

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: P453925

Luminaire Tested: **GLAN-SA5A-727-U-T3R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA5A-727-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14995 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

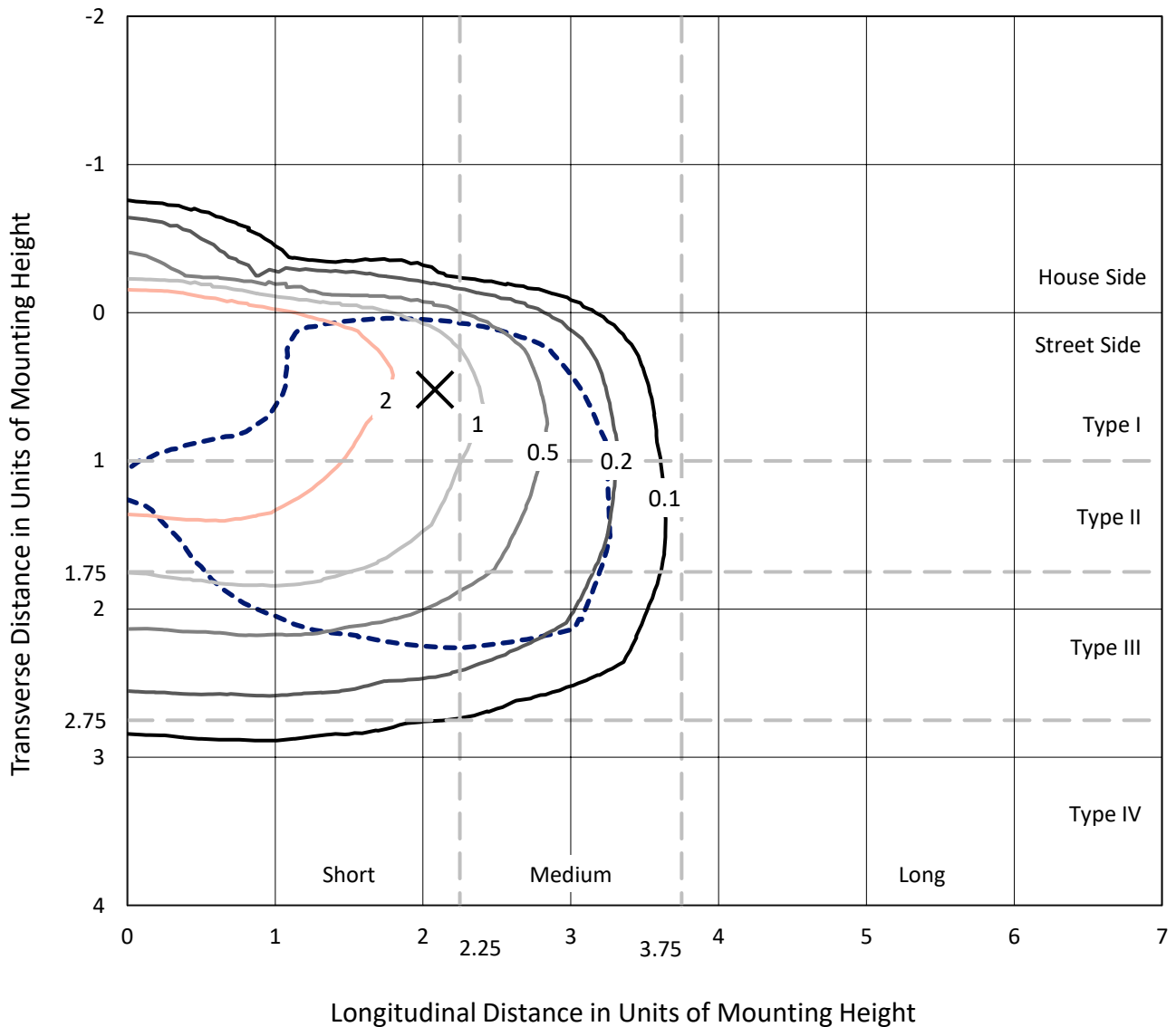
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453925
 CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

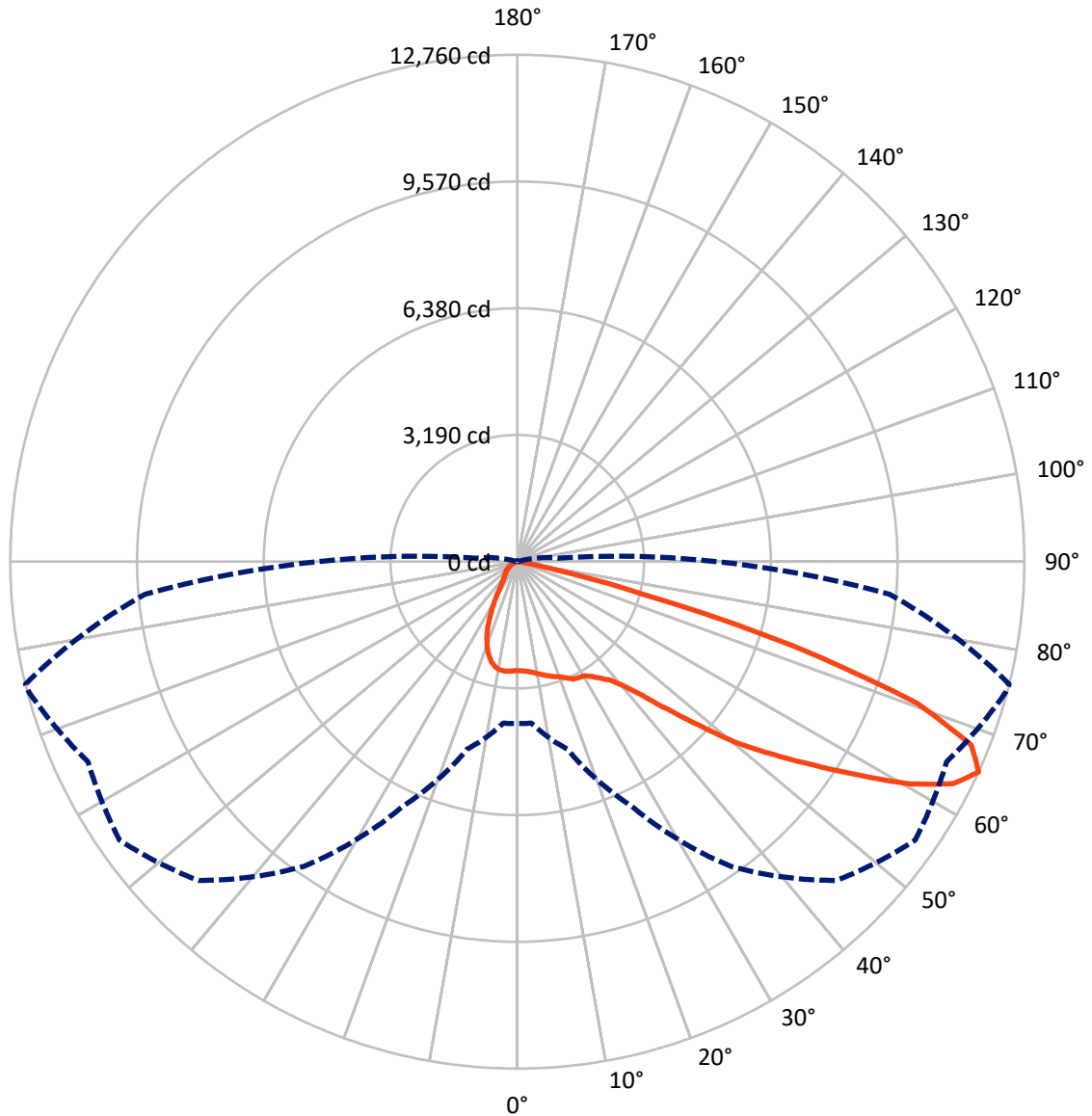
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - N/A

REPORT NUMBER: P453925
CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P453925

CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

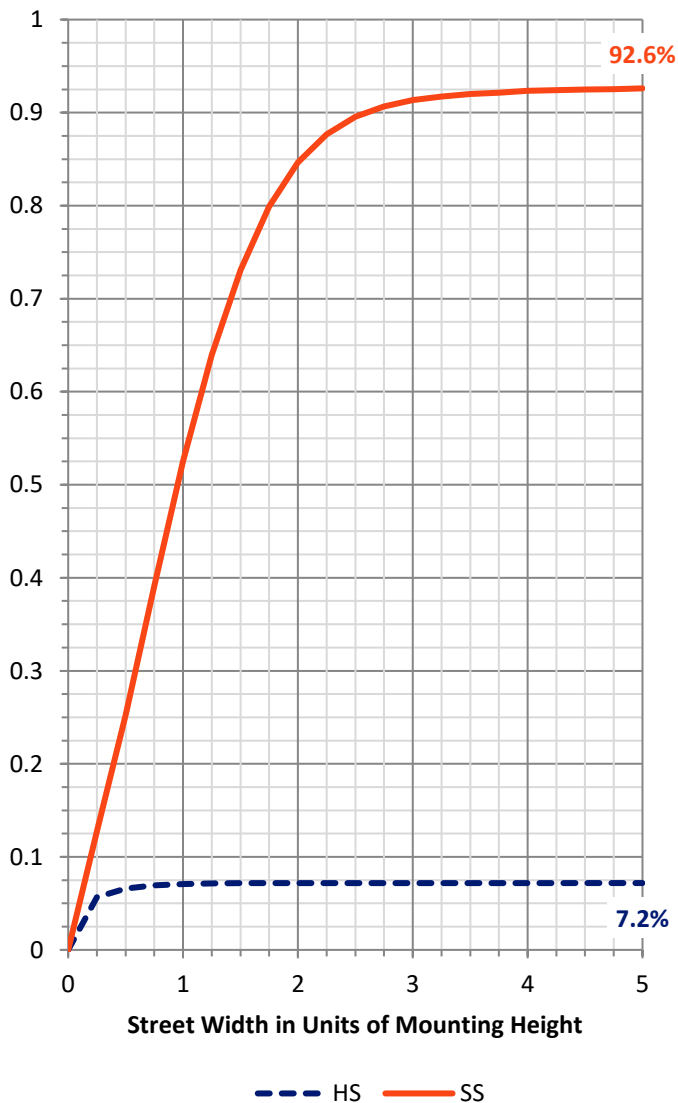
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1082.9 | 0.0 | 1082.9 |
| | % Fixture | 7.2 | 0.0 | 7.2 |
| Street Side | Lumens | 13912.1 | 0.0 | 13912.1 |
| | % Fixture | 92.8 | 0.0 | 92.8 |
| Total | Lumens | 14995.0 | 0.0 | 14995.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 226.0 | 1.5 |
| 10°-20° | 503.1 | 3.4 |
| 20°-30° | 810.7 | 5.4 |
| 30°-40° | 1409.7 | 9.4 |
| 40°-50° | 2329.4 | 15.5 |
| 50°-60° | 3598.5 | 24.0 |
| 60°-70° | 4394.2 | 29.3 |
| 70°-80° | 1667.7 | 11.1 |
| 80°-90° | 55.7 | 0.4 |
| 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° | 14995.0 | 100.0 |
