

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: McGRAW-EDISON

Report Number: P532544

Luminaire Tested: **GALN-SA7D-830-U-AFL-GRSWH**

Issue Date: 5/27/2021

#### Test Information

Test Method: LM-79-08  
Report Number: P532544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7D-830-U-AFL-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 38636 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 433  
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

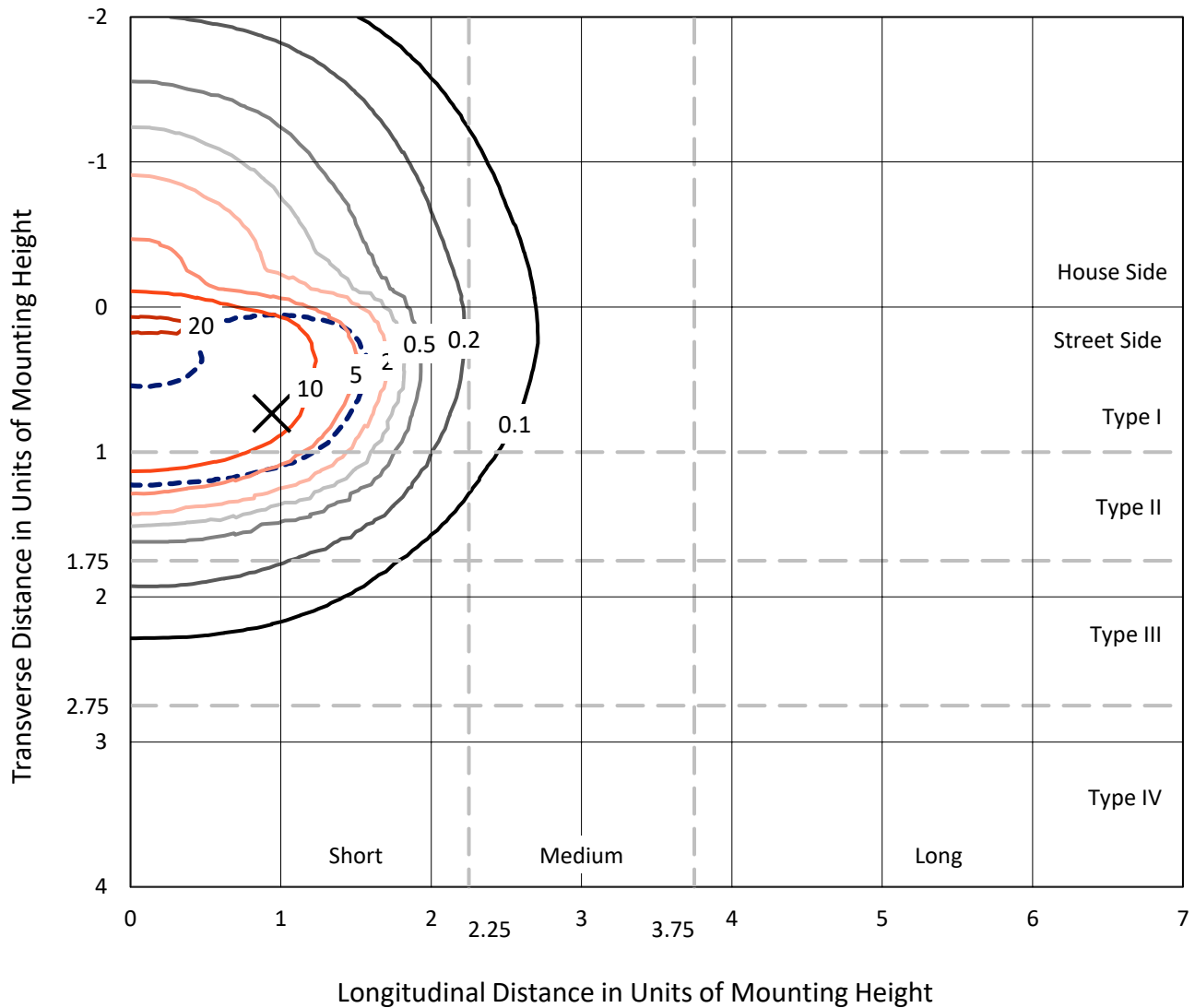


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## Iso-Footcandle Lines of Horizontal Illumination

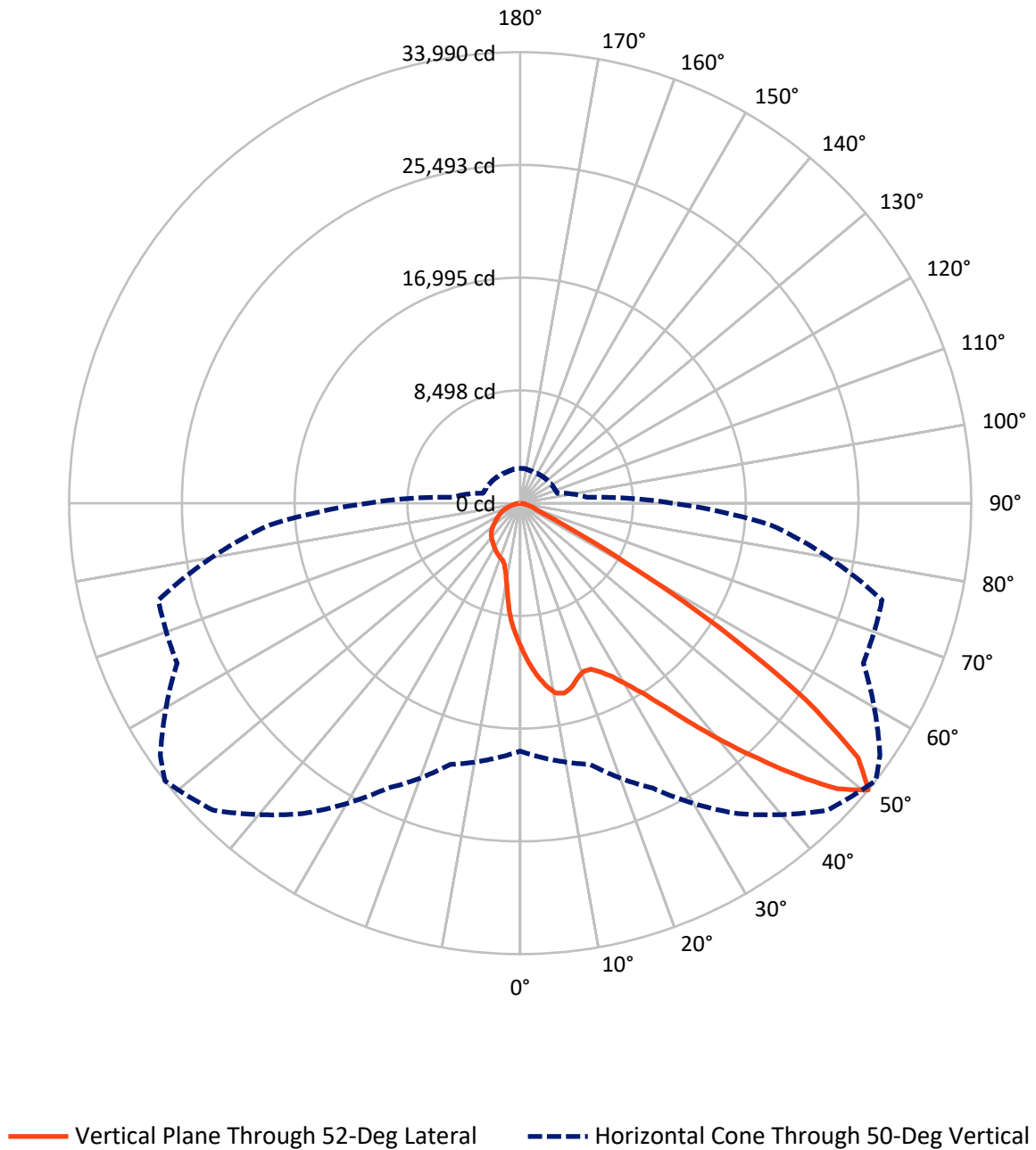
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22.3 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    | 7262.6   | 0.0    | 7262.6  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 31373.3  | 0.0    | 31373.3 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 38636.0  | 0.0    | 38636.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1003.8  | 2.6       |
| 10°-20°   | 2690.4  | 7.0       |
| 20°-30°   | 4532.0  | 11.7      |
| 30°-40°   | 7605.0  | 19.7      |
| 40°-50°   | 11633.8 | 30.1      |
| 50°-60°   | 8482.0  | 22.0      |
| 60°-70°   | 1887.7  | 4.9       |
| 70°-80°   | 680.9   | 1.8       |
| 80°-90°   | 120.5   | 0.3       |
| 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°    | 38636.0 | 100.0     |
| 0°-180°   | 38636.0 | 100.0     |

**Coefficient of Utilization**



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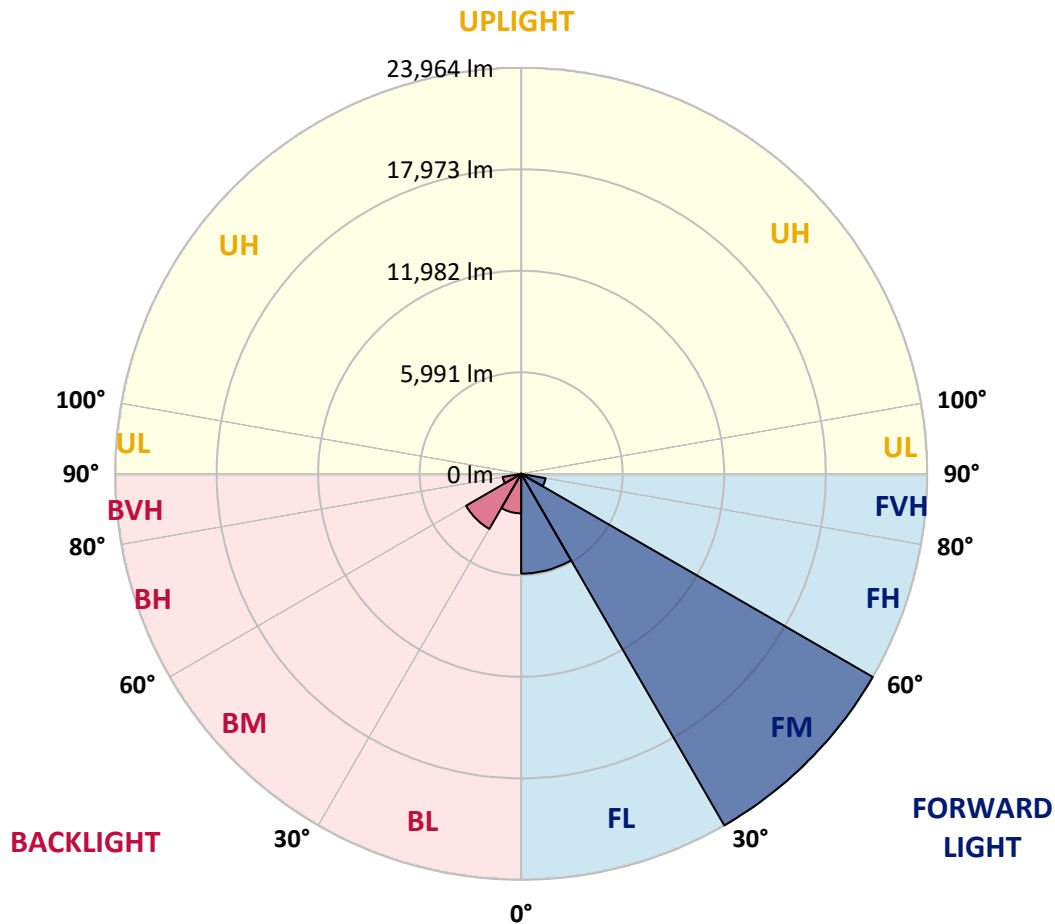
