

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: STREETWORKS

Report Number: P653349

Luminaire Tested: **GLAN-SA4D-840-U-T3R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P653349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA4D-840-U-T3R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15652.7 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

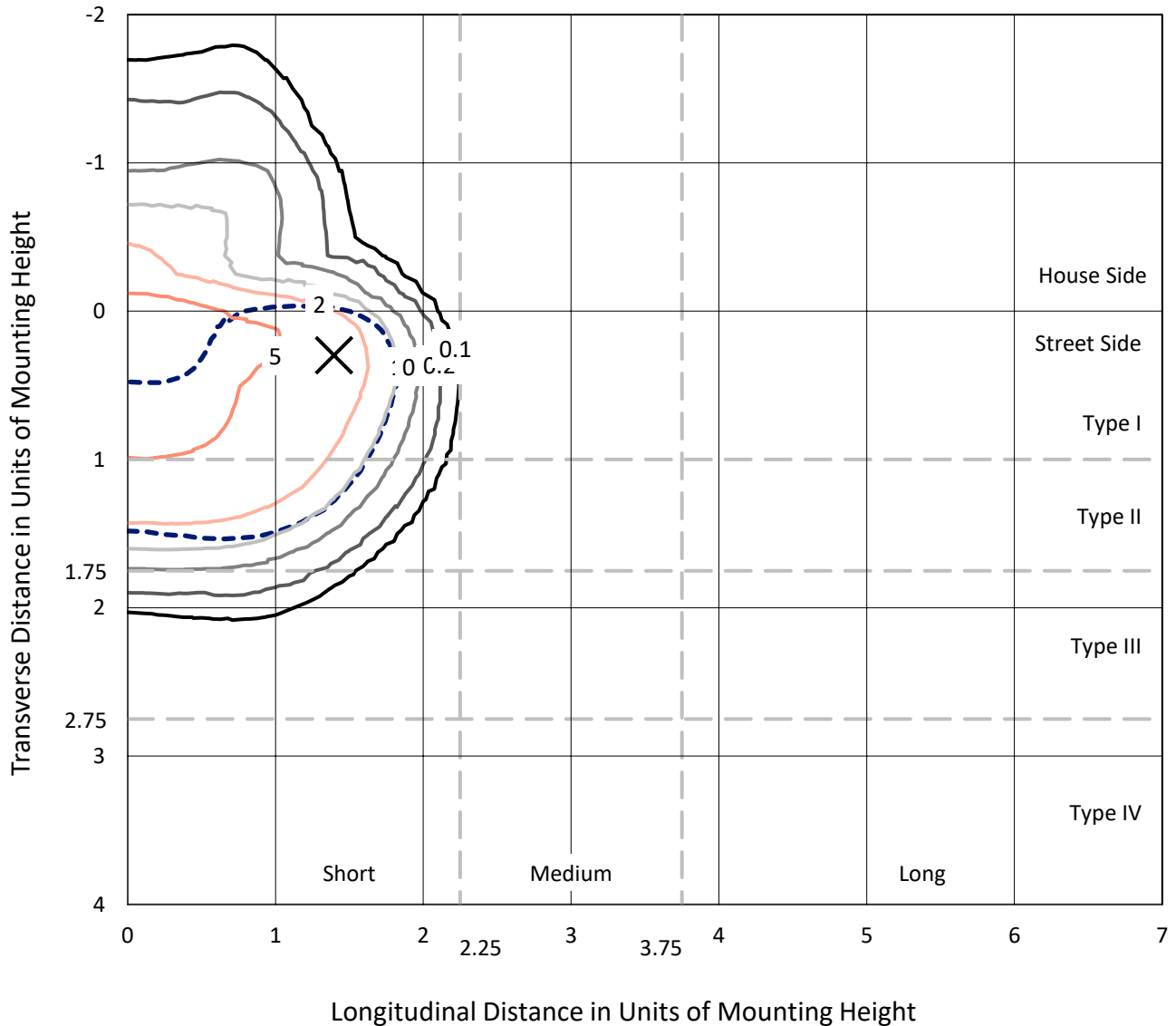
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

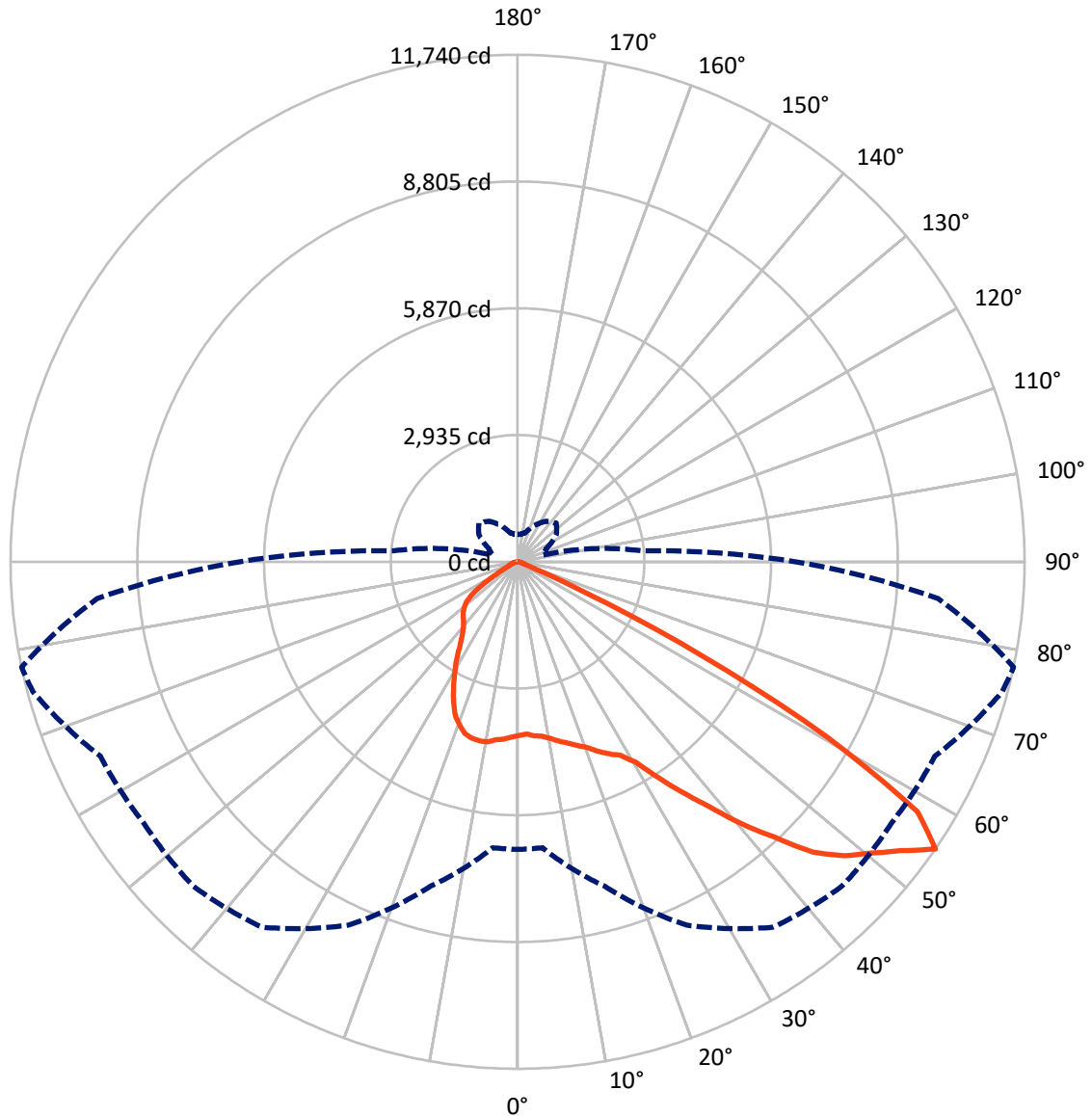
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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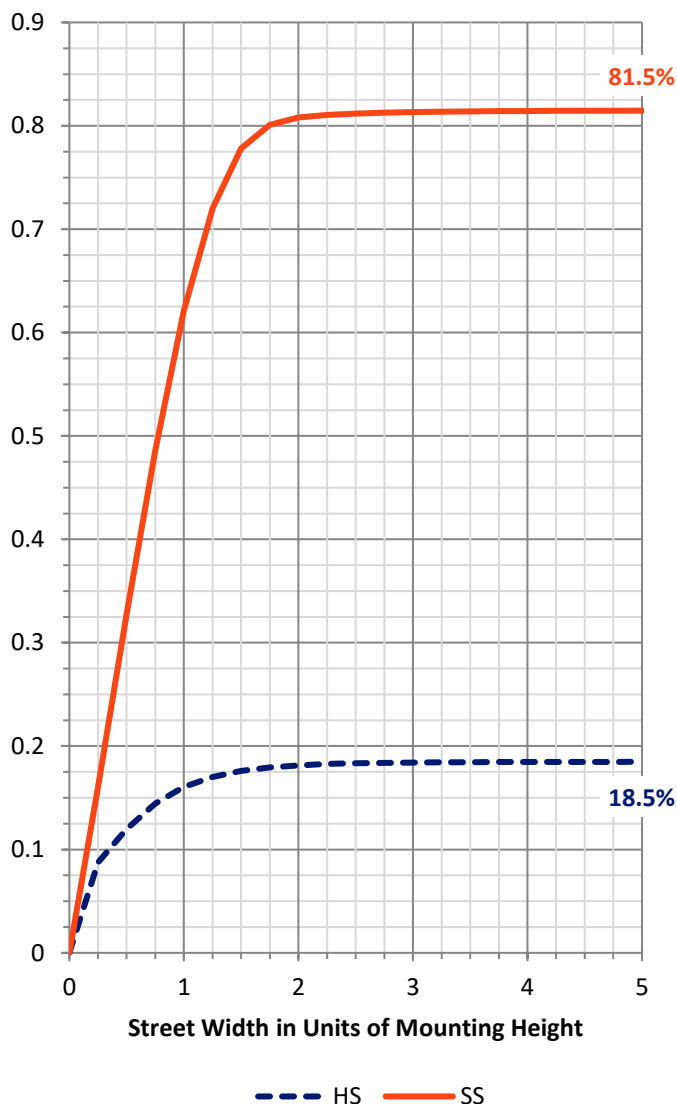
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2907.3 | 0.0 | 2907.3 |
| | % Fixture | 18.6 | 0.0 | 18.6 |
| Street Side | Lumens | 12745.4 | 0.0 | 12745.4 |
| | % Fixture | 81.4 | 0.0 | 81.4 |
| Total | Lumens | 15652.7 | 0.0 | 15652.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 358.8 | 2.3 |
| 10°-20° | 949.7 | 6.1 |
| 20°-30° | 1664.6 | 10.6 |
| 30°-40° | 2744.7 | 17.5 |
| 40°-50° | 3993.9 | 25.5 |
| 50°-60° | 4525.6 | 28.9 |
| 60°-70° | 1293.9 | 8.3 |
| 70°-80° | 100.5 | 0.6 |
| 80°-90° | 20.9 | 0.1 |
| 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° | 15652.7 | 100.0 |
| 0°-180° | 15652.7 | 100.0 |

Coefficient of Utilization



