

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: P652519

Luminaire Tested: **GALN-SA7B-840-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P652519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA7B-840-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33968.8 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

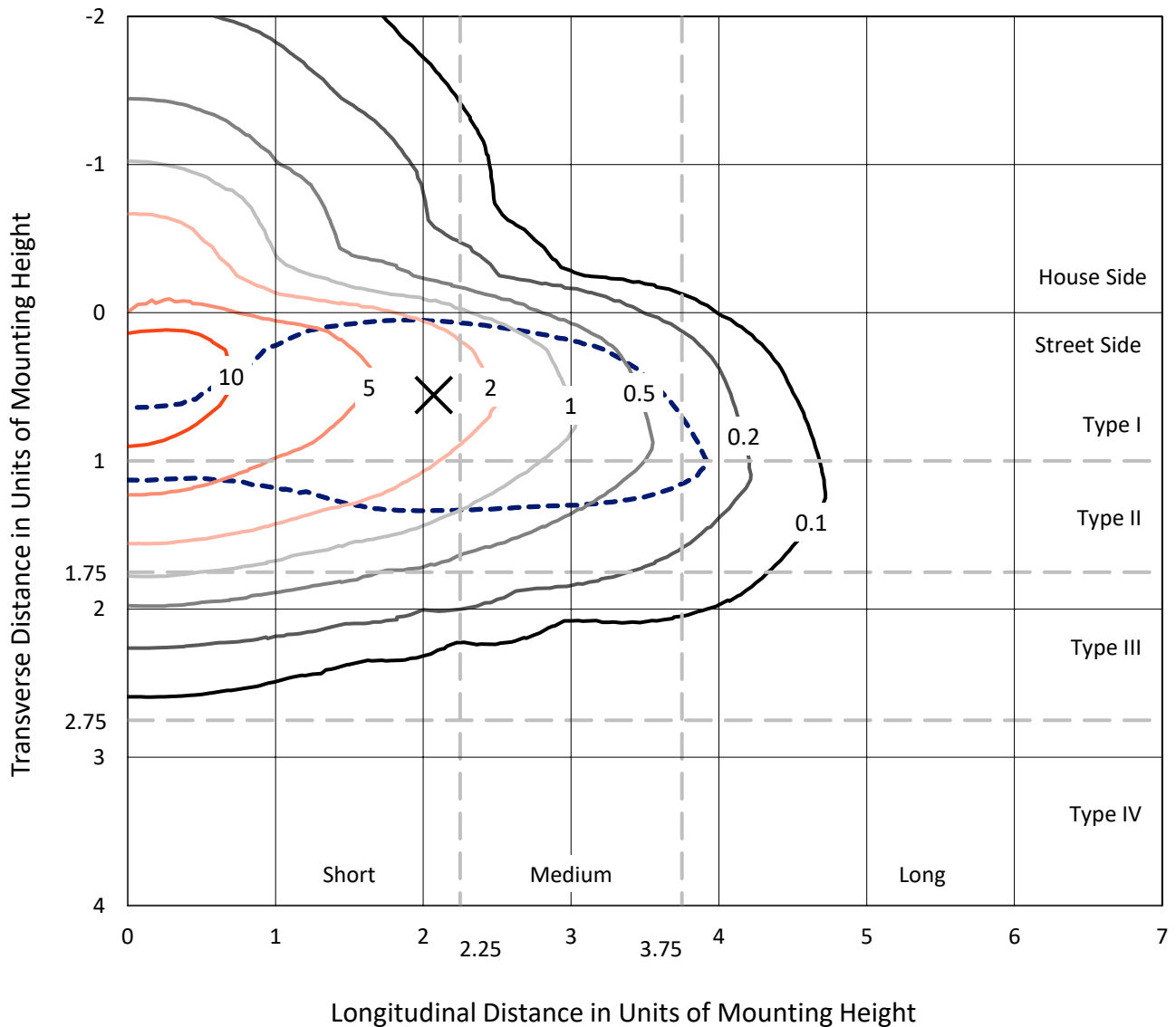
Input Watts (W): 286
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P652519
 CATALOG NUMBER: GALN-SA7B-840-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

