

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: P198172

Luminaire Tested: **TT-C1-LED-E1-DL-MS/DIM-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34704)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C1-LED-E1-DL-MS/DIM-7060  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
DRIVE LANE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR  
Light Source: (160) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3031.9 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 33.5  
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

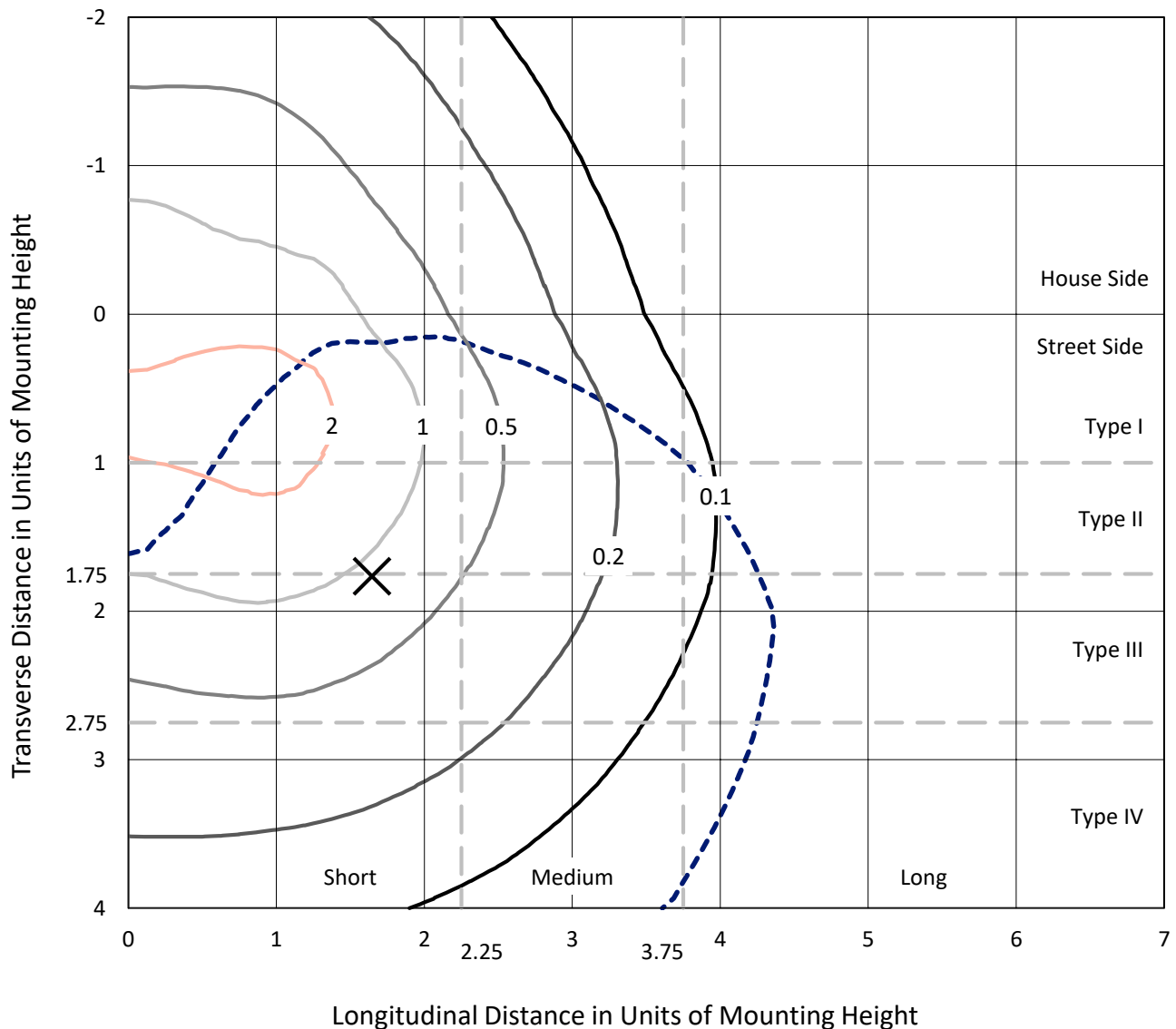


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

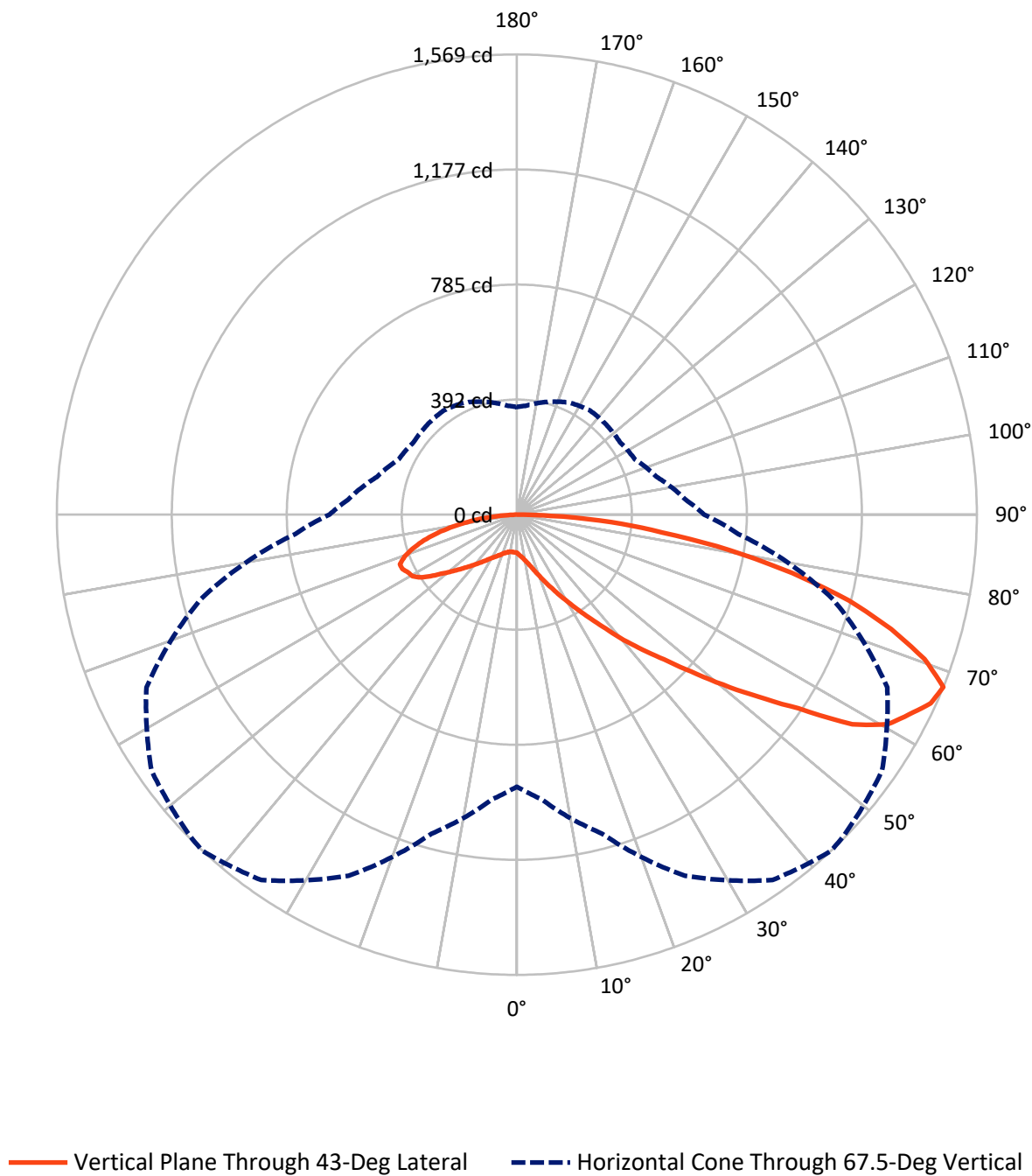


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc  
Type IV - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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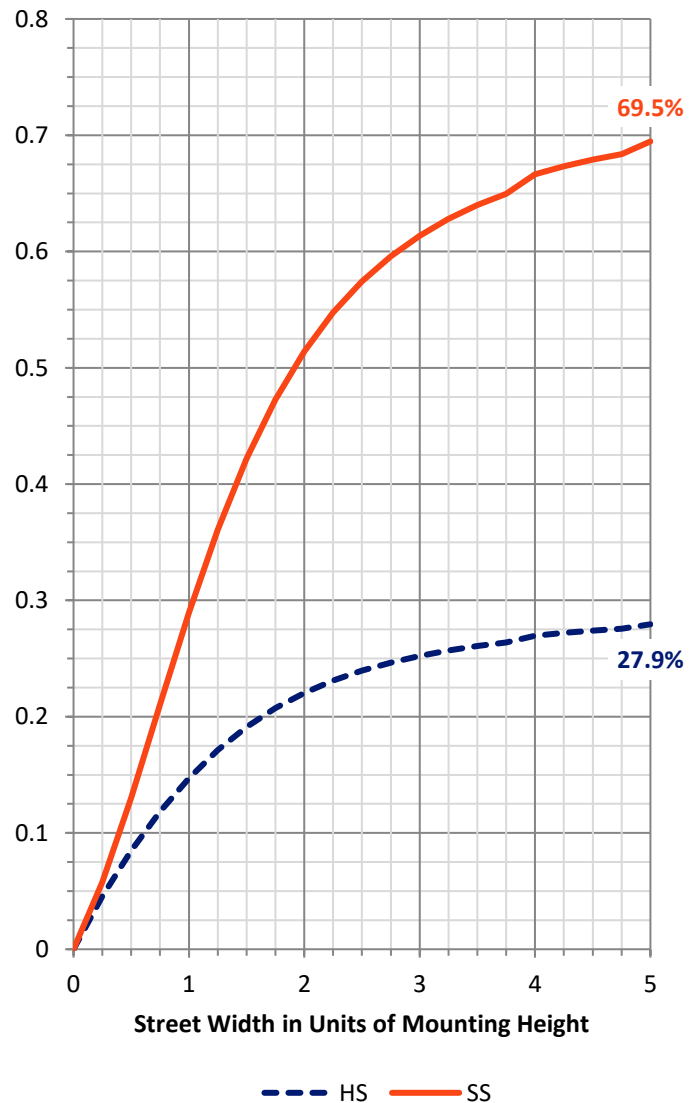
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 865.5    | 0.0    | 865.5  |
|                    | % Fixture | 28.5     | 0.0    | 28.5   |
| <b>Street Side</b> | Lumens    | 2166.4   | 0.0    | 2166.4 |
|                    | % Fixture | 71.5     | 0.0    | 71.5   |
| <b>Total</b>       | Lumens    | 3031.9   | 0.0    | 3031.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 13.2   | 0.4       |
| 10°-20°   | 45.9   | 1.5       |
| 20°-30°   | 99.5   | 3.3       |
| 30°-40°   | 192.2  | 6.3       |
