

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: P158229

Luminaire Tested: **VST-E05-LED-E-U-SL2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158229
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33712)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL2-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (105) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13740.3 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

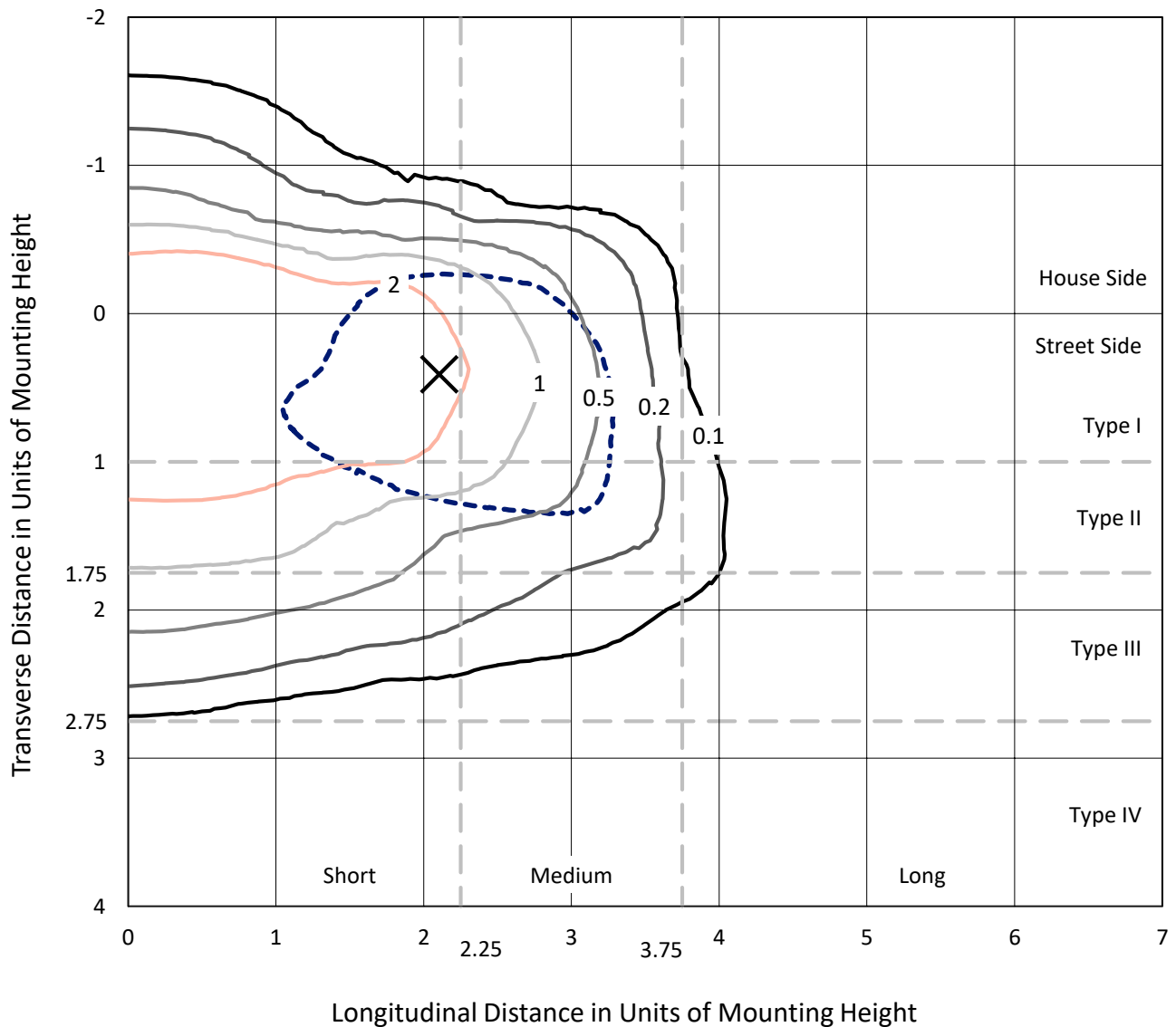
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

