

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: P193002

Luminaire Tested: **GLEON-AF-04-LED-E1-SL4-7030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193002  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)  
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-SL4-7030-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24207.5 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 258  
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

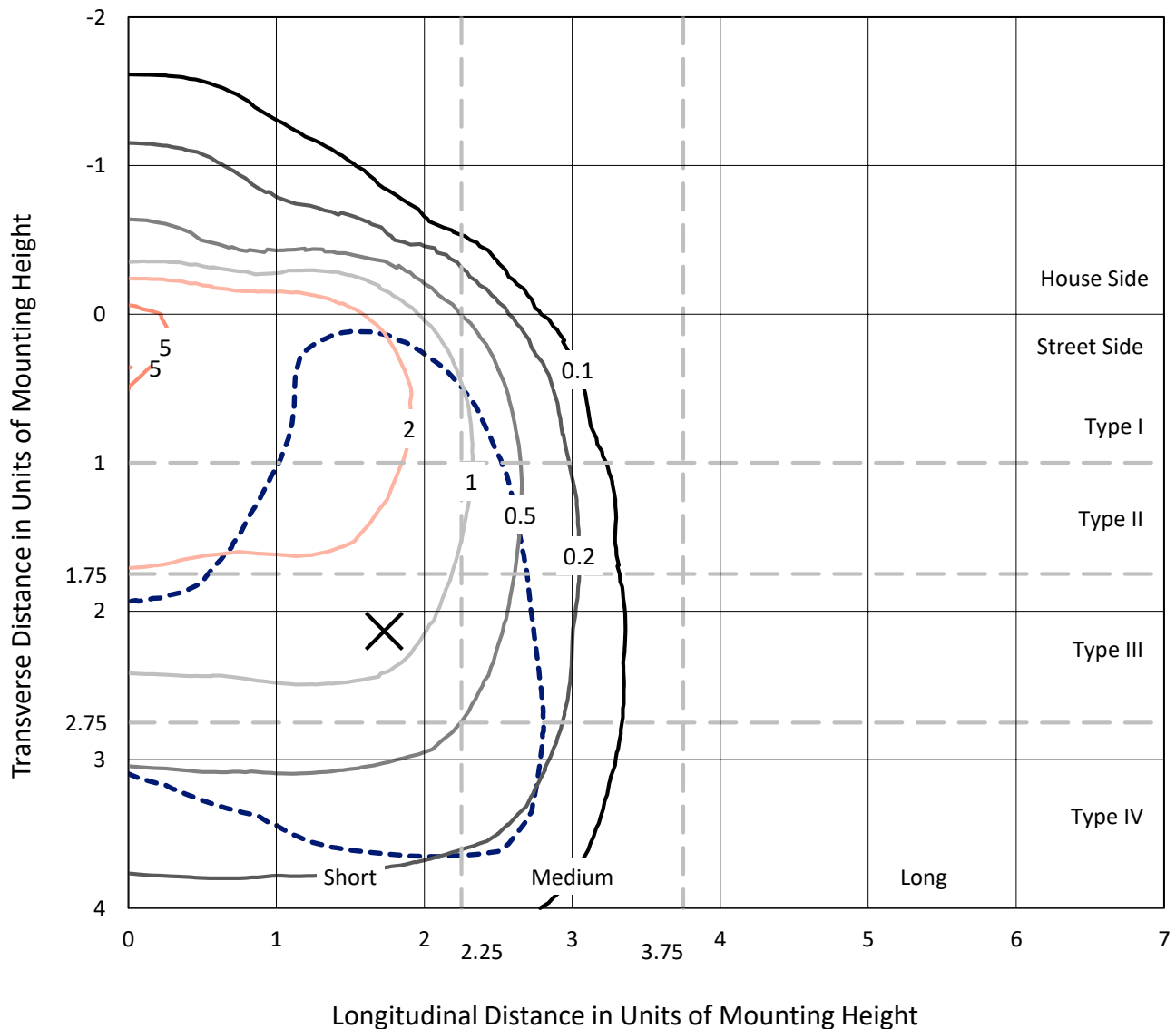


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

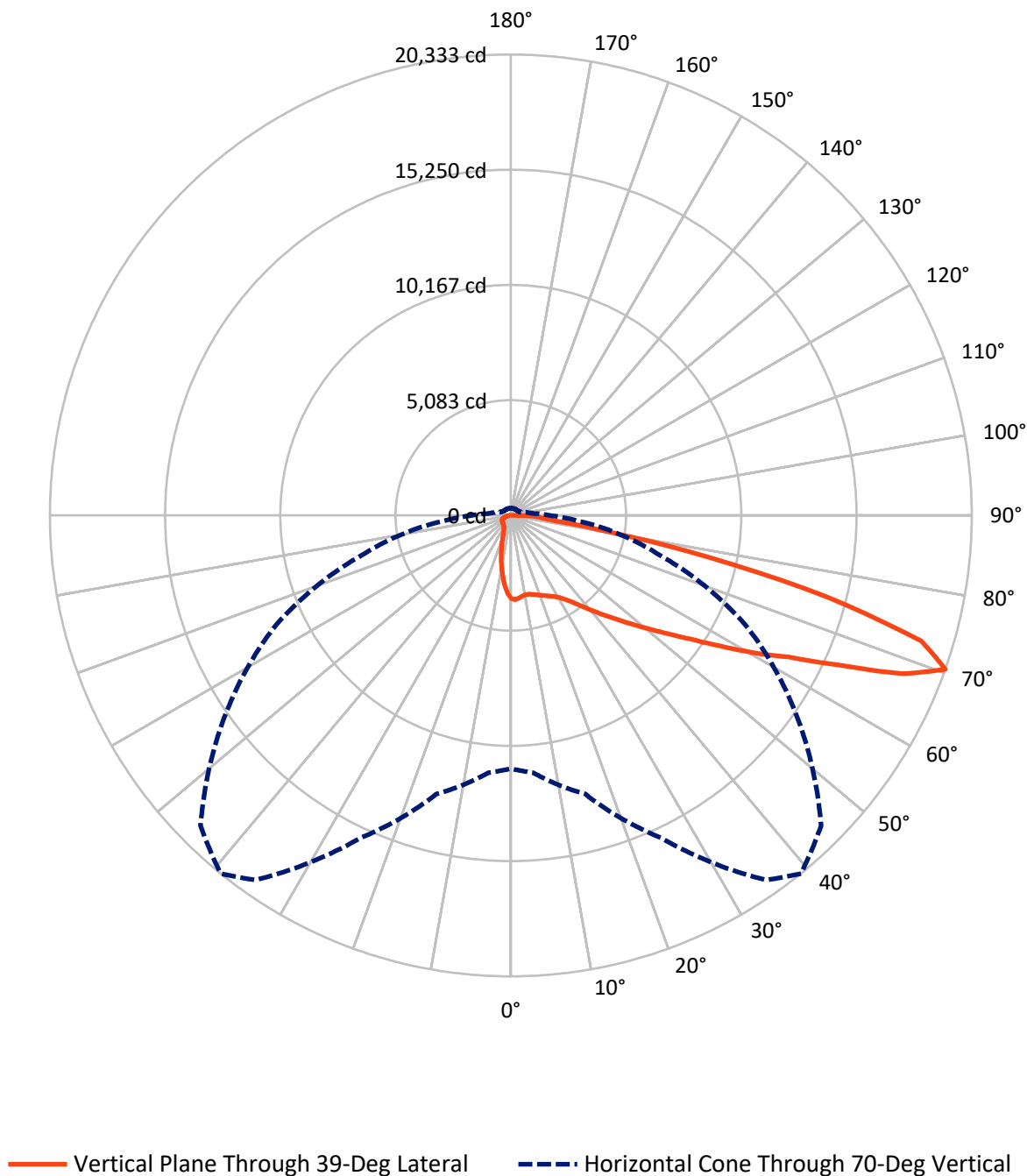


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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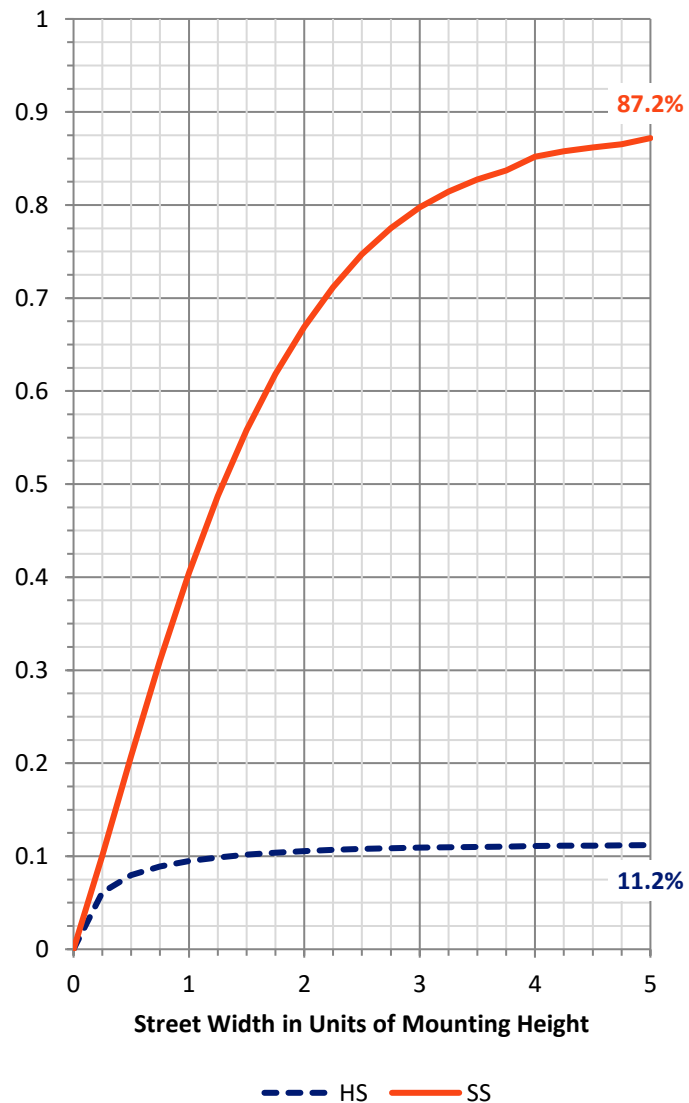
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2753.2   | 0.0    | 2753.2  |
|                    | % Fixture | 11.4     | 0.0    | 11.4    |
| <b>Street Side</b> | Lumens    | 21454.3  | 0.0    | 21454.3 |
|                    | % Fixture | 88.6     | 0.0    | 88.6    |
| <b>Total</b>       | Lumens    | 24207.5  | 0.0    | 24207.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 315.4   | 1.3       |
| 10°-20°   | 788.4   | 3.3       |
| 20°-30°   | 1227.5  | 5.1       |
| 30°-40°   | 1912.2  | 7.9       |
| 40°-50°   | 3210.3  | 13.3      |
| 50°-60°   | 5099.8  | 21.1      |
| 60°-70°   | 6802.6  | 28.1      |
| 70°-80°   | 4107.9  | 17.0      |
| 80°-90°   | 743.5   | 3.1       |
| 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°    | 24207.5 | 100.0     |
