

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: P949464

Luminaire Tested: **GALN-SB4A-950-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4A-950-U-T2R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 90 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12738 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

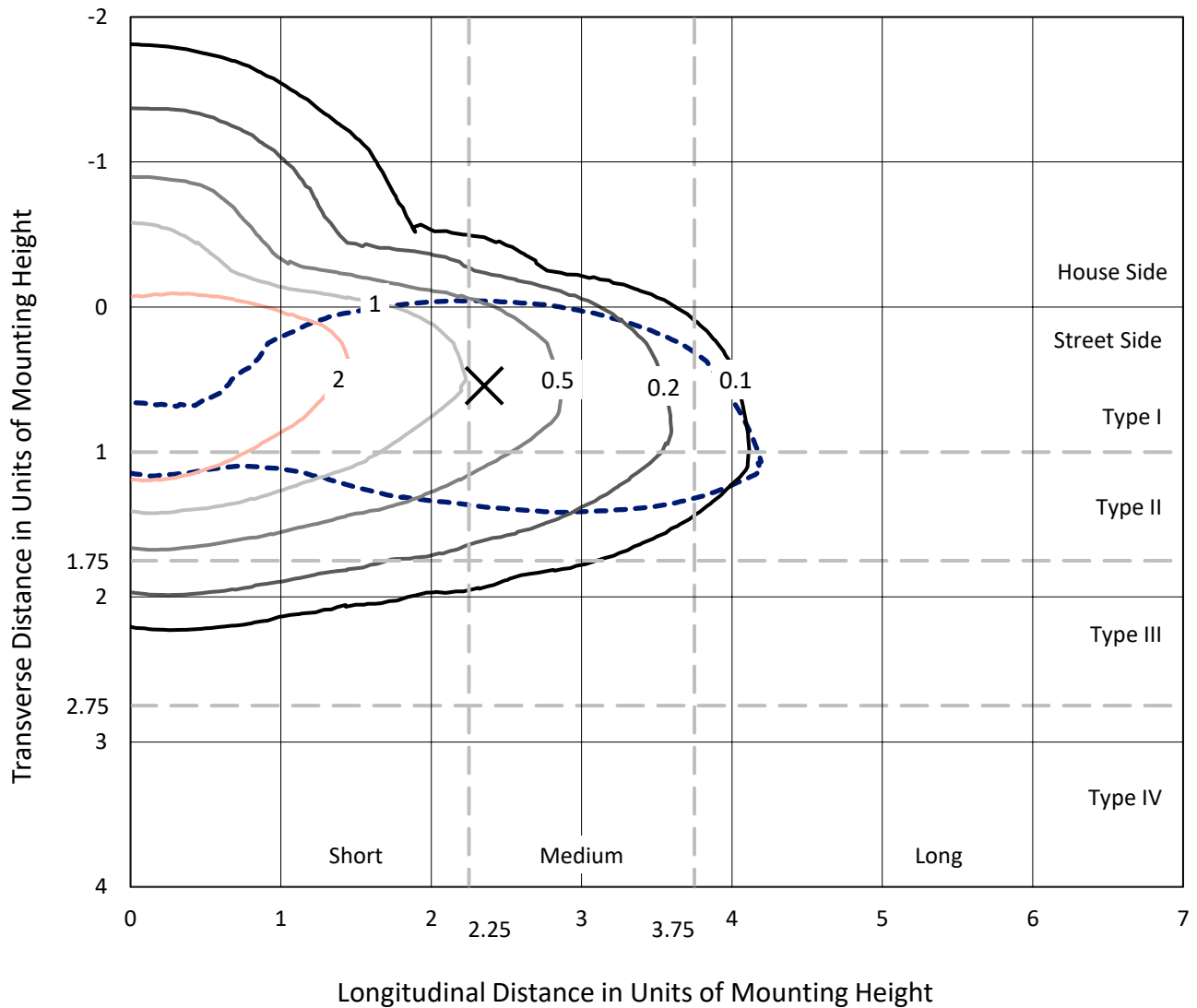
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

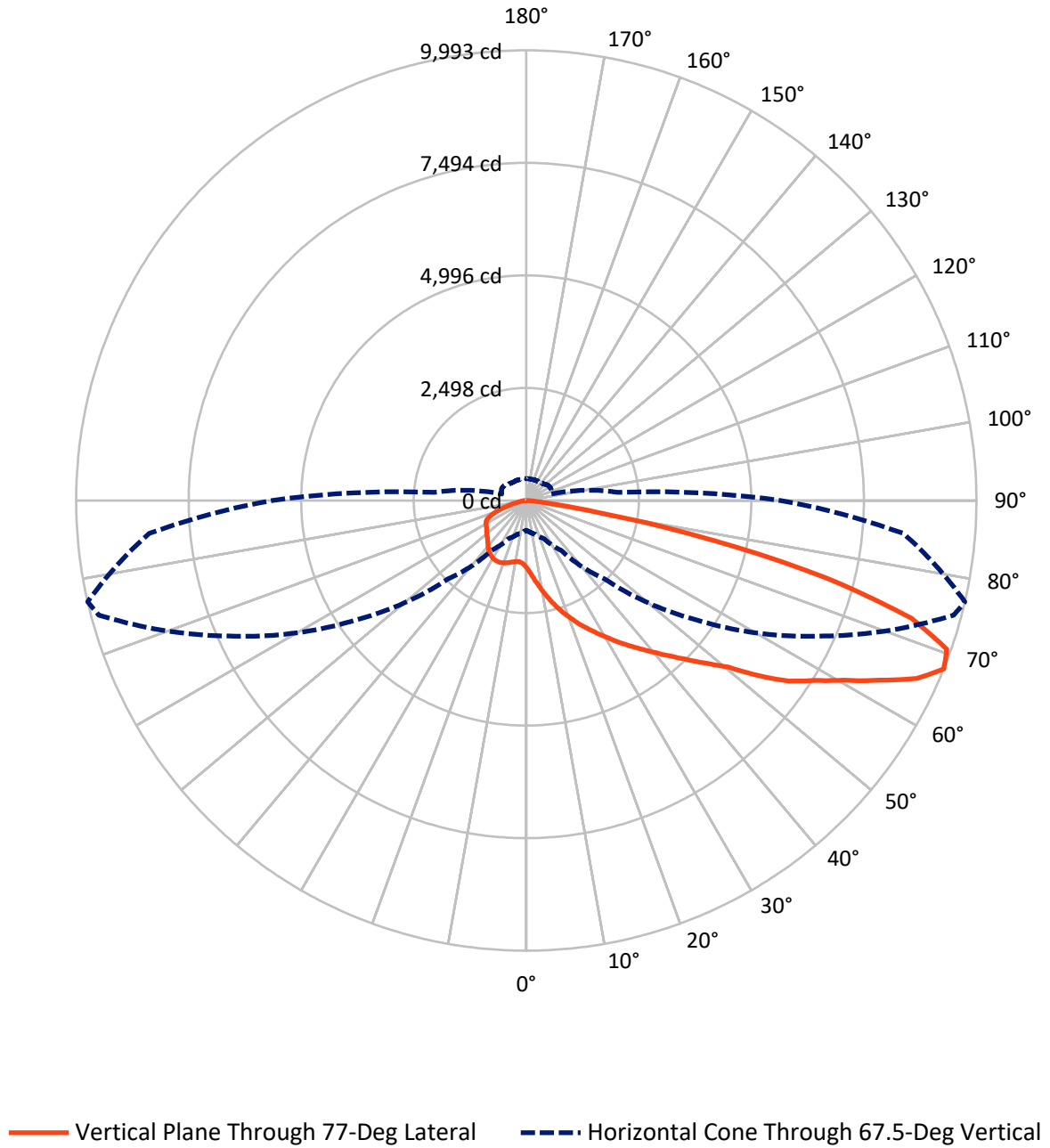
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2409.5 | 0.0 | 2409.5 |
| | % Fixture | 18.9 | 0.0 | 18.9 |
| Street Side | Lumens | 10328.5 | 0.0 | 10328.5 |
| | % Fixture | 81.1 | 0.0 | 81.1 |
| Total | Lumens | 12738.0 | 0.0 | 12738.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 160.2 | 1.3 |
| 10°-20° | 575.5 | 4.5 |
| 20°-30° | 1086.6 | 8.5 |
| 30°-40° | 1750.6 | 13.7 |
| 40°-50° | 2394.5 | 18.8 |
| 50°-60° | 2701.0 | 21.2 |
| 60°-70° | 2521.0 | 19.8 |
| 70°-80° | 1381.9 | 10.8 |
| 80°-90° | 166.7 | 1.3 |
| 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° | 12738.0 | 100.0 |
| 0°-180° | 12738.0 | 100.0 |

Coefficient of Utilization



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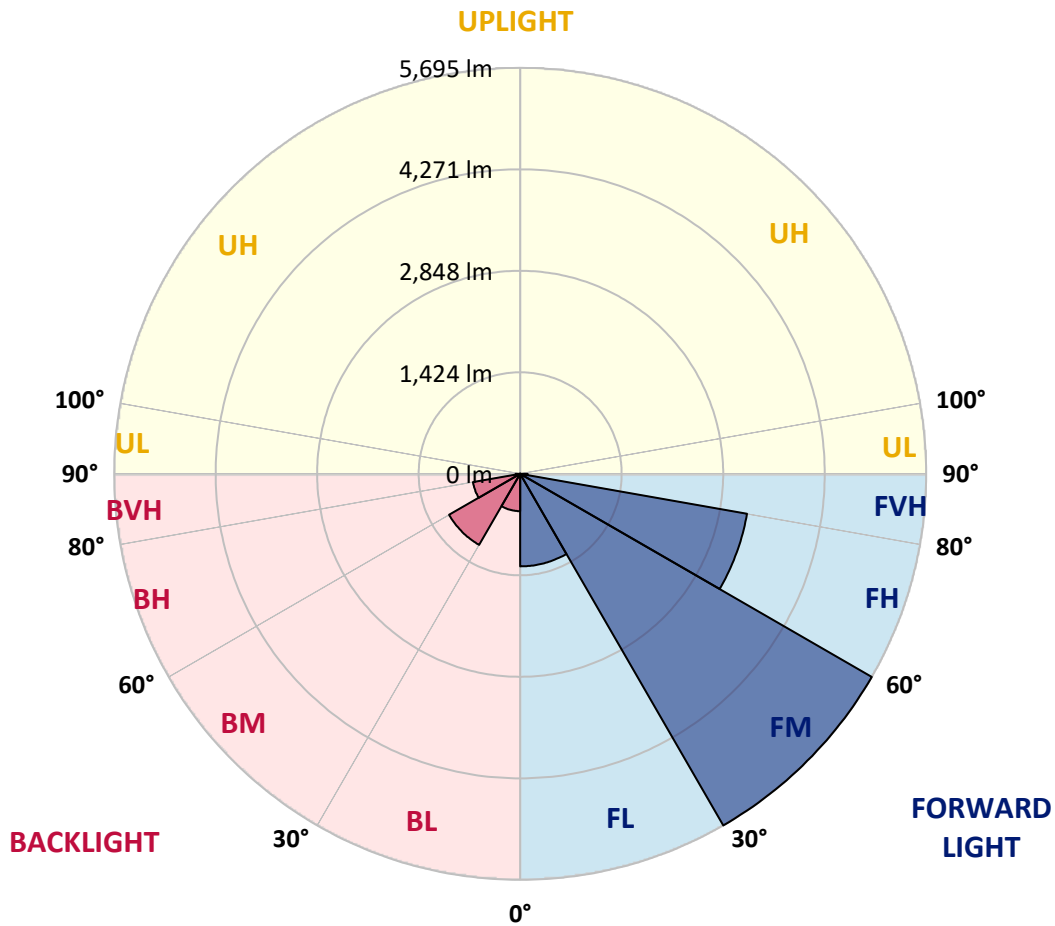
CATALOG NUMBER: GALN-SB4A-950-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1298.5 | 10.2 | | | |