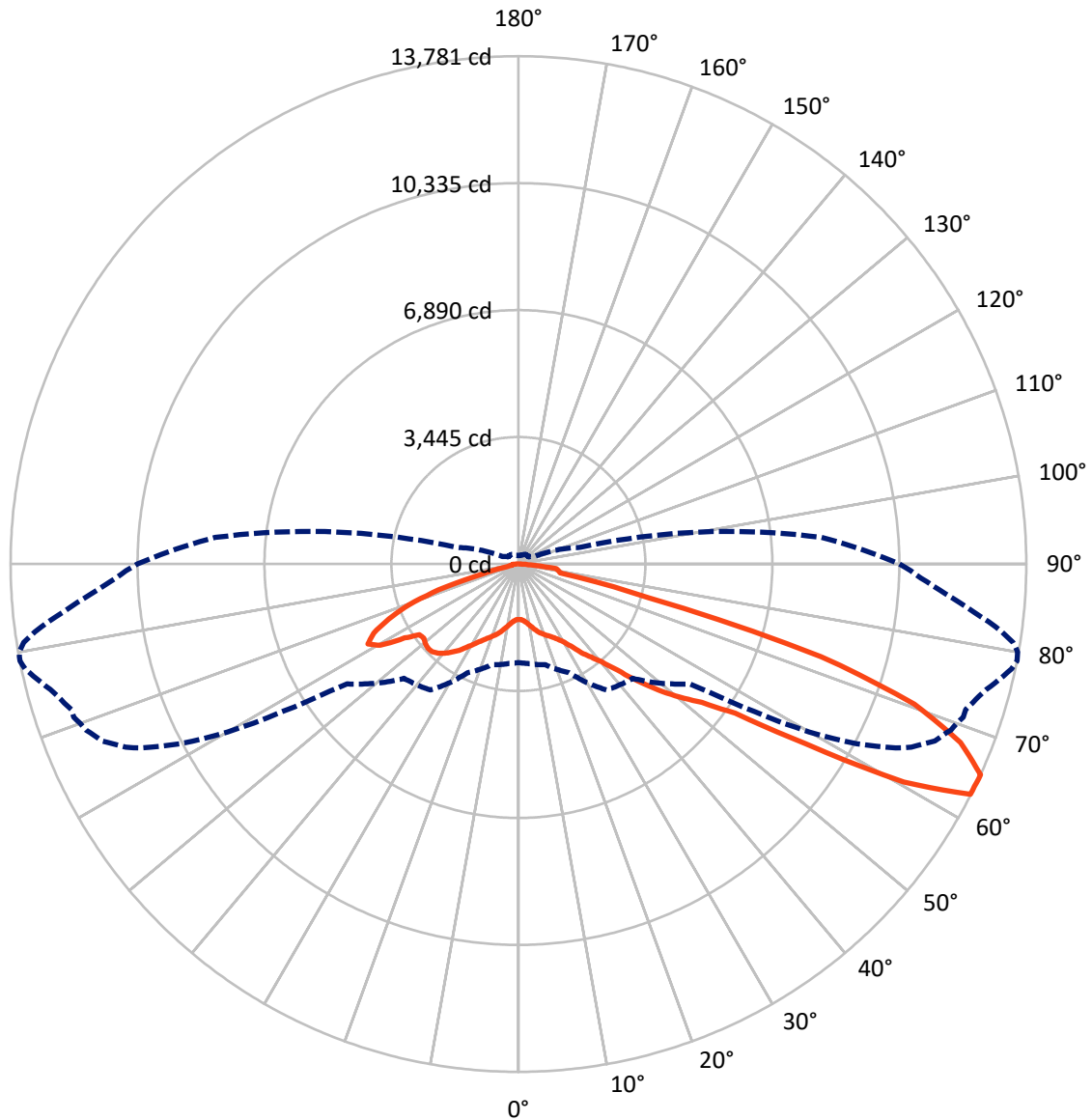
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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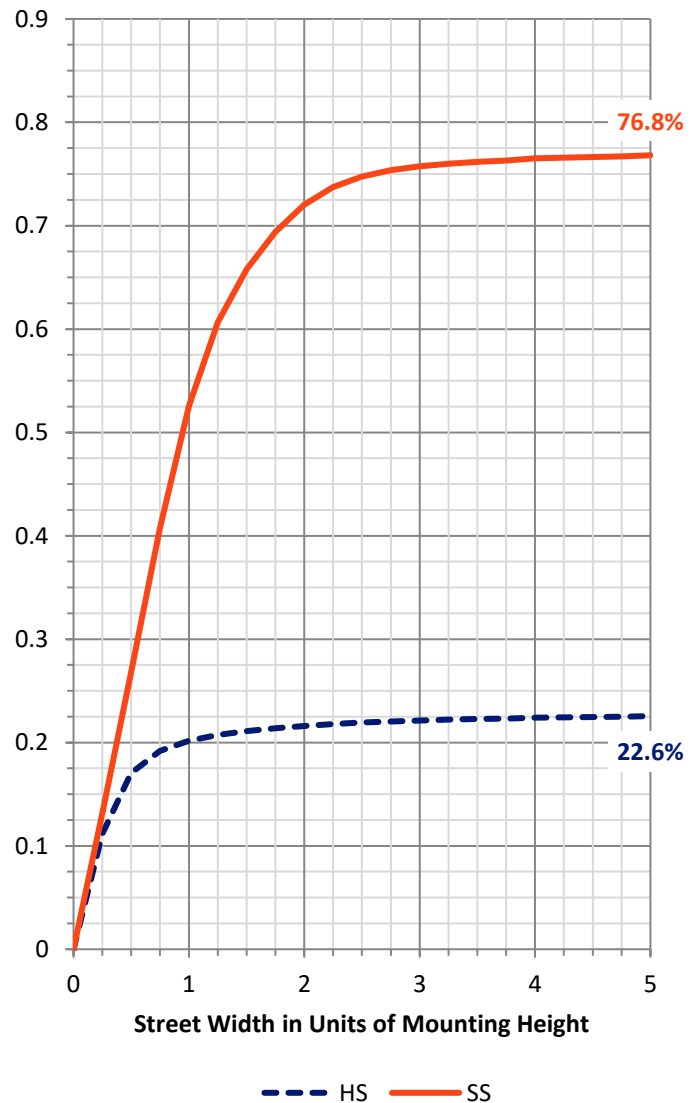
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3157.3 | 0.0 | 3157.3 |
| | % Fixture | 23.0 | 0.0 | 23.0 |
| Street Side | Lumens | 10583.0 | 0.0 | 10583.0 |
| | % Fixture | 77.0 | 0.0 | 77.0 |
| Total | Lumens | 13740.3 | 0.0 | 13740.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 148.7 | 1.1 |
| 10°-20° | 483.1 | 3.5 |
| 20°-30° | 832.8 | 6.1 |
| 30°-40° | 1364.1 | 9.9 |
| 40°-50° | 2284.4 | 16.6 |
| 50°-60° | 3089.9 | 22.5 |
| 60°-70° | 3805.3 | 27.7 |
| 70°-80° | 1473.0 | 10.7 |
| 80°-90° | 259.0 | 1.9 |
| 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° | 13740.3 | 100.0 |
| 0°-180° | 13740.3 | 100.0 |