| 0°-180° | 14995.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P453925

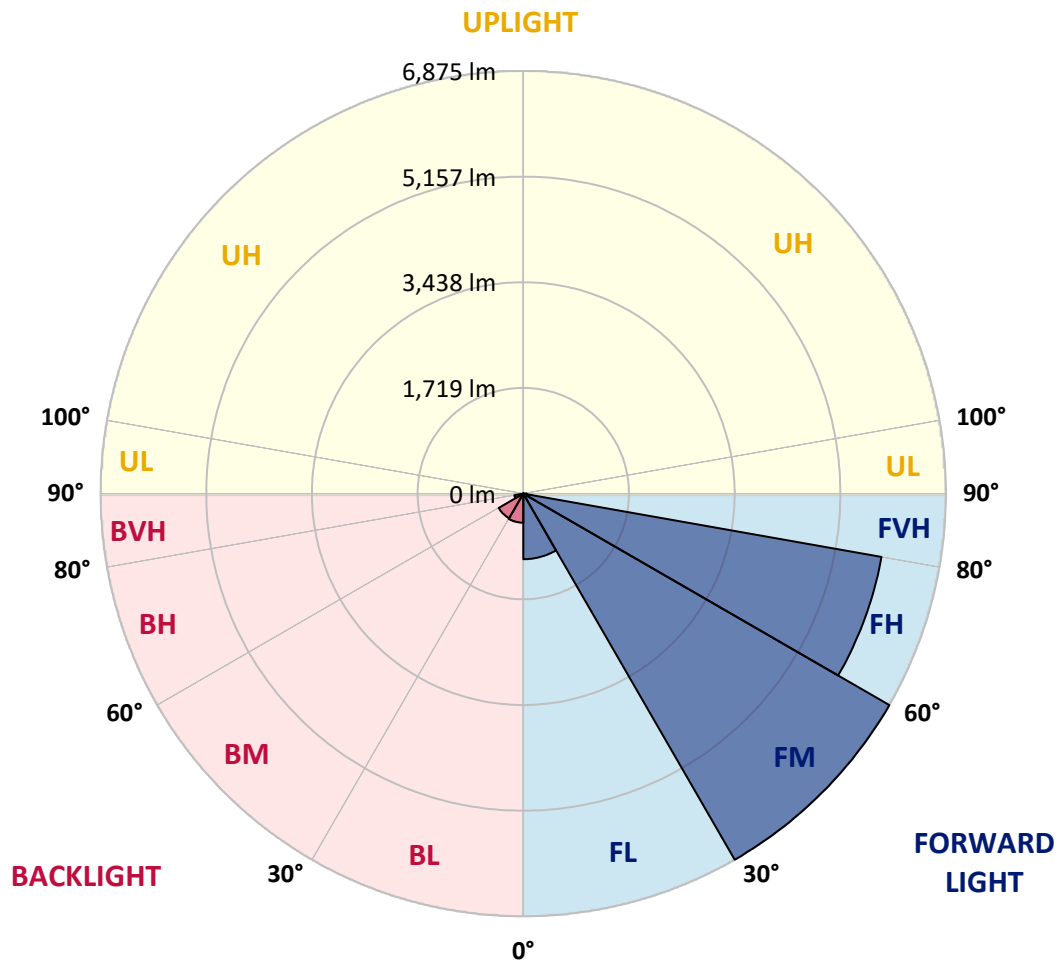
CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1066.7 | 7.1 | | | |
| FM (30°-60°) | 6875.4 | 45.9 | | | |
| FH (60°-80°) | 5915.0 | 39.4 | | | G3/7500 |
| FVH (80°-90°) | 54.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 473.1 | 3.2 | B1/500 | | |
| BM (30°-60°) | 462.1 | 3.1 | B1/1000 | | |
| BH (60°-80°) | 146.9 | 1.0 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.8 | 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-G3

Type III Short





REPORT NUMBER: P453925

CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0° | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 |
| 2.5° | 2621.3 | 2622.4 | 2628.7 | 2644.6 | 2669.0 | 2689.1 | 2706.0 | 2733.5 | 2752.6 | 2754.7 | 2761.1 |
| 5° | 2440.3 | 2427.6 | 2440.3 | 2481.6 | 2518.6 | 2574.7 | 2643.5 | 2712.4 | 2773.8 | 2778.0 | 2807.6 |
| 7.5° | 2237.0 | 2247.6 | 2267.7 | 2310.1 | 2379.9 | 2465.7 | 2565.2 | 2688.0 | 2804.5 | 2815.1 | 2873.3 |
| 10° | 2030.6 | 2053.9 | 2086.7 | 2151.3 | 2248.7 | 2359.8 | 2495.3 | 2671.1 | 2853.2 | 2868.0 | 2968.6 |
| 12.5° | 1840.0 | 1850.6 | 1890.8 | 1977.6 | 2098.3 | 2255.0 | 2442.4 | 2661.5 | 2907.2 | 2925.2 | 3070.2 |
