

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: P458885

Luminaire Tested: **GALN-SA4A-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458885
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: McGRAW-EDISON
Catalog Number: GALN-SA4A-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17246 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

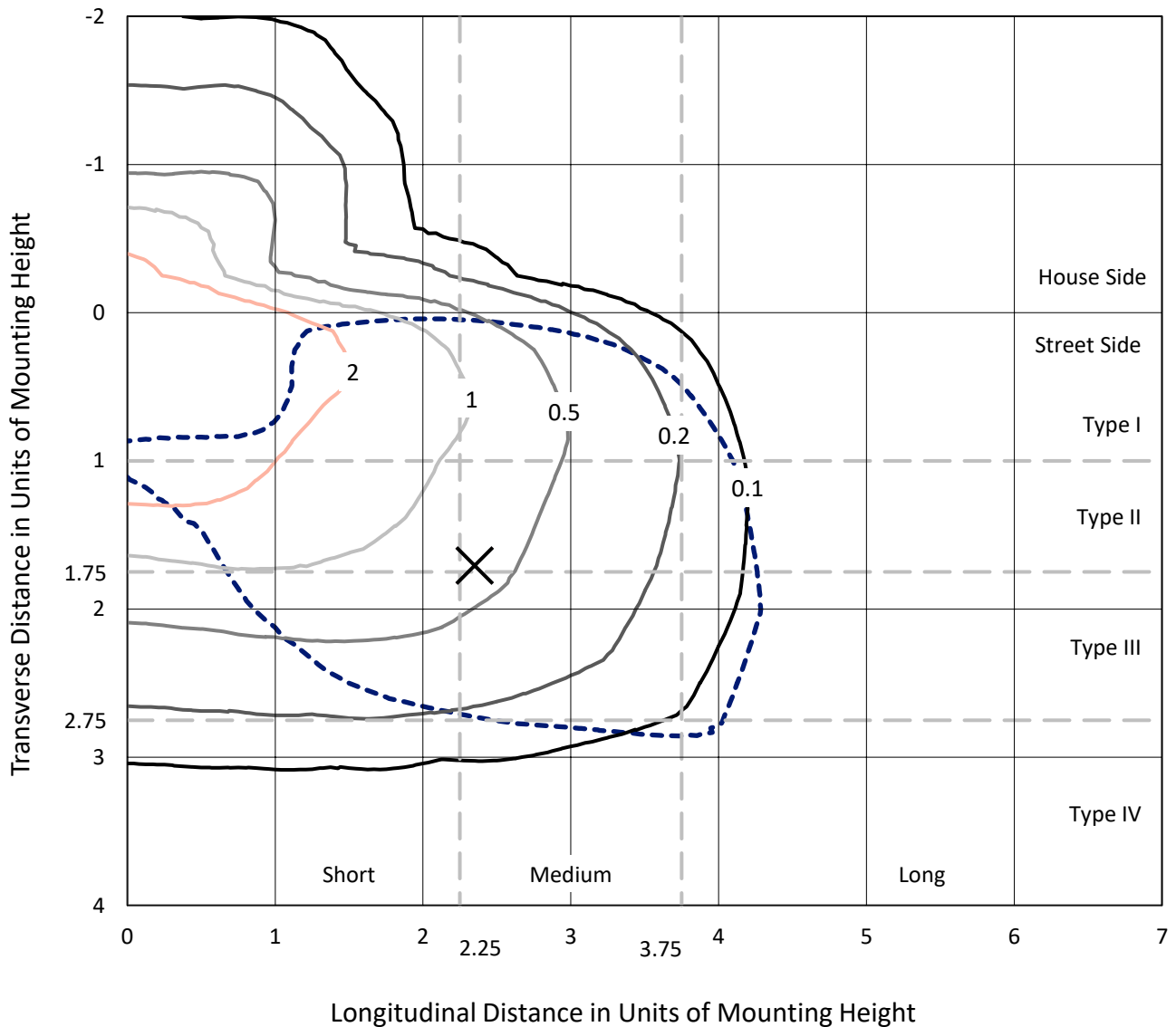
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P458885
 CATALOG NUMBER: GALN-SA4A-735-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

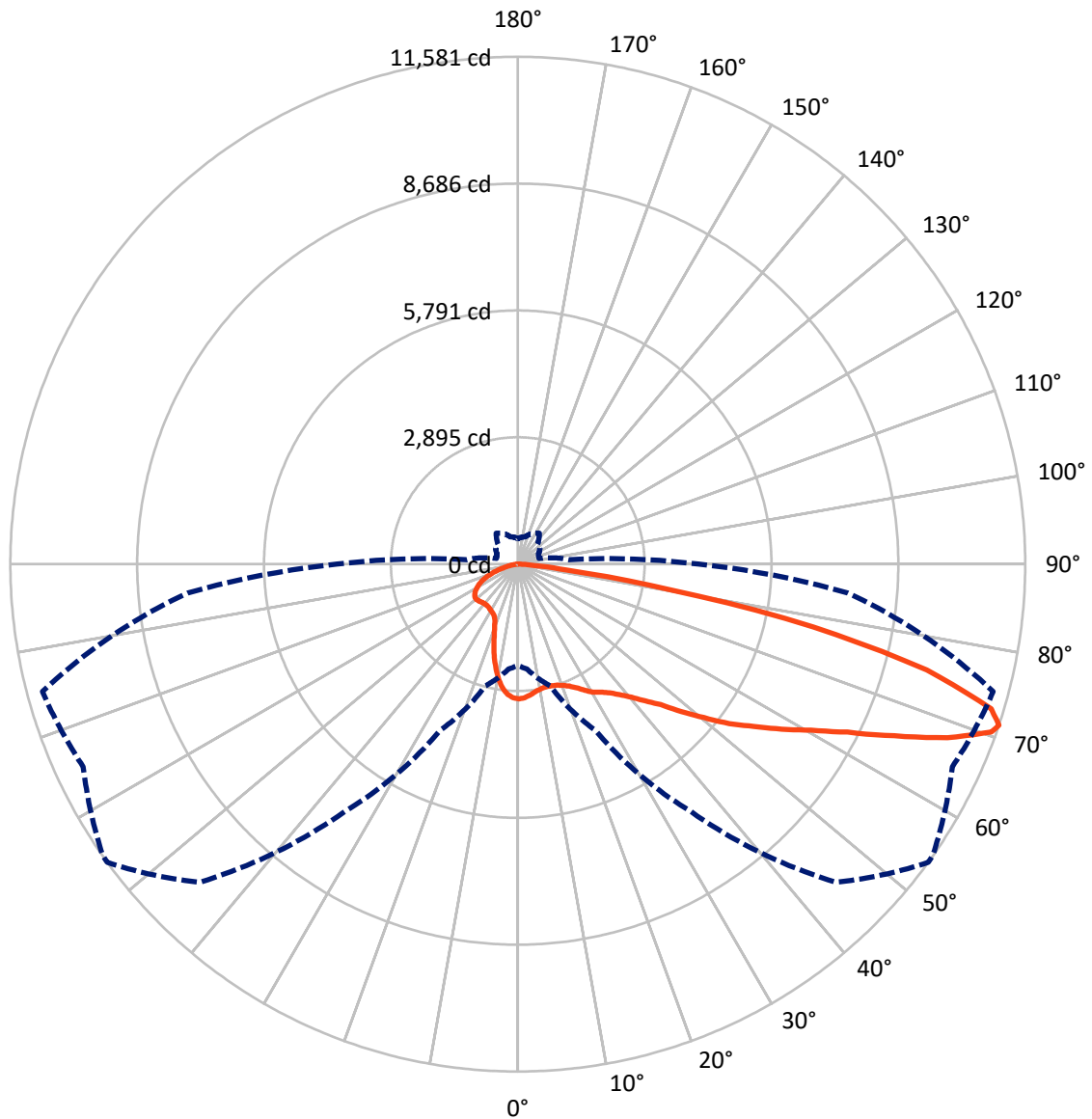
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Medium - N/A

REPORT NUMBER: P458885
CATALOG NUMBER: GALN-SA4A-735-U-T3R

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P458885

CATALOG NUMBER: GALN-SA4A-735-U-T3R

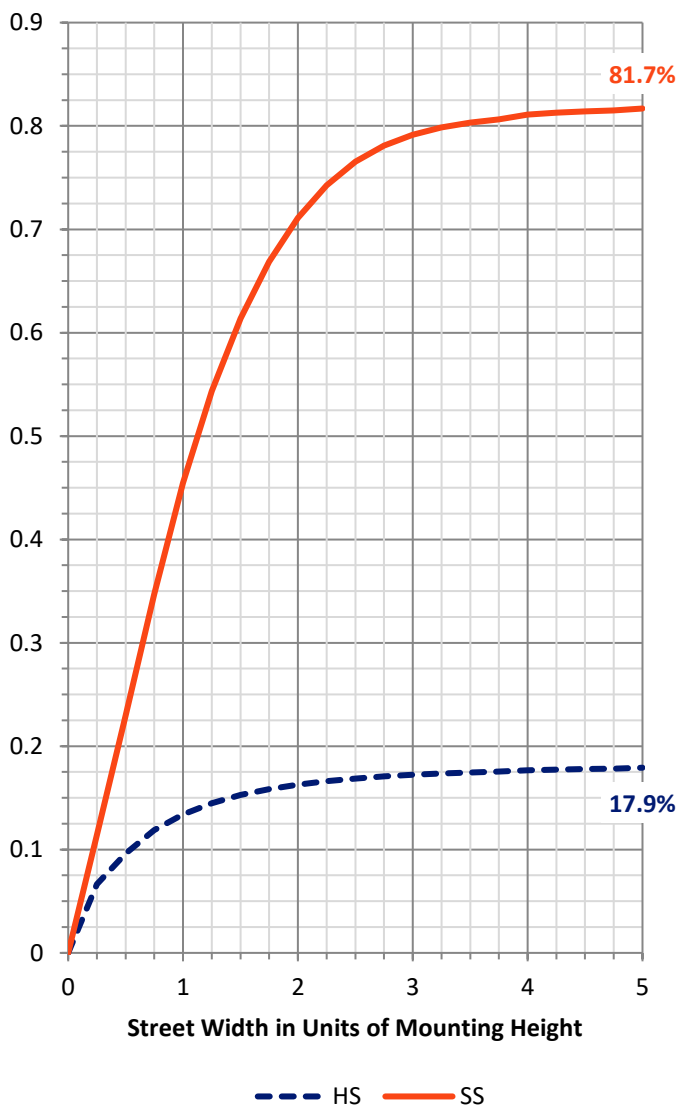
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3113.7 | 0.0 | 3113.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 14132.3 | 0.0 | 14132.3 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 17246.0 | 0.0 | 17246.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 274.2 | 1.6 |
| 10°-20° | 724.0 | 4.2 |
| 20°-30° | 1205.5 | 7.0 |
| 30°-40° | 1782.6 | 10.3 |
| 40°-50° | 2510.9 | 14.6 |
| 50°-60° | 3362.1 | 19.5 |
| 60°-70° | 4237.7 | 24.6 |
| 70°-80° | 2894.4 | 16.8 |
| 80°-90° | 254.5 | 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° | 17246.0 | 100.0 |
