

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: P454369

Luminaire Tested: **GALN-SA5C-727-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5C-727-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24124 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

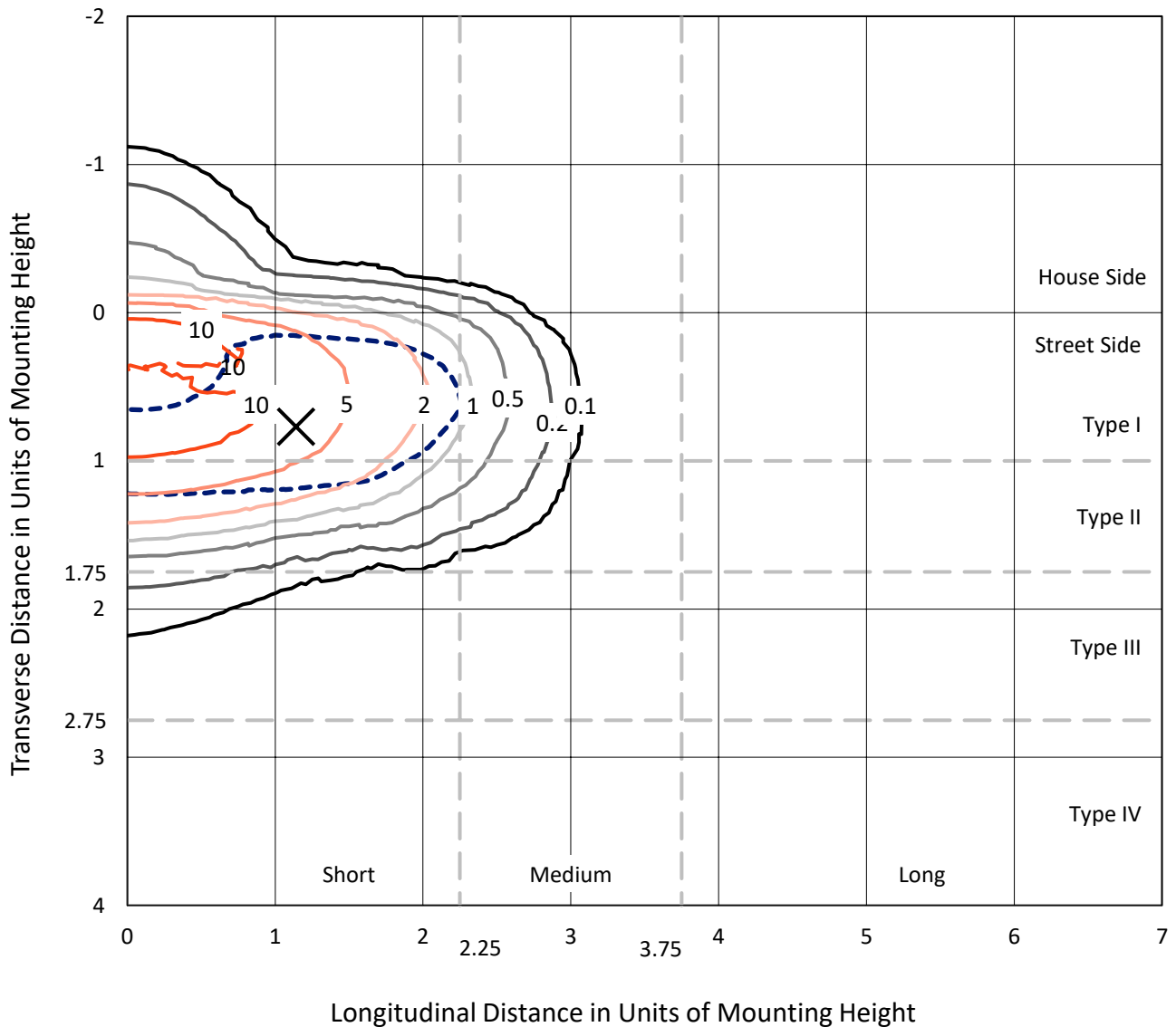
Input Watts (W): 269
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

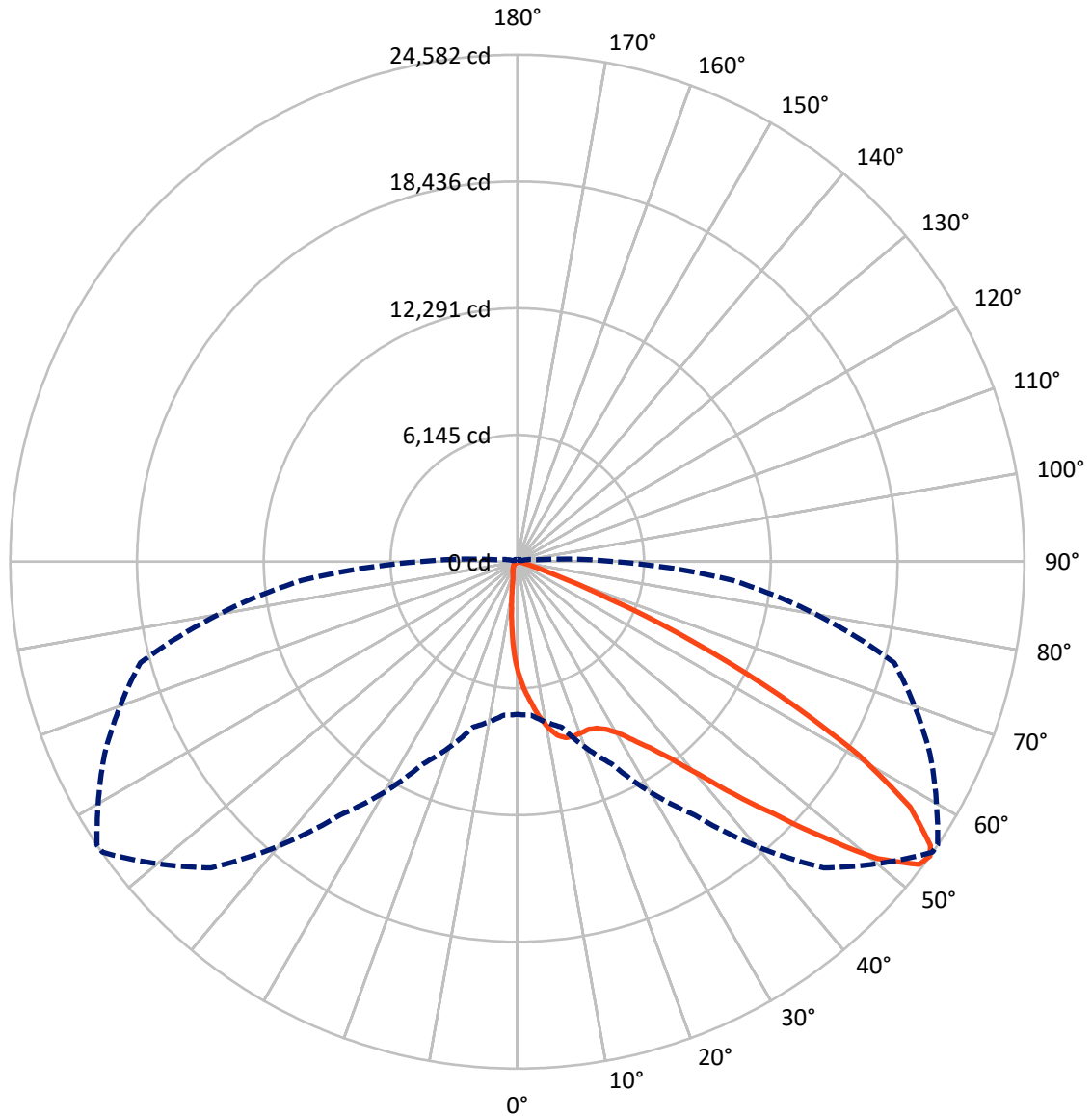
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1140.8 | 0.0 | 1140.8 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 22983.2 | 0.0 | 22983.2 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 24124.0 | 0.0 | 24124.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 473.6 | 2.0 |
| 10°-20° | 1280.3 | 5.3 |
| 20°-30° | 2217.4 | 9.2 |
| 30°-40° | 3827.6 | 15.9 |
| 40°-50° | 6514.8 | 27.0 |
| 50°-60° | 6447.2 | 26.7 |
| 60°-70° | 2942.6 | 12.2 |
| 70°-80° | 377.9 | 1.6 |
| 80°-90° | 42.6 | 0.2 |
| 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° | 24124.0 | 100.0 |
| 0°-180° | 24124.0 | 100.0 |

Coefficient of Utilization



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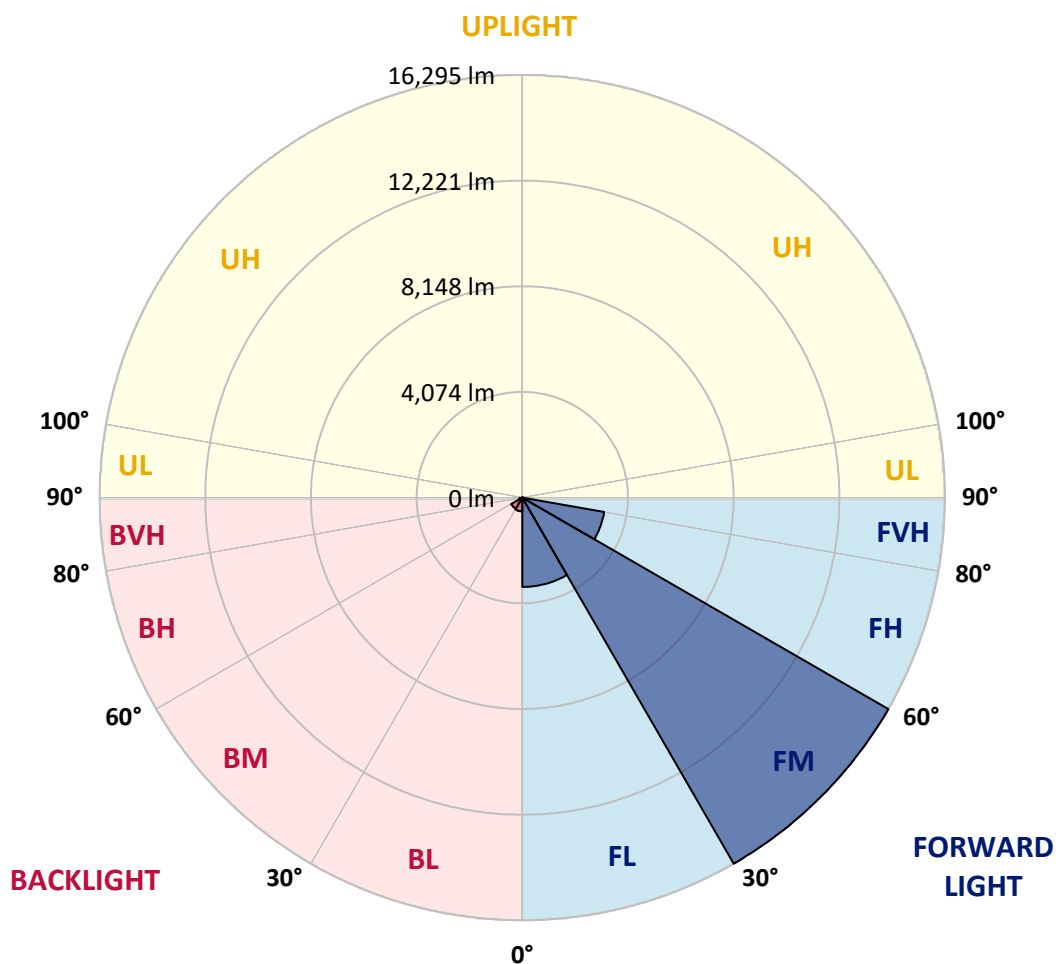
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 3443.8 | 14.3 | | | |
| FM (30°-60°) | 16295.1 | 67.5 | | | |
| FH (60°-80°) | 3206.3 | 13.3 | | | G2/5000 |
| FVH (80°-90°) | 38.0 | 0.2 | | | G1/100 |
| BL (0°-30°) | 527.6 | 2.2 | B2/1000 | | |
| BM (30°-60°) | 494.4 | 2.0 | B1/1000 | | |
