

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: P454573

Luminaire Tested: **GALN-SA5D-722-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-722-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2200K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28758 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

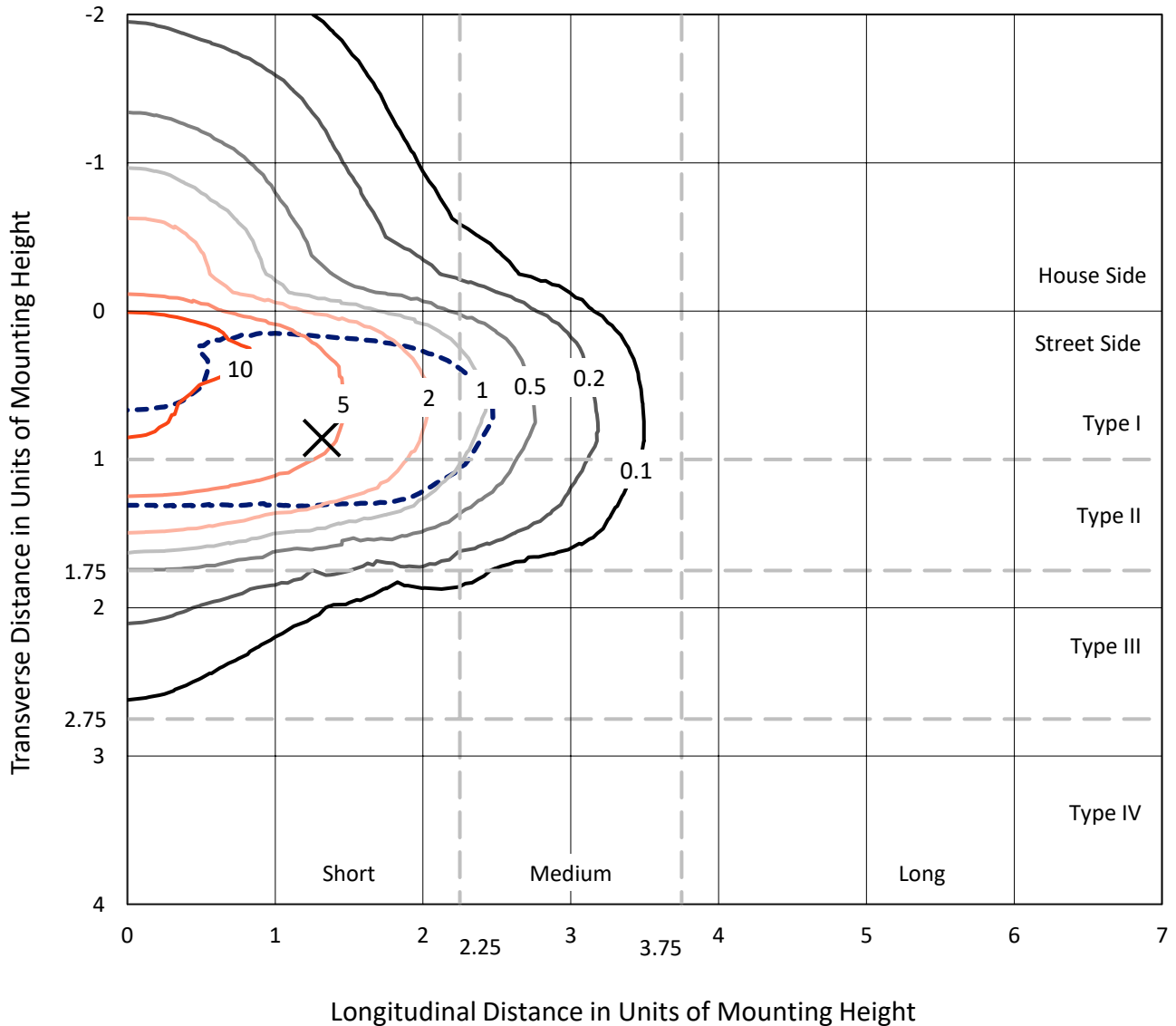
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P454573
 CATALOG NUMBER: GALN-SA5D-722-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

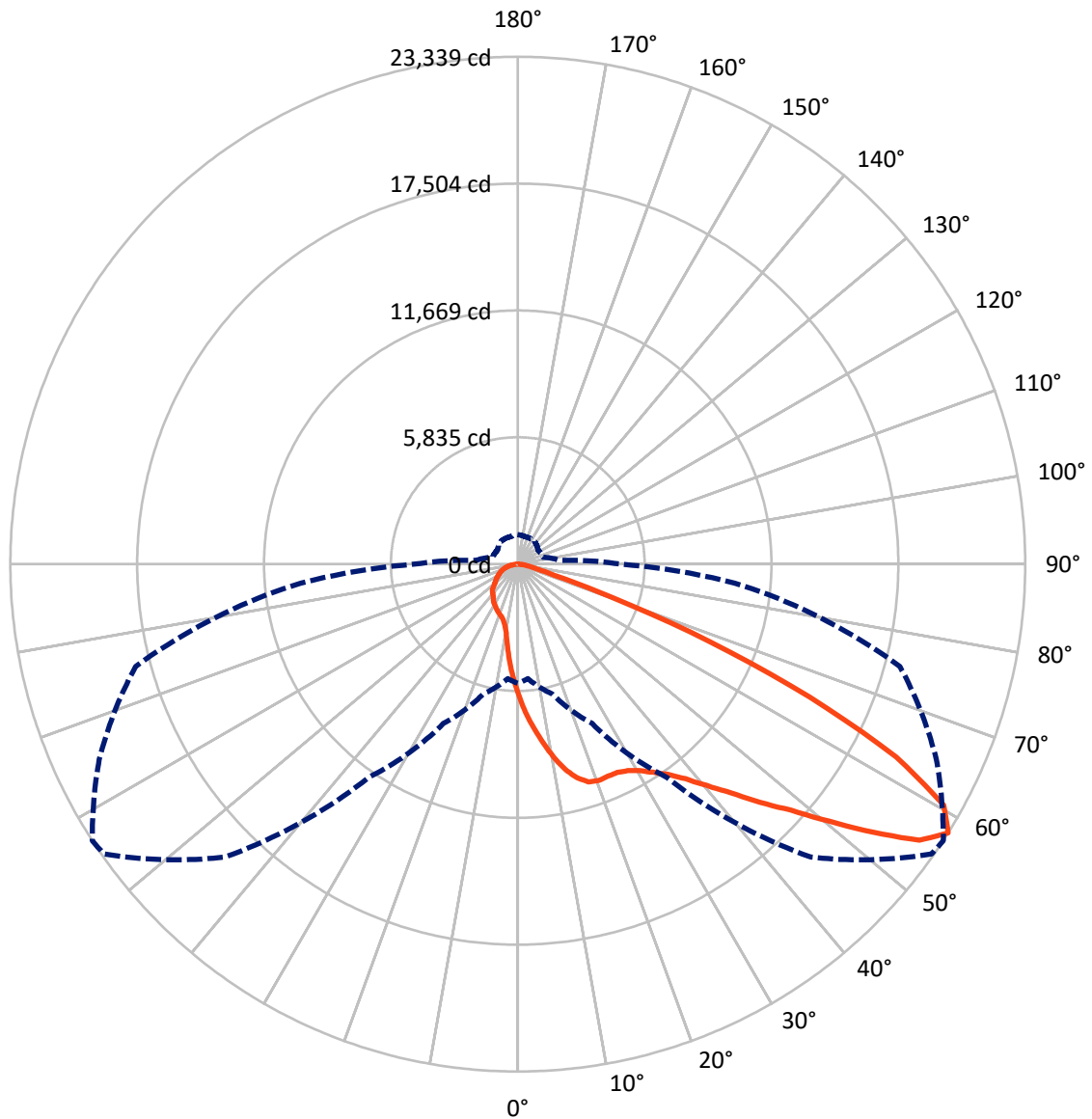
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.7 fc
 Type II - Short - N/A

REPORT NUMBER: P454573
CATALOG NUMBER: GALN-SA5D-722-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P454573

CATALOG NUMBER: GALN-SA5D-722-U-AFL

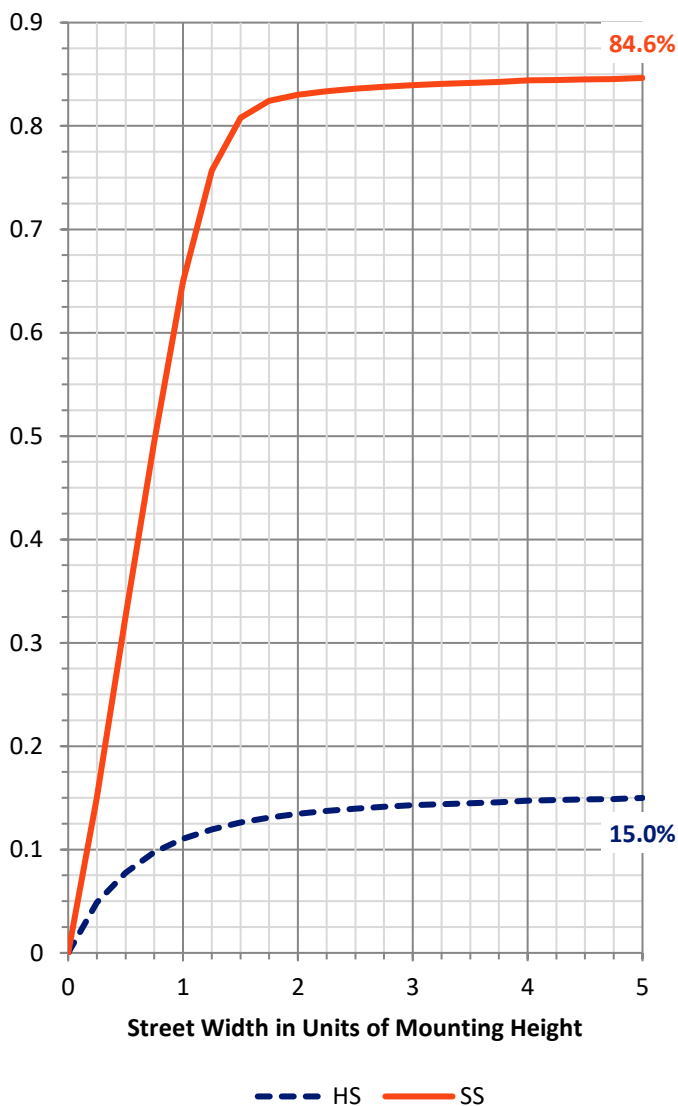
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4373.3 | 0.0 | 4373.3 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 24384.7 | 0.0 | 24384.7 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 28758.0 | 0.0 | 28758.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 580.7 | 2.0 |
| 10°-20° | 1711.3 | 6.0 |
| 20°-30° | 2841.6 | 9.9 |
| 30°-40° | 4280.2 | 14.9 |
| 40°-50° | 6426.4 | 22.3 |
| 50°-60° | 7203.2 | 25.0 |
| 60°-70° | 4215.7 | 14.7 |
| 70°-80° | 1247.0 | 4.3 |
| 80°-90° | 252.0 | 0.9 |
| 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° | 28758.0 | 100.0 |
