

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: P652630

Luminaire Tested: **GALN-SA9B-840-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P652630
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-SA9B-840-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43630.2 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

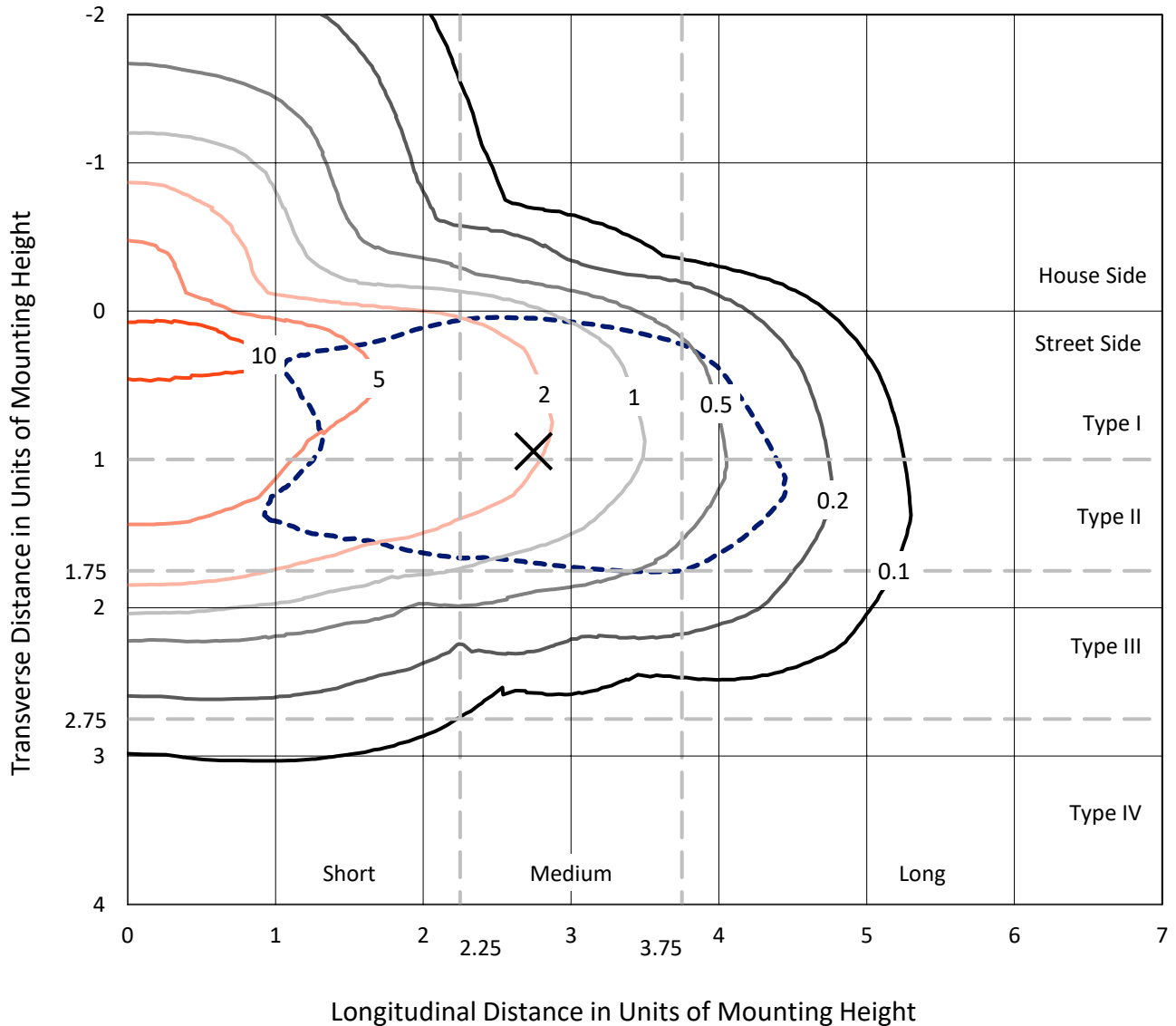
Input Watts (W): 364
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P652630
 CATALOG NUMBER: GALN-SA9B-840-U-T2

Iso-Footcandle Lines of Horizontal Illumination

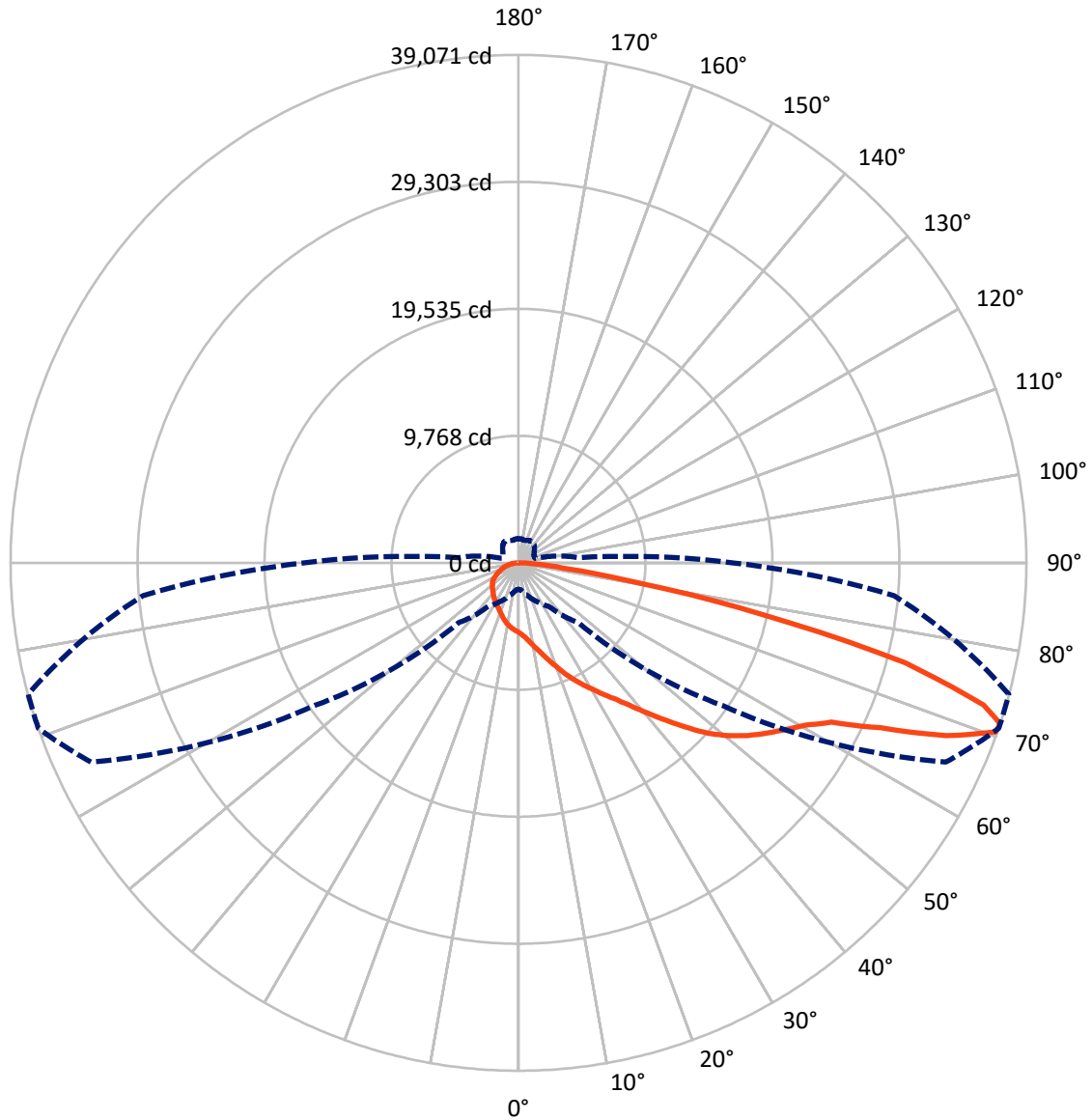
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P652630
CATALOG NUMBER: GALN-SA9B-840-U-T2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P652630
 CATALOG NUMBER: GALN-SA9B-840-U-T2

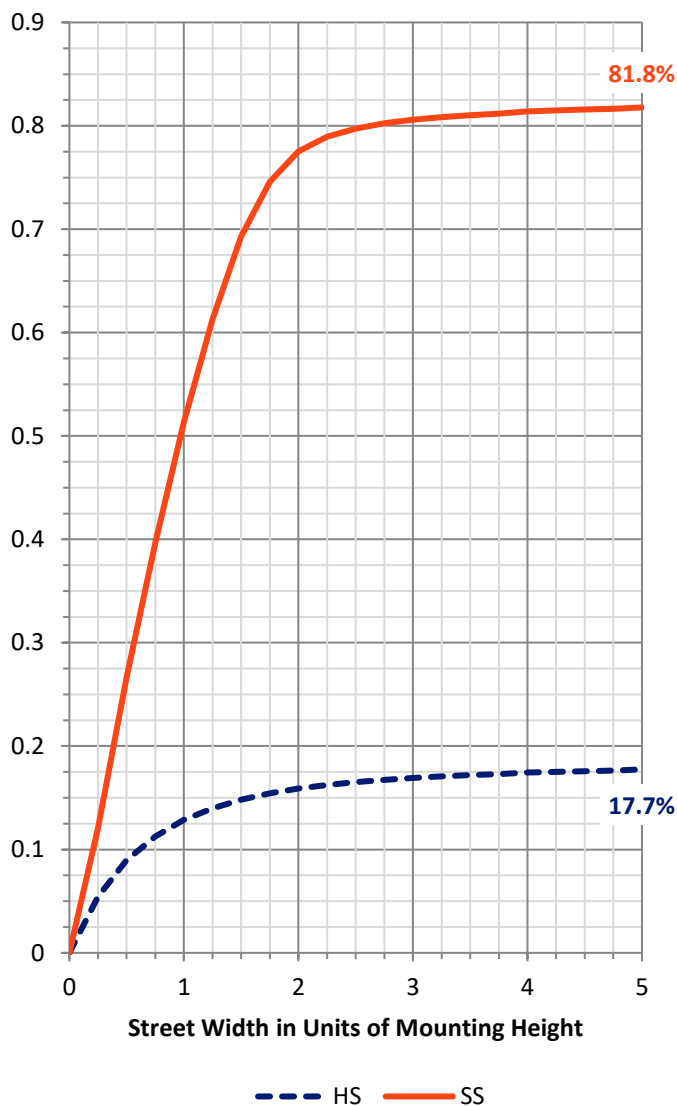
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7846.8 | 0.0 | 7846.8 |
| | % Fixture | 18.0 | 0.0 | 18.0 |
| Street Side | Lumens | 35783.5 | 0.0 | 35783.5 |
| | % Fixture | 82.0 | 0.0 | 82.0 |
| Total | Lumens | 43630.2 | 0.0 | 43630.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 537.7 | 1.2 |
| 10°-20° | 1746.8 | 4.0 |
| 20°-30° | 3052.7 | 7.0 |
| 30°-40° | 4540.4 | 10.4 |
| 40°-50° | 6689.8 | 15.3 |
| 50°-60° | 9365.8 | 21.5 |
| 60°-70° | 10475.3 | 24.0 |
