

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: STREETWORKS

Report Number: P397756

Luminaire Tested: **ARCH-S-PA1-40-727-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-727-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3661 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 40
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: 28.75 FT

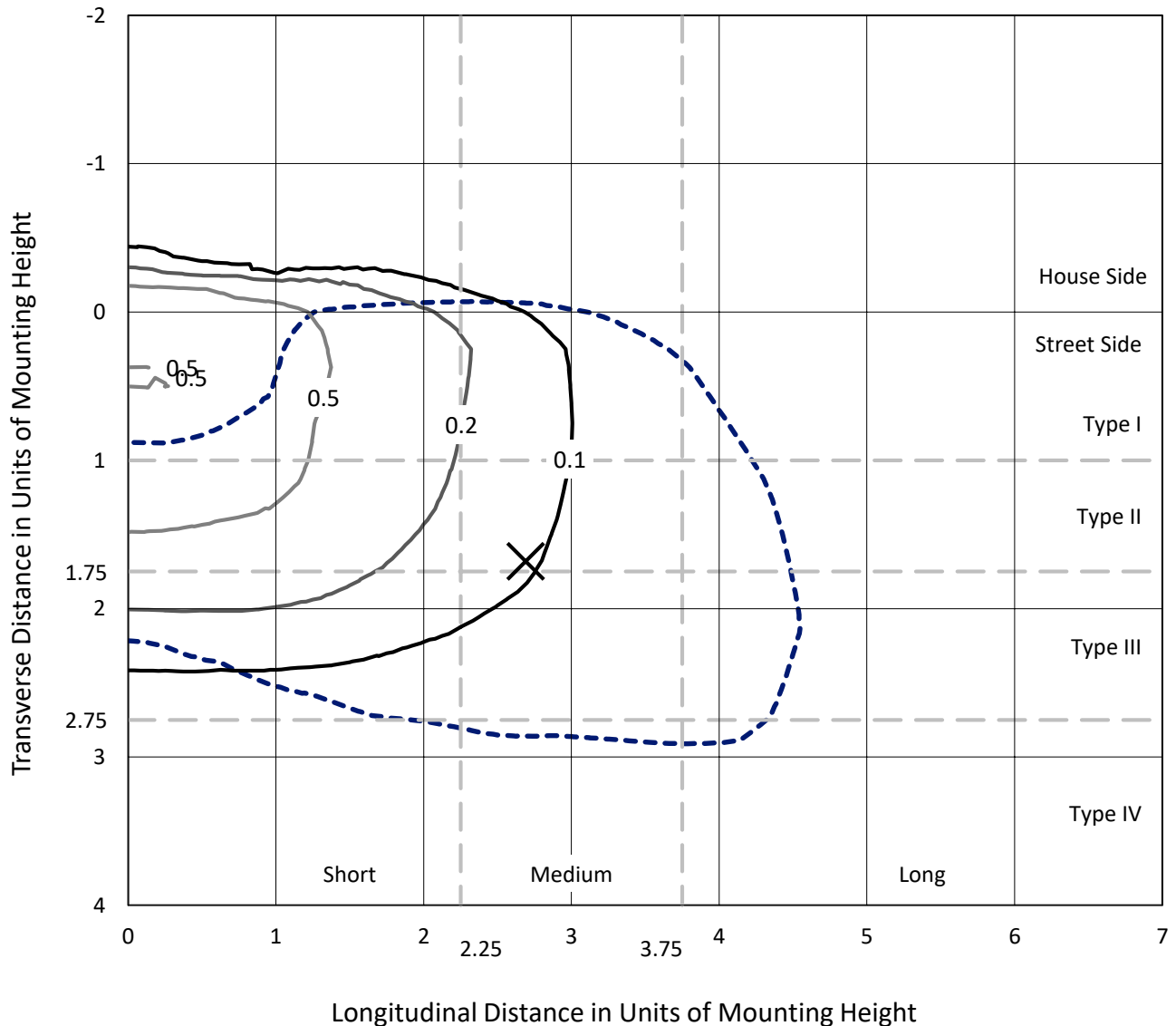


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

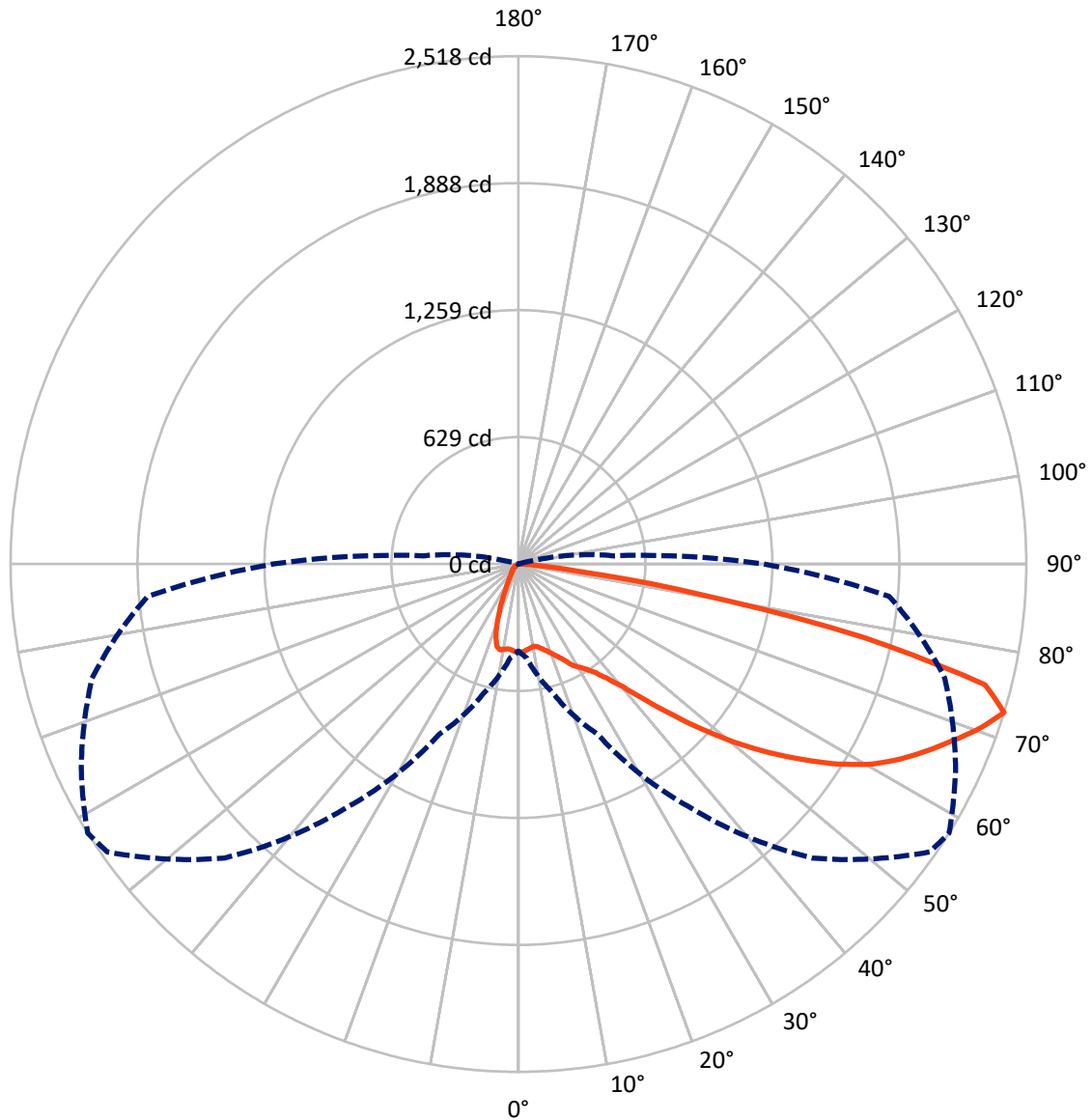


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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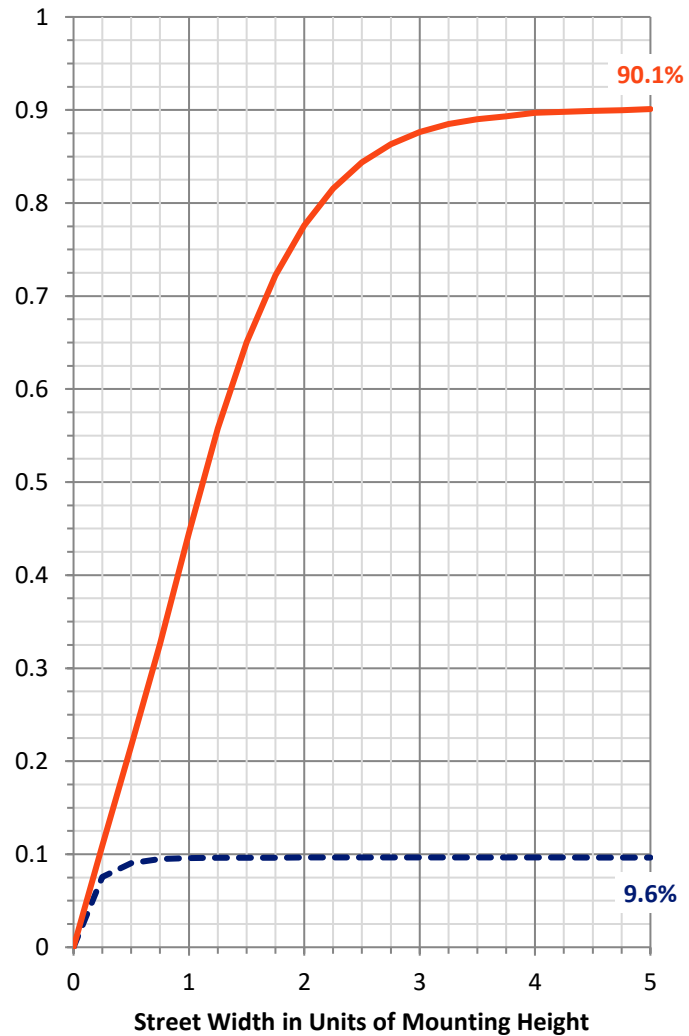
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 356.0 | 0.0 | 356.0 |
| | % Fixture | 9.7 | 0.0 | 9.7 |
| Street Side | Lumens | 3305.0 | 0.0 | 3305.0 |
| | % Fixture | 90.3 | 0.0 | 90.3 |
| Total | Lumens | 3661.0 | 0.0 | 3661.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 40.3 | 1.1 |
| 10°-20° | 105.0 | 2.9 |
| 20°-30° | 165.0 | 4.5 |
| 30°-40° | 284.5 | 7.8 |
| 40°-50° | 541.3 | 14.8 |
| 50°-60° | 857.2 | 23.4 |
| 60°-70° | 1000.2 | 27.3 |
| 70°-80° | 626.5 | 17.1 |
| 80°-90° | 41.1 | 1.1 |
| 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° | 3661.0 | 100.0 |
