

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: INVUE

Report Number: P147715

Luminaire Tested: **VXS-F04-LED-E1-5WQ**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P147715  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33675)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VXS-F04-LED-E1-5WQ  
Description: VISION SITE SMALL LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (28) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10513.2 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 102.2  
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



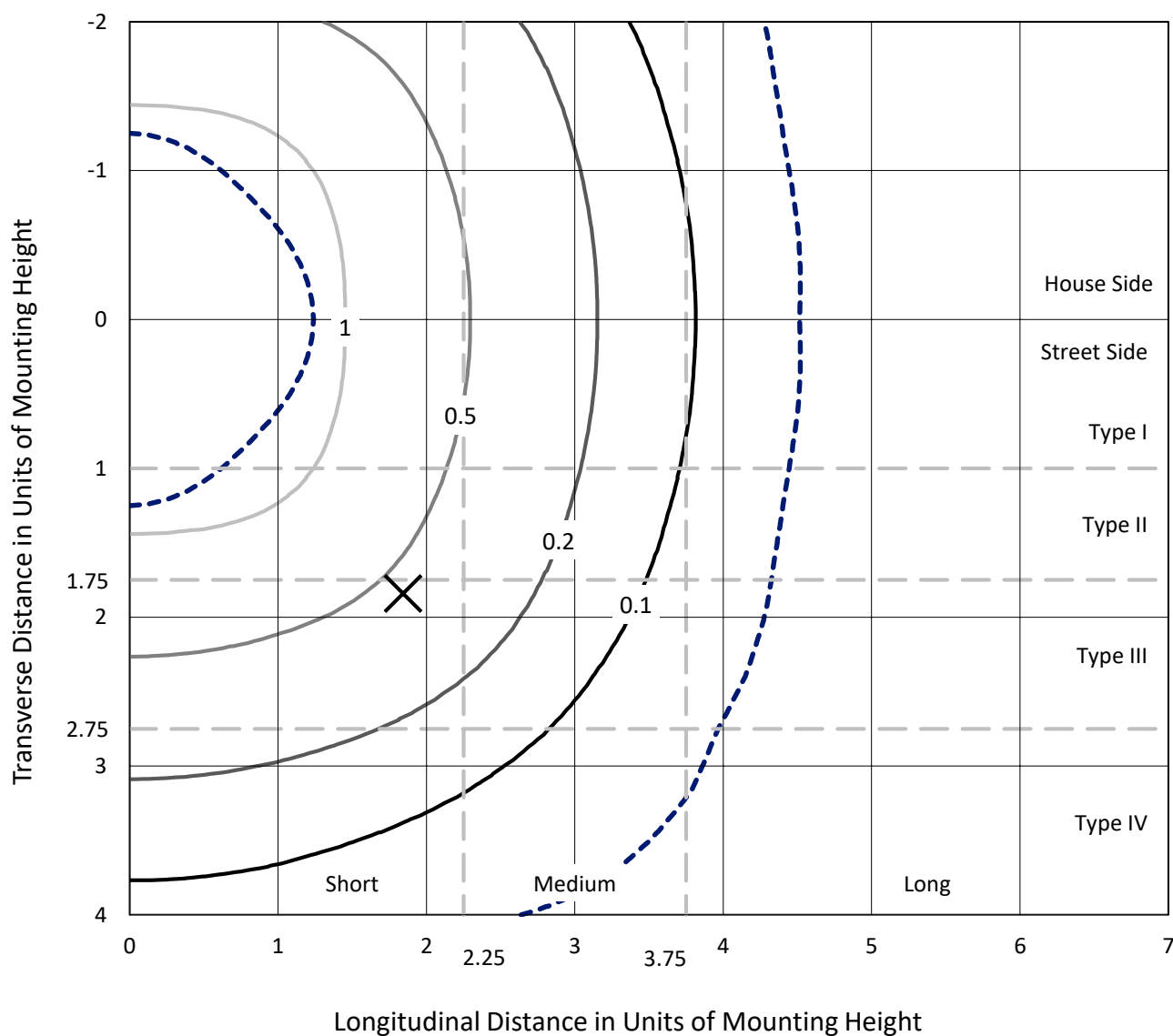
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

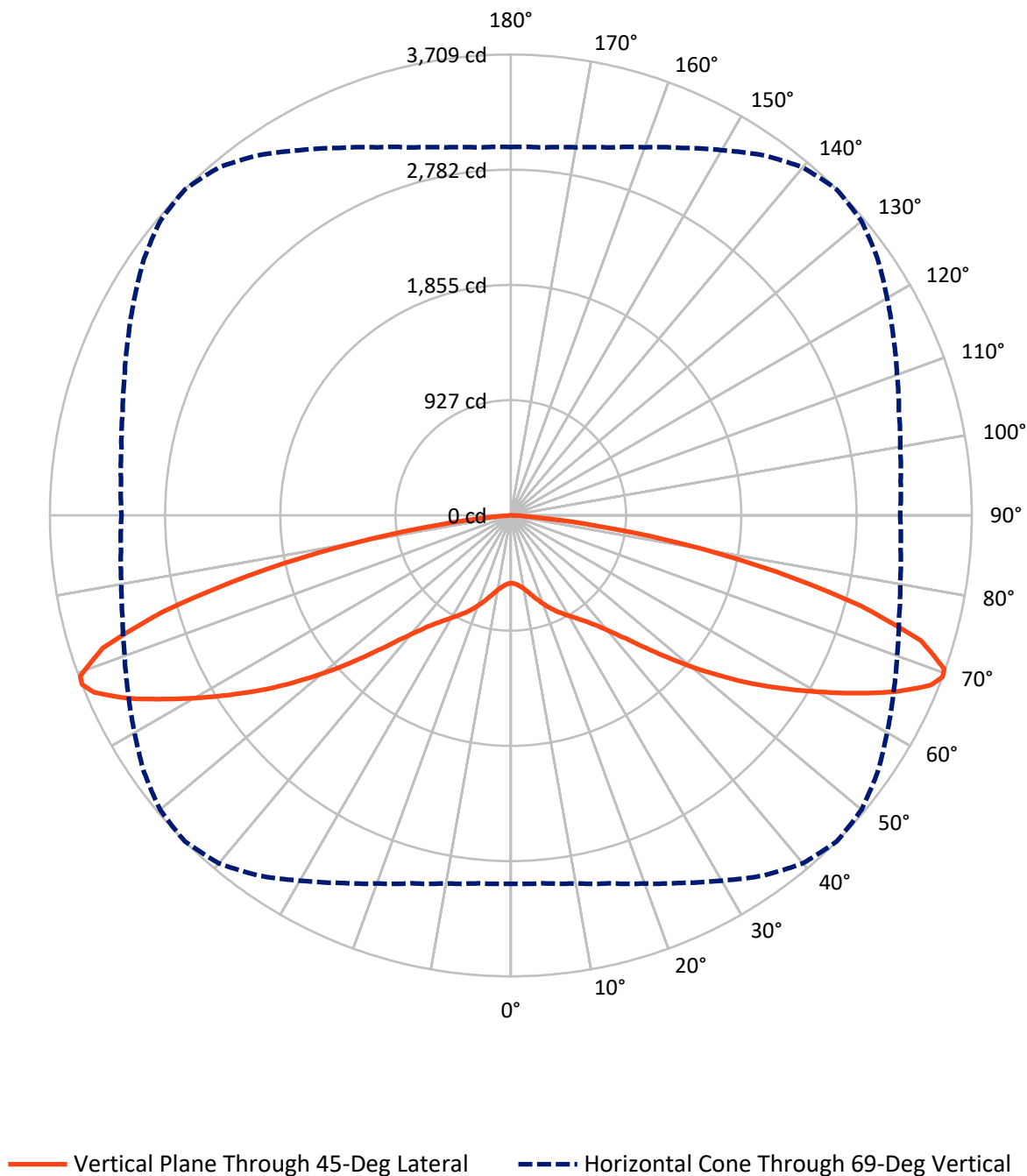


Based on 20 foot mounting height. Maximum calculated value = 1.6 fc  
Type V - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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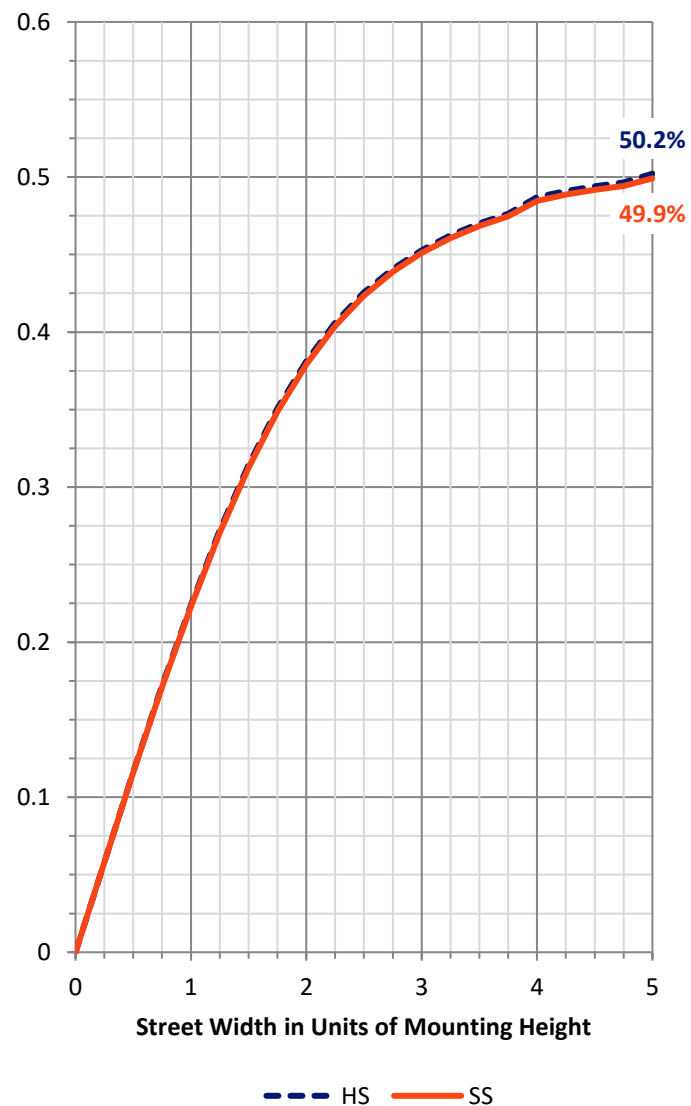
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5256.6   | 0.0    | 5256.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5256.6   | 0.0    | 5256.6  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 10513.2  | 0.0    | 10513.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 54.8    | 0.5       |
| 10°-20°   | 193.6   | 1.8       |
| 20°-30°   | 392.0   | 3.7       |
