

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: P450847

Luminaire Tested: **GALN-SA1C-830-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450847  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1C-830-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4526 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 57  
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

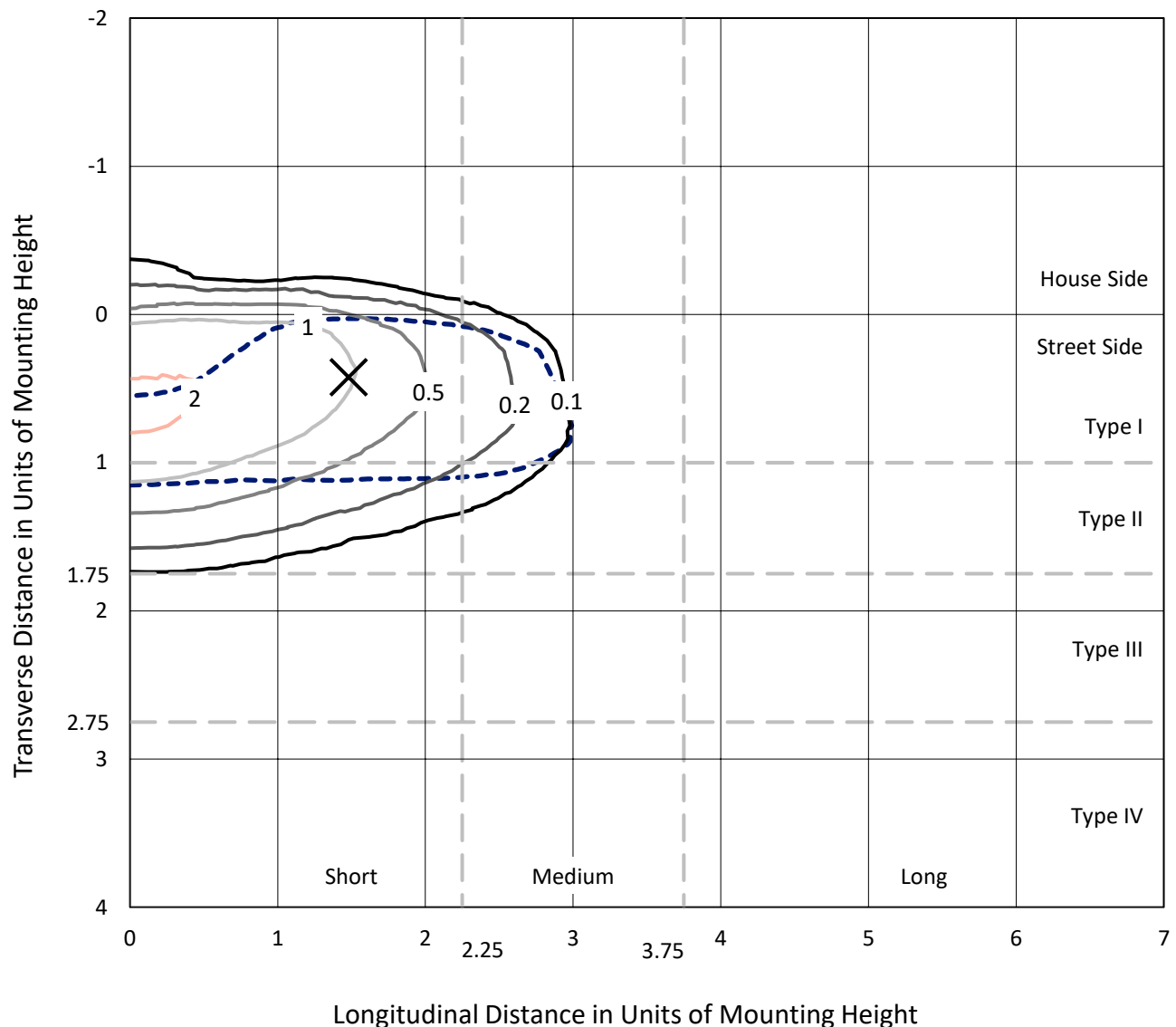


REPORT NUMBER: P450847

CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

## Iso-Footcandle Lines of Horizontal Illumination

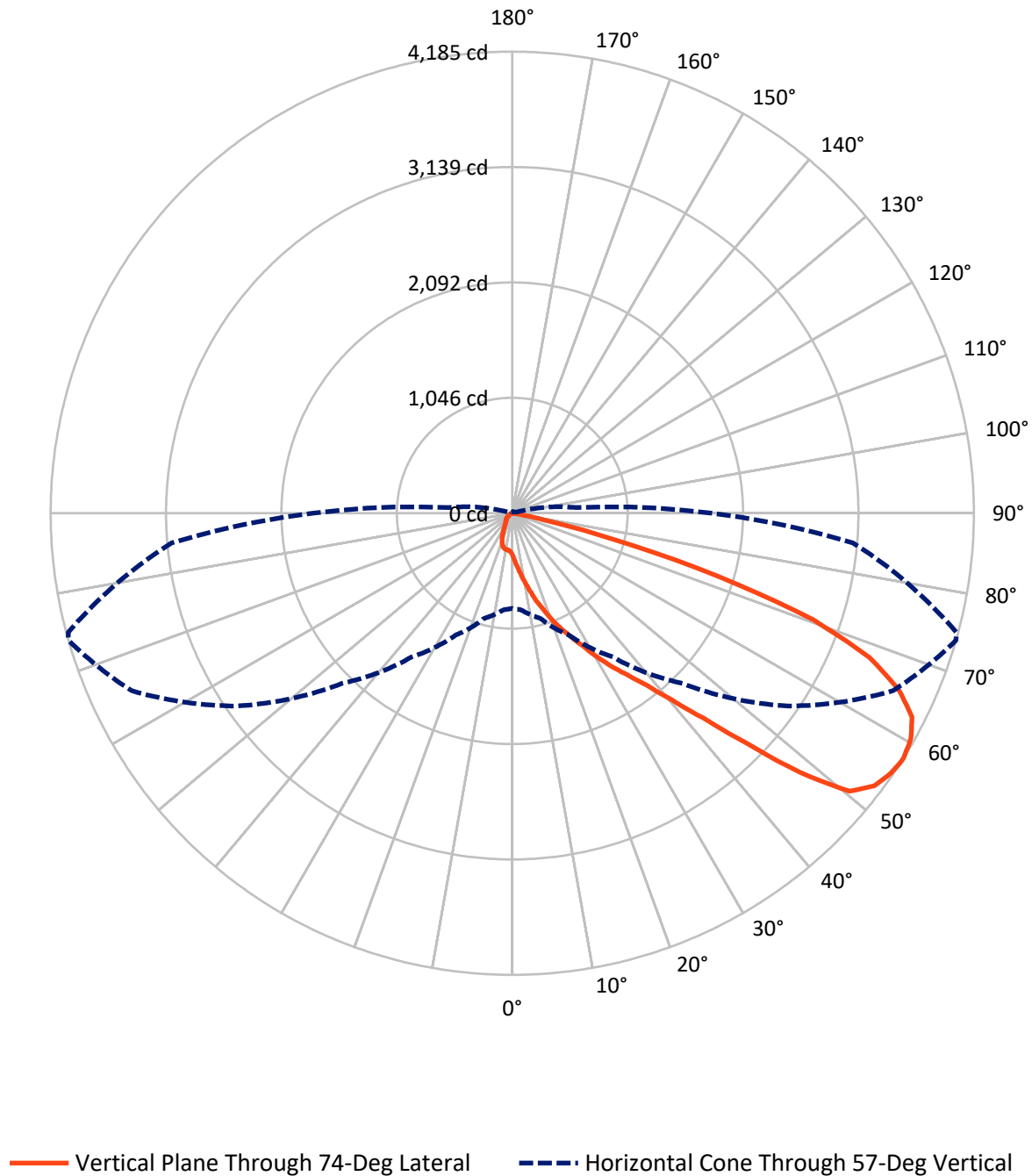
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P450847  
CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P450847

CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

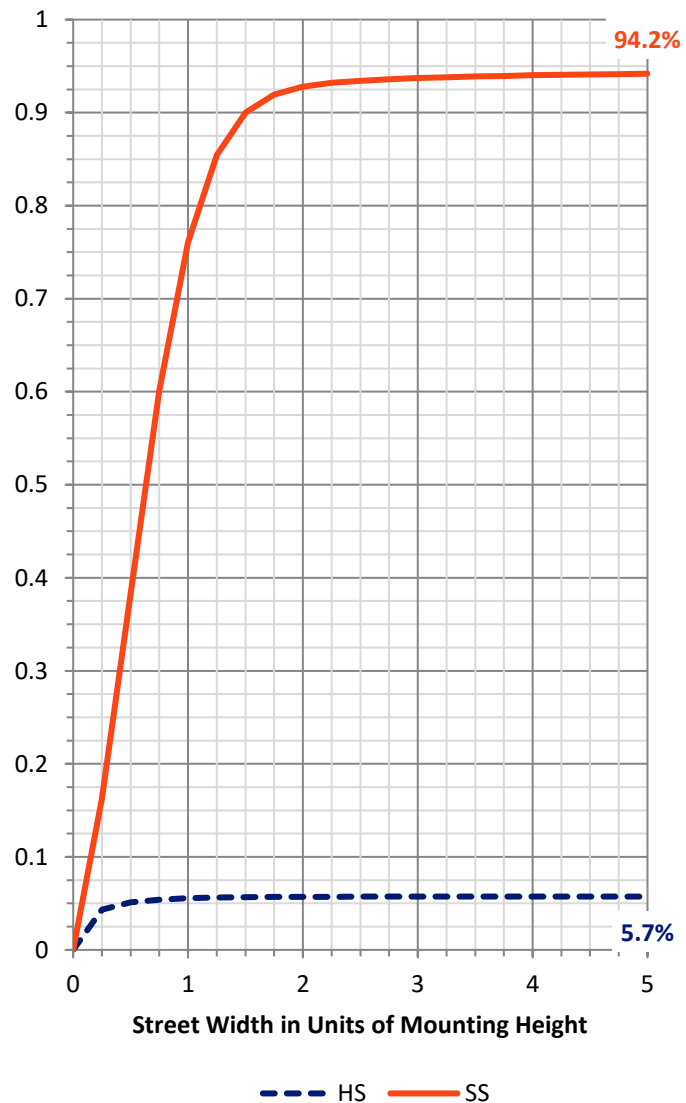
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 261.0    | 0.0    | 261.0  |
|                    | % Fixture | 5.8      | 0.0    | 5.8    |
| <b>Street Side</b> | Lumens    | 4264.9   | 0.0    | 4264.9 |
|                    | % Fixture | 94.2     | 0.0    | 94.2   |
| <b>Total</b>       | Lumens    | 4526.0   | 0.0    | 4526.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.8   | 1.0       |
| 10°-20°   | 180.3  | 4.0       |
| 20°-30°   | 385.9  | 8.5       |
| 30°-40°   | 709.2  | 15.7      |
| 40°-50°   | 1087.3 | 24.0      |
| 50°-60°   | 1150.2 | 25.4      |
| 60°-70°   | 751.1  | 16.6      |
| 70°-80°   | 205.2  | 4.5       |
| 80°-90°   | 11.0   | 0.2       |
| 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°    | 4526.0 | 100.0     |
| 0°-180°   | 4526.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P450847

