

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: P453038

Luminaire Tested: **GALN-SA4A-740-U-SL2-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453038
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-740-U-SL2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14806 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G3

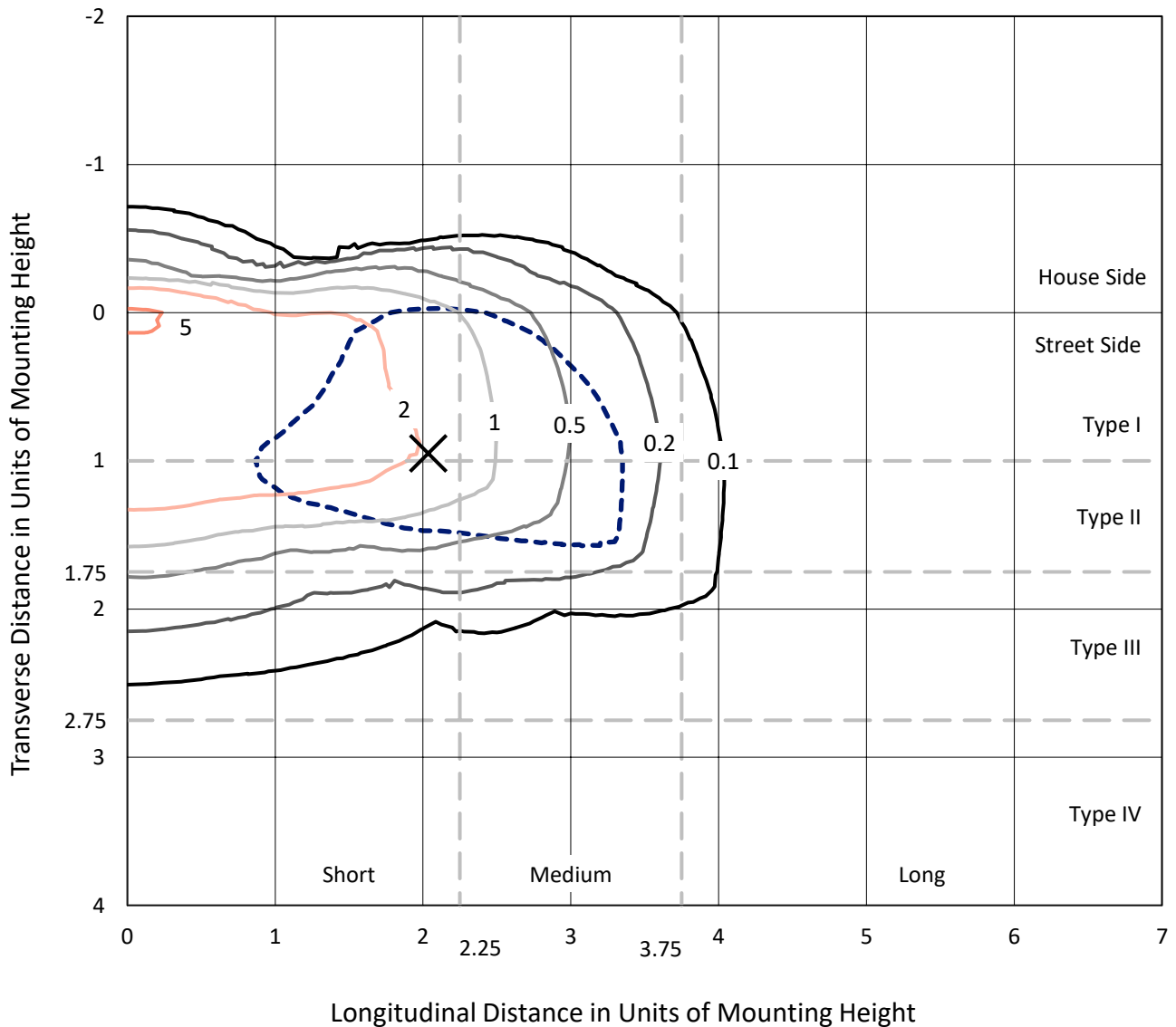
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

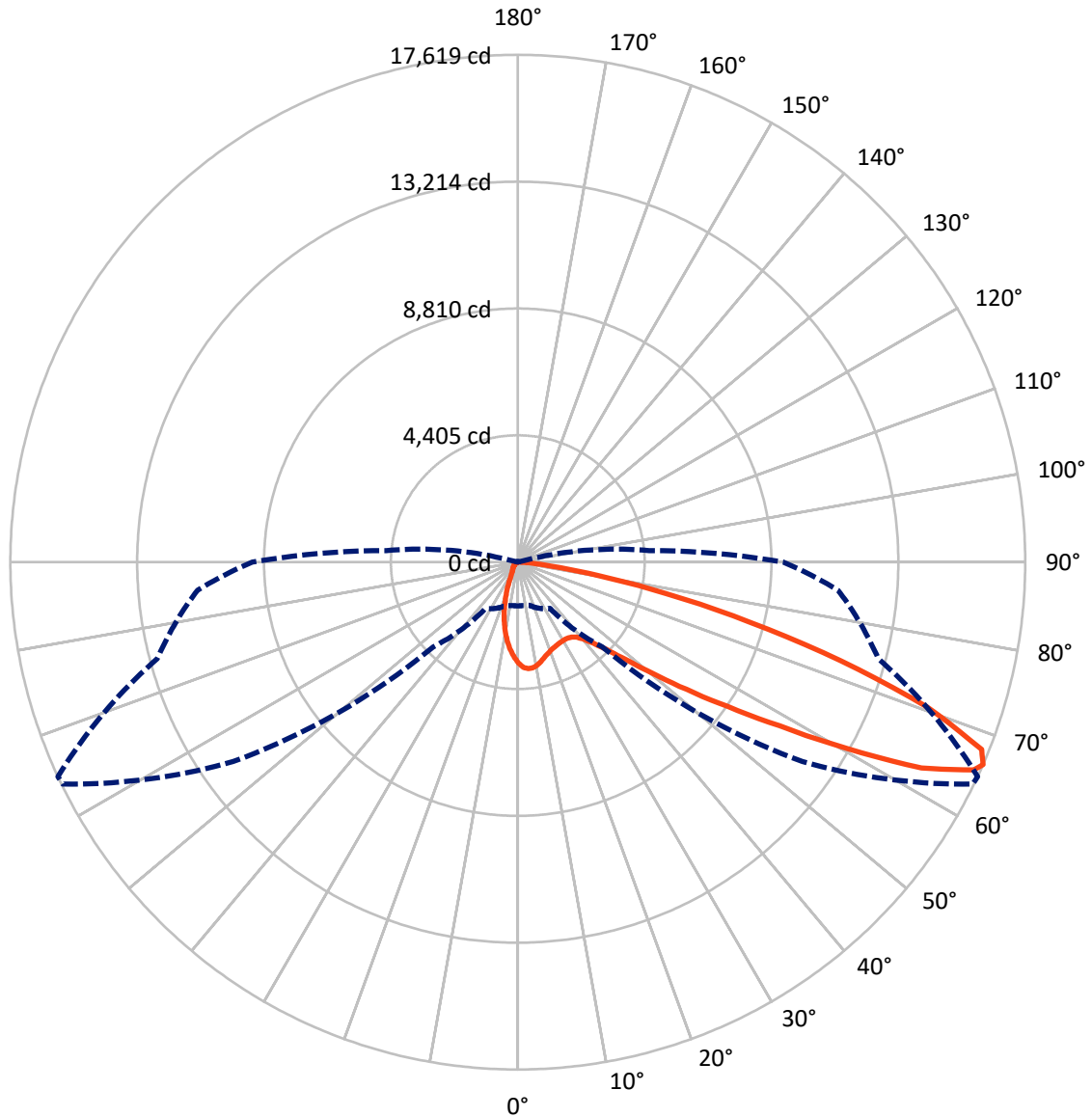
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1531.1 | 0.0 | 1531.1 |
| | % Fixture | 10.3 | 0.0 | 10.3 |
| Street Side | Lumens | 13274.8 | 0.0 | 13274.8 |
| | % Fixture | 89.7 | 0.0 | 89.7 |
| Total | Lumens | 14806.0 | 0.0 | 14806.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 287.1 | 1.9 |
| 10°-20° | 625.7 | 4.2 |
| 20°-30° | 896.2 | 6.1 |
| 30°-40° | 1309.1 | 8.8 |
| 40°-50° | 2195.1 | 14.8 |
| 50°-60° | 3663.2 | 24.7 |
| 60°-70° | 3888.4 | 26.3 |
| 70°-80° | 1761.0 | 11.9 |
| 80°-90° | 180.2 | 1.2 |
| 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° | 14806.0 | 100.0 |
| 0°-180° | 14806.0 | 100.0 |

Coefficient of Utilization



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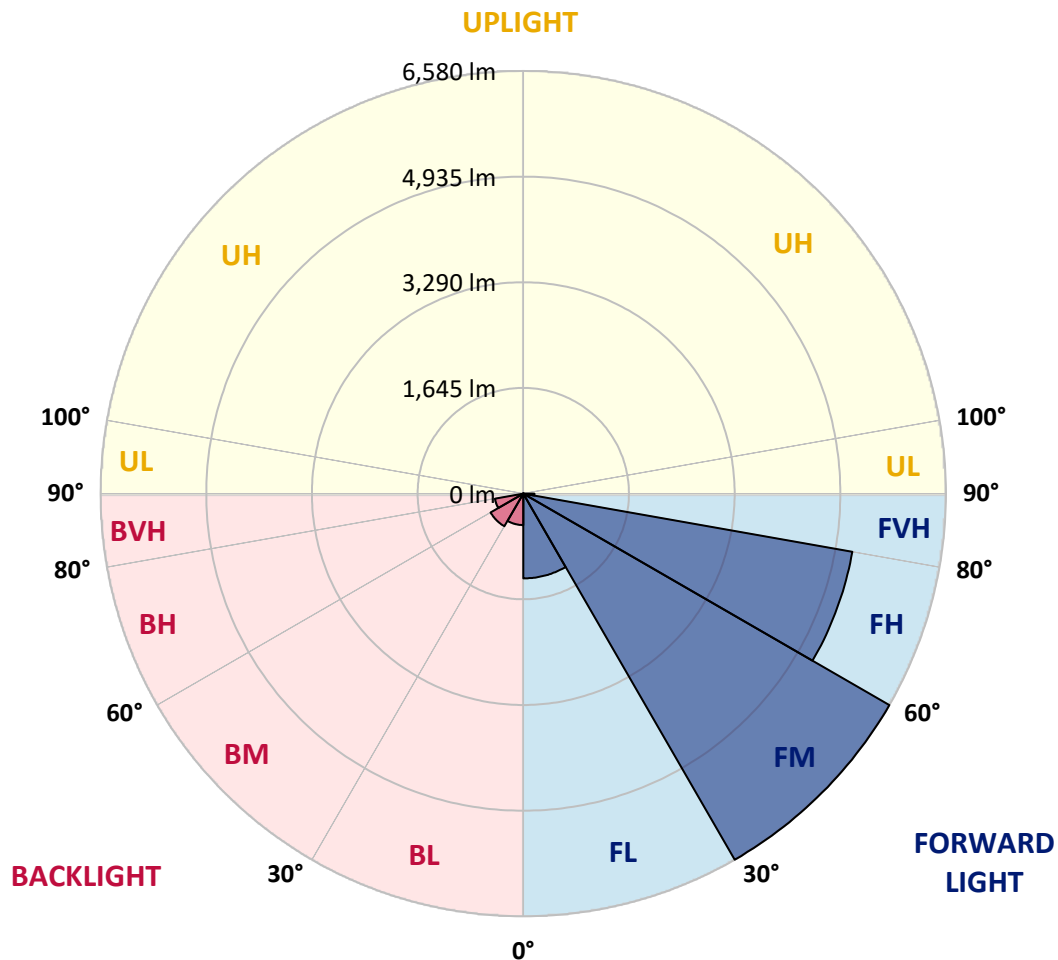
CATALOG NUMBER: GALN-SA4A-740-U-SL2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1319.3 | 8.9 | | | |
