

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: P453416

Luminaire Tested: **GALN-SA4C-722-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-722-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2200K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20408 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

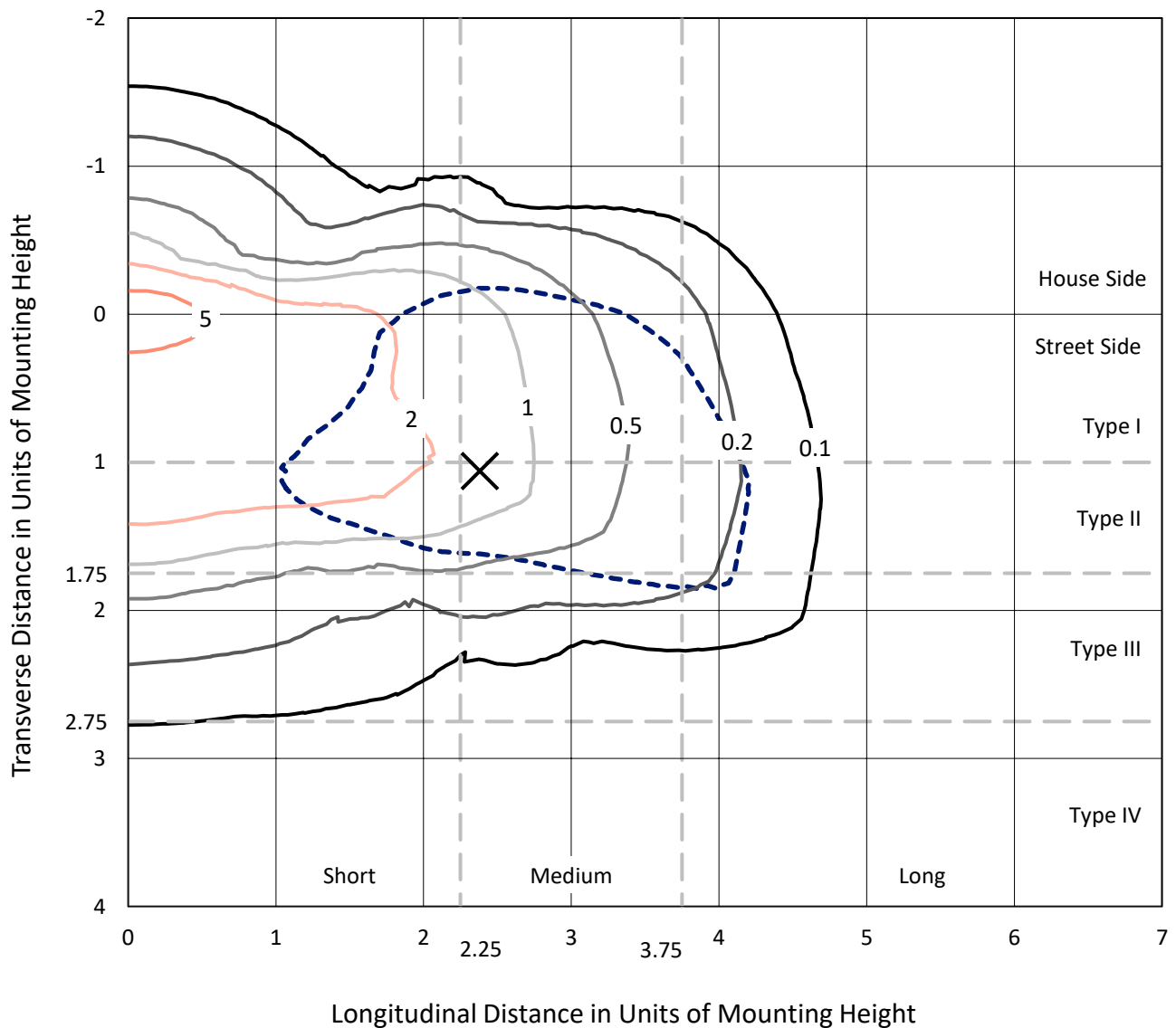
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

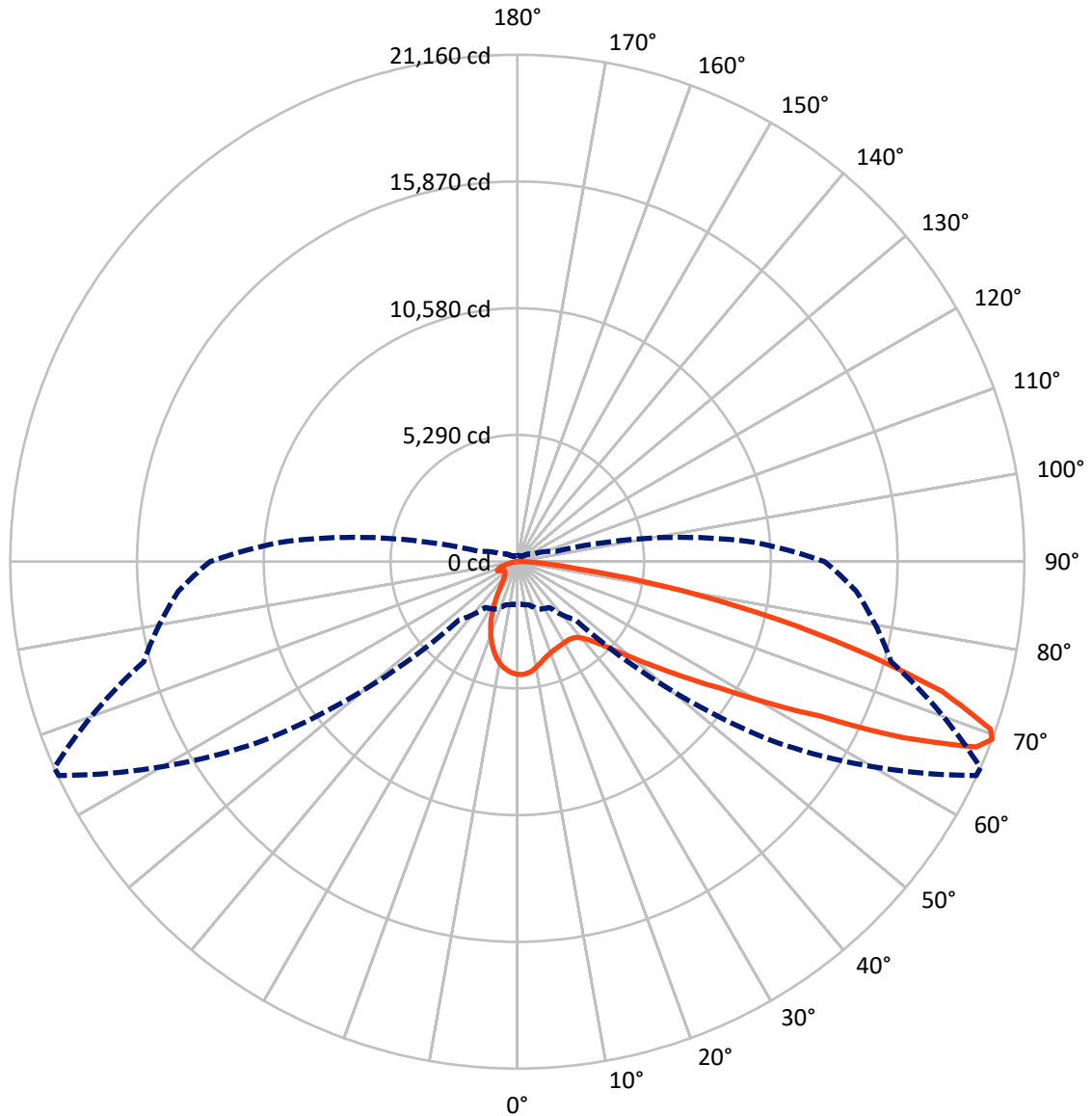
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3838.0 | 0.0 | 3838.0 |
| | % Fixture | 18.8 | 0.0 | 18.8 |
| Street Side | Lumens | 16570.0 | 0.0 | 16570.0 |
| | % Fixture | 81.2 | 0.0 | 81.2 |
| Total | Lumens | 20408.0 | 0.0 | 20408.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 409.3 | 2.0 |
| 10°-20° | 970.7 | 4.8 |
| 20°-30° | 1321.5 | 6.5 |
| 30°-40° | 1775.8 | 8.7 |
| 40°-50° | 2651.6 | 13.0 |
| 50°-60° | 4217.8 | 20.7 |
| 60°-70° | 5187.6 | 25.4 |
| 70°-80° | 3375.3 | 16.5 |
| 80°-90° | 498.4 | 2.4 |
| 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° | 20408.0 | 100.0 |
| 0°-180° | 20408.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P453416

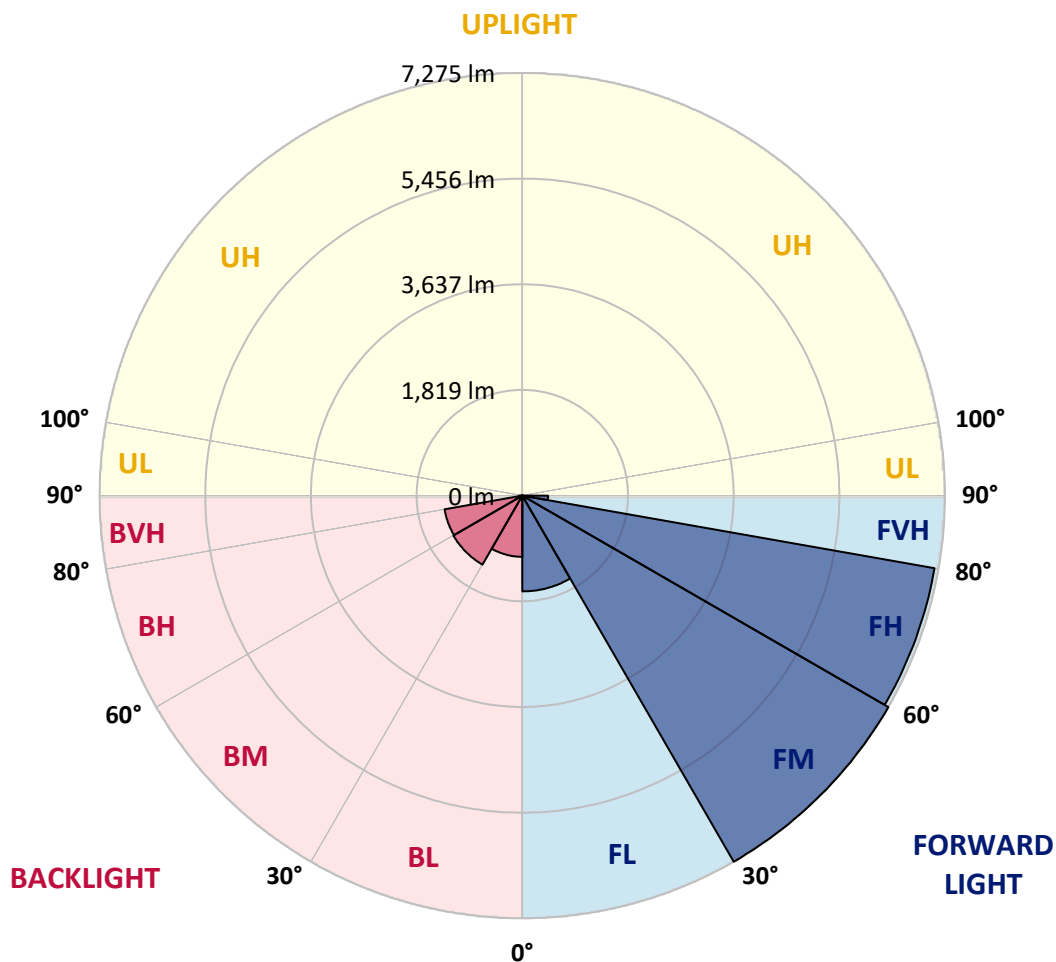
CATALOG NUMBER: GALN-SA4C-722-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1647.9 | 8.1 | | | |
| FM (30°-60°) | 7274.8 | 35.6 | | | |