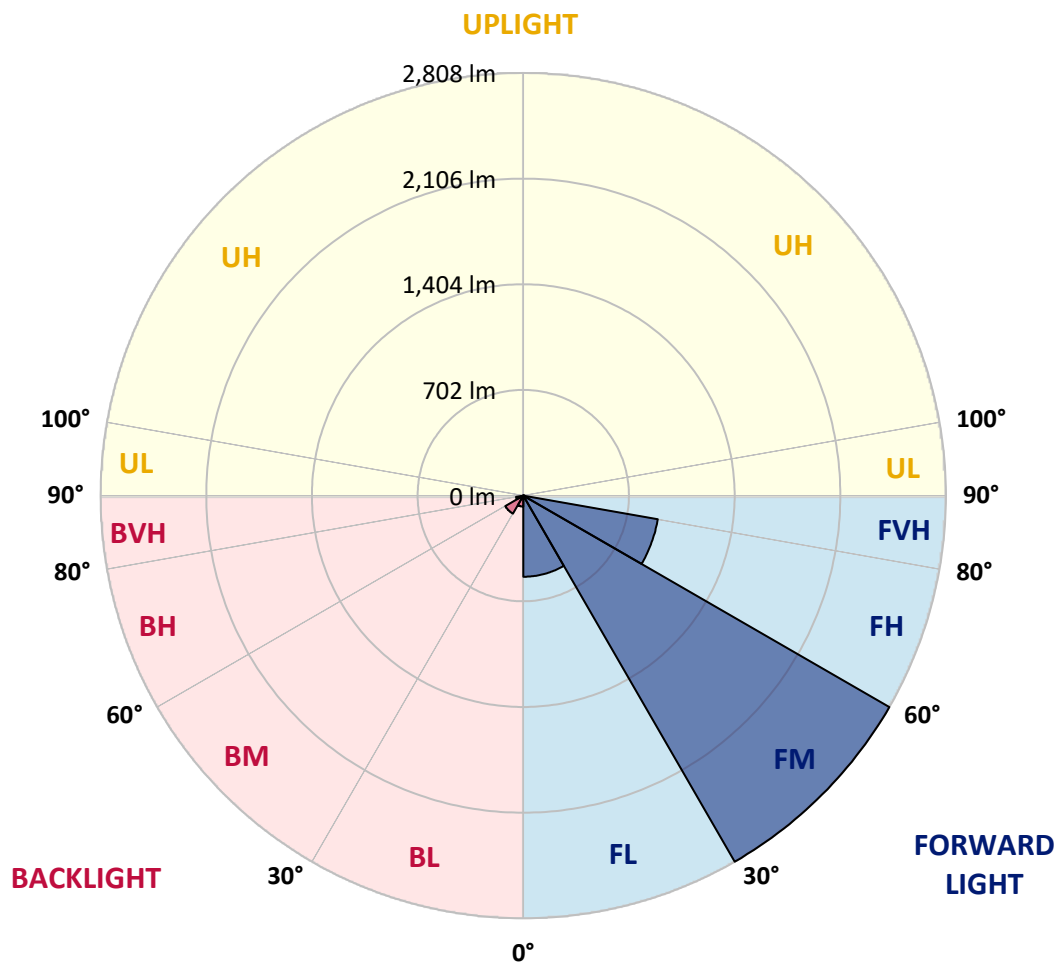
CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 539.0  | 11.9      |                         |      |         |
| FM   | (30°-60°)   | 2808.5 | 62.1      |                         |      |         |
| FH   | (60°-80°)   | 907.3  | 20.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 10.1   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 72.9   | 1.6       | B0/110                  |      |         |
| BM   | (30°-60°)   | 138.2  | 3.1       | B0/220                  |      |         |
| BH   | (60°-80°)   | 49.0   | 1.1       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.9    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**

