

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: P454327

Luminaire Tested: **GLAN-SA5B-830-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA5B-830-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18129 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

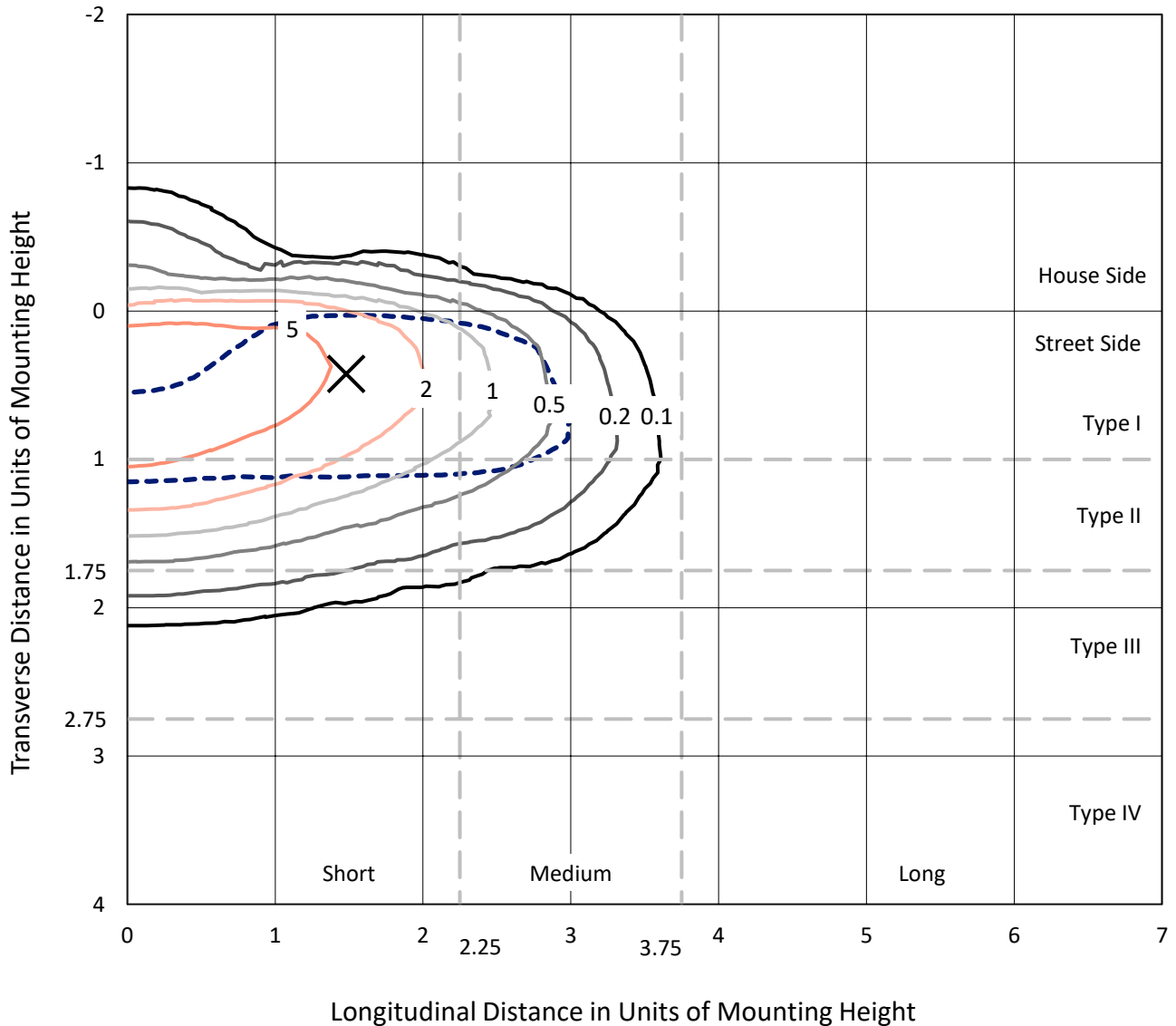
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

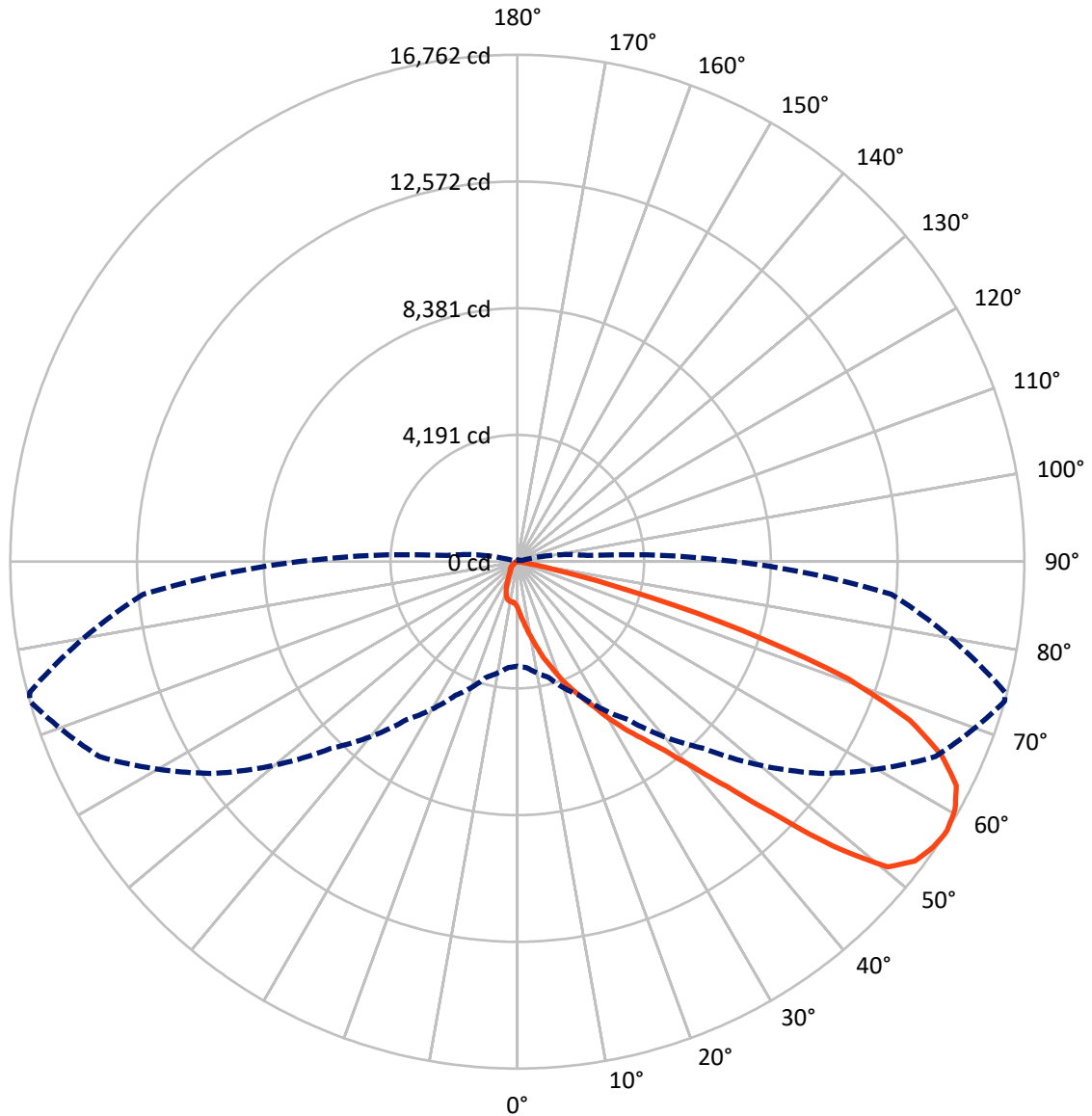
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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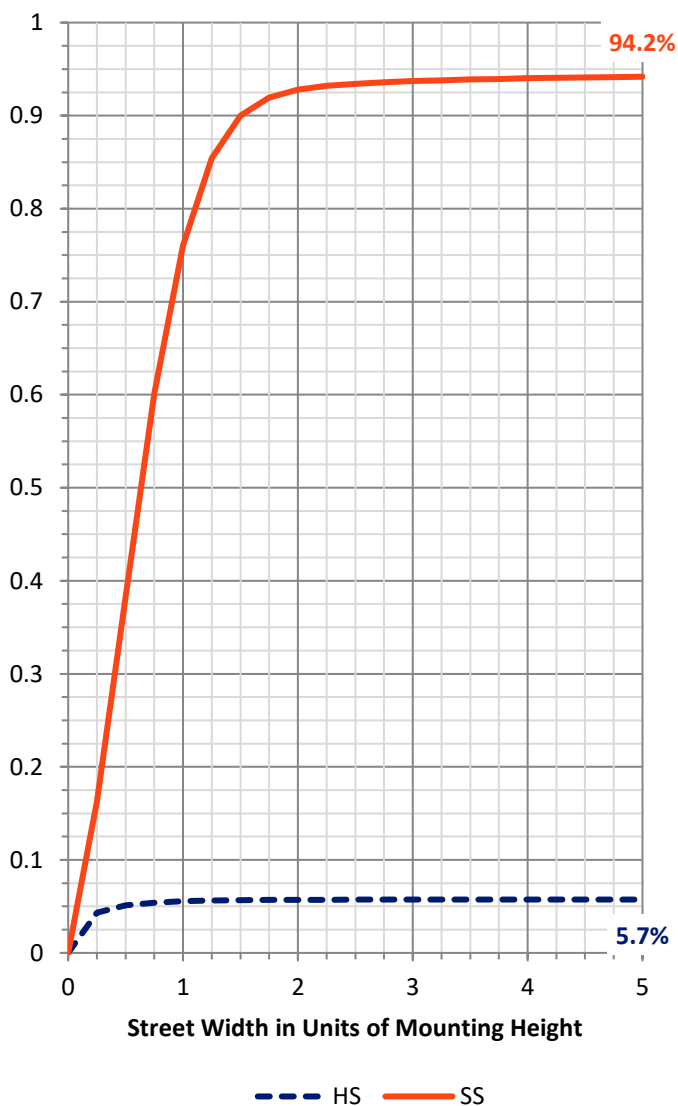
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1045.6 | 0.0 | 1045.6 |
| | % Fixture | 5.8 | 0.0 | 5.8 |
| Street Side | Lumens | 17083.4 | 0.0 | 17083.4 |
| | % Fixture | 94.2 | 0.0 | 94.2 |
| Total | Lumens | 18129.0 | 0.0 | 18129.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 183.3 | 1.0 |
| 10°-20° | 722.3 | 4.0 |
| 20°-30° | 1545.6 | 8.5 |
| 30°-40° | 2840.8 | 15.7 |
| 40°-50° | 4355.1 | 24.0 |
| 50°-60° | 4607.1 | 25.4 |
| 60°-70° | 3008.5 | 16.6 |
| 70°-80° | 822.0 | 4.5 |
| 80°-90° | 44.3 | 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° | 18129.0 | 100.0 |
| 0°-180° | 18129.0 | 100.0 |

Coefficient of Utilization



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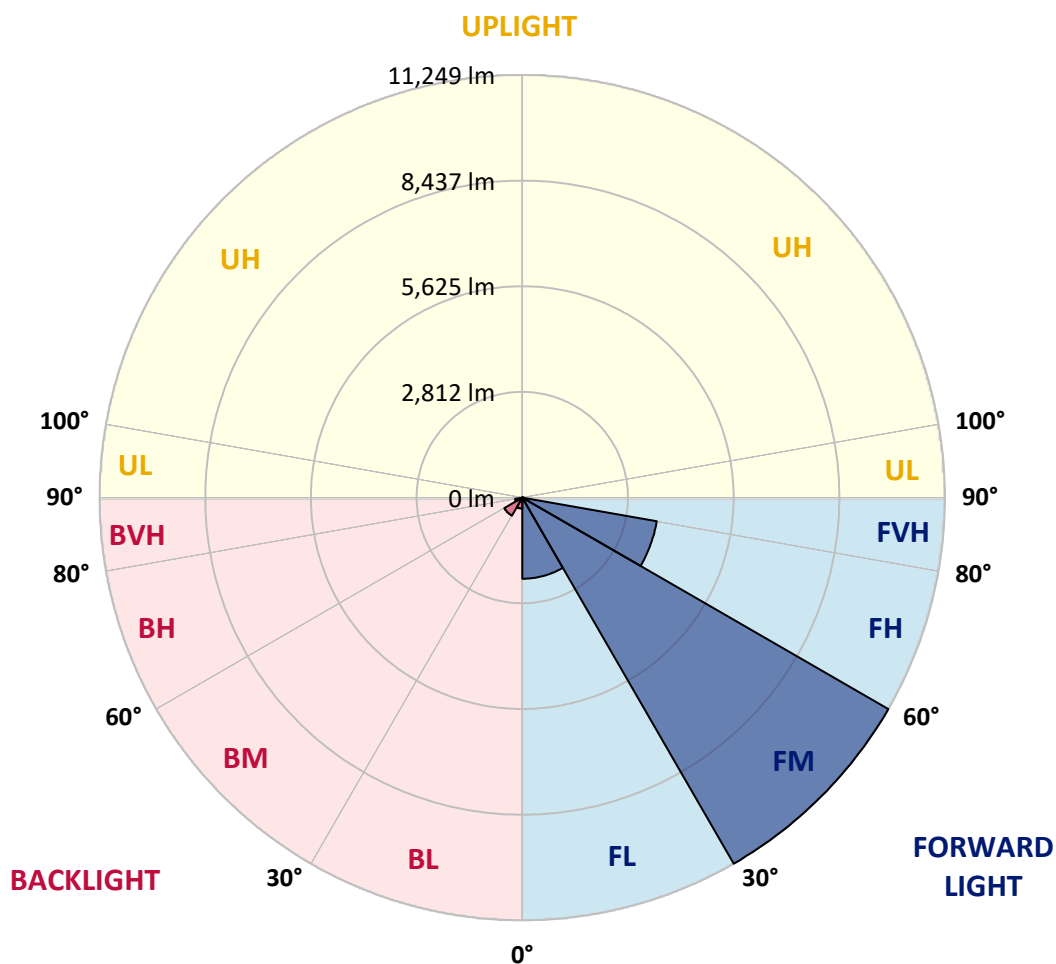
