

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: P522922

Luminaire Tested: **GALN-SA9C-735-U-T4W**

Issue Date: 5/13/2021

Test Information

Test Method: LM-79-08
Report Number: P522922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)
Test Lab: INNOVATION CENTER
Issue Date: 5/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA9C-735-U-T4W
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59415 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

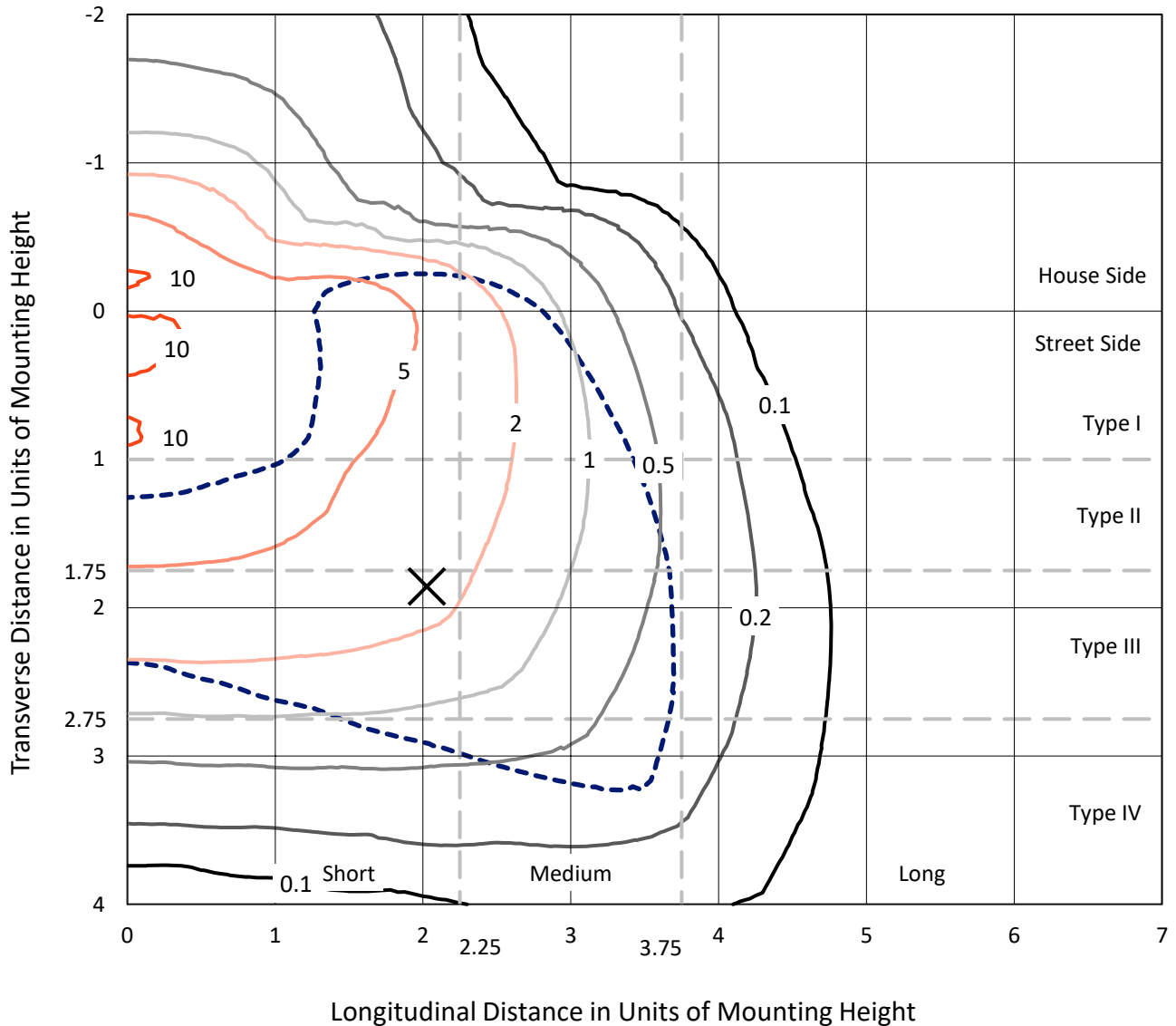
Input Watts (W): 481
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522922
 CATALOG NUMBER: GALN-SA9C-735-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

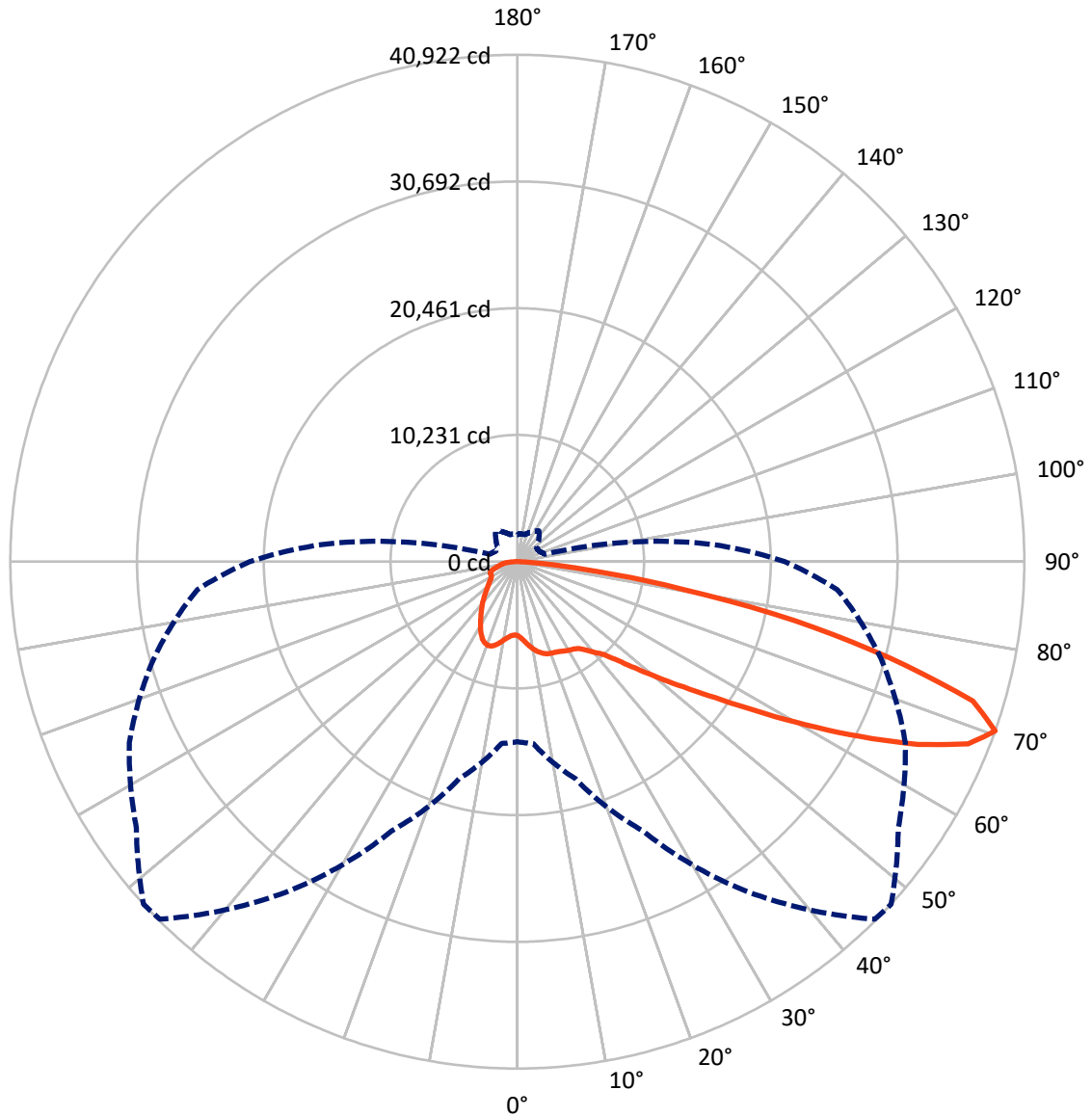
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P522922
CATALOG NUMBER: GALN-SA9C-735-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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CATALOG NUMBER: GALN-SA9C-735-U-T4W

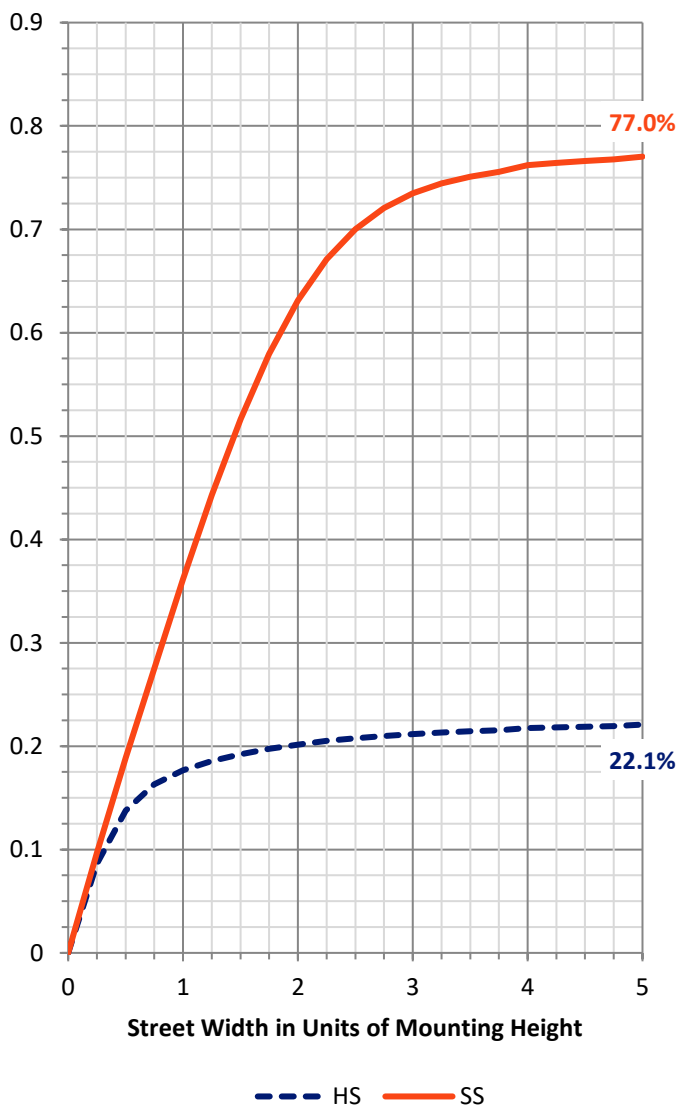
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 13452.7 | 0.0 | 13452.7 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| Street Side | Lumens | 45962.3 | 0.0 | 45962.3 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| Total | Lumens | 59415.0 | 0.0 | 59415.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 614.8 | 1.0 |
| 10°-20° | 2055.4 | 3.5 |
| 20°-30° | 3418.1 | 5.8 |
| 30°-40° | 4844.6 | 8.2 |
| 40°-50° | 7151.7 | 12.0 |
| 50°-60° | 12387.1 | 20.8 |
