

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: STREETWORKS

Report Number: P453375

Luminaire Tested: **GLAN-SA4B-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA4B-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16934 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

Input Watts (W): 164  
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

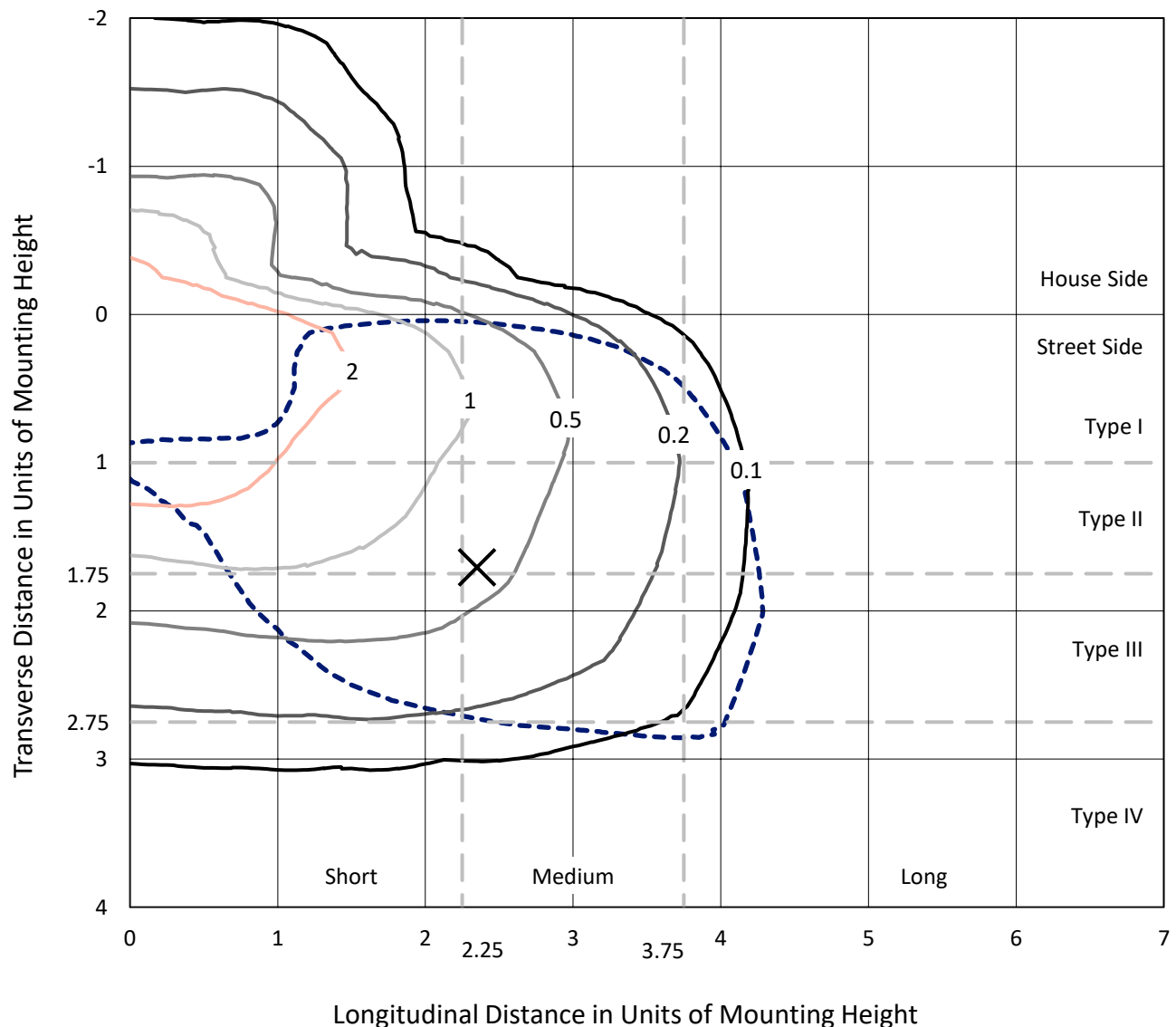


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

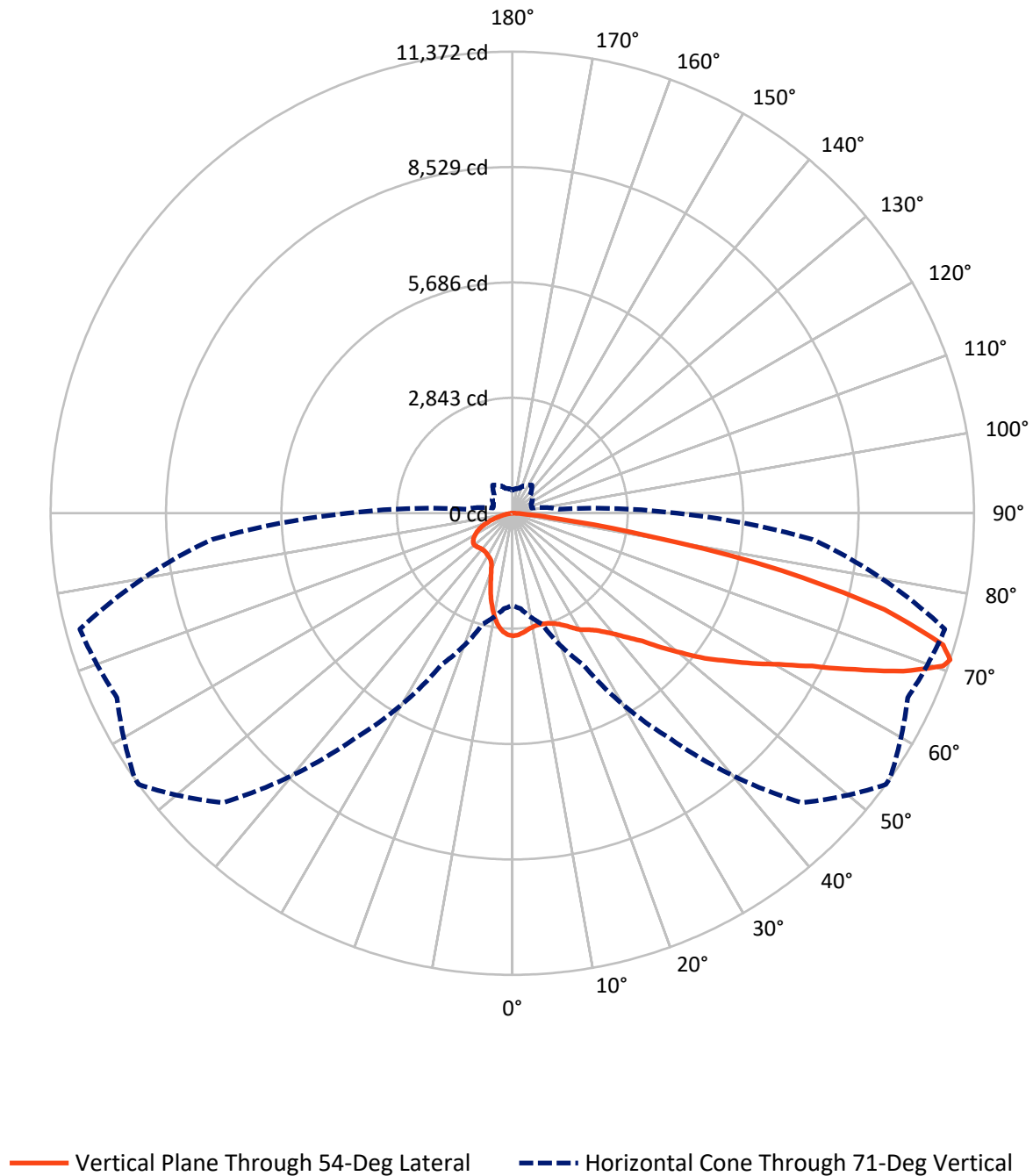


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3057.3   | 0.0    | 3057.3  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 13876.7  | 0.0    | 13876.7 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 16934.0  | 0.0    | 16934.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 269.2   | 1.6       |
| 10°-20°   | 710.9   | 4.2       |
| 20°-30°   | 1183.7  | 7.0       |
| 30°-40°   | 1750.4  | 10.3      |
| 40°-50°   | 2465.4  | 14.6      |
| 50°-60°   | 3301.3  | 19.5      |
| 60°-70°   | 4161.1  | 24.6      |
| 70°-80°   | 2842.0  | 16.8      |
| 80°-90°   | 249.9   | 1.5       |
| 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°    | 16934.0 | 100.0     |
| 0°-180°   | 16934.0 | 100.0     |

**Coefficient of Utilization**



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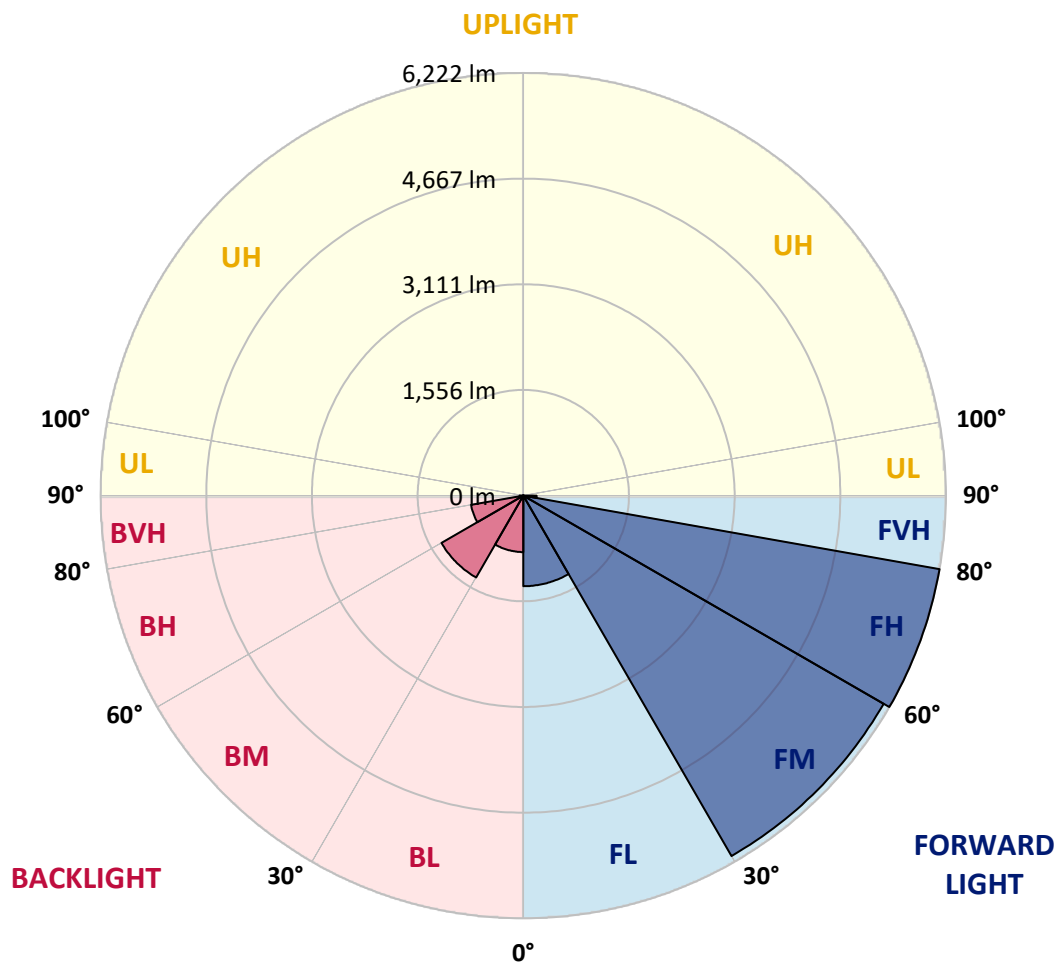
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1333.0 | 7.9       |                         |      |         |
