

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: P436853

Luminaire Tested: **TT-D4-830-U-5CQ-PM-HSS**

Issue Date: 12/2/2020

Test Information

Test Method: LM-79-08
Report Number: P436853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-3)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-D4-830-U-5CQ-PM-HSS
Description: TOPTIER LED SITE LUMINAIRE
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5636.2 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U2 - G1

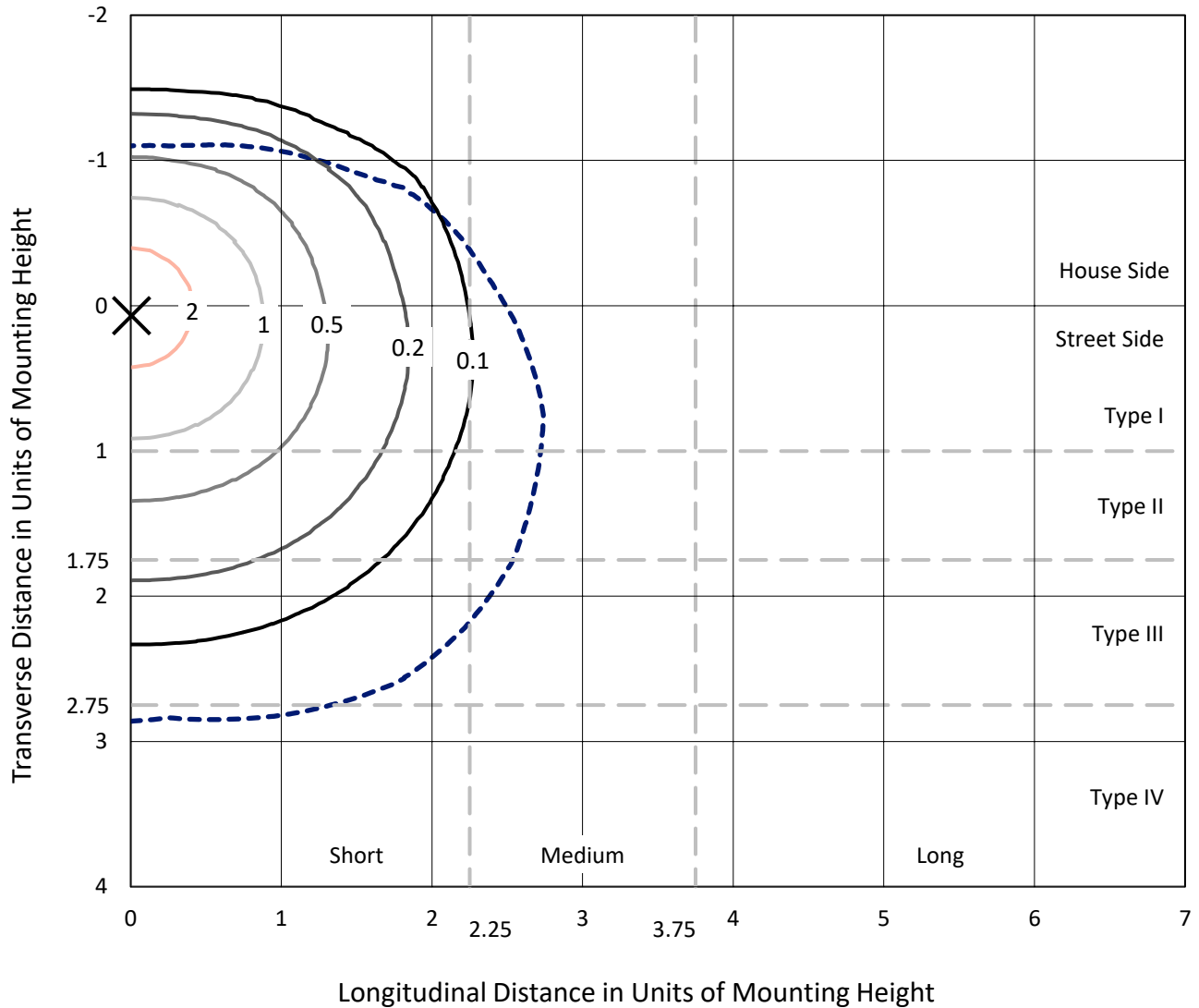
Input Watts (W): 57.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P436853
 CATALOG NUMBER: TT-D4-830-U-5CQ-PM-HSS