| BH (60°-80°) | 114.2 | 0.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 4.6 | 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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 |
| 2.5° | 6811.5 | 6764.3 | 6699.2 | 6648.7 | 6529.9 | 6359.0 | 6178.3 | 6178.3 | 6004.2 | 5761.7 | 5514.3 |
| 5° | 7856.4 | 7825.5 | 7762.0 | 7631.8 | 7498.3 | 7259.1 | 6896.1 | 6832.6 | 6521.8 | 6082.3 | 5620.1 |
| 7.5° | 8281.2 | 8295.8 | 8299.1 | 8264.9 | 8201.4 | 7965.4 | 7605.7 | 7561.8 | 7065.4 | 6476.2 | 5758.4 |
| 10° | 7874.3 | 7945.9 | 8015.9 | 8157.5 | 8357.7 | 8414.6 | 8211.2 | 8165.6 | 7677.3 | 6874.9 | 5908.2 |
| 12.5° | 7268.8 | 7307.9 | 7346.9 | 7569.9 | 7971.9 | 8432.6 | 8645.8 | 8644.1 | 8230.7 | 7272.1 | 6098.6 |
| 15° | 6987.3 | 7021.4 | 7024.7 | 7124.0 | 7472.3 | 8142.8 | 8831.3 | 8855.7 | 8771.1 | 7762.0 | 6303.7 |
| 17.5° | 7045.8 | 7073.5 | 7050.7 | 7075.1 | 7257.4 | 7823.8 | 8810.2 | 8891.5 | 9208.9 | 8232.4 | 6489.2 |
| 20° | 7428.3 | 7482.0 | 7394.1 | 7325.8 | 7381.1 | 7739.2 | 8738.5 | 8852.5 | 9518.2 | 8691.3 | 6658.5 |
| 22.5° | 8115.2 | 8144.5 | 8033.8 | 7846.6 | 7749.0 | 7916.6 | 8719.0 | 8831.3 | 9781.8 | 9067.3 | 6756.1 |
| 25° | 8878.5 | 8868.7 | 8746.7 | 8536.7 | 8331.6 | 8274.7 | 8847.6 | 8948.5 | 9999.9 | 9405.9 | 6785.4 |
| 27.5° | 9641.9 | 9671.1 | 9466.1 | 9205.7 | 8959.9 | 8811.8 | 9135.7 | 9210.5 | 10245.7 | 9791.6 | 6821.2 |
| 30° | 10528.9 | 10481.7 | 10279.9 | 9982.0 | 9700.4 | 9493.7 | 9599.5 | 9620.7 | 10584.2 | 10302.7 | 6915.6 |
| 32.5° | 11682.9 | 11552.6 | 11326.4 | 10805.6 | 10603.8 | 10253.8 | 10279.9 | 10305.9 | 10996.0 | 10808.8 | 7029.6 |
