

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: P269321

Luminaire Tested: **GLEON-AF-05-LED-E1-SL4-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P269321  
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-05-LED-E1-SL4-7027  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K, 1050mA 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: 24560.6 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

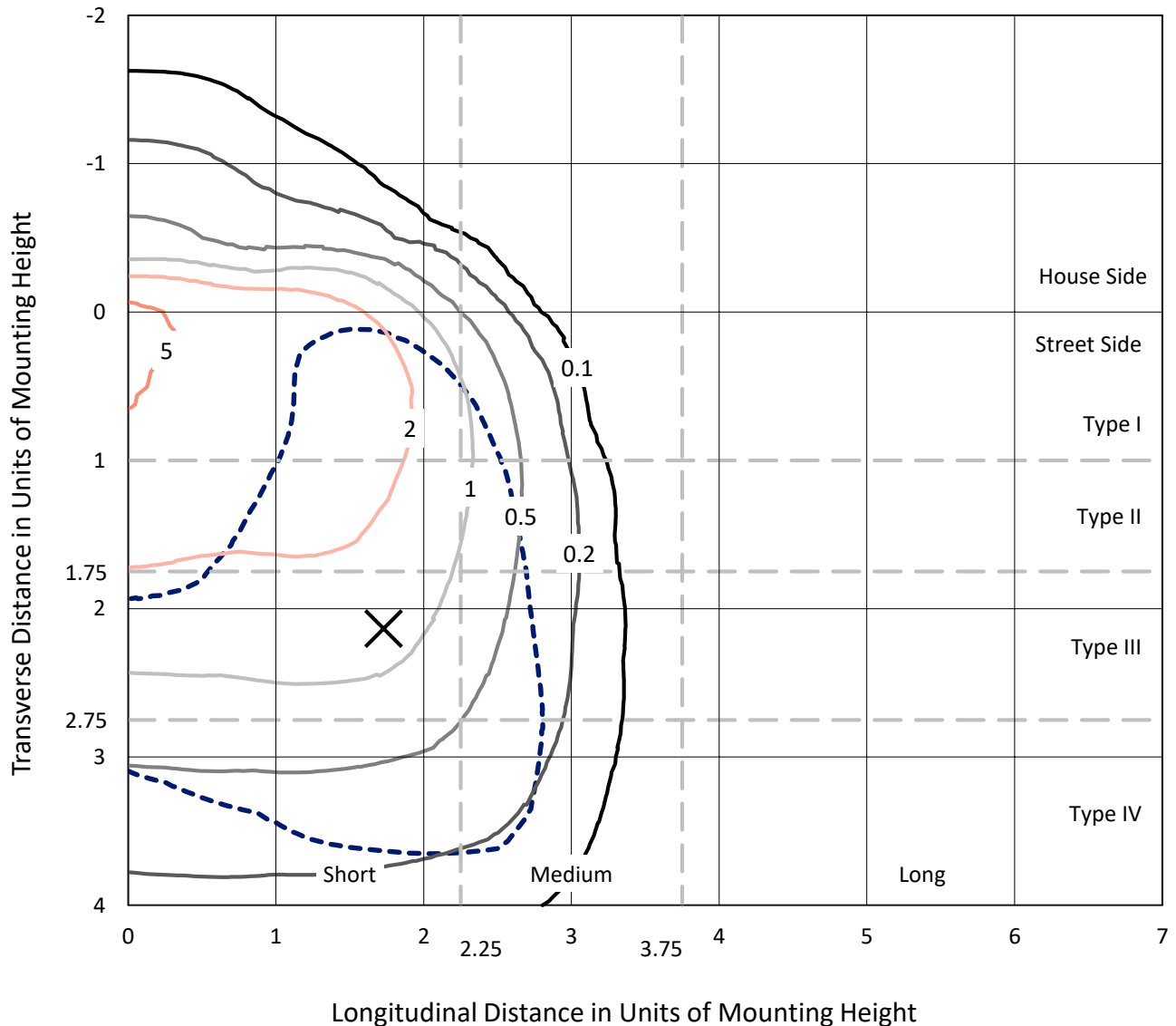
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

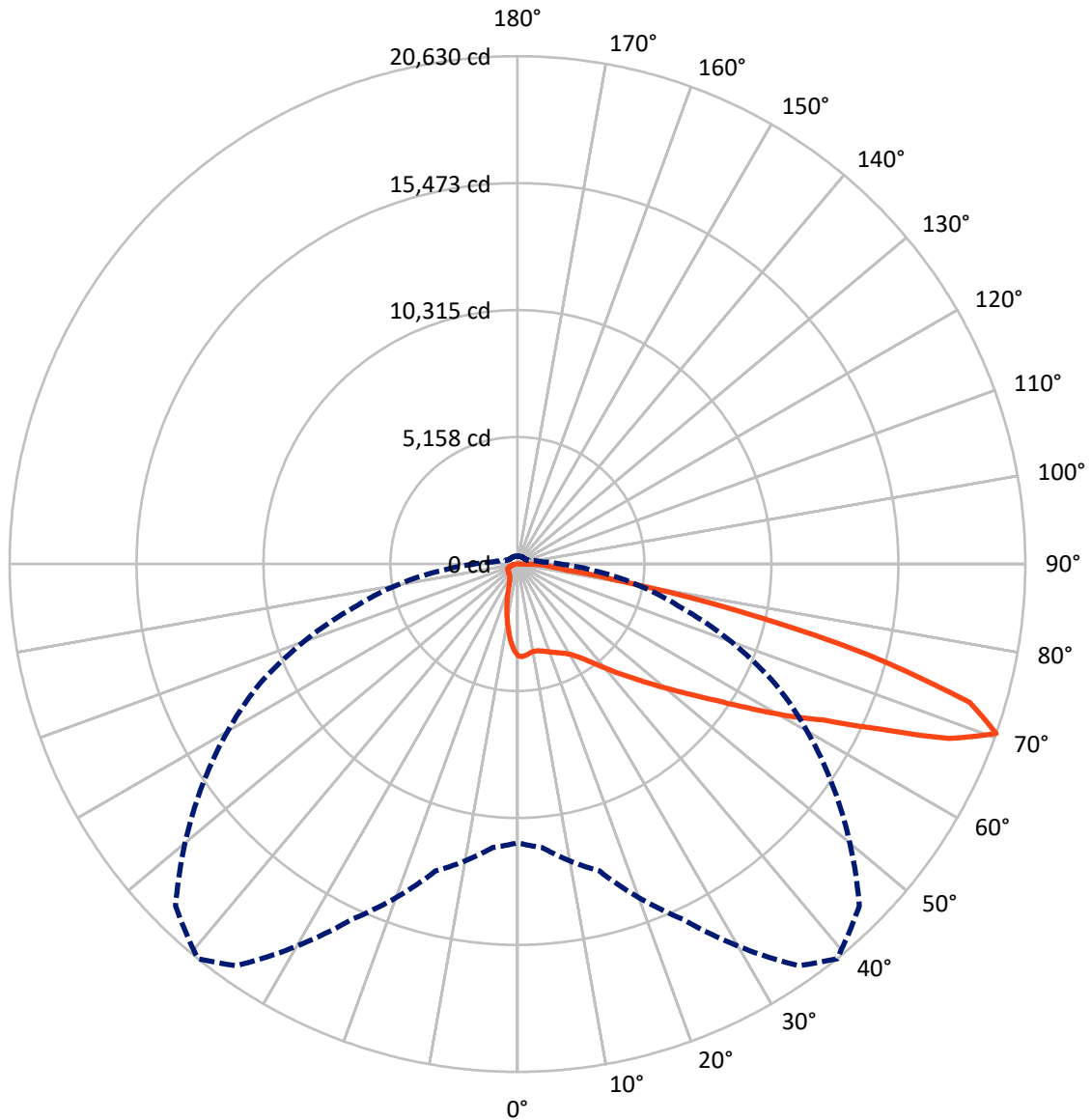
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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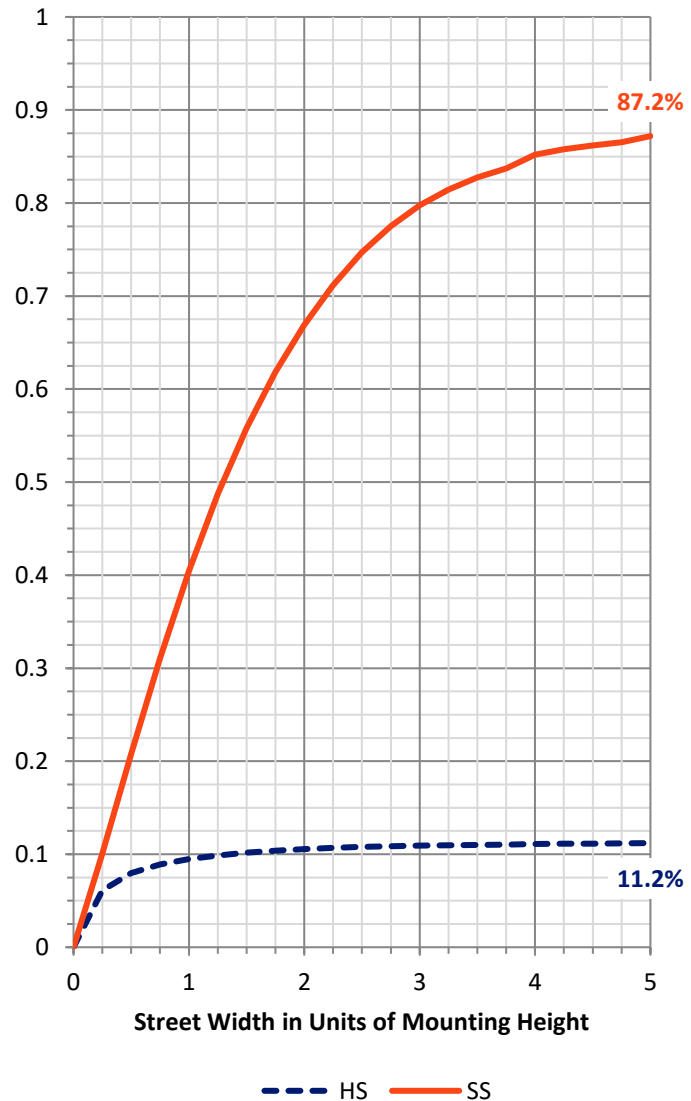
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2793.4   | 0.0    | 2793.4  |
|                    | % Fixture | 11.4     | 0.0    | 11.4    |
| <b>Street Side</b> | Lumens    | 21767.2  | 0.0    | 21767.2 |
|                    | % Fixture | 88.6     | 0.0    | 88.6    |
| <b>Total</b>       | Lumens    | 24560.6  | 0.0    | 24560.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 320.0   | 1.3       |
| 10°-20°   | 799.9   | 3.3       |
| 20°-30°   | 1245.4  | 5.1       |
| 30°-40°   | 1940.1  | 7.9       |
| 40°-50°   | 3257.1  | 13.3      |
| 50°-60°   | 5174.2  | 21.1      |
| 60°-70°   | 6901.8  | 28.1      |
| 70°-80°   | 4167.8  | 17.0      |
| 80°-90°   | 754.3   | 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°    | 24560.6 | 100.0     |
| 0°-180°   | 24560.6 | 100.0     |



