

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: P197533

Luminaire Tested: **TT-C1-LED-E1-CQ-MS/DIM-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197533  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115423)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C1-LED-E1-CQ-MS/DIM-8030  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
CONCENTRATED DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3330.7 lumens  
Efficiency: N/A  
Efficacy: 119.0 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 28  
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



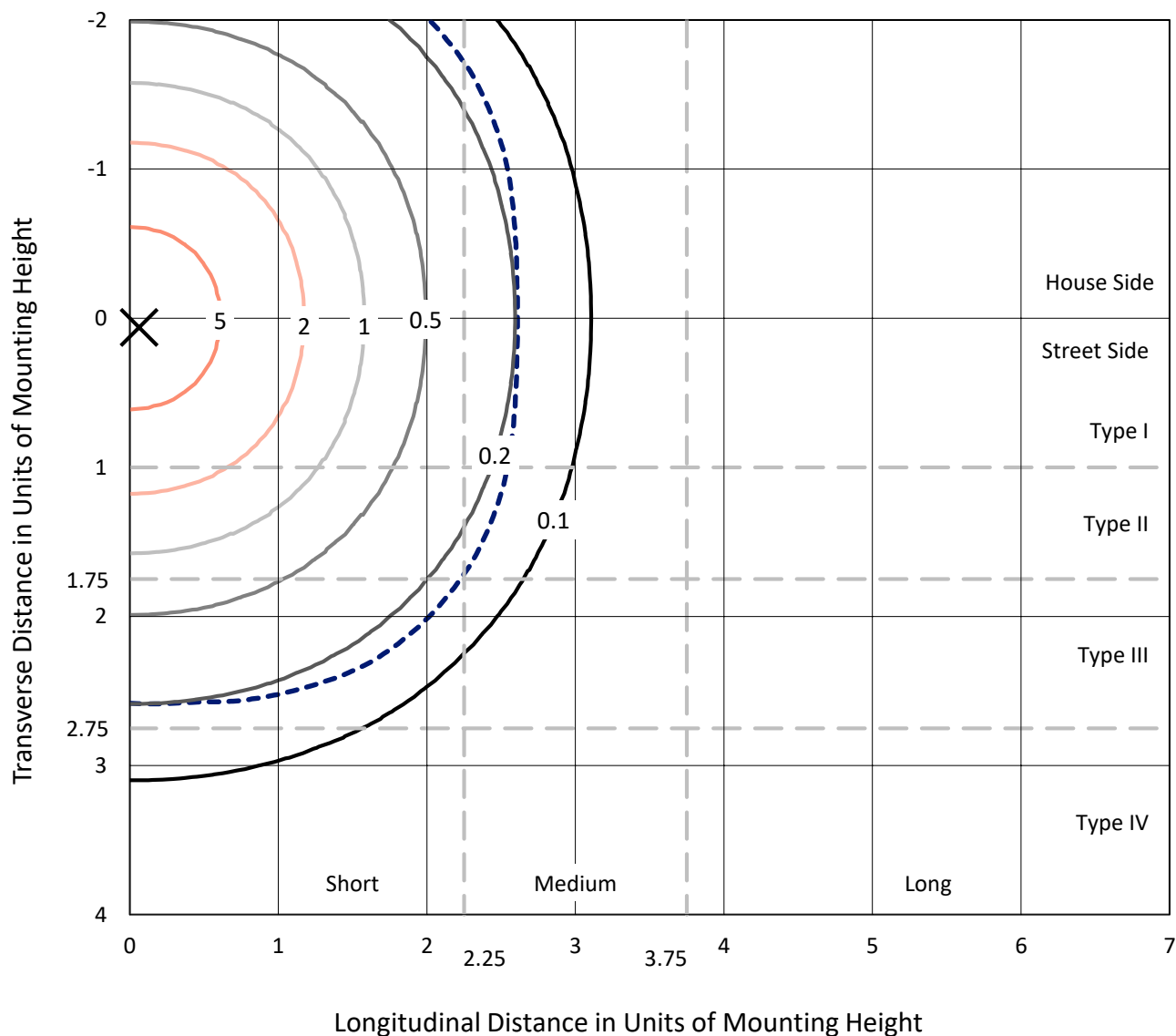
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

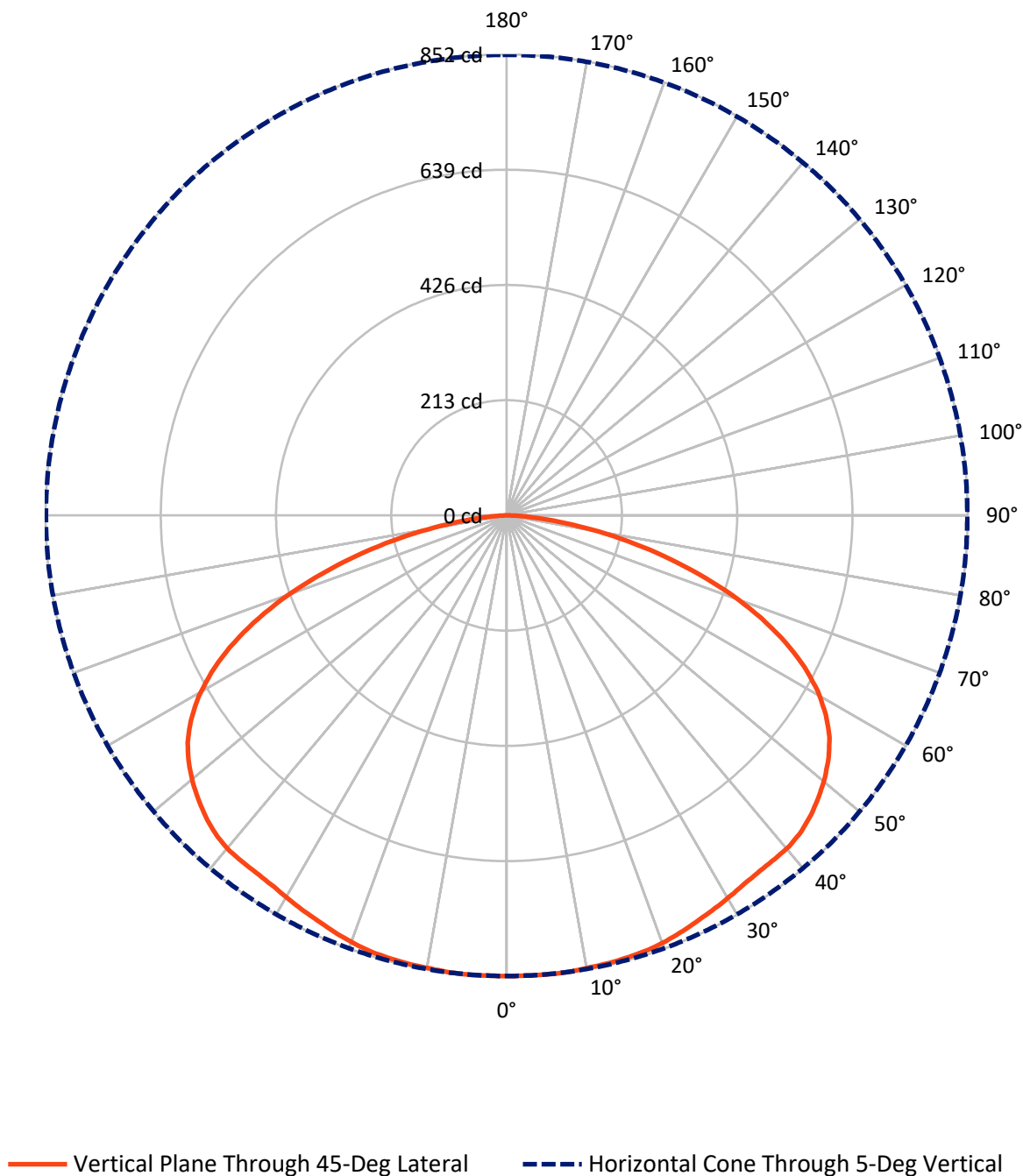


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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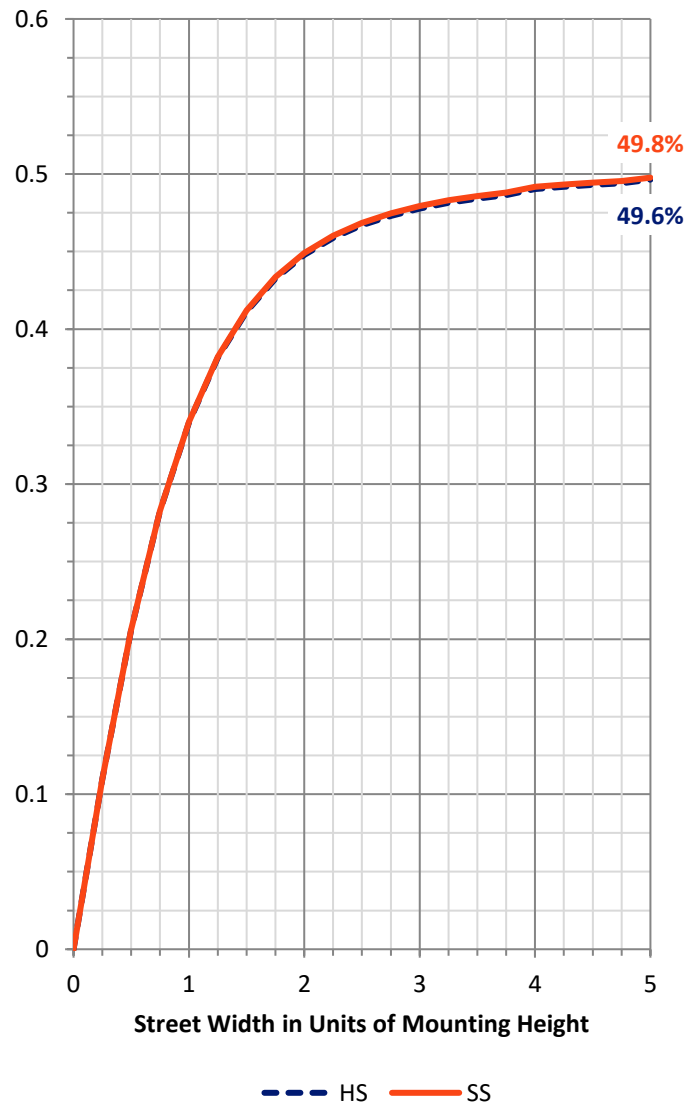
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1665.3   | 0.0    | 1665.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 1665.3   | 0.0    | 1665.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 3330.7   | 0.0    | 3330.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.2   | 2.4       |
| 10°-20°   | 239.4  | 7.2       |
| 20°-30°   | 382.0  | 11.5      |
| 30°-40°   | 503.2  | 15.1      |
| 40°-50°   | 598.6  | 18.0      |
| 50°-60°   | 626.4  | 18.8      |
| 60°-70°   | 532.7  | 16.0      |
| 70°-80°   | 302.7  | 9.1       |