| 0°-180°   | 24207.5 | 100.0     |

**Coefficient of Utilization**



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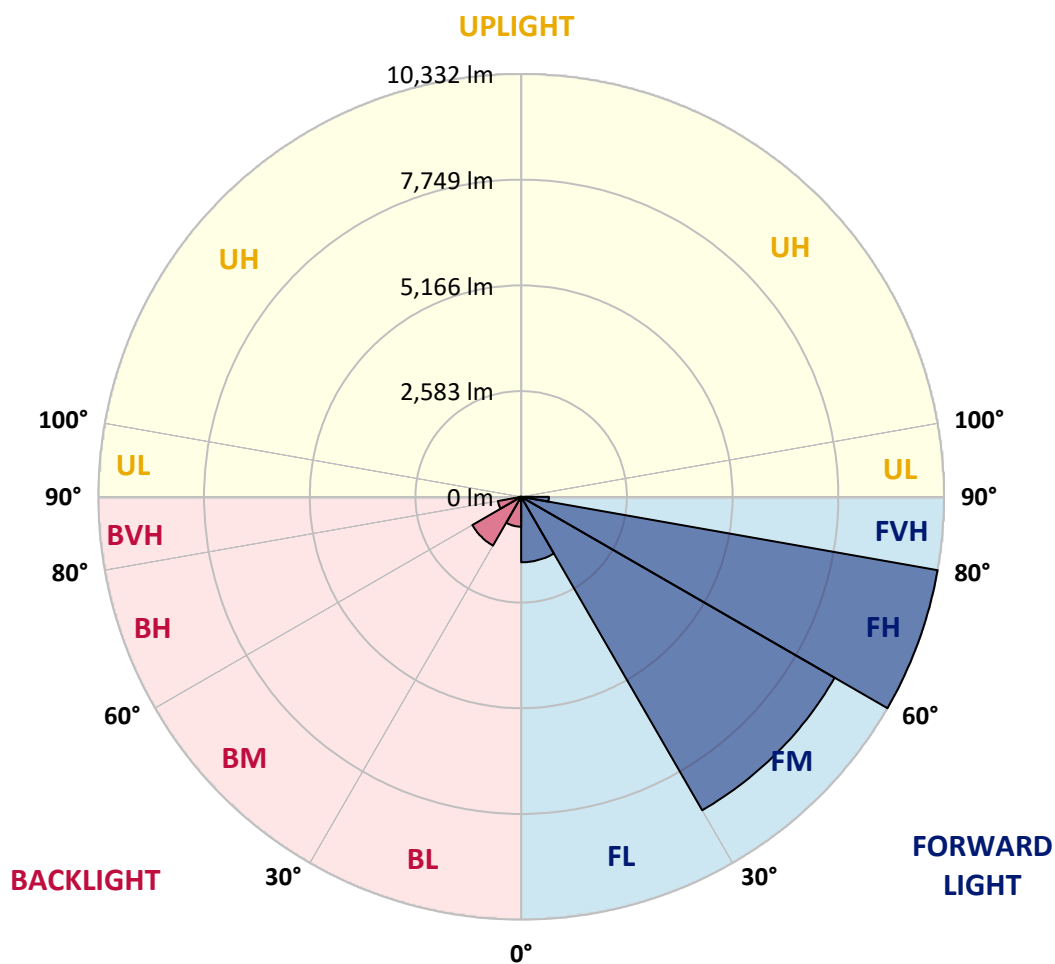
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1600.9  | 6.6       |                         |      |          |
| FM   | (30°-60°)   | 8844.5  | 36.5      |                         |      |          |
| FH   | (60°-80°)   | 10332.4 | 42.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 676.5   | 2.8       |                         |      | G4/750   |
| BL   | (0°-30°)    | 730.4   | 3.0       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1377.8  | 5.7       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 578.0   | 2.4       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 67.0    | 0.3       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 39°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  | 3675.1  |
| 2.5°  | 3746.5  | 3745.2  | 3735.3  | 3728.0  | 3721.8  | 3719.4  | 3724.3  | 3705.8  | 3689.8  | 3670.1  | 3649.3  |
| 5°    | 3718.2  | 3716.9  | 3700.9  | 3686.2  | 3671.3  | 3666.4  | 3665.2  | 3632.0  | 3612.3  | 3582.7  | 3543.4  |
| 7.5°  | 3687.4  | 3681.3  | 3660.3  | 3635.7  | 3609.8  | 3597.6  | 3585.3  | 3542.1  | 3520.0  | 3490.5  | 3445.0  |
| 10°   | 3655.4  | 3647.9  | 3628.3  | 3603.7  | 3579.2  | 3560.6  | 3539.7  | 3497.8  | 3474.5  | 3452.3  | 3399.4  |
| 12.5° | 3622.2  | 3616.1  | 3611.0  | 3600.0  | 3582.7  | 3566.8  | 3550.8  | 3515.1  | 3490.5  | 3464.6  | 3403.1  |
