

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: P456001

Luminaire Tested: **GALN-SA7B-727-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456001
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-SA7B-727-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K, 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: 32444 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

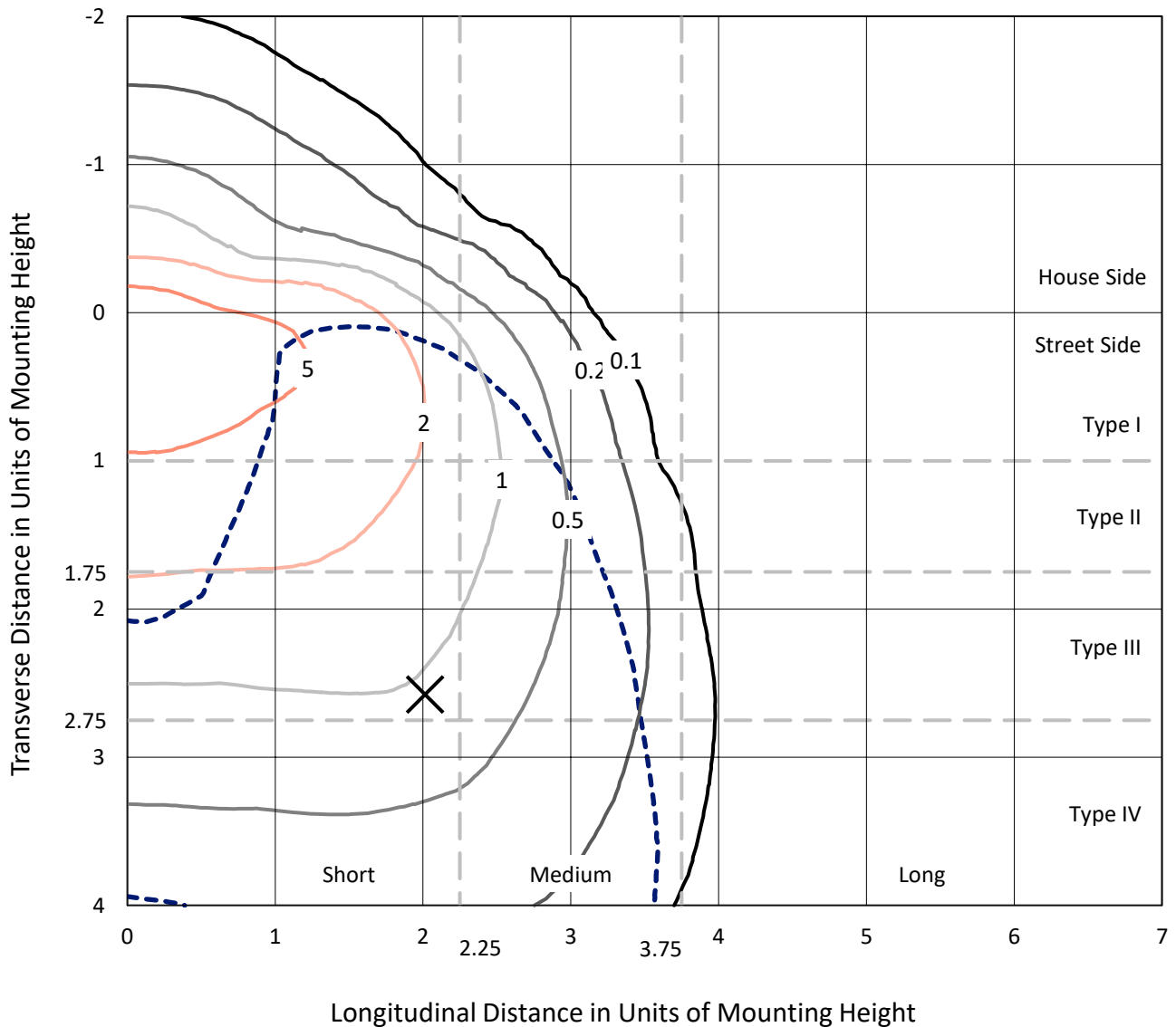
Input Watts (W): 286
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

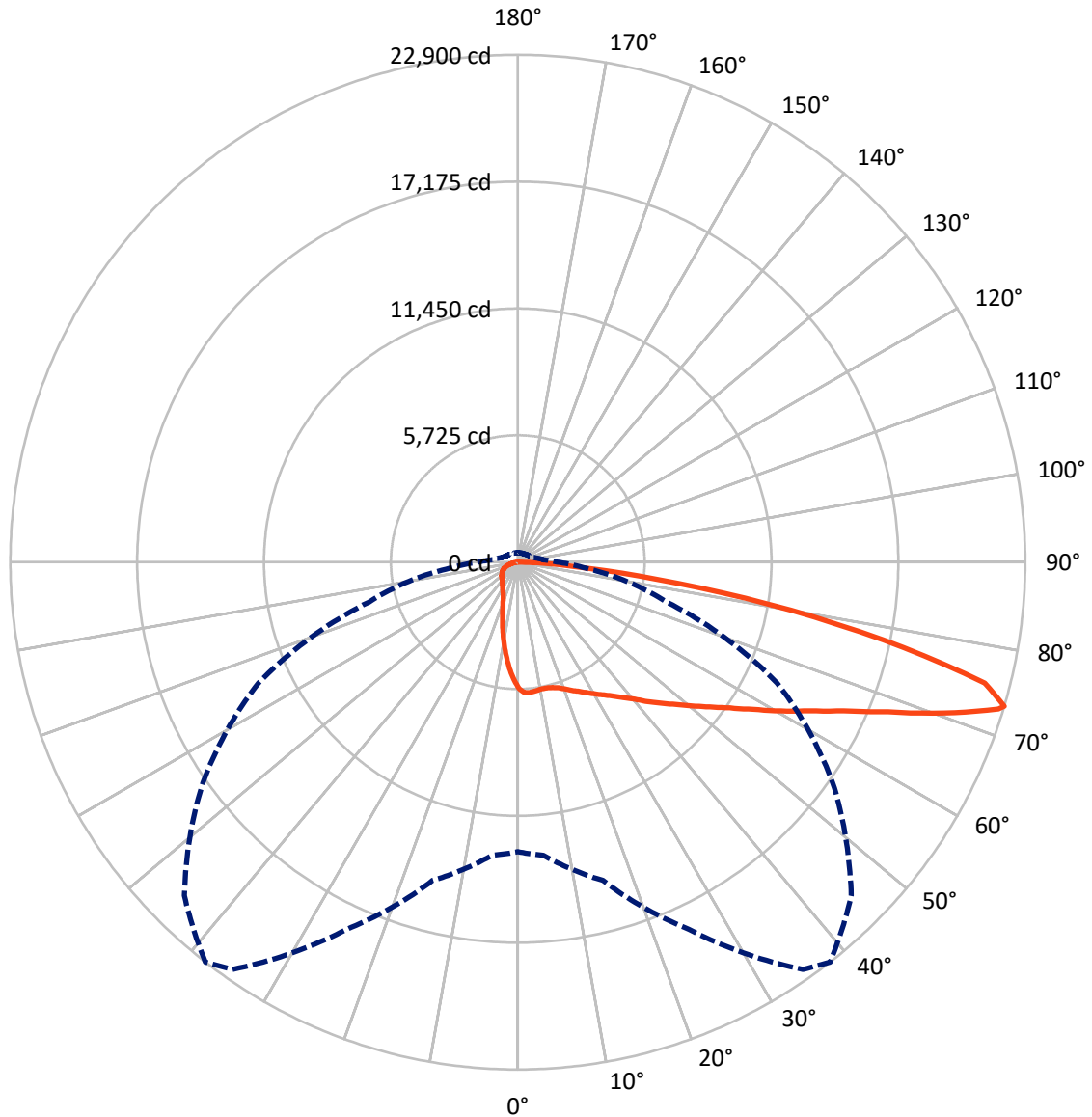
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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 | 4361.4 | 0.0 | 4361.4 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 28082.6 | 0.0 | 28082.6 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 32444.0 | 0.0 | 32444.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 497.5 | 1.5 |
| 10°-20° | 1275.8 | 3.9 |
| 20°-30° | 1986.7 | 6.1 |
| 30°-40° | 2914.1 | 9.0 |
| 40°-50° | 4322.7 | 13.3 |
| 50°-60° | 6124.4 | 18.9 |
| 60°-70° | 7769.0 | 23.9 |
| 70°-80° | 6467.1 | 19.9 |
| 80°-90° | 1086.6 | 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° | 32444.0 | 100.0 |
| 0°-180° | 32444.0 | 100.0 |

Coefficient of Utilization



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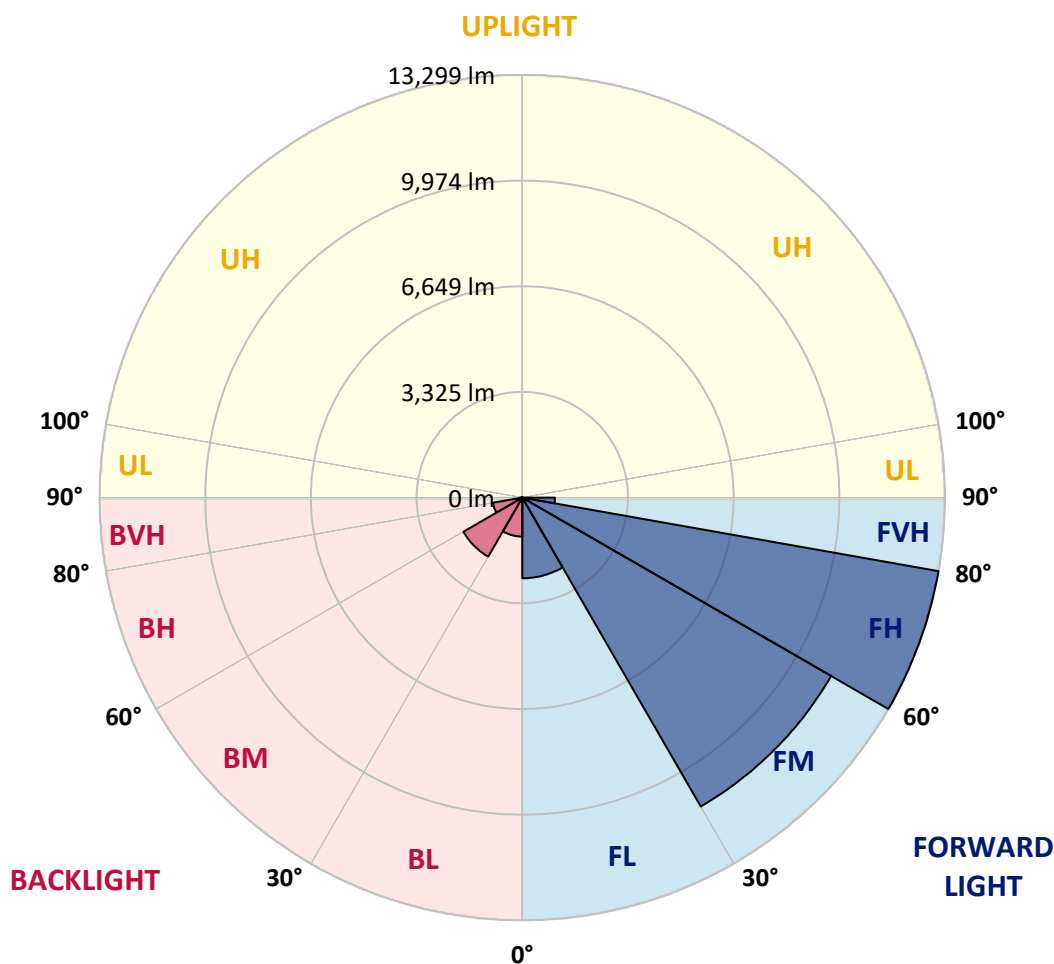