Coefficient of Utilization



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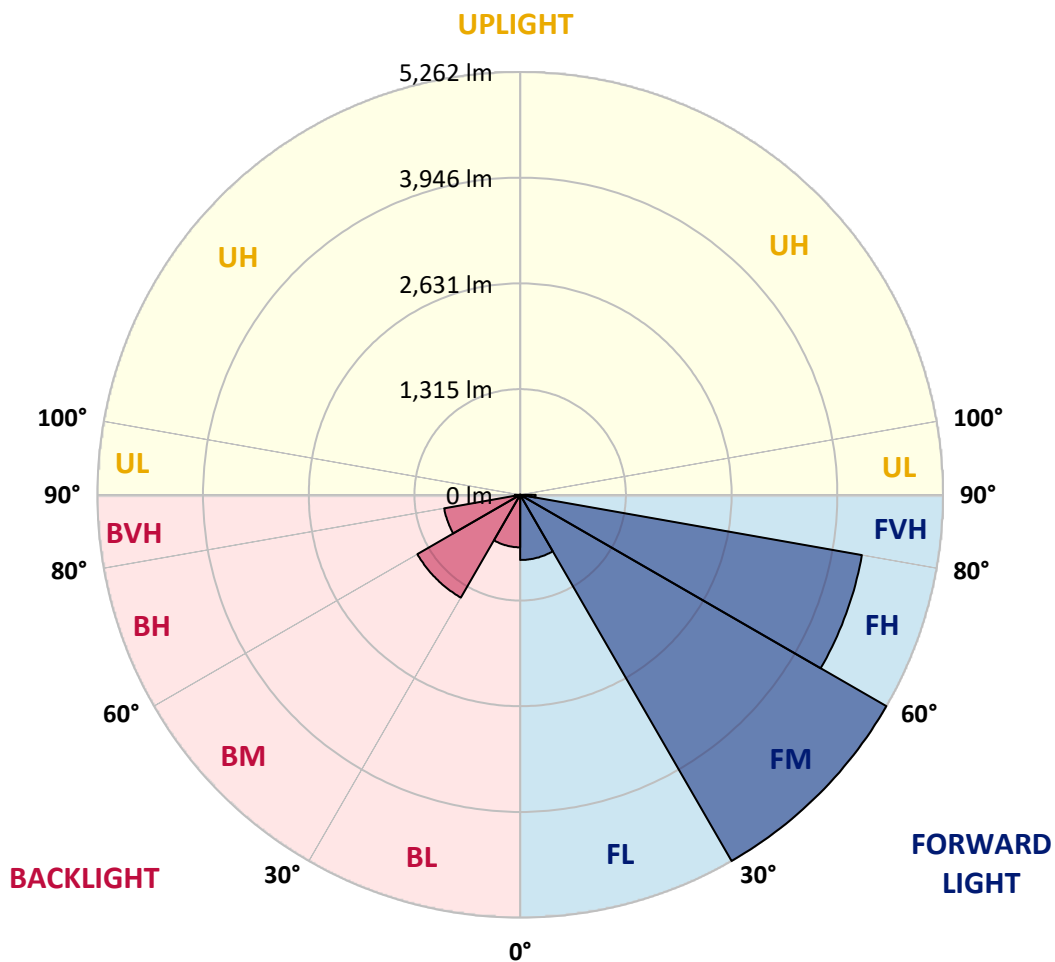
CATALOG NUMBER: VST-E05-LED-E-U-SL2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 811.2 | 5.9 | | | |
| FM (30°-60°) | 5261.9 | 38.3 | | | |
| FH (60°-80°) | 4317.7 | 31.4 | | | G2/5000 |
| FVH (80°-90°) | 192.2 | 1.4 | | | G2/225 |
| BL (0°-30°) | 653.4 | 4.8 | B2/1000 | | |
| BM (30°-60°) | 1476.5 | 10.7 | B2/2500 | | |
| BH (60°-80°) | 960.6 | 7.0 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 66.8 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 57° | 58° | 59° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 |
| 2.5° | 1506.1 | 1501.5 | 1506.1 | 1509.8 | 1512.5 | 1516.2 | 1515.2 | 1514.3 | 1513.4 | 1514.3 | 1514.3 |
| 5° | 1518.9 | 1518.0 | 1522.6 | 1526.2 | 1532.6 | 1537.2 | 1542.6 | 1542.6 | 1542.6 | 1541.7 | 1543.6 |
| 7.5° | 1560.0 | 1559.1 | 1563.7 | 1567.3 | 1572.8 | 1581.9 | 1589.2 | 1592.9 | 1592.0 | 1592.0 | 1592.0 |
| 10° | 1627.6 | 1623.9 | 1623.9 | 1623.9 | 1631.2 | 1637.6 | 1654.1 | 1655.9 | 1659.6 | 1657.7 | 1658.6 |
| 12.5° | 1693.4 | 1694.3 | 1691.5 | 1688.8 | 1689.7 | 1702.5 | 1726.2 | 1730.8 | 1731.7 | 1734.5 | 1736.3 |
| 15° | 1752.7 | 1751.8 | 1745.4 | 1739.0 | 1747.2 | 1769.2 | 1800.2 | 1808.4 | 1808.4 | 1813.9 | 1817.6 |
| 17.5° | 1807.5 | 1805.7 | 1793.8 | 1782.9 | 1791.1 | 1828.5 | 1876.9 | 1882.4 | 1890.6 | 1893.4 | 1897.0 |
| 20° | 1872.4 | 1868.7 | 1855.0 | 1825.8 | 1825.8 | 1876.9 | 1940.9 | 1946.3 | 1953.7 | 1955.5 | 1961.9 |
| 22.5° | 1962.8 | 1953.7 | 1924.4 | 1871.5 | 1856.8 | 1916.2 | 1994.8 | 1997.5 | 2003.0 | 2010.3 | 2015.8 |
| 25° | 2065.1 | 2066.9 | 2019.4 | 1927.2 | 1895.2 | 1957.3 | 2046.8 | 2051.4 | 2061.4 | 2066.9 | 2073.3 |
| 27.5° | 2171.0 | 2173.8 | 2120.8 | 2005.7 | 1951.8 | 2013.9 | 2117.1 | 2122.6 | 2134.5 | 2140.9 | 2150.9 |
| 30° | 2291.6 | 2295.2 | 2244.1 | 2128.1 | 2045.9 | 2097.1 | 2221.3 | 2235.9 | 2245.9 | 2254.1 | 2270.6 |
| 32.5° | 2581.1 | 2559.2 | 2523.6 | 2400.3 | 2270.6 | 2266.9 | 2389.3 | 2405.8 | 2419.5 | 2436.8 | 2452.3 |
| 35° | 2945.6 | 2959.3 | 2977.5 | 2894.4 | 2780.2 | 2697.1 | 2707.2 | 2698.0 | 2710.8 | 2736.4 | 2751.9 |
| 37.5° | 3234.2 | 3264.3 | 3343.8 | 3397.7 | 3393.1 | 3376.7 | 3223.2 | 3223.2 | 3231.4 | 3217.7 | 3215.9 |
