

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: P450507

Luminaire Tested: **GALN-SA1B-740-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P450507
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-SA1B-740-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4165 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

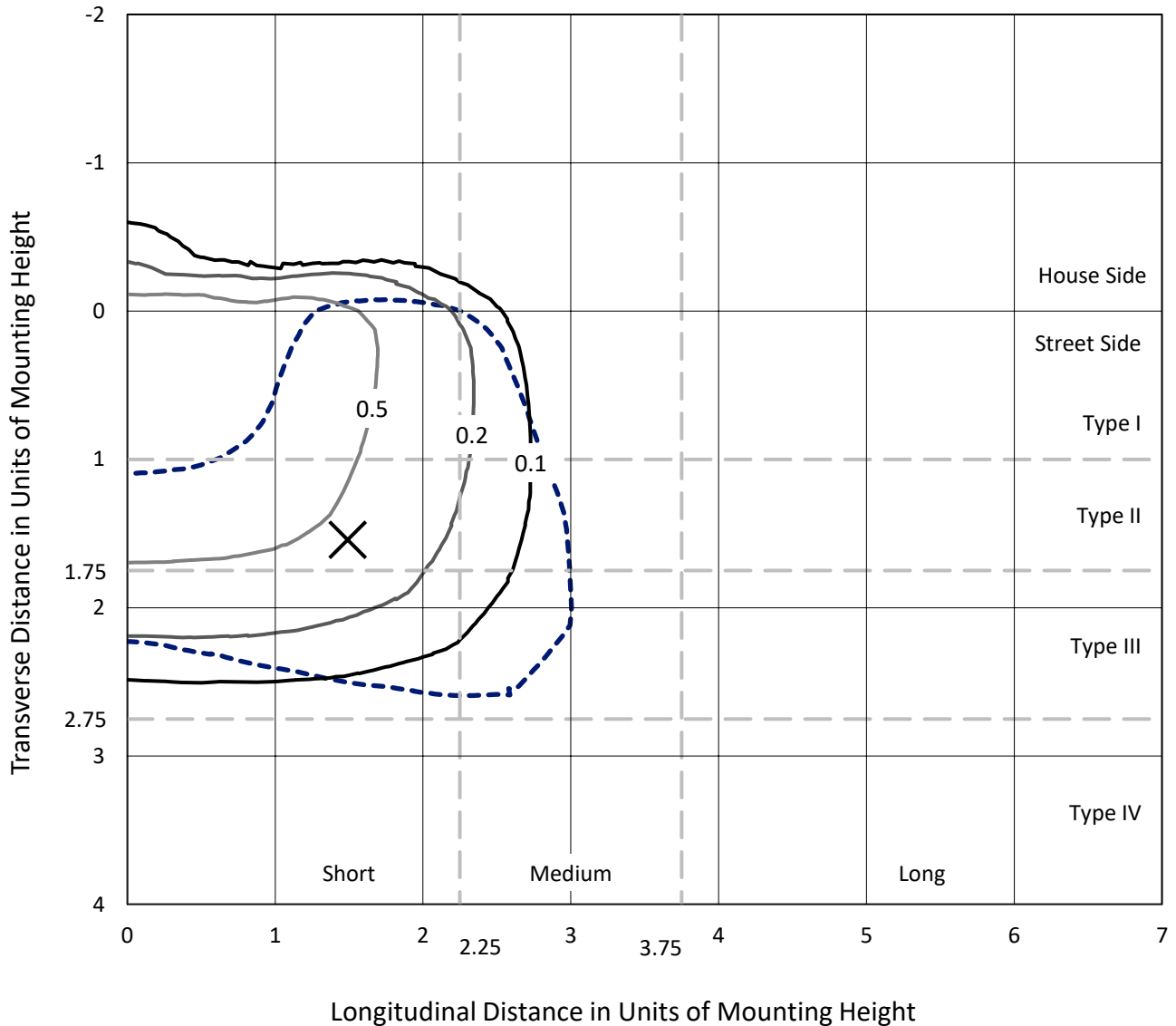
Input Watts (W): 44
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

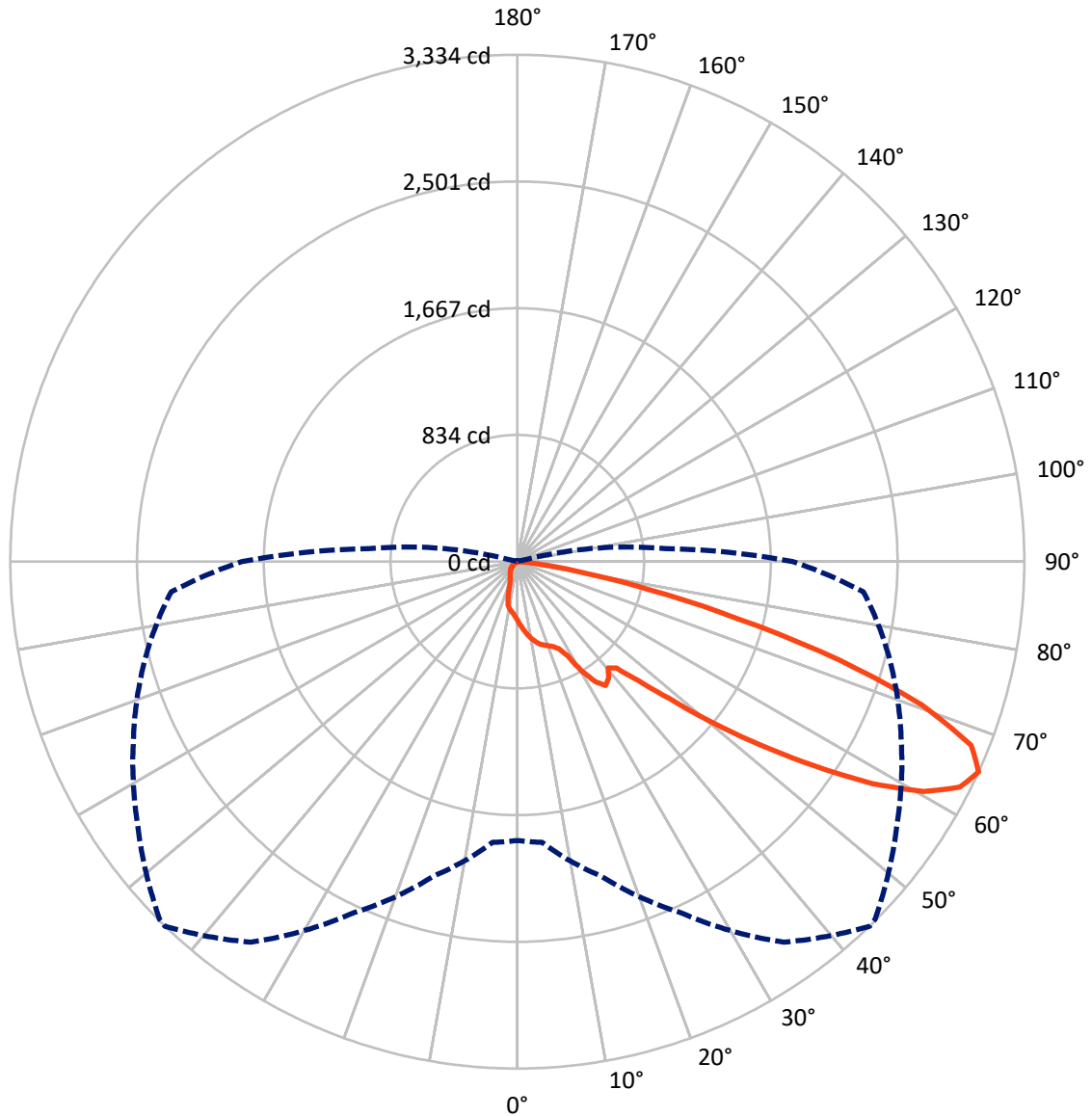
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 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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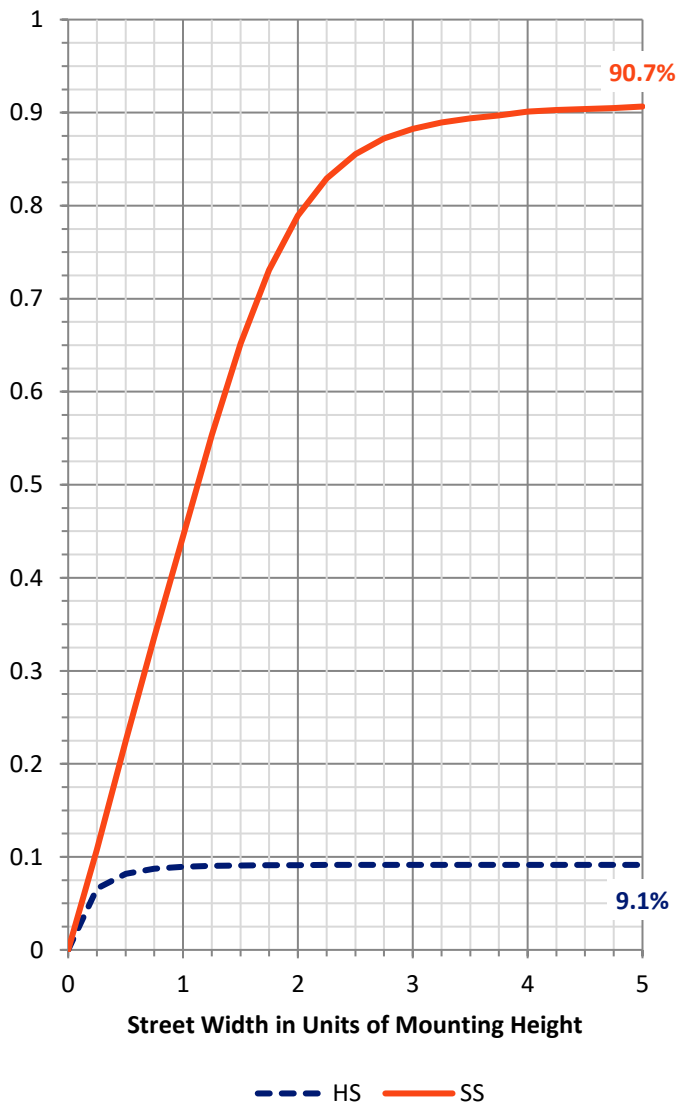
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 383.7 | 0.0 | 383.7 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 3781.3 | 0.0 | 3781.3 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 4165.0 | 0.0 | 4165.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.6 | 0.9 |
| 10°-20° | 116.0 | 2.8 |
| 20°-30° | 196.8 | 4.7 |
| 30°-40° | 327.1 | 7.9 |
| 40°-50° | 571.2 | 13.7 |
| 50°-60° | 1115.9 | 26.8 |
| 60°-70° | 1294.7 | 31.1 |
| 70°-80° | 471.5 | 11.3 |
| 80°-90° | 33.2 | 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° | 4165.0 | 100.0 |