| FM (30°-60°) | 5695.0 | 44.7 | | | |
| FH (60°-80°) | 3230.7 | 25.4 | | | G2/5000 |
| FVH (80°-90°) | 104.2 | 0.8 | | | G2/225 |
| BL (0°-30°) | 523.9 | 4.1 | B2/1000 | | |
| BM (30°-60°) | 1151.0 | 9.0 | B2/2500 | | |
| BH (60°-80°) | 672.2 | 5.3 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 62.4 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 |
| 2.5° | 1871.3 | 1884.5 | 1868.0 | 1868.0 | 1812.8 | 1783.9 | 1728.6 | 1686.6 | 1610.9 | 1597.8 |
| 5° | 2211.9 | 2228.4 | 2205.4 | 2195.5 | 2130.4 | 2070.6 | 1977.8 | 1886.5 | 1751.7 | 1737.8 |
| 7.5° | 2475.6 | 2496.6 | 2476.3 | 2465.7 | 2407.9 | 2340.8 | 2232.3 | 2104.7 | 1914.7 | 1887.8 |
| 10° | 2690.6 | 2693.9 | 2687.3 | 2691.3 | 2645.9 | 2590.7 | 2479.5 | 2330.9 | 2093.6 | 2056.8 |
| 12.5° | 2812.3 | 2827.4 | 2840.5 | 2864.2 | 2856.3 | 2822.1 | 2722.2 | 2544.6 | 2282.9 | 2235.6 |
| 15° | 2869.5 | 2895.8 | 2925.3 | 2979.9 | 3024.0 | 3032.5 | 2956.2 | 2774.1 | 2475.6 | 2418.4 |
| 17.5° | 2889.8 | 2914.8 | 2961.5 | 3040.4 | 3135.1 | 3198.9 | 3164.7 | 2997.0 | 2666.3 | 2600.5 |
| 20° | 2993.1 | 3000.3 | 3028.6 | 3103.5 | 3206.1 | 3312.0 | 3337.6 | 3211.4 | 2855.0 | 2780.7 |
| 22.5° | 3214.0 | 3199.5 | 3207.4 | 3241.6 | 3315.3 | 3417.8 | 3476.4 | 3400.7 | 3049.0 | 2963.5 |
| 25° | 3578.9 | 3536.8 | 3494.8 | 3455.3 | 3492.8 | 3550.7 | 3617.1 | 3590.1 | 3252.1 | 3143.6 |
