

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: P459418

Luminaire Tested: **GALN-SA8D-735-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459418  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA8D-735-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47626 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G5

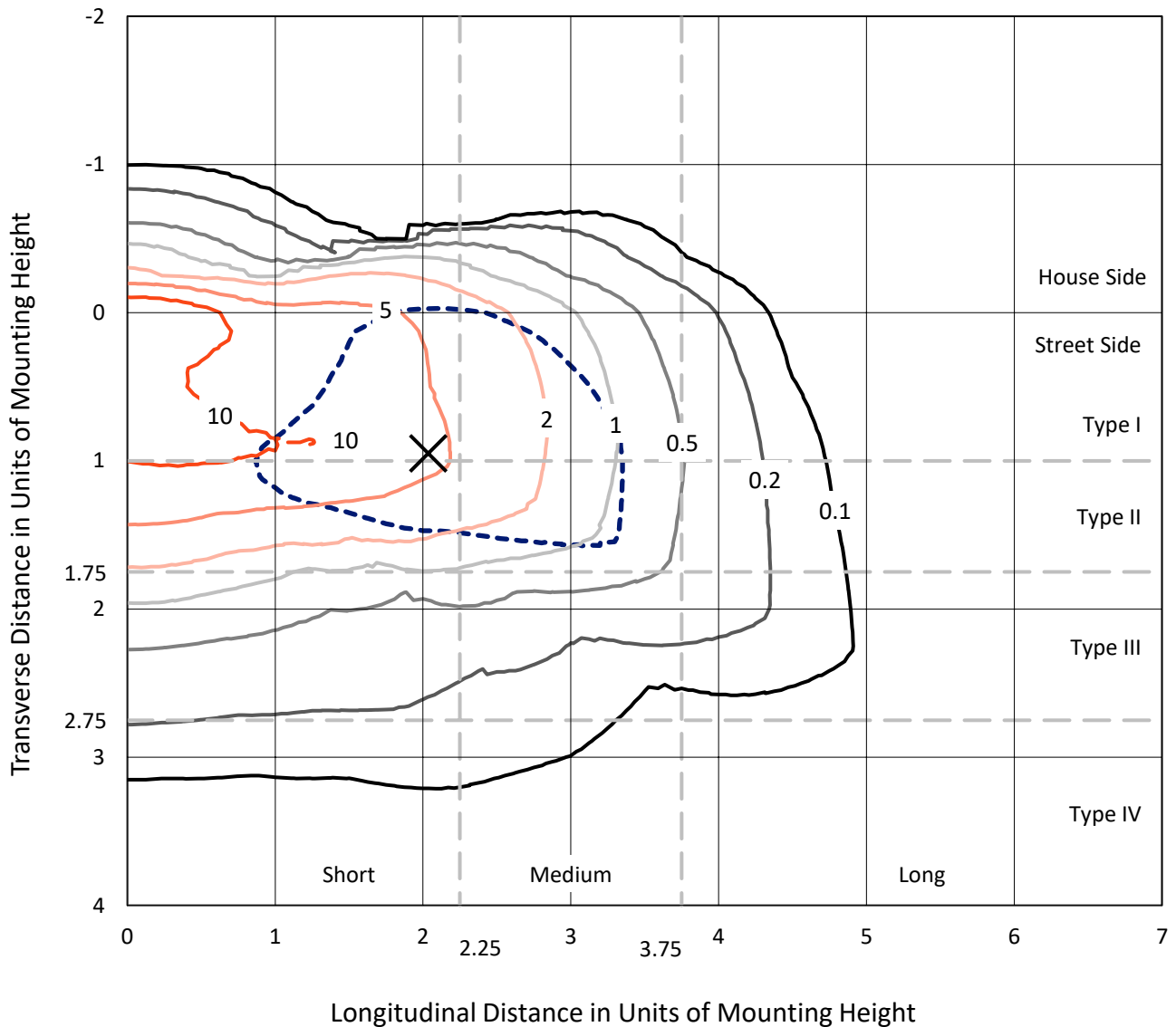
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459418  
 CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

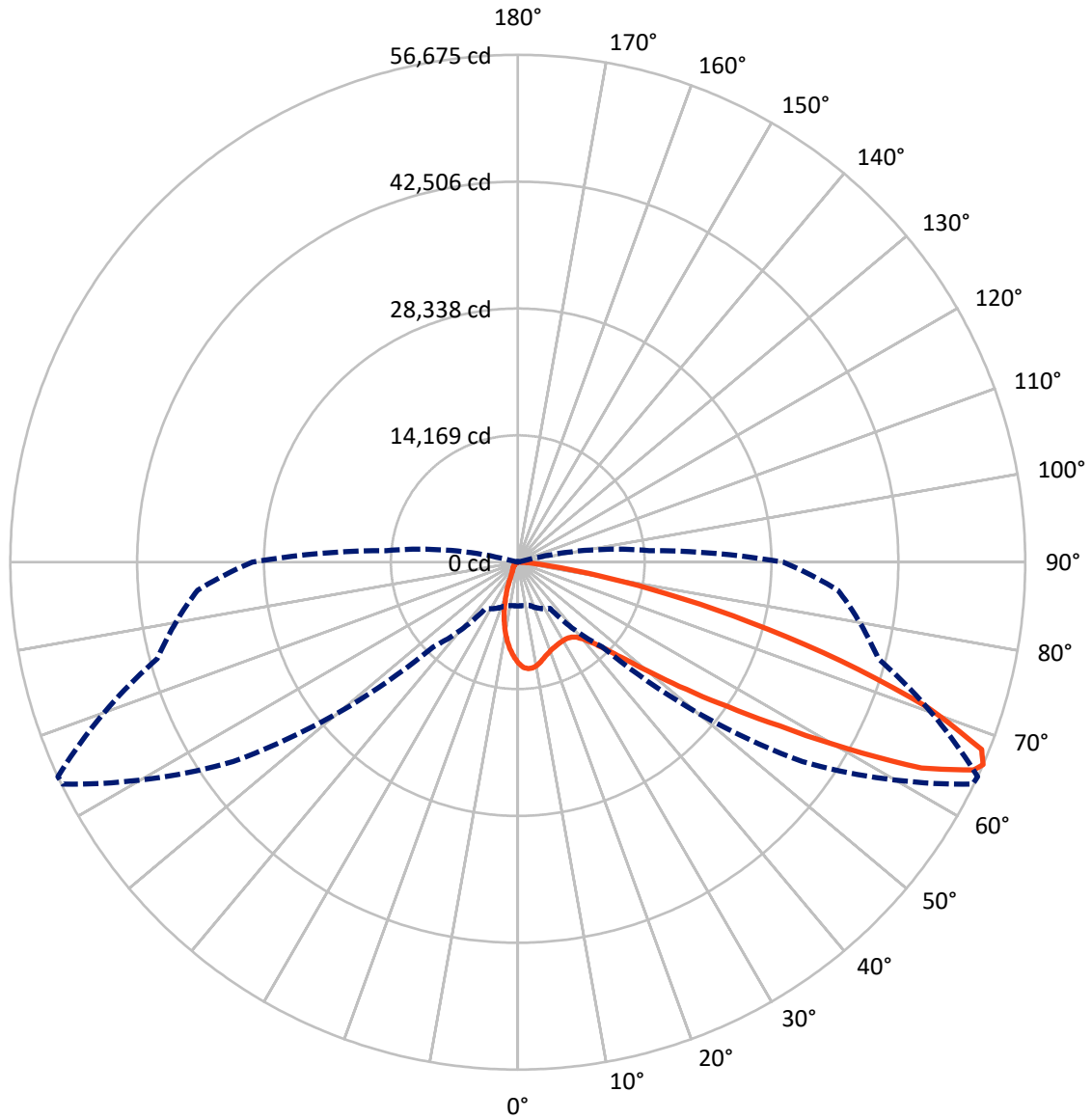
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.1 fc  
 Type II - Short - N/A

REPORT NUMBER: P459418  
CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P459418

CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4925.2   | 0.0    | 4925.2  |
|                    | % Fixture | 10.3     | 0.0    | 10.3    |
| <b>Street Side</b> | Lumens    | 42700.8  | 0.0    | 42700.8 |
|                    | % Fixture | 89.7     | 0.0    | 89.7    |
| <b>Total</b>       | Lumens    | 47626.0  | 0.0    | 47626.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 923.7   | 1.9       |
| 10°-20°   | 2012.5  | 4.2       |
| 20°-30°   | 2883.0  | 6.1       |
| 30°-40°   | 4210.8  | 8.8       |
| 40°-50°   | 7060.8  | 14.8      |
| 50°-60°   | 11783.3 | 24.7      |
| 60°-70°   | 12507.6 | 26.3      |
| 70°-80°   | 5664.7  | 11.9      |
| 80°-90°   | 579.6   | 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°    | 47626.0 | 100.0     |
| 0°-180°   | 47626.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P459418

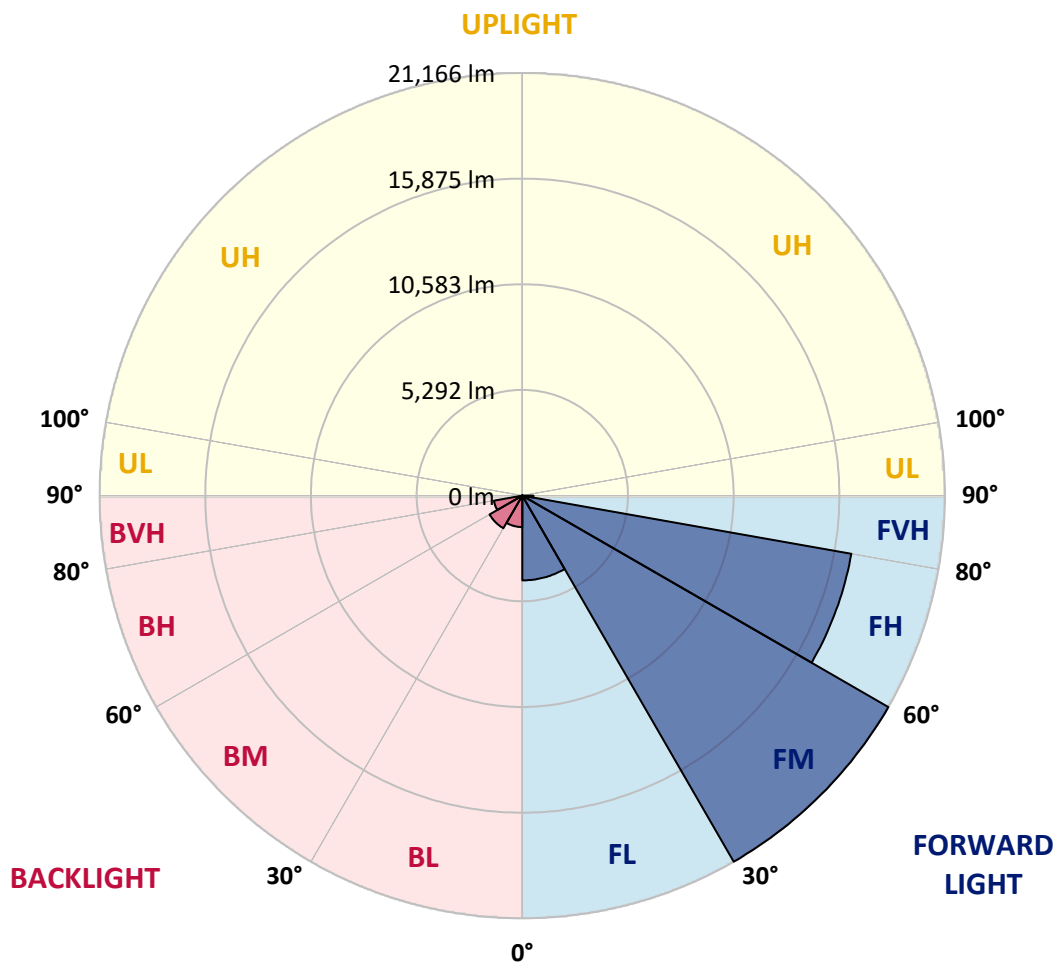
CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4243.6  | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 21166.1 | 44.4      |                         |      |         |
| FH   | (60°-80°)   | 16729.9 | 35.1      |                         |      | G5      |
| FVH  | (80°-90°)   | 561.1   | 1.2       |                         |      | G4/750  |
| BL   | (0°-30°)    | 1575.5  | 3.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1888.9  | 4.0       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1442.4  | 3.0       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 18.5    | 0.0       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type II Short





REPORT NUMBER: P459418

CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 64°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 |
| 2.5°  | 11901.8 | 11914.7 | 11930.8 | 11953.3 | 11969.4 | 11921.1 | 11853.6 | 11776.4 | 11760.3 | 11596.3 | 11396.8 |
| 5°    | 11264.9 | 11284.2 | 11425.8 | 11503.0 | 11676.7 | 11834.3 | 11934.0 | 11946.9 | 11940.4 | 11786.0 | 11467.6 |
| 7.5°  | 10357.8 | 10412.5 | 10550.8 | 10685.9 | 11010.8 | 11310.0 | 11663.8 | 11911.5 | 11927.6 | 11885.8 | 11490.1 |
| 10°   | 9621.2  | 9656.6  | 9727.3  | 9994.3  | 10264.5 | 10721.3 | 11216.7 | 11683.1 | 11721.7 | 11889.0 | 11470.8 |
| 12.5° | 9045.4  | 9096.9  | 9183.7  | 9389.6  | 9714.5  | 10145.5 | 10708.4 | 11335.7 | 11416.1 | 11827.9 | 11416.1 |
| 15°   | 8643.3  | 8669.0  | 8755.9  | 8958.5  | 9273.8  | 9672.7  | 10242.0 | 10972.2 | 11043.0 | 11747.4 | 11406.5 |
| 17.5° | 8453.5  | 8482.5  | 8543.6  | 8704.4  | 8965.0  | 9334.9  | 9891.4  | 10679.5 | 10769.6 | 11696.0 | 11441.8 |
