

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: P451174

Luminaire Tested: **GALN-SA2A-730-U-T4W-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2A-730-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6059 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

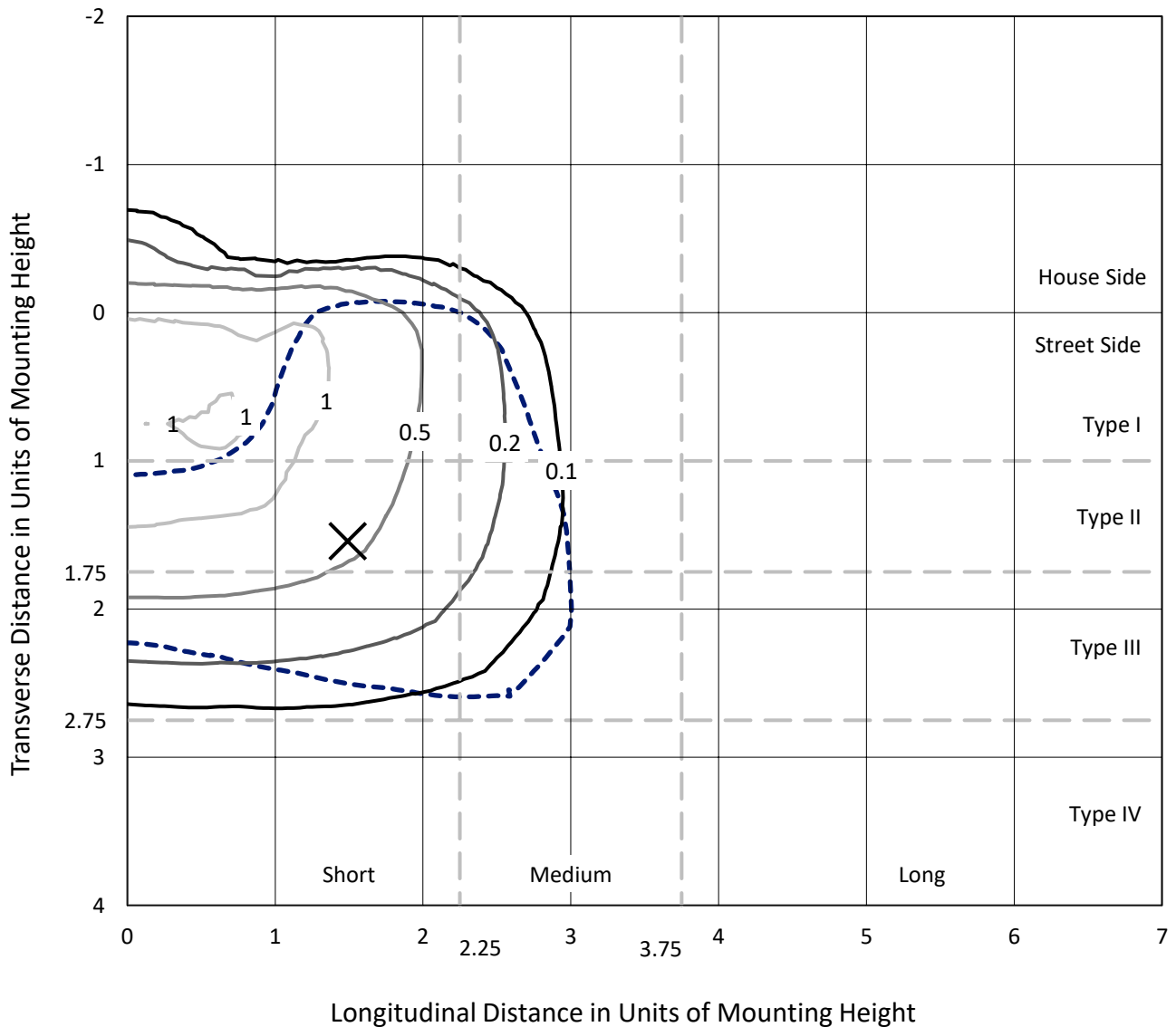
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P451174  
 CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