| 0°-180° | 17246.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P458885

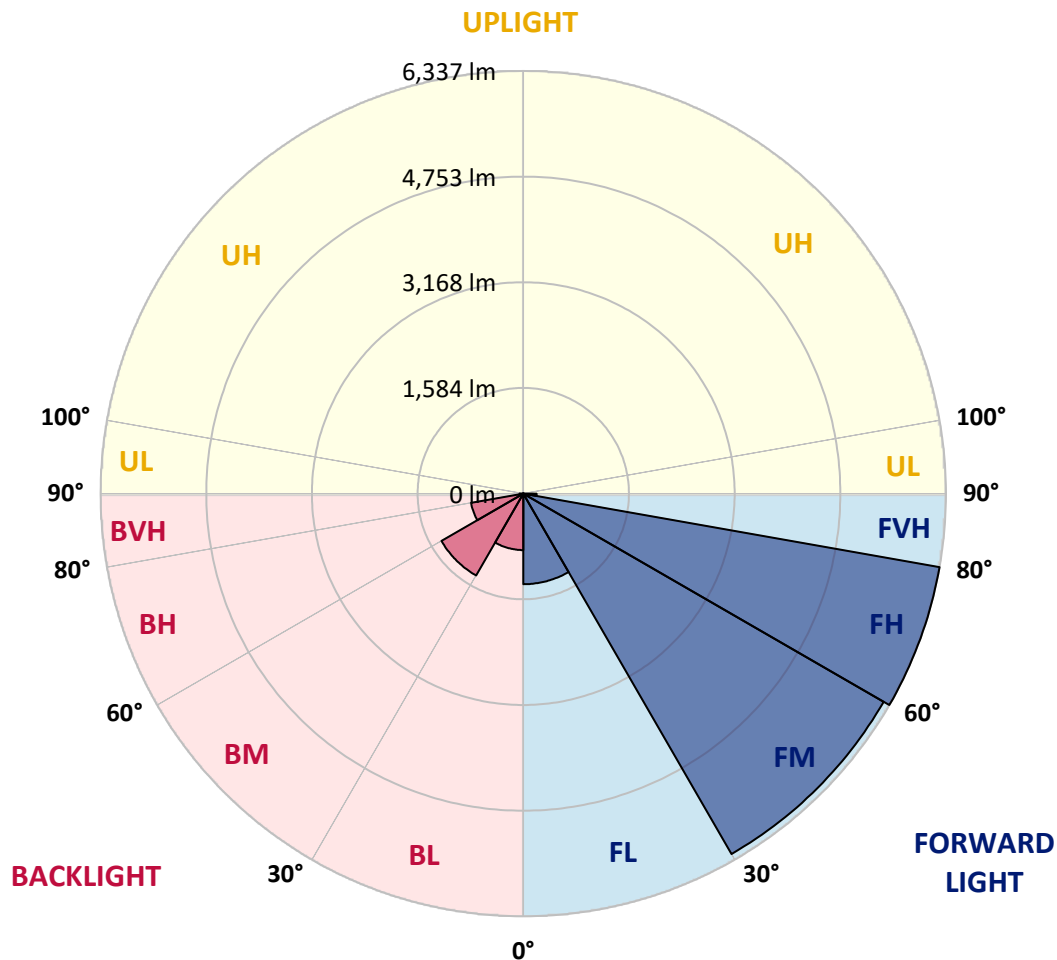
CATALOG NUMBER: GALN-SA4A-735-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1357.5 | 7.9 | | | |
| FM | (30°-60°) | 6239.0 | 36.2 | | | |
| FH | (60°-80°) | 6336.9 | 36.7 | | | G3/7500 |
| FVH | (80°-90°) | 199.0 | 1.2 | | | G2/225 |
| BL | (0°-30°) | 846.2 | 4.9 | B2/1000 | | |
| BM | (30°-60°) | 1416.6 | 8.2 | B2/2500 | | |
| BH | (60°-80°) | 795.2 | 4.6 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 55.6 | 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





REPORT NUMBER: P458885

CATALOG NUMBER: GALN-SA4A-735-U-T3R

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 54° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0° | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 |
| 2.5° | 2972.6 | 2986.6 | 2990.3 | 2999.6 | 3019.2 | 3035.0 | 3050.9 | 3049.0 | 3071.4 | 3080.7 | 3089.1 |
| 5° | 2840.3 | 2844.1 | 2858.0 | 2876.7 | 2911.1 | 2954.9 | 2997.8 | 2998.7 | 3053.7 | 3097.4 | 3118.9 |
| 7.5° | 2743.4 | 2755.6 | 2764.9 | 2784.4 | 2820.8 | 2868.3 | 2936.3 | 2941.9 | 3039.7 | 3126.3 | 3172.0 |
| 10° | 2680.1 | 2694.1 | 2704.3 | 2728.5 | 2764.9 | 2818.0 | 2891.6 | 2901.8 | 3029.4 | 3172.0 | 3252.1 |
| 12.5° | 2622.3 | 2636.3 | 2645.6 | 2677.3 | 2724.8 | 2790.0 | 2872.9 | 2885.0 | 3033.2 | 3225.1 | 3339.6 |
