

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P776174

Luminaire Tested: HCDJBS1525CSD-HCD82TRMW-2500lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B064-HCD82TRMW)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS1525CSD-HCD82TRMW-2500lm-5000K
Description: 8 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

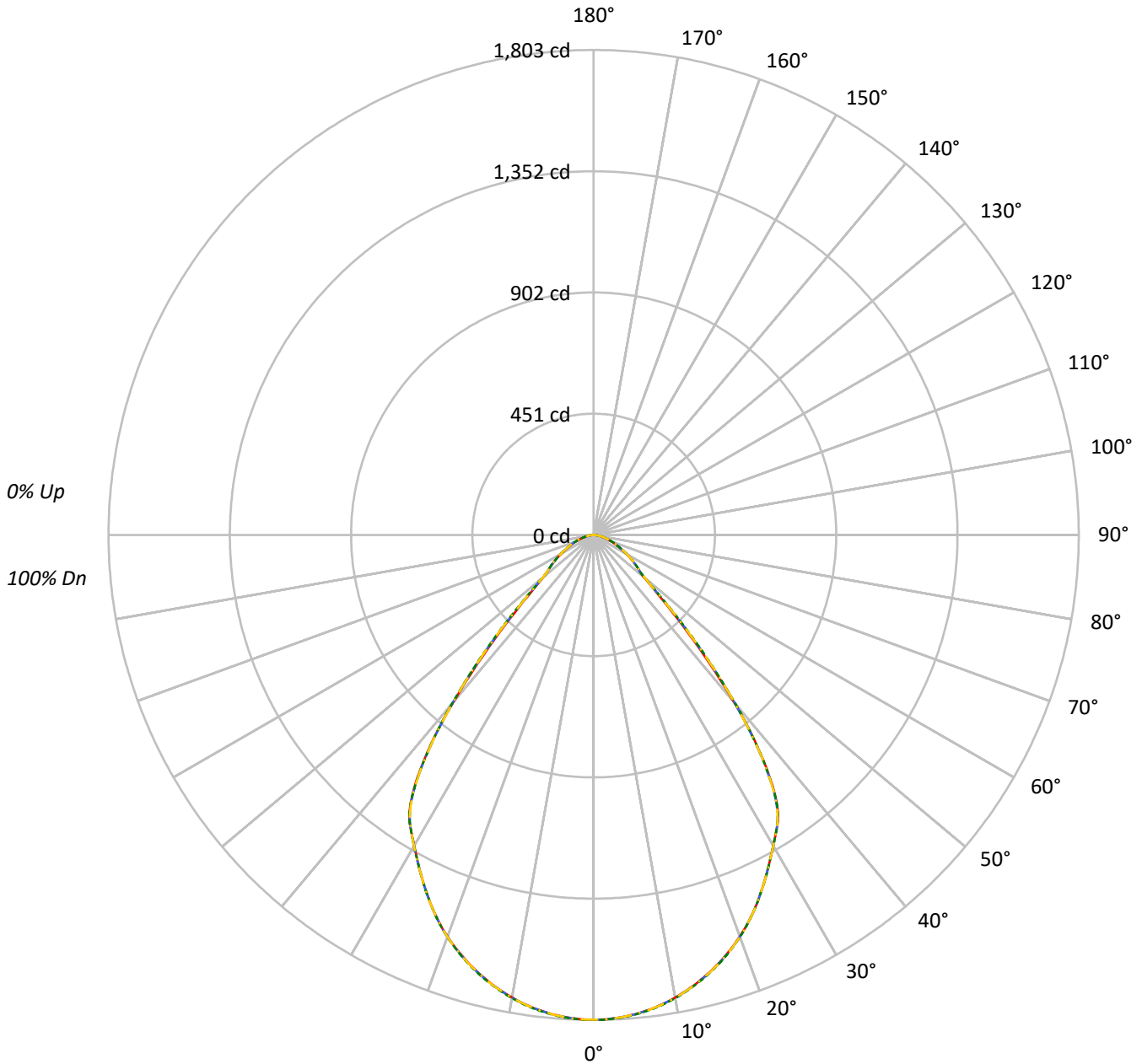
Lumens per Lamp: N/A
Luminaire Lumens: 2718.0 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.12
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 25
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



TEST NUMBER: P776174
CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMW-2500lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMW-2500lm-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | |
| 1 | 112 | 108 | 105 | 103 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | | | |
| 2 | 105 | 99 | 93 | 89 | 102 | 97 | 92 | 88 | 93 | 90 | 86 | 90 | 87 | 84 | 87 | 85 | 83 | 81 | | | | | | | | |
| 3 | 98 | 90 | 84 | 79 | 96 | 88 | 83 | 78 | 86 | 81 | 77 | 83 | 79 | 75 | 81 | 77 | 74 | 72 | | | | | | | | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 70 | 79 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 65 | | | | | | | | |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 | | | | | | | | |
| 6 | 80 | 69 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 54 | | | | | | | | |
| 7 | 75 | 64 | 57 | 52 | 74 | 63 | 57 | 52 | 62 | 56 | 51 | 61 | 55 | 51 | 59 | 55 | 51 | 49 | | | | | | | | |
| 8 | 71 | 60 | 52 | 47 | 69 | 59 | 52 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 55 | 50 | 47 | 45 | | | | | | | | |
| 9 | 67 | 55 | 48 | 44 | 66 | 55 | 48 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 43 | 42 | | | | | | | | |
| 10 | 63 | 52 | 45 | 40 | 62 | 51 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 49 | 44 | 40 | 38 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|-------|-------|-------|
| 0° | 55028 | 55028 | 55028 | 55028 |
| 5° | 54803 | 54852 | 54803 | 54852 |
| 10° | 54141 | 54221 | 54141 | 54221 |
| 15° | 53078 | 53157 | 53078 | 53157 |
| 20° | 51623 | 51672 | 51623 | 51672 |
| 25° | 49479 | 49489 | 49479 | 49489 |
| 30° | 47056 | 47056 | 47056 | 47056 |
| 35° | 43715 | 43629 | 43715 | 43629 |
| 40° | 32310 | 32693 | 32310 | 32693 |
| 45° | 18998 | 19922 | 18998 | 19922 |
| 50° | 11627 | 11774 | 11627 | 11774 |
| 55° | 9964 | 9975 | 9964 | 9975 |
| 60° | 8500 | 8579 | 8500 | 8579 |
| 65° | 7217 | 7383 | 7217 | 7383 |
| 70° | 6132 | 6409 | 6132 | 6409 |
| 75° | 5119 | 5509 | 5119 | 5509 |
| 80° | 4079 | 4624 | 4079 | 4624 |
| 85° | 2522 | 3538 | 2522 | 3538 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 20077 cd/sqm



