

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: P651839

Luminaire Tested: **GALN-SA4A-840-U-SL3-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-20)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-840-U-SL3-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12871.5 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

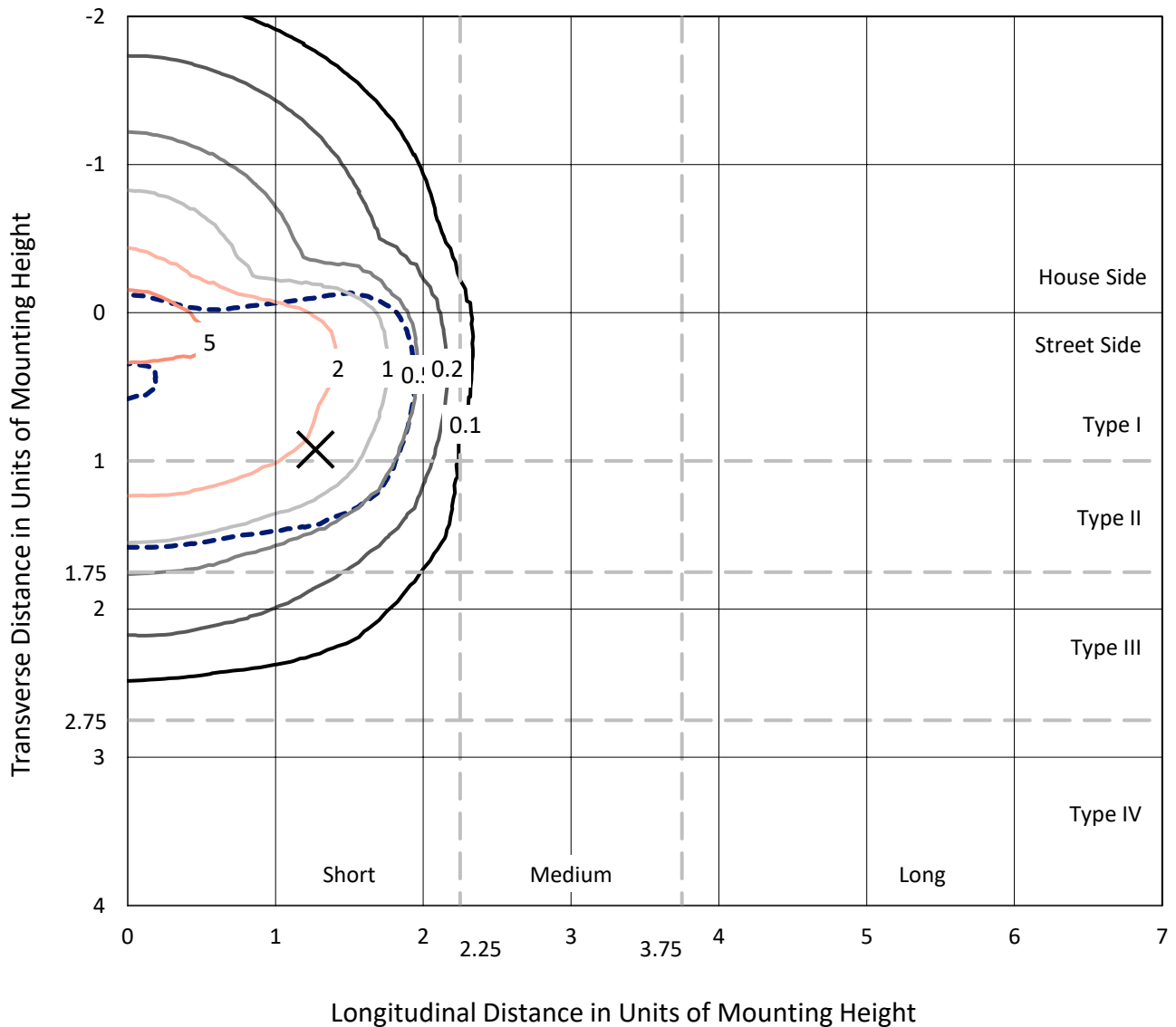
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

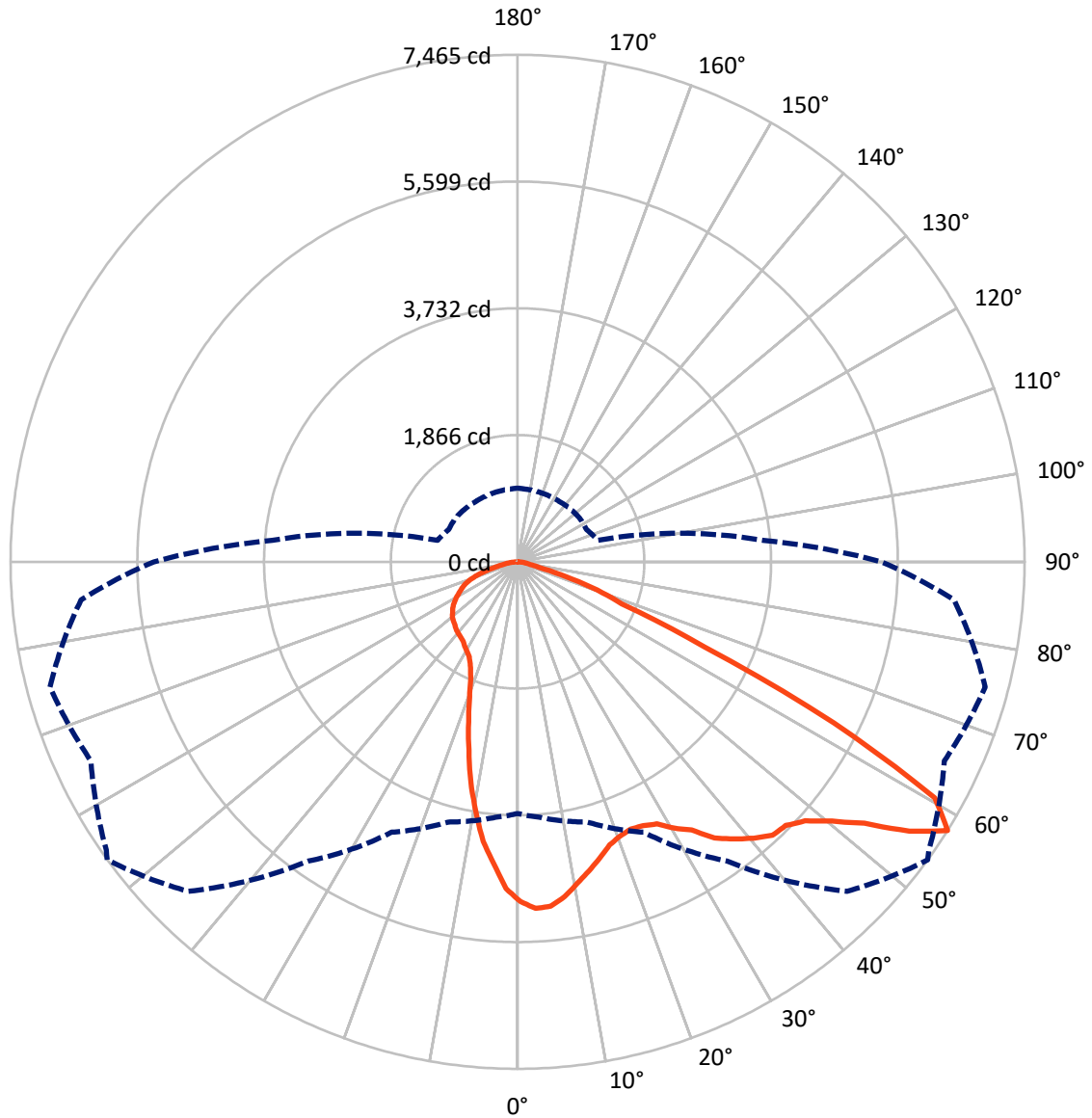
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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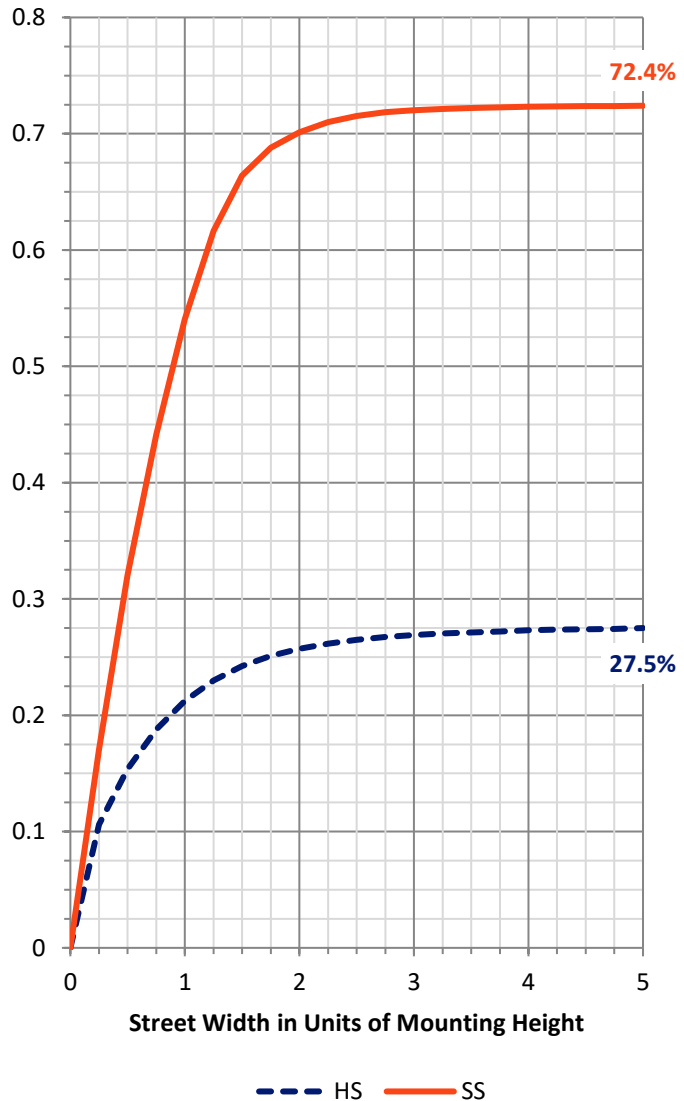
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3561.0 | 0.0 | 3561.0 |
| | % Fixture | 27.7 | 0.0 | 27.7 |
| Street Side | Lumens | 9310.5 | 0.0 | 9310.5 |
| | % Fixture | 72.3 | 0.0 | 72.3 |
| Total | Lumens | 12871.5 | 0.0 | 12871.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 431.5 | 3.4 |
| 10°-20° | 999.0 | 7.8 |
| 20°-30° | 1403.6 | 10.9 |
| 30°-40° | 1962.2 | 15.2 |
| 40°-50° | 2656.5 | 20.6 |
| 50°-60° | 3235.7 | 25.1 |
| 60°-70° | 1685.3 | 13.1 |
| 70°-80° | 431.8 | 3.4 |
| 80°-90° | 65.9 | 0.5 |
| 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° | 12871.5 | 100.0 |
| 0°-180° | 12871.5 | 100.0 |

Coefficient of Utilization



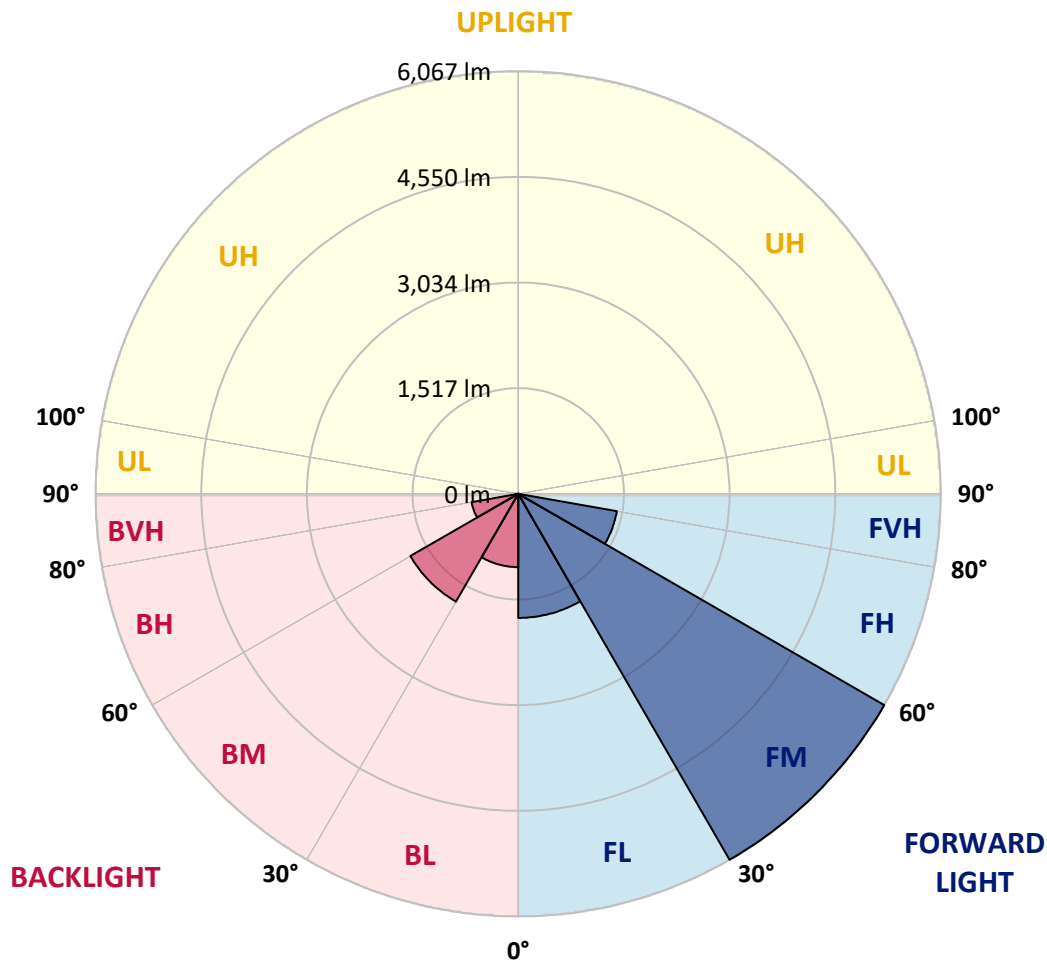
