

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: P177586

Luminaire Tested: **VAL-E04-LED-E-U-GL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177586
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33703)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VAL-E04-LED-E-U-GL4-8030
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE IV W/ GLARE CONTROL
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9729.6 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 97.2
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

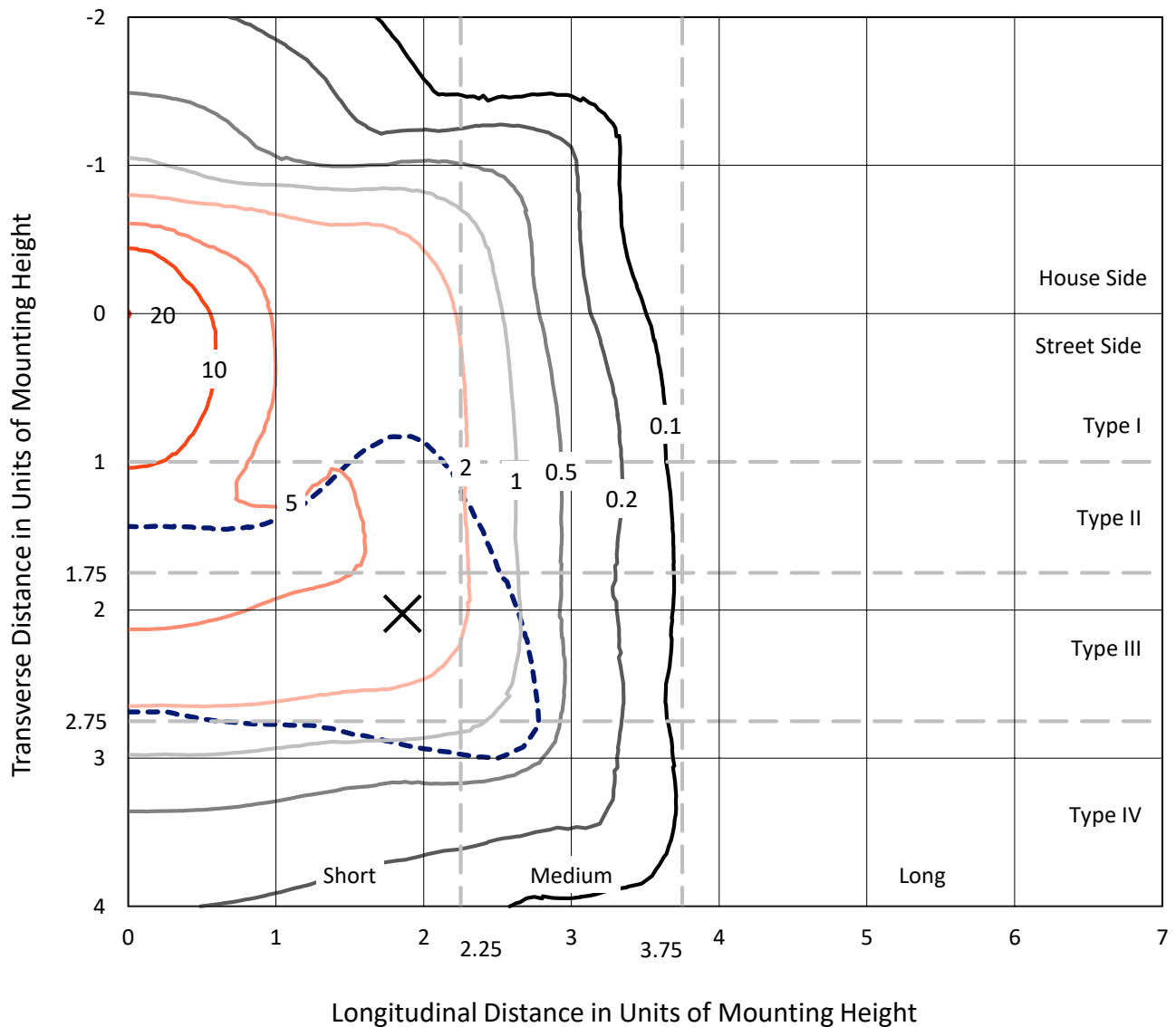


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Iso-Footcandle Lines of Horizontal Illumination

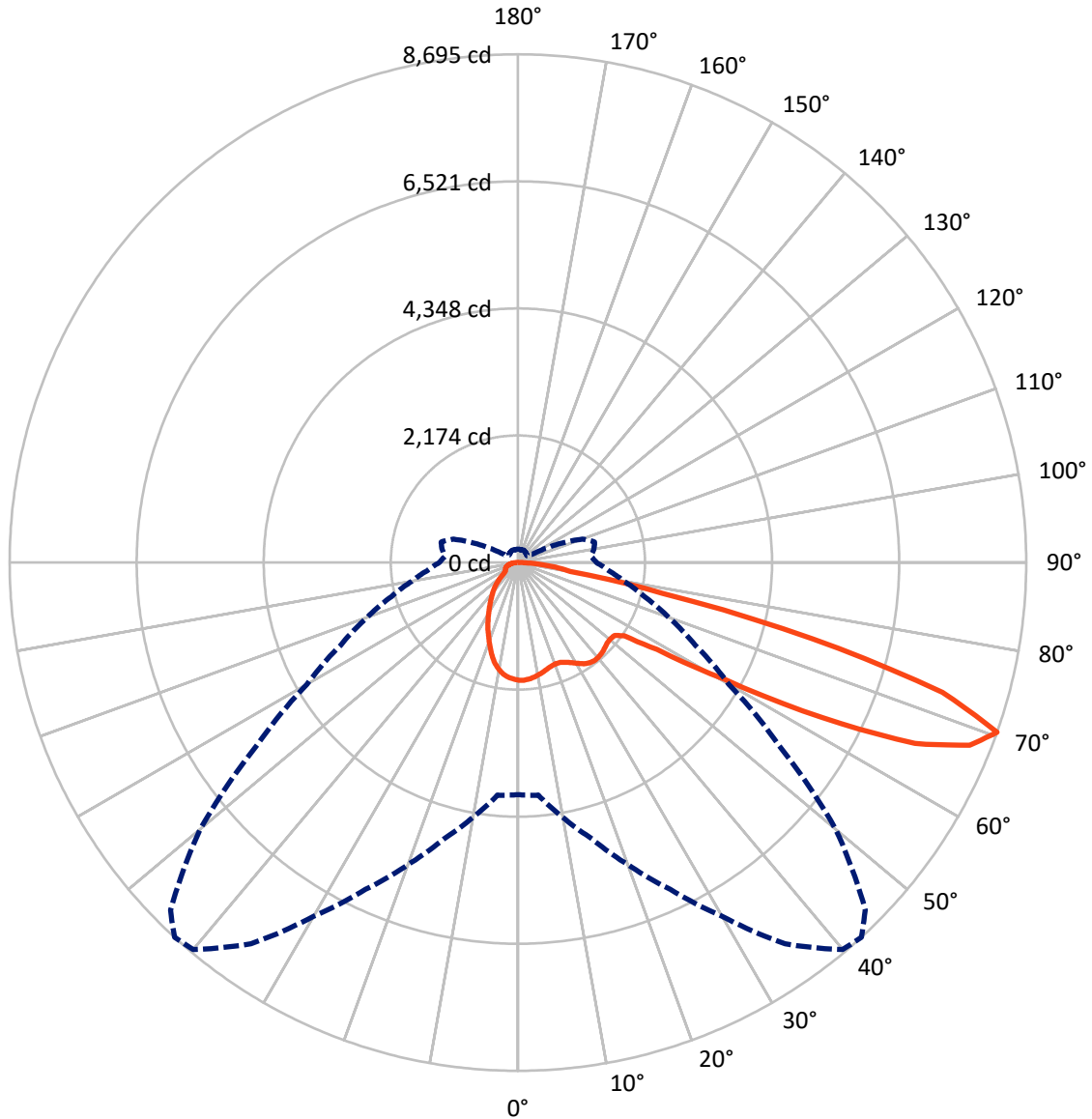
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 42.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2101.8 | 0.0 | 2101.8 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 7627.8 | 0.0 | 7627.8 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 9729.6 | 0.0 | 9729.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 187.2 | 1.9 |
| 10°-20° | 504.3 | 5.2 |
| 20°-30° | 735.6 | 7.6 |
| 30°-40° | 938.2 | 9.6 |
| 40°-50° | 1095.1 | 11.3 |
| 50°-60° | 1674.7 | 17.2 |
| 60°-70° | 3035.8 | 31.2 |
| 70°-80° | 1349.8 | 13.9 |
| 80°-90° | 208.9 | 2.1 |
| 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° | 9729.6 | 100.0 |
| 0°-180° | 9729.6 | 100.0 |



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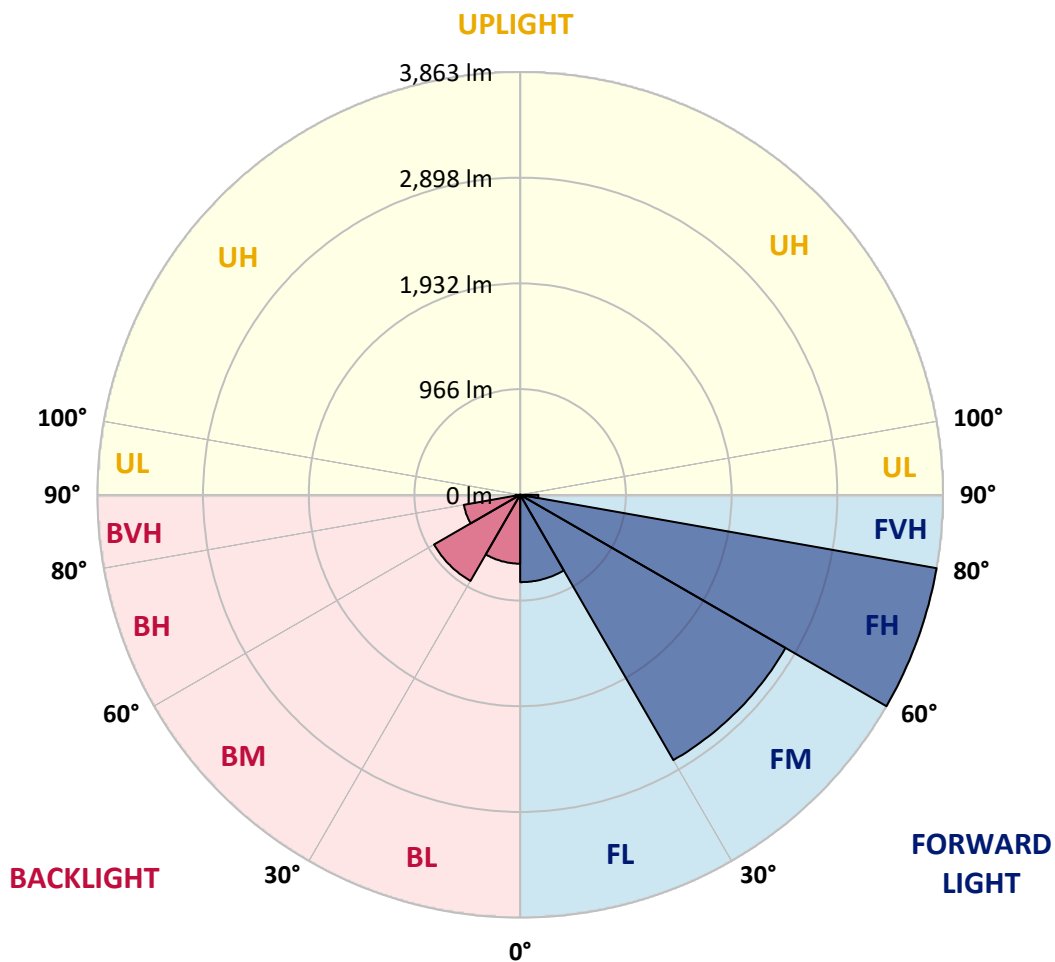
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 798.1 | 8.2 | | | |
| FM (30°-60°) | 2799.5 | 28.8 | | | |
| FH (60°-80°) | 3863.4 | 39.7 | | | G2/5000 |
