

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: P193180

Luminaire Tested: **GLEON-AF-02-LED-E1-T3-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-T3-7030-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9518.7 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 85  
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

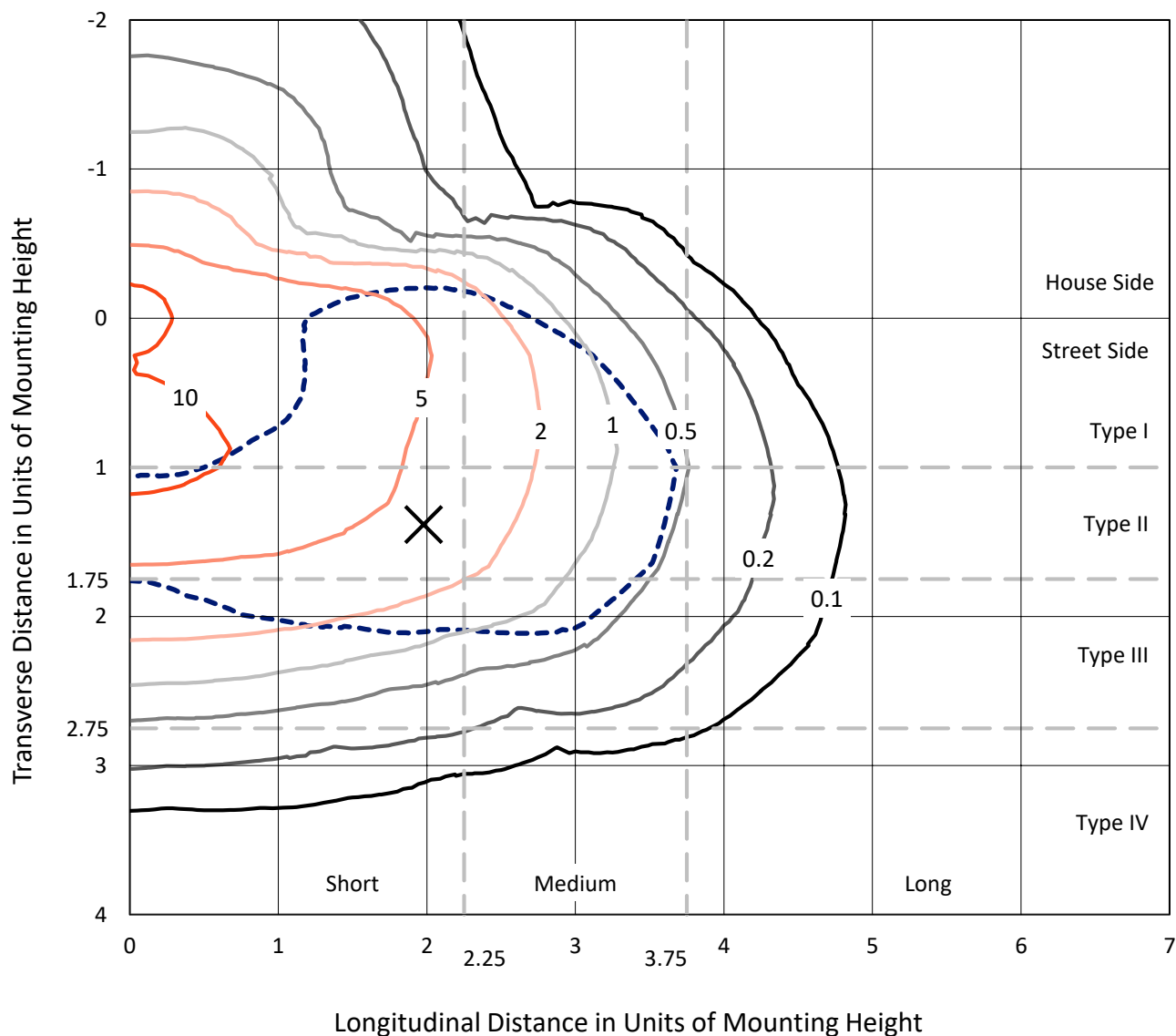


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

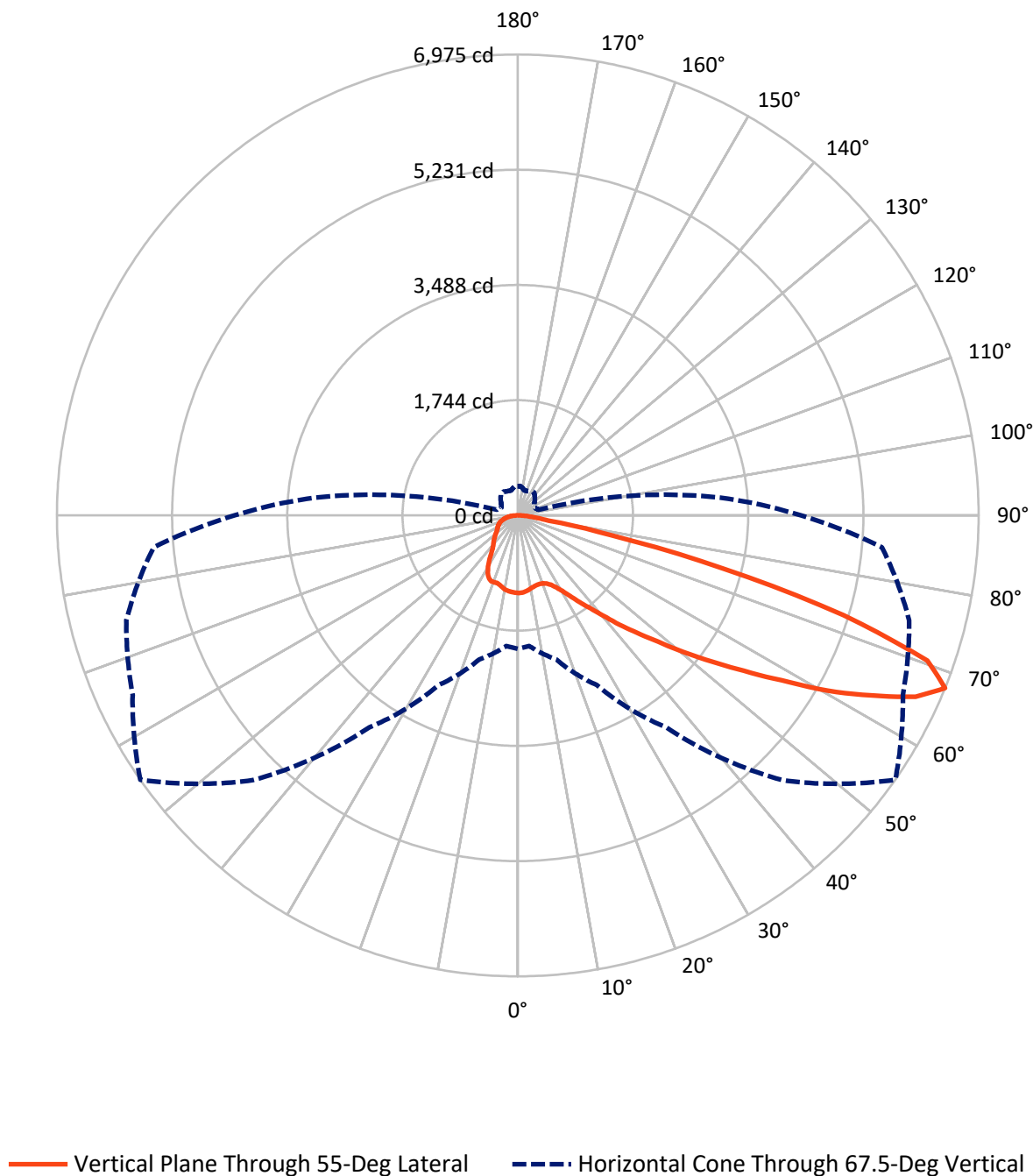


Based on 10 foot mounting height. Maximum calculated value = 12.1 fc  
 Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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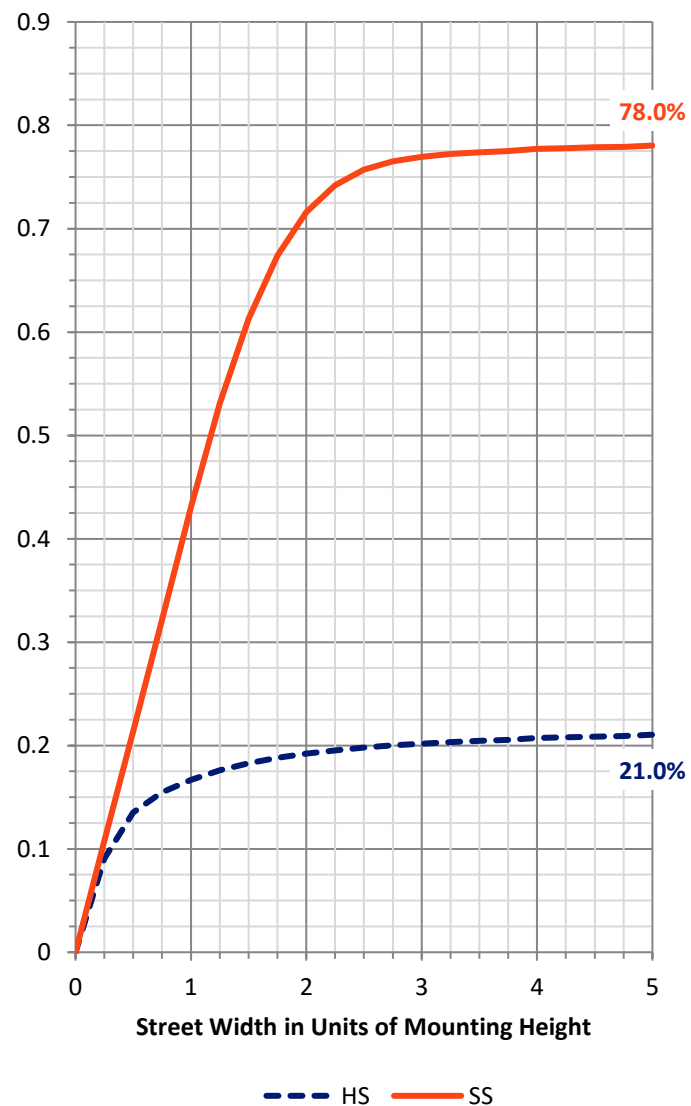
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2056.2   | 0.0    | 2056.2 |
|                    | % Fixture | 21.6     | 0.0    | 21.6   |
| <b>Street Side</b> | Lumens    | 7462.4   | 0.0    | 7462.4 |
|                    | % Fixture | 78.4     | 0.0    | 78.4   |
| <b>Total</b>       | Lumens    | 9518.7   | 0.0    | 9518.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 109.6  | 1.2       |
| 10°-20°   | 310.3  | 3.3       |
| 20°-30°   | 519.8  | 5.5       |
| 30°-40°   | 854.7  | 9.0       |
| 40°-50°   | 1438.8 | 15.1      |
| 50°-60°   | 2264.5 | 23.8      |
| 60°-70°   | 2702.4 | 28.4      |
| 70°-80°   | 1160.5 | 12.2      |
| 80°-90°   | 158.2  | 1.7       |