| 0°-180° | 3661.0 | 100.0 |



--- HS — SS

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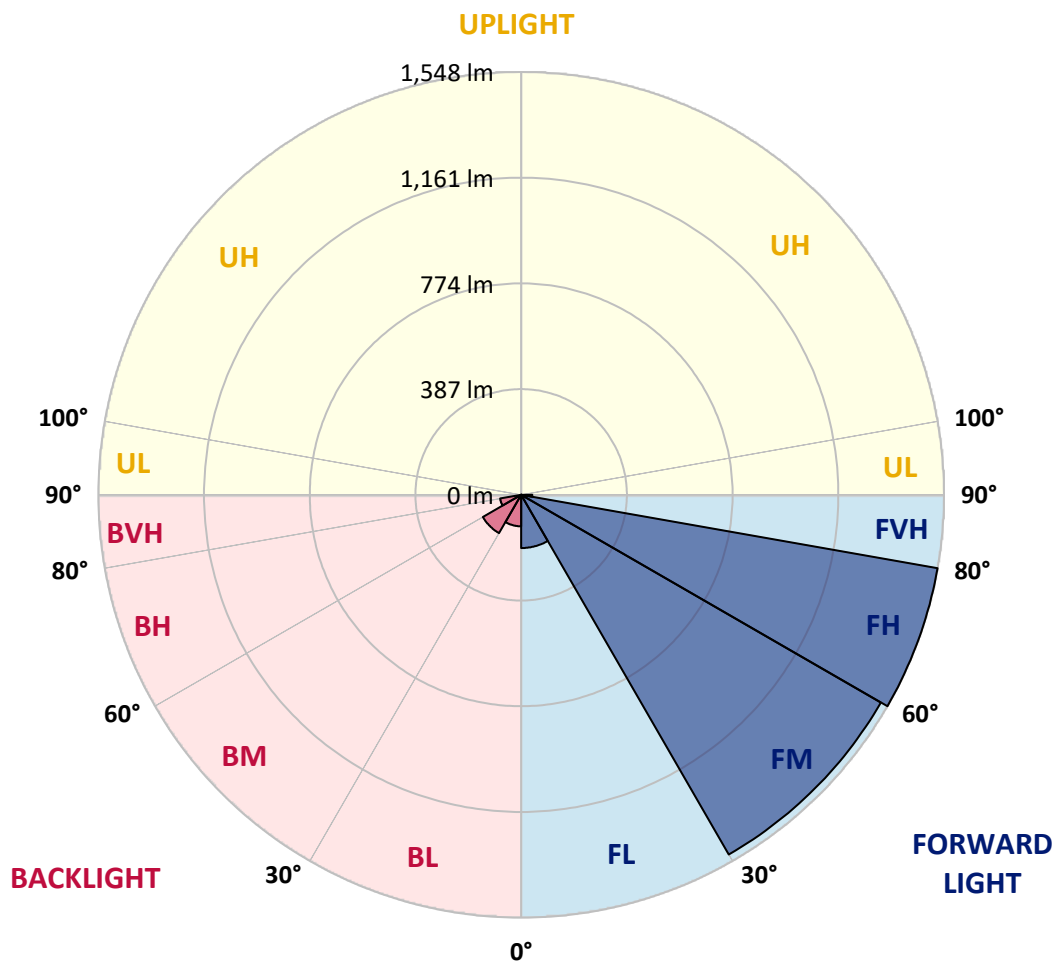
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 195.0 | 5.3 | | | |
| FM | (30°-60°) | 1520.9 | 41.5 | | | |
| FH | (60°-80°) | 1548.3 | 42.3 | | | G1/1800 |
| FVH | (80°-90°) | 40.7 | 1.1 | | | G1/100 |
| BL | (0°-30°) | 115.3 | 3.1 | B1/500 | | |
| BM | (30°-60°) | 162.0 | 4.4 | B0/220 | | |
| BH | (60°-80°) | 78.3 | 2.1 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.4 | 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-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 |
| 2.5° | 437.3 | 435.4 | 434.7 | 434.1 | 434.7 | 435.4 | 433.4 | 435.4 | 434.1 | 434.7 | 436.0 |
| 5° | 421.6 | 419.7 | 419.0 | 419.7 | 421.6 | 424.9 | 426.2 | 428.2 | 428.2 | 430.1 | 430.8 |
| 7.5° | 403.9 | 402.6 | 402.0 | 403.3 | 407.2 | 414.4 | 418.3 | 421.0 | 423.6 | 427.5 | 431.4 |
| 10° | 394.1 | 393.5 | 392.8 | 394.8 | 398.7 | 405.3 | 410.5 | 414.4 | 424.2 | 435.4 | 442.6 |
| 12.5° | 387.6 | 387.6 | 388.9 | 392.8 | 398.1 | 403.3 | 415.7 | 421.0 | 436.0 | 453.0 | 462.9 |
| 15° | 382.3 | 382.3 | 384.3 | 391.5 | 398.7 | 411.1 | 429.5 | 435.4 | 453.0 | 474.0 | 487.1 |