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1781.6 | 13.8 | | | |
| FM (30°-60°) | 6067.2 | 47.1 | | | |
| FH (60°-80°) | 1436.8 | 11.2 | | | G1/1800 |
| FVH (80°-90°) | 24.9 | 0.2 | | | G1/100 |
| BL (0°-30°) | 1052.4 | 8.2 | B3/2500 | | |
| BM (30°-60°) | 1787.2 | 13.9 | B2/2500 | | |
| BH (60°-80°) | 680.3 | 5.3 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 41.0 | 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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 54° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 |
| 2.5° | 5145.3 | 5125.5 | 5128.8 | 5155.2 | 5122.1 | 5108.9 | 5108.9 | 5044.4 | 5049.4 | 5004.6 | 4993.1 |
| 5° | 5026.2 | 4979.8 | 5011.3 | 5051.0 | 5057.6 | 5070.8 | 5092.3 | 5075.8 | 5029.5 | 4981.5 | 4903.7 |
| 7.5° | 4715.2 | 4756.5 | 4768.0 | 4796.2 | 4855.8 | 4910.3 | 4978.2 | 4931.9 | 4930.2 | 4882.3 | 4835.9 |
| 10° | 4442.2 | 4417.4 | 4480.2 | 4521.6 | 4620.9 | 4711.8 | 4816.1 | 4811.1 | 4835.9 | 4781.3 | 4701.9 |
| 12.5° | 4170.9 | 4151.0 | 4180.8 | 4275.1 | 4414.0 | 4546.4 | 4670.5 | 4624.2 | 4756.5 | 4746.6 | 4576.1 |
| 15° | 3883.0 | 3897.9 | 3940.8 | 4028.6 | 4210.6 | 4369.3 | 4526.5 | 4528.2 | 4645.7 | 4685.4 | 4457.0 |
| 17.5° | 3681.1 | 3664.6 | 3719.2 | 3849.8 | 4012.0 | 4202.2 | 4380.9 | 4417.4 | 4597.7 | 4620.9 | 4420.6 |