| FM   | (30°-60°)   | 6126.1 | 36.2      |                         |      |         |
| FH   | (60°-80°)   | 6222.2 | 36.7      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 195.4  | 1.2       |                         |      | G2/225  |
| BL   | (0°-30°)    | 830.9  | 4.9       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1391.0 | 8.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 780.8  | 4.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 54.6   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 54°     | 55°     | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0°    | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3  | 3021.3  | 3021.3  | 3021.3  | 3021.3  | 3021.3 |
| 2.5°  | 2918.8 | 2932.5 | 2936.2 | 2945.4 | 2964.6 | 2980.1  | 2995.7  | 2993.8  | 3015.8  | 3024.9  | 3033.2 |
| 5°    | 2788.9 | 2792.6 | 2806.3 | 2824.6 | 2858.5 | 2901.4  | 2943.5  | 2944.4  | 2998.4  | 3041.4  | 3062.4 |
| 7.5°  | 2693.8 | 2705.7 | 2714.8 | 2734.1 | 2769.7 | 2816.4  | 2883.2  | 2888.6  | 2984.7  | 3069.8  | 3114.6 |
| 10°   | 2631.6 | 2645.3 | 2655.4 | 2679.2 | 2714.8 | 2767.0  | 2839.2  | 2849.3  | 2974.6  | 3114.6  | 3193.2 |
| 12.5° | 2574.9 | 2588.6 | 2597.8 | 2628.9 | 2675.5 | 2739.5  | 2821.0  | 2832.8  | 2978.3  | 3166.7  | 3279.2 |
| 15°   | 2609.7 | 2620.6 | 2617.0 | 2626.1 | 2657.2 | 2730.4  | 2828.3  | 2840.2  | 2992.0  | 3217.0  | 3364.3 |
| 17.5° | 2764.2 | 2773.4 | 2743.2 | 2708.4 | 2693.8 | 2747.8  | 2851.1  | 2863.9  | 3019.4  | 3269.2  | 3451.2 |
