

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: P455761

Luminaire Tested: **GALN-SA7A-727-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P455761
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-SA7A-727-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K, 615mA 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: 21825 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

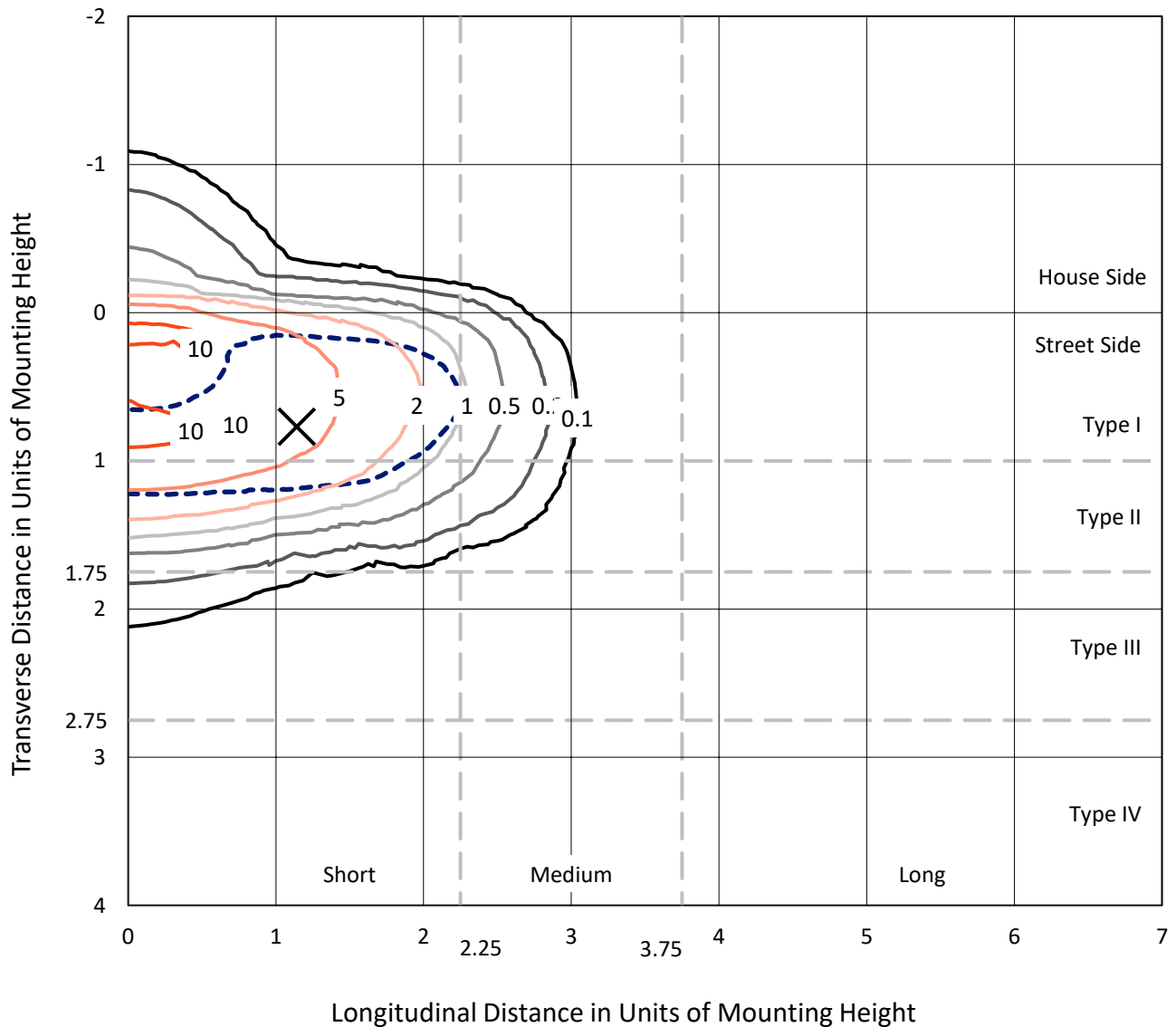
Input Watts (W): 215
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

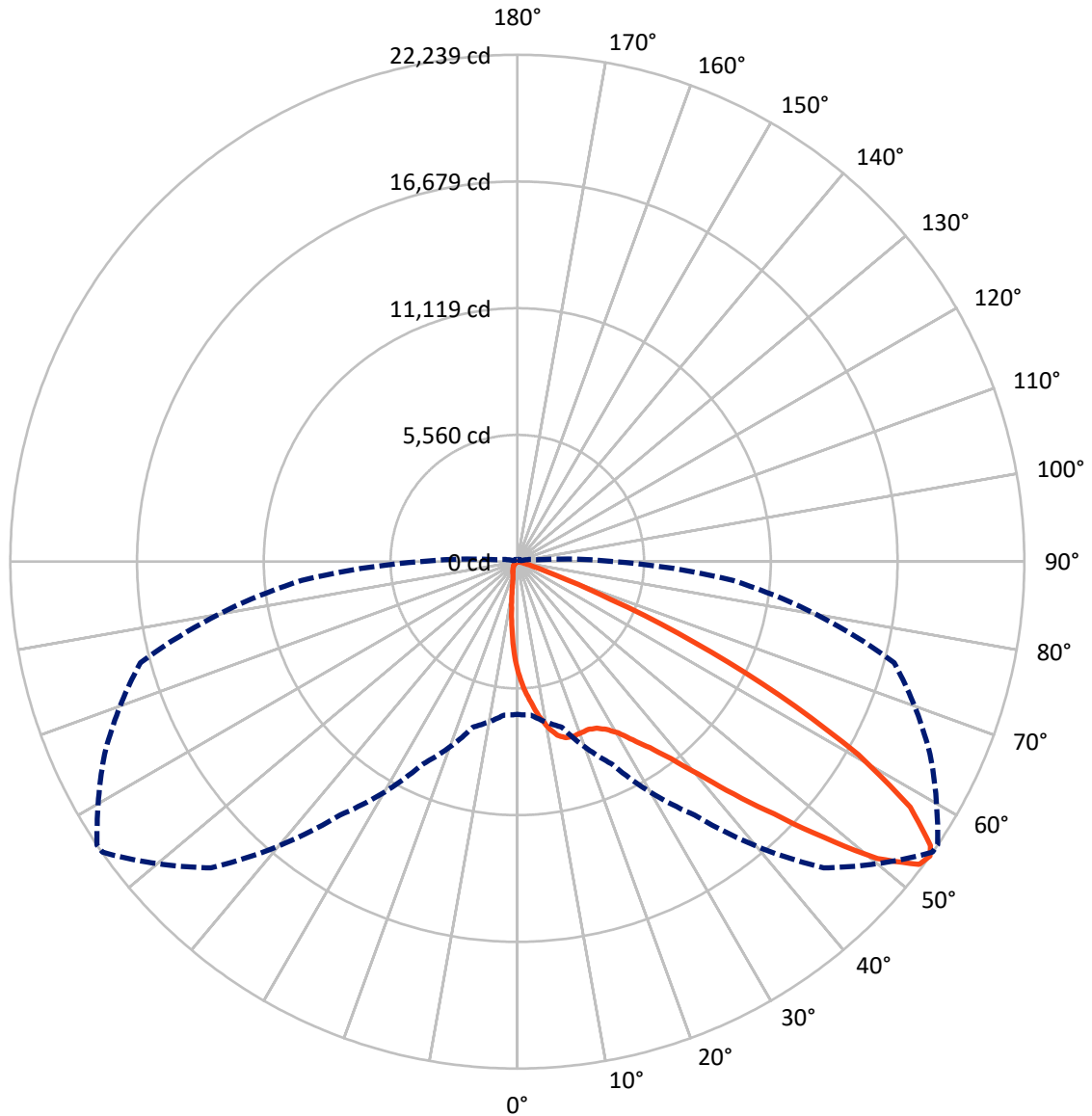
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 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 | 1032.1 | 0.0 | 1032.1 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 20793.0 | 0.0 | 20793.0 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 21825.0 | 0.0 | 21825.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 428.5 | 2.0 |
| 10°-20° | 1158.3 | 5.3 |
| 20°-30° | 2006.1 | 9.2 |
| 30°-40° | 3462.8 | 15.9 |
| 40°-50° | 5893.9 | 27.0 |
| 50°-60° | 5832.8 | 26.7 |
| 60°-70° | 2662.2 | 12.2 |
| 70°-80° | 341.9 | 1.6 |
| 80°-90° | 38.5 | 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° | 21825.0 | 100.0 |
| 0°-180° | 21825.0 | 100.0 |

Coefficient of Utilization



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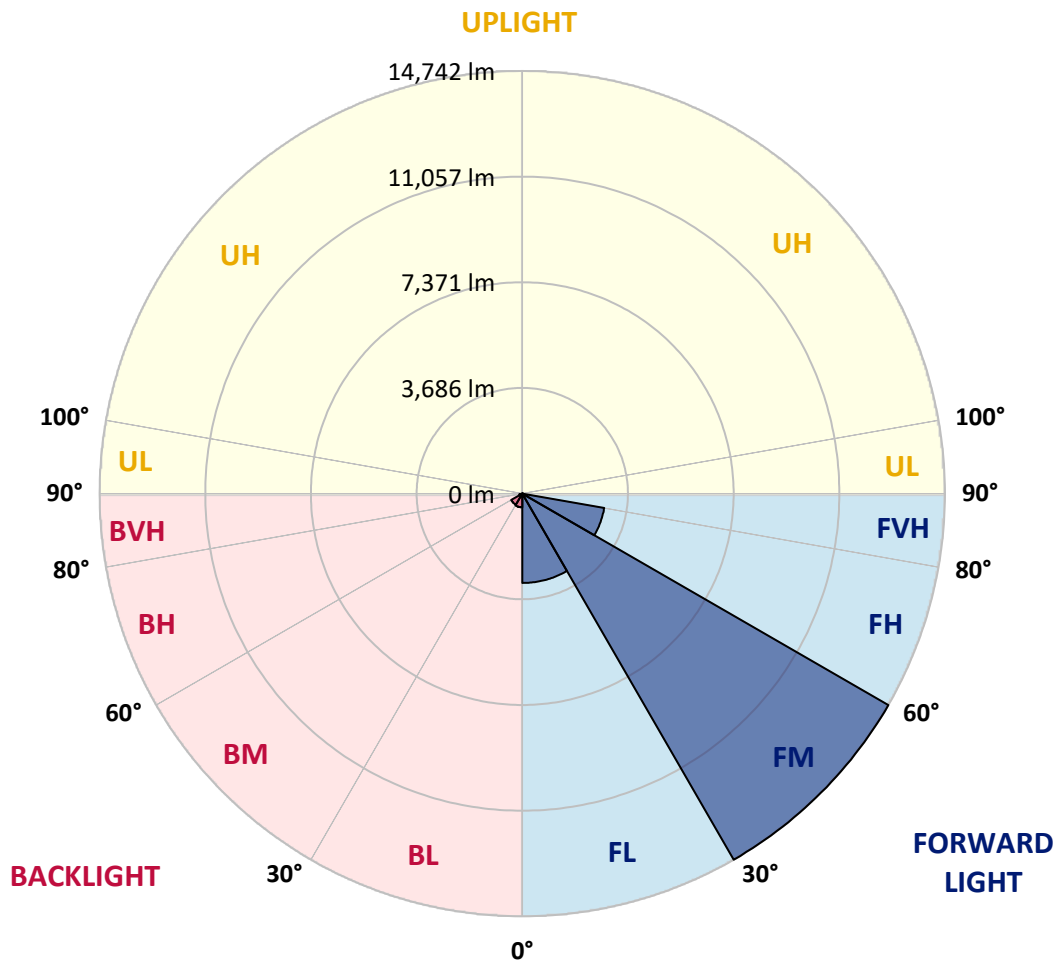
CATALOG NUMBER: GALN-SA7A-727-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 3115.6 | 14.3 | | | |
| FM (30°-60°) | 14742.2 | 67.5 | | | |
| FH (60°-80°) | 2900.7 | 13.3 | | | G2/5000 |