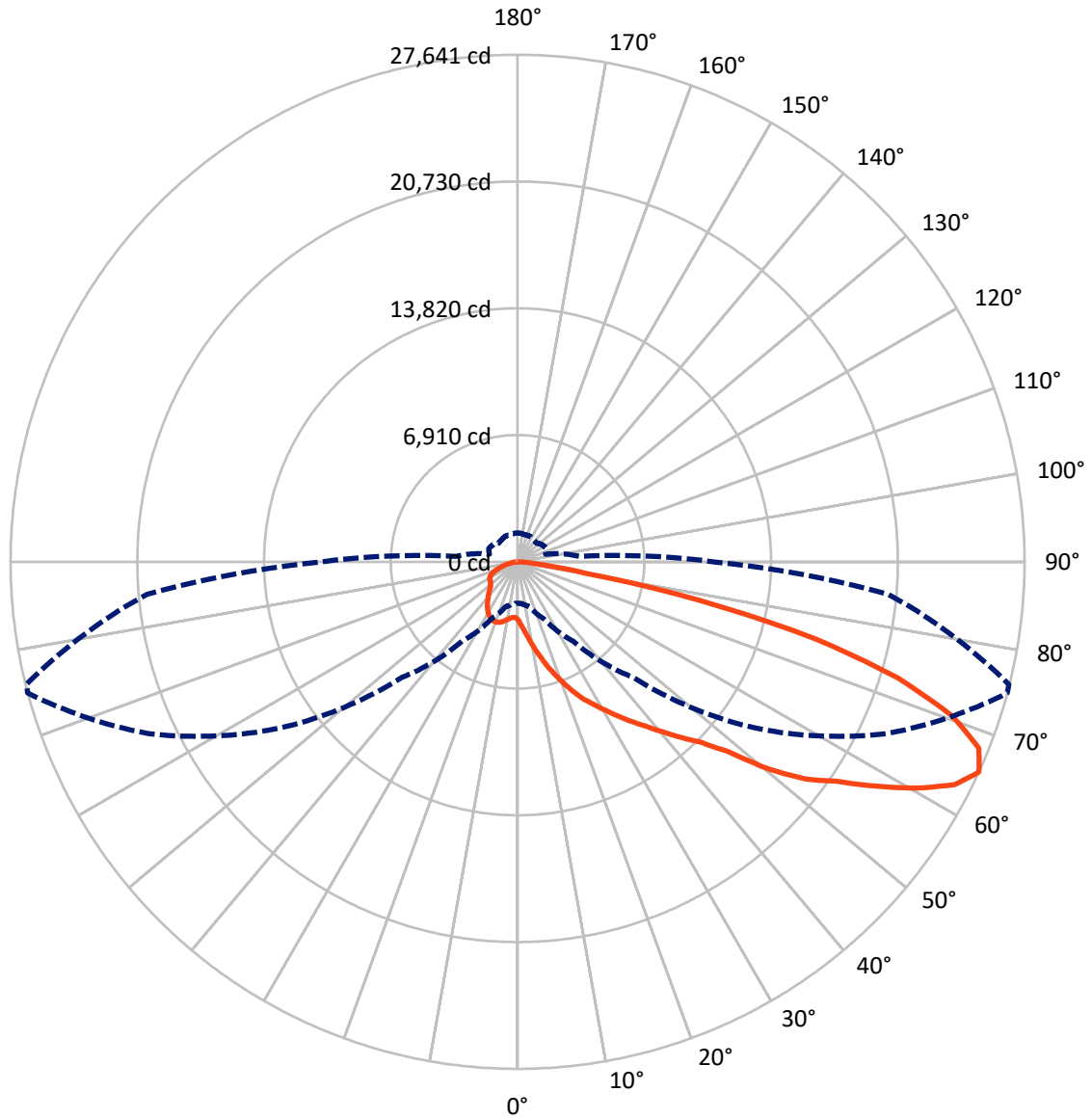
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc
 Type II - Short - N/A

REPORT NUMBER: P652519
CATALOG NUMBER: GALN-SA7B-840-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P652519
 CATALOG NUMBER: GALN-SA7B-840-U-T2R