| FM (30°-60°) | 6580.1 | 44.4 | | | |
| FH (60°-80°) | 5201.0 | 35.1 | | | G3/7500 |
| FVH (80°-90°) | 174.4 | 1.2 | | | G2/225 |
| BL (0°-30°) | 489.8 | 3.3 | B1/500 | | |
| BM (30°-60°) | 587.2 | 4.0 | B1/1000 | | |
| BH (60°-80°) | 448.4 | 3.0 | B1/500 | | G1/500 |
| BVH (80°-90°) | 5.7 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 |
| 2.5° | 3700.1 | 3704.1 | 3709.1 | 3716.1 | 3721.1 | 3706.1 | 3685.1 | 3661.1 | 3656.1 | 3605.0 | 3543.0 |
| 5° | 3502.0 | 3508.0 | 3552.0 | 3576.0 | 3630.1 | 3679.1 | 3710.1 | 3714.1 | 3712.1 | 3664.1 | 3565.0 |
| 7.5° | 3220.0 | 3237.0 | 3280.0 | 3322.0 | 3423.0 | 3516.0 | 3626.1 | 3703.1 | 3708.1 | 3695.1 | 3572.0 |
| 10° | 2991.0 | 3002.0 | 3024.0 | 3107.0 | 3191.0 | 3333.0 | 3487.0 | 3632.1 | 3644.1 | 3696.1 | 3566.0 |
| 12.5° | 2812.0 | 2828.0 | 2855.0 | 2919.0 | 3020.0 | 3154.0 | 3329.0 | 3524.0 | 3549.0 | 3677.1 | 3549.0 |
| 15° | 2687.0 | 2695.0 | 2722.0 | 2785.0 | 2883.0 | 3007.0 | 3184.0 | 3411.0 | 3433.0 | 3652.1 | 3546.0 |
| 17.5° | 2628.0 | 2637.0 | 2656.0 | 2706.0 | 2787.0 | 2902.0 | 3075.0 | 3320.0 | 3348.0 | 3636.1 | 3557.0 |
| 20° | 2644.0 | 2652.0 | 2653.0 | 2679.0 | 2734.0 | 2831.0 | 2995.0 | 3235.0 | 3271.0 | 3626.1 | 3575.0 |
| 22.5° | 2735.0 | 2736.0 | 2724.0 | 2712.0 | 2731.0 | 2801.0 | 2946.0 | 3181.0 | 3218.0 | 3624.1 | 3596.0 |
