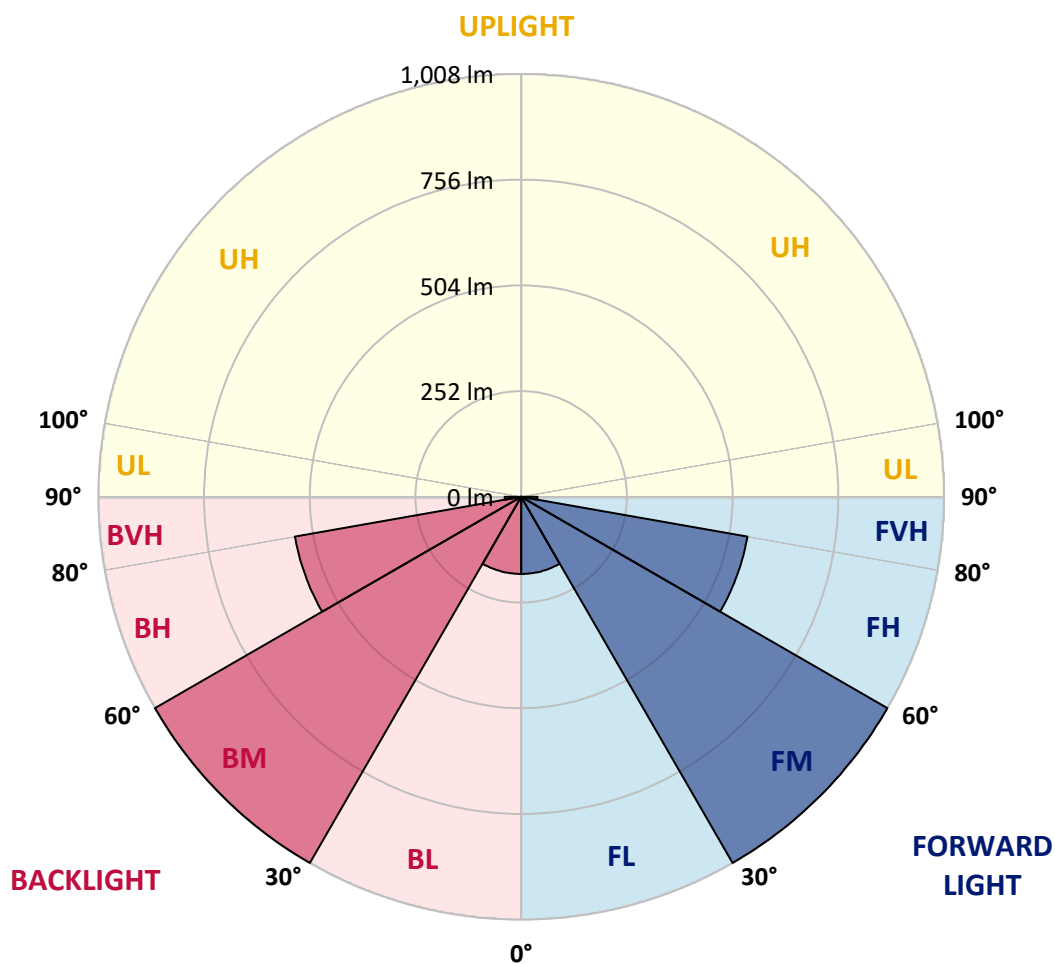
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 184.0  | 5.2       |                         |      |        |
| FM   | (30°-60°)   | 1008.5 | 28.3      |                         |      |        |
| FH   | (60°-80°)   | 547.9  | 15.4      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 39.1   | 1.1       |                         |      | G1/100 |
| BL   | (0°-30°)    | 184.0  | 5.2       | B1/500                  |      |        |
| BM   | (30°-60°)   | 1008.5 | 28.3      | B2/2500                 |      |        |
| BH   | (60°-80°)   | 547.9  | 15.4      | B2/1000                 |      | G0/660 |
| BVH  | (80°-90°)   | 39.1   | 1.1       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 329.8 | 329.8 | 329.8 | 329.8  | 329.8  | 329.8  | 329.8  | 329.8  | 329.8  | 329.8  | 329.8  |
| 2.5°  | 331.2 | 331.2 | 331.2 | 331.2  | 331.2  | 331.2  | 332.0  | 332.0  | 332.0  | 332.0  | 332.0  |
| 5°    | 335.6 | 335.6 | 335.6 | 336.3  | 336.3  | 336.3  | 336.3  | 336.3  | 336.3  | 336.3  | 336.3  |
| 7.5°  | 342.1 | 341.4 | 342.1 | 342.1  | 342.1  | 342.9  | 342.9  | 342.1  | 342.9  | 342.9  | 342.9  |
| 10°   | 351.6 | 350.9 | 351.6 | 351.6  | 351.6  | 352.3  | 352.3  | 352.3  | 352.3  | 353.1  | 353.1  |
| 12.5° | 365.4 | 364.7 | 365.4 | 366.2  | 365.4  | 366.2  | 366.2  | 366.2  | 366.2  | 366.2  | 366.2  |
| 15°   | 382.9 | 382.2 | 382.9 | 383.6  | 382.9  | 384.4  | 384.4  | 383.6  | 383.6  | 384.4  | 384.4  |
| 17.5° | 404.0 | 402.6 | 403.3 | 404.0  | 404.0  | 405.5  | 405.5  | 404.8  | 405.5  | 406.2  | 405.5  |
| 20°   | 425.9 | 424.4 | 425.1 | 427.3  | 427.3  | 428.1  | 429.5  | 428.8  | 429.5  | 430.2  | 429.5  |
| 22.5° | 449.9 | 449.2 | 449.9 | 452.1  | 452.1  | 452.8  | 455.0  | 455.0  | 455.0  | 455.7  | 455.0  |
| 25°   | 476.1 | 475.4 | 476.1 | 478.3  | 478.3  | 479.7  | 482.6  | 482.6  | 483.4  | 484.1  | 483.4  |
