

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: P653836

Luminaire Tested: **GLAN-SA4A-840-U-T2R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P653836
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: STREETWORKS
Catalog Number: GLAN-SA4A-840-U-T2R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA 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: 10062.6 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B1 - U0 - G1

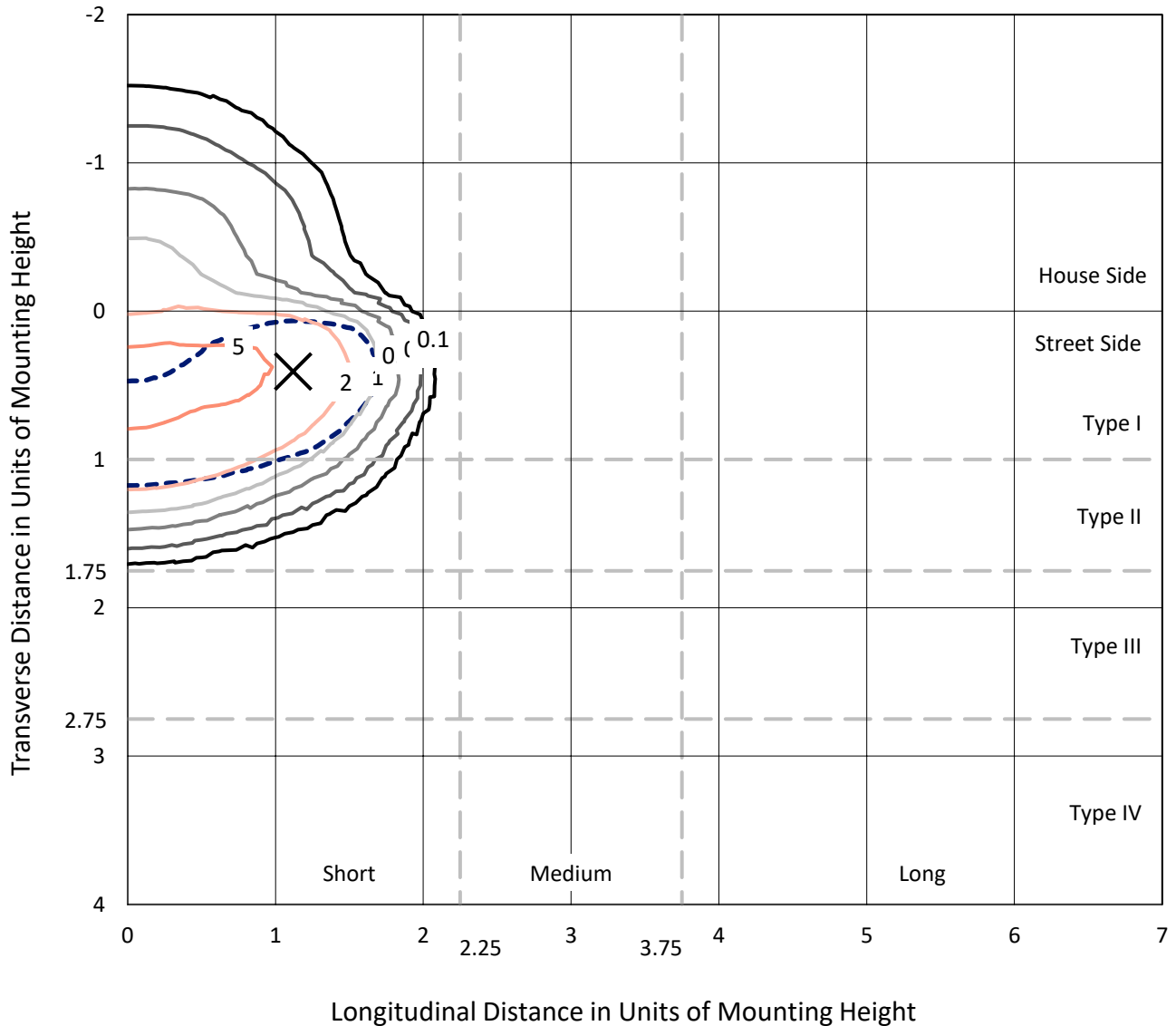
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

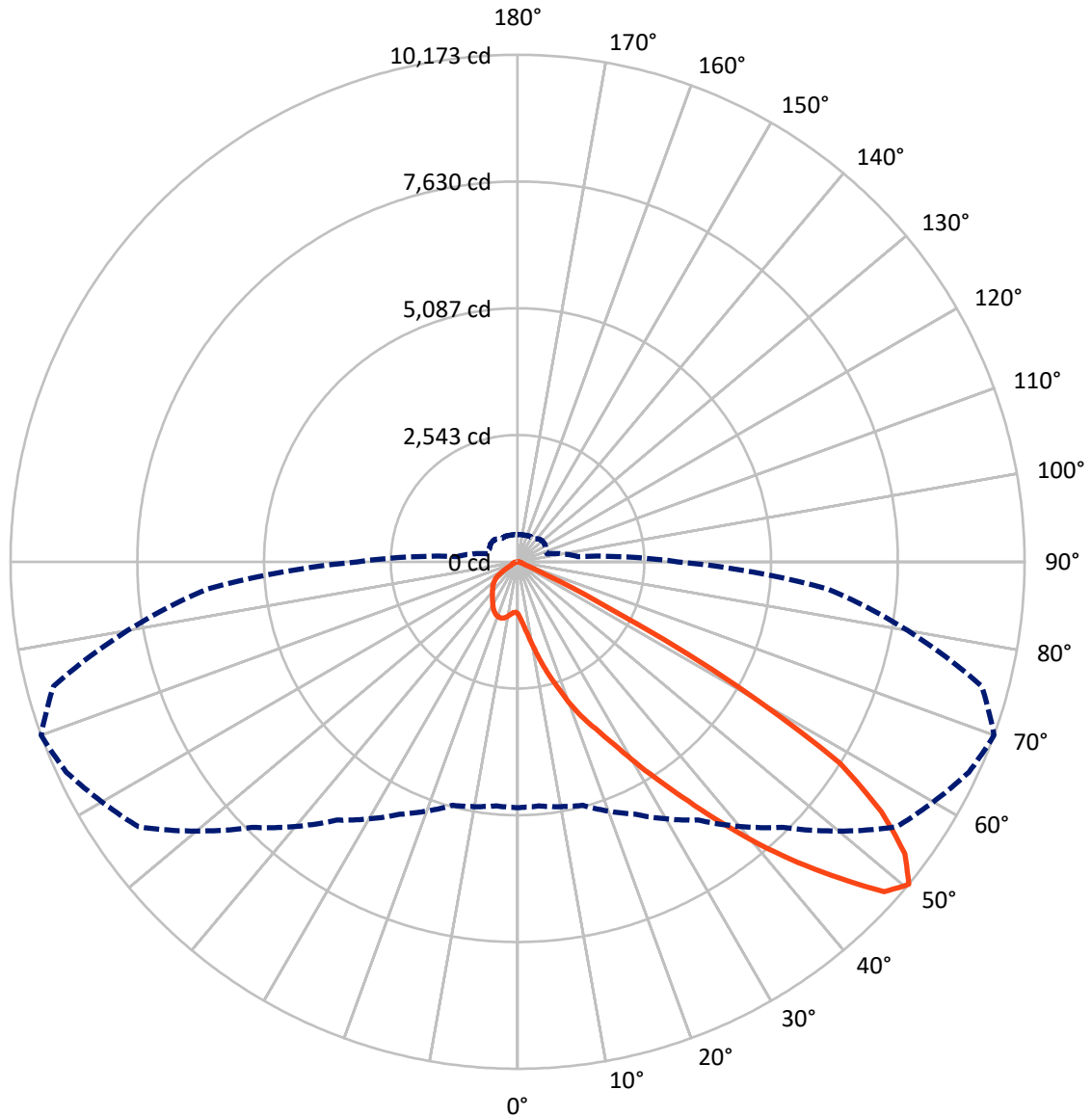
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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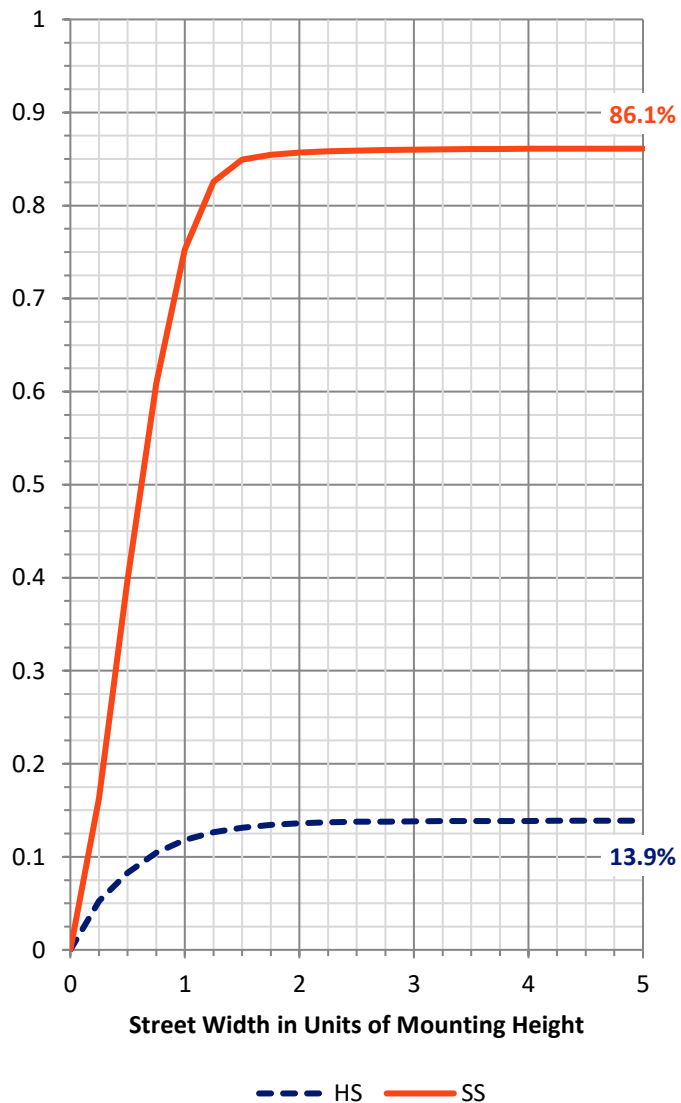
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1405.3 | 0.0 | 1405.3 |
| | % Fixture | 14.0 | 0.0 | 14.0 |
| Street Side | Lumens | 8657.3 | 0.0 | 8657.3 |
| | % Fixture | 86.0 | 0.0 | 86.0 |
| Total | Lumens | 10062.6 | 0.0 | 10062.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 135.5 | 1.3 |
| 10°-20° | 586.3 | 5.8 |
| 20°-30° | 1229.9 | 12.2 |
| 30°-40° | 2119.9 | 21.1 |
| 40°-50° | 3098.3 | 30.8 |
| 50°-60° | 2413.1 | 24.0 |
| 60°-70° | 408.8 | 4.1 |
| 70°-80° | 56.2 | 0.6 |
| 80°-90° | 14.6 | 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° | 10062.6 | 100.0 |