CATALOG NUMBER: GALN-SA7B-727-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2536.2 | 7.8 | | | |
| FM | (30°-60°) | 11220.0 | 34.6 | | | |
| FH | (60°-80°) | 13298.7 | 41.0 | | | G5 |
| FVH | (80°-90°) | 1027.6 | 3.2 | | | G5 |
| BL | (0°-30°) | 1223.9 | 3.8 | B3/2500 | | |
| BM | (30°-60°) | 2141.2 | 6.6 | B2/2500 | | |
| BH | (60°-80°) | 937.5 | 2.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 58.9 | 0.2 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 38° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 |
| 2.5° | 5928.9 | 5958.2 | 5943.5 | 5923.4 | 5910.6 | 5897.7 | 5879.4 | 5826.3 | 5784.1 | 5738.3 | 5666.9 |
| 5° | 5972.9 | 5991.2 | 5978.3 | 5952.7 | 5923.4 | 5910.6 | 5875.7 | 5806.1 | 5738.3 | 5661.4 | 5555.1 |
| 7.5° | 5947.2 | 5954.5 | 5939.9 | 5908.7 | 5883.1 | 5859.3 | 5819.0 | 5742.0 | 5659.6 | 5566.1 | 5426.9 |
| 10° | 5855.6 | 5883.1 | 5883.1 | 5857.4 | 5831.8 | 5819.0 | 5778.6 | 5705.4 | 5630.2 | 5524.0 | 5359.1 |
| 12.5° | 5780.5 | 5809.8 | 5833.6 | 5826.3 | 5824.4 | 5824.4 | 5793.3 | 5738.3 | 5650.4 | 5549.6 | 5353.6 |
| 15° | 5729.2 | 5764.0 | 5815.3 | 5844.6 | 5862.9 | 5868.4 | 5855.6 | 5808.0 | 5718.2 | 5600.9 | 5375.6 |
| 17.5° | 5718.2 | 5760.3 | 5853.8 | 5917.9 | 5965.5 | 5963.7 | 5960.0 | 5894.1 | 5795.1 | 5674.2 | 5403.1 |
| 20° | 5767.7 | 5822.6 | 5952.7 | 6053.5 | 6123.1 | 6110.3 | 6090.1 | 6004.0 | 5888.6 | 5753.0 | 5428.7 |
