

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: P348869

Luminaire Tested: **ARCH-N-PA1-10-730-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-10-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 270mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1450 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 14
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

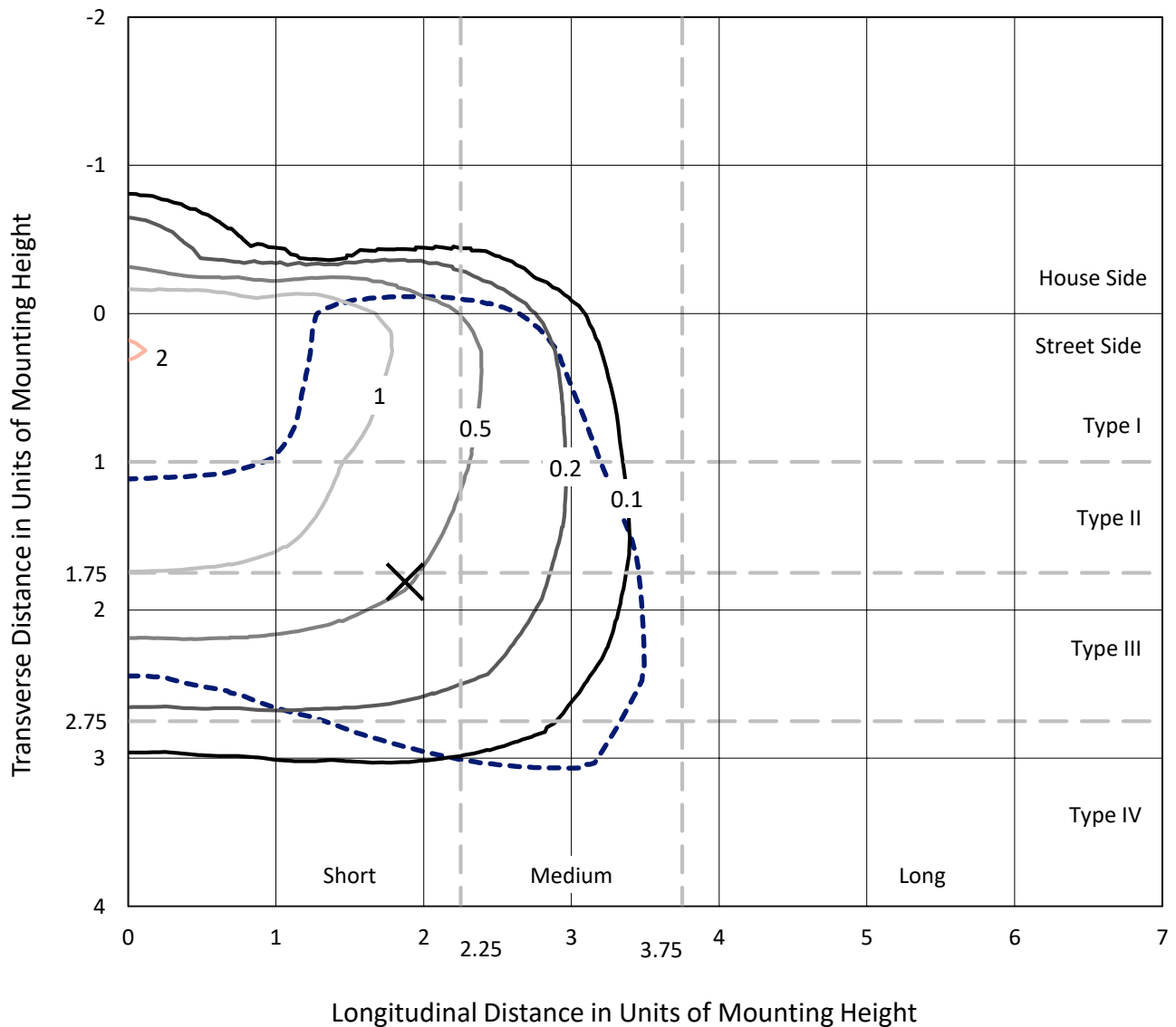


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

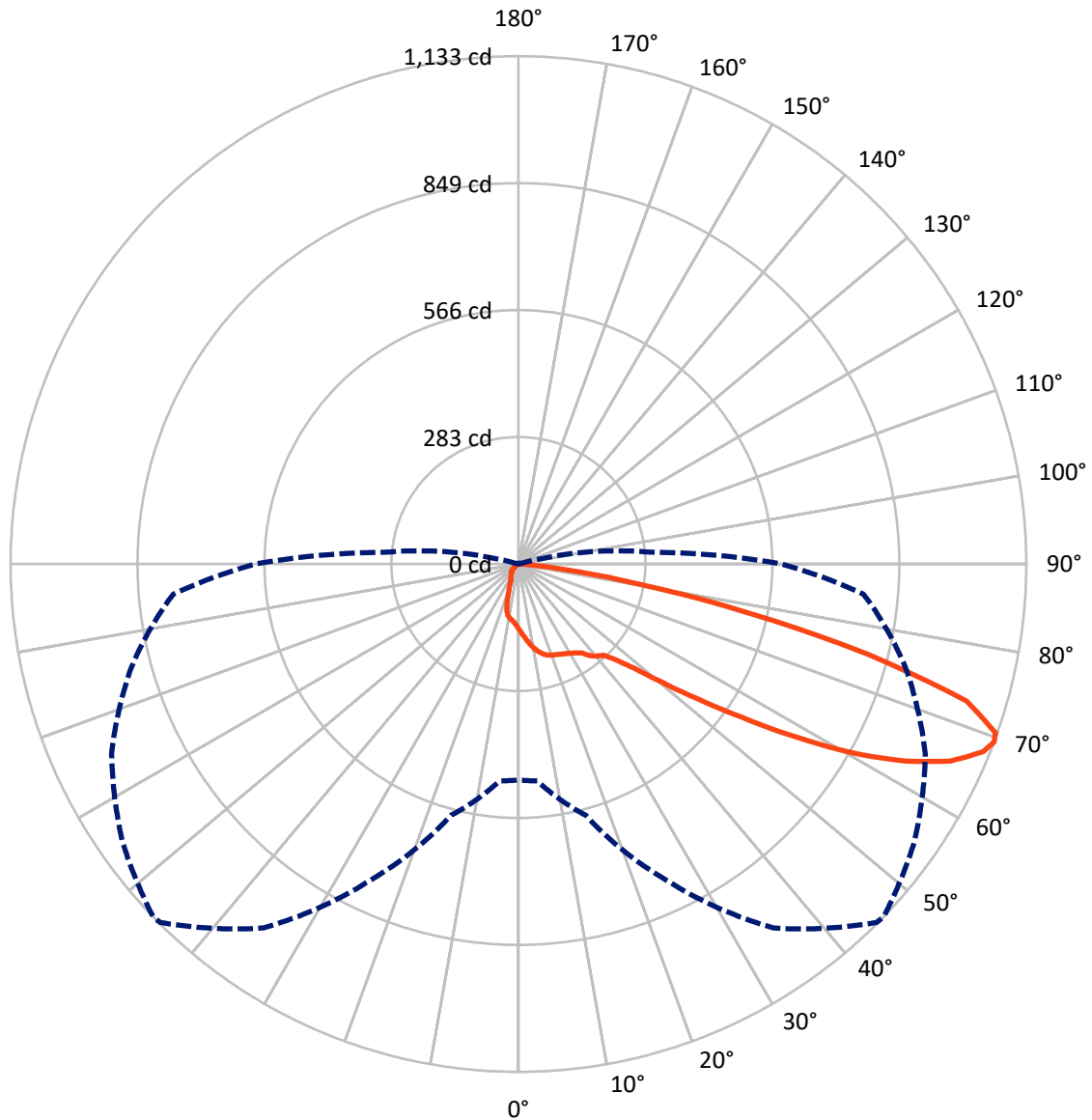


Based on 10 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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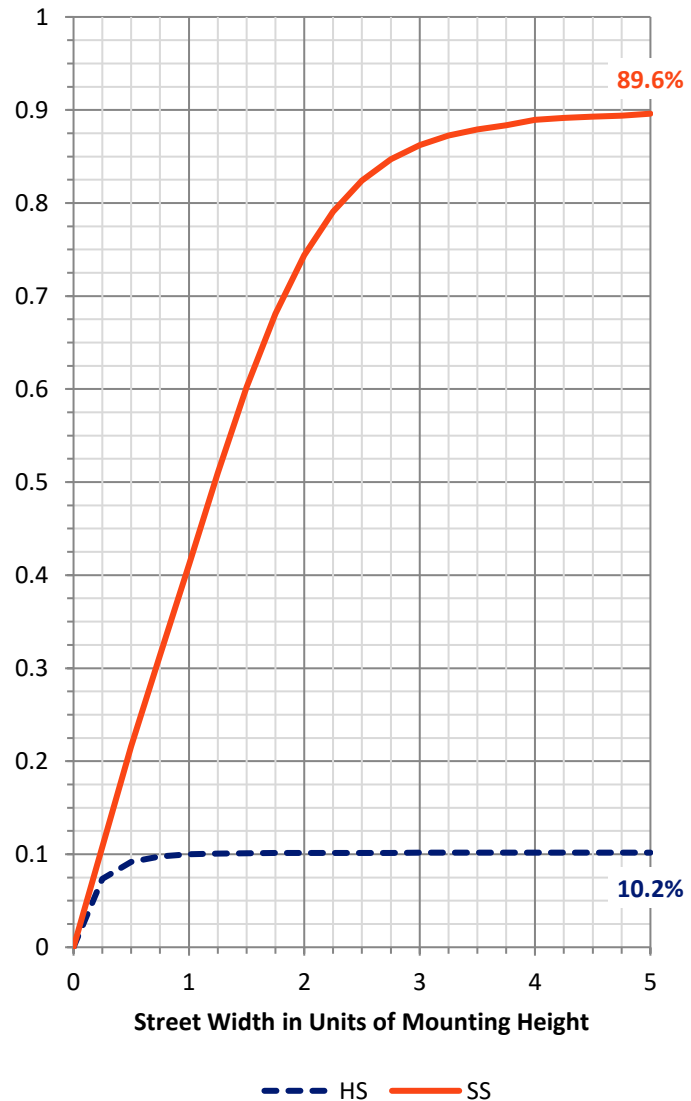
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 148.8 | 0.0 | 148.8 |
| | % Fixture | 10.3 | 0.0 | 10.3 |
| Street Side | Lumens | 1301.2 | 0.0 | 1301.2 |
| | % Fixture | 89.7 | 0.0 | 89.7 |
| Total | Lumens | 1450.0 | 0.0 | 1450.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 14.5 | 1.0 |
| 10°-20° | 43.9 | 3.0 |
| 20°-30° | 69.0 | 4.8 |
| 30°-40° | 98.9 | 6.8 |
| 40°-50° | 171.0 | 11.8 |
| 50°-60° | 337.8 | 23.3 |
| 60°-70° | 472.1 | 32.6 |
| 70°-80° | 228.1 | 15.7 |
| 80°-90° | 14.7 | 1.0 |