| 80°-90°   | 64.4   | 1.9       |
| 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°    | 3330.7 | 100.0     |
| 0°-180°   | 3330.7 | 100.0     |

**Coefficient of Utilization**



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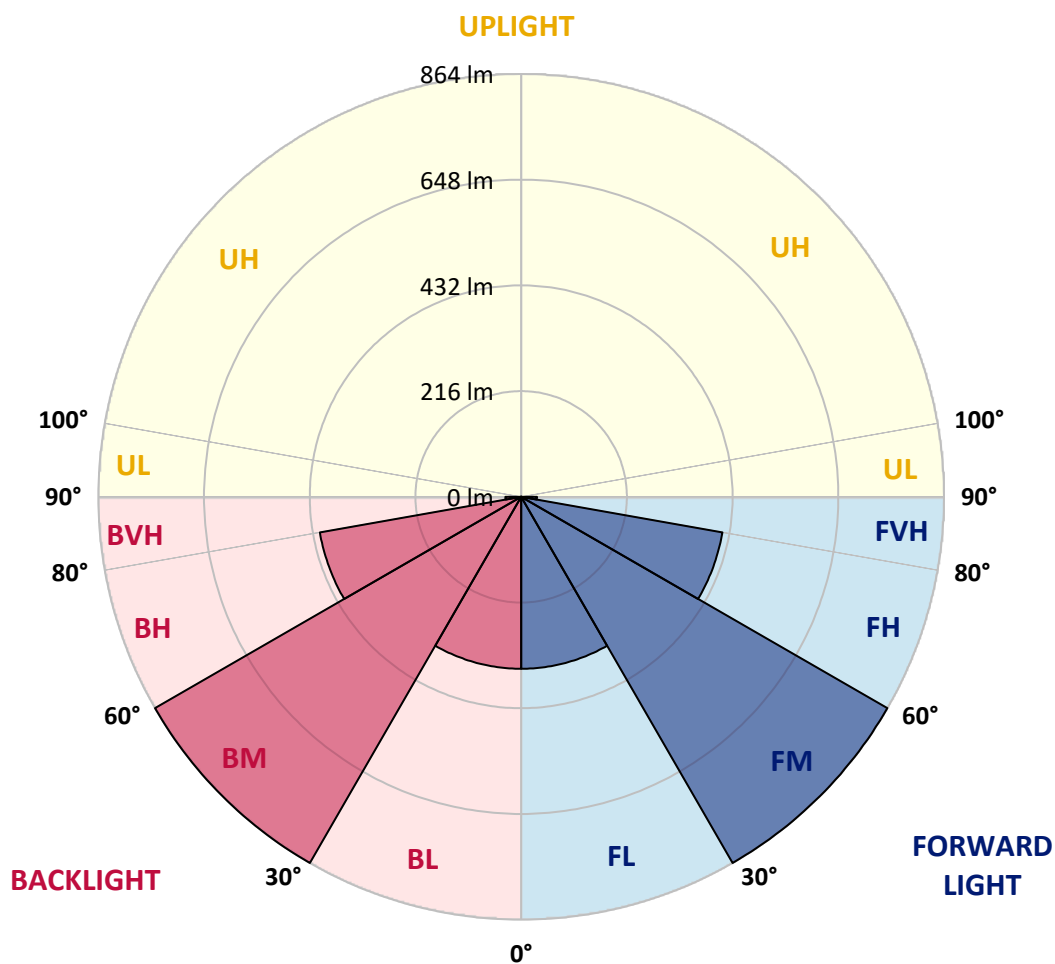
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 351.3  | 10.5      |                         |      |        |
| FM   | (30°-60°)   | 864.1  | 25.9      |                         |      |        |
| FH   | (60°-80°)   | 417.7  | 12.5      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 32.2   | 1.0       |                         |      | G1/100 |
| BL   | (0°-30°)    | 351.3  | 10.5      | B1/500                  |      |        |
| BM   | (30°-60°)   | 864.1  | 25.9      | B1/1000                 |      |        |
| BH   | (60°-80°)   | 417.7  | 12.5      | B1/500                  |      | G0/660 |
| BVH  | (80°-90°)   | 32.2   | 1.0       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B1-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 |
| 2.5°  | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 |
| 5°    | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.6 | 851.0 |
| 7.5°  | 850.3 | 850.3 | 850.3 | 850.3 | 851.0 | 850.3 | 850.3 | 851.0 | 851.0 | 851.0 | 851.0 |
| 10°   | 849.0 | 848.3 | 848.3 | 849.0 | 849.0 | 849.0 | 849.0 | 849.0 | 849.6 | 849.0 | 849.0 |
