

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: P457116

Luminaire Tested: **GALN-SA8B-830-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457116  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8B-830-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37364 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

Input Watts (W): 325  
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

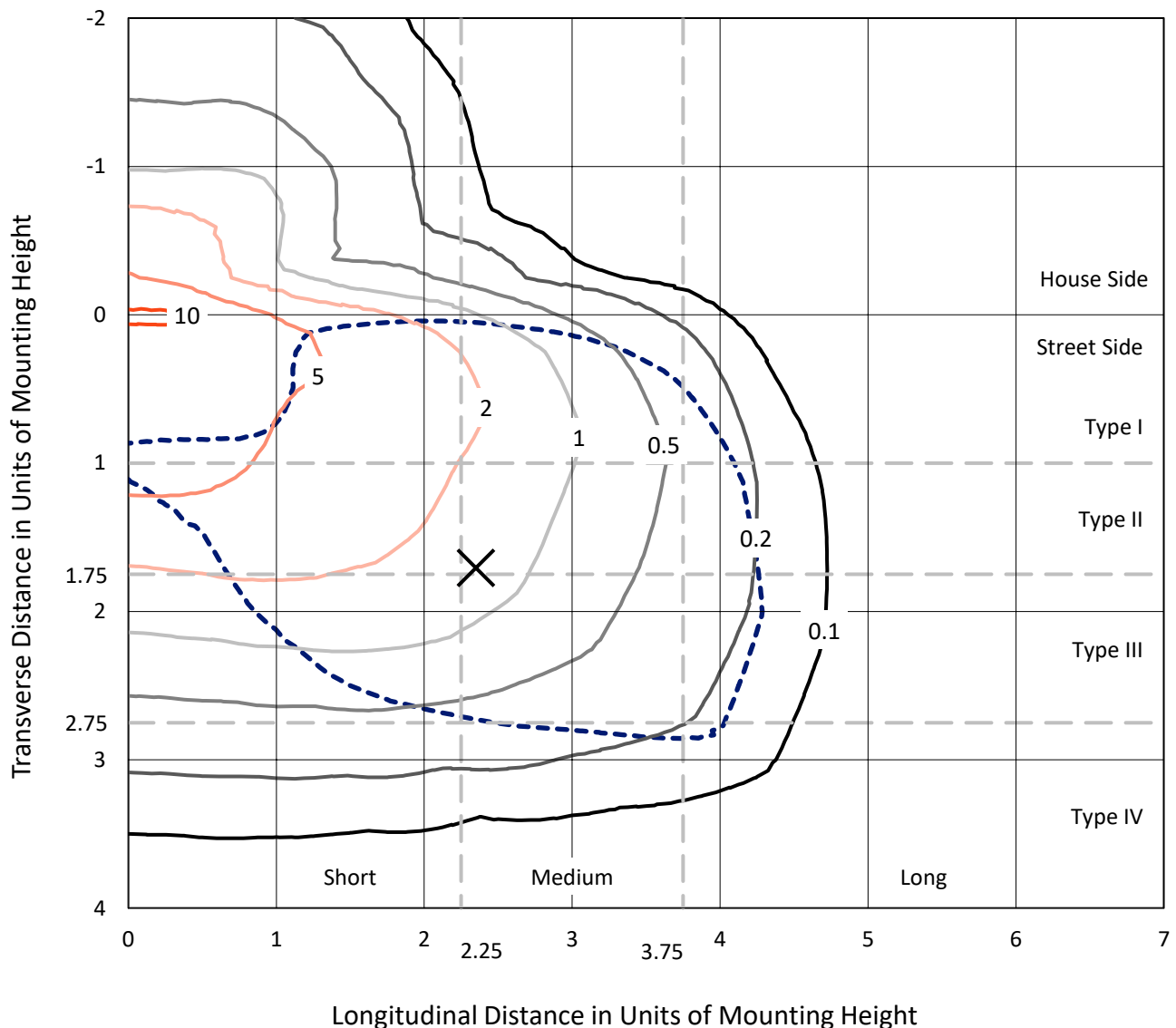


REPORT NUMBER: P457116

CATALOG NUMBER: GALN-SA8B-830-U-T3R

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

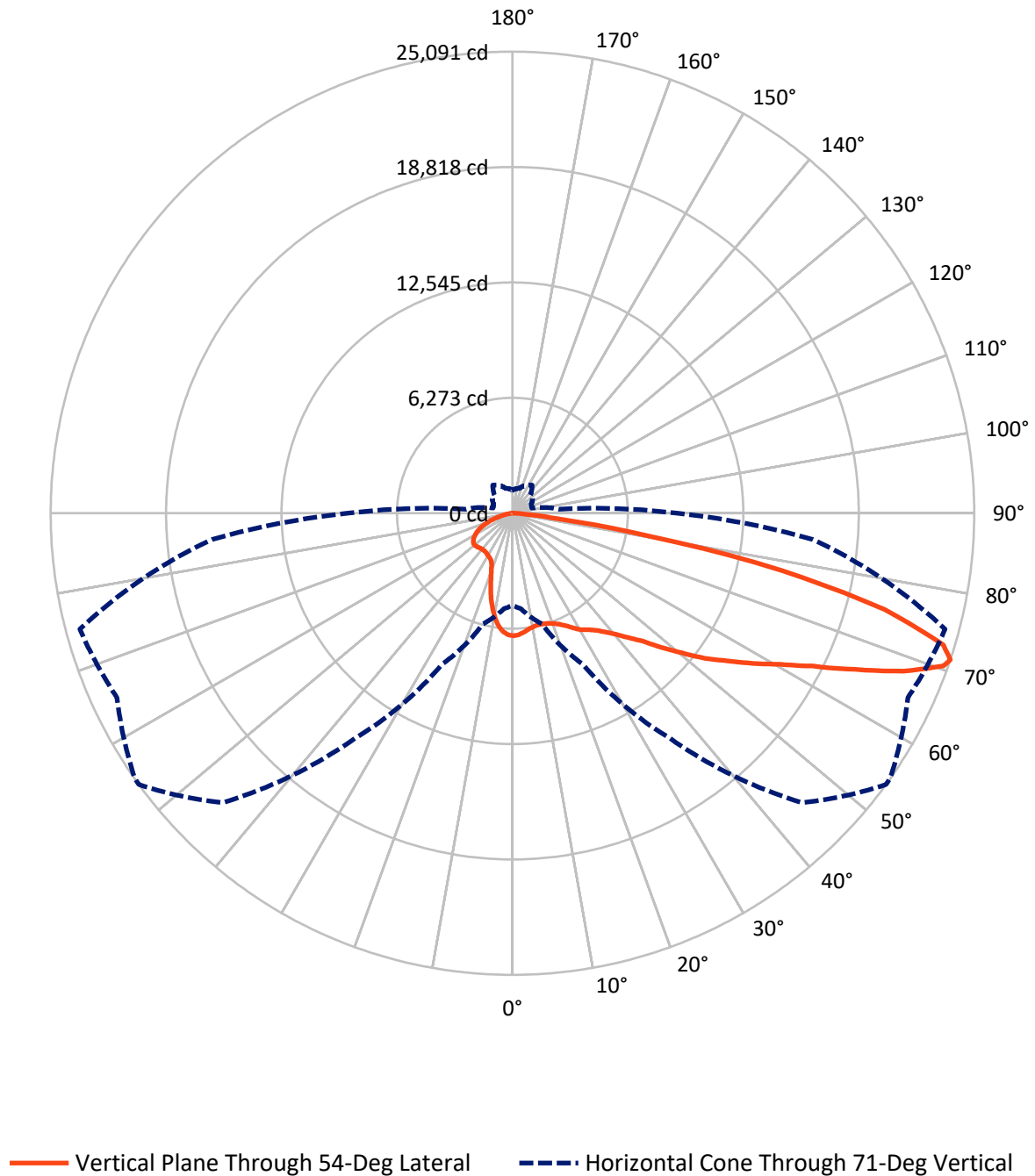


Based on 25 foot mounting height. Maximum calculated value = 10.7 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P457116