| 30°-40°   | 657.2   | 6.3       |
| 40°-50°   | 1159.2  | 11.0      |
| 50°-60°   | 2044.2  | 19.4      |
| 60°-70°   | 3121.0  | 29.7      |
| 70°-80°   | 2607.9  | 24.8      |
| 80°-90°   | 283.4   | 2.7       |
| 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°    | 10513.2 | 100.0     |
| 0°-180°   | 10513.2 | 100.0     |

**Coefficient of Utilization**



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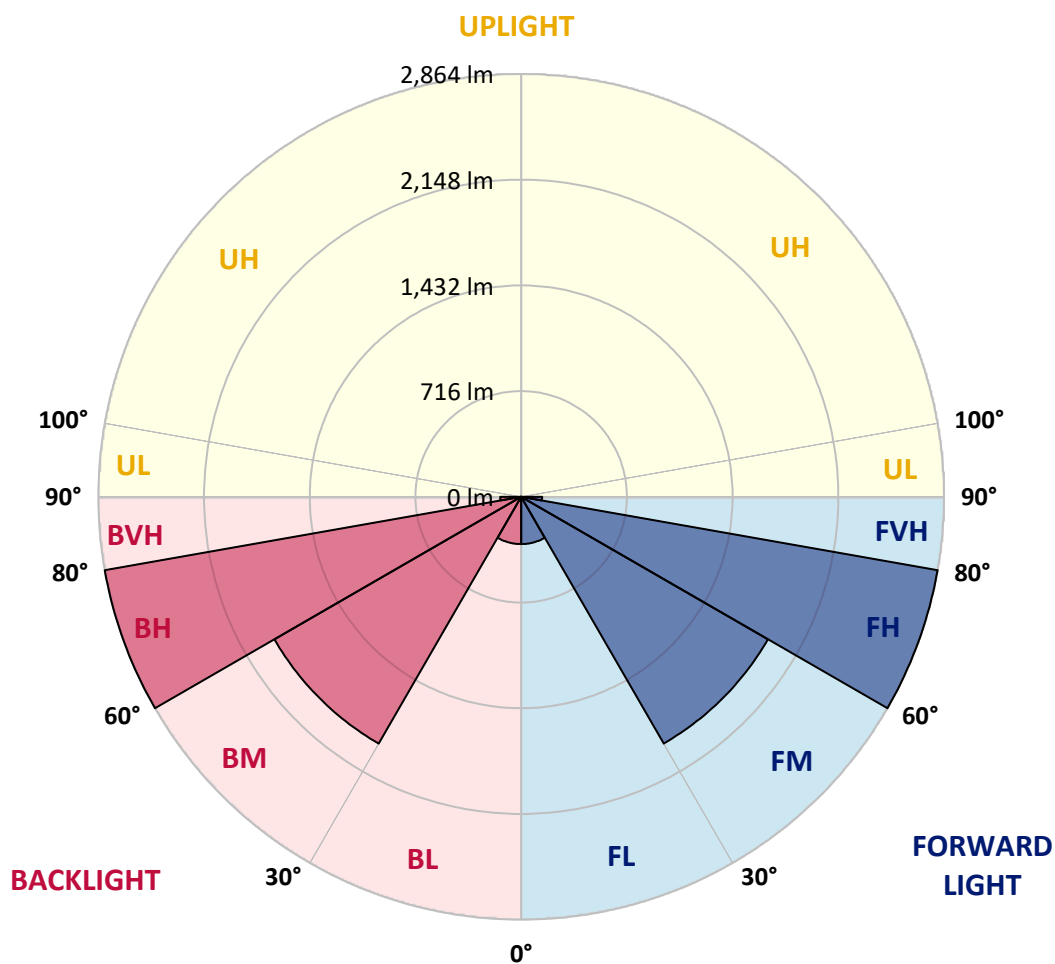
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 320.2  | 3.0       |                         |      |         |
| FM   | (30°-60°)   | 1930.3 | 18.4      |                         |      |         |
| FH   | (60°-80°)   | 2864.4 | 27.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 141.7  | 1.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 320.2  | 3.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1930.3 | 18.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2864.4 | 27.2      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 141.7  | 1.3       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  |
| 2.5°  | 550.4  | 551.4  | 550.4  | 550.4  | 550.4  | 550.4  | 550.4  | 549.2  | 549.2  | 549.2  | 550.4  |
| 5°    | 561.3  | 562.5  | 561.3  | 562.5  | 562.5  | 562.5  | 562.5  | 561.3  | 561.3  | 561.3  | 561.3  |
