

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: P322395

Luminaire Tested: **GAN-SA1B-830-U-T3-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P322395  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA1B-830-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 3465 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
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



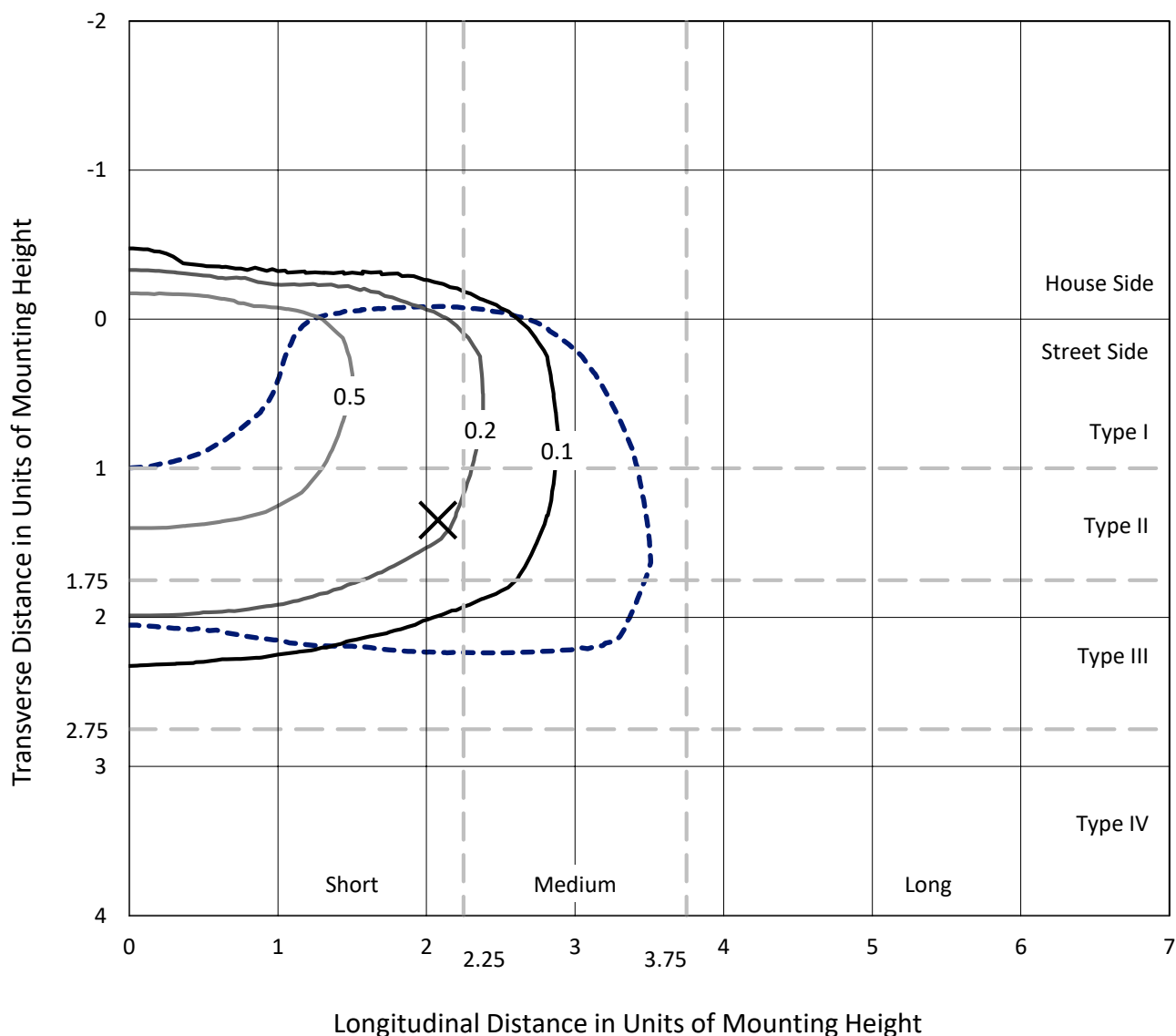
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

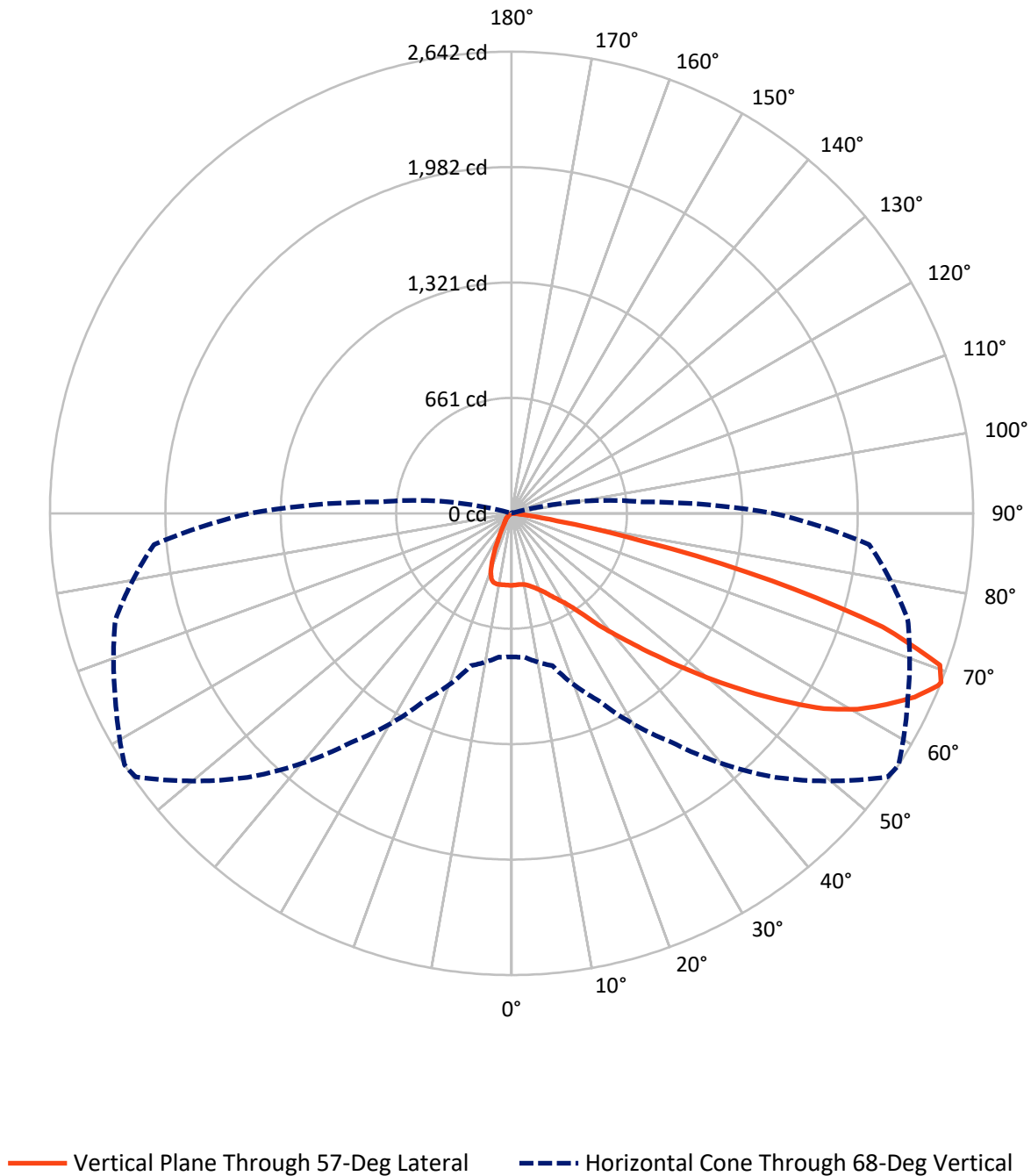


Based on 25 foot mounting height. Maximum calculated value = 0.8 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 380.0    | 0.0    | 380.0  |
|                    | % Fixture | 11.0     | 0.0    | 11.0   |
| <b>Street Side</b> | Lumens    | 3085.0   | 0.0    | 3085.0 |
|                    | % Fixture | 89.0     | 0.0    | 89.0   |
| <b>Total</b>       | Lumens    | 3465.0   | 0.0    | 3465.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 38.5   | 1.1       |
| 10°-20°   | 106.8  | 3.1       |
| 20°-30°   | 184.2  | 5.3       |
| 30°-40°   | 317.9  | 9.2       |
| 40°-50°   | 543.8  | 15.7      |
| 50°-60°   | 870.0  | 25.1      |
| 60°-70°   | 1005.2 | 29.0      |
| 70°-80°   | 384.1  | 11.1      |
| 80°-90°   | 14.4   | 0.4       |
| 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°    | 3465.0 | 100.0     |
| 0°-180°   | 3465.0 | 100.0     |

**Coefficient of Utilization**



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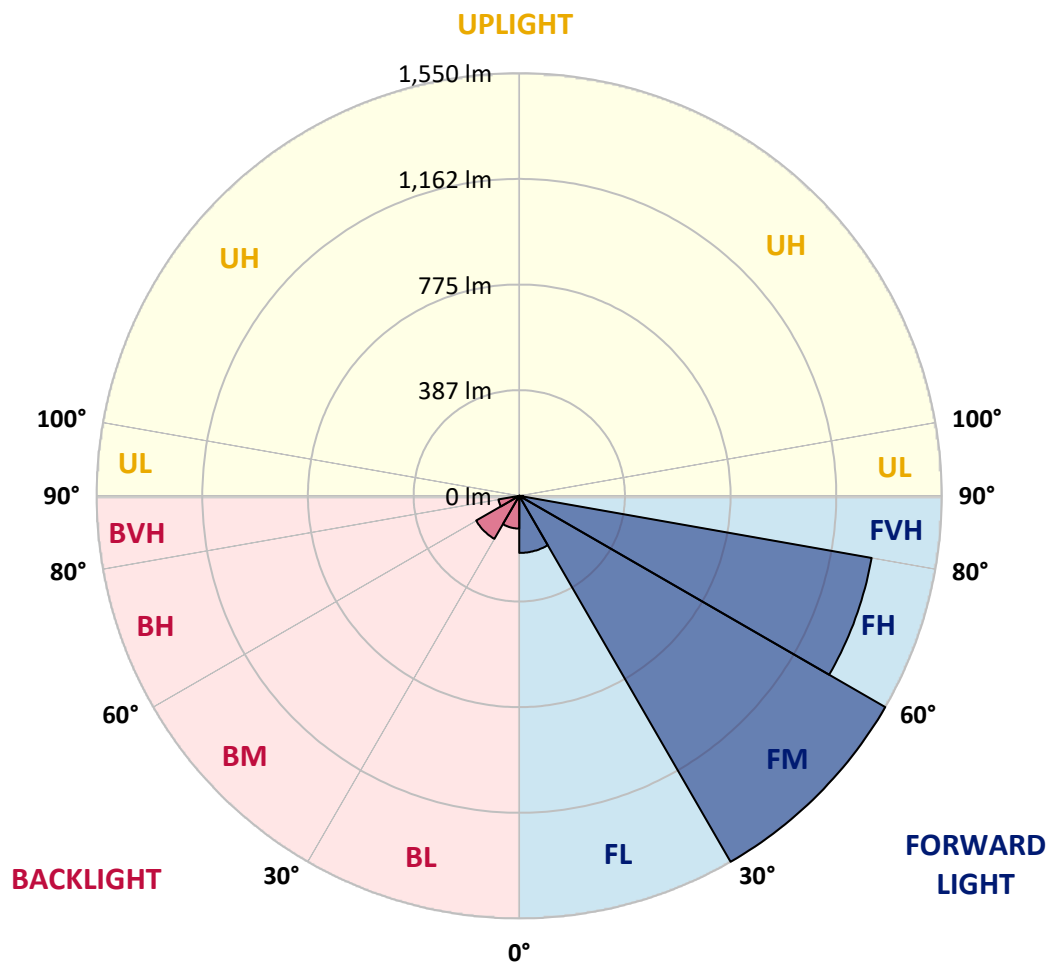
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 209.4  | 6.0       |                         |      |         |