| 35° | 13248.6 | 13242.1 | 12799.4 | 12097.9 | 11606.4 | 11171.8 | 11057.9 | 11079.0 | 11619.4 | 11560.8 | 7281.8 |
| 37.5° | 15133.3 | 15159.4 | 14654.8 | 13948.5 | 13043.5 | 12353.4 | 12119.0 | 12122.3 | 12566.6 | 12599.2 | 7666.0 |
| 40° | 16668.2 | 16736.5 | 16435.4 | 15958.5 | 15065.0 | 13985.9 | 13592.0 | 13556.2 | 13898.0 | 13857.3 | 8214.5 |
| 42.5° | 17329.0 | 17392.4 | 17504.7 | 17670.8 | 17179.2 | 16288.9 | 15359.6 | 15408.4 | 15512.6 | 15227.7 | 8829.7 |
| 45° | 17005.1 | 17106.0 | 17547.1 | 18572.4 | 19034.7 | 18735.2 | 17626.8 | 17455.9 | 17014.8 | 16717.0 | 9448.2 |
| 47.5° | 15655.8 | 15901.6 | 16638.9 | 18346.2 | 19964.0 | 20976.4 | 20185.4 | 19959.2 | 18518.7 | 17804.2 | 9842.0 |
| 50° | 13437.4 | 13452.0 | 14479.1 | 16661.7 | 19482.3 | 22390.8 | 22797.7 | 22628.4 | 19920.1 | 18414.6 | 10040.6 |
| 52.5° | 9741.1 | 10061.8 | 11002.5 | 13530.2 | 17395.7 | 22175.9 | 24462.7 | 24392.7 | 21365.4 | 18727.1 | 10327.1 |
| 54° | 7405.5 | 7467.4 | 8304.0 | 10812.1 | 14998.3 | 20995.9 | 24565.2 | 24581.5 | 22083.2 | 18915.9 | 10496.3 |
| 55° | 6070.9 | 5922.8 | 6801.7 | 9210.5 | 13362.5 | 19952.6 | 24230.0 | 24308.1 | 22405.4 | 19013.5 | 10621.7 |
| 57.5° | 2877.6 | 2879.2 | 3551.4 | 4858.4 | 8369.1 | 15493.0 | 22180.8 | 22457.5 | 22441.2 | 19181.2 | 11007.4 |
| 60° | 1456.7 | 1466.5 | 1614.6 | 2242.8 | 4134.1 | 10299.4 | 18339.7 | 18998.9 | 20714.4 | 19205.6 | 11134.4 |
| 62.5° | 1018.9 | 1007.5 | 983.1 | 1079.1 | 1739.9 | 5234.3 | 13653.9 | 14226.8 | 17599.1 | 18276.2 | 10730.7 |
