

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: P651807

Luminaire Tested: **GALN-SA3A-840-U-T3-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651807
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3A-840-U-T3-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9788.4 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

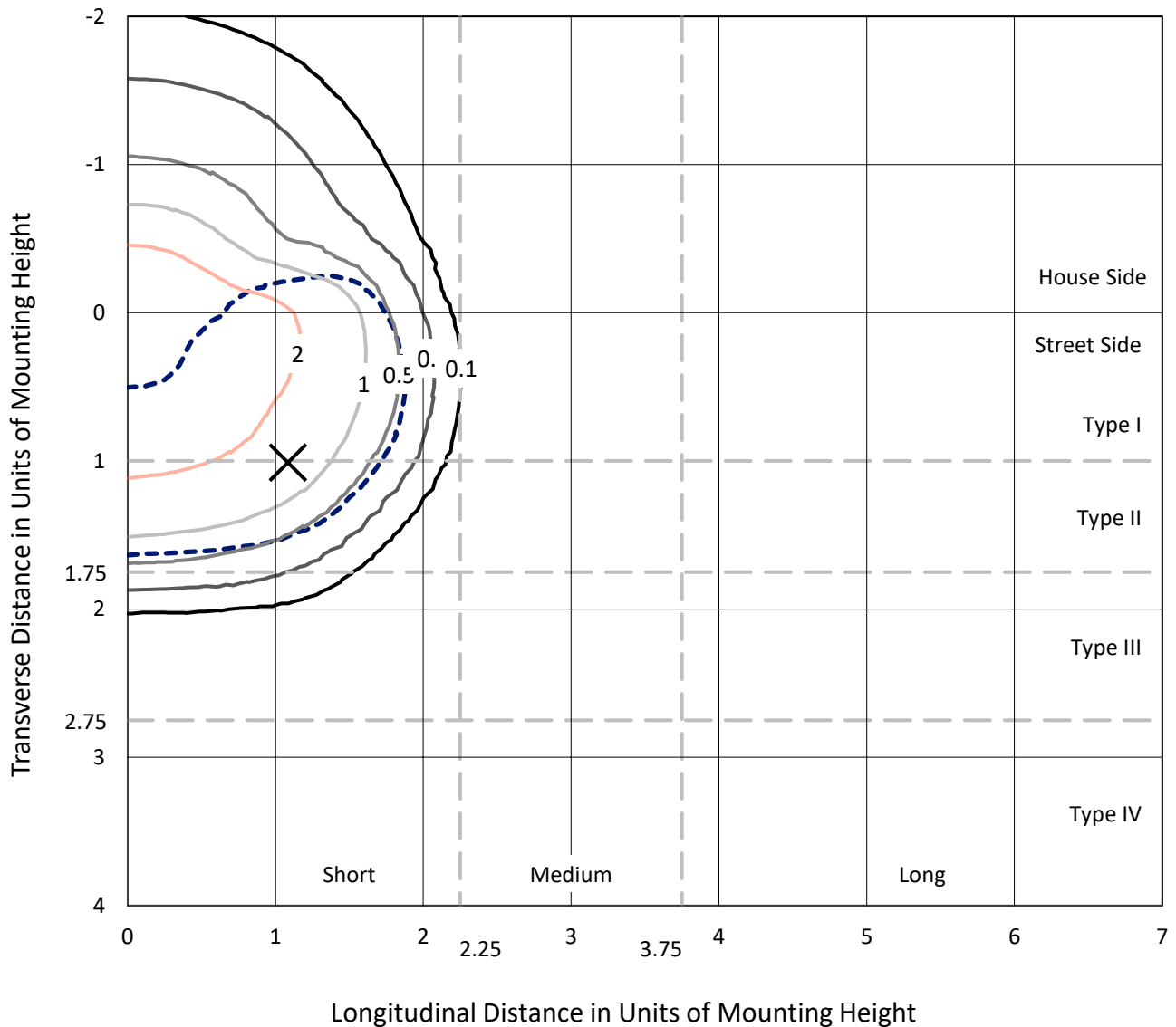
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

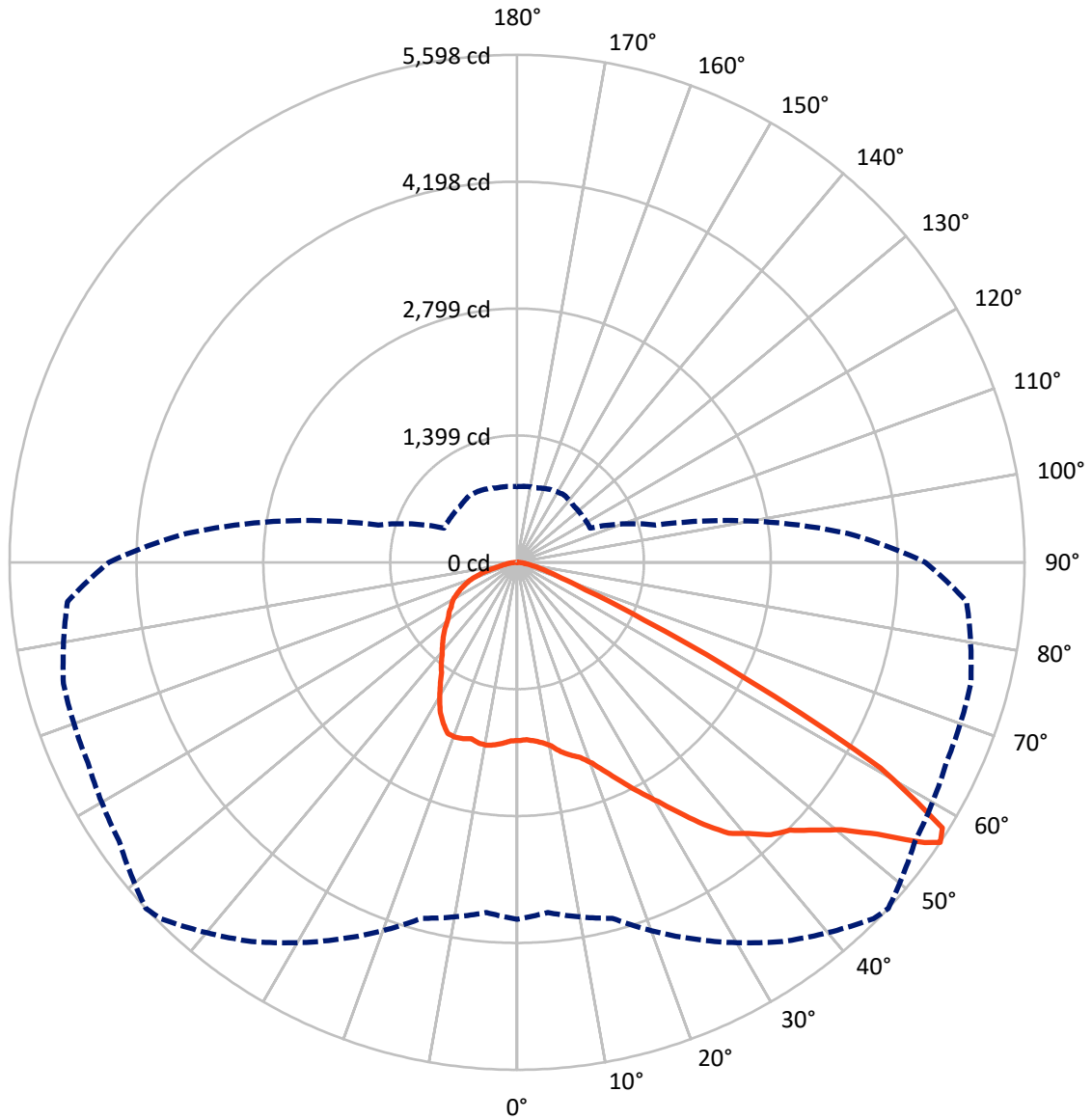
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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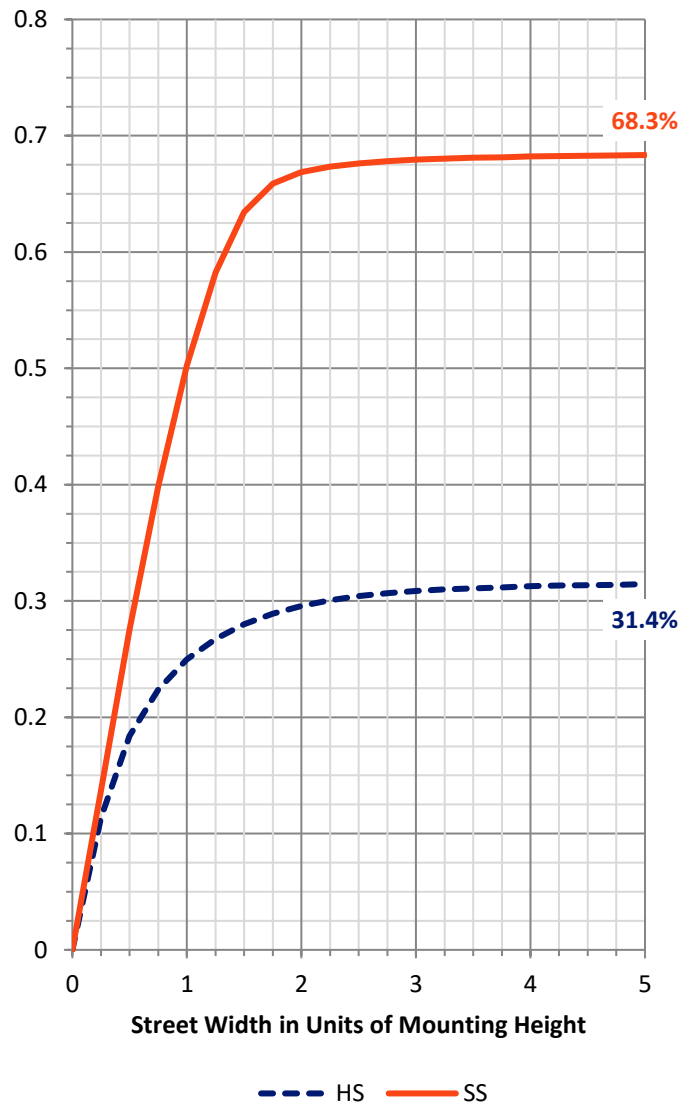
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3101.8 | 0.0 | 3101.8 |
| | % Fixture | 31.7 | 0.0 | 31.7 |
| Street Side | Lumens | 6686.6 | 0.0 | 6686.6 |
| | % Fixture | 68.3 | 0.0 | 68.3 |
| Total | Lumens | 9788.4 | 0.0 | 9788.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 191.6 | 2.0 |
| 10°-20° | 604.3 | 6.2 |
| 20°-30° | 1068.3 | 10.9 |
| 30°-40° | 1604.6 | 16.4 |
| 40°-50° | 2202.1 | 22.5 |
| 50°-60° | 2623.5 | 26.8 |
| 60°-70° | 1122.7 | 11.5 |
| 70°-80° | 317.7 | 3.2 |
| 80°-90° | 53.5 | 0.5 |
| 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° | 9788.4 | 100.0 |
| 0°-180° | 9788.4 | 100.0 |

Coefficient of Utilization



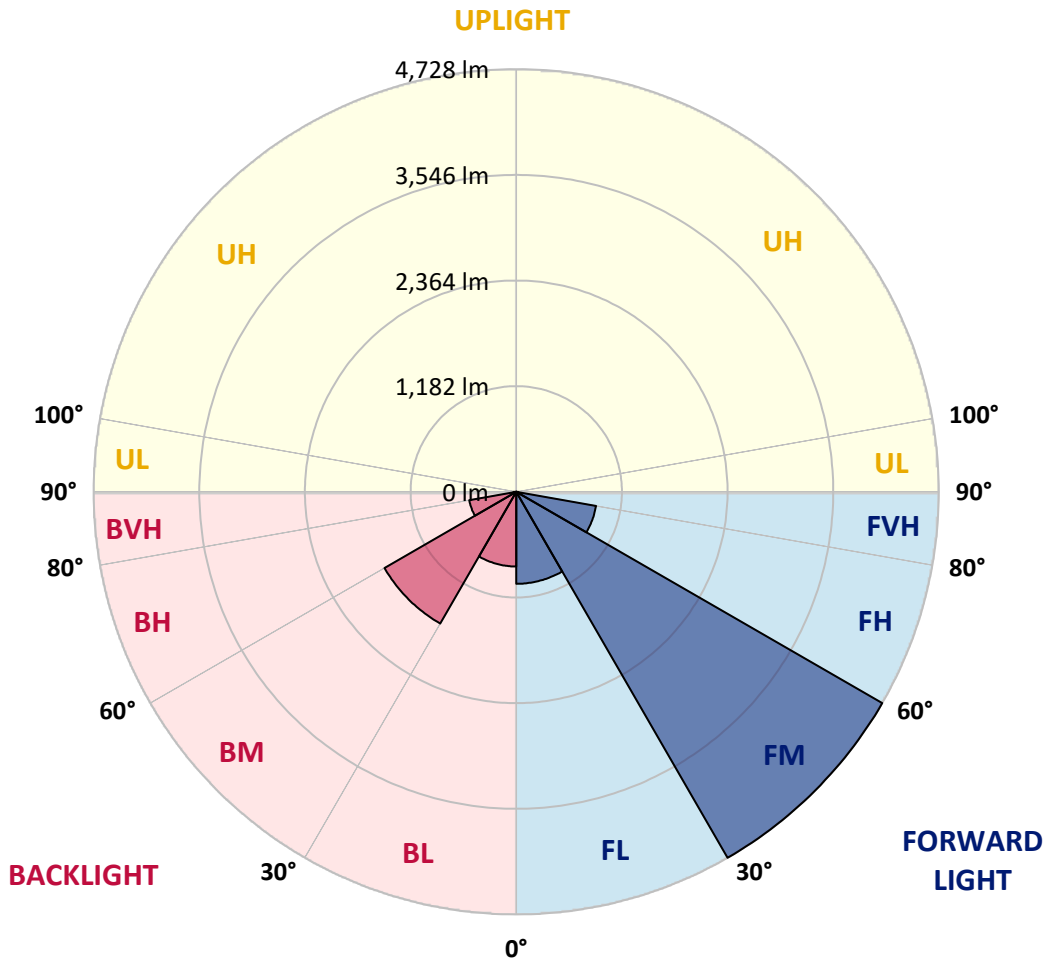
