

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: P459336

Luminaire Tested: **GALN-SA8A-735-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459336
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-SA8A-735-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3500K, 615mA 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: 33672 lumens
Efficiency: N/A
Efficacy: 138.0 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

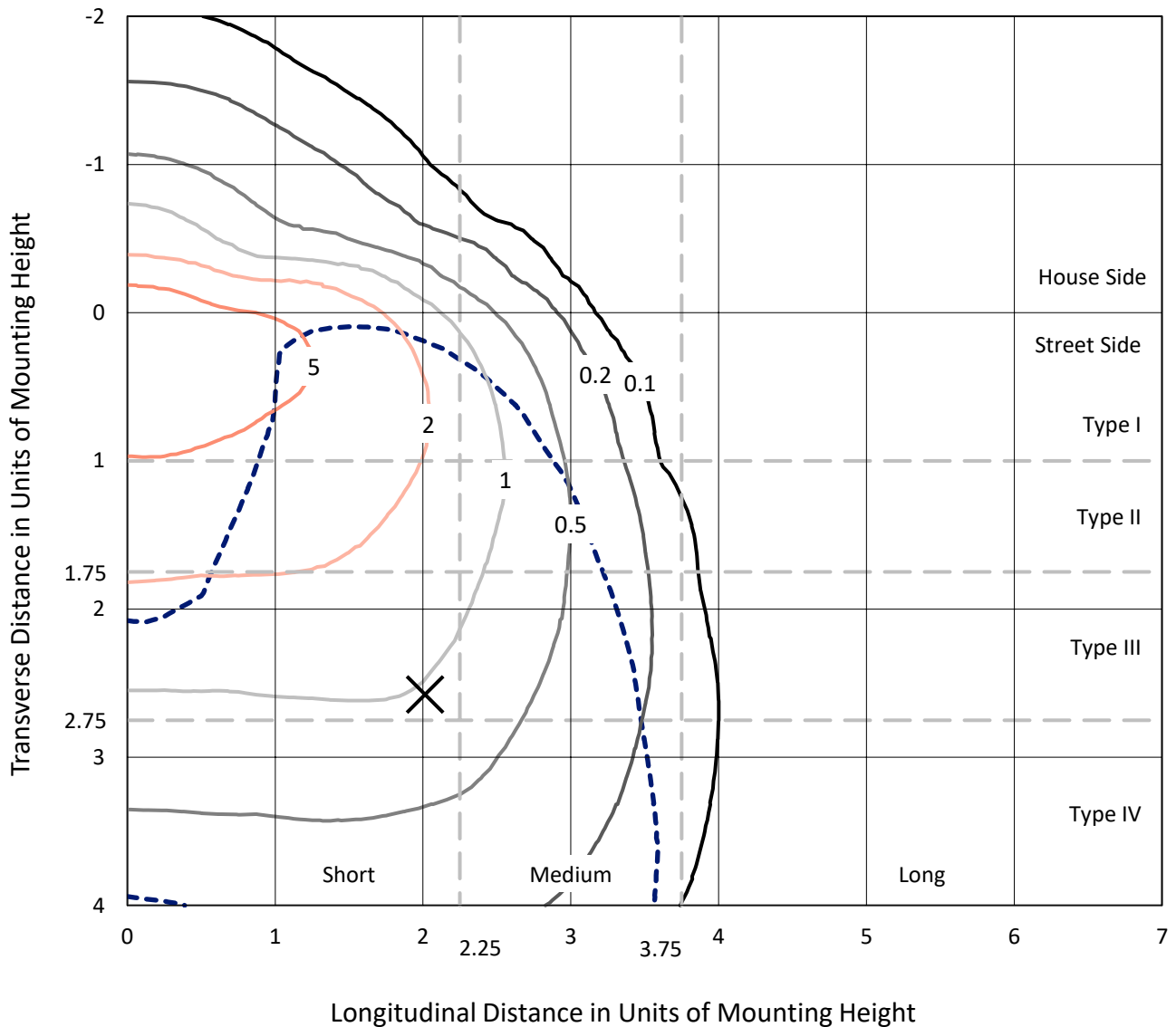
Input Watts (W): 244
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

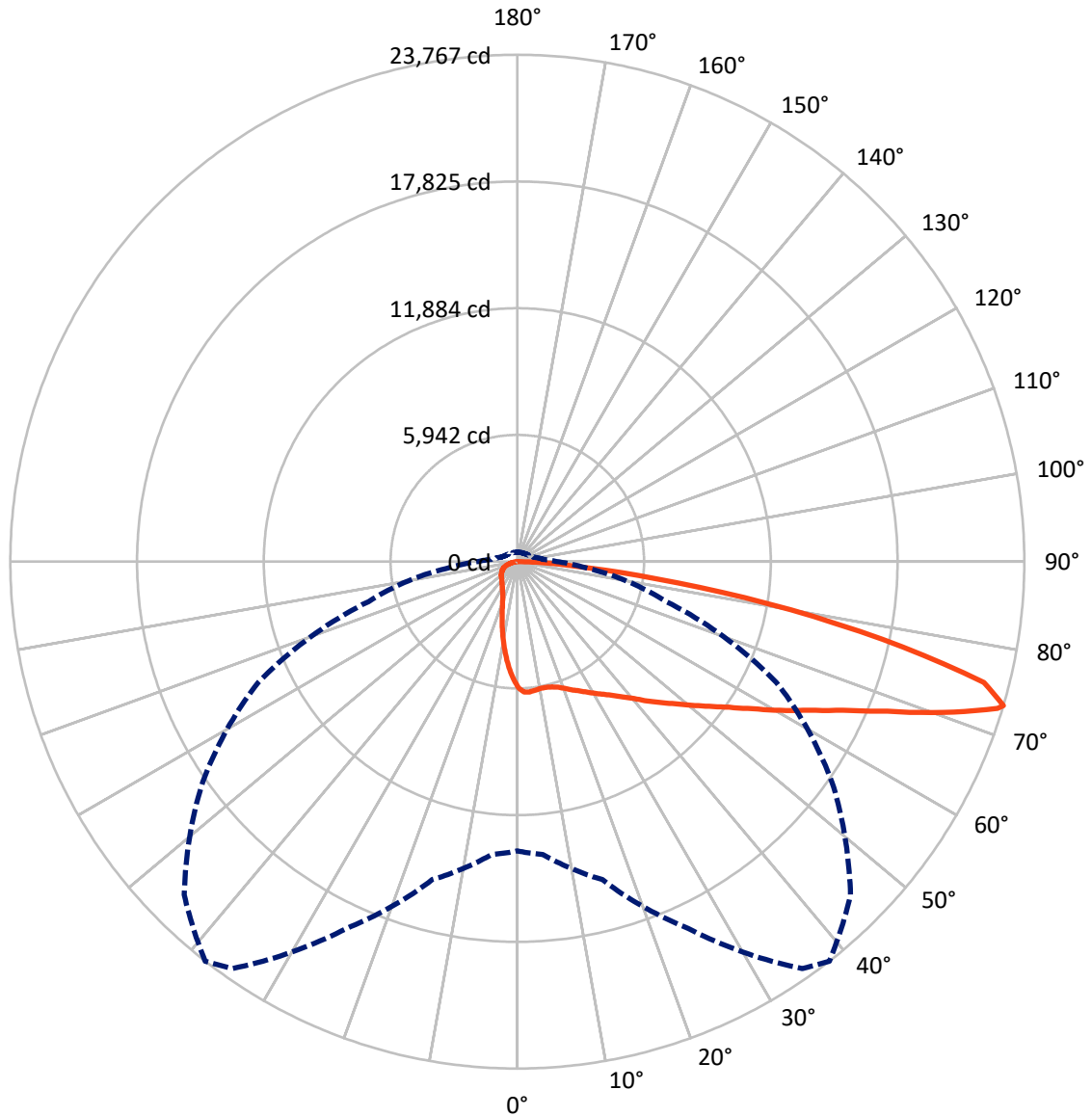
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 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 | 4526.5 | 0.0 | 4526.5 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 29145.5 | 0.0 | 29145.5 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 33672.0 | 0.0 | 33672.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 516.4 | 1.5 |
| 10°-20° | 1324.1 | 3.9 |
| 20°-30° | 2061.9 | 6.1 |
| 30°-40° | 3024.4 | 9.0 |
| 40°-50° | 4486.3 | 13.3 |
| 50°-60° | 6356.2 | 18.9 |
| 60°-70° | 8063.1 | 23.9 |
| 70°-80° | 6711.9 | 19.9 |
| 80°-90° | 1127.7 | 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° | 33672.0 | 100.0 |
| 0°-180° | 33672.0 | 100.0 |

Coefficient of Utilization



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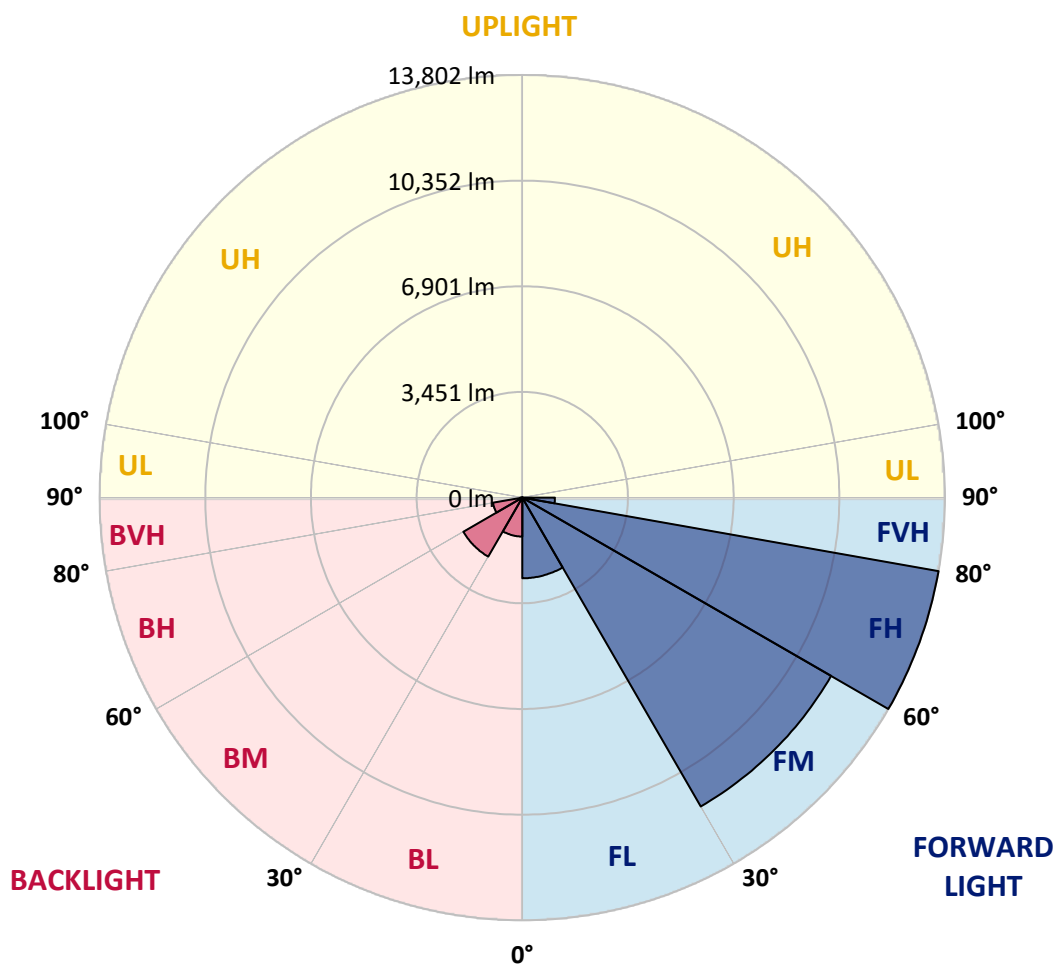