| 25° | 2871.0 | 2874.0 | 2854.0 | 2812.0 | 2774.0 | 2810.0 | 2935.0 | 3146.0 | 3179.0 | 3619.1 | 3609.1 |
| 27.5° | 3059.0 | 3058.0 | 3052.0 | 2982.0 | 2874.0 | 2850.0 | 2944.0 | 3127.0 | 3155.0 | 3605.0 | 3614.1 |
| 30° | 3322.0 | 3314.0 | 3301.0 | 3222.0 | 3057.0 | 2947.0 | 2982.0 | 3115.0 | 3141.0 | 3585.0 | 3601.0 |
| 32.5° | 3581.0 | 3611.1 | 3609.1 | 3534.0 | 3328.0 | 3120.0 | 3061.0 | 3131.0 | 3150.0 | 3572.0 | 3582.0 |
| 35° | 3883.1 | 3882.1 | 3959.1 | 3931.1 | 3690.1 | 3341.0 | 3196.0 | 3184.0 | 3199.0 | 3581.0 | 3573.0 |
| 37.5° | 4163.1 | 4189.1 | 4309.1 | 4338.1 | 4118.1 | 3653.1 | 3387.0 | 3298.0 | 3303.0 | 3642.1 | 3595.0 |
| 40° | 4512.1 | 4562.1 | 4741.1 | 4838.1 | 4644.1 | 4116.1 | 3669.1 | 3507.0 | 3508.0 | 3792.1 | 3678.1 |
| 42.5° | 4962.1 | 5041.1 | 5208.1 | 5370.1 | 5266.1 | 4664.1 | 4092.1 | 3838.1 | 3836.1 | 4056.1 | 3868.1 |
| 45° | 5509.1 | 5564.1 | 5754.1 | 6011.1 | 5945.1 | 5429.1 | 4708.1 | 4351.1 | 4325.1 | 4489.1 | 4205.1 |
| 47.5° | 5981.1 | 6056.1 | 6249.1 | 6542.1 | 6842.1 | 6363.1 | 5444.1 | 5056.1 | 5039.1 | 5178.1 | 4783.1 |
| 50° | 6187.1 | 6253.1 | 6456.1 | 6867.1 | 7594.1 | 7589.1 | 6540.1 | 6085.1 | 6056.1 | 6131.1 | 5677.1 |
| 52.5° | 5961.1 | 6023.1 | 6228.1 | 6740.1 | 7948.1 | 9083.1 | 8128.1 | 7376.1 | 7341.1 | 7245.1 | 6745.1 |
