

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: P458791

Luminaire Tested: **GALN-SA3B-735-U-T2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458791  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3B-735-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11829 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

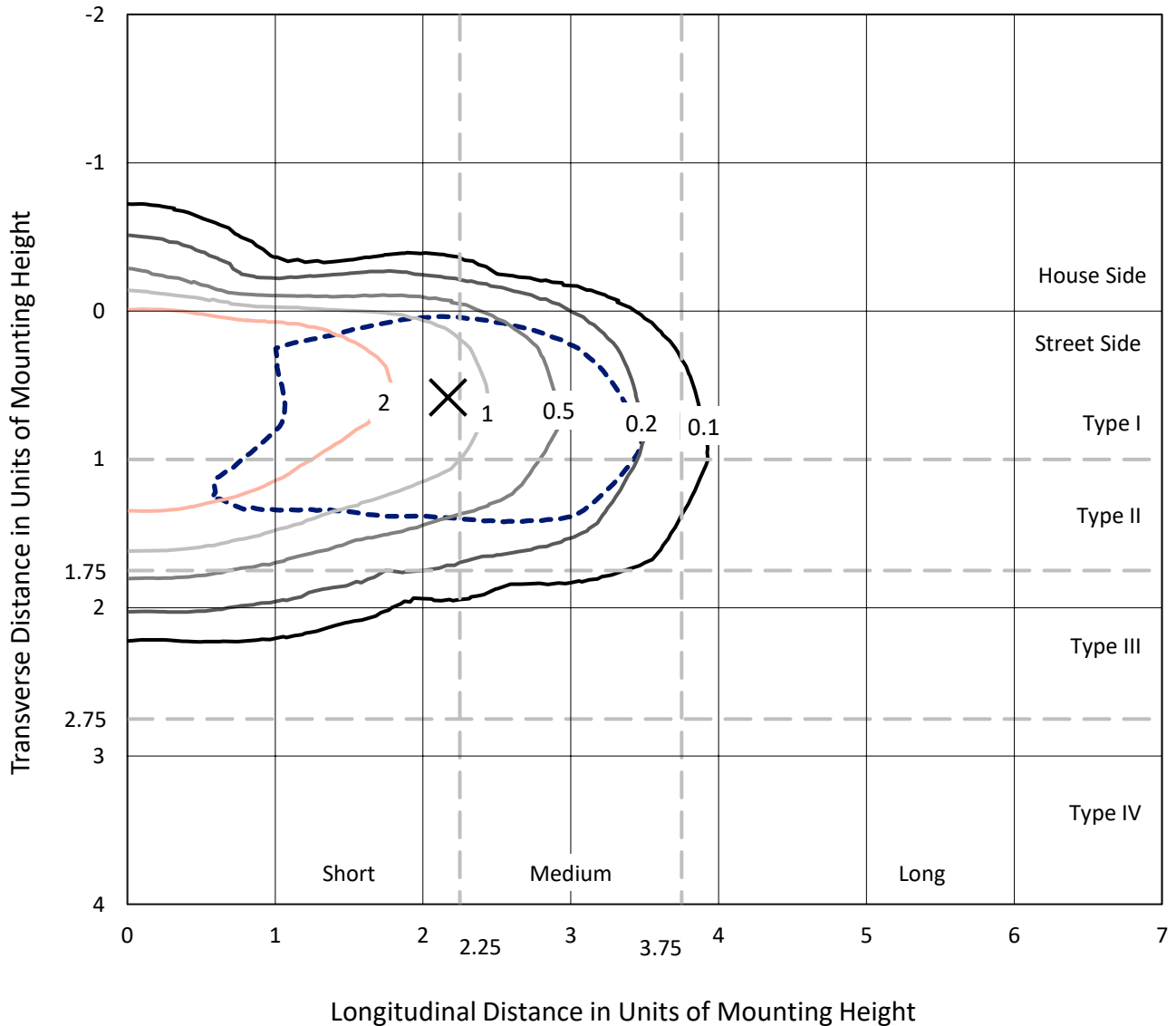
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

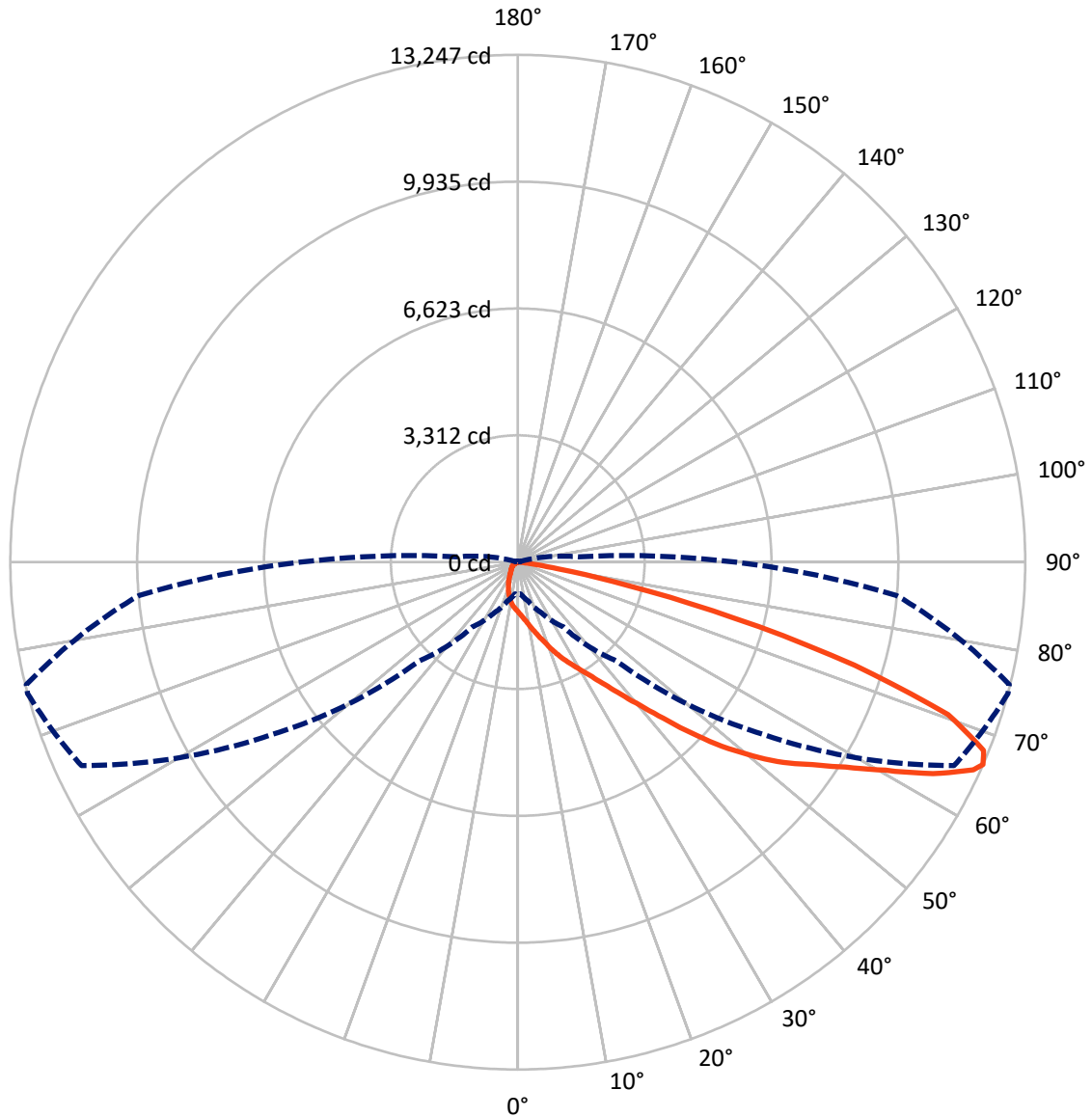
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 730.3    | 0.0    | 730.3   |
|                    | % Fixture | 6.2      | 0.0    | 6.2     |
| <b>Street Side</b> | Lumens    | 11098.7  | 0.0    | 11098.7 |
|                    | % Fixture | 93.8     | 0.0    | 93.8    |
| <b>Total</b>       | Lumens    | 11829.0  | 0.0    | 11829.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 124.8   | 1.1       |
| 10°-20°   | 367.2   | 3.1       |
| 20°-30°   | 634.1   | 5.4       |
| 30°-40°   | 1143.8  | 9.7       |
| 40°-50°   | 2066.2  | 17.5      |
| 50°-60°   | 3221.3  | 27.2      |
| 60°-70°   | 3060.1  | 25.9      |
| 70°-80°   | 1146.8  | 9.7       |
| 80°-90°   | 64.7    | 0.5       |
| 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°    | 11829.0 | 100.0     |
| 0°-180°   | 11829.0 | 100.0     |

**Coefficient of Utilization**



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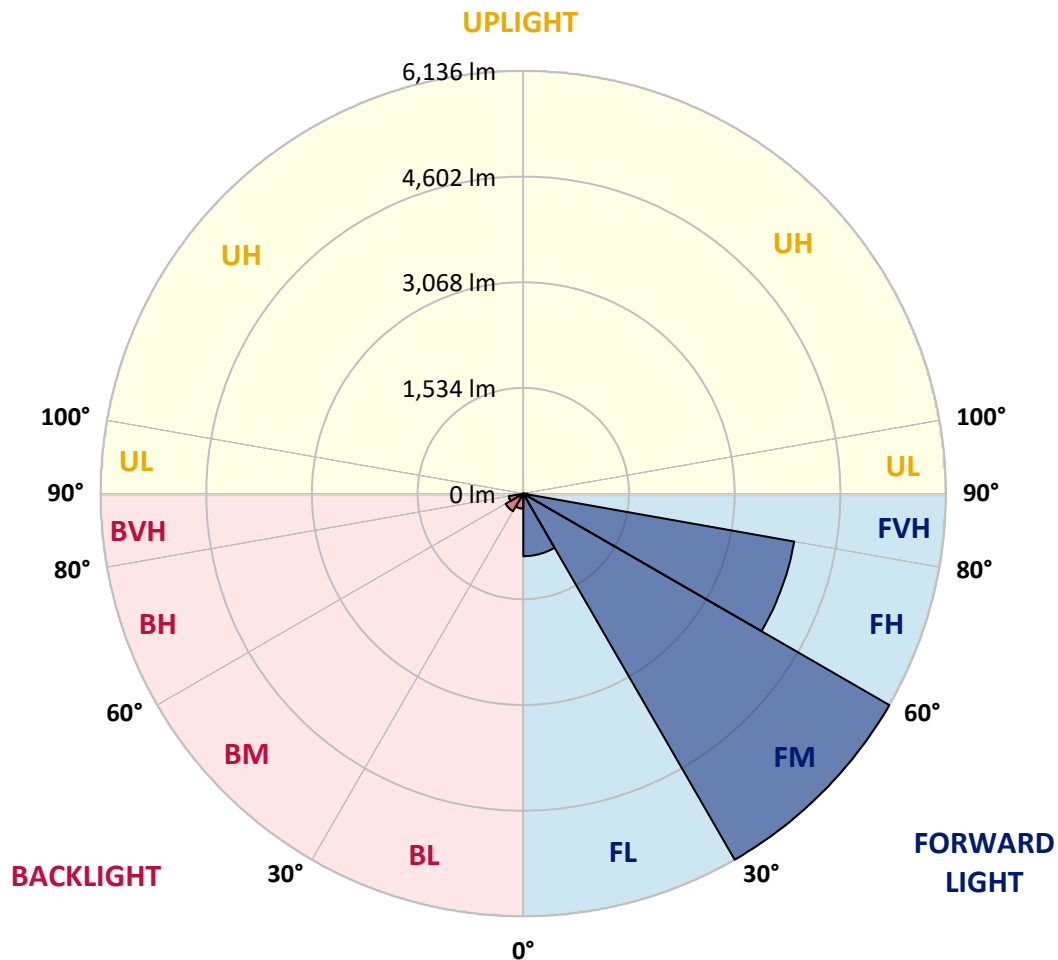
CATALOG NUMBER: GALN-SA3B-735-U-T2-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 908.0  | 7.7       |                         |      |         |
