

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: P459583

Luminaire Tested: **ARCH-S-PA1-30-AMB-U-T4W**

Issue Date: 1/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459583  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-905-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-AMB-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) NARROW BAND AMBER, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1280.9 lumens  
Efficiency: N/A  
Efficacy: 40.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G1

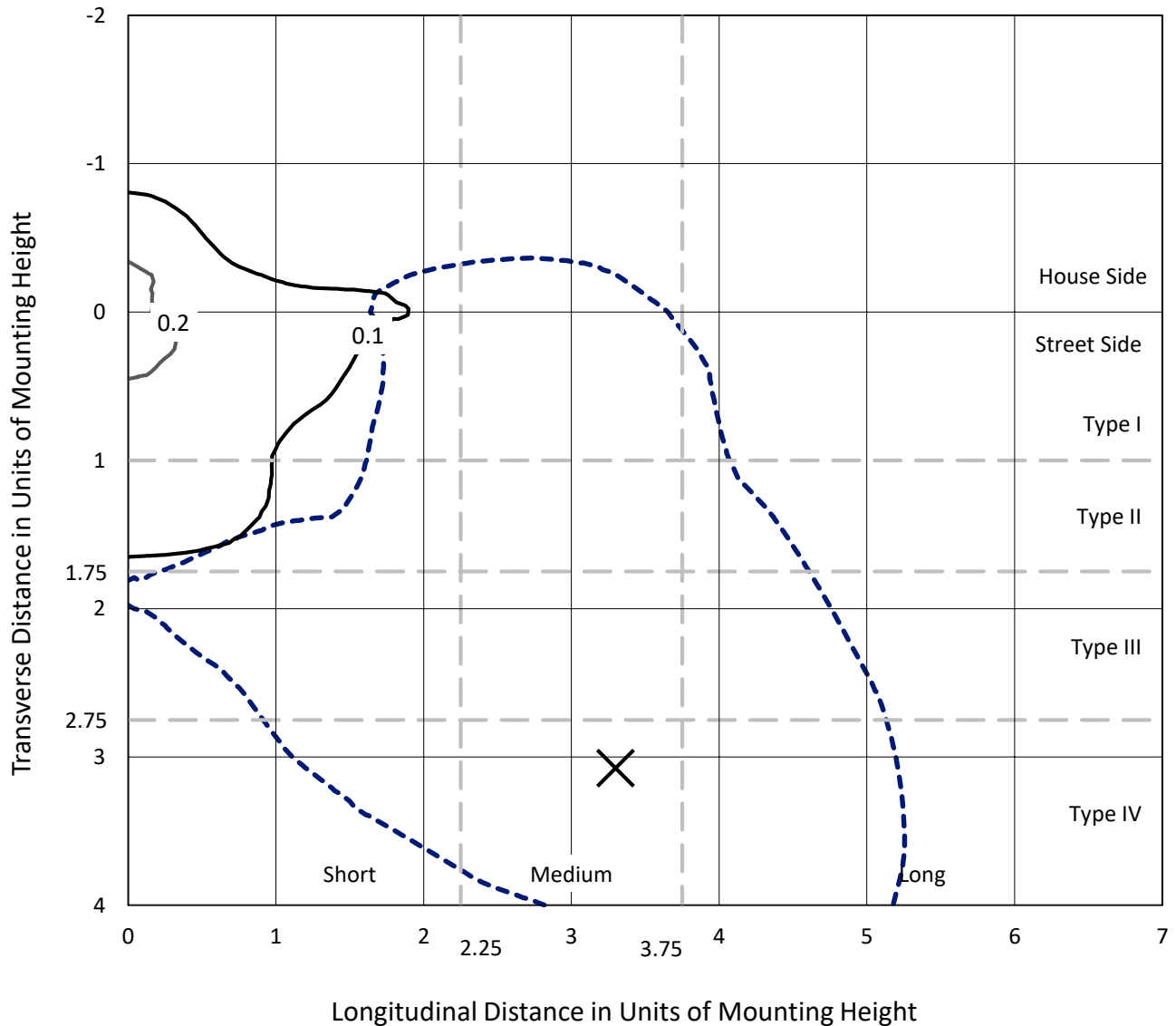
Input Watts (W): 32  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

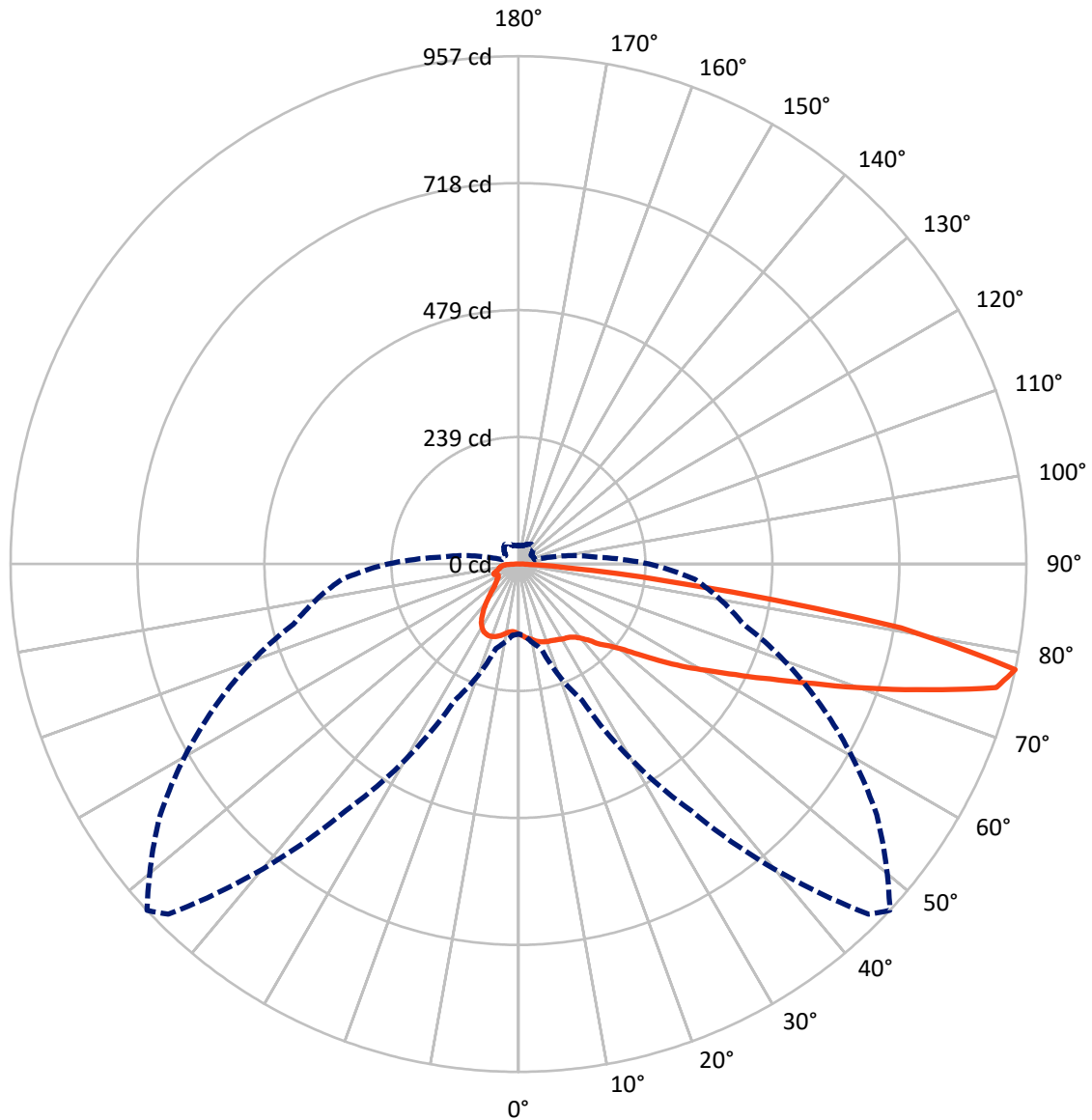
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 77.5-Deg Vertical



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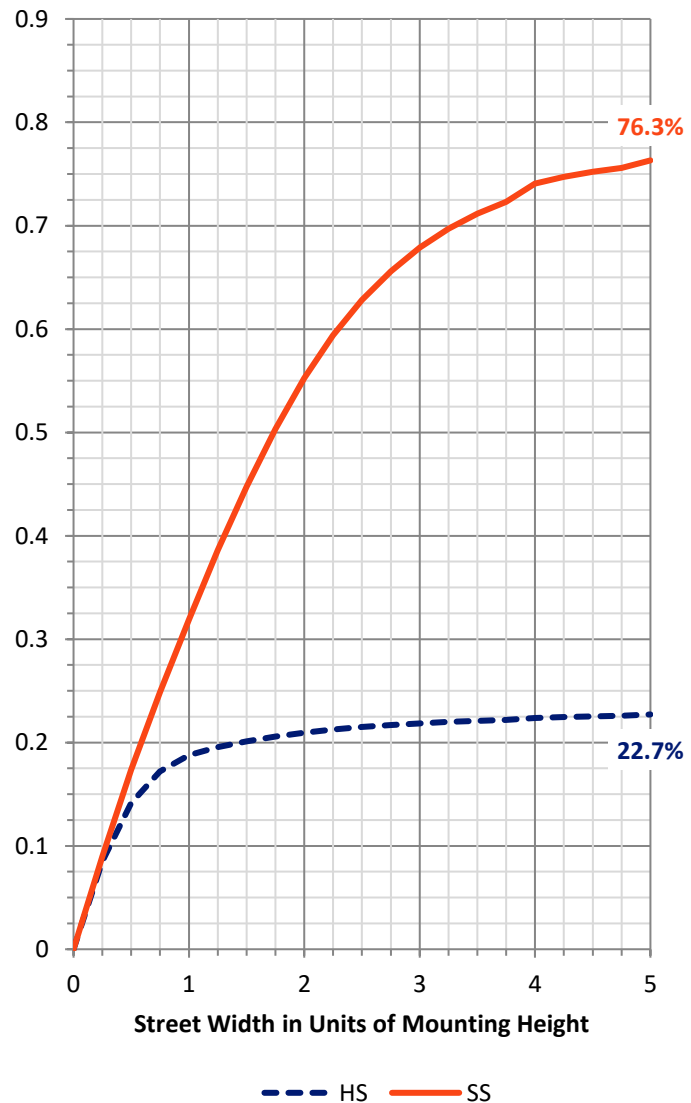
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 299.5    | 0.0    | 299.5  |
|                    | % Fixture | 23.4     | 0.0    | 23.4   |
| <b>Street Side</b> | Lumens    | 981.5    | 0.0    | 981.5  |
|                    | % Fixture | 76.6     | 0.0    | 76.6   |
| <b>Total</b>       | Lumens    | 1280.9   | 0.0    | 1280.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 13.0   | 1.0       |
| 10°-20°   | 41.2   | 3.2       |
| 20°-30°   | 71.1   | 5.6       |
| 30°-40°   | 99.3   | 7.7       |
