

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: P458908

Luminaire Tested: **GALN-SA4B-735-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-735-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21089 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

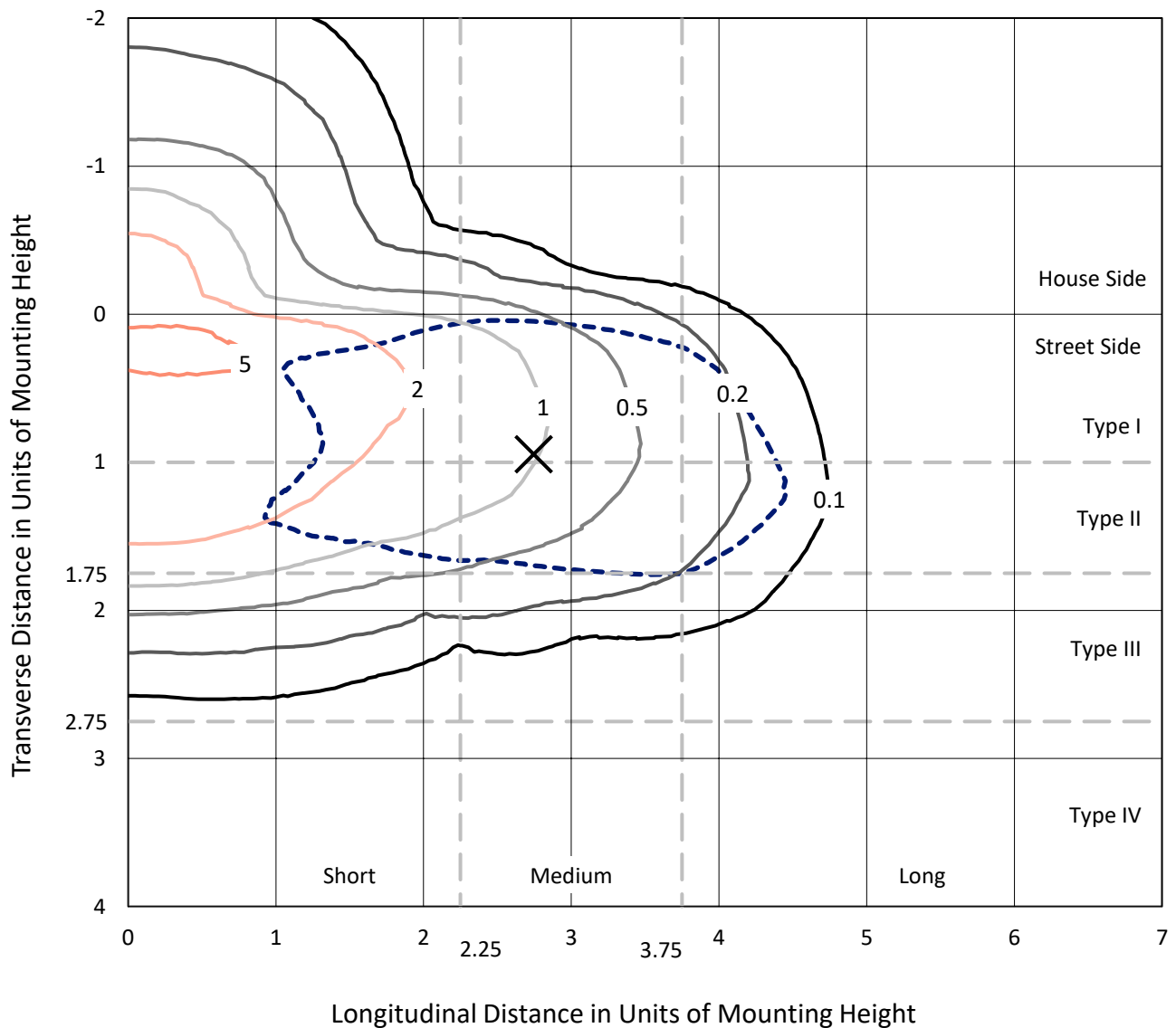
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

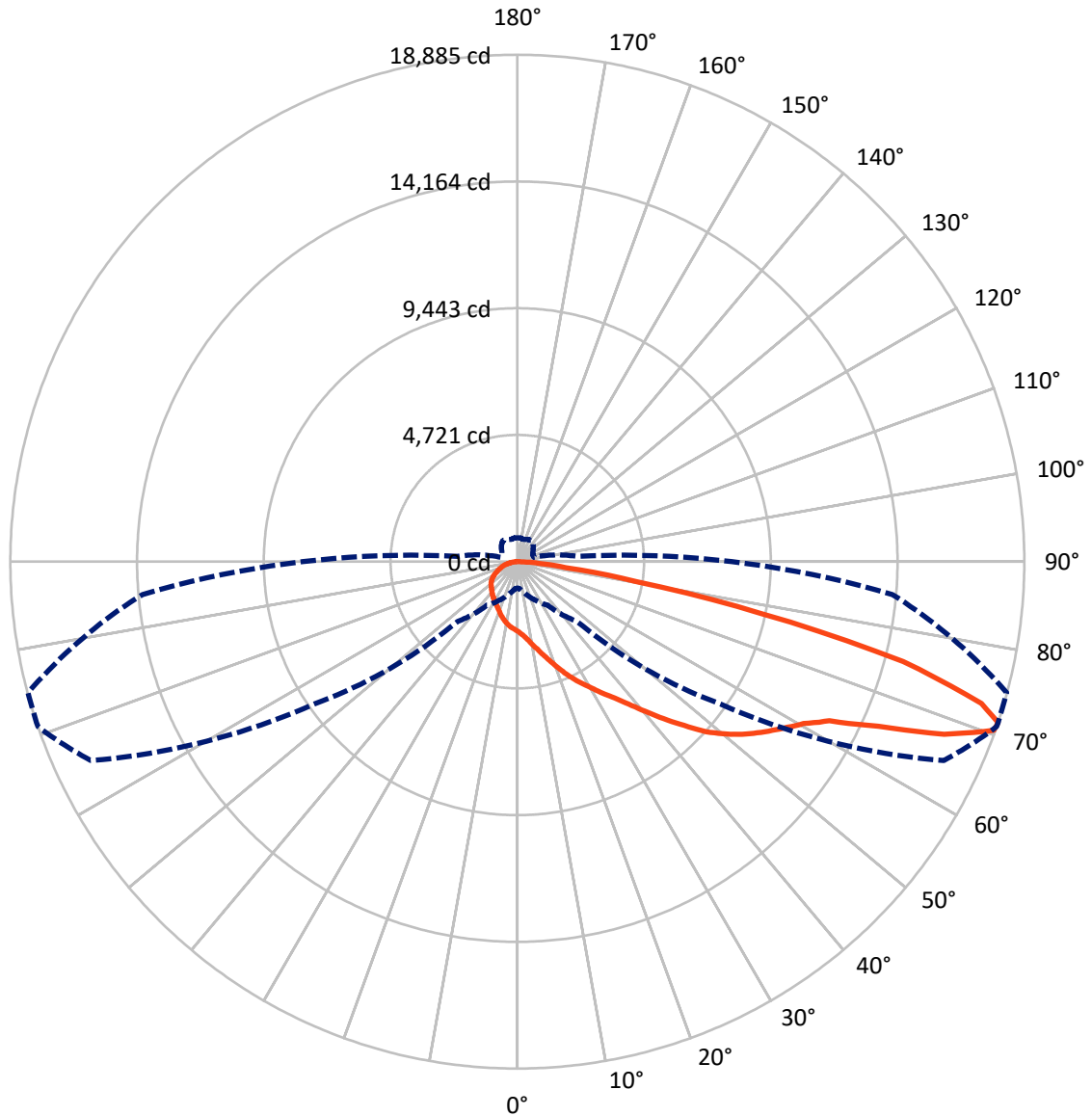
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3792.8 | 0.0 | 3792.8 |
| | % Fixture | 18.0 | 0.0 | 18.0 |
| Street Side | Lumens | 17296.2 | 0.0 | 17296.2 |
| | % Fixture | 82.0 | 0.0 | 82.0 |
| Total | Lumens | 21089.0 | 0.0 | 21089.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 259.9 | 1.2 |
| 10°-20° | 844.3 | 4.0 |
| 20°-30° | 1475.5 | 7.0 |
| 30°-40° | 2194.7 | 10.4 |
| 40°-50° | 3233.5 | 15.3 |
| 50°-60° | 4527.0 | 21.5 |
| 60°-70° | 5063.3 | 24.0 |
| 70°-80° | 3092.9 | 14.7 |
| 80°-90° | 397.9 | 1.9 |
| 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° | 21089.0 | 100.0 |
| 0°-180° | 21089.0 | 100.0 |

Coefficient of Utilization



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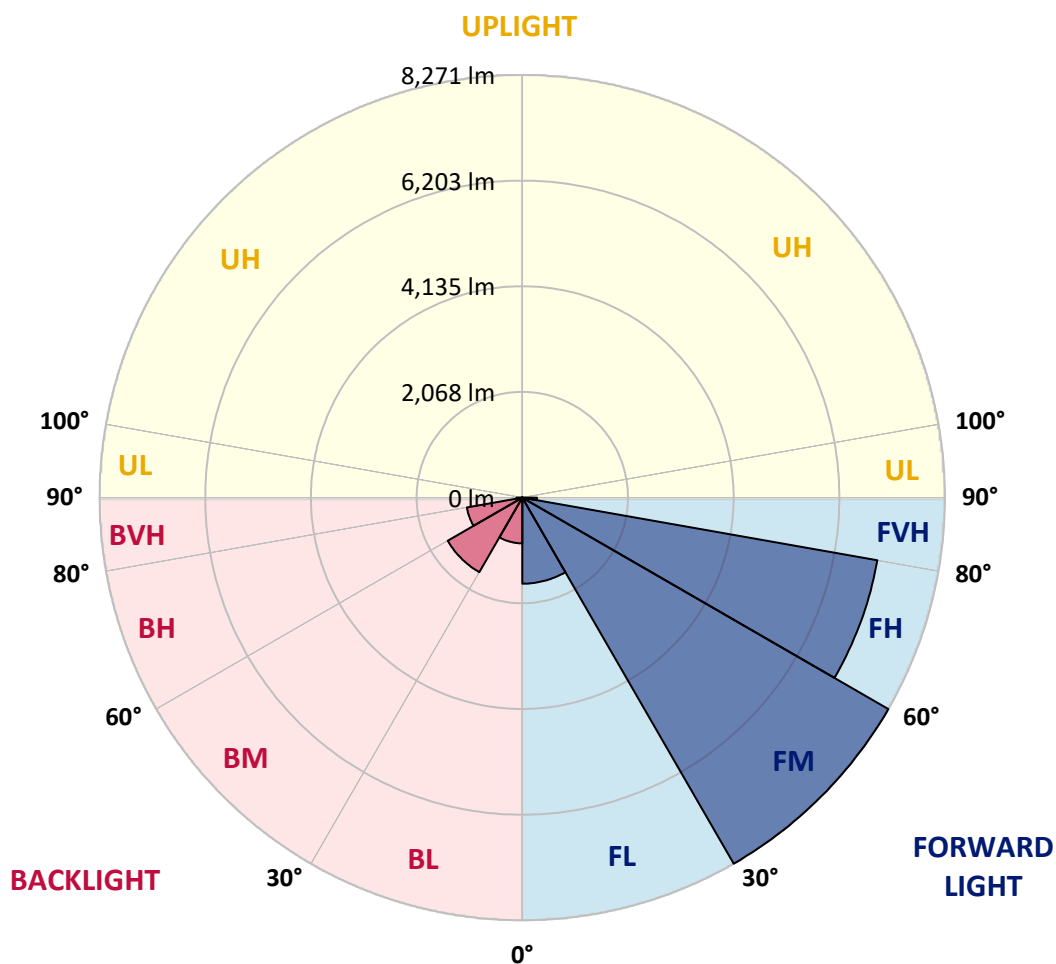
CATALOG NUMBER: GALN-SA4B-735-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1685.0 | 8.0 | | | |
| FM | (30°-60°) | 8270.7 | 39.2 | | | |
| FH | (60°-80°) | 7054.2 | 33.4 | | | G3/7500 |
