

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: P194292

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-7060-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194292  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL-7060-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16230 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 129  
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



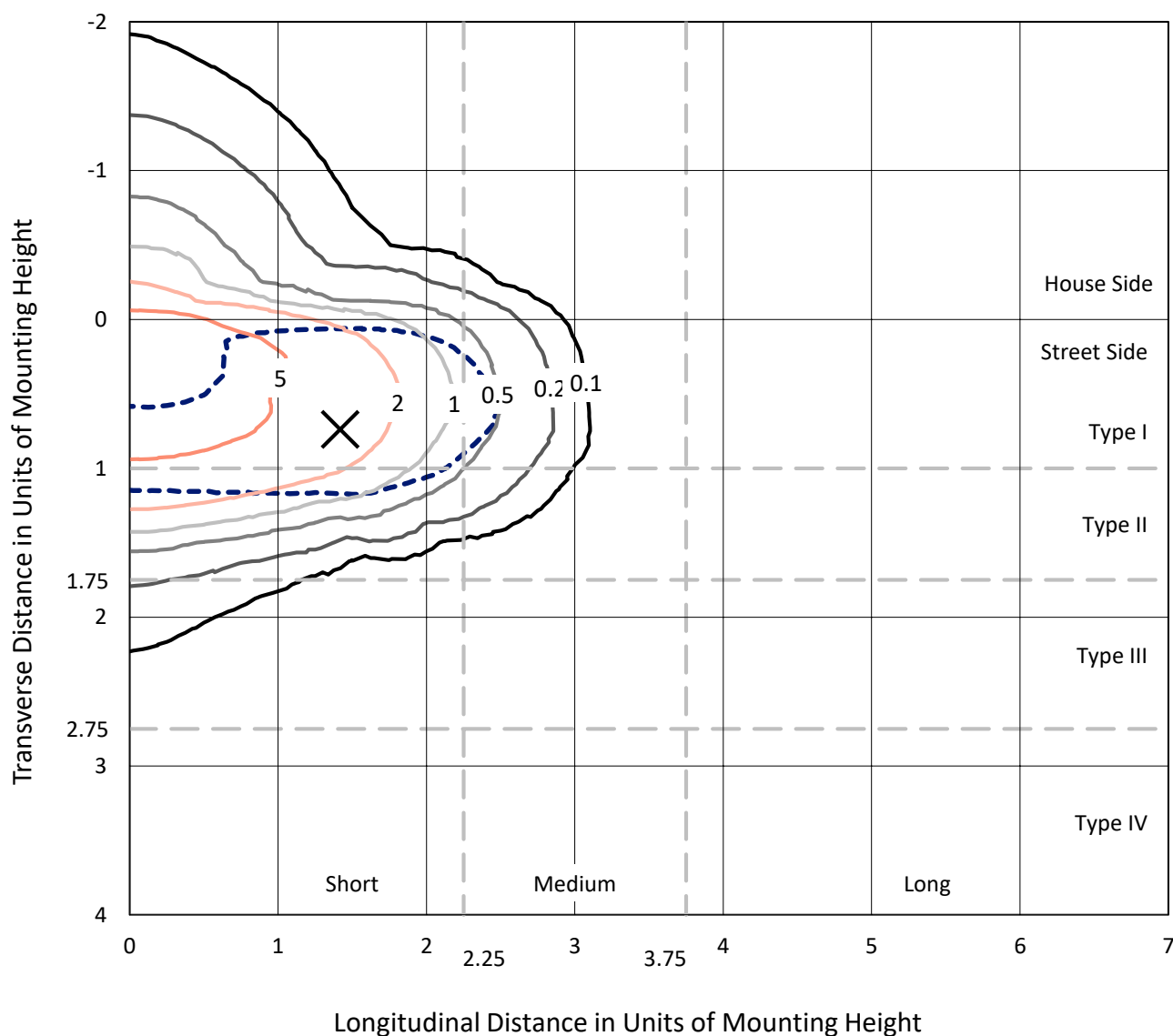
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

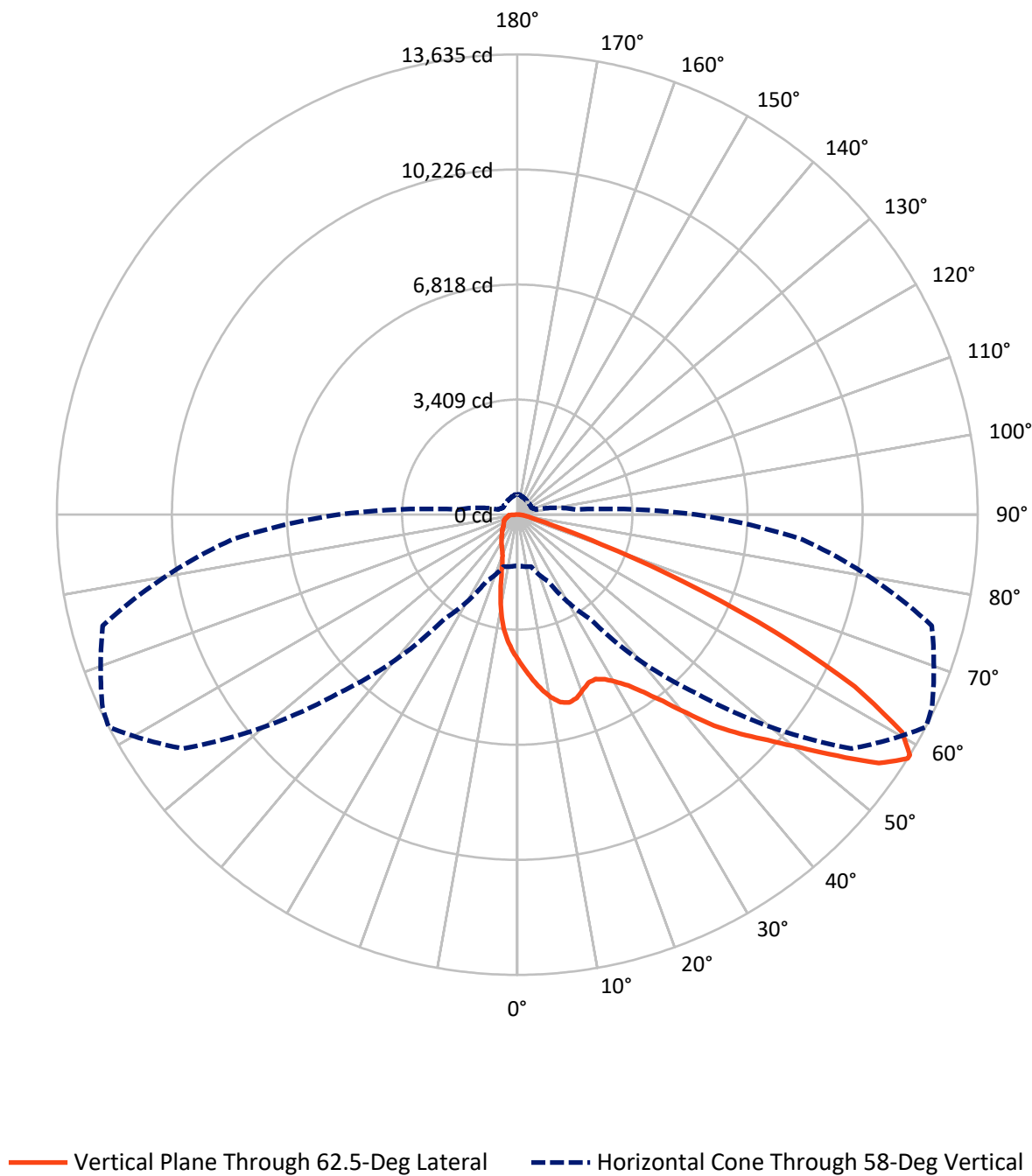


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2475.1   | 0.0    | 2475.1  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 13754.9  | 0.0    | 13754.9 |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 16230.0  | 0.0    | 16230.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 385.6   | 2.4       |
| 10°-20°   | 985.6   | 6.1       |
| 20°-30°   | 1593.2  | 9.8       |
| 30°-40°   | 2529.2  | 15.6      |
| 40°-50°   | 3700.8  | 22.8      |
| 50°-60°   | 3870.7  | 23.8      |
| 60°-70°   | 2286.8  | 14.1      |
| 70°-80°   | 644.2   | 4.0       |
| 80°-90°   | 233.9   | 1.4       |
| 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°    | 16230.0 | 100.0     |
| 0°-180°   | 16230.0 | 100.0     |

**Coefficient of Utilization**



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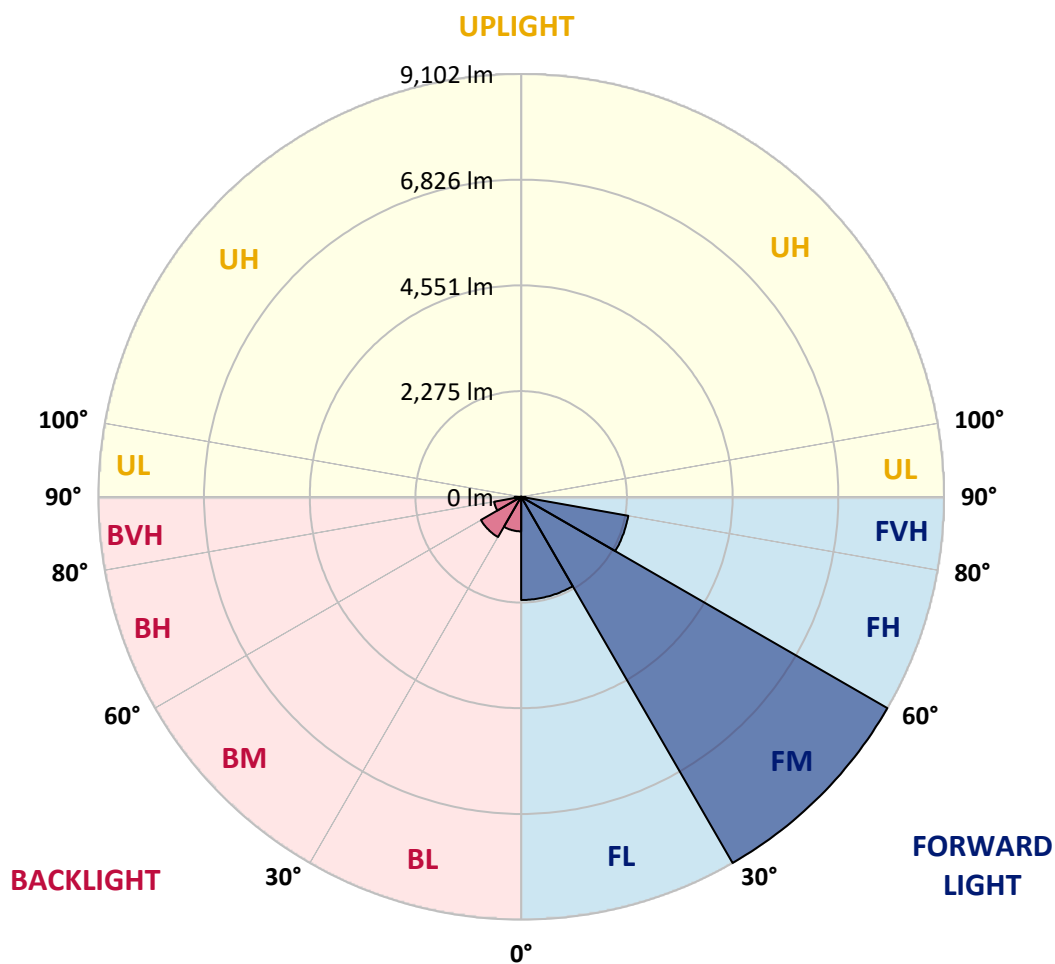
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2220.5 | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 9101.7 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 2340.4 | 14.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 92.3   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 743.9  | 4.