

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: P653508

Luminaire Tested: **GLAN-SA7D-840-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P653508
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-SA7D-840-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 4000K, 1200mA 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: 36279.9 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

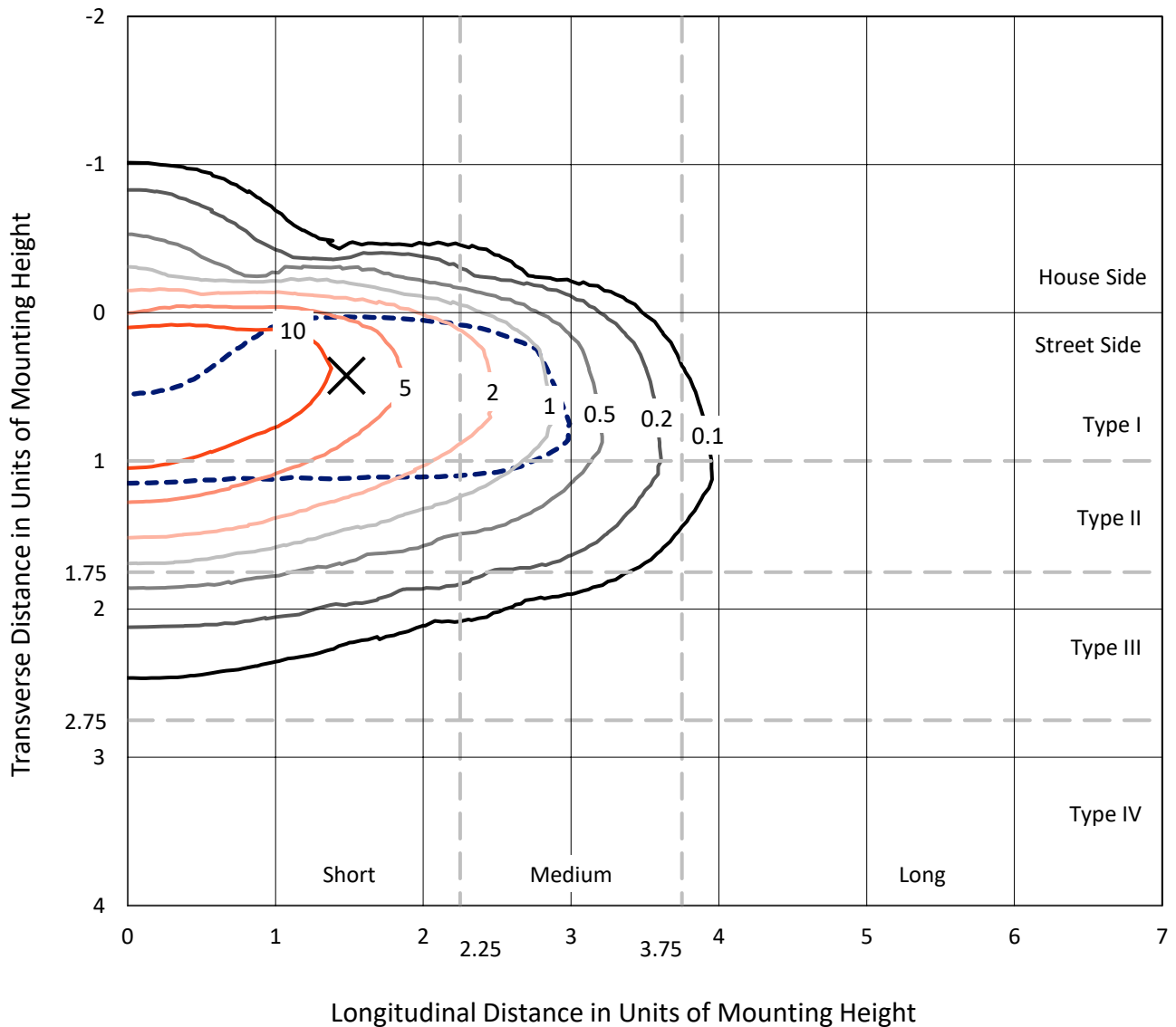
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

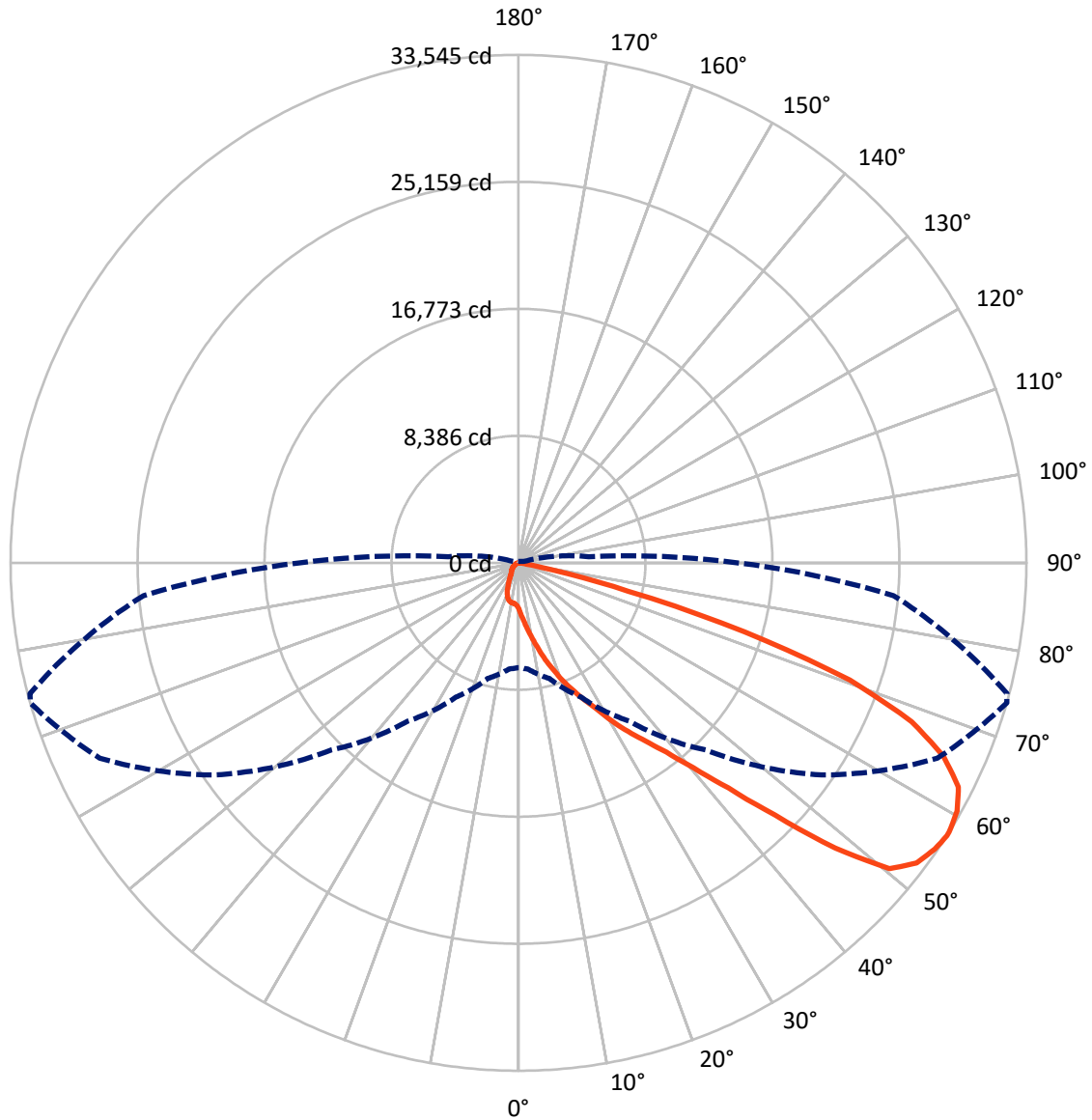
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.4 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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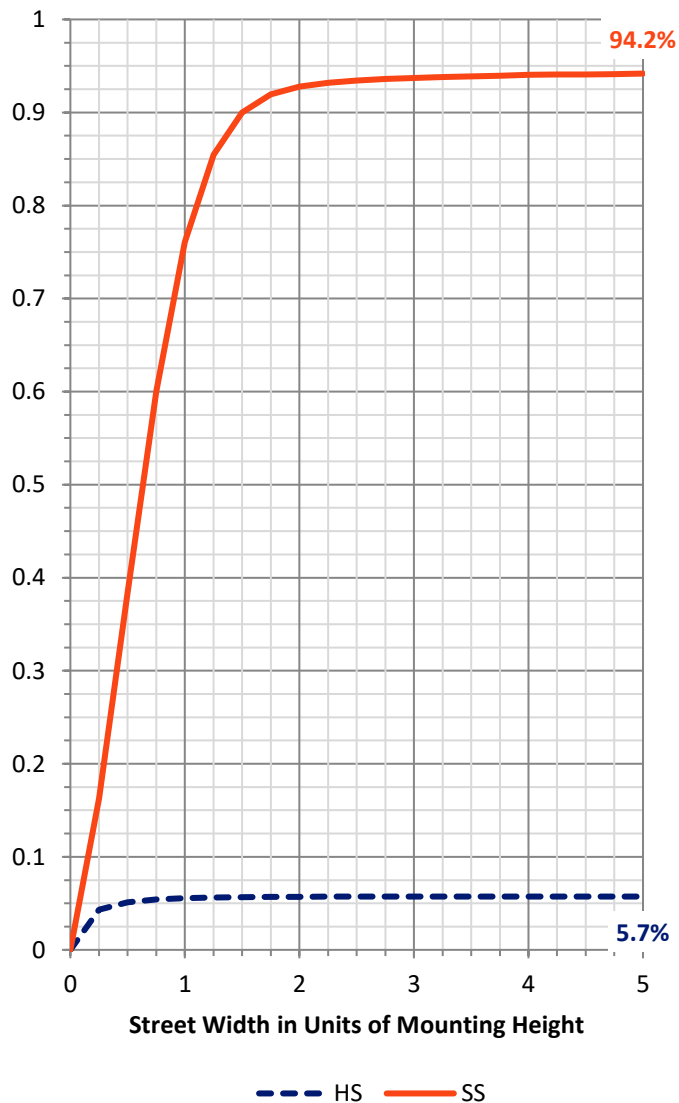
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2092.5 | 0.0 | 2092.5 |
| | % Fixture | 5.8 | 0.0 | 5.8 |
| Street Side | Lumens | 34187.4 | 0.0 | 34187.4 |
| | % Fixture | 94.2 | 0.0 | 94.2 |
| Total | Lumens | 36279.9 | 0.0 | 36279.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 366.7 | 1.0 |
| 10°-20° | 1445.5 | 4.0 |
| 20°-30° | 3093.1 | 8.5 |
| 30°-40° | 5685.1 | 15.7 |
| 40°-50° | 8715.4 | 24.0 |
| 50°-60° | 9219.7 | 25.4 |
| 60°-70° | 6020.7 | 16.6 |
| 70°-80° | 1645.1 | 4.5 |
| 80°-90° | 88.6 | 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° | 36279.9 | 100.0 |
| 0°-180° | 36279.9 | 100.0 |