| FVH | (80°-90°) | 286.3 | 1.4 | | | G3/500 |
| BL | (0°-30°) | 894.7 | 4.2 | B2/1000 | | |
| BM | (30°-60°) | 1684.5 | 8.0 | B2/2500 | | |
| BH | (60°-80°) | 1102.0 | 5.2 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 111.6 | 0.5 | | | 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 Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 71° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 |
| 2.5° | 2873.4 | 2859.5 | 2860.6 | 2840.9 | 2815.4 | 2787.6 | 2748.2 | 2713.4 | 2685.6 | 2669.4 | 2621.9 |
| 5° | 3184.0 | 3170.1 | 3152.7 | 3109.9 | 3091.3 | 3022.9 | 2936.0 | 2857.2 | 2796.9 | 2763.3 | 2668.2 |
| 7.5° | 3435.6 | 3432.1 | 3427.4 | 3403.1 | 3355.6 | 3260.5 | 3186.4 | 3049.6 | 2960.3 | 2896.6 | 2734.3 |
| 10° | 3590.9 | 3596.7 | 3600.1 | 3604.8 | 3585.1 | 3535.2 | 3433.2 | 3260.5 | 3146.9 | 3065.8 | 2820.1 |
| 12.5° | 3669.7 | 3675.5 | 3695.2 | 3738.1 | 3764.7 | 3758.9 | 3675.5 | 3506.3 | 3349.8 | 3243.1 | 2911.6 |
| 15° | 3718.4 | 3727.6 | 3762.4 | 3819.2 | 3908.5 | 3965.3 | 3924.7 | 3768.2 | 3596.7 | 3470.3 | 3020.6 |
| 17.5° | 3771.7 | 3782.1 | 3820.4 | 3901.5 | 4018.6 | 4141.4 | 4185.5 | 4051.0 | 3864.4 | 3713.7 | 3142.3 |
| 20° | 3801.8 | 3815.7 | 3870.2 | 3976.9 | 4113.6 | 4292.1 | 4438.2 | 4367.5 | 4163.5 | 3996.6 | 3282.6 |
| 22.5° | 3850.5 | 3862.1 | 3908.5 | 4022.1 | 4185.5 | 4409.2 | 4690.9 | 4675.8 | 4496.1 | 4280.5 | 3436.7 |