| 70°-80° | 6398.7 | 14.7 |
| 80°-90° | 823.1 | 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° | 43630.2 | 100.0 |
| 0°-180° | 43630.2 | 100.0 |

Coefficient of Utilization

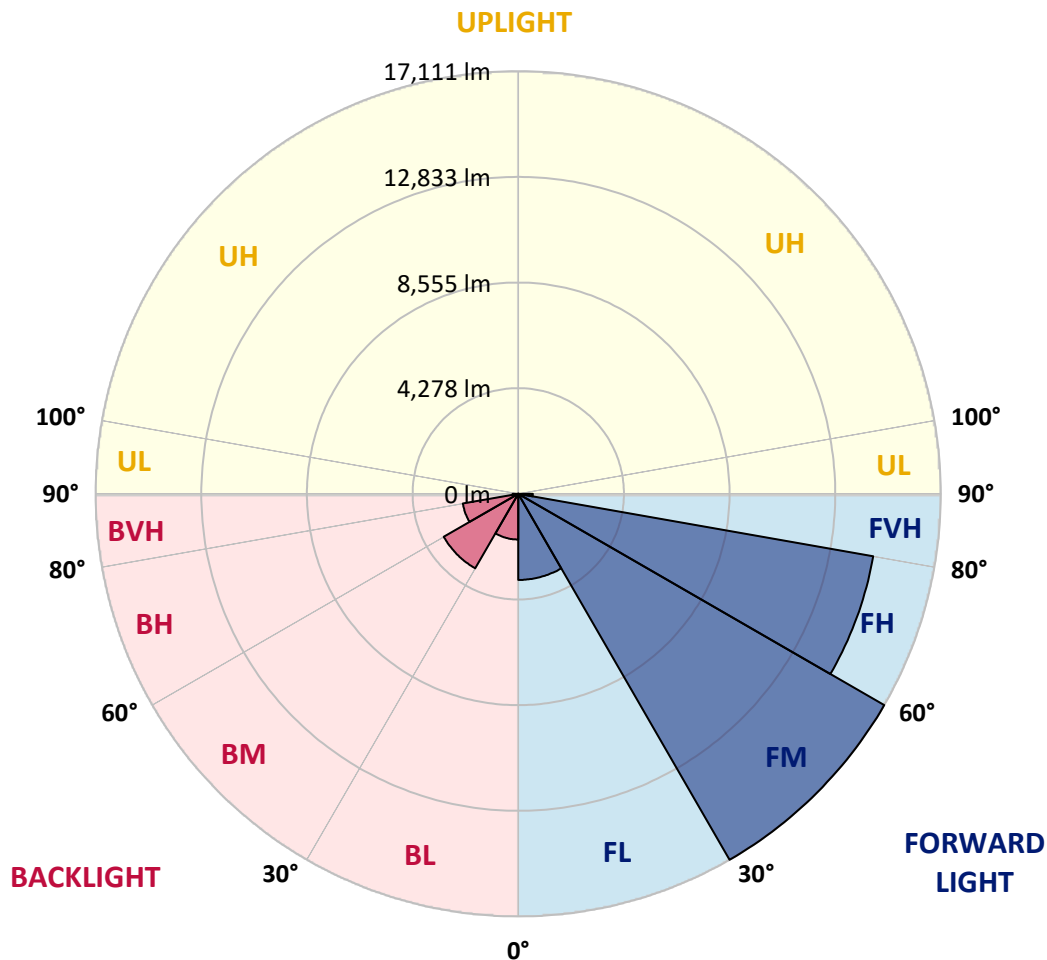


REPORT NUMBER: P652630
 CATALOG NUMBER: GALN-SA9B-840-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 3486.1 | 8.0 | | | |
| FM (30°-60°) | 17110.9 | 39.2 | | | |
| FH (60°-80°) | 14594.2 | 33.4 | | | G5 |
| FVH (80°-90°) | 592.3 | 1.4 | | | G4/750 |
| BL (0°-30°) | 1851.0 | 4.2 | B3/2500 | | |
| BM (30°-60°) | 3485.1 | 8.0 | B3/5000 | | |
| BH (60°-80°) | 2279.8 | 5.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 230.9 | 0.5 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5
 Type II Medium





REPORT NUMBER: P652630

CATALOG NUMBER: GALN-SA9B-840-U-T2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 71° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 |
| 2.5° | 5944.7 | 5915.8 | 5918.3 | 5877.5 | 5824.8 | 5767.2 | 5685.7 | 5613.8 | 5556.2 | 5522.6 | 5424.3 |
| 5° | 6587.3 | 6558.5 | 6522.5 | 6433.8 | 6395.5 | 6254.0 | 6074.1 | 5911.1 | 5786.4 | 5716.9 | 5520.2 |
| 7.5° | 7107.7 | 7100.5 | 7090.9 | 7040.5 | 6942.2 | 6745.6 | 6592.1 | 6309.2 | 6124.5 | 5992.6 | 5656.9 |
