

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: P454618

Luminaire Tested: **GLAN-SA5D-727-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA5D-727-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33019 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

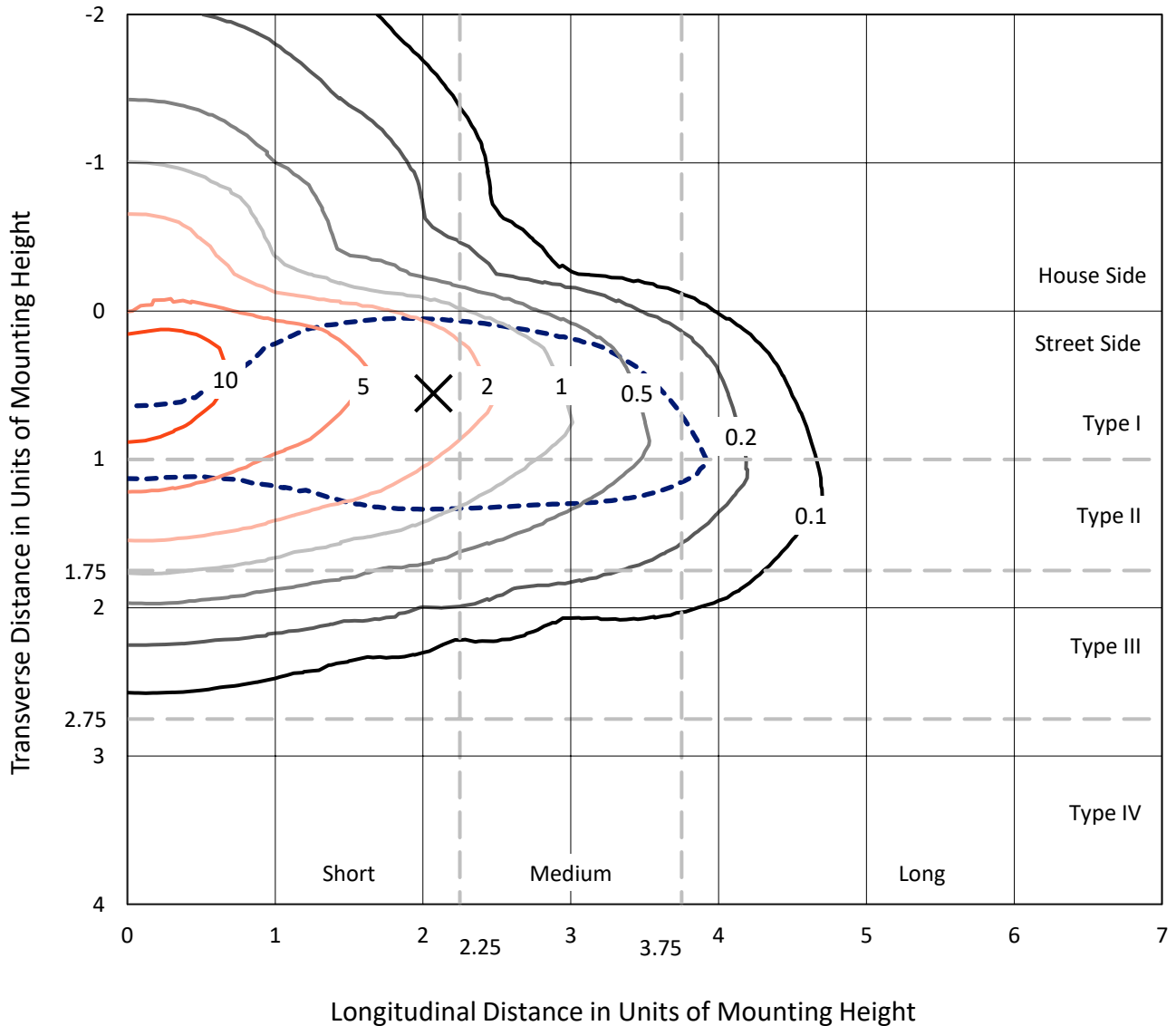
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

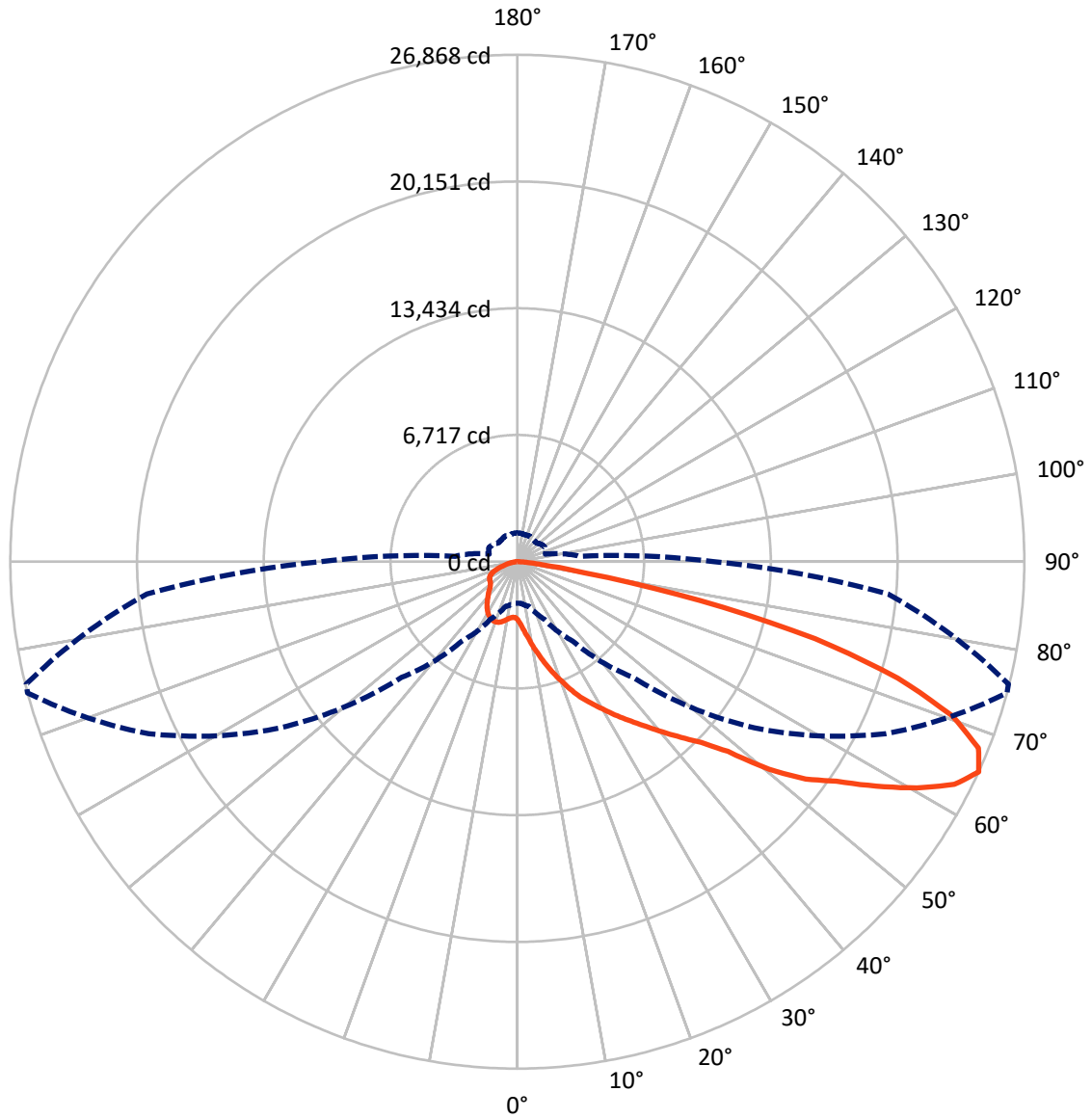
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5550.9 | 0.0 | 5550.9 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 27468.1 | 0.0 | 27468.1 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 33019.0 | 0.0 | 33019.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 372.7 | 1.1 |
| 10°-20° | 1460.0 | 4.4 |
| 20°-30° | 2820.2 | 8.5 |
| 30°-40° | 4580.8 | 13.9 |
| 40°-50° | 6301.3 | 19.1 |
| 50°-60° | 7439.7 | 22.5 |
| 60°-70° | 6518.4 | 19.7 |
| 70°-80° | 3111.9 | 9.4 |
| 80°-90° | 414.1 | 1.3 |
| 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° | 33019.0 | 100.0 |
| 0°-180° | 33019.0 | 100.0 |

Coefficient of Utilization



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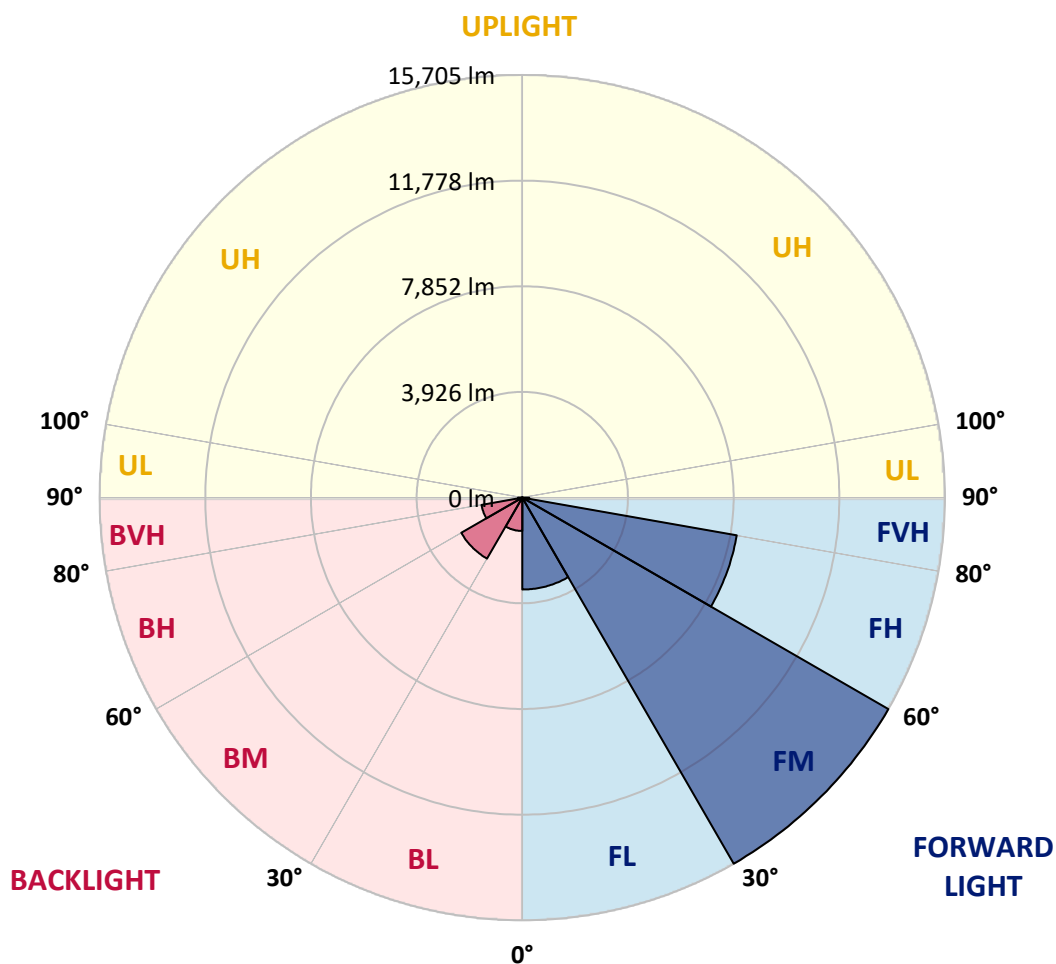
CATALOG NUMBER: GLAN-SA5D-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 3413.6 | 10.3 | | | |
| FM | (30°-60°) | 15704.5 | 47.6 | | | |
| FH | (60°-80°) | 8091.1 | 24.5 | | | G4/12000 |