| 40°-50°   | 352.8  | 11.6      |
| 50°-60°   | 609.4  | 20.1      |
| 60°-70°   | 824.1  | 27.2      |
| 70°-80°   | 690.1  | 22.8      |
| 80°-90°   | 204.6  | 6.7       |
| 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°    | 3031.9 | 100.0     |
| 0°-180°   | 3031.9 | 100.0     |

**Coefficient of Utilization**



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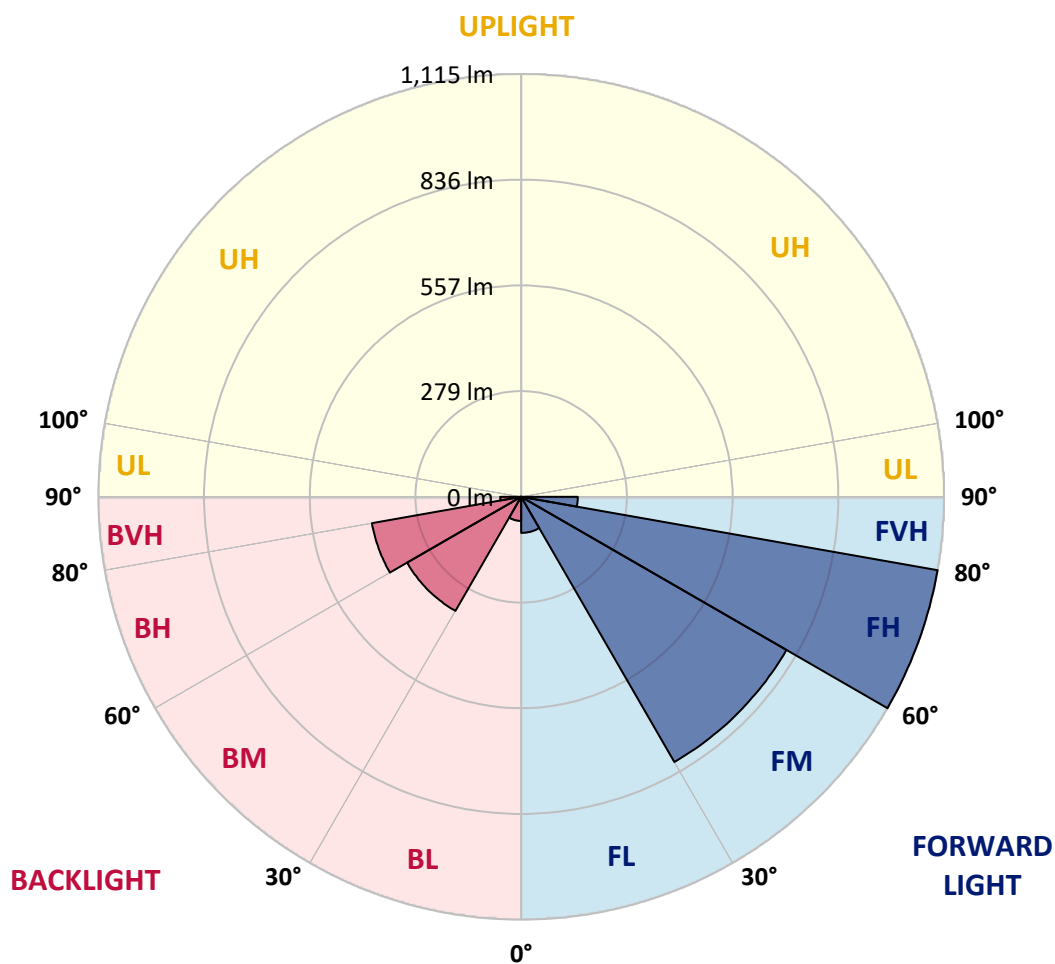
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 95.2   | 3.1       |                         |      |         |
| FM   | (30°-60°)   | 807.3  | 26.6      |                         |      |         |
| FH   | (60°-80°)   | 1114.8 | 36.8      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 149.2  | 4.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 63.5   | 2.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 347.2  | 11.5      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 399.5  | 13.2      | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 55.4   | 1.8       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°     | 15°    | 25°    | 35°    | 43°    | 45°    | 55°    | 65°    | 75°    | 85°   |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 130.6 | 130.6  | 130.6  | 130.6  | 130.6  | 130.6  | 130.6  | 130.6  | 130.6  | 130.6  | 130.6 |
| 2.5°  | 138.1 | 138.1  | 137.5  | 137.5  | 136.9  | 136.3  | 135.8  | 135.8  | 134.6  | 134.0  | 133.4 |
