

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: P323009

Luminaire Tested: **GLEON-SA5C-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P323009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5C-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 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: 18836 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

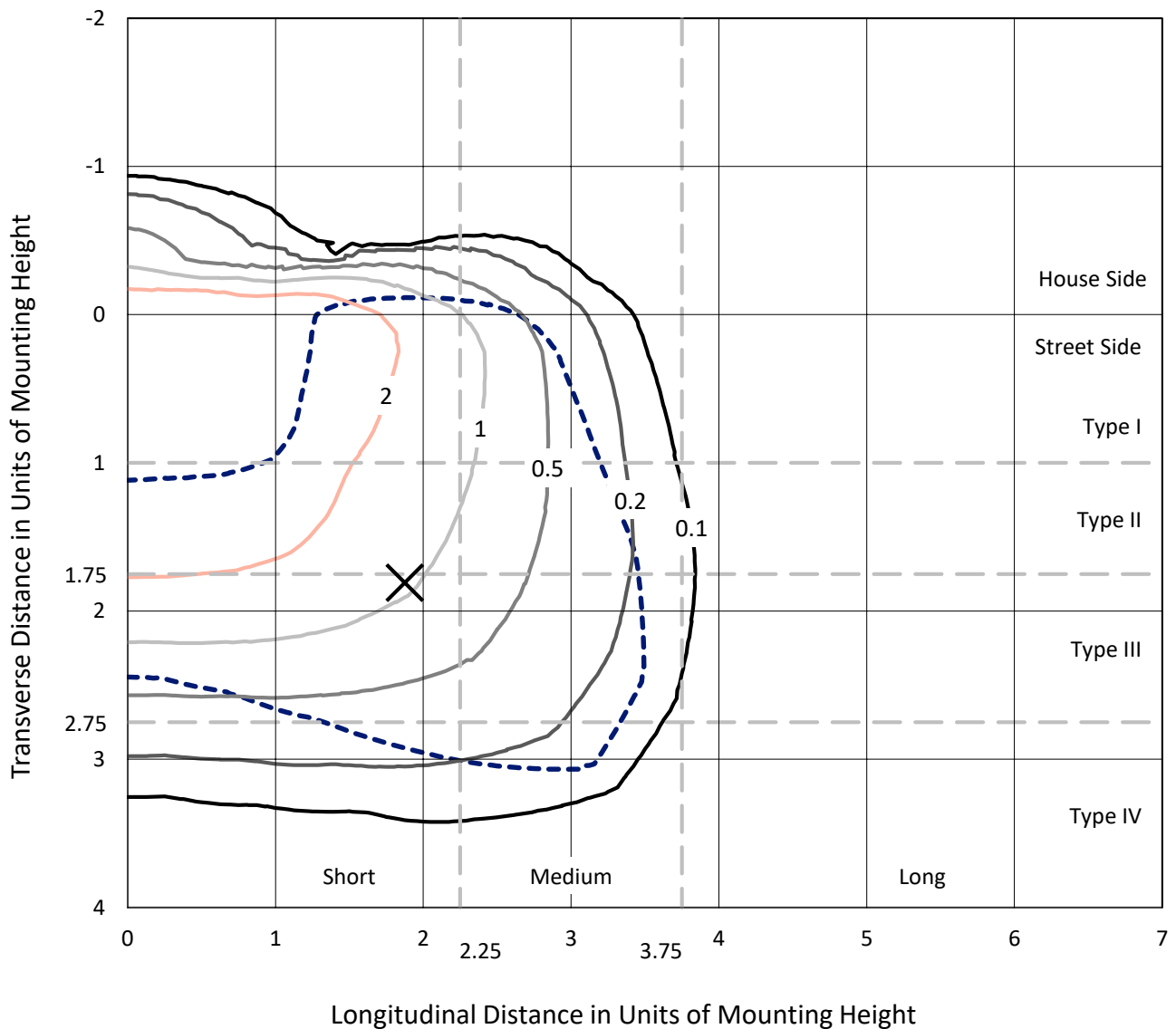
Input Watts (W): 279
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

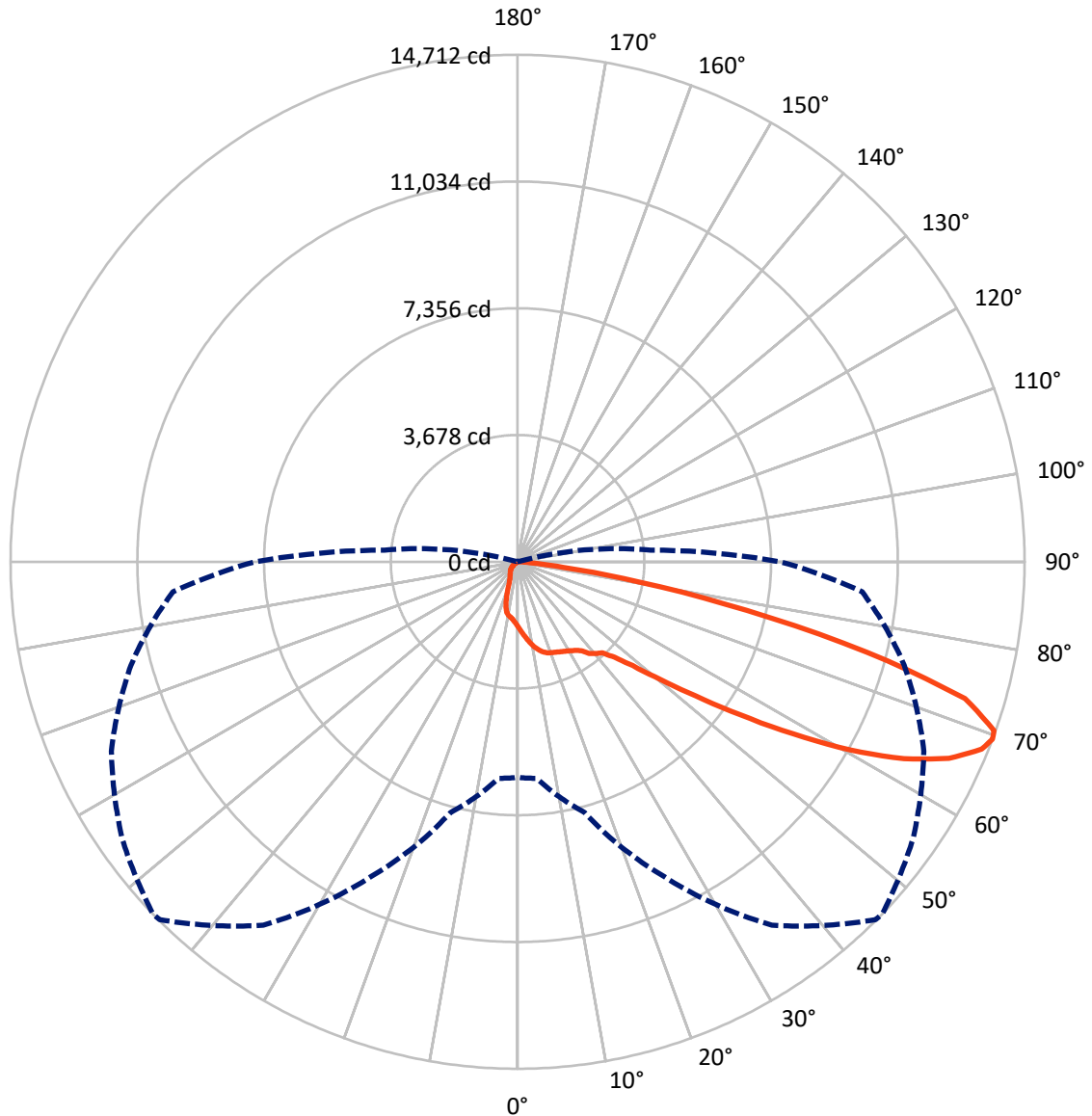
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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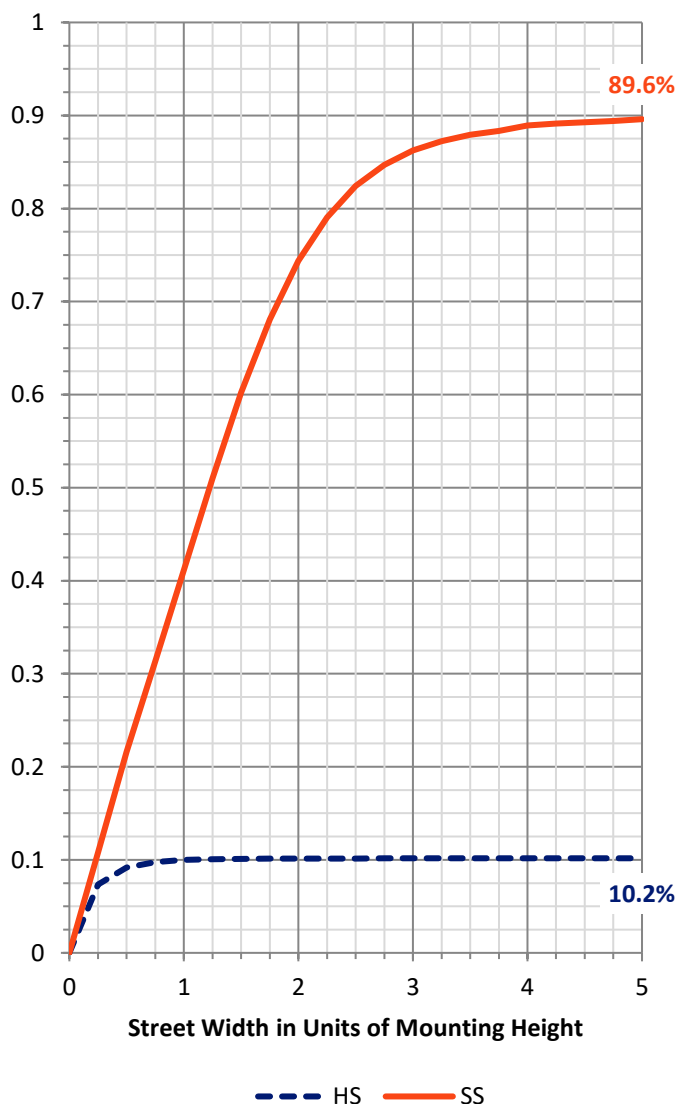
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1933.1 | 0.0 | 1933.1 |
| | % Fixture | 10.3 | 0.0 | 10.3 |
| Street Side | Lumens | 16902.9 | 0.0 | 16902.9 |
| | % Fixture | 89.7 | 0.0 | 89.7 |
| Total | Lumens | 18836.0 | 0.0 | 18836.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 187.9 | 1.0 |
| 10°-20° | 569.9 | 3.0 |
| 20°-30° | 896.3 | 4.8 |
| 30°-40° | 1285.2 | 6.8 |
| 40°-50° | 2221.4 | 11.8 |
| 50°-60° | 4388.5 | 23.3 |
| 60°-70° | 6133.3 | 32.6 |
| 70°-80° | 2963.1 | 15.7 |
| 80°-90° | 190.4 | 1.0 |
| 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° | 18836.0 | 100.0 |
| 0°-180° | 18836.0 | 100.0 |

Coefficient of Utilization

