

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: P527877

Luminaire Tested: **GALN-SA2D-830-U-T2R-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P527877  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2D-830-U-T2R-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8176 lumens  
Efficiency: N/A  
Efficacy: 65.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B1 - U0 - G0

Input Watts (W): 125  
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

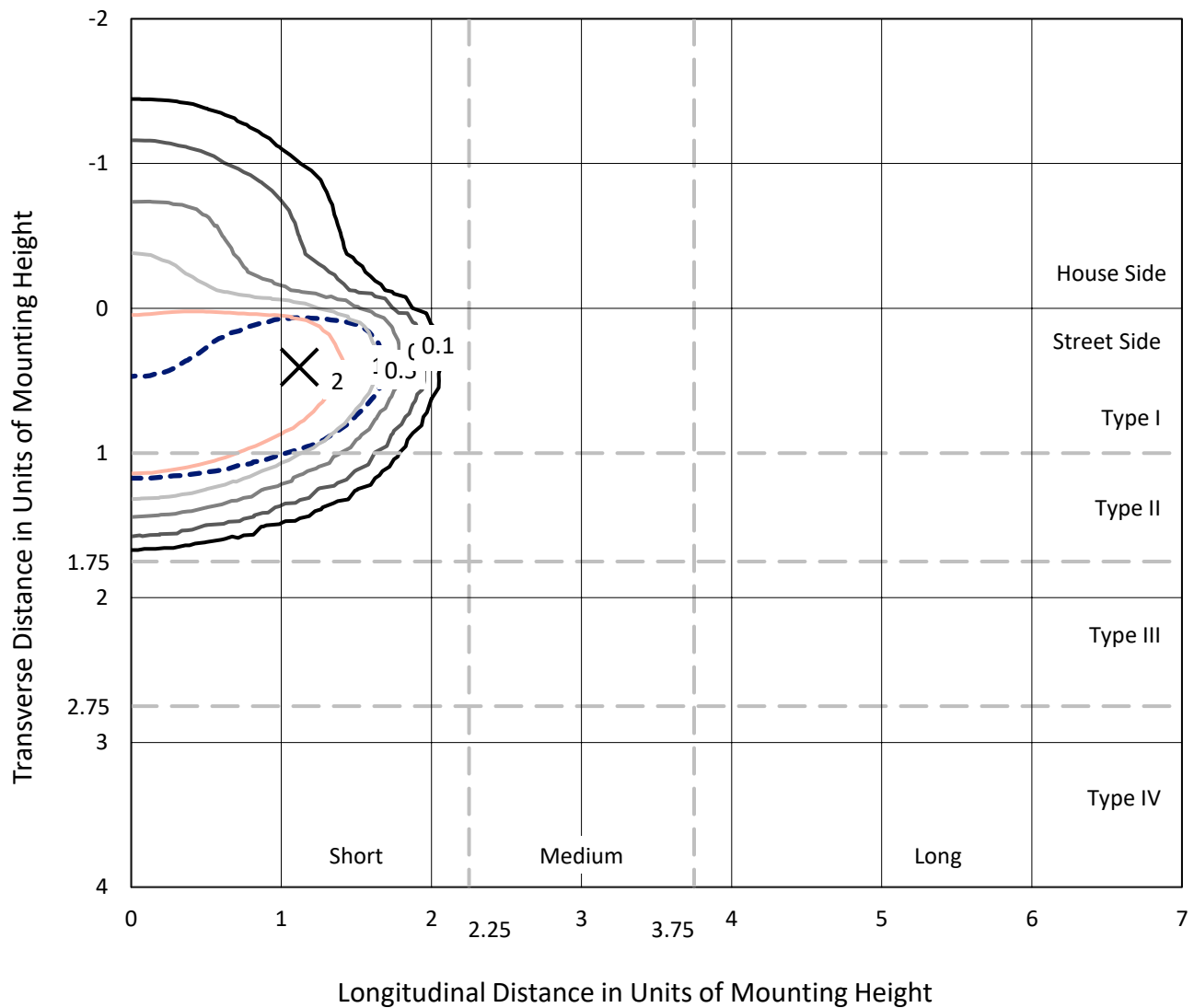


REPORT NUMBER: P527877

CATALOG NUMBER: GALN-SA2D-830-U-T2R-GRSBK

## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

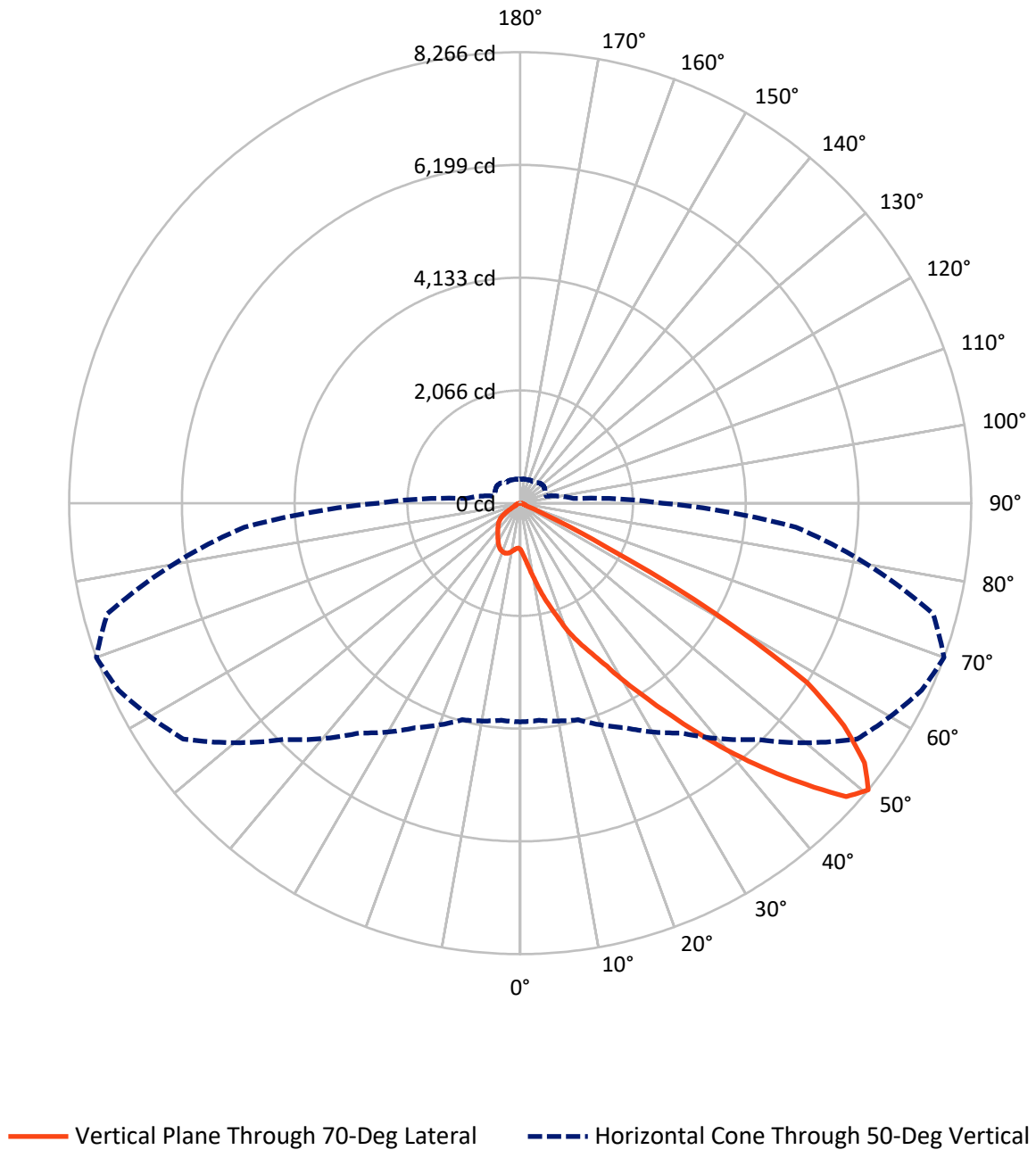


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type I - Short - N/A

REPORT NUMBER: P527877

CATALOG NUMBER: GALN-SA2D-830-U-T2R-GRSBK

## Luminous Intensity Polar Plot



REPORT NUMBER: P527877

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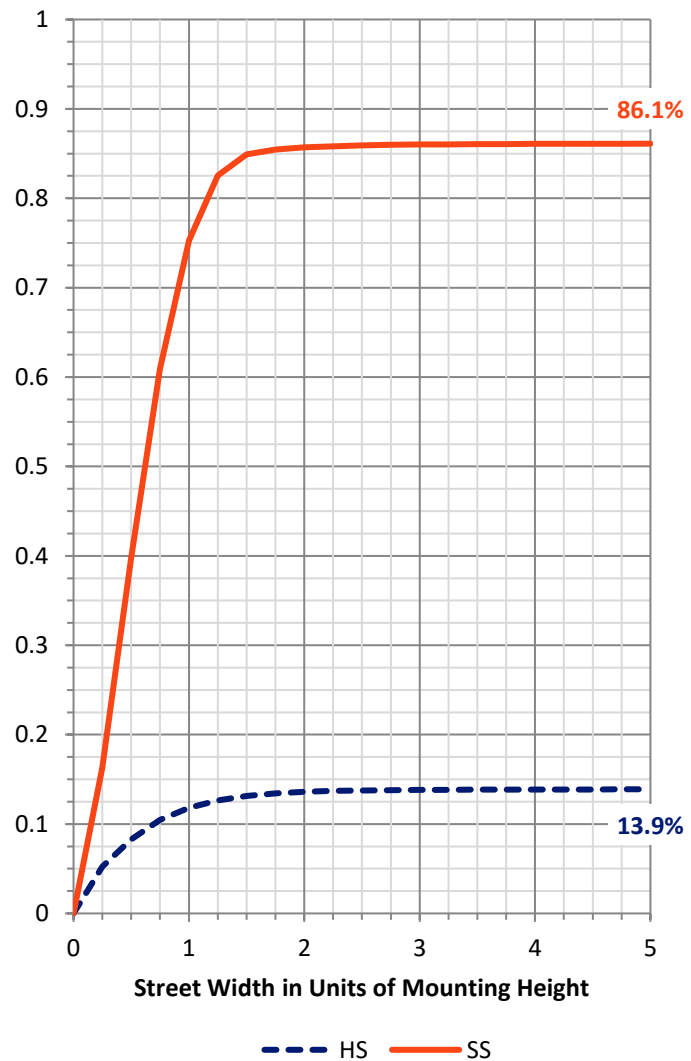
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1141.8   | 0.0    | 1141.8 |
|                    | % Fixture | 14.0     | 0.0    | 14.0   |
| <b>Street Side</b> | Lumens    | 7034.2   | 0.0    | 7034.2 |
|                    | % Fixture | 86.0     | 0.0    | 86.0   |
| <b>Total</b>       | Lumens    | 8176.0   | 0.0    | 8176.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 110.1  | 1.3       |
| 10°-20°   | 476.4  | 5.8       |
| 20°-30°   | 999.3  | 12.2      |
| 30°-40°   | 1722.5 | 21.1      |
| 40°-50°   | 2517.4 | 30.8      |
| 50°-60°   | 1960.6 | 24.0      |
| 60°-70°   | 332.2  | 4.1       |
| 70°-80°   | 45.6   | 0.6       |
| 80°-90°   | 11.8   | 0.1       |
| 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°    | 8176.0 | 100.0     |
| 0°-180°   | 8176.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P527877