| 10° | 7429.1 | 7441.0 | 7448.2 | 7457.8 | 7417.0 | 7313.9 | 7102.9 | 6745.6 | 6510.6 | 6342.7 | 5834.4 |
| 12.5° | 7592.1 | 7604.1 | 7644.9 | 7733.6 | 7788.8 | 7776.7 | 7604.1 | 7254.0 | 6930.3 | 6709.7 | 6023.8 |
| 15° | 7692.8 | 7712.0 | 7784.0 | 7901.4 | 8086.0 | 8203.6 | 8119.7 | 7795.9 | 7441.0 | 7179.6 | 6249.2 |
| 17.5° | 7803.1 | 7824.7 | 7903.8 | 8071.7 | 8313.9 | 8568.1 | 8659.2 | 8381.1 | 7995.0 | 7683.2 | 6501.0 |
| 20° | 7865.5 | 7894.2 | 8006.9 | 8227.6 | 8510.5 | 8879.8 | 9182.0 | 9035.7 | 8613.6 | 8268.3 | 6791.2 |
| 22.5° | 7966.2 | 7990.2 | 8086.0 | 8321.1 | 8659.2 | 9122.0 | 9704.7 | 9673.6 | 9301.9 | 8855.8 | 7110.1 |
| 25° | 8239.5 | 8278.0 | 8325.9 | 8467.4 | 8793.5 | 9369.0 | 10138.8 | 10354.6 | 9968.5 | 9469.7 | 7402.7 |
| 27.5° | 8755.1 | 8786.3 | 8783.9 | 8803.1 | 8987.8 | 9582.4 | 10515.3 | 11028.5 | 10630.4 | 10090.8 | 7685.6 |
| 30° | 9342.7 | 9354.6 | 9364.2 | 9321.1 | 9361.8 | 9800.7 | 10860.6 | 11695.1 | 11297.0 | 10728.7 | 7932.6 |
| 32.5° | 10057.3 | 10081.2 | 9999.7 | 9889.4 | 9855.8 | 10124.4 | 11145.9 | 12361.7 | 12085.9 | 11376.1 | 8177.2 |
| 35° | 10901.4 | 10963.7 | 10798.2 | 10604.0 | 10467.3 | 10589.6 | 11529.6 | 13042.7 | 12894.1 | 12203.5 | 8500.9 |
| 37.5° | 11865.3 | 11942.1 | 11788.6 | 11407.3 | 11213.1 | 11246.7 | 12030.8 | 13884.5 | 13915.6 | 13145.8 | 8983.0 |