| FVH | (80°-90°) | 258.8 | 0.8 | | | G3/500 |
| BL | (0°-30°) | 1239.2 | 3.8 | B3/2500 | | |
| BM | (30°-60°) | 2617.2 | 7.9 | B3/5000 | | |
| BH | (60°-80°) | 1539.2 | 4.7 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 155.3 | 0.5 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 |
| 2.5° | 4076.2 | 4049.3 | 4020.7 | 3941.9 | 3857.7 | 3762.8 | 3626.7 | 3495.9 | 3322.2 | 3316.8 | 3187.9 |
| 5° | 5206.3 | 5188.4 | 5061.2 | 4987.8 | 4792.6 | 4532.9 | 4312.6 | 3970.5 | 3653.5 | 3615.9 | 3365.2 |
| 7.5° | 6245.0 | 6175.2 | 6126.8 | 5994.3 | 5800.9 | 5467.7 | 5041.5 | 4579.4 | 4049.3 | 3999.2 | 3583.7 |
| 10° | 7027.7 | 7020.5 | 6995.4 | 6880.8 | 6735.7 | 6404.4 | 5931.6 | 5268.9 | 4550.8 | 4452.3 | 3848.7 |
| 12.5° | 7613.3 | 7618.7 | 7615.1 | 7613.3 | 7509.4 | 7228.2 | 6716.0 | 6017.6 | 5057.6 | 4987.8 | 4155.0 |
| 15° | 7998.3 | 8052.1 | 8073.6 | 8163.1 | 8172.1 | 7984.0 | 7543.4 | 6741.1 | 5628.9 | 5525.1 | 4484.5 |
| 17.5° | 8252.7 | 8279.5 | 8379.8 | 8532.0 | 8655.6 | 8621.6 | 8229.4 | 7410.9 | 6212.8 | 6039.1 | 4826.6 |
| 20° | 8496.2 | 8542.8 | 8619.8 | 8827.5 | 9046.0 | 9146.3 | 8870.5 | 8096.8 | 6791.2 | 6680.2 | 5204.5 |
| 22.5° | 9003.1 | 9069.3 | 9096.2 | 9201.9 | 9388.1 | 9565.4 | 9440.1 | 8754.1 | 7425.2 | 7274.8 | 5605.6 |
| 25° | 9860.9 | 9930.8 | 9855.5 | 9830.5 | 9891.4 | 9979.1 | 9952.3 | 9373.8 | 8023.4 | 7808.5 | 5985.3 |
