

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: P317556

Luminaire Tested: **GLEON-SA2B-827-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P317556
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA2B-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8954 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

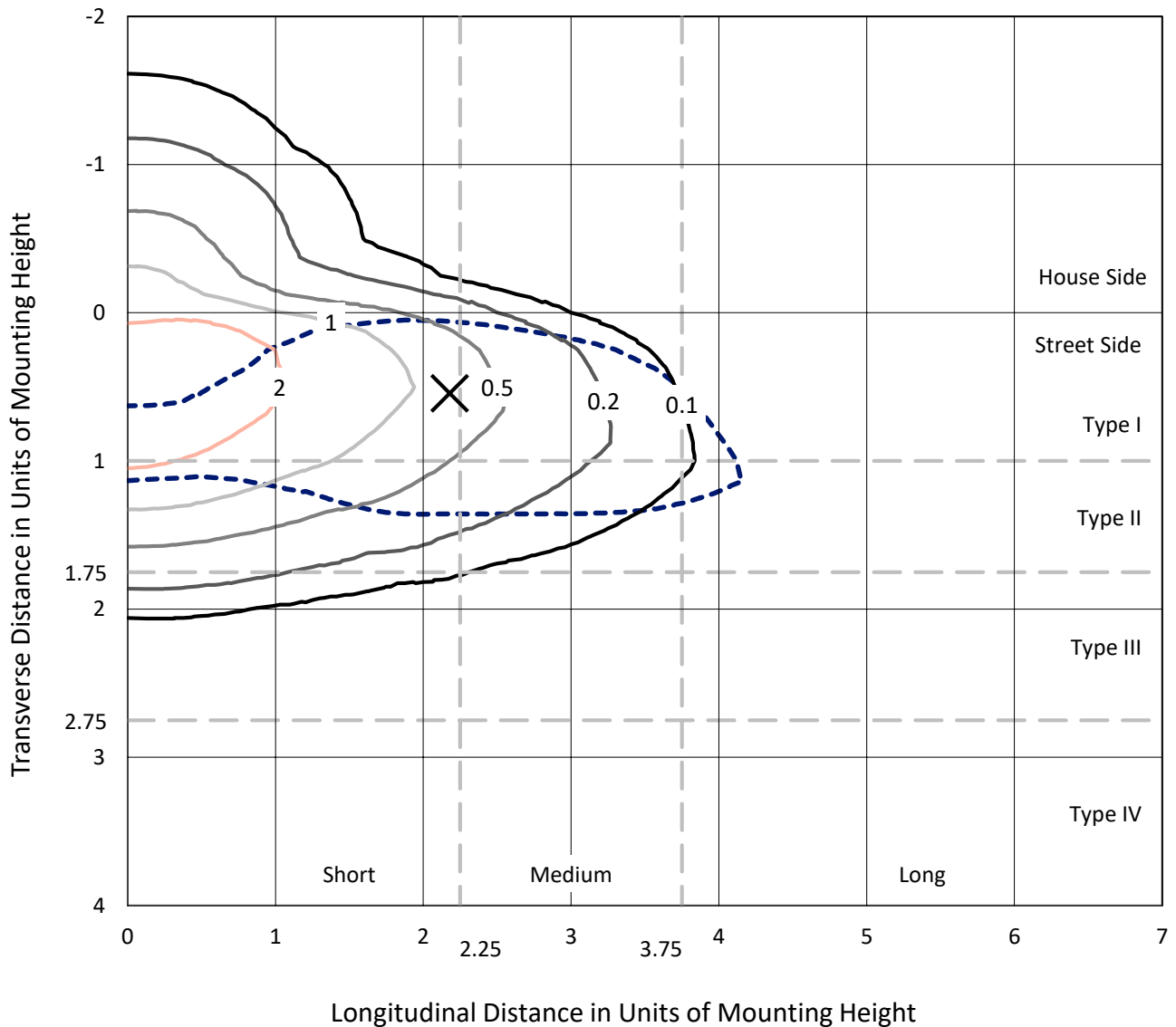
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

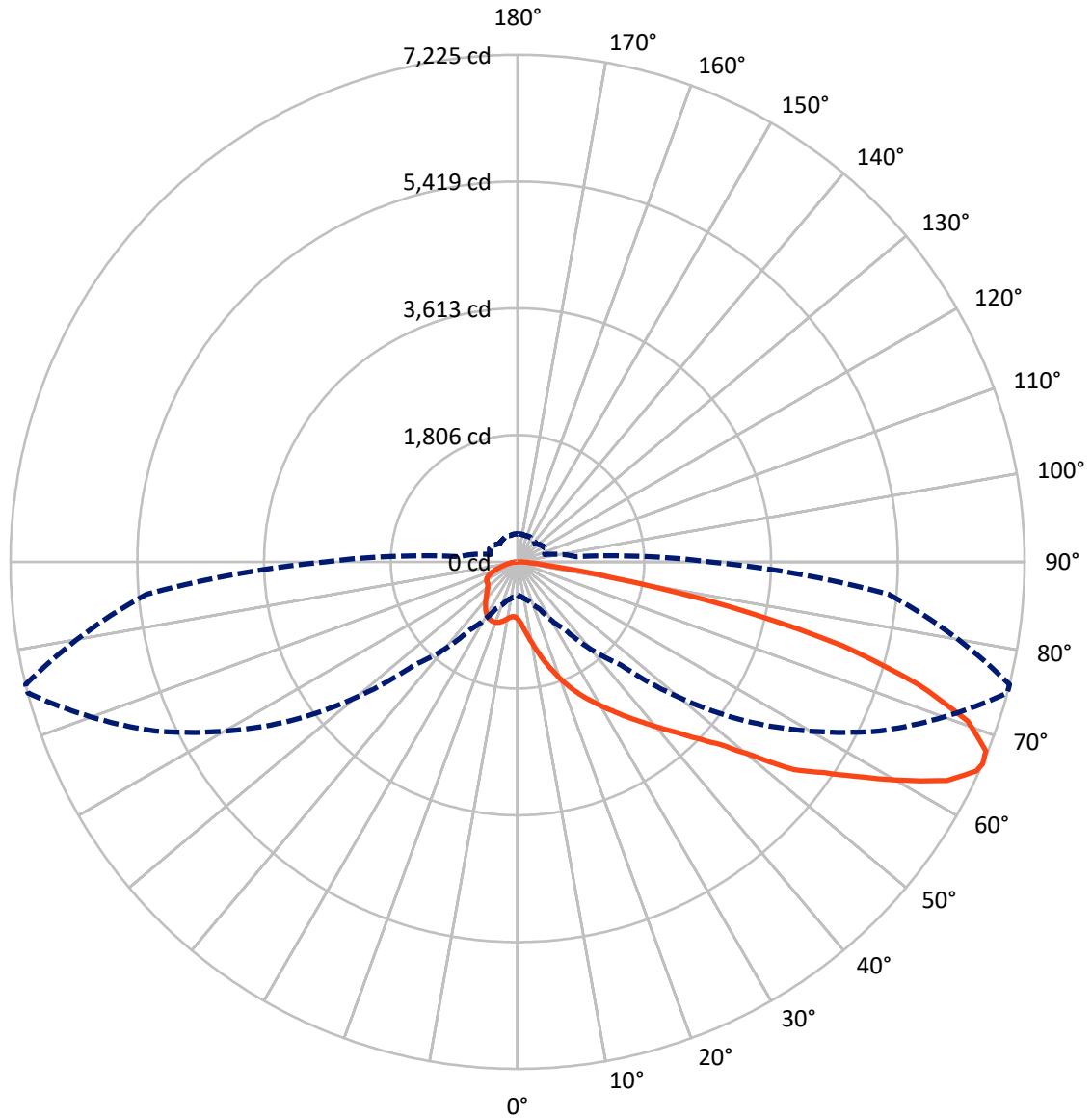
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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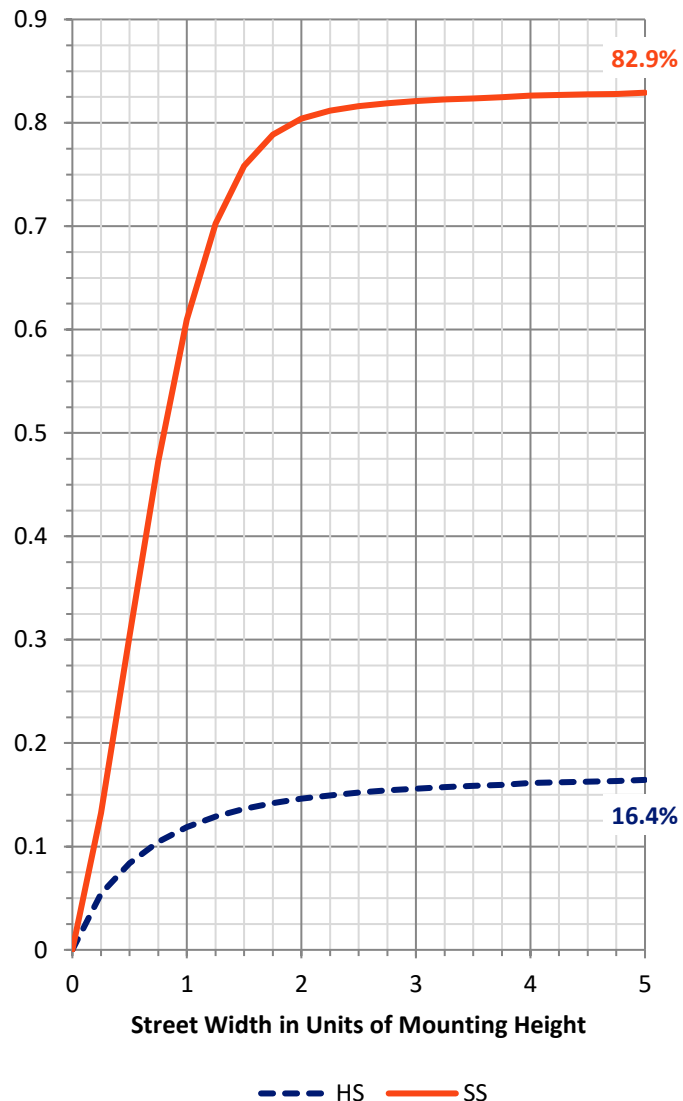
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1506.6 | 0.0 | 1506.6 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 7447.4 | 0.0 | 7447.4 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 8954.0 | 0.0 | 8954.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 98.9 | 1.1 |
| 10°-20° | 390.5 | 4.4 |
| 20°-30° | 758.8 | 8.5 |
| 30°-40° | 1238.5 | 13.8 |
| 40°-50° | 1692.1 | 18.9 |
| 50°-60° | 1971.0 | 22.0 |
| 60°-70° | 1767.0 | 19.7 |
| 70°-80° | 893.0 | 10.0 |
| 80°-90° | 144.2 | 1.6 |
| 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° | 8954.0 | 100.0 |
| 0°-180° | 8954.0 | 100.0 |

Coefficient of Utilization

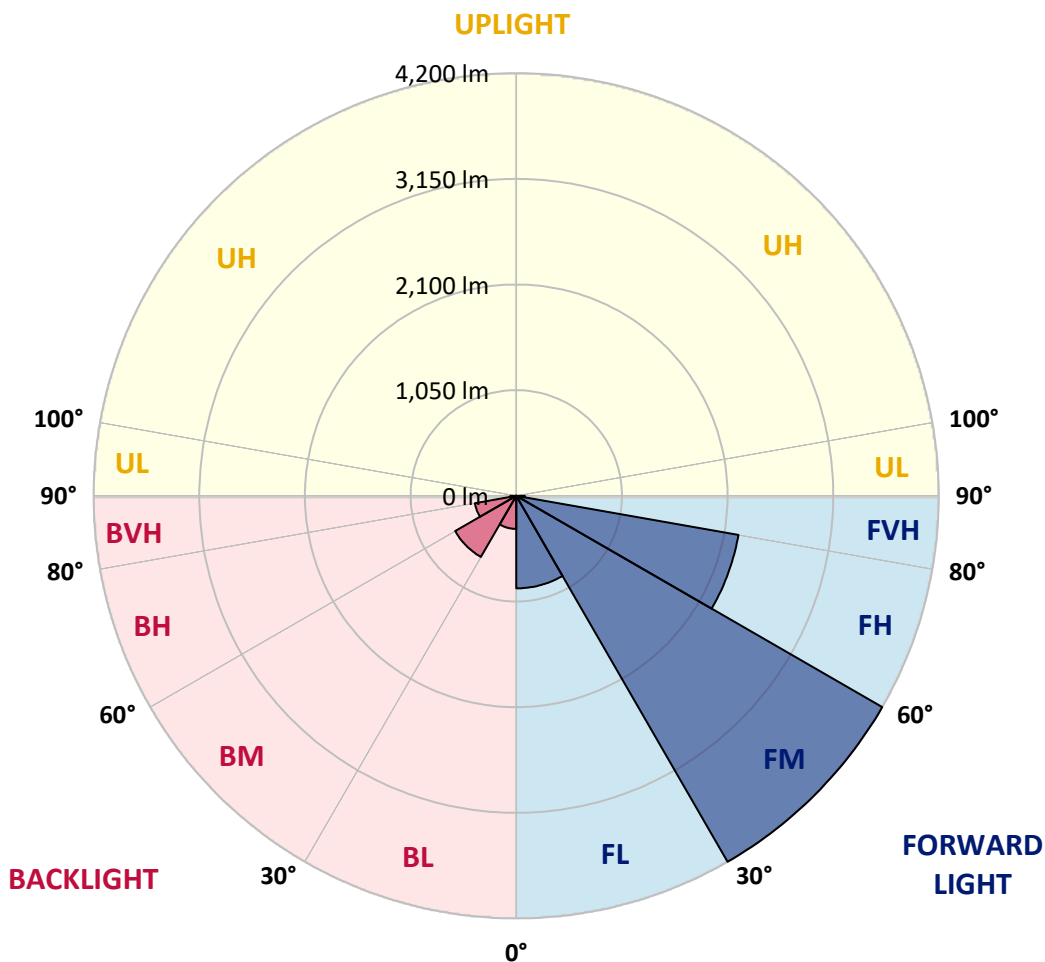


