

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: P651156

Luminaire Tested: **GALN-SA9C-840-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9C-840-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38775.1 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G5

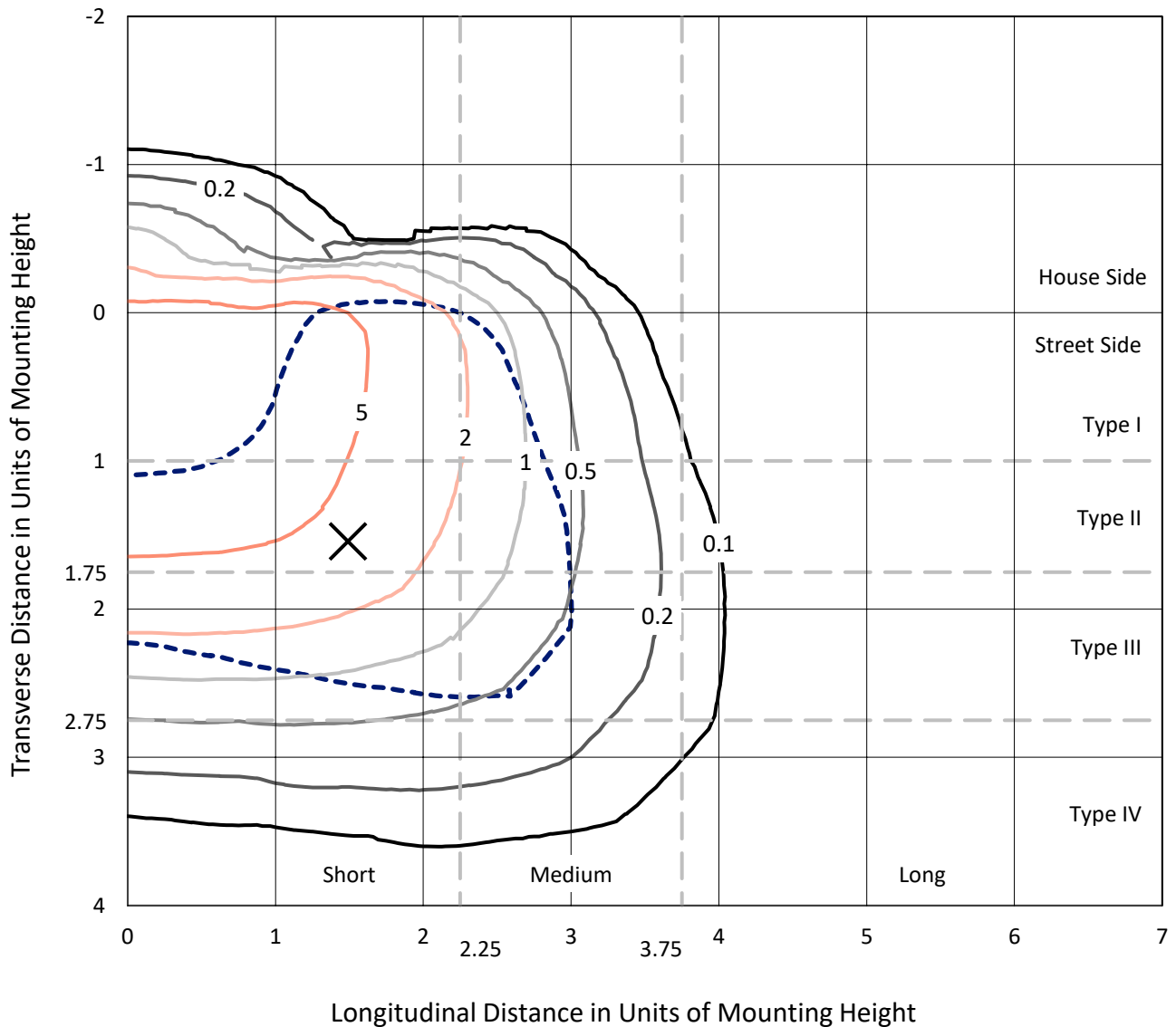
Input Watts (W): 481
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651156
 CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

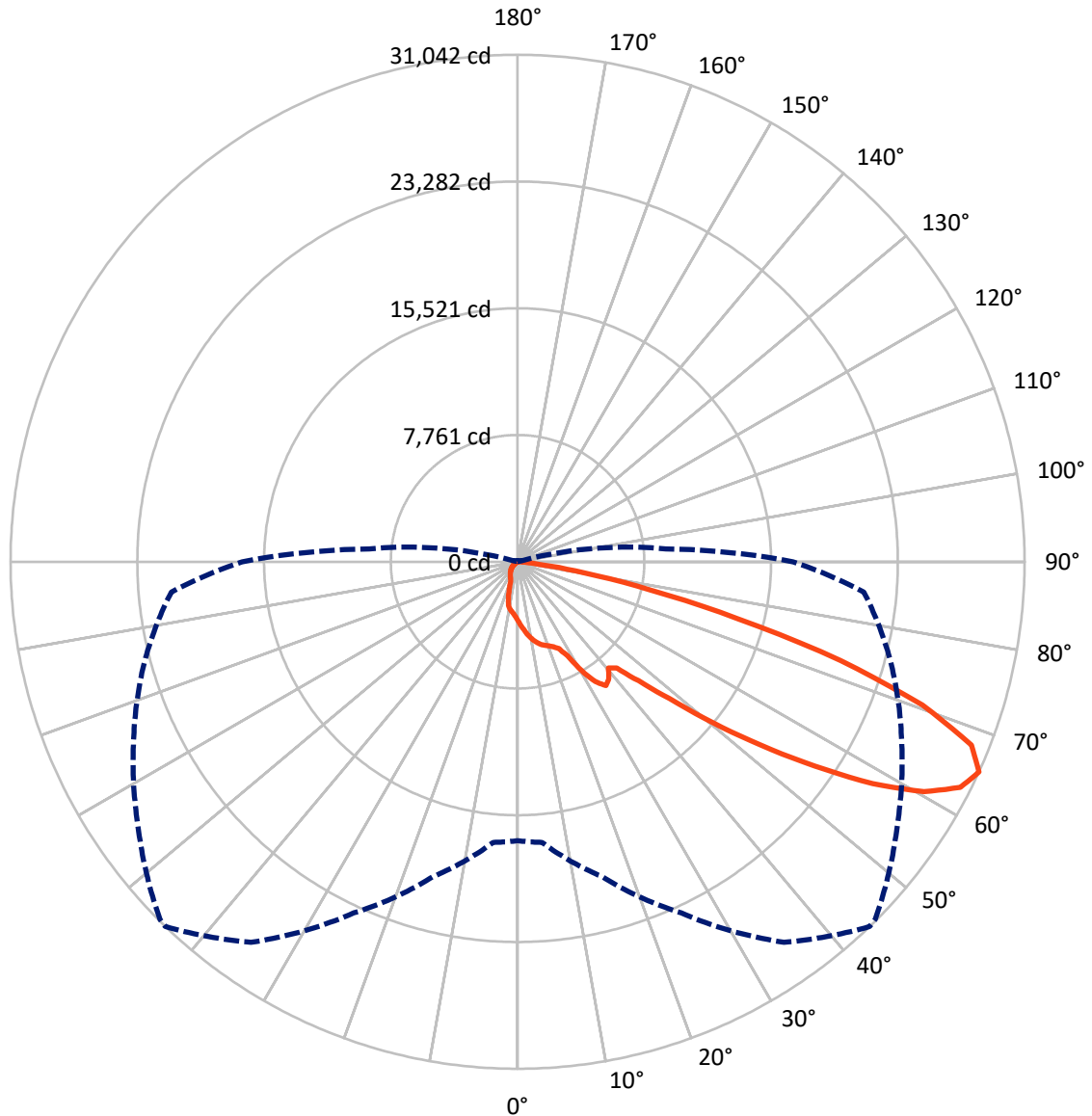
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type III - Short - N/A

REPORT NUMBER: P651156
CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P651156
 CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

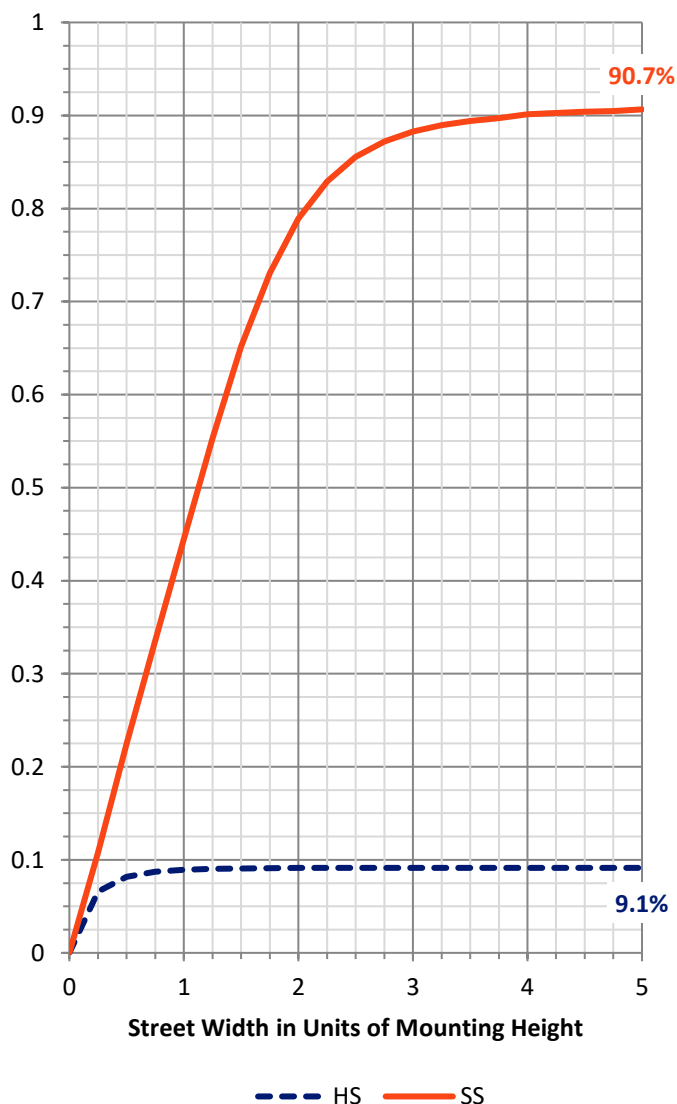
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3572.5 | 0.0 | 3572.5 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 35202.6 | 0.0 | 35202.6 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 38775.1 | 0.0 | 38775.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 358.9 | 0.9 |
| 10°-20° | 1080.3 | 2.8 |
| 20°-30° | 1831.8 | 4.7 |
| 30°-40° | 3045.6 | 7.9 |
| 40°-50° | 5317.7 | 13.7 |
| 50°-60° | 10388.9 | 26.8 |
| 60°-70° | 12053.5 | 31.1 |
| 70°-80° | 4389.3 | 11.3 |
| 80°-90° | 309.3 | 0.8 |
| 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° | 38775.1 | 100.0 |