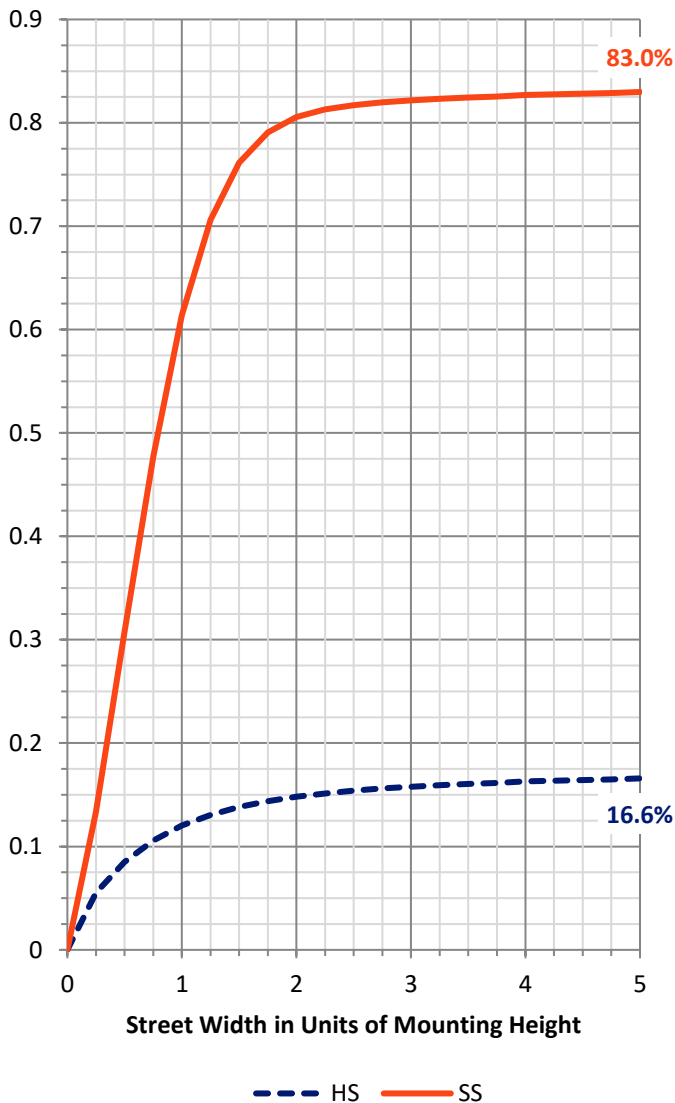
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5710.6 | 0.0 | 5710.6 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 28258.2 | 0.0 | 28258.2 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 33968.8 | 0.0 | 33968.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 383.5 | 1.1 |
| 10°-20° | 1502.0 | 4.4 |
| 20°-30° | 2901.3 | 8.5 |
| 30°-40° | 4712.6 | 13.9 |
| 40°-50° | 6482.5 | 19.1 |
| 50°-60° | 7653.7 | 22.5 |
| 60°-70° | 6705.9 | 19.7 |
| 70°-80° | 3201.4 | 9.4 |
| 80°-90° | 426.0 | 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° | 33968.8 | 100.0 |
| 0°-180° | 33968.8 | 100.0 |

