

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: P650797

Luminaire Tested: **GALN-SA3C-840-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P650797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA3C-840-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14519 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

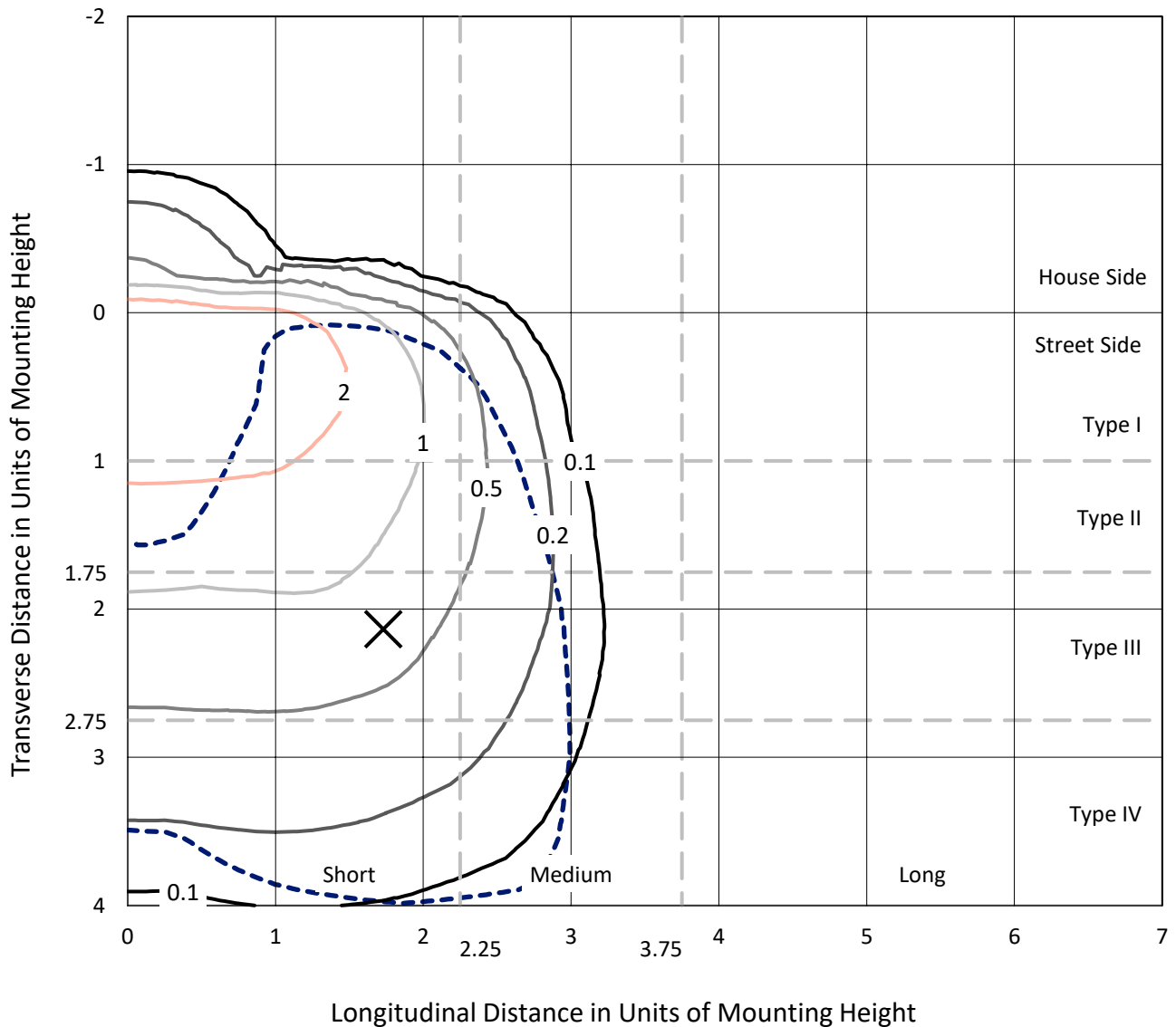
Input Watts (W): 160  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P650797  
 CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

### Iso-Footcandle Lines of Horizontal Illumination

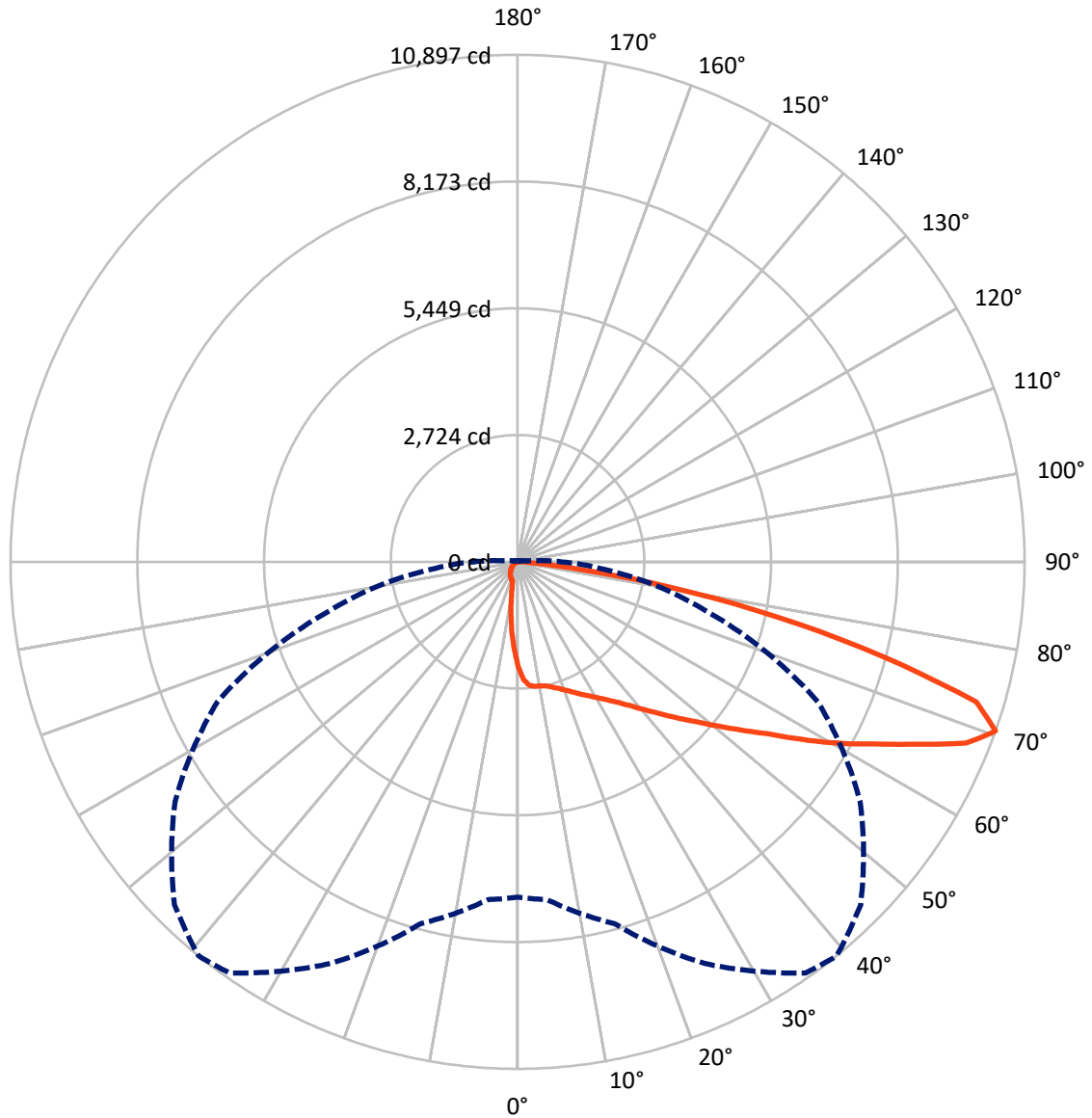
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P650797  
CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P650797  
 CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

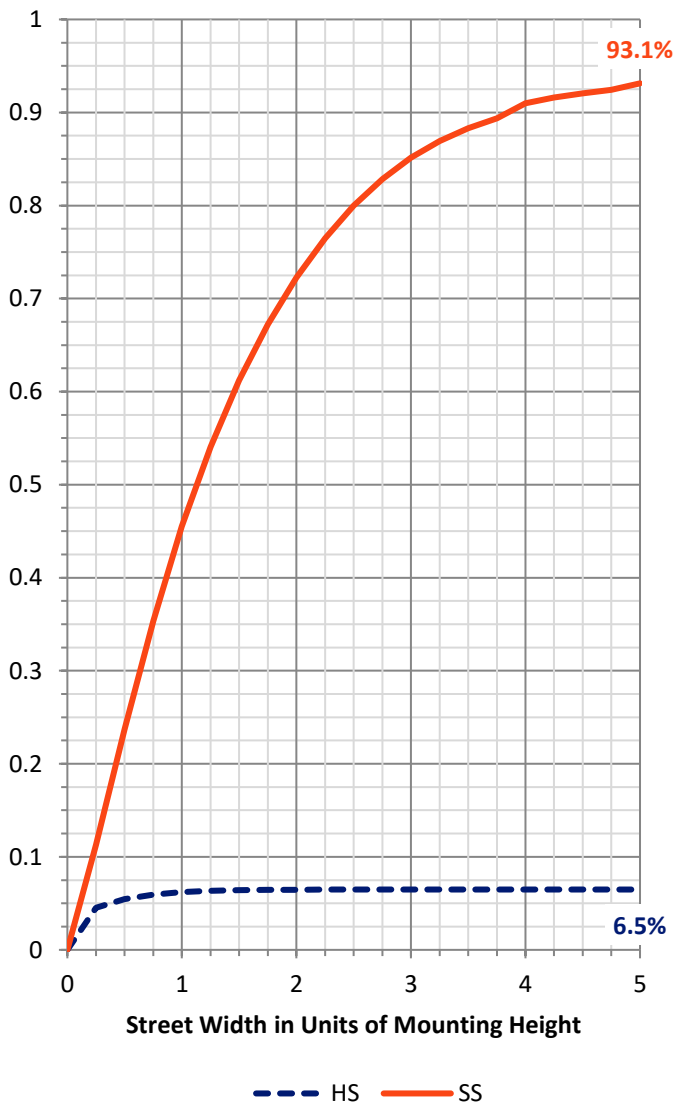
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 946.7    | 0.0    | 946.7   |
|                    | % Fixture | 6.5      | 0.0    | 6.5     |
| <b>Street Side</b> | Lumens    | 13572.3  | 0.0    | 13572.3 |
|                    | % Fixture | 93.5     | 0.0    | 93.5    |
| <b>Total</b>       | Lumens    | 14519.0  | 0.0    | 14519.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 193.2   | 1.3       |
| 10°-20°   | 502.1   | 3.5       |
| 20°-30°   | 841.2   | 5.8       |
| 30°-40°   | 1304.7  | 9.0       |
| 40°-50°   | 2067.5  | 14.2      |
| 50°-60°   | 3030.6  | 20.9      |
| 60°-70°   | 3884.5  | 26.8      |
| 70°-80°   | 2440.9  | 16.8      |