| FM   | (30°-60°)   | 1549.5 | 44.7      |                         |      |         |
| FH   | (60°-80°)   | 1312.0 | 37.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 14.1   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 120.1  | 3.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 182.2  | 5.3       | B0/220                  |      |         |
| BH   | (60°-80°)   | 77.4   | 2.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 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 III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 57°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  | 411.7  |
| 2.5°  | 402.1  | 403.9  | 405.2  | 406.0  | 407.0  | 409.1  | 409.8  | 410.8  | 411.2  | 411.2  | 412.4  |
| 5°    | 386.2  | 388.1  | 390.9  | 393.2  | 397.8  | 403.7  | 408.0  | 409.6  | 412.6  | 415.2  | 416.6  |
| 7.5°  | 371.4  | 373.7  | 377.0  | 382.4  | 390.3  | 399.8  | 408.6  | 410.9  | 416.6  | 422.2  | 425.0  |
| 10°   | 361.9  | 363.7  | 368.0  | 375.7  | 386.0  | 399.3  | 411.7  | 414.5  | 424.3  | 433.7  | 438.9  |
| 12.5° | 358.6  | 360.3  | 364.7  | 373.4  | 386.2  | 401.7  | 418.9  | 423.0  | 437.5  | 451.1  | 458.4  |
| 15°   | 363.4  | 363.7  | 368.5  | 376.7  | 389.3  | 407.8  | 430.9  | 435.8  | 454.0  | 471.7  | 480.9  |
| 17.5° | 381.8  | 380.3  | 382.7  | 386.3  | 396.3  | 415.8  | 443.5  | 450.9  | 475.1  | 495.9  | 504.6  |
| 20°   | 427.6  | 427.6  | 422.1  | 412.2  | 412.4  | 428.3  | 460.6  | 468.9  | 498.6  | 522.7  | 530.5  |
| 22.5° | 506.1  | 504.6  | 493.5  | 469.4  | 447.3  | 449.7  | 481.4  | 492.2  | 526.7  | 552.5  | 555.1  |