| 15° | 2657.7 | 2668.9 | 2665.2 | 2674.5 | 2706.2 | 2780.7 | 2880.4 | 2892.5 | 3047.1 | 3276.3 | 3426.3 |
| 17.5° | 2815.2 | 2824.5 | 2793.7 | 2758.3 | 2743.4 | 2798.4 | 2903.7 | 2916.7 | 3075.1 | 3329.4 | 3514.8 |
| 20° | 3047.1 | 3072.3 | 3005.2 | 2926.0 | 2854.3 | 2861.8 | 2952.1 | 2966.1 | 3114.2 | 3382.5 | 3605.1 |
| 22.5° | 3349.0 | 3367.6 | 3285.6 | 3155.2 | 3022.9 | 2954.9 | 3024.8 | 3033.2 | 3172.9 | 3451.4 | 3703.9 |
| 25° | 3703.9 | 3715.1 | 3601.4 | 3433.7 | 3242.8 | 3114.2 | 3124.5 | 3139.4 | 3269.8 | 3529.7 | 3791.4 |
| 27.5° | 4048.6 | 4084.0 | 3952.6 | 3747.7 | 3496.1 | 3281.9 | 3261.4 | 3270.7 | 3375.0 | 3573.5 | 3852.0 |
| 30° | 4457.5 | 4454.7 | 4315.9 | 4078.4 | 3756.0 | 3464.5 | 3390.9 | 3389.0 | 3431.9 | 3594.9 | 3895.8 |
| 32.5° | 4783.6 | 4821.8 | 4685.7 | 4426.8 | 4053.2 | 3653.6 | 3480.3 | 3476.6 | 3475.6 | 3632.2 | 3961.0 |
| 35° | 5154.3 | 5159.9 | 5035.1 | 4774.2 | 4374.6 | 3891.1 | 3605.1 | 3586.5 | 3565.1 | 3712.3 | 4049.5 |
| 37.5° | 5486.0 | 5512.0 | 5397.5 | 5104.9 | 4690.4 | 4138.0 | 3776.5 | 3764.4 | 3699.2 | 3851.1 | 4191.1 |
| 40° | 5744.9 | 5764.5 | 5695.6 | 5417.0 | 5001.5 | 4404.4 | 3994.5 | 3972.2 | 3893.0 | 4078.4 | 4380.2 |
| 42.5° | 5829.7 | 5869.8 | 5896.8 | 5759.8 | 5359.3 | 4720.2 | 4262.8 | 4234.9 | 4174.3 | 4423.0 | 4598.2 |
| 45° | 5836.2 | 5899.6 | 6042.1 | 6048.6 | 5718.8 | 5098.4 | 4575.8 | 4556.3 | 4551.6 | 4864.6 | 4904.7 |
| 47.5° | 5786.8 | 5851.1 | 6090.5 | 6220.0 | 6039.3 | 5480.4 | 5027.6 | 4996.9 | 4999.7 | 5410.5 | 5248.4 |