| FVH (80°-90°) | 34.4 | 0.2 | | | G1/100 |
| BL (0°-30°) | 477.3 | 2.2 | B1/500 | | |
| BM (30°-60°) | 447.3 | 2.0 | B1/1000 | | |
| BH (60°-80°) | 103.3 | 0.5 | B0/110 | | G0/110 |
| BVH (80°-90°) | 4.1 | 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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 |
| 2.5° | 6162.3 | 6119.6 | 6060.7 | 6015.1 | 5907.6 | 5753.0 | 5589.5 | 5589.5 | 5432.0 | 5212.6 | 4988.8 |
| 5° | 7107.7 | 7079.7 | 7022.3 | 6904.5 | 6783.7 | 6567.3 | 6238.9 | 6181.5 | 5900.2 | 5502.7 | 5084.5 |
| 7.5° | 7492.0 | 7505.2 | 7508.2 | 7477.3 | 7419.8 | 7206.3 | 6880.9 | 6841.2 | 6392.1 | 5859.0 | 5209.6 |
| 10° | 7123.9 | 7188.7 | 7252.0 | 7380.1 | 7561.2 | 7612.7 | 7428.7 | 7387.4 | 6945.7 | 6219.8 | 5345.1 |
| 12.5° | 6576.1 | 6611.5 | 6646.8 | 6848.5 | 7212.2 | 7628.9 | 7821.8 | 7820.4 | 7446.3 | 6579.1 | 5517.4 |
| 15° | 6321.4 | 6352.3 | 6355.2 | 6445.1 | 6760.2 | 7366.8 | 7989.7 | 8011.8 | 7935.2 | 7022.3 | 5702.9 |
| 17.5° | 6374.4 | 6399.4 | 6378.8 | 6400.9 | 6565.8 | 7078.2 | 7970.6 | 8044.2 | 8331.3 | 7447.8 | 5870.8 |
| 20° | 6720.4 | 6769.0 | 6689.5 | 6627.6 | 6677.7 | 7001.7 | 7905.8 | 8008.8 | 8611.1 | 7863.1 | 6023.9 |
| 22.5° | 7341.8 | 7368.3 | 7268.2 | 7098.8 | 7010.5 | 7162.2 | 7888.1 | 7989.7 | 8849.6 | 8203.2 | 6112.3 |
| 25° | 8032.4 | 8023.6 | 7913.1 | 7723.2 | 7537.6 | 7486.1 | 8004.4 | 8095.7 | 9046.9 | 8509.5 | 6138.8 |
| 27.5° | 8723.0 | 8749.5 | 8564.0 | 8328.4 | 8106.0 | 7972.0 | 8265.0 | 8332.8 | 9269.3 | 8858.5 | 6171.2 |