CATALOG NUMBER: GALN-SA8A-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2632.2 | 7.8 | | | |
| FM | (30°-60°) | 11644.7 | 34.6 | | | |
| FH | (60°-80°) | 13802.0 | 41.0 | | | G5 |
| FVH | (80°-90°) | 1066.6 | 3.2 | | | G5 |
| BL | (0°-30°) | 1270.2 | 3.8 | B3/2500 | | |
| BM | (30°-60°) | 2222.2 | 6.6 | B2/2500 | | |
| BH | (60°-80°) | 972.9 | 2.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 61.2 | 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° | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 |
| 2.5° | 6153.3 | 6183.7 | 6168.5 | 6147.6 | 6134.3 | 6121.0 | 6101.9 | 6046.8 | 6003.1 | 5955.5 | 5881.4 |
| 5° | 6198.9 | 6217.9 | 6204.6 | 6178.0 | 6147.6 | 6134.3 | 6098.1 | 6025.9 | 5955.5 | 5875.7 | 5765.4 |
| 7.5° | 6172.3 | 6179.9 | 6164.7 | 6132.4 | 6105.8 | 6081.0 | 6039.2 | 5959.3 | 5873.8 | 5776.8 | 5632.3 |
| 10° | 6077.2 | 6105.8 | 6105.8 | 6079.1 | 6052.5 | 6039.2 | 5997.4 | 5921.3 | 5843.3 | 5733.1 | 5561.9 |
| 12.5° | 5999.3 | 6029.7 | 6054.4 | 6046.8 | 6044.9 | 6044.9 | 6012.6 | 5955.5 | 5864.3 | 5759.7 | 5556.2 |
| 15° | 5946.0 | 5982.2 | 6035.4 | 6065.8 | 6084.8 | 6090.5 | 6077.2 | 6027.8 | 5934.6 | 5812.9 | 5579.0 |
| 17.5° | 5934.6 | 5978.3 | 6075.3 | 6141.9 | 6191.3 | 6189.4 | 6185.6 | 6117.2 | 6014.5 | 5889.0 | 5607.6 |
| 20° | 5986.0 | 6043.0 | 6178.0 | 6282.6 | 6354.8 | 6341.5 | 6320.6 | 6231.3 | 6111.5 | 5970.7 | 5634.2 |