| 12.5° | 847.0 | 846.4 | 847.0 | 847.0 | 847.0 | 847.7 | 847.7 | 847.7 | 848.3 | 848.3 | 847.7 |
| 15°   | 845.1 | 845.1 | 845.1 | 845.1 | 845.1 | 845.7 | 845.7 | 846.4 | 846.4 | 846.4 | 846.4 |
| 17.5° | 842.4 | 842.4 | 842.4 | 843.1 | 843.1 | 843.7 | 843.7 | 843.7 | 844.4 | 844.4 | 844.4 |
| 20°   | 837.8 | 837.2 | 837.8 | 837.8 | 838.5 | 839.1 | 839.1 | 839.8 | 839.8 | 839.8 | 839.8 |
| 22.5° | 831.3 | 831.3 | 831.9 | 831.9 | 832.6 | 833.2 | 833.2 | 833.9 | 833.9 | 833.9 | 833.9 |
| 25°   | 824.7 | 825.4 | 825.4 | 826.0 | 826.0 | 826.7 | 827.3 | 827.3 | 827.3 | 827.3 | 827.3 |
| 27.5° | 818.1 | 818.8 | 818.8 | 818.8 | 819.4 | 820.1 | 820.8 | 821.4 | 822.1 | 821.4 | 821.4 |
| 30°   | 810.9 | 810.9 | 811.6 | 812.2 | 812.9 | 813.5 | 814.8 | 815.5 | 816.2 | 815.5 | 815.5 |
| 32.5° | 803.0 | 803.7 | 804.3 | 805.0 | 806.3 | 807.6 | 808.9 | 809.6 | 810.3 | 809.6 | 809.6 |
| 35°   | 797.1 | 797.1 | 798.4 | 799.7 | 801.1 | 803.0 | 804.3 | 805.7 | 807.0 | 806.3 | 805.7 |
| 37.5° | 791.2 | 791.2 | 792.5 | 794.5 | 797.1 | 799.7 | 802.4 | 804.3 | 805.0 | 805.0 | 804.3 |
| 40°   | 784.0 | 784.6 | 786.0 | 789.2 | 793.2 | 796.5 | 799.7 | 802.4 | 803.7 | 803.7 | 802.4 |
| 42.5° | 776.1 | 776.8 | 778.7 | 782.0 | 786.6 | 790.6 | 794.5 | 796.5 | 798.4 | 798.4 | 797.1 |
| 45°   | 764.9 | 765.6 | 768.2 | 771.5 | 776.1 | 780.0 | 784.6 | 786.6 | 789.2 | 788.6 | 787.9 |
| 47.5° | 750.5 | 751.2 | 753.8 | 757.1 | 761.7 | 766.3 | 770.9 | 774.1 | 776.1 | 776.1 | 775.5 |