CATALOG NUMBER: GALN-SA7D-830-U-AFL-GRSWH

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 5893.3  | 15.3      |                         |      |         |
| FM   | (30°-60°)   | 23964.0 | 62.0      |                         |      |         |
| FH   | (60°-80°)   | 1462.0  | 3.8       |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 54.0    | 0.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 2332.9  | 6.0       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3756.7  | 9.7       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1106.5  | 2.9       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 66.5    | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 52°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 |
| 2.5°  | 12823.2 | 12576.4 | 12604.3 | 12427.4 | 12236.5 | 12180.6 | 11985.1 | 11798.8 | 11659.1 | 11361.1 | 11086.4 |
| 5°    | 14015.2 | 13940.7 | 13828.9 | 13689.2 | 13544.9 | 13191.0 | 12990.8 | 12758.0 | 12245.8 | 11784.8 | 11328.5 |
| 7.5°  | 14187.4 | 14173.5 | 14234.0 | 14234.0 | 14285.2 | 14150.2 | 13866.2 | 13703.2 | 13158.4 | 12408.8 | 11561.3 |
| 10°   | 12976.8 | 13018.7 | 13312.1 | 13693.9 | 14224.7 | 14592.5 | 14546.0 | 14504.1 | 13908.1 | 12883.7 | 11836.1 |
| 12.5° | 12013.0 | 11919.9 | 12092.1 | 12418.1 | 13214.3 | 14103.6 | 14704.3 | 14708.9 | 14555.3 | 13642.7 | 12036.3 |
| 15°   | 11468.2 | 11533.4 | 11580.0 | 11733.6 | 12334.3 | 13363.3 | 14420.2 | 14732.2 | 15407.4 | 14178.1 | 12352.9 |