CATALOG NUMBER: GALN-SA8B-830-U-T3R

## Luminous Intensity Polar Plot



REPORT NUMBER: P457116

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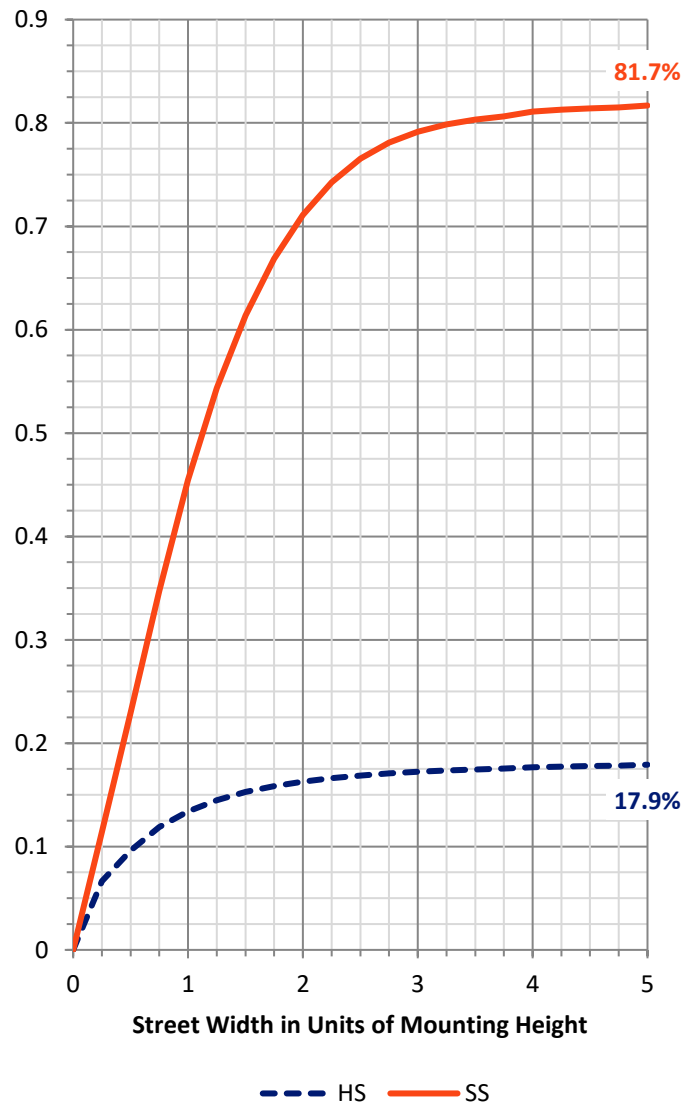
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6745.8   | 0.0    | 6745.8  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 30618.2  | 0.0    | 30618.2 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 37364.0  | 0.0    | 37364.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 594.1   | 1.6       |
| 10°-20°   | 1568.6  | 4.2       |
| 20°-30°   | 2611.8  | 7.0       |
| 30°-40°   | 3862.1  | 10.3      |
| 40°-50°   | 5439.8  | 14.6      |
| 50°-60°   | 7284.2  | 19.5      |
| 60°-70°   | 9181.2  | 24.6      |
| 70°-80°   | 6270.7  | 16.8      |
| 80°-90°   | 551.5   | 1.5       |
| 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°    | 37364.0 | 100.0     |
| 0°-180°   | 37364.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P457116