| 30° | 9525.5 | 9482.8 | 9300.2 | 9030.7 | 8776.0 | 8589.0 | 8684.7 | 8703.8 | 9575.6 | 9320.8 | 6256.6 |
| 32.5° | 10569.5 | 10451.7 | 10247.0 | 9775.8 | 9593.2 | 9276.6 | 9300.2 | 9323.8 | 9948.1 | 9778.8 | 6359.7 |
| 35° | 11986.0 | 11980.1 | 11579.6 | 10945.0 | 10500.3 | 10107.1 | 10004.1 | 10023.2 | 10512.1 | 10459.0 | 6587.9 |
| 37.5° | 13691.2 | 13714.7 | 13258.2 | 12619.2 | 11800.5 | 11176.1 | 10964.1 | 10967.1 | 11369.0 | 11398.5 | 6935.4 |
| 40° | 15079.7 | 15141.5 | 14869.1 | 14437.7 | 13629.3 | 12653.0 | 12296.7 | 12264.3 | 12573.5 | 12536.7 | 7431.6 |
| 42.5° | 15677.5 | 15735.0 | 15836.6 | 15986.8 | 15542.1 | 14736.6 | 13895.8 | 13940.0 | 14034.2 | 13776.6 | 7988.2 |
| 45° | 15384.5 | 15475.8 | 15874.8 | 16802.5 | 17220.7 | 16949.8 | 15947.0 | 15792.4 | 15393.3 | 15123.9 | 8547.8 |
| 47.5° | 14163.8 | 14386.2 | 15053.2 | 16597.8 | 18061.5 | 18977.4 | 18261.7 | 18057.1 | 16753.9 | 16107.5 | 8904.1 |
| 50° | 12156.8 | 12170.1 | 13099.2 | 15073.8 | 17625.6 | 20257.0 | 20625.1 | 20471.9 | 18021.7 | 16659.7 | 9083.7 |
| 52.5° | 8812.8 | 9102.9 | 9954.0 | 12240.8 | 15737.9 | 20062.6 | 22131.4 | 22068.1 | 19329.3 | 16942.4 | 9342.9 |
| 54° | 6699.8 | 6755.8 | 7512.6 | 9781.7 | 13568.9 | 18995.0 | 22224.2 | 22238.9 | 19978.7 | 17113.2 | 9496.0 |
| 55° | 5492.4 | 5358.4 | 6153.5 | 8332.8 | 12089.1 | 18051.2 | 21920.9 | 21991.5 | 20270.2 | 17201.6 | 9609.4 |
| 57.5° | 2603.4 | 2604.8 | 3213.0 | 4395.4 | 7571.5 | 14016.6 | 20067.0 | 20317.3 | 20302.6 | 17353.2 | 9958.4 |
| 60° | 1317.9 | 1326.7 | 1460.7 | 2029.1 | 3740.1 | 9317.9 | 16591.9 | 17188.3 | 18740.3 | 17375.3 | 10073.3 |