| 0°-180° | 10062.6 | 100.0 |

Coefficient of Utilization

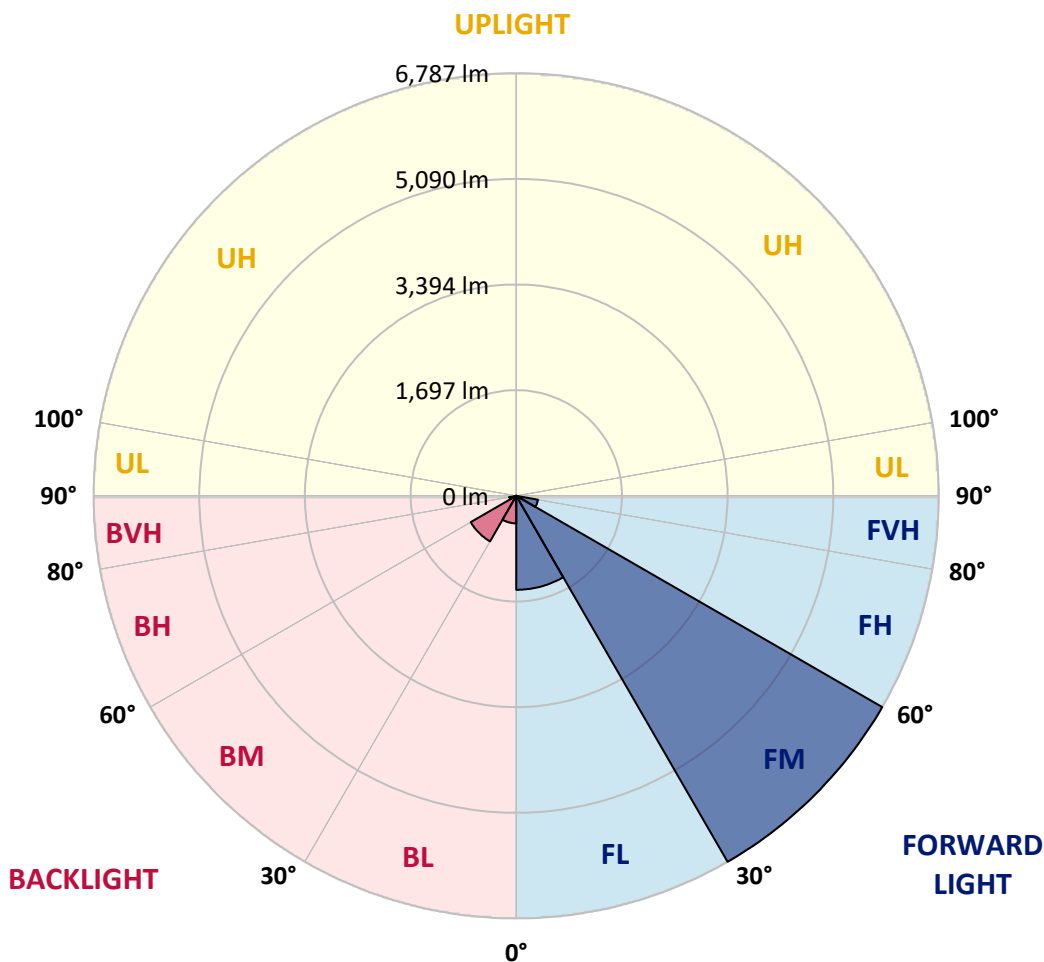


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1509.5 | 15.0 | | | |
| FM (30°-60°) | 6787.0 | 67.4 | | | |
| FH (60°-80°) | 354.0 | 3.5 | | | G0/660 |
| FVH (80°-90°) | 6.7 | 0.1 | | | G0/10 |
| BL (0°-30°) | 442.2 | 4.4 | B1/500 | | |
| BM (30°-60°) | 844.3 | 8.4 | B1/1000 | | |
| BH (60°-80°) | 111.0 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 7.8 | 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-G1
 Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|
| 0° | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 |
| 2.5° | 1364.9 | 1354.9 | 1333.5 | 1293.8 | 1277.2 | 1237.5 | 1214.3 | 1169.7 | 1141.6 | 1110.1 | 1075.4 |
| 5° | 1922.4 | 1871.1 | 1839.7 | 1795.0 | 1664.3 | 1583.3 | 1449.3 | 1335.1 | 1282.2 | 1224.2 | 1144.9 |
| 7.5° | 2498.2 | 2465.1 | 2422.1 | 2326.1 | 2236.8 | 2068.0 | 1838.1 | 1586.5 | 1479.1 | 1379.7 | 1222.6 |
| 10° | 2974.6 | 2882.0 | 2877.1 | 2805.9 | 2708.3 | 2506.4 | 2230.2 | 1917.5 | 1725.6 | 1580.0 | 1333.5 |
| 12.5° | 3307.1 | 3222.8 | 3260.9 | 3252.6 | 3161.6 | 2976.3 | 2657.0 | 2243.4 | 2043.2 | 1816.6 | 1447.6 |
| 15° | 3609.9 | 3575.2 | 3563.7 | 3553.7 | 3517.3 | 3380.0 | 3093.8 | 2640.5 | 2350.9 | 2077.9 | 1576.6 |