| 15° | 1693.9 | 1707.7 | 1742.6 | 1820.9 | 1955.4 | 2156.6 | 2399.0 | 2658.4 | 2960.1 | 2985.5 | 3171.8 |
| 17.5° | 1666.4 | 1674.8 | 1689.7 | 1742.6 | 1860.1 | 2078.2 | 2359.8 | 2657.3 | 3010.9 | 3041.6 | 3266.1 |
| 20° | 1779.7 | 1772.2 | 1757.4 | 1752.1 | 1816.7 | 2017.9 | 2331.2 | 2665.8 | 3059.6 | 3094.5 | 3365.6 |
| 22.5° | 2063.4 | 2072.9 | 1986.1 | 1883.4 | 1862.2 | 2008.3 | 2327.0 | 2706.0 | 3136.9 | 3178.2 | 3476.7 |
| 25° | 2665.8 | 2592.7 | 2457.2 | 2211.6 | 2026.3 | 2066.6 | 2374.6 | 2801.3 | 3226.9 | 3272.4 | 3577.3 |
| 27.5° | 3331.7 | 3309.5 | 3098.8 | 2694.4 | 2349.2 | 2189.4 | 2459.3 | 2874.3 | 3256.5 | 3303.1 | 3634.5 |
| 30° | 3986.0 | 4012.4 | 3771.1 | 3324.3 | 2818.2 | 2417.0 | 2538.7 | 2901.9 | 3283.0 | 3331.7 | 3707.5 |
| 32.5° | 4592.6 | 4624.4 | 4412.6 | 3970.1 | 3370.9 | 2810.8 | 2675.3 | 3008.8 | 3394.2 | 3443.9 | 3829.3 |
| 35° | 5070.1 | 5074.3 | 4914.4 | 4561.9 | 3974.3 | 3289.3 | 2970.7 | 3196.2 | 3544.5 | 3602.7 | 3958.4 |
| 37.5° | 5508.4 | 5502.0 | 5314.6 | 5010.8 | 4477.2 | 3764.7 | 3342.3 | 3412.2 | 3716.0 | 3776.3 | 4144.8 |
| 40° | 5833.4 | 5837.6 | 5777.3 | 5491.4 | 4946.2 | 4204.1 | 3636.6 | 3614.4 | 4004.0 | 4098.2 | 4415.8 |
| 42.5° | 6050.4 | 6089.6 | 6119.2 | 5974.2 | 5535.9 | 4745.0 | 4088.7 | 4047.4 | 4503.7 | 4582.0 | 4799.0 |
| 45° | 6226.2 | 6296.0 | 6444.2 | 6436.8 | 6102.3 | 5408.8 | 4709.1 | 4624.4 | 5211.9 | 5295.6 | 5287.1 |