| 25°   | 600.5  | 598.7  | 581.5  | 547.6  | 509.2  | 484.5  | 509.5  | 522.0  | 560.3  | 583.1  | 577.7  |
| 27.5° | 700.4  | 698.9  | 681.9  | 639.8  | 585.2  | 539.9  | 543.1  | 554.9  | 594.6  | 617.0  | 599.8  |
| 30°   | 797.3  | 797.7  | 780.9  | 737.6  | 675.8  | 610.5  | 585.7  | 592.6  | 627.8  | 650.6  | 626.0  |
| 32.5° | 889.3  | 890.0  | 875.4  | 827.1  | 769.4  | 692.6  | 644.7  | 642.9  | 666.5  | 689.0  | 660.8  |
| 35°   | 971.4  | 973.1  | 963.1  | 925.5  | 864.4  | 784.0  | 721.2  | 717.0  | 721.4  | 746.8  | 714.0  |
| 37.5° | 1050.6 | 1051.5 | 1044.0 | 1012.4 | 961.3  | 884.4  | 817.9  | 811.8  | 802.3  | 821.8  | 784.3  |
| 40°   | 1137.2 | 1134.8 | 1126.1 | 1097.4 | 1053.5 | 995.3  | 921.8  | 911.3  | 894.7  | 912.1  | 876.7  |
| 42.5° | 1217.8 | 1215.0 | 1216.5 | 1184.1 | 1147.1 | 1109.4 | 1042.9 | 1024.8 | 1015.2 | 1035.1 | 990.1  |
| 45°   | 1318.6 | 1317.1 | 1322.0 | 1293.9 | 1263.9 | 1236.5 | 1181.6 | 1162.0 | 1157.7 | 1181.1 | 1127.2 |
| 47.5° | 1418.0 | 1421.7 | 1436.9 | 1424.9 | 1412.8 | 1388.7 | 1328.6 | 1319.7 | 1322.4 | 1350.7 | 1271.9 |
| 50°   | 1501.0 | 1505.2 | 1547.0 | 1560.8 | 1578.3 | 1564.2 | 1503.9 | 1498.5 | 1508.8 | 1534.4 | 1427.5 |
| 52.5° | 1560.9 | 1569.6 | 1621.5 | 1684.9 | 1748.8 | 1758.3 | 1698.2 | 1693.3 | 1707.2 | 1711.2 | 1547.8 |
| 55°   | 1602.5 | 1610.2 | 1669.1 | 1785.1 | 1915.1 | 1956.1 | 1918.7 | 1899.7 | 1897.1 | 1858.3 | 1674.3 |
| 57.5° | 1609.9 | 1609.1 | 1693.6 | 1849.8 | 2045.6 | 2151.2 | 2127.6 | 2109.0 | 2055.2 | 1994.3 | 1819.3 |
| 60°   | 1568.3 | 1573.0 | 1671.2 | 1872.2 | 2127.5 | 2298.9 | 2300.7 | 2276.4 | 2192.7 | 2126.5 | 1959.9 |