| 0°-180° | 4165.0 | 100.0 |



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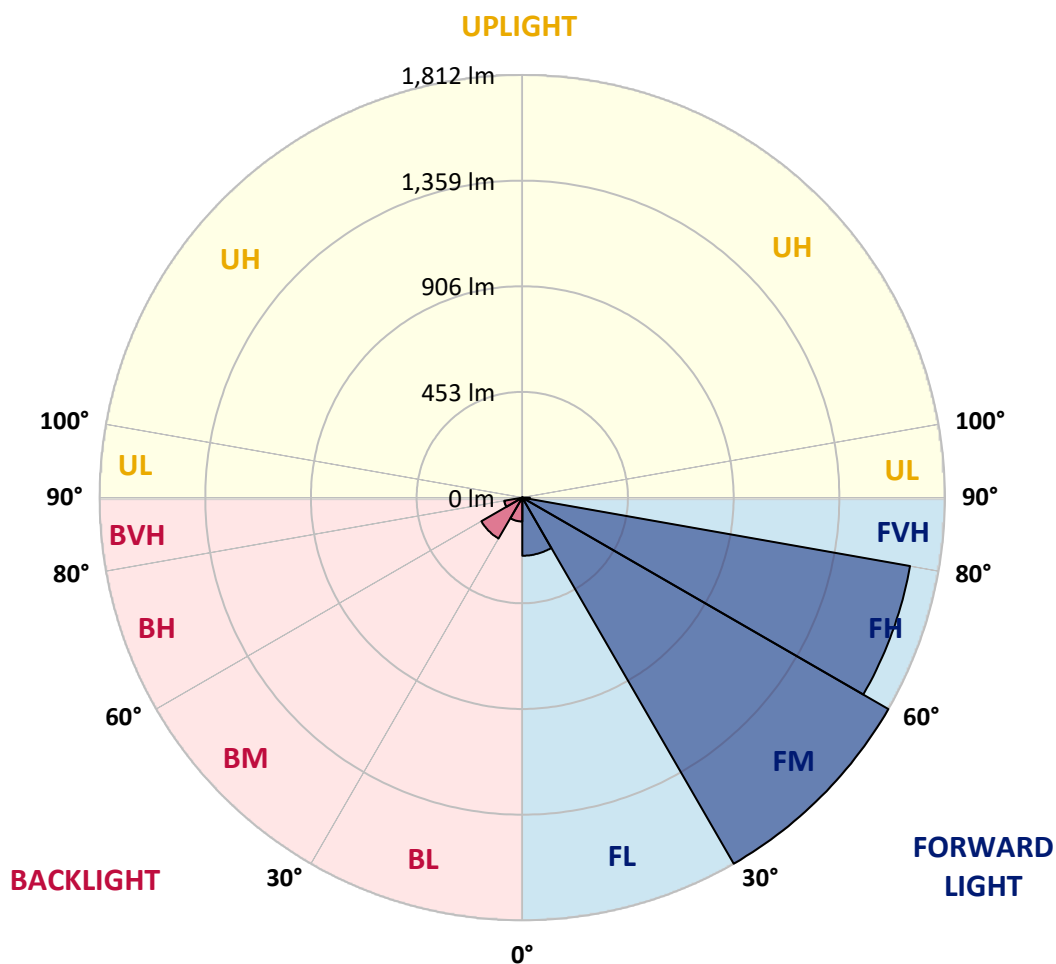
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 249.1 | 6.0 | | | |
| FM (30°-60°) | 1811.8 | 43.5 | | | |
| FH (60°-80°) | 1687.6 | 40.5 | | | G1/1800 |
| FVH (80°-90°) | 32.8 | 0.8 | | | G1/100 |
| BL (0°-30°) | 102.2 | 2.5 | B0/110 | | |
| BM (30°-60°) | 202.5 | 4.9 | B0/220 | | |
| BH (60°-80°) | 78.6 | 1.9 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.5 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 |
| 2.5° | 436.3 | 434.4 | 433.5 | 428.4 | 424.6 | 419.8 | 419.8 | 413.7 | 406.7 | 399.1 | 392.1 |
| 5° | 485.0 | 481.8 | 477.7 | 473.2 | 464.3 | 451.6 | 451.6 | 438.9 | 424.2 | 411.2 | 396.9 |
| 7.5° | 531.8 | 528.9 | 521.9 | 513.3 | 498.7 | 485.3 | 484.4 | 465.9 | 448.4 | 428.7 | 408.3 |
| 10° | 572.9 | 570.6 | 564.6 | 548.0 | 532.8 | 515.3 | 514.9 | 494.3 | 473.9 | 449.7 | 424.6 |
| 12.5° | 601.5 | 601.8 | 593.9 | 578.0 | 558.2 | 541.7 | 540.4 | 520.0 | 498.7 | 472.6 | 441.7 |
| 15° | 621.9 | 621.9 | 613.6 | 595.8 | 578.0 | 563.3 | 562.0 | 544.2 | 522.3 | 493.9 | 460.5 |