| 80°-90°   | 254.3   | 1.8       |
| 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°    | 14519.0 | 100.0     |
| 0°-180°   | 14519.0 | 100.0     |

**Coefficient of Utilization**

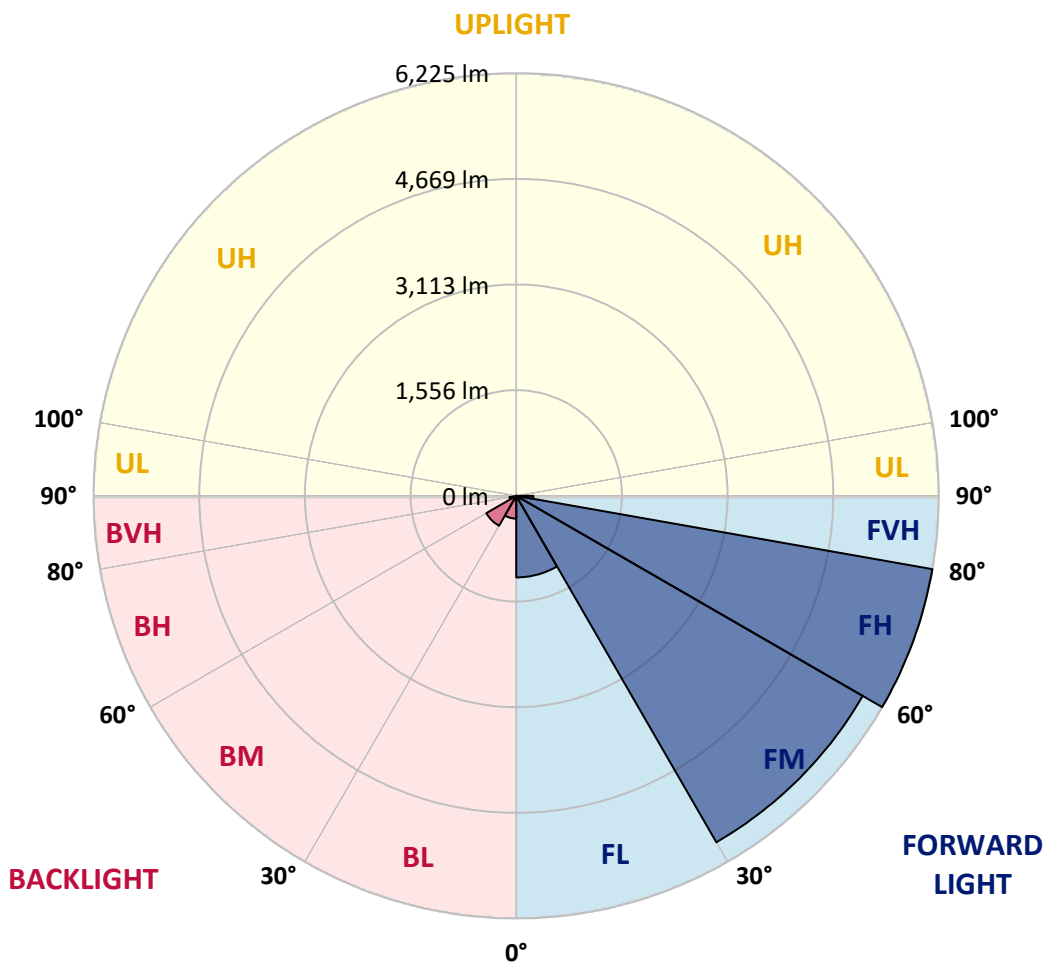


REPORT NUMBER: P650797  
 CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1201.4 | 8.3       |                         |      |         |
| FM (30°-60°)   | 5893.2 | 40.6      |                         |      |         |
| FH (60°-80°)   | 6225.3 | 42.9      |                         |      | G3/7500 |
| FVH (80°-90°)  | 252.4  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 335.2  | 2.3       | B1/500                  |      |         |
| BM (30°-60°)   | 509.5  | 3.5       | B1/1000                 |      |         |
| BH (60°-80°)   | 100.1  | 0.7       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.9    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**  
 Type IV Short





REPORT NUMBER: P650797

CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 39°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5  | 2265.5  | 2265.5  | 2265.5 | 2265.5 | 2265.5 | 2265.5 |
| 2.5°  | 2617.7 | 2608.9 | 2597.2 | 2583.6 | 2544.5  | 2537.6  | 2514.3  | 2464.5 | 2405.0 | 2356.2 | 2288.9 |
| 5°    | 2741.6 | 2746.5 | 2737.7 | 2713.3 | 2685.0  | 2668.4  | 2639.1  | 2562.0 | 2485.0 | 2386.4 | 2276.2 |
| 7.5°  | 2769.9 | 2779.7 | 2768.9 | 2745.5 | 2718.2  | 2700.6  | 2677.2  | 2610.9 | 2521.1 | 2408.9 | 2257.7 |
