

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: P452318

Luminaire Tested: **GALN-SA3B-730-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3B-730-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15142 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

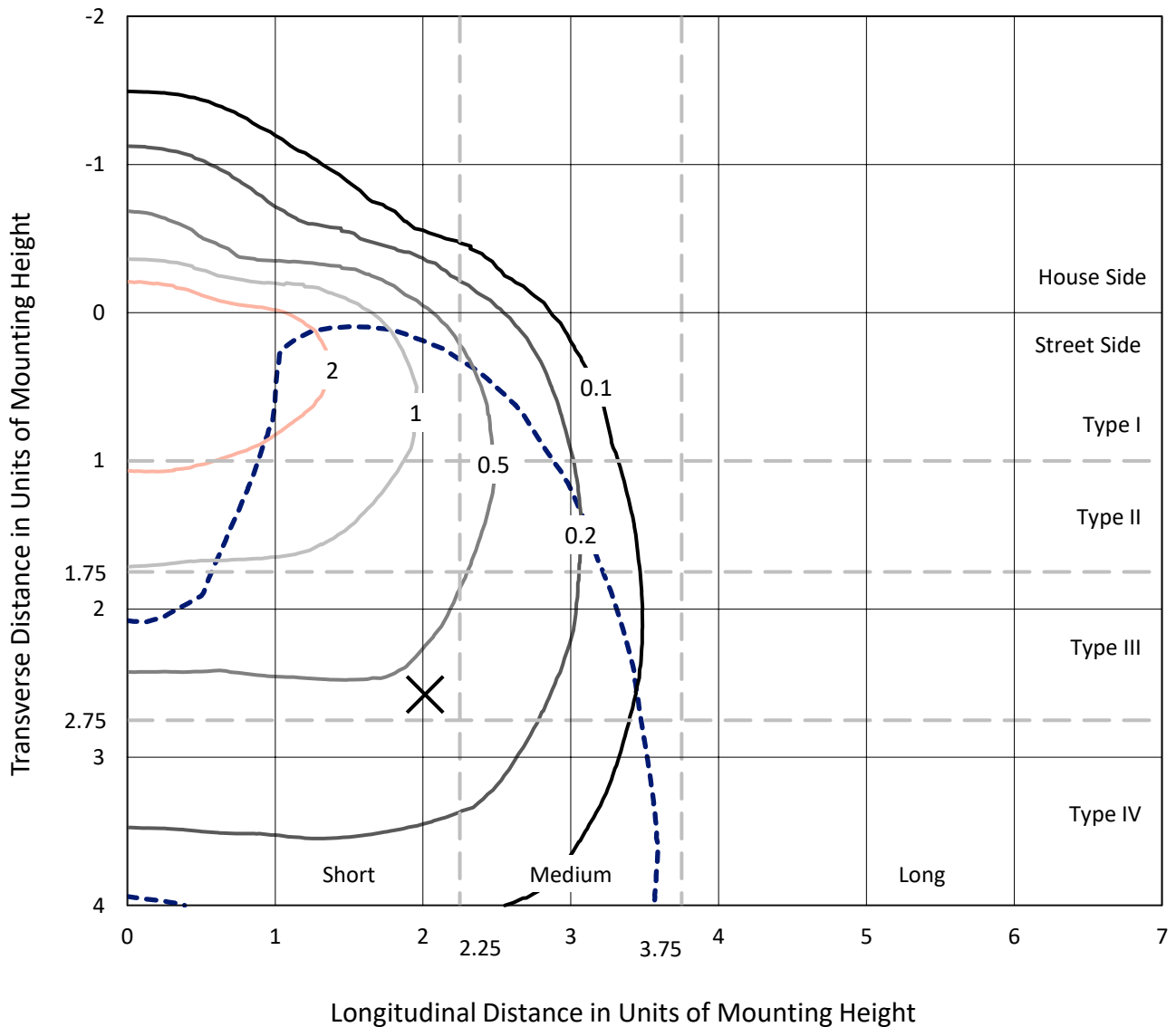
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

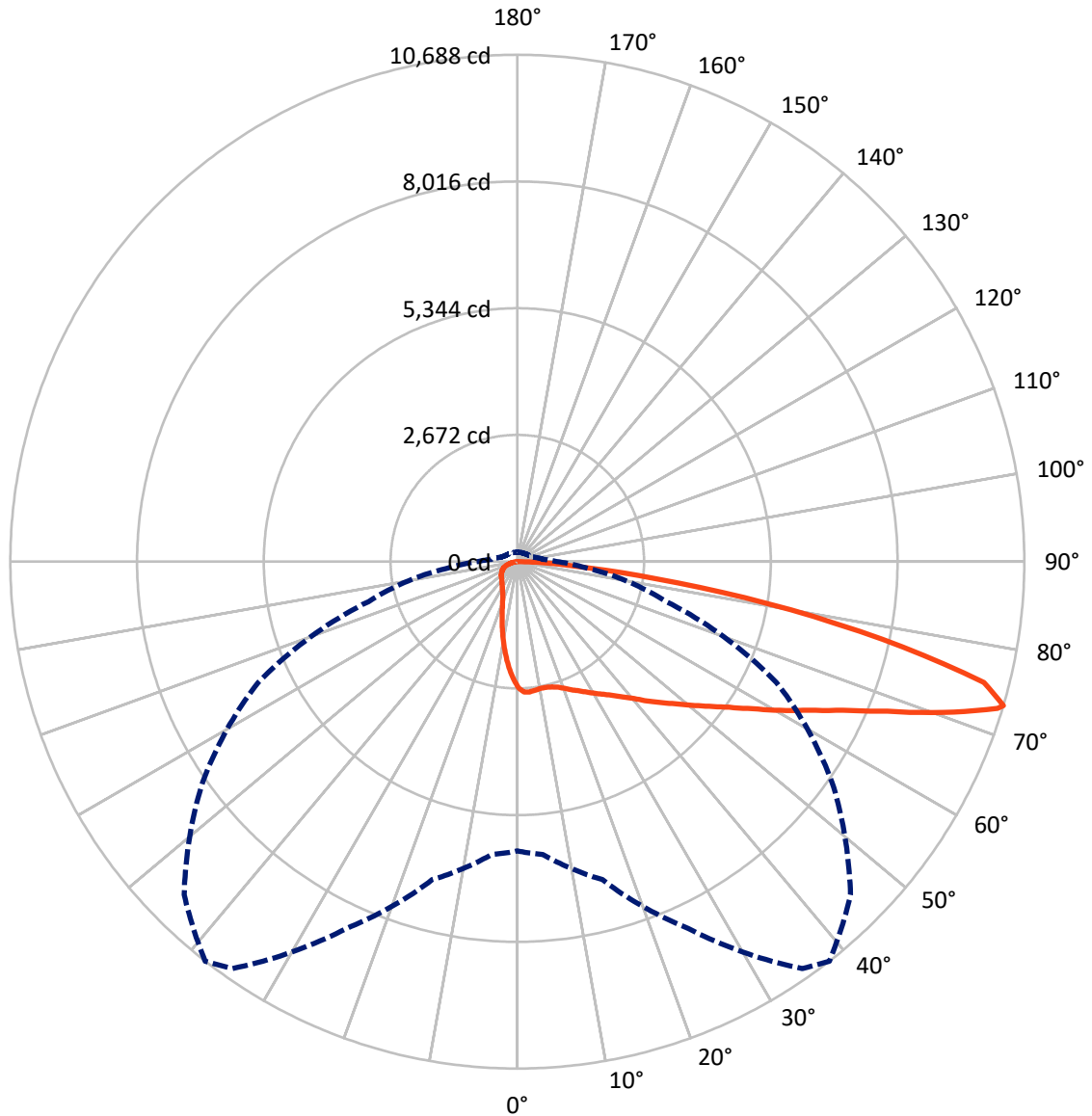
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2035.5 | 0.0 | 2035.5 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 13106.5 | 0.0 | 13106.5 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 15142.0 | 0.0 | 15142.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 232.2 | 1.5 |
| 10°-20° | 595.4 | 3.9 |
| 20°-30° | 927.2 | 6.1 |
| 30°-40° | 1360.0 | 9.0 |
| 40°-50° | 2017.5 | 13.3 |
| 50°-60° | 2858.3 | 18.9 |
| 60°-70° | 3625.9 | 23.9 |
| 70°-80° | 3018.3 | 19.9 |
| 80°-90° | 507.1 | 3.3 |
| 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° | 15142.0 | 100.0 |
| 0°-180° | 15142.0 | 100.0 |

Coefficient of Utilization



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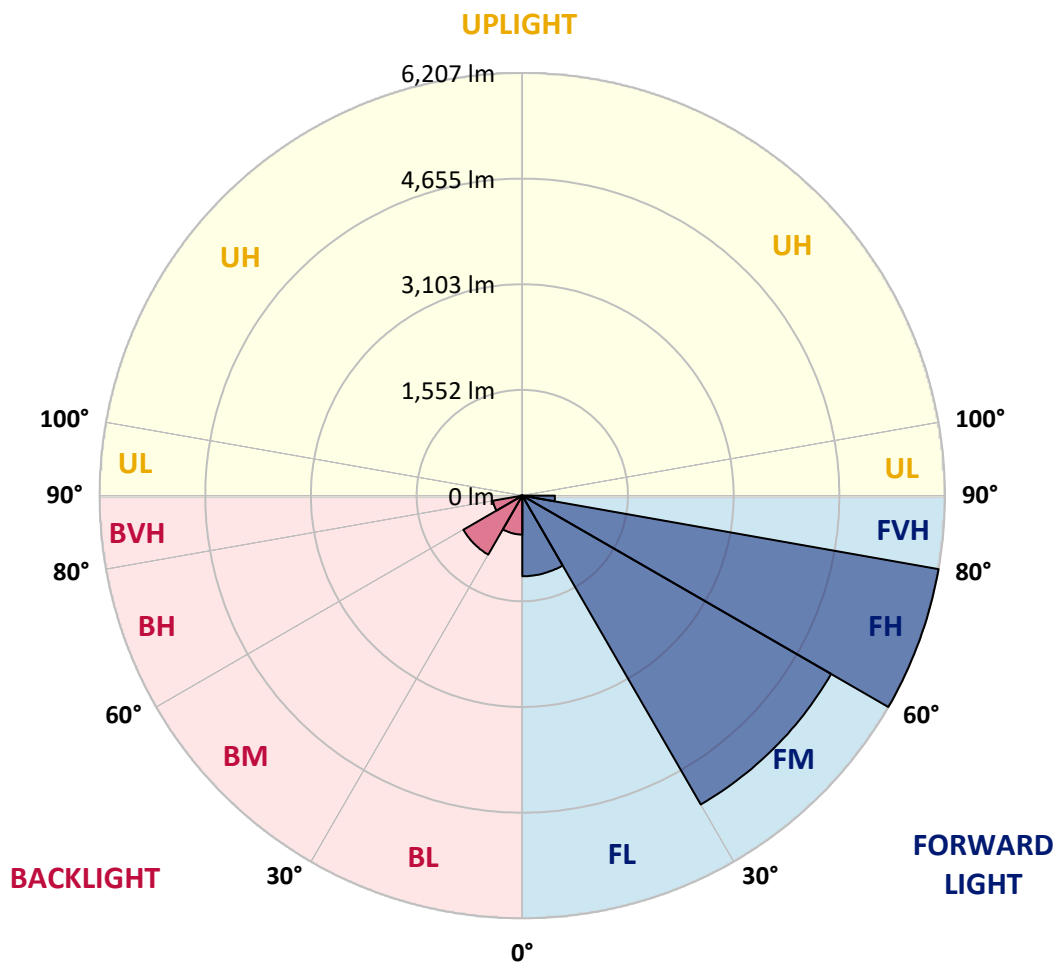
CATALOG NUMBER: GALN-SA3B-730-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1183.7 | 7.8 | | | |
| FM (30°-60°) | 5236.5 | 34.6 | | | |
| FH (60°-80°) | 6206.6 | 41.0 | | | G3/7500 |