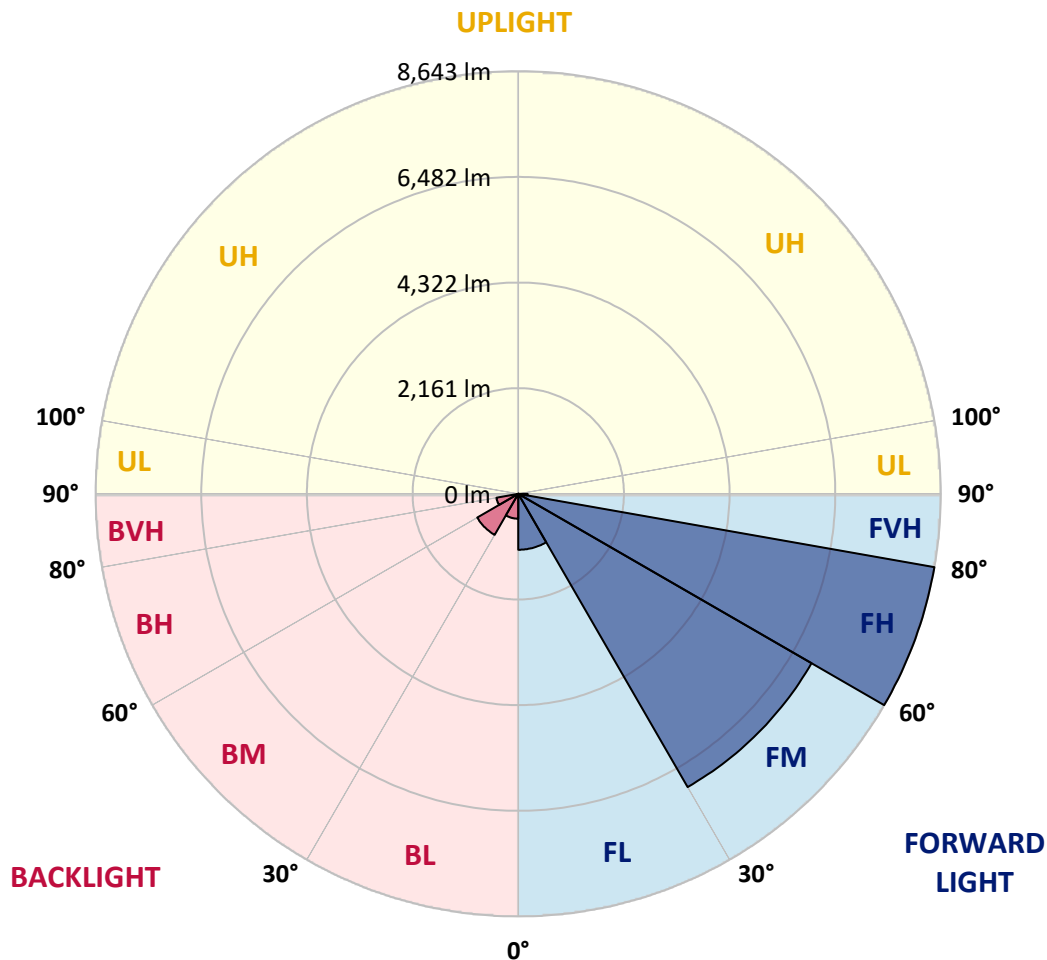


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1144.5 | 6.1 | | | |
| FM (30°-60°) | 6926.4 | 36.8 | | | |
| FH (60°-80°) | 8643.1 | 45.9 | | | G4/12000 |
| FVH (80°-90°) | 188.8 | 1.0 | | | G2/225 |
| BL (0°-30°) | 509.5 | 2.7 | B2/1000 | | |
| BM (30°-60°) | 968.7 | 5.1 | B1/1000 | | |
| BH (60°-80°) | 453.3 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.6 | 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-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 |
| 2.5° | 2096.6 | 2094.0 | 2081.6 | 2076.3 | 2046.3 | 2028.6 | 2021.5 | 1999.5 | 1967.7 | 1935.9 | 1900.5 |
| 5° | 2335.1 | 2334.2 | 2311.2 | 2289.1 | 2232.6 | 2179.6 | 2169.9 | 2118.7 | 2047.1 | 1980.0 | 1912.9 |
| 7.5° | 2578.8 | 2567.3 | 2544.4 | 2502.0 | 2419.8 | 2335.1 | 2327.1 | 2254.7 | 2153.1 | 2056.0 | 1959.7 |
| 10° | 2785.5 | 2778.4 | 2748.4 | 2683.9 | 2587.6 | 2491.4 | 2481.7 | 2392.5 | 2277.7 | 2158.4 | 2035.7 |
| 12.5° | 2946.2 | 2940.9 | 2901.2 | 2820.8 | 2718.3 | 2618.5 | 2605.3 | 2525.8 | 2403.1 | 2269.7 | 2124.9 |
| 15° | 3044.2 | 3041.6 | 2993.0 | 2907.3 | 2806.7 | 2720.1 | 2708.6 | 2638.9 | 2524.9 | 2385.4 | 2222.0 |
| 17.5° | 3067.2 | 3068.1 | 3017.7 | 2931.2 | 2848.2 | 2786.3 | 2777.5 | 2724.5 | 2629.1 | 2490.5 | 2319.2 |