| 10°   | 2767.0 | 2778.7 | 2771.9 | 2750.4 | 2728.0  | 2711.3  | 2686.0  | 2633.3 | 2561.1 | 2443.0 | 2263.6 |
| 12.5° | 2762.1 | 2777.7 | 2776.7 | 2766.0 | 2747.5  | 2734.8  | 2719.1  | 2672.3 | 2605.0 | 2492.8 | 2295.7 |
| 15°   | 2748.4 | 2767.9 | 2785.5 | 2794.3 | 2795.2  | 2795.2  | 2775.7  | 2725.9 | 2661.6 | 2558.2 | 2337.6 |
| 17.5° | 2754.3 | 2776.7 | 2820.6 | 2845.9 | 2863.5  | 2861.6  | 2841.1  | 2787.4 | 2716.2 | 2625.5 | 2381.5 |
| 20°   | 2790.4 | 2820.6 | 2882.1 | 2932.8 | 2950.4  | 2944.5  | 2917.2  | 2854.8 | 2773.8 | 2683.0 | 2424.5 |
| 22.5° | 2879.2 | 2906.5 | 2983.5 | 3043.1 | 3055.8  | 3040.1  | 3001.1  | 2916.3 | 2843.1 | 2745.5 | 2476.2 |
| 25°   | 3011.9 | 3044.0 | 3115.2 | 3160.1 | 3160.1  | 3151.4  | 3096.7  | 2997.2 | 2921.1 | 2832.3 | 2543.5 |
| 27.5° | 3172.8 | 3200.2 | 3270.4 | 3310.4 | 3287.0  | 3261.6  | 3207.0  | 3087.0 | 3013.8 | 2941.6 | 2624.5 |
| 30°   | 3335.7 | 3353.3 | 3427.5 | 3445.0 | 3420.6  | 3388.5  | 3329.9  | 3209.9 | 3145.5 | 3089.9 | 2741.6 |
| 32.5° | 3489.9 | 3528.0 | 3589.4 | 3585.5 | 3552.4  | 3536.7  | 3483.1  | 3355.3 | 3319.2 | 3313.3 | 2905.5 |
| 35°   | 3644.1 | 3673.3 | 3728.0 | 3741.6 | 3712.3  | 3709.4  | 3670.4  | 3575.8 | 3576.8 | 3614.8 | 3161.2 |
| 37.5° | 3776.8 | 3803.1 | 3867.5 | 3897.7 | 3903.6  | 3918.2  | 3902.6  | 3840.2 | 3929.0 | 4033.4 | 3499.7 |
| 40°   | 3887.9 | 3925.0 | 4007.0 | 4059.7 | 4120.1  | 4173.9  | 4176.7  | 4190.5 | 4369.0 | 4548.5 | 3941.6 |
| 42.5° | 3974.8 | 4026.5 | 4145.5 | 4243.1 | 4381.7  | 4450.0  | 4504.6  | 4579.7 | 4880.2 | 5148.5 | 4462.6 |