| 0°-180° | 28758.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P454573

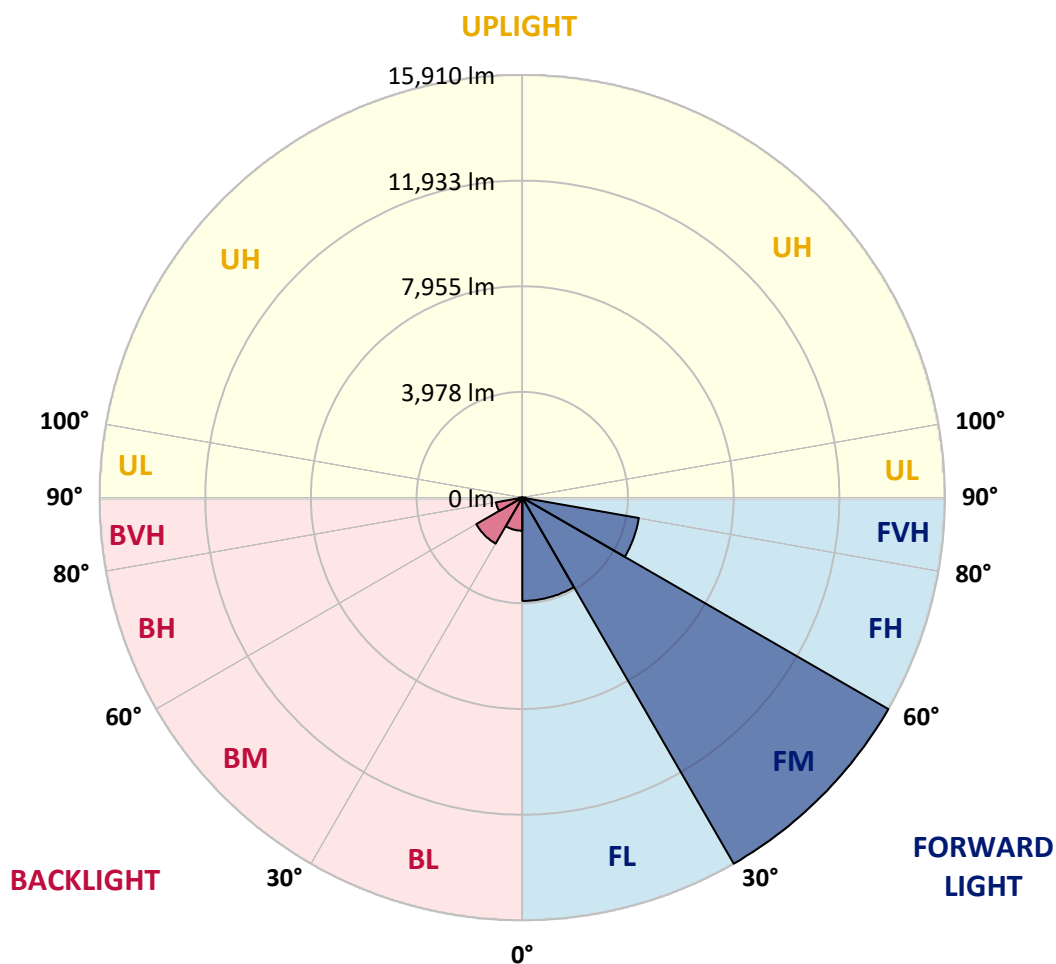
CATALOG NUMBER: GALN-SA5D-722-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 3887.4 | 13.5 | | | |
| FM | (30°-60°) | 15910.2 | 55.3 | | | |
| FH | (60°-80°) | 4456.3 | 15.5 | | | G2/5000 |
| FVH | (80°-90°) | 130.8 | 0.5 | | | G2/225 |
| BL | (0°-30°) | 1246.1 | 4.3 | B3/2500 | | |
| BM | (30°-60°) | 1999.6 | 7.0 | B2/2500 | | |
| BH | (60°-80°) | 1006.3 | 3.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 121.3 | 0.4 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P454573

CATALOG NUMBER: GALN-SA5D-722-U-AFL

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 |
| 2.5° | 7507.3 | 7425.4 | 7360.9 | 7304.2 | 7230.2 | 7030.3 | 6830.4 | 6827.2 | 6668.3 | 6422.7 | 6170.8 |
| 5° | 8730.4 | 8620.2 | 8634.4 | 8458.1 | 8281.8 | 7992.1 | 7568.7 | 7546.6 | 7208.2 | 6748.5 | 6281.0 |
| 7.5° | 9527.0 | 9528.5 | 9484.5 | 9383.7 | 9193.2 | 8864.2 | 8384.1 | 8275.5 | 7804.8 | 7107.5 | 6406.9 |
| 10° | 9486.0 | 9528.5 | 9602.5 | 9689.1 | 9747.4 | 9585.2 | 9147.6 | 9015.4 | 8403.0 | 7541.9 | 6547.0 |
| 12.5° | 8941.4 | 9007.5 | 9113.0 | 9330.2 | 9681.2 | 9948.9 | 9799.3 | 9692.3 | 9095.6 | 7974.8 | 6701.3 |
| 15° | 8601.4 | 8640.7 | 8699.0 | 8845.4 | 9223.2 | 9863.9 | 10251.1 | 10194.4 | 9748.9 | 8464.4 | 6874.5 |