| FH (60°-80°) | 7204.1 | 35.3 | | | G3/7500 |
| FVH (80°-90°) | 443.1 | 2.2 | | | G3/500 |
| BL (0°-30°) | 1053.5 | 5.2 | B3/2500 | | |
| BM (30°-60°) | 1370.3 | 6.7 | B2/2500 | | |
| BH (60°-80°) | 1358.8 | 6.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 55.3 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Medium





REPORT NUMBER: P453416

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 |
| 2.5° | 4547.8 | 4565.9 | 4586.2 | 4608.8 | 4651.7 | 4675.5 | 4692.4 | 4711.6 | 4713.9 | 4724.1 | 4716.2 |
| 5° | 4212.1 | 4233.6 | 4264.1 | 4307.0 | 4371.5 | 4472.0 | 4576.0 | 4660.8 | 4671.0 | 4718.4 | 4732.0 |
| 7.5° | 3931.8 | 3944.3 | 3969.1 | 4038.1 | 4129.6 | 4241.5 | 4392.9 | 4564.7 | 4589.6 | 4702.6 | 4742.2 |
| 10° | 3703.5 | 3716.0 | 3745.4 | 3816.6 | 3907.0 | 4047.1 | 4213.2 | 4439.3 | 4459.6 | 4654.0 | 4744.4 |
| 12.5° | 3532.9 | 3544.2 | 3575.8 | 3645.9 | 3749.9 | 3881.0 | 4064.1 | 4303.7 | 4333.0 | 4589.6 | 4722.9 |
| 15° | 3402.9 | 3424.4 | 3450.4 | 3508.0 | 3617.6 | 3744.2 | 3921.7 | 4179.3 | 4203.1 | 4521.8 | 4708.3 |
| 17.5° | 3347.5 | 3357.7 | 3375.8 | 3428.9 | 3509.2 | 3633.5 | 3812.0 | 4082.1 | 4110.4 | 4474.3 | 4704.9 |
| 20° | 3349.8 | 3360.0 | 3363.4 | 3392.7 | 3450.4 | 3557.7 | 3734.1 | 4005.3 | 4039.2 | 4432.5 | 4710.5 |
| 22.5° | 3426.7 | 3427.8 | 3415.3 | 3405.2 | 3427.8 | 3517.1 | 3678.7 | 3947.7 | 3987.2 | 4414.4 | 4715.0 |