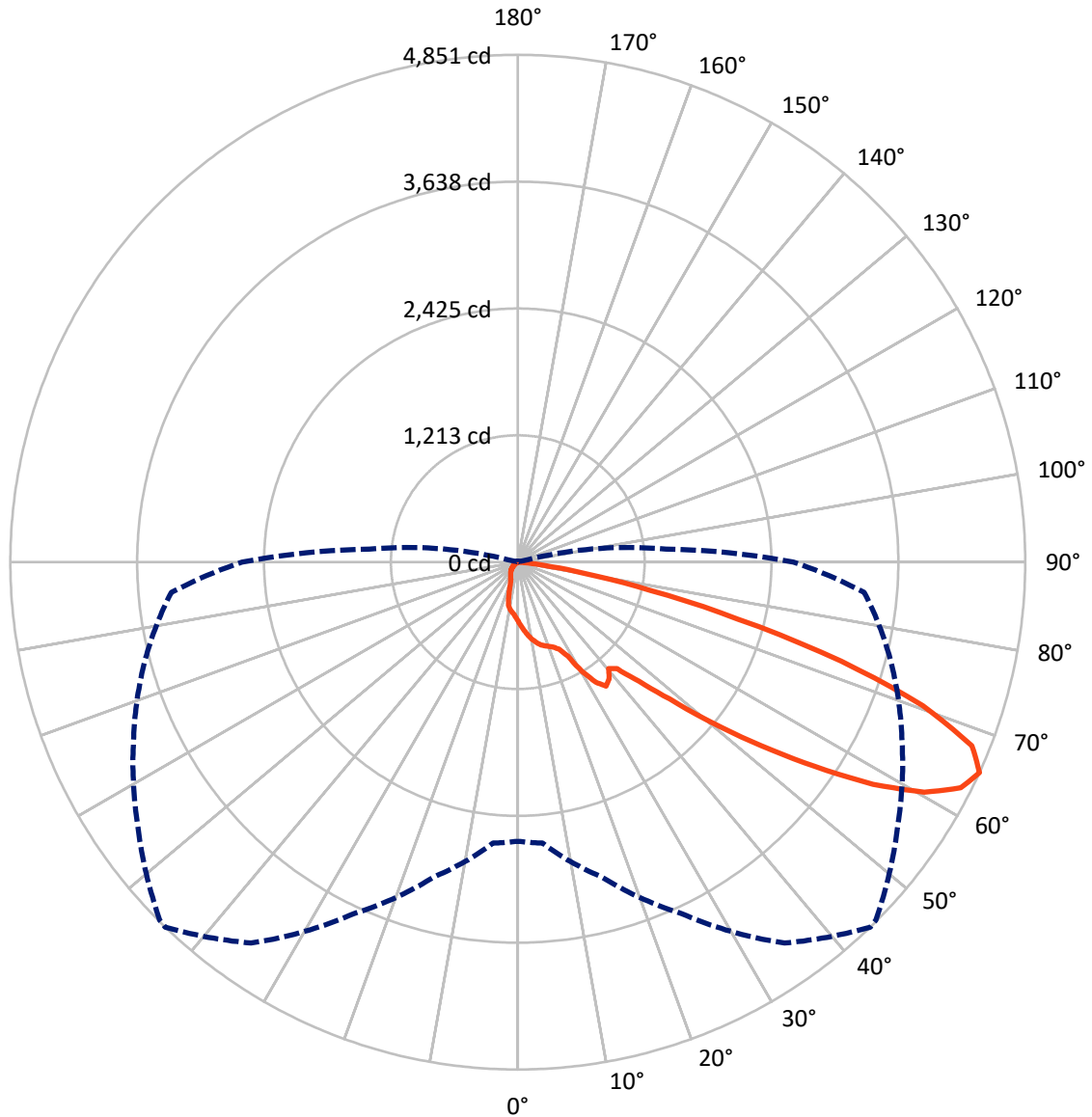
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type III - Short - N/A

REPORT NUMBER: P451174  
CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P451174

CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 558.3    | 0.0    | 558.3  |
|                    | % Fixture | 9.2      | 0.0    | 9.2    |
| <b>Street Side</b> | Lumens    | 5500.8   | 0.0    | 5500.8 |
|                    | % Fixture | 90.8     | 0.0    | 90.8   |
| <b>Total</b>       | Lumens    | 6059.0   | 0.0    | 6059.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 56.1   | 0.9       |
| 10°-20°   | 168.8  | 2.8       |
| 20°-30°   | 286.2  | 4.7       |
| 30°-40°   | 475.9  | 7.9       |
| 40°-50°   | 830.9  | 13.7      |
| 50°-60°   | 1623.4 | 26.8      |
| 60°-70°   | 1883.5 | 31.1      |
| 70°-80°   | 685.9  | 11.3      |
| 80°-90°   | 48.3   | 0.8       |
| 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°    | 6059.0 | 100.0     |
| 0°-180°   | 6059.0 | 100.0     |