| 50°   | 732.8 | 733.4 | 736.1 | 739.3 | 745.2 | 750.5 | 755.1 | 758.4 | 761.7 | 761.7 | 761.0 |
| 52.5° | 710.4 | 711.8 | 713.7 | 718.3 | 724.9 | 730.8 | 736.7 | 742.0 | 743.9 | 744.6 | 743.9 |
| 55°   | 682.9 | 684.2 | 686.8 | 692.1 | 699.3 | 706.5 | 713.1 | 719.0 | 721.6 | 723.6 | 722.3 |
| 57.5° | 650.7 | 652.0 | 655.3 | 661.2 | 669.1 | 676.3 | 684.8 | 691.4 | 693.4 | 695.3 | 694.7 |
| 60°   | 612.6 | 614.6 | 617.9 | 624.4 | 632.3 | 640.2 | 648.1 | 656.0 | 657.9 | 660.5 | 659.2 |
| 62.5° | 568.0 | 569.9 | 573.2 | 580.4 | 589.0 | 596.2 | 605.4 | 612.6 | 614.6 | 617.2 | 616.6 |
| 65°   | 516.7 | 518.7 | 522.0 | 529.9 | 537.8 | 545.6 | 554.2 | 562.1 | 564.0 | 566.7 | 566.0 |
| 67.5° | 458.3 | 460.3 | 463.6 | 472.8 | 480.6 | 488.5 | 495.7 | 503.6 | 504.9 | 507.6 | 506.9 |
| 70°   | 396.6 | 399.2 | 401.8 | 410.4 | 417.6 | 424.2 | 432.0 | 438.6 | 441.2 | 442.6 | 441.2 |
| 72.5° | 334.9 | 336.8 | 339.5 | 345.4 | 350.6 | 356.5 | 364.4 | 369.0 | 371.0 | 371.6 | 371.6 |
| 75°   | 271.2 | 273.1 | 273.1 | 279.7 | 283.7 | 286.9 | 293.5 | 296.8 | 298.1 | 299.4 | 299.4 |
| 77.5° | 210.8 | 209.5 | 210.8 | 213.4 | 216.0 | 218.7 | 222.6 | 224.6 | 225.9 | 228.5 | 227.2 |
| 80°   | 147.7 | 148.4 | 149.0 | 151.0 | 152.3 | 153.0 | 155.6 | 156.3 | 156.9 | 159.6 | 158.2 |
| 82.5° | 95.2  | 93.9  | 95.2  | 94.6  | 95.9  | 93.9  | 95.2  | 97.2  | 95.9  | 97.2  | 97.8  |
| 85°   | 49.9  | 47.9  | 47.9  | 48.6  | 49.2  | 47.9  | 48.6  | 47.9  | 47.9  | 49.2  | 48.6  |