Coefficient of Utilization



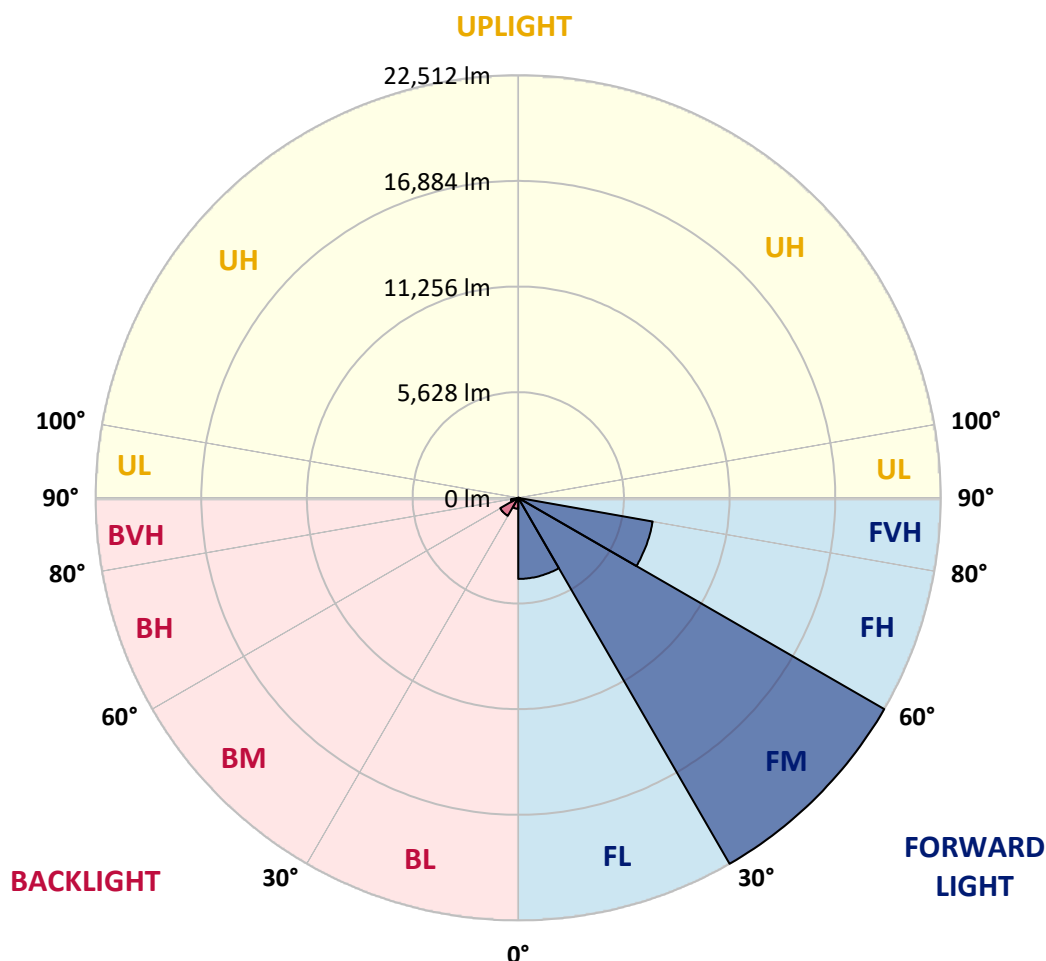
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 4320.9 | 11.9 | | | |
| FM (30°-60°) | 22512.3 | 62.1 | | | |
| FH (60°-80°) | 7272.9 | 20.0 | | | G3/7500 |
| FVH (80°-90°) | 81.2 | 0.2 | | | G1/100 |
| BL (0°-30°) | 584.5 | 1.6 | B2/1000 | | |
| BM (30°-60°) | 1107.8 | 3.1 | B2/2500 | | |
| BH (60°-80°) | 392.9 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 7.3 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Short





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CATALOG NUMBER: GLAN-SA7D-840-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 |
| 2.5° | 4446.1 | 4406.1 | 4325.9 | 4298.4 | 4180.6 | 3997.8 | 3837.5 | 3622.0 | 3451.7 | 3434.1 | 3228.8 |
| 5° | 5954.0 | 5863.9 | 5826.3 | 5646.0 | 5362.9 | 5097.4 | 4641.5 | 4295.8 | 3897.5 | 3867.5 | 3454.2 |
| 7.5° | 7406.9 | 7281.6 | 7244.0 | 7073.7 | 6743.1 | 6324.7 | 5733.6 | 5104.9 | 4473.7 | 4416.1 | 3757.3 |
| 10° | 8458.9 | 8476.4 | 8408.8 | 8296.1 | 8028.1 | 7602.2 | 6873.3 | 6014.2 | 5115.0 | 5042.3 | 4097.9 |
| 12.5° | 9212.9 | 9210.4 | 9222.9 | 9220.4 | 9077.6 | 8754.5 | 7988.0 | 6998.5 | 5821.3 | 5678.5 | 4488.7 |
| 15° | 9703.8 | 9711.4 | 9748.9 | 9879.1 | 9894.2 | 9693.8 | 9055.0 | 7940.4 | 6640.4 | 6462.5 | 4912.0 |
| 17.5° | 10199.8 | 10252.4 | 10312.5 | 10435.2 | 10545.5 | 10465.3 | 10014.5 | 8922.3 | 7381.8 | 7249.1 | 5365.4 |