| 20°   | 8505.0  | 8530.7  | 8533.9  | 8617.6  | 8794.5  | 9106.5  | 9634.1  | 10406.1 | 10521.9 | 11663.8 | 11499.8 |
| 22.5° | 8797.7  | 8800.9  | 8762.3  | 8723.7  | 8784.8  | 9010.0  | 9476.4  | 10232.4 | 10351.4 | 11657.4 | 11567.3 |
| 25°   | 9235.2  | 9244.8  | 9180.5  | 9045.4  | 8923.2  | 9039.0  | 9441.1  | 10119.8 | 10225.9 | 11641.3 | 11609.1 |
| 27.5° | 9839.9  | 9836.7  | 9817.4  | 9592.2  | 9244.8  | 9167.6  | 9470.0  | 10058.7 | 10148.7 | 11596.3 | 11625.2 |
| 30°   | 10685.9 | 10660.2 | 10618.4 | 10364.3 | 9833.5  | 9479.7  | 9592.2  | 10020.1 | 10103.7 | 11531.9 | 11583.4 |
| 32.5° | 11519.1 | 11615.6 | 11609.1 | 11367.9 | 10705.2 | 10036.1 | 9846.4  | 10071.5 | 10132.6 | 11490.1 | 11522.3 |
| 35°   | 12490.5 | 12487.3 | 12735.0 | 12644.9 | 11869.7 | 10747.0 | 10280.6 | 10242.0 | 10290.3 | 11519.1 | 11493.3 |
| 37.5° | 13391.2 | 13474.8 | 13860.8 | 13954.1 | 13246.4 | 11750.7 | 10895.0 | 10608.7 | 10624.8 | 11715.3 | 11564.1 |
| 40°   | 14513.8 | 14674.6 | 15250.4 | 15562.5 | 14938.4 | 13240.0 | 11802.1 | 11281.0 | 11284.2 | 12197.8 | 11831.1 |
| 42.5° | 15961.3 | 16215.5 | 16752.6 | 17273.8 | 16939.2 | 15002.8 | 13162.8 | 12345.7 | 12339.3 | 13047.0 | 12442.2 |
| 45°   | 17720.9 | 17897.8 | 18509.0 | 19335.7 | 19123.4 | 17463.5 | 15144.3 | 13995.9 | 13912.3 | 14439.8 | 13526.3 |
| 47.5° | 19239.2 | 19480.4 | 20101.2 | 21043.7 | 22008.8 | 20467.9 | 17511.8 | 16263.7 | 16209.0 | 16656.1 | 15385.5 |
| 50°   | 19901.8 | 20114.1 | 20767.1 | 22089.2 | 24427.7 | 24411.6 | 21037.3 | 19573.7 | 19480.4 | 19721.7 | 18261.3 |