| 87.5° | 15.8  | 15.1  | 15.8  | 15.1  | 15.8  | 15.1  | 15.8  | 16.4  | 15.8  | 15.8  | 16.4  |
| 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°    | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 |
| 2.5°  | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 |
| 5°    | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 | 851.0 |
| 7.5°  | 850.3 | 850.3 | 850.3 | 850.3 | 850.3 | 850.3 | 849.6 | 850.3 |
| 10°   | 849.0 | 849.0 | 849.0 | 849.0 | 848.3 | 848.3 | 848.3 | 848.3 |
| 12.5° | 847.7 | 847.7 | 847.0 | 847.0 | 847.0 | 847.0 | 846.4 | 846.4 |
| 15°   | 846.4 | 845.7 | 845.7 | 845.1 | 845.1 | 845.1 | 844.4 | 845.1 |
| 17.5° | 844.4 | 843.7 | 843.7 | 843.1 | 843.1 | 842.4 | 842.4 | 842.4 |
| 20°   | 839.8 | 839.1 | 839.1 | 838.5 | 838.5 | 837.8 | 837.2 | 837.2 |
| 22.5° | 833.2 | 833.2 | 833.2 | 832.6 | 831.9 | 831.9 | 831.3 | 831.3 |
| 25°   | 827.3 | 826.7 | 826.7 | 826.0 | 825.4 | 825.4 | 824.7 | 824.7 |
| 27.5° | 821.4 | 820.8 | 820.1 | 818.8 | 818.8 | 818.1 | 817.5 | 816.8 |
| 30°   | 814.8 | 813.5 | 812.2 | 811.6 | 810.9 | 809.6 | 808.9 | 808.3 |
| 32.5° | 808.3 | 807.0 | 805.7 | 804.3 | 802.4 | 801.7 | 800.4 | 800.4 |
| 35°   | 804.3 | 802.4 | 800.4 | 797.8 | 795.8 | 793.8 | 792.5 | 791.9 |
| 37.5° | 802.4 | 799.7 | 796.5 | 793.2 | 789.9 | 787.3 | 785.3 | 785.3 |
| 40°   | 799.7 | 796.5 | 792.5 | 787.9 | 784.0 | 780.7 | 778.7 | 778.1 |