| 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° | 1450.0 | 100.0 |
| 0°-180° | 1450.0 | 100.0 |



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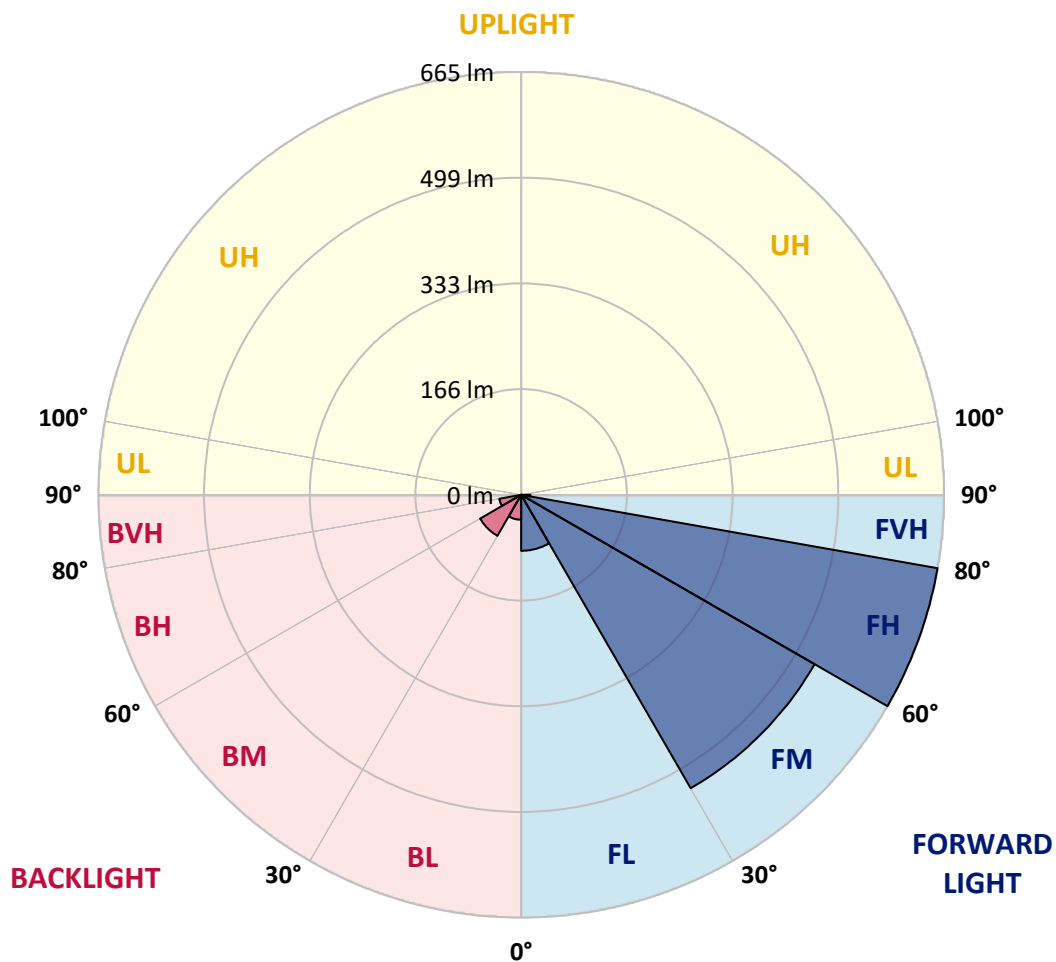
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 88.1 | 6.1 | | | |
| FM | (30°-60°) | 533.2 | 36.8 | | | |
| FH | (60°-80°) | 665.3 | 45.9 | | | G1/1800 |
| FVH | (80°-90°) | 14.5 | 1.0 | | | G1/100 |
| BL | (0°-30°) | 39.2 | 2.7 | B0/110 | | |
| BM | (30°-60°) | 74.6 | 5.1 | B0/220 | | |
| BH | (60°-80°) | 34.9 | 2.4 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.1 | 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 IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|
| 0° | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 |
| 2.5° | 161.4 | 161.2 | 160.2 | 159.8 | 157.5 | 156.2 | 155.6 | 153.9 | 151.5 | 149.0 | 146.3 |
| 5° | 179.8 | 179.7 | 177.9 | 176.2 | 171.9 | 167.8 | 167.0 | 163.1 | 157.6 | 152.4 | 147.3 |
| 7.5° | 198.5 | 197.6 | 195.9 | 192.6 | 186.3 | 179.8 | 179.1 | 173.6 | 165.7 | 158.3 | 150.9 |
| 10° | 214.4 | 213.9 | 211.6 | 206.6 | 199.2 | 191.8 | 191.0 | 184.2 | 175.3 | 166.2 | 156.7 |
| 12.5° | 226.8 | 226.4 | 223.3 | 217.1 | 209.3 | 201.6 | 200.6 | 194.4 | 185.0 | 174.7 | 163.6 |