| 17.5° | 3906.1 | 3816.7 | 3859.8 | 3868.0 | 3864.7 | 3740.6 | 3472.7 | 3017.7 | 2676.8 | 2354.2 | 1712.4 |
| 20° | 4169.2 | 4177.4 | 4119.5 | 4107.9 | 4098.0 | 4093.1 | 3831.6 | 3391.6 | 3077.2 | 2643.8 | 1889.3 |
| 22.5° | 4506.7 | 4448.7 | 4500.0 | 4467.0 | 4402.4 | 4362.7 | 4162.5 | 3722.4 | 3424.6 | 2992.9 | 2069.7 |
| 25° | 4905.4 | 4951.6 | 4830.9 | 4817.7 | 4746.5 | 4609.2 | 4428.9 | 4093.1 | 3758.8 | 3317.1 | 2264.9 |
| 27.5° | 5396.7 | 5315.6 | 5284.2 | 5211.4 | 5082.4 | 5024.5 | 4812.7 | 4475.2 | 4162.5 | 3657.9 | 2453.5 |
| 30° | 5818.6 | 5797.1 | 5639.9 | 5553.9 | 5441.4 | 5439.8 | 5143.6 | 4993.0 | 4688.7 | 4192.3 | 2713.2 |
| 32.5° | 6162.7 | 6068.4 | 6010.5 | 5950.9 | 5859.9 | 5884.7 | 5635.0 | 5555.6 | 5249.4 | 4688.7 | 3019.3 |
| 35° | 6392.7 | 6324.8 | 6290.1 | 6199.1 | 6172.6 | 6283.4 | 6179.2 | 6146.2 | 5894.7 | 5386.8 | 3378.3 |
| 37.5° | 6465.4 | 6487.0 | 6480.3 | 6366.2 | 6422.5 | 6721.9 | 6855.9 | 6769.9 | 6637.5 | 6123.0 | 3767.1 |
| 40° | 6530.0 | 6544.9 | 6511.8 | 6645.8 | 6806.3 | 7147.1 | 7631.8 | 7489.5 | 7439.9 | 6869.1 | 4308.1 |
| 42.5° | 6566.4 | 6554.8 | 6554.8 | 6786.4 | 7029.6 | 7714.6 | 8381.3 | 8287.0 | 8248.9 | 7663.3 | 4933.5 |
| 45° | 6409.2 | 6296.7 | 6417.5 | 6731.9 | 7221.5 | 7994.1 | 8980.2 | 9110.9 | 9056.3 | 8608.0 | 5664.7 |