| 42.5° | 794.5 | 791.2 | 786.0 | 782.0 | 776.8 | 773.5 | 770.9 | 770.2 |
| 45°   | 785.3 | 782.0 | 777.4 | 772.2 | 766.9 | 763.0 | 760.4 | 759.7 |
| 47.5° | 773.5 | 769.5 | 764.3 | 759.0 | 753.8 | 749.2 | 746.6 | 745.9 |
| 50°   | 758.4 | 754.4 | 749.2 | 743.9 | 738.0 | 733.4 | 730.1 | 730.1 |
| 52.5° | 741.3 | 736.7 | 730.8 | 724.9 | 718.3 | 713.7 | 710.4 | 709.8 |
| 55°   | 719.0 | 713.7 | 707.8 | 701.3 | 694.0 | 688.8 | 684.8 | 684.2 |
| 57.5° | 691.4 | 685.5 | 678.9 | 671.7 | 664.5 | 658.6 | 654.0 | 653.3 |
| 60°   | 656.6 | 650.0 | 643.5 | 636.3 | 628.4 | 621.8 | 617.2 | 615.9 |
| 62.5° | 613.9 | 606.7 | 599.5 | 592.9 | 584.4 | 577.8 | 573.2 | 571.9 |
| 65°   | 563.4 | 557.5 | 550.2 | 542.4 | 533.2 | 526.6 | 522.0 | 521.3 |
| 67.5° | 504.3 | 498.4 | 491.1 | 483.9 | 474.7 | 468.8 | 464.2 | 462.9 |
| 70°   | 439.3 | 434.0 | 428.1 | 420.9 | 413.0 | 407.1 | 402.5 | 401.8 |
| 72.5° | 370.3 | 365.7 | 360.5 | 355.2 | 347.3 | 342.7 | 338.8 | 338.2 |
| 75°   | 299.4 | 294.8 | 290.9 | 286.9 | 281.0 | 277.7 | 273.8 | 273.8 |
| 77.5° | 227.2 | 225.9 | 223.2 | 218.7 | 215.4 | 212.7 | 210.8 | 209.5 |
| 80°   | 158.9 | 157.6 | 156.3 | 153.6 | 151.7 | 151.0 | 149.7 | 148.4 |
| 82.5° | 97.2  | 96.5  | 97.2  | 95.9  | 95.2  | 95.2  | 94.6  | 93.2  |
| 85°   | 49.2  | 49.9  | 49.2  | 48.6  | 48.6  | 48.6  | 48.6  | 47.9  |
| 87.5° | 15.8  | 16.4  | 15.8  | 15.1  | 15.1  | 15.1  | 15.1  | 14.4  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)