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2159.1 | 11.9 | | | |
| FM (30°-60°) | 11249.4 | 62.1 | | | |
| FH (60°-80°) | 3634.3 | 20.0 | | | G2/5000 |
| FVH (80°-90°) | 40.6 | 0.2 | | | G1/100 |
| BL (0°-30°) | 292.1 | 1.6 | B1/500 | | |
| BM (30°-60°) | 553.6 | 3.1 | B1/1000 | | |
| BH (60°-80°) | 196.3 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.7 | 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° | 65° | 74° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 |
| 2.5° | 2221.7 | 2201.7 | 2161.6 | 2147.9 | 2089.0 | 1997.7 | 1917.6 | 1809.9 | 1724.8 | 1716.0 | 1613.4 |
| 5° | 2975.2 | 2930.2 | 2911.4 | 2821.3 | 2679.8 | 2547.2 | 2319.4 | 2146.6 | 1947.6 | 1932.6 | 1726.1 |
| 7.5° | 3701.2 | 3638.6 | 3619.8 | 3534.7 | 3369.5 | 3160.5 | 2865.1 | 2550.9 | 2235.5 | 2206.7 | 1877.5 |
| 10° | 4226.9 | 4235.7 | 4201.9 | 4145.5 | 4011.6 | 3798.8 | 3434.6 | 3005.3 | 2555.9 | 2519.6 | 2047.7 |
| 12.5° | 4603.7 | 4602.4 | 4608.7 | 4607.4 | 4536.1 | 4374.6 | 3991.6 | 3497.2 | 2908.9 | 2837.5 | 2243.0 |
| 15° | 4849.0 | 4852.7 | 4871.5 | 4936.6 | 4944.1 | 4844.0 | 4524.8 | 3967.8 | 3318.2 | 3229.3 | 2454.5 |
| 17.5° | 5096.8 | 5123.1 | 5153.1 | 5214.5 | 5269.5 | 5229.5 | 5004.2 | 4458.5 | 3688.7 | 3622.3 | 2681.1 |
| 20° | 5506.1 | 5542.4 | 5524.9 | 5562.4 | 5591.2 | 5595.0 | 5421.0 | 4911.6 | 4138.0 | 4026.6 | 2940.2 |