| 40° | 12654.3 | 12755.0 | 12759.8 | 12220.2 | 11925.3 | 11963.6 | 12666.3 | 14790.9 | 15148.2 | 14311.3 | 9551.2 |
| 42.5° | 13174.7 | 13273.0 | 13376.1 | 13059.6 | 12750.2 | 12968.4 | 13407.2 | 15774.1 | 16534.2 | 15726.1 | 10345.0 |
| 45° | 13745.4 | 13834.1 | 13891.6 | 13747.7 | 13575.1 | 14141.1 | 14301.7 | 16819.7 | 18011.4 | 17306.4 | 11213.1 |
| 47.5° | 14407.3 | 14505.6 | 14560.7 | 14424.0 | 14359.2 | 15169.8 | 15265.7 | 17795.6 | 19589.3 | 18841.2 | 12172.3 |
| 50° | 15289.7 | 15364.1 | 15335.3 | 15248.9 | 15234.5 | 15958.7 | 16191.4 | 18709.2 | 20891.4 | 20493.4 | 13167.5 |
| 52.5° | 16388.0 | 16476.7 | 16507.9 | 16385.6 | 16330.5 | 16522.3 | 16937.2 | 19541.4 | 22076.1 | 21913.0 | 14229.8 |
| 55° | 17052.2 | 17193.7 | 17668.5 | 17860.4 | 17992.3 | 17251.3 | 17740.5 | 20459.8 | 23138.3 | 23409.3 | 15371.2 |
| 57.5° | 16200.9 | 16383.2 | 17445.5 | 18404.7 | 19644.5 | 19073.7 | 18879.5 | 21419.0 | 24200.7 | 24860.1 | 16738.1 |
| 60° | 14124.3 | 14165.0 | 15534.3 | 17301.6 | 19795.5 | 21416.6 | 21255.9 | 22944.2 | 25351.8 | 26323.0 | 18539.0 |
| 62.5° | 9798.2 | 9884.6 | 11503.3 | 14323.3 | 17929.9 | 22260.7 | 25299.0 | 25577.2 | 27001.6 | 28512.3 | 21179.2 |
| 65° | 5052.6 | 4939.9 | 6414.6 | 9002.1 | 13517.6 | 20256.0 | 28574.7 | 30418.7 | 30579.4 | 31936.6 | 24896.1 |