| 7.5°  | 579.0  | 579.0  | 579.0  | 580.1  | 579.0  | 579.0  | 580.1  | 579.0  | 579.0  | 579.0  | 579.0  |
| 10°   | 604.2  | 603.2  | 603.2  | 603.2  | 603.2  | 603.2  | 604.2  | 604.2  | 604.2  | 603.2  | 603.2  |
| 12.5° | 635.1  | 634.0  | 635.1  | 635.1  | 636.2  | 636.2  | 636.2  | 636.2  | 636.2  | 636.2  | 635.1  |
| 15°   | 672.5  | 672.5  | 672.5  | 673.7  | 675.9  | 675.9  | 674.7  | 675.9  | 675.9  | 675.9  | 675.9  |
| 17.5° | 714.4  | 716.6  | 714.4  | 715.4  | 716.6  | 715.4  | 717.6  | 718.8  | 719.9  | 718.8  | 715.4  |
| 20°   | 757.3  | 758.3  | 758.3  | 758.3  | 758.3  | 760.6  | 761.7  | 761.7  | 765.0  | 763.8  | 762.8  |
| 22.5° | 798.0  | 800.2  | 800.2  | 801.3  | 801.3  | 804.7  | 804.7  | 804.7  | 806.8  | 809.0  | 806.8  |
| 25°   | 840.9  | 839.8  | 839.8  | 842.1  | 843.1  | 847.6  | 847.6  | 849.7  | 853.1  | 854.1  | 851.9  |
| 27.5° | 879.5  | 878.3  | 878.3  | 881.7  | 882.8  | 888.3  | 888.3  | 892.6  | 894.8  | 896.0  | 893.8  |
| 30°   | 920.2  | 920.2  | 919.1  | 922.4  | 925.7  | 930.1  | 932.3  | 936.7  | 940.0  | 941.1  | 938.9  |
| 32.5° | 968.6  | 966.4  | 967.6  | 969.7  | 971.9  | 976.3  | 979.6  | 985.1  | 989.5  | 990.7  | 988.4  |
| 35°   | 1023.6 | 1020.3 | 1021.5 | 1023.6 | 1026.9 | 1033.6 | 1039.1 | 1042.4 | 1049.0 | 1051.2 | 1046.7 |
| 37.5° | 1084.1 | 1085.3 | 1084.1 | 1089.7 | 1095.2 | 1102.9 | 1109.5 | 1113.9 | 1120.5 | 1123.8 | 1120.5 |