| 27.5° | 10978.5 | 10987.4 | 10840.6 | 10700.9 | 10550.4 | 10505.7 | 10423.3 | 9923.6 | 8542.8 | 8363.7 | 6366.8 |
| 30° | 12178.4 | 12135.4 | 11891.8 | 11639.3 | 11385.0 | 11134.3 | 10897.9 | 10453.7 | 9121.3 | 8915.3 | 6741.1 |
| 32.5° | 13292.4 | 13269.1 | 12998.7 | 12606.4 | 12176.6 | 11940.2 | 11462.0 | 10989.2 | 9740.9 | 9542.1 | 7126.2 |
| 35° | 14126.9 | 14161.0 | 13863.7 | 13435.6 | 12966.4 | 12756.9 | 12153.3 | 11551.6 | 10382.1 | 10165.4 | 7545.2 |
| 37.5° | 14719.7 | 14701.8 | 14438.6 | 14067.8 | 13655.9 | 13473.3 | 12961.0 | 12165.9 | 11071.6 | 10863.8 | 8003.7 |
| 40° | 14931.1 | 14920.3 | 14725.1 | 14454.7 | 14193.2 | 14128.7 | 13806.4 | 12828.5 | 11861.4 | 11617.8 | 8555.3 |
| 42.5° | 14796.8 | 14820.0 | 14691.1 | 14617.7 | 14569.3 | 14615.9 | 14646.3 | 13697.1 | 12722.8 | 12499.0 | 9153.5 |
| 45° | 14384.8 | 14372.3 | 14354.4 | 14474.4 | 14746.6 | 15052.9 | 15477.3 | 14517.4 | 13659.5 | 13480.4 | 9955.8 |
| 47.5° | 13648.8 | 13738.3 | 13783.1 | 14114.4 | 14709.0 | 15434.3 | 16433.7 | 15617.0 | 15018.8 | 14863.0 | 11179.1 |
| 50° | 12619.0 | 12690.6 | 12955.7 | 13544.9 | 14431.4 | 15577.6 | 17368.5 | 17415.1 | 17286.2 | 16994.2 | 12507.9 |
| 52.5° | 11010.7 | 11121.7 | 11668.0 | 12747.9 | 13861.9 | 15518.5 | 17934.5 | 18957.1 | 19127.3 | 18908.8 | 13817.1 |