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMW-2500lm-5000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 169.4 | 6.2 |
| 10°-20° | 472.8 | 17.4 |
| 20°-30° | 675.2 | 24.8 |
| 30°-40° | 705.0 | 25.9 |
| 40°-50° | 366.2 | 13.5 |
| 50°-60° | 167.9 | 6.2 |
| 60°-70° | 101.8 | 3.7 |
| 70°-80° | 48.8 | 1.8 |
| 80°-90° | 10.9 | 0.4 |
| 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°-30° | 1317.4 | 48.5 |
| 0°-40° | 2022.4 | 74.4 |
| 0°-60° | 2556.5 | 94.1 |
| 0°-90° | 2718.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2718.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1802 | 1802 | 1802 | 1802 | 1802 | |
| 5° | 1788 | 1790 | 1788 | 1790 | 1788 | 169 |
| 15° | 1679 | 1682 | 1679 | 1682 | 1679 | 473 |
| 25° | 1469 | 1469 | 1469 | 1469 | 1469 | 675 |
| 35° | 1173 | 1171 | 1173 | 1171 | 1173 | 706 |
| 45° | 440 | 461 | 440 | 461 | 440 | 358 |
| 55° | 187 | 187 | 187 | 187 | 187 | 167 |
| 65° | 100 | 102 | 100 | 102 | 100 | 100 |
| 75° | 43 | 47 | 43 | 47 | 43 | 47 |
| 85° | 7 | 10 | 7 | 10 | 7 | 9 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 |
| 0.5° | 1802.2 | 1801.6 | 1802.2 | 1802.2 | 1803.2 | 1802.2 | 1802.2 | 1801.6 | 1802.2 | 1801.6 | 1802.2 |
| 1° | 1801.9 | 1801.4 | 1801.9 | 1801.9 | 1802.7 | 1801.9 | 1801.9 | 1801.4 | 1801.9 | 1801.4 | 1801.9 |
| 1.5° | 1801.1 | 1800.6 | 1801.1 | 1801.1 | 1802.2 | 1801.1 | 1801.1 | 1800.6 | 1801.1 | 1800.6 | 1801.1 |
| 2° | 1800.1 | 1799.6 | 1800.1 | 1800.1 | 1801.1 | 1800.1 | 1800.1 | 1799.6 | 1800.1 | 1799.6 | 1800.1 |
| 2.5° | 1798.8 | 1798.3 | 1798.8 | 1799.1 | 1799.8 | 1799.1 | 1798.8 | 1798.3 | 1798.8 | 1798.3 | 1798.8 |
| 3° | 1797.2 | 1796.7 | 1797.2 | 1797.5 | 1798.5 | 1797.5 | 1797.2 | 1796.7 | 1797.2 | 1796.7 | 1797.2 |
| 3.5° | 1795.4 | 1794.9 | 1795.4 | 1795.7 | 1796.7 | 1795.7 | 1795.4 | 1794.9 | 1795.4 | 1794.9 | 1795.4 |
| 4° | 1793.1 | 1792.9 | 1793.4 | 1793.6 | 1794.7 | 1793.6 | 1793.4 | 1792.9 | 1793.1 | 1792.9 | 1793.4 |
| 4.5° | 1790.8 | 1790.5 | 1791.1 | 1791.3 | 1792.3 | 1791.3 | 1791.1 | 1790.5 | 1790.8 | 1790.5 | 1791.1 |
| 5° | 1788.2 | 1787.7 | 1788.2 | 1788.7 | 1789.8 | 1788.7 | 1788.2 | 1787.7 | 1788.2 | 1787.7 | 1788.2 |
| 5.5° | 1785.1 | 1784.9 | 1785.4 | 1785.9 | 1786.9 | 1785.9 | 1785.4 | 1784.9 | 1785.1 | 1784.9 | 1785.4 |
| 6° | 1782.0 | 1781.5 | 1782.3 | 1782.8 | 1783.6 | 1782.8 | 1782.3 | 1781.5 | 1782.0 | 1781.5 | 1782.3 |
| 6.5° | 1778.4 | 1778.1 | 1778.9 | 1779.4 | 1780.2 | 1779.4 | 1778.9 | 1778.1 | 1778.4 | 1778.1 | 1778.9 |
| 7° | 1774.8 | 1774.3 | 1775.0 | 1775.6 | 1776.6 | 1775.6 | 1775.0 | 1774.3 | 1774.8 | 1774.3 | 1775.0 |
| 7.5° | 1770.7 | 1770.1 | 1771.2 | 1771.7 | 1772.7 | 1771.7 | 1771.2 | 1770.1 | 1770.7 | 1770.1 | 1771.2 |
| 8° | 1766.3 | 1766.0 | 1766.8 | 1767.3 | 1768.6 | 1767.3 | 1766.8 | 1766.0 | 1766.3 | 1766.0 | 1766.8 |
| 8.5° | 1761.6 | 1761.4 | 1762.4 | 1762.9 | 1763.9 | 1762.9 | 1762.4 | 1761.4 | 1761.6 | 1761.4 | 1762.4 |
| 9° | 1757.0 | 1756.7 | 1757.5 | 1758.3 | 1759.3 | 1758.3 | 1757.5 | 1756.7 | 1757.0 | 1756.7 | 1757.5 |
| 9.5° | 1751.5 | 1751.5 | 1752.3 | 1753.1 | 1754.1 | 1753.1 | 1752.3 | 1751.5 | 1751.5 | 1751.5 | 1752.3 |
| 10° | 1746.4 | 1746.1 | 1747.2 | 1747.9 | 1749.0 | 1747.9 | 1747.2 | 1746.1 | 1746.4 | 1746.1 | 1747.2 |
| 10.5° | 1740.7 | 1740.4 | 1741.5 | 1742.3 | 1743.5 | 1742.3 | 1741.5 | 1740.4 | 1740.7 | 1740.4 | 1741.5 |
| 11° | 1734.8 | 1734.8 | 1735.5 | 1736.6 | 1737.6 | 1736.6 | 1735.5 | 1734.8 | 1734.8 | 1734.8 | 1735.5 |
| 11.5° | 1728.8 | 1728.6 | 1729.6 | 1730.4 | 1731.4 | 1730.4 | 1729.6 | 1728.6 | 1728.8 | 1728.6 | 1729.6 |
| 12° | 1722.4 | 1722.4 | 1723.1 | 1724.2 | 1725.2 | 1724.2 | 1723.1 | 1722.4 | 1722.4 | 1722.4 | 1723.1 |
| 12.5° | 1715.7 | 1715.7 | 1716.7 | 1717.7 | 1718.5 | 1717.7 | 1716.7 | 1715.7 | 1715.7 | 1715.7 | 1716.7 |
| 13° | 1708.9 | 1708.9 | 1710.0 | 1710.8 | 1711.8 | 1710.8 | 1710.0 | 1708.9 | 1708.9 | 1708.9 | 1710.0 |
| 13.5° | 1701.7 | 1701.7 | 1702.8 | 1704.0 | 1704.6 | 1704.0 | 1702.8 | 1701.7 | 1701.7 | 1701.7 | 1702.8 |
| 14° | 1694.7 | 1694.5 | 1695.5 | 1696.6 | 1697.3 | 1696.6 | 1695.5 | 1694.5 | 1694.7 | 1694.5 | 1695.5 |
| 14.5° | 1687.0 | 1687.0 | 1688.0 | 1689.1 | 1689.8 | 1689.1 | 1688.0 | 1687.0 | 1687.0 | 1687.0 | 1688.0 |
| 15° | 1679.3 | 1679.5 | 1680.5 | 1681.3 | 1681.8 | 1681.3 | 1680.5 | 1679.5 | 1679.3 | 1679.5 | 1680.5 |
| 15.5° | 1671.3 | 1671.5 | 1672.5 | 1673.3 | 1673.8 | 1673.3 | 1672.5 | 1671.5 | 1671.3 | 1671.5 | 1672.5 |
| 16° | 1663.2 | 1663.2 | 1664.3 | 1665.1 | 1665.6 | 1665.1 | 1664.3 | 1663.2 | 1663.2 | 1663.2 | 1664.3 |
| 16.5° | 1655.0 | 1655.0 | 1656.0 | 1656.5 | 1657.3 | 1656.5 | 1656.0 | 1655.0 | 1655.0 | 1655.0 | 1656.0 |
| 17° | 1646.2 | 1646.2 | 1647.2 | 1648.0 | 1648.5 | 1648.0 | 1647.2 | 1646.2 | 1646.2 | 1646.2 | 1647.2 |