| 40°   | 1170.1 | 1166.7 | 1170.1 | 1175.5 | 1184.4 | 1194.3 | 1207.5 | 1210.8 | 1217.4 | 1223.9 | 1216.3 |
| 42.5° | 1281.2 | 1279.0 | 1286.7 | 1291.1 | 1301.0 | 1312.0 | 1328.5 | 1337.3 | 1347.3 | 1351.7 | 1345.1 |
| 45°   | 1426.5 | 1426.5 | 1435.3 | 1436.4 | 1451.8 | 1466.1 | 1489.2 | 1500.2 | 1519.0 | 1519.0 | 1519.0 |
| 47.5° | 1587.3 | 1593.8 | 1599.3 | 1610.4 | 1621.3 | 1647.8 | 1670.9 | 1695.1 | 1712.6 | 1714.9 | 1711.6 |
| 50°   | 1753.4 | 1760.0 | 1776.6 | 1791.9 | 1816.2 | 1849.2 | 1874.5 | 1906.4 | 1921.9 | 1935.0 | 1930.7 |
| 52.5° | 1937.2 | 1938.3 | 1958.1 | 1977.9 | 2013.2 | 2049.5 | 2090.3 | 2123.2 | 2150.8 | 2162.9 | 2153.0 |
| 55°   | 2138.7 | 2140.8 | 2158.4 | 2179.4 | 2219.0 | 2260.8 | 2311.5 | 2345.6 | 2380.8 | 2402.8 | 2386.3 |
| 57.5° | 2356.6 | 2357.7 | 2375.3 | 2400.6 | 2448.0 | 2489.7 | 2538.2 | 2586.6 | 2619.7 | 2639.5 | 2628.5 |
| 60°   | 2597.6 | 2603.1 | 2616.4 | 2648.3 | 2693.4 | 2737.4 | 2785.9 | 2828.8 | 2867.4 | 2888.2 | 2877.2 |
| 62.5° | 2855.2 | 2860.7 | 2879.5 | 2904.8 | 2944.4 | 2992.8 | 3039.1 | 3094.1 | 3126.0 | 3149.1 | 3132.6 |
| 65°   | 3028.0 | 3037.9 | 3067.7 | 3101.8 | 3160.1 | 3222.8 | 3276.8 | 3351.6 | 3390.2 | 3417.7 | 3402.3 |
| 67.5° | 3039.1 | 3044.6 | 3080.8 | 3132.6 | 3210.8 | 3305.4 | 3415.4 | 3532.1 | 3608.1 | 3644.5 | 3618.0 |
