

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: McGRAW-EDISON

Report Number: P197719

Luminaire Tested: **TT-C5-LED-E1-5MQ-PM-CG-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115348)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C5-LED-E1-5MQ-PM-CG-7050
Description: TOPTIER LED AREA/SITE LUMINAIRE
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (160) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8443.9 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

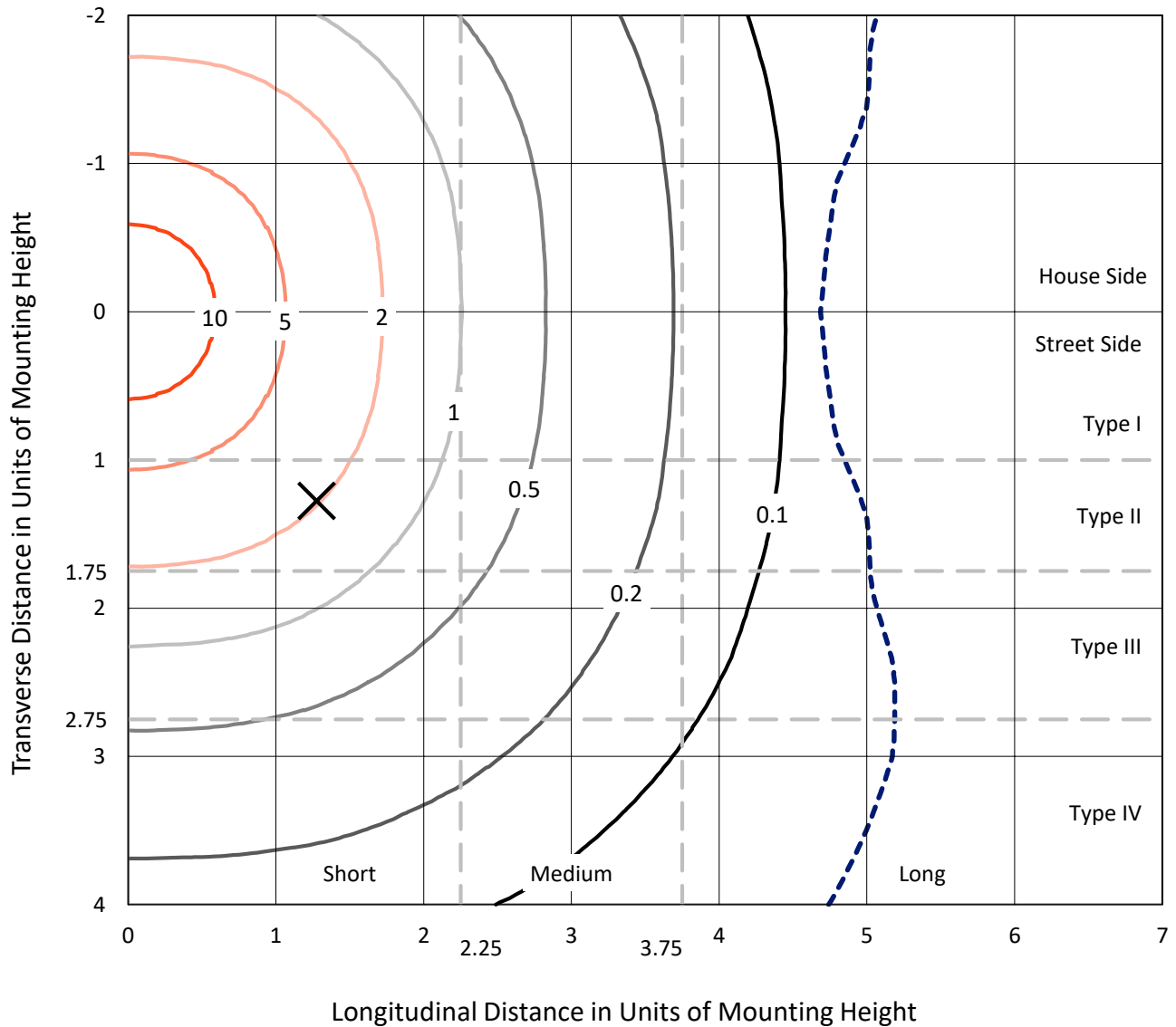
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

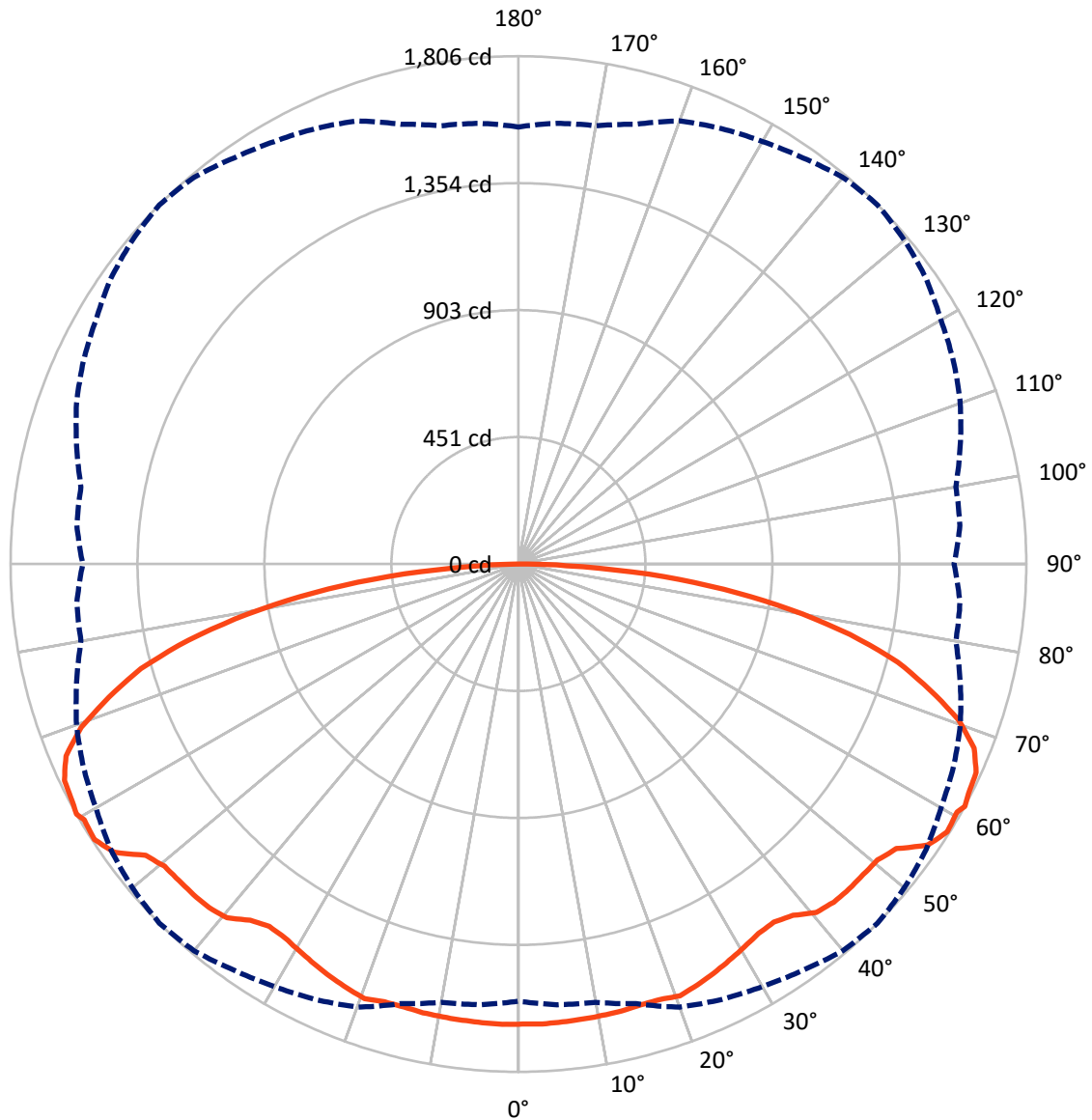
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.4 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 61-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 4221.9 | 0.0 | 4221.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4221.9 | 0.0 | 4221.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 8443.9 | 0.0 | 8443.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 156.0 | 1.8 |
| 10°-20° | 461.4 | 5.5 |
| 20°-30° | 742.4 | 8.8 |
| 30°-40° | 983.5 | 11.6 |
| 40°-50° | 1242.0 | 14.7 |
| 50°-60° | 1488.1 | 17.6 |
| 60°-70° | 1627.2 | 19.3 |
| 70°-80° | 1302.6 | 15.4 |
| 80°-90° | 440.7 | 5.2 |
| 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° | 8443.9 | 100.0 |
| 0°-180° | 8443.9 | 100.0 |



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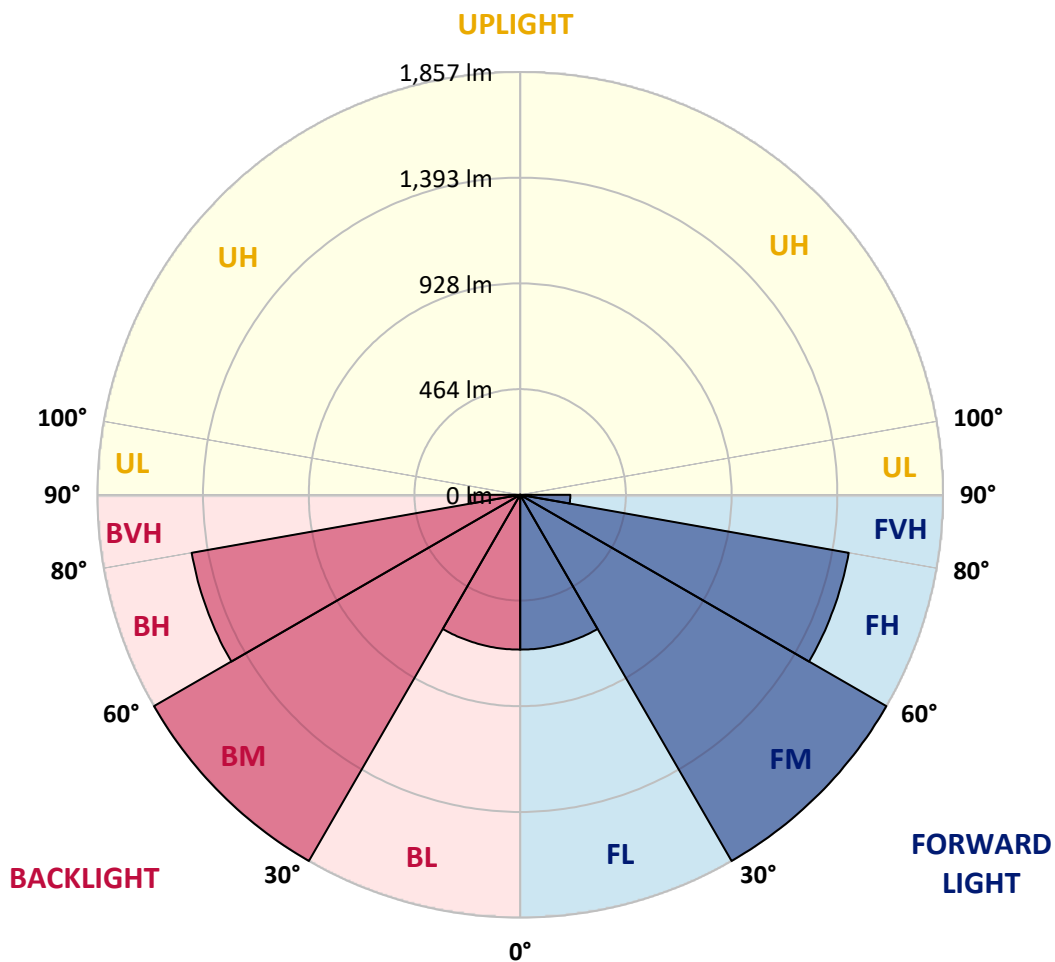