| 15°   | 3617.2  | 3614.8  | 3625.9  | 3633.2  | 3623.4  | 3613.5  | 3596.3  | 3565.5  | 3539.7  | 3513.9  | 3433.8  |
| 17.5° | 3656.6  | 3655.4  | 3683.6  | 3703.4  | 3698.4  | 3681.3  | 3657.9  | 3623.4  | 3602.5  | 3580.3  | 3480.6  |
| 20°   | 3742.7  | 3748.9  | 3783.4  | 3809.3  | 3784.6  | 3760.0  | 3721.8  | 3673.9  | 3662.8  | 3652.9  | 3528.6  |
| 22.5° | 3905.3  | 3911.4  | 3935.9  | 3945.8  | 3881.9  | 3846.2  | 3793.3  | 3731.6  | 3724.3  | 3731.6  | 3586.4  |
| 25°   | 4158.7  | 4152.6  | 4148.9  | 4112.0  | 3995.1  | 3939.7  | 3872.0  | 3808.0  | 3811.7  | 3845.0  | 3667.8  |
| 27.5° | 4494.7  | 4461.5  | 4409.8  | 4299.1  | 4113.2  | 4051.7  | 3969.2  | 3910.2  | 3933.6  | 3997.6  | 3789.5  |
| 30°   | 4843.0  | 4806.1  | 4686.7  | 4505.9  | 4268.3  | 4200.6  | 4108.2  | 4041.8  | 4103.3  | 4204.3  | 3952.0  |
| 32.5° | 5165.6  | 5160.7  | 4985.8  | 4753.3  | 4482.5  | 4423.4  | 4331.0  | 4255.9  | 4355.7  | 4509.5  | 4195.7  |
| 35°   | 5517.5  | 5528.6  | 5319.4  | 5040.0  | 4771.7  | 4710.1  | 4643.7  | 4587.0  | 4720.0  | 4931.6  | 4548.9  |
| 37.5° | 5894.1  | 5916.3  | 5668.9  | 5353.8  | 5101.6  | 5075.6  | 5036.3  | 5011.7  | 5217.2  | 5510.2  | 5042.5  |
| 40°   | 6397.5  | 6375.4  | 6031.9  | 5708.2  | 5506.4  | 5505.2  | 5492.9  | 5522.4  | 5864.6  | 6265.8  | 5676.3  |
| 42.5° | 6936.7  | 6871.5  | 6417.3  | 6088.6  | 5950.8  | 5992.7  | 6017.2  | 6137.8  | 6643.7  | 7184.1  | 6449.2  |
| 45°   | 7517.5  | 7371.0  | 6817.2  | 6491.1  | 6444.3  | 6532.9  | 6616.6  | 6878.8  | 7560.6  | 8228.9  | 7296.0  |
