

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: P455940

Luminaire Tested: **GALN-SA7A-830-U-SL3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P455940  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA7A-830-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20938 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

Input Watts (W): 215  
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

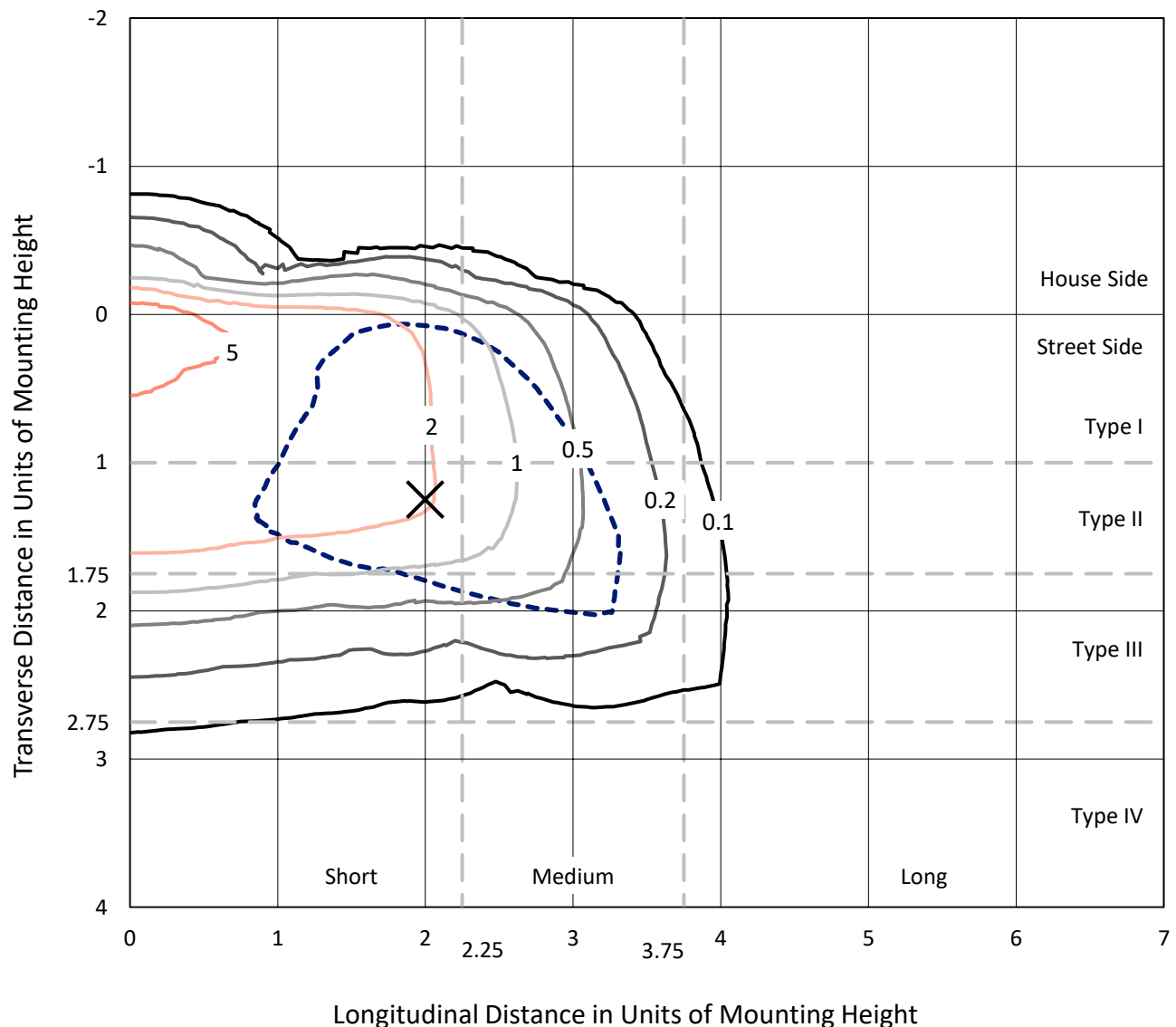


REPORT NUMBER: P455940

CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

## Iso-Footcandle Lines of Horizontal Illumination

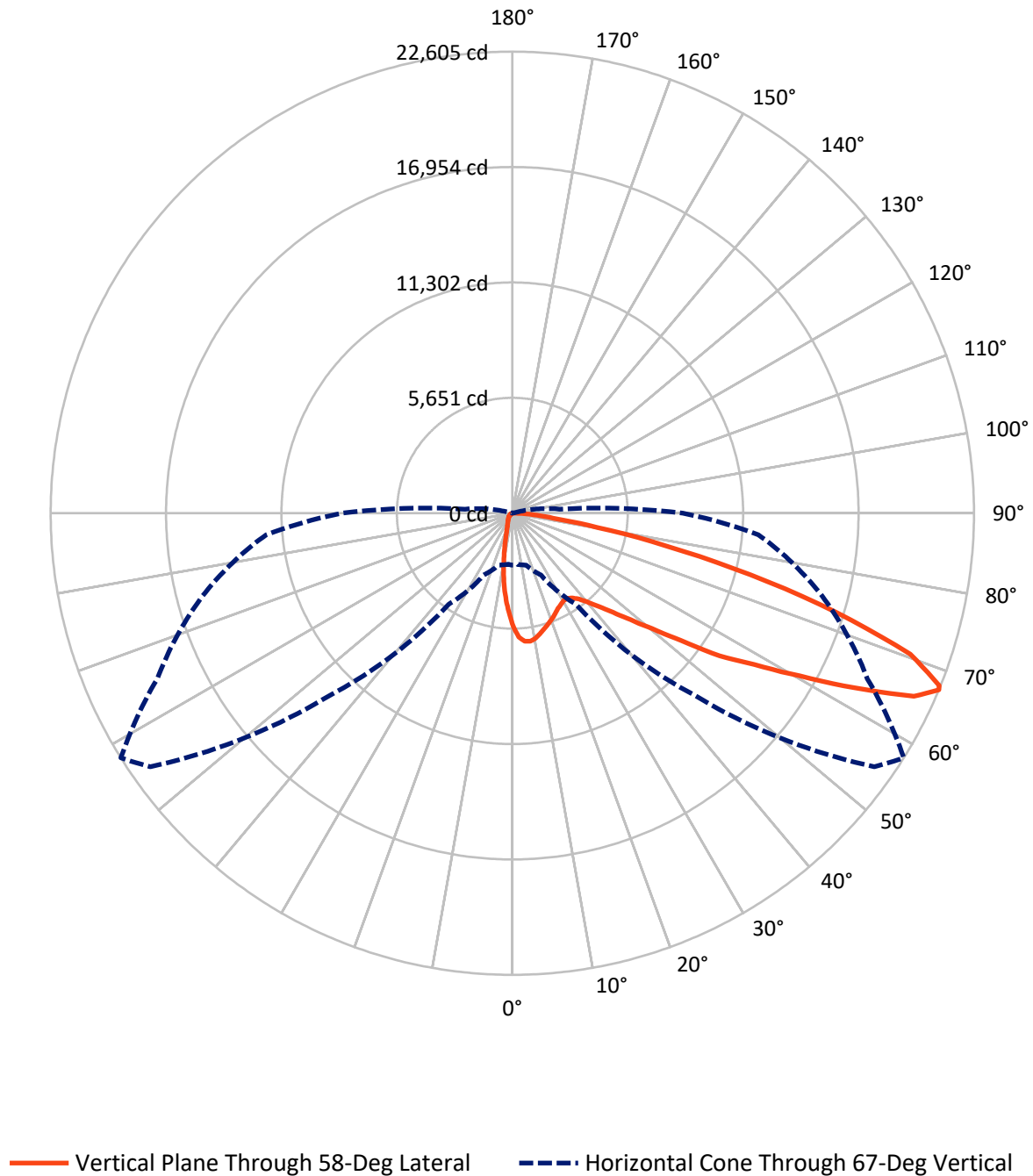
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type III - Short - N/A

REPORT NUMBER: P455940  
CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P455940

CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

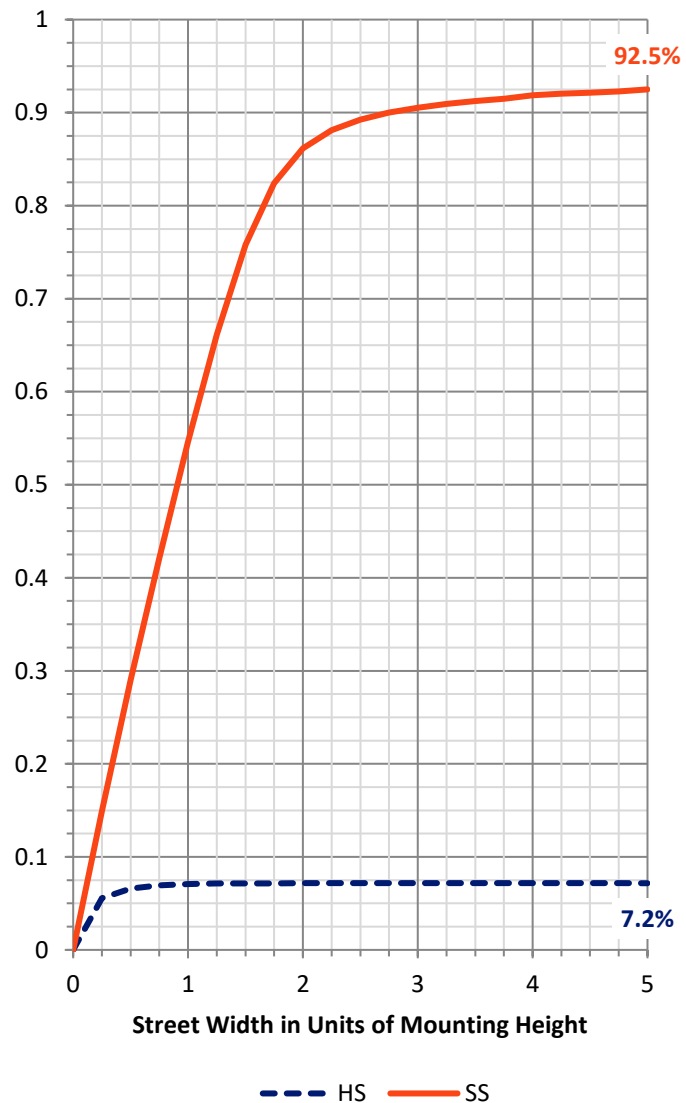
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1511.0   | 0.0    | 1511.0  |
|                    | % Fixture | 7.2      | 0.0    | 7.2     |
| <b>Street Side</b> | Lumens    | 19427.0  | 0.0    | 19427.0 |
|                    | % Fixture | 92.8     | 0.0    | 92.8    |
| <b>Total</b>       | Lumens    | 20938.0  | 0.0    | 20938.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 450.4   | 2.2       |
| 10°-20°   | 972.8   | 4.6       |
| 20°-30°   | 1318.2  | 6.3       |
| 30°-40°   | 1828.2  | 8.7       |
| 40°-50°   | 2915.8  | 13.9      |
| 50°-60°   | 5040.2  | 24.1      |
| 60°-70°   | 5757.5  | 27.5      |
| 70°-80°   | 2400.4  | 11.5      |
| 80°-90°   | 254.5   | 1.2       |
| 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°    | 20938.0 | 100.0     |
| 0°-180°   | 20938.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P455940