| 55° | 5187.1 | 5238.1 | 5541.1 | 6129.1 | 7812.1 | 10079.1 | 10316.1 | 8971.1 | 8835.1 | 8462.1 | 7954.1 |
| 57.5° | 4130.1 | 4104.1 | 4292.1 | 4975.1 | 7014.1 | 10413.1 | 12562.2 | 10958.2 | 10715.1 | 9514.1 | 8977.1 |
| 60° | 2862.0 | 2942.0 | 3018.0 | 3468.0 | 5274.1 | 9834.1 | 13959.2 | 13456.2 | 13136.2 | 10549.1 | 9957.1 |
| 62.5° | 2104.0 | 2157.0 | 2207.0 | 2415.0 | 3316.0 | 7852.1 | 14206.2 | 16022.2 | 15738.2 | 11648.2 | 10892.2 |
| 65° | 1664.0 | 1668.0 | 1688.0 | 1893.0 | 2185.0 | 5106.1 | 13019.2 | 17469.2 | 17396.2 | 12706.2 | 11271.2 |
| 66° | 1516.0 | 1517.0 | 1548.0 | 1768.0 | 1961.0 | 4158.1 | 12068.2 | 17579.2 | 17619.2 | 12960.2 | 11160.2 |
| 67.5° | 1325.0 | 1321.0 | 1366.0 | 1589.0 | 1786.0 | 2998.0 | 10366.1 | 17133.2 | 17370.2 | 13155.2 | 10761.1 |
| 70° | 1027.0 | 1022.0 | 1077.0 | 1333.0 | 1645.0 | 2000.0 | 6890.1 | 14711.2 | 15093.2 | 12756.2 | 9521.1 |
| 72.5° | 684.0 | 688.0 | 782.0 | 1052.0 | 1570.0 | 1761.0 | 4145.1 | 11191.2 | 11731.2 | 10534.1 | 7490.1 |
| 75° | 399.0 | 406.0 | 513.0 | 782.0 | 1363.0 | 1679.0 | 2346.0 | 7980.1 | 8325.1 | 7274.1 | 4666.1 |
| 77.5° | 209.0 | 212.0 | 287.0 | 516.0 | 1045.0 | 1559.0 | 1563.0 | 5098.1 | 5260.1 | 3535.0 | 1847.0 |
| 80° | 111.0 | 108.0 | 154.0 | 311.0 | 719.0 | 1369.0 | 1268.0 | 2699.0 | 2806.0 | 1050.0 | 467.0 |