| 17.5° | 627.6 | 629.5 | 620.6 | 604.7 | 590.4 | 577.6 | 577.3 | 562.4 | 544.9 | 517.5 | 479.6 |
| 20° | 625.4 | 627.3 | 620.3 | 607.9 | 598.0 | 590.7 | 589.7 | 583.7 | 567.5 | 541.7 | 500.0 |
| 22.5° | 620.6 | 622.5 | 617.4 | 610.1 | 605.3 | 607.6 | 606.0 | 611.1 | 602.5 | 571.3 | 524.2 |
| 25° | 621.6 | 623.5 | 619.6 | 615.5 | 619.6 | 633.3 | 637.5 | 659.4 | 651.8 | 608.8 | 550.3 |
| 27.5° | 651.5 | 655.3 | 649.9 | 651.8 | 666.4 | 698.3 | 706.2 | 744.1 | 710.4 | 656.6 | 591.0 |
| 30° | 718.0 | 715.4 | 705.3 | 714.5 | 765.4 | 832.9 | 830.7 | 824.6 | 771.8 | 711.6 | 639.4 |
| 32.5° | 778.5 | 776.2 | 775.6 | 815.4 | 907.7 | 940.5 | 938.9 | 880.3 | 826.8 | 774.6 | 687.1 |
| 35° | 803.0 | 794.4 | 792.5 | 888.9 | 1043.2 | 1000.0 | 990.1 | 903.2 | 893.7 | 843.4 | 735.8 |
| 37.5° | 876.8 | 870.8 | 841.2 | 901.0 | 989.1 | 974.8 | 967.2 | 942.7 | 965.0 | 904.2 | 790.9 |
| 40° | 1028.9 | 1012.1 | 985.3 | 926.8 | 912.4 | 918.5 | 926.1 | 993.3 | 1049.3 | 987.2 | 864.4 |
| 42.5° | 1218.0 | 1214.2 | 1164.5 | 1055.3 | 948.1 | 956.4 | 966.2 | 1098.9 | 1170.6 | 1112.3 | 984.4 |
| 45° | 1444.9 | 1450.3 | 1378.7 | 1249.8 | 1109.1 | 1116.1 | 1130.4 | 1254.9 | 1334.8 | 1306.8 | 1173.1 |
| 47.5° | 1651.1 | 1647.0 | 1622.8 | 1488.8 | 1359.0 | 1343.4 | 1366.6 | 1455.1 | 1562.0 | 1566.5 | 1407.3 |
