

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: P192782

Luminaire Tested: **GLEON-AF-04-LED-E1-SL2-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192782  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-SL2-7030-800-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15540 lumens  
Efficiency: N/A  
Efficacy: 90.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 171  
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



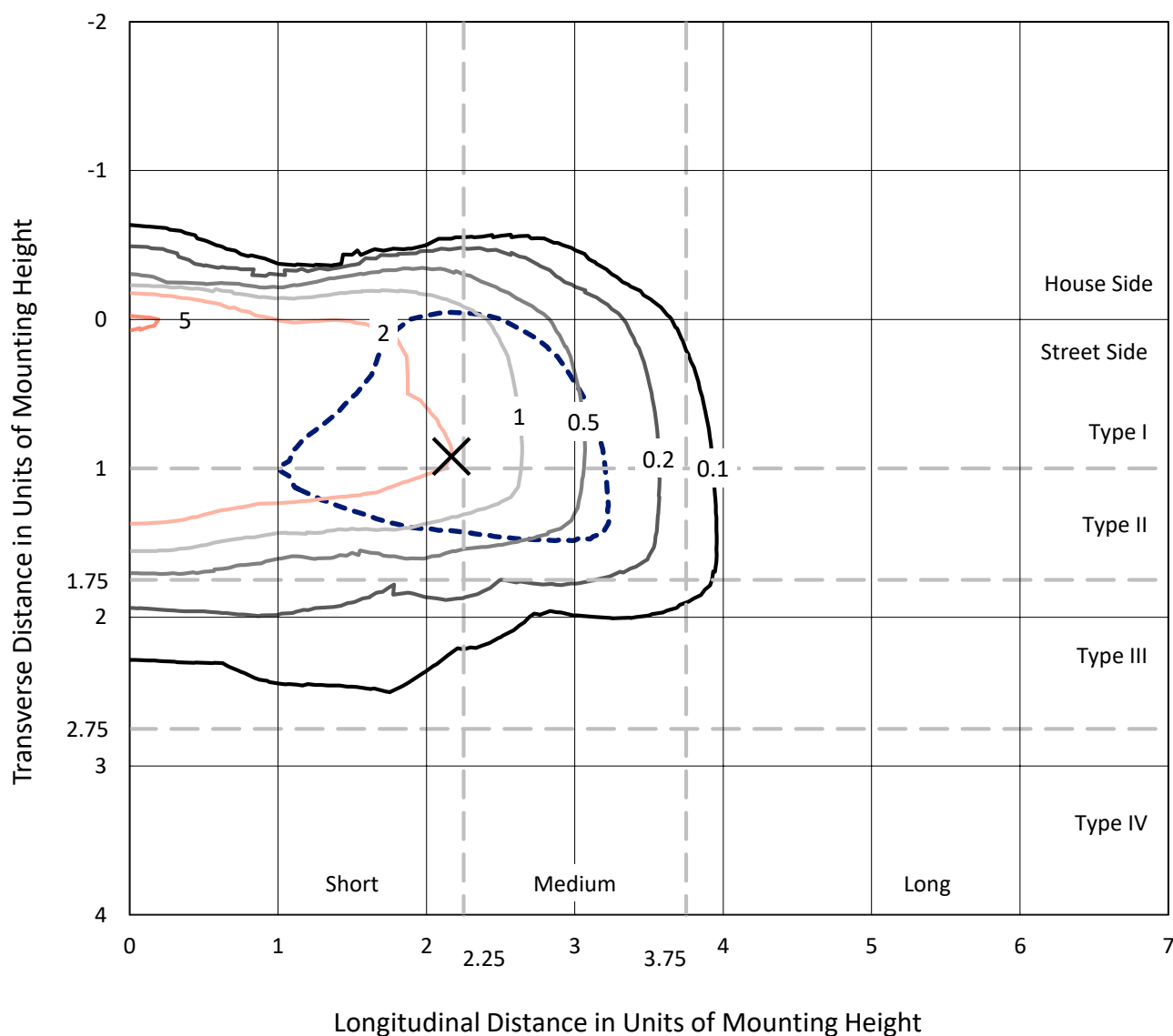
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

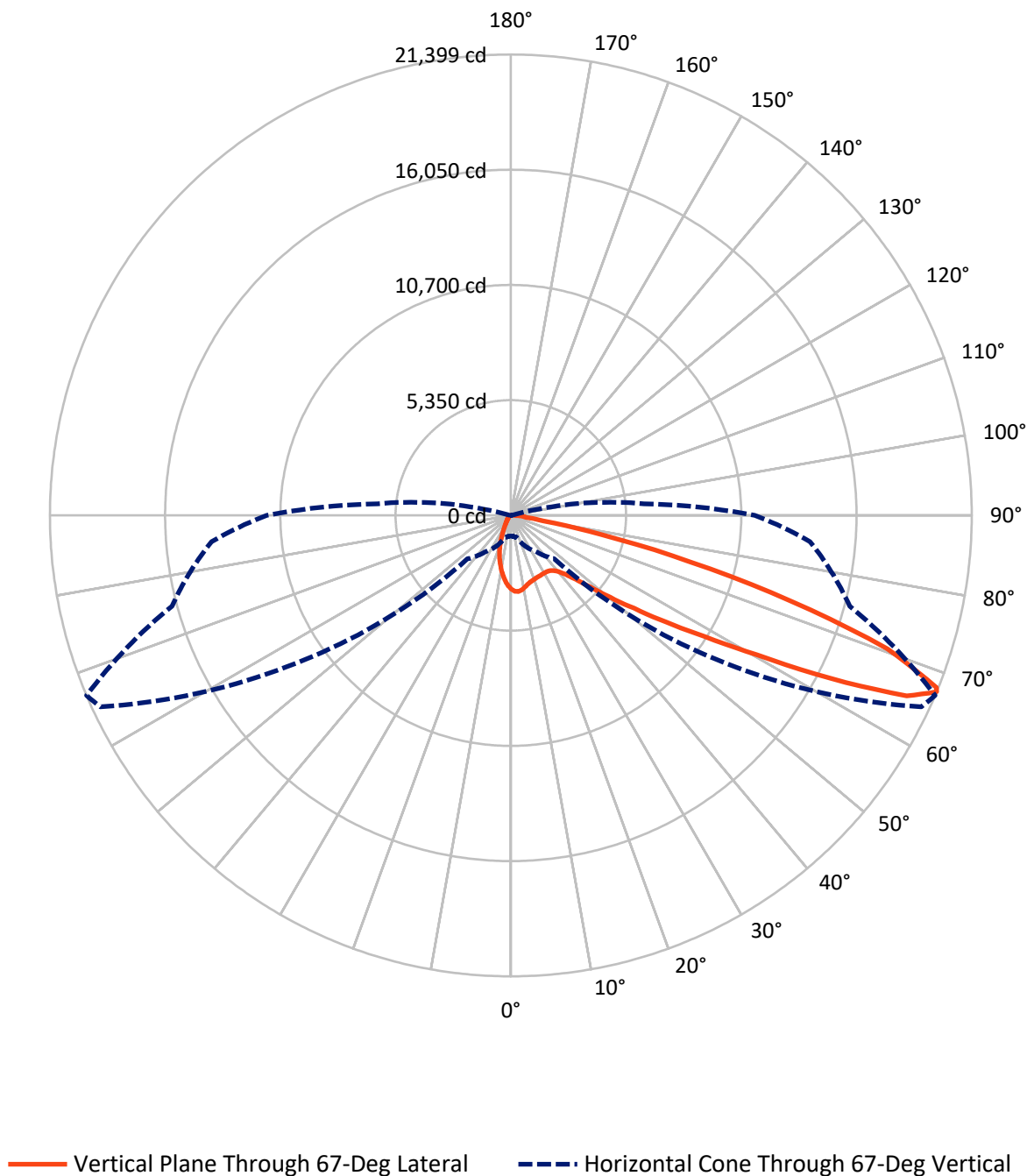


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1613.5   | 0.0    | 1613.5  |
|                    | % Fixture | 10.4     | 0.0    | 10.4    |
| <b>Street Side</b> | Lumens    | 13926.4  | 0.0    | 13926.4 |
|                    | % Fixture | 89.6     | 0.0    | 89.6    |
| <b>Total</b>       | Lumens    | 15540.0  | 0.0    | 15540.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 278.9   | 1.8       |
| 10°-20°   | 593.5   | 3.8       |
| 20°-30°   | 862.9   | 5.6       |
| 30°-40°   | 1346.2  | 8.7       |
| 40°-50°   | 2384.7  | 15.3      |
| 50°-60°   | 3773.6  | 24.3      |
| 60°-70°   | 4322.1  | 27.8      |
| 70°-80°   | 1792.8  | 11.5      |
| 80°-90°   | 185.2   | 1.2       |
| 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°    | 15540.0 | 100.0     |
| 0°-180°   | 15540.0 | 100.0     |

**Coefficient of Utilization**



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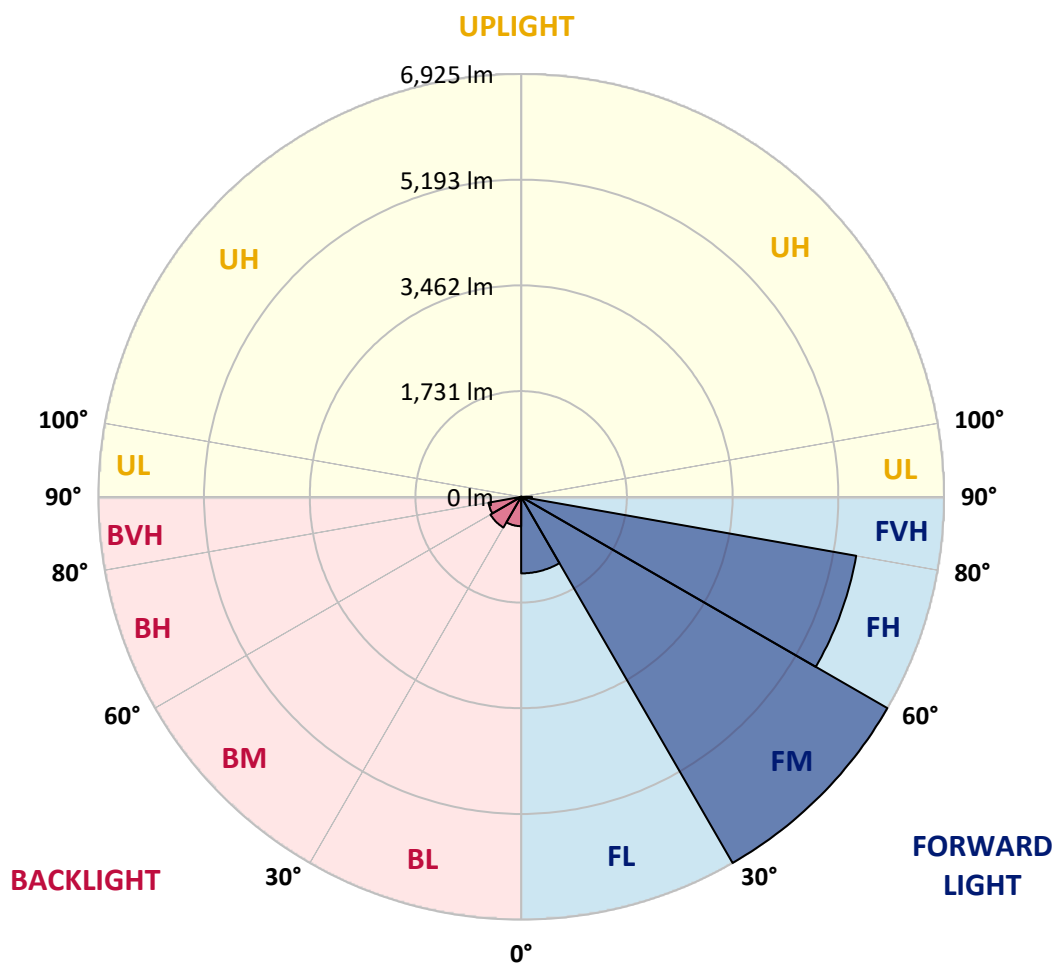