| 15° | 234.3 | 234.1 | 230.4 | 223.8 | 216.1 | 209.4 | 208.5 | 203.1 | 194.4 | 183.6 | 171.1 |
| 17.5° | 236.1 | 236.2 | 232.3 | 225.6 | 219.3 | 214.5 | 213.8 | 209.7 | 202.4 | 191.7 | 178.5 |
| 20° | 232.2 | 233.0 | 229.5 | 223.7 | 219.8 | 217.3 | 216.7 | 214.3 | 208.1 | 198.0 | 184.5 |
| 22.5° | 226.6 | 227.0 | 224.6 | 220.7 | 219.1 | 219.6 | 219.3 | 218.0 | 212.7 | 203.5 | 190.4 |
| 25° | 223.2 | 223.2 | 221.8 | 218.5 | 219.6 | 222.5 | 222.6 | 222.3 | 218.2 | 210.1 | 197.6 |
| 27.5° | 223.1 | 222.7 | 221.0 | 218.6 | 221.6 | 226.1 | 226.3 | 228.2 | 225.6 | 218.2 | 206.6 |
| 30° | 228.5 | 228.0 | 224.6 | 221.4 | 225.2 | 230.0 | 230.7 | 234.7 | 233.4 | 227.0 | 216.6 |
| 32.5° | 241.2 | 239.5 | 231.8 | 226.6 | 229.5 | 235.2 | 236.1 | 242.5 | 244.5 | 237.8 | 226.3 |
| 35° | 258.6 | 253.2 | 242.2 | 236.5 | 236.8 | 242.8 | 243.7 | 253.0 | 259.1 | 247.7 | 233.7 |
| 37.5° | 282.6 | 280.0 | 261.9 | 246.9 | 248.1 | 257.3 | 259.6 | 269.8 | 268.1 | 253.2 | 242.2 |
| 40° | 335.2 | 331.1 | 311.9 | 275.8 | 258.9 | 268.9 | 269.7 | 275.1 | 275.3 | 265.5 | 259.9 |
| 42.5° | 406.9 | 405.2 | 385.0 | 328.4 | 280.2 | 276.8 | 278.1 | 287.3 | 297.6 | 291.5 | 291.2 |
| 45° | 486.2 | 485.3 | 463.9 | 398.1 | 323.2 | 302.4 | 304.1 | 316.4 | 336.1 | 337.4 | 346.0 |