| 27.5° | 4039.9 | 3988.6 | 3895.9 | 3766.3 | 3721.0 | 3741.3 | 3770.9 | 3765.7 | 3440.2 | 3330.4 |
| 30° | 4493.6 | 4433.7 | 4323.3 | 4135.9 | 4016.2 | 3962.3 | 3939.9 | 3924.8 | 3644.7 | 3527.6 |
| 32.5° | 4855.9 | 4808.5 | 4700.0 | 4490.3 | 4316.7 | 4224.6 | 4150.3 | 4096.4 | 3858.4 | 3741.3 |
| 35° | 5172.8 | 5128.7 | 5004.5 | 4775.6 | 4586.9 | 4488.9 | 4391.6 | 4276.6 | 4080.6 | 3962.3 |
| 37.5° | 5462.1 | 5418.0 | 5247.7 | 5009.7 | 4819.7 | 4752.0 | 4665.2 | 4469.9 | 4303.5 | 4191.7 |
| 40° | 5644.9 | 5635.0 | 5475.9 | 5206.3 | 5009.1 | 4975.5 | 4946.6 | 4694.1 | 4550.8 | 4446.9 |
| 42.5° | 5691.6 | 5713.3 | 5587.0 | 5365.4 | 5177.4 | 5150.4 | 5218.1 | 4947.9 | 4828.2 | 4728.9 |
| 45° | 5579.1 | 5641.6 | 5558.7 | 5408.2 | 5297.1 | 5282.6 | 5458.8 | 5225.4 | 5135.3 | 5044.6 |
| 47.5° | 5294.4 | 5400.3 | 5366.1 | 5345.1 | 5329.3 | 5391.7 | 5670.5 | 5520.0 | 5483.1 | 5404.2 |
| 50° | 4719.7 | 4920.3 | 4980.1 | 5112.9 | 5265.5 | 5476.6 | 5863.2 | 5841.5 | 5889.5 | 5809.9 |
| 52.5° | 3726.2 | 4002.4 | 4349.6 | 4682.3 | 5069.5 | 5448.3 | 6074.9 | 6303.1 | 6505.6 | 6462.2 |
| 55° | 3075.9 | 3200.2 | 3467.1 | 4077.3 | 4689.5 | 5329.3 | 6170.3 | 6675.9 | 7117.1 | 7078.3 |
| 57.5° | 2576.2 | 2687.3 | 2851.7 | 3361.3 | 4114.8 | 5059.0 | 6229.4 | 6903.4 | 7535.9 | 7532.0 |
| 60° | 2040.3 | 2158.0 | 2326.3 | 2687.3 | 3443.5 | 4592.2 | 6216.3 | 7162.5 | 8070.5 | 8103.4 |
