

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: P456138

Luminaire Tested: **GLAN-SA7B-827-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456138  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA7B-827-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23871 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 286  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

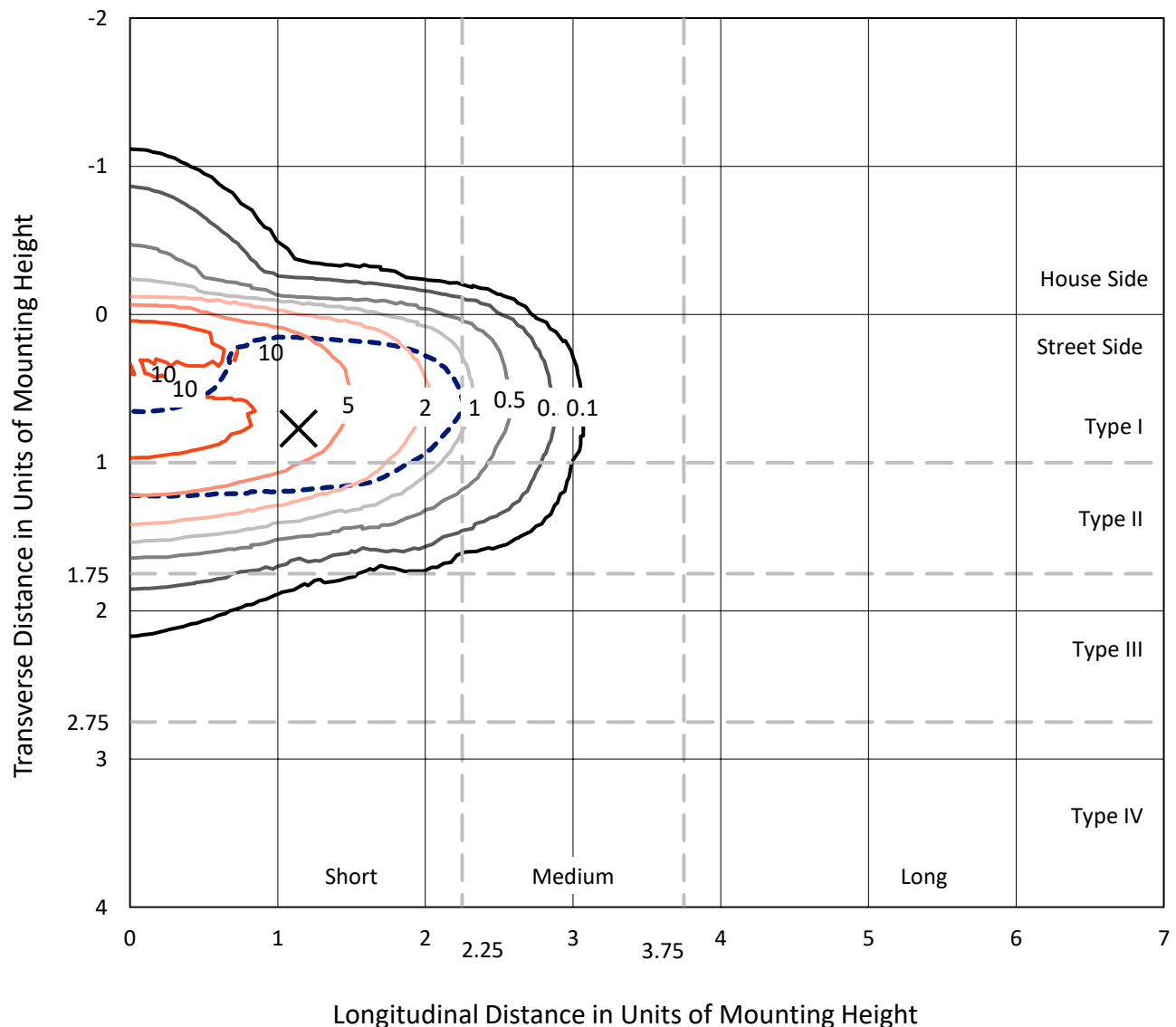


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## Iso-Footcandle Lines of Horizontal Illumination

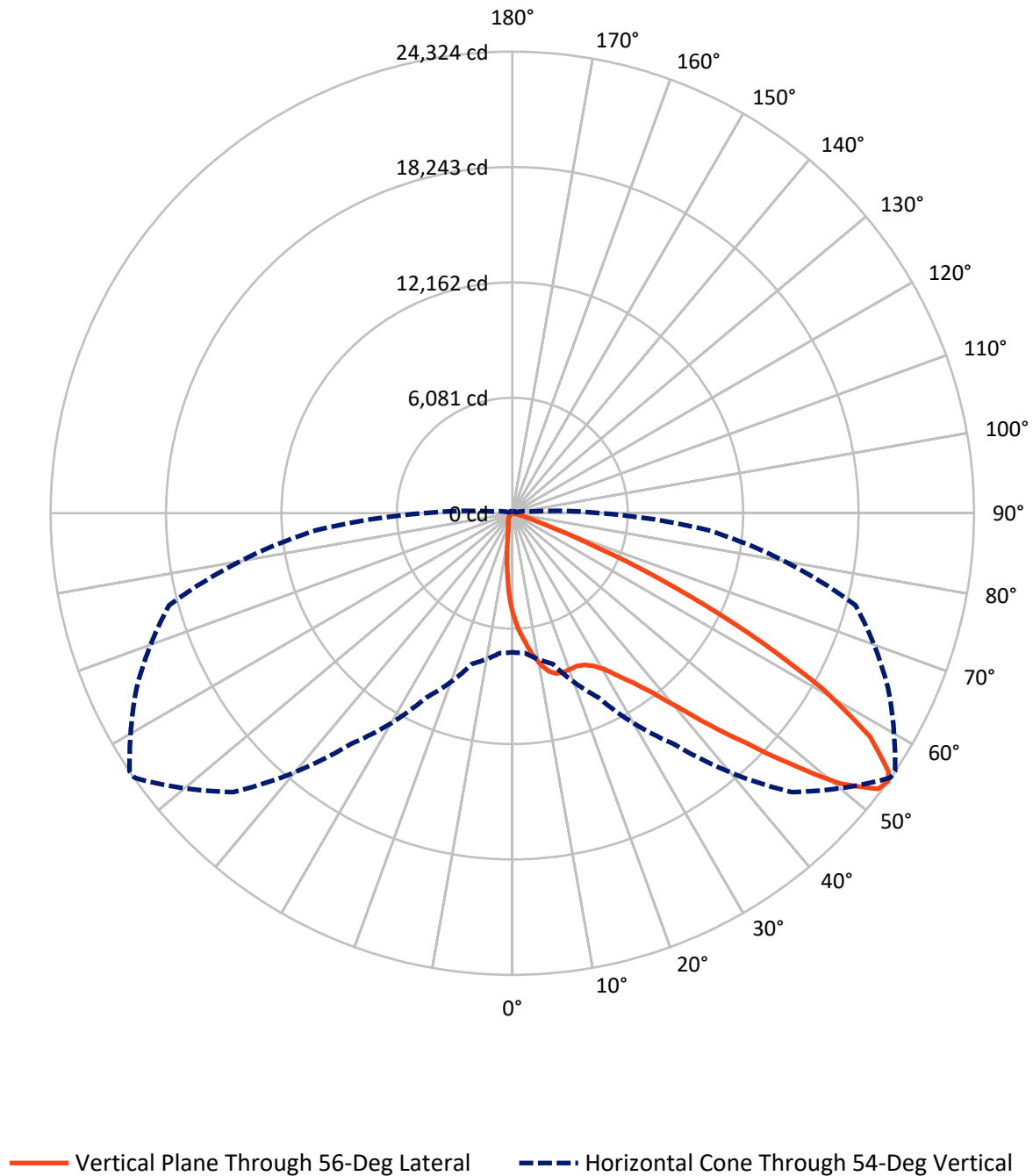
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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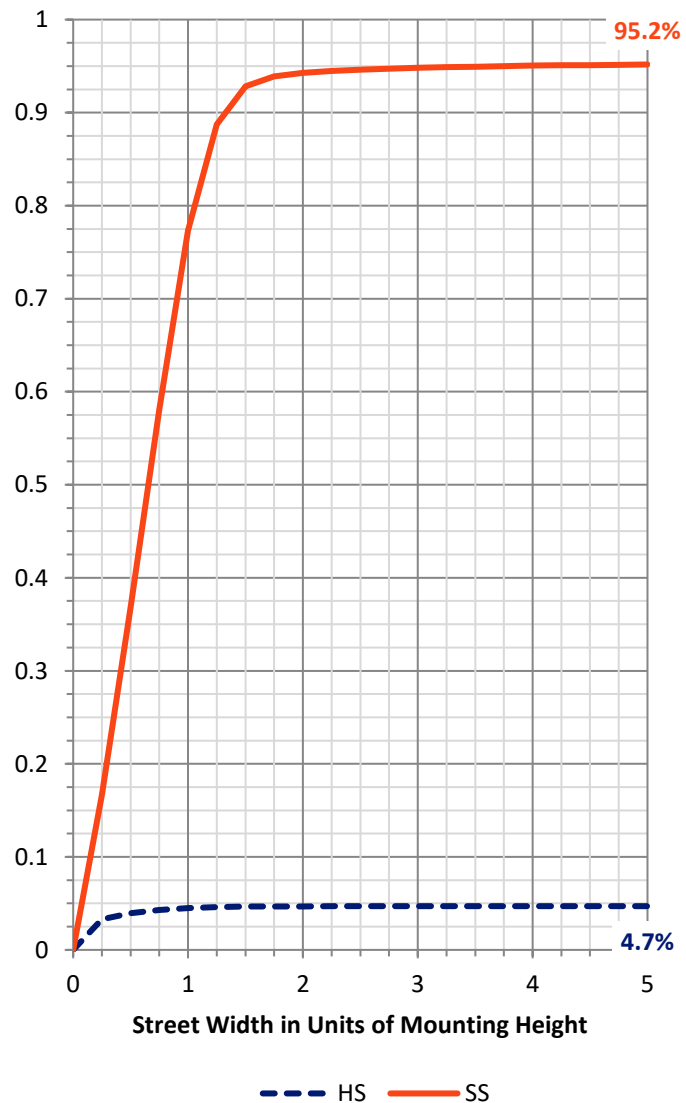
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1128.8   | 0.0    | 1128.8  |
|                    | % Fixture | 4.7      | 0.0    | 4.7     |
| <b>Street Side</b> | Lumens    | 22742.2  | 0.0    | 22742.2 |
|                    | % Fixture | 95.3     | 0.0    | 95.3    |
| <b>Total</b>       | Lumens    | 23871.0  | 0.0    | 23871.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 468.6   | 2.0       |
| 10°-20°   | 1266.9  | 5.3       |
| 20°-30°   | 2194.2  | 9.2       |
| 30°-40°   | 3787.5  | 15.9      |
| 40°-50°   | 6446.4  | 27.0      |
| 50°-60°   | 6379.5  | 26.7      |
| 60°-70°   | 2911.8  | 12.2      |
| 70°-80°   | 373.9   | 1.6       |
| 80°-90°   | 42.1    | 0.2       |
| 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°    | 23871.0 | 100.0     |
| 0°-180°   | 23871.0 | 100.0     |