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 999.0  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 590.6  | 3.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 141.6  | 0.9       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 62.5°   | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0°    | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2  | 4311.2  | 4311.2  | 4311.2  | 4311.2  | 4311.2 |
| 2.5°  | 4926.4 | 4886.7 | 4861.4 | 4839.3 | 4810.2 | 4748.3  | 4665.0  | 4612.3  | 4585.5  | 4494.6  | 4386.8 |
| 5°    | 5409.4 | 5374.2 | 5348.3 | 5318.5 | 5266.5 | 5169.4  | 5034.9  | 4927.9  | 4875.2  | 4693.3  | 4477.8 |
| 7.5°  | 5296.3 | 5310.8 | 5355.9 | 5434.6 | 5501.9 | 5488.9  | 5368.9  | 5232.9  | 5163.3  | 4910.3  | 4583.2 |
| 10°   | 4614.6 | 4639.8 | 4717.8 | 4901.9 | 5200.0 | 5505.7  | 5598.9  | 5504.9  | 5434.6  | 5125.1  | 4691.8 |
| 12.5° | 4477.8 | 4477.0 | 4483.1 | 4532.0 | 4709.3 | 5139.6  | 5606.6  | 5701.4  | 5659.3  | 5329.9  | 4802.6 |
| 15°   | 4533.6 | 4535.1 | 4530.5 | 4551.1 | 4606.2 | 4776.6  | 5372.7  | 5777.0  | 5806.8  | 5536.3  | 4917.2 |
| 17.5° | 4680.3 | 4676.5 | 4658.9 | 4658.9 | 4678.8 | 4745.3  | 5097.6  | 5706.7  | 5844.3  | 5718.9  | 5018.1 |
| 20°   | 4926.4 | 4908.8 | 4862.2 | 4819.4 | 4798.0 | 4833.9  | 4984.5  | 5544.7  | 5779.3  | 5878.7  | 5101.4 |
| 22.5° | 5224.5 | 5210.7 | 5135.0 | 5043.3 | 4969.2 | 4968.4  | 5042.6  | 5403.3  | 5667.0  | 6029.2  | 5171.7 |
| 25°   | 5609.6 | 5587.5 | 5475.1 | 5328.4 | 5198.5 | 5148.8  | 5169.4  | 5396.4  | 5605.8  | 6192.8  | 5234.4 |
| 27.5° | 6062.1 | 6021.6 | 5888.6 | 5676.9 | 5485.8 | 5385.7  | 5355.9  | 5521.0  | 5661.6  | 6395.3  | 5321.5 |