| 40°-50°   | 130.8  | 10.2      |
| 50°-60°   | 206.7  | 16.1      |
| 60°-70°   | 334.6  | 26.1      |
| 70°-80°   | 322.7  | 25.2      |
| 80°-90°   | 61.6   | 4.8       |
| 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°    | 1280.9 | 100.0     |
| 0°-180°   | 1280.9 | 100.0     |



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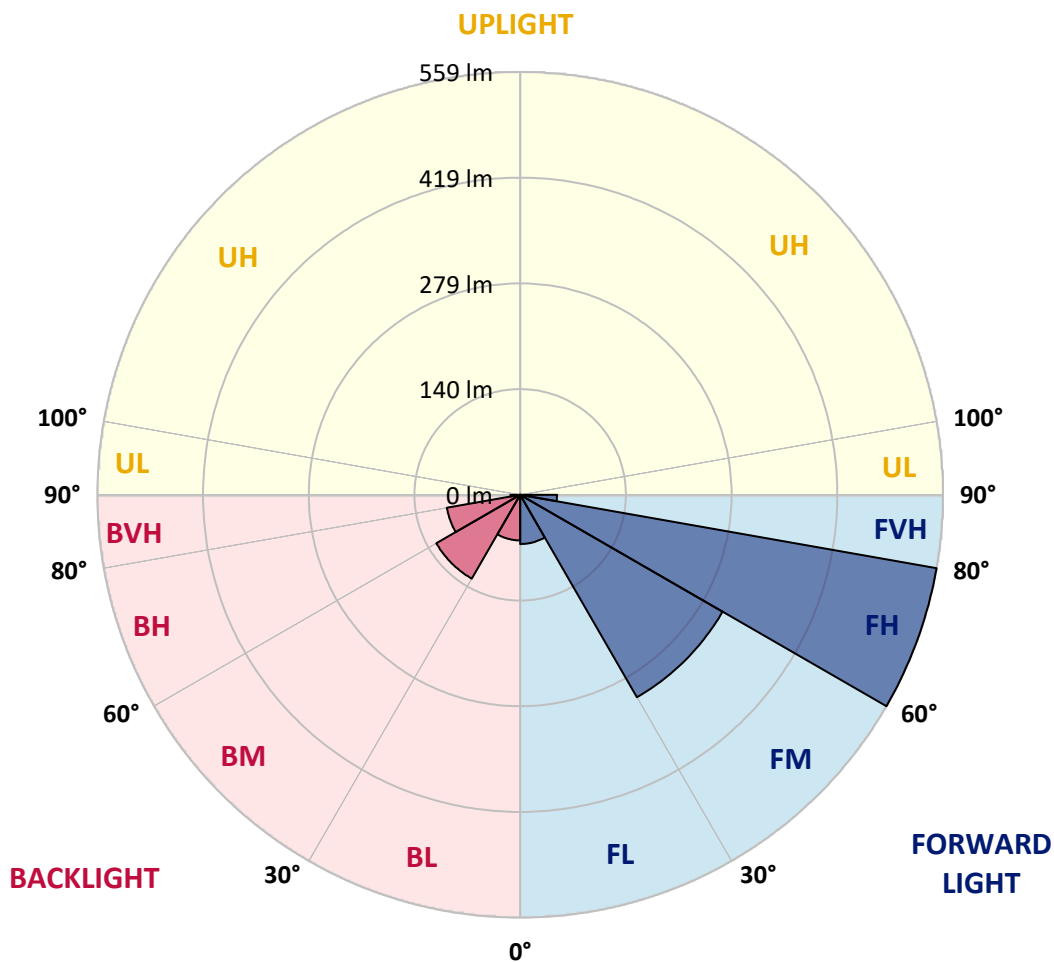
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 65.1   | 5.1       |                         |      |        |
| FM   | (30°-60°)   | 308.8  | 24.1      |                         |      |        |
| FH   | (60°-80°)   | 558.8  | 43.6      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 48.7   | 3.8       |                         |      | G1/100 |
| BL   | (0°-30°)    | 60.2   | 4.7       | B0/110                  |      |        |
| BM   | (30°-60°)   | 127.9  | 10.0      | B0/220                  |      |        |
| BH   | (60°-80°)   | 98.4   | 7.7       | B0/110                  |      | G0/110 |
| BVH  | (80°-90°)   | 12.9   | 1.0       |                         |      | G1/100 |
| 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 Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 47°   | 55°   | 65°   | 75°   | 85°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 |
| 2.5°  | 138.0 | 138.0 | 138.0 | 137.0 | 137.0 | 135.0 | 135.0 | 134.0 | 133.0 | 132.0 | 131.0 |