| 62.5° | 1440.2 | 1459.5 | 1558.6 | 1813.4 | 2126.5 | 2358.3 | 2427.5 | 2409.0 | 2308.9 | 2234.8 | 2102.4 |
| 65°   | 1232.4 | 1239.3 | 1333.8 | 1611.9 | 1982.8 | 2333.4 | 2541.7 | 2534.8 | 2413.5 | 2340.0 | 2175.6 |
| 67.5° | 900.0  | 885.1  | 984.4  | 1269.3 | 1678.7 | 2188.3 | 2623.6 | 2632.3 | 2494.3 | 2361.6 | 2097.7 |
| 68°   | 821.3  | 825.8  | 903.1  | 1184.6 | 1599.1 | 2137.0 | 2629.0 | 2642.3 | 2502.3 | 2347.5 | 2055.1 |
| 70°   | 489.6  | 498.1  | 567.1  | 815.6  | 1216.5 | 1846.8 | 2570.7 | 2601.0 | 2454.5 | 2202.2 | 1777.5 |
| 72.5° | 125.0  | 135.2  | 200.4  | 365.0  | 694.9  | 1301.2 | 2170.1 | 2221.4 | 2131.1 | 1786.5 | 1200.0 |
| 75°   | 51.4   | 54.1   | 71.6   | 120.3  | 258.9  | 586.2  | 1430.3 | 1540.1 | 1477.4 | 1069.6 | 542.3  |
| 77.5° | 35.6   | 37.4   | 46.0   | 66.7   | 112.1  | 198.7  | 701.2  | 780.5  | 703.2  | 365.0  | 118.3  |
| 80°   | 25.6   | 27.0   | 32.9   | 44.4   | 64.4   | 70.9   | 228.6  | 264.3  | 209.9  | 80.1   | 29.3   |
| 82.5° | 15.2   | 16.4   | 24.6   | 31.6   | 39.2   | 33.9   | 56.9   | 64.6   | 60.8   | 39.8   | 13.1   |
| 85°   | 7.5    | 8.8    | 16.5   | 22.6   | 21.1   | 14.3   | 17.4   | 19.3   | 23.9   | 24.2   | 7.0    |
| 87.5° | 0.5    | 1.0    | 9.7    | 13.6   | 5.9    | 3.3    | 5.1    | 6.2    | 8.5    | 12.0   | 2.9    |
| 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°    | 411.7  | 411.7  | 411.7 | 411.7 | 411.7 | 411.7 | 411.7 | 411.7 | 411.7 | 411.7 | 411.7 |
| 2.5°  | 412.9  | 413.0  | 411.9 | 411.4 | 411.7 | 409.8 | 408.9 | 409.3 | 409.3 | 409.8 | 408.9 |
| 5°    | 417.0  | 417.0  | 415.0 | 412.4 | 410.9 | 407.1 | 404.7 | 404.0 | 403.5 | 403.2 | 402.6 |