Type II Short





REPORT NUMBER: P450847

CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 74°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  | 379.0  |
| 2.5°  | 554.7  | 549.7  | 539.7  | 536.2  | 521.5  | 498.7  | 478.7  | 451.9  | 430.6  | 428.4  | 402.8  |
| 5°    | 742.8  | 731.5  | 726.8  | 704.3  | 669.0  | 635.9  | 579.0  | 535.9  | 486.2  | 482.5  | 430.9  |
| 7.5°  | 924.0  | 908.4  | 903.7  | 882.5  | 841.2  | 789.0  | 715.3  | 636.8  | 558.1  | 550.9  | 468.7  |
| 10°   | 1055.3 | 1057.5 | 1049.0 | 1035.0 | 1001.5 | 948.4  | 857.5  | 750.3  | 638.1  | 629.0  | 511.2  |
| 12.5° | 1149.3 | 1149.0 | 1150.6 | 1150.3 | 1132.5 | 1092.1 | 996.5  | 873.1  | 726.2  | 708.4  | 560.0  |
| 15°   | 1210.6 | 1211.5 | 1216.2 | 1232.4 | 1234.3 | 1209.3 | 1129.6 | 990.6  | 828.4  | 806.2  | 612.8  |
| 17.5° | 1272.4 | 1279.0 | 1286.5 | 1301.8 | 1315.6 | 1305.6 | 1249.3 | 1113.1 | 920.9  | 904.3  | 669.3  |
| 20°   | 1374.6 | 1383.7 | 1379.3 | 1388.7 | 1395.9 | 1396.8 | 1353.4 | 1226.2 | 1033.1 | 1005.3 | 734.0  |
| 22.5° | 1538.1 | 1537.7 | 1526.5 | 1509.6 | 1495.6 | 1494.9 | 1455.6 | 1342.4 | 1135.0 | 1108.1 | 799.0  |
| 25°   | 1744.6 | 1745.6 | 1723.7 | 1675.6 | 1640.6 | 1597.7 | 1552.4 | 1444.3 | 1244.0 | 1210.9 | 867.5  |
| 27.5° | 1981.5 | 1975.5 | 1942.4 | 1876.2 | 1806.8 | 1733.7 | 1668.4 | 1562.7 | 1359.6 | 1332.1 | 945.9  |
| 30°   | 2194.3 | 2192.1 | 2153.3 | 2072.4 | 1981.2 | 1907.7 | 1813.0 | 1711.2 | 1509.3 | 1475.6 | 1033.7 |
| 32.5° | 2392.4 | 2395.5 | 2341.8 | 2258.0 | 2169.9 | 2085.2 | 1985.2 | 1853.0 | 1656.2 | 1608.4 | 1129.3 |
| 35°   | 2547.1 | 2550.2 | 2494.6 | 2424.9 | 2334.3 | 2264.0 | 2168.7 | 2004.3 | 1801.2 | 1760.9 | 1239.3 |
| 37.5° | 2629.6 | 2633.6 | 2601.5 | 2549.0 | 2492.4 | 2457.1 | 2368.3 | 2199.0 | 1977.4 | 1953.0 | 1369.3 |
| 40°   | 2645.2 | 2649.9 | 2635.8 | 2621.8 | 2618.6 | 2644.0 | 2618.0 | 2428.3 | 2221.8 | 2183.7 | 1563.1 |
| 42.5° | 2598.3 | 2604.6 | 2610.8 | 2642.1 | 2705.8 | 2798.6 | 2888.9 | 2739.6 | 2536.5 | 2485.2 | 1799.9 |
| 45°   | 2475.2 | 2474.6 | 2499.3 | 2580.2 | 2723.0 | 2921.1 | 3172.1 | 3129.2 | 2965.2 | 2904.3 | 2134.6 |