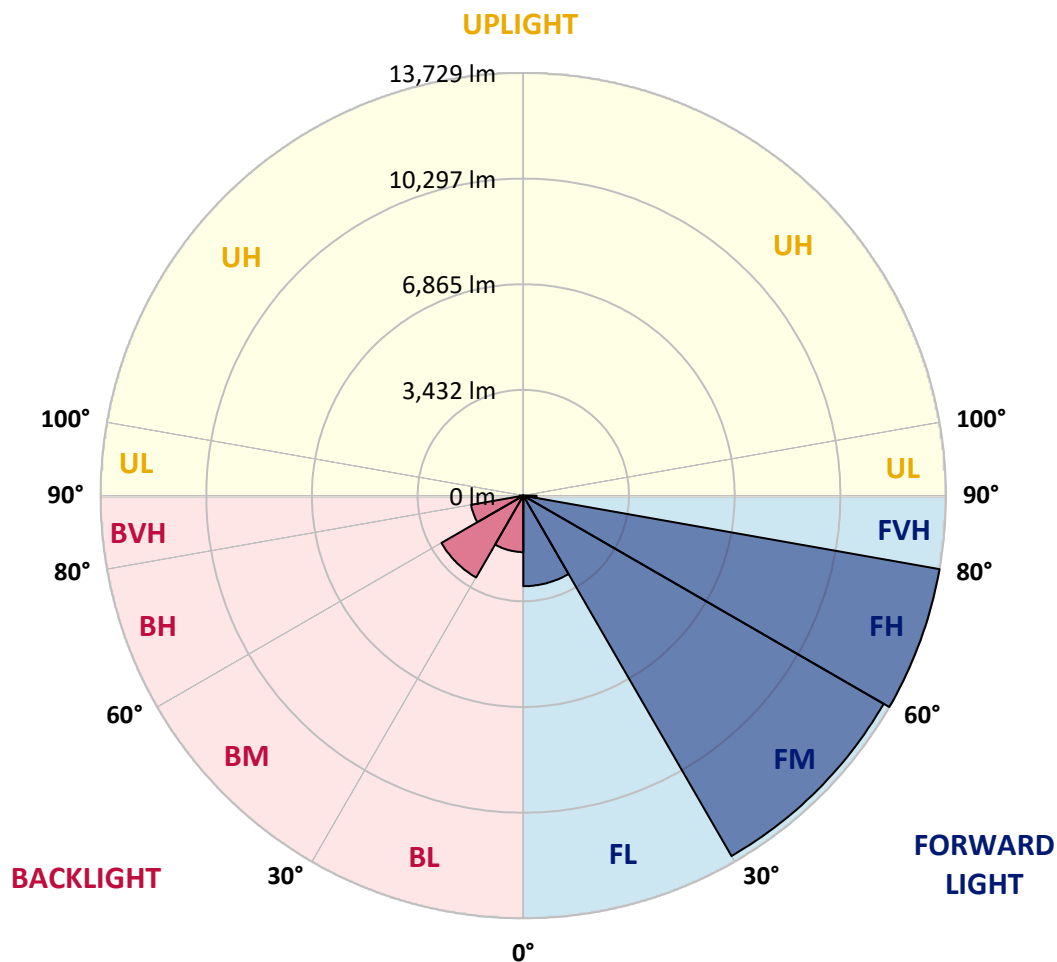
CATALOG NUMBER: GALN-SA8B-830-U-T3R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2941.2  | 7.9       |                         |      |         |
| FM   | (30°-60°)   | 13517.0 | 36.2      |                         |      |         |
| FH   | (60°-80°)   | 13729.0 | 36.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 431.1   | 1.2       |                         |      | G3/500  |
| BL   | (0°-30°)    | 1833.4  | 4.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3069.2  | 8.2       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1722.9  | 4.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 120.4   | 0.3       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type IV Medium