| 52.5° | 19174.8 | 19374.3 | 20033.7 | 21680.6 | 25566.4 | 29217.4 | 26145.4 | 23726.5 | 23613.9 | 23305.1 | 21696.7 |
| 55°   | 16685.1 | 16849.1 | 17823.8 | 19715.2 | 25129.0 | 32421.3 | 33183.6 | 28857.1 | 28419.7 | 27219.8 | 25585.7 |
| 57.5° | 13285.0 | 13201.4 | 13806.1 | 16003.1 | 22562.0 | 33495.6 | 40408.4 | 35248.7 | 34467.1 | 30603.8 | 28876.4 |
| 60°   | 9206.2  | 9463.6  | 9708.0  | 11155.6 | 16964.9 | 31633.2 | 44902.1 | 43284.1 | 42254.7 | 33933.1 | 32028.8 |
| 62.5° | 6768.0  | 6938.5  | 7099.3  | 7768.4  | 10666.6 | 25257.6 | 45696.6 | 51538.2 | 50624.6 | 37468.3 | 35036.4 |
| 65°   | 5352.6  | 5365.5  | 5429.8  | 6089.2  | 7028.5  | 16424.5 | 41878.4 | 56192.8 | 55957.9 | 40871.6 | 36255.6 |
| 66°   | 4876.5  | 4879.8  | 4979.5  | 5687.1  | 6308.0  | 13375.1 | 38819.3 | 56546.6 | 56675.3 | 41688.6 | 35898.5 |
| 67.5° | 4262.1  | 4249.3  | 4394.0  | 5111.4  | 5745.1  | 9643.7  | 33344.5 | 55112.0 | 55874.3 | 42315.9 | 34615.1 |
| 70°   | 3303.6  | 3287.5  | 3464.4  | 4287.9  | 5291.5  | 6433.4  | 22163.2 | 47321.1 | 48549.9 | 41032.4 | 30626.3 |
| 72.5° | 2200.2  | 2213.1  | 2515.5  | 3384.0  | 5050.2  | 5664.6  | 13333.3 | 35998.2 | 37735.3 | 33884.9 | 24093.2 |
| 75°   | 1283.5  | 1306.0  | 1650.2  | 2515.5  | 4384.4  | 5400.9  | 7546.4  | 25669.4 | 26779.1 | 23398.4 | 15009.2 |
| 77.5° | 672.3   | 681.9   | 923.2   | 1659.8  | 3361.5  | 5014.9  | 5027.7  | 16398.8 | 16919.9 | 11371.1 | 5941.3  |
| 80°   | 357.1   | 347.4   | 495.4   | 1000.4  | 2312.8  | 4403.7  | 4078.8  | 8681.9  | 9026.1  | 3377.5  | 1502.2  |