Coefficient of Utilization

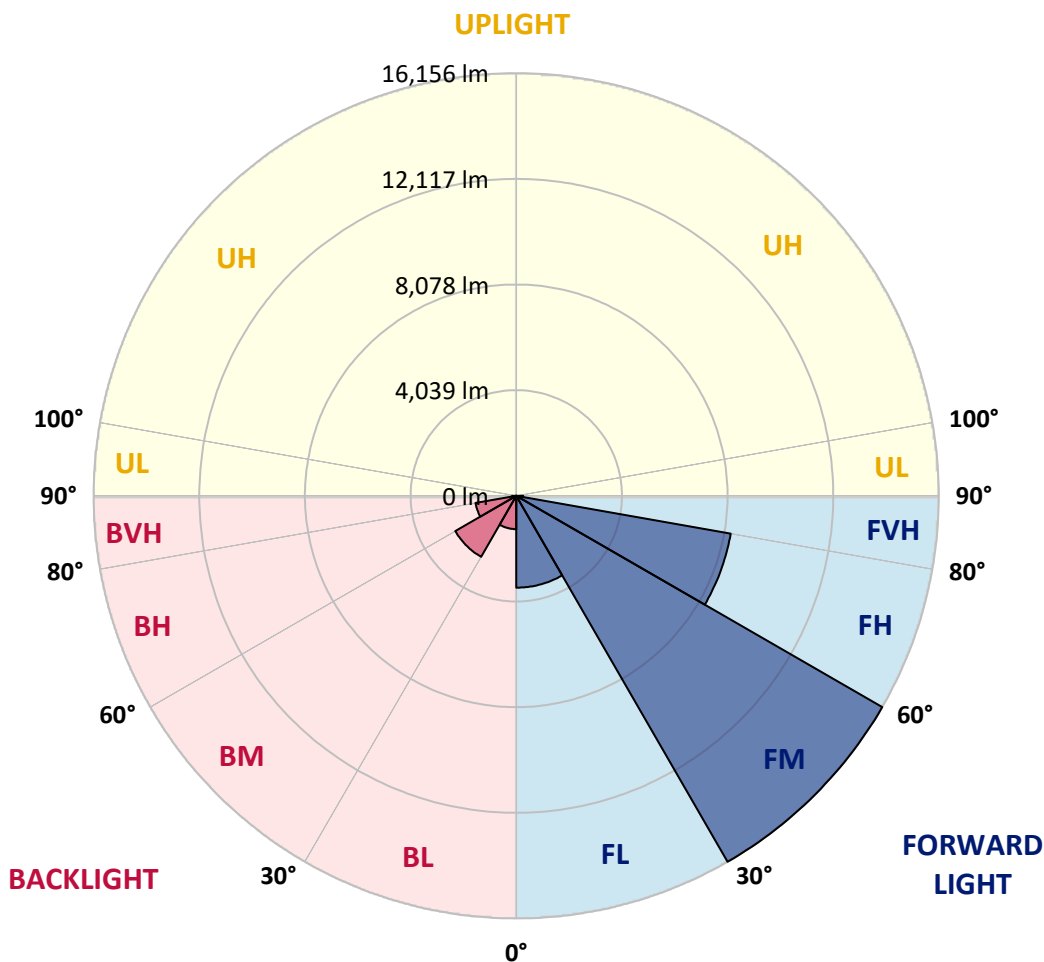


REPORT NUMBER: P652519
 CATALOG NUMBER: GALN-SA7B-840-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 3511.8 | 10.3 | | | |
| FM (30°-60°) | 16156.3 | 47.6 | | | |
| FH (60°-80°) | 8323.9 | 24.5 | | | G4/12000 |
| FVH (80°-90°) | 266.2 | 0.8 | | | G3/500 |
| BL (0°-30°) | 1274.9 | 3.8 | B3/2500 | | |
| BM (30°-60°) | 2692.5 | 7.9 | B3/5000 | | |
| BH (60°-80°) | 1583.4 | 4.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 159.8 | 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-G4
 Type II Short