| FVH (80°-90°) | 166.9 | 1.7 | | | G2/225 |
| BL (0°-30°) | 629.1 | 6.5 | B2/1000 | | |
| BM (30°-60°) | 908.6 | 9.3 | B1/1000 | | |
| BH (60°-80°) | 522.2 | 5.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 42.0 | 0.4 | | | 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 IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 42.5° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 |
| 2.5° | 2021.5 | 2019.5 | 2020.9 | 2022.2 | 2022.2 | 2022.9 | 2016.8 | 2017.5 | 2014.8 | 2015.5 | 2016.1 |
| 5° | 2014.1 | 2012.1 | 2013.4 | 2013.4 | 2013.4 | 2012.7 | 2004.6 | 2004.0 | 2000.6 | 2000.6 | 1999.2 |
| 7.5° | 1999.9 | 1992.5 | 1996.5 | 1997.2 | 1995.9 | 1992.5 | 1987.8 | 1983.0 | 1981.0 | 1981.0 | 1976.3 |
| 10° | 1978.3 | 1970.2 | 1972.2 | 1973.6 | 1972.9 | 1966.2 | 1964.1 | 1959.4 | 1954.0 | 1952.0 | 1946.6 |
| 12.5° | 1950.6 | 1945.2 | 1947.9 | 1947.3 | 1947.3 | 1941.2 | 1937.8 | 1931.1 | 1924.3 | 1920.9 | 1914.2 |
| 15° | 1933.1 | 1926.3 | 1929.0 | 1929.0 | 1926.3 | 1920.2 | 1915.5 | 1903.4 | 1891.9 | 1887.8 | 1879.1 |
| 17.5° | 1943.9 | 1937.1 | 1939.8 | 1937.8 | 1933.1 | 1920.2 | 1908.1 | 1888.5 | 1870.3 | 1859.5 | 1848.0 |
| 20° | 1987.1 | 1980.3 | 1982.4 | 1981.0 | 1974.3 | 1953.3 | 1931.1 | 1897.3 | 1863.5 | 1847.3 | 1829.8 |
| 22.5° | 2056.0 | 2050.6 | 2053.9 | 2051.9 | 2041.1 | 2014.1 | 1981.0 | 1932.4 | 1881.8 | 1857.5 | 1832.5 |
| 25° | 2157.9 | 2156.6 | 2162.0 | 2155.9 | 2140.4 | 2099.8 | 2051.9 | 1986.4 | 1920.2 | 1889.9 | 1854.8 |
| 27.5° | 2280.8 | 2269.3 | 2277.4 | 2272.0 | 2261.2 | 2209.9 | 2145.1 | 2062.0 | 1977.6 | 1937.8 | 1895.9 |
| 30° | 2391.5 | 2381.4 | 2396.3 | 2393.6 | 2377.4 | 2324.7 | 2243.0 | 2145.8 | 2050.6 | 1999.9 | 1952.0 |