| 40° | 3460.7 | 3479.9 | 3642.4 | 3851.6 | 4027.9 | 4114.6 | 3993.2 | 3975.8 | 3984.9 | 3914.6 | 3917.4 |
| 42.5° | 3577.6 | 3605.9 | 3839.7 | 4206.9 | 4556.7 | 4835.3 | 4797.8 | 4786.0 | 4758.6 | 4741.2 | 4730.2 |
| 45° | 3637.0 | 3670.8 | 3949.3 | 4453.5 | 4963.1 | 5393.3 | 5587.0 | 5585.1 | 5560.5 | 5540.4 | 5531.2 |
| 47.5° | 3606.8 | 3636.0 | 3932.9 | 4528.4 | 5176.9 | 5753.2 | 6181.6 | 6208.0 | 6200.7 | 6230.0 | 6241.8 |
| 50° | 3409.5 | 3447.0 | 3744.7 | 4366.7 | 5087.4 | 5894.8 | 6593.5 | 6642.8 | 6709.5 | 6751.5 | 6807.2 |
| 52.5° | 3231.4 | 3262.5 | 3531.0 | 4104.6 | 4793.3 | 5779.7 | 6841.9 | 6943.3 | 7034.6 | 7120.5 | 7187.2 |
| 55° | 3045.1 | 3076.2 | 3311.8 | 3832.4 | 4496.4 | 5439.9 | 6955.2 | 7103.1 | 7245.6 | 7390.8 | 7524.2 |
| 57.5° | 2974.8 | 3007.7 | 3183.0 | 3621.4 | 4253.5 | 5102.9 | 7010.9 | 7253.8 | 7485.8 | 7732.4 | 7988.2 |
| 60° | 3157.5 | 3186.7 | 3320.0 | 3626.9 | 4068.1 | 4765.9 | 6898.5 | 7280.3 | 7679.4 | 8085.9 | 8478.6 |
| 62.5° | 3101.7 | 3117.3 | 3283.5 | 3759.4 | 4304.6 | 4433.4 | 6411.7 | 6915.9 | 7495.9 | 8091.4 | 8693.3 |
| 65° | 2676.1 | 2706.3 | 2831.4 | 3249.7 | 4172.2 | 4388.6 | 5670.1 | 6177.0 | 6861.1 | 7565.3 | 8371.8 |
| 67.5° | 1919.9 | 1877.8 | 1974.7 | 2340.9 | 3236.9 | 4381.3 | 4835.3 | 5210.7 | 5746.8 | 6286.6 | 6947.9 |
| 70° | 872.2 | 852.2 | 928.0 | 1217.5 | 1952.7 | 3462.5 | 4088.2 | 4215.1 | 4414.2 | 4777.7 | 5224.4 |
| 72.5° | 344.3 | 343.4 | 392.7 | 503.3 | 923.4 | 2228.6 | 3437.9 | 3510.9 | 3581.2 | 3739.3 | 3932.0 |
| 75° | 225.6 | 225.6 | 240.2 | 271.3 | 454.8 | 1075.9 | 2908.1 | 2974.8 | 3082.6 | 3127.3 | 3209.5 |
| 77.5° | 169.9 | 170.8 | 177.2 | 184.5 | 251.2 | 566.3 | 2052.3 | 2288.9 | 2471.5 | 2607.6 | 2707.2 |
| 80° | 120.6 | 126.0 | 137.9 | 142.5 | 163.5 | 322.4 | 1160.0 | 1330.8 | 1537.2 | 1757.3 | 2034.0 |
| 82.5° | 90.4 | 96.8 | 116.9 | 122.4 | 129.7 | 183.6 | 523.3 | 593.7 | 693.2 | 898.7 | 1292.4 |
| 85° | 42.0 | 46.6 | 80.4 | 87.7 | 94.1 | 105.9 | 265.8 | 296.8 | 337.0 | 369.0 | 430.2 |
| 87.5° | 6.4 | 4.6 | 13.7 | 19.2 | 30.1 | 31.1 | 91.3 | 108.7 | 117.8 | 141.6 | 147.0 |
| 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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CANDELA DISTRIBUTION (continued):