| 47.5° | 550.1 | 549.7 | 537.4 | 476.0 | 389.1 | 345.8 | 346.4 | 359.4 | 394.0 | 411.0 | 424.8 |
| 50° | 608.3 | 610.2 | 600.5 | 560.2 | 478.8 | 413.9 | 412.6 | 421.3 | 476.8 | 504.7 | 521.9 |
| 52.5° | 689.2 | 692.0 | 664.7 | 638.8 | 573.0 | 498.3 | 497.3 | 506.4 | 576.3 | 597.3 | 600.3 |
| 55° | 760.6 | 755.9 | 734.3 | 726.8 | 687.8 | 602.6 | 602.3 | 610.4 | 672.6 | 681.5 | 687.1 |
| 57.5° | 792.2 | 790.3 | 800.7 | 817.9 | 808.1 | 725.9 | 725.3 | 719.1 | 758.7 | 759.7 | 777.0 |
| 60° | 812.1 | 814.3 | 846.2 | 899.0 | 923.4 | 858.5 | 854.6 | 817.3 | 841.0 | 838.9 | 857.4 |
| 62.5° | 797.1 | 801.5 | 858.9 | 947.0 | 1009.8 | 974.3 | 968.7 | 907.1 | 911.3 | 904.0 | 921.3 |
| 65° | 717.7 | 724.6 | 818.6 | 937.9 | 1052.6 | 1064.8 | 1059.1 | 986.5 | 967.1 | 955.1 | 945.5 |
| 67.5° | 582.8 | 586.8 | 685.0 | 859.3 | 1033.3 | 1118.8 | 1117.6 | 1056.0 | 1009.2 | 946.5 | 872.1 |
| 69° | 481.6 | 485.6 | 580.1 | 776.5 | 990.8 | 1130.3 | 1132.6 | 1078.3 | 1001.2 | 894.0 | 772.7 |
| 70° | 407.9 | 412.2 | 500.2 | 705.5 | 941.5 | 1125.0 | 1129.0 | 1076.2 | 978.2 | 833.2 | 685.5 |
| 72.5° | 213.9 | 217.6 | 308.0 | 486.0 | 767.6 | 1033.0 | 1045.1 | 985.2 | 829.2 | 605.1 | 405.3 |