| 47.5° | 2264.6 | 2261.5 | 2314.9 | 2430.2 | 2652.7 | 2943.6 | 3403.0 | 3602.3 | 3512.4 | 3456.1 | 2494.3 |
| 50°   | 1943.7 | 1959.0 | 2043.0 | 2204.0 | 2478.0 | 2875.5 | 3474.2 | 3912.6 | 3961.4 | 3901.7 | 2784.9 |
| 52.5° | 1567.7 | 1567.1 | 1699.0 | 1917.4 | 2219.3 | 2725.5 | 3424.5 | 3968.9 | 4107.3 | 4061.7 | 2928.0 |
| 55°   | 1160.3 | 1168.4 | 1305.6 | 1525.9 | 1883.4 | 2451.8 | 3262.4 | 3911.1 | 4163.0 | 4130.8 | 3022.4 |
| 57°   | 863.1  | 877.5  | 987.5  | 1220.6 | 1590.9 | 2180.8 | 3046.4 | 3807.7 | 4184.8 | 4167.3 | 3100.8 |
| 57.5° | 805.6  | 806.2  | 913.4  | 1125.3 | 1505.2 | 2076.8 | 2984.6 | 3764.5 | 4184.2 | 4174.5 | 3113.6 |
| 60°   | 495.9  | 511.5  | 585.6  | 760.6  | 1101.8 | 1620.9 | 2569.9 | 3516.7 | 4151.7 | 4165.8 | 3168.3 |
| 62.5° | 296.9  | 303.4  | 351.5  | 458.4  | 710.3  | 1183.1 | 2103.0 | 3199.6 | 4067.0 | 4109.8 | 3164.6 |
| 65°   | 190.9  | 192.5  | 214.4  | 277.5  | 444.0  | 799.7  | 1620.6 | 2780.5 | 3848.0 | 3926.7 | 3040.8 |
| 67.5° | 147.5  | 150.0  | 158.7  | 182.2  | 257.5  | 498.1  | 1146.2 | 2333.3 | 3493.6 | 3595.2 | 2740.8 |
| 70°   | 130.9  | 132.2  | 135.3  | 142.8  | 170.3  | 281.2  | 713.1  | 1822.7 | 2897.1 | 2925.8 | 2144.9 |
| 72.5° | 106.9  | 110.3  | 120.0  | 122.5  | 135.0  | 175.6  | 396.9  | 1223.4 | 1946.5 | 1953.7 | 1199.9 |
| 75°   | 82.8   | 83.4   | 97.8   | 105.0  | 113.7  | 120.9  | 177.2  | 616.8  | 935.0  | 885.0  | 462.5  |
| 77.5° | 61.9   | 64.7   | 71.2   | 80.3   | 92.8   | 86.6   | 79.4   | 232.5  | 290.3  | 285.0  | 134.4  |
| 80°   | 39.7   | 41.2   | 49.7   | 60.3   | 72.2   | 56.6   | 44.7   | 68.1   | 63.7   | 65.6   | 32.2   |
| 82.5° | 20.0   | 20.3   | 31.9   | 49.1   | 45.9   | 28.4   | 28.1   | 27.8   | 23.7   | 23.4   | 15.0   |
| 85°   | 2.2    | 4.7    | 20.6   | 28.1   | 20.6   | 9.4    | 13.1   | 12.8   | 12.5   | 12.8   | 8.7    |
| 87.5° | 0.3    | 0.3    | 3.4    | 4.1    | 2.8    | 3.1    | 3.7    | 4.1    | 5.0    | 4.7    | 3.7    |
| 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: P450847