| 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°    | 9518.7 | 100.0     |
| 0°-180°   | 9518.7 | 100.0     |

**Coefficient of Utilization**



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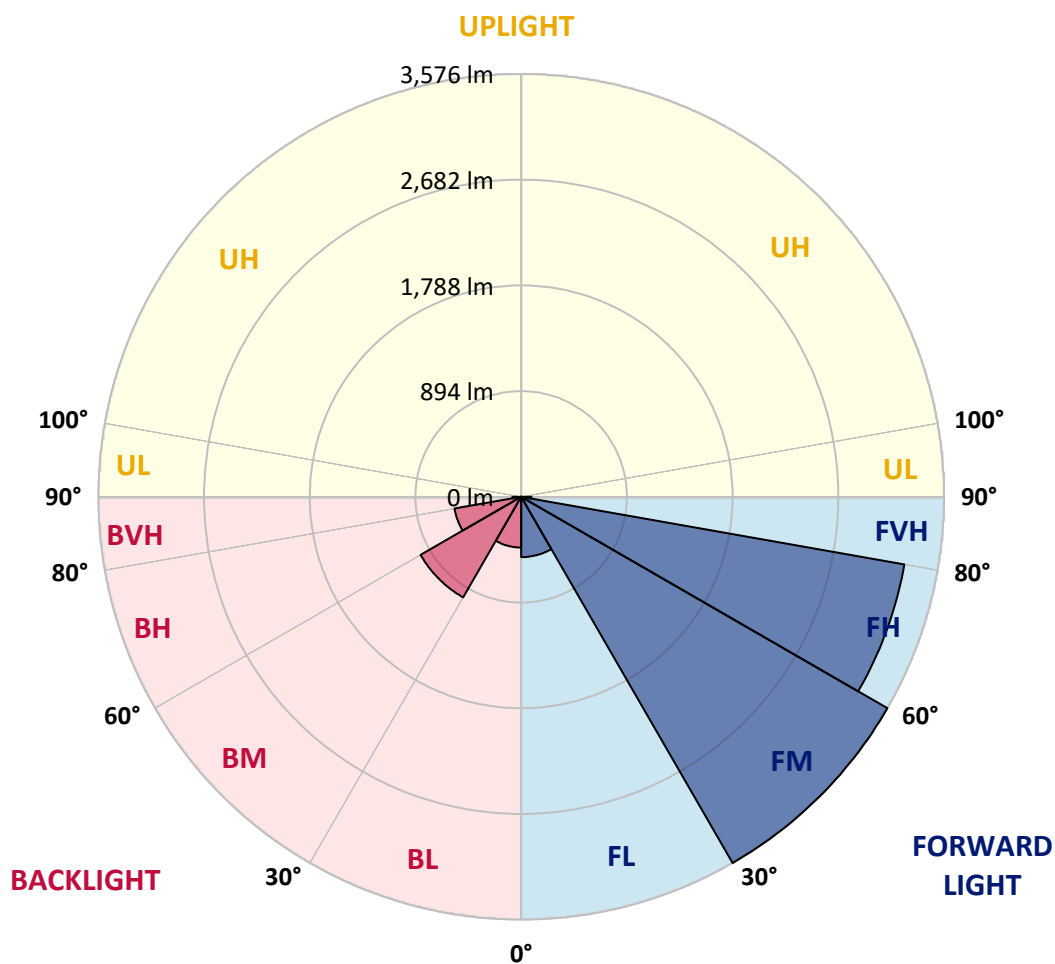
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 510.2  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 3575.9 | 37.6      |                         |      |         |
| FH   | (60°-80°)   | 3290.7 | 34.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 85.6   | 0.9       |                         |      | G1/100  |
| BL   | (0°-30°)    | 429.4  | 4.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 982.0  | 10.3      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 572.2  | 6.0       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 72.6   | 0.8       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 |
| 2.5°  | 1163.6 | 1164.0 | 1165.0 | 1168.7 | 1172.0 | 1171.0 | 1171.5 | 1169.6 | 1169.2 | 1166.5 | 1169.2 |
| 5°    | 1149.0 | 1150.3 | 1150.7 | 1156.7 | 1160.5 | 1161.3 | 1160.0 | 1157.7 | 1154.9 | 1152.1 | 1153.6 |
| 7.5°  | 1115.3 | 1119.1 | 1119.5 | 1127.8 | 1133.8 | 1141.5 | 1142.1 | 1142.6 | 1141.1 | 1139.2 | 1142.1 |
| 10°   | 1094.2 | 1095.1 | 1094.7 | 1100.7 | 1105.2 | 1114.0 | 1119.1 | 1127.8 | 1131.5 | 1132.4 | 1134.2 |
| 12.5° | 1092.8 | 1091.9 | 1090.5 | 1090.5 | 1089.2 | 1092.8 | 1102.0 | 1114.5 | 1123.1 | 1125.9 | 1128.2 |