| 60°-70° | 17497.1 | 29.4 |
| 70°-80° | 10058.3 | 16.9 |
| 80°-90° | 1387.8 | 2.3 |
| 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° | 59415.0 | 100.0 |
| 0°-180° | 59415.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P522922

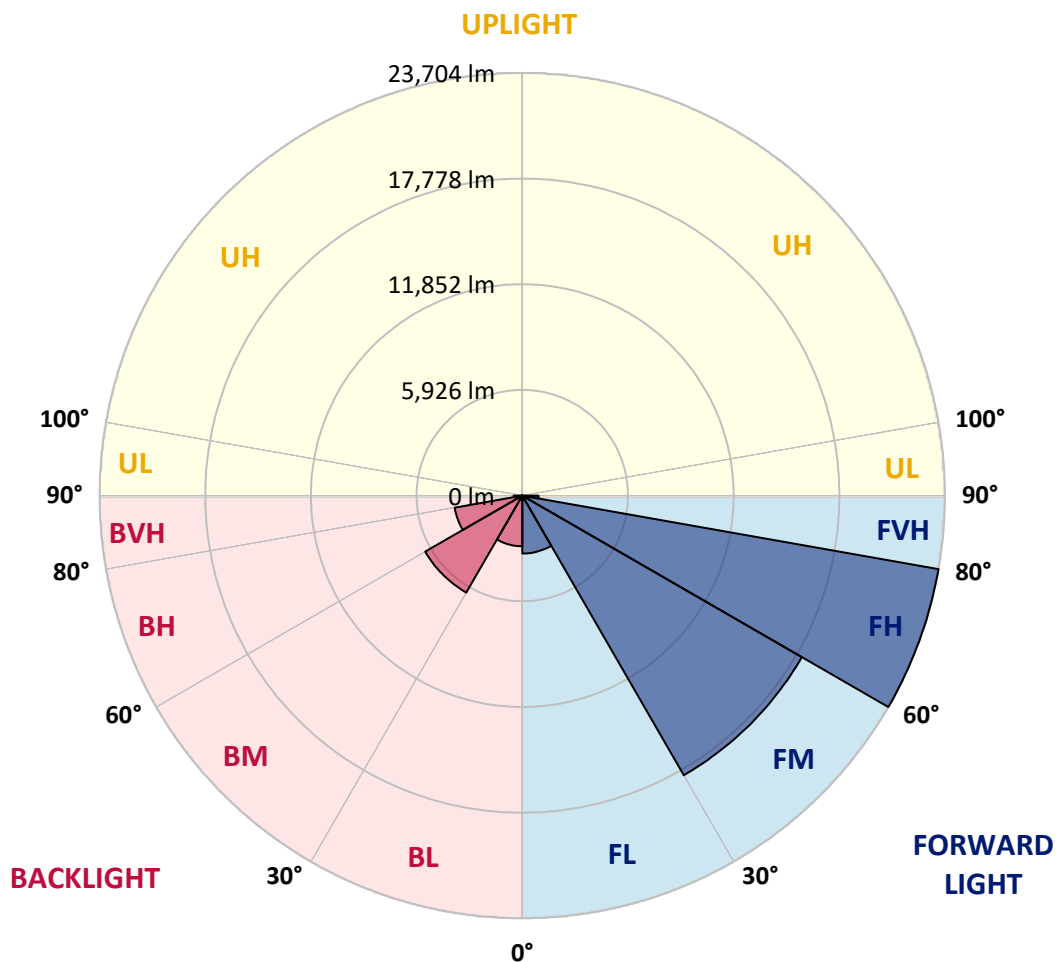
CATALOG NUMBER: GALN-SA9C-735-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 3249.0 | 5.5 | | | |
| FM | (30°-60°) | 18102.6 | 30.5 | | | |
| FH | (60°-80°) | 23704.1 | 39.9 | | | G5 |
| FVH | (80°-90°) | 906.6 | 1.5 | | | G5 |
| BL | (0°-30°) | 2839.3 | 4.8 | B4/5000 | | |
| BM | (30°-60°) | 6280.8 | 10.6 | B4/8500 | | |
| BH | (60°-80°) | 3851.3 | 6.5 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 481.3 | 0.8 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type IV Short





REPORT NUMBER: P522922

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47.5° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 |
| 2.5° | 6349.3 | 6327.0 | 6323.8 | 6276.1 | 6250.7 | 6203.0 | 6183.9 | 6139.4 | 6085.4 | 6031.3 | 5980.4 |
| 5° | 6848.4 | 6848.4 | 6826.2 | 6759.4 | 6654.5 | 6546.4 | 6498.7 | 6412.8 | 6260.2 | 6136.2 | 6031.3 |
| 7.5° | 7360.3 | 7366.7 | 7322.2 | 7223.6 | 7074.2 | 6899.3 | 6854.8 | 6727.6 | 6511.4 | 6330.2 | 6174.4 |
| 10° | 7802.2 | 7802.2 | 7741.8 | 7608.3 | 7420.7 | 7230.0 | 7185.4 | 7042.4 | 6800.7 | 6575.0 | 6371.5 |
| 12.5° | 8139.3 | 8139.3 | 8059.8 | 7884.9 | 7681.4 | 7509.7 | 7458.9 | 7322.2 | 7096.4 | 6845.2 | 6587.7 |