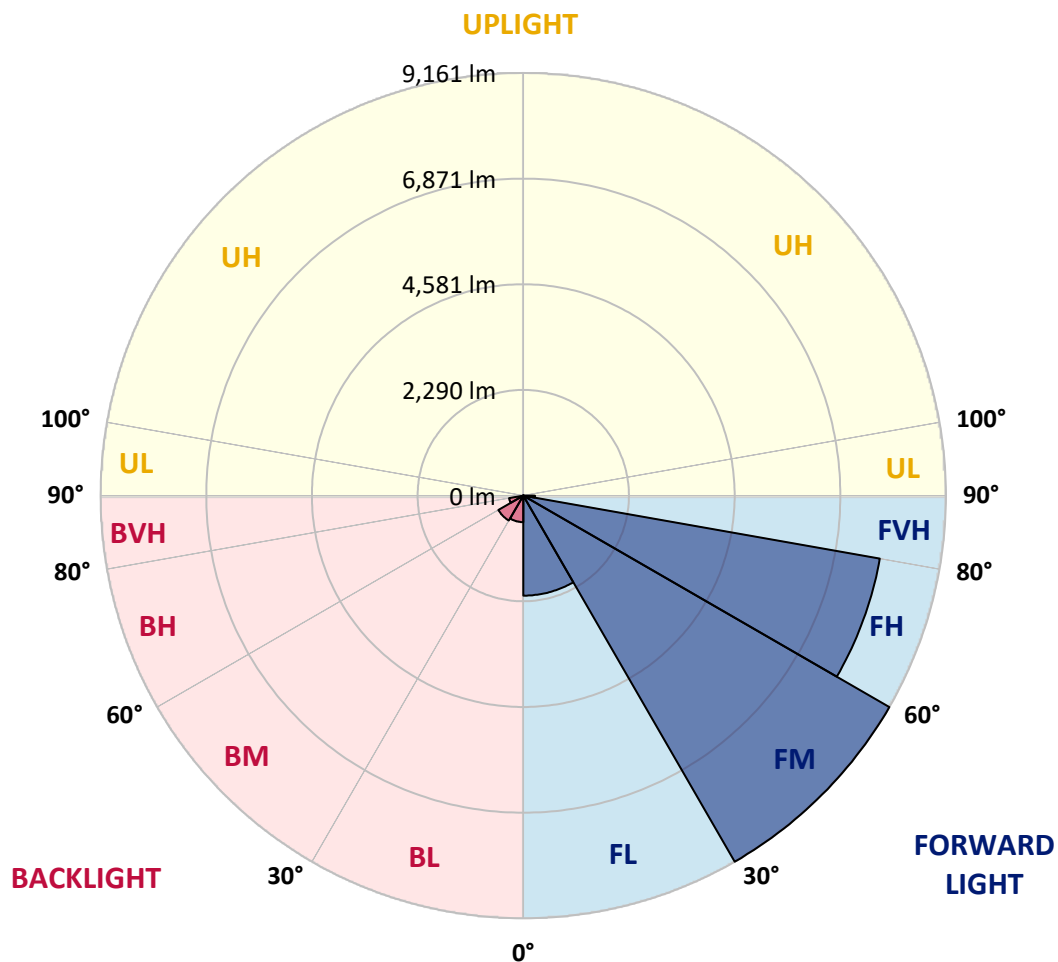
CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2167.6 | 10.4      |                         |      |          |
| FM   | (30°-60°)   | 9161.2 | 43.8      |                         |      |          |
| FH   | (60°-80°)   | 7845.5 | 37.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 252.7  | 1.2       |                         |      | G3/500   |
| BL   | (0°-30°)    | 573.8  | 2.7       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 623.0  | 3.0       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 312.4  | 1.5       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 1.8    | 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-G4**