CATALOG NUMBER: GALN-SA1C-830-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 379.0  | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 | 379.0 |
| 2.5°  | 390.3  | 377.8 | 354.7 | 332.5 | 315.9 | 305.3 | 291.6 | 286.6 | 279.4 | 278.4 | 275.0 |
| 5°    | 407.2  | 383.4 | 343.1 | 311.2 | 285.6 | 266.2 | 249.4 | 235.3 | 224.1 | 221.6 | 222.8 |
| 7.5°  | 431.2  | 395.9 | 339.7 | 296.2 | 260.6 | 227.5 | 200.6 | 184.1 | 172.2 | 167.8 | 168.4 |
| 10°   | 458.4  | 412.5 | 339.0 | 280.3 | 225.9 | 185.3 | 155.9 | 141.2 | 134.4 | 131.9 | 129.1 |
| 12.5° | 490.6  | 431.5 | 337.5 | 255.6 | 187.8 | 147.8 | 126.9 | 118.1 | 111.6 | 109.7 | 109.7 |
| 15°   | 526.9  | 451.9 | 330.0 | 225.0 | 152.5 | 122.2 | 108.1 | 101.2 | 99.1  | 97.2  | 97.2  |
| 17.5° | 564.7  | 471.9 | 314.4 | 187.2 | 126.6 | 104.7 | 95.9  | 91.9  | 88.7  | 86.6  | 86.6  |
| 20°   | 607.8  | 491.5 | 289.4 | 153.7 | 106.9 | 93.4  | 86.6  | 81.9  | 79.4  | 77.5  | 76.9  |
| 22.5° | 648.7  | 507.5 | 257.5 | 126.2 | 93.1  | 84.1  | 77.8  | 72.8  | 70.3  | 69.4  | 69.4  |
| 25°   | 691.2  | 517.2 | 219.1 | 104.4 | 85.0  | 76.2  | 69.4  | 65.3  | 63.1  | 62.5  | 62.2  |
| 27.5° | 732.5  | 522.8 | 185.3 | 91.2  | 77.5  | 69.1  | 62.5  | 59.4  | 57.2  | 56.6  | 56.9  |
| 30°   | 782.5  | 523.7 | 152.5 | 81.9  | 70.9  | 62.2  | 56.2  | 53.4  | 52.2  | 51.6  | 51.2  |
| 32.5° | 833.1  | 522.5 | 128.1 | 76.2  | 64.7  | 56.2  | 51.2  | 49.1  | 48.1  | 47.2  | 47.2  |
| 35°   | 890.0  | 515.9 | 109.1 | 70.6  | 58.7  | 51.2  | 46.9  | 45.0  | 43.7  | 42.8  | 42.5  |
| 37.5° | 960.6  | 512.5 | 98.1  | 64.4  | 53.4  | 46.6  | 42.5  | 40.6  | 39.7  | 38.4  | 38.1  |
| 40°   | 1071.8 | 527.8 | 94.7  | 58.7  | 48.1  | 42.2  | 38.4  | 36.2  | 35.0  | 33.7  | 33.4  |
| 42.5° | 1210.6 | 554.7 | 89.1  | 53.1  | 43.4  | 38.1  | 34.4  | 31.9  | 29.7  | 28.1  | 27.5  |
| 45°   | 1390.3 | 590.0 | 80.3  | 47.2  | 39.4  | 33.7  | 30.3  | 27.2  | 24.4  | 23.1  | 22.8  |
| 47.5° | 1578.7 | 624.0 | 72.5  | 42.5  | 35.0  | 30.0  | 26.2  | 22.8  | 20.3  | 19.4  | 19.1  |
| 50°   | 1694.3 | 630.9 | 67.5  | 37.2  | 30.6  | 25.9  | 22.2  | 19.1  | 17.5  | 16.6  | 16.6  |
| 52.5° | 1747.1 | 620.0 | 60.6  | 32.5  | 26.6  | 22.8  | 19.1  | 16.6  | 15.6  | 15.0  | 14.7  |
| 55°   | 1784.0 | 603.1 | 51.6  | 28.1  | 22.8  | 19.4  | 16.9  | 15.0  | 13.7  | 13.1  | 12.8  |
| 57°   | 1805.5 | 580.3 | 44.7  | 24.7  | 19.7  | 16.9  | 15.0  | 13.4  | 12.2  | 10.9  | 10.9  |
| 57.5° | 1806.5 | 571.5 | 42.8  | 24.4  | 18.7  | 16.2  | 14.7  | 13.1  | 11.6  | 10.3  | 10.0  |
| 60°   | 1778.7 | 511.5 | 34.4  | 20.6  | 15.0  | 13.7  | 12.2  | 10.3  | 8.1   | 6.9   | 6.6   |
| 62.5° | 1689.3 | 435.3 | 28.4  | 17.5  | 12.2  | 10.6  | 8.7   | 7.8   | 5.6   | 4.1   | 4.1   |
| 65°   | 1554.0 | 353.1 | 24.4  | 14.1  | 10.0  | 7.8   | 5.9   | 5.6   | 3.4   | 1.9   | 1.6   |
| 67.5° | 1358.4 | 275.0 | 20.6  | 11.6  | 8.4   | 5.6   | 4.1   | 3.7   | 1.9   | 0.6   | 0.0   |
| 70°   | 1035.0 | 187.5 | 17.2  | 9.4   | 6.2   | 4.1   | 2.8   | 2.2   | 1.2   | 0.3   | 0.0   |
| 72.5° | 596.5  | 103.1 | 14.4  | 7.2   | 4.7   | 3.1   | 2.2   | 1.2   | 1.2   | 0.0   | 0.0   |
| 75°   | 213.1  | 44.4  | 10.9  | 5.3   | 3.7   | 2.5   | 1.6   | 0.6   | 0.9   | 0.3   | 0.0   |
| 77.5° | 67.8   | 23.7  | 7.2   | 4.1   | 3.1   | 1.9   | 1.2   | 0.6   | 0.6   | 0.3   | 0.0   |
| 80°   | 20.0   | 12.5  | 4.4   | 3.4   | 2.2   | 1.6   | 0.9   | 0.3   | 0.6   | 0.3   | 0.0   |
| 82.5° | 10.9   | 6.2   | 3.4   | 2.5   | 2.2   | 1.2   | 0.9   | 0.3   | 0.3   | 0.3   | 0.0   |
| 85°   | 5.6    | 3.7   | 2.8   | 2.5   | 2.2   | 1.2   | 0.9   | 0.3   | 0.0   | 0.3   | 0.3   |
| 87.5° | 3.1    | 2.8   | 2.8   | 2.5   | 2.2   | 1.6   | 0.9   | 0.3   | 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)