| 65° | 872.4 | 848.0 | 779.6 | 765.0 | 878.9 | 2084.9 | 8504.2 | 9438.4 | 13437.4 | 15825.1 | 9581.6 |
| 67.5° | 745.4 | 735.7 | 673.8 | 636.4 | 621.7 | 908.2 | 4388.0 | 4879.5 | 9184.5 | 11375.2 | 7257.4 |
| 70° | 633.1 | 628.3 | 590.8 | 543.6 | 502.9 | 543.6 | 1627.6 | 2016.6 | 5118.8 | 6124.6 | 3424.5 |
| 72.5° | 514.3 | 519.2 | 525.7 | 465.5 | 423.2 | 385.7 | 695.0 | 808.9 | 2141.9 | 2189.1 | 1197.9 |
| 75° | 450.8 | 446.0 | 446.0 | 405.3 | 353.2 | 286.5 | 382.5 | 411.8 | 655.9 | 608.7 | 278.3 |
| 77.5° | 317.4 | 306.0 | 358.1 | 333.7 | 294.6 | 203.4 | 218.1 | 231.1 | 271.8 | 232.7 | 130.2 |
| 80° | 219.7 | 219.7 | 229.5 | 299.5 | 265.3 | 148.1 | 133.5 | 143.2 | 161.1 | 138.3 | 74.9 |
| 82.5° | 123.7 | 127.0 | 149.7 | 159.5 | 154.6 | 99.3 | 87.9 | 89.5 | 107.4 | 94.4 | 47.2 |
| 85° | 14.6 | 24.4 | 86.3 | 84.6 | 63.5 | 43.9 | 48.8 | 50.5 | 66.7 | 58.6 | 27.7 |
| 87.5° | 1.6 | 3.3 | 17.9 | 22.8 | 16.3 | 17.9 | 17.9 | 17.9 | 22.8 | 26.0 | 19.5 |
| 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-SA5C-727-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 | 5359.7 |
| 2.5° | 5380.8 | 5257.1 | 4962.5 | 4620.7 | 4402.6 | 4047.8 | 3748.3 | 3531.9 | 3478.2 | 3374.0 | 3404.9 |
| 5° | 5374.3 | 5117.1 | 4516.6 | 3881.8 | 3204.7 | 2700.2 | 2324.2 | 2028.0 | 1897.8 | 1811.5 | 1751.3 |
| 7.5° | 5377.6 | 4975.5 | 4012.0 | 3001.3 | 2192.4 | 1697.6 | 1349.3 | 1168.6 | 1048.2 | 997.7 | 1004.2 |
| 10° | 5387.3 | 4816.0 | 3426.1 | 2223.3 | 1479.5 | 1097.0 | 883.8 | 797.5 | 756.8 | 750.3 | 748.7 |