| 15°   | 1107.6 | 1107.2 | 1102.5 | 1095.6 | 1086.9 | 1084.1 | 1091.9 | 1105.7 | 1117.1 | 1123.1 | 1125.5 |
| 17.5° | 1140.6 | 1137.9 | 1130.5 | 1114.9 | 1096.1 | 1088.7 | 1089.7 | 1101.2 | 1114.5 | 1122.3 | 1124.6 |
| 20°   | 1201.3 | 1201.3 | 1185.7 | 1156.3 | 1122.7 | 1105.2 | 1097.0 | 1103.8 | 1116.7 | 1127.3 | 1130.5 |
| 22.5° | 1306.2 | 1307.1 | 1280.8 | 1232.6 | 1176.0 | 1138.8 | 1118.2 | 1116.7 | 1131.9 | 1143.8 | 1147.5 |
| 25°   | 1454.7 | 1451.0 | 1414.3 | 1345.2 | 1259.3 | 1197.7 | 1161.8 | 1153.6 | 1166.5 | 1179.8 | 1184.4 |
| 27.5° | 1627.5 | 1614.2 | 1570.5 | 1487.3 | 1376.0 | 1286.0 | 1230.8 | 1217.4 | 1229.8 | 1245.0 | 1249.6 |
| 30°   | 1798.5 | 1784.7 | 1732.9 | 1641.8 | 1518.1 | 1404.1 | 1325.0 | 1303.4 | 1320.8 | 1342.5 | 1345.2 |
| 32.5° | 1969.6 | 1969.6 | 1911.7 | 1805.5 | 1670.8 | 1545.3 | 1450.5 | 1424.7 | 1453.7 | 1479.9 | 1485.9 |
| 35°   | 2174.2 | 2175.2 | 2119.0 | 1991.2 | 1846.4 | 1713.5 | 1609.2 | 1590.3 | 1634.0 | 1652.3 | 1666.6 |
| 37.5° | 2425.7 | 2430.7 | 2358.6 | 2204.1 | 2045.5 | 1905.7 | 1781.6 | 1755.8 | 1799.5 | 1849.6 | 1895.5 |
| 40°   | 2697.4 | 2703.8 | 2624.3 | 2434.0 | 2275.4 | 2129.1 | 1994.8 | 1948.4 | 2021.1 | 2116.7 | 2176.0 |
| 42.5° | 2956.7 | 2989.8 | 2913.0 | 2717.2 | 2546.7 | 2395.3 | 2259.3 | 2191.6 | 2282.7 | 2427.0 | 2478.5 |