| 32.5° | 2519.8 | 2507.0 | 2518.5 | 2518.5 | 2494.2 | 2423.3 | 2330.1 | 2218.7 | 2118.8 | 2064.7 | 2007.3 |
| 35° | 2654.2 | 2640.7 | 2651.5 | 2648.1 | 2604.9 | 2511.0 | 2394.2 | 2273.4 | 2163.3 | 2108.0 | 2049.2 |
| 37.5° | 2779.1 | 2777.1 | 2779.8 | 2757.5 | 2697.4 | 2577.2 | 2437.4 | 2302.4 | 2185.6 | 2127.5 | 2066.1 |
| 40° | 2904.0 | 2899.3 | 2887.8 | 2848.6 | 2760.9 | 2616.4 | 2459.7 | 2312.5 | 2186.9 | 2126.2 | 2064.1 |
| 42.5° | 2982.3 | 2973.5 | 2954.0 | 2900.6 | 2790.6 | 2625.8 | 2453.0 | 2297.0 | 2170.7 | 2108.6 | 2047.9 |
| 45° | 3009.3 | 3000.6 | 2976.9 | 2916.8 | 2791.2 | 2611.0 | 2426.6 | 2265.9 | 2140.4 | 2083.6 | 2022.2 |
| 47.5° | 2987.1 | 2981.7 | 2960.0 | 2900.0 | 2769.6 | 2583.3 | 2393.6 | 2234.9 | 2111.3 | 2056.0 | 1998.6 |
| 50° | 2949.2 | 2945.9 | 2927.0 | 2871.6 | 2749.4 | 2566.4 | 2378.0 | 2220.0 | 2103.2 | 2051.9 | 1997.9 |
| 52.5° | 3043.8 | 3033.6 | 2999.9 | 2934.4 | 2791.9 | 2596.8 | 2402.3 | 2242.3 | 2122.1 | 2070.1 | 2014.8 |
| 55° | 4205.8 | 4130.8 | 3963.4 | 3649.4 | 3209.9 | 2868.9 | 2581.9 | 2388.8 | 2259.2 | 2208.6 | 2155.9 |
| 57.5° | 5531.2 | 5452.9 | 5383.3 | 5143.6 | 4621.7 | 3977.6 | 3398.2 | 3059.3 | 2827.0 | 2804.8 | 2783.8 |
| 60° | 6041.6 | 6066.6 | 6060.5 | 5971.4 | 5704.0 | 5398.2 | 4913.4 | 4513.0 | 4069.4 | 4051.2 | 4077.5 |
| 62.5° | 6393.4 | 6414.3 | 6417.0 | 6390.0 | 6302.9 | 6201.0 | 6099.7 | 5971.4 | 5887.0 | 5850.5 | 5614.9 |
| 65° | 6538.6 | 6569.0 | 6635.8 | 6685.8 | 6699.9 | 6735.0 | 6826.9 | 7175.9 | 7467.0 | 7464.9 | 7188.8 |
| 67.5° | 5984.2 | 6020.7 | 6273.9 | 6522.4 | 6731.0 | 6972.7 | 7344.7 | 7912.6 | 8350.8 | 8337.3 | 8111.1 |
| 70° | 3971.5 | 3994.4 | 4424.5 | 4892.4 | 5499.4 | 6170.6 | 6983.5 | 7962.5 | 8641.8 | 8695.1 | 8403.4 |