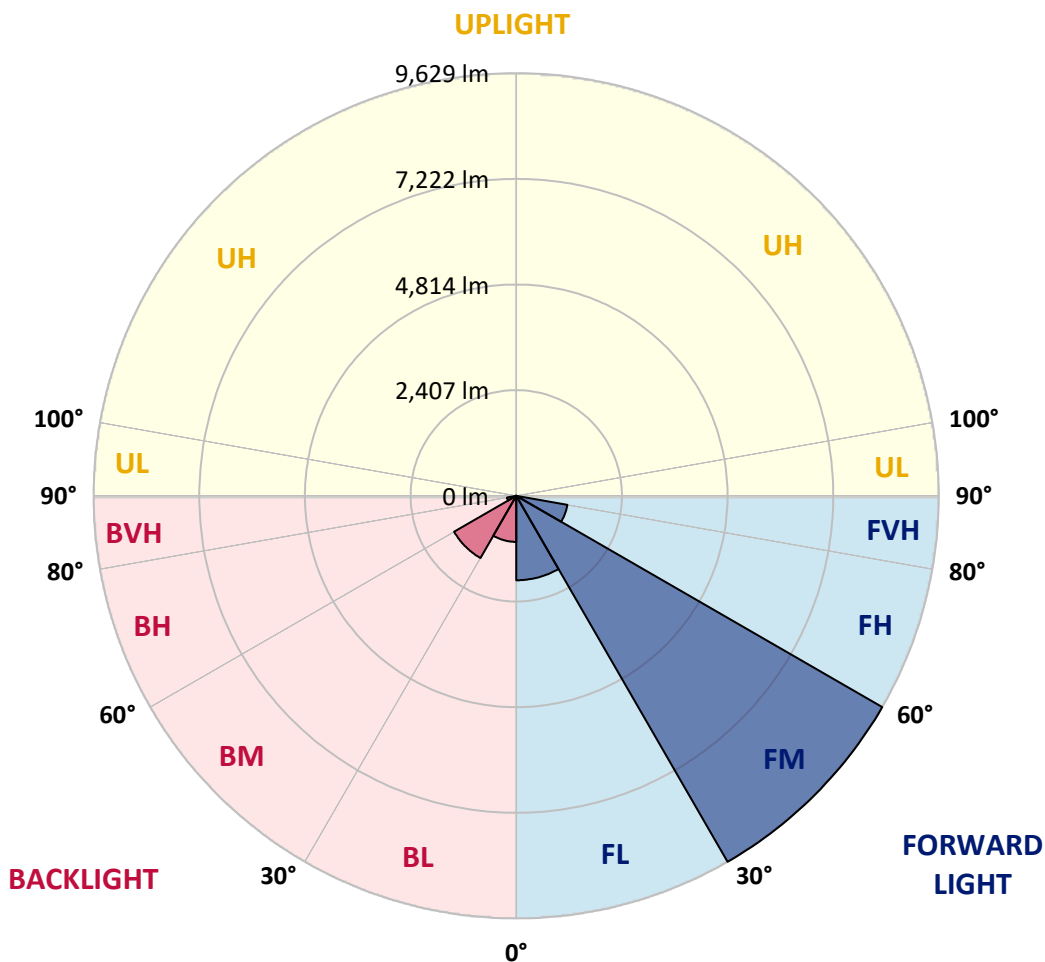
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1924.2 | 12.3 | | | |
| FM (30°-60°) | 9628.8 | 61.5 | | | |
| FH (60°-80°) | 1182.2 | 7.6 | | | G1/1800 |
| FVH (80°-90°) | 10.2 | 0.1 | | | G1/100 |
| BL (0°-30°) | 1049.0 | 6.7 | B3/2500 | | |
| BM (30°-60°) | 1635.4 | 10.4 | B2/2500 | | |
| BH (60°-80°) | 212.2 | 1.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 10.7 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 78° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 |
| 2.5° | 3783.7 | 3820.0 | 3825.6 | 3870.4 | 3867.6 | 3943.2 | 3965.6 | 3968.3 | 4018.7 | 3993.6 | 4057.9 |
| 5° | 3677.3 | 3657.7 | 3649.4 | 3727.6 | 3750.0 | 3817.2 | 3873.2 | 3906.8 | 4010.3 | 4046.7 | 4113.8 |
| 7.5° | 3582.2 | 3582.2 | 3587.7 | 3657.7 | 3649.4 | 3736.1 | 3794.8 | 3898.4 | 4049.5 | 4080.3 | 4161.4 |
| 10° | 3489.8 | 3456.2 | 3498.2 | 3571.0 | 3632.5 | 3671.7 | 3794.8 | 3892.8 | 4069.1 | 4158.7 | 4270.6 |
| 12.5° | 3442.2 | 3459.0 | 3464.6 | 3517.8 | 3584.9 | 3702.5 | 3769.6 | 3931.9 | 4209.0 | 4262.2 | 4382.5 |
| 15° | 3741.7 | 3708.1 | 3626.9 | 3579.4 | 3635.3 | 3691.3 | 3859.2 | 4024.4 | 4281.8 | 4357.3 | 4491.7 |
| 17.5° | 4088.7 | 4060.7 | 3993.6 | 3864.8 | 3738.8 | 3842.4 | 3974.0 | 4125.1 | 4360.2 | 4472.1 | 4670.7 |
