

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: P457663

Luminaire Tested: **GALN-SA9A-730-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA9A-730-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38479 lumens  
Efficiency: N/A  
Efficacy: 140.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

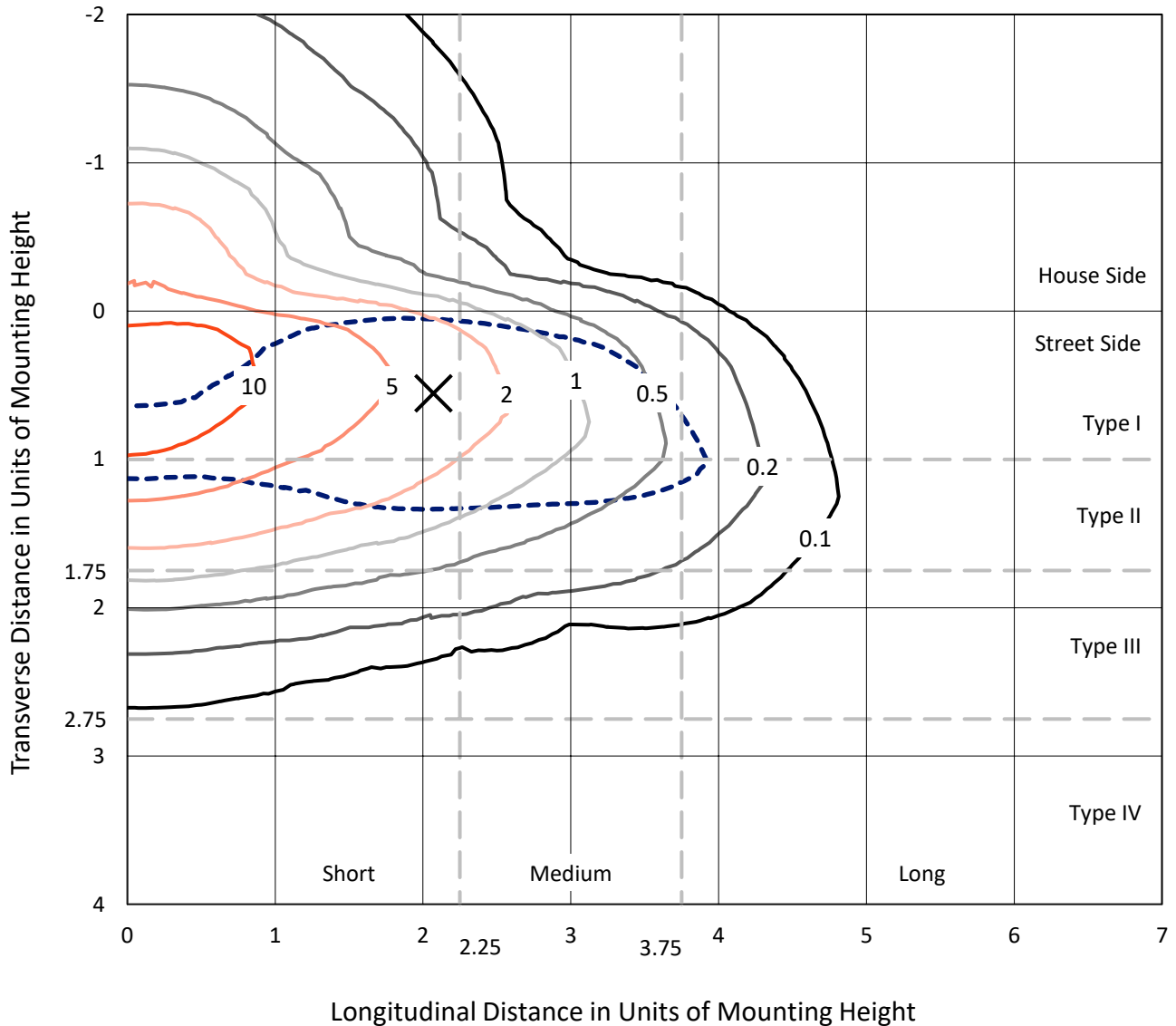
Input Watts (W): 274  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P457663  
 CATALOG NUMBER: GALN-SA9A-730-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

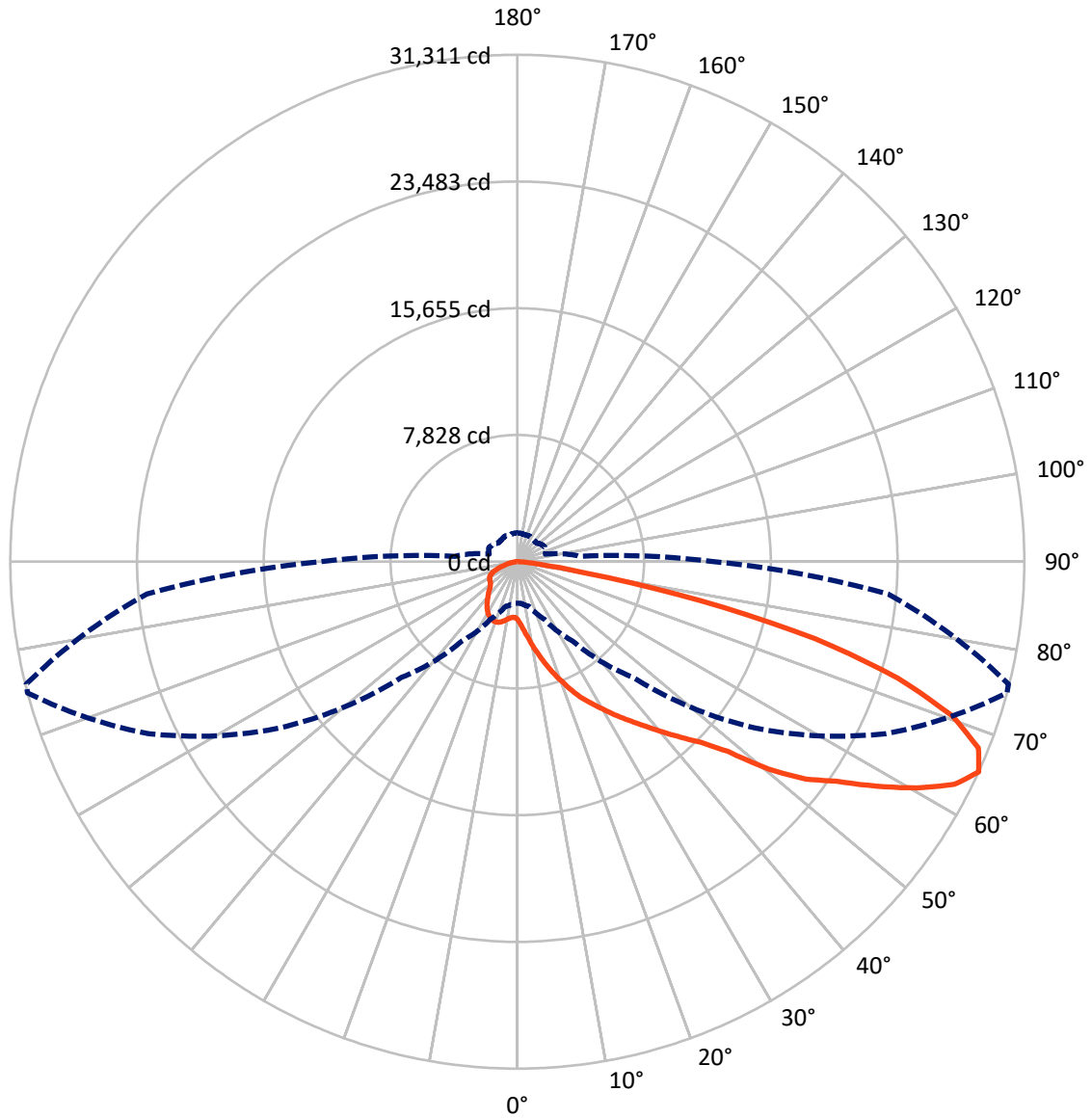
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P457663  
CATALOG NUMBER: GALN-SA9A-730-U-T2R

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P457663

CATALOG NUMBER: GALN-SA9A-730-U-T2R

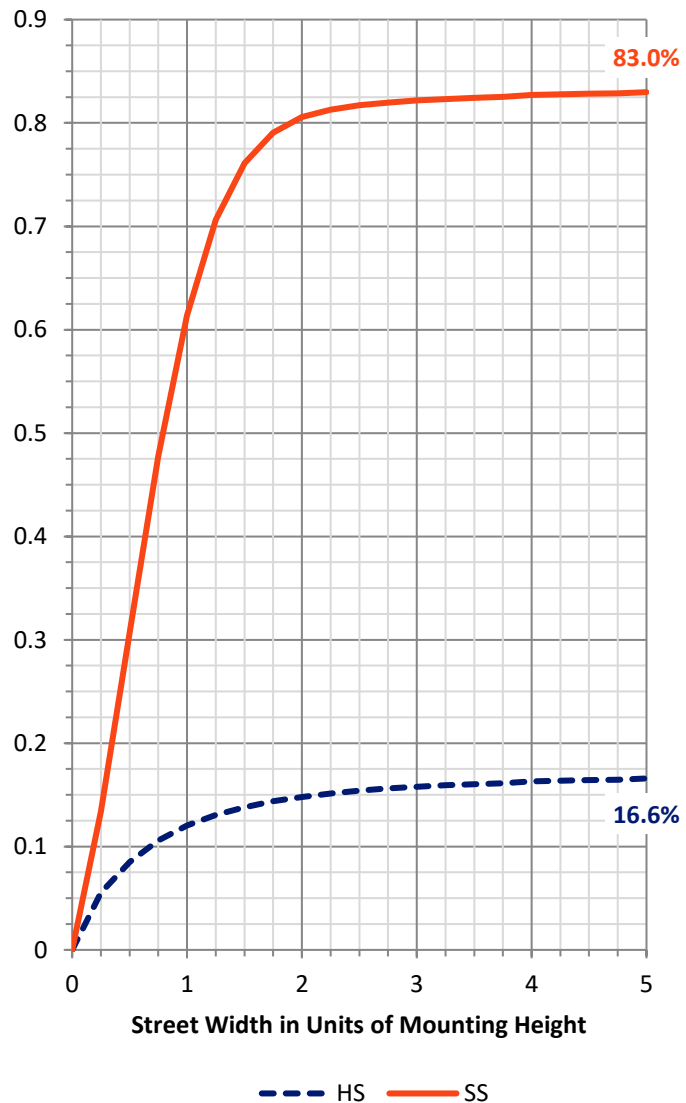
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6468.8   | 0.0    | 6468.8  |
|                    | % Fixture | 16.8     | 0.0    | 16.8    |
| <b>Street Side</b> | Lumens    | 32010.2  | 0.0    | 32010.2 |
|                    | % Fixture | 83.2     | 0.0    | 83.2    |
| <b>Total</b>       | Lumens    | 38479.0  | 0.0    | 38479.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 434.4   | 1.1       |
| 10°-20°   | 1701.4  | 4.4       |
| 20°-30°   | 3286.5  | 8.5       |
| 30°-40°   | 5338.3  | 13.9      |
| 40°-50°   | 7343.3  | 19.1      |
| 50°-60°   | 8669.9  | 22.5      |
| 60°-70°   | 7596.3  | 19.7      |
| 70°-80°   | 3626.5  | 9.4       |
| 80°-90°   | 482.6   | 1.3       |