Type III Short



REPORT NUMBER: P455940

CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5550.5 | 5550.5 | 5550.5 | 5550.5  | 5550.5  | 5550.5  | 5550.5  | 5550.5  | 5550.5  | 5550.5  | 5550.5  |
| 2.5°  | 6441.7 | 6451.5 | 6415.2 | 6385.8  | 6310.2  | 6229.1  | 6121.3  | 6064.0  | 5966.0  | 5796.7  | 5609.2  |
| 5°    | 6592.8 | 6605.4 | 6599.8 | 6592.8  | 6563.5  | 6485.1  | 6348.0  | 6297.6  | 6153.5  | 5877.9  | 5539.3  |
| 7.5°  | 6257.0 | 6303.2 | 6308.8 | 6363.4  | 6415.2  | 6422.1  | 6370.4  | 6332.6  | 6199.7  | 5876.5  | 5414.8  |
| 10°   | 5812.1 | 5842.9 | 5887.7 | 5950.6  | 6075.2  | 6178.7  | 6229.1  | 6223.5  | 6146.5  | 5833.1  | 5269.2  |
| 12.5° | 5363.0 | 5379.8 | 5448.3 | 5556.1  | 5708.6  | 5884.9  | 6019.2  | 6045.8  | 6047.2  | 5781.3  | 5147.5  |
| 15°   | 4976.8 | 4969.8 | 5023.0 | 5147.5  | 5361.6  | 5582.7  | 5823.3  | 5865.3  | 5932.4  | 5731.0  | 5034.2  |
| 17.5° | 4646.6 | 4683.0 | 4691.4 | 4828.5  | 5025.8  | 5312.6  | 5619.0  | 5693.2  | 5827.5  | 5687.6  | 4940.4  |
| 20°   | 4442.3 | 4461.9 | 4480.1 | 4557.1  | 4734.8  | 5037.0  | 5427.3  | 5529.5  | 5729.6  | 5648.4  | 4835.5  |
| 22.5° | 4382.2 | 4394.8 | 4379.4 | 4403.2  | 4529.1  | 4797.7  | 5218.9  | 5354.6  | 5635.8  | 5612.0  | 4750.2  |
| 25°   | 4428.3 | 4440.9 | 4404.6 | 4376.6  | 4419.9  | 4603.2  | 5017.4  | 5182.5  | 5560.3  | 5605.0  | 4685.8  |
| 27.5° | 4540.3 | 4564.1 | 4513.7 | 4463.3  | 4438.1  | 4498.3  | 4859.3  | 5051.0  | 5508.5  | 5638.6  | 4656.4  |
| 30°   | 4715.2 | 4729.2 | 4691.4 | 4629.8  | 4572.5  | 4512.3  | 4776.7  | 4960.0  | 5494.5  | 5717.0  | 4653.6  |
| 32.5° | 4905.5 | 4934.8 | 4913.9 | 4873.3  | 4799.1  | 4656.4  | 4800.5  | 4962.8  | 5528.1  | 5830.3  | 4688.6  |
| 35°   | 5140.5 | 5174.1 | 5193.7 | 5185.3  | 5090.1  | 4912.5  | 4951.6  | 5088.7  | 5617.6  | 6038.8  | 4783.7  |
| 37.5° | 5371.4 | 5400.8 | 5511.3 | 5549.1  | 5465.1  | 5297.2  | 5245.5  | 5336.4  | 5814.9  | 6311.6  | 4955.8  |
| 40°   | 5635.8 | 5675.0 | 5830.3 | 5974.4  | 5933.8  | 5757.5  | 5662.4  | 5738.0  | 6117.1  | 6723.0  | 5281.8  |
| 42.5° | 5889.1 | 5959.0 | 6195.5 | 6450.1  | 6487.9  | 6290.6  | 6227.7  | 6252.9  | 6564.9  | 7314.8  | 5736.6  |