| 20° | 4542.1 | 4497.2 | 4430.1 | 4178.3 | 4069.1 | 3957.2 | 4097.1 | 4276.1 | 4488.8 | 4589.6 | 4794.0 |
| 22.5° | 5082.2 | 5082.2 | 4931.0 | 4626.0 | 4399.4 | 4293.0 | 4351.8 | 4455.3 | 4631.6 | 4768.7 | 4970.2 |
| 25° | 5644.7 | 5627.9 | 5490.7 | 5174.5 | 4791.1 | 4665.2 | 4732.4 | 4805.1 | 4852.7 | 4928.3 | 5062.6 |
| 27.5° | 6288.3 | 6190.4 | 6016.9 | 5667.1 | 5328.4 | 5084.9 | 5157.8 | 5093.3 | 5034.6 | 5073.8 | 5266.8 |
| 30° | 6724.9 | 6786.4 | 6565.4 | 6229.5 | 5910.5 | 5639.1 | 5653.0 | 5597.1 | 5328.4 | 5384.4 | 5499.1 |
| 32.5° | 7178.3 | 7217.5 | 7094.3 | 6909.7 | 6590.6 | 6274.4 | 6159.7 | 6112.1 | 5910.5 | 5935.7 | 5823.8 |
| 35° | 7556.0 | 7631.7 | 7522.5 | 7441.3 | 7349.0 | 7094.3 | 6778.1 | 6932.0 | 6607.4 | 6545.8 | 6254.8 |
| 37.5° | 7903.1 | 7880.8 | 8009.4 | 7925.5 | 7905.9 | 7726.8 | 7379.8 | 7410.6 | 7192.3 | 7178.3 | 6842.5 |
| 40° | 8213.7 | 8219.3 | 8395.6 | 8434.8 | 8356.5 | 8037.4 | 7533.7 | 7777.1 | 7953.5 | 7970.2 | 7539.3 |
| 42.5° | 8471.2 | 8546.7 | 8697.9 | 9014.2 | 8896.6 | 8364.8 | 7693.2 | 7959.1 | 8613.9 | 8717.5 | 8199.8 |
| 45° | 8695.1 | 8849.0 | 9036.5 | 9319.2 | 9252.0 | 8829.4 | 8090.6 | 8334.1 | 9319.2 | 9590.6 | 8821.0 |
| 47.5° | 8709.1 | 8910.6 | 9114.8 | 9534.7 | 9618.6 | 9078.5 | 8502.0 | 8927.4 | 9878.9 | 10172.7 | 9274.4 |