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1029.1 | 10.5 | | | |
| FM (30°-60°) | 4728.0 | 48.3 | | | |
| FH (60°-80°) | 906.8 | 9.3 | | | G1/1800 |
| FVH (80°-90°) | 22.7 | 0.2 | | | G1/100 |
| BL (0°-30°) | 835.1 | 8.5 | B2/1000 | | |
| BM (30°-60°) | 1702.2 | 17.4 | B2/2500 | | |
| BH (60°-80°) | 533.7 | 5.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 30.8 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 47° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 |
| 2.5° | 1958.7 | 1955.0 | 1952.5 | 1972.4 | 1964.9 | 1966.2 | 1958.7 | 1966.2 | 1971.2 | 1960.0 | 1976.2 |
| 5° | 1955.0 | 1966.2 | 1956.2 | 1962.5 | 1978.7 | 1973.7 | 1978.7 | 1993.7 | 1989.9 | 1986.2 | 1981.1 |
| 7.5° | 1989.9 | 1991.2 | 1998.6 | 2001.2 | 2006.1 | 2001.2 | 2008.6 | 2022.4 | 2018.7 | 1997.4 | 1999.9 |
| 10° | 2039.8 | 2042.4 | 2043.6 | 2057.3 | 2066.1 | 2067.3 | 2058.6 | 2046.1 | 2044.8 | 2073.6 | 2053.6 |
| 12.5° | 2097.3 | 2091.1 | 2106.0 | 2111.0 | 2121.0 | 2132.2 | 2143.5 | 2117.2 | 2133.4 | 2134.7 | 2111.0 |
| 15° | 2180.9 | 2187.2 | 2169.7 | 2169.7 | 2173.4 | 2174.7 | 2205.9 | 2193.4 | 2190.9 | 2177.2 | 2187.2 |
| 17.5° | 2305.8 | 2263.3 | 2262.0 | 2244.5 | 2242.1 | 2252.0 | 2263.3 | 2273.3 | 2307.0 | 2279.5 | 2225.9 |
| 20° | 2396.8 | 2406.9 | 2370.7 | 2349.4 | 2353.2 | 2375.7 | 2364.4 | 2409.4 | 2433.1 | 2388.1 | 2335.7 |