| 20°   | 2992.0 | 3016.7 | 2950.8 | 2873.1 | 2802.7 | 2810.0  | 2898.7  | 2912.4  | 3057.9  | 3321.3  | 3539.9 |
| 22.5° | 3288.4 | 3306.7 | 3226.2 | 3098.1 | 2968.2 | 2901.4  | 2970.1  | 2978.3  | 3115.5  | 3389.0  | 3636.9 |
| 25°   | 3636.9 | 3647.9 | 3536.3 | 3371.6 | 3184.1 | 3057.9  | 3067.9  | 3082.6  | 3210.6  | 3465.8  | 3722.9 |
| 27.5° | 3975.3 | 4010.1 | 3881.1 | 3679.9 | 3432.9 | 3222.5  | 3202.4  | 3211.5  | 3314.0  | 3508.8  | 3782.3 |
| 30°   | 4376.9 | 4374.1 | 4237.8 | 4004.6 | 3688.1 | 3401.8  | 3329.5  | 3327.7  | 3369.8  | 3529.9  | 3825.3 |
| 32.5° | 4697.0 | 4734.5 | 4601.0 | 4346.7 | 3979.9 | 3587.5  | 3417.3  | 3413.7  | 3412.8  | 3566.4  | 3889.3 |
| 35°   | 5061.1 | 5066.6 | 4944.0 | 4687.9 | 4295.5 | 3820.7  | 3539.9  | 3521.6  | 3500.6  | 3645.1  | 3976.2 |
| 37.5° | 5386.7 | 5412.3 | 5299.8 | 5012.6 | 4605.5 | 4063.1  | 3708.2  | 3696.3  | 3632.3  | 3781.4  | 4115.3 |
| 40°   | 5641.0 | 5660.2 | 5592.5 | 5319.0 | 4911.1 | 4324.7  | 3922.3  | 3900.3  | 3822.6  | 4004.6  | 4301.0 |
| 42.5° | 5724.2 | 5763.6 | 5790.1 | 5655.6 | 5262.3 | 4634.8  | 4185.7  | 4158.3  | 4098.8  | 4343.0  | 4515.0 |
| 45°   | 5730.6 | 5792.8 | 5932.8 | 5939.2 | 5615.4 | 5006.2  | 4493.0  | 4473.8  | 4469.3  | 4776.6  | 4815.9 |
| 47.5° | 5682.2 | 5745.3 | 5980.4 | 6107.5 | 5930.0 | 5381.2  | 4936.7  | 4906.5  | 4909.2  | 5312.6  | 5153.5 |
| 50°   | 5565.1 | 5640.1 | 5925.5 | 6215.4 | 6176.1 | 5770.9  | 5405.0  | 5394.9  | 5451.7  | 5924.6  | 5503.8 |