| 47.5° | 6354.3 | 6425.2 | 6670.8 | 6819.0 | 6634.8 | 6052.5 | 5489.3 | 5416.3 | 6057.8 | 6148.9 | 5826.0 |
| 50° | 6419.9 | 6504.6 | 6818.0 | 7104.9 | 7050.9 | 6672.9 | 6378.6 | 6382.8 | 7079.5 | 7167.3 | 6450.6 |
| 52.5° | 6266.4 | 6376.5 | 6896.3 | 7412.9 | 7517.8 | 7266.8 | 7211.8 | 7351.5 | 7988.9 | 8064.0 | 7014.9 |
| 55° | 5776.2 | 5914.9 | 6789.4 | 7675.5 | 8058.7 | 7967.7 | 8158.3 | 8371.1 | 8983.0 | 9031.7 | 7594.0 |
| 57.5° | 5466.0 | 5613.2 | 6473.9 | 7898.9 | 8708.8 | 8848.5 | 9150.3 | 9305.9 | 10008.8 | 10132.7 | 8258.8 |
| 60° | 5204.5 | 5319.9 | 6214.5 | 7946.5 | 9369.4 | 9926.3 | 10219.5 | 10380.4 | 11275.0 | 11355.5 | 8990.4 |
| 62.5° | 4769.4 | 4901.7 | 5776.2 | 7614.1 | 9701.8 | 10789.1 | 11396.8 | 11324.8 | 12254.3 | 12310.4 | 9439.3 |
| 65° | 4069.6 | 4081.2 | 4886.9 | 6778.8 | 9358.8 | 11349.1 | 12223.6 | 11921.9 | 12722.3 | 12760.4 | 9404.3 |
| 67.5° | 3037.4 | 3149.6 | 3759.4 | 5328.4 | 7905.2 | 10870.6 | 12491.5 | 11937.8 | 12426.9 | 12321.0 | 8658.0 |
| 70° | 1956.5 | 2042.2 | 2548.3 | 3694.8 | 5700.0 | 9071.9 | 11603.2 | 11119.4 | 10906.6 | 10671.6 | 7086.9 |
| 72.5° | 903.1 | 1013.2 | 1513.9 | 2111.0 | 3380.4 | 6462.2 | 9419.2 | 9033.8 | 7850.2 | 7270.0 | 4504.7 |
| 75° | 393.8 | 421.4 | 747.4 | 1113.7 | 1584.9 | 3417.4 | 6210.3 | 5607.9 | 3545.6 | 3238.5 | 1802.9 |