| FM (30°-60°)   | 6135.7 | 51.9      |                         |      |         |
| FH (60°-80°)   | 3993.7 | 33.8      |                         |      | G2/5000 |
| FVH (80°-90°)  | 61.4   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 218.1  | 1.8       | B1/500                  |      |         |
| BM (30°-60°)   | 295.6  | 2.5       | B1/1000                 |      |         |
| BH (60°-80°)   | 213.2  | 1.8       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 3.3    | 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 II Short





REPORT NUMBER: P458791

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 75°     | 76°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|
| 0°    | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6  | 1293.6  | 1293.6  | 1293.6 |
| 2.5°  | 1545.5 | 1526.3 | 1532.4 | 1523.7 | 1503.5 | 1473.8 | 1447.6 | 1409.9  | 1372.3  | 1366.2  | 1324.2 |
| 5°    | 1749.3 | 1744.1 | 1737.1 | 1711.7 | 1697.7 | 1652.2 | 1598.0 | 1533.3  | 1455.4  | 1441.4  | 1365.3 |
| 7.5°  | 1888.4 | 1885.8 | 1889.3 | 1876.1 | 1863.9 | 1822.8 | 1765.1 | 1676.7  | 1556.0  | 1548.1  | 1421.3 |
| 10°   | 1933.9 | 1940.9 | 1954.0 | 1975.0 | 1994.2 | 1981.1 | 1937.4 | 1827.2  | 1686.3  | 1663.6  | 1485.2 |
| 12.5° | 1907.6 | 1915.5 | 1947.0 | 2003.0 | 2065.1 | 2100.9 | 2083.4 | 2003.0  | 1824.5  | 1806.2  | 1556.9 |
| 15°   | 1840.3 | 1849.9 | 1894.5 | 1981.1 | 2092.2 | 2193.6 | 2237.4 | 2179.6  | 1985.5  | 1955.7  | 1643.5 |