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 919.6 | 10.3 | | | |
| FM (30°-60°) | 4200.0 | 46.9 | | | |
| FH (60°-80°) | 2242.6 | 25.0 | | | G2/5000 |
| FVH (80°-90°) | 85.2 | 1.0 | | | G1/100 |
| BL (0°-30°) | 328.6 | 3.7 | B1/500 | | |
| BM (30°-60°) | 701.6 | 7.8 | B1/1000 | | |
| BH (60°-80°) | 417.4 | 4.7 | B1/500 | | G1/500 |
| BVH (80°-90°) | 59.0 | 0.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 |
| 2.5° | 1085.5 | 1069.1 | 1067.6 | 1043.6 | 1038.1 | 992.2 | 958.4 | 923.2 | 883.1 | 875.2 | 843.5 |
| 5° | 1394.3 | 1392.8 | 1371.9 | 1332.6 | 1301.9 | 1223.5 | 1146.0 | 1063.9 | 973.9 | 959.4 | 888.2 |
| 7.5° | 1672.2 | 1669.8 | 1653.6 | 1611.4 | 1567.0 | 1470.6 | 1360.0 | 1234.2 | 1088.2 | 1066.7 | 948.7 |
| 10° | 1883.1 | 1882.2 | 1876.8 | 1845.8 | 1808.1 | 1715.7 | 1593.5 | 1421.7 | 1221.1 | 1191.6 | 1024.4 |
| 12.5° | 2046.1 | 2047.9 | 2051.6 | 2040.6 | 2022.7 | 1943.9 | 1818.7 | 1620.5 | 1362.7 | 1333.6 | 1108.6 |
| 15° | 2156.4 | 2161.9 | 2180.7 | 2196.2 | 2205.7 | 2157.3 | 2036.0 | 1823.9 | 1521.4 | 1486.5 | 1201.9 |
| 17.5° | 2212.1 | 2218.1 | 2250.7 | 2297.5 | 2340.6 | 2335.8 | 2239.4 | 2017.8 | 1673.7 | 1640.0 | 1302.2 |
| 20° | 2260.1 | 2264.6 | 2301.1 | 2357.4 | 2433.7 | 2467.4 | 2413.3 | 2204.5 | 1840.6 | 1800.5 | 1408.6 |