| 62.5° | 921.8 | 911.5 | 889.4 | 976.3 | 1574.1 | 4735.5 | 12352.7 | 12871.0 | 15922.0 | 16534.5 | 9708.1 |
| 65° | 789.3 | 767.2 | 705.3 | 692.1 | 795.1 | 1886.3 | 7693.7 | 8538.9 | 12156.8 | 14317.0 | 8668.5 |
| 67.5° | 674.4 | 665.6 | 609.6 | 575.7 | 562.5 | 821.6 | 3969.8 | 4414.5 | 8309.2 | 10291.2 | 6565.8 |
| 70° | 572.8 | 568.4 | 534.5 | 491.8 | 455.0 | 491.8 | 1472.5 | 1824.4 | 4631.0 | 5541.0 | 3098.1 |
| 72.5° | 465.3 | 469.7 | 475.6 | 421.1 | 382.8 | 349.0 | 628.8 | 731.8 | 1937.8 | 1980.5 | 1083.7 |
| 75° | 407.9 | 403.5 | 403.5 | 366.6 | 319.5 | 259.2 | 346.0 | 372.5 | 593.4 | 550.7 | 251.8 |
| 77.5° | 287.1 | 276.8 | 323.9 | 301.9 | 266.5 | 184.1 | 197.3 | 209.1 | 245.9 | 210.6 | 117.8 |
| 80° | 198.8 | 198.8 | 207.6 | 270.9 | 240.0 | 134.0 | 120.7 | 129.6 | 145.8 | 125.2 | 67.7 |
| 82.5° | 111.9 | 114.9 | 135.5 | 144.3 | 139.9 | 89.8 | 79.5 | 81.0 | 97.2 | 85.4 | 42.7 |
| 85° | 13.3 | 22.1 | 78.0 | 76.6 | 57.4 | 39.8 | 44.2 | 45.6 | 60.4 | 53.0 | 25.0 |
| 87.5° | 1.5 | 2.9 | 16.2 | 20.6 | 14.7 | 16.2 | 16.2 | 16.2 | 20.6 | 23.6 | 17.7 |
| 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-SA7A-727-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 | 4848.9 |
| 2.5° | 4868.0 | 4756.1 | 4489.6 | 4180.4 | 3983.1 | 3662.1 | 3391.1 | 3195.3 | 3146.7 | 3052.5 | 3080.4 |
| 5° | 4862.1 | 4629.5 | 4086.1 | 3511.9 | 2899.3 | 2442.8 | 2102.7 | 1834.7 | 1716.9 | 1638.9 | 1584.4 |
| 7.5° | 4865.1 | 4501.4 | 3629.7 | 2715.3 | 1983.4 | 1535.8 | 1220.7 | 1057.2 | 948.3 | 902.6 | 908.5 |