| 22.5° | 6160.7 | 6159.5 | 6114.4 | 6046.8 | 5990.5 | 5988.0 | 5830.3 | 5377.2 | 4546.1 | 4438.4 | 3200.5 |
| 25° | 6988.1 | 6991.8 | 6904.2 | 6711.5 | 6571.3 | 6399.8 | 6218.3 | 5785.2 | 4982.9 | 4850.2 | 3474.6 |
| 27.5° | 7936.9 | 7913.1 | 7780.4 | 7515.0 | 7237.2 | 6944.3 | 6682.7 | 6259.6 | 5446.0 | 5335.9 | 3788.8 |
| 30° | 8789.3 | 8780.5 | 8625.3 | 8301.1 | 7935.6 | 7641.5 | 7262.2 | 6854.2 | 6045.6 | 5910.4 | 4140.5 |
| 32.5° | 9582.8 | 9595.3 | 9380.0 | 9044.6 | 8691.6 | 8352.4 | 7951.9 | 7422.4 | 6633.9 | 6442.4 | 4523.5 |
| 35° | 10202.4 | 10214.9 | 9992.1 | 9713.0 | 9350.0 | 9068.4 | 8686.6 | 8028.2 | 7214.6 | 7053.2 | 4964.1 |
| 37.5° | 10532.8 | 10549.1 | 10420.2 | 10209.9 | 9983.3 | 9841.9 | 9486.4 | 8808.0 | 7920.6 | 7823.0 | 5484.8 |
| 40° | 10595.4 | 10614.2 | 10557.9 | 10501.5 | 10489.0 | 10590.4 | 10486.5 | 9726.8 | 8899.4 | 8746.7 | 6260.9 |
| 42.5° | 10407.7 | 10432.7 | 10457.7 | 10582.9 | 10838.2 | 11210.0 | 11571.7 | 10973.4 | 10159.8 | 9954.6 | 7209.6 |
| 45° | 9914.5 | 9912.0 | 10010.9 | 10335.1 | 10907.1 | 11700.6 | 12705.7 | 12534.3 | 11877.1 | 11633.1 | 8550.2 |
| 47.5° | 9070.9 | 9058.4 | 9272.4 | 9734.3 | 10625.5 | 11790.8 | 13630.7 | 14429.3 | 14068.8 | 13843.5 | 9990.9 |