| FVH (80°-90°) | 479.6 | 3.2 | | | G3/500 |
| BL (0°-30°) | 571.2 | 3.8 | B2/1000 | | |
| BM (30°-60°) | 999.3 | 6.6 | B1/1000 | | |
| BH (60°-80°) | 437.5 | 2.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 27.5 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 38° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| 0° | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 |
| 2.5° | 2767.1 | 2780.8 | 2773.9 | 2764.5 | 2758.5 | 2752.5 | 2744.0 | 2719.2 | 2699.5 | 2678.1 | 2644.8 |
| 5° | 2787.6 | 2796.2 | 2790.2 | 2778.2 | 2764.5 | 2758.5 | 2742.3 | 2709.8 | 2678.1 | 2642.2 | 2592.6 |
| 7.5° | 2775.6 | 2779.1 | 2772.2 | 2757.7 | 2745.7 | 2734.6 | 2715.8 | 2679.9 | 2641.4 | 2597.8 | 2532.8 |
| 10° | 2732.9 | 2745.7 | 2745.7 | 2733.7 | 2721.8 | 2715.8 | 2697.0 | 2662.8 | 2627.7 | 2578.1 | 2501.1 |
| 12.5° | 2697.8 | 2711.5 | 2722.6 | 2719.2 | 2718.3 | 2718.3 | 2703.8 | 2678.1 | 2637.1 | 2590.1 | 2498.6 |
| 15° | 2673.9 | 2690.1 | 2714.1 | 2727.7 | 2736.3 | 2738.9 | 2732.9 | 2710.6 | 2668.7 | 2614.0 | 2508.8 |
| 17.5° | 2668.7 | 2688.4 | 2732.0 | 2761.9 | 2784.2 | 2783.3 | 2781.6 | 2750.8 | 2704.7 | 2648.2 | 2521.7 |
| 20° | 2691.8 | 2717.5 | 2778.2 | 2825.2 | 2857.7 | 2851.7 | 2842.3 | 2802.1 | 2748.3 | 2685.0 | 2533.6 |
| 22.5° | 2761.1 | 2787.6 | 2854.3 | 2905.6 | 2937.2 | 2937.2 | 2909.0 | 2856.0 | 2798.7 | 2727.7 | 2549.9 |