| 67.5° | 3110.2 | 3160.6 | 3851.2 | 5256.4 | 7992.5 | 14721.4 | 28231.8 | 36334.6 | 35488.1 | 36140.4 | 28346.8 |
| 70° | 2335.6 | 2398.0 | 2872.8 | 3597.0 | 4872.8 | 8417.0 | 22704.3 | 37768.6 | 38950.8 | 38783.0 | 29397.2 |
| 71° | 2031.1 | 2095.9 | 2589.9 | 3273.3 | 4093.4 | 6496.2 | 19128.9 | 36267.5 | 39070.8 | 39042.0 | 29001.5 |
| 72.5° | 1731.4 | 1772.2 | 2158.2 | 2772.1 | 3450.7 | 4553.8 | 14371.3 | 32526.6 | 37404.1 | 38361.0 | 27589.1 |
| 75° | 1359.6 | 1390.8 | 1563.5 | 2115.0 | 2716.9 | 2796.1 | 7712.0 | 24385.3 | 30720.9 | 32543.3 | 22968.1 |
| 77.5° | 1107.8 | 1129.5 | 1218.2 | 1570.7 | 2095.9 | 1980.7 | 4045.5 | 15872.4 | 19246.4 | 21080.9 | 13529.6 |
| 80° | 880.1 | 904.1 | 956.8 | 1064.7 | 1570.7 | 1412.5 | 1930.4 | 8042.9 | 9297.1 | 9277.9 | 5400.3 |
| 82.5° | 683.4 | 690.6 | 752.9 | 781.7 | 1074.3 | 1002.4 | 1045.5 | 3405.2 | 3772.1 | 3896.8 | 1949.6 |
| 85° | 431.6 | 453.2 | 666.7 | 599.5 | 642.7 | 587.5 | 515.5 | 1352.5 | 1666.6 | 1642.6 | 779.4 |
| 87.5° | 131.9 | 139.1 | 225.4 | 254.2 | 285.4 | 256.6 | 189.5 | 398.0 | 486.8 | 527.6 | 194.3 |
| 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: P652630
 CATALOG NUMBER: GALN-SA9B-840-U-T2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 | 5354.7 |