| 20° | 11018.9 | 11091.5 | 11056.5 | 11131.6 | 11189.2 | 11196.7 | 10848.6 | 9829.1 | 8281.1 | 8058.1 | 5883.9 |
| 22.5° | 12328.9 | 12326.5 | 12236.2 | 12101.0 | 11988.3 | 11983.2 | 11667.6 | 10760.8 | 9097.7 | 8882.2 | 6404.9 |
| 25° | 13984.7 | 13992.1 | 13816.8 | 13431.0 | 13150.5 | 12807.3 | 12444.1 | 11577.5 | 9971.8 | 9706.3 | 6953.5 |
| 27.5° | 15883.3 | 15835.7 | 15570.2 | 15039.2 | 14483.1 | 13896.9 | 13373.4 | 12526.8 | 10898.6 | 10678.2 | 7582.2 |
| 30° | 17589.1 | 17571.6 | 17261.0 | 16612.2 | 15880.8 | 15292.2 | 14533.2 | 13716.6 | 12098.5 | 11827.9 | 8286.0 |
| 32.5° | 19177.2 | 19202.2 | 18771.5 | 18100.1 | 17393.7 | 16715.0 | 15913.4 | 14853.8 | 13275.8 | 12892.5 | 9052.5 |
| 35° | 20417.1 | 20442.2 | 19996.3 | 19437.7 | 18711.3 | 18147.7 | 17383.7 | 16066.1 | 14438.0 | 14114.9 | 9934.3 |
| 37.5° | 21078.4 | 21111.0 | 20852.9 | 20432.1 | 19978.8 | 19695.7 | 18984.3 | 17626.7 | 15850.7 | 15655.4 | 10976.3 |
| 40° | 21203.6 | 21241.2 | 21128.5 | 21015.7 | 20990.7 | 21193.6 | 20985.7 | 19465.3 | 17809.5 | 17504.0 | 12529.3 |
| 42.5° | 20827.9 | 20878.0 | 20928.1 | 21178.6 | 21689.6 | 22433.5 | 23157.4 | 21960.1 | 20331.9 | 19921.2 | 14428.0 |
| 45° | 19841.0 | 19836.0 | 20033.9 | 20682.6 | 21827.3 | 23415.5 | 25426.8 | 25083.7 | 23768.6 | 23280.1 | 17110.7 |
| 47.5° | 18152.7 | 18127.7 | 18556.0 | 19480.3 | 21263.8 | 23595.8 | 27277.9 | 28876.0 | 28154.6 | 27703.7 | 19993.8 |