| 17.5° | 378.4 | 379.7 | 381.0 | 388.2 | 402.0 | 422.9 | 444.5 | 453.0 | 474.7 | 497.6 | 512.0 |
| 20° | 379.1 | 380.4 | 381.0 | 388.2 | 407.9 | 436.7 | 464.2 | 474.0 | 498.9 | 523.1 | 537.5 |
| 22.5° | 383.0 | 385.0 | 385.6 | 395.4 | 418.3 | 451.1 | 486.4 | 497.6 | 524.4 | 549.9 | 561.1 |
| 25° | 399.4 | 400.7 | 396.7 | 405.3 | 433.4 | 473.3 | 515.2 | 527.0 | 553.9 | 577.4 | 586.6 |
| 27.5° | 455.0 | 456.3 | 434.7 | 424.9 | 445.2 | 491.7 | 550.6 | 567.0 | 600.4 | 616.1 | 617.4 |
| 30° | 575.5 | 576.8 | 534.2 | 487.7 | 473.3 | 507.4 | 570.2 | 593.2 | 636.4 | 654.0 | 646.2 |
| 32.5° | 730.6 | 729.3 | 671.1 | 602.3 | 540.1 | 534.9 | 598.4 | 622.6 | 669.7 | 686.8 | 680.9 |
| 35° | 886.5 | 888.4 | 838.7 | 735.2 | 646.2 | 586.6 | 634.4 | 662.5 | 719.5 | 743.7 | 733.3 |
| 37.5° | 993.2 | 1006.3 | 984.7 | 872.7 | 776.5 | 682.2 | 692.7 | 722.8 | 794.1 | 826.9 | 804.6 |
| 40° | 1143.7 | 1140.5 | 1088.1 | 1005.6 | 920.5 | 823.6 | 786.9 | 801.3 | 883.2 | 927.0 | 892.3 |
| 42.5° | 1346.0 | 1339.5 | 1250.5 | 1169.9 | 1075.0 | 995.8 | 921.2 | 918.5 | 985.3 | 1036.4 | 986.0 |
| 45° | 1529.4 | 1519.5 | 1458.7 | 1380.7 | 1276.6 | 1185.6 | 1084.8 | 1061.9 | 1108.4 | 1151.6 | 1092.7 |