| 47.5° | 7981.5  | 7840.0  | 7230.8  | 6913.3  | 7015.3  | 7149.5  | 7310.7  | 7725.5  | 8587.0  | 9308.4  | 8131.7  |
| 50°   | 8347.1  | 8254.7  | 7648.0  | 7405.5  | 7644.4  | 7851.1  | 8114.4  | 8684.3  | 9655.4  | 10359.4 | 8905.8  |
| 52.5° | 8701.5  | 8632.6  | 8068.9  | 7910.2  | 8382.8  | 8668.3  | 9026.5  | 9713.2  | 10750.8 | 11393.2 | 9556.9  |
| 55°   | 9021.5  | 8972.3  | 8521.7  | 8539.0  | 9251.6  | 9623.3  | 10073.8 | 10885.0 | 11944.6 | 12315.0 | 10108.3 |
| 57.5° | 9382.1  | 9319.4  | 9038.8  | 9328.0  | 10367.9 | 10850.4 | 11436.2 | 12201.8 | 13064.5 | 13134.7 | 10528.0 |
| 60°   | 9745.2  | 9691.1  | 9612.3  | 10238.8 | 11785.8 | 12292.9 | 12848.1 | 13478.1 | 14200.7 | 13771.0 | 10503.4 |
| 62.5° | 10060.3 | 10066.5 | 10205.5 | 11195.0 | 13174.2 | 13761.2 | 14438.2 | 15061.0 | 15228.3 | 13881.8 | 9726.8  |
| 65°   | 10594.5 | 10691.7 | 11106.4 | 12548.9 | 15128.6 | 15913.8 | 16744.6 | 16644.9 | 15512.6 | 12846.7 | 8061.4  |
| 67.5° | 11229.5 | 11400.5 | 12241.2 | 14353.2 | 17598.7 | 18641.2 | 18962.4 | 17003.0 | 14374.1 | 10443.1 | 5746.5  |
| 70°   | 11165.5 | 11400.5 | 12731.1 | 15698.5 | 19634.4 | 20333.4 | 19358.8 | 15388.3 | 11414.1 | 6822.1  | 3052.2  |
| 72.5° | 9915.1  | 10251.0 | 11733.0 | 15081.8 | 18993.2 | 18931.7 | 16806.1 | 11472.0 | 6781.5  | 2739.6  | 1192.6  |
| 75°   | 7556.9  | 7896.6  | 9171.7  | 11915.0 | 15011.6 | 14494.8 | 11924.9 | 6337.2  | 2573.5  | 1088.0  | 752.0   |
