

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: P451522

Luminaire Tested: **GALN-SA2B-827-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA2B-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6085 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

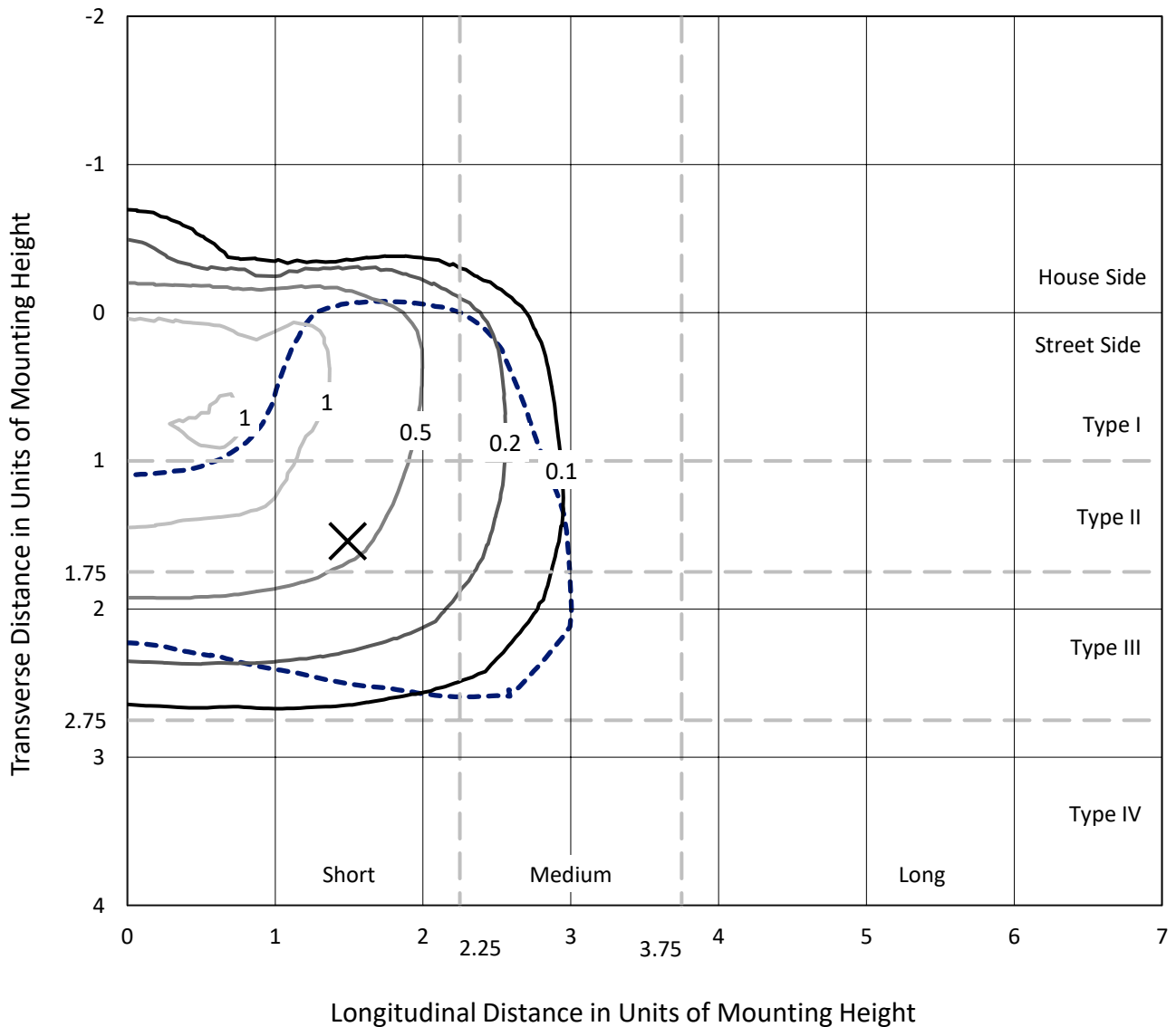
Input Watts (W): 82
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

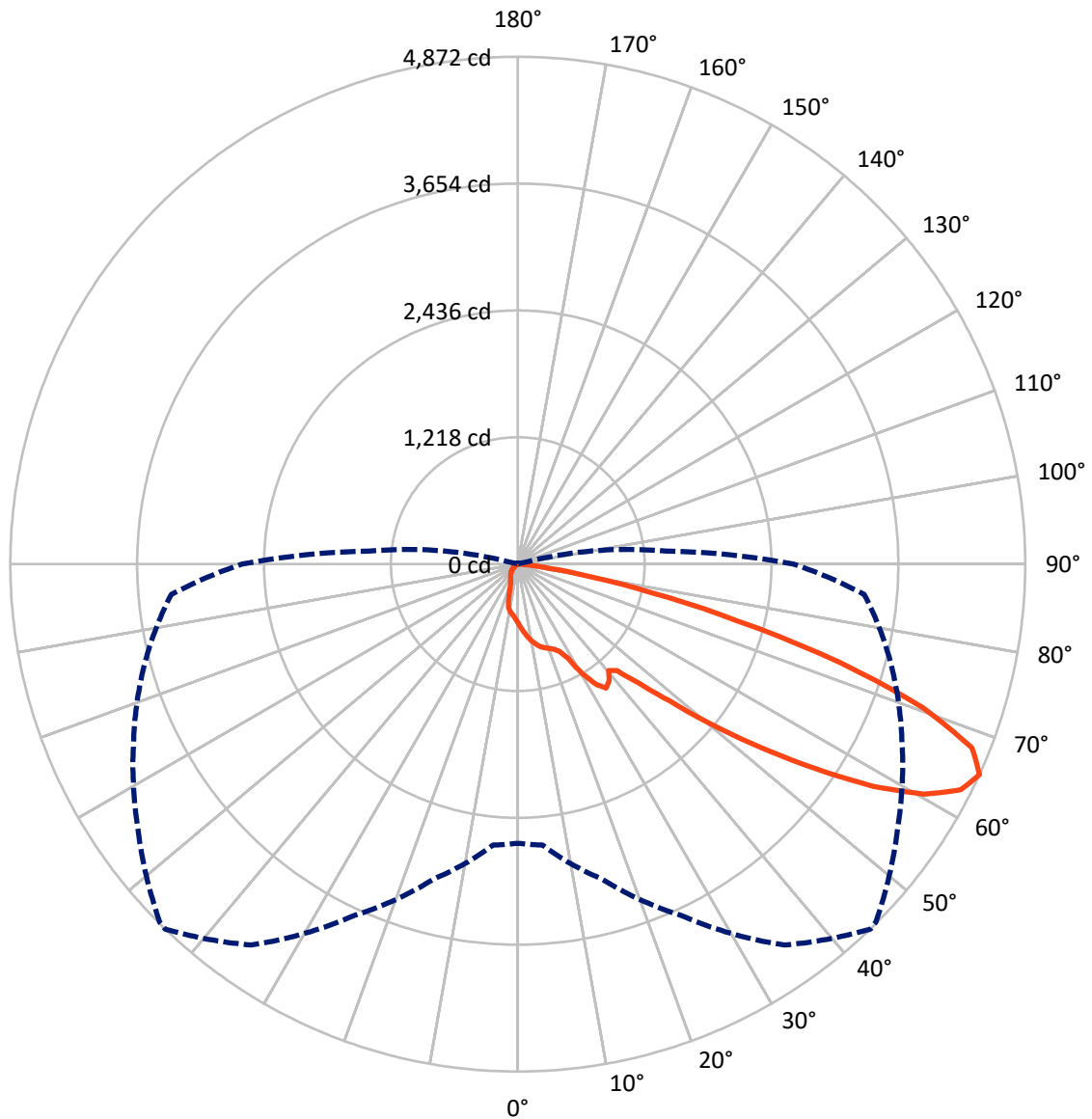
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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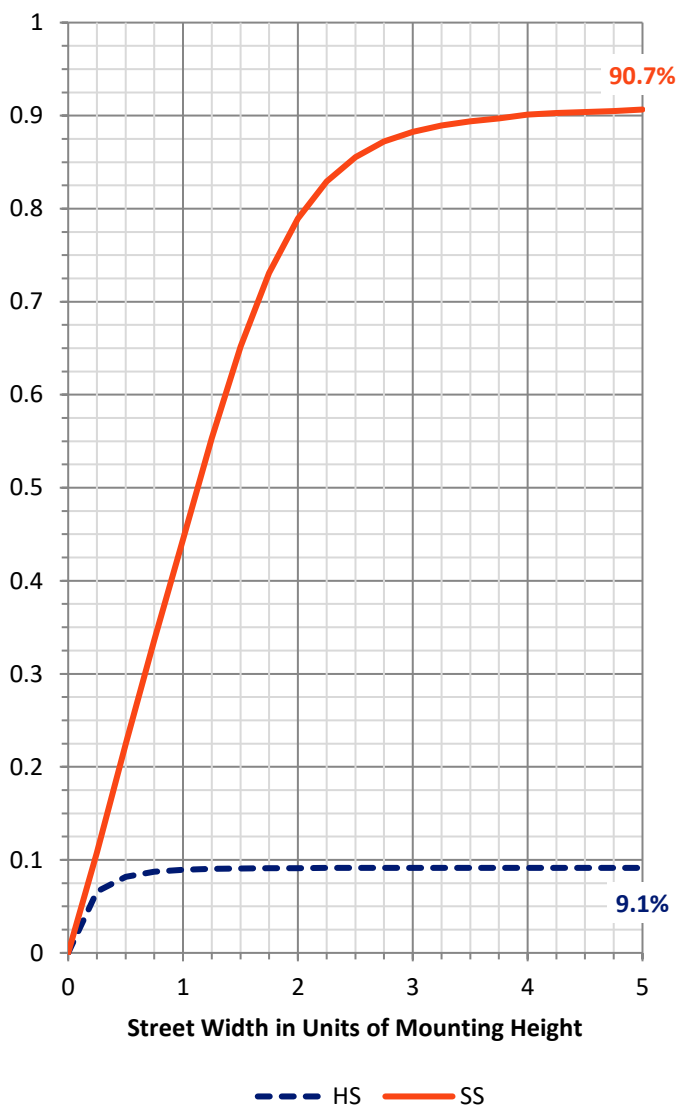
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 560.6 | 0.0 | 560.6 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 5524.4 | 0.0 | 5524.4 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 6085.0 | 0.0 | 6085.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 56.3 | 0.9 |
| 10°-20° | 169.5 | 2.8 |
| 20°-30° | 287.5 | 4.7 |
| 30°-40° | 478.0 | 7.9 |
| 40°-50° | 834.5 | 13.7 |
| 50°-60° | 1630.3 | 26.8 |
| 60°-70° | 1891.6 | 31.1 |
| 70°-80° | 688.8 | 11.3 |
| 80°-90° | 48.5 | 0.8 |
| 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° | 6085.0 | 100.0 |
| 0°-180° | 6085.0 | 100.0 |

Coefficient of Utilization