| 25° | 2860.3 | 2889.4 | 2960.3 | 3012.5 | 3027.0 | 3015.9 | 2987.7 | 2923.6 | 2857.7 | 2789.3 | 2584.1 |
| 27.5° | 2981.7 | 3016.8 | 3082.6 | 3126.2 | 3121.9 | 3113.4 | 3084.3 | 3002.2 | 2936.4 | 2874.0 | 2642.2 |
| 30° | 3133.1 | 3158.7 | 3227.1 | 3237.4 | 3222.0 | 3220.3 | 3179.2 | 3097.1 | 3035.6 | 2987.7 | 2725.2 |
| 32.5° | 3275.9 | 3298.9 | 3353.7 | 3357.9 | 3330.6 | 3334.0 | 3295.5 | 3220.3 | 3185.2 | 3168.1 | 2864.6 |
| 35° | 3427.2 | 3439.2 | 3486.2 | 3481.1 | 3463.1 | 3460.6 | 3445.2 | 3373.3 | 3384.5 | 3415.2 | 3062.1 |
| 37.5° | 3553.8 | 3577.7 | 3604.2 | 3608.5 | 3607.6 | 3616.2 | 3626.4 | 3592.2 | 3656.4 | 3753.0 | 3321.2 |
| 40° | 3670.1 | 3690.6 | 3729.9 | 3743.6 | 3776.9 | 3794.0 | 3829.1 | 3830.0 | 3977.9 | 4136.9 | 3640.1 |
| 42.5° | 3748.7 | 3783.8 | 3857.3 | 3882.1 | 3963.4 | 4014.7 | 4066.8 | 4122.4 | 4337.0 | 4541.4 | 4016.4 |
| 45° | 3817.1 | 3863.3 | 3985.6 | 4062.5 | 4172.9 | 4235.3 | 4345.6 | 4461.9 | 4770.6 | 5038.2 | 4398.6 |
| 47.5° | 3920.6 | 3961.6 | 4101.9 | 4237.8 | 4404.6 | 4476.4 | 4641.4 | 4815.0 | 5218.6 | 5511.9 | 4764.6 |
| 50° | 4064.3 | 4089.1 | 4231.9 | 4453.3 | 4666.2 | 4758.6 | 4976.6 | 5227.2 | 5697.5 | 5979.7 | 5086.1 |
| 52.5° | 4248.1 | 4258.4 | 4372.1 | 4667.1 | 4947.6 | 5062.1 | 5351.2 | 5643.6 | 6116.5 | 6385.8 | 5340.9 |