| 72.5° | 2436.1 | 2488.8 | 2629.2 | 2818.9 | 3143.0 | 3764.9 | 4973.5 | 6646.6 | 7643.2 | 7593.2 | 7361.0 |
| 75° | 1644.8 | 1647.5 | 1643.4 | 1663.7 | 1681.9 | 1807.5 | 2294.3 | 3654.8 | 5177.4 | 5204.4 | 5104.5 |
| 77.5° | 1124.2 | 1139.1 | 1147.2 | 1141.8 | 1160.0 | 1154.6 | 1182.9 | 1252.5 | 1984.4 | 2532.6 | 2327.4 |
| 80° | 982.4 | 988.5 | 997.3 | 984.4 | 950.7 | 931.8 | 958.1 | 933.1 | 879.1 | 908.1 | 869.6 |
| 82.5° | 621.9 | 640.1 | 642.1 | 686.7 | 752.8 | 755.5 | 789.3 | 764.3 | 695.4 | 650.2 | 594.8 |
| 85° | 447.0 | 453.7 | 465.9 | 468.6 | 445.6 | 426.0 | 438.2 | 417.3 | 376.1 | 351.8 | 311.3 |
| 87.5° | 260.6 | 267.4 | 279.5 | 272.1 | 249.1 | 220.8 | 199.2 | 171.5 | 135.7 | 126.9 | 112.1 |
| 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):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 |
| 2.5° | 2016.8 | 2013.4 | 2010.7 | 2009.4 | 2012.1 | 2009.4 | 2006.7 | 2005.3 | 2002.6 | 2003.3 | 1999.9 |
| 5° | 1997.9 | 1993.2 | 1989.1 | 1985.7 | 1988.4 | 1983.7 | 1979.7 | 1977.0 | 1973.6 | 1972.9 | 1969.5 |
| 7.5° | 1971.6 | 1964.1 | 1958.7 | 1952.7 | 1945.9 | 1941.9 | 1937.1 | 1932.4 | 1925.0 | 1924.3 | 1922.9 |
| 10° | 1937.1 | 1931.1 | 1920.2 | 1910.8 | 1901.3 | 1891.2 | 1881.1 | 1873.7 | 1864.9 | 1861.5 | 1856.8 |
| 12.5° | 1902.7 | 1890.5 | 1877.7 | 1862.9 | 1851.4 | 1835.2 | 1821.7 | 1807.5 | 1794.7 | 1786.6 | 1777.8 |
| 15° | 1862.2 | 1849.4 | 1831.1 | 1816.9 | 1800.7 | 1782.5 | 1765.0 | 1744.0 | 1723.1 | 1710.3 | 1698.1 |
| 17.5° | 1827.1 | 1810.9 | 1796.0 | 1775.8 | 1759.6 | 1738.6 | 1712.3 | 1690.0 | 1665.0 | 1644.1 | 1621.8 |
| 20° | 1800.1 | 1781.8 | 1764.3 | 1746.0 | 1726.5 | 1702.8 | 1673.8 | 1642.1 | 1610.3 | 1580.6 | 1547.5 |