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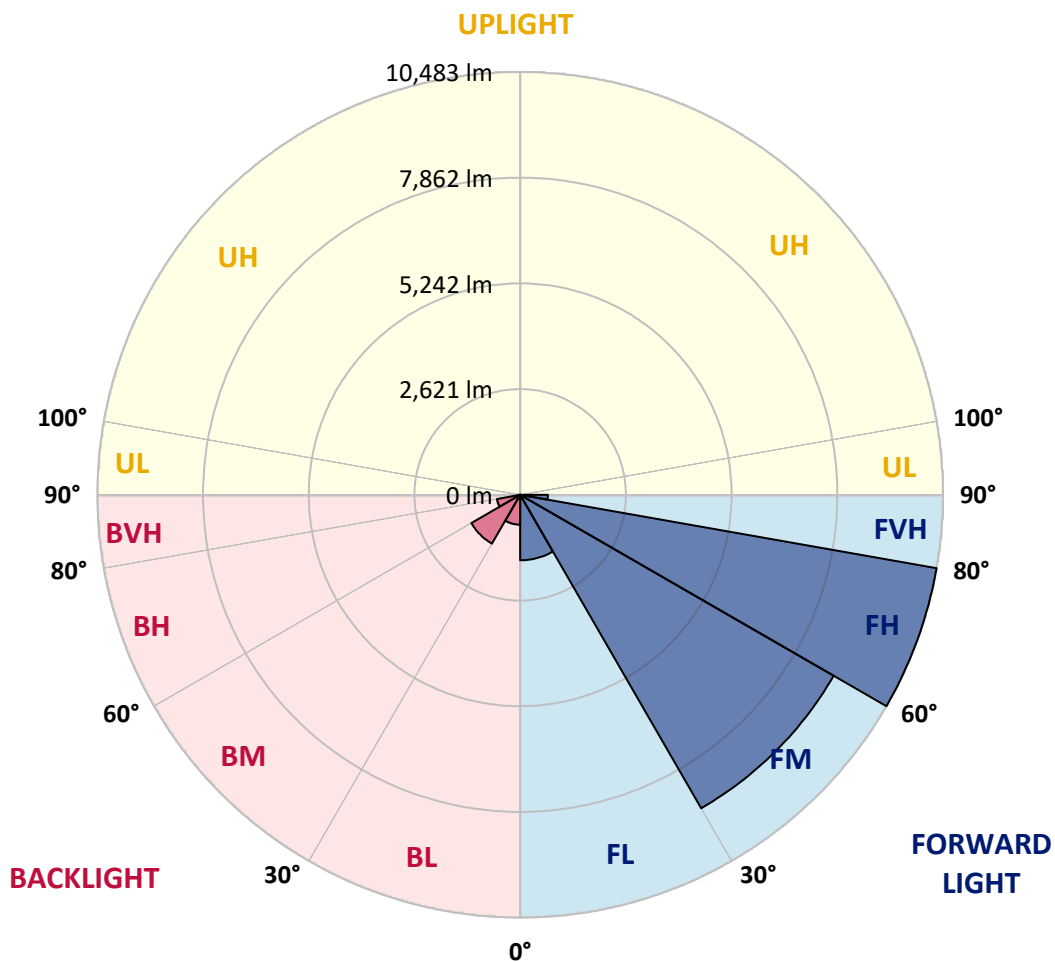
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1624.2  | 6.6       |                         |      |          |
| FM   | (30°-60°)   | 8973.5  | 36.5      |                         |      |          |
| FH   | (60°-80°)   | 10483.2 | 42.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 686.3   | 2.8       |                         |      | G4/750   |
| BL   | (0°-30°)    | 741.0   | 3.0       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1397.9  | 5.7       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 586.4   | 2.4       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 68.0    | 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°    | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  | 3728.7  |
| 2.5°  | 3801.1  | 3799.9  | 3789.9  | 3782.4  | 3776.1  | 3773.6  | 3778.6  | 3759.9  | 3743.6  | 3723.7  | 3702.5  |
| 5°    | 3772.4  | 3771.2  | 3754.8  | 3740.0  | 3724.9  | 3719.9  | 3718.8  | 3684.9  | 3664.9  | 3635.0  | 3595.0  |
| 7.5°  | 3741.3  | 3735.0  | 3713.8  | 3688.7  | 3662.5  | 3650.1  | 3637.5  | 3593.8  | 3571.3  | 3541.4  | 3495.1  |
| 10°   | 3708.7  | 3701.1  | 3681.3  | 3656.2  | 3631.3  | 3612.5  | 3591.3  | 3548.8  | 3525.0  | 3502.6  | 3449.0  |
| 12.5° | 3675.0  | 3668.8  | 3663.7  | 3652.5  | 3635.0  | 3618.8  | 3602.6  | 3566.4  | 3541.4  | 3515.2  | 3452.7  |