| 22.5° | 6140.0 | 6198.9 | 6347.2 | 6461.3 | 6531.7 | 6531.7 | 6468.9 | 6351.0 | 6223.6 | 6065.8 | 5670.3 |
| 25° | 6360.6 | 6425.2 | 6583.0 | 6699.0 | 6731.3 | 6706.6 | 6643.9 | 6501.3 | 6354.8 | 6202.7 | 5746.4 |
| 27.5° | 6630.6 | 6708.5 | 6854.9 | 6951.9 | 6942.4 | 6923.4 | 6858.7 | 6676.2 | 6529.8 | 6391.0 | 5875.7 |
| 30° | 6967.1 | 7024.2 | 7176.3 | 7199.1 | 7164.9 | 7161.1 | 7069.8 | 6887.3 | 6750.4 | 6643.9 | 6060.1 |
| 32.5° | 7284.7 | 7336.0 | 7457.7 | 7467.2 | 7406.4 | 7414.0 | 7328.4 | 7161.1 | 7083.1 | 7045.1 | 6370.1 |
| 35° | 7621.3 | 7647.9 | 7752.5 | 7741.0 | 7701.1 | 7695.4 | 7661.2 | 7501.5 | 7526.2 | 7594.6 | 6809.3 |
| 37.5° | 7902.7 | 7955.9 | 8014.9 | 8024.4 | 8022.5 | 8041.5 | 8064.3 | 7988.2 | 8130.9 | 8345.7 | 7385.5 |
| 40° | 8161.3 | 8206.9 | 8294.4 | 8324.8 | 8399.0 | 8437.0 | 8515.0 | 8516.9 | 8845.8 | 9199.5 | 8094.7 |
| 42.5° | 8336.2 | 8414.2 | 8577.7 | 8632.9 | 8813.5 | 8927.6 | 9043.6 | 9167.2 | 9644.5 | 10098.9 | 8931.4 |
| 45° | 8488.3 | 8591.0 | 8862.9 | 9034.1 | 9279.4 | 9418.2 | 9663.5 | 9922.1 | 10608.5 | 11203.7 | 9781.4 |
| 47.5° | 8718.4 | 8809.7 | 9121.5 | 9423.9 | 9794.7 | 9954.4 | 10321.4 | 10707.4 | 11604.9 | 12257.1 | 10595.2 |
| 50° | 9037.9 | 9093.0 | 9410.6 | 9903.1 | 10376.5 | 10581.9 | 11066.8 | 11623.9 | 12669.8 | 13297.3 | 11310.2 |
| 52.5° | 9446.7 | 9469.5 | 9722.4 | 10378.4 | 11002.1 | 11256.9 | 11899.7 | 12550.0 | 13601.5 | 14200.5 | 11876.8 |