| 2.5° | 5385.9 | 5359.5 | 5266.0 | 5189.3 | 5117.3 | 5038.2 | 4971.1 | 4951.9 | 4935.1 | 4927.9 | 4925.5 |
| 5° | 5436.3 | 5357.2 | 5172.5 | 5021.4 | 4901.5 | 4791.3 | 4721.7 | 4690.5 | 4659.3 | 4659.3 | 4668.9 |
| 7.5° | 5508.2 | 5364.3 | 5079.0 | 4853.6 | 4702.5 | 4599.3 | 4549.1 | 4544.3 | 4551.4 | 4558.6 | 4561.0 |
| 10° | 5587.4 | 5359.5 | 4942.3 | 4661.7 | 4527.4 | 4479.5 | 4481.9 | 4522.6 | 4561.0 | 4589.8 | 4594.6 |
| 12.5° | 5664.1 | 5330.8 | 4781.6 | 4481.9 | 4395.6 | 4405.2 | 4472.3 | 4563.4 | 4637.8 | 4678.5 | 4680.9 |
| 15° | 5750.4 | 5285.2 | 4587.4 | 4311.6 | 4282.9 | 4357.2 | 4481.9 | 4621.0 | 4733.7 | 4800.8 | 4808.0 |
| 17.5° | 5822.3 | 5208.5 | 4383.5 | 4146.1 | 4182.1 | 4318.8 | 4491.4 | 4671.3 | 4808.0 | 4891.9 | 4906.3 |
| 20° | 5903.9 | 5110.2 | 4172.5 | 3987.9 | 4091.0 | 4275.6 | 4472.3 | 4666.5 | 4808.0 | 4889.6 | 4908.7 |
| 22.5° | 5968.7 | 4971.1 | 3971.1 | 3858.4 | 4009.5 | 4222.9 | 4407.5 | 4563.4 | 4678.5 | 4721.7 | 4750.5 |
| 25° | 5995.0 | 4796.1 | 3781.6 | 3752.9 | 3944.7 | 4136.5 | 4261.3 | 4350.0 | 4386.0 | 4381.2 | 4393.1 |
| 27.5° | 5980.6 | 4594.6 | 3618.6 | 3668.9 | 3863.2 | 4002.2 | 4064.6 | 4057.4 | 3992.6 | 3932.8 | 3961.5 |
| 30° | 5920.6 | 4354.8 | 3481.9 | 3582.7 | 3757.7 | 3834.5 | 3824.8 | 3731.3 | 3609.0 | 3496.3 | 3503.5 |