| 22.5° | 1789.3 | 1760.2 | 1740.6 | 1723.8 | 1703.5 | 1676.5 | 1644.1 | 1604.9 | 1565.8 | 1528.0 | 1489.5 |
| 25° | 1798.7 | 1755.5 | 1725.1 | 1706.2 | 1688.0 | 1660.3 | 1623.8 | 1579.3 | 1533.4 | 1485.4 | 1439.5 |
| 27.5° | 1824.4 | 1769.7 | 1726.5 | 1696.8 | 1675.8 | 1648.8 | 1608.3 | 1561.7 | 1509.7 | 1455.7 | 1406.4 |
| 30° | 1861.5 | 1793.3 | 1739.3 | 1696.8 | 1665.7 | 1634.6 | 1590.8 | 1538.1 | 1483.4 | 1426.7 | 1371.3 |
| 32.5° | 1902.0 | 1819.6 | 1754.8 | 1698.8 | 1650.8 | 1611.7 | 1565.8 | 1514.5 | 1456.4 | 1396.3 | 1336.9 |
| 35° | 1932.4 | 1838.5 | 1761.6 | 1691.4 | 1629.9 | 1580.6 | 1531.3 | 1481.4 | 1424.7 | 1363.9 | 1304.5 |
| 37.5° | 1945.2 | 1846.0 | 1760.2 | 1675.8 | 1600.9 | 1546.9 | 1495.6 | 1445.6 | 1390.9 | 1333.5 | 1278.8 |
| 40° | 1945.9 | 1846.0 | 1752.1 | 1654.9 | 1570.5 | 1511.8 | 1457.7 | 1411.2 | 1359.8 | 1310.5 | 1261.9 |
| 42.5° | 1933.1 | 1836.5 | 1737.3 | 1635.3 | 1548.2 | 1482.0 | 1426.7 | 1378.7 | 1337.6 | 1293.7 | 1252.5 |
| 45° | 1910.1 | 1817.6 | 1723.8 | 1624.5 | 1540.1 | 1474.6 | 1415.2 | 1370.0 | 1332.8 | 1293.7 | 1257.9 |
| 47.5° | 1892.6 | 1806.8 | 1724.4 | 1640.0 | 1559.7 | 1492.2 | 1428.0 | 1380.1 | 1348.4 | 1317.3 | 1291.6 |
| 50° | 1895.9 | 1810.9 | 1732.5 | 1652.2 | 1573.2 | 1505.0 | 1442.9 | 1401.7 | 1382.8 | 1372.7 | 1366.6 |
| 52.5° | 1913.5 | 1827.1 | 1767.7 | 1714.3 | 1688.7 | 1646.8 | 1612.4 | 1581.3 | 1586.0 | 1561.7 | 1530.7 |
| 55° | 2094.4 | 2065.4 | 2133.6 | 2182.9 | 2207.2 | 2249.7 | 2311.2 | 2252.4 | 2244.3 | 2169.4 | 1946.6 |
| 57.5° | 2812.2 | 2881.0 | 2985.7 | 3060.0 | 3067.4 | 3054.6 | 3003.9 | 2955.3 | 2876.3 | 2763.6 | 2451.6 |