| 15°   | 3669.9  | 3667.5  | 3678.6  | 3686.3  | 3676.3  | 3666.3  | 3648.7  | 3617.6  | 3591.3  | 3565.2  | 3483.9  |
| 17.5° | 3709.9  | 3708.7  | 3737.4  | 3757.4  | 3752.4  | 3735.0  | 3711.2  | 3676.3  | 3655.1  | 3632.6  | 3531.3  |
| 20°   | 3797.3  | 3803.7  | 3838.5  | 3864.8  | 3839.9  | 3814.8  | 3776.1  | 3727.4  | 3716.2  | 3706.1  | 3580.0  |
| 22.5° | 3962.2  | 3968.4  | 3993.4  | 4003.3  | 3938.4  | 3902.2  | 3848.6  | 3786.1  | 3778.6  | 3786.1  | 3638.8  |
| 25°   | 4219.3  | 4213.2  | 4209.5  | 4172.0  | 4053.3  | 3997.2  | 3928.5  | 3863.5  | 3867.4  | 3901.0  | 3721.1  |
| 27.5° | 4560.3  | 4526.6  | 4474.2  | 4361.8  | 4173.3  | 4110.7  | 4027.1  | 3967.2  | 3990.9  | 4055.8  | 3844.8  |
| 30°   | 4913.6  | 4876.3  | 4755.1  | 4571.6  | 4330.5  | 4261.9  | 4168.2  | 4100.9  | 4163.3  | 4265.6  | 4009.7  |
| 32.5° | 5240.9  | 5236.0  | 5058.5  | 4822.6  | 4547.8  | 4487.9  | 4394.2  | 4318.1  | 4419.2  | 4575.2  | 4256.9  |
| 35°   | 5598.0  | 5609.2  | 5396.9  | 5113.5  | 4841.2  | 4778.9  | 4711.4  | 4653.9  | 4788.9  | 5003.6  | 4615.3  |
| 37.5° | 5980.1  | 6002.7  | 5751.6  | 5432.0  | 5175.9  | 5149.8  | 5109.7  | 5084.8  | 5293.4  | 5590.5  | 5115.9  |
| 40°   | 6490.9  | 6468.3  | 6120.0  | 5791.6  | 5586.7  | 5585.5  | 5573.1  | 5603.0  | 5950.2  | 6357.2  | 5759.2  |
| 42.5° | 7037.9  | 6971.6  | 6510.8  | 6177.5  | 6037.6  | 6080.0  | 6105.1  | 6227.4  | 6740.6  | 7288.8  | 6543.3  |
| 45°   | 7627.1  | 7478.6  | 6916.7  | 6585.7  | 6538.4  | 6628.2  | 6713.2  | 6979.1  | 7670.8  | 8348.9  | 7402.5  |