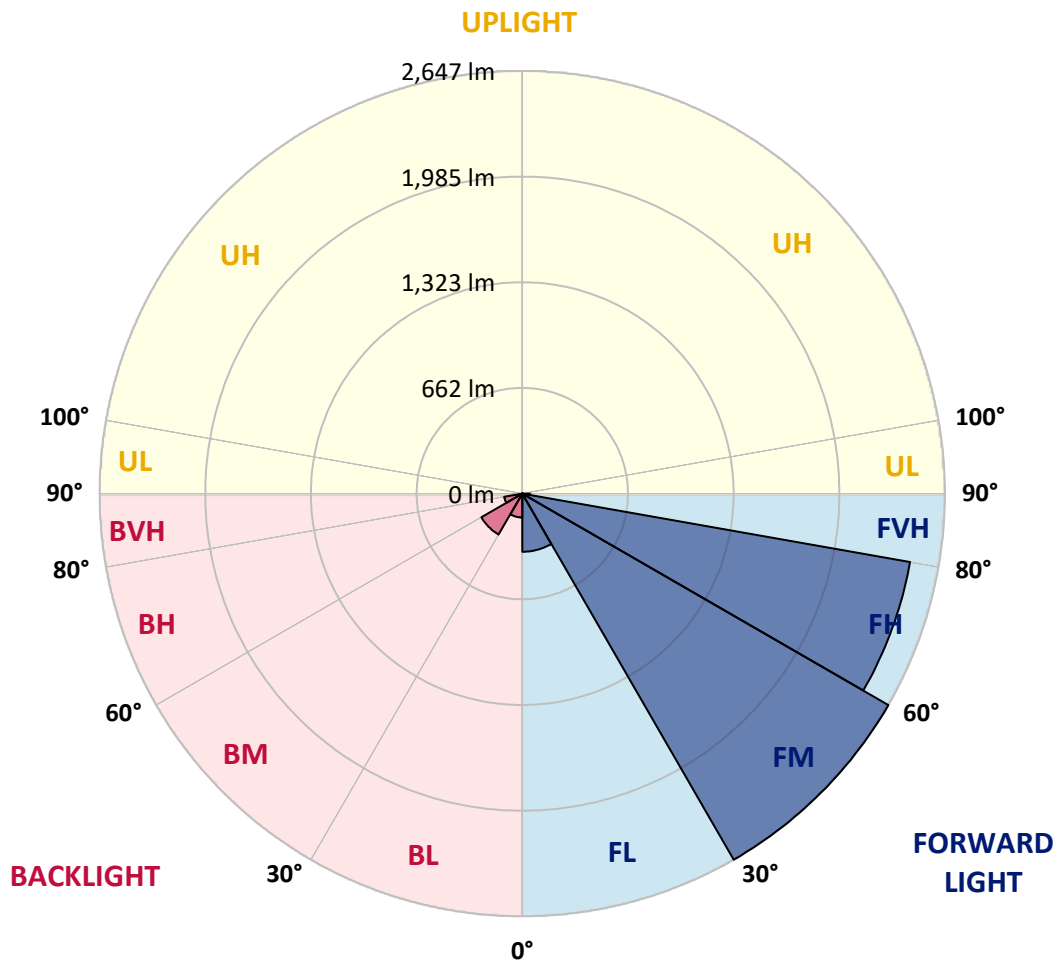


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 363.9 | 6.0 | | | |
| FM (30°-60°) | 2647.0 | 43.5 | | | |
| FH (60°-80°) | 2465.6 | 40.5 | | | G2/5000 |
| FVH (80°-90°) | 47.9 | 0.8 | | | G1/100 |
| BL (0°-30°) | 149.4 | 2.5 | B1/500 | | |
| BM (30°-60°) | 295.8 | 4.9 | B1/1000 | | |
| BH (60°-80°) | 114.8 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.7 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 |
| 2.5° | 637.5 | 634.7 | 633.3 | 625.8 | 620.3 | 613.3 | 613.3 | 604.5 | 594.2 | 583.1 | 572.8 |
| 5° | 708.6 | 704.0 | 697.9 | 691.4 | 678.4 | 659.8 | 659.8 | 641.2 | 619.8 | 600.7 | 579.8 |
| 7.5° | 777.0 | 772.8 | 762.5 | 750.0 | 728.6 | 709.1 | 707.7 | 680.7 | 655.1 | 626.3 | 596.6 |
| 10° | 836.9 | 833.7 | 824.9 | 800.7 | 778.4 | 752.8 | 752.3 | 722.1 | 692.3 | 657.0 | 620.3 |
| 12.5° | 878.8 | 879.3 | 867.6 | 844.4 | 815.6 | 791.4 | 789.5 | 759.8 | 728.6 | 690.5 | 645.4 |
| 15° | 908.5 | 908.5 | 896.5 | 870.4 | 844.4 | 823.0 | 821.1 | 795.1 | 763.0 | 721.6 | 672.8 |
| 17.5° | 916.9 | 919.7 | 906.7 | 883.4 | 862.5 | 843.9 | 843.5 | 821.6 | 796.0 | 756.0 | 700.7 |
| 20° | 913.7 | 916.5 | 906.2 | 888.1 | 873.7 | 863.0 | 861.6 | 852.8 | 829.0 | 791.4 | 730.5 |