| 55° | 4465.3 | 4448.2 | 4537.1 | 4893.7 | 5269.1 | 5418.7 | 5729.1 | 6065.2 | 6587.6 | 6714.2 | 5526.5 |
| 57.5° | 4679.9 | 4653.4 | 4724.4 | 5169.0 | 5665.8 | 5846.3 | 6208.0 | 6499.6 | 7008.3 | 7021.2 | 5656.4 |
| 60° | 4907.4 | 4887.7 | 4972.4 | 5492.3 | 6152.4 | 6366.2 | 6700.5 | 6950.2 | 7415.4 | 7234.9 | 5677.0 |
| 62.5° | 5140.8 | 5109.2 | 5229.7 | 5855.7 | 6700.5 | 6894.6 | 7218.7 | 7429.0 | 7814.7 | 7314.5 | 5479.4 |
| 65° | 5367.4 | 5352.9 | 5539.3 | 6287.5 | 7324.7 | 7545.3 | 7860.0 | 8002.8 | 8134.5 | 7194.7 | 4989.5 |
| 67.5° | 5608.6 | 5637.6 | 5935.2 | 6863.8 | 8138.8 | 8415.8 | 8755.3 | 8621.0 | 8226.0 | 6627.8 | 4201.9 |
| 70° | 5976.2 | 5995.1 | 6455.1 | 7618.9 | 9188.0 | 9522.3 | 9686.5 | 8840.8 | 7784.8 | 5551.3 | 3158.7 |
| 72.5° | 6134.4 | 6217.4 | 6919.4 | 8411.5 | 10380.0 | 10584.3 | 9999.5 | 8350.8 | 6485.0 | 3771.0 | 1659.7 |
| 73° | 6099.4 | 6198.6 | 6940.8 | 8532.1 | 10473.2 | 10687.8 | 9932.8 | 8098.6 | 6028.4 | 3247.6 | 1422.9 |
| 75° | 5662.4 | 5784.7 | 6662.9 | 8431.2 | 10291.9 | 10163.6 | 8860.5 | 6902.3 | 4073.7 | 1476.7 | 648.2 |
| 77.5° | 4467.9 | 4502.9 | 5279.3 | 6808.2 | 8104.6 | 7866.9 | 6631.2 | 4313.9 | 1664.0 | 549.0 | 367.7 |
| 80° | 2241.2 | 2370.3 | 2975.7 | 3900.1 | 5419.6 | 5341.8 | 4185.7 | 2040.3 | 693.5 | 322.4 | 243.7 |