| 22.5° | 5916.1 | 5972.9 | 6115.8 | 6225.7 | 6293.5 | 6293.5 | 6233.0 | 6119.4 | 5996.7 | 5844.6 | 5463.5 |
| 25° | 6128.6 | 6190.9 | 6343.0 | 6454.7 | 6485.9 | 6462.0 | 6401.6 | 6264.2 | 6123.1 | 5976.5 | 5536.8 |
| 27.5° | 6388.8 | 6463.9 | 6604.9 | 6698.4 | 6689.2 | 6670.9 | 6608.6 | 6432.7 | 6291.6 | 6157.9 | 5661.4 |
| 30° | 6713.0 | 6768.0 | 6914.6 | 6936.6 | 6903.6 | 6899.9 | 6812.0 | 6636.1 | 6504.2 | 6401.6 | 5839.1 |
| 32.5° | 7019.0 | 7068.5 | 7185.7 | 7194.9 | 7136.3 | 7143.6 | 7061.2 | 6899.9 | 6824.8 | 6788.2 | 6137.7 |
| 35° | 7343.3 | 7369.0 | 7469.7 | 7458.7 | 7420.3 | 7414.8 | 7381.8 | 7227.9 | 7251.7 | 7317.7 | 6561.0 |
| 37.5° | 7614.5 | 7665.8 | 7722.6 | 7731.7 | 7729.9 | 7748.2 | 7770.2 | 7696.9 | 7834.3 | 8041.4 | 7116.1 |
| 40° | 7863.6 | 7907.6 | 7991.9 | 8021.2 | 8092.7 | 8129.3 | 8204.4 | 8206.3 | 8523.2 | 8864.0 | 7799.5 |
| 42.5° | 8032.2 | 8107.3 | 8264.9 | 8318.0 | 8492.1 | 8602.0 | 8713.8 | 8832.9 | 9292.7 | 9730.6 | 8605.7 |
| 45° | 8178.8 | 8277.7 | 8539.7 | 8704.6 | 8941.0 | 9074.7 | 9311.1 | 9560.2 | 10221.6 | 10795.1 | 9424.6 |
| 47.5° | 8400.5 | 8488.4 | 8788.9 | 9080.2 | 9437.5 | 9591.4 | 9945.0 | 10316.9 | 11181.7 | 11810.1 | 10208.8 |
| 50° | 8708.3 | 8761.4 | 9067.4 | 9541.9 | 9998.1 | 10196.0 | 10663.2 | 11200.0 | 12207.7 | 12812.3 | 10897.7 |
| 52.5° | 9102.2 | 9124.2 | 9367.9 | 9999.9 | 10600.9 | 10846.4 | 11465.7 | 12092.3 | 13105.5 | 13682.6 | 11443.7 |