| 27.5° | 506.7 | 505.9 | 507.4 | 509.6  | 510.3  | 512.5  | 516.1  | 516.9  | 517.6  | 518.3  | 516.9  |
| 30°   | 542.3 | 540.9 | 543.1 | 546.7  | 548.2  | 551.1  | 555.4  | 556.9  | 557.6  | 559.8  | 558.4  |
| 32.5° | 583.1 | 581.7 | 584.6 | 588.9  | 591.1  | 595.5  | 601.3  | 602.8  | 605.0  | 606.4  | 604.2  |
| 35°   | 631.2 | 630.4 | 633.3 | 639.9  | 643.5  | 648.6  | 656.6  | 658.8  | 660.3  | 663.2  | 660.3  |
| 37.5° | 684.3 | 683.6 | 688.7 | 695.9  | 702.5  | 710.5  | 719.2  | 722.9  | 725.1  | 728.7  | 725.1  |
| 40°   | 743.3 | 742.5 | 749.1 | 757.8  | 765.8  | 776.0  | 786.9  | 792.0  | 796.4  | 800.0  | 795.7  |
| 42.5° | 803.7 | 803.7 | 811.7 | 821.2  | 832.8  | 845.2  | 857.6  | 863.4  | 870.7  | 872.8  | 867.8  |
| 45°   | 861.9 | 862.7 | 870.7 | 882.3  | 899.1  | 915.1  | 928.9  | 936.2  | 944.2  | 946.4  | 939.8  |
| 47.5° | 917.3 | 918.0 | 925.3 | 940.5  | 959.5  | 977.7  | 994.4  | 1004.6 | 1012.6 | 1013.3 | 1008.3 |
| 50°   | 962.4 | 965.3 | 974.8 | 988.6  | 1008.3 | 1027.2 | 1047.6 | 1060.7 | 1068.7 | 1070.9 | 1065.8 |
| 52.5° | 979.9 | 985.0 | 995.9 | 1013.3 | 1035.9 | 1055.6 | 1078.1 | 1094.9 | 1104.3 | 1108.0 | 1103.6 |
| 55°   | 963.8 | 969.7 | 982.8 | 1002.4 | 1027.2 | 1051.9 | 1075.2 | 1094.9 | 1108.0 | 1113.1 | 1108.7 |
| 57.5° | 928.2 | 928.9 | 942.0 | 961.7  | 984.2  | 1009.7 | 1032.3 | 1050.5 | 1062.8 | 1067.9 | 1067.2 |
| 60°   | 866.3 | 866.3 | 878.7 | 897.6  | 915.1  | 941.3  | 960.2  | 974.0  | 982.8  | 988.6  | 987.1  |
| 62.5° | 783.3 | 783.3 | 794.2 | 813.9  | 831.4  | 853.9  | 872.1  | 886.7  | 892.5  | 899.1  | 900.5  |
| 65°   | 690.9 | 690.9 | 701.0 | 720.7  | 736.7  | 757.1  | 774.6  | 788.4  | 794.2  | 802.2  | 800.8  |
| 67.5° | 592.6 | 591.8 | 601.3 | 618.1  | 633.3  | 652.3  | 669.0  | 682.1  | 688.7  | 698.1  | 691.6  |
| 70°   | 491.4 | 491.4 | 499.4 | 512.5  | 523.4  | 542.3  | 558.4  | 571.5  | 576.6  | 584.6  | 580.9  |