| 32.5° | 5812.7 | 4095.8 | 3354.8 | 3484.3 | 3609.0 | 3642.5 | 3577.9 | 3455.5 | 3280.5 | 3134.2 | 3112.6 |
| 35° | 5721.7 | 3848.8 | 3242.1 | 3371.6 | 3460.3 | 3443.6 | 3381.2 | 3223.0 | 3064.7 | 2935.2 | 2913.6 |
| 37.5° | 5707.3 | 3637.7 | 3134.2 | 3244.5 | 3294.9 | 3270.9 | 3194.1 | 3059.9 | 3002.3 | 2904.0 | 2892.0 |
| 40° | 5784.0 | 3489.1 | 3023.9 | 3110.2 | 3134.2 | 3115.0 | 3031.0 | 2954.3 | 3007.1 | 2983.1 | 2983.1 |
| 42.5° | 5992.6 | 3410.0 | 2925.6 | 2976.0 | 2995.1 | 3009.5 | 2949.6 | 2884.8 | 2949.6 | 2839.2 | 2803.3 |
| 45° | 6323.6 | 3412.4 | 2836.9 | 2844.0 | 2901.6 | 2951.9 | 2911.2 | 2815.2 | 2781.7 | 2561.1 | 2517.9 |
| 47.5° | 6810.3 | 3493.9 | 2764.9 | 2719.4 | 2822.5 | 2906.4 | 2848.8 | 2709.8 | 2561.1 | 2414.8 | 2388.4 |
| 50° | 7378.7 | 3640.2 | 2700.2 | 2589.9 | 2716.9 | 2848.8 | 2805.7 | 2642.6 | 2489.1 | 2400.4 | 2383.6 |
| 52.5° | 8009.3 | 3824.8 | 2621.1 | 2446.0 | 2587.4 | 2822.5 | 2815.2 | 2633.0 | 2422.0 | 2362.0 | 2347.7 |
| 55° | 8788.7 | 4007.1 | 2522.7 | 2278.1 | 2472.4 | 2800.9 | 2788.9 | 2553.9 | 2407.6 | 2364.5 | 2359.7 |
| 57.5° | 9695.1 | 4270.9 | 2381.2 | 2107.9 | 2340.4 | 2712.1 | 2685.7 | 2505.9 | 2359.7 | 2328.5 | 2326.0 |
| 60° | 11155.5 | 4680.9 | 2179.8 | 1952.0 | 2206.2 | 2556.3 | 2589.9 | 2424.4 | 2282.9 | 2275.7 | 2273.3 |