| 5°    | 145.6 | 145.6  | 145.6  | 144.4  | 143.3  | 142.7  | 142.7  | 141.0  | 139.2  | 137.5  | 135.8 |
| 7.5°  | 154.8 | 154.2  | 154.2  | 153.1  | 151.4  | 149.6  | 149.0  | 147.9  | 145.0  | 142.7  | 139.2 |
| 10°   | 165.2 | 165.2  | 165.2  | 162.9  | 161.2  | 159.4  | 158.3  | 156.0  | 152.5  | 148.5  | 145.0 |
| 12.5° | 177.9 | 177.9  | 178.5  | 175.6  | 173.9  | 170.4  | 169.8  | 166.4  | 161.7  | 156.0  | 150.8 |
| 15°   | 192.4 | 194.7  | 192.9  | 192.9  | 187.2  | 185.4  | 184.3  | 180.2  | 173.9  | 166.4  | 159.4 |
| 17.5° | 213.2 | 212.6  | 210.3  | 210.9  | 206.8  | 203.9  | 201.0  | 194.1  | 187.2  | 176.8  | 167.5 |
| 20°   | 236.8 | 235.7  | 232.8  | 231.6  | 229.3  | 224.1  | 223.0  | 213.7  | 202.8  | 191.8  | 179.7 |
| 22.5° | 260.0 | 260.5  | 259.4  | 257.1  | 254.8  | 250.7  | 248.4  | 238.6  | 223.0  | 208.5  | 190.6 |
| 25°   | 283.1 | 285.4  | 285.4  | 287.1  | 283.1  | 277.9  | 276.1  | 264.6  | 247.2  | 225.3  | 206.2 |
| 27.5° | 311.9 | 312.5  | 314.3  | 316.6  | 315.4  | 310.8  | 307.3  | 294.6  | 273.2  | 249.0  | 223.6 |
| 30°   | 340.8 | 343.1  | 344.3  | 348.9  | 350.1  | 346.6  | 343.1  | 328.7  | 306.7  | 275.0  | 242.6 |
| 32.5° | 372.0 | 375.5  | 377.8  | 384.2  | 391.7  | 389.4  | 388.2  | 371.4  | 345.4  | 308.5  | 268.6 |
| 35°   | 407.3 | 407.8  | 415.3  | 429.8  | 436.1  | 437.3  | 434.4  | 422.9  | 391.1  | 347.2  | 297.5 |
| 37.5° | 440.8 | 443.7  | 456.4  | 474.8  | 485.8  | 493.3  | 494.5  | 483.5  | 448.3  | 392.8  | 329.3 |