| 0°-180° | 38775.1 | 100.0 |

Coefficient of Utilization

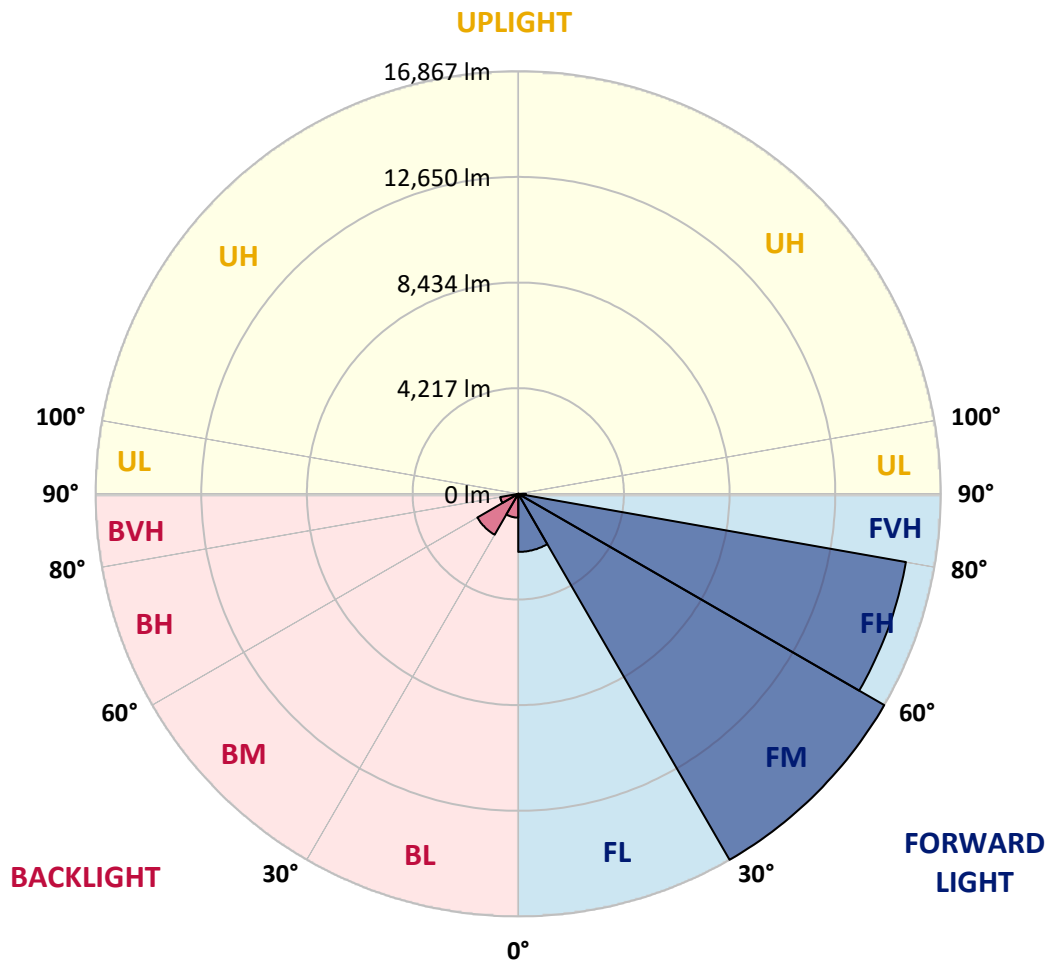


REPORT NUMBER: P651156
 CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2319.1 | 6.0 | | | |
| FM (30°-60°) | 16867.3 | 43.5 | | | |
| FH (60°-80°) | 15711.2 | 40.5 | | | G5 |
| FVH (80°-90°) | 305.1 | 0.8 | | | G3/500 |
| BL (0°-30°) | 951.8 | 2.5 | B2/1000 | | |
| BM (30°-60°) | 1884.9 | 4.9 | B2/2500 | | |
| BH (60°-80°) | 731.6 | 1.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 4.2 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G5
 Type III Short





REPORT NUMBER: P651156

CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 |
| 2.5° | 4062.1 | 4044.4 | 4035.5 | 3988.0 | 3952.5 | 3908.0 | 3908.0 | 3851.8 | 3786.6 | 3715.5 | 3650.3 |
| 5° | 4515.5 | 4485.8 | 4447.3 | 4405.8 | 4322.9 | 4204.3 | 4204.3 | 4085.8 | 3949.5 | 3828.1 | 3694.8 |
| 7.5° | 4951.0 | 4924.3 | 4859.1 | 4779.2 | 4642.8 | 4518.4 | 4509.5 | 4337.7 | 4174.7 | 3991.0 | 3801.4 |
| 10° | 5333.2 | 5312.5 | 5256.2 | 5102.1 | 4959.9 | 4796.9 | 4794.0 | 4601.4 | 4411.7 | 4186.6 | 3952.5 |
| 12.5° | 5599.9 | 5602.8 | 5528.7 | 5380.6 | 5197.0 | 5042.9 | 5031.0 | 4841.4 | 4642.8 | 4399.9 | 4112.5 |
| 15° | 5789.5 | 5789.5 | 5712.5 | 5546.6 | 5380.6 | 5244.3 | 5232.4 | 5066.5 | 4862.2 | 4598.4 | 4287.3 |
| 17.5° | 5842.8 | 5860.6 | 5777.7 | 5629.5 | 5496.2 | 5377.7 | 5374.7 | 5235.5 | 5072.5 | 4817.7 | 4465.1 |