| 17.5° | 11817.4 | 11598.6 | 11589.3 | 11626.5 | 11933.8 | 12706.8 | 13894.1 | 14429.6 | 15873.0 | 14867.2 | 12744.0 |
| 20°   | 12273.7 | 12269.1 | 12138.7 | 12092.1 | 12087.5 | 12776.6 | 13549.5 | 14275.9 | 16119.8 | 15761.2 | 13139.8 |
| 22.5° | 13074.6 | 13074.6 | 12860.4 | 12758.0 | 12539.1 | 13102.5 | 13596.1 | 14089.7 | 16529.5 | 16375.8 | 13330.7 |
| 25°   | 14415.6 | 14196.7 | 13828.9 | 13577.5 | 13451.8 | 13652.0 | 14089.7 | 14532.0 | 16888.0 | 17027.7 | 13726.5 |
| 27.5° | 15654.1 | 15309.6 | 15128.0 | 14695.0 | 14527.3 | 14410.9 | 14811.4 | 15258.4 | 17307.1 | 18042.8 | 13940.7 |
| 30°   | 17060.3 | 16999.8 | 16673.8 | 16115.1 | 15700.7 | 15486.5 | 15854.4 | 16296.7 | 18075.4 | 19081.1 | 14434.2 |
| 32.5° | 19574.7 | 19025.2 | 18582.9 | 17898.4 | 17223.3 | 16767.0 | 17130.2 | 17423.5 | 19351.2 | 20166.0 | 14974.3 |
| 35°   | 22289.2 | 22112.3 | 21348.7 | 20114.8 | 19081.1 | 18671.4 | 18885.5 | 19104.4 | 20836.5 | 21823.6 | 15882.3 |
| 37.5° | 24957.2 | 24715.1 | 24086.5 | 23048.2 | 21791.0 | 20957.5 | 21111.2 | 21367.3 | 22503.4 | 24058.6 | 16990.5 |
| 40°   | 26875.6 | 26577.6 | 26261.0 | 26107.3 | 24859.4 | 23718.7 | 23630.2 | 23695.4 | 24757.0 | 26153.9 | 18219.7 |
| 42.5° | 27015.3 | 27383.1 | 27480.9 | 28100.2 | 27806.8 | 26870.9 | 26326.1 | 26340.1 | 26908.2 | 28225.9 | 19462.9 |
| 45°   | 26721.9 | 26382.0 | 27103.7 | 28793.9 | 29762.4 | 30200.1 | 29282.8 | 29166.4 | 28239.8 | 29427.2 | 20082.2 |
| 47.5° | 23644.2 | 23737.3 | 24957.2 | 27629.9 | 30428.3 | 32383.9 | 32169.7 | 31783.2 | 28952.2 | 29385.3 | 19984.4 |
| 50°   | 18690.0 | 19253.4 | 20384.8 | 23714.0 | 28565.8 | 32728.4 | 33990.2 | 33096.3 | 28528.5 | 28230.5 | 18988.0 |