| 17.5° | 8497.5 | 8536.8 | 8555.7 | 8645.4 | 8914.6 | 9571.1 | 10429.0 | 10529.7 | 10328.2 | 8914.6 | 7049.2 |
| 20° | 8601.4 | 8620.2 | 8620.2 | 8673.8 | 8884.7 | 9399.5 | 10421.1 | 10624.2 | 10803.6 | 9454.6 | 7212.9 |
| 22.5° | 8873.7 | 8881.6 | 8870.5 | 8889.4 | 9046.8 | 9446.7 | 10347.1 | 10599.0 | 11187.7 | 9912.7 | 7340.4 |
| 25° | 9316.0 | 9328.6 | 9256.2 | 9212.1 | 9327.1 | 9654.5 | 10388.1 | 10619.5 | 11488.4 | 10350.3 | 7425.4 |
| 27.5° | 9818.2 | 9833.9 | 9745.8 | 9643.5 | 9697.0 | 9911.1 | 10548.6 | 10756.4 | 11713.5 | 10781.6 | 7479.0 |
| 30° | 10433.7 | 10440.0 | 10292.0 | 10169.2 | 10134.6 | 10293.6 | 10822.5 | 11016.2 | 11993.7 | 11290.1 | 7559.2 |
| 32.5° | 11063.4 | 11110.6 | 10920.1 | 10747.0 | 10688.7 | 10737.5 | 11227.1 | 11414.4 | 12327.5 | 11836.3 | 7688.3 |
| 35° | 11919.7 | 11927.6 | 11699.4 | 11488.4 | 11296.4 | 11359.3 | 11745.0 | 11880.4 | 12788.7 | 12467.6 | 7870.9 |
| 37.5° | 12988.6 | 13061.0 | 12746.2 | 12352.6 | 12116.5 | 12025.2 | 12371.5 | 12519.5 | 13435.7 | 13242.1 | 8146.4 |
| 40° | 14175.5 | 14202.3 | 13933.1 | 13687.5 | 13256.2 | 12991.8 | 13231.0 | 13391.6 | 14233.8 | 14166.1 | 8466.0 |
| 42.5° | 14921.7 | 14980.0 | 15000.4 | 14975.2 | 14651.0 | 14207.0 | 14298.3 | 14373.9 | 15178.3 | 15033.5 | 8793.4 |
| 45° | 15173.6 | 15260.2 | 15553.0 | 16173.2 | 16207.8 | 15770.2 | 15557.7 | 15630.1 | 16207.8 | 15908.7 | 9106.7 |
| 47.5° | 14756.4 | 14904.4 | 15444.3 | 16716.3 | 17668.7 | 17701.7 | 17061.0 | 16902.0 | 17146.0 | 16634.4 | 9333.4 |