| | 60° | 61° | 62° | 64° | 65° | 66° | 67° | 68° | 69° | 70° | 71° |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 |
| 2.5° | 1514.3 | 1515.2 | 1516.2 | 1514.3 | 1515.2 | 1515.2 | 1513.4 | 1512.5 | 1512.5 | 1512.5 | 1513.4 |
| 5° | 1543.6 | 1545.4 | 1543.6 | 1544.5 | 1548.1 | 1547.2 | 1545.4 | 1544.5 | 1548.1 | 1549.0 | 1546.3 |
| 7.5° | 1595.6 | 1596.5 | 1592.9 | 1597.4 | 1599.3 | 1600.2 | 1600.2 | 1602.0 | 1602.0 | 1604.8 | 1602.0 |
| 10° | 1662.3 | 1662.3 | 1668.7 | 1667.8 | 1668.7 | 1670.5 | 1671.4 | 1675.1 | 1677.8 | 1677.8 | 1679.7 |
| 12.5° | 1739.0 | 1739.9 | 1746.3 | 1747.2 | 1750.9 | 1751.8 | 1757.3 | 1753.6 | 1762.8 | 1762.8 | 1765.5 |
| 15° | 1818.5 | 1824.9 | 1825.8 | 1834.9 | 1836.7 | 1837.7 | 1845.0 | 1845.0 | 1851.4 | 1852.3 | 1854.1 |
| 17.5° | 1897.0 | 1902.5 | 1906.2 | 1913.5 | 1919.9 | 1922.6 | 1925.3 | 1930.8 | 1935.4 | 1937.2 | 1941.8 |
| 20° | 1964.6 | 1970.1 | 1973.8 | 1981.1 | 1986.5 | 1991.1 | 1993.8 | 2000.2 | 2004.8 | 2006.6 | 2013.0 |
| 22.5° | 2021.2 | 2024.9 | 2031.3 | 2041.3 | 2043.2 | 2048.6 | 2056.9 | 2061.4 | 2063.3 | 2068.7 | 2076.0 |
| 25° | 2081.5 | 2087.0 | 2090.7 | 2099.8 | 2107.1 | 2116.2 | 2123.5 | 2130.8 | 2132.7 | 2140.0 | 2146.4 |
| 27.5° | 2161.9 | 2167.4 | 2168.3 | 2186.6 | 2193.9 | 2206.7 | 2214.9 | 2225.8 | 2231.3 | 2237.7 | 2250.5 |
| 30° | 2280.6 | 2293.4 | 2298.9 | 2319.9 | 2323.6 | 2338.2 | 2352.8 | 2356.4 | 2364.7 | 2365.6 | 2386.6 |
| 32.5° | 2462.4 | 2480.7 | 2488.0 | 2509.9 | 2515.4 | 2529.1 | 2537.3 | 2556.5 | 2557.4 | 2566.5 | 2571.1 |
| 35° | 2760.1 | 2755.6 | 2783.9 | 2789.4 | 2805.8 | 2817.7 | 2825.9 | 2825.9 | 2843.3 | 2844.2 | 2849.7 |
| 37.5° | 3166.6 | 3157.5 | 3164.8 | 3131.9 | 3140.1 | 3125.5 | 3122.7 | 3126.4 | 3119.1 | 3120.9 | 3120.0 |
| 40° | 3816.9 | 3775.8 | 3732.9 | 3631.5 | 3609.6 | 3567.5 | 3534.7 | 3508.2 | 3482.6 | 3455.2 | 3436.9 |
| 42.5° | 4632.5 | 4573.1 | 4509.2 | 4346.6 | 4270.8 | 4189.5 | 4110.1 | 4064.4 | 3973.1 | 3917.4 | 3887.2 |
| 45° | 5487.4 | 5418.0 | 5328.5 | 5193.3 | 5085.5 | 4998.8 | 4853.5 | 4785.0 | 4643.5 | 4573.1 | 4478.2 |
| 47.5° | 6187.9 | 6188.9 | 6116.7 | 5979.7 | 5864.6 | 5807.1 | 5716.7 | 5584.2 | 5423.5 | 5333.1 | 5164.1 |
| 50° | 6800.8 | 6799.9 | 6795.3 | 6713.1 | 6632.8 | 6569.7 | 6490.3 | 6370.6 | 6239.1 | 6136.8 | 5943.2 |
| 52.5° | 7253.8 | 7314.1 | 7339.7 | 7338.8 | 7328.7 | 7299.5 | 7239.2 | 7136.0 | 7002.7 | 6945.1 | 6790.8 |
| 55° | 7628.3 | 7759.8 | 7828.3 | 7978.1 | 7991.8 | 8040.2 | 7987.2 | 7988.2 | 7909.6 | 7915.1 | 7865.8 |
| 57.5° | 8195.5 | 8435.7 | 8573.6 | 8905.2 | 9071.4 | 9272.3 | 9236.7 | 9404.8 | 9466.0 | 9543.6 | 9646.8 |
| 60° | 8839.4 | 9287.9 | 9614.8 | 10274.3 | 10542.8 | 10868.0 | 11047.0 | 11237.9 | 11376.7 | 11519.2 | 11624.2 |
| 62.5° | 9299.7 | 9888.8 | 10425.9 | 11365.7 | 11714.6 | 12057.1 | 12282.7 | 12513.8 | 12670.0 | 12772.3 | 12848.1 |
| 65° | 9111.6 | 9762.8 | 10397.6 | 11383.1 | 11763.0 | 12011.5 | 12280.0 | 12413.3 | 12569.5 | 12654.5 | 12763.2 |
| 67.5° | 7742.5 | 8395.5 | 9076.0 | 10238.7 | 10636.0 | 10979.4 | 11188.5 | 11361.2 | 11487.2 | 11595.0 | 11720.1 |
| 70° | 5757.8 | 6472.0 | 7175.3 | 8450.3 | 8951.7 | 9447.7 | 9694.3 | 9908.0 | 10039.5 | 10148.2 | 10286.2 |
| 72.5° | 4143.9 | 4591.4 | 5030.7 | 6458.3 | 6959.7 | 7600.9 | 7856.6 | 8094.1 | 8264.9 | 8259.4 | 8405.6 |
| 75° | 3299.0 | 3480.8 | 3676.2 | 4413.3 | 4773.2 | 5313.9 | 5457.3 | 5590.6 | 5510.2 | 5355.9 | 5346.8 |
| 77.5° | 2746.4 | 2821.3 | 2887.1 | 3118.2 | 3171.2 | 3299.9 | 3228.7 | 3154.7 | 2916.3 | 2715.4 | 2609.4 |
| 80° | 2229.5 | 2377.5 | 2474.3 | 2638.7 | 2706.3 | 2744.6 | 2754.7 | 2729.1 | 2641.4 | 2519.9 | 2326.3 |
| 82.5° | 1657.7 | 1939.0 | 2130.8 | 2454.2 | 2572.9 | 2597.6 | 2645.1 | 2615.8 | 2558.3 | 2459.7 | 2320.8 |
| 85° | 485.9 | 549.8 | 630.2 | 854.9 | 1001.9 | 1127.1 | 1254.9 | 1318.0 | 1357.2 | 1302.4 | 1159.0 |
| 87.5° | 170.8 | 192.7 | 215.6 | 296.8 | 316.0 | 381.8 | 374.5 | 442.1 | 444.8 | 464.0 | 443.9 |
| 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: VST-E05-LED-E-U-SL2-7030