| 50° | 8653.1 | 8759.4 | 9168.1 | 9624.2 | 9814.6 | 9484.3 | 9078.5 | 9425.5 | 10421.8 | 10606.5 | 9503.9 |
| 52.5° | 7989.8 | 8071.0 | 8891.0 | 9708.2 | 10167.1 | 9943.2 | 9842.5 | 10119.6 | 10975.9 | 11113.1 | 9719.4 |
| 55° | 6660.6 | 6646.6 | 7774.4 | 9285.6 | 10329.4 | 10623.3 | 10561.7 | 10659.7 | 11616.8 | 11739.9 | 9772.5 |
| 57.5° | 4556.0 | 4810.7 | 5784.6 | 7732.4 | 9335.9 | 10463.8 | 10528.1 | 10365.8 | 10869.6 | 10917.2 | 8518.8 |
| 60° | 2457.1 | 2563.5 | 3347.1 | 5160.5 | 7108.3 | 8527.2 | 8695.1 | 8401.3 | 8362.1 | 8227.8 | 6081.3 |
| 62.5° | 976.7 | 1029.9 | 1474.9 | 2555.0 | 3873.2 | 5182.9 | 5544.0 | 5423.6 | 5166.1 | 4813.5 | 3148.4 |
| 65° | 464.6 | 498.1 | 733.2 | 1195.0 | 1718.3 | 2160.4 | 2521.5 | 2633.4 | 1942.2 | 1749.1 | 1038.3 |
| 67.5° | 316.2 | 341.4 | 534.5 | 682.8 | 612.9 | 640.8 | 833.9 | 775.2 | 456.2 | 389.0 | 288.2 |
| 70° | 240.7 | 257.4 | 428.2 | 464.6 | 274.3 | 193.1 | 215.5 | 201.5 | 187.5 | 190.3 | 187.5 |
| 72.5° | 170.7 | 184.7 | 313.4 | 274.3 | 120.3 | 89.6 | 114.7 | 137.2 | 137.2 | 137.2 | 134.3 |
| 75° | 103.5 | 117.6 | 181.9 | 106.4 | 47.6 | 47.6 | 72.7 | 92.3 | 98.0 | 100.8 | 95.1 |
| 77.5° | 53.2 | 67.2 | 61.6 | 30.8 | 30.8 | 36.4 | 53.2 | 64.3 | 70.0 | 70.0 | 67.2 |
| 80° | 11.2 | 11.2 | 11.2 | 16.8 | 30.8 | 39.2 | 53.2 | 58.8 | 67.2 | 67.2 | 61.6 |