| 52.5° | 12446.0 | 12678.8 | 13423.8 | 17721.5 | 22969.0 | 29254.9 | 31895.0 | 32099.8 | 28137.4 | 26717.3 | 17726.1 |
| 55°   | 5540.9  | 5522.3  | 6569.9  | 9256.5  | 14410.9 | 22261.3 | 26060.7 | 27308.6 | 26633.5 | 25176.1 | 16496.9 |
| 57.5° | 2346.7  | 2425.9  | 2854.2  | 3999.7  | 7086.7  | 13433.1 | 17656.3 | 18750.5 | 20482.6 | 20673.5 | 12655.5 |
| 60°   | 1587.8  | 1597.1  | 1713.5  | 2002.2  | 2966.0  | 6309.1  | 9261.2  | 10574.2 | 11812.8 | 11729.0 | 6714.2  |
| 62.5° | 1247.9  | 1280.5  | 1368.9  | 1485.3  | 1760.0  | 2863.6  | 4144.0  | 4875.0  | 4954.2  | 4167.3  | 2546.9  |
| 65°   | 1066.3  | 1070.9  | 1159.4  | 1257.2  | 1378.2  | 1666.9  | 1997.5  | 2034.8  | 2058.0  | 1983.5  | 1871.8  |
| 67.5° | 880.0   | 889.3   | 959.2   | 1070.9  | 1182.7  | 1275.8  | 1368.9  | 1415.5  | 1522.6  | 1732.1  | 1704.2  |
| 70°   | 698.4   | 712.4   | 772.9   | 866.1   | 968.5   | 1024.4  | 1140.8  | 1182.7  | 1280.5  | 1443.4  | 1508.6  |
| 72.5° | 530.8   | 535.5   | 586.7   | 651.9   | 745.0   | 800.9   | 898.6   | 945.2   | 1010.4  | 1150.1  | 1210.6  |
| 75°   | 381.8   | 395.8   | 433.0   | 465.6   | 479.6   | 516.8   | 610.0   | 661.2   | 754.3   | 814.8   | 819.5   |
| 77.5° | 200.2   | 209.5   | 218.8   | 218.8   | 265.4   | 335.2   | 395.8   | 423.7   | 488.9   | 535.5   | 512.2   |
| 80°   | 79.2    | 83.8    | 107.1   | 144.3   | 186.2   | 242.1   | 284.0   | 298.0   | 353.9   | 381.8   | 395.8   |
| 82.5° | 46.6    | 51.2    | 69.8    | 102.4   | 135.0   | 172.3   | 204.9   | 218.8   | 256.1   | 288.7   | 298.0   |