| 45°   | 4088.0 | 4147.5 | 4295.8 | 4449.0 | 4665.5  | 4777.8  | 4853.8  | 5054.8 | 5481.2 | 5847.1 | 4997.3 |
| 47.5° | 4275.3 | 4306.5 | 4457.7 | 4681.2 | 4966.1  | 5126.1  | 5274.4  | 5578.8 | 6126.1 | 6453.9 | 5442.2 |
| 50°   | 4516.3 | 4536.8 | 4650.9 | 4961.2 | 5330.0  | 5540.8  | 5811.0  | 6169.1 | 6795.4 | 6957.3 | 5693.9 |
| 52.5° | 4782.7 | 4789.5 | 4875.4 | 5269.5 | 5737.8  | 6003.2  | 6305.6  | 6747.6 | 7340.8 | 7316.4 | 5860.8 |
| 55°   | 5091.9 | 5082.2 | 5155.3 | 5604.2 | 6220.8  | 6524.2  | 6876.4  | 7339.8 | 7814.0 | 7571.1 | 5956.4 |
| 57.5° | 5446.1 | 5419.7 | 5491.0 | 6048.1 | 6839.3  | 7202.2  | 7560.3  | 7851.1 | 8180.8 | 7784.7 | 6002.2 |
| 60°   | 5816.9 | 5764.1 | 5849.1 | 6546.6 | 7568.2  | 7912.5  | 8210.1  | 8288.1 | 8567.2 | 7954.5 | 5923.2 |
| 62.5° | 6112.5 | 6113.5 | 6271.5 | 7077.4 | 8317.4  | 8618.9  | 8777.0  | 8847.2 | 8899.9 | 7917.4 | 5507.5 |
| 65°   | 6573.9 | 6589.6 | 6842.3 | 7814.0 | 9184.8  | 9446.3  | 9554.6  | 9326.3 | 8914.5 | 7456.9 | 4883.2 |
| 67.5° | 7050.1 | 7099.8 | 7562.3 | 8828.6 | 10186.8 | 10397.5 | 10258.0 | 9418.9 | 8516.5 | 6406.1 | 3702.6 |
| 70°   | 7205.2 | 7287.2 | 8049.1 | 9527.3 | 10787.8 | 10897.1 | 10424.9 | 8986.8 | 7119.3 | 4283.1 | 1863.5 |
| 72.5° | 6602.3 | 6734.9 | 7769.2 | 9272.6 | 10404.3 | 10309.7 | 9327.3  | 7537.0 | 4526.1 | 1626.4 | 568.8  |
| 75°   | 4655.8 | 4714.4 | 6456.9 | 7692.0 | 8368.2  | 8099.8  | 7094.9  | 4858.7 | 1861.6 | 456.6  | 195.1  |