| 50° | 1858.6 | 1880.6 | 1844.6 | 1792.1 | 1695.7 | 1662.9 | 1654.3 | 1697.6 | 1860.5 | 1839.2 | 1688.7 |
| 52.5° | 2156.8 | 2168.3 | 2100.8 | 2087.4 | 2109.4 | 2003.1 | 1994.5 | 2005.0 | 2150.8 | 2077.6 | 1899.4 |
| 55° | 2344.3 | 2337.6 | 2312.5 | 2416.8 | 2503.7 | 2371.0 | 2360.2 | 2317.9 | 2391.7 | 2245.9 | 2102.1 |
| 57.5° | 2403.5 | 2413.0 | 2471.6 | 2660.3 | 2865.9 | 2753.2 | 2733.5 | 2613.2 | 2565.5 | 2402.8 | 2288.6 |
| 60° | 2377.1 | 2394.6 | 2520.9 | 2801.6 | 3086.8 | 3069.9 | 3053.0 | 2850.9 | 2690.2 | 2534.0 | 2419.4 |
| 62.5° | 2189.0 | 2213.5 | 2415.6 | 2776.5 | 3161.6 | 3266.9 | 3245.9 | 2999.3 | 2773.3 | 2597.6 | 2442.3 |
| 65° | 1834.4 | 1852.6 | 2142.8 | 2548.3 | 3055.3 | 3334.4 | 3326.7 | 3045.7 | 2786.3 | 2539.4 | 2285.4 |
| 67.5° | 1307.7 | 1369.5 | 1638.4 | 2147.6 | 2740.8 | 3219.2 | 3232.2 | 2990.0 | 2663.8 | 2287.6 | 1892.7 |
| 70° | 822.1 | 864.1 | 1056.9 | 1537.5 | 2197.2 | 2824.2 | 2867.2 | 2735.1 | 2311.8 | 1783.2 | 1267.0 |
| 72.5° | 392.1 | 423.3 | 560.8 | 973.2 | 1550.9 | 2222.1 | 2256.1 | 2245.3 | 1787.7 | 1123.4 | 653.7 |
| 75° | 174.7 | 186.5 | 267.7 | 496.8 | 1001.2 | 1493.6 | 1581.7 | 1596.4 | 1117.1 | 549.6 | 254.3 |