| 50° | 5667.6 | 5744.0 | 6034.6 | 6329.9 | 6289.9 | 5877.2 | 5504.6 | 5494.3 | 5552.1 | 6033.7 | 5605.2 |
| 52.5° | 5443.1 | 5535.3 | 5976.9 | 6398.9 | 6476.2 | 6219.1 | 6046.8 | 6017.9 | 6164.1 | 6710.0 | 5995.5 |
| 55° | 4821.8 | 4960.6 | 5765.4 | 6437.1 | 6653.2 | 6546.1 | 6534.9 | 6587.1 | 6780.8 | 7447.8 | 6425.0 |
| 57.5° | 4497.6 | 4601.9 | 5306.2 | 6443.6 | 6876.8 | 6926.1 | 7105.0 | 7118.0 | 7457.1 | 8231.3 | 6910.3 |
| 60° | 4320.6 | 4412.8 | 5054.6 | 6400.7 | 7188.8 | 7396.6 | 7688.2 | 7734.7 | 8117.6 | 9079.9 | 7413.4 |
| 62.5° | 4165.9 | 4245.1 | 4903.7 | 6252.6 | 7541.0 | 8094.3 | 8443.7 | 8466.0 | 8867.5 | 10017.1 | 7909.9 |
| 65° | 3801.7 | 3892.1 | 4600.0 | 6104.5 | 7844.7 | 8966.3 | 9446.0 | 9419.9 | 9665.9 | 10825.7 | 8221.0 |
| 67.5° | 3310.8 | 3425.3 | 4032.7 | 5593.1 | 7994.6 | 9919.2 | 10575.1 | 10542.5 | 10454.0 | 11355.7 | 8310.4 |
| 70° | 2683.8 | 2745.3 | 3307.0 | 4709.0 | 7395.7 | 10419.5 | 11466.6 | 11432.1 | 10942.1 | 11425.6 | 7887.5 |
| 71° | 2309.3 | 2405.3 | 2879.5 | 4182.7 | 6897.3 | 10266.7 | 11581.2 | 11571.8 | 10943.0 | 11232.7 | 7568.9 |
| 72.5° | 1802.6 | 1861.3 | 2280.5 | 3240.9 | 5862.3 | 9398.5 | 11298.0 | 11333.4 | 10705.5 | 10697.1 | 6912.2 |
| 75° | 1140.2 | 1166.3 | 1430.9 | 1907.8 | 3216.7 | 6656.0 | 9644.4 | 9740.4 | 9505.6 | 8755.7 | 5140.3 |
| 77.5° | 662.3 | 695.9 | 857.0 | 1124.4 | 1389.9 | 3612.6 | 6901.0 | 7005.3 | 6604.8 | 4820.8 | 2104.4 |