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 679.9 | 8.1 | | | |
| FM (30°-60°) | 1856.8 | 22.0 | | | |
| FH (60°-80°) | 1464.9 | 17.3 | | | G1/1800 |
| FVH (80°-90°) | 220.3 | 2.6 | | | G2/225 |
| BL (0°-30°) | 679.9 | 8.1 | B2/1000 | | |
| BM (30°-60°) | 1856.8 | 22.0 | B2/2500 | | |
| BH (60°-80°) | 1464.9 | 17.3 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 220.3 | 2.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 |
| 2.5° | 1637.5 | 1635.9 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 |
| 5° | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 |
| 7.5° | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1635.9 | 1634.3 | 1635.9 |
| 10° | 1631.3 | 1631.3 | 1631.3 | 1631.3 | 1632.7 | 1632.7 | 1632.7 | 1632.7 | 1632.7 | 1632.7 | 1632.7 |
| 12.5° | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1629.7 | 1629.7 | 1629.7 | 1629.7 | 1631.3 | 1631.3 | 1629.7 |
| 15° | 1624.9 | 1623.3 | 1623.3 | 1624.9 | 1624.9 | 1626.5 | 1626.5 | 1626.5 | 1628.1 | 1626.5 | 1626.5 |
| 17.5° | 1621.7 | 1620.1 | 1621.7 | 1623.3 | 1623.3 | 1624.9 | 1626.5 | 1626.5 | 1628.1 | 1628.1 | 1628.1 |
| 20° | 1626.5 | 1624.9 | 1626.5 | 1628.1 | 1629.7 | 1632.7 | 1634.3 | 1635.9 | 1637.5 | 1639.1 | 1639.1 |
| 22.5° | 1617.1 | 1615.5 | 1617.1 | 1617.1 | 1618.7 | 1620.1 | 1623.3 | 1624.9 | 1626.5 | 1626.5 | 1626.5 |
| 25° | 1602.9 | 1602.9 | 1604.5 | 1604.5 | 1606.1 | 1607.6 | 1609.2 | 1610.7 | 1610.7 | 1612.3 | 1610.7 |