| 20° | 5822.1 | 5839.9 | 5774.7 | 5659.2 | 5567.3 | 5499.1 | 5490.2 | 5434.0 | 5282.8 | 5042.9 | 4654.7 |
| 22.5° | 5777.7 | 5795.4 | 5748.0 | 5679.9 | 5635.5 | 5656.1 | 5641.3 | 5688.8 | 5608.8 | 5318.4 | 4879.9 |
| 25° | 5786.5 | 5804.3 | 5768.8 | 5730.2 | 5768.8 | 5896.2 | 5934.7 | 6139.1 | 6068.0 | 5668.0 | 5122.9 |
| 27.5° | 6065.0 | 6100.6 | 6050.2 | 6068.0 | 6204.3 | 6500.6 | 6574.7 | 6927.2 | 6613.2 | 6112.5 | 5502.1 |
| 30° | 6684.3 | 6660.6 | 6565.8 | 6651.7 | 7125.8 | 7753.9 | 7733.2 | 7676.9 | 7185.0 | 6625.1 | 5952.4 |
| 32.5° | 7247.2 | 7226.5 | 7220.6 | 7591.0 | 8450.2 | 8755.4 | 8740.5 | 8195.4 | 7697.6 | 7211.7 | 6396.9 |
| 35° | 7475.4 | 7395.4 | 7377.6 | 8275.4 | 9712.4 | 9309.4 | 9217.6 | 8408.7 | 8319.8 | 7851.7 | 6850.2 |
| 37.5° | 8162.7 | 8106.5 | 7831.0 | 8388.0 | 9208.7 | 9075.3 | 9004.3 | 8776.1 | 8983.5 | 8417.6 | 7362.8 |
| 40° | 9579.1 | 9422.0 | 9173.1 | 8628.0 | 8494.6 | 8551.0 | 8622.0 | 9247.2 | 9768.6 | 9190.9 | 8047.2 |
| 42.5° | 11339.0 | 11303.5 | 10841.2 | 9825.0 | 8826.5 | 8903.5 | 8995.3 | 10230.8 | 10897.5 | 10355.3 | 9164.2 |
| 45° | 13451.5 | 13501.9 | 12835.3 | 11635.3 | 10325.7 | 10390.9 | 10524.2 | 11682.7 | 12426.4 | 12165.7 | 10921.2 |
| 47.5° | 15371.5 | 15333.0 | 15107.8 | 13860.4 | 12651.6 | 12506.4 | 12722.6 | 13546.4 | 14541.9 | 14583.4 | 13101.9 |