| 62.5° | 1435.4 | 1564.9 | 1751.7 | 2088.3 | 2757.7 | 3987.3 | 5948.0 | 7349.9 | 8699.8 | 8789.2 |
| 65° | 943.6 | 1029.0 | 1169.7 | 1460.4 | 2054.8 | 3209.4 | 5435.8 | 7374.2 | 9373.1 | 9524.3 |
| 67.5° | 661.5 | 694.4 | 777.2 | 935.0 | 1354.5 | 2461.1 | 4619.8 | 7122.4 | 9822.2 | 9992.5 |
| 70° | 516.2 | 532.6 | 574.7 | 637.8 | 850.8 | 1655.0 | 3540.1 | 6467.5 | 9726.2 | 9903.7 |
| 72.5° | 445.8 | 461.6 | 477.4 | 485.3 | 570.7 | 1021.8 | 2398.0 | 5407.5 | 8822.1 | 8942.4 |
| 75° | 404.4 | 408.3 | 421.5 | 418.8 | 435.3 | 662.8 | 1384.1 | 3939.9 | 6960.6 | 6919.2 |
| 77.5° | 339.9 | 345.2 | 366.9 | 363.6 | 386.6 | 453.0 | 718.7 | 2542.7 | 4512.6 | 4231.2 |
| 80° | 288.0 | 290.6 | 314.3 | 310.4 | 336.0 | 328.1 | 366.9 | 1296.0 | 1914.1 | 1621.5 |
| 82.5° | 99.9 | 123.6 | 240.0 | 247.2 | 256.4 | 198.6 | 211.7 | 528.7 | 584.5 | 447.8 |
| 85° | 48.7 | 51.9 | 122.3 | 173.6 | 172.9 | 99.9 | 103.2 | 188.7 | 184.1 | 144.7 |
| 87.5° | 7.9 | 9.9 | 14.5 | 67.7 | 53.9 | 26.3 | 35.5 | 36.8 | 38.1 | 32.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

REPORT NUMBER: P949464
 CATALOG NUMBER: GALN-SB4A-950-U-T2R

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1494.6 | 0° | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 | 1494.6 |