| 20° | 3530.6 | 3553.7 | 3624.9 | 3691.1 | 3878.0 | 4107.9 | 4309.8 | 4323.1 | 4587.7 | 4650.6 | 4362.8 |
| 22.5° | 3494.2 | 3480.9 | 3504.1 | 3611.6 | 3765.5 | 4015.3 | 4271.8 | 4321.4 | 4586.1 | 4640.7 | 4253.5 |
| 25° | 3456.1 | 3499.1 | 3497.5 | 3605.0 | 3717.5 | 3940.8 | 4303.1 | 4357.8 | 4673.8 | 4691.9 | 4268.4 |
| 27.5° | 3542.1 | 3537.2 | 3583.5 | 3591.7 | 3730.8 | 3960.7 | 4369.3 | 4410.7 | 4819.4 | 4804.5 | 4280.0 |
| 30° | 3628.2 | 3603.3 | 3631.5 | 3729.1 | 3793.6 | 4074.9 | 4551.3 | 4548.0 | 5008.0 | 4998.1 | 4316.4 |
| 32.5° | 3734.0 | 3722.4 | 3740.7 | 3826.7 | 3935.9 | 4227.1 | 4705.2 | 4802.8 | 5199.9 | 5262.7 | 4442.2 |
| 35° | 3753.9 | 3801.9 | 3844.9 | 3960.7 | 4116.2 | 4473.6 | 4994.7 | 5075.8 | 5421.6 | 5618.5 | 4682.0 |
| 37.5° | 3879.6 | 3897.9 | 3998.8 | 4203.9 | 4346.2 | 4802.8 | 5178.4 | 5229.7 | 5623.4 | 5846.8 | 4935.2 |
| 40° | 4013.7 | 4035.2 | 4187.3 | 4402.5 | 4597.7 | 5017.9 | 5350.4 | 5367.0 | 5687.9 | 6022.1 | 5100.6 |
| 42.5° | 4195.7 | 4215.5 | 4366.1 | 4635.8 | 4897.1 | 5201.5 | 5502.7 | 5520.8 | 5683.0 | 6224.0 | 5363.6 |
| 45° | 4384.2 | 4432.2 | 4609.3 | 4915.3 | 5150.3 | 5416.6 | 5537.4 | 5611.8 | 5729.3 | 6404.3 | 5577.1 |
| 47.5° | 4649.0 | 4693.6 | 4839.2 | 5138.7 | 5413.3 | 5605.2 | 5697.9 | 5770.7 | 5840.2 | 6561.5 | 5714.4 |
| 50° | 4930.2 | 4938.5 | 5115.5 | 5386.9 | 5588.7 | 5818.6 | 5997.3 | 6022.1 | 5985.7 | 6743.5 | 5947.7 |