| 82.5° | 42.0 | 46.0 | 82.0 | 204.0 | 425.0 | 983.0 | 1092.0 | 1193.0 | 1156.0 | 231.0 | 196.0 |
| 85° | 8.0 | 10.0 | 35.0 | 121.0 | 214.0 | 411.0 | 805.0 | 585.0 | 542.0 | 87.0 | 113.0 |
| 87.5° | 1.0 | 2.0 | 10.0 | 29.0 | 31.0 | 139.0 | 238.0 | 162.0 | 140.0 | 32.0 | 47.0 |
| 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-SA4A-740-U-SL2-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 | 3511.0 |
| 2.5° | 3513.0 | 3486.0 | 3396.0 | 3307.0 | 3216.0 | 3134.0 | 3078.0 | 2987.0 | 2964.0 | 2931.0 | 2912.0 |
| 5° | 3506.0 | 3443.0 | 3270.0 | 3081.0 | 2905.0 | 2715.0 | 2570.0 | 2430.0 | 2355.0 | 2317.0 | 2303.0 |
| 7.5° | 3486.0 | 3386.0 | 3116.0 | 2820.0 | 2538.0 | 2254.0 | 2007.0 | 1819.0 | 1698.0 | 1615.0 | 1559.0 |
| 10° | 3446.0 | 3308.0 | 2937.0 | 2530.0 | 2104.0 | 1729.0 | 1416.0 | 1178.0 | 994.0 | 936.0 | 938.0 |
| 12.5° | 3405.0 | 3221.0 | 2737.0 | 2208.0 | 1680.0 | 1207.0 | 875.0 | 687.0 | 599.0 | 570.0 | 564.0 |
| 15° | 3367.0 | 3138.0 | 2541.0 | 1896.0 | 1251.0 | 782.0 | 564.0 | 498.0 | 474.0 | 469.0 | 468.0 |
| 17.5° | 3347.0 | 3061.0 | 2332.0 | 1539.0 | 873.0 | 531.0 | 452.0 | 434.0 | 427.0 | 422.0 | 420.0 |
| 20° | 3330.0 | 2994.0 | 2132.0 | 1205.0 | 597.0 | 435.0 | 405.0 | 388.0 | 376.0 | 371.0 | 368.0 |