| 82.5° | 135.1   | 148.0   | 263.8   | 656.2   | 1367.1  | 3162.0  | 3512.7  | 3837.5  | 3718.5  | 743.1   | 630.5   |
| 85°   | 25.7    | 32.2    | 112.6   | 389.2   | 688.4   | 1322.1  | 2589.5  | 1881.8  | 1743.5  | 279.9   | 363.5   |
| 87.5° | 3.2     | 6.4     | 32.2    | 93.3    | 99.7    | 447.1   | 765.6   | 521.1   | 450.3   | 102.9   | 151.2   |
| 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: P459418

CATALOG NUMBER: GALN-SA8D-735-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 | 11293.9 |
| 2.5°  | 11300.3 | 11213.5 | 10924.0 | 10637.7 | 10345.0 | 10081.2 | 9901.0  | 9608.3  | 9534.3  | 9428.2  | 9367.1  |
| 5°    | 11277.8 | 11075.1 | 10518.7 | 9910.7  | 9344.6  | 8733.4  | 8267.0  | 7816.6  | 7575.4  | 7453.1  | 7408.1  |
| 7.5°  | 11213.5 | 10891.8 | 10023.3 | 9071.1  | 8164.0  | 7250.5  | 6455.9  | 5851.2  | 5462.0  | 5195.0  | 5014.9  |
| 10°   | 11084.8 | 10640.9 | 9447.5  | 8138.3  | 6768.0  | 5561.7  | 4554.9  | 3789.3  | 3197.4  | 3010.8  | 3017.3  |
| 12.5° | 10952.9 | 10361.0 | 8804.1  | 7102.5  | 5404.1  | 3882.6  | 2814.6  | 2209.9  | 1926.8  | 1833.5  | 1814.2  |
| 15°   | 10830.7 | 10094.0 | 8173.7  | 6098.9  | 4024.1  | 2515.5  | 1814.2  | 1601.9  | 1524.7  | 1508.6  | 1505.4  |
| 17.5° | 10766.3 | 9846.4  | 7501.4  | 4950.5  | 2808.2  | 1708.1  | 1454.0  | 1396.1  | 1373.5  | 1357.5  | 1351.0  |
| 20°   | 10711.7 | 9630.8  | 6858.0  | 3876.1  | 1920.4  | 1399.3  | 1302.8  | 1248.1  | 1209.5  | 1193.4  | 1183.8  |
| 22.5° | 10673.1 | 9408.9  | 6192.2  | 3001.2  | 1470.0  | 1241.7  | 1154.8  | 1084.0  | 1029.3  | 1010.0  | 997.2   |
| 25°   | 10615.2 | 9164.4  | 5519.9  | 2193.8  | 1238.4  | 1103.3  | 1003.6  | 920.0   | 849.2   | 813.8   | 807.4   |