| 20° | 3016.0 | 3026.6 | 2981.5 | 2906.5 | 2855.2 | 2822.6 | 2815.5 | 2783.7 | 2703.3 | 2572.6 | 2396.9 |
| 22.5° | 2943.5 | 2948.8 | 2917.9 | 2867.6 | 2846.4 | 2852.6 | 2849.0 | 2831.4 | 2763.4 | 2643.3 | 2473.7 |
| 25° | 2899.4 | 2899.4 | 2880.8 | 2838.5 | 2852.6 | 2890.6 | 2891.4 | 2887.9 | 2834.0 | 2729.8 | 2567.3 |
| 27.5° | 2897.6 | 2892.3 | 2871.1 | 2839.3 | 2878.2 | 2936.5 | 2940.0 | 2963.9 | 2930.3 | 2834.9 | 2683.9 |
| 30° | 2968.3 | 2962.1 | 2917.1 | 2875.5 | 2925.0 | 2987.7 | 2996.5 | 3048.6 | 3031.9 | 2948.8 | 2813.7 |
| 32.5° | 3133.4 | 3111.3 | 3011.5 | 2943.5 | 2980.6 | 3055.7 | 3067.2 | 3150.2 | 3176.7 | 3089.3 | 2939.1 |
| 35° | 3359.5 | 3289.7 | 3145.8 | 3072.5 | 3076.0 | 3154.6 | 3165.2 | 3287.1 | 3365.7 | 3218.2 | 3036.3 |
| 37.5° | 3671.3 | 3636.8 | 3402.8 | 3206.7 | 3222.6 | 3341.8 | 3372.8 | 3505.2 | 3483.2 | 3288.9 | 3146.7 |
| 40° | 4354.8 | 4301.0 | 4051.9 | 3582.9 | 3363.0 | 3493.8 | 3503.5 | 3574.1 | 3575.9 | 3448.7 | 3376.3 |
| 42.5° | 5285.7 | 5263.6 | 5001.3 | 4265.6 | 3639.5 | 3595.3 | 3613.0 | 3732.2 | 3865.6 | 3786.1 | 3782.5 |
| 45° | 6316.3 | 6304.8 | 6026.6 | 5171.7 | 4198.5 | 3928.3 | 3950.3 | 4110.2 | 4365.4 | 4383.1 | 4495.2 |
| 47.5° | 7145.6 | 7140.3 | 6980.4 | 6183.0 | 5054.3 | 4492.6 | 4499.7 | 4669.2 | 5117.9 | 5339.5 | 5518.8 |
| 50° | 7901.6 | 7927.2 | 7800.9 | 7277.2 | 6220.0 | 5376.6 | 5359.9 | 5472.9 | 6193.5 | 6556.5 | 6779.1 |