| 77.5° | 4347.1  | 4610.4  | 5595.0  | 7307.0  | 9523.7  | 8993.2  | 6637.5  | 2818.5  | 1252.8  | 758.1   | 587.0   |
| 80°   | 2427.0  | 2573.5  | 3171.7  | 3707.0  | 4667.1  | 4278.1  | 2969.8  | 1751.4  | 935.4   | 550.1   | 452.9   |
| 82.5° | 1918.8  | 2049.2  | 2565.0  | 2338.4  | 2131.6  | 1966.7  | 1705.9  | 1559.3  | 747.2   | 347.1   | 270.8   |
| 85°   | 1676.2  | 1800.6  | 2171.1  | 1841.2  | 1456.0  | 1335.3  | 1385.9  | 1534.8  | 580.9   | 209.2   | 231.4   |
| 87.5° | 1553.2  | 1719.4  | 1934.8  | 1419.1  | 1133.6  | 1004.3  | 1278.8  | 1682.5  | 187.1   | 130.4   | 93.5    |
| 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°    | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 | 3675.1 |
| 2.5°  | 3630.8 | 3611.0 | 3579.2 | 3550.8 | 3506.4 | 3483.0 | 3457.2 | 3438.7 | 3423.9 | 3411.7 | 3431.4 |
| 5°    | 3518.8 | 3481.9 | 3414.2 | 3341.5 | 3255.4 | 3187.6 | 3131.1 | 3078.2 | 3041.2 | 3016.6 | 3033.8 |
| 7.5°  | 3412.9 | 3352.6 | 3246.7 | 3115.1 | 2967.4 | 2841.9 | 2738.5 | 2647.4 | 2584.6 | 2544.0 | 2560.0 |
| 10°   | 3352.6 | 3277.6 | 3113.9 | 2907.1 | 2689.2 | 2493.6 | 2331.0 | 2190.7 | 2093.5 | 2038.1 | 2046.8 |
| 12.5° | 3337.9 | 3240.6 | 3014.1 | 2729.9 | 2432.0 | 2159.9 | 1931.0 | 1736.5 | 1600.0 | 1528.6 | 1531.0 |
| 15°   | 3348.9 | 3224.6 | 2920.6 | 2560.0 | 2183.3 | 1840.0 | 1554.4 | 1318.1 | 1159.4 | 1078.2 | 1077.0 |
| 17.5° | 3367.4 | 3212.3 | 2822.1 | 2376.6 | 1931.0 | 1532.3 | 1213.6 | 982.1  | 841.9  | 776.7  | 771.7  |
| 20°   | 3387.0 | 3192.5 | 2711.4 | 2178.4 | 1668.9 | 1246.7 | 950.1  | 769.1  | 680.5  | 644.9  | 642.5  |