| 55° | 9929.7 | 9891.7 | 10089.4 | 10882.3 | 11717.1 | 12049.9 | 12740.1 | 13487.4 | 14649.2 | 14930.7 | 12289.5 |
| 57.5° | 10407.0 | 10348.0 | 10505.8 | 11494.6 | 12599.4 | 13000.6 | 13805.0 | 14453.4 | 15584.8 | 15613.3 | 12578.5 |
| 60° | 10912.8 | 10869.0 | 11057.3 | 12213.4 | 13681.4 | 14156.7 | 14900.2 | 15455.5 | 16489.9 | 16088.7 | 12624.1 |
| 62.5° | 11431.9 | 11361.5 | 11629.6 | 13021.5 | 14900.2 | 15331.9 | 16052.6 | 16520.3 | 17377.9 | 16265.5 | 12184.9 |
| 65° | 11935.8 | 11903.5 | 12318.0 | 13981.8 | 16288.3 | 16778.9 | 17478.7 | 17796.2 | 18089.1 | 15999.3 | 11095.3 |
| 67.5° | 12472.0 | 12536.7 | 13198.4 | 15263.4 | 18098.6 | 18714.7 | 19469.6 | 19171.0 | 18292.5 | 14738.6 | 9344.0 |
| 70° | 13289.7 | 13331.5 | 14354.5 | 16942.5 | 20431.7 | 21175.2 | 21540.3 | 19659.7 | 17311.4 | 12344.6 | 7024.2 |
| 72.5° | 13641.4 | 13825.9 | 15387.0 | 18705.2 | 23082.4 | 23536.9 | 22236.3 | 18570.2 | 14421.1 | 8385.7 | 3690.8 |
| 73° | 13563.5 | 13784.1 | 15434.6 | 18973.3 | 23289.7 | 23767.0 | 22087.9 | 18009.2 | 13405.7 | 7221.9 | 3164.1 |
| 75° | 12591.8 | 12863.7 | 14816.6 | 18748.9 | 22886.6 | 22601.4 | 19703.5 | 15349.0 | 9058.8 | 3283.9 | 1441.3 |
| 77.5° | 9935.4 | 10013.4 | 11739.9 | 15139.8 | 18022.5 | 17493.9 | 14746.2 | 9593.1 | 3700.3 | 1220.8 | 817.6 |
| 80° | 4983.9 | 5271.0 | 6617.3 | 8672.8 | 12051.8 | 11878.7 | 9307.9 | 4537.0 | 1542.1 | 716.9 | 541.9 |