| 50° | 13678.1 | 13709.6 | 14536.0 | 16377.8 | 18353.4 | 19548.2 | 18885.5 | 18589.6 | 18037.0 | 17171.2 | 9489.2 |
| 52.5° | 12009.5 | 12045.7 | 12738.3 | 14805.2 | 17931.6 | 20839.1 | 21020.1 | 20491.2 | 18942.2 | 17588.4 | 9591.5 |
| 55° | 8914.6 | 9124.0 | 9885.9 | 11883.5 | 15932.3 | 20717.9 | 22717.1 | 22416.4 | 20036.2 | 17919.0 | 9752.1 |
| 57.5° | 5481.3 | 5289.3 | 6192.8 | 8085.0 | 11982.7 | 19052.4 | 23241.3 | 23338.9 | 21240.5 | 18196.0 | 10021.3 |
| 60° | 2521.8 | 2559.6 | 2932.7 | 4170.0 | 7304.2 | 14904.4 | 21890.6 | 22507.7 | 21906.4 | 18186.6 | 10089.0 |
| 62.5° | 1737.9 | 1703.3 | 1608.8 | 1830.8 | 3331.0 | 9426.2 | 18490.4 | 19535.7 | 20571.5 | 17621.4 | 9819.8 |
| 65° | 1553.7 | 1519.1 | 1336.5 | 1275.1 | 1530.1 | 4108.6 | 13442.0 | 14761.1 | 17320.8 | 16195.2 | 9149.2 |
| 67.5° | 1451.4 | 1404.2 | 1215.3 | 1095.6 | 1092.5 | 1635.6 | 7926.0 | 9514.4 | 12846.9 | 13692.3 | 7927.6 |
| 70° | 1344.4 | 1306.6 | 1119.2 | 987.0 | 930.3 | 1027.9 | 3483.7 | 4560.4 | 8341.6 | 9867.0 | 6175.5 |
| 72.5° | 1237.3 | 1193.2 | 1024.8 | 883.1 | 809.1 | 769.8 | 1334.9 | 1736.3 | 4713.1 | 5915.8 | 3785.9 |
| 75° | 1081.5 | 1059.4 | 916.2 | 799.7 | 719.4 | 621.8 | 846.9 | 966.6 | 2254.2 | 2717.0 | 1900.0 |
| 77.5° | 946.1 | 922.5 | 813.9 | 698.9 | 640.7 | 505.3 | 601.3 | 656.4 | 950.8 | 1101.9 | 857.9 |