| 52.5° | 5137.0 | 5163.5 | 5300.8 | 5565.5 | 5866.6 | 6149.6 | 6394.4 | 6420.9 | 6349.7 | 6811.3 | 6027.1 |
| 55° | 4794.5 | 4779.7 | 5003.0 | 5355.4 | 6053.6 | 6642.6 | 6998.2 | 7018.1 | 6614.5 | 7021.4 | 6286.8 |
| 57.5° | 3706.0 | 3777.1 | 3967.3 | 4392.5 | 5378.5 | 6861.0 | 7464.8 | 7393.7 | 6932.1 | 7127.3 | 6452.3 |
| 60° | 2693.4 | 2676.9 | 2804.2 | 3088.8 | 4053.4 | 5913.0 | 7057.8 | 7130.6 | 6672.3 | 6424.1 | 5320.7 |
| 62.5° | 2193.7 | 2170.6 | 2180.5 | 2190.5 | 2615.7 | 3924.3 | 5224.7 | 5223.0 | 5138.7 | 4617.5 | 3588.5 |
| 65° | 1753.7 | 1808.3 | 1813.3 | 1887.7 | 1942.3 | 2344.4 | 3027.6 | 3189.7 | 2777.8 | 2278.2 | 1652.8 |
| 67.5° | 1321.9 | 1302.0 | 1368.2 | 1632.9 | 1735.5 | 1692.5 | 1652.8 | 1671.0 | 1187.9 | 857.0 | 807.4 |
| 70° | 779.3 | 770.9 | 850.4 | 1138.2 | 1429.4 | 1345.1 | 1245.8 | 1247.5 | 815.6 | 598.9 | 666.7 |
| 72.5° | 426.8 | 425.2 | 441.7 | 577.4 | 812.3 | 843.8 | 747.8 | 770.9 | 486.4 | 484.8 | 521.2 |
| 75° | 238.3 | 233.3 | 228.3 | 254.8 | 292.8 | 309.4 | 316.0 | 319.3 | 334.2 | 373.9 | 388.8 |
| 77.5° | 87.7 | 84.4 | 84.4 | 97.6 | 124.0 | 155.5 | 196.9 | 200.2 | 236.6 | 271.3 | 286.2 |
| 80° | 29.8 | 33.1 | 44.7 | 61.2 | 82.8 | 110.8 | 134.0 | 137.3 | 167.1 | 190.2 | 195.2 |
| 82.5° | 18.2 | 19.8 | 29.8 | 43.0 | 59.5 | 77.8 | 99.2 | 100.9 | 124.0 | 138.9 | 145.6 |