| 50° | 15580.2 | 15703.0 | 16376.8 | 17666.8 | 19863.5 | 23049.7 | 27849.0 | 31363.3 | 31754.1 | 31275.7 | 22323.3 |
| 52.5° | 12566.9 | 12561.8 | 13618.9 | 15369.8 | 17789.5 | 21847.4 | 27450.7 | 31814.2 | 32923.9 | 32558.1 | 23470.5 |
| 55° | 9300.5 | 9365.6 | 10465.3 | 12231.3 | 15096.8 | 19653.2 | 26150.7 | 31350.8 | 33369.7 | 33111.8 | 24227.0 |
| 57° | 6918.4 | 7033.6 | 7915.3 | 9783.9 | 12752.3 | 17481.4 | 24419.9 | 30521.7 | 33545.1 | 33404.8 | 24855.8 |
| 57.5° | 6457.5 | 6462.5 | 7321.7 | 9020.0 | 12065.9 | 16647.3 | 23923.9 | 30176.0 | 33540.1 | 33462.4 | 24958.4 |
| 60° | 3975.2 | 4100.5 | 4694.1 | 6096.8 | 8832.1 | 12992.7 | 20600.0 | 28189.6 | 33279.5 | 33392.2 | 25396.8 |
| 62.5° | 2379.6 | 2432.3 | 2817.9 | 3674.7 | 5693.6 | 9483.4 | 16857.7 | 25647.2 | 32600.8 | 32943.9 | 25366.7 |
| 65° | 1530.5 | 1543.0 | 1718.3 | 2224.3 | 3559.4 | 6409.9 | 12990.2 | 22288.3 | 30844.9 | 31476.0 | 24374.8 |
| 67.5° | 1182.3 | 1202.3 | 1272.4 | 1460.3 | 2064.0 | 3992.7 | 9187.8 | 18703.8 | 28004.3 | 28818.4 | 21970.1 |
| 70° | 1049.6 | 1059.6 | 1084.6 | 1144.7 | 1365.1 | 2254.4 | 5716.1 | 14610.9 | 23222.5 | 23453.0 | 17193.3 |
| 72.5° | 856.6 | 884.2 | 961.9 | 981.9 | 1082.1 | 1407.7 | 3181.2 | 9806.6 | 15602.7 | 15660.3 | 9618.7 |
| 75° | 663.8 | 668.8 | 784.0 | 841.7 | 911.7 | 969.4 | 1420.3 | 4944.6 | 7494.6 | 7093.8 | 3707.2 |