| 27.5° | 1587.2 | 1587.2 | 1588.8 | 1588.8 | 1592.0 | 1592.0 | 1593.6 | 1595.0 | 1596.6 | 1596.6 | 1596.6 |
| 30° | 1568.4 | 1568.4 | 1569.8 | 1571.4 | 1574.6 | 1576.2 | 1577.8 | 1579.4 | 1581.0 | 1581.0 | 1581.0 |
| 32.5° | 1551.0 | 1549.4 | 1551.0 | 1554.2 | 1558.8 | 1562.0 | 1565.2 | 1566.8 | 1566.8 | 1566.8 | 1568.4 |
| 35° | 1536.8 | 1538.4 | 1541.6 | 1544.6 | 1551.0 | 1554.2 | 1557.2 | 1562.0 | 1563.6 | 1563.6 | 1563.6 |
| 37.5° | 1540.0 | 1541.6 | 1546.2 | 1552.6 | 1560.4 | 1569.8 | 1576.2 | 1582.4 | 1587.2 | 1585.6 | 1584.0 |
| 40° | 1560.4 | 1563.6 | 1571.4 | 1581.0 | 1593.6 | 1606.1 | 1615.5 | 1623.3 | 1628.1 | 1629.7 | 1628.1 |
| 42.5° | 1563.6 | 1566.8 | 1573.0 | 1587.2 | 1601.4 | 1615.5 | 1628.1 | 1635.9 | 1642.3 | 1643.9 | 1642.3 |
| 45° | 1562.0 | 1562.0 | 1571.4 | 1587.2 | 1601.4 | 1615.5 | 1631.3 | 1642.3 | 1648.5 | 1648.5 | 1648.5 |
| 47.5° | 1551.0 | 1555.8 | 1562.0 | 1577.8 | 1596.6 | 1610.7 | 1626.5 | 1637.5 | 1645.3 | 1650.1 | 1645.3 |
| 50° | 1551.0 | 1551.0 | 1562.0 | 1573.0 | 1590.4 | 1615.5 | 1637.5 | 1648.5 | 1656.5 | 1654.9 | 1656.5 |
| 52.5° | 1547.8 | 1557.2 | 1563.6 | 1579.4 | 1610.7 | 1635.9 | 1653.3 | 1669.1 | 1680.0 | 1681.6 | 1678.4 |
| 55° | 1576.2 | 1577.8 | 1592.0 | 1621.7 | 1651.7 | 1680.0 | 1711.4 | 1735.0 | 1753.9 | 1764.9 | 1749.2 |
| 57.5° | 1598.2 | 1590.4 | 1618.7 | 1643.9 | 1678.4 | 1721.0 | 1768.1 | 1786.9 | 1801.1 | 1797.9 | 1802.7 |