| 55° | 9567.6 | 9530.9 | 9721.5 | 10485.5 | 11289.8 | 11610.4 | 12275.5 | 12995.5 | 14115.0 | 14386.1 | 11841.3 |
| 57.5° | 10027.4 | 9970.6 | 10122.7 | 11075.4 | 12139.9 | 12526.5 | 13301.5 | 13926.3 | 15016.4 | 15043.9 | 12119.8 |
| 60° | 10514.8 | 10472.6 | 10654.0 | 11768.0 | 13182.4 | 13640.5 | 14356.8 | 14891.8 | 15888.5 | 15501.9 | 12163.7 |
| 62.5° | 11015.0 | 10947.2 | 11205.5 | 12546.7 | 14356.8 | 14772.7 | 15467.1 | 15917.8 | 16744.1 | 15672.3 | 11740.5 |
| 65° | 11500.5 | 11469.3 | 11868.8 | 13471.9 | 15694.3 | 16167.0 | 16841.2 | 17147.2 | 17429.4 | 15415.8 | 10690.7 |
| 67.5° | 12017.2 | 12079.5 | 12717.0 | 14706.8 | 17438.5 | 18032.2 | 18759.5 | 18471.9 | 17625.4 | 14201.1 | 9003.3 |
| 70° | 12805.0 | 12845.3 | 13831.0 | 16324.6 | 19686.6 | 20403.0 | 20754.7 | 18942.7 | 16680.0 | 11894.4 | 6768.0 |
| 72.5° | 13143.9 | 13321.7 | 14825.9 | 18023.0 | 22240.6 | 22678.5 | 21425.3 | 17892.9 | 13895.1 | 8079.8 | 3556.2 |
| 73° | 13068.8 | 13281.4 | 14871.7 | 18281.3 | 22440.3 | 22900.2 | 21282.4 | 17352.4 | 12916.8 | 6958.6 | 3048.7 |
| 75° | 12132.6 | 12394.6 | 14276.2 | 18065.1 | 22051.9 | 21777.1 | 18984.9 | 14789.2 | 8728.4 | 3164.1 | 1388.8 |
| 77.5° | 9573.1 | 9648.2 | 11311.8 | 14587.7 | 17365.2 | 16855.9 | 14208.4 | 9243.3 | 3565.4 | 1176.2 | 787.8 |
| 80° | 4802.1 | 5078.8 | 6375.9 | 8356.5 | 11612.3 | 11445.5 | 8968.4 | 4371.5 | 1485.9 | 690.7 | 522.2 |