| 1547.8 | 2.5° | 1511.0 | 1478.1 | 1409.1 | 1345.3 | 1295.3 | 1247.3 | 1220.4 | 1197.4 | 1184.2 | 1181.6 |
| 1620.2 | 5° | 1551.8 | 1484.0 | 1358.5 | 1252.6 | 1183.6 | 1132.3 | 1105.3 | 1088.2 | 1079.7 | 1074.4 |
| 1717.5 | 7.5° | 1610.3 | 1511.0 | 1332.2 | 1211.8 | 1139.5 | 1102.7 | 1088.9 | 1086.2 | 1085.6 | 1086.2 |
| 1835.2 | 10° | 1691.2 | 1555.1 | 1329.5 | 1202.0 | 1141.5 | 1121.1 | 1120.4 | 1121.1 | 1123.7 | 1124.4 |
| 1963.4 | 12.5° | 1778.6 | 1600.4 | 1340.0 | 1210.5 | 1166.5 | 1155.3 | 1153.3 | 1152.6 | 1154.6 | 1155.9 |
| 2092.9 | 15° | 1874.0 | 1660.3 | 1357.8 | 1228.9 | 1194.1 | 1182.2 | 1180.3 | 1176.3 | 1175.7 | 1175.0 |
| 2229.0 | 17.5° | 1971.9 | 1719.4 | 1377.5 | 1248.6 | 1211.8 | 1195.4 | 1188.2 | 1178.9 | 1171.7 | 1169.7 |
| 2369.7 | 20° | 2071.2 | 1778.0 | 1391.3 | 1258.5 | 1213.1 | 1190.1 | 1175.7 | 1159.9 | 1147.4 | 1140.2 |
| 2511.8 | 22.5° | 2177.1 | 1839.1 | 1399.9 | 1255.9 | 1201.3 | 1169.7 | 1143.4 | 1125.0 | 1106.0 | 1093.5 |
| 2655.1 | 25° | 2280.3 | 1892.4 | 1399.2 | 1242.1 | 1178.3 | 1138.2 | 1104.6 | 1081.0 | 1054.7 | 1041.5 |
| 2803.0 | 27.5° | 2379.6 | 1940.4 | 1382.8 | 1217.7 | 1145.4 | 1100.7 | 1060.6 | 1032.3 | 1006.7 | 994.2 |
| 2952.3 | 30° | 2482.2 | 1980.5 | 1357.1 | 1182.2 | 1106.6 | 1057.3 | 1013.3 | 988.9 | 965.9 | 954.1 |
| 3110.1 | 32.5° | 2584.1 | 2017.3 | 1321.0 | 1138.2 | 1061.9 | 1014.6 | 971.2 | 948.8 | 935.0 | 935.0 |