| 5°    | 146.0 | 147.0 | 146.0 | 144.0 | 142.0 | 139.0 | 139.0 | 137.0 | 135.0 | 132.0 | 130.0 |
| 7.5°  | 153.0 | 153.0 | 151.0 | 149.0 | 146.0 | 143.0 | 142.0 | 140.0 | 136.0 | 133.0 | 130.0 |
| 10°   | 157.0 | 156.0 | 155.0 | 153.0 | 149.0 | 146.0 | 145.0 | 143.0 | 139.0 | 135.0 | 131.0 |
| 12.5° | 160.0 | 160.0 | 159.0 | 155.0 | 152.0 | 149.0 | 149.0 | 146.0 | 143.0 | 139.0 | 134.0 |
| 15°   | 163.0 | 164.0 | 162.0 | 158.0 | 154.0 | 152.0 | 152.0 | 150.0 | 147.0 | 143.0 | 137.0 |
| 17.5° | 164.0 | 164.0 | 163.0 | 158.0 | 156.0 | 154.0 | 154.0 | 153.0 | 150.0 | 146.0 | 140.0 |
| 20°   | 163.0 | 164.0 | 164.0 | 158.0 | 156.0 | 156.0 | 156.0 | 155.0 | 152.0 | 149.0 | 144.0 |
| 22.5° | 165.0 | 165.0 | 165.0 | 158.0 | 157.0 | 157.0 | 157.0 | 157.0 | 155.0 | 152.0 | 147.0 |
| 25°   | 165.0 | 165.0 | 165.0 | 158.0 | 157.0 | 158.0 | 159.0 | 159.0 | 158.0 | 155.0 | 150.0 |
| 27.5° | 167.0 | 167.0 | 166.0 | 159.0 | 159.0 | 160.0 | 161.0 | 162.0 | 162.0 | 159.0 | 154.0 |
| 30°   | 171.0 | 170.0 | 170.0 | 161.0 | 160.0 | 163.0 | 164.0 | 166.0 | 166.0 | 163.0 | 158.0 |
| 32.5° | 177.0 | 176.0 | 175.0 | 165.0 | 163.0 | 165.0 | 166.0 | 169.0 | 171.0 | 167.0 | 163.0 |
| 35°   | 186.0 | 184.0 | 181.0 | 172.0 | 168.0 | 169.0 | 169.0 | 173.0 | 176.0 | 173.0 | 168.0 |
| 37.5° | 198.0 | 196.0 | 192.0 | 182.0 | 176.0 | 175.0 | 175.0 | 179.0 | 183.0 | 181.0 | 176.0 |