| 40°   | 477.7 | 479.5  | 500.3  | 519.9  | 549.4  | 561.5  | 558.6  | 547.1  | 508.9  | 445.4  | 366.8 |
| 42.5° | 515.9 | 521.6  | 541.3  | 573.6  | 610.0  | 630.2  | 635.4  | 621.6  | 583.5  | 507.8  | 415.3 |
| 45°   | 552.8 | 562.1  | 583.5  | 625.6  | 679.9  | 704.2  | 709.4  | 716.3  | 680.5  | 585.8  | 480.0 |
| 47.5° | 593.3 | 598.5  | 630.8  | 686.9  | 746.4  | 798.3  | 813.4  | 818.6  | 763.7  | 659.1  | 525.7 |
| 50°   | 635.4 | 636.6  | 681.7  | 757.9  | 850.9  | 911.0  | 912.1  | 938.7  | 868.8  | 752.1  | 581.7 |
| 52.5° | 680.5 | 681.7  | 734.8  | 833.0  | 955.5  | 1030.6 | 1045.6 | 1054.3 | 1018.4 | 872.9  | 685.1 |
| 55°   | 725.0 | 727.9  | 793.7  | 934.7  | 1086.6 | 1165.7 | 1201.0 | 1238.5 | 1153.6 | 966.5  | 722.7 |
| 57.5° | 771.8 | 777.6  | 874.0  | 1045.6 | 1231.0 | 1349.4 | 1367.4 | 1373.1 | 1240.3 | 1004.0 | 734.2 |
| 60°   | 814.5 | 827.2  | 957.8  | 1153.0 | 1352.9 | 1452.3 | 1454.6 | 1421.1 | 1273.2 | 1026.0 | 734.8 |
| 62.5° | 859.0 | 875.2  | 1034.6 | 1255.9 | 1446.5 | 1500.8 | 1506.6 | 1452.9 | 1331.0 | 1099.3 | 785.6 |
| 65°   | 892.5 | 922.5  | 1092.4 | 1328.1 | 1483.5 | 1551.1 | 1561.5 | 1546.4 | 1421.7 | 1149.0 | 803.0 |
| 67.5° | 927.2 | 974.5  | 1125.9 | 1358.1 | 1520.4 | 1569.0 | 1564.9 | 1521.0 | 1393.9 | 1116.6 | 759.1 |
| 70°   | 971.1 | 1005.7 | 1151.9 | 1347.7 | 1467.3 | 1474.8 | 1474.8 | 1420.5 | 1306.1 | 1051.9 | 705.3 |