| 85°   | 23.3    | 27.9    | 41.9    | 65.2    | 88.5    | 107.1   | 102.4   | 97.8    | 97.8    | 93.1    | 97.8    |
| 87.5° | 9.3     | 9.3     | 14.0    | 14.0    | 14.0    | 18.6    | 23.3    | 23.3    | 23.3    | 27.9    | 27.9    |
| 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°    | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 | 10890.8 |
| 2.5°  | 10904.8 | 10718.6 | 10546.3 | 10229.7 | 9885.1  | 9787.3  | 9386.9  | 9242.6  | 9140.1  | 9019.1  | 8981.8  |
| 5°    | 10960.7 | 10713.9 | 10159.8 | 9521.9  | 9014.4  | 8362.5  | 7934.2  | 7473.2  | 7138.0  | 7054.1  | 7030.9  |
| 7.5°  | 11077.1 | 10653.4 | 9698.9  | 8735.0  | 7696.7  | 6812.0  | 6136.9  | 5773.7  | 5452.4  | 5433.8  | 5401.2  |
| 10°   | 11207.5 | 10471.8 | 9196.0  | 7682.7  | 6355.7  | 5536.2  | 5131.1  | 4972.8  | 4893.7  | 4875.0  | 4865.7  |
| 12.5° | 11314.6 | 10434.5 | 8632.6  | 6658.4  | 5405.8  | 4912.3  | 4791.2  | 4777.3  | 4809.9  | 4819.2  | 4837.8  |
| 15°   | 11361.1 | 10285.5 | 7952.8  | 5741.1  | 4814.5  | 4632.9  | 4684.1  | 4740.0  | 4763.3  | 4823.8  | 4777.3  |
| 17.5° | 11449.6 | 10094.6 | 7114.7  | 5014.7  | 4483.9  | 4516.5  | 4605.0  | 4670.2  | 4707.4  | 4749.3  | 4688.8  |
| 20°   | 11496.2 | 9922.4  | 6327.8  | 4581.7  | 4367.5  | 4428.0  | 4549.1  | 4600.3  | 4646.9  | 4665.5  | 4595.7  |
| 22.5° | 11454.2 | 9568.5  | 5634.0  | 4232.5  | 4255.8  | 4334.9  | 4442.0  | 4497.9  | 4470.0  | 4395.5  | 4353.5  |