| 27.5° | 10531.5 | 8887.8  | 4783.3  | 1624.4  | 1106.5  | 981.1   | 858.9   | 755.9   | 685.2   | 646.6   | 649.8   |
| 30°   | 10396.4 | 8598.3  | 4046.6  | 1289.9  | 1000.4  | 855.6   | 723.8   | 624.0   | 556.5   | 527.5   | 524.3   |
| 32.5° | 10235.6 | 8247.7  | 3371.1  | 1106.5  | 903.9   | 743.1   | 604.7   | 517.9   | 466.4   | 443.9   | 440.7   |
| 35°   | 10084.4 | 7893.8  | 2682.7  | 994.0   | 804.2   | 640.1   | 508.2   | 434.3   | 395.7   | 376.4   | 379.6   |
| 37.5° | 10000.8 | 7578.6  | 2090.9  | 903.9   | 723.8   | 550.1   | 437.5   | 373.1   | 337.8   | 321.7   | 318.5   |
| 40°   | 10055.4 | 7321.2  | 1663.0  | 823.5   | 633.7   | 472.9   | 376.4   | 321.7   | 286.3   | 263.8   | 263.8   |
| 42.5° | 10312.8 | 7208.7  | 1341.4  | 746.3   | 550.1   | 408.5   | 328.1   | 276.6   | 238.0   | 215.5   | 218.7   |
| 45°   | 11097.7 | 7327.7  | 1122.6  | 675.5   | 472.9   | 353.8   | 283.1   | 228.4   | 193.0   | 176.9   | 173.7   |
| 47.5° | 12400.4 | 7774.8  | 971.4   | 601.5   | 405.3   | 302.4   | 238.0   | 189.8   | 154.4   | 141.5   | 138.3   |
| 50°   | 14677.9 | 8698.0  | 858.9   | 527.5   | 344.2   | 257.3   | 196.2   | 151.2   | 122.2   | 109.4   | 109.4   |
| 52.5° | 17810.9 | 10711.7 | 778.4   | 443.9   | 289.5   | 218.7   | 160.8   | 122.2   | 96.5    | 86.9    | 83.6    |
| 55°   | 21085.6 | 12834.7 | 736.6   | 373.1   | 241.3   | 180.1   | 128.7   | 96.5    | 74.0    | 64.3    | 61.1    |
| 57.5° | 24234.7 | 14500.9 | 688.4   | 302.4   | 193.0   | 138.3   | 99.7    | 74.0    | 51.5    | 45.0    | 41.8    |