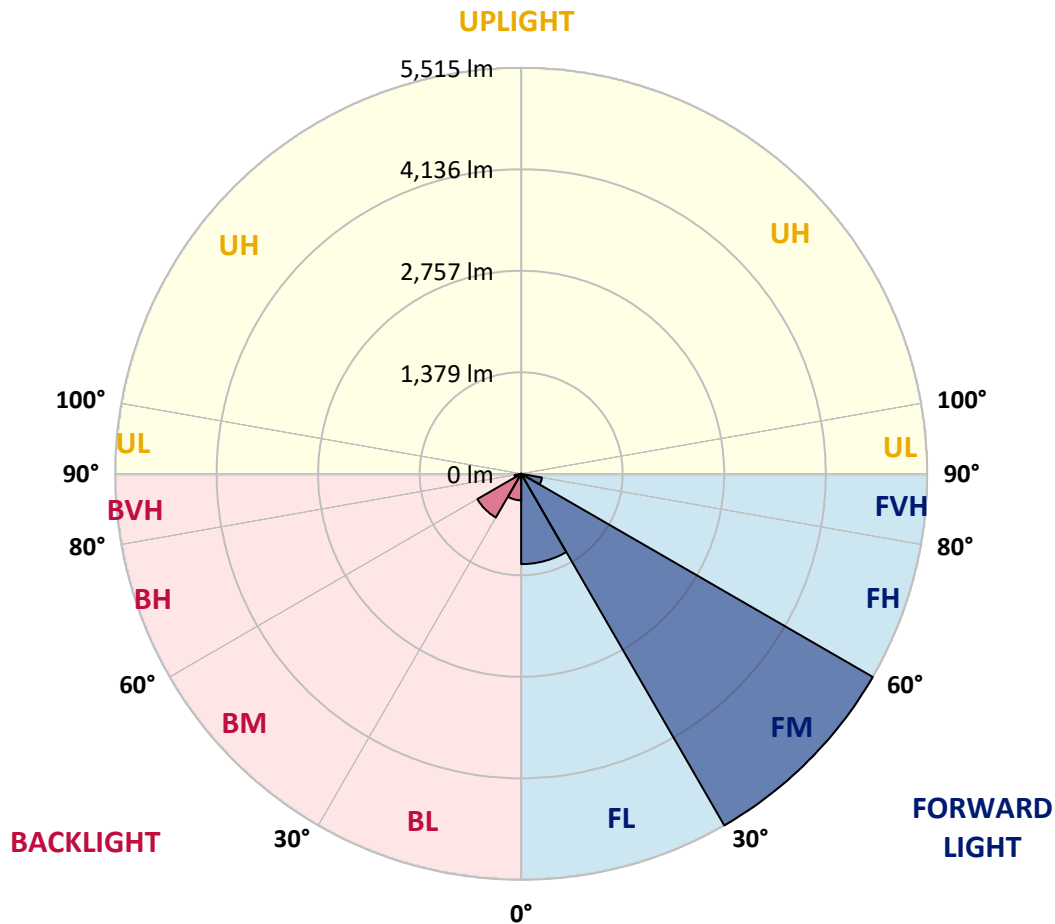
CATALOG NUMBER: GALN-SA2D-830-U-T2R-GRSBK

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 1226.5 | 15.0      |                         |      |        |
| FM   | (30°-60°)   | 5514.6 | 67.4      |                         |      |        |
| FH   | (60°-80°)   | 287.6  | 3.5       |                         |      | G0/660 |
| FVH  | (80°-90°)   | 5.5    | 0.1       |                         |      | G0/10  |
| BL   | (0°-30°)    | 359.3  | 4.4       | B1/500                  |      |        |
| BM   | (30°-60°)   | 686.0  | 8.4       | B1/1000                 |      |        |
| BH   | (60°-80°)   | 90.2   | 1.1       | B0/110                  |      | G0/110 |
| BVH  | (80°-90°)   | 6.4    | 0.1       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B1-U0-G0**