| 47.5° | 8098.0  | 7954.3  | 7336.3  | 7014.1  | 7117.7  | 7253.9  | 7417.3  | 7838.3  | 8712.3  | 9444.2  | 8250.4  |
| 50°   | 8468.9  | 8375.2  | 7759.6  | 7513.6  | 7755.7  | 7965.6  | 8232.7  | 8810.9  | 9796.1  | 10510.4 | 9035.7  |
| 52.5° | 8828.5  | 8758.6  | 8186.7  | 8025.5  | 8505.1  | 8794.8  | 9158.1  | 9854.9  | 10907.6 | 11559.4 | 9696.3  |
| 55°   | 9153.1  | 9103.2  | 8646.1  | 8663.7  | 9386.6  | 9763.8  | 10220.7 | 11043.8 | 12118.9 | 12494.6 | 10255.7 |
| 57.5° | 9519.0  | 9455.3  | 9170.5  | 9464.1  | 10519.2 | 11008.6 | 11603.0 | 12379.8 | 13255.2 | 13326.4 | 10681.6 |
| 60°   | 9887.4  | 9832.4  | 9752.4  | 10388.1 | 11957.8 | 12472.2 | 13035.3 | 13674.7 | 14407.7 | 13972.0 | 10656.6 |
| 62.5° | 10207.0 | 10213.3 | 10354.5 | 11358.3 | 13366.3 | 13961.9 | 14648.8 | 15280.6 | 15450.4 | 14084.3 | 9868.6  |
| 65°   | 10748.9 | 10847.7 | 11268.5 | 12731.9 | 15349.2 | 16146.0 | 16988.8 | 16887.6 | 15738.8 | 13034.1 | 8179.1  |
| 67.5° | 11393.4 | 11566.8 | 12419.7 | 14562.6 | 17855.4 | 18913.2 | 19239.0 | 17251.1 | 14583.9 | 10595.4 | 5830.3  |
| 70°   | 11328.3 | 11566.8 | 12916.8 | 15927.4 | 19920.9 | 20630.1 | 19641.1 | 15612.7 | 11580.6 | 6921.7  | 3096.8  |
| 72.5° | 10059.7 | 10400.5 | 11904.1 | 15301.8 | 19270.3 | 19207.7 | 17051.3 | 11639.2 | 6880.5  | 2779.6  | 1209.9  |
| 75°   | 7667.2  | 8011.9  | 9305.5  | 12088.9 | 15230.7 | 14706.2 | 12098.8 | 6429.7  | 2611.1  | 1103.8  | 763.0   |
| 77.5° | 4410.5  | 4677.7  | 5676.7  | 7413.6  | 9662.6  | 9124.4  | 6734.4  | 2859.6  | 1271.2  | 769.2   | 595.7   |