| 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°    | 38479.0 | 100.0     |
| 0°-180°   | 38479.0 | 100.0     |



REPORT NUMBER: P457663

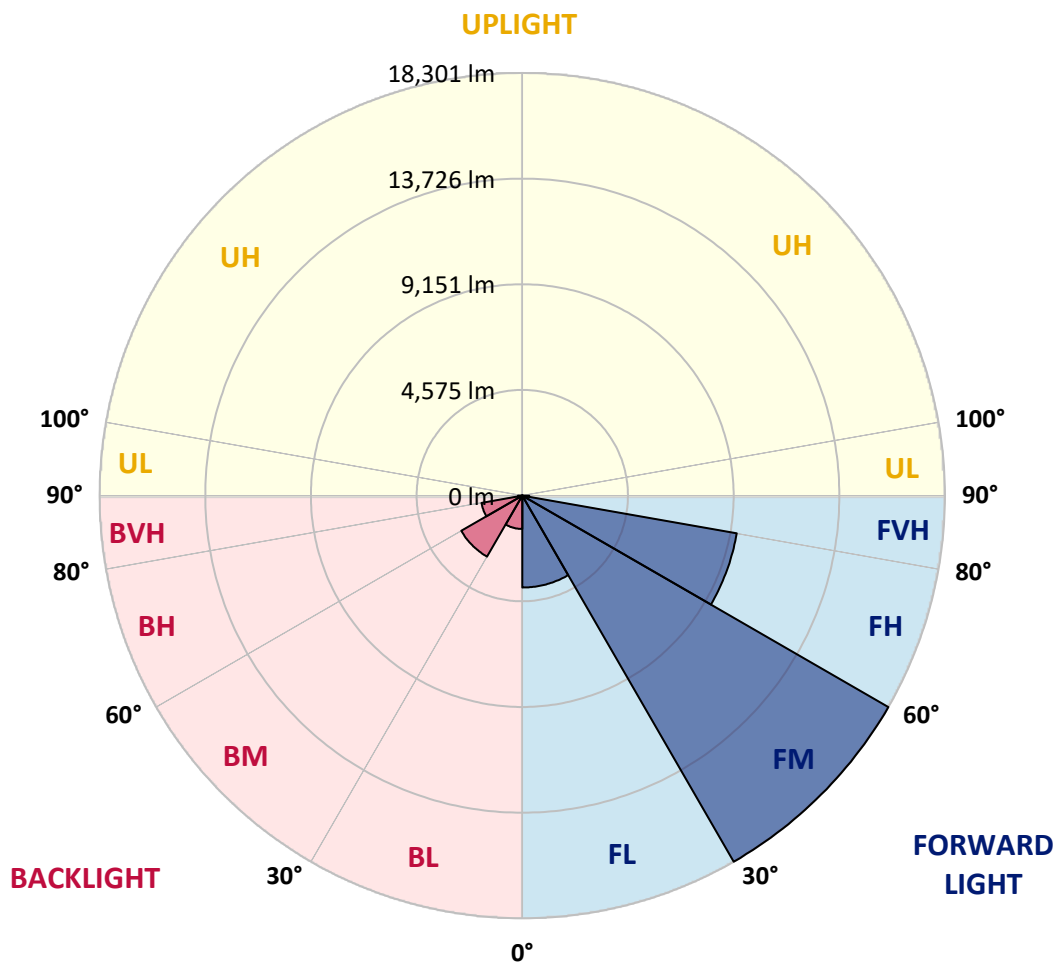
CATALOG NUMBER: GALN-SA9A-730-U-T2R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3978.1  | 10.3      |                         |      |          |
| FM   | (30°-60°)   | 18301.4 | 47.6      |                         |      |          |
| FH   | (60°-80°)   | 9429.1  | 24.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 301.6   | 0.8       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1444.1  | 3.8       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 3050.0  | 7.9       | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1793.7  | 4.7       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 181.0   | 0.5       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Short





REPORT NUMBER: P457663

CATALOG NUMBER: GALN-SA9A-730-U-T2R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  | 3575.2  |
| 2.5°  | 4750.2  | 4718.9  | 4685.5  | 4593.7  | 4495.6  | 4385.0  | 4226.4  | 4074.0  | 3871.6  | 3865.3  | 3715.0  |
| 5°    | 6067.2  | 6046.3  | 5898.1  | 5812.5  | 5585.1  | 5282.4  | 5025.7  | 4627.1  | 4257.7  | 4213.8  | 3921.6  |
| 7.5°  | 7277.7  | 7196.3  | 7139.9  | 6985.5  | 6760.1  | 6371.9  | 5875.2  | 5336.7  | 4718.9  | 4660.5  | 4176.3  |
| 10°   | 8189.7  | 8181.4  | 8152.2  | 8018.6  | 7849.5  | 7463.4  | 6912.4  | 6140.2  | 5303.3  | 5188.5  | 4485.2  |
| 12.5° | 8872.2  | 8878.5  | 8874.3  | 8872.2  | 8751.2  | 8423.5  | 7826.6  | 7012.6  | 5893.9  | 5812.5  | 4842.0  |