| 17.5° | 1637.2 | 1637.4 | 1638.5 | 1639.0 | 1639.5 | 1639.0 | 1638.5 | 1637.4 | 1637.2 | 1637.4 | 1638.5 |
| 18° | 1628.1 | 1628.1 | 1629.2 | 1629.7 | 1630.2 | 1629.7 | 1629.2 | 1628.1 | 1628.1 | 1628.1 | 1629.2 |
| 18.5° | 1618.8 | 1618.8 | 1619.9 | 1620.1 | 1620.6 | 1620.1 | 1619.9 | 1618.8 | 1618.8 | 1618.8 | 1619.9 |
| 19° | 1609.0 | 1609.0 | 1610.1 | 1610.6 | 1610.8 | 1610.6 | 1610.1 | 1609.0 | 1609.0 | 1609.0 | 1610.1 |
| 19.5° | 1599.0 | 1599.2 | 1600.0 | 1600.5 | 1600.8 | 1600.5 | 1600.0 | 1599.2 | 1599.0 | 1599.2 | 1600.0 |
| 20° | 1588.9 | 1588.9 | 1589.7 | 1589.9 | 1590.4 | 1589.9 | 1589.7 | 1588.9 | 1588.9 | 1588.9 | 1589.7 |
| 20.5° | 1578.3 | 1578.3 | 1579.1 | 1579.1 | 1579.6 | 1579.1 | 1579.1 | 1578.3 | 1578.3 | 1578.3 | 1579.1 |
| 21° | 1567.5 | 1567.5 | 1568.2 | 1568.2 | 1568.5 | 1568.2 | 1568.2 | 1567.5 | 1567.5 | 1567.5 | 1568.2 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 22.5° | 1532.6 | 1532.6 | 1533.1 | 1532.9 | 1533.4 | 1532.9 | 1533.1 | 1532.6 | 1532.6 | 1532.6 | 1533.1 |
| 23° | 1520.5 | 1520.5 | 1520.7 | 1520.7 | 1521.0 | 1520.7 | 1520.7 | 1520.5 | 1520.5 | 1520.5 | 1520.7 |
| 23.5° | 1508.1 | 1508.1 | 1508.3 | 1508.1 | 1508.3 | 1508.1 | 1508.3 | 1508.1 | 1508.1 | 1508.1 | 1508.3 |
| 24° | 1495.4 | 1495.2 | 1495.4 | 1495.2 | 1495.4 | 1495.2 | 1495.4 | 1495.2 | 1495.4 | 1495.2 | 1495.4 |
| 24.5° | 1482.0 | 1482.0 | 1482.5 | 1482.3 | 1482.3 | 1482.3 | 1482.5 | 1482.0 | 1482.0 | 1482.0 | 1482.5 |
| 25° | 1468.8 | 1468.8 | 1469.1 | 1469.1 | 1469.1 | 1469.1 | 1469.1 | 1468.8 | 1468.8 | 1468.8 | 1469.1 |
| 25.5° | 1455.7 | 1455.4 | 1455.9 | 1455.7 | 1455.7 | 1455.7 | 1455.9 | 1455.4 | 1455.7 | 1455.4 | 1455.9 |
| 26° | 1442.2 | 1442.0 | 1442.2 | 1442.5 | 1442.2 | 1442.5 | 1442.2 | 1442.0 | 1442.2 | 1442.0 | 1442.2 |
| 26.5° | 1428.6 | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.6 | 1428.8 | 1428.8 |
| 27° | 1415.1 | 1415.1 | 1415.4 | 1415.4 | 1415.1 | 1415.4 | 1415.4 | 1415.1 | 1415.1 | 1415.1 | 1415.4 |
| 27.5° | 1401.4 | 1401.4 | 1402.0 | 1402.0 | 1401.4 | 1402.0 | 1402.0 | 1401.4 | 1401.4 | 1401.4 | 1402.0 |
| 28° | 1388.0 | 1388.0 | 1388.5 | 1388.3 | 1388.3 | 1388.3 | 1388.5 | 1388.0 | 1388.0 | 1388.0 | 1388.5 |
| 28.5° | 1374.6 | 1374.6 | 1375.1 | 1374.9 | 1374.6 | 1374.9 | 1375.1 | 1374.6 | 1374.6 | 1374.6 | 1375.1 |
| 29° | 1360.9 | 1361.4 | 1361.7 | 1361.4 | 1361.4 | 1361.4 | 1361.7 | 1361.4 | 1360.9 | 1361.4 | 1361.7 |
| 29.5° | 1347.7 | 1348.0 | 1348.5 | 1348.5 | 1348.0 | 1348.5 | 1348.5 | 1348.0 | 1347.7 | 1348.0 | 1348.5 |
| 30° | 1334.8 | 1335.1 | 1335.3 | 1335.3 | 1334.8 | 1335.3 | 1335.3 | 1335.1 | 1334.8 | 1335.1 | 1335.3 |
| 30.5° | 1321.9 | 1322.4 | 1322.7 | 1322.4 | 1321.9 | 1322.4 | 1322.7 | 1322.4 | 1321.9 | 1322.4 | 1322.7 |
| 31° | 1309.3 | 1309.5 | 1310.0 | 1309.8 | 1309.5 | 1309.8 | 1310.0 | 1309.5 | 1309.3 | 1309.5 | 1310.0 |
| 31.5° | 1297.1 | 1297.1 | 1297.4 | 1297.1 | 1296.6 | 1297.1 | 1297.4 | 1297.1 | 1297.1 | 1297.1 | 1297.4 |
| 32° | 1284.5 | 1284.5 | 1284.5 | 1284.2 | 1284.2 | 1284.2 | 1284.5 | 1284.5 | 1284.5 | 1284.5 | 1284.5 |
| 32.5° | 1271.8 | 1270.8 | 1270.5 | 1270.3 | 1271.6 | 1270.3 | 1270.5 | 1270.8 | 1271.8 | 1270.8 | 1270.5 |
| 33° | 1257.9 | 1255.3 | 1254.8 | 1254.0 | 1258.4 | 1254.0 | 1254.8 | 1255.3 | 1257.9 | 1255.3 | 1254.8 |
| 33.5° | 1240.9 | 1237.0 | 1237.2 | 1235.7 | 1241.4 | 1235.7 | 1237.2 | 1237.0 | 1240.9 | 1237.0 | 1237.2 |
| 34° | 1220.5 | 1216.1 | 1217.6 | 1214.5 | 1221.2 | 1214.5 | 1217.6 | 1216.1 | 1220.5 | 1216.1 | 1217.6 |
| 34.5° | 1198.5 | 1192.3 | 1194.9 | 1191.8 | 1198.0 | 1191.8 | 1194.9 | 1192.3 | 1198.5 | 1192.3 | 1194.9 |
| 35° | 1172.9 | 1167.3 | 1168.6 | 1166.5 | 1170.6 | 1166.5 | 1168.6 | 1167.3 | 1172.9 | 1167.3 | 1168.6 |
| 35.5° | 1144.3 | 1141.2 | 1139.6 | 1137.8 | 1140.7 | 1137.8 | 1139.6 | 1141.2 | 1144.3 | 1141.2 | 1139.6 |
| 36° | 1112.8 | 1113.3 | 1108.7 | 1106.6 | 1111.0 | 1106.6 | 1108.7 | 1113.3 | 1112.8 | 1113.3 | 1108.7 |
| 36.5° | 1079.7 | 1082.1 | 1075.9 | 1073.5 | 1078.2 | 1073.5 | 1075.9 | 1082.1 | 1079.7 | 1082.1 | 1075.9 |
| 37° | 1045.7 | 1047.7 | 1042.0 | 1038.9 | 1044.6 | 1038.9 | 1042.0 | 1047.7 | 1045.7 | 1047.7 | 1042.0 |
| 37.5° | 1010.3 | 1010.3 | 1006.4 | 1003.6 | 1008.7 | 1003.6 | 1006.4 | 1010.3 | 1010.3 | 1010.3 | 1006.4 |
| 38° | 973.4 | 970.8 | 970.0 | 967.7 | 972.6 | 967.7 | 970.0 | 970.8 | 973.4 | 970.8 | 970.0 |
| 38.5° | 934.9 | 930.3 | 932.3 | 930.5 | 935.4 | 930.5 | 932.3 | 930.3 | 934.9 | 930.3 | 932.3 |
| 39° | 894.6 | 890.2 | 893.3 | 893.1 | 898.2 | 893.1 | 893.3 | 890.2 | 894.6 | 890.2 | 893.3 |
| 39.5° | 853.6 | 850.5 | 854.1 | 855.1 | 859.8 | 855.1 | 854.1 | 850.5 | 853.6 | 850.5 | 854.1 |
| 40° | 810.7 | 811.5 | 815.1 | 817.9 | 820.3 | 817.9 | 815.1 | 811.5 | 810.7 | 811.5 | 815.1 |