| 22.5° | 2557.9 | 2524.2 | 2532.9 | 2485.5 | 2489.3 | 2513.0 | 2511.7 | 2557.9 | 2571.7 | 2500.5 | 2424.4 |
| 25° | 2666.6 | 2657.8 | 2665.3 | 2627.9 | 2632.8 | 2651.6 | 2681.5 | 2757.6 | 2735.2 | 2656.6 | 2480.5 |
| 27.5° | 2825.1 | 2807.6 | 2801.4 | 2787.7 | 2782.6 | 2832.6 | 2867.6 | 2948.6 | 2932.4 | 2817.6 | 2580.4 |
| 30° | 2987.4 | 2976.1 | 2982.4 | 2926.2 | 2946.2 | 3052.2 | 3062.2 | 3173.3 | 3165.9 | 2963.7 | 2691.5 |
| 32.5° | 3099.8 | 3106.0 | 3117.2 | 3086.0 | 3174.6 | 3259.5 | 3293.2 | 3419.3 | 3425.6 | 3214.6 | 2906.2 |
| 35° | 3280.7 | 3259.5 | 3265.8 | 3301.9 | 3343.1 | 3498.0 | 3552.9 | 3636.5 | 3689.0 | 3478.0 | 3112.2 |
| 37.5° | 3394.4 | 3416.8 | 3390.6 | 3448.0 | 3555.4 | 3741.4 | 3791.3 | 3877.4 | 3932.3 | 3737.7 | 3393.1 |
| 40° | 3571.6 | 3535.4 | 3554.2 | 3595.4 | 3705.2 | 3947.4 | 3933.6 | 4022.3 | 4039.7 | 3958.6 | 3655.2 |
| 42.5° | 3762.6 | 3745.1 | 3718.9 | 3812.5 | 3904.9 | 4081.0 | 4108.4 | 4067.2 | 4155.8 | 4174.6 | 4029.7 |
| 45° | 3991.0 | 4012.2 | 4016.0 | 4018.6 | 4099.7 | 4253.2 | 4215.8 | 4179.6 | 4282.0 | 4418.0 | 4261.9 |
| 47.5° | 4203.3 | 4135.9 | 4184.6 | 4251.9 | 4366.8 | 4368.1 | 4411.8 | 4325.6 | 4434.3 | 4555.4 | 4471.7 |
| 50° | 4274.5 | 4242.0 | 4306.9 | 4434.3 | 4611.5 | 4630.2 | 4635.3 | 4512.9 | 4569.1 | 4665.2 | 4544.1 |
| 52.5° | 4247.0 | 4235.8 | 4401.8 | 4599.0 | 4858.7 | 4953.6 | 4978.6 | 4827.5 | 4858.7 | 4815.0 | 4703.9 |