REPORT NUMBER: P457116

CATALOG NUMBER: GALN-SA8B-830-U-T3R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  | 6666.3  |
| 2.5°  | 6440.2  | 6470.5  | 6478.6  | 6498.8  | 6541.2  | 6575.5  | 6609.8  | 6605.7  | 6654.2  | 6674.4  | 6692.5  |
| 5°    | 6153.7  | 6161.7  | 6192.0  | 6232.4  | 6307.0  | 6401.9  | 6494.7  | 6496.8  | 6615.8  | 6710.7  | 6757.1  |
| 7.5°  | 5943.8  | 5970.0  | 5990.2  | 6032.6  | 6111.3  | 6214.2  | 6361.5  | 6373.6  | 6585.6  | 6773.3  | 6872.2  |
| 10°   | 5806.5  | 5836.8  | 5859.0  | 5911.5  | 5990.2  | 6105.2  | 6264.7  | 6286.9  | 6563.4  | 6872.2  | 7045.7  |
| 12.5° | 5681.4  | 5711.7  | 5731.8  | 5800.5  | 5903.4  | 6044.7  | 6224.3  | 6250.5  | 6571.4  | 6987.2  | 7235.4  |
| 15°   | 5758.1  | 5782.3  | 5774.2  | 5794.4  | 5863.0  | 6024.5  | 6240.4  | 6266.7  | 6601.7  | 7098.2  | 7423.1  |
| 17.5° | 6099.2  | 6119.3  | 6052.7  | 5976.0  | 5943.8  | 6062.8  | 6290.9  | 6319.2  | 6662.3  | 7213.2  | 7614.9  |
| 20°   | 6601.7  | 6656.2  | 6510.9  | 6339.3  | 6183.9  | 6200.1  | 6395.8  | 6426.1  | 6747.0  | 7328.3  | 7810.6  |
| 22.5° | 7255.6  | 7296.0  | 7118.4  | 6835.8  | 6549.2  | 6401.9  | 6553.3  | 6571.4  | 6874.2  | 7477.6  | 8024.6  |
| 25°   | 8024.6  | 8048.8  | 7802.6  | 7439.3  | 7025.5  | 6747.0  | 6769.2  | 6801.5  | 7084.1  | 7647.2  | 8214.3  |
| 27.5° | 8771.3  | 8848.0  | 8563.4  | 8119.4  | 7574.5  | 7110.3  | 7065.9  | 7086.1  | 7312.1  | 7742.0  | 8345.5  |
| 30°   | 9657.3  | 9651.3  | 9350.6  | 8835.9  | 8137.6  | 7505.9  | 7346.4  | 7342.4  | 7435.2  | 7788.4  | 8440.3  |
| 32.5° | 10363.7 | 10446.5 | 10151.8 | 9590.7  | 8781.4  | 7915.6  | 7540.2  | 7532.1  | 7530.1  | 7869.2  | 8581.6  |
| 35°   | 11167.0 | 11179.1 | 10908.7 | 10343.5 | 9477.7  | 8430.2  | 7810.6  | 7770.3  | 7723.9  | 8042.7  | 8773.3  |
| 37.5° | 11885.5 | 11942.0 | 11693.8 | 11060.0 | 10161.9 | 8965.1  | 8182.0  | 8155.8  | 8014.5  | 8343.5  | 9080.1  |
| 40°   | 12446.6 | 12489.0 | 12339.6 | 11736.1 | 10836.0 | 9542.3  | 8654.3  | 8605.8  | 8434.3  | 8835.9  | 9489.8  |
| 42.5° | 12630.2 | 12717.0 | 12775.5 | 12478.9 | 11611.0 | 10226.5 | 9235.5  | 9175.0  | 9043.8  | 9582.7  | 9962.1  |
| 45°   | 12644.4 | 12781.6 | 13090.4 | 13104.5 | 12390.1 | 11045.9 | 9913.7  | 9871.3  | 9861.2  | 10539.3 | 10626.1 |