| 40.5° | 767.9 | 771.7 | 775.6 | 780.5 | 780.8 | 780.5 | 775.6 | 771.7 | 767.9 | 771.7 | 775.6 |
| 41° | 726.3 | 732.7 | 737.6 | 743.3 | 741.5 | 743.3 | 737.6 | 732.7 | 726.3 | 732.7 | 737.6 |
| 41.5° | 685.2 | 692.7 | 699.7 | 706.4 | 702.5 | 706.4 | 699.7 | 692.7 | 685.2 | 692.7 | 699.7 |
| 42° | 646.0 | 653.7 | 662.0 | 669.2 | 665.1 | 669.2 | 662.0 | 653.7 | 646.0 | 653.7 | 662.0 |
| 42.5° | 608.0 | 615.5 | 624.6 | 633.1 | 628.2 | 633.1 | 624.6 | 615.5 | 608.0 | 615.5 | 624.6 |
| 43° | 571.1 | 578.6 | 588.7 | 597.2 | 593.1 | 597.2 | 588.7 | 578.6 | 571.1 | 578.6 | 588.7 |
| 43.5° | 536.0 | 542.7 | 553.6 | 562.9 | 558.5 | 562.9 | 553.6 | 542.7 | 536.0 | 542.7 | 553.6 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL5125CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 45° | 440.0 | 444.6 | 456.5 | 465.0 | 461.4 | 465.0 | 456.5 | 444.6 | 440.0 | 444.6 | 456.5 |
| 45.5° | 411.8 | 415.9 | 427.3 | 435.3 | 432.5 | 435.3 | 427.3 | 415.9 | 411.8 | 415.9 | 427.3 |
| 46° | 385.2 | 389.9 | 399.7 | 407.2 | 404.8 | 407.2 | 399.7 | 389.9 | 385.2 | 389.9 | 399.7 |
| 46.5° | 360.9 | 366.1 | 373.1 | 380.8 | 379.0 | 380.8 | 373.1 | 366.1 | 360.9 | 366.1 | 373.1 |
| 47° | 338.2 | 344.2 | 349.1 | 356.6 | 354.8 | 356.6 | 349.1 | 344.2 | 338.2 | 344.2 | 349.1 |
| 47.5° | 318.1 | 324.3 | 326.9 | 334.1 | 332.0 | 334.1 | 326.9 | 324.3 | 318.1 | 324.3 | 326.9 |
| 48° | 300.0 | 305.4 | 307.0 | 314.2 | 311.4 | 314.2 | 307.0 | 305.4 | 300.0 | 305.4 | 307.0 |
| 48.5° | 283.7 | 288.1 | 289.4 | 295.6 | 292.3 | 295.6 | 289.4 | 288.1 | 283.7 | 288.1 | 289.4 |
| 49° | 269.0 | 272.4 | 273.7 | 278.8 | 275.7 | 278.8 | 273.7 | 272.4 | 269.0 | 272.4 | 273.7 |
| 49.5° | 256.4 | 258.7 | 260.3 | 264.1 | 260.5 | 264.1 | 260.3 | 258.7 | 256.4 | 258.7 | 260.3 |
| 50° | 244.8 | 246.8 | 248.6 | 251.2 | 247.9 | 251.2 | 248.6 | 246.8 | 244.8 | 246.8 | 248.6 |
| 50.5° | 235.2 | 236.8 | 238.3 | 240.4 | 237.0 | 240.4 | 238.3 | 236.8 | 235.2 | 236.8 | 238.3 |
| 51° | 227.2 | 228.8 | 229.5 | 231.1 | 228.2 | 231.1 | 229.5 | 228.8 | 227.2 | 228.8 | 229.5 |
| 51.5° | 220.5 | 221.8 | 222.6 | 223.1 | 221.3 | 223.1 | 222.6 | 221.8 | 220.5 | 221.8 | 222.6 |
| 52° | 215.3 | 215.8 | 216.4 | 216.6 | 215.6 | 216.6 | 216.4 | 215.8 | 215.3 | 215.8 | 216.4 |
| 52.5° | 210.4 | 210.7 | 210.9 | 210.9 | 210.9 | 210.9 | 210.9 | 210.7 | 210.4 | 210.7 | 210.9 |
| 53° | 205.8 | 206.0 | 206.0 | 206.0 | 206.3 | 206.0 | 206.0 | 206.0 | 205.8 | 206.0 | 206.0 |
| 53.5° | 201.4 | 201.4 | 201.4 | 201.1 | 201.6 | 201.1 | 201.4 | 201.4 | 201.4 | 201.4 | 201.4 |
| 54° | 196.7 | 196.7 | 196.7 | 196.5 | 197.0 | 196.5 | 196.7 | 196.7 | 196.7 | 196.7 | 196.7 |
| 54.5° | 192.1 | 192.1 | 192.1 | 191.8 | 192.4 | 191.8 | 192.1 | 192.1 | 192.1 | 192.1 | 192.1 |
| 55° | 187.2 | 187.2 | 187.2 | 187.2 | 187.4 | 187.2 | 187.2 | 187.2 | 187.2 | 187.2 | 187.2 |
| 55.5° | 182.3 | 182.3 | 182.5 | 182.3 | 182.5 | 182.3 | 182.5 | 182.3 | 182.3 | 182.3 | 182.5 |
| 56° | 177.4 | 177.4 | 177.6 | 177.6 | 177.6 | 177.6 | 177.6 | 177.4 | 177.4 | 177.4 | 177.6 |
| 56.5° | 172.5 | 172.7 | 172.7 | 172.7 | 172.7 | 172.7 | 172.7 | 172.7 | 172.5 | 172.7 | 172.7 |
| 57° | 167.6 | 167.8 | 167.8 | 167.8 | 167.8 | 167.8 | 167.8 | 167.8 | 167.6 | 167.8 | 167.8 |
| 57.5° | 162.7 | 162.9 | 163.2 | 163.2 | 163.2 | 163.2 | 163.2 | 162.9 | 162.7 | 162.9 | 163.2 |
| 58° | 157.8 | 158.3 | 158.3 | 158.5 | 158.5 | 158.5 | 158.3 | 158.3 | 157.8 | 158.3 | 158.3 |
| 58.5° | 152.8 | 153.6 | 153.6 | 153.9 | 153.9 | 153.9 | 153.6 | 153.6 | 152.8 | 153.6 | 153.6 |
| 59° | 148.2 | 149.0 | 149.2 | 149.2 | 149.2 | 149.2 | 149.2 | 149.0 | 148.2 | 149.0 | 149.2 |
| 59.5° | 143.8 | 144.6 | 144.8 | 144.8 | 144.8 | 144.8 | 144.8 | 144.6 | 143.8 | 144.6 | 144.8 |
| 60° | 139.2 | 140.2 | 140.5 | 140.7 | 140.5 | 140.7 | 140.5 | 140.2 | 139.2 | 140.2 | 140.5 |
| 60.5° | 134.8 | 135.8 | 136.3 | 136.3 | 136.3 | 136.3 | 136.3 | 135.8 | 134.8 | 135.8 | 136.3 |
| 61° | 130.6 | 131.7 | 132.2 | 132.2 | 132.2 | 132.2 | 132.2 | 131.7 | 130.6 | 131.7 | 132.2 |
| 61.5° | 126.5 | 127.5 | 128.1 | 128.3 | 128.3 | 128.3 | 128.1 | 127.5 | 126.5 | 127.5 | 128.1 |
| 62° | 122.4 | 123.4 | 124.2 | 124.2 | 124.2 | 124.2 | 124.2 | 123.4 | 122.4 | 123.4 | 124.2 |
| 62.5° | 118.5 | 119.5 | 120.3 | 120.3 | 120.3 | 120.3 | 120.3 | 119.5 | 118.5 | 119.5 | 120.3 |
| 63° | 114.4 | 115.7 | 116.7 | 116.7 | 116.7 | 116.7 | 116.7 | 115.7 | 114.4 | 115.7 | 116.7 |
| 63.5° | 110.8 | 112.1 | 112.8 | 113.1 | 113.1 | 113.1 | 112.8 | 112.1 | 110.8 | 112.1 | 112.8 |
| 64° | 107.1 | 108.2 | 109.2 | 109.5 | 109.5 | 109.5 | 109.2 | 108.2 | 107.1 | 108.2 | 109.2 |
| 64.5° | 103.5 | 104.6 | 105.9 | 105.9 | 105.9 | 105.9 | 105.9 | 104.6 | 103.5 | 104.6 | 105.9 |
| 65° | 99.9 | 101.0 | 102.2 | 102.5 | 102.2 | 102.5 | 102.2 | 101.0 | 99.9 | 101.0 | 102.2 |
