

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: P161832

Luminaire Tested: **OVF-F05-LED-E-U-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P161832
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33701)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVF-F05-LED-E-U-SL2
Description: OVF LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12085.6 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 133.3
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

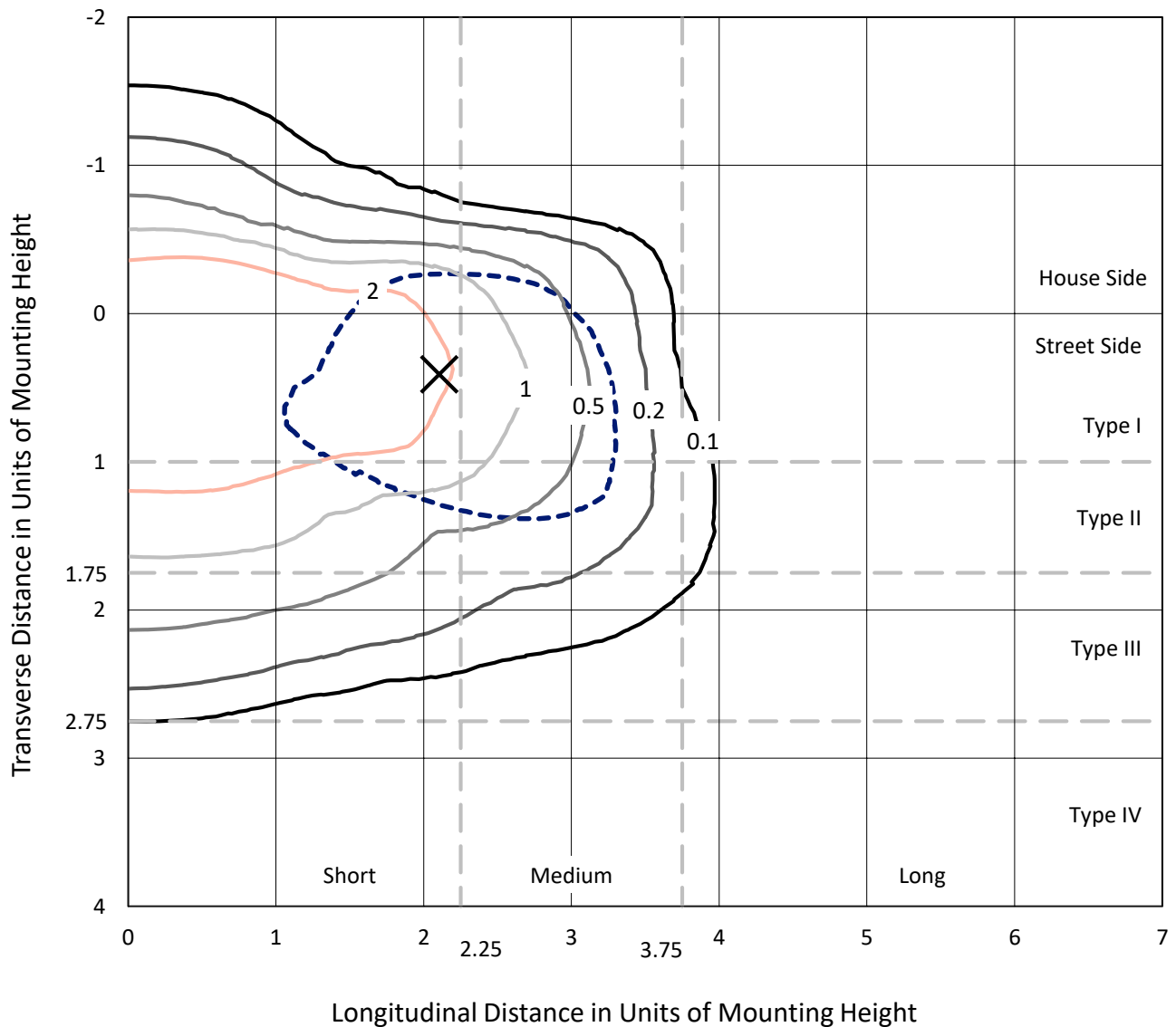


REPORT NUMBER: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

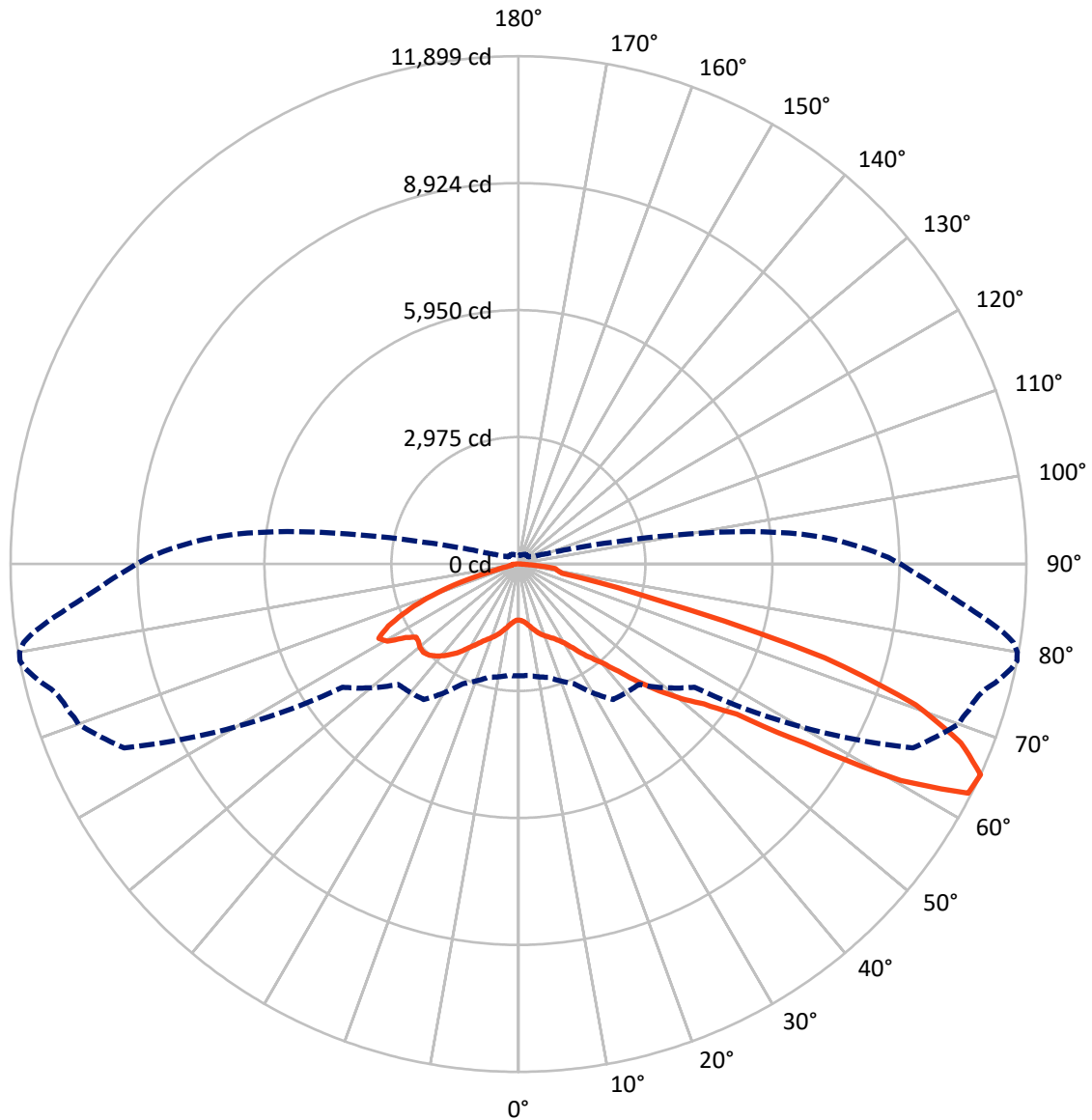


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

Luminous Intensity Polar Plot



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



REPORT NUMBER: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2743.3 | 0.0 | 2743.3 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 9342.3 | 0.0 | 9342.3 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 12085.6 | 0.0 | 12085.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 130.4 | 1.1 |