| 60° | 4016.0 | 3999.8 | 3902.6 | 3772.3 | 3671.0 | 3538.0 | 3404.3 | 3291.6 | 3164.6 | 2991.8 | 2659.6 |
| 62.5° | 5282.0 | 4891.8 | 4545.4 | 4250.3 | 3999.8 | 3777.7 | 3575.8 | 3406.3 | 3232.1 | 2983.7 | 2629.9 |
| 65° | 6304.3 | 5553.5 | 4943.1 | 4468.4 | 4095.7 | 3781.8 | 3521.1 | 3287.5 | 3054.6 | 2766.9 | 2423.9 |
| 67.5° | 7034.8 | 5843.8 | 4922.8 | 4255.1 | 3732.5 | 3300.3 | 2920.9 | 2654.9 | 2415.8 | 2189.7 | 2035.0 |
| 70° | 7092.9 | 5442.1 | 4164.6 | 3347.6 | 2744.7 | 2236.9 | 1843.3 | 1552.9 | 1345.0 | 1251.1 | 1318.0 |
| 72.5° | 6061.2 | 4026.2 | 2769.0 | 2049.2 | 1626.5 | 1264.0 | 1016.2 | 812.3 | 644.8 | 562.4 | 573.9 |
| 75° | 3569.7 | 1933.1 | 1247.1 | 929.1 | 758.9 | 606.3 | 524.6 | 442.9 | 390.9 | 313.3 | 250.5 |
| 77.5° | 1359.2 | 840.6 | 629.3 | 522.6 | 372.7 | 268.1 | 211.3 | 182.3 | 167.4 | 165.4 | 156.6 |
| 80° | 783.2 | 616.5 | 431.4 | 282.2 | 206.6 | 174.9 | 149.9 | 128.3 | 119.5 | 117.5 | 120.9 |
| 82.5° | 494.9 | 384.2 | 237.0 | 181.6 | 150.6 | 129.6 | 108.0 | 93.9 | 86.4 | 83.7 | 88.5 |
| 85° | 255.9 | 192.4 | 144.5 | 124.2 | 115.5 | 105.3 | 86.4 | 72.2 | 71.6 | 74.9 | 86.4 |
| 87.5° | 94.5 | 82.4 | 64.8 | 56.0 | 60.1 | 56.0 | 40.5 | 35.1 | 31.7 | 41.9 | 60.8 |
| 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: VAL-E04-LED-E-U-GL4-8030

CANDELA DISTRIBUTION (continued):

| | 105° | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 | 2012.1 |
| 2.5° | 1999.9 | 1998.6 | 1999.2 | 1997.9 | 1997.9 | 1999.9 | 1997.2 | 1995.2 | 1998.6 | 1998.6 | 2000.6 |
| 5° | 1968.9 | 1970.2 | 1970.2 | 1969.5 | 1970.9 | 1974.3 | 1973.6 | 1973.6 | 1979.0 | 1981.0 | 1983.7 |
| 7.5° | 1919.6 | 1921.6 | 1922.3 | 1924.3 | 1925.0 | 1929.7 | 1933.1 | 1937.1 | 1945.2 | 1947.3 | 1953.3 |