| 50° | 7785.4 | 7846.7 | 8183.4 | 8828.1 | 9925.8 | 11517.9 | 13916.1 | 15672.2 | 15867.5 | 15628.4 | 11154.9 |
| 52.5° | 6279.6 | 6277.1 | 6805.3 | 7680.3 | 8889.4 | 10917.1 | 13717.1 | 15897.5 | 16452.0 | 16269.3 | 11728.2 |
| 55° | 4647.5 | 4680.0 | 5229.5 | 6111.9 | 7543.8 | 9820.6 | 13067.5 | 15665.9 | 16674.8 | 16545.9 | 12106.2 |
| 57° | 3457.1 | 3514.7 | 3955.3 | 4889.0 | 6372.3 | 8735.4 | 12202.6 | 15251.6 | 16762.4 | 16692.3 | 12420.4 |
| 57.5° | 3226.8 | 3229.3 | 3658.6 | 4507.3 | 6029.3 | 8318.6 | 11954.7 | 15078.9 | 16759.9 | 16721.1 | 12471.7 |
| 60° | 1986.4 | 2049.0 | 2345.6 | 3046.6 | 4413.4 | 6492.4 | 10293.8 | 14086.3 | 16629.7 | 16686.1 | 12690.7 |
| 62.5° | 1189.1 | 1215.4 | 1408.1 | 1836.2 | 2845.1 | 4738.8 | 8423.8 | 12815.9 | 16290.5 | 16462.0 | 12675.7 |
| 65° | 764.8 | 771.0 | 858.6 | 1111.5 | 1778.6 | 3203.0 | 6491.2 | 11137.4 | 15413.1 | 15728.5 | 12180.0 |
| 67.5° | 590.8 | 600.8 | 635.9 | 729.7 | 1031.4 | 1995.2 | 4591.1 | 9346.2 | 13993.7 | 14400.5 | 10978.4 |
| 70° | 524.5 | 529.5 | 542.0 | 572.0 | 682.2 | 1126.5 | 2856.3 | 7301.0 | 11604.3 | 11719.4 | 8591.5 |
| 72.5° | 428.1 | 441.8 | 480.6 | 490.7 | 540.7 | 703.4 | 1589.6 | 4900.3 | 7796.7 | 7825.5 | 4806.4 |
| 75° | 331.7 | 334.2 | 391.8 | 420.6 | 455.6 | 484.4 | 709.7 | 2470.8 | 3745.0 | 3544.7 | 1852.5 |