| 77.5° | 240.3 | 258.3 | 391.7 | 597.1 | 622.5 | 1302.2 | 3345.5 | 2446.6 | 1095.7 | 966.6 | 489.1 |
| 80° | 163.0 | 183.2 | 284.8 | 312.3 | 212.8 | 363.1 | 1255.6 | 653.2 | 221.3 | 211.7 | 104.8 |
| 82.5° | 79.4 | 100.6 | 210.7 | 174.7 | 92.1 | 116.5 | 365.2 | 139.7 | 64.6 | 60.3 | 37.1 |
| 85° | 11.6 | 20.1 | 118.6 | 114.3 | 41.3 | 27.5 | 64.6 | 34.9 | 22.2 | 21.2 | 16.9 |
| 87.5° | 0.0 | 0.0 | 40.2 | 18.0 | 4.2 | 4.2 | 7.4 | 7.4 | 8.5 | 7.4 | 8.5 |
| 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: P453925

CATALOG NUMBER: GLAN-SA5A-727-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 | 2743.1 |
| 2.5° | 2764.2 | 2769.5 | 2749.4 | 2720.8 | 2690.1 | 2659.4 | 2616.0 | 2576.8 | 2553.6 | 2567.3 | 2533.4 |
| 5° | 2814.0 | 2809.8 | 2756.8 | 2670.0 | 2554.6 | 2415.9 | 2278.3 | 2160.8 | 2122.7 | 2065.5 | 2059.2 |
| 7.5° | 2882.8 | 2871.2 | 2758.9 | 2559.9 | 2299.5 | 2039.0 | 1785.0 | 1616.6 | 1520.3 | 1438.8 | 1440.9 |
| 10° | 2979.2 | 2945.3 | 2734.6 | 2366.2 | 1937.4 | 1544.6 | 1220.7 | 998.3 | 902.0 | 871.3 | 847.0 |
| 12.5° | 3078.7 | 3013.0 | 2666.8 | 2104.7 | 1508.6 | 1055.5 | 742.1 | 606.6 | 547.3 | 528.3 | 526.2 |
| 15° | 3167.6 | 3063.8 | 2548.3 | 1790.2 | 1096.8 | 674.4 | 506.1 | 461.6 | 454.2 | 455.2 | 454.2 |