Type I Short



REPORT NUMBER: P527877

CATALOG NUMBER: GALN-SA2D-830-U-T2R-GRSBK

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 70°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  | 846.9  |
| 2.5°  | 1109.0 | 1100.9 | 1083.5 | 1051.2 | 1037.8 | 1005.5 | 986.7  | 950.4  | 927.5  | 902.0  | 873.8  |
| 5°    | 1562.0 | 1520.3 | 1494.8 | 1458.5 | 1352.3 | 1286.4 | 1177.6 | 1084.8 | 1041.8 | 994.7  | 930.2  |
| 7.5°  | 2029.8 | 2002.9 | 1968.0 | 1890.0 | 1817.4 | 1680.3 | 1493.5 | 1289.1 | 1201.8 | 1121.1 | 993.4  |
| 10°   | 2416.9 | 2341.7 | 2337.6 | 2279.8 | 2200.5 | 2036.5 | 1812.0 | 1558.0 | 1402.0 | 1283.8 | 1083.5 |
| 12.5° | 2687.1 | 2618.6 | 2649.5 | 2642.8 | 2568.8 | 2418.3 | 2158.9 | 1822.8 | 1660.1 | 1476.0 | 1176.2 |
| 15°   | 2933.1 | 2904.9 | 2895.5 | 2887.4 | 2857.9 | 2746.3 | 2513.7 | 2145.4 | 1910.2 | 1688.4 | 1281.1 |
| 17.5° | 3173.8 | 3101.2 | 3136.1 | 3142.8 | 3140.1 | 3039.3 | 2821.6 | 2451.9 | 2175.0 | 1912.9 | 1391.3 |
| 20°   | 3387.5 | 3394.2 | 3347.2 | 3337.8 | 3329.7 | 3325.7 | 3113.3 | 2755.7 | 2500.3 | 2148.1 | 1535.1 |
| 22.5° | 3661.7 | 3614.7 | 3656.3 | 3629.5 | 3577.0 | 3544.8 | 3382.1 | 3024.5 | 2782.6 | 2431.7 | 1681.6 |
| 25°   | 3985.7 | 4023.3 | 3925.2 | 3914.4 | 3856.6 | 3745.1 | 3598.5 | 3325.7 | 3054.1 | 2695.2 | 1840.3 |
| 27.5° | 4384.9 | 4319.1 | 4293.5 | 4234.4 | 4129.5 | 4082.5 | 3910.4 | 3636.2 | 3382.1 | 2972.1 | 1993.5 |
| 30°   | 4727.7 | 4710.2 | 4582.5 | 4512.6 | 4421.2 | 4419.9 | 4179.2 | 4056.9 | 3809.6 | 3406.3 | 2204.6 |
| 32.5° | 5007.3 | 4930.7 | 4883.6 | 4835.2 | 4761.3 | 4781.5 | 4578.5 | 4514.0 | 4265.3 | 3809.6 | 2453.2 |
| 35°   | 5194.2 | 5139.0 | 5110.8 | 5036.9 | 5015.4 | 5105.4 | 5020.7 | 4993.9 | 4789.5 | 4376.9 | 2744.9 |
| 37.5° | 5253.3 | 5270.8 | 5265.4 | 5172.6 | 5218.3 | 5461.7 | 5570.5 | 5500.6 | 5393.1 | 4975.0 | 3060.8 |
| 40°   | 5305.7 | 5317.8 | 5290.9 | 5399.8 | 5530.2 | 5807.1 | 6201.0 | 6085.4 | 6045.1 | 5581.3 | 3500.4 |
| 42.5° | 5335.3 | 5325.9 | 5325.9 | 5514.1 | 5711.7 | 6268.2 | 6809.9 | 6733.3 | 6702.4 | 6226.5 | 4008.5 |