| 25° | 3982.6 | 4001.2 | 4024.4 | 4092.8 | 4250.4 | 4528.6 | 4900.7 | 5005.0 | 4818.4 | 4577.3 | 3578.1 |
| 27.5° | 4231.9 | 4246.9 | 4245.8 | 4255.0 | 4344.3 | 4631.7 | 5082.6 | 5330.7 | 5138.3 | 4877.5 | 3714.9 |
| 30° | 4515.8 | 4521.6 | 4526.3 | 4505.4 | 4525.1 | 4737.2 | 5249.5 | 5652.9 | 5460.5 | 5185.8 | 3834.3 |
| 32.5° | 4861.2 | 4872.8 | 4833.4 | 4780.1 | 4763.9 | 4893.7 | 5387.5 | 5975.1 | 5841.8 | 5498.7 | 3952.5 |
| 35° | 5269.2 | 5299.4 | 5219.4 | 5125.5 | 5059.4 | 5118.6 | 5572.9 | 6304.3 | 6232.5 | 5898.6 | 4109.0 |
| 37.5° | 5735.2 | 5772.3 | 5698.1 | 5513.8 | 5419.9 | 5436.2 | 5815.2 | 6711.2 | 6726.2 | 6354.2 | 4342.0 |
| 40° | 6116.5 | 6165.2 | 6167.5 | 5906.7 | 5764.2 | 5782.7 | 6122.3 | 7149.3 | 7322.0 | 6917.5 | 4616.7 |
| 42.5° | 6368.1 | 6415.6 | 6465.4 | 6312.4 | 6162.9 | 6268.4 | 6480.5 | 7624.5 | 7992.0 | 7601.3 | 5000.3 |
| 45° | 6643.9 | 6686.8 | 6714.6 | 6645.1 | 6561.6 | 6835.2 | 6912.8 | 8129.9 | 8706.0 | 8365.2 | 5419.9 |
| 47.5° | 6963.8 | 7011.4 | 7038.0 | 6972.0 | 6940.7 | 7332.4 | 7378.8 | 8601.6 | 9468.6 | 9107.0 | 5883.6 |
| 50° | 7390.4 | 7426.3 | 7412.4 | 7370.7 | 7363.7 | 7713.8 | 7826.2 | 9043.3 | 10098.0 | 9905.6 | 6364.6 |
| 52.5° | 7921.3 | 7964.1 | 7979.2 | 7920.1 | 7893.4 | 7986.2 | 8186.7 | 9445.5 | 10670.6 | 10591.8 | 6878.1 |
| 55° | 8242.3 | 8310.7 | 8540.2 | 8632.9 | 8696.7 | 8338.5 | 8575.0 | 9889.4 | 11184.1 | 11315.1 | 7429.8 |