| 82.5° | 1078.3 | 1169.8 | 1449.4 | 1901.7 | 2994.5 | 2923.6 | 2072.7 | 1115.0 | 440.4 | 188.1 | 143.7 |
| 85° | 694.3 | 762.7 | 922.6 | 907.3 | 1231.3 | 1175.8 | 931.2 | 844.0 | 260.8 | 98.3 | 100.0 |
| 87.5° | 458.3 | 501.9 | 602.0 | 481.4 | 448.1 | 405.3 | 411.3 | 475.4 | 51.3 | 37.6 | 13.7 |
| 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-SA3B-730-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 | 2660.2 |
| 2.5° | 2631.1 | 2620.0 | 2583.2 | 2547.3 | 2513.1 | 2480.6 | 2459.2 | 2431.0 | 2412.2 | 2417.3 | 2425.0 |
| 5° | 2565.3 | 2540.5 | 2475.5 | 2412.2 | 2352.4 | 2281.4 | 2224.1 | 2177.9 | 2142.9 | 2130.0 | 2127.5 |
| 7.5° | 2496.0 | 2454.1 | 2360.9 | 2252.3 | 2150.6 | 2062.5 | 1960.7 | 1910.3 | 1851.3 | 1830.8 | 1823.9 |
| 10° | 2454.1 | 2397.7 | 2266.9 | 2115.5 | 1962.4 | 1816.2 | 1705.9 | 1616.1 | 1534.9 | 1519.5 | 1511.8 |
| 12.5° | 2442.1 | 2367.8 | 2191.6 | 1996.6 | 1793.1 | 1613.6 | 1450.2 | 1332.2 | 1253.6 | 1235.6 | 1209.1 |
| 15° | 2435.3 | 2343.0 | 2121.5 | 1876.9 | 1618.7 | 1399.8 | 1227.9 | 1090.2 | 1018.4 | 970.5 | 971.4 |
| 17.5° | 2429.3 | 2314.7 | 2042.8 | 1746.1 | 1468.2 | 1215.9 | 1026.1 | 902.1 | 836.3 | 810.6 | 808.1 |
| 20° | 2420.8 | 2281.4 | 1952.2 | 1608.4 | 1296.3 | 1048.3 | 876.5 | 784.1 | 739.7 | 718.3 | 717.4 |
| 22.5° | 2417.3 | 2248.9 | 1863.2 | 1468.2 | 1144.1 | 919.2 | 777.3 | 712.3 | 684.1 | 669.5 | 669.5 |