**Coefficient of Utilization**



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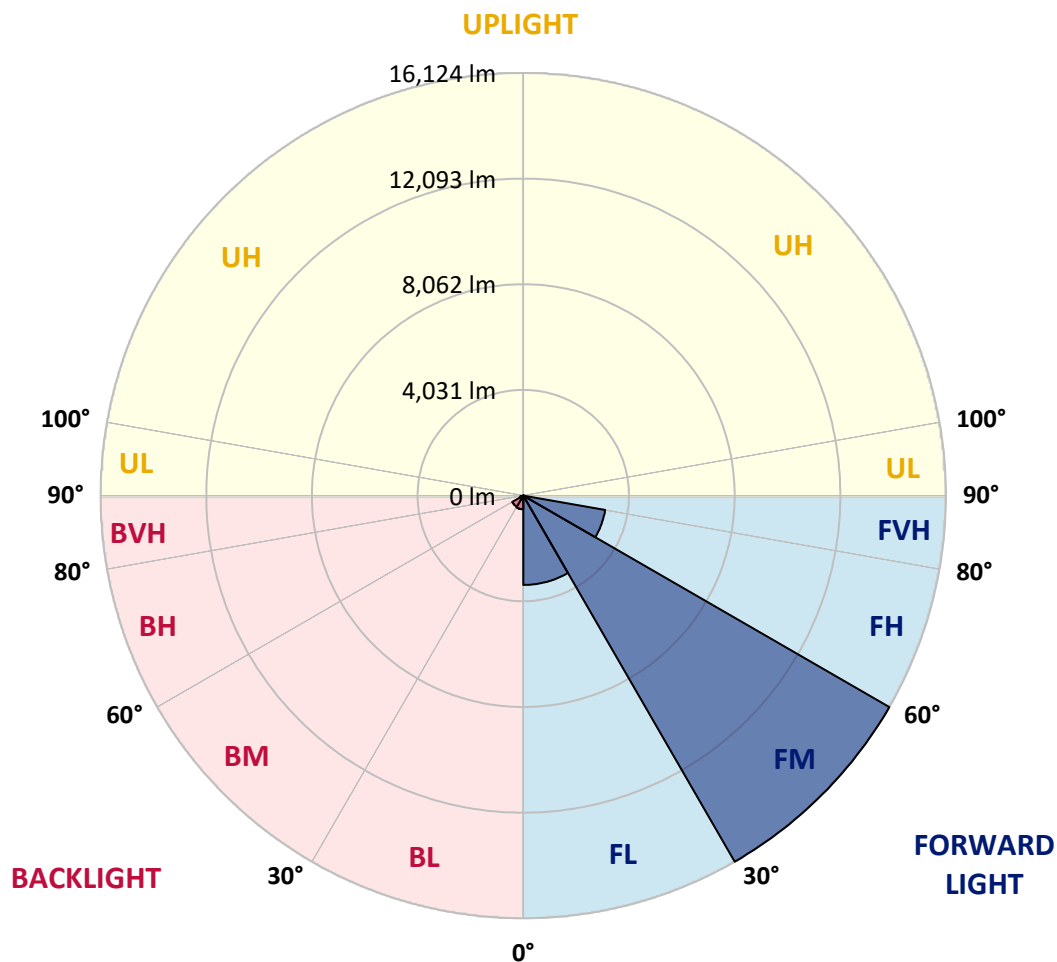
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3407.7  | 14.3      |                         |      |         |
| FM   | (30°-60°)   | 16124.2 | 67.5      |                         |      |         |
| FH   | (60°-80°)   | 3172.7  | 13.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 37.6    | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 522.0   | 2.2       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 489.2   | 2.0       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 113.0   | 0.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 4.5     | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 56°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  | 5303.5  |
| 2.5°  | 6740.0  | 6693.3  | 6628.9  | 6579.0  | 6461.4  | 6292.3  | 6113.5  | 6113.5  | 5941.2  | 5701.2  | 5456.4  |
| 5°    | 7774.0  | 7743.4  | 7680.6  | 7551.7  | 7419.7  | 7182.9  | 6823.8  | 6761.0  | 6453.4  | 6018.5  | 5561.1  |
| 7.5°  | 8194.3  | 8208.8  | 8212.1  | 8178.2  | 8115.4  | 7881.9  | 7526.0  | 7482.5  | 6991.3  | 6408.3  | 5698.0  |
| 10°   | 7791.7  | 7862.6  | 7931.8  | 8071.9  | 8270.0  | 8326.4  | 8125.1  | 8080.0  | 7596.8  | 6802.8  | 5846.2  |
| 12.5° | 7192.6  | 7231.2  | 7269.9  | 7490.5  | 7888.3  | 8344.1  | 8555.1  | 8553.5  | 8144.4  | 7195.8  | 6034.6  |
| 15°   | 6914.0  | 6947.8  | 6951.0  | 7049.3  | 7393.9  | 8057.4  | 8738.7  | 8762.9  | 8679.1  | 7680.6  | 6237.6  |