| 57.5° | 7830.8 | 7918.9 | 8432.4 | 8896.1 | 9495.3 | 9219.4 | 9125.6 | 10353.0 | 11697.6 | 12016.3 | 8090.5 |
| 60° | 6827.1 | 6846.8 | 7508.6 | 8362.9 | 9568.3 | 10351.9 | 10274.2 | 11090.2 | 12254.0 | 12723.4 | 8961.0 |
| 62.5° | 4736.1 | 4777.8 | 5560.2 | 6923.3 | 8666.6 | 10759.9 | 12228.5 | 12362.9 | 13051.4 | 13781.6 | 10237.1 |
| 65° | 2442.2 | 2387.7 | 3100.6 | 4351.2 | 6533.8 | 9790.9 | 13811.8 | 14703.1 | 14780.8 | 15436.8 | 12033.7 |
| 67.5° | 1503.3 | 1527.7 | 1861.5 | 2540.7 | 3863.3 | 7115.7 | 13646.0 | 17562.6 | 17153.4 | 17468.7 | 13701.7 |
| 70° | 1129.0 | 1159.1 | 1388.6 | 1738.6 | 2355.3 | 4068.4 | 10974.3 | 18255.7 | 18827.2 | 18746.0 | 14209.3 |
| 71° | 981.8 | 1013.0 | 1251.8 | 1582.2 | 1978.6 | 3140.0 | 9246.1 | 17530.2 | 18885.1 | 18871.2 | 14018.1 |
| 72.5° | 836.9 | 856.6 | 1043.2 | 1339.9 | 1667.9 | 2201.1 | 6946.5 | 15722.0 | 18079.6 | 18542.0 | 13335.4 |
| 75° | 657.2 | 672.3 | 755.7 | 1022.3 | 1313.3 | 1351.5 | 3727.6 | 11786.8 | 14849.2 | 15730.1 | 11101.8 |
| 77.5° | 535.5 | 545.9 | 588.8 | 759.2 | 1013.0 | 957.4 | 1955.4 | 7672.0 | 9302.9 | 10189.6 | 6539.6 |
| 80° | 425.4 | 437.0 | 462.5 | 514.6 | 759.2 | 682.7 | 933.1 | 3887.6 | 4493.8 | 4484.5 | 2610.3 |
| 82.5° | 330.3 | 333.8 | 364.0 | 377.9 | 519.3 | 484.5 | 505.4 | 1645.9 | 1823.3 | 1883.5 | 942.3 |