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL2-7030-800-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1253.8 | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 6924.6 | 44.6      |                         |      |         |
| FH   | (60°-80°)   | 5571.1 | 35.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 176.9  | 1.1       |                         |      | G2/225  |
| BL   | (0°-30°)    | 481.5  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 579.9  | 3.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 543.8  | 3.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 8.3    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1  | 3427.1  | 3427.1  | 3427.1  | 3427.1  | 3427.1  |
| 2.5°  | 3543.2 | 3550.4 | 3549.5 | 3555.0 | 3567.7 | 3568.5  | 3555.9  | 3531.4  | 3525.9  | 3494.2  | 3438.9  |
| 5°    | 3267.6 | 3288.4 | 3301.2 | 3352.8 | 3410.8 | 3480.6  | 3533.2  | 3552.2  | 3549.5  | 3526.9  | 3443.5  |
| 7.5°  | 2953.1 | 2973.9 | 2988.5 | 3049.2 | 3126.2 | 3245.9  | 3382.6  | 3495.1  | 3505.0  | 3529.5  | 3439.8  |
| 10°   | 2743.7 | 2747.4 | 2767.3 | 2825.2 | 2906.0 | 3028.3  | 3191.5  | 3388.1  | 3418.0  | 3507.8  | 3430.7  |
| 12.5° | 2571.5 | 2574.1 | 2600.5 | 2662.9 | 2749.2 | 2872.4  | 3043.8  | 3271.2  | 3317.4  | 3480.6  | 3429.0  |
| 15°   | 2449.1 | 2459.1 | 2482.7 | 2547.9 | 2639.4 | 2761.8  | 2937.7  | 3185.1  | 3240.4  | 3470.6  | 3445.3  |
| 17.5° | 2408.3 | 2419.2 | 2426.4 | 2473.6 | 2557.0 | 2676.7  | 2857.0  | 3128.9  | 3191.5  | 3476.1  | 3476.9  |