| 77.5° | 89.1 | 89.4 | 125.4 | 240.6 | 500.0 | 891.1 | 908.6 | 959.9 | 605.6 | 242.2 | 88.5 |
| 80° | 47.4 | 50.6 | 66.5 | 113.6 | 259.4 | 438.9 | 436.6 | 479.9 | 268.6 | 118.7 | 29.6 |
| 82.5° | 21.3 | 23.6 | 37.6 | 59.5 | 126.7 | 166.4 | 179.5 | 196.4 | 115.2 | 75.7 | 13.0 |
| 85° | 6.4 | 7.6 | 18.5 | 29.9 | 45.8 | 48.1 | 53.8 | 69.4 | 65.2 | 53.8 | 6.7 |
| 87.5° | 1.0 | 1.0 | 7.6 | 8.3 | 6.7 | 8.6 | 8.9 | 9.9 | 21.0 | 19.7 | 3.5 |
| 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° | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 | 387.6 |
| 2.5° | 388.3 | 386.0 | 378.1 | 371.4 | 365.7 | 362.2 | 358.0 | 355.5 | 354.2 | 353.3 | 353.6 |
| 5° | 389.9 | 384.5 | 370.8 | 359.9 | 351.7 | 342.8 | 336.7 | 333.2 | 331.6 | 329.1 | 329.1 |
| 7.5° | 398.8 | 390.2 | 371.1 | 354.5 | 340.2 | 328.1 | 316.7 | 312.5 | 309.7 | 309.0 | 308.4 |
| 10° | 411.5 | 400.7 | 374.6 | 351.7 | 331.3 | 314.8 | 298.5 | 284.2 | 273.1 | 266.4 | 265.4 |
| 12.5° | 427.4 | 411.8 | 380.0 | 349.8 | 323.7 | 294.4 | 251.4 | 222.5 | 203.0 | 197.0 | 198.0 |
| 15° | 442.1 | 425.2 | 385.4 | 348.2 | 309.7 | 244.1 | 195.4 | 162.3 | 152.4 | 151.5 | 151.8 |
| 17.5° | 459.6 | 439.5 | 391.8 | 345.9 | 271.2 | 186.5 | 145.1 | 136.2 | 138.1 | 141.3 | 141.0 |