REPORT NUMBER: P652519

CATALOG NUMBER: GALN-SA7B-840-U-T2R

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 |
| 2.5° | 4193.5 | 4165.8 | 4136.3 | 4055.2 | 3968.7 | 3871.0 | 3731.0 | 3596.5 | 3417.7 | 3412.3 | 3279.6 |
| 5° | 5356.0 | 5337.6 | 5206.8 | 5131.3 | 4930.4 | 4663.3 | 4436.6 | 4084.7 | 3758.6 | 3719.9 | 3462.0 |
| 7.5° | 6424.7 | 6352.8 | 6303.0 | 6166.7 | 5967.7 | 5625.0 | 5186.5 | 4711.2 | 4165.8 | 4114.2 | 3686.8 |
| 10° | 7229.8 | 7222.4 | 7196.7 | 7078.7 | 6929.5 | 6588.6 | 6102.2 | 5420.5 | 4681.7 | 4580.3 | 3959.4 |
| 12.5° | 7832.3 | 7837.8 | 7834.2 | 7832.3 | 7725.4 | 7436.2 | 6909.2 | 6190.7 | 5203.1 | 5131.3 | 4274.5 |
| 15° | 8228.4 | 8283.7 | 8305.8 | 8397.9 | 8407.1 | 8213.7 | 7760.4 | 6935.1 | 5790.9 | 5684.0 | 4613.6 |
| 17.5° | 8490.1 | 8517.7 | 8620.8 | 8777.5 | 8904.6 | 8869.6 | 8466.1 | 7624.1 | 6391.5 | 6212.8 | 4965.4 |
| 20° | 8740.6 | 8788.5 | 8867.8 | 9081.5 | 9306.3 | 9409.4 | 9125.7 | 8329.8 | 6986.6 | 6872.4 | 5354.2 |
| 22.5° | 9262.0 | 9330.2 | 9357.9 | 9466.5 | 9658.2 | 9840.5 | 9711.6 | 9005.9 | 7638.8 | 7484.1 | 5766.9 |
| 25° | 10144.6 | 10216.5 | 10139.1 | 10113.3 | 10175.9 | 10266.2 | 10238.6 | 9643.4 | 8254.2 | 8033.1 | 6157.5 |
| 27.5° | 11294.3 | 11303.5 | 11152.4 | 11008.7 | 10853.9 | 10807.9 | 10723.1 | 10209.1 | 8788.5 | 8604.3 | 6550.0 |
| 30° | 12528.7 | 12484.5 | 12233.9 | 11974.2 | 11712.5 | 11454.6 | 11211.4 | 10754.5 | 9383.6 | 9171.8 | 6935.1 |
| 32.5° | 13674.7 | 13650.8 | 13372.6 | 12969.1 | 12526.9 | 12283.6 | 11791.7 | 11305.3 | 10021.1 | 9816.7 | 7331.2 |
| 35° | 14533.3 | 14568.3 | 14262.5 | 13822.2 | 13339.4 | 13123.8 | 12502.9 | 11883.8 | 10680.7 | 10457.8 | 7762.3 |
| 37.5° | 15143.2 | 15124.7 | 14853.9 | 14472.5 | 14048.7 | 13860.9 | 13333.9 | 12515.8 | 11390.1 | 11176.4 | 8234.0 |
| 40° | 15360.6 | 15349.5 | 15148.7 | 14870.5 | 14601.5 | 14535.2 | 14203.5 | 13197.6 | 12202.6 | 11952.0 | 8801.4 |
| 42.5° | 15222.4 | 15246.3 | 15113.7 | 15038.2 | 14988.4 | 15036.3 | 15067.6 | 14091.1 | 13088.8 | 12858.6 | 9416.8 |