| 10°-20° | 424.4 | 3.5 |
| 20°-30° | 731.6 | 6.1 |
| 30°-40° | 1193.1 | 9.9 |
| 40°-50° | 1991.8 | 16.5 |
| 50°-60° | 2693.2 | 22.3 |
| 60°-70° | 3345.9 | 27.7 |
| 70°-80° | 1339.8 | 11.1 |
| 80°-90° | 235.4 | 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° | 12085.6 | 100.0 |
| 0°-180° | 12085.6 | 100.0 |



REPORT NUMBER: P161832

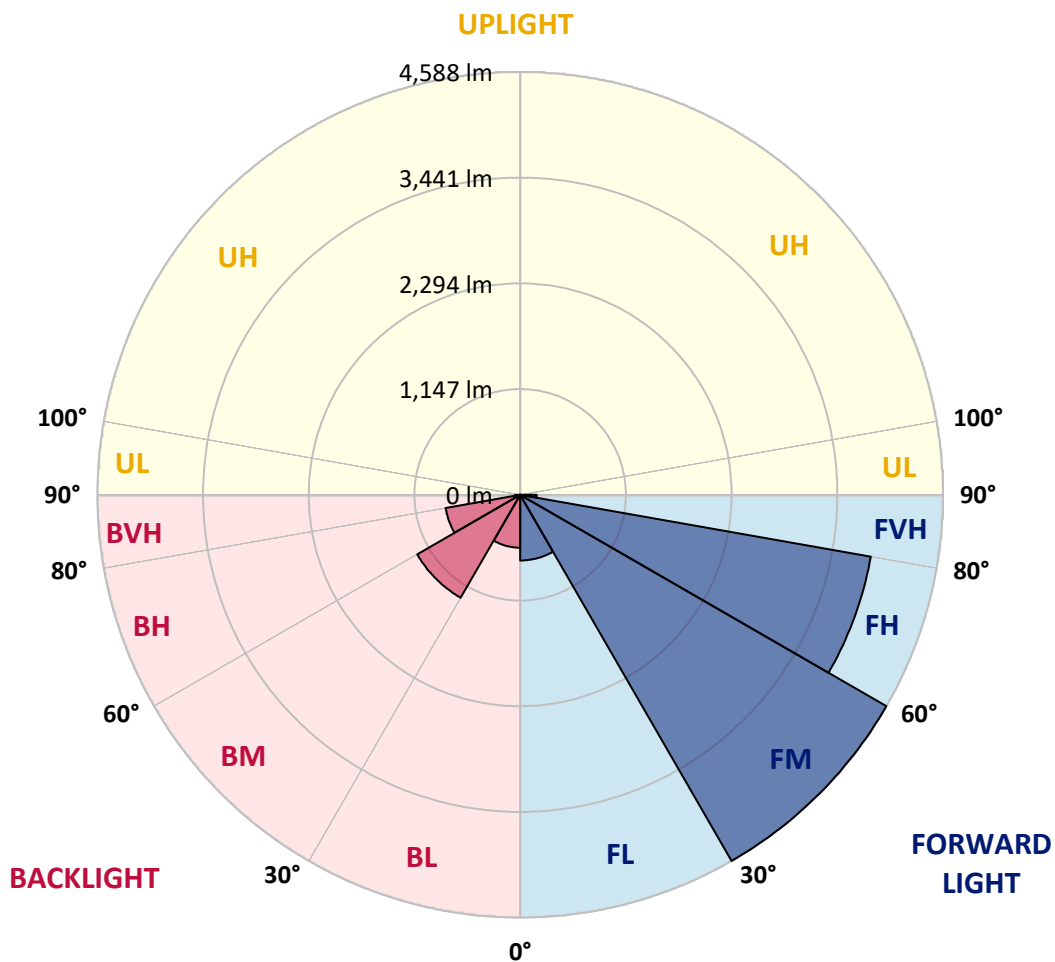
CATALOG NUMBER: OVF-F05-LED-E-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 712.7 | 5.9 | | | |
| FM (30°-60°) | 4587.9 | 38.0 | | | |
| FH (60°-80°) | 3863.2 | 32.0 | | | G2/5000 |
| FVH (80°-90°) | 178.6 | 1.5 | | | G2/225 |
| BL (0°-30°) | 573.8 | 4.7 | B2/1000 | | |
| BM (30°-60°) | 1290.3 | 10.7 | B2/2500 | | |
| BH (60°-80°) | 822.4 | 6.8 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 56.9 | 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