| 82.5° | 0.0 | 2.8 | 8.4 | 16.8 | 28.0 | 36.4 | 50.4 | 58.8 | 67.2 | 70.0 | 64.3 |
| 85° | 0.0 | 2.8 | 5.6 | 11.2 | 19.6 | 22.4 | 19.6 | 16.8 | 16.8 | 16.8 | 16.8 |
| 87.5° | 0.0 | 0.0 | 2.8 | 2.8 | 2.8 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P653349

CATALOG NUMBER: GLAN-SA4D-840-U-T3R-GRSBK

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 | 4024.4 |
| 2.5° | 4063.5 | 4071.9 | 4057.9 | 4055.1 | 4043.9 | 4077.5 | 3996.3 | 3976.8 | 4027.1 | 3979.5 | 3990.7 |
| 5° | 4116.7 | 4136.3 | 4111.1 | 4069.1 | 4007.5 | 3912.4 | 3831.2 | 3724.9 | 3674.5 | 3638.1 | 3632.5 |
| 7.5° | 4155.9 | 4169.8 | 4144.6 | 4010.3 | 3825.6 | 3584.9 | 3405.8 | 3274.3 | 3170.7 | 3140.0 | 3089.6 |
| 10° | 4315.3 | 4318.2 | 4192.2 | 3895.6 | 3534.6 | 3218.3 | 2944.1 | 2742.6 | 2639.1 | 2574.6 | 2546.7 |
| 12.5° | 4421.7 | 4416.1 | 4161.4 | 3668.9 | 3187.6 | 2767.7 | 2454.3 | 2210.8 | 2115.7 | 2084.9 | 2065.3 |
| 15° | 4556.0 | 4525.3 | 4088.7 | 3436.7 | 2739.8 | 2286.4 | 2003.8 | 1835.8 | 1827.5 | 1807.9 | 1827.5 |
| 17.5° | 4662.4 | 4575.6 | 3982.3 | 3014.1 | 2311.6 | 1883.4 | 1698.7 | 1709.9 | 1732.3 | 1751.9 | 1754.7 |
| 20° | 4835.9 | 4656.8 | 3738.8 | 2644.6 | 1914.2 | 1614.8 | 1611.9 | 1662.3 | 1718.3 | 1740.7 | 1763.1 |
| 22.5° | 4967.5 | 4690.3 | 3478.6 | 2250.0 | 1589.6 | 1505.6 | 1553.2 | 1628.8 | 1670.7 | 1693.1 | 1726.7 |