| 22.5° | 2399.3 | 2405.1 | 2416.0 | 2447.9 | 2515.4 | 2577.4 | 2551.3 | 2381.1 | 1993.5 | 1956.1 | 1509.6 |
| 25° | 2668.0 | 2675.0 | 2651.3 | 2624.2 | 2637.0 | 2680.2 | 2685.0 | 2542.2 | 2148.5 | 2106.3 | 1618.1 |
| 27.5° | 2991.8 | 3001.8 | 2961.4 | 2891.7 | 2831.0 | 2814.2 | 2808.5 | 2674.1 | 2296.6 | 2247.6 | 1725.4 |
| 30° | 3308.8 | 3326.1 | 3273.5 | 3183.3 | 3071.7 | 2993.3 | 2935.2 | 2803.3 | 2442.5 | 2395.7 | 1826.6 |
| 32.5° | 3618.6 | 3611.6 | 3535.3 | 3447.1 | 3316.4 | 3218.2 | 3077.8 | 2941.9 | 2606.6 | 2552.8 | 1927.2 |
| 35° | 3830.7 | 3833.2 | 3762.3 | 3657.8 | 3533.1 | 3457.8 | 3268.7 | 3091.5 | 2774.1 | 2724.6 | 2041.5 |
| 37.5° | 4011.3 | 4000.1 | 3919.8 | 3822.2 | 3714.9 | 3682.7 | 3492.1 | 3256.2 | 2955.6 | 2901.5 | 2163.1 |
| 40° | 4071.5 | 4058.4 | 4005.8 | 3935.6 | 3849.6 | 3846.8 | 3738.6 | 3442.9 | 3160.8 | 3107.3 | 2300.2 |
| 42.5° | 4035.0 | 4018.3 | 3996.7 | 3977.6 | 3951.1 | 3963.3 | 3970.3 | 3661.7 | 3386.3 | 3326.4 | 2458.9 |
| 45° | 3900.3 | 3875.1 | 3890.3 | 3932.0 | 3989.4 | 4058.1 | 4179.4 | 3904.0 | 3638.9 | 3588.8 | 2645.2 |
| 47.5° | 3693.3 | 3670.5 | 3718.0 | 3807.0 | 3963.3 | 4137.1 | 4377.3 | 4171.5 | 3940.5 | 3890.6 | 2910.6 |
| 50° | 3402.1 | 3408.8 | 3476.6 | 3638.6 | 3874.8 | 4173.6 | 4621.1 | 4525.6 | 4378.8 | 4332.3 | 3272.6 |
| 52.5° | 2924.3 | 2925.5 | 3116.4 | 3382.4 | 3718.0 | 4154.8 | 4756.4 | 4978.3 | 4977.3 | 4921.1 | 3617.3 |