| 22.5° | 906.7 | 909.5 | 902.0 | 891.3 | 884.4 | 887.6 | 885.3 | 892.7 | 880.2 | 834.6 | 765.8 |
| 25° | 908.1 | 910.9 | 905.3 | 899.2 | 905.3 | 925.3 | 931.3 | 963.4 | 952.3 | 889.5 | 803.9 |
| 27.5° | 951.8 | 957.4 | 949.5 | 952.3 | 973.6 | 1020.1 | 1031.8 | 1087.1 | 1037.8 | 959.2 | 863.4 |
| 30° | 1049.0 | 1045.2 | 1030.4 | 1043.9 | 1118.3 | 1216.8 | 1213.6 | 1204.7 | 1127.5 | 1039.7 | 934.1 |
| 32.5° | 1137.3 | 1134.1 | 1133.1 | 1191.3 | 1326.1 | 1374.0 | 1371.7 | 1286.1 | 1208.0 | 1131.7 | 1003.9 |
| 35° | 1173.1 | 1160.6 | 1157.8 | 1298.7 | 1524.2 | 1460.9 | 1446.5 | 1319.6 | 1305.6 | 1232.2 | 1075.0 |
| 37.5° | 1281.0 | 1272.2 | 1228.9 | 1316.3 | 1445.1 | 1424.2 | 1413.0 | 1377.2 | 1409.8 | 1321.0 | 1155.4 |
| 40° | 1503.2 | 1478.6 | 1439.5 | 1354.0 | 1333.1 | 1341.9 | 1353.1 | 1451.2 | 1533.0 | 1442.3 | 1262.9 |
| 42.5° | 1779.4 | 1773.9 | 1701.3 | 1541.8 | 1385.1 | 1397.2 | 1411.6 | 1605.5 | 1710.2 | 1625.1 | 1438.1 |
| 45° | 2111.0 | 2118.9 | 2014.2 | 1825.9 | 1620.4 | 1630.6 | 1651.6 | 1833.4 | 1950.1 | 1909.2 | 1713.9 |
| 47.5° | 2412.3 | 2406.2 | 2370.9 | 2175.1 | 1985.4 | 1962.6 | 1996.6 | 2125.8 | 2282.1 | 2288.6 | 2056.1 |