| 20°   | 2450.9 | 2459.1 | 2442.8 | 2454.5 | 2506.2 | 2613.2  | 2789.1  | 3080.9  | 3155.2  | 3482.4  | 3517.8  |
| 22.5° | 2609.5 | 2613.2 | 2568.8 | 2517.2 | 2508.0 | 2566.9  | 2735.6  | 3042.8  | 3122.6  | 3499.7  | 3565.7  |
| 25°   | 2881.5 | 2875.1 | 2802.6 | 2691.2 | 2585.9 | 2558.8  | 2703.8  | 3019.3  | 3106.2  | 3517.8  | 3615.7  |
| 27.5° | 3209.6 | 3218.7 | 3119.0 | 2956.7 | 2756.4 | 2613.2  | 2699.2  | 3009.3  | 3099.0  | 3530.5  | 3659.2  |
| 30°   | 3608.4 | 3621.1 | 3506.9 | 3302.9 | 3015.7 | 2747.4  | 2741.0  | 3007.5  | 3094.4  | 3522.3  | 3662.8  |
| 32.5° | 4015.4 | 4030.8 | 3941.1 | 3730.7 | 3361.9 | 2972.1  | 2835.3  | 3027.3  | 3103.5  | 3494.2  | 3641.9  |
| 35°   | 4441.4 | 4463.1 | 4403.3 | 4223.0 | 3831.4 | 3296.6  | 3001.2  | 3088.1  | 3146.1  | 3491.5  | 3621.1  |
| 37.5° | 5029.6 | 5049.6 | 4937.2 | 4746.0 | 4399.8 | 3731.6  | 3267.6  | 3202.4  | 3246.7  | 3535.0  | 3626.6  |
| 40°   | 5907.9 | 5905.3 | 5615.2 | 5322.4 | 5024.2 | 4284.6  | 3641.9  | 3409.0  | 3431.7  | 3666.4  | 3693.6  |
| 42.5° | 6865.1 | 6860.6 | 6431.9 | 5986.9 | 5717.6 | 4965.3  | 4134.2  | 3766.1  | 3750.8  | 3908.4  | 3867.7  |
| 45°   | 7603.0 | 7602.0 | 7252.2 | 6750.9 | 6552.4 | 5746.6  | 4770.5  | 4262.9  | 4239.3  | 4301.9  | 4188.6  |
| 47.5° | 7917.5 | 7922.9 | 7747.0 | 7394.4 | 7477.9 | 6803.5  | 5572.6  | 4982.6  | 4947.2  | 4921.8  | 4749.6  |
| 50°   | 7672.7 | 7683.6 | 7698.1 | 7629.2 | 8156.7 | 8223.8  | 6648.5  | 5996.8  | 5979.5  | 5866.2  | 5597.1  |