| 47.5° | 12537.4 | 12676.6 | 13195.3 | 13475.9 | 13084.3 | 11873.4 | 10892.5 | 10825.9 | 10832.0 | 11722.0 | 11370.8 |
| 50°   | 12279.1 | 12444.6 | 13074.2 | 13714.0 | 13627.2 | 12733.2 | 11925.9 | 11903.7 | 12028.8 | 13072.2 | 12143.8 |
| 52.5° | 11792.7 | 11992.5 | 12949.1 | 13863.4 | 14030.9 | 13473.9 | 13100.5 | 13037.9 | 13354.8 | 14537.5 | 12989.5 |
| 55°   | 10446.5 | 10747.2 | 12491.0 | 13946.1 | 14414.4 | 14182.3 | 14158.0 | 14271.1 | 14690.9 | 16135.9 | 13919.9 |
| 57.5° | 9744.1  | 9970.2  | 11496.0 | 13960.3 | 14898.7 | 15005.7 | 15393.2 | 15421.5 | 16156.1 | 17833.3 | 14971.4 |
| 60°   | 9360.7  | 9560.5  | 10951.0 | 13867.4 | 15574.9 | 16024.9 | 16656.6 | 16757.6 | 17587.1 | 19671.9 | 16061.3 |
| 62.5° | 9025.6  | 9197.2  | 10624.1 | 13546.5 | 16337.8 | 17536.6 | 18293.4 | 18341.9 | 19211.8 | 21702.3 | 17137.0 |
| 65°   | 8236.5  | 8432.3  | 9966.1  | 13225.6 | 16995.7 | 19425.7 | 20465.1 | 20408.6 | 20941.4 | 23454.1 | 17811.1 |
| 67.5° | 7172.9  | 7421.1  | 8737.0  | 12117.6 | 17320.7 | 21490.4 | 22911.2 | 22840.6 | 22648.8 | 24602.5 | 18004.8 |
| 70°   | 5814.6  | 5947.8  | 7164.8  | 10202.3 | 16022.9 | 22574.2 | 24842.7 | 24768.0 | 23706.4 | 24753.9 | 17088.6 |
| 71°   | 5003.3  | 5211.1  | 6238.4  | 9062.0  | 14943.1 | 22243.2 | 25090.9 | 25070.7 | 23708.4 | 24336.1 | 16398.3 |
| 72.5° | 3905.3  | 4032.5  | 4940.7  | 7021.5  | 12700.9 | 20362.2 | 24477.4 | 24554.1 | 23193.8 | 23175.6 | 14975.4 |
| 75°   | 2470.3  | 2526.9  | 3100.0  | 4133.4  | 6969.0  | 14420.4 | 20895.0 | 21102.9 | 20594.3 | 18969.6 | 11136.7 |
| 77.5° | 1435.0  | 1507.6  | 1856.8  | 2436.0  | 3011.2  | 7826.8  | 14951.2 | 15177.3 | 14309.4 | 10444.5 | 4559.2  |
| 80°   | 835.6   | 916.3   | 1223.1  | 1414.8  | 1382.5  | 2904.3  | 7612.9  | 7998.3  | 6196.0  | 2637.9  | 1279.6  |
| 82.5° | 464.2   | 518.7   | 859.8   | 861.8   | 736.7   | 948.6   | 2395.7  | 2506.7  | 1768.0  | 1063.6  | 522.7   |
| 85°   | 337.0   | 381.4   | 555.0   | 502.5   | 353.2   | 407.7   | 833.5   | 873.9   | 714.5   | 448.1   | 169.5   |
| 87.5° | 119.1   | 169.5   | 304.8   | 242.2   | 96.9    | 84.8    | 240.2   | 195.8   | 181.6   | 125.1   | 38.3    |
| 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: P457116