| 50° | 2715.4 | 2747.5 | 2695.0 | 2618.2 | 2477.4 | 2429.5 | 2416.9 | 2480.1 | 2718.2 | 2687.1 | 2467.1 |
| 52.5° | 3151.1 | 3167.8 | 3069.3 | 3049.7 | 3081.8 | 2926.5 | 2914.0 | 2929.3 | 3142.3 | 3035.3 | 2774.9 |
| 55° | 3425.0 | 3415.2 | 3378.5 | 3531.0 | 3657.9 | 3464.0 | 3448.2 | 3386.4 | 3494.2 | 3281.3 | 3071.1 |
| 57.5° | 3511.4 | 3525.4 | 3610.9 | 3886.7 | 4187.0 | 4022.4 | 3993.6 | 3817.9 | 3748.1 | 3510.5 | 3343.6 |
| 60° | 3472.9 | 3498.4 | 3683.0 | 4093.1 | 4509.7 | 4485.1 | 4460.4 | 4165.2 | 3930.4 | 3702.1 | 3534.7 |
| 62.5° | 3198.1 | 3233.9 | 3529.1 | 4056.4 | 4619.0 | 4772.9 | 4742.2 | 4381.9 | 4051.7 | 3795.1 | 3568.2 |
| 65° | 2680.1 | 2706.6 | 3130.6 | 3723.0 | 4463.7 | 4871.5 | 4860.3 | 4449.8 | 4070.8 | 3710.0 | 3338.9 |
| 67.5° | 1910.6 | 2000.8 | 2393.7 | 3137.6 | 4004.3 | 4703.2 | 4722.2 | 4368.4 | 3891.8 | 3342.2 | 2765.2 |
| 70° | 1201.0 | 1262.4 | 1544.2 | 2246.3 | 3210.1 | 4126.1 | 4188.9 | 3995.9 | 3377.5 | 2605.2 | 1851.0 |
| 72.5° | 572.8 | 618.4 | 819.3 | 1421.9 | 2265.8 | 3246.4 | 3296.2 | 3280.4 | 2611.7 | 1641.3 | 955.0 |
| 75° | 255.3 | 272.5 | 391.0 | 725.8 | 1462.8 | 2182.1 | 2310.9 | 2332.3 | 1632.0 | 803.0 | 371.5 |
| 77.5° | 130.2 | 130.7 | 183.2 | 351.5 | 730.5 | 1301.9 | 1327.5 | 1402.3 | 884.8 | 353.8 | 129.3 |