| 15°   | 9320.9  | 9383.6  | 9408.6  | 9513.0  | 9523.4  | 9304.2  | 8790.8  | 7855.8  | 6559.7  | 6438.7  | 5226.1  |
| 17.5° | 9617.3  | 9648.6  | 9765.5  | 9942.9  | 10086.9 | 10047.3 | 9590.2  | 8636.4  | 7240.1  | 7037.7  | 5624.7  |
| 20°   | 9901.2  | 9955.4  | 10045.2 | 10287.3 | 10541.9 | 10658.8 | 10337.4 | 9435.7  | 7914.2  | 7784.8  | 6065.1  |
| 22.5° | 10491.8 | 10569.0 | 10600.3 | 10723.5 | 10940.5 | 11147.1 | 11001.1 | 10201.7 | 8653.1  | 8477.8  | 6532.6  |
| 25°   | 11491.5 | 11572.9 | 11485.3 | 11456.0 | 11527.0 | 11629.3 | 11598.0 | 10923.8 | 9350.2  | 9099.7  | 6975.1  |
| 27.5° | 12793.9 | 12804.3 | 12633.2 | 12470.4 | 12295.0 | 12242.9 | 12146.9 | 11564.6 | 9955.4  | 9746.7  | 7419.6  |
| 30°   | 14192.2 | 14142.1 | 13858.3 | 13564.0 | 13267.6 | 12975.4 | 12699.9 | 12182.3 | 10629.5 | 10389.5 | 7855.8  |
| 32.5° | 15490.4 | 15463.2 | 15148.1 | 14691.0 | 14190.1 | 13914.6 | 13357.4 | 12806.4 | 11351.7 | 11120.0 | 8304.5  |
| 35°   | 16463.0 | 16502.6 | 16156.2 | 15657.3 | 15110.5 | 14866.3 | 14163.0 | 13461.7 | 12098.9 | 11846.3 | 8792.9  |
| 37.5° | 17153.8 | 17132.9 | 16826.1 | 16394.1 | 15914.1 | 15701.2 | 15104.3 | 14177.6 | 12902.4 | 12660.3 | 9327.2  |
| 40°   | 17400.1 | 17387.5 | 17160.1 | 16844.9 | 16540.2 | 16465.1 | 16089.4 | 14949.8 | 13822.8 | 13539.0 | 9970.0  |
| 42.5° | 17243.5 | 17270.7 | 17120.4 | 17034.8 | 16978.5 | 17032.7 | 17068.2 | 15962.1 | 14826.7 | 14565.8 | 10667.1 |
| 45°   | 16763.5 | 16748.9 | 16728.0 | 16867.9 | 17185.1 | 17542.0 | 18036.6 | 16918.0 | 15918.2 | 15709.5 | 11602.1 |