| 52.5° | 8952.5 | 8988.7 | 8634.6 | 8298.1 | 7443.2 | 6473.5 | 6460.3 | 6578.6 | 7486.5 | 7758.5 | 7798.2 |
| 55° | 9880.7 | 9818.9 | 9538.9 | 9441.8 | 8934.9 | 7828.3 | 7824.7 | 7928.9 | 8737.0 | 8852.7 | 8926.0 |
| 57.5° | 10290.5 | 10266.6 | 10401.8 | 10624.3 | 10497.2 | 9429.4 | 9421.5 | 9342.0 | 9856.0 | 9868.3 | 10093.5 |
| 60° | 10549.3 | 10578.4 | 10992.6 | 11678.8 | 11995.9 | 11152.4 | 11101.2 | 10616.4 | 10924.6 | 10897.2 | 11138.3 |
| 62.5° | 10355.0 | 10412.4 | 11157.7 | 12301.4 | 13117.5 | 12656.5 | 12584.0 | 11783.9 | 11837.8 | 11743.3 | 11967.6 |
| 65° | 9323.4 | 9412.6 | 10634.0 | 12184.0 | 13673.8 | 13831.9 | 13758.6 | 12814.5 | 12562.8 | 12407.4 | 12282.9 |
| 67.5° | 7570.4 | 7623.4 | 8898.6 | 11162.2 | 13423.0 | 14533.2 | 14518.1 | 13718.0 | 13110.4 | 12295.2 | 11329.1 |
| 69° | 6256.3 | 6308.4 | 7535.9 | 10086.5 | 12871.1 | 14683.3 | 14712.4 | 14007.7 | 13006.2 | 11613.5 | 10037.9 |
| 70° | 5298.9 | 5354.6 | 6498.2 | 9164.5 | 12230.8 | 14613.5 | 14665.6 | 13980.3 | 12707.7 | 10823.9 | 8904.8 |
| 72.5° | 2779.3 | 2827.0 | 4000.7 | 6313.7 | 9970.8 | 13418.6 | 13576.7 | 12798.6 | 10771.8 | 7860.9 | 5265.4 |
| 75° | 873.4 | 900.8 | 1562.3 | 3300.3 | 6826.8 | 10433.6 | 10469.8 | 10039.7 | 7649.0 | 4323.9 | 2192.9 |
| 77.5° | 332.9 | 325.0 | 520.2 | 1216.1 | 3451.4 | 6569.8 | 6791.4 | 6273.9 | 4013.9 | 1528.7 | 506.0 |