| 17.5° | 1740.6 | 1754.6 | 1818.4 | 1933.0 | 2085.2 | 2260.1 | 2383.4 | 2364.2  | 2156.9  | 2128.9  | 1737.9 |
| 20°   | 1665.3 | 1675.8 | 1730.1 | 1861.3 | 2055.4 | 2296.8 | 2522.5 | 2576.7  | 2368.6  | 2320.5  | 1849.0 |
| 22.5° | 1715.2 | 1718.7 | 1737.1 | 1815.8 | 2002.1 | 2306.5 | 2645.0 | 2798.0  | 2593.4  | 2550.5  | 1964.5 |
| 25°   | 1959.2 | 1924.2 | 1905.9 | 1888.4 | 1990.7 | 2297.7 | 2756.0 | 3028.9  | 2817.3  | 2771.8  | 2079.1 |
| 27.5° | 2344.1 | 2328.3 | 2235.6 | 2111.4 | 2087.8 | 2309.1 | 2829.5 | 3247.6  | 3028.1  | 2979.1  | 2191.0 |
| 30°   | 2763.0 | 2735.9 | 2679.1 | 2497.1 | 2314.3 | 2389.6 | 2882.9 | 3460.1  | 3277.3  | 3212.6  | 2293.4 |
| 32.5° | 3147.9 | 3165.4 | 3080.5 | 2893.4 | 2681.7 | 2561.0 | 2952.0 | 3691.9  | 3563.4  | 3482.9  | 2412.3 |
| 35°   | 3596.6 | 3631.6 | 3501.3 | 3321.9 | 3074.4 | 2870.6 | 3086.7 | 3953.5  | 3926.3  | 3824.9  | 2596.0 |
| 37.5° | 4052.3 | 4073.3 | 3993.7 | 3741.8 | 3518.7 | 3264.2 | 3340.3 | 4276.2  | 4373.3  | 4286.7  | 2815.5 |
| 40°   | 4435.4 | 4464.3 | 4405.6 | 4181.7 | 3943.8 | 3719.9 | 3708.5 | 4627.8  | 4905.1  | 4815.9  | 3142.6 |
| 42.5° | 4728.4 | 4750.3 | 4752.0 | 4593.7 | 4379.4 | 4277.9 | 4178.2 | 5076.5  | 5571.6  | 5468.4  | 3522.2 |
| 45°   | 5098.4 | 5129.9 | 5111.5 | 5003.9 | 4843.9 | 4825.5 | 4773.9 | 5618.8  | 6369.3  | 6238.9  | 4014.7 |
| 47.5° | 5670.4 | 5691.4 | 5645.9 | 5519.1 | 5356.4 | 5385.3 | 5354.7 | 6226.7  | 7182.7  | 7070.7  | 4524.6 |