REPORT NUMBER: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 71° | 72° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0° | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 |
| 2.5° | 1323.3 | 1322.5 | 1326.6 | 1329.9 | 1329.9 | 1331.6 | 1330.7 | 1325.8 | 1326.6 | 1328.3 | 1326.6 |
| 5° | 1338.2 | 1334.9 | 1339.0 | 1344.0 | 1347.3 | 1351.4 | 1355.5 | 1356.3 | 1359.6 | 1359.6 | 1358.8 |
| 7.5° | 1370.4 | 1367.9 | 1373.7 | 1375.3 | 1382.8 | 1389.4 | 1397.6 | 1403.4 | 1406.7 | 1408.3 | 1410.8 |
| 10° | 1425.7 | 1424.0 | 1425.7 | 1429.0 | 1432.3 | 1439.7 | 1453.7 | 1466.1 | 1473.6 | 1473.6 | 1476.9 |
| 12.5° | 1492.5 | 1485.9 | 1487.6 | 1481.0 | 1482.6 | 1498.3 | 1514.8 | 1535.5 | 1547.9 | 1549.5 | 1551.2 |
| 15° | 1544.6 | 1541.3 | 1538.8 | 1529.7 | 1536.3 | 1556.9 | 1582.5 | 1612.3 | 1623.0 | 1632.1 | 1631.2 |
| 17.5° | 1593.3 | 1589.1 | 1583.4 | 1571.0 | 1577.6 | 1610.6 | 1649.4 | 1682.4 | 1700.6 | 1702.2 | 1703.9 |
| 20° | 1651.0 | 1646.1 | 1635.4 | 1609.8 | 1608.1 | 1654.4 | 1706.4 | 1741.9 | 1758.4 | 1765.8 | 1768.3 |
| 22.5° | 1724.5 | 1717.9 | 1698.1 | 1648.6 | 1635.4 | 1689.8 | 1751.8 | 1795.5 | 1812.9 | 1820.3 | 1824.4 |
| 25° | 1818.6 | 1805.4 | 1774.1 | 1696.5 | 1669.2 | 1726.2 | 1800.5 | 1853.3 | 1877.2 | 1884.7 | 1889.6 |
| 27.5° | 1903.7 | 1893.8 | 1855.8 | 1764.1 | 1717.1 | 1774.9 | 1859.9 | 1927.6 | 1960.6 | 1969.7 | 1977.1 |
| 30° | 2002.7 | 1988.7 | 1958.1 | 1860.7 | 1798.0 | 1849.2 | 1957.3 | 2043.2 | 2083.6 | 2084.5 | 2101.0 |
| 32.5° | 2235.5 | 2226.4 | 2198.4 | 2091.1 | 1985.4 | 1988.7 | 2089.4 | 2207.5 | 2247.9 | 2254.5 | 2269.4 |
| 35° | 2580.6 | 2577.3 | 2576.5 | 2517.0 | 2438.6 | 2357.7 | 2365.1 | 2455.1 | 2482.4 | 2493.1 | 2498.0 |
| 37.5° | 2807.6 | 2836.5 | 2906.7 | 2949.6 | 2929.8 | 2947.1 | 2856.3 | 2746.5 | 2730.8 | 2719.3 | 2724.2 |
| 40° | 3003.3 | 3028.9 | 3170.8 | 3369.0 | 3489.5 | 3574.5 | 3494.4 | 3157.6 | 3032.2 | 2995.8 | 2981.8 |
| 42.5° | 3118.8 | 3147.7 | 3350.8 | 3667.8 | 3974.9 | 4176.3 | 4197.8 | 3729.7 | 3411.1 | 3406.9 | 3354.1 |
| 45° | 3181.6 | 3210.5 | 3453.2 | 3880.0 | 4314.2 | 4677.4 | 4865.6 | 4433.9 | 3965.8 | 3931.1 | 3857.7 |
| 47.5° | 3169.2 | 3196.4 | 3449.0 | 3958.4 | 4514.8 | 5010.1 | 5386.6 | 5145.5 | 4605.6 | 4522.2 | 4420.7 |
| 50° | 3018.1 | 3037.9 | 3302.9 | 3830.4 | 4461.1 | 5148.8 | 5743.2 | 5798.5 | 5329.6 | 5216.5 | 5064.6 |
| 52.5° | 2862.1 | 2897.6 | 3117.2 | 3603.4 | 4217.6 | 5062.9 | 5956.2 | 6392.9 | 6005.7 | 5928.1 | 5733.3 |
| 55° | 2777.9 | 2806.0 | 2985.1 | 3400.3 | 3960.9 | 4769.9 | 6044.5 | 6953.4 | 6827.1 | 6795.7 | 6657.9 |
| 57.5° | 2774.6 | 2801.8 | 2944.6 | 3277.3 | 3752.0 | 4464.4 | 6070.1 | 7819.4 | 8190.0 | 8198.3 | 8158.7 |
| 60° | 2910.0 | 2938.0 | 3057.7 | 3336.8 | 3687.6 | 4202.7 | 5978.5 | 9047.8 | 9866.7 | 9939.3 | 10060.7 |
| 62.5° | 2929.0 | 2942.2 | 3086.6 | 3463.1 | 3922.1 | 4007.1 | 5601.2 | 10070.6 | 11019.1 | 11086.0 | 11152.8 |
| 65° | 2620.2 | 2619.4 | 2747.3 | 3094.1 | 3873.4 | 3987.3 | 5034.1 | 10196.1 | 10972.9 | 11013.3 | 11096.7 |
| 67.5° | 1954.0 | 1937.5 | 2010.2 | 2327.2 | 3073.4 | 3992.2 | 4362.1 | 9249.2 | 10117.6 | 10194.4 | 10222.5 |
| 70° | 1007.1 | 1032.7 | 1082.3 | 1276.3 | 1951.5 | 3213.8 | 3747.1 | 7803.7 | 8881.8 | 8910.7 | 9010.6 |
| 72.5° | 413.6 | 402.9 | 436.7 | 536.6 | 976.6 | 2124.1 | 3099.8 | 6158.4 | 7335.6 | 7315.8 | 7334.0 |
| 75° | 230.3 | 233.6 | 243.5 | 279.9 | 474.7 | 1066.6 | 2663.1 | 4359.6 | 4988.6 | 4646.9 | 4543.7 |
| 77.5° | 184.9 | 186.6 | 187.4 | 194.0 | 259.2 | 568.8 | 2044.0 | 2871.2 | 2508.8 | 2329.6 | 2261.1 |
| 80° | 135.4 | 144.5 | 154.4 | 156.0 | 178.3 | 322.8 | 1121.1 | 2417.1 | 2117.5 | 1968.9 | 1846.7 |
| 82.5° | 109.0 | 113.1 | 134.6 | 137.9 | 142.0 | 192.3 | 507.7 | 2270.2 | 2109.2 | 1957.3 | 1788.9 |
| 85° | 65.2 | 72.6 | 109.8 | 110.6 | 112.3 | 117.2 | 280.7 | 924.6 | 1150.0 | 1016.2 | 930.4 |
| 87.5° | 23.1 | 29.7 | 54.5 | 45.4 | 57.8 | 47.9 | 123.0 | 309.6 | 381.4 | 362.4 | 321.1 |
| 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: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

| | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° | 83° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 |
| 2.5° | 1325.8 | 1325.8 | 1327.4 | 1326.6 | 1326.6 | 1326.6 | 1326.6 | 1325.0 | 1325.0 | 1322.5 | 1324.1 |
| 5° | 1358.8 | 1358.0 | 1358.8 | 1359.6 | 1358.8 | 1360.5 | 1359.6 | 1358.8 | 1359.6 | 1358.8 | 1359.6 |
| 7.5° | 1411.6 | 1407.5 | 1413.3 | 1410.0 | 1409.2 | 1414.1 | 1411.6 | 1414.1 | 1414.9 | 1414.1 | 1413.3 |
| 10° | 1478.5 | 1481.0 | 1481.0 | 1481.0 | 1479.3 | 1484.3 | 1485.1 | 1486.8 | 1487.6 | 1490.9 | 1490.9 |
| 12.5° | 1555.3 | 1556.1 | 1559.4 | 1558.6 | 1560.2 | 1566.0 | 1570.1 | 1571.0 | 1571.8 | 1574.3 | 1571.0 |
| 15° | 1637.8 | 1639.5 | 1639.5 | 1646.9 | 1644.4 | 1652.7 | 1655.2 | 1655.2 | 1656.0 | 1665.9 | 1666.7 |
| 17.5° | 1711.3 | 1711.3 | 1717.9 | 1717.9 | 1724.5 | 1726.2 | 1733.6 | 1734.4 | 1737.7 | 1746.8 | 1747.6 |
| 20° | 1773.2 | 1776.5 | 1780.7 | 1785.6 | 1788.1 | 1793.0 | 1798.0 | 1802.9 | 1807.1 | 1814.5 | 1815.3 |
| 22.5° | 1831.8 | 1835.1 | 1841.7 | 1845.0 | 1850.8 | 1854.1 | 1858.3 | 1864.0 | 1870.6 | 1880.5 | 1883.0 |
| 25° | 1899.5 | 1902.8 | 1910.3 | 1915.2 | 1921.8 | 1926.8 | 1934.2 | 1941.6 | 1945.8 | 1955.7 | 1963.1 |
| 27.5° | 1985.4 | 1995.3 | 2005.2 | 2007.7 | 2012.6 | 2024.2 | 2034.1 | 2044.0 | 2053.1 | 2058.0 | 2067.1 |
| 30° | 2110.9 | 2110.9 | 2131.5 | 2131.5 | 2140.6 | 2151.3 | 2157.9 | 2168.7 | 2185.2 | 2190.1 | 2201.7 |
| 32.5° | 2279.3 | 2283.4 | 2290.8 | 2313.1 | 2329.6 | 2334.6 | 2339.5 | 2355.2 | 2365.1 | 2377.5 | 2391.5 |
| 35° | 2519.5 | 2523.6 | 2527.8 | 2549.2 | 2568.2 | 2573.2 | 2578.1 | 2588.0 | 2604.5 | 2626.0 | 2619.4 |
| 37.5° | 2735.0 | 2737.4 | 2750.6 | 2774.6 | 2785.3 | 2798.5 | 2802.7 | 2820.8 | 2829.9 | 2849.7 | 2850.5 |
| 40° | 2994.2 | 2988.4 | 2995.8 | 3023.1 | 3039.6 | 3038.8 | 3052.0 | 3085.0 | 3091.6 | 3100.7 | 3123.8 |
| 42.5° | 3355.8 | 3334.3 | 3357.4 | 3366.5 | 3391.3 | 3406.9 | 3433.4 | 3455.6 | 3471.3 | 3506.0 | 3522.5 |
| 45° | 3823.0 | 3800.7 | 3819.7 | 3823.8 | 3875.0 | 3890.7 | 3930.3 | 3960.0 | 3993.9 | 4033.5 | 4045.1 |
| 47.5° | 4355.5 | 4314.2 | 4291.1 | 4316.7 | 4377.8 | 4403.3 | 4442.1 | 4470.2 | 4505.7 | 4526.4 | 4519.7 |
| 50° | 4972.1 | 4873.1 | 4826.8 | 4813.6 | 4857.4 | 4893.7 | 4954.0 | 4967.2 | 4983.7 | 4982.9 | 4983.7 |
| 52.5° | 5659.8 | 5556.6 | 5460.0 | 5393.2 | 5386.6 | 5435.3 | 5450.1 | 5453.4 | 5448.5 | 5411.3 | 5388.2 |
| 55° | 6558.0 | 6550.5 | 6449.0 | 6310.3 | 6301.2 | 6295.5 | 6208.8 | 6198.0 | 6178.2 | 6121.3 | 6042.8 |
| 57.5° | 8187.6 | 8270.1 | 8203.2 | 8199.9 | 8127.3 | 8079.4 | 7920.1 | 7840.8 | 7757.5 | 7603.1 | 7480.1 |
| 60° | 10071.4 | 10191.1 | 10257.1 | 10286.0 | 10428.0 | 10428.0 | 10297.6 | 10185.3 | 10049.9 | 9814.7 | 9585.2 |
| 62.5° | 11205.7 | 11310.5 | 11407.9 | 11560.7 | 11741.4 | 11821.5 | 11828.1 | 11728.2 | 11557.3 | 11289.1 | 10964.6 |
| 65° | 11133.9 | 11211.5 | 11329.5 | 11509.5 | 11658.9 | 11802.5 | 11899.1 | 11868.6 | 11738.1 | 11469.8 | 11116.5 |
| 67.5° | 10320.7 | 10433.8 | 10586.5 | 10752.5 | 10891.2 | 11026.5 | 11182.6 | 11194.1 | 11159.4 | 10904.4 | 10584.9 |
| 70° | 9065.9 | 9211.2 | 9307.8 | 9516.7 | 9579.4 | 9716.4 | 9873.3 | 9948.4 | 9892.3 | 9695.8 | 9508.4 |
| 72.5° | 7365.3 | 7480.1 | 7496.6 | 7405.8 | 7437.2 | 7471.0 | 7509.0 | 7333.1 | 7265.4 | 7002.9 | 6882.4 |
| 75° | 4466.1 | 4315.0 | 4187.9 | 4061.6 | 3684.3 | 3550.6 | 3345.0 | 2939.7 | 2893.5 | 2615.3 | 2422.1 |
| 77.5° | 2124.1 | 2060.5 | 1945.8 | 1753.4 | 1497.5 | 1252.3 | 1039.3 | 844.5 | 771.9 | 635.7 | 541.5 |
| 80° | 1778.2 | 1702.2 | 1599.0 | 1456.2 | 1277.1 | 1098.8 | 930.4 | 785.9 | 640.6 | 521.7 | 416.9 |
| 82.5° | 1631.2 | 1499.2 | 1353.9 | 1230.9 | 1104.6 | 983.2 | 870.1 | 739.7 | 662.9 | 534.9 | 436.7 |
| 85° | 824.7 | 722.3 | 585.3 | 492.8 | 416.1 | 338.5 | 293.1 | 250.1 | 222.9 | 177.5 | 154.4 |
| 87.5° | 276.6 | 226.2 | 168.4 | 142.8 | 128.8 | 110.6 | 101.5 | 96.6 | 94.1 | 83.4 | 74.3 |
| 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: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

| | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 91° | 92° | 93° | 94° |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 |
| 2.5° | 1324.1 | 1324.1 | 1324.1 | 1324.1 | 1323.3 | 1323.3 | 1323.3 | 1323.3 | 1323.3 | 1323.3 | 1324.1 |
| 5° | 1358.0 | 1358.0 | 1358.8 | 1361.3 | 1356.3 | 1358.0 | 1359.6 | 1357.2 | 1359.6 | 1357.2 | 1360.5 |
| 7.5° | 1412.5 | 1414.9 | 1413.3 | 1416.6 | 1414.9 | 1419.9 | 1416.6 | 1414.1 | 1415.8 | 1415.8 | 1416.6 |
| 10° | 1489.2 | 1492.5 | 1490.1 | 1491.7 | 1491.7 | 1495.0 | 1490.9 | 1491.7 | 1492.5 | 1490.9 | 1491.7 |
| 12.5° | 1574.3 | 1575.9 | 1575.1 | 1580.1 | 1577.6 | 1580.1 | 1577.6 | 1580.9 | 1582.5 | 1584.2 | 1584.2 |
| 15° | 1666.7 | 1668.4 | 1673.3 | 1672.5 | 1677.5 | 1675.8 | 1676.6 | 1672.5 | 1680.8 | 1675.8 | 1677.5 |
| 17.5° | 1751.8 | 1750.9 | 1757.5 | 1760.0 | 1760.8 | 1761.7 | 1764.1 | 1760.8 | 1761.7 | 1764.1 | 1762.5 |
| 20° | 1817.8 | 1823.6 | 1825.2 | 1831.8 | 1836.8 | 1838.4 | 1837.6 | 1840.1 | 1843.4 | 1840.1 | 1840.1 |
| 22.5° | 1888.0 | 1896.2 | 1898.7 | 1902.8 | 1907.8 | 1908.6 | 1913.6 | 1916.0 | 1917.7 | 1916.9 | 1917.7 |
| 25° | 1972.2 | 1978.0 | 1983.7 | 1992.0 | 1997.8 | 1998.6 | 2002.7 | 2006.0 | 2006.9 | 2006.0 | 2011.0 |
| 27.5° | 2075.4 | 2082.8 | 2090.2 | 2100.1 | 2106.7 | 2108.4 | 2117.5 | 2117.5 | 2122.4 | 2124.9 | 2126.6 |
| 30° | 2208.3 | 2210.8 | 2229.7 | 2239.6 | 2237.2 | 2248.7 | 2261.1 | 2260.3 | 2266.1 | 2267.7 | 2271.8 |
| 32.5° | 2401.5 | 2401.5 | 2418.0 | 2430.3 | 2443.6 | 2439.4 | 2458.4 | 2455.1 | 2464.2 | 2469.1 | 2466.7 |
| 35° | 2635.9 | 2644.2 | 2656.5 | 2664.0 | 2678.0 | 2685.4 | 2698.6 | 2706.1 | 2710.2 | 2709.4 | 2700.3 |
| 37.5° | 2877.8 | 2891.0 | 2895.9 | 2914.1 | 2928.1 | 2940.5 | 2942.2 | 2933.9 | 2937.2 | 2920.7 | 2915.8 |
| 40° | 3154.3 | 3173.3 | 3184.9 | 3212.1 | 3210.5 | 3226.2 | 3227.8 | 3203.9 | 3199.7 | 3178.3 | 3156.0 |
| 42.5° | 3540.7 | 3567.1 | 3576.2 | 3596.8 | 3580.3 | 3587.7 | 3546.5 | 3536.5 | 3503.5 | 3468.9 | 3418.5 |
| 45° | 4061.6 | 4048.4 | 4054.2 | 4048.4 | 4004.6 | 3972.4 | 3938.6 | 3889.9 | 3841.2 | 3774.3 | 3702.5 |
| 47.5° | 4519.7 | 4526.4 | 4483.4 | 4456.2 | 4385.2 | 4339.8 | 4277.9 | 4192.8 | 4133.4 | 4043.4 | 3948.5 |
| 50° | 4964.7 | 4891.2 | 4831.0 | 4768.2 | 4705.5 | 4622.1 | 4528.8 | 4453.7 | 4367.0 | 4254.8 | 4138.4 |
| 52.5° | 5326.3 | 5231.4 | 5158.7 | 5069.5 | 4984.5 | 4892.1 | 4794.6 | 4685.7 | 4571.8 | 4459.5 | 4315.8 |
| 55° | 5966.9 | 5829.0 | 5735.7 | 5579.7 | 5483.1 | 5353.5 | 5277.6 | 5136.4 | 4977.9 | 4829.3 | 4676.6 |
| 57.5° | 7341.4 | 7135.0 | 7028.5 | 6940.2 | 6789.9 | 6577.0 | 6441.6 | 6209.6 | 5983.4 | 5824.9 | 5570.6 |
| 60° | 9411.8 | 9202.1 | 9025.5 | 8816.6 | 8586.3 | 8297.4 | 8168.6 | 7895.3 | 7571.7 | 7310.0 | 6974.0 |
| 62.5° | 10702.1 | 10412.3 | 10125.9 | 9832.8 | 9601.7 | 9375.5 | 9108.8 | 8833.1 | 8512.8 | 8157.0 | 7789.7 |
| 65° | 10754.1 | 10406.6 | 10064.0 | 9765.1 | 9494.4 | 9200.5 | 8950.3 | 8670.5 | 8333.7 | 7967.1 | 7585.7 |
| 67.5° | 10214.2 | 9825.4 | 9458.0 | 9130.3 | 8820.7 | 8548.3 | 8286.6 | 8023.3 | 7662.5 | 7355.4 | 6965.0 |
| 70° | 9138.6 | 8783.6 | 8450.9 | 8077.8 | 7840.8 | 7534.6 | 7279.5 | 7002.1 | 6743.7 | 6456.4 | 6090.7 |
| 72.5° | 6712.3 | 6444.9 | 6065.1 | 5906.6 | 5779.5 | 5455.1 | 5265.2 | 5242.1 | 5077.0 | 4732.7 | 4459.5 |
| 75° | 2496.4 | 2124.9 | 2012.6 | 2079.5 | 1968.1 | 2005.2 | 1991.2 | 1911.9 | 1915.2 | 1856.6 | 1787.3 |
| 77.5° | 488.7 | 454.0 | 426.8 | 434.2 | 403.7 | 390.5 | 418.5 | 410.3 | 395.4 | 399.6 | 392.9 |
| 80° | 332.7 | 281.5 | 255.1 | 245.2 | 232.8 | 227.0 | 225.4 | 222.9 | 217.9 | 215.5 | 208.0 |
| 82.5° | 327.7 | 243.5 | 192.3 | 165.1 | 155.2 | 150.2 | 146.1 | 145.3 | 143.6 | 142.8 | 145.3 |
| 85° | 130.4 | 105.7 | 96.6 | 88.3 | 85.9 | 83.4 | 83.4 | 82.6 | 81.7 | 83.4 | 86.7 |
| 87.5° | 63.6 | 53.7 | 48.7 | 44.6 | 42.9 | 42.1 | 42.1 | 42.9 | 43.8 | 47.1 | 53.7 |
| 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: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