| 55° | 2480.5 | 2507.5 | 2658.6 | 3012.1 | 3463.8 | 4079.4 | 4850.9 | 5198.3 | 5370.4 | 5304.4 | 3938.6 |
| 57.5° | 2047.0 | 2062.8 | 2206.0 | 2561.0 | 3101.2 | 3878.5 | 4947.9 | 5462.5 | 5823.3 | 5781.7 | 4338.1 |
| 60° | 1553.9 | 1578.3 | 1726.3 | 2054.3 | 2637.3 | 3521.9 | 4957.0 | 5738.2 | 6364.7 | 6322.8 | 4784.0 |
| 62.5° | 1008.6 | 1050.5 | 1189.2 | 1496.5 | 2076.2 | 3009.1 | 4745.4 | 5918.5 | 6877.8 | 6862.9 | 5179.8 |
| 65° | 579.7 | 611.3 | 707.7 | 944.8 | 1432.3 | 2365.3 | 4242.3 | 5849.2 | 7193.7 | 7185.1 | 5327.8 |
| 66° | 473.6 | 493.4 | 567.2 | 738.4 | 1181.9 | 2077.1 | 3949.9 | 5702.9 | 7225.0 | 7225.3 | 5310.8 |
| 67.5° | 378.8 | 387.6 | 420.7 | 528.6 | 872.1 | 1646.3 | 3427.4 | 5380.4 | 7186.1 | 7196.7 | 5201.1 |
| 70° | 313.4 | 318.0 | 328.3 | 354.4 | 476.0 | 992.8 | 2432.7 | 4542.4 | 6795.4 | 6803.6 | 4772.8 |
| 72.5° | 281.2 | 283.9 | 287.9 | 291.5 | 335.9 | 554.8 | 1485.8 | 3633.8 | 5958.0 | 5968.6 | 4120.1 |
| 75° | 254.7 | 256.3 | 255.6 | 255.9 | 281.8 | 353.5 | 767.8 | 2713.0 | 4817.5 | 4796.2 | 3156.2 |
| 77.5° | 223.7 | 225.2 | 222.2 | 222.8 | 249.3 | 271.8 | 382.1 | 1899.3 | 3251.0 | 3100.9 | 1778.3 |
| 80° | 189.1 | 190.3 | 189.1 | 191.2 | 217.0 | 205.2 | 222.2 | 1068.5 | 1437.5 | 1359.7 | 632.3 |