| 55° | 9210.8 | 9366.6 | 9943.3 | 11359.9 | 13077.5 | 15196.1 | 18324.9 | 19850.8 | 20529.6 | 20327.2 | 15077.9 |
| 57.5° | 7448.5 | 7613.3 | 8206.1 | 9578.0 | 11709.2 | 14483.3 | 18581.0 | 20846.6 | 22438.7 | 22175.4 | 16646.8 |
| 60° | 5582.4 | 5754.3 | 6262.9 | 7676.0 | 9760.6 | 13090.0 | 18407.3 | 21709.8 | 24346.1 | 24233.2 | 18217.5 |
| 62.5° | 3601.6 | 3791.4 | 4233.8 | 5403.3 | 7502.3 | 11186.2 | 17477.8 | 22186.2 | 25997.3 | 25861.2 | 19363.7 |
| 65° | 2193.9 | 2215.4 | 2459.0 | 3354.4 | 5134.6 | 8661.0 | 15351.9 | 21554.0 | 26867.7 | 26826.5 | 19712.9 |
| 67.5° | 1418.4 | 1452.5 | 1563.5 | 2009.4 | 3078.6 | 6015.8 | 12275.1 | 19467.5 | 26359.1 | 26344.7 | 18991.1 |
| 70° | 1198.1 | 1208.9 | 1259.0 | 1355.7 | 1789.2 | 3648.1 | 8619.8 | 16141.8 | 24426.6 | 24426.6 | 17255.7 |
| 72.5° | 1071.0 | 1085.3 | 1103.2 | 1133.7 | 1276.9 | 2066.7 | 5143.6 | 12565.2 | 21090.1 | 21229.8 | 14687.5 |
| 75° | 972.5 | 968.9 | 979.6 | 985.0 | 1088.9 | 1350.4 | 2659.5 | 9293.2 | 16315.5 | 16036.1 | 10636.4 |
| 77.5° | 832.8 | 838.2 | 832.8 | 856.1 | 961.7 | 1028.0 | 1350.4 | 6236.1 | 9887.8 | 9526.0 | 5338.8 |
| 80° | 684.1 | 693.1 | 702.0 | 716.4 | 822.0 | 780.9 | 811.3 | 2842.2 | 3657.1 | 3580.1 | 1649.5 |
| 82.5° | 514.0 | 526.5 | 540.9 | 574.9 | 646.5 | 515.8 | 512.2 | 1214.3 | 1319.9 | 1208.9 | 607.1 |