| 69°   | 2964.1 | 2971.9 | 3007.2 | 3065.5 | 3152.4 | 3262.5 | 3393.5 | 3538.8 | 3655.4 | 3709.3 | 3684.0 |
| 70°   | 2879.5 | 2896.0 | 2934.5 | 2998.3 | 3083.1 | 3198.7 | 3334.0 | 3489.2 | 3625.7 | 3699.5 | 3680.7 |
| 72.5° | 2701.1 | 2705.5 | 2730.9 | 2781.5 | 2846.4 | 2942.2 | 3069.8 | 3216.3 | 3346.1 | 3451.8 | 3467.3 |
| 75°   | 2397.3 | 2411.6 | 2430.4 | 2464.5 | 2497.5 | 2566.8 | 2652.6 | 2752.8 | 2828.8 | 2910.3 | 2913.6 |
| 77.5° | 1811.7 | 1854.7 | 1869.0 | 1876.7 | 1891.0 | 1946.0 | 2020.9 | 2107.9 | 2170.6 | 2183.8 | 2181.6 |
| 80°   | 813.4  | 870.7  | 883.8  | 946.6  | 985.1  | 1076.5 | 1191.0 | 1324.1 | 1413.3 | 1423.2 | 1399.0 |
| 82.5° | 159.6  | 170.6  | 199.3  | 248.8  | 339.1  | 393.0  | 467.8  | 561.3  | 647.3  | 696.8  | 667.0  |
| 85°   | 52.8   | 56.2   | 65.0   | 71.5   | 82.6   | 93.6   | 113.4  | 140.9  | 175.0  | 193.7  | 172.8  |
| 87.5° | 20.9   | 20.9   | 24.2   | 26.4   | 28.6   | 28.6   | 28.6   | 26.4   | 25.3   | 20.9   | 18.8   |
| 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°    | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  | 545.9  |
| 2.5°  | 549.2  | 549.2  | 549.2  | 549.2  | 549.2  | 549.2  | 549.2  | 549.2  |
| 5°    | 561.3  | 560.2  | 560.2  | 559.2  | 559.2  | 559.2  | 559.2  | 559.2  |
| 7.5°  | 577.8  | 576.8  | 575.6  | 576.8  | 575.6  | 575.6  | 575.6  | 575.6  |