| 82.5° | 2310.4 | 2506.4 | 3105.5 | 4074.7 | 6416.2 | 6264.2 | 4441.2 | 2389.1 | 943.6 | 403.1 | 307.8 |
| 85° | 1487.7 | 1634.3 | 1976.9 | 1943.9 | 2638.3 | 2519.2 | 1995.2 | 1808.3 | 558.8 | 210.7 | 214.4 |
| 87.5° | 982.0 | 1075.5 | 1289.8 | 1031.5 | 960.1 | 868.4 | 881.3 | 1018.7 | 109.9 | 80.6 | 29.3 |
| 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-SA7B-727-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 | 5699.9 |
| 2.5° | 5637.6 | 5613.7 | 5535.0 | 5458.0 | 5384.7 | 5315.1 | 5269.3 | 5208.8 | 5168.5 | 5179.5 | 5196.0 |
| 5° | 5496.5 | 5443.4 | 5304.1 | 5168.5 | 5040.3 | 4888.2 | 4765.5 | 4666.5 | 4591.4 | 4563.9 | 4558.4 |
| 7.5° | 5348.1 | 5258.3 | 5058.6 | 4825.9 | 4607.9 | 4419.2 | 4201.2 | 4093.1 | 3966.6 | 3922.7 | 3908.0 |
| 10° | 5258.3 | 5137.4 | 4857.1 | 4532.8 | 4204.8 | 3891.5 | 3655.2 | 3462.8 | 3288.7 | 3255.8 | 3239.3 |
| 12.5° | 5232.7 | 5073.3 | 4695.8 | 4278.1 | 3842.0 | 3457.3 | 3107.3 | 2854.5 | 2686.0 | 2647.5 | 2590.7 |
| 15° | 5218.0 | 5020.1 | 4545.6 | 4021.6 | 3468.3 | 2999.3 | 2631.0 | 2336.0 | 2182.1 | 2079.5 | 2081.3 |
| 17.5° | 5205.2 | 4959.7 | 4377.0 | 3741.3 | 3145.8 | 2605.3 | 2198.6 | 1932.9 | 1791.9 | 1736.9 | 1731.4 |
| 20° | 5186.9 | 4888.2 | 4182.8 | 3446.3 | 2777.6 | 2246.2 | 1878.0 | 1680.1 | 1584.8 | 1539.0 | 1537.2 |
| 22.5° | 5179.5 | 4818.6 | 3992.3 | 3145.8 | 2451.4 | 1969.6 | 1665.4 | 1526.2 | 1465.7 | 1434.6 | 1434.6 |