| 77.5° | 2404.0 | 2375.7 | 3840.2 | 5103.6 | 5968.1  | 5690.0  | 4646.0  | 2515.3 | 705.4  | 190.2  | 121.0  |
| 80°   | 1243.0 | 1263.4 | 1661.6 | 2674.3 | 3643.1  | 3352.3  | 2477.2  | 1165.9 | 375.6  | 105.4  | 92.7   |
| 82.5° | 696.6  | 653.7  | 955.1  | 1167.9 | 1703.5  | 1335.7  | 950.2   | 825.4  | 163.9  | 63.4   | 87.8   |
| 85°   | 126.8  | 132.7  | 523.9  | 631.3  | 591.2   | 375.6   | 306.4   | 551.3  | 47.8   | 35.2   | 61.5   |
| 87.5° | 1.9    | 1.9    | 101.5  | 181.5  | 115.1   | 52.6    | 96.6    | 79.1   | 9.8    | 13.6   | 10.8   |
| 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: P650797

CATALOG NUMBER: GALN-SA3C-840-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 | 2265.5 |
| 2.5°  | 2254.7 | 2217.6 | 2148.4 | 2080.1 | 1993.3 | 1922.0 | 1874.3 | 1824.5 | 1773.8 | 1777.6 | 1789.3 |
| 5°    | 2215.7 | 2151.3 | 2014.7 | 1870.3 | 1731.8 | 1606.9 | 1483.9 | 1373.7 | 1328.9 | 1287.8 | 1289.8 |
| 7.5°  | 2176.7 | 2085.9 | 1885.9 | 1659.5 | 1449.8 | 1237.1 | 1083.0 | 956.1  | 888.9  | 838.1  | 823.4  |
| 10°   | 2159.1 | 2039.1 | 1767.9 | 1456.6 | 1159.1 | 926.9  | 728.8  | 625.4  | 545.4  | 520.0  | 526.9  |
| 12.5° | 2166.9 | 2015.7 | 1661.6 | 1273.2 | 919.0  | 645.9  | 507.4  | 454.6  | 437.1  | 434.1  | 432.2  |
| 15°   | 2181.6 | 1999.1 | 1557.1 | 1070.3 | 675.2  | 480.0  | 426.4  | 416.6  | 414.6  | 412.7  | 413.7  |
| 17.5° | 2201.1 | 1984.5 | 1445.9 | 880.0  | 518.1  | 419.5  | 403.9  | 399.1  | 398.0  | 398.0  | 398.0  |
| 20°   | 2220.6 | 1967.9 | 1322.0 | 710.3  | 432.2  | 396.1  | 386.4  | 383.4  | 382.5  | 382.5  | 381.5  |