| 75° | 67.2 | 69.3 | 120.3 | 254.1 | 525.5 | 803.2 | 806.0 | 772.9 | 588.8 | 332.9 | 168.8 |
| 77.5° | 25.6 | 25.0 | 40.0 | 93.6 | 265.7 | 505.7 | 522.8 | 483.0 | 309.0 | 117.7 | 39.0 |
| 80° | 13.8 | 13.9 | 20.8 | 38.8 | 113.7 | 259.9 | 274.3 | 234.1 | 109.8 | 36.7 | 9.0 |
| 82.5° | 6.0 | 6.3 | 11.7 | 20.5 | 52.2 | 95.9 | 103.1 | 85.8 | 41.9 | 24.7 | 3.3 |
| 85° | 1.3 | 1.4 | 5.6 | 11.1 | 21.3 | 26.9 | 28.2 | 27.8 | 26.7 | 19.2 | 1.3 |
| 87.5° | 0.0 | 0.0 | 2.5 | 4.0 | 5.4 | 6.1 | 5.4 | 7.0 | 14.8 | 12.9 | 0.7 |
| 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° | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 | 145.3 |
| 2.5° | 145.4 | 144.2 | 142.1 | 139.8 | 138.1 | 136.4 | 135.1 | 134.5 | 133.8 | 133.3 | 133.9 |
| 5° | 145.1 | 142.8 | 138.7 | 134.7 | 131.9 | 129.6 | 127.7 | 126.9 | 126.2 | 125.6 | 125.6 |
| 7.5° | 147.5 | 144.2 | 137.9 | 132.2 | 127.7 | 124.6 | 122.0 | 120.9 | 120.1 | 119.7 | 119.3 |
| 10° | 152.1 | 147.8 | 139.4 | 131.9 | 126.2 | 120.9 | 115.3 | 111.0 | 108.2 | 106.9 | 106.5 |
| 12.5° | 158.0 | 152.6 | 142.3 | 133.3 | 125.0 | 114.8 | 103.0 | 92.8 | 86.2 | 84.0 | 82.7 |
| 15° | 164.9 | 158.3 | 146.0 | 135.2 | 120.8 | 102.2 | 82.1 | 68.8 | 62.7 | 61.5 | 60.1 |