| 52.5° | 6873.3 | 6928.5 | 7099.0 | 7317.4 | 8392.4 | 9587.1  | 8335.4  | 7256.7  | 7164.2  | 7043.7  | 6747.3  |
| 55°   | 5526.4 | 5587.1 | 5910.7 | 6441.0 | 8041.7 | 10482.7 | 10699.2 | 8881.0  | 8726.9  | 8367.1  | 7939.3  |
| 57.5° | 3657.4 | 3751.6 | 4221.1 | 4895.5 | 7022.8 | 10626.8 | 13057.7 | 11135.2 | 10598.5 | 9613.4  | 9131.2  |
| 60°   | 2015.0 | 2105.5 | 2615.0 | 3225.9 | 5072.3 | 9914.3  | 14643.9 | 14070.2 | 13122.0 | 11006.6 | 10578.7 |
| 62.5° | 1240.8 | 1289.8 | 1665.9 | 2234.4 | 3041.9 | 7825.0  | 14972.1 | 17758.4 | 16660.7 | 12800.3 | 12327.1 |
| 65°   | 988.0  | 1008.8 | 1192.8 | 1826.4 | 2180.9 | 4654.5  | 13912.4 | 20570.0 | 20203.9 | 14972.1 | 13892.6 |
| 67°   | 959.0  | 967.2  | 1054.2 | 1568.1 | 2055.7 | 2853.5  | 11655.6 | 21027.8 | 21399.4 | 16286.4 | 13941.5 |
| 67.5° | 965.3  | 974.4  | 1056.9 | 1496.6 | 2052.1 | 2622.2  | 10877.9 | 20847.4 | 21316.9 | 16390.6 | 13724.8 |
| 70°   | 930.9  | 959.0  | 1210.0 | 1495.5 | 1951.5 | 2178.9  | 6514.4  | 18063.0 | 18551.4 | 15229.4 | 11645.5 |
| 72.5° | 330.0  | 331.7  | 523.1  | 1210.0 | 2122.0 | 2202.5  | 3271.2  | 13241.6 | 13603.5 | 11650.1 | 8396.0  |
| 75°   | 195.8  | 166.7  | 174.0  | 344.3  | 2027.7 | 2139.1  | 1887.1  | 8461.4  | 8596.4  | 6675.7  | 4252.0  |
| 77.5° | 135.1  | 117.8  | 121.5  | 152.3  | 772.3  | 2109.2  | 1499.1  | 4412.4  | 4268.3  | 2341.2  | 905.5   |
| 80°   | 77.0   | 68.0   | 72.5   | 133.3  | 281.1  | 1967.8  | 1414.1  | 1789.2  | 1525.5  | 397.0   | 250.2   |