| 62.5° | 13076.4 | 5256.4 | 1971.1 | 1791.3 | 2050.3 | 2354.9 | 2450.8 | 2314.1 | 2201.4 | 2237.3 | 2242.1 |
| 65° | 15728.6 | 5740.8 | 1755.3 | 1654.6 | 1877.6 | 2160.6 | 2318.9 | 2211.0 | 2110.2 | 2179.8 | 2179.8 |
| 67.5° | 17457.5 | 5750.4 | 1558.7 | 1513.1 | 1702.6 | 1997.5 | 2179.8 | 2088.6 | 1992.7 | 2110.2 | 2115.0 |
| 70° | 17097.8 | 5038.2 | 1395.6 | 1364.4 | 1532.3 | 1822.4 | 2026.3 | 1954.4 | 1844.1 | 1949.6 | 1911.2 |
| 71° | 16517.5 | 4642.6 | 1330.9 | 1306.9 | 1465.2 | 1738.5 | 1954.4 | 1894.4 | 1784.1 | 1853.6 | 1832.1 |
| 72.5° | 15591.9 | 4031.1 | 1225.4 | 1230.2 | 1364.4 | 1633.1 | 1853.6 | 1791.3 | 1681.0 | 1719.3 | 1712.2 |
| 75° | 13179.5 | 3520.3 | 1048.0 | 1069.5 | 1172.6 | 1453.2 | 1652.2 | 1604.3 | 1491.6 | 1491.6 | 1484.4 |
| 77.5° | 8239.5 | 2460.3 | 870.4 | 882.5 | 995.2 | 1244.6 | 1419.6 | 1378.8 | 1270.9 | 1235.0 | 1225.4 |
| 80° | 3074.3 | 1270.9 | 681.0 | 695.4 | 765.0 | 980.8 | 1175.0 | 1136.7 | 1026.4 | 985.6 | 947.2 |
| 82.5° | 1163.0 | 637.9 | 501.2 | 489.2 | 563.6 | 748.2 | 920.8 | 875.3 | 788.9 | 690.6 | 661.9 |
| 85° | 438.8 | 316.6 | 307.0 | 297.4 | 330.9 | 443.6 | 570.7 | 561.1 | 470.0 | 400.5 | 393.3 |
| 87.5° | 115.1 | 103.1 | 119.9 | 88.7 | 93.5 | 83.9 | 86.3 | 36.0 | 16.8 | 7.2 | 4.8 |
| 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)