| 50°   | 6067.5 | 6102.5 | 6167.2 | 6217.9 | 6099.9 | 5993.2 | 5902.2 | 6794.3  | 7955.0  | 7854.4  | 5045.9 |
| 52.5° | 6063.1 | 6120.9 | 6325.5 | 6580.9 | 6838.9 | 6806.6 | 6545.1 | 7421.5  | 8692.3  | 8568.1  | 5535.7 |
| 55°   | 5654.7 | 5766.6 | 6067.5 | 6520.6 | 7235.2 | 7591.2 | 7472.2 | 8147.4  | 9329.1  | 9245.1  | 6103.4 |
| 57.5° | 4811.5 | 4879.7 | 5297.8 | 5931.1 | 7013.9 | 7960.3 | 8546.3 | 9131.4  | 10092.7 | 10053.3 | 6985.0 |
| 60°   | 3236.2 | 3266.8 | 3804.8 | 4587.6 | 5971.3 | 7592.0 | 9333.5 | 10321.8 | 11032.9 | 11013.7 | 8014.5 |
| 62.5° | 1854.3 | 1867.4 | 2257.5 | 2917.9 | 4249.1 | 6434.0 | 9399.9 | 11790.4 | 12160.4 | 12170.9 | 9205.8 |
| 65°   | 998.0  | 1005.0 | 1319.9 | 1712.6 | 2585.5 | 4585.8 | 8452.7 | 12595.1 | 13071.8 | 13091.9 | 9944.0 |
| 66°   | 861.5  | 828.3  | 1050.5 | 1459.8 | 2057.2 | 3649.9 | 7853.5 | 12566.2 | 13246.7 | 13224.8 | 9917.7 |
| 67.5° | 655.1  | 684.9  | 838.8  | 1122.2 | 1524.5 | 2595.1 | 6483.8 | 12007.3 | 13113.7 | 13045.5 | 9514.5 |
| 70°   | 468.8  | 481.1  | 597.4  | 800.3  | 1038.2 | 1423.9 | 4143.3 | 9972.8  | 11919.0 | 11827.1 | 8289.1 |
| 72.5° | 302.6  | 315.8  | 423.3  | 579.0  | 750.5  | 777.6  | 2319.6 | 7205.4  | 9189.1  | 9176.0  | 6242.4 |
| 75°   | 216.0  | 228.3  | 279.9  | 414.6  | 564.2  | 481.1  | 1116.9 | 4856.1  | 5841.8  | 5802.5  | 3861.6 |
| 77.5° | 156.6  | 162.7  | 187.2  | 271.1  | 403.2  | 344.6  | 517.8  | 2593.4  | 2908.2  | 3045.6  | 1706.5 |
| 80°   | 90.1   | 95.3   | 130.3  | 165.3  | 272.9  | 235.3  | 247.5  | 1040.8  | 1073.2  | 1021.6  | 533.5  |