| 22.5° | 2243.0 | 1953.2 | 1196.2 | 558.1  | 398.0  | 379.5  | 370.7  | 368.8  | 367.9  | 366.8  | 366.8  |
| 25°   | 2275.2 | 1934.7 | 1062.5 | 456.6  | 376.6  | 363.9  | 355.2  | 353.2  | 352.2  | 348.3  | 349.3  |
| 27.5° | 2318.1 | 1921.1 | 924.9  | 394.2  | 357.1  | 344.4  | 338.6  | 335.6  | 333.7  | 330.8  | 331.7  |
| 30°   | 2376.7 | 1909.3 | 778.6  | 360.0  | 334.6  | 324.0  | 318.1  | 316.1  | 314.2  | 311.3  | 311.3  |
| 32.5° | 2478.2 | 1914.2 | 624.4  | 332.7  | 314.2  | 301.5  | 295.6  | 293.7  | 291.7  | 288.8  | 288.8  |
| 35°   | 2630.4 | 1942.5 | 499.6  | 309.3  | 289.8  | 277.1  | 271.2  | 271.2  | 268.3  | 264.4  | 263.4  |
| 37.5° | 2879.2 | 2014.7 | 401.0  | 286.9  | 266.3  | 254.7  | 247.8  | 245.8  | 243.0  | 237.1  | 236.1  |
| 40°   | 3172.8 | 2126.9 | 337.6  | 264.4  | 244.9  | 233.2  | 227.3  | 221.4  | 213.7  | 207.8  | 206.8  |
| 42.5° | 3541.6 | 2242.0 | 292.7  | 242.0  | 224.4  | 213.7  | 206.8  | 197.0  | 185.4  | 177.5  | 176.6  |
| 45°   | 3926.0 | 2347.4 | 262.5  | 221.4  | 204.9  | 196.1  | 188.3  | 172.7  | 158.0  | 148.3  | 147.3  |
| 47.5° | 4212.9 | 2366.9 | 238.1  | 201.9  | 188.3  | 179.6  | 168.8  | 149.3  | 129.8  | 121.0  | 118.1  |
| 50°   | 4348.5 | 2272.3 | 212.7  | 182.4  | 171.7  | 162.0  | 148.3  | 125.9  | 104.4  | 93.7   | 91.8   |
| 52.5° | 4396.3 | 2108.4 | 192.2  | 164.9  | 155.2  | 143.4  | 126.8  | 101.5  | 81.9   | 71.2   | 70.2   |
| 55°   | 4376.8 | 1901.6 | 173.7  | 148.3  | 135.7  | 121.9  | 105.4  | 81.0   | 60.5   | 51.7   | 49.8   |