| 50° | 17303.3 | 17507.8 | 17173.0 | 16684.1 | 15786.3 | 15481.1 | 15401.1 | 15804.1 | 17321.1 | 17122.6 | 15721.1 |
| 52.5° | 20079.5 | 20186.2 | 19558.1 | 19433.7 | 19638.1 | 18648.5 | 18568.5 | 18666.2 | 20023.3 | 19341.8 | 17682.6 |
| 55° | 21824.7 | 21762.5 | 21528.4 | 22500.3 | 23309.2 | 22073.6 | 21972.9 | 21578.8 | 22266.1 | 20909.2 | 19569.9 |
| 57.5° | 22375.8 | 22464.7 | 23009.8 | 24766.9 | 26680.9 | 25632.0 | 25448.3 | 24328.4 | 23883.9 | 22369.8 | 21306.2 |
| 60° | 22129.9 | 22292.8 | 23469.1 | 26082.4 | 28737.1 | 28580.1 | 28423.1 | 26541.6 | 25045.4 | 23590.6 | 22523.9 |
| 62.5° | 20378.8 | 20606.9 | 22488.4 | 25848.3 | 29433.4 | 30414.2 | 30218.6 | 27922.4 | 25818.7 | 24183.2 | 22737.3 |
| 65° | 17078.1 | 17247.1 | 19949.2 | 23723.9 | 28443.8 | 31042.3 | 30971.2 | 28354.9 | 25940.1 | 23640.9 | 21276.5 |
| 67.5° | 12174.6 | 12749.4 | 15253.0 | 19993.6 | 25516.4 | 29969.7 | 30091.2 | 27836.4 | 24799.5 | 21297.3 | 17620.4 |
| 70° | 7653.2 | 8044.2 | 9839.8 | 14313.7 | 20455.8 | 26292.8 | 26692.8 | 25463.1 | 21522.5 | 16601.1 | 11795.3 |
| 72.5° | 3650.3 | 3940.7 | 5220.6 | 9060.5 | 14438.2 | 20686.9 | 21004.0 | 20903.2 | 16642.6 | 10459.0 | 6085.8 |
| 75° | 1626.7 | 1736.2 | 2491.8 | 4625.1 | 9321.3 | 13904.8 | 14725.6 | 14861.9 | 10399.8 | 5116.9 | 2367.3 |