| 85° | 208.6 | 219.1 | 322.2 | 289.8 | 310.6 | 284.0 | 249.2 | 653.7 | 805.6 | 794.0 | 376.7 |
| 87.5° | 63.8 | 67.2 | 109.0 | 122.9 | 137.9 | 124.0 | 91.6 | 192.4 | 235.3 | 255.0 | 93.9 |
| 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: GALN-SA4B-735-U-T2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 | 2588.3 |
| 2.5° | 2603.3 | 2590.6 | 2545.4 | 2508.3 | 2473.5 | 2435.3 | 2402.8 | 2393.5 | 2385.4 | 2381.9 | 2380.8 |
| 5° | 2627.7 | 2589.4 | 2500.2 | 2427.1 | 2369.2 | 2315.9 | 2282.3 | 2267.2 | 2252.1 | 2252.1 | 2256.8 |
| 7.5° | 2662.4 | 2592.9 | 2455.0 | 2346.0 | 2273.0 | 2223.1 | 2198.8 | 2196.5 | 2200.0 | 2203.4 | 2204.6 |
| 10° | 2700.7 | 2590.6 | 2388.9 | 2253.3 | 2188.4 | 2165.2 | 2166.3 | 2186.1 | 2204.6 | 2218.5 | 2220.8 |
| 12.5° | 2737.8 | 2576.7 | 2311.2 | 2166.3 | 2124.6 | 2129.3 | 2161.7 | 2205.8 | 2241.7 | 2261.4 | 2262.6 |
| 15° | 2779.5 | 2554.6 | 2217.3 | 2084.1 | 2070.1 | 2106.1 | 2166.3 | 2233.6 | 2288.1 | 2320.5 | 2324.0 |
| 17.5° | 2814.3 | 2517.6 | 2118.8 | 2004.1 | 2021.5 | 2087.5 | 2171.0 | 2257.9 | 2324.0 | 2364.6 | 2371.5 |
| 20° | 2853.7 | 2470.0 | 2016.8 | 1927.6 | 1977.4 | 2066.7 | 2161.7 | 2255.6 | 2324.0 | 2363.4 | 2372.7 |
| 22.5° | 2885.0 | 2402.8 | 1919.5 | 1865.0 | 1938.0 | 2041.2 | 2130.4 | 2205.8 | 2261.4 | 2282.3 | 2296.2 |
| 25° | 2897.7 | 2318.2 | 1827.9 | 1814.0 | 1906.7 | 1999.4 | 2059.7 | 2102.6 | 2120.0 | 2117.7 | 2123.5 |