| 82.5° | 142.9 | 148.0 | 151.7 | 160.2 | 178.7 | 145.9 | 148.6 | 416.1 | 437.7 | 416.8 | 193.9 |
| 85° | 62.6 | 76.3 | 114.3 | 122.5 | 134.4 | 87.5 | 97.6 | 169.6 | 178.1 | 172.7 | 70.5 |
| 87.5° | 16.4 | 17.9 | 56.5 | 71.1 | 74.5 | 39.5 | 50.8 | 77.2 | 81.5 | 77.2 | 23.4 |
| 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° | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 |
| 2.5° | 826.8 | 811.9 | 785.2 | 761.5 | 743.5 | 731.4 | 719.2 | 713.1 | 709.5 | 705.8 | 706.4 |
| 5° | 853.3 | 823.2 | 777.3 | 744.7 | 726.5 | 715.0 | 708.9 | 706.4 | 704.9 | 701.3 | 701.3 |
| 7.5° | 893.1 | 850.5 | 787.3 | 753.9 | 739.6 | 730.8 | 727.1 | 725.9 | 724.1 | 719.8 | 720.4 |
| 10° | 943.2 | 883.7 | 808.3 | 775.8 | 762.7 | 753.0 | 747.8 | 746.0 | 742.6 | 737.8 | 738.4 |
| 12.5° | 1002.2 | 924.7 | 835.9 | 801.9 | 786.1 | 773.0 | 764.5 | 759.3 | 753.6 | 747.2 | 747.5 |
| 15° | 1066.7 | 969.4 | 865.7 | 825.3 | 803.7 | 785.5 | 771.8 | 763.0 | 753.9 | 746.0 | 745.7 |
| 17.5° | 1132.0 | 1012.6 | 888.5 | 838.1 | 808.9 | 784.9 | 766.3 | 752.7 | 741.4 | 731.7 | 730.8 |
| 20° | 1202.5 | 1051.5 | 901.3 | 836.9 | 799.2 | 770.6 | 746.0 | 728.9 | 716.5 | 706.7 | 705.2 |
| 22.5° | 1274.3 | 1087.9 | 903.4 | 824.4 | 777.6 | 742.6 | 716.8 | 697.9 | 685.2 | 675.1 | 671.5 |
| 25° | 1339.9 | 1116.2 | 894.6 | 800.4 | 747.5 | 709.8 | 684.6 | 665.4 | 655.1 | 643.2 | 639.6 |