| | 95° | 96° | 97° | 98° | 99° | 100° | 101° | 102° | 103° | 104° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 |
| 2.5° | 1322.5 | 1323.3 | 1321.7 | 1322.5 | 1321.7 | 1320.0 | 1319.2 | 1321.7 | 1320.8 | 1320.0 | 1320.0 |
| 5° | 1356.3 | 1359.6 | 1358.0 | 1356.3 | 1356.3 | 1355.5 | 1355.5 | 1355.5 | 1354.7 | 1355.5 | 1353.0 |
| 7.5° | 1414.9 | 1414.1 | 1414.1 | 1412.5 | 1410.8 | 1412.5 | 1411.6 | 1409.2 | 1410.0 | 1408.3 | 1405.9 |
| 10° | 1490.1 | 1487.6 | 1491.7 | 1491.7 | 1488.4 | 1487.6 | 1485.9 | 1483.5 | 1483.5 | 1481.0 | 1481.0 |
| 12.5° | 1579.2 | 1576.8 | 1582.5 | 1578.4 | 1573.5 | 1572.6 | 1567.7 | 1566.0 | 1568.5 | 1567.7 | 1566.0 |
| 15° | 1670.0 | 1670.9 | 1673.3 | 1672.5 | 1666.7 | 1666.7 | 1660.1 | 1661.0 | 1656.0 | 1654.4 | 1650.2 |
| 17.5° | 1758.4 | 1759.2 | 1756.7 | 1756.7 | 1752.6 | 1750.1 | 1742.7 | 1743.5 | 1740.2 | 1733.6 | 1728.6 |
| 20° | 1837.6 | 1836.8 | 1831.0 | 1836.0 | 1827.7 | 1826.1 | 1819.5 | 1812.9 | 1814.5 | 1807.9 | 1798.0 |
| 22.5° | 1915.2 | 1913.6 | 1911.9 | 1909.4 | 1905.3 | 1903.7 | 1896.2 | 1895.4 | 1887.1 | 1877.2 | 1869.0 |
| 25° | 2005.2 | 2004.4 | 2001.9 | 2002.7 | 1994.5 | 1995.3 | 1982.1 | 1978.8 | 1973.8 | 1963.1 | 1956.5 |
| 27.5° | 2121.6 | 2121.6 | 2115.0 | 2112.5 | 2110.0 | 2106.7 | 2095.2 | 2086.9 | 2074.5 | 2062.2 | 2049.0 |
| 30° | 2264.4 | 2262.8 | 2261.1 | 2254.5 | 2245.4 | 2240.5 | 2219.8 | 2206.6 | 2190.1 | 2167.0 | 2147.2 |
| 32.5° | 2468.3 | 2454.3 | 2442.7 | 2427.9 | 2413.0 | 2397.3 | 2365.1 | 2342.8 | 2316.4 | 2279.3 | 2247.9 |
| 35° | 2695.3 | 2671.4 | 2659.0 | 2628.5 | 2600.4 | 2569.0 | 2530.2 | 2484.8 | 2448.5 | 2399.8 | 2348.6 |
| 37.5° | 2882.7 | 2864.6 | 2831.6 | 2796.9 | 2757.3 | 2697.8 | 2654.1 | 2605.4 | 2541.8 | 2488.1 | 2426.2 |
| 40° | 3113.9 | 3072.6 | 3025.5 | 2967.8 | 2913.3 | 2846.4 | 2786.1 | 2716.0 | 2638.4 | 2560.8 | 2479.9 |
| 42.5° | 3356.6 | 3293.0 | 3215.4 | 3148.6 | 3066.0 | 2978.5 | 2900.1 | 2805.1 | 2706.1 | 2602.1 | 2493.9 |
| 45° | 3604.2 | 3525.8 | 3422.6 | 3327.7 | 3212.9 | 3103.1 | 2990.9 | 2861.3 | 2725.9 | 2587.2 | 2451.0 |
| 47.5° | 3831.3 | 3716.5 | 3599.3 | 3471.3 | 3339.2 | 3198.1 | 3038.8 | 2868.7 | 2690.4 | 2507.9 | 2337.9 |
| 50° | 4009.6 | 3865.9 | 3718.2 | 3570.4 | 3408.6 | 3225.3 | 3024.7 | 2802.7 | 2583.1 | 2364.3 | 2168.7 |
| 52.5° | 4167.2 | 4006.3 | 3824.7 | 3641.4 | 3441.6 | 3216.2 | 2965.3 | 2703.6 | 2436.1 | 2194.2 | 1974.7 |
| 55° | 4472.7 | 4270.4 | 4031.0 | 3794.9 | 3542.3 | 3258.3 | 2945.5 | 2625.2 | 2317.2 | 2053.9 | 1820.3 |
| 57.5° | 5302.3 | 5029.1 | 4658.4 | 4330.7 | 4010.4 | 3596.8 | 3156.0 | 2761.4 | 2369.3 | 2058.0 | 1798.0 |
| 60° | 6609.2 | 6164.2 | 5739.9 | 5240.4 | 4722.0 | 4154.9 | 3563.8 | 3032.2 | 2554.2 | 2163.7 | 1850.8 |
| 62.5° | 7367.0 | 6897.3 | 6351.6 | 5746.5 | 5074.5 | 4383.5 | 3705.0 | 3084.2 | 2560.0 | 2134.8 | 1788.1 |
| 65° | 7162.3 | 6690.1 | 6089.9 | 5470.8 | 4755.8 | 4049.2 | 3375.6 | 2779.5 | 2271.0 | 1878.1 | 1546.2 |
| 67.5° | 6554.7 | 6061.0 | 5497.2 | 4810.3 | 4126.8 | 3472.2 | 2858.0 | 2296.6 | 1846.7 | 1480.2 | 1187.1 |
| 70° | 5670.5 | 5231.4 | 4688.2 | 4055.0 | 3392.1 | 2803.5 | 2285.9 | 1779.8 | 1399.3 | 1063.3 | 832.1 |
| 72.5° | 4208.5 | 3819.7 | 3480.4 | 2951.3 | 2465.8 | 2004.4 | 1582.5 | 1238.3 | 910.6 | 688.5 | 530.0 |
| 75° | 1766.6 | 1635.4 | 1580.1 | 1386.1 | 1205.3 | 988.2 | 743.8 | 592.7 | 480.5 | 408.6 | 324.4 |
| 77.5° | 428.4 | 428.4 | 402.9 | 377.3 | 346.7 | 313.7 | 277.4 | 247.7 | 232.8 | 219.6 | 208.9 |
| 80° | 208.0 | 206.4 | 199.8 | 199.0 | 193.2 | 185.7 | 181.6 | 175.8 | 173.4 | 170.1 | 168.4 |
| 82.5° | 146.1 | 145.3 | 142.8 | 146.1 | 145.3 | 148.6 | 150.2 | 151.1 | 151.1 | 151.9 | 152.7 |
| 85° | 92.5 | 95.8 | 102.4 | 110.6 | 118.1 | 127.1 | 135.4 | 142.0 | 146.9 | 151.1 | 154.4 |
| 87.5° | 58.6 | 66.9 | 71.8 | 84.2 | 96.6 | 110.6 | 126.3 | 132.9 | 138.7 | 139.5 | 134.6 |
| 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: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