| 77.5° | 247.8 | 259.1 | 285.4 | 321.7 | 371.7 | 346.7 | 317.9 | 931.2 | 1162.8 | 1141.5 | 538.2 |
| 80° | 159.0 | 165.2 | 199.0 | 241.6 | 289.1 | 226.6 | 179.0 | 272.9 | 255.3 | 262.9 | 128.9 |
| 82.5° | 80.1 | 81.4 | 127.7 | 196.5 | 184.0 | 113.9 | 112.7 | 111.4 | 95.1 | 93.9 | 60.1 |
| 85° | 8.8 | 18.8 | 82.6 | 112.7 | 82.6 | 37.6 | 52.6 | 51.3 | 50.1 | 51.3 | 35.0 |
| 87.5° | 1.3 | 1.3 | 13.8 | 16.3 | 11.3 | 12.5 | 15.0 | 16.3 | 20.0 | 18.8 | 15.0 |
| 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: GLAN-SA5B-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 | 1518.3 |
| 2.5° | 1563.3 | 1513.3 | 1420.6 | 1331.8 | 1265.4 | 1222.9 | 1167.8 | 1147.8 | 1119.0 | 1115.2 | 1101.5 |
| 5° | 1630.9 | 1535.8 | 1374.3 | 1246.7 | 1144.0 | 1066.4 | 998.8 | 942.5 | 897.5 | 887.4 | 892.4 |
| 7.5° | 1727.3 | 1585.9 | 1360.6 | 1186.6 | 1043.9 | 911.2 | 803.6 | 737.2 | 689.7 | 672.1 | 674.7 |
| 10° | 1836.2 | 1652.2 | 1358.1 | 1122.8 | 905.0 | 742.2 | 624.6 | 565.8 | 538.2 | 528.2 | 516.9 |
| 12.5° | 1965.1 | 1728.6 | 1351.8 | 1023.9 | 752.3 | 592.0 | 508.2 | 473.1 | 446.8 | 439.3 | 439.3 |
| 15° | 2110.3 | 1809.9 | 1321.8 | 901.2 | 610.8 | 489.4 | 433.1 | 405.5 | 396.8 | 389.3 | 389.3 |
| 17.5° | 2261.8 | 1890.0 | 1259.2 | 749.8 | 506.9 | 419.3 | 384.3 | 368.0 | 355.5 | 346.7 | 346.7 |
| 20° | 2434.5 | 1968.9 | 1159.0 | 615.8 | 428.1 | 374.3 | 346.7 | 327.9 | 317.9 | 310.4 | 307.9 |