| 27.5° | 1399.8 | 1136.0 | 877.0 | 769.7 | 713.7 | 676.7 | 652.9 | 636.5 | 625.3 | 616.2 | 613.1 |
| 30° | 1453.6 | 1146.6 | 848.1 | 733.2 | 679.1 | 645.3 | 625.3 | 614.0 | 604.3 | 592.8 | 590.6 |
| 32.5° | 1504.7 | 1146.6 | 811.0 | 693.4 | 644.7 | 617.7 | 605.8 | 598.8 | 587.9 | 576.6 | 573.6 |
| 35° | 1555.8 | 1139.6 | 767.2 | 651.7 | 613.1 | 597.9 | 597.3 | 589.1 | 572.4 | 557.2 | 553.2 |
| 37.5° | 1609.6 | 1125.3 | 718.0 | 612.8 | 587.3 | 589.1 | 594.3 | 576.0 | 552.3 | 530.7 | 525.0 |
| 40° | 1670.4 | 1105.6 | 666.9 | 579.1 | 565.7 | 585.2 | 586.1 | 557.2 | 511.0 | 491.2 | 486.1 |
| 42.5° | 1741.8 | 1085.8 | 619.5 | 549.3 | 548.7 | 573.3 | 570.6 | 516.5 | 488.8 | 478.8 | 476.0 |
| 45° | 1835.7 | 1074.6 | 574.5 | 521.0 | 535.3 | 554.2 | 544.1 | 494.0 | 482.4 | 476.6 | 474.2 |
| 47.5° | 1983.8 | 1080.3 | 533.2 | 498.5 | 521.9 | 535.0 | 494.9 | 484.8 | 476.6 | 469.6 | 467.2 |
| 50° | 2169.2 | 1077.0 | 499.7 | 483.0 | 506.7 | 514.9 | 472.7 | 473.0 | 468.7 | 460.8 | 457.2 |
| 52.5° | 2308.7 | 1050.9 | 478.2 | 474.2 | 493.4 | 479.4 | 458.7 | 461.4 | 459.3 | 447.8 | 443.8 |
| 55° | 2443.4 | 1028.4 | 467.2 | 470.9 | 483.6 | 435.0 | 442.3 | 449.0 | 446.8 | 435.6 | 433.8 |
| 57.5° | 2610.9 | 1024.1 | 460.5 | 471.8 | 475.4 | 412.8 | 426.5 | 435.3 | 433.8 | 428.9 | 428.0 |