| | 106° | 107° | 108° | 109° | 110° | 115° | 125° | 135° | 145° | 155° | 165° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 | 1313.4 |
| 2.5° | 1320.0 | 1319.2 | 1320.8 | 1319.2 | 1319.2 | 1318.4 | 1315.9 | 1313.4 | 1310.9 | 1310.1 | 1307.6 |
| 5° | 1352.2 | 1352.2 | 1353.9 | 1350.6 | 1351.4 | 1348.1 | 1340.7 | 1332.4 | 1325.0 | 1318.4 | 1310.9 |
| 7.5° | 1406.7 | 1404.2 | 1405.0 | 1404.2 | 1402.6 | 1396.0 | 1379.5 | 1358.8 | 1339.0 | 1318.4 | 1301.9 |
| 10° | 1479.3 | 1474.4 | 1474.4 | 1472.7 | 1470.3 | 1461.2 | 1426.5 | 1385.2 | 1344.0 | 1306.8 | 1279.6 |
| 12.5° | 1560.2 | 1561.1 | 1554.5 | 1550.3 | 1546.2 | 1527.2 | 1475.2 | 1409.2 | 1344.0 | 1284.5 | 1240.8 |
| 15° | 1644.4 | 1643.6 | 1636.2 | 1633.7 | 1624.6 | 1596.6 | 1518.1 | 1421.6 | 1328.3 | 1240.8 | 1175.5 |
| 17.5° | 1720.4 | 1717.1 | 1709.7 | 1704.7 | 1694.8 | 1657.7 | 1547.0 | 1415.8 | 1287.0 | 1172.2 | 1090.5 |
| 20° | 1789.7 | 1785.6 | 1779.0 | 1769.9 | 1760.0 | 1706.4 | 1557.8 | 1386.1 | 1221.8 | 1090.5 | 1008.0 |
| 22.5° | 1861.6 | 1852.5 | 1845.0 | 1832.7 | 1821.9 | 1750.1 | 1550.3 | 1333.2 | 1147.5 | 999.7 | 911.4 |
| 25° | 1941.6 | 1930.9 | 1915.2 | 1900.4 | 1883.8 | 1785.6 | 1529.7 | 1267.2 | 1058.3 | 901.5 | 812.3 |
| 27.5° | 2028.3 | 2012.6 | 1992.0 | 1973.0 | 1946.6 | 1812.0 | 1494.2 | 1193.7 | 960.9 | 804.1 | 711.6 |
| 30° | 2119.9 | 2091.1 | 2065.5 | 2036.6 | 2002.7 | 1824.4 | 1443.0 | 1102.9 | 853.6 | 705.0 | 612.5 |
| 32.5° | 2209.1 | 2170.3 | 2132.3 | 2090.2 | 2044.0 | 1819.5 | 1370.4 | 995.6 | 746.3 | 612.5 | 534.9 |
| 35° | 2299.9 | 2243.8 | 2190.9 | 2134.0 | 2077.8 | 1794.7 | 1270.5 | 876.7 | 644.7 | 535.8 | 479.6 |
| 37.5° | 2361.8 | 2291.7 | 2221.5 | 2153.0 | 2085.3 | 1741.0 | 1137.6 | 743.8 | 553.1 | 480.5 | 440.0 |
| 40° | 2393.2 | 2307.3 | 2221.5 | 2136.5 | 2053.1 | 1651.9 | 982.4 | 622.4 | 487.9 | 439.2 | 410.3 |
| 42.5° | 2384.1 | 2277.6 | 2171.1 | 2070.4 | 1968.1 | 1509.9 | 814.0 | 522.6 | 442.5 | 407.0 | 381.4 |
| 45° | 2309.0 | 2181.9 | 2060.5 | 1954.0 | 1826.1 | 1327.4 | 668.7 | 460.6 | 407.8 | 380.6 | 356.6 |
| 47.5° | 2167.8 | 2025.8 | 1877.2 | 1756.7 | 1637.0 | 1116.1 | 556.4 | 421.8 | 377.3 | 355.0 | 331.0 |
| 50° | 1987.9 | 1823.6 | 1675.0 | 1544.6 | 1427.3 | 918.8 | 479.6 | 388.8 | 352.5 | 333.5 | 307.9 |
| 52.5° | 1789.7 | 1613.1 | 1477.7 | 1340.7 | 1225.9 | 766.9 | 426.0 | 352.5 | 328.6 | 308.7 | 288.1 |
| 55° | 1625.5 | 1462.0 | 1324.1 | 1186.3 | 1070.7 | 671.2 | 381.4 | 324.4 | 306.3 | 285.6 | 269.1 |
| 57.5° | 1581.7 | 1395.1 | 1244.9 | 1114.5 | 995.6 | 612.5 | 349.2 | 298.8 | 286.5 | 270.8 | 252.6 |
| 60° | 1599.9 | 1394.3 | 1225.9 | 1083.1 | 958.4 | 565.5 | 325.3 | 281.5 | 271.6 | 257.6 | 238.6 |
| 62.5° | 1534.7 | 1317.5 | 1147.5 | 995.6 | 877.5 | 506.0 | 307.9 | 273.2 | 266.6 | 247.7 | 226.2 |
| 65° | 1307.6 | 1108.7 | 945.2 | 814.0 | 712.4 | 426.0 | 293.9 | 280.7 | 274.1 | 241.1 | 217.9 |
| 67.5° | 995.6 | 829.7 | 698.4 | 600.2 | 526.7 | 352.5 | 290.6 | 305.4 | 292.2 | 244.4 | 215.5 |
| 70° | 688.5 | 563.0 | 478.8 | 419.4 | 373.1 | 297.2 | 301.3 | 332.7 | 313.7 | 255.1 | 229.5 |
| 72.5° | 436.7 | 364.9 | 323.6 | 301.3 | 279.0 | 251.0 | 298.8 | 329.4 | 303.8 | 256.7 | 229.5 |
| 75° | 279.9 | 250.1 | 236.1 | 227.8 | 221.2 | 218.8 | 263.3 | 270.8 | 244.4 | 222.9 | 213.8 |
| 77.5° | 198.1 | 193.2 | 190.7 | 189.9 | 190.7 | 196.5 | 217.9 | 203.9 | 177.5 | 178.3 | 183.3 |
| 80° | 167.6 | 167.6 | 165.9 | 166.8 | 168.4 | 170.9 | 174.2 | 150.2 | 136.2 | 146.9 | 163.5 |
| 82.5° | 153.5 | 156.0 | 157.7 | 159.3 | 161.8 | 158.5 | 147.8 | 113.9 | 109.8 | 142.8 | 160.2 |
| 85° | 156.0 | 156.0 | 156.8 | 158.5 | 159.3 | 142.8 | 123.0 | 85.9 | 84.2 | 160.2 | 151.1 |
| 87.5° | 133.7 | 132.1 | 126.3 | 122.2 | 116.4 | 98.2 | 81.7 | 47.9 | 49.5 | 99.1 | 105.7 |
| 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: P161832