| 30°   | 6610.8 | 6564.2 | 6393.8 | 6117.9 | 5848.1 | 5683.8  | 5620.3  | 5741.9  | 5846.6  | 6642.2  | 5461.4 |
| 32.5° | 7235.2 | 7168.0 | 6970.8 | 6666.6 | 6312.0 | 6061.3  | 5958.1  | 6033.8  | 6117.1  | 6939.4  | 5636.4 |
| 35°   | 8098.1 | 8017.8 | 7732.7 | 7313.2 | 6912.7 | 6568.0  | 6402.9  | 6458.0  | 6539.0  | 7382.7  | 5889.4 |
| 37.5° | 8686.5 | 8650.6 | 8461.1 | 8066.7 | 7631.1 | 7234.4  | 6979.2  | 7011.3  | 7057.1  | 7936.8  | 6213.4 |
| 40°   | 8681.2 | 8695.7 | 8699.5 | 8703.3 | 8406.8 | 8027.0  | 7752.6  | 7719.0  | 7709.8  | 8545.1  | 6581.8 |
| 42.5° | 8246.3 | 8305.9 | 8498.5 | 8889.1 | 9069.4 | 8895.2  | 8643.7  | 8546.7  | 8498.5  | 9262.0  | 6972.3 |
| 45°   | 7580.7 | 7612.8 | 7973.5 | 8736.2 | 9408.8 | 9755.0  | 9564.7  | 9259.0  | 9171.8  | 9920.8  | 7296.4 |
| 47.5° | 7237.5 | 7272.7 | 7499.6 | 8331.2 | 9404.9 | 10449.7 | 10559.7 | 9977.4  | 9821.5  | 10494.0 | 7576.1 |
| 50°   | 6420.5 | 6493.9 | 6779.7 | 7626.5 | 9061.8 | 10769.1 | 11599.9 | 10833.3 | 10510.8 | 11051.9 | 7856.6 |
| 52.5° | 4920.3 | 5033.4 | 5353.6 | 6467.9 | 8191.3 | 10610.9 | 12432.2 | 11871.2 | 11415.7 | 11629.7 | 8097.3 |
| 55°   | 3103.6 | 3187.7 | 3456.7 | 4568.0 | 6552.7 | 9787.8  | 12747.8 | 12993.9 | 12588.8 | 12176.9 | 8305.9 |
| 57.5° | 1687.5 | 1724.9 | 1825.8 | 2522.0 | 4262.3 | 7968.1  | 12287.7 | 13632.8 | 13464.7 | 12641.6 | 8463.4 |
| 58°   | 1510.2 | 1535.4 | 1598.1 | 2185.8 | 3780.0 | 7470.6  | 12083.7 | 13635.1 | 13551.0 | 12709.6 | 8475.6 |
| 60°   | 1120.4 | 1107.4 | 1051.6 | 1247.3 | 2104.0 | 5161.0  | 10850.1 | 13089.4 | 13336.3 | 12792.9 | 8416.0 |
| 62.5° | 984.4  | 953.0  | 839.2  | 826.2  | 1023.3 | 2377.6  | 8302.1  | 11212.4 | 11795.5 | 12317.5 | 8053.7 |
| 65°   | 924.7  | 891.1  | 744.4  | 697.0  | 738.3  | 1005.8  | 4890.5  | 8409.1  | 9140.5  | 10876.1 | 7127.5 |