| 25° | 3545.3 | 3565.7 | 3547.6 | 3500.1 | 3458.3 | 3501.2 | 3657.2 | 3916.0 | 3953.3 | 4388.4 | 4709.4 |
| 27.5° | 3737.4 | 3740.8 | 3726.1 | 3661.7 | 3553.2 | 3521.6 | 3648.2 | 3892.3 | 3923.9 | 4369.2 | 4681.1 |
| 30° | 3995.1 | 3985.0 | 3971.4 | 3900.2 | 3729.5 | 3599.6 | 3667.4 | 3870.8 | 3903.6 | 4341.0 | 4647.2 |
| 32.5° | 4256.2 | 4287.8 | 4275.4 | 4191.8 | 3970.3 | 3751.0 | 3729.5 | 3868.5 | 3895.7 | 4319.5 | 4609.9 |
| 35° | 4533.1 | 4547.8 | 4606.5 | 4563.6 | 4336.4 | 3996.3 | 3845.9 | 3903.6 | 3925.1 | 4320.6 | 4583.9 |
| 37.5° | 4750.1 | 4789.6 | 4927.5 | 4964.8 | 4751.2 | 4320.6 | 4034.7 | 4003.0 | 4012.1 | 4376.0 | 4594.1 |
| 40° | 5012.3 | 5080.1 | 5257.5 | 5410.1 | 5269.9 | 4742.2 | 4355.6 | 4187.2 | 4198.6 | 4509.3 | 4660.8 |
| 42.5° | 5344.5 | 5392.0 | 5630.5 | 5837.3 | 5814.7 | 5299.3 | 4744.4 | 4489.0 | 4494.7 | 4774.9 | 4847.3 |
| 45° | 5733.3 | 5801.1 | 6069.0 | 6379.8 | 6432.9 | 5930.0 | 5306.1 | 4945.6 | 4942.2 | 5187.4 | 5195.4 |
| 47.5° | 6230.6 | 6272.4 | 6538.0 | 6877.0 | 7091.8 | 6722.2 | 5987.6 | 5601.1 | 5564.9 | 5788.7 | 5724.3 |
| 50° | 6688.3 | 6753.8 | 6955.0 | 7325.7 | 7860.3 | 7650.1 | 6883.8 | 6451.0 | 6366.2 | 6575.3 | 6466.8 |
| 52.5° | 6880.4 | 6949.4 | 7118.9 | 7578.9 | 8519.2 | 8850.3 | 8021.9 | 7464.7 | 7323.4 | 7483.9 | 7444.4 |