| 60°   | 27255.2 | 15848.7 | 585.4   | 241.3   | 151.2   | 99.7    | 74.0    | 51.5    | 35.4    | 29.0    | 29.0    |
| 62.5° | 29957.3 | 16633.6 | 460.0   | 193.0   | 115.8   | 70.8    | 48.3    | 38.6    | 25.7    | 19.3    | 19.3    |
| 65°   | 30272.5 | 15613.9 | 347.4   | 148.0   | 83.6    | 45.0    | 29.0    | 29.0    | 19.3    | 12.9    | 12.9    |
| 66°   | 29638.8 | 14748.6 | 305.6   | 135.1   | 74.0    | 38.6    | 25.7    | 22.5    | 16.1    | 9.7     | 9.7     |
| 67.5° | 28223.4 | 13272.2 | 263.8   | 115.8   | 61.1    | 29.0    | 19.3    | 19.3    | 12.9    | 6.4     | 6.4     |
| 70°   | 24385.9 | 10840.3 | 209.1   | 86.9    | 45.0    | 22.5    | 12.9    | 12.9    | 9.7     | 6.4     | 6.4     |
| 72.5° | 18586.2 | 8093.3  | 170.5   | 64.3    | 32.2    | 16.1    | 9.7     | 9.7     | 9.7     | 6.4     | 6.4     |
| 75°   | 11210.2 | 4358.6  | 131.9   | 48.3    | 29.0    | 12.9    | 6.4     | 9.7     | 12.9    | 9.7     | 6.4     |
| 77.5° | 4130.3  | 1482.9  | 102.9   | 38.6    | 22.5    | 12.9    | 6.4     | 6.4     | 12.9    | 9.7     | 9.7     |
| 80°   | 1013.3  | 386.0   | 74.0    | 32.2    | 22.5    | 12.9    | 6.4     | 6.4     | 12.9    | 12.9    | 12.9    |
| 82.5° | 469.6   | 164.1   | 51.5    | 29.0    | 22.5    | 12.9    | 6.4     | 6.4     | 9.7     | 12.9    | 12.9    |
| 85°   | 270.2   | 77.2    | 41.8    | 32.2    | 22.5    | 12.9    | 6.4     | 6.4     | 9.7     | 12.9    | 12.9    |
| 87.5° | 109.4   | 38.6    | 38.6    | 32.2    | 25.7    | 16.1    | 6.4     | 6.4     | 6.4     | 9.7     | 9.7     |
| 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)