| 25° | 2425.9 | 2225.8 | 1770.0 | 1334.8 | 1009.0 | 808.9 | 708.9 | 664.4 | 648.2 | 640.5 | 637.9 |
| 27.5° | 2452.4 | 2215.5 | 1677.7 | 1201.4 | 885.0 | 733.7 | 662.7 | 631.9 | 619.9 | 614.0 | 614.8 |
| 30° | 2502.9 | 2214.7 | 1587.1 | 1069.7 | 792.7 | 676.4 | 625.9 | 604.6 | 595.1 | 591.7 | 590.9 |
| 32.5° | 2584.1 | 2233.5 | 1498.1 | 961.1 | 714.9 | 628.5 | 591.7 | 576.3 | 572.1 | 569.5 | 568.6 |
| 35° | 2721.8 | 2286.5 | 1410.0 | 861.9 | 655.0 | 585.7 | 559.2 | 551.5 | 545.5 | 548.1 | 549.0 |
| 37.5° | 2907.3 | 2378.0 | 1326.2 | 784.1 | 609.7 | 554.1 | 531.9 | 525.0 | 521.6 | 524.2 | 526.7 |
| 40° | 3156.1 | 2509.7 | 1256.1 | 721.7 | 577.2 | 527.6 | 507.9 | 501.9 | 498.5 | 502.8 | 503.6 |
| 42.5° | 3430.6 | 2661.9 | 1198.0 | 673.0 | 550.7 | 505.4 | 486.5 | 479.7 | 477.1 | 479.7 | 480.6 |
| 45° | 3712.8 | 2838.9 | 1168.1 | 637.9 | 528.4 | 489.1 | 469.4 | 461.7 | 455.8 | 454.1 | 456.6 |
| 47.5° | 3990.7 | 2992.8 | 1167.2 | 616.5 | 510.5 | 474.6 | 453.2 | 444.6 | 437.0 | 432.7 | 431.8 |
| 50° | 4217.3 | 3115.1 | 1187.7 | 607.1 | 495.1 | 458.3 | 437.0 | 428.4 | 418.1 | 409.6 | 411.3 |
| 52.5° | 4388.3 | 3194.6 | 1197.1 | 602.8 | 486.5 | 441.2 | 419.9 | 412.2 | 400.2 | 389.1 | 389.1 |
| 55° | 4498.6 | 3213.4 | 1174.0 | 598.6 | 479.7 | 423.3 | 400.2 | 393.3 | 381.4 | 370.3 | 370.3 |