| 25°   | 11342.5 | 9070.3  | 4912.3  | 4009.0  | 4097.5  | 4237.1  | 4321.0  | 4279.0  | 4227.8  | 4185.9  | 4172.0  |
| 27.5° | 11337.8 | 8460.3  | 4390.8  | 3804.1  | 3962.4  | 4153.3  | 4125.4  | 4088.1  | 4111.4  | 4078.8  | 4041.6  |
| 30°   | 11361.1 | 7869.0  | 3962.4  | 3687.7  | 3864.6  | 3957.8  | 3990.4  | 3953.1  | 3981.0  | 3920.5  | 3939.1  |
| 32.5° | 11240.1 | 7291.6  | 3683.1  | 3552.7  | 3748.2  | 3743.6  | 3850.7  | 3878.6  | 3813.4  | 3687.7  | 3706.3  |
| 35°   | 11291.3 | 6826.0  | 3445.6  | 3492.1  | 3617.9  | 3617.9  | 3701.7  | 3669.1  | 3496.8  | 3422.3  | 3440.9  |
| 37.5° | 11645.2 | 6369.7  | 3329.2  | 3408.3  | 3492.1  | 3529.4  | 3501.5  | 3361.8  | 3319.9  | 3319.9  | 3329.2  |
| 40°   | 11980.4 | 5978.6  | 3259.3  | 3389.7  | 3375.7  | 3399.0  | 3194.2  | 3208.1  | 3208.1  | 3212.8  | 3189.5  |
| 42.5° | 12278.4 | 5713.2  | 3203.5  | 3278.0  | 3301.2  | 3180.2  | 3054.5  | 3040.5  | 3073.1  | 3068.4  | 3049.8  |
| 45°   | 12385.5 | 5494.3  | 3124.3  | 3152.2  | 3170.9  | 2970.7  | 2910.1  | 2882.2  | 2919.4  | 2933.4  | 2952.0  |
| 47.5° | 11975.7 | 5312.7  | 3035.8  | 2980.0  | 2942.7  | 2812.3  | 2733.2  | 2682.0  | 2728.5  | 2807.7  | 2826.3  |
| 50°   | 11449.6 | 5075.3  | 2896.2  | 2789.1  | 2709.9  | 2654.0  | 2598.2  | 2546.9  | 2579.5  | 2635.4  | 2621.4  |
| 52.5° | 10672.0 | 4702.8  | 2719.2  | 2607.5  | 2472.4  | 2486.4  | 2435.2  | 2407.3  | 2425.9  | 2425.9  | 2411.9  |
| 55°   | 9563.8  | 3864.6  | 2421.2  | 2342.1  | 2230.3  | 2267.6  | 2276.9  | 2239.6  | 2202.4  | 2235.0  | 2207.0  |