| 47.5° | 15905.7 | 16010.1 | 16062.2 | 16448.4 | 17141.3 | 17986.5 | 19151.1 | 18199.4 | 17502.3 | 17320.8 | 13027.6 |
| 50°   | 14705.6 | 14789.1 | 15098.0 | 15784.7 | 16817.8 | 18153.5 | 20240.6 | 20294.9 | 20144.6 | 19804.4 | 14576.2 |
| 52.5° | 12831.4 | 12960.8 | 13597.4 | 14855.9 | 16154.1 | 18084.6 | 20900.1 | 22091.8 | 22290.1 | 22035.5 | 16101.9 |
| 55°   | 10733.9 | 10915.5 | 11587.5 | 13238.4 | 15239.9 | 17709.0 | 21355.1 | 23133.3 | 23924.3 | 23688.5 | 17571.2 |
| 57.5° | 8680.2  | 8872.2  | 9563.0  | 11161.8 | 13645.4 | 16878.3 | 21653.6 | 24293.7 | 26149.2 | 25842.3 | 19399.5 |
| 60°   | 6505.5  | 6705.8  | 7298.6  | 8945.3  | 11374.6 | 15254.5 | 21451.1 | 25299.7 | 28371.9 | 28240.4 | 21229.9 |
| 62.5° | 4197.1  | 4418.4  | 4933.9  | 6296.8  | 8742.8  | 13036.0 | 20367.9 | 25854.9 | 30296.2 | 30137.6 | 22565.6 |
| 65°   | 2556.7  | 2581.7  | 2865.6  | 3909.1  | 5983.7  | 10093.2 | 17890.5 | 25118.1 | 31310.5 | 31262.5 | 22972.6 |
| 67.5° | 1653.0  | 1692.6  | 1822.0  | 2341.7  | 3587.7  | 7010.5  | 14304.9 | 22686.7 | 30717.8 | 30701.1 | 22131.5 |
| 70°   | 1396.3  | 1408.8  | 1467.2  | 1579.9  | 2085.0  | 4251.4  | 10045.2 | 18810.9 | 28465.8 | 28465.8 | 20109.1 |
| 72.5° | 1248.1  | 1264.8  | 1285.6  | 1321.1  | 1488.1  | 2408.5  | 5994.1  | 14643.0 | 24577.6 | 24740.4 | 17116.2 |
| 75°   | 1133.3  | 1129.1  | 1141.6  | 1147.9  | 1269.0  | 1573.7  | 3099.3  | 10829.9 | 19013.4 | 18687.8 | 12395.2 |
| 77.5° | 970.5   | 976.8   | 970.5   | 997.6   | 1120.8  | 1198.0  | 1573.7  | 7267.2  | 11522.8 | 11101.2 | 6221.6  |