| 22.5° | 3318.0 | 2925.0 | 1925.0 | 933.0 | 457.0 | 386.0 | 359.0 | 337.0 | 320.0 | 314.0 | 310.0 |
| 25° | 3300.0 | 2849.0 | 1716.0 | 682.0 | 385.0 | 343.0 | 312.0 | 286.0 | 264.0 | 253.0 | 251.0 |
| 27.5° | 3274.0 | 2763.0 | 1487.0 | 505.0 | 344.0 | 305.0 | 267.0 | 235.0 | 213.0 | 201.0 | 202.0 |
| 30° | 3232.0 | 2673.0 | 1258.0 | 401.0 | 311.0 | 266.0 | 225.0 | 194.0 | 173.0 | 164.0 | 163.0 |
| 32.5° | 3182.0 | 2564.0 | 1048.0 | 344.0 | 281.0 | 231.0 | 188.0 | 161.0 | 145.0 | 138.0 | 137.0 |
| 35° | 3135.0 | 2454.0 | 834.0 | 309.0 | 250.0 | 199.0 | 158.0 | 135.0 | 123.0 | 117.0 | 118.0 |
| 37.5° | 3109.0 | 2356.0 | 650.0 | 281.0 | 225.0 | 171.0 | 136.0 | 116.0 | 105.0 | 100.0 | 99.0 |
| 40° | 3126.0 | 2276.0 | 517.0 | 256.0 | 197.0 | 147.0 | 117.0 | 100.0 | 89.0 | 82.0 | 82.0 |
| 42.5° | 3206.0 | 2241.0 | 417.0 | 232.0 | 171.0 | 127.0 | 102.0 | 86.0 | 74.0 | 67.0 | 68.0 |
| 45° | 3450.0 | 2278.0 | 349.0 | 210.0 | 147.0 | 110.0 | 88.0 | 71.0 | 60.0 | 55.0 | 54.0 |
| 47.5° | 3855.1 | 2417.0 | 302.0 | 187.0 | 126.0 | 94.0 | 74.0 | 59.0 | 48.0 | 44.0 | 43.0 |
| 50° | 4563.1 | 2704.0 | 267.0 | 164.0 | 107.0 | 80.0 | 61.0 | 47.0 | 38.0 | 34.0 | 34.0 |
| 52.5° | 5537.1 | 3330.0 | 242.0 | 138.0 | 90.0 | 68.0 | 50.0 | 38.0 | 30.0 | 27.0 | 26.0 |
| 55° | 6555.1 | 3990.1 | 229.0 | 116.0 | 75.0 | 56.0 | 40.0 | 30.0 | 23.0 | 20.0 | 19.0 |