| 10° | 1852.7 | 1851.4 | 1856.1 | 1855.4 | 1861.5 | 1865.6 | 1868.3 | 1877.0 | 1889.2 | 1895.9 | 1902.0 |
| 12.5° | 1773.7 | 1773.7 | 1776.4 | 1777.1 | 1782.5 | 1787.9 | 1791.3 | 1802.1 | 1812.2 | 1821.0 | 1834.5 |
| 15° | 1690.0 | 1687.3 | 1681.2 | 1680.6 | 1682.6 | 1688.0 | 1695.4 | 1703.5 | 1719.0 | 1731.9 | 1743.3 |
| 17.5° | 1602.2 | 1594.1 | 1586.7 | 1577.3 | 1576.6 | 1575.9 | 1580.0 | 1586.0 | 1610.3 | 1623.2 | 1639.4 |
| 20° | 1524.6 | 1507.0 | 1489.5 | 1469.9 | 1458.4 | 1453.0 | 1455.0 | 1463.1 | 1486.1 | 1503.0 | 1519.9 |
| 22.5° | 1455.0 | 1428.7 | 1401.0 | 1370.0 | 1351.1 | 1339.6 | 1340.9 | 1344.3 | 1361.2 | 1371.3 | 1380.1 |
| 25° | 1395.6 | 1359.2 | 1320.7 | 1280.8 | 1254.5 | 1237.0 | 1236.3 | 1236.3 | 1228.9 | 1230.2 | 1225.5 |
| 27.5° | 1355.1 | 1304.5 | 1255.2 | 1208.6 | 1174.2 | 1156.6 | 1133.0 | 1116.1 | 1101.2 | 1081.0 | 1072.2 |
| 30° | 1316.0 | 1264.0 | 1207.9 | 1156.6 | 1115.4 | 1081.0 | 1037.1 | 1000.6 | 971.6 | 943.9 | 920.3 |
| 32.5° | 1280.8 | 1226.8 | 1173.5 | 1117.4 | 1060.7 | 1001.3 | 943.9 | 902.1 | 860.9 | 818.3 | 790.0 |
| 35° | 1249.8 | 1199.1 | 1145.8 | 1082.3 | 1002.7 | 925.0 | 860.2 | 803.5 | 754.9 | 703.6 | 662.4 |
| 37.5° | 1232.2 | 1186.3 | 1130.9 | 1044.5 | 944.6 | 856.1 | 783.9 | 720.4 | 655.6 | 594.2 | 543.5 |
| 40° | 1223.4 | 1182.9 | 1115.4 | 1006.0 | 892.6 | 798.1 | 717.7 | 641.4 | 565.1 | 492.9 | 440.2 |
| 42.5° | 1222.1 | 1182.9 | 1092.5 | 966.9 | 848.0 | 746.8 | 657.0 | 565.1 | 472.6 | 402.4 | 355.8 |
| 45° | 1234.3 | 1181.6 | 1068.2 | 931.8 | 808.2 | 700.9 | 592.8 | 484.8 | 389.6 | 328.1 | 302.5 |
| 47.5° | 1269.4 | 1186.3 | 1049.2 | 902.1 | 770.4 | 650.2 | 519.9 | 395.7 | 314.6 | 287.0 | 286.3 |