| 7.5°  | 425.8  | 424.8  | 421.4 | 415.7 | 410.8 | 402.6 | 396.3 | 393.1 | 391.4 | 390.8 | 390.3 |
| 10°   | 440.1  | 438.3  | 432.5 | 421.9 | 410.6 | 396.0 | 382.4 | 372.7 | 364.7 | 361.4 | 359.5 |
| 12.5° | 459.2  | 456.6  | 447.0 | 429.3 | 409.4 | 382.6 | 353.1 | 324.7 | 298.4 | 287.5 | 282.1 |
| 15°   | 481.4  | 477.6  | 462.4 | 435.5 | 402.7 | 352.3 | 288.2 | 238.6 | 202.0 | 188.3 | 182.4 |
| 17.5° | 503.8  | 498.9  | 475.8 | 439.4 | 382.6 | 289.5 | 202.2 | 152.7 | 128.3 | 121.7 | 119.4 |
| 20°   | 526.4  | 519.2  | 487.4 | 436.5 | 337.0 | 208.7 | 133.4 | 111.6 | 104.5 | 102.6 | 101.9 |
| 22.5° | 547.9  | 536.7  | 497.9 | 425.0 | 266.9 | 140.1 | 105.5 | 98.6  | 96.3  | 95.2  | 94.9  |
| 25°   | 566.6  | 551.0  | 507.1 | 389.6 | 188.9 | 105.8 | 95.0  | 92.7  | 89.8  | 87.7  | 87.8  |
| 27.5° | 584.1  | 565.3  | 512.7 | 331.3 | 126.0 | 90.4  | 88.0  | 84.9  | 79.5  | 76.4  | 76.4  |
| 30°   | 605.2  | 584.3  | 516.8 | 254.9 | 92.7  | 80.0  | 78.0  | 73.2  | 65.9  | 61.8  | 61.8  |
| 32.5° | 637.0  | 613.1  | 514.1 | 178.9 | 76.8  | 70.3  | 65.7  | 59.1  | 51.1  | 47.2  | 47.0  |
| 35°   | 685.7  | 657.7  | 495.5 | 117.3 | 67.8  | 61.1  | 53.7  | 45.7  | 38.7  | 35.4  | 35.2  |
| 37.5° | 751.2  | 717.3  | 453.5 | 83.9  | 60.8  | 52.6  | 43.7  | 34.9  | 29.7  | 27.5  | 27.4  |
| 40°   | 836.2  | 786.6  | 393.5 | 68.0  | 54.2  | 44.4  | 33.8  | 27.0  | 23.4  | 21.8  | 22.0  |
| 42.5° | 938.3  | 860.8  | 321.6 | 58.7  | 47.8  | 36.5  | 26.4  | 21.3  | 19.0  | 17.9  | 17.5  |
| 45°   | 1051.7 | 934.1  | 246.3 | 52.3  | 41.5  | 29.5  | 20.6  | 16.9  | 15.1  | 14.4  | 14.4  |
| 47.5° | 1176.4 | 1005.3 | 180.2 | 46.7  | 34.6  | 22.8  | 16.5  | 13.8  | 12.3  | 11.8  | 11.6  |