CANDELA DISTRIBUTION (continued):

| | 72° | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 |
| 2.5° | 1512.5 | 1512.5 | 1512.5 | 1513.4 | 1513.4 | 1513.4 | 1511.6 | 1510.7 | 1511.6 | 1513.4 | 1513.4 |
| 5° | 1548.1 | 1549.0 | 1550.9 | 1547.2 | 1548.1 | 1550.9 | 1549.0 | 1548.1 | 1549.0 | 1550.9 | 1549.0 |
| 7.5° | 1605.7 | 1606.6 | 1604.8 | 1608.4 | 1608.4 | 1610.2 | 1613.0 | 1610.2 | 1611.2 | 1612.1 | 1613.0 |
| 10° | 1680.6 | 1681.5 | 1683.3 | 1686.0 | 1687.0 | 1688.8 | 1690.6 | 1693.4 | 1693.4 | 1691.5 | 1696.1 |
| 12.5° | 1770.1 | 1769.2 | 1771.0 | 1774.6 | 1776.5 | 1779.2 | 1784.7 | 1784.7 | 1788.3 | 1787.4 | 1792.0 |
| 15° | 1857.8 | 1862.3 | 1863.2 | 1869.6 | 1872.4 | 1876.9 | 1883.3 | 1887.0 | 1887.0 | 1892.5 | 1894.3 |
| 17.5° | 1945.4 | 1949.1 | 1952.7 | 1958.2 | 1961.9 | 1964.6 | 1971.9 | 1976.5 | 1975.6 | 1985.6 | 1985.6 |
| 20° | 2013.0 | 2020.3 | 2024.9 | 2028.6 | 2034.9 | 2039.5 | 2045.0 | 2050.5 | 2054.1 | 2060.5 | 2062.3 |
| 22.5° | 2078.8 | 2083.4 | 2089.7 | 2094.3 | 2101.6 | 2107.1 | 2113.5 | 2118.1 | 2124.5 | 2132.7 | 2135.4 |
| 25° | 2151.9 | 2159.2 | 2166.5 | 2172.9 | 2178.3 | 2184.7 | 2195.7 | 2205.7 | 2214.9 | 2222.2 | 2224.9 |
| 27.5° | 2253.2 | 2261.5 | 2272.4 | 2277.0 | 2285.2 | 2290.7 | 2307.1 | 2319.9 | 2324.5 | 2337.3 | 2340.9 |
| 30° | 2390.2 | 2399.4 | 2410.3 | 2415.8 | 2430.4 | 2437.7 | 2455.1 | 2468.8 | 2473.4 | 2488.9 | 2491.6 |
| 32.5° | 2588.4 | 2593.9 | 2615.8 | 2614.9 | 2635.0 | 2656.0 | 2666.1 | 2677.0 | 2697.1 | 2705.3 | 2708.1 |
| 35° | 2863.4 | 2876.1 | 2891.7 | 2890.8 | 2916.3 | 2928.2 | 2948.3 | 2960.2 | 2974.8 | 2973.9 | 2989.4 |
| 37.5° | 3129.1 | 3133.7 | 3139.2 | 3151.1 | 3169.3 | 3185.8 | 3193.1 | 3204.9 | 3215.9 | 3232.3 | 3252.4 |
| 40° | 3418.7 | 3429.6 | 3430.5 | 3436.9 | 3446.1 | 3467.1 | 3480.8 | 3493.6 | 3531.0 | 3554.8 | 3566.6 |
| 42.5° | 3852.5 | 3849.8 | 3831.5 | 3843.4 | 3848.9 | 3880.8 | 3890.9 | 3930.1 | 3972.2 | 4022.4 | 4036.1 |
| 45° | 4410.6 | 4374.0 | 4363.1 | 4358.5 | 4387.7 | 4404.2 | 4445.3 | 4518.3 | 4562.2 | 4609.7 | 4632.5 |
| 47.5° | 5097.4 | 4983.2 | 4929.4 | 4917.5 | 4947.6 | 5017.9 | 5031.6 | 5103.8 | 5161.3 | 5196.1 | 5218.9 |
| 50° | 5785.2 | 5695.7 | 5582.4 | 5544.0 | 5535.8 | 5600.7 | 5616.2 | 5676.5 | 5734.9 | 5745.0 | 5733.1 |
| 52.5° | 6649.2 | 6503.1 | 6315.8 | 6248.2 | 6194.3 | 6198.9 | 6211.7 | 6237.3 | 6274.7 | 6259.2 | 6227.2 |
| 55° | 7754.3 | 7588.1 | 7495.9 | 7368.0 | 7286.7 | 7272.1 | 7216.4 | 7139.7 | 7136.9 | 7147.0 | 7051.1 |
| 57.5° | 9594.7 | 9525.3 | 9564.6 | 9550.9 | 9470.5 | 9518.9 | 9267.8 | 9196.5 | 9139.9 | 9041.3 | 8952.7 |
| 60° | 11717.4 | 11788.6 | 11869.9 | 12057.1 | 12048.9 | 12237.1 | 12062.6 | 12018.8 | 11965.8 | 11661.7 | 11512.8 |
| 62.5° | 12980.5 | 13008.8 | 13128.5 | 13302.9 | 13474.7 | 13654.6 | 13735.9 | 13764.2 | 13653.7 | 13405.2 | 13094.7 |
| 65° | 12760.4 | 12885.5 | 13001.5 | 13152.2 | 13328.5 | 13508.5 | 13680.2 | 13780.6 | 13755.1 | 13590.7 | 13249.1 |
| 67.5° | 11760.3 | 11891.8 | 12061.7 | 12219.7 | 12409.7 | 12565.9 | 12754.0 | 12938.5 | 12944.0 | 12861.8 | 12624.3 |
| 70° | 10300.8 | 10453.3 | 10628.7 | 10717.3 | 10922.8 | 11064.3 | 11220.5 | 11403.2 | 11462.5 | 11472.6 | 11195.8 |
| 72.5° | 8374.5 | 8438.4 | 8524.3 | 8477.7 | 8518.8 | 8609.2 | 8567.2 | 8581.8 | 8356.2 | 8398.3 | 8056.7 |
| 75° | 5100.1 | 5041.7 | 4782.3 | 4545.7 | 4257.1 | 4035.2 | 4088.2 | 3664.4 | 3247.0 | 3226.0 | 2924.5 |
| 77.5° | 2586.6 | 2493.4 | 2332.7 | 2165.6 | 1920.8 | 1640.4 | 1406.6 | 1154.5 | 941.7 | 820.2 | 704.2 |
| 80° | 2203.0 | 2137.2 | 2048.6 | 1927.2 | 1749.1 | 1541.7 | 1297.9 | 1106.1 | 928.0 | 742.6 | 594.6 |
| 82.5° | 2108.0 | 1907.1 | 1778.3 | 1676.9 | 1484.2 | 1292.4 | 1159.0 | 1027.5 | 901.5 | 787.3 | 623.8 |
| 85° | 1045.8 | 925.2 | 782.7 | 694.1 | 534.3 | 418.3 | 391.8 | 322.4 | 300.5 | 232.0 | 195.5 |
| 87.5° | 351.6 | 287.7 | 214.6 | 180.8 | 144.3 | 117.8 | 116.0 | 103.2 | 102.3 | 93.2 | 85.9 |
| 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: P158229