**Coefficient of Utilization**

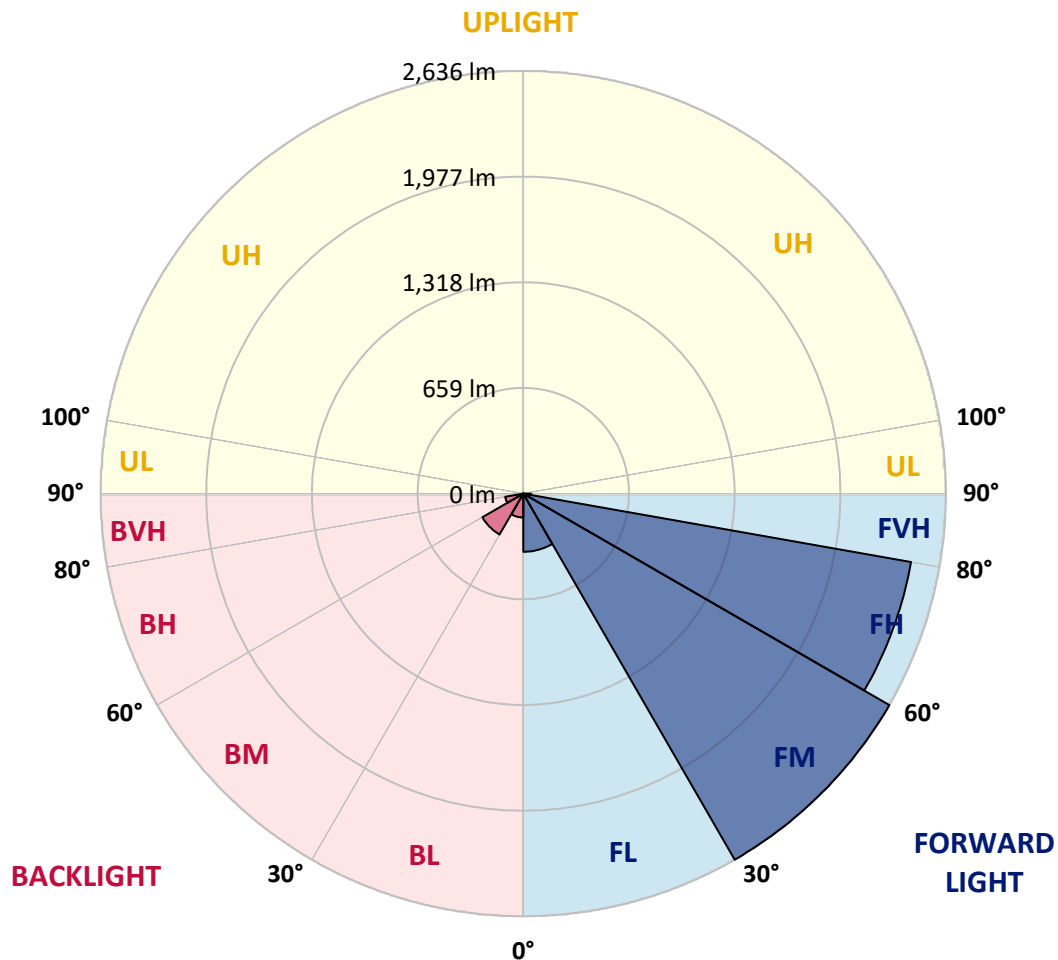


REPORT NUMBER: P451174  
 CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 362.4  | 6.0       |                         |      |         |
| FM (30°-60°)   | 2635.7 | 43.5      |                         |      |         |
| FH (60°-80°)   | 2455.0 | 40.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 47.7   | 0.8       |                         |      | G1/100  |
| BL (0°-30°)    | 148.7  | 2.5       | B1/500                  |      |         |
| BM (30°-60°)   | 294.5  | 4.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 114.3  | 1.9       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.7    | 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-G2**  
 Type III Short