| 82.5° | 2397.8 | 2601.3 | 3223.1 | 4229.0 | 6659.1 | 6501.3 | 4609.3 | 2479.6 | 979.3 | 418.3 | 319.5 |
| 85° | 1544.0 | 1696.1 | 2051.7 | 2017.5 | 2738.2 | 2614.6 | 2070.7 | 1876.8 | 580.0 | 218.7 | 222.5 |
| 87.5° | 1019.2 | 1116.2 | 1338.7 | 1070.6 | 996.4 | 901.3 | 914.6 | 1057.2 | 114.1 | 83.7 | 30.4 |
| 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-SA8A-735-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 | 5915.6 |
| 2.5° | 5850.9 | 5826.2 | 5744.5 | 5664.6 | 5588.5 | 5516.3 | 5468.7 | 5406.0 | 5364.2 | 5375.6 | 5392.7 |
| 5° | 5704.5 | 5649.4 | 5504.9 | 5364.2 | 5231.1 | 5073.2 | 4945.8 | 4843.1 | 4765.2 | 4736.7 | 4731.0 |
| 7.5° | 5550.5 | 5457.3 | 5250.1 | 5008.6 | 4782.3 | 4586.4 | 4360.2 | 4248.0 | 4116.8 | 4071.1 | 4055.9 |
| 10° | 5457.3 | 5331.8 | 5040.9 | 4704.3 | 4364.0 | 4038.8 | 3793.5 | 3593.9 | 3413.2 | 3379.0 | 3361.9 |
| 12.5° | 5430.7 | 5265.3 | 4873.6 | 4440.0 | 3987.5 | 3588.2 | 3225.0 | 2962.6 | 2787.6 | 2747.7 | 2688.7 |
| 15° | 5415.5 | 5210.1 | 4717.6 | 4173.8 | 3599.6 | 3112.8 | 2730.6 | 2424.4 | 2264.7 | 2158.2 | 2160.1 |
| 17.5° | 5402.2 | 5147.4 | 4542.7 | 3882.9 | 3264.9 | 2703.9 | 2281.8 | 2006.1 | 1859.7 | 1802.6 | 1796.9 |
| 20° | 5383.2 | 5073.2 | 4341.1 | 3576.7 | 2882.7 | 2331.3 | 1949.0 | 1743.7 | 1644.8 | 1597.3 | 1595.4 |
| 22.5° | 5375.6 | 5001.0 | 4143.4 | 3264.9 | 2544.2 | 2044.1 | 1728.5 | 1584.0 | 1521.2 | 1488.9 | 1488.9 |