| 77.5° | 829.6 | 832.6 | 1167.4 | 2239.9 | 4654.7 | 8296.1 | 8459.1 | 8936.1 | 5638.4 | 2254.8 | 823.7 |
| 80° | 441.4 | 471.1 | 619.2 | 1057.7 | 2414.8 | 4085.8 | 4065.1 | 4468.1 | 2500.7 | 1105.2 | 275.5 |
| 82.5° | 198.5 | 219.2 | 349.6 | 554.1 | 1179.3 | 1549.6 | 1671.1 | 1828.1 | 1072.5 | 705.2 | 121.4 |
| 85° | 59.3 | 71.1 | 171.8 | 278.5 | 426.6 | 447.4 | 500.7 | 645.9 | 607.4 | 500.7 | 62.2 |
| 87.5° | 8.9 | 8.9 | 71.1 | 77.0 | 62.2 | 80.0 | 82.9 | 91.8 | 195.5 | 183.7 | 32.6 |
| 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: P651156

CATALOG NUMBER: GALN-SA9C-840-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 | 3608.8 |
| 2.5° | 3614.7 | 3594.0 | 3519.9 | 3457.7 | 3404.4 | 3371.7 | 3333.2 | 3309.6 | 3297.7 | 3288.8 | 3291.8 |
| 5° | 3629.6 | 3579.2 | 3451.8 | 3351.0 | 3274.0 | 3191.0 | 3134.7 | 3102.1 | 3087.3 | 3063.6 | 3063.6 |
| 7.5° | 3712.5 | 3632.5 | 3454.7 | 3300.7 | 3167.4 | 3054.8 | 2948.1 | 2909.6 | 2882.9 | 2877.0 | 2871.1 |
| 10° | 3831.0 | 3730.3 | 3487.3 | 3274.0 | 3084.4 | 2930.3 | 2779.2 | 2645.9 | 2542.2 | 2479.9 | 2471.0 |
| 12.5° | 3979.2 | 3834.0 | 3537.7 | 3256.2 | 3013.3 | 2740.7 | 2340.7 | 2071.0 | 1890.3 | 1834.1 | 1842.9 |
| 15° | 4115.4 | 3958.4 | 3588.0 | 3241.4 | 2882.9 | 2272.6 | 1819.3 | 1511.1 | 1419.2 | 1410.4 | 1413.3 |
| 17.5° | 4278.4 | 4091.8 | 3647.3 | 3220.7 | 2524.4 | 1736.2 | 1351.1 | 1268.1 | 1285.9 | 1315.5 | 1312.5 |