| 25° | 5015.0 | 4598.0 | 3131.5 | 1855.4 | 1432.9 | 1455.3 | 1528.0 | 1578.4 | 1631.5 | 1656.8 | 1642.7 |
| 27.5° | 5062.6 | 4550.5 | 2717.4 | 1528.0 | 1348.9 | 1421.6 | 1483.3 | 1533.6 | 1550.4 | 1583.9 | 1606.4 |
| 30° | 5177.3 | 4385.3 | 2345.2 | 1320.9 | 1306.9 | 1399.3 | 1444.1 | 1460.8 | 1505.6 | 1525.2 | 1525.2 |
| 32.5° | 5269.7 | 4321.0 | 1950.6 | 1223.0 | 1301.4 | 1410.4 | 1416.1 | 1416.1 | 1421.6 | 1407.7 | 1402.1 |
| 35° | 5459.9 | 4099.9 | 1598.0 | 1164.2 | 1298.5 | 1413.3 | 1427.3 | 1379.7 | 1251.0 | 1200.6 | 1186.6 |
| 37.5° | 5695.1 | 3957.2 | 1337.7 | 1150.2 | 1318.1 | 1446.9 | 1469.2 | 1290.1 | 1122.2 | 1041.1 | 1027.0 |
| 40° | 5980.5 | 3856.4 | 1167.0 | 1144.6 | 1362.9 | 1525.2 | 1458.0 | 1220.2 | 1001.9 | 884.3 | 878.8 |
| 42.5° | 6313.6 | 3764.1 | 1052.3 | 1141.8 | 1418.9 | 1606.4 | 1446.9 | 1161.4 | 878.8 | 800.4 | 811.6 |
| 45° | 6579.4 | 3713.7 | 973.9 | 1122.2 | 1438.4 | 1653.9 | 1455.3 | 1057.9 | 828.4 | 778.0 | 783.6 |
| 47.5° | 6786.4 | 3607.3 | 909.5 | 1088.7 | 1435.7 | 1670.7 | 1379.7 | 1015.8 | 803.2 | 817.2 | 831.2 |
| 50° | 6792.1 | 3464.6 | 828.4 | 1015.8 | 1393.7 | 1640.0 | 1293.0 | 976.7 | 797.6 | 856.4 | 884.3 |
| 52.5° | 6716.6 | 3263.1 | 741.6 | 912.3 | 1295.7 | 1533.6 | 1214.6 | 959.9 | 772.4 | 766.8 | 800.4 |