| 17.5° | 171.6 | 164.3 | 150.5 | 135.5 | 111.6 | 81.7 | 60.2 | 51.1 | 48.7 | 49.6 | 49.8 |
| 20° | 177.4 | 170.2 | 154.9 | 132.5 | 94.8 | 61.3 | 46.6 | 44.3 | 45.2 | 46.8 | 47.0 |
| 22.5° | 183.4 | 175.9 | 159.0 | 124.6 | 73.3 | 46.5 | 41.9 | 42.5 | 43.4 | 44.9 | 45.2 |
| 25° | 190.6 | 182.8 | 162.8 | 110.1 | 55.0 | 39.6 | 39.8 | 40.7 | 41.5 | 43.0 | 43.1 |
| 27.5° | 198.9 | 191.6 | 165.3 | 91.3 | 40.8 | 36.4 | 37.3 | 38.5 | 39.4 | 40.7 | 41.0 |
| 30° | 209.9 | 203.1 | 166.2 | 71.8 | 34.2 | 33.5 | 33.9 | 35.4 | 36.7 | 37.9 | 38.1 |
| 32.5° | 220.2 | 214.6 | 163.4 | 54.2 | 31.7 | 30.9 | 30.9 | 31.7 | 33.2 | 34.4 | 34.7 |
| 35° | 229.7 | 226.1 | 154.7 | 39.6 | 29.8 | 28.4 | 27.7 | 27.7 | 28.7 | 29.6 | 29.9 |
| 37.5° | 242.3 | 242.2 | 140.7 | 31.6 | 27.9 | 26.4 | 25.0 | 23.9 | 23.5 | 23.7 | 23.9 |
| 40° | 263.9 | 264.1 | 122.3 | 28.3 | 26.4 | 24.3 | 22.1 | 20.1 | 18.3 | 17.7 | 17.6 |
| 42.5° | 297.5 | 294.4 | 103.1 | 26.8 | 25.0 | 22.1 | 18.8 | 16.2 | 13.3 | 12.4 | 12.4 |
| 45° | 350.9 | 332.8 | 82.7 | 25.4 | 23.6 | 19.6 | 15.6 | 12.0 | 9.7 | 9.0 | 9.0 |
| 47.5° | 428.8 | 383.2 | 64.0 | 23.8 | 21.7 | 16.9 | 11.8 | 8.6 | 7.1 | 6.7 | 6.8 |
| 50° | 509.3 | 432.5 | 49.1 | 21.8 | 19.4 | 13.9 | 8.7 | 6.3 | 5.4 | 5.4 | 5.4 |