| 10° | 4873.9 | 4357.1 | 3099.6 | 2011.4 | 1338.5 | 992.5 | 799.6 | 721.5 | 684.7 | 678.8 | 677.3 |
| 12.5° | 4894.5 | 4199.5 | 2593.0 | 1493.1 | 936.5 | 721.5 | 647.9 | 621.4 | 609.6 | 609.6 | 605.2 |
| 15° | 4916.6 | 4025.8 | 2171.9 | 1110.3 | 721.5 | 619.9 | 586.0 | 572.8 | 565.4 | 565.4 | 564.0 |
| 17.5° | 4916.6 | 3825.5 | 1778.8 | 861.4 | 621.4 | 569.9 | 543.3 | 525.7 | 519.8 | 519.8 | 518.3 |
| 20° | 4885.7 | 3592.9 | 1429.8 | 693.5 | 564.0 | 522.7 | 496.2 | 477.1 | 469.7 | 466.8 | 465.3 |
| 22.5° | 4778.2 | 3282.2 | 1138.2 | 596.4 | 516.8 | 481.5 | 447.6 | 425.5 | 419.7 | 416.7 | 418.2 |
| 25° | 4586.8 | 2931.7 | 901.2 | 524.2 | 474.1 | 431.4 | 402.0 | 385.8 | 379.9 | 379.9 | 381.4 |
| 27.5° | 4389.5 | 2565.1 | 714.2 | 469.7 | 422.6 | 384.3 | 360.8 | 350.5 | 349.0 | 353.4 | 354.9 |
| 30° | 4206.9 | 2196.9 | 578.7 | 425.5 | 377.0 | 344.6 | 328.4 | 325.4 | 325.4 | 326.9 | 328.4 |
| 32.5° | 4003.7 | 1874.5 | 484.4 | 387.3 | 340.1 | 312.2 | 303.3 | 303.3 | 306.3 | 306.3 | 309.2 |
| 35° | 3875.6 | 1597.6 | 425.5 | 350.5 | 312.2 | 288.6 | 282.7 | 284.2 | 288.6 | 294.5 | 297.4 |
| 37.5° | 3806.4 | 1376.8 | 387.3 | 321.0 | 285.7 | 269.5 | 263.6 | 266.5 | 276.8 | 287.1 | 288.6 |
| 40° | 3812.3 | 1210.4 | 356.3 | 296.0 | 265.0 | 247.4 | 243.0 | 251.8 | 262.1 | 272.4 | 273.9 |
| 42.5° | 3877.0 | 1086.7 | 326.9 | 266.5 | 247.4 | 222.3 | 220.9 | 229.7 | 234.1 | 244.4 | 245.9 |
| 45° | 3953.6 | 996.9 | 296.0 | 235.6 | 215.0 | 192.9 | 194.4 | 201.7 | 207.6 | 223.8 | 226.8 |
| 47.5° | 3977.2 | 935.0 | 260.6 | 200.3 | 176.7 | 169.3 | 170.8 | 175.2 | 187.0 | 201.7 | 203.2 |