| 17.5° | 3255.5 | 3104.1 | 2384.2 | 1456.8 | 745.3 | 483.8 | 435.1 | 424.5 | 427.7 | 431.9 | 430.9 |
| 20° | 3328.5 | 3112.5 | 2174.5 | 1111.6 | 527.2 | 424.5 | 408.7 | 406.5 | 409.7 | 412.9 | 412.9 |
| 22.5° | 3407.9 | 3118.9 | 1925.8 | 769.7 | 430.9 | 394.9 | 386.4 | 386.4 | 390.7 | 394.9 | 395.9 |
| 25° | 3467.2 | 3084.0 | 1628.3 | 552.6 | 380.1 | 366.3 | 362.1 | 363.1 | 367.4 | 369.5 | 368.4 |
| 27.5° | 3476.7 | 2985.5 | 1312.8 | 423.5 | 345.1 | 331.4 | 327.1 | 331.4 | 326.1 | 329.3 | 327.1 |
| 30° | 3485.2 | 2860.6 | 993.1 | 356.8 | 313.4 | 292.2 | 285.8 | 279.5 | 275.3 | 270.0 | 268.9 |
| 32.5° | 3511.7 | 2713.4 | 725.2 | 320.8 | 283.7 | 260.4 | 245.6 | 227.6 | 213.9 | 209.6 | 208.6 |
| 35° | 3523.3 | 2536.6 | 532.5 | 292.2 | 257.3 | 231.9 | 205.4 | 180.0 | 159.9 | 152.5 | 157.7 |
| 37.5° | 3567.8 | 2365.1 | 412.9 | 271.0 | 234.0 | 202.2 | 168.3 | 136.6 | 117.5 | 113.3 | 115.4 |
| 40° | 3658.8 | 2178.8 | 346.2 | 253.0 | 213.9 | 174.7 | 133.4 | 102.7 | 90.0 | 85.8 | 84.7 |
| 42.5° | 3804.9 | 1993.5 | 308.1 | 236.1 | 193.7 | 147.2 | 104.8 | 80.5 | 69.9 | 66.7 | 66.7 |
| 45° | 3982.8 | 1815.7 | 281.6 | 218.1 | 172.6 | 118.6 | 82.6 | 64.6 | 58.2 | 56.1 | 56.1 |
| 47.5° | 4216.8 | 1660.0 | 259.4 | 200.1 | 149.3 | 94.2 | 66.7 | 56.1 | 51.9 | 52.9 | 54.0 |
| 50° | 4453.9 | 1544.6 | 235.0 | 180.0 | 122.8 | 77.3 | 57.2 | 49.8 | 48.7 | 49.8 | 49.8 |