| 47.5° | 5821.9 | 5891.4 | 5959.2 | 6379.4 | 6988.3 | 7908.1 | 9347.5 | 9792.5 | 9893.4 | 9402.0 | 6144.5 |
| 50° | 4933.5 | 4918.6 | 5059.2 | 5588.6 | 6328.2 | 7537.5 | 9276.3 | 9989.4 | 10173.0 | 9640.3 | 6245.4 |
| 52.5° | 3588.5 | 3697.6 | 3849.8 | 4376.0 | 5252.8 | 6578.0 | 8358.1 | 9481.4 | 9726.3 | 9347.5 | 6179.2 |
| 55° | 2089.5 | 1968.8 | 2311.2 | 2756.3 | 3583.5 | 4961.6 | 7066.0 | 8404.4 | 8857.7 | 8814.8 | 5845.0 |
| 57.5° | 837.1 | 810.6 | 928.1 | 1250.7 | 1869.5 | 3075.5 | 5138.6 | 6905.5 | 7631.8 | 8073.6 | 5137.0 |
| 60° | 367.3 | 359.0 | 421.8 | 509.6 | 764.3 | 1417.8 | 2810.9 | 4294.9 | 5052.6 | 5641.6 | 3535.5 |
| 62.5° | 264.7 | 261.4 | 292.8 | 324.3 | 403.7 | 617.1 | 1181.3 | 1730.5 | 2157.3 | 2605.7 | 1583.3 |
| 65° | 213.4 | 221.7 | 243.2 | 259.8 | 297.8 | 342.5 | 416.9 | 481.5 | 590.6 | 612.2 | 349.1 |
| 67.5° | 173.8 | 180.3 | 200.2 | 218.4 | 225.0 | 185.3 | 191.9 | 168.8 | 168.8 | 150.5 | 120.8 |
| 70° | 127.4 | 129.0 | 152.2 | 173.8 | 138.9 | 74.4 | 130.7 | 130.7 | 117.5 | 112.5 | 102.6 |
| 72.5° | 94.3 | 96.0 | 114.1 | 107.6 | 54.6 | 46.3 | 96.0 | 105.9 | 96.0 | 91.0 | 82.8 |
| 75° | 69.5 | 71.1 | 59.5 | 24.8 | 23.1 | 29.8 | 56.3 | 72.8 | 69.5 | 67.9 | 62.9 |
| 77.5° | 13.2 | 9.9 | 8.2 | 11.6 | 16.6 | 24.8 | 36.4 | 44.7 | 46.3 | 49.6 | 46.3 |