| 15° | 8358.6 | 8342.7 | 8253.7 | 8056.6 | 7859.5 | 7710.0 | 7675.1 | 7560.6 | 7353.9 | 7099.6 | 6810.3 |
| 17.5° | 8368.2 | 8361.8 | 8276.0 | 8110.6 | 7939.0 | 7837.2 | 7815.0 | 7738.7 | 7576.5 | 7334.9 | 7029.6 |
| 20° | 8183.8 | 8196.5 | 8139.3 | 8021.6 | 7939.0 | 7894.4 | 7884.9 | 7859.5 | 7745.0 | 7519.3 | 7214.1 |
| 22.5° | 7986.6 | 8008.9 | 7954.9 | 7891.3 | 7884.9 | 7929.4 | 7935.8 | 7942.1 | 7869.0 | 7649.6 | 7369.8 |
| 25° | 7939.0 | 7954.9 | 7900.8 | 7843.6 | 7878.5 | 7996.2 | 8021.6 | 8047.1 | 7989.8 | 7805.4 | 7554.3 |
| 27.5° | 8180.6 | 8167.9 | 8063.0 | 7939.0 | 7961.2 | 8120.2 | 8155.2 | 8183.8 | 8155.2 | 7996.2 | 7783.2 |
| 30° | 8864.2 | 8822.8 | 8613.0 | 8250.5 | 8136.1 | 8247.4 | 8282.3 | 8361.8 | 8361.8 | 8244.2 | 8031.2 |
| 32.5° | 10008.7 | 9929.3 | 9544.6 | 8832.4 | 8434.9 | 8368.2 | 8403.1 | 8533.5 | 8600.3 | 8508.1 | 8276.0 |
| 35° | 11398.1 | 11315.5 | 10765.4 | 9808.4 | 8981.8 | 8609.8 | 8600.3 | 8746.5 | 8924.6 | 8717.9 | 8415.9 |
| 37.5° | 12793.9 | 12708.1 | 12046.7 | 10972.1 | 9779.8 | 9118.5 | 9061.3 | 9112.2 | 9188.5 | 8810.1 | 8609.8 |
| 40° | 14189.7 | 14087.9 | 13509.3 | 12272.5 | 10755.9 | 9792.5 | 9643.1 | 9414.2 | 9382.4 | 9112.2 | 8985.0 |
| 42.5° | 15572.7 | 15480.5 | 15188.0 | 13731.8 | 11925.9 | 10450.7 | 10221.8 | 9827.5 | 9948.3 | 9786.2 | 9674.9 |
| 45° | 16968.4 | 16974.8 | 16663.2 | 15369.2 | 13337.6 | 11665.2 | 11356.8 | 10740.0 | 11026.2 | 10965.7 | 11029.3 |