| 47.5° | 1675.4 | 1659.0 | 1615.8 | 1574.5 | 1549.0 | 1407.6 | 1256.4 | 1221.7 | 1245.2 | 1277.3 | 1194.2 |
| 50° | 1848.2 | 1803.0 | 1740.2 | 1715.3 | 1768.3 | 1659.0 | 1421.3 | 1387.9 | 1386.6 | 1405.0 | 1298.9 |
| 52.5° | 1926.8 | 1844.9 | 1809.6 | 1830.5 | 1924.1 | 1892.7 | 1599.4 | 1551.6 | 1532.6 | 1534.6 | 1396.5 |
| 55° | 1831.8 | 1822.7 | 1841.6 | 1907.1 | 2029.5 | 2011.2 | 1770.3 | 1711.4 | 1683.2 | 1647.9 | 1490.1 |
| 57.5° | 1723.8 | 1752.0 | 1827.2 | 1952.3 | 2163.1 | 2134.9 | 1938.5 | 1871.8 | 1820.0 | 1738.9 | 1594.2 |
| 60° | 1624.3 | 1653.1 | 1777.5 | 1962.8 | 2236.4 | 2254.1 | 2078.6 | 2015.1 | 1938.5 | 1831.8 | 1708.7 |
| 62.5° | 1473.1 | 1495.3 | 1670.1 | 1947.7 | 2204.3 | 2323.5 | 2176.2 | 2128.4 | 2057.0 | 1920.2 | 1840.3 |
| 65° | 1302.8 | 1317.2 | 1490.1 | 1827.2 | 2141.5 | 2315.6 | 2256.7 | 2229.9 | 2160.5 | 2012.5 | 1970.6 |
| 67.5° | 1116.2 | 1133.3 | 1277.3 | 1610.5 | 2018.4 | 2279.0 | 2332.7 | 2330.0 | 2250.8 | 2114.7 | 2064.9 |
| 70° | 901.5 | 902.8 | 1022.0 | 1335.6 | 1803.7 | 2205.7 | 2426.9 | 2432.8 | 2337.2 | 2191.3 | 2068.8 |
| 72.5° | 431.4 | 466.8 | 662.5 | 932.3 | 1465.9 | 2061.6 | 2488.5 | 2517.9 | 2391.6 | 2188.6 | 1845.6 |