| 80° | 692.6 | 716.3 | 686.3 | 617.1 | 571.4 | 396.7 | 404.6 | 450.2 | 565.1 | 625.0 | 524.2 |
| 82.5° | 439.2 | 483.3 | 528.9 | 475.4 | 432.9 | 313.3 | 280.2 | 297.5 | 385.7 | 409.3 | 233.0 |
| 85° | 184.2 | 187.3 | 307.0 | 289.7 | 247.1 | 185.8 | 168.4 | 177.9 | 206.2 | 215.7 | 108.6 |
| 87.5° | 70.8 | 69.3 | 108.6 | 100.7 | 77.1 | 53.5 | 53.5 | 59.8 | 81.9 | 75.6 | 34.6 |
| 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: P454573

CATALOG NUMBER: GALN-SA5D-722-U-AFL

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 | 6041.7 |
| 2.5° | 6062.2 | 5950.4 | 5728.5 | 5453.0 | 5251.5 | 5024.8 | 4824.9 | 4681.6 | 4628.1 | 4602.9 | 4555.7 |
| 5° | 6057.5 | 5837.1 | 5377.4 | 4895.7 | 4508.5 | 4111.8 | 3776.5 | 3559.2 | 3540.3 | 3395.5 | 3381.4 |
| 7.5° | 6059.0 | 5722.2 | 4990.2 | 4281.8 | 3691.5 | 3285.3 | 3008.3 | 2935.9 | 2849.3 | 2827.2 | 2838.3 |
| 10° | 6063.8 | 5575.8 | 4574.6 | 3674.2 | 3102.7 | 2836.7 | 2732.8 | 2704.5 | 2707.6 | 2717.0 | 2718.6 |
| 12.5° | 6070.1 | 5434.1 | 4143.3 | 3212.9 | 2772.1 | 2661.9 | 2650.9 | 2676.1 | 2702.9 | 2723.3 | 2728.1 |
| 15° | 6077.9 | 5271.9 | 3723.0 | 2841.4 | 2606.9 | 2597.4 | 2633.6 | 2676.1 | 2713.9 | 2743.8 | 2748.5 |
| 17.5° | 6068.5 | 5083.0 | 3370.3 | 2613.1 | 2515.5 | 2561.2 | 2621.0 | 2674.5 | 2709.2 | 2737.5 | 2740.7 |
| 20° | 6046.4 | 4872.1 | 3030.3 | 2452.6 | 2458.9 | 2532.9 | 2597.4 | 2647.8 | 2685.6 | 2699.7 | 2710.7 |