| 65.5° | 96.6 | 97.6 | 98.9 | 99.1 | 99.1 | 99.1 | 98.9 | 97.6 | 96.6 | 97.6 | 98.9 |
| 66° | 93.2 | 94.2 | 95.5 | 95.8 | 95.8 | 95.8 | 95.5 | 94.2 | 93.2 | 94.2 | 95.5 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|------|-------|------|-------|------|--------|------|--------|------|--------|------|
| 67.5° | 83.4 | 84.7 | 86.0 | 86.5 | 86.2 | 86.5 | 86.0 | 84.7 | 83.4 | 84.7 | 86.0 |
| 68° | 80.3 | 81.6 | 83.1 | 83.4 | 83.4 | 83.4 | 83.1 | 81.6 | 80.3 | 81.6 | 83.1 |
| 68.5° | 77.5 | 78.5 | 80.0 | 80.3 | 80.3 | 80.3 | 80.0 | 78.5 | 77.5 | 78.5 | 80.0 |
| 69° | 74.4 | 75.6 | 77.2 | 77.5 | 77.5 | 77.5 | 77.2 | 75.6 | 74.4 | 75.6 | 77.2 |
| 69.5° | 71.5 | 72.6 | 74.4 | 74.6 | 74.6 | 74.6 | 74.4 | 72.6 | 71.5 | 72.6 | 74.4 |
| 70° | 68.7 | 69.7 | 71.5 | 71.8 | 71.8 | 71.8 | 71.5 | 69.7 | 68.7 | 69.7 | 71.5 |
| 70.5° | 65.8 | 66.9 | 68.7 | 68.9 | 68.9 | 68.9 | 68.7 | 66.9 | 65.8 | 66.9 | 68.7 |
| 71° | 63.3 | 64.3 | 65.8 | 66.4 | 66.4 | 66.4 | 65.8 | 64.3 | 63.3 | 64.3 | 65.8 |
| 71.5° | 60.4 | 61.4 | 63.3 | 63.8 | 63.5 | 63.8 | 63.3 | 61.4 | 60.4 | 61.4 | 63.3 |
| 72° | 57.8 | 58.9 | 60.7 | 61.2 | 60.9 | 61.2 | 60.7 | 58.9 | 57.8 | 58.9 | 60.7 |
| 72.5° | 55.3 | 56.3 | 58.1 | 58.6 | 58.4 | 58.6 | 58.1 | 56.3 | 55.3 | 56.3 | 58.1 |
| 73° | 52.7 | 53.7 | 55.5 | 56.0 | 56.0 | 56.0 | 55.5 | 53.7 | 52.7 | 53.7 | 55.5 |
| 73.5° | 50.3 | 51.4 | 53.2 | 53.7 | 53.7 | 53.7 | 53.2 | 51.4 | 50.3 | 51.4 | 53.2 |
| 74° | 48.0 | 49.1 | 50.6 | 51.4 | 51.1 | 51.4 | 50.6 | 49.1 | 48.0 | 49.1 | 50.6 |
| 74.5° | 45.7 | 46.5 | 48.3 | 49.1 | 48.8 | 49.1 | 48.3 | 46.5 | 45.7 | 46.5 | 48.3 |
| 75° | 43.4 | 44.2 | 46.0 | 46.7 | 46.7 | 46.7 | 46.0 | 44.2 | 43.4 | 44.2 | 46.0 |
| 75.5° | 41.1 | 42.1 | 43.6 | 44.4 | 44.4 | 44.4 | 43.6 | 42.1 | 41.1 | 42.1 | 43.6 |
| 76° | 39.0 | 39.8 | 41.6 | 42.3 | 42.1 | 42.3 | 41.6 | 39.8 | 39.0 | 39.8 | 41.6 |
| 76.5° | 36.7 | 37.7 | 39.2 | 40.0 | 40.0 | 40.0 | 39.2 | 37.7 | 36.7 | 37.7 | 39.2 |
| 77° | 34.6 | 35.6 | 37.2 | 38.0 | 38.0 | 38.0 | 37.2 | 35.6 | 34.6 | 35.6 | 37.2 |
| 77.5° | 32.8 | 33.6 | 35.1 | 35.9 | 35.9 | 35.9 | 35.1 | 33.6 | 32.8 | 33.6 | 35.1 |
| 78° | 30.7 | 31.5 | 33.0 | 34.1 | 33.8 | 34.1 | 33.0 | 31.5 | 30.7 | 31.5 | 33.0 |
| 78.5° | 28.7 | 29.4 | 31.2 | 32.0 | 32.0 | 32.0 | 31.2 | 29.4 | 28.7 | 29.4 | 31.2 |
| 79° | 26.9 | 27.6 | 29.2 | 30.2 | 29.9 | 30.2 | 29.2 | 27.6 | 26.9 | 27.6 | 29.2 |
| 79.5° | 25.0 | 25.6 | 27.4 | 28.1 | 28.1 | 28.1 | 27.4 | 25.6 | 25.0 | 25.6 | 27.4 |
| 80° | 23.2 | 23.8 | 25.6 | 26.3 | 26.3 | 26.3 | 25.6 | 23.8 | 23.2 | 23.8 | 25.6 |
| 80.5° | 21.4 | 21.9 | 23.8 | 24.5 | 24.5 | 24.5 | 23.8 | 21.9 | 21.4 | 21.9 | 23.8 |
| 81° | 19.6 | 20.1 | 21.9 | 22.7 | 22.7 | 22.7 | 21.9 | 20.1 | 19.6 | 20.1 | 21.9 |
| 81.5° | 18.1 | 18.3 | 20.1 | 21.2 | 21.2 | 21.2 | 20.1 | 18.3 | 18.1 | 18.3 | 20.1 |
| 82° | 16.3 | 16.8 | 18.3 | 19.4 | 19.4 | 19.4 | 18.3 | 16.8 | 16.3 | 16.8 | 18.3 |
| 82.5° | 14.7 | 15.0 | 16.8 | 17.8 | 17.8 | 17.8 | 16.8 | 15.0 | 14.7 | 15.0 | 16.8 |
| 83° | 13.2 | 13.4 | 15.2 | 16.3 | 16.0 | 16.3 | 15.2 | 13.4 | 13.2 | 13.4 | 15.2 |
| 83.5° | 11.6 | 11.9 | 13.7 | 14.5 | 14.5 | 14.5 | 13.7 | 11.9 | 11.6 | 11.9 | 13.7 |
| 84° | 10.1 | 10.3 | 12.1 | 12.9 | 12.9 | 12.9 | 12.1 | 10.3 | 10.1 | 10.3 | 12.1 |
| 84.5° | 8.5 | 8.8 | 10.6 | 11.6 | 11.6 | 11.6 | 10.6 | 8.8 | 8.5 | 8.8 | 10.6 |
| 85° | 7.2 | 7.5 | 9.3 | 10.1 | 10.1 | 10.1 | 9.3 | 7.5 | 7.2 | 7.5 | 9.3 |
| 85.5° | 5.9 | 6.2 | 8.0 | 8.5 | 8.5 | 8.5 | 8.0 | 6.2 | 5.9 | 6.2 | 8.0 |
| 86° | 4.6 | 5.2 | 6.7 | 7.2 | 7.2 | 7.2 | 6.7 | 5.2 | 4.6 | 5.2 | 6.7 |
| 86.5° | 3.6 | 4.1 | 5.4 | 5.9 | 5.9 | 5.9 | 5.4 | 4.1 | 3.6 | 4.1 | 5.4 |
| 87° | 2.8 | 3.1 | 4.1 | 4.6 | 4.6 | 4.6 | 4.1 | 3.1 | 2.8 | 3.1 | 4.1 |
| 87.5° | 2.1 | 2.3 | 3.1 | 3.6 | 3.4 | 3.6 | 3.1 | 2.3 | 2.1 | 2.3 | 3.1 |
| 88° | 1.3 | 1.5 | 2.3 | 2.6 | 2.1 | 2.6 | 2.3 | 1.5 | 1.3 | 1.5 | 2.3 |
| 88.5° | 0.8 | 1.0 | 1.5 | 1.8 | 1.3 | 1.8 | 1.5 | 1.0 | 0.8 | 1.0 | 1.5 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-----|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 90° | 0.0 | 0.0 | 0.3 | 0.3 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 |
| 0.5° | 1802.2 | 1803.2 | 1802.2 | 1802.2 | 1801.6 | 1802.2 |
| 1° | 1801.9 | 1802.7 | 1801.9 | 1801.9 | 1801.4 | 1801.9 |
| 1.5° | 1801.1 | 1802.2 | 1801.1 | 1801.1 | 1800.6 | 1801.1 |
| 2° | 1800.1 | 1801.1 | 1800.1 | 1800.1 | 1799.6 | 1800.1 |
| 2.5° | 1799.1 | 1799.8 | 1799.1 | 1798.8 | 1798.3 | 1798.8 |
| 3° | 1797.5 | 1798.5 | 1797.5 | 1797.2 | 1796.7 | 1797.2 |
| 3.5° | 1795.7 | 1796.7 | 1795.7 | 1795.4 | 1794.9 | 1795.4 |
| 4° | 1793.6 | 1794.7 | 1793.6 | 1793.4 | 1792.9 | 1793.1 |
| 4.5° | 1791.3 | 1792.3 | 1791.3 | 1791.1 | 1790.5 | 1790.8 |
| 5° | 1788.7 | 1789.8 | 1788.7 | 1788.2 | 1787.7 | 1788.2 |