| 40°   | 213.1 | 212.1 | 212.1 | 196.0 | 185.0 | 184.0 | 184.0 | 186.0 | 191.0 | 190.0 | 186.0 |
| 42.5° | 240.1 | 241.1 | 243.1 | 213.1 | 197.0 | 198.0 | 197.0 | 196.0 | 201.1 | 201.1 | 197.0 |
| 45°   | 273.1 | 269.1 | 274.1 | 237.1 | 213.1 | 214.1 | 216.1 | 210.1 | 214.1 | 214.1 | 211.1 |
| 47.5° | 313.1 | 309.1 | 301.1 | 271.1 | 237.1 | 230.1 | 230.1 | 228.1 | 233.1 | 233.1 | 230.1 |
| 50°   | 346.1 | 343.1 | 334.1 | 304.1 | 275.1 | 252.1 | 251.1 | 252.1 | 257.1 | 260.1 | 260.1 |
| 52.5° | 380.1 | 375.1 | 364.1 | 343.1 | 317.1 | 284.1 | 282.1 | 281.1 | 290.1 | 298.1 | 302.1 |
| 55°   | 397.1 | 394.1 | 391.1 | 384.1 | 357.1 | 324.1 | 320.1 | 317.1 | 333.1 | 344.1 | 352.1 |
| 57.5° | 430.1 | 429.1 | 429.1 | 434.1 | 414.1 | 368.1 | 363.1 | 360.1 | 386.1 | 397.1 | 410.1 |
| 60°   | 468.1 | 467.1 | 481.1 | 491.1 | 469.1 | 415.1 | 406.1 | 411.1 | 443.1 | 457.1 | 476.1 |
| 62.5° | 484.1 | 492.1 | 526.1 | 557.1 | 542.1 | 465.1 | 459.1 | 470.1 | 507.1 | 516.1 | 549.1 |
| 65°   | 456.1 | 460.1 | 537.1 | 594.1 | 628.2 | 530.1 | 522.1 | 538.1 | 574.1 | 576.1 | 621.2 |
| 67.5° | 410.1 | 416.1 | 490.1 | 610.2 | 691.2 | 607.2 | 601.2 | 611.2 | 635.2 | 617.2 | 675.2 |
| 70°   | 371.1 | 376.1 | 437.1 | 596.1 | 731.2 | 703.2 | 700.2 | 687.2 | 674.2 | 628.2 | 702.2 |
| 72.5° | 345.1 | 345.1 | 396.1 | 553.1 | 761.2 | 809.2 | 809.2 | 756.2 | 688.2 | 605.2 | 675.2 |