CATALOG NUMBER: VST-E05-LED-E-U-SL2-7030

CANDELA DISTRIBUTION (continued):

| | 83° | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 95° | 105° | 115° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 |
| 2.5° | 1512.5 | 1514.3 | 1514.3 | 1512.5 | 1513.4 | 1511.6 | 1512.5 | 1513.4 | 1510.7 | 1509.8 | 1507.0 |
| 5° | 1550.0 | 1549.0 | 1549.0 | 1550.0 | 1552.7 | 1553.6 | 1549.0 | 1550.9 | 1551.8 | 1547.2 | 1537.2 |
| 7.5° | 1612.1 | 1612.1 | 1614.8 | 1613.9 | 1619.4 | 1617.5 | 1616.6 | 1616.6 | 1616.6 | 1607.5 | 1591.1 |
| 10° | 1696.1 | 1696.1 | 1698.8 | 1702.5 | 1703.4 | 1701.6 | 1701.6 | 1702.5 | 1707.1 | 1688.8 | 1663.2 |
| 12.5° | 1790.2 | 1794.7 | 1793.8 | 1793.8 | 1804.8 | 1802.0 | 1798.4 | 1802.0 | 1806.6 | 1781.0 | 1744.5 |
| 15° | 1895.2 | 1897.9 | 1899.8 | 1906.2 | 1904.3 | 1910.7 | 1912.6 | 1910.7 | 1915.3 | 1882.4 | 1821.2 |
| 17.5° | 1990.2 | 1995.7 | 1997.5 | 2004.8 | 2004.8 | 2005.7 | 2013.0 | 2010.3 | 2011.2 | 1973.8 | 1886.1 |
| 20° | 2068.7 | 2074.2 | 2077.0 | 2085.2 | 2087.0 | 2090.7 | 2093.4 | 2095.2 | 2099.8 | 2055.0 | 1939.0 |
| 22.5° | 2147.3 | 2151.9 | 2156.4 | 2161.9 | 2169.2 | 2173.8 | 2177.4 | 2179.3 | 2187.5 | 2135.4 | 1989.3 |
| 25° | 2235.0 | 2245.0 | 2249.6 | 2258.7 | 2266.0 | 2273.3 | 2278.8 | 2279.7 | 2293.4 | 2228.6 | 2030.4 |
| 27.5° | 2351.9 | 2365.6 | 2372.9 | 2387.5 | 2394.8 | 2402.1 | 2400.3 | 2411.2 | 2430.4 | 2335.4 | 2062.3 |
| 30° | 2505.3 | 2522.7 | 2527.2 | 2541.9 | 2553.7 | 2561.0 | 2569.3 | 2578.4 | 2591.2 | 2454.2 | 2077.9 |
| 32.5° | 2719.0 | 2745.5 | 2751.9 | 2760.1 | 2777.5 | 2790.3 | 2795.8 | 2810.4 | 2814.0 | 2566.5 | 2073.3 |
| 35° | 3012.2 | 3000.4 | 3031.4 | 3038.7 | 3063.4 | 3073.4 | 3079.8 | 3099.0 | 3084.4 | 2688.9 | 2043.2 |
| 37.5° | 3277.1 | 3273.4 | 3303.6 | 3320.0 | 3352.0 | 3344.7 | 3360.2 | 3373.0 | 3320.9 | 2775.7 | 1987.5 |
| 40° | 3600.4 | 3595.9 | 3637.9 | 3643.4 | 3692.7 | 3681.7 | 3688.1 | 3698.2 | 3582.2 | 2836.0 | 1886.1 |
| 42.5° | 4051.6 | 4053.4 | 4098.2 | 4103.7 | 4110.1 | 4130.2 | 4097.3 | 4099.1 | 3859.8 | 2852.4 | 1718.9 |
| 45° | 4646.2 | 4678.2 | 4650.8 | 4651.7 | 4649.9 | 4611.5 | 4570.4 | 4522.0 | 4148.4 | 2795.8 | 1503.4 |
| 47.5° | 5222.5 | 5200.6 | 5165.9 | 5133.9 | 5107.5 | 5047.2 | 4986.9 | 4904.7 | 4397.8 | 2661.5 | 1263.2 |
| 50° | 5715.7 | 5666.4 | 5635.4 | 5546.8 | 5483.8 | 5405.2 | 5321.2 | 5227.1 | 4602.4 | 2467.9 | 1038.5 |
| 52.5° | 6174.2 | 6123.1 | 6007.1 | 5914.9 | 5824.4 | 5720.3 | 5622.6 | 5512.1 | 4783.2 | 2246.8 | 866.8 |
| 55° | 6936.0 | 6891.2 | 6775.2 | 6606.3 | 6494.8 | 6351.4 | 6222.7 | 6072.9 | 5149.5 | 2067.8 | 753.5 |
| 57.5° | 8708.8 | 8670.4 | 8426.6 | 8319.7 | 8172.7 | 7812.8 | 7759.8 | 7526.0 | 6131.3 | 2046.8 | 686.8 |
| 60° | 11205.0 | 11040.6 | 10837.8 | 10545.5 | 10201.2 | 10082.5 | 9817.6 | 9506.2 | 7711.4 | 2104.4 | 633.0 |
| 62.5° | 12737.6 | 12363.1 | 12065.4 | 11728.3 | 11411.4 | 11139.2 | 10849.7 | 10541.9 | 8519.7 | 2028.6 | 566.3 |
| 65° | 12852.7 | 12412.4 | 12018.8 | 11623.3 | 11267.1 | 10928.2 | 10646.9 | 10339.1 | 8256.7 | 1743.6 | 479.5 |
| 67.5° | 12218.8 | 11754.8 | 11325.5 | 10877.1 | 10517.2 | 10211.3 | 9853.2 | 9557.3 | 7515.0 | 1357.2 | 399.1 |
| 70° | 10911.8 | 10504.4 | 10134.5 | 9651.4 | 9352.7 | 8980.1 | 8752.6 | 8382.7 | 6550.5 | 925.2 | 329.7 |
| 72.5° | 7859.4 | 7552.5 | 7431.9 | 7094.9 | 6704.0 | 6484.8 | 6379.8 | 6020.8 | 4840.8 | 574.5 | 269.4 |
| 75° | 2655.1 | 2730.9 | 2557.4 | 2291.6 | 2421.3 | 2221.3 | 2302.6 | 2131.8 | 2047.7 | 329.7 | 226.5 |
| 77.5° | 589.1 | 553.5 | 511.5 | 474.9 | 472.2 | 443.9 | 470.4 | 444.8 | 475.9 | 210.1 | 200.0 |
| 80° | 464.9 | 367.2 | 312.4 | 285.0 | 270.4 | 262.1 | 255.7 | 248.4 | 226.5 | 179.0 | 184.5 |
| 82.5° | 502.3 | 379.0 | 277.7 | 221.9 | 190.0 | 178.1 | 175.4 | 168.1 | 166.2 | 173.5 | 186.3 |
| 85° | 160.7 | 134.3 | 114.2 | 107.8 | 99.6 | 95.0 | 93.2 | 90.4 | 109.6 | 189.1 | 179.0 |
| 87.5° | 84.0 | 74.0 | 65.8 | 63.0 | 54.8 | 51.1 | 50.2 | 51.1 | 76.7 | 189.1 | 129.7 |
| 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: P158229