| 57.5° | 7534.1 | 4508.1 | 214.0 | 94.0 | 60.0 | 43.0 | 31.0 | 23.0 | 16.0 | 14.0 | 13.0 |
| 60° | 8473.1 | 4927.1 | 182.0 | 75.0 | 47.0 | 31.0 | 23.0 | 16.0 | 11.0 | 9.0 | 9.0 |
| 62.5° | 9313.1 | 5171.1 | 143.0 | 60.0 | 36.0 | 22.0 | 15.0 | 12.0 | 8.0 | 6.0 | 6.0 |
| 65° | 9411.1 | 4854.1 | 108.0 | 46.0 | 26.0 | 14.0 | 9.0 | 9.0 | 6.0 | 4.0 | 4.0 |
| 66° | 9214.1 | 4585.1 | 95.0 | 42.0 | 23.0 | 12.0 | 8.0 | 7.0 | 5.0 | 3.0 | 3.0 |
| 67.5° | 8774.1 | 4126.1 | 82.0 | 36.0 | 19.0 | 9.0 | 6.0 | 6.0 | 4.0 | 2.0 | 2.0 |
| 70° | 7581.1 | 3370.0 | 65.0 | 27.0 | 14.0 | 7.0 | 4.0 | 4.0 | 3.0 | 2.0 | 2.0 |
| 72.5° | 5778.1 | 2516.0 | 53.0 | 20.0 | 10.0 | 5.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 |
| 75° | 3485.0 | 1355.0 | 41.0 | 15.0 | 9.0 | 4.0 | 2.0 | 3.0 | 4.0 | 3.0 | 2.0 |
| 77.5° | 1284.0 | 461.0 | 32.0 | 12.0 | 7.0 | 4.0 | 2.0 | 2.0 | 4.0 | 3.0 | 3.0 |
| 80° | 315.0 | 120.0 | 23.0 | 10.0 | 7.0 | 4.0 | 2.0 | 2.0 | 4.0 | 4.0 | 4.0 |
| 82.5° | 146.0 | 51.0 | 16.0 | 9.0 | 7.0 | 4.0 | 2.0 | 2.0 | 3.0 | 4.0 | 4.0 |
| 85° | 84.0 | 24.0 | 13.0 | 10.0 | 7.0 | 4.0 | 2.0 | 2.0 | 3.0 | 4.0 | 4.0 |
| 87.5° | 34.0 | 12.0 | 12.0 | 10.0 | 8.0 | 5.0 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 |
| 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)