| 80° | 385.7 | 422.9 | 564.5 | 653.0 | 638.1 | 1340.5 | 3513.8 | 3691.8 | 2859.9 | 1217.5 | 590.6 |
| 82.5° | 214.3 | 239.4 | 396.8 | 397.8 | 340.0 | 437.8 | 1105.8 | 1157.0 | 816.0 | 490.9 | 241.3 |
| 85° | 155.6 | 176.1 | 256.2 | 232.0 | 163.0 | 188.2 | 384.7 | 403.4 | 329.8 | 206.8 | 78.3 |
| 87.5° | 55.0 | 78.3 | 140.7 | 111.8 | 44.7 | 39.1 | 110.9 | 90.4 | 83.8 | 57.8 | 17.7 |
| 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: P458885
 CATALOG NUMBER: GALN-SA4A-735-U-T3R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 | 3076.9 |
| 2.5° | 3093.7 | 3095.6 | 3086.3 | 3069.5 | 3052.7 | 3031.3 | 3007.1 | 2988.4 | 2980.1 | 2979.1 | 2978.2 |
| 5° | 3127.2 | 3131.9 | 3096.5 | 3044.3 | 2986.6 | 2915.8 | 2855.2 | 2786.3 | 2768.6 | 2740.6 | 2749.0 |
| 7.5° | 3181.3 | 3178.5 | 3108.6 | 2997.8 | 2862.7 | 2712.7 | 2586.0 | 2512.4 | 2436.0 | 2414.6 | 2415.5 |
| 10° | 3258.6 | 3240.9 | 3108.6 | 2902.7 | 2677.3 | 2454.7 | 2277.7 | 2165.9 | 2105.3 | 2055.0 | 2036.4 |
| 12.5° | 3340.6 | 3295.9 | 3078.8 | 2769.5 | 2438.8 | 2165.9 | 1975.8 | 1824.9 | 1785.8 | 1744.8 | 1745.7 |
| 15° | 3418.8 | 3344.3 | 3020.1 | 2582.3 | 2181.7 | 1857.5 | 1673.1 | 1582.7 | 1570.6 | 1575.3 | 1574.3 |
| 17.5° | 3489.6 | 3378.8 | 2930.7 | 2373.6 | 1881.8 | 1593.0 | 1495.2 | 1501.7 | 1534.3 | 1557.6 | 1560.4 |
| 20° | 3561.4 | 3399.3 | 2797.5 | 2094.1 | 1598.6 | 1432.7 | 1436.5 | 1487.7 | 1537.1 | 1568.7 | 1573.4 |