| 27.5° | 2890.8 | 2220.8 | 1749.1 | 1773.4 | 1867.3 | 1934.5 | 1964.7 | 1961.2 | 1929.9 | 1900.9 | 1914.8 |
| 30° | 2861.8 | 2104.9 | 1683.0 | 1731.7 | 1816.3 | 1853.4 | 1848.8 | 1803.6 | 1744.4 | 1690.0 | 1693.4 |
| 32.5° | 2809.6 | 1979.7 | 1621.6 | 1684.2 | 1744.4 | 1760.7 | 1729.4 | 1670.3 | 1585.6 | 1514.9 | 1504.5 |
| 35° | 2765.6 | 1860.3 | 1567.1 | 1629.7 | 1672.6 | 1664.5 | 1634.3 | 1557.8 | 1481.3 | 1418.7 | 1408.3 |
| 37.5° | 2758.6 | 1758.3 | 1514.9 | 1568.3 | 1592.6 | 1581.0 | 1543.9 | 1479.0 | 1451.2 | 1403.7 | 1397.9 |
| 40° | 2795.7 | 1686.5 | 1461.6 | 1503.3 | 1514.9 | 1505.7 | 1465.1 | 1428.0 | 1453.5 | 1441.9 | 1441.9 |
| 42.5° | 2896.6 | 1648.2 | 1414.1 | 1438.4 | 1447.7 | 1454.7 | 1425.7 | 1394.4 | 1425.7 | 1372.4 | 1355.0 |
| 45° | 3056.5 | 1649.4 | 1371.2 | 1374.7 | 1402.5 | 1426.8 | 1407.1 | 1360.8 | 1344.6 | 1237.9 | 1217.0 |
| 47.5° | 3291.8 | 1688.8 | 1336.4 | 1314.4 | 1364.3 | 1404.8 | 1377.0 | 1309.8 | 1237.9 | 1167.2 | 1154.5 |
| 50° | 3566.5 | 1759.5 | 1305.1 | 1251.8 | 1313.3 | 1377.0 | 1356.1 | 1277.3 | 1203.1 | 1160.3 | 1152.1 |
| 52.5° | 3871.4 | 1848.8 | 1266.9 | 1182.3 | 1250.7 | 1364.3 | 1360.8 | 1272.7 | 1170.7 | 1141.7 | 1134.8 |
| 55° | 4248.1 | 1936.8 | 1219.4 | 1101.1 | 1195.0 | 1353.8 | 1348.0 | 1234.4 | 1163.7 | 1142.9 | 1140.5 |
| 57.5° | 4686.2 | 2064.3 | 1151.0 | 1018.8 | 1131.3 | 1310.9 | 1298.2 | 1211.3 | 1140.5 | 1125.5 | 1124.3 |