| 80°   | 797.3   | 807.7   | 818.1   | 834.8   | 958.0   | 910.0   | 945.5   | 3312.2  | 4261.8  | 4172.1  | 1922.2  |
| 82.5° | 599.0   | 613.6   | 630.3   | 670.0   | 753.4   | 601.1   | 596.9   | 1415.0  | 1538.2  | 1408.8  | 707.5   |
| 85°   | 242.1   | 285.9   | 432.0   | 471.7   | 473.8   | 329.8   | 367.3   | 590.6   | 628.2   | 613.6   | 277.6   |
| 87.5° | 56.4    | 66.8    | 139.8   | 210.8   | 194.1   | 123.1   | 135.7   | 192.0   | 219.1   | 202.4   | 93.9    |
| 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: P457663

CATALOG NUMBER: GALN-SA9A-730-U-T2R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3575.2  | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 | 3575.2 |
| 2.5°  | 3646.1  | 3573.1 | 3447.9 | 3351.9 | 3283.0 | 3222.5 | 3184.9 | 3161.9 | 3153.6 | 3151.5 | 3153.6 |
| 5°    | 3769.3  | 3639.9 | 3441.6 | 3316.4 | 3247.5 | 3207.9 | 3184.9 | 3182.8 | 3184.9 | 3187.0 | 3180.7 |
| 7.5°  | 3938.3  | 3752.6 | 3493.8 | 3376.9 | 3324.7 | 3295.5 | 3285.1 | 3280.9 | 3283.0 | 3280.9 | 3280.9 |
| 10°   | 4163.7  | 3909.1 | 3596.1 | 3475.0 | 3431.2 | 3397.8 | 3381.1 | 3370.7 | 3362.3 | 3354.0 | 3349.8 |
| 12.5° | 4412.1  | 4082.3 | 3706.7 | 3589.8 | 3527.2 | 3475.0 | 3437.4 | 3410.3 | 3391.5 | 3372.7 | 3368.6 |
| 15°   | 4689.7  | 4266.0 | 3829.8 | 3667.0 | 3577.3 | 3500.0 | 3435.4 | 3391.5 | 3358.1 | 3331.0 | 3328.9 |
| 17.5° | 4954.8  | 4439.2 | 3913.3 | 3702.5 | 3571.0 | 3462.5 | 3376.9 | 3316.4 | 3274.6 | 3239.2 | 3235.0 |