| 20° | 477.7 | 454.8 | 399.4 | 332.6 | 216.4 | 140.4 | 128.3 | 129.2 | 132.1 | 134.9 | 135.6 |
| 22.5° | 497.1 | 472.3 | 408.3 | 300.4 | 165.2 | 122.2 | 121.6 | 122.8 | 125.7 | 128.9 | 129.5 |
| 25° | 523.9 | 494.3 | 415.0 | 258.4 | 125.1 | 113.0 | 114.3 | 116.5 | 119.0 | 122.5 | 123.2 |
| 27.5° | 558.2 | 523.9 | 418.5 | 203.7 | 108.2 | 104.7 | 105.0 | 108.2 | 111.4 | 114.6 | 114.6 |
| 30° | 602.8 | 559.2 | 411.5 | 154.0 | 99.9 | 96.8 | 95.5 | 97.4 | 101.5 | 104.7 | 105.0 |
| 32.5° | 642.6 | 592.6 | 393.0 | 117.8 | 93.9 | 89.4 | 86.2 | 86.6 | 88.2 | 90.1 | 90.4 |
| 35° | 682.3 | 625.1 | 361.5 | 99.0 | 87.5 | 82.4 | 77.7 | 75.1 | 73.8 | 72.9 | 73.8 |
| 37.5° | 733.3 | 665.5 | 319.5 | 90.1 | 82.1 | 75.7 | 69.1 | 63.7 | 59.2 | 56.3 | 57.0 |
| 40° | 798.8 | 721.5 | 269.9 | 84.3 | 77.0 | 69.4 | 60.5 | 53.5 | 45.8 | 43.3 | 42.0 |
| 42.5° | 907.0 | 806.5 | 217.7 | 79.6 | 71.9 | 62.7 | 51.6 | 42.0 | 35.0 | 32.5 | 33.1 |
| 45° | 1077.9 | 913.7 | 167.7 | 74.5 | 66.8 | 55.4 | 43.3 | 33.1 | 27.4 | 26.1 | 26.7 |
| 47.5° | 1304.5 | 1052.5 | 129.2 | 68.7 | 60.5 | 47.4 | 34.1 | 26.1 | 22.6 | 22.3 | 22.0 |
| 50° | 1517.8 | 1181.7 | 107.9 | 62.4 | 52.8 | 39.5 | 28.0 | 22.0 | 19.7 | 19.4 | 19.4 |