| 80°   | 2462.4  | 2611.1  | 3218.0  | 3761.2  | 4735.1  | 4340.5  | 3013.2  | 1776.9  | 949.0   | 558.1   | 459.6   |
| 82.5° | 1946.7  | 2079.0  | 2602.3  | 2372.6  | 2162.8  | 1995.4  | 1730.8  | 1582.2  | 758.0   | 352.1   | 274.7   |
| 85°   | 1700.8  | 1826.9  | 2202.7  | 1868.0  | 1477.3  | 1354.9  | 1406.0  | 1557.1  | 589.4   | 212.3   | 234.7   |
| 87.5° | 1575.8  | 1744.5  | 1962.9  | 1439.8  | 1150.1  | 1018.9  | 1297.4  | 1707.0  | 189.8   | 132.4   | 95.0    |
| 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°    | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 | 3728.7 |
| 2.5°  | 3683.7 | 3663.7 | 3631.3 | 3602.6 | 3557.6 | 3533.9 | 3507.6 | 3488.9 | 3473.9 | 3461.4 | 3481.4 |
| 5°    | 3570.1 | 3532.7 | 3464.0 | 3390.3 | 3302.9 | 3234.2 | 3176.8 | 3123.0 | 3085.6 | 3060.6 | 3078.1 |
| 7.5°  | 3462.6 | 3401.5 | 3294.2 | 3160.4 | 3010.7 | 2883.3 | 2778.4 | 2686.0 | 2622.3 | 2581.1 | 2597.3 |
| 10°   | 3401.5 | 3325.3 | 3159.2 | 2949.4 | 2728.4 | 2529.8 | 2365.1 | 2222.8 | 2124.0 | 2067.9 | 2076.6 |
| 12.5° | 3386.5 | 3287.8 | 3058.1 | 2769.7 | 2467.5 | 2191.5 | 1959.3 | 1761.9 | 1623.3 | 1551.0 | 1553.3 |
| 15°   | 3397.7 | 3271.6 | 2963.1 | 2597.3 | 2215.2 | 1866.9 | 1577.2 | 1337.3 | 1176.3 | 1093.9 | 1092.6 |
| 17.5° | 3416.6 | 3259.2 | 2863.3 | 2411.3 | 1959.3 | 1554.6 | 1231.2 | 996.5  | 854.1  | 788.0  | 783.0  |
| 20°   | 3436.5 | 3239.2 | 2750.9 | 2210.2 | 1693.2 | 1265.0 | 964.1  | 780.4  | 690.5  | 654.3  | 651.8  |