| 45°   | 6248.7 | 6314.4 | 6619.4 | 6965.0  | 7142.7  | 6988.8  | 6924.4  | 6920.3  | 7179.1  | 8147.3  | 6473.9  |
| 47.5° | 6767.7 | 6826.5 | 7186.1 | 7527.5  | 7843.7  | 7864.7  | 7743.0  | 7784.9  | 7951.4  | 9121.1  | 7377.8  |
| 50°   | 7404.4 | 7542.9 | 7779.3 | 8134.7  | 8557.3  | 8898.7  | 8936.4  | 8880.5  | 9023.2  | 10248.9 | 8463.5  |
| 52.5° | 8329.2 | 8382.4 | 8599.2 | 8891.7  | 9387.0  | 9966.2  | 10415.4 | 10338.4 | 10293.6 | 11323.4 | 9560.5  |
| 55°   | 9019.0 | 9090.3 | 9427.5 | 9829.1  | 10555.3 | 11319.2 | 12293.0 | 12319.6 | 11754.4 | 12356.0 | 10633.6 |
| 57.5° | 8810.5 | 8919.7 | 9430.3 | 10237.7 | 11834.1 | 13230.5 | 13955.2 | 13973.4 | 13105.9 | 13359.2 | 11845.3 |
| 60°   | 7740.2 | 7791.9 | 8523.7 | 9601.0  | 11943.2 | 15301.2 | 16312.8 | 16165.9 | 14481.3 | 14481.3 | 12915.7 |
| 62.5° | 5488.9 | 5570.1 | 6163.3 | 7748.6  | 10786.1 | 16020.4 | 19136.3 | 18832.7 | 16375.8 | 15554.5 | 13553.7 |
| 65°   | 3507.7 | 3429.3 | 3822.5 | 4891.5  | 8035.4  | 14958.4 | 21594.7 | 21612.8 | 18158.3 | 15984.0 | 13205.3 |
| 67°   | 2540.9 | 2510.1 | 2623.4 | 3344.0  | 5448.3  | 12574.3 | 21646.4 | 22604.8 | 19182.5 | 15712.6 | 12091.5 |
| 67.5° | 2324.0 | 2347.8 | 2430.3 | 3016.6  | 4950.2  | 11442.3 | 21411.4 | 22546.1 | 19413.4 | 15548.9 | 11688.6 |
| 70°   | 1761.5 | 1721.0 | 1810.5 | 2133.7  | 2967.6  | 7218.3  | 18418.6 | 20678.2 | 19126.5 | 13924.4 | 9339.4  |
| 72.5° | 1295.6 | 1291.4 | 1416.0 | 1744.8  | 2284.8  | 3844.9  | 13826.5 | 16580.1 | 15625.8 | 10602.8 | 5880.7  |
| 75°   | 874.5  | 913.7  | 1112.3 | 1457.9  | 2070.8  | 2493.3  | 9426.1  | 12028.6 | 10847.7 | 6020.6  | 2403.8  |
| 77.5° | 498.1  | 500.9  | 716.4  | 1171.1  | 1859.5  | 2006.4  | 5585.5  | 7663.2  | 5742.2  | 2002.2  | 713.6   |
| 80°   | 215.5  | 236.5  | 355.4  | 850.7   | 1541.9  | 1776.9  | 3202.7  | 4211.5  | 2322.6  | 423.9   | 230.9   |
| 82.5° | 79.8   | 93.7   | 156.7  | 523.3   | 1124.9  | 1463.5  | 1935.0  | 2010.6  | 787.7   | 149.7   | 144.1   |
| 85°   | 0.0    | 2.8    | 57.4   | 244.9   | 586.2   | 653.4   | 1292.8  | 1192.1  | 348.4   | 71.4    | 93.7    |
| 87.5° | 0.0    | 0.0    | 0.0    | 25.2    | 77.0    | 243.5   | 401.6   | 447.7   | 83.9    | 25.2    | 22.4    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