| 50° | 1326.1 | 1207.9 | 1045.2 | 880.5 | 733.3 | 586.7 | 434.1 | 316.7 | 277.5 | 276.2 | 283.6 |
| 52.5° | 1415.9 | 1248.4 | 1055.3 | 865.6 | 688.7 | 504.4 | 343.7 | 273.5 | 266.0 | 273.5 | 282.9 |
| 55° | 1613.7 | 1320.7 | 1068.8 | 839.3 | 616.5 | 399.7 | 282.9 | 259.3 | 262.6 | 271.4 | 280.2 |
| 57.5° | 1973.6 | 1470.6 | 1083.0 | 779.8 | 499.6 | 307.2 | 254.5 | 253.9 | 259.9 | 267.4 | 275.5 |
| 60° | 2201.8 | 1655.6 | 1117.4 | 692.1 | 377.4 | 253.9 | 243.7 | 250.5 | 257.9 | 263.3 | 270.1 |
| 62.5° | 2209.2 | 1704.2 | 1135.7 | 598.2 | 280.9 | 232.3 | 234.3 | 247.1 | 255.9 | 257.9 | 261.3 |
| 65° | 2066.8 | 1612.4 | 1053.3 | 486.8 | 232.9 | 220.1 | 227.5 | 239.0 | 247.8 | 249.1 | 251.8 |
| 67.5° | 1805.5 | 1422.0 | 892.6 | 367.3 | 212.0 | 210.7 | 218.8 | 227.5 | 233.6 | 239.0 | 243.1 |
| 70° | 1359.8 | 1173.5 | 717.7 | 284.9 | 199.2 | 197.8 | 205.9 | 213.4 | 218.8 | 225.5 | 232.3 |
| 72.5° | 689.4 | 812.3 | 544.2 | 232.9 | 181.6 | 183.0 | 191.8 | 198.5 | 202.6 | 208.6 | 215.4 |
| 75° | 235.0 | 354.5 | 344.3 | 188.4 | 162.0 | 167.4 | 171.5 | 178.9 | 185.0 | 189.1 | 192.4 |
| 77.5° | 147.2 | 153.9 | 177.6 | 151.9 | 143.1 | 144.5 | 151.2 | 158.0 | 164.7 | 167.4 | 168.8 |
| 80° | 122.9 | 123.6 | 124.2 | 121.5 | 122.2 | 126.3 | 130.3 | 137.7 | 144.5 | 145.8 | 146.5 |
| 82.5° | 97.2 | 104.0 | 103.3 | 102.6 | 106.0 | 110.1 | 112.8 | 115.5 | 118.2 | 119.5 | 121.5 |
| 85° | 85.7 | 84.4 | 85.1 | 87.1 | 84.4 | 81.7 | 81.0 | 81.0 | 85.1 | 89.8 | 91.8 |
| 87.5° | 78.3 | 66.8 | 50.0 | 47.3 | 47.3 | 45.9 | 43.2 | 43.2 | 47.3 | 51.3 | 53.3 |
| 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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