| 55° | 6547.0 | 6636.3 | 6794.5 | 7354.0 | 8808.5 | 10234.7 | 9556.6 | 8636.7 | 8533.9 | 8464.9 | 8476.2 |
| 57.5° | 5650.8 | 5735.6 | 5949.2 | 6566.2 | 8462.7 | 11239.5 | 11748.0 | 10143.2 | 9922.8 | 9605.2 | 9659.5 |
| 60° | 4301.4 | 4354.5 | 4465.3 | 5149.0 | 7437.6 | 11500.5 | 14236.6 | 12047.5 | 11907.4 | 10741.1 | 10779.5 |
| 62.5° | 3054.8 | 3114.7 | 3191.6 | 3532.9 | 5445.1 | 10764.8 | 16185.0 | 14706.8 | 14206.1 | 11917.6 | 11880.3 |
| 65° | 2480.7 | 2440.0 | 2532.7 | 2692.0 | 3195.0 | 8342.9 | 16623.5 | 18397.9 | 17708.5 | 13467.0 | 12949.4 |
| 67.5° | 2039.9 | 1997.0 | 2088.5 | 2372.2 | 2429.8 | 4842.7 | 15043.6 | 20793.8 | 20656.0 | 15152.1 | 14035.5 |
| 69° | 1806.0 | 1783.4 | 1863.6 | 2186.9 | 2332.7 | 3439.1 | 13105.4 | 21127.2 | 21160.0 | 16145.5 | 14202.7 |
| 70° | 1627.4 | 1636.5 | 1714.5 | 2093.1 | 2288.6 | 2835.6 | 11201.0 | 20667.3 | 20945.3 | 16641.6 | 14021.9 |
| 72.5° | 1198.0 | 1217.2 | 1325.7 | 1733.7 | 2246.8 | 2406.1 | 6665.7 | 18052.1 | 18543.7 | 16671.0 | 12827.3 |
| 75° | 837.4 | 828.4 | 924.5 | 1305.3 | 2122.4 | 2384.6 | 3914.9 | 13960.9 | 14518.1 | 14409.6 | 10778.4 |
| 77.5° | 548.1 | 562.8 | 639.7 | 922.2 | 1785.7 | 2366.6 | 2551.9 | 9904.7 | 10266.4 | 9636.9 | 6375.2 |
| 80° | 386.5 | 385.4 | 428.3 | 629.5 | 1324.5 | 2273.9 | 2089.7 | 6243.0 | 6151.5 | 3787.2 | 1890.8 |
| 82.5° | 221.5 | 237.3 | 287.1 | 443.0 | 886.0 | 2001.5 | 1922.4 | 2985.9 | 2725.9 | 1079.3 | 638.5 |