CATALOG NUMBER: OVF-F05-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

| | 175° | 180° |
|-------|--------|--------|
| 0° | 1313.4 | 1313.4 |
| 2.5° | 1306.8 | 1306.8 |
| 5° | 1306.8 | 1306.8 |
| 7.5° | 1296.1 | 1292.8 |
| 10° | 1264.7 | 1260.6 |
| 12.5° | 1216.8 | 1212.7 |
| 15° | 1143.4 | 1138.4 |
| 17.5° | 1051.7 | 1043.5 |
| 20° | 956.0 | 944.4 |
| 22.5° | 860.2 | 851.1 |
| 25° | 762.0 | 753.7 |
| 27.5° | 665.4 | 657.1 |
| 30° | 576.2 | 572.9 |
| 32.5° | 510.2 | 506.9 |
| 35° | 461.5 | 459.8 |
| 37.5° | 428.4 | 426.8 |
| 40° | 399.6 | 397.9 |
| 42.5° | 373.1 | 370.7 |
| 45° | 346.7 | 347.5 |
| 47.5° | 320.3 | 319.5 |
| 50° | 297.2 | 297.2 |
| 52.5° | 278.2 | 277.4 |
| 55° | 260.9 | 260.0 |
| 57.5° | 243.5 | 242.7 |
| 60° | 228.7 | 226.2 |
| 62.5° | 214.6 | 213.0 |
| 65° | 205.6 | 204.7 |
| 67.5° | 199.0 | 196.5 |
| 70° | 197.3 | 190.7 |
| 72.5° | 192.3 | 184.1 |
| 75° | 180.8 | 176.7 |
| 77.5° | 159.3 | 154.4 |
| 80° | 123.0 | 113.9 |
| 82.5° | 103.2 | 89.2 |
| 85° | 75.9 | 70.2 |
| 87.5° | 55.3 | 43.8 |
| 90° | 0.0 | 0.0 |

(END OF REPORT)