| 22.5° | 5961.4 | 4620.2 | 2734.4 | 2328.2 | 2391.2 | 2493.5 | 2570.6 | 2600.6 | 2558.1 | 2528.1 | 2536.0 |
| 25° | 5816.6 | 4292.8 | 2458.9 | 2227.5 | 2329.8 | 2438.4 | 2517.1 | 2444.7 | 2410.1 | 2397.5 | 2403.8 |
| 27.5° | 5635.6 | 3933.9 | 2251.1 | 2122.0 | 2251.1 | 2377.0 | 2355.0 | 2342.4 | 2326.6 | 2306.2 | 2310.9 |
| 30° | 5440.4 | 3582.8 | 2074.8 | 2040.1 | 2166.1 | 2238.5 | 2247.9 | 2268.4 | 2251.1 | 2219.6 | 2232.2 |
| 32.5° | 5259.4 | 3252.3 | 1941.0 | 1970.9 | 2106.3 | 2095.2 | 2166.1 | 2189.7 | 2109.4 | 2003.9 | 2008.7 |
| 35° | 5105.1 | 2945.3 | 1840.2 | 1903.2 | 2003.9 | 2008.7 | 2079.5 | 1997.6 | 1911.1 | 1860.7 | 1863.8 |
| 37.5° | 4988.6 | 2706.0 | 1774.1 | 1844.9 | 1873.3 | 1933.1 | 1895.3 | 1852.8 | 1841.8 | 1807.2 | 1808.7 |
| 40° | 4919.3 | 2496.7 | 1731.6 | 1799.3 | 1794.6 | 1835.5 | 1714.3 | 1756.8 | 1772.5 | 1761.5 | 1763.1 |
| 42.5° | 4850.1 | 2348.7 | 1687.5 | 1736.3 | 1734.8 | 1654.5 | 1627.7 | 1663.9 | 1704.8 | 1709.6 | 1706.4 |
| 45° | 4795.0 | 2233.8 | 1641.9 | 1640.3 | 1671.8 | 1545.9 | 1538.0 | 1560.0 | 1618.3 | 1646.6 | 1645.0 |
| 47.5° | 4733.6 | 2137.7 | 1572.6 | 1528.5 | 1538.0 | 1478.2 | 1465.6 | 1475.0 | 1545.9 | 1591.5 | 1604.1 |
| 50° | 4656.4 | 2041.7 | 1486.0 | 1426.2 | 1386.9 | 1415.2 | 1418.3 | 1419.9 | 1490.8 | 1542.7 | 1553.7 |
| 52.5° | 4595.0 | 1969.3 | 1386.9 | 1342.8 | 1295.6 | 1358.5 | 1382.1 | 1385.3 | 1427.8 | 1470.3 | 1478.2 |
| 55° | 4631.3 | 1928.4 | 1289.3 | 1257.8 | 1215.3 | 1300.3 | 1345.9 | 1352.2 | 1361.7 | 1393.2 | 1397.9 |