| 80° | 69.3 | 73.9 | 97.2 | 166.0 | 378.9 | 641.2 | 637.9 | 701.2 | 392.4 | 173.4 | 43.2 |
| 82.5° | 31.2 | 34.4 | 54.9 | 86.9 | 185.1 | 243.2 | 262.2 | 286.9 | 168.3 | 110.7 | 19.1 |
| 85° | 9.3 | 11.2 | 27.0 | 43.7 | 67.0 | 70.2 | 78.6 | 101.4 | 95.3 | 78.6 | 9.8 |
| 87.5° | 1.4 | 1.4 | 11.2 | 12.1 | 9.8 | 12.6 | 13.0 | 14.4 | 30.7 | 28.8 | 5.1 |
| 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° | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 | 566.3 |
| 2.5° | 567.3 | 564.0 | 552.4 | 542.6 | 534.2 | 529.1 | 523.1 | 519.4 | 517.5 | 516.1 | 516.6 |
| 5° | 569.6 | 561.7 | 541.7 | 525.9 | 513.8 | 500.8 | 491.9 | 486.8 | 484.5 | 480.8 | 480.8 |
| 7.5° | 582.6 | 570.1 | 542.2 | 518.0 | 497.1 | 479.4 | 462.6 | 456.6 | 452.4 | 451.5 | 450.6 |
| 10° | 601.2 | 585.4 | 547.3 | 513.8 | 484.0 | 459.9 | 436.1 | 415.2 | 398.9 | 389.2 | 387.8 |
| 12.5° | 624.5 | 601.7 | 555.2 | 511.0 | 472.9 | 430.1 | 367.3 | 325.0 | 296.7 | 287.8 | 289.2 |
| 15° | 645.8 | 621.2 | 563.1 | 508.7 | 452.4 | 356.6 | 285.5 | 237.1 | 222.7 | 221.3 | 221.8 |
| 17.5° | 671.4 | 642.1 | 572.4 | 505.4 | 396.2 | 272.5 | 212.0 | 199.0 | 201.8 | 206.4 | 206.0 |
| 20° | 697.9 | 664.4 | 583.5 | 485.9 | 316.2 | 205.1 | 187.4 | 188.8 | 193.0 | 197.1 | 198.1 |