| 85° | 8.2 | 9.9 | 16.6 | 26.5 | 38.0 | 51.3 | 53.0 | 53.0 | 51.3 | 53.0 | 49.6 |
| 87.5° | 0.0 | 0.0 | 3.3 | 3.3 | 3.3 | 5.0 | 6.6 | 5.0 | 8.2 | 9.9 | 9.9 |
| 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-SA4A-840-U-SL3-GRSWH

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 | 5003.0 |
| 2.5° | 4958.4 | 4940.1 | 4883.9 | 4834.2 | 4819.4 | 4753.2 | 4655.6 | 4667.1 | 4596.0 | 4629.1 | 4594.4 |
| 5° | 4890.5 | 4829.3 | 4685.4 | 4624.2 | 4463.7 | 4390.9 | 4341.2 | 4217.1 | 4159.2 | 4147.6 | 4098.0 |
| 7.5° | 4716.7 | 4678.7 | 4498.4 | 4333.0 | 4162.5 | 4017.0 | 3830.0 | 3702.6 | 3611.6 | 3586.8 | 3514.0 |
| 10° | 4579.5 | 4495.1 | 4245.3 | 3993.8 | 3750.6 | 3497.5 | 3254.2 | 3064.0 | 2971.3 | 2863.9 | 2827.4 |
| 12.5° | 4443.8 | 4316.4 | 3978.9 | 3656.3 | 3342.0 | 3022.6 | 2728.1 | 2496.5 | 2294.7 | 2246.7 | 2230.2 |
| 15° | 4359.4 | 4137.7 | 3740.7 | 3351.9 | 2905.2 | 2488.3 | 2193.7 | 2041.6 | 1917.5 | 1866.2 | 1902.6 |
| 17.5° | 4248.6 | 3990.5 | 3512.4 | 2994.5 | 2503.2 | 2119.3 | 1872.8 | 1778.5 | 1733.8 | 1738.8 | 1723.9 |
| 20° | 4109.6 | 3851.5 | 3212.9 | 2670.3 | 2144.1 | 1838.1 | 1697.5 | 1662.7 | 1669.3 | 1680.9 | 1675.9 |
| 22.5° | 4010.3 | 3682.7 | 2996.1 | 2339.4 | 1853.0 | 1682.6 | 1624.6 | 1599.8 | 1621.4 | 1631.3 | 1623.0 |