| 47.5° | 18205.2 | 18189.3 | 18078.1 | 16958.9 | 15089.4 | 13229.5 | 12832.1 | 12116.7 | 12606.3 | 12828.9 | 13315.3 |
| 50° | 19403.9 | 19394.3 | 19400.7 | 18761.6 | 17124.2 | 15089.4 | 14650.7 | 13900.3 | 15003.6 | 15776.2 | 16647.3 |
| 52.5° | 21120.7 | 21174.8 | 20790.1 | 20621.6 | 19597.8 | 17286.4 | 16803.1 | 16027.3 | 17836.4 | 19054.1 | 20755.1 |
| 55° | 22844.0 | 22799.5 | 22497.4 | 22672.3 | 22185.8 | 19887.1 | 19381.6 | 18764.8 | 20990.4 | 22322.6 | 24878.8 |
| 57.5° | 23858.2 | 23874.1 | 24182.5 | 25037.8 | 25381.1 | 23130.1 | 22672.3 | 22195.4 | 24535.4 | 25479.7 | 28547.8 |
| 60° | 24770.7 | 24843.8 | 25730.9 | 27346.0 | 28277.6 | 27113.9 | 26706.9 | 26242.8 | 27787.9 | 28163.1 | 31733.6 |
| 62.5° | 25056.8 | 25282.6 | 26830.9 | 29247.3 | 31100.9 | 31609.6 | 31104.1 | 30080.3 | 30884.7 | 30738.4 | 33892.4 |
| 65° | 23629.3 | 23937.7 | 26713.3 | 29959.5 | 33622.1 | 35876.3 | 35555.2 | 33653.9 | 33523.6 | 32642.9 | 34245.3 |
| 67.5° | 19871.2 | 20179.6 | 23743.7 | 28465.2 | 34665.0 | 39570.8 | 39249.7 | 36261.0 | 35126.0 | 32820.9 | 31574.6 |
| 70° | 14539.4 | 14733.3 | 18141.6 | 23966.3 | 32569.8 | 40810.8 | 40922.0 | 37532.8 | 34553.7 | 30401.4 | 25924.8 |
| 72.5° | 8377.7 | 8806.9 | 11194.7 | 16860.3 | 26608.4 | 37675.9 | 38448.5 | 34887.5 | 30935.5 | 25362.1 | 18125.7 |
| 75° | 3602.3 | 3611.8 | 5176.1 | 9299.7 | 18020.8 | 30283.8 | 31030.9 | 28919.8 | 24293.8 | 17537.6 | 9678.1 |
| 77.5° | 1713.7 | 1745.5 | 2276.4 | 4152.3 | 9919.7 | 20923.6 | 22939.4 | 20430.8 | 15537.7 | 8425.4 | 3656.3 |