| 82.5° | 40.8   | 34.4   | 41.7   | 109.7  | 195.8  | 1226.3  | 1416.8  | 864.7   | 685.3   | 134.2   | 170.5   |
| 85°   | 14.5   | 11.8   | 20.0   | 75.3   | 130.6  | 376.2   | 1313.4  | 726.9   | 571.0   | 65.2    | 129.6   |
| 87.5° | 2.7    | 2.7    | 8.2    | 30.8   | 52.6   | 115.2   | 776.9   | 431.5   | 289.1   | 39.0    | 88.8    |
| 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):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3427.1  | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 | 3427.1 |
| 2.5°  | 3416.2  | 3377.3 | 3324.8 | 3260.4 | 3184.3 | 3117.1 | 3067.2 | 3015.7 | 3004.7 | 2986.6 | 2983.9 |
| 5°    | 3393.6  | 3326.5 | 3196.1 | 3046.4 | 2886.9 | 2742.9 | 2625.8 | 2521.6 | 2475.4 | 2435.5 | 2431.0 |
| 7.5°  | 3360.0  | 3259.4 | 3037.4 | 2796.3 | 2547.1 | 2320.4 | 2128.3 | 1992.3 | 1867.2 | 1807.3 | 1798.3 |
| 10°   | 3321.1  | 3176.9 | 2858.8 | 2524.3 | 2179.9 | 1859.9 | 1574.4 | 1335.1 | 1190.2 | 1103.9 | 1093.1 |
| 12.5° | 3284.9  | 3096.3 | 2676.7 | 2242.4 | 1784.7 | 1356.9 | 989.8  | 761.4  | 609.1  | 547.5  | 540.2  |
| 15°   | 3267.6  | 3031.1 | 2506.2 | 1954.2 | 1371.4 | 863.8  | 541.2  | 418.8  | 368.9  | 354.4  | 353.5  |
| 17.5° | 3265.8  | 2975.7 | 2339.5 | 1656.1 | 960.8  | 502.1  | 352.6  | 321.8  | 311.8  | 308.2  | 308.2  |
| 20°   | 3264.8  | 2923.1 | 2172.6 | 1346.9 | 610.0  | 334.5  | 293.7  | 286.5  | 279.1  | 274.7  | 274.7  |
| 22.5° | 3274.8  | 2876.0 | 1998.7 | 1031.5 | 384.3  | 271.0  | 258.3  | 251.1  | 242.0  | 235.7  | 234.8  |