| 52.5° | 5344.6 | 5435.2 | 5868.8 | 6283.1 | 6359.0 | 6106.6  | 5937.4  | 5909.0  | 6052.6  | 6588.6  | 5887.1 |
| 55°   | 4734.5 | 4870.8 | 5661.1 | 6320.6 | 6532.8 | 6427.6  | 6416.7  | 6467.9  | 6658.2  | 7313.1  | 6308.7 |
| 57.5° | 4416.2 | 4518.7 | 5210.2 | 6327.0 | 6752.4 | 6800.8  | 6976.5  | 6989.3  | 7322.2  | 8082.3  | 6785.3 |
| 60°   | 4242.4 | 4333.0 | 4963.2 | 6284.9 | 7058.8 | 7262.8  | 7549.1  | 7594.8  | 7970.8  | 8915.6  | 7279.2 |
| 62.5° | 4090.6 | 4168.3 | 4815.0 | 6139.5 | 7404.6 | 7947.9  | 8290.9  | 8312.9  | 8707.1  | 9835.8  | 7766.8 |
| 65°   | 3732.9 | 3821.6 | 4516.8 | 5994.1 | 7702.7 | 8804.1  | 9275.1  | 9249.5  | 9491.0  | 10629.8 | 8072.3 |
| 67.5° | 3250.9 | 3363.4 | 3959.8 | 5491.9 | 7850.0 | 9739.8  | 10383.8 | 10351.7 | 10264.8 | 11150.3 | 8160.1 |
| 70°   | 2635.3 | 2695.6 | 3247.2 | 4623.8 | 7261.9 | 10231.0 | 11259.1 | 11225.3 | 10744.1 | 11218.9 | 7744.8 |
| 71°   | 2267.6 | 2361.8 | 2827.4 | 4107.0 | 6772.5 | 10081.0 | 11371.6 | 11362.5 | 10745.1 | 11029.5 | 7432.0 |
| 72.5° | 1770.0 | 1827.6 | 2239.2 | 3182.3 | 5756.2 | 9228.5  | 11093.6 | 11128.3 | 10511.8 | 10503.6 | 6787.1 |
| 75°   | 1119.6 | 1145.2 | 1405.0 | 1873.3 | 3158.5 | 6535.6  | 9470.0  | 9564.2  | 9333.7  | 8597.3  | 5047.4 |
| 77.5° | 650.4  | 683.3  | 841.5  | 1104.1 | 1364.7 | 3547.2  | 6776.1  | 6878.6  | 6485.3  | 4733.6  | 2066.3 |
| 80°   | 378.7  | 415.3  | 554.3  | 641.2  | 626.6  | 1316.3  | 3450.3  | 3625.0  | 2808.1  | 1195.5  | 579.9  |