| 17.5° | 6972.0  | 6999.3  | 6976.8  | 7000.9  | 7181.3  | 7741.8  | 8717.8  | 8798.3  | 9112.3  | 8146.0  | 6421.2  |
| 20°   | 7350.4  | 7403.6  | 7316.6  | 7249.0  | 7303.7  | 7658.0  | 8646.9  | 8759.6  | 9418.3  | 8600.2  | 6588.6  |
| 22.5° | 8030.1  | 8059.1  | 7949.5  | 7764.3  | 7667.7  | 7833.6  | 8627.6  | 8738.7  | 9679.2  | 8972.2  | 6685.3  |
| 25°   | 8785.4  | 8775.7  | 8654.9  | 8447.2  | 8244.3  | 8187.9  | 8754.8  | 8854.7  | 9895.0  | 9307.2  | 6714.3  |
| 27.5° | 9540.7  | 9569.7  | 9366.8  | 9109.1  | 8865.9  | 8719.4  | 9039.9  | 9113.9  | 10138.2 | 9688.9  | 6749.7  |
| 30°   | 10418.5 | 10371.8 | 10172.1 | 9877.3  | 9598.7  | 9394.2  | 9498.9  | 9519.8  | 10473.2 | 10194.6 | 6843.1  |
| 32.5° | 11560.3 | 11431.5 | 11207.6 | 10692.3 | 10492.6 | 10146.3 | 10172.1 | 10197.8 | 10880.7 | 10695.5 | 6955.8  |
| 35°   | 13109.7 | 13103.2 | 12665.1 | 11971.0 | 11484.6 | 11054.6 | 10941.9 | 10962.8 | 11497.5 | 11439.5 | 7205.5  |
| 37.5° | 14974.6 | 15000.4 | 14501.1 | 13802.2 | 12906.7 | 12223.9 | 11991.9 | 11995.2 | 12434.8 | 12467.1 | 7585.6  |
| 40°   | 16493.4 | 16561.0 | 16263.1 | 15791.2 | 14907.0 | 13839.2 | 13449.5 | 13414.0 | 13752.3 | 13712.0 | 8128.3  |
| 42.5° | 17147.2 | 17210.0 | 17321.2 | 17485.4 | 16999.1 | 16118.1 | 15198.5 | 15246.8 | 15349.9 | 15068.0 | 8737.1  |
| 45°   | 16826.7 | 16926.6 | 17363.0 | 18377.7 | 18835.1 | 18538.7 | 17442.0 | 17272.9 | 16836.4 | 16541.7 | 9349.1  |
| 47.5° | 15491.6 | 15734.8 | 16464.4 | 18153.8 | 19754.7 | 20756.4 | 19973.7 | 19749.8 | 18324.5 | 17617.5 | 9738.8  |