| 55° | 4115.9 | 4149.6 | 4316.9 | 4718.9 | 5117.1 | 5410.5 | 5457.9 | 5266.9 | 5068.4 | 5102.1 | 4979.8 |
| 56° | 3936.1 | 3877.4 | 4064.7 | 4582.8 | 5105.9 | 5559.0 | 5597.7 | 5359.3 | 5224.5 | 5180.7 | 4977.3 |
| 57.5° | 3339.4 | 3263.2 | 3509.2 | 4123.4 | 4822.5 | 5502.8 | 5531.6 | 5398.0 | 5198.2 | 5109.6 | 4614.0 |
| 60° | 1955.0 | 1992.4 | 2304.5 | 2843.8 | 3720.2 | 4511.6 | 4607.8 | 4705.1 | 4571.6 | 4174.6 | 3434.3 |
| 62.5° | 943.8 | 920.1 | 1143.5 | 1630.4 | 2267.1 | 2880.0 | 2851.3 | 3124.7 | 3274.5 | 2966.1 | 2168.4 |
| 65° | 494.3 | 491.9 | 624.2 | 890.1 | 1245.9 | 1513.0 | 1539.3 | 1686.5 | 1892.5 | 1528.0 | 1101.0 |
| 67.5° | 363.3 | 373.2 | 439.4 | 625.5 | 801.5 | 817.7 | 813.9 | 887.6 | 907.6 | 767.7 | 676.6 |
| 70° | 284.6 | 289.6 | 338.3 | 475.7 | 596.7 | 534.3 | 523.1 | 531.8 | 590.5 | 615.4 | 585.5 |
| 72.5° | 206.0 | 211.0 | 252.1 | 320.8 | 373.2 | 364.5 | 372.0 | 420.7 | 493.1 | 519.3 | 488.1 |
| 75° | 137.3 | 141.0 | 163.6 | 196.0 | 220.9 | 238.4 | 252.1 | 308.3 | 375.8 | 390.7 | 375.8 |
| 77.5° | 94.9 | 98.6 | 113.6 | 138.6 | 141.0 | 152.3 | 157.3 | 183.5 | 224.7 | 243.5 | 233.5 |
| 80° | 53.7 | 53.7 | 61.1 | 71.1 | 87.4 | 102.3 | 104.9 | 126.1 | 144.8 | 157.3 | 159.8 |
| 82.5° | 25.0 | 26.2 | 32.5 | 43.7 | 57.4 | 71.1 | 73.7 | 87.4 | 101.1 | 113.6 | 117.3 |