| 60° | 1568.4 | 1579.4 | 1599.8 | 1626.5 | 1681.6 | 1724.0 | 1749.2 | 1769.7 | 1786.9 | 1791.7 | 1785.3 |
| 61° | 1554.2 | 1573.0 | 1582.4 | 1618.7 | 1676.8 | 1708.4 | 1735.0 | 1763.3 | 1794.9 | 1805.9 | 1791.7 |
| 62.5° | 1530.6 | 1560.4 | 1557.2 | 1615.5 | 1651.7 | 1687.8 | 1738.2 | 1771.3 | 1793.3 | 1796.5 | 1793.3 |
| 65° | 1532.1 | 1527.5 | 1563.6 | 1606.1 | 1642.3 | 1706.8 | 1749.2 | 1769.7 | 1782.3 | 1788.5 | 1785.3 |
| 67.5° | 1481.7 | 1466.1 | 1510.1 | 1540.0 | 1601.4 | 1651.7 | 1692.6 | 1722.4 | 1741.4 | 1747.6 | 1739.8 |
| 70° | 1365.5 | 1376.5 | 1407.8 | 1453.6 | 1503.9 | 1565.2 | 1602.9 | 1642.3 | 1657.9 | 1659.5 | 1659.5 |
| 72.5° | 1253.6 | 1260.0 | 1291.4 | 1333.9 | 1392.1 | 1445.6 | 1483.3 | 1514.9 | 1529.0 | 1530.6 | 1533.7 |
| 75° | 1105.8 | 1112.1 | 1148.4 | 1187.7 | 1245.9 | 1291.4 | 1318.2 | 1355.9 | 1376.5 | 1393.7 | 1379.5 |
| 77.5° | 934.3 | 945.5 | 973.6 | 1016.2 | 1069.7 | 1094.9 | 1142.0 | 1186.1 | 1200.3 | 1204.9 | 1200.3 |
| 80° | 741.0 | 755.1 | 780.3 | 836.8 | 860.4 | 901.3 | 946.9 | 965.8 | 978.4 | 981.6 | 983.2 |
| 82.5° | 533.3 | 544.2 | 571.0 | 610.3 | 637.1 | 670.1 | 701.6 | 725.2 | 739.4 | 736.2 | 734.6 |
| 85° | 314.6 | 317.8 | 346.1 | 372.9 | 393.2 | 413.6 | 438.8 | 456.2 | 459.4 | 465.6 | 464.0 |
| 87.5° | 94.5 | 95.9 | 108.5 | 122.6 | 132.2 | 141.6 | 157.4 | 177.8 | 182.5 | 170.0 | 171.5 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 |
| 2.5° | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1637.5 | 1635.9 | 1637.5 |