| 67.5° | 880.4  | 836.9  | 684.0  | 619.0  | 622.1  | 664.9   | 1960.3  | 5296.3  | 6119.4  | 8257.8  | 5543.9 |
| 70°   | 837.6  | 790.2  | 632.8  | 557.9  | 540.3  | 525.8   | 779.5   | 2651.2  | 3397.9  | 5216.0  | 3534.7 |
| 72.5° | 791.8  | 745.1  | 587.7  | 509.8  | 475.4  | 427.2   | 509.0   | 1084.5  | 1514.8  | 2467.8  | 1603.4 |
| 75°   | 725.3  | 683.2  | 542.6  | 467.0  | 418.0  | 353.9   | 384.4   | 566.3   | 679.4   | 982.8   | 772.7  |
| 77.5° | 643.5  | 609.1  | 492.2  | 431.8  | 370.7  | 287.4   | 295.8   | 392.8   | 435.6   | 562.5   | 459.3  |
| 80°   | 462.4  | 474.6  | 437.9  | 388.2  | 330.2  | 233.1   | 227.0   | 286.6   | 309.5   | 361.5   | 298.8  |
| 82.5° | 324.8  | 331.7  | 362.3  | 317.2  | 272.8  | 183.4   | 167.4   | 201.8   | 215.5   | 237.7   | 161.3  |
| 85°   | 223.9  | 216.3  | 248.4  | 220.9  | 197.2  | 122.3   | 114.6   | 136.8   | 145.2   | 147.5   | 83.3   |
| 87.5° | 134.5  | 134.5  | 143.7  | 118.5  | 106.2  | 63.4    | 61.9    | 78.0    | 83.3    | 79.5    | 45.9   |
| 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°    | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 | 4311.2 |
| 2.5°  | 4322.6 | 4268.4 | 4153.0 | 4060.5 | 3943.6 | 3822.0 | 3754.0 | 3681.4 | 3631.7 | 3595.8 | 3653.1 |
| 5°    | 4355.5 | 4244.7 | 4006.2 | 3780.0 | 3530.1 | 3270.3 | 3073.1 | 2889.7 | 2762.0 | 2682.5 | 2757.4 |
| 7.5°  | 4407.5 | 4237.0 | 3857.2 | 3470.5 | 3021.9 | 2589.3 | 2202.6 | 1960.3 | 1818.9 | 1749.4 | 1792.9 |
| 10°   | 4467.1 | 4224.8 | 3682.2 | 3050.9 | 2408.9 | 1864.0 | 1575.1 | 1477.3 | 1445.2 | 1432.2 | 1438.3 |
| 12.5° | 4516.8 | 4198.8 | 3467.4 | 2543.4 | 1809.0 | 1472.0 | 1388.7 | 1386.4 | 1393.2 | 1394.8 | 1397.1 |