| 75°   | 270.1 | 267.1 | 321.1 | 468.1 | 732.2 | 918.2 | 930.2 | 821.2 | 687.2 | 561.1 | 534.1 |
| 77.5° | 132.0 | 135.0 | 165.0 | 283.1 | 568.1 | 933.2 | 957.2 | 824.2 | 628.2 | 439.1 | 334.1 |
| 80°   | 38.0  | 40.0  | 55.0  | 93.0  | 298.1 | 684.2 | 731.2 | 628.2 | 442.1 | 273.1 | 154.0 |
| 82.5° | 14.0  | 15.0  | 25.0  | 45.0  | 131.0 | 283.1 | 326.1 | 292.1 | 216.1 | 126.0 | 54.0  |
| 85°   | 8.0   | 8.0   | 14.0  | 26.0  | 69.0  | 80.0  | 94.0  | 103.0 | 97.0  | 55.0  | 22.0  |
| 87.5° | 3.0   | 4.0   | 7.0   | 13.0  | 41.0  | 21.0  | 21.0  | 38.0  | 46.0  | 27.0  | 8.0   |
| 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°    | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 | 132.0 |
| 2.5°  | 130.0 | 130.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 129.0 | 130.0 | 130.0 | 130.0 |
| 5°    | 129.0 | 128.0 | 127.0 | 127.0 | 127.0 | 128.0 | 129.0 | 131.0 | 132.0 | 132.0 | 132.0 |
| 7.5°  | 129.0 | 128.0 | 127.0 | 127.0 | 128.0 | 129.0 | 131.0 | 133.0 | 135.0 | 136.0 | 136.0 |
| 10°   | 130.0 | 129.0 | 128.0 | 129.0 | 130.0 | 132.0 | 134.0 | 136.0 | 138.0 | 140.0 | 140.0 |
| 12.5° | 132.0 | 131.0 | 130.0 | 132.0 | 134.0 | 136.0 | 137.0 | 138.0 | 140.0 | 142.0 | 143.0 |
| 15°   | 135.0 | 134.0 | 133.0 | 136.0 | 138.0 | 140.0 | 141.0 | 141.0 | 142.0 | 145.0 | 145.0 |
| 17.5° | 138.0 | 136.0 | 137.0 | 140.0 | 142.0 | 143.0 | 143.0 | 143.0 | 143.0 | 146.0 | 147.0 |