REPORT NUMBER: P455940

CATALOG NUMBER: GALN-SA7A-830-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 | 5550.5 |
| 2.5°  | 5508.5 | 5417.6 | 5189.5 | 4961.4 | 4792.1 | 4650.8 | 4438.1 | 4322.0 | 4260.4 | 4169.5 | 4175.1 |
| 5°    | 5370.0 | 5185.3 | 4783.7 | 4368.2 | 4032.4 | 3705.0 | 3313.2 | 3155.1 | 3022.2 | 2946.6 | 2896.3 |
| 7.5°  | 5164.3 | 4891.5 | 4296.8 | 3742.8 | 3226.5 | 2654.2 | 2224.7 | 1937.8 | 1744.8 | 1673.4 | 1604.8 |
| 10°   | 4939.0 | 4576.7 | 3802.9 | 3034.8 | 2318.4 | 1728.0 | 1364.2 | 1101.1 | 1007.4 | 920.6  | 929.0  |
| 12.5° | 4730.6 | 4289.8 | 3349.6 | 2395.4 | 1624.4 | 1098.3 | 856.3  | 748.6  | 717.8  | 708.0  | 708.0  |
| 15°   | 4559.9 | 4015.6 | 2862.7 | 1800.7 | 1113.7 | 789.1  | 685.6  | 656.2  | 645.0  | 642.2  | 642.2  |
| 17.5° | 4378.0 | 3755.3 | 2423.3 | 1330.6 | 810.1  | 660.4  | 625.4  | 605.8  | 601.6  | 598.8  | 598.8  |
| 20°   | 4215.7 | 3493.7 | 2006.4 | 990.6  | 654.8  | 594.6  | 572.3  | 559.7  | 555.5  | 552.7  | 554.1  |
| 22.5° | 4061.8 | 3261.4 | 1614.6 | 748.6  | 576.5  | 541.5  | 519.1  | 506.5  | 498.1  | 491.1  | 492.5  |
| 25°   | 3924.6 | 3037.6 | 1298.4 | 612.8  | 519.1  | 488.3  | 465.9  | 447.7  | 429.5  | 421.1  | 419.7  |
| 27.5° | 3828.1 | 2841.7 | 1011.6 | 524.7  | 467.3  | 433.7  | 405.8  | 383.4  | 359.6  | 347.0  | 344.2  |
| 30°   | 3748.4 | 2643.0 | 800.3  | 463.1  | 415.6  | 383.4  | 348.4  | 316.2  | 291.0  | 278.4  | 272.8  |
| 32.5° | 3696.6 | 2454.1 | 631.0  | 412.8  | 372.2  | 333.0  | 293.8  | 261.6  | 233.7  | 221.1  | 218.3  |
| 35°   | 3688.2 | 2296.0 | 516.3  | 370.8  | 333.0  | 291.0  | 250.4  | 215.5  | 191.7  | 179.1  | 176.3  |
| 37.5° | 3748.4 | 2174.3 | 432.3  | 337.2  | 300.8  | 254.6  | 209.9  | 177.7  | 156.7  | 146.9  | 145.5  |
| 40°   | 3909.3 | 2097.3 | 375.0  | 309.2  | 271.4  | 221.1  | 179.1  | 151.1  | 130.1  | 120.3  | 120.3  |
| 42.5° | 4215.7 | 2100.1 | 337.2  | 282.6  | 242.1  | 188.9  | 152.5  | 125.9  | 107.7  | 99.3   | 96.5   |
| 45°   | 4694.2 | 2195.3 | 305.0  | 256.0  | 214.1  | 163.7  | 130.1  | 103.5  | 85.3   | 78.4   | 78.4   |
| 47.5° | 5335.0 | 2384.2 | 277.0  | 229.5  | 188.9  | 139.9  | 110.5  | 83.9   | 68.6   | 61.6   | 61.6   |
| 50°   | 6173.1 | 2687.8 | 253.2  | 207.1  | 167.9  | 120.3  | 89.5   | 68.6   | 53.2   | 47.6   | 46.2   |
| 52.5° | 7049.0 | 3062.8 | 225.3  | 187.5  | 144.1  | 102.1  | 72.8   | 53.2   | 40.6   | 36.4   | 35.0   |
| 55°   | 8015.8 | 3429.3 | 198.7  | 167.9  | 117.5  | 85.3   | 57.4   | 42.0   | 29.4   | 25.2   | 25.2   |
| 57.5° | 8991.0 | 3788.9 | 166.5  | 139.9  | 92.3   | 63.0   | 44.8   | 30.8   | 19.6   | 15.4   | 15.4   |
| 60°   | 9816.5 | 3905.1 | 141.3  | 113.3  | 70.0   | 44.8   | 32.2   | 19.6   | 11.2   | 7.0    | 7.0    |
| 62.5° | 9929.8 | 3513.3 | 118.9  | 86.7   | 50.4   | 30.8   | 16.8   | 11.2   | 4.2    | 2.8    | 2.8    |
| 65°   | 9314.2 | 2854.3 | 99.3   | 65.8   | 33.6   | 15.4   | 7.0    | 4.2    | 1.4    | 0.0    | 0.0    |
| 67°   | 8346.0 | 2314.2 | 81.2   | 49.0   | 23.8   | 9.8    | 4.2    | 1.4    | 0.0    | 0.0    | 0.0    |
| 67.5° | 8098.3 | 2206.5 | 78.4   | 46.2   | 21.0   | 8.4    | 2.8    | 1.4    | 0.0    | 0.0    | 0.0    |
| 70°   | 6355.0 | 1652.4 | 56.0   | 28.0   | 12.6   | 5.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 3949.8 | 934.6  | 40.6   | 16.8   | 8.4    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 1492.9 | 327.4  | 28.0   | 11.2   | 5.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 464.5  | 124.5  | 16.8   | 8.4    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 156.7  | 47.6   | 11.2   | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 96.5   | 19.6   | 7.0    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 60.2   | 8.4    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 11.2   | 2.8    | 1.4    | 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)