| 55° | 6447.9 | 2885.3 | 596.1 | 738.8 | 1094.2 | 1264.9 | 1144.6 | 929.1 | 696.9 | 632.4 | 638.1 |
| 57.5° | 5210.9 | 2068.1 | 439.3 | 528.9 | 775.2 | 926.4 | 1032.7 | 915.1 | 626.9 | 537.3 | 540.1 |
| 60° | 3226.7 | 1172.6 | 321.9 | 361.0 | 478.5 | 562.5 | 836.8 | 850.8 | 559.7 | 453.4 | 447.7 |
| 62.5° | 1656.8 | 579.3 | 249.1 | 254.7 | 293.8 | 330.3 | 573.7 | 713.6 | 506.5 | 431.0 | 431.0 |
| 65° | 554.1 | 285.4 | 218.3 | 195.9 | 195.9 | 204.3 | 347.0 | 495.3 | 428.2 | 361.0 | 361.0 |
| 67.5° | 237.8 | 212.7 | 190.3 | 170.7 | 156.7 | 148.4 | 195.9 | 288.2 | 319.1 | 274.3 | 263.1 |
| 70° | 184.7 | 179.1 | 165.1 | 142.7 | 123.1 | 111.9 | 114.7 | 148.4 | 181.9 | 176.3 | 170.7 |
| 72.5° | 137.2 | 137.2 | 131.5 | 111.9 | 95.1 | 81.2 | 75.5 | 78.4 | 86.8 | 89.6 | 92.3 |
| 75° | 95.1 | 98.0 | 98.0 | 86.8 | 70.0 | 58.8 | 50.4 | 42.0 | 33.6 | 28.0 | 25.1 |
| 77.5° | 64.3 | 67.2 | 72.7 | 64.3 | 53.2 | 39.2 | 30.8 | 22.4 | 14.0 | 5.6 | 5.6 |
| 80° | 56.0 | 64.3 | 70.0 | 64.3 | 56.0 | 42.0 | 30.8 | 16.8 | 8.4 | 0.0 | 0.0 |
| 82.5° | 58.8 | 64.3 | 72.7 | 61.6 | 53.2 | 39.2 | 30.8 | 19.6 | 8.4 | 2.8 | 0.0 |
| 85° | 14.0 | 14.0 | 16.8 | 19.6 | 25.1 | 28.0 | 22.4 | 14.0 | 8.4 | 2.8 | 0.0 |
| 87.5° | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 2.8 | 2.8 | 2.8 | 2.8 | 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)