| 82.5° | 210.4  | 235.1  | 389.7  | 390.6  | 333.9  | 429.9   | 1085.8  | 1136.1  | 801.3   | 482.1   | 236.9  |
| 85°   | 152.8  | 172.9  | 251.5  | 227.8  | 160.1  | 184.8   | 377.8   | 396.1   | 323.8   | 203.1   | 76.8   |
| 87.5° | 54.0   | 76.8   | 138.1  | 109.8  | 43.9   | 38.4    | 108.9   | 88.7    | 82.3    | 56.7    | 17.4   |
| 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: P453375

CATALOG NUMBER: GLAN-SA4B-827-U-T3R

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 | 3021.3 |
| 2.5°  | 3037.7 | 3039.6 | 3030.4 | 3014.0 | 2997.5 | 2976.5 | 2952.7 | 2934.4 | 2926.1 | 2925.2 | 2924.3 |
| 5°    | 3070.7 | 3075.2 | 3040.5 | 2989.3 | 2932.5 | 2863.0 | 2803.6 | 2735.9 | 2718.5 | 2691.1 | 2699.3 |
| 7.5°  | 3123.7 | 3121.0 | 3052.4 | 2943.5 | 2810.9 | 2663.6 | 2539.2 | 2467.0 | 2392.0 | 2370.9 | 2371.8 |
| 10°   | 3199.6 | 3182.3 | 3052.4 | 2850.2 | 2628.9 | 2410.3 | 2236.5 | 2126.7 | 2067.2 | 2017.8 | 1999.5 |
| 12.5° | 3280.1 | 3236.2 | 3023.1 | 2719.4 | 2394.7 | 2126.7 | 1940.1 | 1791.9 | 1753.5 | 1713.2 | 1714.2 |
| 15°   | 3357.0 | 3283.8 | 2965.5 | 2535.6 | 2142.2 | 1823.9 | 1642.8 | 1554.1 | 1542.2 | 1546.8 | 1545.9 |
| 17.5° | 3426.5 | 3317.6 | 2877.7 | 2330.7 | 1847.7 | 1564.1 | 1468.1 | 1474.5 | 1506.5 | 1529.4 | 1532.1 |
| 20°   | 3496.9 | 3337.8 | 2746.9 | 2056.3 | 1569.6 | 1406.8 | 1410.5 | 1460.8 | 1509.3 | 1540.4 | 1544.9 |
| 22.5° | 3563.7 | 3346.9 | 2593.2 | 1791.0 | 1368.4 | 1340.0 | 1394.0 | 1448.0 | 1495.5 | 1525.7 | 1530.3 |