| 3279.8 | 35° | 2691.9 | 2042.9 | 1273.0 | 1086.9 | 1014.6 | 969.2 | 935.0 | 921.9 | 920.5 | 912.7 |
| 3459.3 | 37.5° | 2805.7 | 2059.4 | 1214.5 | 1034.3 | 967.9 | 925.1 | 914.6 | 898.8 | 885.7 | 868.6 |
| 3656.5 | 40° | 2925.3 | 2075.8 | 1144.1 | 979.7 | 918.6 | 894.9 | 890.3 | 869.3 | 831.8 | 789.7 |
| 3880.1 | 42.5° | 3070.7 | 2087.0 | 1071.1 | 925.1 | 866.6 | 858.7 | 865.3 | 829.1 | 769.3 | 737.7 |
| 4149.7 | 45° | 3239.0 | 2105.4 | 1004.0 | 871.2 | 813.4 | 813.4 | 841.0 | 793.6 | 744.3 | 724.6 |
| 4457.4 | 47.5° | 3457.3 | 2148.1 | 941.6 | 812.0 | 764.0 | 777.2 | 787.1 | 750.9 | 723.3 | 699.0 |
| 4832.2 | 50° | 3772.9 | 2250.7 | 877.1 | 752.2 | 726.6 | 752.9 | 739.1 | 718.0 | 685.8 | 666.1 |
| 5427.9 | 52.5° | 4164.8 | 2311.2 | 819.9 | 698.3 | 694.4 | 720.7 | 700.9 | 681.2 | 656.9 | 630.6 |
| 5879.6 | 55° | 4431.7 | 2322.4 | 771.9 | 658.8 | 672.7 | 670.0 | 662.8 | 645.0 | 631.9 | 597.0 |
| 6325.4 | 57.5° | 4730.3 | 2344.7 | 732.5 | 635.2 | 658.8 | 629.9 | 627.3 | 612.2 | 595.1 | 571.4 |
| 6869.2 | 60° | 5087.3 | 2379.6 | 698.3 | 626.0 | 647.0 | 603.6 | 590.5 | 584.5 | 567.4 | 555.6 |
| 7523.4 | 62.5° | 5476.6 | 2411.2 | 663.4 | 627.3 | 633.2 | 578.0 | 558.2 | 556.3 | 545.7 | 541.8 |
| 8137.6 | 65° | 5742.2 | 2325.0 | 620.0 | 626.0 | 611.5 | 551.7 | 526.7 | 526.0 | 517.5 | 516.2 |