| 45°   | 5207.6 | 5116.2 | 5214.3 | 5469.7 | 5867.6 | 6495.4 | 7296.5 | 7402.7 | 7358.4 | 6994.1 | 4602.7 |
| 47.5° | 4730.4 | 4786.8 | 4842.0 | 5183.4 | 5678.1 | 6425.5 | 7595.0 | 7956.6 | 8038.6 | 7639.3 | 4992.5 |
| 50°   | 4008.5 | 3996.4 | 4110.7 | 4540.9 | 5141.7 | 6124.4 | 7537.2 | 8116.5 | 8265.7 | 7832.9 | 5074.5 |
| 52.5° | 2915.7 | 3004.4 | 3128.1 | 3555.5 | 4268.0 | 5344.7 | 6791.1 | 7703.9 | 7902.8 | 7595.0 | 5020.7 |
| 55°   | 1697.8 | 1599.6 | 1877.9 | 2239.5 | 2911.6 | 4031.4 | 5741.3 | 6828.8 | 7197.1 | 7162.1 | 4749.2 |
| 57.5° | 680.2  | 658.7  | 754.1  | 1016.2 | 1519.0 | 2498.9 | 4175.2 | 5610.9 | 6201.0 | 6559.9 | 4173.9 |
| 60°   | 298.4  | 291.7  | 342.8  | 414.0  | 621.0  | 1152.0 | 2283.9 | 3489.7 | 4105.3 | 4583.9 | 2872.6 |
| 62.5° | 215.1  | 212.4  | 237.9  | 263.5  | 328.0  | 501.4  | 959.8  | 1406.1 | 1752.9 | 2117.2 | 1286.4 |
| 65°   | 173.4  | 180.1  | 197.6  | 211.0  | 242.0  | 278.3  | 338.7  | 391.2  | 479.9  | 497.4  | 283.6  |
| 67.5° | 141.1  | 146.5  | 162.7  | 177.4  | 182.8  | 150.6  | 155.9  | 137.1  | 137.1  | 122.3  | 98.1   |
| 70°   | 103.5  | 104.9  | 123.7  | 141.1  | 112.9  | 60.5   | 106.2  | 106.2  | 95.4   | 91.4   | 83.3   |
| 72.5° | 76.6   | 78.0   | 92.8   | 87.4   | 44.4   | 37.6   | 78.0   | 86.0   | 78.0   | 73.9   | 67.2   |
| 75°   | 56.5   | 57.8   | 48.4   | 20.2   | 18.8   | 24.2   | 45.7   | 59.1   | 56.5   | 55.1   | 51.1   |
| 77.5° | 10.8   | 8.1    | 6.7    | 9.4    | 13.4   | 20.2   | 29.6   | 36.3   | 37.6   | 40.3   | 37.6   |
| 80°   | 1.3    | 1.3    | 4.0    | 8.1    | 14.8   | 21.5   | 30.9   | 35.0   | 36.3   | 37.6   | 35.0   |
| 82.5° | 0.0    | 1.3    | 4.0    | 8.1    | 14.8   | 20.2   | 26.9   | 30.9   | 33.6   | 35.0   | 33.6   |
| 85°   | 0.0    | 1.3    | 2.7    | 6.7    | 12.1   | 14.8   | 13.4   | 9.4    | 8.1    | 9.4    | 6.7    |
| 87.5° | 0.0    | 0.0    | 1.3    | 1.3    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    |
| 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: P527877