Iso-Footcandle Lines of Horizontal Illumination

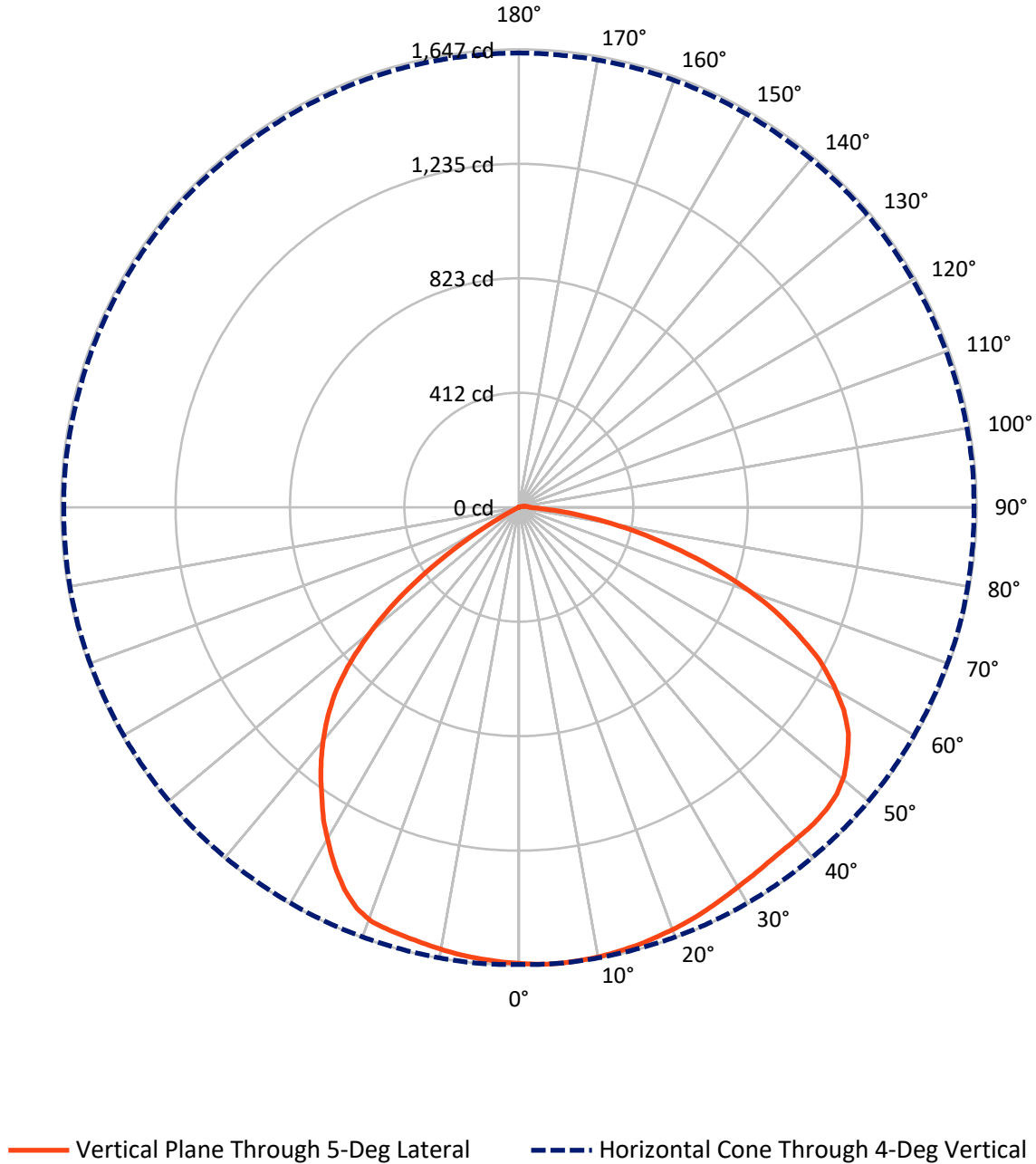
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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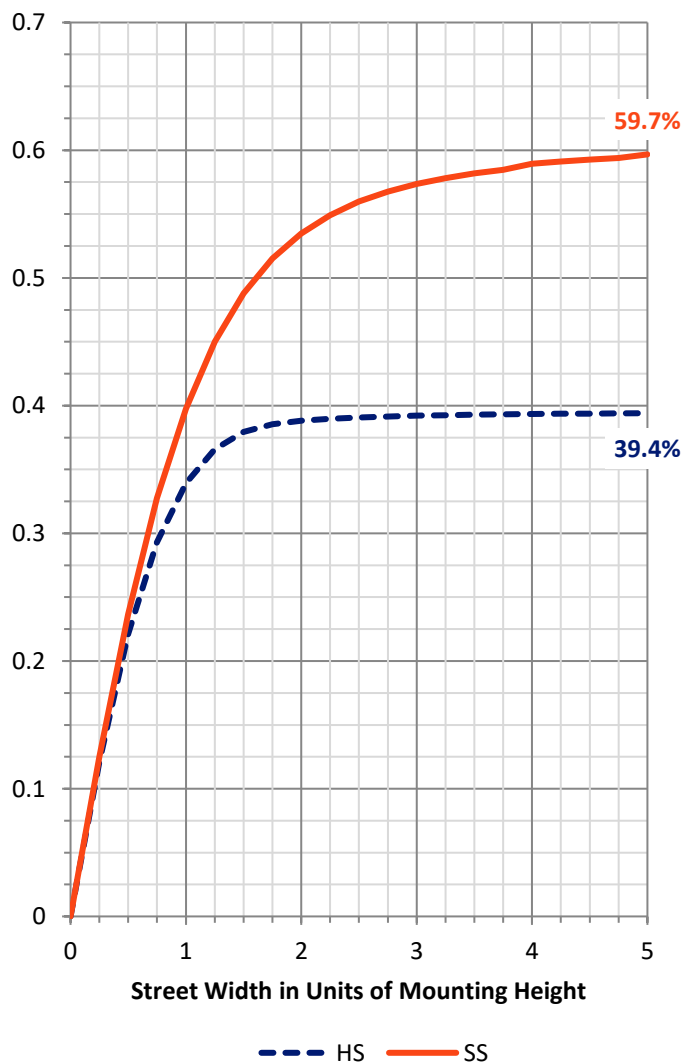
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2233.5 | 3.0 | 2236.5 |
| | % Fixture | 39.6 | 0.1 | 39.7 |
| Street Side | Lumens | 3383.9 | 15.8 | 3399.7 |
| | % Fixture | 60.0 | 0.3 | 60.3 |
| Total | Lumens | 5617.4 | 18.8 | 5636.2 |
| | % Fixture | 99.7 | 0.3 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 156.0 | 2.8 |
| 10°-20° | 456.9 | 8.1 |
| 20°-30° | 719.8 | 12.8 |
| 30°-40° | 916.1 | 16.3 |
| 40°-50° | 1058.2 | 18.8 |
| 50°-60° | 1036.1 | 18.4 |
| 60°-70° | 771.7 | 13.7 |
| 70°-80° | 418.0 | 7.4 |
| 80°-90° | 84.7 | 1.5 |
| 90°-100° | 10.7 | 0.2 |
| 100°-110° | 4.2 | 0.1 |
| 110°-120° | 1.2 | 0.0 |
| 120°-130° | 0.9 | 0.0 |
| 130°-140° | 0.7 | 0.0 |
| 140°-150° | 0.5 | 0.0 |
| 150°-160° | 0.3 | 0.0 |
| 160°-170° | 0.2 | 0.0 |
| 170°-180° | 0.1 | 0.0 |
| 0°-90° | 5617.4 | 99.7 |
| 0°-180° | 5636.2 | 100.0 |