| 22.5° | 3629.4 | 3408.6 | 2641.0 | 1824.0 | 1393.6 | 1364.7 | 1419.7 | 1474.7 | 1523.1 | 1553.8 | 1558.5 |
| 25° | 3674.1 | 3387.2 | 2419.3 | 1541.7 | 1293.0 | 1340.5 | 1398.3 | 1444.8 | 1485.8 | 1517.5 | 1525.0 |
| 27.5° | 3686.2 | 3318.2 | 2144.5 | 1313.5 | 1246.4 | 1317.2 | 1370.3 | 1404.8 | 1436.5 | 1466.3 | 1471.9 |
| 30° | 3679.7 | 3216.7 | 1842.6 | 1179.4 | 1219.4 | 1290.2 | 1331.2 | 1356.4 | 1394.5 | 1417.8 | 1422.5 |
| 32.5° | 3669.4 | 3098.4 | 1527.8 | 1107.6 | 1197.1 | 1265.1 | 1289.3 | 1311.6 | 1310.7 | 1301.4 | 1307.9 |
| 35° | 3673.1 | 2956.8 | 1272.5 | 1064.8 | 1177.5 | 1246.4 | 1266.9 | 1239.0 | 1158.9 | 1155.1 | 1151.4 |
| 37.5° | 3692.7 | 2817.0 | 1087.1 | 1035.0 | 1167.2 | 1243.6 | 1254.8 | 1126.3 | 1055.5 | 1022.9 | 1014.5 |
| 40° | 3743.0 | 2654.0 | 965.1 | 1012.6 | 1166.3 | 1265.1 | 1199.8 | 1069.4 | 933.4 | 870.1 | 865.4 |
| 42.5° | 3810.1 | 2493.8 | 890.6 | 998.6 | 1177.5 | 1297.7 | 1177.5 | 989.3 | 841.2 | 803.9 | 798.3 |
| 45° | 3909.8 | 2310.3 | 849.6 | 992.1 | 1194.3 | 1309.8 | 1170.0 | 930.6 | 803.9 | 774.1 | 774.1 |
| 47.5° | 4022.5 | 2135.1 | 827.2 | 987.5 | 1215.7 | 1301.4 | 1103.9 | 912.0 | 786.2 | 790.0 | 807.7 |
| 50° | 4134.3 | 1983.3 | 810.5 | 977.2 | 1234.3 | 1296.7 | 1076.9 | 911.1 | 790.9 | 838.4 | 870.1 |
| 52.5° | 4263.7 | 1876.2 | 790.0 | 960.4 | 1234.3 | 1266.9 | 1068.5 | 929.7 | 803.9 | 817.9 | 831.9 |