| 10°   | 603.2  | 600.9  | 599.9  | 598.8  | 598.8  | 598.8  | 597.7  | 597.7  |
| 12.5° | 633.0  | 633.0  | 631.8  | 630.7  | 628.5  | 629.6  | 628.5  | 626.3  |
| 15°   | 673.7  | 671.4  | 670.4  | 669.2  | 667.0  | 667.0  | 667.0  | 665.9  |
| 17.5° | 714.4  | 712.1  | 712.1  | 708.8  | 707.8  | 707.8  | 707.8  | 708.8  |
| 20°   | 759.5  | 756.2  | 754.0  | 751.8  | 749.5  | 750.7  | 748.5  | 750.7  |
| 22.5° | 804.7  | 800.2  | 798.0  | 794.7  | 791.4  | 791.4  | 790.3  | 788.1  |
| 25°   | 848.6  | 843.1  | 840.9  | 837.6  | 833.3  | 833.3  | 831.0  | 828.8  |
| 27.5° | 890.5  | 885.0  | 882.8  | 876.2  | 871.7  | 870.7  | 868.5  | 867.4  |
| 30°   | 936.7  | 930.1  | 926.8  | 920.2  | 913.6  | 912.4  | 909.2  | 909.2  |
| 32.5° | 985.1  | 978.5  | 976.3  | 966.4  | 960.9  | 960.9  | 958.8  | 956.5  |
| 35°   | 1045.7 | 1035.8 | 1033.6 | 1023.6 | 1016.0 | 1016.0 | 1013.8 | 1014.8 |
| 37.5° | 1117.2 | 1109.5 | 1101.8 | 1094.1 | 1085.3 | 1084.1 | 1082.0 | 1079.8 |
| 40°   | 1213.0 | 1204.1 | 1195.3 | 1184.4 | 1176.7 | 1174.4 | 1171.2 | 1170.1 |
| 42.5° | 1340.6 | 1331.8 | 1314.2 | 1305.4 | 1297.7 | 1291.1 | 1290.1 | 1288.9 |
| 45°   | 1503.5 | 1492.5 | 1480.4 | 1463.9 | 1454.0 | 1439.7 | 1437.5 | 1432.0 |
| 47.5° | 1699.5 | 1678.5 | 1657.6 | 1643.3 | 1628.0 | 1611.4 | 1608.1 | 1599.3 |
| 50°   | 1907.5 | 1891.0 | 1855.8 | 1832.6 | 1808.5 | 1791.9 | 1780.9 | 1777.6 |