| 57.5° | 4739.9 | 1937.8 | 1210.5 | 1169.6 | 1138.1 | 1231.0 | 1308.1 | 1312.9 | 1306.6 | 1344.4 | 1350.7 |
| 60° | 4772.9 | 1933.1 | 1152.3 | 1072.0 | 1053.1 | 1157.0 | 1253.1 | 1262.5 | 1260.9 | 1316.0 | 1327.0 |
| 62.5° | 4634.4 | 1873.3 | 1094.1 | 990.2 | 977.6 | 1081.5 | 1175.9 | 1213.7 | 1221.6 | 1300.3 | 1314.4 |
| 65° | 4308.5 | 1750.5 | 1016.9 | 903.6 | 903.6 | 1001.2 | 1101.9 | 1153.9 | 1175.9 | 1281.4 | 1297.1 |
| 67.5° | 3878.8 | 1605.7 | 938.2 | 829.6 | 826.4 | 924.0 | 1023.2 | 1076.7 | 1111.4 | 1254.6 | 1264.1 |
| 70° | 3219.2 | 1410.5 | 840.6 | 749.3 | 749.3 | 837.5 | 927.2 | 991.7 | 1042.1 | 1204.3 | 1204.3 |
| 72.5° | 2205.4 | 1172.8 | 722.6 | 658.0 | 659.6 | 741.4 | 832.7 | 905.2 | 965.0 | 1103.5 | 1106.7 |
| 75° | 1394.7 | 916.2 | 593.5 | 560.4 | 566.7 | 643.8 | 738.3 | 813.9 | 933.5 | 1090.9 | 1095.6 |
| 77.5° | 741.4 | 643.8 | 472.3 | 464.4 | 472.3 | 543.1 | 648.6 | 752.5 | 936.6 | 946.1 | 930.3 |
| 80° | 480.1 | 456.5 | 373.1 | 357.3 | 360.5 | 437.6 | 577.7 | 714.7 | 752.5 | 761.9 | 727.3 |
| 82.5° | 261.3 | 289.7 | 264.5 | 248.7 | 248.7 | 341.6 | 492.7 | 568.3 | 539.9 | 448.6 | 428.2 |
| 85° | 111.8 | 135.4 | 137.0 | 119.6 | 114.9 | 210.9 | 330.6 | 310.1 | 288.1 | 275.5 | 272.3 |
| 87.5° | 31.5 | 44.1 | 44.1 | 33.1 | 25.2 | 58.2 | 66.1 | 18.9 | 0.0 | 1.6 | 3.1 |
| 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)