| 5° | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 | 1635.9 |
| 7.5° | 1635.9 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 | 1634.3 |
| 10° | 1632.7 | 1632.7 | 1632.7 | 1632.7 | 1631.3 | 1631.3 | 1631.3 | 1631.3 |
| 12.5° | 1629.7 | 1629.7 | 1629.7 | 1629.7 | 1628.1 | 1628.1 | 1628.1 | 1628.1 |
| 15° | 1626.5 | 1626.5 | 1626.5 | 1626.5 | 1624.9 | 1624.9 | 1624.9 | 1624.9 |
| 17.5° | 1628.1 | 1626.5 | 1624.9 | 1624.9 | 1623.3 | 1621.7 | 1621.7 | 1621.7 |
| 20° | 1637.5 | 1635.9 | 1632.7 | 1629.7 | 1628.1 | 1626.5 | 1626.5 | 1626.5 |
| 22.5° | 1624.9 | 1623.3 | 1620.1 | 1618.7 | 1618.7 | 1617.1 | 1615.5 | 1615.5 |
| 25° | 1610.7 | 1607.6 | 1607.6 | 1606.1 | 1606.1 | 1602.9 | 1602.9 | 1601.4 |
| 27.5° | 1595.0 | 1593.6 | 1592.0 | 1590.4 | 1590.4 | 1588.8 | 1587.2 | 1585.6 |
| 30° | 1581.0 | 1577.8 | 1574.6 | 1573.0 | 1571.4 | 1569.8 | 1569.8 | 1569.8 |
| 32.5° | 1566.8 | 1563.6 | 1562.0 | 1557.2 | 1554.2 | 1552.6 | 1551.0 | 1551.0 |
| 35° | 1562.0 | 1557.2 | 1554.2 | 1549.4 | 1544.6 | 1541.6 | 1540.0 | 1536.8 |
| 37.5° | 1581.0 | 1574.6 | 1569.8 | 1562.0 | 1551.0 | 1546.2 | 1541.6 | 1540.0 |
| 40° | 1621.7 | 1615.5 | 1606.1 | 1593.6 | 1581.0 | 1571.4 | 1563.6 | 1560.4 |
| 42.5° | 1635.9 | 1628.1 | 1615.5 | 1602.9 | 1587.2 | 1573.0 | 1566.8 | 1563.6 |
| 45° | 1640.7 | 1632.7 | 1615.5 | 1599.8 | 1585.6 | 1573.0 | 1563.6 | 1560.4 |