| 25°   | 3607.6 | 3325.9 | 2375.5 | 1513.8 | 1269.6 | 1316.3 | 1373.0 | 1418.7 | 1459.0 | 1490.1 | 1497.4 |
| 27.5° | 3619.5 | 3258.2 | 2105.7 | 1289.7 | 1223.9 | 1293.4 | 1345.5 | 1379.4 | 1410.5 | 1439.7 | 1445.2 |
| 30°   | 3613.1 | 3158.5 | 1809.3 | 1158.0 | 1197.4 | 1266.9 | 1307.1 | 1331.8 | 1369.3 | 1392.2 | 1396.8 |
| 32.5° | 3603.0 | 3042.3 | 1500.1 | 1087.6 | 1175.4 | 1242.2 | 1266.0 | 1287.9 | 1287.0 | 1277.8 | 1284.2 |
| 35°   | 3606.7 | 2903.3 | 1249.5 | 1045.5 | 1156.2 | 1223.9 | 1244.0 | 1216.6 | 1137.9 | 1134.2 | 1130.6 |
| 37.5° | 3625.9 | 2766.1 | 1067.5 | 1016.2 | 1146.1 | 1221.1 | 1232.1 | 1105.9 | 1036.4 | 1004.3 | 996.1  |
| 40°   | 3675.3 | 2606.0 | 947.6  | 994.3  | 1145.2 | 1242.2 | 1178.1 | 1050.1 | 916.5  | 854.3  | 849.8  |
| 42.5° | 3741.2 | 2448.7 | 874.5  | 980.6  | 1156.2 | 1274.2 | 1156.2 | 971.4  | 826.0  | 789.4  | 783.9  |
| 45°   | 3839.0 | 2268.5 | 834.2  | 974.2  | 1172.7 | 1286.1 | 1148.9 | 913.8  | 789.4  | 760.1  | 760.1  |
| 47.5° | 3949.7 | 2096.5 | 812.3  | 969.6  | 1193.7 | 1277.8 | 1083.9 | 895.5  | 772.0  | 775.7  | 793.1  |
| 50°   | 4059.5 | 1947.4 | 795.8  | 959.5  | 1212.0 | 1273.3 | 1057.4 | 894.6  | 776.6  | 823.2  | 854.3  |
| 52.5° | 4186.6 | 1842.2 | 775.7  | 943.1  | 1212.0 | 1244.0 | 1049.2 | 912.9  | 789.4  | 803.1  | 816.8  |
| 55°   | 4340.3 | 1809.3 | 750.1  | 907.4  | 1190.0 | 1170.8 | 1044.6 | 939.4  | 798.5  | 766.5  | 772.0  |