| 77.5° | 495.9 | 518.5 | 571.1 | 643.8 | 743.9 | 693.8 | 636.2 | 1863.7 | 2327.0 | 2284.4 | 1077.1 |
| 80° | 318.2 | 330.7 | 398.3 | 483.4 | 578.6 | 453.4 | 358.2 | 546.1 | 511.0 | 526.0 | 258.0 |
| 82.5° | 160.3 | 162.8 | 255.5 | 393.3 | 368.2 | 227.9 | 225.5 | 222.9 | 190.4 | 187.9 | 120.3 |
| 85° | 17.5 | 37.6 | 165.3 | 225.5 | 165.3 | 75.2 | 105.2 | 102.7 | 100.2 | 102.7 | 70.1 |
| 87.5° | 2.5 | 2.5 | 27.6 | 32.5 | 22.5 | 25.1 | 30.0 | 32.5 | 40.1 | 37.6 | 30.0 |
| 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-SA7D-840-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 | 3038.4 |
| 2.5° | 3128.6 | 3028.4 | 2843.0 | 2665.1 | 2532.4 | 2447.2 | 2337.1 | 2296.9 | 2239.3 | 2231.8 | 2204.3 |
| 5° | 3263.8 | 3073.4 | 2750.3 | 2494.8 | 2289.5 | 2134.1 | 1998.9 | 1886.2 | 1796.0 | 1775.9 | 1785.9 |
| 7.5° | 3456.7 | 3173.7 | 2722.8 | 2374.6 | 2089.0 | 1823.5 | 1608.2 | 1475.4 | 1380.2 | 1345.1 | 1350.1 |
| 10° | 3674.7 | 3306.4 | 2717.8 | 2246.9 | 1811.0 | 1485.4 | 1249.9 | 1132.2 | 1077.1 | 1057.1 | 1034.5 |
| 12.5° | 3932.6 | 3459.2 | 2705.2 | 2049.0 | 1505.4 | 1184.8 | 1016.9 | 946.8 | 894.2 | 879.2 | 879.2 |
| 15° | 4223.2 | 3622.0 | 2645.1 | 1803.5 | 1222.4 | 979.4 | 866.7 | 811.6 | 794.1 | 779.0 | 779.0 |
| 17.5° | 4526.3 | 3782.3 | 2519.9 | 1500.4 | 1014.5 | 839.1 | 769.0 | 736.5 | 711.4 | 693.8 | 693.8 |