| 80° | 1112.8 | 1135.0 | 1392.6 | 2060.3 | 4864.5 | 12132.6 | 13537.9 | 11786.0 | 6854.8 | 3010.9 | 1577.0 |
| 82.5° | 674.0 | 680.4 | 931.6 | 1259.0 | 2677.1 | 5494.0 | 6476.4 | 5115.7 | 2925.0 | 1802.7 | 928.4 |
| 85° | 410.1 | 413.3 | 565.9 | 779.0 | 1624.7 | 1898.1 | 1949.0 | 1933.1 | 1716.9 | 1179.6 | 496.0 |
| 87.5° | 197.1 | 203.5 | 292.5 | 368.8 | 639.1 | 588.2 | 556.4 | 645.4 | 810.7 | 635.9 | 213.0 |
| 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-SA9C-735-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 | 5964.6 |
| 2.5° | 5958.2 | 5948.7 | 5926.4 | 5916.9 | 5910.5 | 5913.7 | 5910.5 | 5910.5 | 5913.7 | 5913.7 | 5913.7 |
| 5° | 5986.8 | 5970.9 | 5935.9 | 5935.9 | 5955.0 | 5999.5 | 6040.9 | 6072.7 | 6107.6 | 6104.4 | 6104.4 |
| 7.5° | 6110.8 | 6082.2 | 6040.9 | 6053.6 | 6101.3 | 6171.2 | 6244.3 | 6314.3 | 6384.2 | 6390.6 | 6387.4 |
| 10° | 6292.0 | 6263.4 | 6218.9 | 6234.8 | 6311.1 | 6416.0 | 6508.2 | 6610.0 | 6686.3 | 6708.5 | 6702.2 |
| 12.5° | 6498.7 | 6441.5 | 6403.3 | 6447.8 | 6568.6 | 6708.5 | 6797.6 | 6873.9 | 6927.9 | 6959.7 | 6947.0 |
| 15° | 6708.5 | 6654.5 | 6610.0 | 6702.2 | 6848.4 | 6978.8 | 7023.3 | 7036.0 | 7045.5 | 7077.3 | 7071.0 |
| 17.5° | 6912.0 | 6838.9 | 6823.0 | 6943.8 | 7083.7 | 7140.9 | 7115.5 | 7061.4 | 7020.1 | 7045.5 | 7042.4 |
| 20° | 7093.2 | 7036.0 | 7029.6 | 7150.5 | 7204.5 | 7150.5 | 7042.4 | 6947.0 | 6873.9 | 6880.2 | 6877.0 |