| 80° | 1.7 | 1.7 | 5.0 | 9.9 | 18.2 | 26.5 | 38.0 | 43.0 | 44.7 | 46.3 | 43.0 |
| 82.5° | 0.0 | 1.7 | 5.0 | 9.9 | 18.2 | 24.8 | 33.1 | 38.0 | 41.4 | 43.0 | 41.4 |
| 85° | 0.0 | 1.7 | 3.3 | 8.2 | 14.9 | 18.2 | 16.6 | 11.6 | 9.9 | 11.6 | 8.2 |
| 87.5° | 0.0 | 0.0 | 1.7 | 1.7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: GLAN-SA4A-840-U-T2R-GRSBK

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 | 1042.3 |
| 2.5° | 1055.5 | 1048.9 | 1025.8 | 1001.0 | 979.4 | 989.4 | 979.4 | 971.1 | 974.5 | 971.1 | 967.8 |
| 5° | 1113.4 | 1083.6 | 1034.0 | 1012.5 | 994.3 | 992.6 | 987.7 | 986.1 | 987.7 | 987.7 | 972.8 |
| 7.5° | 1168.0 | 1120.0 | 1067.1 | 1043.9 | 1022.4 | 1024.1 | 1012.5 | 1012.5 | 1010.9 | 1002.6 | 999.3 |
| 10° | 1250.7 | 1186.2 | 1118.4 | 1077.0 | 1050.6 | 1045.6 | 1034.0 | 1022.4 | 1022.4 | 1022.4 | 1005.9 |
| 12.5° | 1341.7 | 1260.7 | 1168.0 | 1120.0 | 1088.6 | 1063.8 | 1045.6 | 1042.3 | 1024.1 | 1020.8 | 1012.5 |
| 15° | 1421.1 | 1318.6 | 1201.1 | 1134.9 | 1095.2 | 1062.1 | 1034.0 | 1015.8 | 1007.5 | 1002.6 | 996.0 |
| 17.5° | 1498.9 | 1368.2 | 1219.3 | 1134.9 | 1092.0 | 1053.9 | 1024.1 | 1007.5 | 987.7 | 991.0 | 977.7 |
| 20° | 1603.1 | 1421.1 | 1224.2 | 1113.4 | 1060.5 | 1024.1 | 984.4 | 976.1 | 964.5 | 954.6 | 957.9 |