| 15°   | 4551.9 | 4160.6 | 3148.7 | 2014.6 | 1446.7 | 1341.3 | 1336.7 | 1350.4 | 1363.4 | 1368.8 | 1371.8 |
| 17.5° | 4575.6 | 4081.9 | 2788.8 | 1592.7 | 1296.2 | 1277.8 | 1288.5 | 1306.1 | 1319.9 | 1323.7 | 1326.7 |
| 20°   | 4573.3 | 3966.5 | 2360.0 | 1328.3 | 1214.4 | 1214.4 | 1232.7 | 1246.5 | 1247.3 | 1242.7 | 1245.0 |
| 22.5° | 4549.6 | 3808.3 | 1944.3 | 1187.7 | 1141.8 | 1154.8 | 1173.1 | 1160.1 | 1106.6 | 1071.5 | 1073.8 |
| 25°   | 4509.9 | 3619.5 | 1588.1 | 1098.2 | 1074.5 | 1097.5 | 1092.1 | 994.3  | 917.9  | 883.5  | 883.5  |
| 27.5° | 4474.7 | 3396.4 | 1314.5 | 1020.3 | 1007.3 | 1035.6 | 940.8  | 852.1  | 820.0  | 804.0  | 798.6  |
| 30°   | 4449.5 | 3155.6 | 1131.9 | 945.4  | 943.9  | 923.2  | 816.2  | 791.8  | 786.4  | 773.4  | 768.8  |
| 32.5° | 4455.6 | 2911.8 | 1014.9 | 879.7  | 885.0  | 790.2  | 756.6  | 762.0  | 757.4  | 743.6  | 737.5  |
| 35°   | 4506.1 | 2680.2 | 938.5  | 820.0  | 804.0  | 713.8  | 721.5  | 731.4  | 729.9  | 710.8  | 704.6  |
| 37.5° | 4596.2 | 2460.9 | 888.1  | 770.4  | 701.6  | 675.6  | 687.8  | 703.1  | 699.3  | 686.3  | 681.7  |
| 40°   | 4691.0 | 2254.6 | 846.8  | 731.4  | 641.2  | 649.6  | 660.3  | 668.7  | 672.5  | 676.4  | 673.3  |
| 42.5° | 4783.5 | 2039.0 | 796.4  | 691.7  | 616.0  | 625.2  | 629.7  | 638.2  | 658.8  | 673.3  | 672.5  |
| 45°   | 4838.5 | 1836.5 | 744.4  | 635.1  | 596.1  | 601.5  | 598.4  | 615.2  | 640.4  | 664.1  | 664.9  |
| 47.5° | 4899.6 | 1679.1 | 703.1  | 583.1  | 577.0  | 580.8  | 571.7  | 588.5  | 611.4  | 640.4  | 643.5  |
| 50°   | 4973.8 | 1585.1 | 670.3  | 541.9  | 551.0  | 551.0  | 548.7  | 564.0  | 596.1  | 629.7  | 635.9  |
| 52.5° | 5057.8 | 1566.7 | 642.7  | 512.1  | 525.0  | 524.3  | 526.6  | 549.5  | 584.7  | 617.5  | 622.9  |