| 57.5° | 6528.0  | 2728.5  | 2160.5  | 2160.5  | 2048.7  | 2099.9  | 2095.3  | 2006.8  | 1918.4  | 1927.7  | 1909.0  |
| 60°   | 3776.2  | 2174.4  | 1992.9  | 1974.2  | 1857.8  | 1899.7  | 1909.0  | 1848.5  | 1713.5  | 1722.8  | 1704.2  |
| 62.5° | 2146.5  | 1857.8  | 1741.4  | 1713.5  | 1690.2  | 1727.4  | 1727.4  | 1648.3  | 1531.9  | 1541.2  | 1522.6  |
| 65°   | 1825.2  | 1722.8  | 1555.2  | 1550.5  | 1541.2  | 1550.5  | 1513.3  | 1429.5  | 1327.0  | 1285.1  | 1289.8  |
| 67.5° | 1657.6  | 1592.4  | 1429.5  | 1387.5  | 1359.6  | 1355.0  | 1285.1  | 1206.0  | 1159.4  | 1122.1  | 1117.5  |
| 70°   | 1452.7  | 1401.5  | 1280.5  | 1224.6  | 1196.6  | 1131.5  | 1061.6  | 1010.4  | 945.2   | 926.6   | 945.2   |
| 72.5° | 1150.1  | 1145.4  | 1098.9  | 1038.3  | 977.8   | 926.6   | 866.1   | 796.2   | 735.7   | 721.7   | 689.1   |
| 75°   | 796.2   | 805.5   | 814.8   | 805.5   | 754.3   | 689.1   | 619.3   | 563.4   | 488.9   | 447.0   | 437.7   |
| 77.5° | 521.5   | 535.5   | 549.4   | 530.8   | 498.2   | 437.7   | 391.1   | 321.3   | 265.4   | 232.8   | 228.2   |
| 80°   | 381.8   | 400.4   | 409.7   | 395.8   | 358.5   | 312.0   | 260.7   | 204.9   | 163.0   | 135.0   | 135.0   |
| 82.5° | 293.3   | 312.0   | 321.3   | 298.0   | 260.7   | 223.5   | 186.2   | 144.3   | 111.7   | 88.5    | 83.8    |
| 85°   | 102.4   | 97.8    | 116.4   | 121.1   | 144.3   | 135.0   | 111.7   | 83.8    | 65.2    | 46.6    | 41.9    |
| 87.5° | 27.9    | 27.9    | 32.6    | 32.6    | 27.9    | 23.3    | 23.3    | 23.3    | 18.6    | 14.0    | 14.0    |
| 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)