| 25°   | 3284.9  | 2839.7 | 1821.1 | 734.2  | 278.3  | 235.7  | 223.0  | 213.0  | 200.3  | 192.2  | 191.2  |
| 27.5° | 3286.6  | 2794.5 | 1630.5 | 491.2  | 232.9  | 205.7  | 189.4  | 174.0  | 159.5  | 151.4  | 150.4  |
| 30°   | 3259.4  | 2718.4 | 1419.4 | 331.7  | 205.7  | 178.5  | 156.8  | 140.5  | 126.8  | 120.5  | 120.5  |
| 32.5° | 3206.0  | 2624.1 | 1187.4 | 250.2  | 183.1  | 153.2  | 129.6  | 114.1  | 105.1  | 102.3  | 101.5  |
| 35°   | 3157.9  | 2522.6 | 949.0  | 212.1  | 164.1  | 129.6  | 106.1  | 96.0   | 90.6   | 89.7   | 88.8   |
| 37.5° | 3129.8  | 2441.0 | 725.2  | 192.2  | 146.0  | 108.8  | 89.7   | 82.5   | 79.8   | 77.9   | 78.8   |
| 40°   | 3151.6  | 2373.0 | 535.7  | 175.8  | 127.9  | 90.6   | 76.2   | 72.5   | 69.8   | 68.9   | 68.9   |
| 42.5° | 3246.7  | 2361.2 | 397.9  | 161.3  | 110.6  | 75.3   | 66.2   | 63.5   | 61.6   | 60.7   | 61.6   |
| 45°   | 3497.0  | 2433.8 | 309.1  | 147.7  | 93.3   | 63.5   | 56.2   | 55.2   | 54.4   | 54.4   | 54.4   |
| 47.5° | 3873.1  | 2583.2 | 257.5  | 132.3  | 77.9   | 54.4   | 48.9   | 48.1   | 47.1   | 48.1   | 48.1   |
| 50°   | 4510.3  | 2857.0 | 230.2  | 116.9  | 64.4   | 46.2   | 41.7   | 41.7   | 41.7   | 41.7   | 42.6   |
| 52.5° | 5479.3  | 3395.4 | 212.1  | 101.5  | 52.6   | 39.0   | 35.4   | 35.4   | 36.3   | 36.3   | 37.1   |
| 55°   | 6558.8  | 4109.7 | 195.8  | 86.1   | 44.5   | 32.7   | 29.0   | 29.9   | 30.8   | 31.6   | 31.6   |
| 57.5° | 7729.9  | 4901.0 | 182.1  | 70.7   | 38.0   | 26.3   | 24.5   | 25.3   | 26.3   | 28.1   | 28.1   |