| 80° | 179.3 | 180.2 | 270.2 | 503.4 | 1476.6 | 3376.3 | 3563.5 | 3040.7 | 1426.3 | 476.9 | 116.6 |
| 82.5° | 77.7 | 81.3 | 151.9 | 266.7 | 678.3 | 1245.2 | 1338.9 | 1114.5 | 544.9 | 320.6 | 43.3 |
| 85° | 16.8 | 18.5 | 73.3 | 144.8 | 276.4 | 349.7 | 366.5 | 361.2 | 347.1 | 249.0 | 16.8 |
| 87.5° | 0.0 | 0.0 | 32.7 | 52.1 | 69.8 | 79.5 | 69.8 | 91.0 | 191.6 | 167.8 | 8.8 |
| 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: GLEON-SA5C-827-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 | 1887.3 |
| 2.5° | 1889.1 | 1873.2 | 1845.8 | 1815.8 | 1794.6 | 1772.5 | 1754.8 | 1746.9 | 1738.0 | 1731.9 | 1739.8 |
| 5° | 1885.5 | 1854.6 | 1801.6 | 1750.4 | 1713.3 | 1683.3 | 1658.6 | 1648.8 | 1639.1 | 1632.1 | 1631.2 |
| 7.5° | 1916.4 | 1873.2 | 1791.9 | 1716.8 | 1659.4 | 1618.8 | 1585.3 | 1571.1 | 1559.6 | 1554.3 | 1549.9 |
| 10° | 1975.6 | 1920.0 | 1811.3 | 1713.3 | 1639.1 | 1570.2 | 1497.8 | 1442.2 | 1406.0 | 1389.2 | 1383.0 |
| 12.5° | 2052.4 | 1982.7 | 1848.4 | 1731.9 | 1624.1 | 1491.6 | 1338.0 | 1205.5 | 1119.8 | 1091.6 | 1074.8 |
| 15° | 2142.5 | 2056.0 | 1897.0 | 1755.7 | 1569.4 | 1327.4 | 1066.8 | 893.8 | 814.3 | 798.4 | 780.7 |
| 17.5° | 2229.1 | 2133.7 | 1955.3 | 1760.1 | 1449.3 | 1060.7 | 781.6 | 664.1 | 633.2 | 643.8 | 646.5 |