| 57.5° | 4536.3 | 3155.3 | 1091.1 | 588.3 | 472.9 | 407.9 | 380.5 | 374.5 | 365.1 | 354.0 | 352.3 |
| 60° | 4449.0 | 2958.6 | 945.7 | 557.5 | 459.2 | 391.6 | 359.1 | 356.6 | 353.2 | 343.7 | 342.9 |
| 62.5° | 4113.0 | 2541.3 | 787.5 | 517.3 | 436.1 | 374.5 | 339.5 | 343.7 | 346.3 | 341.2 | 340.3 |
| 65° | 3553.8 | 2063.3 | 673.0 | 461.7 | 405.3 | 350.6 | 318.1 | 329.2 | 336.1 | 336.1 | 334.3 |
| 67.5° | 2882.5 | 1584.5 | 566.9 | 413.9 | 366.8 | 318.1 | 294.2 | 302.7 | 307.8 | 306.1 | 310.4 |
| 70° | 2048.8 | 1073.1 | 461.7 | 359.1 | 318.1 | 281.3 | 263.4 | 263.4 | 259.9 | 258.2 | 258.2 |
| 72.5° | 993.6 | 613.1 | 374.5 | 300.1 | 271.1 | 240.3 | 225.7 | 219.8 | 212.9 | 212.1 | 207.8 |
| 73° | 830.3 | 549.8 | 357.4 | 289.0 | 259.9 | 234.3 | 218.0 | 208.6 | 204.4 | 200.9 | 200.1 |
| 75° | 505.4 | 417.3 | 298.4 | 243.7 | 221.5 | 201.8 | 187.3 | 178.7 | 174.4 | 171.9 | 171.0 |
| 77.5° | 332.6 | 311.3 | 231.7 | 186.4 | 169.3 | 157.3 | 151.4 | 142.8 | 140.2 | 136.8 | 136.8 |
| 80° | 248.0 | 237.7 | 165.9 | 131.7 | 121.4 | 111.2 | 109.5 | 107.7 | 100.9 | 96.6 | 94.9 |
| 82.5° | 159.9 | 169.3 | 112.9 | 88.1 | 77.0 | 68.4 | 69.3 | 71.8 | 65.0 | 59.0 | 57.3 |
| 85° | 113.7 | 122.3 | 68.4 | 40.2 | 32.5 | 28.2 | 31.6 | 28.2 | 29.1 | 23.1 | 18.8 |
| 87.5° | 18.8 | 32.5 | 12.0 | 5.1 | 2.6 | 1.7 | 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)