| 25° | 5394.6 | 4949.6 | 3936.1 | 2968.3 | 2243.8 | 1798.8 | 1576.4 | 1477.5 | 1441.3 | 1424.2 | 1418.5 |
| 27.5° | 5453.5 | 4926.8 | 3730.8 | 2671.6 | 1968.1 | 1631.5 | 1473.7 | 1405.2 | 1378.6 | 1365.3 | 1367.2 |
| 30° | 5565.7 | 4924.9 | 3529.2 | 2378.8 | 1762.7 | 1504.1 | 1391.9 | 1344.4 | 1323.5 | 1315.8 | 1313.9 |
| 32.5° | 5746.4 | 4966.7 | 3331.4 | 2137.3 | 1589.7 | 1397.6 | 1315.8 | 1281.6 | 1272.1 | 1266.4 | 1264.5 |
| 35° | 6052.5 | 5084.6 | 3135.6 | 1916.7 | 1456.6 | 1302.5 | 1243.6 | 1226.5 | 1213.2 | 1218.9 | 1220.8 |
| 37.5° | 6465.1 | 5288.1 | 2949.2 | 1743.7 | 1355.8 | 1232.2 | 1182.7 | 1167.5 | 1159.9 | 1165.6 | 1171.3 |
| 40° | 7018.5 | 5580.9 | 2793.3 | 1604.9 | 1283.5 | 1173.2 | 1129.5 | 1116.2 | 1108.6 | 1118.1 | 1120.0 |
| 42.5° | 7628.9 | 5919.4 | 2664.0 | 1496.5 | 1224.6 | 1123.8 | 1082.0 | 1066.7 | 1061.0 | 1066.7 | 1068.6 |
| 45° | 8256.4 | 6313.0 | 2597.5 | 1418.5 | 1175.1 | 1087.7 | 1043.9 | 1026.8 | 1013.5 | 1009.7 | 1015.4 |
| 47.5° | 8874.4 | 6655.3 | 2595.6 | 1371.0 | 1135.2 | 1055.3 | 1007.8 | 988.8 | 971.7 | 962.2 | 960.3 |
| 50° | 9378.3 | 6927.2 | 2641.2 | 1350.1 | 1101.0 | 1019.2 | 971.7 | 952.7 | 929.8 | 910.8 | 914.6 |
| 52.5° | 9758.6 | 7104.0 | 2662.1 | 1340.6 | 1082.0 | 981.2 | 933.6 | 916.5 | 889.9 | 865.2 | 865.2 |
| 55° | 10003.8 | 7145.9 | 2610.8 | 1331.1 | 1066.7 | 941.2 | 889.9 | 874.7 | 848.1 | 823.4 | 823.4 |