| 45°   | 3331.5 | 3355.3 | 3221.5 | 3044.1 | 2883.6 | 2714.4 | 2534.2 | 2462.9 | 2590.2 | 2772.4 | 2783.0 |
| 47.5° | 3581.1 | 3563.1 | 3495.1 | 3384.8 | 3283.1 | 3125.0 | 2853.8 | 2775.5 | 2944.7 | 3159.0 | 3099.6 |
| 50°   | 3713.9 | 3719.4 | 3710.2 | 3716.7 | 3720.4 | 3621.1 | 3245.4 | 3138.3 | 3340.2 | 3599.0 | 3462.4 |
| 52.5° | 3838.1 | 3801.2 | 3831.6 | 3982.4 | 4164.4 | 4127.7 | 3671.6 | 3559.8 | 3764.0 | 4087.3 | 3845.8 |
| 55°   | 3835.3 | 3779.2 | 3878.0 | 4144.2 | 4539.1 | 4581.5 | 4150.2 | 4021.5 | 4212.3 | 4610.8 | 4252.3 |
| 57.5° | 3699.6 | 3702.4 | 3854.5 | 4203.1 | 4800.3 | 5008.1 | 4705.6 | 4512.5 | 4687.7 | 5141.4 | 4623.3 |
| 60°   | 3513.0 | 3538.3 | 3757.5 | 4193.5 | 5009.5 | 5358.0 | 5386.9 | 5041.7 | 5153.4 | 5623.7 | 4930.5 |
| 62.5° | 3211.9 | 3238.6 | 3541.0 | 4093.2 | 4977.8 | 5695.0 | 6003.0 | 5642.1 | 5640.3 | 5916.2 | 5020.6 |
| 65°   | 2737.0 | 2729.1 | 3046.8 | 3718.5 | 4711.6 | 5944.1 | 6615.0 | 6161.1 | 6007.2 | 5920.8 | 4839.4 |
| 67.5° | 2018.3 | 1983.4 | 2255.9 | 2832.1 | 3916.2 | 5665.1 | 6975.0 | 6431.5 | 6132.1 | 5531.4 | 4285.8 |
| 70°   | 1047.4 | 1012.4 | 1233.1 | 1653.7 | 2575.6 | 4421.5 | 6576.4 | 6291.8 | 5855.9 | 4636.6 | 3357.6 |
| 72.5° | 447.9  | 441.9  | 531.4  | 725.5  | 1245.9 | 2550.2 | 5156.6 | 5445.8 | 5024.7 | 3454.6 | 2308.4 |
| 75°   | 301.1  | 299.3  | 332.9  | 395.4  | 560.4  | 1034.9 | 3227.0 | 3865.6 | 3676.2 | 2142.0 | 1298.3 |