REPORT NUMBER: P451174

CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  | 563.9  |
| 2.5°  | 634.7  | 632.0  | 630.6  | 623.2  | 617.6  | 610.7  | 610.7  | 601.9  | 591.7  | 580.6  | 570.4  |
| 5°    | 705.6  | 701.0  | 694.9  | 688.5  | 675.5  | 657.0  | 657.0  | 638.5  | 617.2  | 598.2  | 577.3  |
| 7.5°  | 773.6  | 769.5  | 759.3  | 746.8  | 725.5  | 706.0  | 704.7  | 677.8  | 652.3  | 623.6  | 594.0  |
| 10°   | 833.4  | 830.1  | 821.3  | 797.3  | 775.0  | 749.6  | 749.1  | 719.0  | 689.4  | 654.2  | 617.6  |
| 12.5° | 875.0  | 875.5  | 863.9  | 840.8  | 812.1  | 788.0  | 786.1  | 756.5  | 725.5  | 687.5  | 642.6  |
| 15°   | 904.7  | 904.7  | 892.6  | 866.7  | 840.8  | 819.5  | 817.6  | 791.7  | 759.8  | 718.5  | 669.9  |
| 17.5° | 913.0  | 915.8  | 902.8  | 879.7  | 858.8  | 840.3  | 839.8  | 818.1  | 792.6  | 752.8  | 697.7  |
| 20°   | 909.8  | 912.5  | 902.4  | 884.3  | 869.9  | 859.3  | 857.9  | 849.1  | 825.5  | 788.0  | 727.3  |
| 22.5° | 902.8  | 905.6  | 898.2  | 887.5  | 880.6  | 883.8  | 881.5  | 888.9  | 876.4  | 831.1  | 762.5  |
| 25°   | 904.2  | 907.0  | 901.4  | 895.4  | 901.4  | 921.3  | 927.4  | 959.3  | 948.2  | 885.7  | 800.5  |
| 27.5° | 947.7  | 953.3  | 945.4  | 948.2  | 969.5  | 1015.8 | 1027.4 | 1082.5 | 1033.4 | 955.1  | 859.8  |
| 30°   | 1044.5 | 1040.8 | 1026.0 | 1039.4 | 1113.5 | 1211.6 | 1208.4 | 1199.6 | 1122.7 | 1035.2 | 930.1  |
| 32.5° | 1132.5 | 1129.2 | 1128.3 | 1186.2 | 1320.4 | 1368.1 | 1365.8 | 1280.6 | 1202.8 | 1126.9 | 999.6  |
| 35°   | 1168.1 | 1155.6 | 1152.8 | 1293.1 | 1517.7 | 1454.7 | 1440.3 | 1313.9 | 1300.1 | 1226.9 | 1070.4 |
| 37.5° | 1275.5 | 1266.7 | 1223.7 | 1310.7 | 1438.9 | 1418.1 | 1407.0 | 1371.4 | 1403.8 | 1315.3 | 1150.5 |
| 40°   | 1496.8 | 1472.3 | 1433.4 | 1348.2 | 1327.4 | 1336.2 | 1347.3 | 1445.0 | 1526.5 | 1436.2 | 1257.5 |
| 42.5° | 1771.8 | 1766.3 | 1694.1 | 1535.2 | 1379.2 | 1391.3 | 1405.6 | 1598.7 | 1702.8 | 1618.1 | 1432.0 |