| 75° | 98.9 | 102.1 | 193.1 | 443.2 | 859.6 | 1582.4 | 2334.6 | 2389.6 | 2259.3 | 1892.7 | 1300.2 |
| 77.5° | 36.0 | 38.0 | 54.3 | 129.6 | 330.6 | 817.7 | 1670.8 | 1751.3 | 1670.1 | 1223.6 | 614.8 |
| 80° | 24.2 | 23.6 | 28.2 | 57.6 | 151.9 | 231.8 | 854.4 | 902.2 | 823.6 | 417.7 | 147.3 |
| 82.5° | 12.4 | 13.1 | 19.6 | 32.1 | 102.1 | 80.5 | 285.4 | 310.3 | 255.3 | 83.8 | 27.5 |
| 85° | 5.9 | 5.9 | 11.1 | 20.3 | 43.2 | 28.2 | 63.5 | 76.6 | 68.7 | 36.7 | 9.2 |
| 87.5° | 5.9 | 5.9 | 10.5 | 13.1 | 22.3 | 11.8 | 15.7 | 19.6 | 18.3 | 19.6 | 3.3 |
| 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° | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 | 439.3 |
| 2.5° | 436.0 | 435.4 | 434.7 | 436.0 | 435.4 | 436.7 | 436.7 | 438.0 | 438.0 | 436.7 | 436.0 |
| 5° | 430.1 | 428.8 | 427.5 | 427.5 | 426.9 | 428.2 | 432.1 | 435.4 | 436.0 | 434.1 | 433.4 |
| 7.5° | 430.8 | 430.8 | 429.5 | 426.9 | 422.3 | 422.3 | 422.3 | 426.2 | 428.2 | 426.9 | 426.2 |
| 10° | 442.6 | 443.2 | 440.0 | 434.1 | 426.2 | 419.0 | 405.3 | 385.0 | 366.0 | 360.7 | 358.8 |
| 12.5° | 462.9 | 463.5 | 457.0 | 446.5 | 430.1 | 387.6 | 335.2 | 286.8 | 249.4 | 239.0 | 237.0 |
| 15° | 487.1 | 487.7 | 476.0 | 458.9 | 409.2 | 310.3 | 232.4 | 177.4 | 144.7 | 136.8 | 136.2 |