| 50° | 4003.7 | 896.7 | 226.8 | 169.3 | 150.2 | 148.7 | 150.2 | 153.1 | 160.5 | 166.4 | 164.9 |
| 52.5° | 4117.1 | 895.3 | 198.8 | 147.2 | 128.1 | 131.1 | 132.5 | 131.1 | 125.2 | 116.3 | 113.4 |
| 54° | 4223.1 | 899.7 | 185.5 | 136.9 | 117.8 | 122.2 | 120.7 | 113.4 | 98.7 | 89.8 | 85.4 |
| 55° | 4308.5 | 904.1 | 178.2 | 129.6 | 111.9 | 113.4 | 114.9 | 100.1 | 81.0 | 72.2 | 69.2 |
| 57.5° | 4476.3 | 893.8 | 160.5 | 113.4 | 98.7 | 92.8 | 91.3 | 66.3 | 44.2 | 38.3 | 35.3 |
| 60° | 4392.4 | 806.9 | 145.8 | 97.2 | 83.9 | 75.1 | 61.8 | 36.8 | 22.1 | 16.2 | 16.2 |
| 62.5° | 4062.6 | 684.7 | 129.6 | 79.5 | 69.2 | 57.4 | 32.4 | 20.6 | 10.3 | 5.9 | 4.4 |
| 65° | 3634.1 | 575.7 | 116.3 | 63.3 | 54.5 | 36.8 | 17.7 | 13.3 | 4.4 | 0.0 | 0.0 |
| 67.5° | 2702.0 | 427.0 | 98.7 | 50.1 | 41.2 | 23.6 | 11.8 | 7.4 | 1.5 | 0.0 | 0.0 |
| 70° | 1251.6 | 260.6 | 83.9 | 38.3 | 29.4 | 17.7 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 |
| 72.5° | 359.3 | 163.4 | 69.2 | 28.0 | 20.6 | 14.7 | 7.4 | 2.9 | 1.5 | 0.0 | 0.0 |
| 75° | 125.2 | 131.1 | 51.5 | 20.6 | 16.2 | 10.3 | 5.9 | 2.9 | 1.5 | 0.0 | 0.0 |
| 77.5° | 75.1 | 106.0 | 32.4 | 17.7 | 13.3 | 8.8 | 5.9 | 2.9 | 1.5 | 1.5 | 0.0 |
| 80° | 42.7 | 70.7 | 20.6 | 14.7 | 11.8 | 7.4 | 4.4 | 2.9 | 1.5 | 1.5 | 0.0 |
| 82.5° | 23.6 | 33.9 | 16.2 | 13.3 | 10.3 | 7.4 | 4.4 | 2.9 | 1.5 | 1.5 | 1.5 |
| 85° | 19.1 | 17.7 | 13.3 | 11.8 | 8.8 | 5.9 | 4.4 | 1.5 | 0.0 | 0.0 | 0.0 |
| 87.5° | 14.7 | 11.8 | 11.8 | 11.8 | 8.8 | 5.9 | 4.4 | 1.5 | 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)