| 22.5° | 7264.9 | 7220.4 | 7226.8 | 7277.6 | 7191.8 | 7007.4 | 6829.3 | 6699.0 | 6619.5 | 6635.4 | 6644.9 |
| 25° | 7455.7 | 7411.2 | 7427.1 | 7344.4 | 7061.4 | 6740.3 | 6482.8 | 6371.5 | 6339.7 | 6371.5 | 6393.8 |
| 27.5° | 7703.7 | 7675.1 | 7665.5 | 7347.6 | 6829.3 | 6346.1 | 6053.6 | 6012.2 | 6040.9 | 6110.8 | 6145.8 |
| 30° | 7970.8 | 7970.8 | 7919.9 | 7293.5 | 6511.4 | 5872.3 | 5618.0 | 5624.4 | 5722.9 | 5821.5 | 5856.5 |
| 32.5° | 8228.3 | 8282.3 | 8123.4 | 7147.3 | 6101.3 | 5411.3 | 5217.4 | 5223.8 | 5309.6 | 5430.4 | 5462.2 |
| 35° | 8441.3 | 8597.1 | 8298.2 | 6880.2 | 5618.0 | 5023.4 | 4877.2 | 4791.4 | 4794.5 | 4886.7 | 4912.2 |
| 37.5° | 8733.8 | 9023.1 | 8400.0 | 6482.8 | 5102.9 | 4692.8 | 4527.5 | 4378.0 | 4279.5 | 4241.3 | 4241.3 |
| 40° | 9242.5 | 9668.6 | 8425.4 | 5894.6 | 4616.5 | 4378.0 | 4142.8 | 3964.7 | 3773.9 | 3602.3 | 3570.5 |
| 42.5° | 10104.1 | 10641.4 | 8374.5 | 5217.4 | 4177.7 | 4031.5 | 3802.6 | 3583.2 | 3319.3 | 3077.7 | 3058.6 |
| 45° | 11630.2 | 11906.8 | 8237.8 | 4514.7 | 3786.7 | 3697.6 | 3475.1 | 3236.6 | 2956.8 | 2740.6 | 2724.7 |
| 47.5° | 14075.2 | 13684.1 | 8056.6 | 3891.6 | 3430.6 | 3405.1 | 3233.4 | 2956.8 | 2677.1 | 2527.6 | 2511.7 |
| 50° | 17645.7 | 16482.0 | 8031.2 | 3440.1 | 3144.4 | 3157.1 | 3017.2 | 2762.9 | 2518.1 | 2394.1 | 2375.0 |
| 52.5° | 21944.2 | 19861.7 | 8199.7 | 3122.2 | 2893.3 | 2940.9 | 2871.0 | 2635.7 | 2419.5 | 2314.6 | 2295.5 |
| 55° | 26115.6 | 22901.2 | 8301.4 | 2874.2 | 2658.0 | 2747.0 | 2756.5 | 2559.4 | 2362.3 | 2257.4 | 2244.7 |