| 25° | 3934.3 | 3538.8 | 2733.2 | 2046.6 | 1684.2 | 1594.9 | 1568.4 | 1566.8 | 1599.8 | 1613.0 | 1604.8 |
| 27.5° | 3864.7 | 3404.8 | 2471.7 | 1823.2 | 1571.7 | 1527.0 | 1518.8 | 1538.6 | 1560.1 | 1573.3 | 1584.9 |
| 30° | 3823.4 | 3302.3 | 2226.9 | 1636.2 | 1515.5 | 1494.0 | 1479.1 | 1497.2 | 1508.8 | 1522.0 | 1515.5 |
| 32.5° | 3863.1 | 3229.4 | 1990.3 | 1530.4 | 1469.1 | 1447.6 | 1467.5 | 1455.9 | 1475.8 | 1487.3 | 1469.1 |
| 35° | 3987.2 | 3164.9 | 1821.5 | 1474.1 | 1416.2 | 1424.5 | 1427.8 | 1422.8 | 1431.0 | 1421.1 | 1442.7 |
| 37.5° | 4109.6 | 3141.8 | 1666.0 | 1426.1 | 1391.4 | 1391.4 | 1388.1 | 1378.1 | 1394.7 | 1391.4 | 1401.3 |
| 40° | 4265.1 | 3156.7 | 1533.6 | 1374.9 | 1368.2 | 1364.9 | 1351.7 | 1350.1 | 1343.4 | 1345.1 | 1348.4 |
| 42.5° | 4400.8 | 3189.7 | 1457.5 | 1341.7 | 1346.7 | 1353.3 | 1328.5 | 1308.7 | 1316.9 | 1300.4 | 1300.4 |
| 45° | 4544.8 | 3219.5 | 1389.8 | 1318.6 | 1313.6 | 1312.0 | 1292.1 | 1280.5 | 1273.9 | 1275.5 | 1290.4 |
| 47.5° | 4771.4 | 3262.6 | 1338.5 | 1287.2 | 1290.4 | 1265.6 | 1260.7 | 1245.8 | 1252.4 | 1262.3 | 1264.0 |
| 50° | 4931.9 | 3353.6 | 1298.8 | 1250.7 | 1262.3 | 1245.8 | 1216.0 | 1209.4 | 1209.4 | 1225.9 | 1222.6 |
| 52.5° | 5044.4 | 3480.9 | 1260.7 | 1211.0 | 1216.0 | 1202.8 | 1192.9 | 1178.0 | 1168.1 | 1191.2 | 1202.8 |
| 55° | 5388.5 | 3692.7 | 1250.7 | 1178.0 | 1176.3 | 1163.1 | 1144.9 | 1130.0 | 1125.0 | 1128.3 | 1151.5 |