| 47.5° | 1635.9 | 1624.9 | 1609.2 | 1596.6 | 1576.2 | 1560.4 | 1554.2 | 1549.4 |
| 50° | 1646.9 | 1637.5 | 1617.1 | 1588.8 | 1571.4 | 1562.0 | 1551.0 | 1549.4 |
| 52.5° | 1669.1 | 1651.7 | 1632.7 | 1612.3 | 1579.4 | 1560.4 | 1554.2 | 1546.2 |
| 55° | 1735.0 | 1711.4 | 1678.4 | 1645.3 | 1624.9 | 1595.0 | 1576.2 | 1576.2 |
| 57.5° | 1785.3 | 1766.5 | 1724.0 | 1680.0 | 1642.3 | 1620.1 | 1592.0 | 1593.6 |
| 60° | 1771.3 | 1746.1 | 1725.6 | 1681.6 | 1628.1 | 1598.2 | 1587.2 | 1566.8 |
| 61° | 1769.7 | 1735.0 | 1706.8 | 1672.1 | 1626.5 | 1579.4 | 1576.2 | 1549.4 |
| 62.5° | 1772.7 | 1741.4 | 1687.8 | 1651.7 | 1617.1 | 1555.8 | 1554.2 | 1529.0 |
| 65° | 1769.7 | 1739.8 | 1713.0 | 1645.3 | 1598.2 | 1573.0 | 1519.5 | 1540.0 |
| 67.5° | 1721.0 | 1694.2 | 1645.3 | 1607.6 | 1535.3 | 1503.9 | 1473.9 | 1473.9 |
| 70° | 1643.9 | 1604.5 | 1557.2 | 1510.1 | 1461.4 | 1407.8 | 1381.1 | 1365.5 |
| 72.5° | 1514.9 | 1481.7 | 1444.0 | 1393.7 | 1333.9 | 1285.2 | 1260.0 | 1249.0 |
| 75° | 1352.9 | 1316.6 | 1283.6 | 1245.9 | 1182.9 | 1142.0 | 1115.2 | 1107.4 |
| 77.5° | 1182.9 | 1151.4 | 1093.3 | 1057.1 | 1014.6 | 967.4 | 943.9 | 934.3 |
| 80° | 965.8 | 948.5 | 907.7 | 849.4 | 829.0 | 770.7 | 755.1 | 741.0 |
| 82.5° | 725.2 | 706.2 | 668.5 | 627.7 | 602.5 | 569.4 | 541.1 | 538.0 |
| 85° | 456.2 | 443.6 | 420.0 | 390.1 | 358.7 | 339.7 | 314.6 | 320.9 |
| 87.5° | 170.0 | 162.0 | 147.8 | 129.0 | 114.8 | 102.3 | 89.7 | 94.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)