| 22.5° | 1704.0 | 1459.2 | 1209.4 | 1087.0 | 1010.9 | 967.8 | 948.0 | 938.1 | 933.1 | 924.8 | 913.2 |
| 25° | 1795.0 | 1500.6 | 1186.2 | 1039.0 | 957.9 | 926.4 | 908.3 | 906.6 | 895.1 | 895.1 | 873.5 |
| 27.5° | 1887.7 | 1515.5 | 1146.5 | 982.7 | 911.6 | 893.4 | 885.2 | 881.8 | 876.8 | 865.2 | 850.3 |
| 30° | 1993.6 | 1520.4 | 1088.6 | 924.8 | 870.2 | 850.3 | 861.9 | 870.2 | 848.7 | 827.2 | 833.9 |
| 32.5° | 2081.2 | 1508.8 | 1019.1 | 870.2 | 840.4 | 830.5 | 853.7 | 861.9 | 837.1 | 814.0 | 802.4 |
| 35° | 2187.1 | 1480.7 | 951.3 | 827.2 | 810.6 | 830.5 | 850.3 | 850.3 | 800.7 | 772.6 | 766.0 |
| 37.5° | 2347.7 | 1449.3 | 888.4 | 790.8 | 779.3 | 820.6 | 847.1 | 828.9 | 751.1 | 716.4 | 708.1 |
| 40° | 2519.7 | 1429.4 | 827.2 | 754.4 | 762.7 | 804.1 | 819.0 | 762.7 | 683.3 | 661.8 | 655.1 |
| 42.5° | 2769.5 | 1389.8 | 772.6 | 723.0 | 747.8 | 780.9 | 780.9 | 679.9 | 650.2 | 638.6 | 637.0 |
| 45° | 3080.5 | 1361.6 | 724.6 | 696.5 | 726.3 | 734.5 | 708.1 | 637.0 | 615.4 | 612.2 | 613.8 |
| 47.5° | 3232.7 | 1307.0 | 675.0 | 665.1 | 686.6 | 688.3 | 618.7 | 602.2 | 584.0 | 579.0 | 575.7 |
| 50° | 3209.6 | 1209.4 | 610.5 | 623.7 | 653.5 | 637.0 | 564.1 | 567.5 | 550.9 | 549.3 | 541.0 |
| 52.5° | 3047.4 | 1055.5 | 546.0 | 577.4 | 610.5 | 562.5 | 519.5 | 516.2 | 516.2 | 494.7 | 486.4 |