CATALOG NUMBER: VST-E05-LED-E-U-SL2-7030

CANDELA DISTRIBUTION (continued):

| | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 | 1503.4 |
| 2.5° | 1504.3 | 1503.4 | 1501.5 | 1500.6 | 1499.7 | 1495.2 | 1498.8 |
| 5° | 1532.6 | 1523.5 | 1515.2 | 1505.2 | 1499.7 | 1495.2 | 1495.2 |
| 7.5° | 1575.5 | 1550.0 | 1528.9 | 1506.1 | 1490.6 | 1478.7 | 1476.9 |
| 10° | 1629.4 | 1580.1 | 1531.7 | 1490.6 | 1461.4 | 1439.4 | 1436.7 |
| 12.5° | 1680.6 | 1605.7 | 1528.9 | 1461.4 | 1415.7 | 1384.6 | 1382.8 |
| 15° | 1728.1 | 1619.4 | 1507.9 | 1408.4 | 1339.9 | 1298.8 | 1294.2 |
| 17.5° | 1765.5 | 1611.2 | 1460.4 | 1334.4 | 1241.2 | 1192.8 | 1190.1 |
| 20° | 1773.7 | 1578.3 | 1392.9 | 1243.1 | 1144.4 | 1093.3 | 1081.4 |
| 22.5° | 1766.4 | 1518.9 | 1308.8 | 1142.6 | 1029.3 | 978.2 | 971.8 |
| 25° | 1744.5 | 1446.7 | 1204.7 | 1025.7 | 920.7 | 868.6 | 855.8 |
| 27.5° | 1705.2 | 1361.8 | 1092.4 | 912.4 | 808.3 | 758.1 | 745.3 |
| 30° | 1646.8 | 1259.5 | 972.7 | 806.5 | 698.7 | 658.5 | 645.7 |
| 32.5° | 1565.5 | 1135.3 | 854.9 | 697.8 | 608.3 | 576.3 | 570.8 |
| 35° | 1453.1 | 992.8 | 731.6 | 608.3 | 542.5 | 523.3 | 520.6 |
| 37.5° | 1309.7 | 850.3 | 628.4 | 544.4 | 496.9 | 485.0 | 483.2 |
| 40° | 1122.5 | 704.2 | 555.3 | 498.7 | 464.0 | 453.9 | 452.1 |
| 42.5° | 929.8 | 594.6 | 501.4 | 462.2 | 433.8 | 424.7 | 422.0 |
| 45° | 760.8 | 520.6 | 461.2 | 432.0 | 405.5 | 395.5 | 394.6 |
| 47.5° | 634.8 | 477.7 | 428.4 | 404.6 | 378.1 | 366.3 | 367.2 |
| 50° | 542.5 | 438.4 | 401.0 | 380.9 | 350.7 | 339.8 | 340.7 |
| 52.5° | 479.5 | 399.1 | 375.4 | 352.6 | 327.0 | 316.0 | 316.0 |
| 55° | 430.2 | 367.2 | 350.7 | 326.1 | 306.0 | 295.9 | 295.0 |
| 57.5° | 390.0 | 341.6 | 327.0 | 306.9 | 286.8 | 274.9 | 274.9 |
| 60° | 365.3 | 323.3 | 311.5 | 293.2 | 269.4 | 256.7 | 255.7 |
| 62.5° | 350.7 | 317.8 | 307.8 | 282.2 | 255.7 | 243.0 | 240.2 |
| 65° | 339.8 | 330.6 | 317.8 | 275.8 | 244.8 | 231.1 | 228.3 |
| 67.5° | 340.7 | 360.8 | 342.5 | 279.5 | 241.1 | 221.0 | 217.4 |
| 70° | 346.2 | 384.5 | 359.9 | 287.7 | 256.7 | 216.5 | 208.2 |
| 72.5° | 318.8 | 348.0 | 324.2 | 274.0 | 250.3 | 208.2 | 198.2 |
| 75° | 265.8 | 253.9 | 232.9 | 222.9 | 224.7 | 189.1 | 185.4 |
| 77.5° | 215.6 | 189.1 | 169.0 | 177.2 | 189.1 | 161.7 | 158.0 |
| 80° | 187.2 | 153.4 | 143.4 | 157.1 | 171.7 | 137.9 | 128.8 |
| 82.5° | 175.4 | 129.7 | 123.3 | 163.5 | 179.9 | 118.7 | 104.1 |
| 85° | 154.4 | 105.9 | 96.8 | 192.7 | 179.9 | 89.5 | 83.1 |
| 87.5° | 103.2 | 63.0 | 60.3 | 141.6 | 123.3 | 62.1 | 50.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)