| 12.5° | 5410.1 | 4641.9 | 2866.2 | 1650.4 | 1035.1 | 797.5 | 716.1 | 686.8 | 673.8 | 673.8 | 668.9 |
| 15° | 5434.5 | 4449.8 | 2400.7 | 1227.2 | 797.5 | 685.2 | 647.8 | 633.1 | 625.0 | 625.0 | 623.4 |
| 17.5° | 5434.5 | 4228.5 | 1966.1 | 952.1 | 686.8 | 629.9 | 600.6 | 581.1 | 574.5 | 574.5 | 572.9 |
| 20° | 5400.3 | 3971.3 | 1580.4 | 766.6 | 623.4 | 577.8 | 548.5 | 527.3 | 519.2 | 515.9 | 514.3 |
| 22.5° | 5281.5 | 3627.9 | 1258.1 | 659.2 | 571.3 | 532.2 | 494.8 | 470.4 | 463.9 | 460.6 | 462.2 |
| 25° | 5069.9 | 3240.5 | 996.1 | 579.4 | 524.1 | 476.9 | 444.3 | 426.4 | 419.9 | 419.9 | 421.5 |
| 27.5° | 4851.9 | 2835.3 | 789.4 | 519.2 | 467.1 | 424.8 | 398.8 | 387.4 | 385.7 | 390.6 | 392.2 |
| 30° | 4650.0 | 2428.4 | 639.6 | 470.4 | 416.7 | 380.9 | 363.0 | 359.7 | 359.7 | 361.3 | 363.0 |
| 32.5° | 4425.4 | 2071.9 | 535.5 | 428.1 | 376.0 | 345.0 | 335.3 | 335.3 | 338.5 | 338.5 | 341.8 |
| 35° | 4283.8 | 1765.9 | 470.4 | 387.4 | 345.0 | 319.0 | 312.5 | 314.1 | 319.0 | 325.5 | 328.8 |
| 37.5° | 4207.3 | 1521.8 | 428.1 | 354.8 | 315.8 | 297.8 | 291.3 | 294.6 | 306.0 | 317.4 | 319.0 |
| 40° | 4213.8 | 1337.9 | 393.9 | 327.1 | 293.0 | 273.4 | 268.6 | 278.3 | 289.7 | 301.1 | 302.7 |
| 42.5° | 4285.4 | 1201.2 | 361.3 | 294.6 | 273.4 | 245.8 | 244.1 | 253.9 | 258.8 | 270.2 | 271.8 |
| 45° | 4370.1 | 1101.9 | 327.1 | 260.4 | 237.6 | 213.2 | 214.8 | 223.0 | 229.5 | 247.4 | 250.6 |
| 47.5° | 4396.1 | 1033.5 | 288.1 | 221.4 | 195.3 | 187.2 | 188.8 | 193.7 | 206.7 | 223.0 | 224.6 |