| 82.5° | 44.6   | 50.7   | 77.8   | 112.8  | 170.6  | 158.3  | 113.7  | 313.1   | 330.6   | 321.9   | 134.7  |
| 85°   | 10.5   | 13.1   | 43.7   | 74.3   | 83.1   | 70.8   | 55.1   | 91.8    | 113.7   | 111.1   | 51.6   |
| 87.5° | 0.9    | 1.7    | 15.7   | 13.1   | 14.0   | 23.6   | 19.2   | 23.6    | 36.7    | 34.1    | 18.4   |
| 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: P458791  
 CATALOG NUMBER: GALN-SA3B-735-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 | 1293.6 |
| 2.5°  | 1305.0 | 1288.4 | 1240.3 | 1193.0 | 1153.7 | 1112.6 | 1075.0 | 1053.1 | 1044.3 | 1034.7 | 1039.1 |
| 5°    | 1323.4 | 1283.1 | 1186.0 | 1102.1 | 1019.9 | 949.9  | 893.9  | 858.0  | 840.5  | 837.9  | 833.5  |
| 7.5°  | 1347.8 | 1278.7 | 1128.3 | 997.1  | 889.5  | 811.7  | 747.8  | 696.2  | 680.5  | 666.5  | 655.1  |
| 10°   | 1377.6 | 1270.9 | 1056.6 | 886.9  | 772.3  | 674.4  | 590.4  | 529.2  | 497.7  | 488.9  | 495.1  |
| 12.5° | 1409.1 | 1256.0 | 981.4  | 785.4  | 653.4  | 528.3  | 450.4  | 419.8  | 411.1  | 407.6  | 408.5  |
| 15°   | 1440.6 | 1237.6 | 902.6  | 687.5  | 520.4  | 421.6  | 385.7  | 377.9  | 374.4  | 372.6  | 370.9  |
| 17.5° | 1469.4 | 1207.9 | 814.3  | 592.1  | 421.6  | 360.4  | 347.2  | 340.2  | 333.2  | 330.6  | 326.2  |
| 20°   | 1503.5 | 1173.8 | 734.7  | 485.4  | 356.9  | 326.2  | 310.5  | 297.4  | 286.9  | 279.9  | 279.0  |
| 22.5° | 1535.9 | 1130.1 | 651.6  | 402.3  | 325.4  | 293.0  | 267.6  | 253.7  | 241.4  | 232.7  | 235.3  |