| 52.5° | 4632.8 | 1476.9 | 202.2 | 152.5 | 96.3 | 64.6 | 50.8 | 46.6 | 45.5 | 43.4 | 43.4 |
| 55° | 4874.2 | 1462.0 | 160.9 | 123.9 | 76.2 | 54.0 | 45.5 | 42.3 | 39.2 | 37.1 | 36.0 |
| 57.5° | 5184.4 | 1479.0 | 123.9 | 96.3 | 59.3 | 44.5 | 40.2 | 34.9 | 30.7 | 26.5 | 26.5 |
| 60° | 5377.1 | 1440.9 | 96.3 | 74.1 | 43.4 | 36.0 | 30.7 | 25.4 | 20.1 | 16.9 | 15.9 |
| 62.5° | 5315.7 | 1280.0 | 76.2 | 55.1 | 30.7 | 26.5 | 20.1 | 16.9 | 11.6 | 8.5 | 7.4 |
| 65° | 4999.1 | 1033.3 | 61.4 | 38.1 | 22.2 | 15.9 | 10.6 | 10.6 | 5.3 | 1.1 | 0.0 |
| 67.5° | 4375.6 | 765.4 | 48.7 | 25.4 | 12.7 | 7.4 | 5.3 | 3.2 | 0.0 | 0.0 | 0.0 |
| 70° | 3561.4 | 552.6 | 38.1 | 15.9 | 7.4 | 5.3 | 2.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 72.5° | 2261.4 | 316.5 | 29.6 | 9.5 | 5.3 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 874.5 | 123.9 | 20.1 | 6.4 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 247.7 | 58.2 | 11.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 64.6 | 25.4 | 6.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 30.7 | 10.6 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 18.0 | 4.2 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 8.5 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 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)