| 45° | 14798.7 | 14785.7 | 14767.3 | 14890.7 | 15170.8 | 15485.8 | 15922.6 | 14935.0 | 14052.4 | 13868.2 | 10242.2 |
| 47.5° | 14041.4 | 14133.5 | 14179.6 | 14520.5 | 15132.1 | 15878.3 | 16906.4 | 16066.2 | 15450.9 | 15290.6 | 11500.7 |
| 50° | 12982.0 | 13055.7 | 13328.3 | 13934.5 | 14846.5 | 16025.7 | 17868.1 | 17916.1 | 17783.4 | 17483.1 | 12867.7 |
| 52.5° | 11327.4 | 11441.6 | 12003.6 | 13114.6 | 14260.7 | 15964.9 | 18450.4 | 19502.5 | 19677.5 | 19452.7 | 14214.6 |
| 55° | 9475.8 | 9636.1 | 10229.3 | 11686.7 | 13453.6 | 15633.3 | 18852.0 | 20421.8 | 21120.1 | 20911.9 | 15511.7 |
| 57.5° | 7662.8 | 7832.3 | 8442.1 | 9853.5 | 12046.0 | 14900.0 | 19115.5 | 21446.3 | 23084.2 | 22813.3 | 17125.7 |
| 60° | 5742.9 | 5919.8 | 6443.1 | 7896.8 | 10041.4 | 13466.5 | 18936.8 | 22334.3 | 25046.4 | 24930.4 | 18741.5 |
| 62.5° | 3705.2 | 3900.5 | 4355.5 | 5558.7 | 7718.0 | 11508.0 | 17980.6 | 22824.4 | 26745.1 | 26605.1 | 19920.7 |
| 65° | 2257.0 | 2279.1 | 2529.7 | 3451.0 | 5282.3 | 8910.1 | 15793.6 | 22174.0 | 27640.6 | 27598.2 | 20280.0 |
| 67.5° | 1459.2 | 1494.2 | 1608.5 | 2067.3 | 3167.2 | 6188.8 | 12628.2 | 20027.6 | 27117.3 | 27102.6 | 19537.4 |
| 70° | 1232.6 | 1243.7 | 1295.2 | 1394.7 | 1840.6 | 3753.1 | 8867.8 | 16606.0 | 25129.3 | 25129.3 | 17752.1 |
| 72.5° | 1101.8 | 1116.5 | 1134.9 | 1166.3 | 1313.6 | 2126.2 | 5291.6 | 12926.7 | 21696.8 | 21840.5 | 15110.0 |
| 75° | 1000.5 | 996.8 | 1007.9 | 1013.3 | 1120.2 | 1389.2 | 2736.0 | 9560.5 | 16784.8 | 16497.4 | 10942.3 |
| 77.5° | 856.7 | 862.3 | 856.7 | 880.7 | 989.4 | 1057.6 | 1389.2 | 6415.5 | 10172.2 | 9800.0 | 5492.4 |
| 80° | 703.8 | 713.0 | 722.3 | 737.0 | 845.7 | 803.3 | 834.6 | 2924.0 | 3762.3 | 3683.1 | 1696.9 |
| 82.5° | 528.8 | 541.7 | 556.4 | 591.4 | 665.1 | 530.6 | 527.0 | 1249.2 | 1357.9 | 1243.7 | 624.6 |
| 85° | 213.7 | 252.4 | 381.4 | 416.4 | 418.2 | 291.1 | 324.3 | 521.4 | 554.6 | 541.7 | 245.1 |
| 87.5° | 49.8 | 59.0 | 123.5 | 186.1 | 171.3 | 108.7 | 119.8 | 169.5 | 193.4 | 178.7 | 82.9 |
| 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: P652519