| 25°   | 1553.4 | 1076.7 | 577.3  | 350.7  | 296.5  | 259.8  | 231.8  | 214.3  | 201.2  | 196.8  | 195.9  |
| 27.5° | 1553.4 | 1011.1 | 504.7  | 321.0  | 270.3  | 230.0  | 201.2  | 184.6  | 175.8  | 169.7  | 170.6  |
| 30°   | 1541.1 | 938.5  | 437.3  | 298.3  | 247.5  | 203.8  | 176.7  | 161.8  | 154.8  | 150.4  | 149.6  |
| 32.5° | 1531.5 | 869.4  | 379.6  | 276.4  | 223.9  | 181.1  | 157.4  | 146.1  | 139.1  | 134.7  | 134.7  |
| 35°   | 1546.4 | 809.9  | 335.0  | 254.5  | 202.0  | 163.6  | 142.6  | 132.1  | 125.1  | 121.6  | 120.7  |
| 37.5° | 1585.8 | 755.7  | 300.9  | 230.9  | 181.9  | 148.7  | 132.1  | 119.8  | 112.8  | 108.5  | 106.7  |
| 40°   | 1682.8 | 725.1  | 275.5  | 209.0  | 162.7  | 136.4  | 119.8  | 108.5  | 99.7   | 95.3   | 94.5   |
| 42.5° | 1838.5 | 726.0  | 251.0  | 188.9  | 147.8  | 126.0  | 109.3  | 96.2   | 86.6   | 82.2   | 81.3   |
| 45°   | 2072.9 | 759.2  | 231.8  | 169.7  | 134.7  | 114.6  | 98.0   | 84.0   | 75.2   | 70.8   | 70.8   |
| 47.5° | 2353.7 | 823.9  | 215.2  | 153.1  | 122.5  | 104.1  | 86.6   | 72.6   | 63.8   | 60.4   | 60.4   |
| 50°   | 2658.1 | 907.9  | 198.5  | 135.6  | 112.0  | 92.7   | 74.3   | 63.0   | 56.0   | 53.4   | 53.4   |
| 52.5° | 2968.6 | 1009.4 | 181.9  | 121.6  | 100.6  | 80.5   | 63.8   | 56.0   | 49.9   | 48.1   | 47.2   |
| 55°   | 3376.2 | 1138.8 | 164.4  | 106.7  | 88.3   | 69.1   | 56.9   | 49.0   | 42.0   | 39.4   | 38.5   |
| 57.5° | 4003.3 | 1333.9 | 145.2  | 93.6   | 72.6   | 57.7   | 49.0   | 41.1   | 33.2   | 28.9   | 28.0   |