| 20° | 2305.0 | 2210.5 | 2012.7 | 1721.3 | 1231.1 | 795.7 | 605.0 | 575.8 | 587.3 | 607.6 | 611.1 |
| 22.5° | 2381.9 | 2284.7 | 2065.7 | 1618.8 | 952.0 | 604.1 | 544.9 | 552.0 | 563.5 | 583.8 | 587.3 |
| 25° | 2475.5 | 2374.8 | 2115.2 | 1430.7 | 714.5 | 514.0 | 517.5 | 528.1 | 539.6 | 558.2 | 559.9 |
| 27.5° | 2583.2 | 2488.7 | 2147.8 | 1186.1 | 529.9 | 472.5 | 484.0 | 499.9 | 511.3 | 529.0 | 532.5 |
| 30° | 2726.3 | 2638.9 | 2158.4 | 932.6 | 444.2 | 435.4 | 440.7 | 460.1 | 476.9 | 492.8 | 495.4 |
| 32.5° | 2860.5 | 2787.2 | 2123.1 | 703.9 | 411.5 | 401.0 | 401.0 | 412.4 | 431.9 | 446.9 | 450.4 |
| 35° | 2984.2 | 2936.5 | 2010.1 | 514.9 | 386.8 | 369.2 | 360.3 | 360.3 | 372.7 | 385.1 | 388.6 |
| 37.5° | 3147.6 | 3145.8 | 1827.2 | 410.7 | 363.0 | 342.7 | 324.1 | 310.0 | 305.6 | 308.2 | 310.0 |
| 40° | 3427.5 | 3430.2 | 1588.8 | 368.3 | 342.7 | 315.3 | 287.0 | 261.4 | 237.6 | 229.6 | 228.7 |
| 42.5° | 3864.7 | 3824.9 | 1338.9 | 348.0 | 325.0 | 287.0 | 244.6 | 210.2 | 173.1 | 161.6 | 160.7 |
| 45° | 4558.8 | 4323.0 | 1073.9 | 329.4 | 306.5 | 255.2 | 202.2 | 155.4 | 125.4 | 116.6 | 116.6 |
| 47.5° | 5570.0 | 4977.4 | 831.9 | 309.1 | 281.7 | 219.0 | 152.8 | 112.2 | 91.8 | 87.4 | 88.3 |
| 50° | 6615.7 | 5618.6 | 637.6 | 283.5 | 251.7 | 181.0 | 113.0 | 81.3 | 69.8 | 69.8 | 70.7 |
| 52.5° | 7543.0 | 6088.5 | 497.2 | 256.1 | 214.6 | 142.2 | 85.7 | 63.6 | 58.3 | 57.4 | 58.3 |