| 85° | 207.7 | 245.4 | 370.7 | 404.8 | 406.5 | 283.0 | 315.2 | 506.8 | 539.1 | 526.5 | 238.2 |
| 87.5° | 48.4 | 57.3 | 120.0 | 180.9 | 166.6 | 105.7 | 116.4 | 164.8 | 188.0 | 173.7 | 80.6 |
| 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-SA5D-727-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 | 3067.9 |
| 2.5° | 3128.8 | 3066.1 | 2958.6 | 2876.3 | 2817.2 | 2765.2 | 2733.0 | 2713.3 | 2706.1 | 2704.3 | 2706.1 |
| 5° | 3234.4 | 3123.4 | 2953.3 | 2845.8 | 2786.7 | 2752.7 | 2733.0 | 2731.2 | 2733.0 | 2734.8 | 2729.4 |
| 7.5° | 3379.5 | 3220.1 | 2998.0 | 2897.7 | 2853.0 | 2827.9 | 2818.9 | 2815.4 | 2817.2 | 2815.4 | 2815.4 |
| 10° | 3572.9 | 3354.4 | 3085.8 | 2981.9 | 2944.3 | 2915.7 | 2901.3 | 2892.4 | 2885.2 | 2878.0 | 2874.5 |
| 12.5° | 3786.0 | 3503.1 | 3180.7 | 3080.4 | 3026.7 | 2981.9 | 2949.7 | 2926.4 | 2910.3 | 2894.2 | 2890.6 |
| 15° | 4024.2 | 3660.7 | 3286.4 | 3146.7 | 3069.7 | 3003.4 | 2947.9 | 2910.3 | 2881.6 | 2858.3 | 2856.6 |
| 17.5° | 4251.7 | 3809.3 | 3358.0 | 3177.1 | 3064.3 | 2971.2 | 2897.7 | 2845.8 | 2810.0 | 2779.5 | 2776.0 |
| 20° | 4495.3 | 3950.8 | 3390.3 | 3157.4 | 3010.6 | 2897.7 | 2801.0 | 2738.3 | 2697.2 | 2663.1 | 2657.8 |
| 22.5° | 4740.6 | 4070.8 | 3386.7 | 3094.7 | 2917.4 | 2784.9 | 2682.8 | 2616.6 | 2568.2 | 2534.2 | 2521.6 |
| 25° | 4975.2 | 4167.5 | 3341.9 | 2994.5 | 2788.5 | 2650.6 | 2546.7 | 2485.8 | 2442.8 | 2401.7 | 2401.7 |