| 60° | 2816.1 | 1025.3 | 454.4 | 473.3 | 466.3 | 396.4 | 411.6 | 422.8 | 423.7 | 422.8 | 422.2 |
| 62.5° | 2928.8 | 992.2 | 439.2 | 469.0 | 450.2 | 382.1 | 396.1 | 412.5 | 412.8 | 414.6 | 414.3 |
| 65° | 2833.1 | 893.1 | 411.0 | 454.1 | 423.1 | 370.2 | 382.7 | 400.6 | 396.1 | 404.3 | 404.3 |
| 66° | 2740.1 | 835.9 | 397.0 | 444.4 | 411.6 | 365.7 | 378.5 | 394.6 | 388.8 | 400.0 | 400.0 |
| 67.5° | 2550.1 | 739.6 | 371.8 | 423.7 | 395.2 | 359.3 | 373.6 | 384.5 | 376.6 | 393.3 | 392.1 |
| 70° | 2202.9 | 572.1 | 321.0 | 376.9 | 368.1 | 349.9 | 366.9 | 364.5 | 352.9 | 378.5 | 373.6 |
| 72.5° | 1857.3 | 434.7 | 257.8 | 315.5 | 327.1 | 338.0 | 357.5 | 338.9 | 324.3 | 342.3 | 331.6 |
| 75° | 1441.2 | 326.8 | 203.7 | 245.3 | 276.3 | 319.5 | 346.2 | 309.5 | 288.5 | 286.7 | 280.9 |
| 77.5° | 779.1 | 224.3 | 161.4 | 187.3 | 219.5 | 296.4 | 338.6 | 277.8 | 246.2 | 238.9 | 234.4 |
| 80° | 308.5 | 145.9 | 117.3 | 142.0 | 153.5 | 262.9 | 320.4 | 241.1 | 203.1 | 195.8 | 188.8 |
| 82.5° | 127.4 | 86.3 | 75.7 | 95.1 | 100.0 | 224.9 | 287.6 | 197.6 | 156.9 | 217.0 | 230.4 |
| 85° | 54.7 | 47.4 | 45.0 | 49.2 | 56.5 | 157.8 | 228.9 | 150.8 | 169.3 | 151.1 | 120.1 |
| 87.5° | 16.4 | 20.1 | 19.2 | 18.8 | 20.7 | 37.7 | 121.9 | 83.9 | 124.3 | 47.1 | 35.3 |
| 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)