| 55° | 8411.1 | 6391.4 | 380.6 | 224.3 | 170.4 | 106.0 | 65.4 | 52.1 | 48.6 | 46.8 | 45.9 |
| 57.5° | 9248.4 | 6541.5 | 285.3 | 181.0 | 123.6 | 76.8 | 52.1 | 44.2 | 40.6 | 38.0 | 37.1 |
| 60° | 9805.6 | 6419.6 | 196.1 | 133.4 | 85.7 | 55.6 | 43.3 | 38.0 | 33.6 | 30.9 | 30.0 |
| 62.5° | 10120.0 | 6086.7 | 126.3 | 96.3 | 60.9 | 41.5 | 34.4 | 31.8 | 25.6 | 23.0 | 23.0 |
| 65° | 9992.9 | 5537.4 | 88.3 | 68.9 | 44.2 | 30.9 | 25.6 | 25.6 | 18.5 | 15.0 | 14.1 |
| 67.5° | 8855.4 | 4678.1 | 67.1 | 51.2 | 31.8 | 23.0 | 19.4 | 22.1 | 11.5 | 7.1 | 7.1 |
| 69° | 7619.0 | 3877.0 | 57.4 | 42.4 | 26.5 | 18.5 | 16.8 | 20.3 | 7.9 | 5.3 | 4.4 |
| 70° | 6621.9 | 3344.5 | 52.1 | 37.1 | 22.1 | 15.9 | 15.0 | 19.4 | 7.9 | 4.4 | 3.5 |
| 72.5° | 3961.8 | 1865.2 | 39.7 | 26.5 | 14.1 | 12.4 | 12.4 | 22.1 | 7.9 | 4.4 | 3.5 |
| 75° | 1601.2 | 657.1 | 29.1 | 18.5 | 10.6 | 10.6 | 15.0 | 28.3 | 7.1 | 3.5 | 2.6 |
| 77.5° | 363.0 | 144.0 | 16.8 | 11.5 | 7.1 | 10.6 | 17.7 | 22.1 | 4.4 | 1.8 | 0.0 |
| 80° | 88.3 | 35.3 | 10.6 | 7.1 | 4.4 | 7.9 | 13.2 | 12.4 | 0.9 | 0.0 | 0.0 |
| 82.5° | 29.1 | 12.4 | 4.4 | 3.5 | 0.9 | 2.6 | 6.2 | 3.5 | 0.0 | 0.0 | 0.0 |
| 85° | 12.4 | 7.1 | 1.8 | 0.9 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.9 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 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)