| 5.5° | 1785.9 | 1786.9 | 1785.9 | 1785.4 | 1784.9 | 1785.1 |
| 6° | 1782.8 | 1783.6 | 1782.8 | 1782.3 | 1781.5 | 1782.0 |
| 6.5° | 1779.4 | 1780.2 | 1779.4 | 1778.9 | 1778.1 | 1778.4 |
| 7° | 1775.6 | 1776.6 | 1775.6 | 1775.0 | 1774.3 | 1774.8 |
| 7.5° | 1771.7 | 1772.7 | 1771.7 | 1771.2 | 1770.1 | 1770.7 |
| 8° | 1767.3 | 1768.6 | 1767.3 | 1766.8 | 1766.0 | 1766.3 |
| 8.5° | 1762.9 | 1763.9 | 1762.9 | 1762.4 | 1761.4 | 1761.6 |
| 9° | 1758.3 | 1759.3 | 1758.3 | 1757.5 | 1756.7 | 1757.0 |
| 9.5° | 1753.1 | 1754.1 | 1753.1 | 1752.3 | 1751.5 | 1751.5 |
| 10° | 1747.9 | 1749.0 | 1747.9 | 1747.2 | 1746.1 | 1746.4 |
| 10.5° | 1742.3 | 1743.5 | 1742.3 | 1741.5 | 1740.4 | 1740.7 |
| 11° | 1736.6 | 1737.6 | 1736.6 | 1735.5 | 1734.8 | 1734.8 |
| 11.5° | 1730.4 | 1731.4 | 1730.4 | 1729.6 | 1728.6 | 1728.8 |
| 12° | 1724.2 | 1725.2 | 1724.2 | 1723.1 | 1722.4 | 1722.4 |
| 12.5° | 1717.7 | 1718.5 | 1717.7 | 1716.7 | 1715.7 | 1715.7 |
| 13° | 1710.8 | 1711.8 | 1710.8 | 1710.0 | 1708.9 | 1708.9 |
| 13.5° | 1704.0 | 1704.6 | 1704.0 | 1702.8 | 1701.7 | 1701.7 |
| 14° | 1696.6 | 1697.3 | 1696.6 | 1695.5 | 1694.5 | 1694.7 |
| 14.5° | 1689.1 | 1689.8 | 1689.1 | 1688.0 | 1687.0 | 1687.0 |
| 15° | 1681.3 | 1681.8 | 1681.3 | 1680.5 | 1679.5 | 1679.3 |
| 15.5° | 1673.3 | 1673.8 | 1673.3 | 1672.5 | 1671.5 | 1671.3 |
| 16° | 1665.1 | 1665.6 | 1665.1 | 1664.3 | 1663.2 | 1663.2 |
| 16.5° | 1656.5 | 1657.3 | 1656.5 | 1656.0 | 1655.0 | 1655.0 |
| 17° | 1648.0 | 1648.5 | 1648.0 | 1647.2 | 1646.2 | 1646.2 |
| 17.5° | 1639.0 | 1639.5 | 1639.0 | 1638.5 | 1637.4 | 1637.2 |
| 18° | 1629.7 | 1630.2 | 1629.7 | 1629.2 | 1628.1 | 1628.1 |
| 18.5° | 1620.1 | 1620.6 | 1620.1 | 1619.9 | 1618.8 | 1618.8 |
| 19° | 1610.6 | 1610.8 | 1610.6 | 1610.1 | 1609.0 | 1609.0 |
| 19.5° | 1600.5 | 1600.8 | 1600.5 | 1600.0 | 1599.2 | 1599.0 |
| 20° | 1589.9 | 1590.4 | 1589.9 | 1589.7 | 1588.9 | 1588.9 |
| 20.5° | 1579.1 | 1579.6 | 1579.1 | 1579.1 | 1578.3 | 1578.3 |
| 21° | 1568.2 | 1568.5 | 1568.2 | 1568.2 | 1567.5 | 1567.5 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL5125CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 22.5° | 1532.9 | 1533.4 | 1532.9 | 1533.1 | 1532.6 | 1532.6 |
| 23° | 1520.7 | 1521.0 | 1520.7 | 1520.7 | 1520.5 | 1520.5 |
| 23.5° | 1508.1 | 1508.3 | 1508.1 | 1508.3 | 1508.1 | 1508.1 |
| 24° | 1495.2 | 1495.4 | 1495.2 | 1495.4 | 1495.2 | 1495.4 |
| 24.5° | 1482.3 | 1482.3 | 1482.3 | 1482.5 | 1482.0 | 1482.0 |
| 25° | 1469.1 | 1469.1 | 1469.1 | 1469.1 | 1468.8 | 1468.8 |
| 25.5° | 1455.7 | 1455.7 | 1455.7 | 1455.9 | 1455.4 | 1455.7 |
| 26° | 1442.5 | 1442.2 | 1442.5 | 1442.2 | 1442.0 | 1442.2 |
| 26.5° | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.8 | 1428.6 |
| 27° | 1415.4 | 1415.1 | 1415.4 | 1415.4 | 1415.1 | 1415.1 |
| 27.5° | 1402.0 | 1401.4 | 1402.0 | 1402.0 | 1401.4 | 1401.4 |
| 28° | 1388.3 | 1388.3 | 1388.3 | 1388.5 | 1388.0 | 1388.0 |
| 28.5° | 1374.9 | 1374.6 | 1374.9 | 1375.1 | 1374.6 | 1374.6 |
| 29° | 1361.4 | 1361.4 | 1361.4 | 1361.7 | 1361.4 | 1360.9 |
| 29.5° | 1348.5 | 1348.0 | 1348.5 | 1348.5 | 1348.0 | 1347.7 |
| 30° | 1335.3 | 1334.8 | 1335.3 | 1335.3 | 1335.1 | 1334.8 |
| 30.5° | 1322.4 | 1321.7 | 1322.4 | 1322.7 | 1322.4 | 1321.9 |
| 31° | 1309.8 | 1309.5 | 1309.8 | 1310.0 | 1309.5 | 1309.3 |
| 31.5° | 1297.1 | 1296.6 | 1297.1 | 1297.4 | 1297.1 | 1297.1 |
| 32° | 1284.2 | 1284.2 | 1284.2 | 1284.5 | 1284.5 | 1284.5 |
| 32.5° | 1270.3 | 1271.6 | 1270.3 | 1270.5 | 1270.8 | 1271.8 |
| 33° | 1254.0 | 1258.4 | 1254.0 | 1254.8 | 1255.3 | 1257.9 |
| 33.5° | 1235.7 | 1241.4 | 1235.7 | 1237.2 | 1237.0 | 1240.9 |
| 34° | 1214.5 | 1221.2 | 1214.5 | 1217.6 | 1216.1 | 1220.5 |
| 34.5° | 1191.8 | 1198.0 | 1191.8 | 1194.9 | 1192.3 | 1198.5 |
| 35° | 1166.5 | 1170.6 | 1166.5 | 1168.6 | 1167.3 | 1172.9 |
| 35.5° | 1137.8 | 1140.7 | 1137.8 | 1139.6 | 1141.2 | 1144.3 |
| 36° | 1106.6 | 1111.0 | 1106.6 | 1108.7 | 1113.3 | 1112.8 |
| 36.5° | 1073.5 | 1078.2 | 1073.5 | 1075.9 | 1082.1 | 1079.7 |
| 37° | 1038.9 | 1044.6 | 1038.9 | 1042.0 | 1047.7 | 1045.7 |
| 37.5° | 1003.6 | 1008.7 | 1003.6 | 1006.4 | 1010.3 | 1010.3 |
| 38° | 967.7 | 972.6 | 967.7 | 970.0 | 970.8 | 973.4 |
| 38.5° | 930.5 | 935.4 | 930.5 | 932.3 | 930.3 | 934.9 |
| 39° | 893.1 | 898.2 | 893.1 | 893.3 | 890.2 | 894.6 |
| 39.5° | 855.1 | 859.8 | 855.1 | 854.1 | 850.5 | 853.6 |
| 40° | 817.9 | 820.3 | 817.9 | 815.1 | 811.5 | 810.7 |
| 40.5° | 780.5 | 780.8 | 780.5 | 775.6 | 771.7 | 767.9 |
| 41° | 743.3 | 741.5 | 743.3 | 737.6 | 732.7 | 726.3 |
| 41.5° | 706.4 | 702.5 | 706.4 | 699.7 | 692.7 | 685.2 |
| 42° | 669.2 | 665.1 | 669.2 | 662.0 | 653.7 | 646.0 |
| 42.5° | 633.1 | 628.2 | 633.1 | 624.6 | 615.5 | 608.0 |
| 43° | 597.2 | 593.1 | 597.2 | 588.7 | 578.6 | 571.1 |