| 22.5° | 3465.2 | 3221.7 | 2634.8 | 1997.9 | 1432.3 | 1030.1 | 792.9  | 669.2  | 621.8  | 603.1  | 600.6  |
| 25°   | 3511.5 | 3213.0 | 2511.2 | 1776.9 | 1197.5 | 861.7  | 690.5  | 614.4  | 587.0  | 574.3  | 573.2  |
| 27.5° | 3588.8 | 3225.5 | 2395.1 | 1562.2 | 1006.6 | 748.0  | 633.0  | 587.0  | 566.9  | 555.7  | 554.4  |
| 30°   | 3688.7 | 3264.1 | 2272.7 | 1358.5 | 857.9  | 670.6  | 598.1  | 568.2  | 551.9  | 540.7  | 540.7  |
| 32.5° | 3854.7 | 3329.1 | 2144.1 | 1182.6 | 751.7  | 616.9  | 572.0  | 551.9  | 538.3  | 529.5  | 528.3  |
| 35°   | 4099.5 | 3451.5 | 2024.2 | 1036.5 | 675.5  | 578.1  | 549.5  | 534.4  | 524.5  | 519.5  | 519.5  |
| 37.5° | 4455.5 | 3645.1 | 1918.1 | 931.5  | 629.4  | 551.9  | 528.3  | 517.0  | 510.7  | 510.7  | 510.7  |
| 40°   | 4933.8 | 3912.3 | 1831.9 | 861.7  | 603.1  | 533.2  | 511.9  | 503.2  | 499.5  | 500.7  | 500.7  |
| 42.5° | 5524.3 | 4259.5 | 1774.4 | 813.0  | 590.6  | 521.9  | 500.7  | 493.3  | 489.4  | 488.3  | 489.4  |
| 45°   | 6197.3 | 4653.9 | 1768.1 | 776.8  | 578.1  | 514.5  | 493.3  | 485.8  | 478.3  | 473.2  | 473.2  |
| 47.5° | 6851.7 | 5054.9 | 1819.3 | 764.2  | 564.5  | 505.7  | 487.1  | 479.5  | 468.2  | 457.1  | 457.1  |
| 50°   | 7429.9 | 5395.7 | 1888.1 | 769.2  | 559.5  | 493.3  | 477.0  | 473.2  | 455.8  | 443.4  | 442.1  |
| 52.5° | 7889.5 | 5658.0 | 1944.2 | 784.2  | 564.5  | 484.5  | 464.6  | 465.9  | 447.0  | 433.3  | 432.1  |
| 55°   | 8257.8 | 5830.3 | 1929.3 | 799.2  | 575.6  | 479.5  | 453.3  | 455.8  | 440.8  | 427.1  | 427.1  |