CATALOG NUMBER: GALN-SA2D-830-U-T2R-GRSBK

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 846.9  | 846.9  | 846.9 | 846.9 | 846.9 | 846.9 | 846.9 | 846.9 | 846.9 | 846.9 | 846.9 |
| 2.5°  | 857.6  | 852.2  | 833.4 | 813.3 | 795.8 | 803.9 | 795.8 | 789.1 | 791.8 | 789.1 | 786.4 |
| 5°    | 904.7  | 880.5  | 840.2 | 822.7 | 807.9 | 806.5 | 802.5 | 801.2 | 802.5 | 802.5 | 790.4 |
| 7.5°  | 949.0  | 910.1  | 867.0 | 848.2 | 830.7 | 832.1 | 822.7 | 822.7 | 821.3 | 814.6 | 811.9 |
| 10°   | 1016.2 | 963.8  | 908.7 | 875.1 | 853.6 | 849.6 | 840.2 | 830.7 | 830.7 | 830.7 | 817.3 |
| 12.5° | 1090.2 | 1024.3 | 949.0 | 910.1 | 884.5 | 864.3 | 849.6 | 846.9 | 832.1 | 829.4 | 822.7 |
| 15°   | 1154.7 | 1071.4 | 975.9 | 922.2 | 889.9 | 863.0 | 840.2 | 825.4 | 818.6 | 814.6 | 809.2 |
| 17.5° | 1217.9 | 1111.7 | 990.7 | 922.2 | 887.2 | 856.3 | 832.1 | 818.6 | 802.5 | 805.2 | 794.4 |
| 20°   | 1302.6 | 1154.7 | 994.7 | 904.7 | 861.7 | 832.1 | 799.8 | 793.1 | 783.7 | 775.6 | 778.3 |
| 22.5° | 1384.6 | 1185.6 | 982.6 | 883.2 | 821.3 | 786.4 | 770.3 | 762.2 | 758.2 | 751.4 | 742.0 |
| 25°   | 1458.5 | 1219.2 | 963.8 | 844.2 | 778.3 | 752.8 | 738.0 | 736.6 | 727.2 | 727.2 | 709.8 |
| 27.5° | 1533.8 | 1231.3 | 931.6 | 798.5 | 740.7 | 725.9 | 719.2 | 716.5 | 712.4 | 703.0 | 690.9 |
| 30°   | 1619.8 | 1235.4 | 884.5 | 751.4 | 707.1 | 690.9 | 700.4 | 707.1 | 689.6 | 672.1 | 677.5 |
| 32.5° | 1691.1 | 1225.9 | 828.1 | 707.1 | 682.9 | 674.8 | 693.6 | 700.4 | 680.2 | 661.4 | 652.0 |
| 35°   | 1777.1 | 1203.1 | 772.9 | 672.1 | 658.7 | 674.8 | 690.9 | 690.9 | 650.6 | 627.8 | 622.4 |
| 37.5° | 1907.5 | 1177.6 | 721.9 | 642.5 | 633.1 | 666.7 | 688.3 | 673.5 | 610.3 | 582.1 | 575.3 |
| 40°   | 2047.3 | 1161.4 | 672.1 | 613.0 | 619.7 | 653.3 | 665.4 | 619.7 | 555.2 | 537.7 | 532.3 |
| 42.5° | 2250.3 | 1129.2 | 627.8 | 587.4 | 607.6 | 634.5 | 634.5 | 552.5 | 528.3 | 518.9 | 517.5 |
| 45°   | 2503.0 | 1106.3 | 588.8 | 565.9 | 590.1 | 596.8 | 575.3 | 517.5 | 500.1 | 497.4 | 498.7 |
| 47.5° | 2626.6 | 1062.0 | 548.5 | 540.4 | 557.9 | 559.2 | 502.7 | 489.3 | 474.5 | 470.5 | 467.8 |
| 50°   | 2607.8 | 982.6  | 496.0 | 506.8 | 531.0 | 517.5 | 458.4 | 461.1 | 447.6 | 446.3 | 439.6 |
| 52.5° | 2476.1 | 857.6  | 443.6 | 469.1 | 496.0 | 457.0 | 422.1 | 419.4 | 419.4 | 401.9 | 395.2 |
| 55°   | 2195.1 | 690.9  | 380.4 | 412.7 | 444.9 | 384.5 | 375.0 | 372.4 | 365.6 | 349.5 | 345.5 |
| 57.5° | 1738.1 | 506.8  | 286.3 | 321.3 | 377.7 | 326.7 | 325.3 | 313.2 | 295.7 | 283.6 | 283.6 |
| 60°   | 1033.7 | 291.7  | 180.1 | 196.3 | 250.0 | 264.8 | 294.4 | 289.0 | 259.4 | 240.6 | 235.2 |
| 62.5° | 471.8  | 150.6  | 114.3 | 116.9 | 134.4 | 172.1 | 231.2 | 267.5 | 225.8 | 193.6 | 190.9 |
| 65°   | 158.6  | 111.6  | 94.1  | 90.1  | 92.8  | 103.5 | 138.5 | 189.5 | 180.1 | 149.2 | 143.8 |
| 67.5° | 96.8   | 99.5   | 88.7  | 82.0  | 82.0  | 80.7  | 79.3  | 86.0  | 106.2 | 103.5 | 104.9 |
| 70°   | 83.3   | 91.4   | 82.0  | 73.9  | 71.2  | 67.2  | 56.5  | 47.0  | 40.3  | 47.0  | 49.7  |
| 72.5° | 67.2   | 72.6   | 69.9  | 63.2  | 56.5  | 51.1  | 40.3  | 30.9  | 22.9  | 20.2  | 20.2  |
| 75°   | 49.7   | 53.8   | 56.5  | 48.4  | 43.0  | 36.3  | 29.6  | 20.2  | 12.1  | 8.1   | 8.1   |
| 77.5° | 36.3   | 40.3   | 41.7  | 37.6  | 32.3  | 25.5  | 18.8  | 13.4  | 6.7   | 2.7   | 2.7   |
| 80°   | 30.9   | 36.3   | 40.3  | 37.6  | 33.6  | 24.2  | 17.5  | 9.4   | 5.4   | 1.3   | 1.3   |
| 82.5° | 29.6   | 36.3   | 40.3  | 36.3  | 32.3  | 22.9  | 17.5  | 10.8  | 4.0   | 1.3   | 1.3   |
| 85°   | 6.7    | 9.4    | 12.1  | 14.8  | 17.5  | 17.5  | 13.4  | 8.1   | 4.0   | 1.3   | 1.3   |
| 87.5° | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 1.3   | 1.3   | 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)