| 72.5° | 988.4 | 1015.6 | 1123.0 | 1264.5 | 1337.3 | 1335.0 | 1324.6 | 1294.6 | 1186.5 | 952.6  | 625.6 |
| 75°   | 969.9 | 973.4  | 1023.1 | 1109.1 | 1164.0 | 1169.8 | 1157.7 | 1115.5 | 1030.6 | 826.1  | 535.5 |
| 77.5° | 870.0 | 861.9  | 873.4  | 916.2  | 964.7  | 960.7  | 958.9  | 911.0  | 845.1  | 681.7  | 439.6 |
| 80°   | 685.1 | 689.7  | 690.3  | 698.4  | 727.9  | 738.3  | 727.3  | 690.9  | 646.4  | 530.3  | 340.3 |
| 82.5° | 470.8 | 478.3  | 485.2  | 474.8  | 487.6  | 499.1  | 497.4  | 462.7  | 448.3  | 372.0  | 235.1 |
| 85°   | 253.6 | 271.5  | 275.6  | 281.3  | 309.6  | 323.5  | 318.3  | 292.3  | 272.1  | 229.9  | 142.1 |
| 87.5° | 51.4  | 42.2   | 60.1   | 85.5   | 108.0  | 116.7  | 131.1  | 98.8   | 78.6   | 57.8   | 32.3  |
| 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):**

|       | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 | 130.6 |
| 2.5°  | 132.9 | 132.3 | 131.7 | 130.6 | 129.4 | 128.8 | 128.2 | 127.7 | 127.7 | 127.7 | 127.7 |
| 5°    | 135.2 | 134.6 | 132.9 | 131.7 | 130.0 | 128.8 | 127.7 | 127.1 | 125.9 | 125.4 | 125.9 |
| 7.5°  | 138.1 | 136.9 | 134.0 | 131.7 | 130.0 | 128.2 | 127.1 | 126.5 | 125.9 | 124.8 | 124.8 |
| 10°   | 142.7 | 141.0 | 136.9 | 133.4 | 131.1 | 128.8 | 127.1 | 126.5 | 125.9 | 125.4 | 125.4 |
| 12.5° | 149.0 | 145.6 | 141.0 | 136.9 | 132.9 | 130.0 | 128.8 | 127.7 | 127.1 | 127.1 | 127.1 |
| 15°   | 155.4 | 152.5 | 146.2 | 139.8 | 135.8 | 133.4 | 131.7 | 130.0 | 130.0 | 130.0 | 130.0 |