| 60°   | 9143.0  | 5757.5 | 162.2  | 55.2   | 31.6   | 20.9   | 19.0   | 20.9   | 23.6   | 25.3   | 26.3   |
| 62.5° | 10694.8 | 6585.9 | 136.9  | 43.4   | 26.3   | 16.3   | 15.4   | 19.0   | 22.6   | 24.5   | 25.3   |
| 65°   | 11755.2 | 6846.0 | 105.1  | 35.4   | 20.0   | 11.8   | 12.7   | 17.3   | 21.8   | 24.5   | 24.5   |
| 67°   | 11325.6 | 6207.1 | 86.1   | 29.9   | 16.3   | 9.1    | 11.8   | 17.3   | 21.8   | 23.6   | 24.5   |
| 67.5° | 11027.3 | 5957.0 | 82.5   | 29.0   | 15.4   | 9.1    | 11.8   | 17.3   | 21.8   | 24.5   | 24.5   |
| 70°   | 8972.6  | 4474.9 | 68.9   | 21.8   | 12.7   | 8.2    | 10.0   | 16.3   | 20.9   | 23.6   | 23.6   |
| 72.5° | 6234.4  | 2759.2 | 61.6   | 15.4   | 10.9   | 7.2    | 9.1    | 15.4   | 20.0   | 22.6   | 23.6   |
| 75°   | 2963.9  | 998.8  | 52.6   | 11.8   | 10.0   | 6.3    | 8.2    | 15.4   | 20.0   | 22.6   | 22.6   |
| 77.5° | 604.5   | 232.0  | 42.6   | 10.0   | 8.2    | 6.3    | 7.2    | 14.5   | 19.0   | 21.8   | 21.8   |
| 80°   | 198.6   | 89.7   | 31.6   | 9.1    | 8.2    | 6.3    | 7.2    | 13.5   | 19.0   | 20.9   | 21.8   |
| 82.5° | 143.2   | 45.4   | 20.9   | 9.1    | 8.2    | 6.3    | 6.3    | 13.5   | 18.1   | 20.9   | 20.9   |
| 85°   | 109.7   | 31.6   | 13.5   | 9.1    | 8.2    | 6.3    | 6.3    | 12.7   | 17.3   | 20.0   | 20.0   |
| 87.5° | 72.5    | 12.7   | 10.9   | 9.1    | 8.2    | 6.3    | 6.3    | 12.7   | 16.3   | 19.0   | 20.0   |
| 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)