| 77.5° | 236.3  | 234.1  | 253.8  | 284.2  | 363.2  | 408.3  | 1432.2 | 2075.4 | 1920.9 | 932.4  | 568.2  |
| 80°   | 184.8  | 183.0  | 195.3  | 212.0  | 261.1  | 257.5  | 471.2  | 825.7  | 639.0  | 357.3  | 276.3  |
| 82.5° | 145.8  | 145.8  | 155.8  | 156.3  | 185.3  | 175.6  | 246.0  | 363.7  | 319.0  | 208.2  | 169.3  |
| 85°   | 133.3  | 133.3  | 143.9  | 116.8  | 121.0  | 110.8  | 152.6  | 215.7  | 202.2  | 85.5   | 73.5   |
| 87.5° | 67.0   | 65.3   | 121.0  | 103.5  | 65.8   | 58.9   | 74.6   | 104.4  | 112.2  | 47.3   | 36.8   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 | 1173.8 |
| 2.5°  | 1168.2 | 1167.8 | 1168.7 | 1169.2 | 1172.8 | 1178.0 | 1180.2 | 1183.4 | 1185.3 | 1184.4 |
| 5°    | 1154.5 | 1155.4 | 1159.0 | 1161.8 | 1168.2 | 1176.5 | 1181.1 | 1184.8 | 1187.9 | 1186.7 |
| 7.5°  | 1143.0 | 1145.2 | 1150.7 | 1153.0 | 1156.7 | 1159.0 | 1158.5 | 1160.0 | 1162.7 | 1159.5 |
| 10°   | 1136.6 | 1139.2 | 1143.4 | 1140.2 | 1131.5 | 1119.1 | 1107.6 | 1101.6 | 1103.4 | 1101.2 |
| 12.5° | 1130.1 | 1133.8 | 1130.5 | 1115.3 | 1091.0 | 1074.9 | 1066.2 | 1067.1 | 1071.2 | 1072.2 |
| 15°   | 1126.4 | 1127.8 | 1114.0 | 1085.5 | 1060.7 | 1058.4 | 1063.0 | 1062.0 | 1062.5 | 1062.5 |
| 17.5° | 1126.4 | 1122.7 | 1097.0 | 1068.4 | 1057.8 | 1053.8 | 1039.5 | 1021.6 | 1013.7 | 1010.9 |
| 20°   | 1132.4 | 1122.7 | 1091.5 | 1072.6 | 1049.7 | 1014.3 | 976.6  | 943.5  | 928.7  | 924.6  |