| 17.5° | 164.1 | 158.9 | 151.4 | 144.4 | 139.8 | 136.3 | 135.2 | 134.0 | 134.0 | 134.6 | 134.6 |
| 20°   | 173.3 | 167.5 | 158.3 | 150.8 | 145.0 | 141.0 | 139.8 | 139.2 | 139.2 | 139.8 | 139.8 |
| 22.5° | 183.7 | 176.8 | 165.2 | 156.6 | 150.8 | 147.9 | 145.6 | 145.6 | 145.6 | 146.2 | 146.7 |
| 25°   | 197.6 | 187.7 | 173.9 | 164.1 | 157.1 | 153.7 | 152.5 | 152.5 | 152.5 | 153.7 | 153.7 |
| 27.5° | 212.0 | 201.6 | 183.7 | 171.6 | 164.6 | 161.2 | 159.4 | 160.0 | 160.6 | 161.2 | 161.2 |
| 30°   | 228.8 | 216.6 | 194.7 | 182.0 | 173.3 | 169.3 | 167.5 | 168.1 | 168.7 | 169.8 | 168.7 |
| 32.5° | 249.6 | 234.5 | 209.7 | 192.9 | 183.1 | 179.1 | 177.9 | 178.5 | 178.5 | 178.5 | 179.1 |
| 35°   | 277.3 | 258.2 | 227.6 | 206.2 | 196.4 | 190.6 | 189.5 | 189.5 | 189.5 | 188.9 | 188.9 |
| 37.5° | 304.4 | 280.2 | 245.5 | 224.1 | 211.4 | 204.5 | 201.0 | 201.0 | 201.0 | 201.0 | 201.0 |
| 40°   | 336.2 | 307.9 | 268.6 | 243.2 | 228.2 | 219.5 | 214.9 | 213.2 | 212.6 | 212.0 | 210.9 |
| 42.5° | 377.2 | 344.9 | 295.2 | 264.0 | 246.1 | 236.8 | 229.9 | 226.4 | 224.1 | 223.6 | 221.8 |
| 45°   | 432.1 | 392.2 | 335.1 | 294.6 | 268.6 | 255.9 | 247.8 | 240.9 | 236.8 | 235.7 | 232.8 |
| 47.5° | 472.5 | 426.3 | 362.8 | 321.2 | 294.0 | 277.9 | 265.7 | 256.5 | 250.7 | 247.8 | 246.1 |
| 50°   | 514.7 | 471.4 | 401.5 | 350.1 | 322.3 | 303.9 | 288.3 | 275.6 | 265.2 | 261.1 | 260.5 |
| 52.5° | 607.1 | 549.4 | 454.6 | 391.1 | 351.2 | 330.4 | 314.3 | 299.2 | 283.1 | 276.1 | 277.9 |