| 27.5° | 5186.6 | 4224.8 | 3257.7 | 2872.7 | 2656.0 | 2510.9 | 2428.5 | 2373.0 | 2333.6 | 2306.7 | 2290.6 |
| 30° | 5394.3 | 4251.7 | 3143.1 | 2718.6 | 2516.3 | 2392.7 | 2326.4 | 2294.2 | 2258.4 | 2227.9 | 2224.3 |
| 32.5° | 5580.6 | 4246.3 | 2999.8 | 2568.2 | 2383.7 | 2296.0 | 2269.1 | 2244.0 | 2206.4 | 2163.5 | 2152.7 |
| 35° | 5761.5 | 4210.5 | 2829.7 | 2403.4 | 2272.7 | 2238.7 | 2245.8 | 2210.0 | 2142.0 | 2088.2 | 2079.3 |
| 37.5° | 5958.5 | 4146.0 | 2643.4 | 2269.1 | 2179.6 | 2211.8 | 2229.7 | 2150.9 | 2039.9 | 1955.7 | 1936.0 |
| 40° | 6185.9 | 4072.6 | 2450.0 | 2134.8 | 2106.1 | 2186.7 | 2186.7 | 2041.7 | 1889.4 | 1837.5 | 1823.2 |
| 42.5° | 6452.8 | 4011.7 | 2288.8 | 2022.0 | 2045.3 | 2125.8 | 2116.9 | 1896.6 | 1833.9 | 1807.1 | 1799.9 |
| 45° | 6875.4 | 3990.2 | 2122.3 | 1923.5 | 1995.1 | 2054.2 | 1980.8 | 1846.5 | 1810.6 | 1789.2 | 1782.0 |
| 47.5° | 7543.4 | 4015.3 | 1975.4 | 1850.0 | 1937.8 | 1982.6 | 1828.6 | 1812.4 | 1787.4 | 1756.9 | 1753.3 |
| 50° | 8163.1 | 3992.0 | 1871.5 | 1808.9 | 1887.7 | 1896.6 | 1765.9 | 1771.2 | 1756.9 | 1722.9 | 1715.7 |
| 52.5° | 8669.9 | 3918.6 | 1805.3 | 1787.4 | 1844.7 | 1746.2 | 1706.8 | 1726.5 | 1721.1 | 1678.1 | 1670.9 |
| 55° | 9226.9 | 3873.8 | 1773.0 | 1787.4 | 1816.0 | 1615.4 | 1651.2 | 1679.9 | 1672.7 | 1642.3 | 1640.5 |