| 43.5° | 562.9 | 558.5 | 562.9 | 553.6 | 542.7 | 536.0 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 45° | 465.0 | 461.4 | 465.0 | 456.5 | 444.6 | 440.0 |
| 45.5° | 435.3 | 432.5 | 435.3 | 427.3 | 415.9 | 411.8 |
| 46° | 407.2 | 404.8 | 407.2 | 399.7 | 389.9 | 385.2 |
| 46.5° | 380.8 | 379.0 | 380.8 | 373.1 | 366.1 | 360.9 |
| 47° | 356.6 | 354.8 | 356.6 | 349.1 | 344.2 | 338.2 |
| 47.5° | 334.1 | 332.0 | 334.1 | 326.9 | 324.3 | 318.1 |
| 48° | 314.2 | 311.4 | 314.2 | 307.0 | 305.4 | 300.0 |
| 48.5° | 295.6 | 292.3 | 295.6 | 289.4 | 288.1 | 283.7 |
| 49° | 278.8 | 275.7 | 278.8 | 273.7 | 272.4 | 269.0 |
| 49.5° | 264.1 | 260.5 | 264.1 | 260.3 | 258.7 | 256.4 |
| 50° | 251.2 | 247.9 | 251.2 | 248.6 | 246.8 | 244.8 |
| 50.5° | 240.4 | 237.0 | 240.4 | 238.3 | 236.8 | 235.2 |
| 51° | 231.1 | 228.2 | 231.1 | 229.5 | 228.8 | 227.2 |
| 51.5° | 223.1 | 221.3 | 223.1 | 222.6 | 221.8 | 220.5 |
| 52° | 216.6 | 215.6 | 216.6 | 216.4 | 215.8 | 215.3 |
| 52.5° | 210.9 | 210.9 | 210.9 | 210.9 | 210.7 | 210.4 |
| 53° | 206.0 | 206.3 | 206.0 | 206.0 | 206.0 | 205.8 |
| 53.5° | 201.1 | 201.6 | 201.1 | 201.4 | 201.4 | 201.4 |
| 54° | 196.5 | 197.0 | 196.5 | 196.7 | 196.7 | 196.7 |
| 54.5° | 191.8 | 192.4 | 191.8 | 192.1 | 192.1 | 192.1 |
| 55° | 187.2 | 187.4 | 187.2 | 187.2 | 187.2 | 187.2 |
| 55.5° | 182.3 | 182.5 | 182.3 | 182.5 | 182.3 | 182.3 |
| 56° | 177.6 | 177.6 | 177.6 | 177.6 | 177.4 | 177.4 |
| 56.5° | 172.7 | 172.7 | 172.7 | 172.7 | 172.7 | 172.5 |
| 57° | 167.8 | 167.8 | 167.8 | 167.8 | 167.8 | 167.6 |
| 57.5° | 163.2 | 163.2 | 163.2 | 163.2 | 162.9 | 162.7 |
| 58° | 158.5 | 158.5 | 158.5 | 158.3 | 158.3 | 157.8 |
| 58.5° | 153.9 | 153.9 | 153.9 | 153.6 | 153.6 | 152.8 |
| 59° | 149.2 | 149.2 | 149.2 | 149.2 | 149.0 | 148.2 |
| 59.5° | 144.8 | 144.8 | 144.8 | 144.8 | 144.6 | 143.8 |
| 60° | 140.7 | 140.5 | 140.7 | 140.5 | 140.2 | 139.2 |
| 60.5° | 136.3 | 136.3 | 136.3 | 136.3 | 135.8 | 134.8 |
| 61° | 132.2 | 132.2 | 132.2 | 132.2 | 131.7 | 130.6 |
| 61.5° | 128.3 | 128.3 | 128.3 | 128.1 | 127.5 | 126.5 |
| 62° | 124.2 | 124.2 | 124.2 | 124.2 | 123.4 | 122.4 |
| 62.5° | 120.3 | 120.3 | 120.3 | 120.3 | 119.5 | 118.5 |
| 63° | 116.7 | 116.7 | 116.7 | 116.7 | 115.7 | 114.4 |
| 63.5° | 113.1 | 113.1 | 113.1 | 112.8 | 112.1 | 110.8 |
| 64° | 109.5 | 109.5 | 109.5 | 109.2 | 108.2 | 107.1 |
| 64.5° | 105.9 | 105.9 | 105.9 | 105.9 | 104.6 | 103.5 |
| 65° | 102.5 | 102.2 | 102.5 | 102.2 | 101.0 | 99.9 |
| 65.5° | 99.1 | 99.1 | 99.1 | 98.9 | 97.6 | 96.6 |
| 66° | 95.8 | 95.8 | 95.8 | 95.5 | 94.2 | 93.2 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 67.5° | 86.5 | 86.2 | 86.5 | 86.0 | 84.7 | 83.4 |
| 68° | 83.4 | 83.4 | 83.4 | 83.1 | 81.6 | 80.3 |
| 68.5° | 80.3 | 80.3 | 80.3 | 80.0 | 78.5 | 77.5 |
| 69° | 77.5 | 77.5 | 77.5 | 77.2 | 75.6 | 74.4 |
| 69.5° | 74.6 | 74.6 | 74.6 | 74.4 | 72.6 | 71.5 |
| 70° | 71.8 | 71.8 | 71.8 | 71.5 | 69.7 | 68.7 |
| 70.5° | 68.9 | 68.9 | 68.9 | 68.7 | 66.9 | 65.8 |
| 71° | 66.4 | 66.4 | 66.4 | 65.8 | 64.3 | 63.3 |
| 71.5° | 63.8 | 63.5 | 63.8 | 63.3 | 61.4 | 60.4 |
| 72° | 61.2 | 60.9 | 61.2 | 60.7 | 58.9 | 57.8 |
| 72.5° | 58.6 | 58.4 | 58.6 | 58.1 | 56.3 | 55.3 |
| 73° | 56.0 | 56.0 | 56.0 | 55.5 | 53.7 | 52.7 |
| 73.5° | 53.7 | 53.7 | 53.7 | 53.2 | 51.4 | 50.3 |
| 74° | 51.4 | 51.1 | 51.4 | 50.6 | 49.1 | 48.0 |
| 74.5° | 49.1 | 48.8 | 49.1 | 48.3 | 46.5 | 45.7 |
| 75° | 46.7 | 46.7 | 46.7 | 46.0 | 44.2 | 43.4 |
| 75.5° | 44.4 | 44.4 | 44.4 | 43.6 | 42.1 | 41.1 |
| 76° | 42.3 | 42.1 | 42.3 | 41.6 | 39.8 | 39.0 |
| 76.5° | 40.0 | 40.0 | 40.0 | 39.2 | 37.7 | 36.7 |
| 77° | 38.0 | 38.0 | 38.0 | 37.2 | 35.6 | 34.6 |
| 77.5° | 35.9 | 35.9 | 35.9 | 35.1 | 33.6 | 32.8 |
| 78° | 34.1 | 33.8 | 34.1 | 33.0 | 31.5 | 30.7 |
| 78.5° | 32.0 | 32.0 | 32.0 | 31.2 | 29.4 | 28.7 |
| 79° | 30.2 | 29.9 | 30.2 | 29.2 | 27.6 | 26.9 |
| 79.5° | 28.1 | 28.1 | 28.1 | 27.4 | 25.6 | 25.0 |
| 80° | 26.3 | 26.3 | 26.3 | 25.6 | 23.8 | 23.2 |
| 80.5° | 24.5 | 24.5 | 24.5 | 23.8 | 21.9 | 21.4 |
| 81° | 22.7 | 22.7 | 22.7 | 21.9 | 20.1 | 19.6 |
| 81.5° | 21.2 | 21.2 | 21.2 | 20.1 | 18.3 | 18.1 |
| 82° | 19.4 | 19.4 | 19.4 | 18.3 | 16.8 | 16.3 |
| 82.5° | 17.8 | 17.8 | 17.8 | 16.8 | 15.0 | 14.7 |
| 83° | 16.3 | 16.0 | 16.3 | 15.2 | 13.4 | 13.2 |
| 83.5° | 14.5 | 14.5 | 14.5 | 13.7 | 11.9 | 11.6 |
| 84° | 12.9 | 12.9 | 12.9 | 12.1 | 10.3 | 10.1 |
| 84.5° | 11.6 | 11.6 | 11.6 | 10.6 | 8.8 | 8.5 |
| 85° | 10.1 | 10.1 | 10.1 | 9.3 | 7.5 | 7.2 |
| 85.5° | 8.5 | 8.5 | 8.5 | 8.0 | 6.2 | 5.9 |
| 86° | 7.2 | 7.2 | 7.2 | 6.7 | 5.2 | 4.6 |
| 86.5° | 5.9 | 5.9 | 5.9 | 5.4 | 4.1 | 3.6 |
| 87° | 4.6 | 4.6 | 4.6 | 4.1 | 3.1 | 2.8 |
| 87.5° | 3.6 | 3.4 | 3.6 | 3.1 | 2.3 | 2.1 |
| 88° | 2.6 | 2.1 | 2.6 | 2.3 | 1.5 | 1.3 |
| 88.5° | 1.8 | 1.3 | 1.8 | 1.5 | 1.0 | 0.8 |