CATALOG NUMBER: GALN-SA7B-840-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 | 3156.1 |
| 2.5° | 3218.8 | 3154.3 | 3043.7 | 2959.0 | 2898.2 | 2844.8 | 2811.6 | 2791.4 | 2784.0 | 2782.1 | 2784.0 |
| 5° | 3327.5 | 3213.2 | 3038.2 | 2927.7 | 2866.9 | 2831.9 | 2811.6 | 2809.8 | 2811.6 | 2813.4 | 2807.9 |
| 7.5° | 3476.7 | 3312.8 | 3084.3 | 2981.1 | 2935.0 | 2909.3 | 2900.0 | 2896.3 | 2898.2 | 2896.3 | 2896.3 |
| 10° | 3675.7 | 3451.0 | 3174.5 | 3067.7 | 3029.0 | 2999.5 | 2984.8 | 2975.5 | 2968.2 | 2960.8 | 2957.1 |
| 12.5° | 3894.9 | 3603.9 | 3272.2 | 3169.1 | 3113.7 | 3067.7 | 3034.5 | 3010.6 | 2994.0 | 2977.4 | 2973.7 |
| 15° | 4140.0 | 3766.0 | 3380.9 | 3237.2 | 3158.0 | 3089.8 | 3032.7 | 2994.0 | 2964.5 | 2940.6 | 2938.7 |
| 17.5° | 4374.0 | 3918.9 | 3454.6 | 3268.5 | 3152.5 | 3056.6 | 2981.1 | 2927.7 | 2890.9 | 2859.5 | 2855.8 |
| 20° | 4624.6 | 4064.5 | 3487.8 | 3248.3 | 3097.2 | 2981.1 | 2881.6 | 2817.1 | 2774.7 | 2739.7 | 2734.2 |
| 22.5° | 4877.0 | 4187.9 | 3484.1 | 3183.8 | 3001.4 | 2865.0 | 2760.0 | 2691.9 | 2642.1 | 2607.1 | 2594.1 |
| 25° | 5118.3 | 4287.4 | 3438.0 | 3080.6 | 2868.7 | 2726.9 | 2620.0 | 2557.3 | 2513.1 | 2470.8 | 2470.8 |
| 27.5° | 5335.7 | 4346.4 | 3351.5 | 2955.3 | 2732.4 | 2583.1 | 2498.4 | 2441.3 | 2400.7 | 2373.0 | 2356.5 |
| 30° | 5549.5 | 4374.0 | 3233.5 | 2796.8 | 2588.7 | 2461.5 | 2393.3 | 2360.2 | 2323.3 | 2292.1 | 2288.4 |
| 32.5° | 5741.1 | 4368.5 | 3086.1 | 2642.1 | 2452.3 | 2362.0 | 2334.4 | 2308.6 | 2269.9 | 2225.7 | 2214.6 |
| 35° | 5927.2 | 4331.7 | 2911.1 | 2472.5 | 2338.1 | 2303.1 | 2310.5 | 2273.6 | 2203.6 | 2148.3 | 2139.1 |
| 37.5° | 6129.9 | 4265.3 | 2719.5 | 2334.4 | 2242.3 | 2275.4 | 2293.8 | 2212.8 | 2098.5 | 2011.9 | 1991.7 |
| 40° | 6363.8 | 4189.8 | 2520.5 | 2196.2 | 2166.8 | 2249.7 | 2249.7 | 2100.4 | 1943.8 | 1890.4 | 1875.6 |
| 42.5° | 6638.3 | 4127.1 | 2354.6 | 2080.1 | 2104.1 | 2187.0 | 2177.8 | 1951.2 | 1886.7 | 1859.0 | 1851.7 |
| 45° | 7073.2 | 4105.0 | 2183.3 | 1978.8 | 2052.5 | 2113.3 | 2037.7 | 1899.6 | 1862.7 | 1840.6 | 1833.2 |
| 47.5° | 7760.4 | 4130.8 | 2032.2 | 1903.3 | 1993.5 | 2039.6 | 1881.1 | 1864.6 | 1838.8 | 1807.5 | 1803.8 |
| 50° | 8397.9 | 4106.9 | 1925.4 | 1860.9 | 1942.0 | 1951.2 | 1816.6 | 1822.2 | 1807.5 | 1772.4 | 1765.1 |
| 52.5° | 8919.3 | 4031.3 | 1857.2 | 1838.8 | 1897.7 | 1796.4 | 1755.8 | 1776.1 | 1770.6 | 1726.4 | 1719.0 |
| 55° | 9492.4 | 3985.2 | 1824.0 | 1838.8 | 1868.3 | 1661.9 | 1698.7 | 1728.3 | 1720.9 | 1689.6 | 1687.7 |
| 57.5° | 10186.9 | 3994.4 | 1800.1 | 1844.3 | 1838.8 | 1593.7 | 1641.6 | 1676.6 | 1674.8 | 1665.6 | 1665.6 |
| 60° | 10898.2 | 3998.1 | 1763.2 | 1842.5 | 1803.8 | 1540.3 | 1582.7 | 1632.4 | 1636.1 | 1641.6 | 1641.6 |
| 62.5° | 11134.0 | 3837.8 | 1691.4 | 1809.3 | 1726.4 | 1488.7 | 1527.4 | 1595.5 | 1591.8 | 1606.6 | 1608.5 |
| 65° | 10693.7 | 3393.8 | 1584.5 | 1733.7 | 1626.9 | 1451.8 | 1485.0 | 1547.7 | 1527.4 | 1566.1 | 1573.4 |
| 67.5° | 9733.7 | 2807.9 | 1418.7 | 1597.4 | 1516.3 | 1413.1 | 1457.4 | 1481.3 | 1444.5 | 1520.0 | 1521.9 |
| 70° | 8412.7 | 2192.5 | 1208.7 | 1404.0 | 1391.1 | 1372.6 | 1435.3 | 1398.4 | 1346.9 | 1439.0 | 1420.5 |
| 72.5° | 7034.5 | 1674.8 | 965.5 | 1147.9 | 1223.4 | 1311.8 | 1396.6 | 1291.5 | 1219.7 | 1247.4 | 1214.2 |
| 75° | 5284.2 | 1238.1 | 775.7 | 899.1 | 1018.9 | 1225.3 | 1361.6 | 1162.6 | 1052.0 | 1026.3 | 1018.9 |
| 77.5° | 2693.6 | 808.9 | 580.4 | 672.5 | 764.6 | 1107.3 | 1313.6 | 1011.5 | 871.4 | 830.9 | 812.5 |
| 80° | 961.8 | 503.0 | 409.1 | 464.3 | 515.9 | 952.5 | 1147.9 | 836.5 | 676.2 | 668.8 | 676.2 |
| 82.5° | 445.9 | 324.3 | 274.5 | 304.0 | 305.9 | 635.6 | 875.1 | 624.6 | 514.0 | 781.2 | 659.6 |
| 85° | 191.6 | 162.1 | 154.7 | 151.0 | 140.0 | 283.8 | 491.9 | 335.3 | 523.3 | 234.0 | 215.5 |
| 87.5° | 57.1 | 64.5 | 57.1 | 42.4 | 31.3 | 31.3 | 49.8 | 18.4 | 12.9 | 9.3 | 9.3 |
| 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)