| 22.5° | 1150.3 | 1133.8 | 1107.2 | 1074.4 | 1009.1 | 949.9  | 890.1  | 850.6  | 824.0  | 819.3  |
| 25°   | 1186.7 | 1168.2 | 1137.9 | 1050.1 | 944.8  | 860.2  | 792.1  | 748.0  | 721.3  | 717.8  |
| 27.5° | 1250.0 | 1238.1 | 1154.5 | 996.3  | 859.4  | 768.7  | 705.7  | 671.7  | 651.9  | 650.5  |
| 30°   | 1345.7 | 1339.7 | 1146.1 | 916.8  | 754.0  | 680.0  | 649.6  | 629.9  | 615.1  | 614.7  |
| 32.5° | 1498.4 | 1450.1 | 1119.1 | 819.8  | 658.0  | 617.0  | 604.5  | 592.6  | 581.1  | 581.1  |
| 35°   | 1694.6 | 1539.3 | 1067.6 | 715.8  | 599.5  | 582.1  | 566.4  | 547.6  | 532.4  | 531.4  |
| 37.5° | 1925.4 | 1594.4 | 975.1  | 632.2  | 572.0  | 558.7  | 535.6  | 507.6  | 480.8  | 476.3  |
| 40°   | 2158.5 | 1611.0 | 845.0  | 580.7  | 554.5  | 535.2  | 507.1  | 473.9  | 448.3  | 446.9  |
| 42.5° | 2372.3 | 1579.3 | 707.1  | 545.3  | 537.0  | 511.3  | 481.9  | 452.5  | 432.1  | 431.7  |
| 45°   | 2551.6 | 1497.0 | 591.2  | 511.7  | 518.7  | 489.6  | 463.5  | 439.6  | 423.9  | 420.6  |
| 47.5° | 2720.3 | 1380.6 | 509.9  | 476.3  | 500.2  | 477.7  | 455.6  | 433.1  | 417.9  | 415.6  |
| 50°   | 2916.2 | 1255.2 | 452.9  | 441.9  | 484.1  | 473.5  | 462.0  | 438.5  | 413.3  | 410.6  |
| 52.5° | 3153.4 | 1146.6 | 408.3  | 411.5  | 471.7  | 479.1  | 478.5  | 454.2  | 410.0  | 406.5  |
| 55°   | 3418.2 | 1026.2 | 374.6  | 386.7  | 466.6  | 489.2  | 482.7  | 468.9  | 412.9  | 407.3  |