| 20° | 4871.9 | 3940.2 | 2319.5 | 1232.4 | 856.6 | 749.0 | 693.8 | 656.2 | 636.2 | 621.2 | 616.2 |
| 22.5° | 5200.1 | 4067.9 | 2064.0 | 1012.0 | 746.5 | 673.8 | 623.7 | 583.7 | 563.6 | 556.1 | 556.1 |
| 25° | 5540.8 | 4145.5 | 1755.9 | 836.6 | 681.3 | 611.2 | 556.1 | 523.5 | 505.9 | 501.0 | 498.5 |
| 27.5° | 5871.4 | 4190.6 | 1485.4 | 731.4 | 621.2 | 553.5 | 501.0 | 475.9 | 458.4 | 453.4 | 455.9 |
| 30° | 6272.2 | 4198.1 | 1222.4 | 656.2 | 568.6 | 498.5 | 450.9 | 428.3 | 418.3 | 413.3 | 410.8 |
| 32.5° | 6678.0 | 4188.1 | 1027.0 | 611.2 | 518.5 | 450.9 | 410.8 | 393.3 | 385.8 | 378.2 | 378.2 |
| 35° | 7133.9 | 4135.5 | 874.2 | 566.1 | 470.9 | 410.8 | 375.8 | 360.7 | 350.7 | 343.1 | 340.7 |
| 37.5° | 7699.9 | 4107.9 | 786.5 | 516.0 | 428.3 | 373.2 | 340.7 | 325.6 | 318.2 | 308.1 | 305.6 |
| 40° | 8591.7 | 4230.7 | 759.0 | 470.9 | 385.8 | 338.2 | 308.1 | 290.6 | 280.6 | 270.5 | 268.0 |
| 42.5° | 9703.8 | 4446.1 | 713.9 | 425.8 | 348.2 | 305.6 | 275.5 | 255.5 | 238.0 | 225.5 | 220.4 |
| 45° | 11144.1 | 4729.2 | 643.8 | 378.2 | 315.6 | 270.5 | 243.0 | 217.9 | 195.4 | 185.4 | 182.8 |
| 47.5° | 12654.5 | 5002.2 | 581.1 | 340.7 | 280.6 | 240.4 | 210.4 | 182.8 | 162.8 | 155.3 | 152.8 |
| 50° | 13581.3 | 5057.3 | 541.0 | 298.1 | 245.5 | 207.9 | 177.9 | 152.8 | 140.3 | 132.8 | 132.8 |
| 52.5° | 14004.7 | 4969.6 | 485.9 | 260.5 | 212.9 | 182.8 | 152.8 | 132.8 | 125.2 | 120.3 | 117.7 |