| 45°   | 2101.9 | 2109.8 | 2005.6 | 1818.1 | 1613.5 | 1623.7 | 1644.5 | 1825.5 | 1941.7 | 1901.0 | 1706.6 |
| 47.5° | 2402.0 | 2395.9 | 2360.7 | 2165.8 | 1976.9 | 1954.2 | 1988.0 | 2116.8 | 2272.3 | 2278.8 | 2047.3 |
| 50°   | 2703.8 | 2735.8 | 2683.4 | 2607.1 | 2466.8 | 2419.1 | 2406.6 | 2469.5 | 2706.6 | 2675.6 | 2456.6 |
| 52.5° | 3137.6 | 3154.3 | 3056.1 | 3036.7 | 3068.6 | 2914.0 | 2901.5 | 2916.8 | 3128.8 | 3022.3 | 2763.1 |
| 55°   | 3410.3 | 3400.6 | 3364.0 | 3515.9 | 3642.3 | 3449.2 | 3433.5 | 3371.9 | 3479.3 | 3267.3 | 3058.0 |
| 57.5° | 3496.4 | 3510.3 | 3595.5 | 3870.1 | 4169.2 | 4005.3 | 3976.6 | 3801.5 | 3732.1 | 3495.5 | 3329.3 |
| 60°   | 3458.0 | 3483.5 | 3667.3 | 4075.6 | 4490.5 | 4465.9 | 4441.4 | 4147.4 | 3913.6 | 3686.3 | 3519.6 |
| 62.5° | 3184.4 | 3220.0 | 3514.0 | 4039.1 | 4599.3 | 4752.5 | 4722.0 | 4363.1 | 4034.4 | 3778.9 | 3552.9 |
| 65°   | 2668.6 | 2695.0 | 3117.3 | 3707.1 | 4444.6 | 4850.7 | 4839.6 | 4430.7 | 4053.4 | 3694.1 | 3324.7 |
| 67.5° | 1902.4 | 1992.2 | 2383.4 | 3124.2 | 3987.2 | 4683.1 | 4702.0 | 4349.7 | 3875.2 | 3327.9 | 2753.4 |
| 70°   | 1195.9 | 1257.0 | 1537.6 | 2236.7 | 3196.4 | 4108.5 | 4171.0 | 3978.9 | 3363.1 | 2594.1 | 1843.1 |
| 72.5° | 570.4  | 615.8  | 815.8  | 1415.8 | 2256.1 | 3232.5 | 3282.1 | 3266.3 | 2600.6 | 1634.3 | 951.0  |
| 75°   | 254.2  | 271.3  | 389.4  | 722.7  | 1456.5 | 2172.8 | 2301.0 | 2322.3 | 1625.1 | 799.6  | 369.9  |
| 77.5° | 129.6  | 130.1  | 182.4  | 350.0  | 727.3  | 1296.3 | 1321.8 | 1396.4 | 881.1  | 352.3  | 128.7  |
| 80°   | 69.0   | 73.6   | 96.8   | 165.3  | 377.3  | 638.5  | 635.2  | 698.2  | 390.8  | 172.7  | 43.1   |
| 82.5° | 31.0   | 34.3   | 54.6   | 86.6   | 184.3  | 242.1  | 261.1  | 285.7  | 167.6  | 110.2  | 19.0   |
| 85°   | 9.3    | 11.1   | 26.9   | 43.5   | 66.7   | 69.9   | 78.2   | 100.9  | 94.9   | 78.2   | 9.7    |
| 87.5° | 1.4    | 1.4    | 11.1   | 12.0   | 9.7    | 12.5   | 13.0   | 14.4   | 30.6   | 28.7   | 5.1    |
| 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: P451174