| 57.5° | 10087.5 | 7016.6 | 2426.3 | 1308.2 | 1051.5 | 907.0 | 846.2 | 832.9 | 811.9 | 787.2 | 783.4 |
| 60° | 9893.6 | 6579.2 | 2103.1 | 1239.8 | 1021.1 | 870.9 | 798.6 | 792.9 | 785.3 | 764.4 | 762.5 |
| 62.5° | 9146.3 | 5651.3 | 1751.3 | 1150.4 | 969.8 | 832.9 | 754.9 | 764.4 | 770.1 | 758.7 | 756.8 |
| 65° | 7902.7 | 4588.3 | 1496.5 | 1026.8 | 901.3 | 779.6 | 707.4 | 732.1 | 747.3 | 747.3 | 743.5 |
| 67.5° | 6410.0 | 3523.5 | 1260.7 | 920.3 | 815.7 | 707.4 | 654.1 | 673.1 | 684.5 | 680.7 | 690.2 |
| 70° | 4556.0 | 2386.4 | 1026.8 | 798.6 | 707.4 | 625.6 | 585.7 | 585.7 | 578.1 | 574.3 | 574.3 |
| 72.5° | 2209.6 | 1363.4 | 832.9 | 667.4 | 602.8 | 534.3 | 502.0 | 488.7 | 473.5 | 471.6 | 462.1 |
| 73° | 1846.4 | 1222.7 | 794.8 | 642.7 | 578.1 | 521.0 | 484.9 | 464.0 | 454.5 | 446.9 | 445.0 |
| 75° | 1123.8 | 927.9 | 663.6 | 541.9 | 492.5 | 448.8 | 416.4 | 397.4 | 387.9 | 382.2 | 380.3 |
| 77.5° | 739.7 | 692.1 | 515.3 | 414.5 | 376.5 | 349.9 | 336.6 | 317.6 | 311.8 | 304.2 | 304.2 |
| 80° | 551.4 | 528.6 | 368.9 | 292.8 | 270.0 | 247.2 | 243.4 | 239.6 | 224.4 | 214.9 | 211.1 |
| 82.5° | 355.6 | 376.5 | 251.0 | 195.9 | 171.1 | 152.1 | 154.0 | 159.7 | 144.5 | 131.2 | 127.4 |
| 85° | 252.9 | 271.9 | 152.1 | 89.4 | 72.3 | 62.7 | 70.4 | 62.7 | 64.7 | 51.3 | 41.8 |
| 87.5° | 41.8 | 72.3 | 26.6 | 11.4 | 5.7 | 3.8 | 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)