| 55° | 2701.6 | 850.3 | 468.2 | 507.9 | 547.6 | 473.1 | 461.5 | 458.3 | 450.0 | 430.2 | 425.2 |
| 57.5° | 2139.2 | 623.7 | 352.4 | 395.4 | 464.9 | 402.0 | 400.4 | 385.5 | 364.0 | 349.1 | 349.1 |
| 60° | 1272.3 | 359.0 | 221.7 | 241.5 | 307.7 | 325.9 | 362.3 | 355.7 | 319.3 | 296.1 | 289.6 |
| 62.5° | 580.7 | 185.3 | 140.6 | 143.9 | 165.4 | 211.8 | 284.6 | 329.3 | 278.0 | 238.3 | 234.9 |
| 65° | 195.2 | 137.3 | 115.8 | 110.8 | 114.1 | 127.4 | 170.4 | 233.3 | 221.7 | 183.7 | 177.0 |
| 67.5° | 119.1 | 122.4 | 109.2 | 100.9 | 100.9 | 99.2 | 97.6 | 105.9 | 130.7 | 127.4 | 129.0 |
| 70° | 102.6 | 112.5 | 100.9 | 91.0 | 87.7 | 82.8 | 69.5 | 57.9 | 49.6 | 57.9 | 61.2 |
| 72.5° | 82.8 | 89.3 | 86.0 | 77.8 | 69.5 | 62.9 | 49.6 | 38.0 | 28.1 | 24.8 | 24.8 |
| 75° | 61.2 | 66.2 | 69.5 | 59.5 | 53.0 | 44.7 | 36.4 | 24.8 | 14.9 | 9.9 | 9.9 |
| 77.5° | 44.7 | 49.6 | 51.3 | 46.3 | 39.7 | 31.5 | 23.1 | 16.6 | 8.2 | 3.3 | 3.3 |
| 80° | 38.0 | 44.7 | 49.6 | 46.3 | 41.4 | 29.8 | 21.5 | 11.6 | 6.6 | 1.7 | 1.7 |
| 82.5° | 36.4 | 44.7 | 49.6 | 44.7 | 39.7 | 28.1 | 21.5 | 13.2 | 5.0 | 1.7 | 1.7 |
| 85° | 8.2 | 11.6 | 14.9 | 18.2 | 21.5 | 21.5 | 16.6 | 9.9 | 5.0 | 1.7 | 1.7 |
| 87.5° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 1.7 | 1.7 | 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)