| 52.5° | 580.7 | 468.7 | 38.3 | 19.7 | 16.5 | 10.9 | 6.6 | 4.9 | 4.5 | 4.4 | 4.5 |
| 55° | 647.5 | 492.0 | 29.3 | 17.3 | 13.1 | 8.2 | 5.0 | 4.0 | 3.7 | 3.6 | 3.5 |
| 57.5° | 711.9 | 503.6 | 22.0 | 13.9 | 9.5 | 5.9 | 4.0 | 3.4 | 3.1 | 2.9 | 2.9 |
| 60° | 754.8 | 494.2 | 15.1 | 10.3 | 6.6 | 4.3 | 3.3 | 2.9 | 2.6 | 2.4 | 2.3 |
| 62.5° | 779.0 | 468.6 | 9.7 | 7.4 | 4.7 | 3.2 | 2.7 | 2.4 | 2.0 | 1.8 | 1.8 |
| 65° | 769.3 | 426.3 | 6.8 | 5.3 | 3.4 | 2.4 | 2.0 | 2.0 | 1.4 | 1.2 | 1.1 |
| 67.5° | 681.7 | 360.1 | 5.2 | 3.9 | 2.4 | 1.8 | 1.5 | 1.7 | 0.9 | 0.5 | 0.5 |
| 69° | 586.5 | 298.5 | 4.4 | 3.3 | 2.0 | 1.4 | 1.3 | 1.6 | 0.6 | 0.4 | 0.3 |
| 70° | 509.8 | 257.5 | 4.0 | 2.9 | 1.7 | 1.2 | 1.2 | 1.5 | 0.6 | 0.3 | 0.3 |
| 72.5° | 305.0 | 143.6 | 3.1 | 2.0 | 1.1 | 1.0 | 1.0 | 1.7 | 0.6 | 0.3 | 0.3 |
| 75° | 123.3 | 50.6 | 2.2 | 1.4 | 0.8 | 0.8 | 1.2 | 2.2 | 0.5 | 0.3 | 0.2 |
| 77.5° | 27.9 | 11.1 | 1.3 | 0.9 | 0.5 | 0.8 | 1.4 | 1.7 | 0.3 | 0.1 | 0.0 |
| 80° | 6.8 | 2.7 | 0.8 | 0.5 | 0.3 | 0.6 | 1.0 | 1.0 | 0.1 | 0.0 | 0.0 |
| 82.5° | 2.2 | 1.0 | 0.3 | 0.3 | 0.1 | 0.2 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 |
| 85° | 1.0 | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.6 | 0.2 | 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)