| 25° | 5197.8 | 4769.1 | 3792.6 | 2860.0 | 2162.0 | 1733.2 | 1518.9 | 1423.6 | 1388.8 | 1372.3 | 1366.8 |
| 27.5° | 5254.6 | 4747.1 | 3594.7 | 2574.2 | 1896.3 | 1572.0 | 1419.9 | 1354.0 | 1328.3 | 1315.5 | 1317.3 |
| 30° | 5362.7 | 4745.3 | 3400.5 | 2292.0 | 1698.4 | 1449.2 | 1341.1 | 1295.3 | 1275.2 | 1267.9 | 1266.0 |
| 32.5° | 5536.8 | 4785.6 | 3210.0 | 2059.4 | 1531.7 | 1346.6 | 1267.9 | 1234.9 | 1225.7 | 1220.2 | 1218.4 |
| 35° | 5831.8 | 4899.2 | 3021.2 | 1846.8 | 1403.4 | 1255.0 | 1198.2 | 1181.7 | 1168.9 | 1174.4 | 1176.2 |
| 37.5° | 6229.4 | 5095.2 | 2841.7 | 1680.1 | 1306.3 | 1187.2 | 1139.6 | 1124.9 | 1117.6 | 1123.1 | 1128.6 |
| 40° | 6762.5 | 5377.4 | 2691.4 | 1546.3 | 1236.7 | 1130.4 | 1088.3 | 1075.5 | 1068.2 | 1077.3 | 1079.1 |
| 42.5° | 7350.6 | 5703.5 | 2566.9 | 1441.9 | 1179.9 | 1082.8 | 1042.5 | 1027.8 | 1022.3 | 1027.8 | 1029.7 |
| 45° | 7955.3 | 6082.8 | 2502.7 | 1366.8 | 1132.3 | 1048.0 | 1005.9 | 989.4 | 976.5 | 972.9 | 978.4 |
| 47.5° | 8550.7 | 6412.6 | 2500.9 | 1321.0 | 1093.8 | 1016.9 | 971.0 | 952.7 | 936.2 | 927.1 | 925.2 |
| 50° | 9036.2 | 6674.6 | 2544.9 | 1300.8 | 1060.8 | 982.0 | 936.2 | 917.9 | 895.9 | 877.6 | 881.3 |
| 52.5° | 9402.7 | 6845.0 | 2565.0 | 1291.7 | 1042.5 | 945.4 | 899.6 | 883.1 | 857.5 | 833.6 | 833.6 |
| 55° | 9639.0 | 6885.3 | 2515.6 | 1282.5 | 1027.8 | 906.9 | 857.5 | 842.8 | 817.1 | 793.3 | 793.3 |