| 55° | 14300.3 | 4834.4 | 413.3 | 225.5 | 182.8 | 155.3 | 135.2 | 120.3 | 110.3 | 105.2 | 102.7 |
| 57° | 14473.1 | 4651.5 | 358.2 | 197.9 | 157.8 | 135.2 | 120.3 | 107.7 | 97.7 | 87.6 | 87.6 |
| 57.5° | 14480.6 | 4581.3 | 343.1 | 195.4 | 150.3 | 130.3 | 117.7 | 105.2 | 92.7 | 82.7 | 80.1 |
| 60° | 14257.6 | 4100.5 | 275.5 | 165.3 | 120.3 | 110.3 | 97.7 | 82.7 | 65.1 | 55.1 | 52.6 |
| 62.5° | 13541.3 | 3489.3 | 227.9 | 140.3 | 97.7 | 85.2 | 70.1 | 62.7 | 45.1 | 32.5 | 32.5 |
| 65° | 12456.6 | 2830.5 | 195.4 | 112.7 | 80.1 | 62.7 | 47.6 | 45.1 | 27.6 | 15.1 | 12.5 |
| 67.5° | 10888.6 | 2204.3 | 165.3 | 92.7 | 67.6 | 45.1 | 32.5 | 30.0 | 15.1 | 5.0 | 0.0 |
| 70° | 8296.1 | 1503.0 | 137.8 | 75.2 | 50.1 | 32.5 | 22.5 | 17.5 | 10.0 | 2.5 | 0.0 |
| 72.5° | 4781.8 | 826.6 | 115.2 | 57.6 | 37.6 | 25.1 | 17.5 | 10.0 | 10.0 | 0.0 | 0.0 |
| 75° | 1708.3 | 355.7 | 87.6 | 42.6 | 30.0 | 20.0 | 12.5 | 5.0 | 7.5 | 2.5 | 0.0 |
| 77.5° | 543.5 | 190.4 | 57.6 | 32.5 | 25.1 | 15.1 | 10.0 | 5.0 | 5.0 | 2.5 | 0.0 |
| 80° | 160.3 | 100.2 | 35.1 | 27.6 | 17.5 | 12.5 | 7.5 | 2.5 | 5.0 | 2.5 | 0.0 |
| 82.5° | 87.6 | 50.1 | 27.6 | 20.0 | 17.5 | 10.0 | 7.5 | 2.5 | 2.5 | 2.5 | 0.0 |
| 85° | 45.1 | 30.0 | 22.5 | 20.0 | 17.5 | 10.0 | 7.5 | 2.5 | 0.0 | 2.5 | 2.5 |
| 87.5° | 25.1 | 22.5 | 22.5 | 20.0 | 17.5 | 12.5 | 7.5 | 2.5 | 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)