| 85° | 12.4 | 13.7 | 18.8 | 26.2 | 35.0 | 42.5 | 41.2 | 42.5 | 44.9 | 42.5 | 43.7 |
| 87.5° | 3.8 | 3.8 | 5.0 | 6.2 | 5.0 | 6.2 | 6.2 | 7.5 | 8.7 | 10.0 | 11.3 |
| 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-SA3A-840-U-T3-GRSWH

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 | 1966.2 |
| 2.5° | 1977.4 | 1981.1 | 1956.2 | 1979.9 | 1971.2 | 1970.0 | 1987.5 | 1984.9 | 1991.2 | 1988.6 | 1973.7 |
| 5° | 1978.7 | 1970.0 | 1996.1 | 1972.4 | 1983.7 | 2007.4 | 1991.2 | 2028.6 | 2009.9 | 2022.4 | 1994.9 |
| 7.5° | 2017.4 | 2019.9 | 2014.9 | 2024.9 | 2019.9 | 2031.1 | 2022.4 | 2031.1 | 2016.1 | 2017.4 | 2042.4 |
| 10° | 2051.1 | 2043.6 | 2052.3 | 2039.8 | 2048.6 | 2044.8 | 2024.9 | 2018.7 | 2023.6 | 2017.4 | 2033.6 |
| 12.5° | 2113.5 | 2099.8 | 2093.5 | 2078.5 | 2068.5 | 2031.1 | 1999.9 | 1982.4 | 2006.1 | 2009.9 | 2002.4 |
| 15° | 2177.2 | 2178.4 | 2149.7 | 2116.0 | 2053.6 | 1997.4 | 2004.9 | 2011.2 | 2011.2 | 2021.1 | 2002.4 |
| 17.5° | 2217.1 | 2217.1 | 2190.9 | 2123.5 | 2059.9 | 2027.4 | 2019.9 | 1999.9 | 1982.4 | 1979.9 | 1978.7 |
| 20° | 2287.0 | 2265.8 | 2205.9 | 2122.3 | 2057.3 | 2042.4 | 1986.2 | 1938.8 | 1902.5 | 1890.1 | 1888.8 |
| 22.5° | 2366.9 | 2313.3 | 2229.6 | 2124.7 | 2053.6 | 2032.4 | 1927.5 | 1856.3 | 1791.4 | 1763.9 | 1767.7 |
| 25° | 2440.6 | 2354.5 | 2243.4 | 2113.5 | 2039.8 | 1937.5 | 1820.1 | 1721.5 | 1654.1 | 1631.6 | 1620.4 |