| 20° | 4447.3 | 4234.0 | 3718.4 | 3096.2 | 2014.8 | 1306.7 | 1194.1 | 1203.0 | 1229.6 | 1256.3 | 1262.2 |
| 22.5° | 4628.0 | 4396.9 | 3801.4 | 2797.0 | 1537.8 | 1137.8 | 1131.8 | 1143.7 | 1170.3 | 1199.9 | 1205.9 |
| 25° | 4877.0 | 4601.4 | 3863.6 | 2405.8 | 1164.4 | 1051.8 | 1063.7 | 1084.4 | 1108.1 | 1140.7 | 1146.6 |
| 27.5° | 5197.0 | 4877.0 | 3896.2 | 1896.3 | 1007.3 | 974.8 | 977.7 | 1007.3 | 1037.0 | 1066.6 | 1066.6 |
| 30° | 5611.7 | 5205.8 | 3831.0 | 1434.1 | 930.3 | 900.7 | 888.9 | 906.7 | 945.2 | 974.8 | 977.7 |
| 32.5° | 5982.1 | 5516.9 | 3659.2 | 1096.2 | 874.1 | 832.6 | 803.0 | 805.9 | 820.7 | 838.5 | 841.5 |
| 35° | 6352.5 | 5819.1 | 3365.9 | 921.5 | 814.8 | 767.4 | 722.9 | 699.2 | 687.4 | 678.5 | 687.4 |
| 37.5° | 6826.5 | 6195.4 | 2974.8 | 838.5 | 764.5 | 705.2 | 642.9 | 592.6 | 551.1 | 524.4 | 530.3 |
| 40° | 7436.9 | 6716.9 | 2512.6 | 785.2 | 717.0 | 645.9 | 563.0 | 497.8 | 426.6 | 402.9 | 391.1 |
| 42.5° | 8444.2 | 7507.9 | 2026.6 | 740.8 | 669.6 | 583.7 | 480.0 | 391.1 | 325.9 | 302.3 | 308.1 |
| 45° | 10035.3 | 8506.5 | 1561.5 | 693.3 | 622.2 | 515.5 | 402.9 | 308.1 | 254.8 | 243.0 | 248.9 |
| 47.5° | 12144.9 | 9798.3 | 1203.0 | 640.0 | 563.0 | 441.4 | 317.1 | 243.0 | 210.3 | 207.4 | 204.4 |
| 50° | 14130.1 | 11001.2 | 1004.4 | 580.7 | 491.8 | 367.4 | 260.7 | 204.4 | 183.7 | 180.7 | 180.7 |