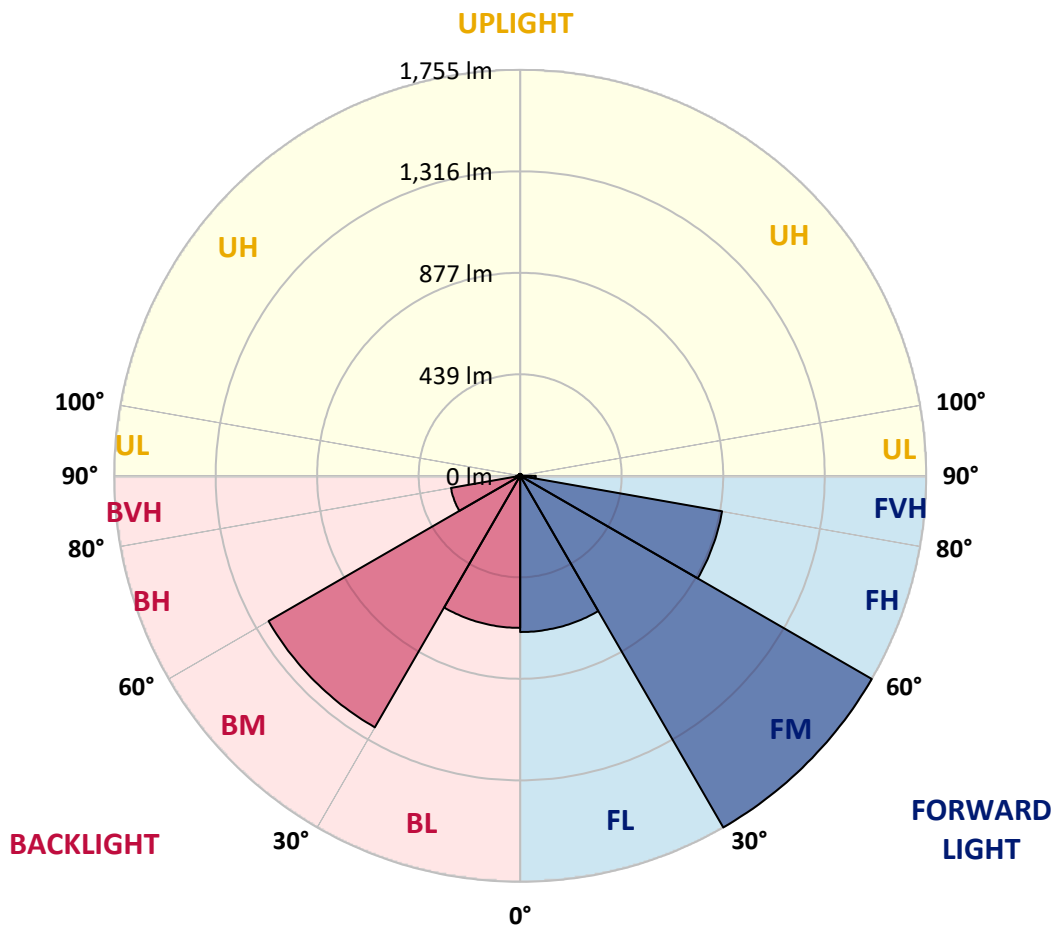


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|-------|---------|
| | | | B | U | G |
| FL (0°-30°) | 675.3 | 12.0 | | | |
| FM (30°-60°) | 1754.8 | 31.1 | | | |
| FH (60°-80°) | 886.1 | 15.7 | | | G1/1800 |
| FVH (80°-90°) | 67.6 | 1.2 | | | G1/100 |
| BL (0°-30°) | 657.4 | 11.7 | B2/1000 | | |
| BM (30°-60°) | 1255.6 | 22.3 | B2/2500 | | |
| BH (60°-80°) | 303.5 | 5.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 17.1 | 0.3 | | | G1/100 |
| UL (90°-100°) | 10.7 | 0.2 | | U2/50 | |
| UH (100°-180°) | 8.0 | 0.1 | | U1/10 | |