CATALOG NUMBER: GALN-SA8B-830-U-T3R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 6666.3  | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 | 6666.3 |
| 2.5°  | 6702.6  | 6706.7 | 6686.5 | 6650.1 | 6613.8 | 6567.4 | 6514.9 | 6474.6 | 6456.4 | 6454.4 | 6452.4 |
| 5°    | 6775.3  | 6785.4 | 6708.7 | 6595.7 | 6470.5 | 6317.1 | 6185.9 | 6036.6 | 5998.2 | 5937.7 | 5955.9 |
| 7.5°  | 6892.3  | 6886.3 | 6734.9 | 6494.7 | 6202.1 | 5877.2 | 5602.7 | 5443.2 | 5277.7 | 5231.3 | 5233.3 |
| 10°   | 7059.9  | 7021.5 | 6734.9 | 6288.9 | 5800.5 | 5318.1 | 4934.6 | 4692.4 | 4561.3 | 4452.3 | 4411.9 |
| 12.5° | 7237.5  | 7140.6 | 6670.3 | 6000.3 | 5283.8 | 4692.4 | 4280.7 | 3953.8 | 3869.0 | 3780.2 | 3782.2 |
| 15°   | 7407.0  | 7245.5 | 6543.2 | 5594.6 | 4726.7 | 4024.4 | 3624.8 | 3429.0 | 3402.8 | 3412.9 | 3410.8 |
| 17.5° | 7560.4  | 7320.2 | 6349.4 | 5142.5 | 4076.9 | 3451.2 | 3239.3 | 3253.4 | 3324.1 | 3374.5 | 3380.6 |
| 20°   | 7715.8  | 7364.6 | 6060.8 | 4537.0 | 3463.3 | 3104.1 | 3112.1 | 3223.2 | 3330.1 | 3398.7 | 3408.8 |
| 22.5° | 7863.1  | 7384.8 | 5721.7 | 3951.7 | 3019.3 | 2956.7 | 3075.8 | 3194.9 | 3299.8 | 3366.4 | 3376.5 |
| 25°   | 7960.0  | 7338.4 | 5241.4 | 3340.2 | 2801.3 | 2904.3 | 3029.4 | 3130.3 | 3219.1 | 3287.7 | 3303.9 |
| 27.5° | 7986.2  | 7189.0 | 4646.0 | 2845.7 | 2700.4 | 2853.8 | 2968.9 | 3043.5 | 3112.1 | 3176.7 | 3188.8 |
| 30°   | 7972.1  | 6969.0 | 3992.1 | 2555.1 | 2641.9 | 2795.3 | 2884.1 | 2938.6 | 3021.3 | 3071.8 | 3081.9 |
| 32.5° | 7949.9  | 6712.7 | 3309.9 | 2399.7 | 2593.5 | 2740.8 | 2793.3 | 2841.7 | 2839.7 | 2819.5 | 2833.6 |
| 35°   | 7958.0  | 6405.9 | 2756.9 | 2306.9 | 2551.1 | 2700.4 | 2744.8 | 2684.3 | 2510.7 | 2502.6 | 2494.6 |
| 37.5° | 8000.4  | 6103.2 | 2355.3 | 2242.3 | 2528.9 | 2694.4 | 2718.6 | 2440.1 | 2286.7 | 2216.0 | 2197.9 |
| 40°   | 8109.3  | 5750.0 | 2090.9 | 2193.8 | 2526.9 | 2740.8 | 2599.5 | 2317.0 | 2022.3 | 1885.0 | 1875.0 |
| 42.5° | 8254.7  | 5402.9 | 1929.5 | 2163.6 | 2551.1 | 2811.4 | 2551.1 | 2143.4 | 1822.5 | 1741.8 | 1729.6 |
| 45°   | 8470.6  | 5005.3 | 1840.6 | 2149.4 | 2587.4 | 2837.7 | 2534.9 | 2016.2 | 1741.8 | 1677.2 | 1677.2 |
| 47.5° | 8714.8  | 4625.8 | 1792.2 | 2139.3 | 2633.8 | 2819.5 | 2391.6 | 1975.9 | 1703.4 | 1711.5 | 1749.8 |
| 50°   | 8957.0  | 4296.9 | 1755.9 | 2117.1 | 2674.2 | 2809.4 | 2333.1 | 1973.9 | 1713.5 | 1816.4 | 1885.0 |
| 52.5° | 9237.5  | 4064.8 | 1711.5 | 2080.8 | 2674.2 | 2744.8 | 2314.9 | 2014.2 | 1741.8 | 1772.0 | 1802.3 |
| 55°   | 9576.6  | 3992.1 | 1655.0 | 2002.1 | 2625.7 | 2583.4 | 2304.8 | 2072.7 | 1761.9 | 1691.3 | 1703.4 |
| 57.5° | 10024.7 | 4109.2 | 1600.5 | 1903.2 | 2514.7 | 2415.8 | 2300.8 | 2088.9 | 1715.5 | 1657.0 | 1644.9 |
| 60°   | 10545.4 | 4341.3 | 1584.3 | 1802.3 | 2363.4 | 2272.6 | 2276.6 | 2042.5 | 1650.9 | 1590.4 | 1600.5 |
| 62.5° | 10910.7 | 4480.5 | 1574.2 | 1725.6 | 2197.9 | 2115.1 | 2218.1 | 1986.0 | 1622.7 | 1570.2 | 1580.3 |
| 65°   | 10910.7 | 4311.0 | 1481.4 | 1608.5 | 1983.9 | 1925.4 | 2147.4 | 1915.3 | 1586.3 | 1525.8 | 1515.7 |
| 67.5° | 10496.9 | 3816.5 | 1340.1 | 1433.0 | 1747.8 | 1709.5 | 2048.5 | 1830.6 | 1531.9 | 1485.4 | 1461.2 |
| 70°   | 9419.2  | 2894.2 | 1162.5 | 1227.1 | 1449.1 | 1483.4 | 1921.4 | 1715.5 | 1441.0 | 1384.5 | 1348.2 |
| 71°   | 8944.9  | 2520.8 | 1087.8 | 1122.1 | 1334.1 | 1384.5 | 1860.8 | 1667.1 | 1400.7 | 1319.9 | 1255.4 |
| 72.5° | 8030.6  | 2123.2 | 974.8  | 988.9  | 1140.3 | 1231.1 | 1733.7 | 1574.2 | 1324.0 | 1208.9 | 1136.3 |
| 75°   | 6101.2  | 1550.0 | 785.1  | 777.0  | 843.6  | 976.8  | 1467.3 | 1402.7 | 1160.5 | 1005.1 | 962.7  |
| 77.5° | 2635.8  | 843.6  | 587.3  | 593.4  | 573.2  | 740.7  | 1154.4 | 1204.9 | 995.0  | 817.4  | 779.0  |
| 80°   | 799.2   | 486.4  | 401.6  | 409.7  | 383.5  | 496.5  | 813.4  | 944.5  | 799.2  | 635.7  | 583.3  |
| 82.5° | 409.7   | 290.6  | 274.5  | 270.4  | 244.2  | 280.5  | 492.5  | 645.8  | 571.2  | 397.6  | 351.2  |
| 85°   | 177.6   | 155.4  | 135.2  | 131.2  | 115.0  | 100.9  | 175.6  | 322.9  | 302.7  | 222.0  | 211.9  |
| 87.5° | 44.4    | 40.4   | 26.2   | 24.2   | 14.1   | 2.0    | 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)