| 55°   | 636.0 | 575.9 | 487.6 | 430.9 | 389.9 | 365.7 | 342.6 | 322.9 | 304.4 | 292.3 | 292.9 |
| 57.5° | 639.5 | 578.3 | 494.5 | 444.2 | 416.5 | 396.9 | 376.6 | 349.5 | 327.0 | 310.2 | 309.6 |
| 60°   | 634.9 | 574.2 | 492.8 | 442.5 | 421.7 | 415.9 | 403.2 | 379.5 | 347.2 | 327.5 | 325.2 |
| 62.5° | 671.3 | 606.6 | 511.2 | 448.9 | 422.9 | 420.5 | 416.5 | 402.6 | 369.7 | 344.3 | 340.3 |
| 65°   | 678.2 | 610.6 | 521.1 | 465.6 | 441.3 | 432.7 | 428.1 | 411.9 | 390.5 | 358.2 | 355.3 |
| 67.5° | 638.9 | 578.3 | 494.5 | 444.8 | 429.8 | 432.7 | 433.8 | 421.7 | 398.0 | 372.6 | 366.8 |
| 70°   | 592.1 | 531.5 | 459.3 | 411.3 | 400.9 | 406.7 | 417.7 | 417.7 | 400.3 | 379.0 | 379.5 |
| 72.5° | 522.2 | 473.1 | 407.3 | 372.6 | 362.2 | 369.7 | 382.4 | 392.2 | 387.6 | 380.1 | 380.7 |
| 75°   | 447.1 | 404.4 | 350.1 | 324.7 | 317.1 | 326.4 | 339.1 | 350.6 | 357.6 | 362.8 | 366.2 |
| 77.5° | 368.0 | 336.2 | 290.6 | 266.3 | 266.3 | 275.0 | 287.1 | 297.5 | 309.1 | 322.3 | 324.7 |
| 80°   | 283.1 | 257.6 | 224.1 | 207.4 | 209.1 | 216.1 | 228.8 | 238.0 | 244.9 | 256.5 | 258.2 |
| 82.5° | 199.9 | 184.9 | 156.6 | 144.4 | 147.3 | 156.6 | 162.3 | 168.7 | 173.9 | 176.8 | 180.2 |
| 85°   | 117.8 | 106.3 | 93.6  | 89.5  | 89.5  | 93.0  | 100.5 | 101.7 | 102.2 | 102.8 | 102.2 |
| 87.5° | 29.5  | 32.3  | 27.7  | 27.2  | 27.2  | 29.5  | 28.3  | 30.6  | 30.6  | 31.8  | 29.5  |
| 90°   | 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)