| 57.5° | 29501.6 | 25190.4 | 7849.9 | 2648.4 | 2454.5 | 2591.2 | 2661.2 | 2514.9 | 2333.7 | 2254.2 | 2241.5 |
| 60° | 31857.6 | 26271.4 | 6565.5 | 2448.1 | 2305.1 | 2467.2 | 2626.2 | 2518.1 | 2403.6 | 2413.2 | 2419.5 |
| 62.5° | 32607.9 | 25791.3 | 4924.9 | 2298.7 | 2203.3 | 2425.9 | 2683.4 | 2648.4 | 2530.8 | 2603.9 | 2616.6 |
| 65° | 31364.8 | 23807.3 | 3570.5 | 2181.1 | 2114.3 | 2454.5 | 2855.1 | 2743.8 | 2486.3 | 2540.3 | 2540.3 |
| 67.5° | 27202.9 | 20510.3 | 2778.8 | 2073.0 | 2012.6 | 2508.5 | 3026.8 | 2734.3 | 2381.4 | 2445.0 | 2387.7 |
| 70° | 21578.6 | 15865.2 | 2314.6 | 1952.2 | 1904.5 | 2429.1 | 3042.7 | 2635.7 | 2257.4 | 2270.1 | 2162.0 |
| 72.5° | 14320.0 | 10431.6 | 1990.3 | 1837.7 | 1739.1 | 2184.2 | 2912.3 | 2508.5 | 2136.6 | 2063.4 | 1955.3 |
| 75° | 7016.9 | 5201.5 | 1736.0 | 1694.6 | 1522.9 | 1901.3 | 2734.3 | 2387.7 | 2006.2 | 1891.7 | 1831.3 |
| 77.5° | 2718.4 | 2212.9 | 1481.6 | 1513.4 | 1325.8 | 1675.5 | 2499.0 | 2216.0 | 1834.5 | 1678.7 | 1631.0 |
| 80° | 1319.5 | 1255.9 | 1214.5 | 1262.2 | 1090.5 | 1427.5 | 2282.8 | 2066.6 | 1675.5 | 1503.9 | 1433.9 |
| 82.5° | 820.3 | 775.8 | 931.6 | 982.4 | 839.4 | 1303.6 | 2165.2 | 1939.4 | 1475.2 | 1246.3 | 1189.1 |
| 85° | 416.5 | 445.1 | 623.2 | 670.9 | 600.9 | 1036.5 | 1783.6 | 1456.2 | 1065.1 | 883.9 | 890.2 |
| 87.5° | 159.0 | 213.0 | 327.5 | 352.9 | 321.1 | 546.9 | 982.4 | 848.9 | 683.6 | 464.2 | 429.2 |
| 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)