| 22.5° | 3415.3 | 3175.4 | 2596.9 | 1969.2 | 1411.7 | 1015.3 | 781.5  | 659.7  | 613.0  | 594.5  | 591.9  |
| 25°   | 3460.9 | 3166.8 | 2475.0 | 1751.4 | 1180.3 | 849.3  | 680.5  | 605.6  | 578.4  | 566.2  | 564.9  |
| 27.5° | 3537.3 | 3179.1 | 2360.6 | 1539.7 | 992.0  | 737.3  | 624.0  | 578.4  | 558.8  | 547.7  | 546.6  |
| 30°   | 3635.7 | 3217.2 | 2240.1 | 1339.1 | 845.5  | 660.9  | 589.6  | 560.0  | 544.0  | 532.9  | 532.9  |
| 32.5° | 3799.4 | 3281.3 | 2113.2 | 1165.6 | 740.9  | 608.0  | 563.7  | 544.0  | 530.5  | 521.8  | 520.6  |
| 35°   | 4040.6 | 3401.8 | 1995.1 | 1021.6 | 665.8  | 569.9  | 541.5  | 526.7  | 516.9  | 512.0  | 512.0  |
| 37.5° | 4391.3 | 3592.7 | 1890.5 | 918.1  | 620.3  | 544.0  | 520.6  | 509.5  | 503.3  | 503.3  | 503.3  |
| 40°   | 4862.8 | 3856.0 | 1805.5 | 849.3  | 594.5  | 525.5  | 504.7  | 496.0  | 492.3  | 493.6  | 493.6  |
| 42.5° | 5444.9 | 4198.2 | 1748.9 | 801.2  | 582.2  | 514.5  | 493.6  | 486.2  | 482.5  | 481.2  | 482.5  |
| 45°   | 6108.2 | 4587.0 | 1742.8 | 765.6  | 569.9  | 507.1  | 486.2  | 478.8  | 471.4  | 466.4  | 466.4  |
| 47.5° | 6753.2 | 4982.1 | 1793.3 | 753.3  | 556.3  | 498.4  | 479.9  | 472.6  | 461.5  | 450.4  | 450.4  |
| 50°   | 7323.1 | 5318.2 | 1860.9 | 758.1  | 551.4  | 486.2  | 470.2  | 466.4  | 449.3  | 436.9  | 435.7  |
| 52.5° | 7776.0 | 5576.6 | 1916.3 | 772.9  | 556.3  | 477.6  | 457.8  | 459.1  | 440.7  | 427.1  | 425.9  |
| 55°   | 8139.0 | 5746.5 | 1901.5 | 787.6  | 567.4  | 472.6  | 446.8  | 449.3  | 434.5  | 420.9  | 420.9  |