| 57.5° | 3679.0 | 885.4  | 351.3  | 367.7  | 459.3  | 488.3  | 462.9  | 443.1  | 419.3  | 411.5  |
| 60°   | 3874.4 | 696.5  | 333.3  | 351.3  | 443.1  | 473.1  | 441.4  | 415.1  | 417.9  | 411.9  |
| 62.5° | 3887.2 | 538.3  | 311.7  | 336.9  | 418.8  | 457.9  | 427.1  | 402.7  | 423.9  | 418.4  |
| 65°   | 3658.8 | 406.9  | 291.0  | 320.0  | 392.7  | 448.3  | 413.3  | 395.8  | 436.3  | 430.4  |
| 67.5° | 3080.3 | 327.3  | 273.5  | 302.5  | 366.4  | 428.1  | 400.9  | 389.4  | 447.3  | 436.8  |
| 70°   | 2223.9 | 279.0  | 256.5  | 281.4  | 343.0  | 405.1  | 389.8  | 377.9  | 417.5  | 400.9  |
| 72.5° | 1369.1 | 241.8  | 237.2  | 253.4  | 325.0  | 381.1  | 373.3  | 356.3  | 376.1  | 362.7  |
| 75°   | 683.6  | 209.7  | 215.7  | 225.7  | 299.8  | 354.0  | 345.7  | 328.8  | 331.5  | 328.8  |
| 77.5° | 327.3  | 179.3  | 190.3  | 198.2  | 267.1  | 323.2  | 314.4  | 296.9  | 293.8  | 294.2  |
| 80°   | 207.4  | 149.9  | 160.5  | 166.0  | 238.6  | 287.4  | 278.6  | 261.1  | 297.9  | 276.3  |
| 82.5° | 129.7  | 121.9  | 124.5  | 134.7  | 207.8  | 250.1  | 238.6  | 223.0  | 268.4  | 212.4  |
| 85°   | 71.7   | 85.0   | 88.7   | 97.5   | 159.9  | 209.2  | 197.6  | 177.9  | 159.5  | 156.8  |
| 87.5° | 42.7   | 50.6   | 51.9   | 58.4   | 107.6  | 151.3  | 133.9  | 126.8  | 105.3  | 104.8  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)