| 52.5° | 1710.6 | 1274.3 | 87.8 | 55.1 | 44.6 | 32.5 | 23.6 | 19.4 | 17.5 | 16.5 | 16.5 |
| 55° | 1882.2 | 1334.8 | 71.3 | 46.1 | 35.0 | 25.8 | 20.4 | 17.5 | 15.3 | 14.0 | 13.7 |
| 57.5° | 2011.7 | 1342.1 | 53.5 | 36.9 | 26.1 | 20.1 | 17.5 | 15.3 | 12.7 | 11.1 | 10.5 |
| 60° | 2067.1 | 1278.8 | 39.5 | 28.0 | 19.4 | 15.9 | 14.0 | 12.4 | 9.5 | 8.0 | 7.6 |
| 62.5° | 2011.4 | 1155.6 | 29.3 | 21.3 | 15.0 | 11.8 | 9.9 | 9.2 | 6.7 | 4.8 | 4.5 |
| 65° | 1811.8 | 977.7 | 23.2 | 16.2 | 11.1 | 8.6 | 6.4 | 6.0 | 4.1 | 2.2 | 1.9 |
| 67.5° | 1451.6 | 765.7 | 18.5 | 12.1 | 8.0 | 5.7 | 4.1 | 3.8 | 2.2 | 0.6 | 0.6 |
| 70° | 944.0 | 489.5 | 15.0 | 8.9 | 5.1 | 3.8 | 2.5 | 1.9 | 1.3 | 0.3 | 0.0 |
| 72.5° | 466.9 | 228.8 | 12.1 | 7.0 | 3.5 | 1.9 | 1.0 | 0.6 | 1.0 | 0.0 | 0.0 |
| 75° | 181.1 | 81.5 | 8.9 | 4.8 | 1.9 | 1.0 | 0.6 | 0.0 | 0.3 | 0.0 | 0.0 |
| 77.5° | 60.2 | 27.1 | 5.4 | 2.5 | 1.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 22.3 | 10.5 | 2.9 | 1.6 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 8.9 | 4.1 | 1.9 | 1.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 4.5 | 2.5 | 1.3 | 1.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.2 | 1.9 | 1.3 | 1.0 | 0.6 | 0.3 | 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)