| 50°   | 13296.5 | 13311.0 | 14327.2 | 16486.9 | 19278.0 | 22156.0 | 22558.6 | 22391.1 | 19711.2 | 18221.4 | 9935.3  |
| 52.5° | 9639.0  | 9956.2  | 10887.1 | 13388.3 | 17213.3 | 21943.4 | 24206.2 | 24136.9 | 21141.3 | 18530.7 | 10218.8 |
| 54°   | 7327.9  | 7389.1  | 8216.9  | 10698.7 | 14841.0 | 20775.7 | 24307.6 | 24323.7 | 21851.6 | 18717.5 | 10386.3 |
| 55°   | 6007.2  | 5860.7  | 6730.4  | 9113.9  | 13222.4 | 19743.4 | 23975.8 | 24053.2 | 22170.5 | 18814.1 | 10510.3 |
| 57.5° | 2847.4  | 2849.0  | 3514.2  | 4807.4  | 8281.3  | 15330.6 | 21948.2 | 22222.0 | 22205.9 | 18980.0 | 10892.0 |
| 60°   | 1441.4  | 1451.1  | 1597.6  | 2219.3  | 4090.7  | 10191.4 | 18147.4 | 18799.6 | 20497.1 | 19004.2 | 11017.6 |
| 62.5° | 1008.2  | 996.9   | 972.8   | 1067.8  | 1721.6  | 5179.4  | 13510.7 | 14077.6 | 17414.6 | 18084.6 | 10618.2 |
| 65°   | 863.2   | 839.1   | 771.4   | 756.9   | 869.7   | 2063.1  | 8415.0  | 9339.4  | 13296.5 | 15659.1 | 9481.1  |
| 67.5° | 737.6   | 728.0   | 666.8   | 629.7   | 615.2   | 898.7   | 4342.0  | 4828.3  | 9088.2  | 11255.9 | 7181.3  |
| 70°   | 626.5   | 621.7   | 584.6   | 537.9   | 497.7   | 537.9   | 1610.5  | 1995.4  | 5065.1  | 6060.4  | 3388.5  |
| 72.5° | 508.9   | 513.8   | 520.2   | 460.6   | 418.7   | 381.7   | 687.7   | 800.4   | 2119.4  | 2166.2  | 1185.3  |
| 75°   | 446.1   | 441.3   | 441.3   | 401.0   | 349.5   | 283.5   | 378.5   | 407.5   | 649.0   | 602.3   | 275.4   |