| 20°   | 141.0 | 140.0 | 141.0 | 145.0 | 145.0 | 145.0 | 144.0 | 145.0 | 146.0 | 149.0 | 149.0 |
| 22.5° | 145.0 | 144.0 | 146.0 | 148.0 | 147.0 | 146.0 | 145.0 | 146.0 | 146.0 | 150.0 | 150.0 |
| 25°   | 149.0 | 149.0 | 152.0 | 152.0 | 147.0 | 145.0 | 145.0 | 147.0 | 148.0 | 152.0 | 152.0 |
| 27.5° | 153.0 | 155.0 | 157.0 | 153.0 | 146.0 | 143.0 | 144.0 | 147.0 | 150.0 | 153.0 | 154.0 |
| 30°   | 157.0 | 160.0 | 161.0 | 151.0 | 141.0 | 138.0 | 142.0 | 147.0 | 150.0 | 153.0 | 155.0 |
| 32.5° | 162.0 | 166.0 | 164.0 | 145.0 | 132.0 | 132.0 | 138.0 | 145.0 | 149.0 | 151.0 | 152.0 |
| 35°   | 169.0 | 173.0 | 164.0 | 137.0 | 121.0 | 122.0 | 130.0 | 139.0 | 145.0 | 147.0 | 148.0 |
| 37.5° | 178.0 | 183.0 | 165.0 | 126.0 | 109.0 | 110.0 | 118.0 | 127.0 | 136.0 | 139.0 | 140.0 |
| 40°   | 189.0 | 195.0 | 164.0 | 114.0 | 97.0  | 96.0  | 102.0 | 111.0 | 121.0 | 126.0 | 127.0 |
| 42.5° | 202.1 | 208.1 | 163.0 | 102.0 | 86.0  | 82.0  | 85.0  | 92.0  | 101.0 | 105.0 | 105.0 |
| 45°   | 216.1 | 224.1 | 163.0 | 92.0  | 77.0  | 70.0  | 71.0  | 74.0  | 77.0  | 78.0  | 77.0  |
| 47.5° | 237.1 | 243.1 | 163.0 | 85.0  | 69.0  | 60.0  | 59.0  | 60.0  | 59.0  | 55.0  | 55.0  |
| 50°   | 269.1 | 270.1 | 163.0 | 80.0  | 63.0  | 55.0  | 52.0  | 50.0  | 47.0  | 44.0  | 44.0  |
| 52.5° | 313.1 | 305.1 | 164.0 | 74.0  | 57.0  | 51.0  | 48.0  | 45.0  | 41.0  | 39.0  | 39.0  |