| 57.5° | 5355.4 | 3626.5 | 1219.3 | 1120.0 | 1116.8 | 1098.5 | 1080.3 | 1075.4 | 1073.7 | 1077.1 | 1083.6 |
| 60° | 4347.9 | 2678.5 | 1088.6 | 1053.9 | 1048.9 | 1045.6 | 1027.4 | 1007.5 | 997.6 | 1007.5 | 999.3 |
| 62.5° | 2877.1 | 1793.4 | 959.6 | 974.5 | 977.7 | 969.5 | 939.7 | 919.9 | 923.2 | 934.8 | 916.5 |
| 65° | 1412.9 | 1053.9 | 870.3 | 910.0 | 913.2 | 890.1 | 861.9 | 838.8 | 827.2 | 837.1 | 828.9 |
| 67.5° | 807.4 | 805.7 | 797.4 | 838.8 | 837.1 | 814.0 | 769.3 | 749.5 | 729.6 | 732.9 | 728.0 |
| 70° | 684.9 | 698.2 | 714.7 | 739.5 | 737.9 | 711.4 | 658.5 | 643.5 | 615.4 | 612.2 | 603.8 |
| 72.5° | 539.3 | 562.5 | 598.9 | 617.1 | 602.2 | 569.1 | 534.4 | 509.6 | 484.8 | 469.9 | 474.8 |
| 75° | 400.4 | 433.5 | 453.3 | 464.9 | 441.7 | 423.5 | 395.4 | 365.7 | 335.8 | 322.6 | 317.6 |
| 77.5° | 291.2 | 301.1 | 319.3 | 327.6 | 312.7 | 294.5 | 278.0 | 248.2 | 220.0 | 201.8 | 196.9 |
| 80° | 203.5 | 210.1 | 223.4 | 223.4 | 223.4 | 215.0 | 193.6 | 163.8 | 145.6 | 129.0 | 125.7 |
| 82.5° | 142.3 | 148.9 | 162.1 | 155.5 | 153.9 | 143.9 | 130.7 | 107.6 | 87.7 | 76.1 | 72.8 |
| 85° | 49.6 | 54.6 | 66.2 | 79.4 | 84.4 | 82.8 | 74.4 | 59.5 | 46.3 | 38.0 | 34.7 |
| 87.5° | 11.6 | 11.6 | 13.2 | 11.6 | 11.6 | 13.2 | 11.6 | 11.6 | 11.6 | 8.2 | 6.6 |
| 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)