| 27.5° | 2491.8 | 2398.1 | 2243.4 | 2123.5 | 1988.6 | 1831.4 | 1711.5 | 1585.5 | 1526.8 | 1511.8 | 1514.3 |
| 30° | 2560.4 | 2453.0 | 2282.1 | 2102.2 | 1886.3 | 1694.0 | 1550.5 | 1468.0 | 1433.1 | 1420.6 | 1429.4 |
| 32.5° | 2721.5 | 2596.6 | 2335.7 | 2051.1 | 1765.2 | 1556.7 | 1440.6 | 1394.5 | 1343.2 | 1318.3 | 1309.5 |
| 35° | 2896.2 | 2732.7 | 2388.1 | 1964.9 | 1629.1 | 1431.9 | 1359.5 | 1317.0 | 1255.9 | 1228.4 | 1233.4 |
| 37.5° | 3143.4 | 2907.5 | 2391.9 | 1822.6 | 1481.8 | 1362.0 | 1295.8 | 1229.6 | 1179.8 | 1137.3 | 1124.8 |
| 40° | 3476.7 | 3145.9 | 2383.1 | 1672.8 | 1363.3 | 1279.6 | 1230.9 | 1148.5 | 1092.3 | 1062.4 | 1068.6 |
| 42.5° | 3770.1 | 3425.6 | 2347.0 | 1503.0 | 1255.9 | 1223.4 | 1168.5 | 1087.3 | 1032.4 | 1001.2 | 998.7 |
| 45° | 4017.3 | 3631.5 | 2278.3 | 1358.2 | 1166.0 | 1161.0 | 1097.3 | 1034.9 | 991.2 | 962.5 | 975.0 |
| 47.5° | 4245.7 | 3797.5 | 2174.7 | 1213.4 | 1083.6 | 1093.6 | 1032.4 | 993.7 | 966.2 | 940.0 | 938.8 |
| 50° | 4328.1 | 3795.1 | 2083.6 | 1093.6 | 1017.4 | 1012.4 | 1010.0 | 968.7 | 940.0 | 917.5 | 927.5 |
| 52.5° | 4465.5 | 3837.5 | 1984.9 | 1011.2 | 957.5 | 958.7 | 967.5 | 937.5 | 905.1 | 891.4 | 903.8 |
| 55° | 4662.7 | 3843.8 | 1767.7 | 915.1 | 907.6 | 916.3 | 916.3 | 896.3 | 868.8 | 857.7 | 851.4 |