| 57.5° | 8418.8 | 5766.6 | 1763.3 | 786.6  | 584.3  | 480.8  | 444.5  | 454.5  | 442.1  | 429.6  | 429.6  |
| 60°   | 8073.0 | 5200.9 | 1452.3 | 731.8  | 573.2  | 477.0  | 440.8  | 459.6  | 458.2  | 445.7  | 444.5  |
| 62.5° | 7026.5 | 4188.2 | 1126.4 | 650.6  | 534.4  | 458.2  | 430.7  | 458.2  | 472.0  | 468.2  | 466.9  |
| 65°   | 5415.7 | 2983.2 | 860.3  | 563.1  | 482.0  | 427.1  | 404.5  | 429.6  | 448.3  | 453.3  | 452.0  |
| 67.5° | 3515.2 | 1828.1 | 663.0  | 480.8  | 423.3  | 390.9  | 370.9  | 382.0  | 385.8  | 385.8  | 383.3  |
| 70°   | 1728.2 | 984.1  | 528.3  | 404.5  | 363.4  | 352.1  | 340.8  | 334.7  | 328.4  | 323.4  | 323.4  |
| 72.5° | 852.9  | 643.0  | 434.6  | 342.2  | 313.4  | 308.5  | 306.0  | 298.4  | 293.4  | 287.2  | 284.8  |
| 75°   | 630.6  | 523.3  | 369.7  | 288.4  | 269.8  | 264.7  | 269.8  | 263.6  | 262.2  | 257.3  | 254.7  |
| 77.5° | 518.2  | 445.7  | 318.4  | 247.3  | 231.0  | 222.3  | 229.7  | 231.0  | 232.2  | 224.8  | 222.3  |
| 80°   | 420.9  | 377.1  | 266.0  | 204.9  | 189.8  | 183.6  | 188.6  | 198.5  | 201.0  | 189.8  | 184.8  |
| 82.5° | 303.4  | 308.5  | 214.8  | 159.9  | 147.3  | 142.3  | 152.4  | 164.7  | 167.4  | 151.1  | 147.3  |
| 85°   | 254.7  | 257.3  | 164.7  | 113.6  | 101.1  | 93.7   | 110.0  | 122.3  | 131.2  | 114.9  | 111.1  |
| 87.5° | 106.1  | 151.1  | 95.0   | 63.7   | 56.2   | 48.7   | 58.7   | 64.9   | 78.7   | 72.5   | 71.1   |
| 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)