| 22.5° | 2598.5 | 2032.7 | 1031.4 | 505.7 | 373.0 | 336.7 | 311.7 | 291.6 | 281.6 | 277.9 | 277.9 |
| 25° | 2768.7 | 2071.5 | 877.4 | 418.1 | 340.5 | 305.4 | 277.9 | 261.6 | 252.8 | 250.3 | 249.1 |
| 27.5° | 2933.9 | 2094.1 | 742.2 | 365.5 | 310.4 | 276.6 | 250.3 | 237.8 | 229.1 | 226.6 | 227.8 |
| 30° | 3134.2 | 2097.8 | 610.8 | 327.9 | 284.1 | 249.1 | 225.3 | 214.0 | 209.0 | 206.5 | 205.3 |
| 32.5° | 3337.0 | 2092.8 | 513.2 | 305.4 | 259.1 | 225.3 | 205.3 | 196.5 | 192.8 | 189.0 | 189.0 |
| 35° | 3564.8 | 2066.5 | 436.8 | 282.9 | 235.3 | 205.3 | 187.8 | 180.2 | 175.2 | 171.5 | 170.2 |
| 37.5° | 3847.6 | 2052.7 | 393.0 | 257.8 | 214.0 | 186.5 | 170.2 | 162.7 | 159.0 | 154.0 | 152.7 |
| 40° | 4293.2 | 2114.1 | 379.3 | 235.3 | 192.8 | 169.0 | 154.0 | 145.2 | 140.2 | 135.2 | 133.9 |
| 42.5° | 4849.0 | 2221.7 | 356.7 | 212.8 | 174.0 | 152.7 | 137.7 | 127.7 | 118.9 | 112.7 | 110.1 |
| 45° | 5568.7 | 2363.2 | 321.7 | 189.0 | 157.7 | 135.2 | 121.4 | 108.9 | 97.6 | 92.6 | 91.4 |
| 47.5° | 6323.5 | 2499.6 | 290.4 | 170.2 | 140.2 | 120.2 | 105.1 | 91.4 | 81.4 | 77.6 | 76.4 |
| 50° | 6786.6 | 2527.1 | 270.4 | 148.9 | 122.7 | 103.9 | 88.9 | 76.4 | 70.1 | 66.3 | 66.3 |
| 52.5° | 6998.1 | 2483.3 | 242.8 | 130.2 | 106.4 | 91.4 | 76.4 | 66.3 | 62.6 | 60.1 | 58.8 |