| 55°   | 367.1 | 353.1 | 166.0 | 67.0  | 52.0  | 48.0  | 45.0  | 43.0  | 40.0  | 38.0  | 39.0  |
| 57.5° | 435.1 | 417.1 | 169.0 | 60.0  | 47.0  | 45.0  | 44.0  | 42.0  | 40.0  | 40.0  | 41.0  |
| 60°   | 525.1 | 497.1 | 171.0 | 54.0  | 43.0  | 44.0  | 45.0  | 45.0  | 43.0  | 45.0  | 45.0  |
| 62.5° | 640.2 | 581.1 | 149.0 | 50.0  | 41.0  | 44.0  | 50.0  | 50.0  | 48.0  | 49.0  | 49.0  |
| 65°   | 751.2 | 643.2 | 102.0 | 47.0  | 40.0  | 49.0  | 55.0  | 52.0  | 47.0  | 44.0  | 44.0  |
| 67.5° | 802.2 | 667.2 | 66.0  | 44.0  | 38.0  | 53.0  | 55.0  | 49.0  | 44.0  | 42.0  | 41.0  |
| 70°   | 775.2 | 628.2 | 51.0  | 41.0  | 38.0  | 51.0  | 53.0  | 47.0  | 42.0  | 41.0  | 40.0  |
| 72.5° | 655.2 | 510.1 | 43.0  | 38.0  | 36.0  | 46.0  | 50.0  | 45.0  | 40.0  | 39.0  | 38.0  |
| 75°   | 449.1 | 316.1 | 38.0  | 35.0  | 32.0  | 42.0  | 47.0  | 43.0  | 39.0  | 37.0  | 36.0  |
| 77.5° | 246.1 | 147.0 | 32.0  | 31.0  | 29.0  | 39.0  | 45.0  | 41.0  | 36.0  | 35.0  | 34.0  |
| 80°   | 100.0 | 64.0  | 27.0  | 27.0  | 27.0  | 37.0  | 42.0  | 38.0  | 33.0  | 32.0  | 30.0  |
| 82.5° | 46.0  | 30.0  | 21.0  | 23.0  | 24.0  | 35.0  | 40.0  | 36.0  | 31.0  | 31.0  | 28.0  |
| 85°   | 21.0  | 19.0  | 15.0  | 17.0  | 19.0  | 31.0  | 37.0  | 33.0  | 29.0  | 27.0  | 25.0  |
| 87.5° | 9.0   | 11.0  | 9.0   | 10.0  | 14.0  | 26.0  | 33.0  | 30.0  | 26.0  | 23.0  | 23.0  |
| 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)