| 77.5° | 314.1   | 302.8   | 354.3   | 330.2   | 291.5   | 201.3   | 215.8   | 228.7   | 269.0   | 230.3   | 128.8   |
| 80°   | 217.4   | 217.4   | 227.1   | 296.3   | 262.5   | 146.6   | 132.1   | 141.7   | 159.4   | 136.9   | 74.1    |
| 82.5° | 122.4   | 125.6   | 148.2   | 157.8   | 153.0   | 98.2    | 87.0    | 88.6    | 106.3   | 93.4    | 46.7    |
| 85°   | 14.5    | 24.2    | 85.4    | 83.7    | 62.8    | 43.5    | 48.3    | 49.9    | 66.0    | 58.0    | 27.4    |
| 87.5° | 1.6     | 3.2     | 17.7    | 22.5    | 16.1    | 17.7    | 17.7    | 17.7    | 22.5    | 25.8    | 19.3    |
| 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°    | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 | 5303.5 |
| 2.5°  | 5324.4 | 5202.0 | 4910.5 | 4572.3 | 4356.5 | 4005.4 | 3709.0 | 3494.8 | 3441.7 | 3338.6 | 3369.2 |
| 5°    | 5317.9 | 5063.5 | 4469.2 | 3841.1 | 3171.1 | 2671.9 | 2299.8 | 2006.7 | 1877.9 | 1792.5 | 1732.9 |
| 7.5°  | 5321.2 | 4923.4 | 3969.9 | 2969.8 | 2169.4 | 1679.8 | 1335.1 | 1156.4 | 1037.2 | 987.3  | 993.7  |
| 10°   | 5330.8 | 4765.5 | 3390.1 | 2200.0 | 1464.0 | 1085.5 | 874.5  | 789.2  | 748.9  | 742.5  | 740.8  |
| 12.5° | 5353.4 | 4593.2 | 2836.1 | 1633.1 | 1024.3 | 789.2  | 708.6  | 679.6  | 666.8  | 666.8  | 661.9  |
| 15°   | 5377.5 | 4403.2 | 2375.5 | 1214.3 | 789.2  | 678.0  | 641.0  | 626.5  | 618.4  | 618.4  | 616.8  |
| 17.5° | 5377.5 | 4184.1 | 1945.5 | 942.2  | 679.6  | 623.3  | 594.3  | 575.0  | 568.5  | 568.5  | 566.9  |
| 20°   | 5343.7 | 3929.7 | 1563.8 | 758.6  | 616.8  | 571.7  | 542.7  | 521.8  | 513.8  | 510.5  | 508.9  |