TEST NUMBER: P776174

CATALOG NUMBER: HCDJBL1525CSD-HCD82TRMW-2500lm-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-----|--------|------|--------|------|--------|------|
| 90° | 0.3 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 |



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Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





| | | | | | | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 21.5° | 1556.1 | 1556.4 | 1556.9 | 1556.9 | 1557.1 | 1556.9 | 1556.9 | 1556.4 | 1556.1 | 1556.4 | 1556.9 |
| 22° | 1544.7 | 1544.7 | 1545.0 | 1545.0 | 1545.5 | 1545.0 | 1545.0 | 1544.7 | 1544.7 | 1544.7 | 1545.0 |



| | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 44° | 502.4 | 508.1 | 520.0 | 528.8 | 524.9 | 528.8 | 520.0 | 508.1 | 502.4 | 508.1 | 520.0 |
| 44.5° | 470.7 | 475.3 | 487.5 | 496.5 | 492.4 | 496.5 | 487.5 | 475.3 | 470.7 | 475.3 | 487.5 |



| | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 66.5° | 89.6 | 90.9 | 92.2 | 92.4 | 92.7 | 92.4 | 92.2 | 90.9 | 89.6 | 90.9 | 92.2 |
| 67° | 86.5 | 87.5 | 89.1 | 89.6 | 89.6 | 89.6 | 89.1 | 87.5 | 86.5 | 87.5 | 89.1 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 89° | 0.3 | 0.5 | 0.8 | 1.3 | 0.8 | 1.3 | 0.8 | 0.5 | 0.3 | 0.5 | 0.8 |
| 89.5° | 0.0 | 0.3 | 0.5 | 0.8 | 0.3 | 0.8 | 0.5 | 0.3 | 0.0 | 0.3 | 0.5 |

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





| | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|
| 21.5° | 1556.9 | 1557.1 | 1556.9 | 1556.9 | 1556.4 | 1556.1 |
| 22° | 1545.0 | 1545.5 | 1545.0 | 1545.0 | 1544.7 | 1544.7 |



| | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 44° | 528.8 | 524.9 | 528.8 | 520.0 | 508.1 | 502.4 |
| 44.5° | 496.5 | 492.4 | 496.5 | 487.5 | 475.3 | 470.7 |

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



| | | | | | | |
|-------|------|------|------|------|------|------|
| 66.5° | 92.4 | 92.7 | 92.4 | 92.2 | 90.9 | 89.6 |
| 67° | 89.6 | 89.6 | 89.6 | 89.1 | 87.5 | 86.5 |

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 89° | 1.3 | 0.8 | 1.3 | 0.8 | 0.5 | 0.3 |
| 89.5° | 0.8 | 0.3 | 0.8 | 0.5 | 0.3 | 0.0 |

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(END OF REPORT)