| 57.5° | 4274.3 | 1638.1 | 155.2  | 131.7  | 116.1  | 102.4  | 83.9   | 60.5   | 41.0   | 33.1   | 32.2   |
| 60°   | 3998.2 | 1279.1 | 136.6  | 113.2  | 98.6   | 83.9   | 66.4   | 42.9   | 25.4   | 18.5   | 18.5   |
| 62.5° | 3531.9 | 949.3  | 119.0  | 94.6   | 82.9   | 67.3   | 46.8   | 27.3   | 13.6   | 9.8    | 8.7    |
| 65°   | 2951.3 | 700.6  | 99.5   | 80.0   | 69.3   | 52.6   | 33.1   | 16.6   | 6.8    | 2.9    | 1.9    |
| 67.5° | 2059.6 | 432.2  | 82.9   | 65.3   | 56.6   | 38.0   | 20.5   | 6.8    | 2.9    | 0.0    | 0.0    |
| 70°   | 935.6  | 205.9  | 63.4   | 49.8   | 42.9   | 27.3   | 10.8   | 3.9    | 1.9    | 0.0    | 0.0    |
| 72.5° | 290.7  | 108.3  | 44.9   | 36.1   | 29.3   | 17.6   | 5.9    | 2.9    | 1.9    | 0.0    | 0.0    |
| 75°   | 134.6  | 69.3   | 28.3   | 19.5   | 16.6   | 8.7    | 3.9    | 1.9    | 1.0    | 0.0    | 0.0    |
| 77.5° | 100.5  | 53.7   | 16.6   | 10.8   | 8.7    | 5.9    | 2.9    | 1.9    | 1.0    | 0.0    | 0.0    |
| 80°   | 87.8   | 27.3   | 9.8    | 6.8    | 4.9    | 3.9    | 1.9    | 1.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 79.1   | 13.6   | 5.9    | 3.9    | 2.9    | 1.9    | 1.0    | 1.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 42.9   | 7.8    | 3.9    | 2.9    | 1.9    | 1.0    | 1.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.8    | 3.9    | 2.9    | 1.9    | 1.9    | 1.0    | 1.0    | 1.0    | 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)