| 22.5° | 726.3 | 690.0 | 596.6 | 438.9 | 241.3 | 178.5 | 177.6 | 179.5 | 183.7 | 188.3 | 189.2 |
| 25° | 765.3 | 722.1 | 606.3 | 377.6 | 182.7 | 165.1 | 166.9 | 170.2 | 173.9 | 179.0 | 179.9 |
| 27.5° | 815.6 | 765.3 | 611.4 | 297.6 | 158.1 | 153.0 | 153.4 | 158.1 | 162.7 | 167.4 | 167.4 |
| 30° | 880.7 | 817.0 | 601.2 | 225.0 | 146.0 | 141.4 | 139.5 | 142.3 | 148.3 | 153.0 | 153.4 |
| 32.5° | 938.8 | 865.8 | 574.2 | 172.0 | 137.2 | 130.7 | 126.0 | 126.5 | 128.8 | 131.6 | 132.1 |
| 35° | 996.9 | 913.2 | 528.2 | 144.6 | 127.9 | 120.4 | 113.5 | 109.7 | 107.9 | 106.5 | 107.9 |
| 37.5° | 1071.3 | 972.2 | 466.8 | 131.6 | 120.0 | 110.7 | 100.9 | 93.0 | 86.5 | 82.3 | 83.2 |
| 40° | 1167.1 | 1054.1 | 394.3 | 123.2 | 112.5 | 101.4 | 88.3 | 78.1 | 67.0 | 63.2 | 61.4 |
| 42.5° | 1325.2 | 1178.2 | 318.0 | 116.2 | 105.1 | 91.6 | 75.3 | 61.4 | 51.1 | 47.4 | 48.4 |
| 45° | 1574.8 | 1334.9 | 245.0 | 108.8 | 97.6 | 80.9 | 63.2 | 48.4 | 40.0 | 38.1 | 39.1 |
| 47.5° | 1905.9 | 1537.7 | 188.8 | 100.4 | 88.3 | 69.3 | 49.8 | 38.1 | 33.0 | 32.5 | 32.1 |
| 50° | 2217.4 | 1726.4 | 157.6 | 91.1 | 77.2 | 57.7 | 40.9 | 32.1 | 28.8 | 28.4 | 28.4 |