CATALOG NUMBER: GALN-SA2A-730-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 563.9  | 563.9  | 563.9 | 563.9 | 563.9 | 563.9 | 563.9 | 563.9 | 563.9 | 563.9 | 563.9 |
| 2.5°  | 564.8  | 561.6  | 550.0 | 540.3 | 532.0 | 526.9 | 520.9 | 517.2 | 515.3 | 513.9 | 514.4 |
| 5°    | 567.2  | 559.3  | 539.4 | 523.6 | 511.6 | 498.6 | 489.8 | 484.7 | 482.4 | 478.7 | 478.7 |
| 7.5°  | 580.1  | 567.6  | 539.8 | 515.8 | 494.9 | 477.3 | 460.7 | 454.6 | 450.5 | 449.6 | 448.6 |
| 10°   | 598.6  | 582.9  | 544.9 | 511.6 | 482.0 | 457.9 | 434.3 | 413.4 | 397.2 | 387.5 | 386.1 |
| 12.5° | 621.8  | 599.1  | 552.8 | 508.8 | 470.9 | 428.3 | 365.8 | 323.6 | 295.4 | 286.6 | 288.0 |
| 15°   | 643.1  | 618.5  | 560.7 | 506.5 | 450.5 | 355.1 | 284.3 | 236.1 | 221.8 | 220.4 | 220.8 |
| 17.5° | 668.5  | 639.4  | 569.9 | 503.3 | 394.5 | 271.3 | 211.1 | 198.2 | 200.9 | 205.6 | 205.1 |
| 20°   | 694.9  | 661.6  | 581.0 | 483.8 | 314.8 | 204.2 | 186.6 | 188.0 | 192.1 | 196.3 | 197.2 |
| 22.5° | 723.2  | 687.1  | 594.0 | 437.1 | 240.3 | 177.8 | 176.9 | 178.7 | 182.9 | 187.5 | 188.4 |
| 25°   | 762.1  | 719.0  | 603.7 | 375.9 | 182.0 | 164.4 | 166.2 | 169.5 | 173.2 | 178.2 | 179.2 |
| 27.5° | 812.1  | 762.1  | 608.8 | 296.3 | 157.4 | 152.3 | 152.8 | 157.4 | 162.0 | 166.7 | 166.7 |
| 30°   | 876.9  | 813.5  | 598.6 | 224.1 | 145.4 | 140.7 | 138.9 | 141.7 | 147.7 | 152.3 | 152.8 |
| 32.5° | 934.8  | 862.1  | 571.8 | 171.3 | 136.6 | 130.1 | 125.5 | 125.9 | 128.2 | 131.0 | 131.5 |
| 35°   | 992.6  | 909.3  | 525.9 | 144.0 | 127.3 | 119.9 | 113.0 | 109.3 | 107.4 | 106.0 | 107.4 |
| 37.5° | 1066.7 | 968.1  | 464.8 | 131.0 | 119.4 | 110.2 | 100.5 | 92.6  | 86.1  | 81.9  | 82.9  |
| 40°   | 1162.1 | 1049.6 | 392.6 | 122.7 | 112.0 | 100.9 | 88.0  | 77.8  | 66.7  | 63.0  | 61.1  |
| 42.5° | 1319.5 | 1173.2 | 316.7 | 115.7 | 104.6 | 91.2  | 75.0  | 61.1  | 50.9  | 47.2  | 48.2  |
| 45°   | 1568.1 | 1329.2 | 244.0 | 108.3 | 97.2  | 80.6  | 63.0  | 48.2  | 39.8  | 38.0  | 38.9  |
| 47.5° | 1897.8 | 1531.1 | 188.0 | 100.0 | 88.0  | 69.0  | 49.5  | 38.0  | 32.9  | 32.4  | 31.9  |
| 50°   | 2208.0 | 1719.1 | 157.0 | 90.7  | 76.9  | 57.4  | 40.7  | 31.9  | 28.7  | 28.2  | 28.2  |
| 52.5° | 2488.5 | 1853.8 | 127.8 | 80.1  | 64.8  | 47.2  | 34.3  | 28.2  | 25.5  | 24.1  | 24.1  |
| 55°   | 2738.1 | 1941.7 | 103.7 | 67.1  | 50.9  | 37.5  | 29.6  | 25.5  | 22.2  | 20.4  | 19.9  |
| 57.5° | 2926.5 | 1952.4 | 77.8  | 53.7  | 38.0  | 29.2  | 25.5  | 22.2  | 18.5  | 16.2  | 15.3  |
| 60°   | 3007.1 | 1860.3 | 57.4  | 40.7  | 28.2  | 23.1  | 20.4  | 18.1  | 13.9  | 11.6  | 11.1  |
| 62.5° | 2926.0 | 1681.1 | 42.6  | 31.0  | 21.8  | 17.1  | 14.4  | 13.4  | 9.7   | 6.9   | 6.5   |
| 65°   | 2635.8 | 1422.3 | 33.8  | 23.6  | 16.2  | 12.5  | 9.3   | 8.8   | 6.0   | 3.2   | 2.8   |
| 67.5° | 2111.7 | 1113.9 | 26.9  | 17.6  | 11.6  | 8.3   | 6.0   | 5.6   | 3.2   | 0.9   | 0.9   |
| 70°   | 1373.2 | 712.1  | 21.8  | 13.0  | 7.4   | 5.6   | 3.7   | 2.8   | 1.9   | 0.5   | 0.0   |
| 72.5° | 679.2  | 332.9  | 17.6  | 10.2  | 5.1   | 2.8   | 1.4   | 0.9   | 1.4   | 0.0   | 0.0   |
| 75°   | 263.4  | 118.5  | 13.0  | 6.9   | 2.8   | 1.4   | 0.9   | 0.0   | 0.5   | 0.0   | 0.0   |
| 77.5° | 87.5   | 39.4   | 7.9   | 3.7   | 1.9   | 0.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 32.4   | 15.3   | 4.2   | 2.3   | 0.9   | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 13.0   | 6.0    | 2.8   | 1.9   | 0.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 6.5    | 3.7    | 1.9   | 1.4   | 0.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 4.6    | 2.8    | 1.9   | 1.4   | 0.9   | 0.5   | 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)