| 52.5° | 2131.0 | 2100.1 | 2064.9 | 2034.1 | 1998.9 | 1976.9 | 1957.0 | 1951.5 |
| 55°   | 2364.4 | 2320.3 | 2276.3 | 2239.9 | 2204.7 | 2178.2 | 2159.6 | 2150.8 |
| 57.5° | 2597.6 | 2549.2 | 2500.8 | 2461.1 | 2431.4 | 2397.3 | 2378.7 | 2374.2 |
| 60°   | 2840.9 | 2794.7 | 2745.2 | 2705.5 | 2669.2 | 2639.5 | 2628.5 | 2607.6 |
| 62.5° | 3098.4 | 3050.1 | 3003.8 | 2965.3 | 2919.1 | 2898.1 | 2879.5 | 2867.4 |
| 65°   | 3351.6 | 3295.5 | 3237.2 | 3196.5 | 3150.2 | 3120.5 | 3097.4 | 3080.8 |
| 67.5° | 3547.6 | 3462.8 | 3384.7 | 3316.4 | 3253.7 | 3207.5 | 3177.7 | 3162.3 |
| 69°   | 3602.6 | 3496.9 | 3396.8 | 3307.6 | 3233.9 | 3182.1 | 3149.1 | 3133.7 |
| 70°   | 3596.0 | 3479.3 | 3369.2 | 3271.3 | 3190.9 | 3135.9 | 3103.9 | 3075.3 |
| 72.5° | 3392.3 | 3285.6 | 3163.4 | 3056.7 | 2984.0 | 2931.2 | 2899.3 | 2883.8 |
| 75°   | 2894.8 | 2823.3 | 2735.2 | 2652.6 | 2599.9 | 2569.0 | 2529.4 | 2530.5 |
| 77.5° | 2107.9 | 2110.1 | 2050.6 | 1965.8 | 1906.4 | 1895.4 | 1877.8 | 1860.2 |
| 80°   | 1307.7 | 1203.1 | 1134.8 | 1043.4 | 976.3  | 918.0  | 892.6  | 837.6  |
| 82.5° | 603.2  | 471.1  | 365.4  | 276.3  | 212.4  | 166.2  | 145.3  | 118.9  |
| 85°   | 134.3  | 102.4  | 84.8   | 68.3   | 58.3   | 53.9   | 44.0   | 40.7   |
| 87.5° | 18.8   | 16.5   | 15.4   | 14.3   | 12.1   | 8.8    | 6.6    | 5.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)