| 20°   | 5238.6  | 4604.1 | 3950.9 | 3679.5 | 3508.4 | 3376.9 | 3264.2 | 3191.2 | 3143.2 | 3103.5 | 3097.2 |
| 22.5° | 5524.5  | 4744.0 | 3946.7 | 3606.5 | 3399.9 | 3245.4 | 3126.5 | 3049.2 | 2992.9 | 2953.2 | 2938.6 |
| 25°   | 5797.9  | 4856.7 | 3894.5 | 3489.6 | 3249.6 | 3088.9 | 2967.8 | 2896.9 | 2846.8 | 2798.8 | 2798.8 |
| 27.5° | 6044.2  | 4923.4 | 3796.4 | 3347.7 | 3095.2 | 2926.1 | 2830.1 | 2765.4 | 2719.5 | 2688.2 | 2669.4 |
| 30°   | 6286.3  | 4954.8 | 3662.8 | 3168.2 | 2932.4 | 2788.4 | 2711.1 | 2673.6 | 2631.8 | 2596.3 | 2592.2 |
| 32.5° | 6503.4  | 4948.5 | 3495.9 | 2992.9 | 2777.9 | 2675.6 | 2644.3 | 2615.1 | 2571.3 | 2521.2 | 2508.7 |
| 35°   | 6714.2  | 4906.7 | 3297.6 | 2800.9 | 2648.5 | 2608.9 | 2617.2 | 2575.5 | 2496.2 | 2433.5 | 2423.1 |
| 37.5° | 6943.7  | 4831.6 | 3080.5 | 2644.3 | 2540.0 | 2577.6 | 2598.4 | 2506.6 | 2377.2 | 2279.1 | 2256.1 |
| 40°   | 7208.8  | 4746.0 | 2855.1 | 2487.8 | 2454.4 | 2548.3 | 2548.3 | 2379.3 | 2201.9 | 2141.4 | 2124.7 |
| 42.5° | 7519.8  | 4675.1 | 2667.3 | 2356.3 | 2383.5 | 2477.4 | 2466.9 | 2210.2 | 2137.2 | 2105.9 | 2097.5 |
| 45°   | 8012.3  | 4650.0 | 2473.2 | 2241.5 | 2325.0 | 2393.9 | 2308.3 | 2151.8 | 2110.0 | 2085.0 | 2076.7 |
| 47.5° | 8790.8  | 4679.3 | 2302.1 | 2156.0 | 2258.2 | 2310.4 | 2130.9 | 2112.1 | 2082.9 | 2047.4 | 2043.3 |
| 50°   | 9513.0  | 4652.1 | 2181.0 | 2108.0 | 2199.8 | 2210.2 | 2057.9 | 2064.1 | 2047.4 | 2007.8 | 1999.4 |
| 52.5° | 10103.6 | 4566.6 | 2103.8 | 2082.9 | 2149.7 | 2034.9 | 1989.0 | 2012.0 | 2005.7 | 1955.6 | 1947.3 |