| 55° | 4420.3 | 1842.6 | 763.9 | 924.1 | 1212.0 | 1192.4 | 1063.8 | 956.7 | 813.3 | 780.6 | 786.2 |
| 57.5° | 4627.1 | 1896.7 | 738.7 | 878.5 | 1160.7 | 1115.1 | 1062.0 | 964.2 | 791.8 | 764.8 | 759.2 |
| 60° | 4867.4 | 2003.8 | 731.3 | 831.9 | 1090.9 | 1048.9 | 1050.8 | 942.7 | 762.0 | 734.1 | 738.7 |
| 62.5° | 5036.0 | 2068.1 | 726.6 | 796.5 | 1014.5 | 976.3 | 1023.8 | 916.7 | 749.0 | 724.8 | 729.4 |
| 65° | 5036.0 | 1989.8 | 683.8 | 742.5 | 915.7 | 888.7 | 991.2 | 884.1 | 732.2 | 704.3 | 699.6 |
| 67.5° | 4845.0 | 1761.6 | 618.6 | 661.4 | 806.7 | 789.0 | 945.5 | 844.9 | 707.1 | 685.6 | 674.4 |
| 70° | 4347.6 | 1335.9 | 536.6 | 566.4 | 668.9 | 684.7 | 886.8 | 791.8 | 665.1 | 639.0 | 622.3 |
| 71° | 4128.7 | 1163.5 | 502.1 | 517.9 | 615.8 | 639.0 | 858.9 | 769.5 | 646.5 | 609.2 | 579.4 |
| 72.5° | 3706.7 | 980.0 | 449.9 | 456.5 | 526.3 | 568.3 | 800.2 | 726.6 | 611.1 | 558.0 | 524.5 |
| 75° | 2816.1 | 715.4 | 362.4 | 358.7 | 389.4 | 450.9 | 677.2 | 647.4 | 535.6 | 463.9 | 444.4 |
| 77.5° | 1216.6 | 389.4 | 271.1 | 273.9 | 264.6 | 341.9 | 532.9 | 556.1 | 459.3 | 377.3 | 359.6 |
| 80° | 368.9 | 224.5 | 185.4 | 189.1 | 177.0 | 229.2 | 375.4 | 436.0 | 368.9 | 293.4 | 269.2 |
| 82.5° | 189.1 | 134.1 | 126.7 | 124.8 | 112.7 | 129.5 | 227.3 | 298.1 | 263.6 | 183.5 | 162.1 |
| 85° | 82.0 | 71.7 | 62.4 | 60.6 | 53.1 | 46.6 | 81.0 | 149.0 | 139.7 | 102.5 | 97.8 |
| 87.5° | 20.5 | 18.6 | 12.1 | 11.2 | 6.5 | 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)