| 57.5° | 4543.3 | 1862.3 | 725.4  | 862.6  | 1139.7 | 1094.9 | 1042.8 | 946.7  | 777.5  | 751.0  | 745.5  |
| 60°   | 4779.3 | 1967.5 | 718.0  | 816.8  | 1071.1 | 1030.0 | 1031.8 | 925.7  | 748.2  | 720.8  | 725.4  |
| 62.5° | 4944.9 | 2030.6 | 713.5  | 782.1  | 996.1  | 958.6  | 1005.3 | 900.1  | 735.4  | 711.6  | 716.2  |
| 65°   | 4944.9 | 1953.8 | 671.4  | 729.0  | 899.2  | 872.6  | 973.2  | 868.1  | 719.0  | 691.5  | 686.9  |
| 67.5° | 4757.4 | 1729.7 | 607.4  | 649.4  | 792.1  | 774.8  | 928.4  | 829.6  | 694.3  | 673.2  | 662.2  |
| 70°   | 4268.9 | 1311.7 | 526.9  | 556.1  | 656.8  | 672.3  | 870.8  | 777.5  | 653.1  | 627.5  | 611.0  |
| 71°   | 4054.0 | 1142.5 | 493.0  | 508.6  | 604.6  | 627.5  | 843.4  | 755.5  | 634.8  | 598.2  | 568.9  |
| 72.5° | 3639.6 | 962.3  | 441.8  | 448.2  | 516.8  | 558.0  | 785.7  | 713.5  | 600.0  | 547.9  | 515.0  |
| 75°   | 2765.2 | 702.5  | 355.8  | 352.2  | 382.3  | 442.7  | 665.0  | 635.7  | 526.0  | 455.5  | 436.3  |
| 77.5° | 1194.6 | 382.3  | 266.2  | 268.9  | 259.8  | 335.7  | 523.2  | 546.1  | 451.0  | 370.5  | 353.1  |
| 80°   | 362.2  | 220.4  | 182.0  | 185.7  | 173.8  | 225.0  | 368.6  | 428.1  | 362.2  | 288.1  | 264.4  |
| 82.5° | 185.7  | 131.7  | 124.4  | 122.6  | 110.7  | 127.1  | 223.2  | 292.7  | 258.9  | 180.2  | 159.2  |
| 85°   | 80.5   | 70.4   | 61.3   | 59.5   | 52.1   | 45.7   | 79.6   | 146.4  | 137.2  | 100.6  | 96.0   |
| 87.5° | 20.1   | 18.3   | 11.9   | 11.0   | 6.4    | 0.9    | 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)