| 85° | 123.2 | 128.8 | 170.7 | 267.8 | 517.6 | 1507.6 | 1678.3 | 1358.5 | 1281.6 | 450.9 | 274.6 |
| 87.5° | 39.6 | 42.9 | 71.2 | 135.6 | 235.1 | 712.0 | 950.5 | 627.2 | 578.6 | 162.7 | 110.8 |
| 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: GALN-SA4C-722-U-SL2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 | 4712.8 |
| 2.5° | 4719.6 | 4733.1 | 4697.0 | 4661.9 | 4630.3 | 4586.2 | 4546.6 | 4513.9 | 4491.3 | 4487.9 | 4476.6 |
| 5° | 4735.4 | 4736.5 | 4667.6 | 4574.9 | 4484.5 | 4385.0 | 4282.2 | 4208.7 | 4139.8 | 4101.4 | 4082.1 |
| 7.5° | 4746.7 | 4736.5 | 4612.2 | 4461.9 | 4287.8 | 4107.0 | 3926.2 | 3781.5 | 3669.6 | 3625.6 | 3642.5 |
| 10° | 4742.2 | 4710.5 | 4528.6 | 4287.8 | 4034.7 | 3764.6 | 3504.6 | 3301.2 | 3114.7 | 3018.7 | 3020.9 |
| 12.5° | 4717.3 | 4665.3 | 4404.2 | 4092.3 | 3720.5 | 3358.8 | 2961.0 | 2686.4 | 2470.5 | 2342.8 | 2303.3 |
| 15° | 4695.8 | 4605.4 | 4258.4 | 3826.7 | 3364.5 | 2848.0 | 2363.2 | 2024.1 | 1843.3 | 1742.7 | 1741.6 |
| 17.5° | 4673.2 | 4547.8 | 4099.1 | 3545.3 | 2955.4 | 2290.8 | 1782.3 | 1523.5 | 1438.7 | 1448.9 | 1431.9 |
| 20° | 4649.5 | 4480.0 | 3933.0 | 3232.3 | 2457.0 | 1708.8 | 1334.7 | 1229.6 | 1253.3 | 1299.7 | 1306.5 |
| 22.5° | 4622.4 | 4407.6 | 3754.4 | 2887.6 | 1932.6 | 1286.1 | 1082.7 | 1066.9 | 1127.9 | 1200.2 | 1210.4 |