| 60°   | 4759.9 | 1571.8 | 125.1  | 82.2   | 58.6   | 47.2   | 39.4   | 31.5   | 24.5   | 19.2   | 18.4   |
| 62.5° | 5468.4 | 1723.1 | 105.8  | 69.1   | 46.4   | 35.9   | 28.0   | 23.6   | 17.5   | 12.2   | 11.4   |
| 65°   | 5781.5 | 1672.3 | 87.5   | 56.0   | 36.7   | 25.4   | 18.4   | 16.6   | 10.5   | 5.2    | 4.4    |
| 66°   | 5677.4 | 1597.1 | 80.5   | 50.7   | 33.2   | 21.9   | 15.7   | 14.0   | 7.9    | 2.6    | 2.6    |
| 67.5° | 5370.4 | 1419.6 | 70.0   | 43.7   | 28.9   | 17.5   | 12.2   | 10.5   | 4.4    | 0.9    | 0.0    |
| 70°   | 4601.6 | 1148.4 | 55.1   | 32.4   | 21.0   | 12.2   | 7.0    | 5.2    | 2.6    | 0.0    | 0.0    |
| 72.5° | 3534.5 | 855.4  | 43.7   | 24.5   | 14.9   | 7.0    | 3.5    | 1.7    | 2.6    | 0.0    | 0.0    |
| 75°   | 2165.7 | 488.9  | 34.1   | 18.4   | 9.6    | 4.4    | 2.6    | 0.0    | 2.6    | 0.9    | 0.0    |
| 77.5° | 961.2  | 219.5  | 22.7   | 12.2   | 7.0    | 3.5    | 1.7    | 0.0    | 1.7    | 0.9    | 0.0    |
| 80°   | 243.2  | 71.7   | 13.1   | 8.7    | 5.2    | 2.6    | 0.9    | 0.0    | 1.7    | 1.7    | 0.9    |
| 82.5° | 66.5   | 26.2   | 9.6    | 7.0    | 4.4    | 2.6    | 0.9    | 0.0    | 1.7    | 1.7    | 1.7    |
| 85°   | 26.2   | 12.2   | 8.7    | 7.0    | 5.2    | 2.6    | 0.9    | 0.0    | 1.7    | 1.7    | 1.7    |
| 87.5° | 12.2   | 8.7    | 8.7    | 7.9    | 6.1    | 2.6    | 0.9    | 0.0    | 1.7    | 0.9    | 1.7    |
| 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)