| 57.5° | 8297.8 | 5683.6 | 1737.9 | 775.4  | 576.1  | 473.8  | 438.1  | 448.0  | 435.7  | 423.4  | 423.4  |
| 60°   | 7957.0 | 5126.1 | 1431.4 | 721.2  | 564.9  | 470.2  | 434.5  | 452.9  | 451.7  | 439.3  | 438.1  |
| 62.5° | 6925.5 | 4128.1 | 1110.2 | 641.3  | 526.7  | 451.7  | 424.6  | 451.7  | 465.2  | 461.5  | 460.3  |
| 65°   | 5337.9 | 2940.2 | 848.0  | 555.0  | 475.1  | 420.9  | 398.8  | 423.4  | 441.9  | 446.8  | 445.6  |
| 67.5° | 3464.6 | 1801.8 | 653.6  | 473.8  | 417.3  | 385.2  | 365.6  | 376.6  | 380.3  | 380.3  | 377.8  |
| 70°   | 1703.4 | 969.9  | 520.6  | 398.8  | 358.2  | 347.1  | 336.0  | 329.9  | 323.7  | 318.8  | 318.8  |
| 72.5° | 840.6  | 633.8  | 428.3  | 337.3  | 308.8  | 304.0  | 301.5  | 294.1  | 289.2  | 283.1  | 280.6  |
| 75°   | 621.5  | 515.7  | 364.3  | 284.3  | 265.8  | 260.9  | 265.8  | 259.7  | 258.5  | 253.6  | 251.1  |
| 77.5° | 510.8  | 439.3  | 313.8  | 243.6  | 227.7  | 219.1  | 226.5  | 227.7  | 228.9  | 221.6  | 219.1  |
| 80°   | 414.7  | 371.7  | 262.1  | 201.8  | 187.1  | 181.0  | 185.8  | 195.7  | 198.2  | 187.1  | 182.1  |
| 82.5° | 299.1  | 304.0  | 211.8  | 157.6  | 145.2  | 140.3  | 150.1  | 162.5  | 164.9  | 148.9  | 145.2  |
| 85°   | 251.1  | 253.6  | 162.5  | 112.0  | 99.7   | 92.4   | 108.2  | 120.6  | 129.3  | 113.2  | 109.6  |
| 87.5° | 104.6  | 148.9  | 93.5   | 62.8   | 55.4   | 48.0   | 57.8   | 64.0   | 77.6   | 71.3   | 70.2   |
| 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)