| 55° | 7145.8 | 2415.7 | 206.5 | 112.7 | 91.4 | 77.6 | 67.6 | 60.1 | 55.1 | 52.6 | 51.3 |
| 57° | 7232.2 | 2324.4 | 179.0 | 98.9 | 78.9 | 67.6 | 60.1 | 53.8 | 48.8 | 43.8 | 43.8 |
| 57.5° | 7235.9 | 2289.3 | 171.5 | 97.6 | 75.1 | 65.1 | 58.8 | 52.6 | 46.3 | 41.3 | 40.1 |
| 60° | 7124.5 | 2049.0 | 137.7 | 82.6 | 60.1 | 55.1 | 48.8 | 41.3 | 32.5 | 27.5 | 26.3 |
| 62.5° | 6766.5 | 1743.6 | 113.9 | 70.1 | 48.8 | 42.6 | 35.0 | 31.3 | 22.5 | 16.3 | 16.3 |
| 65° | 6224.6 | 1414.4 | 97.6 | 56.3 | 40.1 | 31.3 | 23.8 | 22.5 | 13.8 | 7.5 | 6.3 |
| 67.5° | 5441.0 | 1101.5 | 82.6 | 46.3 | 33.8 | 22.5 | 16.3 | 15.0 | 7.5 | 2.5 | 0.0 |
| 70° | 4145.5 | 751.0 | 68.8 | 37.6 | 25.0 | 16.3 | 11.3 | 8.8 | 5.0 | 1.3 | 0.0 |
| 72.5° | 2389.4 | 413.1 | 57.6 | 28.8 | 18.8 | 12.5 | 8.8 | 5.0 | 5.0 | 0.0 | 0.0 |
| 75° | 853.6 | 177.7 | 43.8 | 21.3 | 15.0 | 10.0 | 6.3 | 2.5 | 3.8 | 1.3 | 0.0 |
| 77.5° | 271.6 | 95.1 | 28.8 | 16.3 | 12.5 | 7.5 | 5.0 | 2.5 | 2.5 | 1.3 | 0.0 |
| 80° | 80.1 | 50.1 | 17.5 | 13.8 | 8.8 | 6.3 | 3.8 | 1.3 | 2.5 | 1.3 | 0.0 |
| 82.5° | 43.8 | 25.0 | 13.8 | 10.0 | 8.8 | 5.0 | 3.8 | 1.3 | 1.3 | 1.3 | 0.0 |
| 85° | 22.5 | 15.0 | 11.3 | 10.0 | 8.8 | 5.0 | 3.8 | 1.3 | 0.0 | 1.3 | 1.3 |
| 87.5° | 12.5 | 11.3 | 11.3 | 10.0 | 8.8 | 6.3 | 3.8 | 1.3 | 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)