| 57.5° | 9902.1 | 3882.8 | 1749.7 | 1792.7 | 1787.4 | 1549.2 | 1595.7 | 1629.8 | 1628.0 | 1619.0 | 1619.0 |
| 60° | 10593.4 | 3886.3 | 1713.9 | 1790.9 | 1753.3 | 1497.2 | 1538.4 | 1586.8 | 1590.4 | 1595.7 | 1595.7 |
| 62.5° | 10822.7 | 3730.5 | 1644.1 | 1758.7 | 1678.1 | 1447.1 | 1484.7 | 1551.0 | 1547.4 | 1561.7 | 1563.5 |
| 65° | 10394.6 | 3298.9 | 1540.2 | 1685.3 | 1581.4 | 1411.3 | 1443.5 | 1504.4 | 1484.7 | 1522.3 | 1529.5 |
| 67.5° | 9461.5 | 2729.4 | 1379.0 | 1552.7 | 1473.9 | 1373.7 | 1416.6 | 1439.9 | 1404.1 | 1477.5 | 1479.3 |
| 70° | 8177.4 | 2131.2 | 1174.9 | 1364.7 | 1352.2 | 1334.3 | 1395.1 | 1359.3 | 1309.2 | 1398.7 | 1380.8 |
| 72.5° | 6837.8 | 1628.0 | 938.5 | 1115.8 | 1189.2 | 1275.2 | 1357.5 | 1255.4 | 1185.6 | 1212.5 | 1180.2 |
| 75° | 5136.4 | 1203.5 | 754.0 | 874.0 | 990.4 | 1191.0 | 1323.5 | 1130.1 | 1022.6 | 997.6 | 990.4 |
| 77.5° | 2618.4 | 786.2 | 564.1 | 653.7 | 743.2 | 1076.4 | 1276.9 | 983.2 | 847.1 | 807.7 | 789.8 |
| 80° | 934.9 | 488.9 | 397.6 | 451.3 | 501.5 | 925.9 | 1115.8 | 813.1 | 657.3 | 650.1 | 657.3 |
| 82.5° | 433.4 | 315.2 | 266.9 | 295.5 | 297.3 | 617.9 | 850.7 | 607.1 | 499.7 | 759.4 | 641.2 |
| 85° | 186.3 | 157.6 | 150.4 | 146.9 | 136.1 | 275.8 | 478.2 | 326.0 | 508.6 | 227.4 | 209.5 |
| 87.5° | 55.5 | 62.7 | 55.5 | 41.2 | 30.4 | 30.4 | 48.4 | 17.9 | 12.5 | 9.0 | 9.0 |
| 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)