| 17.5° | 512.0 | 510.7 | 493.0 | 460.2 | 347.0 | 220.0 | 141.4 | 113.3 | 104.8 | 102.8 | 103.4 |
| 20° | 536.2 | 532.3 | 508.0 | 436.0 | 267.1 | 144.0 | 103.4 | 96.9 | 94.9 | 93.6 | 93.6 |
| 22.5° | 558.5 | 550.6 | 520.5 | 388.2 | 187.2 | 103.4 | 92.3 | 91.0 | 88.4 | 86.4 | 85.8 |
| 25° | 580.7 | 569.6 | 528.3 | 326.0 | 125.7 | 90.3 | 87.1 | 84.5 | 81.2 | 78.6 | 77.9 |
| 27.5° | 607.6 | 591.8 | 524.4 | 247.5 | 94.3 | 83.8 | 81.2 | 77.3 | 72.7 | 68.7 | 67.4 |
| 30° | 633.1 | 615.4 | 502.1 | 170.9 | 80.5 | 77.3 | 73.3 | 67.4 | 61.5 | 57.0 | 55.6 |
| 32.5° | 665.2 | 644.9 | 462.2 | 112.0 | 70.1 | 67.4 | 63.5 | 56.3 | 48.4 | 43.2 | 41.9 |
| 35° | 711.0 | 688.1 | 411.1 | 78.6 | 61.5 | 57.0 | 51.7 | 43.9 | 35.4 | 31.4 | 30.8 |
| 37.5° | 775.2 | 744.4 | 347.0 | 63.5 | 54.3 | 47.8 | 39.9 | 32.1 | 26.2 | 22.9 | 22.3 |
| 40° | 853.7 | 806.6 | 275.6 | 56.3 | 48.4 | 39.9 | 30.1 | 22.9 | 19.0 | 16.4 | 16.4 |
| 42.5° | 938.8 | 864.8 | 203.0 | 51.7 | 42.6 | 32.7 | 22.3 | 16.4 | 13.7 | 12.4 | 11.8 |
| 45° | 1026.6 | 916.6 | 136.8 | 47.8 | 37.3 | 24.9 | 15.7 | 11.1 | 9.2 | 9.2 | 8.5 |
| 47.5° | 1117.6 | 951.3 | 88.4 | 43.2 | 31.4 | 18.3 | 10.5 | 7.9 | 6.5 | 6.5 | 6.5 |