| 25° | 4580.5 | 4317.2 | 3529.5 | 2527.0 | 1490.7 | 1036.4 | 948.2 | 959.5 | 1019.4 | 1080.4 | 1087.2 |
| 27.5° | 4521.8 | 4205.3 | 3302.3 | 2077.2 | 1120.0 | 889.4 | 866.8 | 881.5 | 910.9 | 948.2 | 957.2 |
| 30° | 4442.7 | 4078.8 | 3041.3 | 1688.5 | 897.3 | 816.0 | 806.9 | 814.8 | 831.8 | 847.6 | 852.1 |
| 32.5° | 4363.6 | 3956.7 | 2777.9 | 1292.9 | 800.2 | 767.4 | 758.3 | 758.3 | 758.3 | 760.6 | 761.7 |
| 35° | 4290.1 | 3841.4 | 2495.4 | 1007.0 | 749.3 | 729.0 | 716.5 | 703.0 | 700.7 | 692.8 | 692.8 |
| 37.5° | 4249.4 | 3736.3 | 2194.8 | 843.1 | 712.0 | 697.3 | 680.4 | 657.8 | 645.3 | 646.5 | 644.2 |
| 40° | 4257.3 | 3667.4 | 1921.3 | 750.4 | 681.5 | 665.7 | 639.7 | 613.7 | 605.8 | 605.8 | 603.5 |
| 42.5° | 4346.6 | 3644.8 | 1659.1 | 701.8 | 652.1 | 634.0 | 601.2 | 577.5 | 573.0 | 571.9 | 574.1 |
| 45° | 4552.3 | 3700.1 | 1424.0 | 670.2 | 627.2 | 600.1 | 567.3 | 545.9 | 541.3 | 541.3 | 540.2 |
| 47.5° | 4953.5 | 3879.8 | 1255.6 | 649.8 | 609.2 | 574.1 | 540.2 | 518.7 | 510.8 | 508.6 | 508.6 |
| 50° | 5577.3 | 4269.8 | 1130.2 | 631.8 | 586.6 | 550.4 | 515.4 | 490.5 | 478.1 | 476.9 | 475.8 |
| 52.5° | 6444.2 | 4877.8 | 1081.6 | 618.2 | 561.7 | 525.5 | 487.1 | 463.4 | 447.5 | 444.2 | 441.9 |
| 55° | 7457.9 | 5726.5 | 1148.2 | 608.0 | 535.7 | 497.3 | 457.7 | 432.9 | 418.2 | 411.4 | 410.2 |
| 57.5° | 8632.2 | 6745.9 | 1401.4 | 594.5 | 512.0 | 466.8 | 428.3 | 403.5 | 387.6 | 379.7 | 377.5 |