| 52.5° | 2499.2 | 1861.7 | 128.3 | 80.4 | 65.1 | 47.4 | 34.4 | 28.4 | 25.6 | 24.2 | 24.2 |
| 55° | 2749.8 | 1950.1 | 104.2 | 67.4 | 51.1 | 37.7 | 29.8 | 25.6 | 22.3 | 20.5 | 20.0 |
| 57.5° | 2939.1 | 1960.8 | 78.1 | 53.9 | 38.1 | 29.3 | 25.6 | 22.3 | 18.6 | 16.3 | 15.3 |
| 60° | 3020.0 | 1868.2 | 57.7 | 40.9 | 28.4 | 23.2 | 20.5 | 18.1 | 13.9 | 11.6 | 11.2 |
| 62.5° | 2938.6 | 1688.3 | 42.8 | 31.2 | 21.9 | 17.2 | 14.4 | 13.5 | 9.8 | 7.0 | 6.5 |
| 65° | 2647.1 | 1428.4 | 33.9 | 23.7 | 16.3 | 12.6 | 9.3 | 8.8 | 6.0 | 3.3 | 2.8 |
| 67.5° | 2120.7 | 1118.7 | 27.0 | 17.7 | 11.6 | 8.4 | 6.0 | 5.6 | 3.3 | 0.9 | 0.9 |
| 70° | 1379.1 | 715.1 | 21.9 | 13.0 | 7.4 | 5.6 | 3.7 | 2.8 | 1.9 | 0.5 | 0.0 |
| 72.5° | 682.1 | 334.3 | 17.7 | 10.2 | 5.1 | 2.8 | 1.4 | 0.9 | 1.4 | 0.0 | 0.0 |
| 75° | 264.6 | 119.0 | 13.0 | 7.0 | 2.8 | 1.4 | 0.9 | 0.0 | 0.5 | 0.0 | 0.0 |
| 77.5° | 87.9 | 39.5 | 7.9 | 3.7 | 1.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 32.5 | 15.3 | 4.2 | 2.3 | 0.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 13.0 | 6.0 | 2.8 | 1.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 6.5 | 3.7 | 1.9 | 1.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.6 | 2.8 | 1.9 | 1.4 | 0.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)