| 56° | 4501.6 | 3657.8 | 1585.5 | 890.1 | 882.6 | 882.6 | 906.3 | 883.9 | 850.2 | 841.4 | 833.9 |
| 57.5° | 4152.1 | 3204.5 | 1327.0 | 860.1 | 848.9 | 866.4 | 878.8 | 855.1 | 823.9 | 811.5 | 819.0 |
| 60° | 2863.8 | 2168.4 | 997.4 | 795.2 | 795.2 | 823.9 | 833.9 | 798.9 | 785.2 | 784.0 | 774.0 |
| 62.5° | 1671.6 | 1263.4 | 780.2 | 736.5 | 739.1 | 762.8 | 770.3 | 750.3 | 732.8 | 754.0 | 764.0 |
| 65° | 886.3 | 754.0 | 669.1 | 674.1 | 675.4 | 694.1 | 726.5 | 725.3 | 724.0 | 730.3 | 731.6 |
| 67.5° | 641.7 | 626.7 | 608.0 | 603.0 | 605.4 | 619.2 | 651.7 | 676.6 | 675.4 | 660.4 | 649.2 |
| 70° | 571.8 | 550.5 | 539.3 | 540.5 | 530.6 | 546.8 | 573.0 | 589.2 | 560.5 | 543.0 | 535.5 |
| 72.5° | 475.7 | 469.4 | 461.9 | 463.1 | 443.2 | 439.4 | 409.5 | 409.5 | 402.0 | 397.0 | 405.7 |
| 75° | 363.3 | 360.8 | 364.5 | 358.3 | 337.1 | 314.6 | 297.1 | 280.9 | 255.9 | 245.9 | 240.9 |
| 77.5° | 229.7 | 237.2 | 245.9 | 232.2 | 223.5 | 207.2 | 189.7 | 173.5 | 153.6 | 142.3 | 142.3 |
| 80° | 156.0 | 162.3 | 168.5 | 166.0 | 156.0 | 141.0 | 127.3 | 109.8 | 96.1 | 87.4 | 86.1 |
| 82.5° | 118.6 | 123.6 | 132.3 | 122.4 | 112.4 | 99.9 | 88.6 | 76.1 | 63.7 | 53.7 | 53.7 |
| 85° | 42.5 | 48.7 | 53.7 | 58.7 | 62.4 | 63.7 | 54.9 | 44.9 | 36.2 | 28.7 | 27.5 |
| 87.5° | 11.3 | 12.4 | 13.7 | 12.4 | 12.4 | 12.4 | 13.7 | 12.4 | 11.3 | 8.7 | 8.7 |
| 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)