| 50° | 4425.4 | 991.2 | 250.6 | 187.2 | 166.0 | 164.4 | 166.0 | 169.3 | 177.4 | 183.9 | 182.3 |
| 52.5° | 4550.7 | 989.6 | 219.7 | 162.8 | 141.6 | 144.9 | 146.5 | 144.9 | 138.3 | 128.6 | 125.3 |
| 54° | 4667.9 | 994.5 | 205.1 | 151.4 | 130.2 | 135.1 | 133.5 | 125.3 | 109.0 | 99.3 | 94.4 |
| 55° | 4762.3 | 999.3 | 196.9 | 143.2 | 123.7 | 125.3 | 127.0 | 110.7 | 89.5 | 79.8 | 76.5 |
| 57.5° | 4947.9 | 987.9 | 177.4 | 125.3 | 109.0 | 102.5 | 100.9 | 73.2 | 48.8 | 42.3 | 39.1 |
| 60° | 4855.1 | 891.9 | 161.1 | 107.4 | 92.8 | 83.0 | 68.4 | 40.7 | 24.4 | 17.9 | 17.9 |
| 62.5° | 4490.5 | 756.8 | 143.2 | 87.9 | 76.5 | 63.5 | 35.8 | 22.8 | 11.4 | 6.5 | 4.9 |
| 65° | 4016.9 | 636.4 | 128.6 | 70.0 | 60.2 | 40.7 | 19.5 | 14.6 | 4.9 | 0.0 | 0.0 |
| 67.5° | 2986.6 | 472.0 | 109.0 | 55.3 | 45.6 | 26.0 | 13.0 | 8.1 | 1.6 | 0.0 | 0.0 |
| 70° | 1383.5 | 288.1 | 92.8 | 42.3 | 32.6 | 19.5 | 9.8 | 4.9 | 0.0 | 0.0 | 0.0 |
| 72.5° | 397.1 | 180.7 | 76.5 | 30.9 | 22.8 | 16.3 | 8.1 | 3.3 | 1.6 | 0.0 | 0.0 |
| 75° | 138.3 | 144.9 | 57.0 | 22.8 | 17.9 | 11.4 | 6.5 | 3.3 | 1.6 | 0.0 | 0.0 |
| 77.5° | 83.0 | 117.2 | 35.8 | 19.5 | 14.6 | 9.8 | 6.5 | 3.3 | 1.6 | 1.6 | 0.0 |
| 80° | 47.2 | 78.1 | 22.8 | 16.3 | 13.0 | 8.1 | 4.9 | 3.3 | 1.6 | 1.6 | 0.0 |
| 82.5° | 26.0 | 37.4 | 17.9 | 14.6 | 11.4 | 8.1 | 4.9 | 3.3 | 1.6 | 1.6 | 1.6 |
| 85° | 21.2 | 19.5 | 14.6 | 13.0 | 9.8 | 6.5 | 4.9 | 1.6 | 0.0 | 0.0 | 0.0 |
| 87.5° | 16.3 | 13.0 | 13.0 | 13.0 | 9.8 | 6.5 | 4.9 | 1.6 | 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)