| 22.5° | 5226.1 | 3589.9 | 1244.9 | 652.3  | 565.3  | 526.6  | 489.6  | 465.4  | 459.0  | 455.8  | 457.4  |
| 25°   | 5016.8 | 3206.5 | 985.6  | 573.3  | 518.6  | 471.9  | 439.7  | 422.0  | 415.5  | 415.5  | 417.1  |
| 27.5° | 4801.0 | 2805.5 | 781.1  | 513.8  | 462.2  | 420.3  | 394.6  | 383.3  | 381.7  | 386.5  | 388.1  |
| 30°   | 4601.3 | 2402.9 | 632.9  | 465.4  | 412.3  | 376.9  | 359.1  | 355.9  | 355.9  | 357.5  | 359.1  |
| 32.5° | 4379.0 | 2050.2 | 529.9  | 423.6  | 372.0  | 341.4  | 331.8  | 331.8  | 335.0  | 335.0  | 338.2  |
| 35°   | 4238.9 | 1747.4 | 465.4  | 383.3  | 341.4  | 315.7  | 309.2  | 310.8  | 315.7  | 322.1  | 325.3  |
| 37.5° | 4163.2 | 1505.8 | 423.6  | 351.1  | 312.4  | 294.7  | 288.3  | 291.5  | 302.8  | 314.1  | 315.7  |
| 40°   | 4169.6 | 1323.8 | 389.7  | 323.7  | 289.9  | 270.6  | 265.7  | 275.4  | 286.7  | 297.9  | 299.6  |
| 42.5° | 4240.5 | 1188.6 | 357.5  | 291.5  | 270.6  | 243.2  | 241.6  | 251.2  | 256.1  | 267.3  | 269.0  |
| 45°   | 4324.3 | 1090.3 | 323.7  | 257.7  | 235.1  | 211.0  | 212.6  | 220.6  | 227.1  | 244.8  | 248.0  |
| 47.5° | 4350.0 | 1022.7 | 285.1  | 219.0  | 193.3  | 185.2  | 186.8  | 191.7  | 204.5  | 220.6  | 222.3  |
| 50°   | 4379.0 | 980.8  | 248.0  | 185.2  | 164.3  | 162.7  | 164.3  | 167.5  | 175.5  | 182.0  | 180.4  |
| 52.5° | 4503.0 | 979.2  | 217.4  | 161.1  | 140.1  | 143.3  | 144.9  | 143.3  | 136.9  | 127.2  | 124.0  |
| 54°   | 4619.0 | 984.0  | 202.9  | 149.8  | 128.8  | 133.7  | 132.1  | 124.0  | 107.9  | 98.2   | 93.4   |