| 50° | 1207.9 | 969.6 | 62.9 | 39.3 | 25.5 | 12.4 | 7.9 | 5.9 | 5.2 | 5.2 | 5.2 |
| 52.5° | 1273.4 | 957.8 | 50.4 | 34.0 | 19.6 | 9.2 | 5.9 | 4.6 | 3.9 | 3.9 | 3.9 |
| 55° | 1330.3 | 937.5 | 43.9 | 29.5 | 14.4 | 6.5 | 4.6 | 3.9 | 3.3 | 3.3 | 3.3 |
| 57.5° | 1388.6 | 911.3 | 39.3 | 24.9 | 10.5 | 4.6 | 3.3 | 2.6 | 2.6 | 2.6 | 2.6 |
| 60° | 1441.6 | 866.8 | 34.0 | 19.6 | 7.2 | 3.3 | 2.6 | 2.0 | 2.0 | 2.0 | 2.0 |
| 62.5° | 1493.4 | 828.8 | 29.5 | 15.1 | 5.2 | 2.6 | 1.3 | 1.3 | 0.7 | 0.7 | 0.7 |
| 65° | 1522.8 | 777.8 | 23.6 | 9.8 | 3.3 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 |
| 67.5° | 1513.6 | 716.9 | 16.4 | 5.9 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 1450.1 | 635.1 | 9.8 | 3.3 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1214.5 | 470.1 | 5.9 | 2.6 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 811.2 | 216.0 | 3.3 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 371.2 | 64.8 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 74.6 | 17.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 15.7 | 3.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 3.3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 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)