| 60° | 9686.6 | 7793.6 | 1843.3 | 586.6 | 491.6 | 434.0 | 394.4 | 371.8 | 357.1 | 349.2 | 348.1 |
| 62.5° | 10845.0 | 8792.7 | 2371.1 | 608.0 | 482.6 | 402.3 | 362.8 | 342.4 | 330.0 | 322.1 | 322.1 |
| 65° | 12082.6 | 9792.9 | 2720.3 | 680.4 | 496.1 | 377.5 | 328.9 | 311.9 | 300.6 | 295.0 | 293.8 |
| 67.5° | 12916.6 | 10138.7 | 2241.1 | 754.9 | 530.0 | 350.4 | 296.1 | 282.5 | 275.8 | 270.1 | 270.1 |
| 69° | 12826.2 | 9701.3 | 1653.4 | 774.2 | 540.2 | 336.8 | 278.0 | 267.8 | 258.8 | 256.5 | 254.3 |
| 70° | 12540.3 | 9202.9 | 1385.6 | 761.7 | 532.3 | 324.4 | 266.7 | 254.3 | 246.4 | 244.1 | 243.0 |
| 72.5° | 11169.4 | 7981.2 | 1031.8 | 662.3 | 453.2 | 281.4 | 236.2 | 224.9 | 218.1 | 214.7 | 214.7 |
| 75° | 9279.8 | 6523.3 | 805.8 | 526.7 | 354.9 | 237.3 | 202.3 | 193.3 | 187.6 | 185.3 | 184.2 |
| 77.5° | 5201.0 | 3642.5 | 578.6 | 412.5 | 269.0 | 192.1 | 169.5 | 161.6 | 156.0 | 153.7 | 153.7 |
| 80° | 1448.9 | 1040.9 | 340.2 | 272.4 | 183.1 | 145.8 | 134.5 | 128.8 | 120.9 | 115.3 | 118.7 |
| 82.5° | 545.9 | 450.9 | 194.4 | 163.9 | 116.4 | 97.2 | 93.8 | 89.3 | 85.9 | 78.0 | 78.0 |
| 85° | 265.6 | 219.3 | 124.3 | 87.0 | 64.4 | 50.9 | 48.6 | 46.3 | 44.1 | 38.4 | 39.6 |
| 87.5° | 91.5 | 97.2 | 54.2 | 31.6 | 19.2 | 12.4 | 10.2 | 5.7 | 5.7 | 5.7 | 5.7 |
| 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)