| 52.5° | 15925.6 | 11863.5 | 817.8 | 512.6 | 414.8 | 302.3 | 219.2 | 180.7 | 163.0 | 154.1 | 154.1 |
| 55° | 17522.6 | 12426.4 | 663.7 | 429.6 | 325.9 | 240.0 | 189.6 | 163.0 | 142.2 | 130.4 | 127.4 |
| 57.5° | 18728.5 | 12494.6 | 497.8 | 343.7 | 243.0 | 186.7 | 163.0 | 142.2 | 118.5 | 103.7 | 97.8 |
| 60° | 19244.0 | 11904.9 | 367.4 | 260.7 | 180.7 | 148.2 | 130.4 | 115.6 | 88.9 | 74.1 | 71.1 |
| 62.5° | 18725.5 | 10758.3 | 272.6 | 198.5 | 139.3 | 109.7 | 91.8 | 86.0 | 62.2 | 44.4 | 41.5 |
| 65° | 16867.8 | 9102.1 | 216.3 | 151.1 | 103.7 | 80.0 | 59.3 | 56.3 | 38.5 | 20.8 | 17.7 |
| 67.5° | 13513.8 | 7128.7 | 171.8 | 112.6 | 74.1 | 53.3 | 38.5 | 35.6 | 20.8 | 5.9 | 5.9 |
| 70° | 8787.9 | 4557.0 | 139.3 | 82.9 | 47.4 | 35.6 | 23.7 | 17.7 | 11.9 | 2.9 | 0.0 |
| 72.5° | 4346.5 | 2130.3 | 112.6 | 65.2 | 32.6 | 17.7 | 8.9 | 5.9 | 8.9 | 0.0 | 0.0 |
| 75° | 1685.9 | 758.5 | 82.9 | 44.4 | 17.7 | 8.9 | 5.9 | 0.0 | 2.9 | 0.0 | 0.0 |
| 77.5° | 560.0 | 251.9 | 50.4 | 23.7 | 11.9 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 207.4 | 97.8 | 26.7 | 14.8 | 5.9 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 82.9 | 38.5 | 17.7 | 11.9 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 41.5 | 23.7 | 11.9 | 8.9 | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 29.6 | 17.7 | 11.9 | 8.9 | 5.9 | 2.9 | 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)