| 57.5° | 9719.6 | 6760.7 | 2337.8 | 1260.5 | 1013.2 | 873.9 | 815.3 | 802.5 | 782.3 | 758.5 | 754.9 |
| 60° | 9532.7 | 6339.3 | 2026.4 | 1194.6 | 983.9 | 839.1 | 769.5 | 764.0 | 756.7 | 736.5 | 734.7 |
| 62.5° | 8812.7 | 5445.2 | 1687.4 | 1108.5 | 934.4 | 802.5 | 727.4 | 736.5 | 742.0 | 731.0 | 729.2 |
| 65° | 7614.5 | 4421.0 | 1441.9 | 989.4 | 868.4 | 751.2 | 681.6 | 705.4 | 720.0 | 720.0 | 716.4 |
| 67.5° | 6176.2 | 3395.0 | 1214.7 | 886.8 | 786.0 | 681.6 | 630.3 | 648.6 | 659.6 | 655.9 | 665.1 |
| 70° | 4389.9 | 2299.4 | 989.4 | 769.5 | 681.6 | 602.8 | 564.3 | 564.3 | 557.0 | 553.3 | 553.3 |
| 72.5° | 2129.0 | 1313.7 | 802.5 | 643.1 | 580.8 | 514.8 | 483.7 | 470.9 | 456.2 | 454.4 | 445.2 |
| 73° | 1779.0 | 1178.1 | 765.8 | 619.3 | 557.0 | 502.0 | 467.2 | 447.0 | 437.9 | 430.6 | 428.7 |
| 75° | 1082.8 | 894.1 | 639.4 | 522.2 | 474.5 | 432.4 | 401.2 | 382.9 | 373.8 | 368.3 | 366.4 |
| 77.5° | 712.7 | 666.9 | 496.5 | 399.4 | 362.8 | 337.1 | 324.3 | 306.0 | 300.5 | 293.1 | 293.1 |
| 80° | 531.3 | 509.3 | 355.4 | 282.2 | 260.2 | 238.2 | 234.5 | 230.9 | 216.2 | 207.0 | 203.4 |
| 82.5° | 342.6 | 362.8 | 241.8 | 188.7 | 164.9 | 146.6 | 148.4 | 153.9 | 139.2 | 126.4 | 122.8 |
| 85° | 243.7 | 262.0 | 146.6 | 86.1 | 69.6 | 60.5 | 67.8 | 60.5 | 62.3 | 49.5 | 40.3 |
| 87.5° | 40.3 | 69.6 | 25.7 | 11.0 | 5.5 | 3.7 | 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)