| 55°   | 4712.4 | 988.9  | 194.9  | 141.7  | 122.4  | 124.0  | 125.6  | 109.5  | 88.6   | 78.9   | 75.7   |
| 57.5° | 4896.0 | 977.6  | 175.5  | 124.0  | 107.9  | 101.5  | 99.9   | 72.5   | 48.3   | 41.9   | 38.7   |
| 60°   | 4804.2 | 882.6  | 159.4  | 106.3  | 91.8   | 82.1   | 67.6   | 40.3   | 24.2   | 17.7   | 17.7   |
| 62.5° | 4443.4 | 748.9  | 141.7  | 87.0   | 75.7   | 62.8   | 35.4   | 22.5   | 11.3   | 6.4    | 4.8    |
| 65°   | 3974.8 | 629.7  | 127.2  | 69.3   | 59.6   | 40.3   | 19.3   | 14.5   | 4.8    | 0.0    | 0.0    |
| 67.5° | 2955.3 | 467.1  | 107.9  | 54.8   | 45.1   | 25.8   | 12.9   | 8.1    | 1.6    | 0.0    | 0.0    |
| 70°   | 1368.9 | 285.1  | 91.8   | 41.9   | 32.2   | 19.3   | 9.7    | 4.8    | 0.0    | 0.0    | 0.0    |
| 72.5° | 393.0  | 178.8  | 75.7   | 30.6   | 22.5   | 16.1   | 8.1    | 3.2    | 1.6    | 0.0    | 0.0    |
| 75°   | 136.9  | 143.3  | 56.4   | 22.5   | 17.7   | 11.3   | 6.4    | 3.2    | 1.6    | 0.0    | 0.0    |
| 77.5° | 82.1   | 116.0  | 35.4   | 19.3   | 14.5   | 9.7    | 6.4    | 3.2    | 1.6    | 1.6    | 0.0    |
| 80°   | 46.7   | 77.3   | 22.5   | 16.1   | 12.9   | 8.1    | 4.8    | 3.2    | 1.6    | 1.6    | 0.0    |
| 82.5° | 25.8   | 37.0   | 17.7   | 14.5   | 11.3   | 8.1    | 4.8    | 3.2    | 1.6    | 1.6    | 1.6    |
| 85°   | 20.9   | 19.3   | 14.5   | 12.9   | 9.7    | 6.4    | 4.8    | 1.6    | 0.0    | 0.0    | 0.0    |
| 87.5° | 16.1   | 12.9   | 12.9   | 12.9   | 9.7    | 6.4    | 4.8    | 1.6    | 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)