| 50°   | 1289.6 | 1054.8 | 129.9 | 40.8  | 28.3  | 18.0  | 13.4  | 11.5  | 10.5  | 9.8   | 9.8   |
| 52.5° | 1384.0 | 1070.4 | 95.7  | 34.4  | 22.9  | 14.4  | 11.1  | 9.8   | 8.8   | 8.4   | 8.4   |
| 55°   | 1467.0 | 1064.0 | 71.1  | 28.3  | 18.5  | 11.8  | 9.5   | 8.4   | 7.5   | 7.0   | 7.0   |
| 57.5° | 1546.7 | 1043.3 | 53.1  | 23.1  | 14.9  | 9.5   | 8.0   | 7.0   | 6.2   | 5.9   | 5.9   |
| 60°   | 1611.7 | 1008.9 | 39.5  | 18.7  | 12.0  | 7.7   | 6.7   | 5.7   | 5.1   | 4.6   | 4.6   |
| 62.5° | 1664.5 | 970.9  | 29.0  | 15.4  | 9.5   | 6.1   | 5.2   | 4.8   | 3.8   | 3.3   | 3.3   |
| 65°   | 1664.8 | 907.8  | 21.8  | 12.8  | 7.4   | 4.8   | 3.9   | 3.8   | 2.5   | 2.0   | 1.8   |
| 67.5° | 1544.4 | 782.7  | 16.7  | 11.0  | 5.7   | 3.6   | 2.9   | 3.1   | 1.3   | 0.8   | 0.7   |
| 68°   | 1500.6 | 750.9  | 15.7  | 10.8  | 5.4   | 3.4   | 2.8   | 3.1   | 1.1   | 0.7   | 0.5   |
| 70°   | 1265.2 | 597.4  | 12.6  | 10.5  | 4.8   | 2.6   | 2.3   | 3.1   | 1.0   | 0.5   | 0.3   |
| 72.5° | 809.2  | 346.7  | 9.3   | 8.4   | 3.6   | 2.0   | 1.5   | 2.8   | 1.0   | 0.3   | 0.2   |
| 75°   | 344.4  | 107.5  | 6.4   | 5.9   | 2.1   | 1.5   | 1.0   | 1.8   | 0.7   | 0.2   | 0.0   |
| 77.5° | 72.6   | 24.2   | 3.8   | 3.6   | 1.5   | 1.0   | 0.7   | 0.5   | 0.2   | 0.0   | 0.0   |
| 80°   | 18.7   | 7.0    | 2.0   | 1.8   | 0.8   | 0.5   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 5.9    | 2.8    | 1.1   | 0.8   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 2.9    | 1.6    | 0.7   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.6    | 0.5    | 0.2   | 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)