| 8403.9 | 67.5° | 5649.5 | 2052.1 | 561.5 | 607.6 | 589.1 | 525.4 | 497.7 | 495.1 | 483.9 | 484.6 |
| 8125.7 | 70° | 5185.3 | 1662.9 | 480.7 | 562.2 | 561.5 | 501.7 | 467.5 | 459.0 | 443.8 | 446.5 |
| 7065.1 | 72.5° | 4314.7 | 1232.2 | 372.2 | 486.6 | 517.5 | 480.0 | 432.7 | 418.8 | 399.8 | 402.4 |
| 5215.5 | 75° | 3116.0 | 837.7 | 270.9 | 370.2 | 450.4 | 454.4 | 398.5 | 374.8 | 351.8 | 355.7 |
| 2903.0 | 77.5° | 1594.5 | 474.7 | 199.2 | 255.1 | 353.8 | 412.9 | 367.6 | 336.0 | 330.7 | 367.6 |
| 837.0 | 80° | 520.1 | 238.0 | 138.1 | 178.8 | 232.1 | 338.0 | 322.2 | 286.0 | 284.7 | 293.3 |
| 175.6 | 82.5° | 155.2 | 100.6 | 88.8 | 117.7 | 128.2 | 259.1 | 278.1 | 216.3 | 186.1 | 195.9 |
| 58.5 | 85° | 53.3 | 48.7 | 50.6 | 58.5 | 61.2 | 151.9 | 194.6 | 143.3 | 135.5 | 149.3 |
| 13.2 | 87.5° | 12.5 | 17.1 | 14.5 | 13.2 | 13.2 | 36.8 | 75.6 | 59.8 | 82.8 | 55.2 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O

| <u>180°</u> |
|-------------|
| 1494.6 |
| 1181.6 |
| 1073.7 |
| 1088.2 |
| 1125.0 |
| 1156.6 |
| 1174.3 |
| 1171.7 |
| 1142.8 |
| 1094.1 |
| 1041.5 |
| 993.5 |
| 953.4 |
| 935.7 |
| 910.7 |
| 866.0 |
| 783.8 |
| 738.4 |
| 727.9 |
| 698.3 |
| 664.1 |
| 625.3 |
| 597.7 |
| 563.5 |
| 558.9 |
| 541.8 |
| 515.5 |
| 484.6 |
| 449.1 |
| 401.8 |
| 357.0 |
| 362.3 |
| 251.8 |
| 202.5 |
| 147.3 |
| 53.3 |
| 0.0 |

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