| 72.5° | 395.3 | 394.6 | 401.1 | 411.3  | 420.0  | 436.8  | 446.3  | 460.8  | 465.2  | 476.1  | 470.3  |
| 75°   | 308.7 | 307.2 | 312.3 | 319.6  | 325.4  | 336.3  | 343.6  | 355.3  | 358.9  | 366.2  | 363.3  |
| 77.5° | 232.2 | 231.5 | 233.7 | 238.8  | 243.1  | 251.9  | 254.8  | 260.6  | 263.5  | 270.8  | 265.0  |
| 80°   | 166.7 | 164.5 | 166.7 | 169.6  | 171.1  | 177.6  | 178.4  | 180.5  | 182.0  | 187.1  | 181.3  |
| 82.5° | 112.1 | 109.2 | 110.7 | 112.8  | 112.8  | 116.5  | 117.2  | 116.5  | 119.4  | 120.8  | 117.9  |
| 85°   | 64.1  | 61.9  | 62.6  | 64.1   | 63.3   | 65.5   | 65.5   | 64.8   | 67.0   | 67.0   | 65.5   |
| 87.5° | 21.1  | 19.7  | 20.4  | 21.1   | 21.1   | 21.8   | 22.6   | 21.8   | 23.3   | 23.3   | 21.8   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°   | 85°   | 90°   |
|-------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 329.8  | 329.8  | 329.8  | 329.8  | 329.8  | 329.8 | 329.8 | 329.8 |
| 2.5°  | 332.0  | 332.0  | 332.0  | 332.0  | 332.0  | 332.0 | 332.0 | 332.0 |
| 5°    | 336.3  | 336.3  | 336.3  | 336.3  | 336.3  | 335.6 | 335.6 | 335.6 |
| 7.5°  | 342.9  | 342.9  | 342.9  | 342.9  | 342.9  | 342.1 | 342.1 | 342.1 |
| 10°   | 353.1  | 352.3  | 352.3  | 352.3  | 352.3  | 351.6 | 352.3 | 351.6 |
| 12.5° | 366.2  | 366.9  | 366.9  | 366.2  | 366.9  | 365.4 | 365.4 | 365.4 |
| 15°   | 384.4  | 383.6  | 383.6  | 383.6  | 383.6  | 382.9 | 382.9 | 382.9 |
| 17.5° | 404.8  | 404.8  | 404.0  | 404.0  | 403.3  | 402.6 | 402.6 | 402.6 |
| 20°   | 428.8  | 428.1  | 427.3  | 426.6  | 425.9  | 424.4 | 423.7 | 423.7 |
| 22.5° | 453.5  | 452.8  | 452.1  | 451.3  | 450.6  | 449.2 | 447.7 | 447.7 |
| 25°   | 481.2  | 479.7  | 479.0  | 477.6  | 476.1  | 474.6 | 473.9 | 473.2 |
| 27.5° | 514.7  | 513.2  | 511.0  | 508.9  | 505.9  | 505.2 | 503.8 | 503.8 |
| 30°   | 554.7  | 552.5  | 549.6  | 546.0  | 543.1  | 540.2 | 538.7 | 538.0 |