| 55°   | 10752.7 | 4514.4 | 2066.2 | 2082.9 | 2116.3 | 1882.6 | 1924.3 | 1957.7 | 1949.3 | 1913.9 | 1911.8 |
| 57.5° | 11539.5 | 4524.8 | 2039.1 | 2089.2 | 2082.9 | 1805.3 | 1859.6 | 1899.3 | 1897.2 | 1886.7 | 1886.7 |
| 60°   | 12345.1 | 4529.0 | 1997.3 | 2087.1 | 2043.3 | 1744.8 | 1792.8 | 1849.2 | 1853.3 | 1859.6 | 1859.6 |
| 62.5° | 12612.3 | 4347.4 | 1915.9 | 2049.5 | 1955.6 | 1686.4 | 1730.2 | 1807.4 | 1803.2 | 1819.9 | 1822.0 |
| 65°   | 12113.5 | 3844.4 | 1794.9 | 1964.0 | 1842.9 | 1644.6 | 1682.2 | 1753.2 | 1730.2 | 1774.0 | 1782.4 |
| 67.5° | 11026.1 | 3180.7 | 1607.1 | 1809.5 | 1717.7 | 1600.8 | 1650.9 | 1678.0 | 1636.3 | 1721.8 | 1723.9 |
| 70°   | 9529.7  | 2483.6 | 1369.1 | 1590.4 | 1575.8 | 1554.9 | 1625.8 | 1584.1 | 1525.7 | 1630.0 | 1609.1 |
| 72.5° | 7968.5  | 1897.2 | 1093.6 | 1300.3 | 1385.8 | 1486.0 | 1582.0 | 1463.1 | 1381.7 | 1413.0 | 1375.4 |
| 75°   | 5985.8  | 1402.5 | 878.7  | 1018.5 | 1154.2 | 1387.9 | 1542.4 | 1317.0 | 1191.7 | 1162.5 | 1154.2 |
| 77.5° | 3051.3  | 916.2  | 657.4  | 761.8  | 866.1  | 1254.3 | 1488.1 | 1145.8 | 987.2  | 941.3  | 920.4  |
| 80°   | 1089.5  | 569.8  | 463.3  | 525.9  | 584.4  | 1079.0 | 1300.3 | 947.5  | 766.0  | 757.6  | 766.0  |
| 82.5° | 505.1   | 367.3  | 311.0  | 344.4  | 346.5  | 720.0  | 991.4  | 707.5  | 582.3  | 884.9  | 747.2  |
| 85°   | 217.1   | 183.7  | 175.3  | 171.1  | 158.6  | 321.4  | 557.3  | 379.9  | 592.7  | 265.1  | 244.2  |
| 87.5° | 64.7    | 73.0   | 64.7   | 48.0   | 35.5   | 35.5   | 56.4   | 20.9   | 14.6   | 10.4   | 10.4   |
| 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)