| 55°   | 5160.3 | 1616.4 | 612.9  | 489.9  | 499.8  | 502.9  | 510.5  | 536.5  | 566.3  | 603.8  | 606.1  |
| 57.5° | 5279.5 | 1717.3 | 589.2  | 472.3  | 476.9  | 486.8  | 499.1  | 522.8  | 554.8  | 596.1  | 598.4  |
| 58°   | 5299.4 | 1738.7 | 585.4  | 470.8  | 472.3  | 483.8  | 497.5  | 520.5  | 552.6  | 597.6  | 599.9  |
| 60°   | 5300.1 | 1809.8 | 577.0  | 463.9  | 454.7  | 473.8  | 489.1  | 512.1  | 548.7  | 603.0  | 608.3  |
| 62.5° | 5112.1 | 1809.0 | 570.9  | 454.0  | 436.4  | 460.1  | 477.7  | 504.4  | 544.9  | 616.0  | 626.7  |
| 65°   | 4501.5 | 1643.9 | 541.9  | 438.7  | 421.9  | 447.9  | 467.7  | 499.1  | 555.6  | 672.5  | 679.4  |
| 67.5° | 3520.9 | 1347.4 | 487.6  | 417.3  | 402.8  | 435.6  | 461.6  | 498.3  | 567.1  | 685.5  | 690.1  |
| 70°   | 2327.9 | 1008.1 | 428.0  | 392.8  | 382.9  | 421.1  | 464.7  | 524.3  | 554.1  | 658.0  | 645.8  |
| 72.5° | 1208.3 | 707.7  | 379.8  | 362.3  | 360.0  | 408.1  | 509.0  | 521.2  | 541.1  | 619.0  | 603.8  |
| 75°   | 634.3  | 491.4  | 337.8  | 328.6  | 332.5  | 405.1  | 600.7  | 507.5  | 524.3  | 592.3  | 621.3  |
| 77.5° | 388.2  | 396.6  | 301.9  | 298.1  | 305.7  | 395.9  | 599.9  | 489.9  | 499.8  | 544.9  | 577.0  |
| 80°   | 259.8  | 321.8  | 274.4  | 275.1  | 280.5  | 362.3  | 538.8  | 462.4  | 470.0  | 515.1  | 548.0  |
| 82.5° | 164.3  | 190.3  | 249.1  | 262.1  | 255.3  | 298.8  | 457.8  | 421.1  | 431.8  | 589.2  | 622.9  |
| 85°   | 83.3   | 119.2  | 216.3  | 252.2  | 230.0  | 209.4  | 371.4  | 369.1  | 374.5  | 424.9  | 444.0  |
| 87.5° | 38.2   | 65.7   | 168.9  | 220.1  | 173.5  | 130.7  | 269.8  | 273.6  | 295.0  | 301.9  | 301.9  |
| 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)