| 60° | 5392.1 | 2262.6 | 1053.6 | 943.5 | 1066.4 | 1235.6 | 1251.8 | 1171.8 | 1103.5 | 1100.0 | 1098.8 |
| 62.5° | 6320.5 | 2540.7 | 952.8 | 865.8 | 991.0 | 1138.2 | 1184.6 | 1118.5 | 1064.0 | 1081.4 | 1083.8 |
| 65° | 7602.5 | 2774.9 | 848.5 | 799.8 | 907.6 | 1044.3 | 1120.8 | 1068.7 | 1020.0 | 1053.6 | 1053.6 |
| 67.5° | 8438.2 | 2779.5 | 753.4 | 731.4 | 823.0 | 965.5 | 1053.6 | 1009.6 | 963.2 | 1020.0 | 1022.3 |
| 70° | 8264.3 | 2435.3 | 674.6 | 659.5 | 740.7 | 880.9 | 979.4 | 944.7 | 891.3 | 942.3 | 923.8 |
| 71° | 7983.8 | 2244.0 | 643.3 | 631.7 | 708.2 | 840.3 | 944.7 | 915.7 | 862.4 | 896.0 | 885.5 |
| 72.5° | 7536.4 | 1948.4 | 592.3 | 594.6 | 659.5 | 789.3 | 896.0 | 865.8 | 812.5 | 831.1 | 827.6 |
| 75° | 6370.4 | 1701.6 | 506.5 | 517.0 | 566.8 | 702.4 | 798.6 | 775.4 | 721.0 | 721.0 | 717.5 |
| 77.5° | 3982.6 | 1189.2 | 420.8 | 426.5 | 481.0 | 601.6 | 686.2 | 666.5 | 614.3 | 596.9 | 592.3 |
| 80° | 1486.0 | 614.3 | 329.2 | 336.1 | 369.8 | 474.1 | 568.0 | 549.4 | 496.1 | 476.4 | 457.8 |
| 82.5° | 562.2 | 308.3 | 242.3 | 236.5 | 272.4 | 361.6 | 445.1 | 423.1 | 381.3 | 333.8 | 319.9 |
| 85° | 212.1 | 153.0 | 148.4 | 143.7 | 160.0 | 214.4 | 275.9 | 271.2 | 227.2 | 193.6 | 190.1 |
| 87.5° | 55.6 | 49.8 | 58.0 | 42.9 | 45.2 | 40.6 | 41.7 | 17.4 | 8.1 | 3.5 | 2.3 |
| 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)