| 32.5° | 601.3  | 598.4  | 593.3  | 588.9  | 583.8  | 580.9 | 578.7 | 577.3 |
| 35°   | 655.9  | 651.5  | 645.7  | 639.2  | 632.6  | 627.5 | 623.9 | 623.9 |
| 37.5° | 720.0  | 713.4  | 704.7  | 696.7  | 687.2  | 681.4 | 677.0 | 674.1 |
| 40°   | 789.9  | 780.4  | 769.5  | 759.3  | 748.4  | 740.4 | 733.8 | 734.5 |
| 42.5° | 859.0  | 851.0  | 837.9  | 825.5  | 811.7  | 800.8 | 792.8 | 792.0 |
| 45°   | 931.8  | 921.6  | 905.6  | 889.6  | 873.6  | 860.5 | 851.0 | 849.6 |
| 47.5° | 999.5  | 988.6  | 969.7  | 950.0  | 932.5  | 918.0 | 907.8 | 906.3 |
| 50°   | 1054.8 | 1041.7 | 1022.1 | 1001.0 | 982.0  | 966.0 | 955.1 | 952.2 |
| 52.5° | 1090.5 | 1076.0 | 1054.8 | 1029.4 | 1009.0 | 990.8 | 977.7 | 974.0 |
| 55°   | 1096.3 | 1077.4 | 1054.8 | 1026.4 | 1003.9 | 983.5 | 968.9 | 964.6 |
| 57.5° | 1056.3 | 1035.9 | 1015.5 | 990.8  | 968.2  | 946.4 | 934.7 | 928.9 |
| 60°   | 978.4  | 962.4  | 945.6  | 923.1  | 904.9  | 884.5 | 875.0 | 872.1 |
| 62.5° | 888.9  | 875.0  | 859.7  | 836.4  | 821.2  | 803.0 | 794.2 | 790.6 |
| 65°   | 792.8  | 776.8  | 762.2  | 743.3  | 726.5  | 711.2 | 698.9 | 697.4 |
| 67.5° | 686.5  | 669.7  | 657.4  | 640.6  | 623.9  | 609.3 | 601.3 | 596.9 |
| 70°   | 574.4  | 560.5  | 548.2  | 530.0  | 519.0  | 505.2 | 499.4 | 495.0 |
| 72.5° | 463.0  | 455.0  | 439.7  | 428.1  | 415.7  | 404.8 | 401.1 | 396.7 |
| 75°   | 358.2  | 348.7  | 337.1  | 329.8  | 320.3  | 314.5 | 311.6 | 308.7 |
| 77.5° | 262.8  | 254.8  | 248.2  | 245.3  | 241.0  | 235.1 | 233.0 | 230.8 |
| 80°   | 182.0  | 178.4  | 174.0  | 173.3  | 170.3  | 166.0 | 165.3 | 164.5 |
| 82.5° | 117.9  | 115.7  | 114.3  | 114.3  | 112.8  | 109.9 | 109.2 | 109.2 |
| 85°   | 65.5   | 64.8   | 65.5   | 64.8   | 63.3   | 61.9  | 61.9  | 61.9  |
| 87.5° | 21.8   | 21.8   | 22.6   | 23.3   | 21.1   | 21.1  | 20.4  | 20.4  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   |

(END OF REPORT)