BUG Rating: B2-U2-G1
 Type IV Short





REPORT NUMBER: P436853

CATALOG NUMBER: TT-D4-830-U-5CQ-PM-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 |
| 2.5° | 1643.6 | 1645.8 | 1644.7 | 1644.7 | 1642.6 | 1643.6 | 1642.6 | 1642.6 | 1641.5 | 1640.5 | 1640.5 |
| 4° | 1644.7 | 1646.8 | 1644.7 | 1644.7 | 1643.6 | 1643.6 | 1642.6 | 1640.5 | 1641.5 | 1638.3 | 1637.3 |
| 5° | 1645.8 | 1646.8 | 1645.8 | 1645.8 | 1643.6 | 1642.6 | 1640.5 | 1640.5 | 1639.4 | 1637.3 | 1637.3 |
| 7.5° | 1643.6 | 1644.7 | 1644.7 | 1643.6 | 1641.5 | 1639.4 | 1638.3 | 1637.3 | 1636.2 | 1633.0 | 1633.0 |
| 10° | 1639.4 | 1641.5 | 1639.4 | 1639.4 | 1638.3 | 1636.2 | 1633.0 | 1632.0 | 1628.8 | 1626.7 | 1625.6 |
| 12.5° | 1635.2 | 1636.2 | 1635.2 | 1635.2 | 1633.0 | 1629.9 | 1628.8 | 1626.7 | 1622.4 | 1619.3 | 1619.3 |
| 15° | 1628.8 | 1630.9 | 1629.9 | 1628.8 | 1627.7 | 1624.6 | 1621.4 | 1618.2 | 1615.0 | 1611.9 | 1611.9 |
| 17.5° | 1621.4 | 1622.4 | 1623.5 | 1622.4 | 1620.3 | 1618.2 | 1615.0 | 1610.8 | 1607.6 | 1604.4 | 1603.4 |
| 20° | 1612.9 | 1615.0 | 1615.0 | 1615.0 | 1612.9 | 1610.8 | 1606.6 | 1602.3 | 1600.2 | 1596.0 | 1594.9 |
| 22.5° | 1604.4 | 1606.6 | 1605.5 | 1606.6 | 1605.5 | 1602.3 | 1598.1 | 1593.8 | 1589.6 | 1586.4 | 1584.3 |
| 25° | 1596.0 | 1596.0 | 1596.0 | 1596.0 | 1596.0 | 1591.7 | 1587.5 | 1582.2 | 1577.9 | 1572.6 | 1572.6 |
| 27.5° | 1585.4 | 1585.4 | 1586.4 | 1586.4 | 1585.4 | 1582.2 | 1576.9 | 1570.5 | 1564.2 | 1558.9 | 1556.7 |
| 30° | 1575.8 | 1574.8 | 1576.9 | 1579.0 | 1577.9 | 1574.8 | 1568.4 | 1561.0 | 1551.4 | 1544.0 | 1537.7 |
| 32.5° | 1564.2 | 1567.3 | 1569.5 | 1573.7 | 1574.8 | 1570.5 | 1563.1 | 1553.6 | 1544.0 | 1530.3 | 1518.6 |
| 35° | 1559.9 | 1559.9 | 1565.2 | 1571.6 | 1573.7 | 1571.6 | 1561.0 | 1550.4 | 1536.6 | 1516.5 | 1502.7 |
| 37.5° | 1555.7 | 1556.7 | 1565.2 | 1574.8 | 1577.9 | 1577.9 | 1566.3 | 1552.5 | 1533.4 | 1504.8 | 1487.9 |
| 40° | 1553.6 | 1555.7 | 1566.3 | 1580.1 | 1588.5 | 1587.5 | 1573.7 | 1556.7 | 1533.4 | 1496.3 | 1475.1 |
| 42.5° | 1551.4 | 1555.7 | 1567.3 | 1586.4 | 1599.1 | 1598.1 | 1583.2 | 1561.0 | 1531.3 | 1485.7 | 1461.4 |
| 45° | 1548.3 | 1551.4 | 1567.3 | 1591.7 | 1608.7 | 1611.9 | 1594.9 | 1566.3 | 1531.3 | 1476.2 | 1444.4 |
| 47.5° | 1538.7 | 1539.8 | 1561.0 | 1589.6 | 1615.0 | 1619.3 | 1602.3 | 1568.4 | 1527.1 | 1460.3 | 1423.2 |
| 50° | 1513.3 | 1516.5 | 1540.9 | 1579.0 | 1608.7 | 1615.0 | 1600.2 | 1563.1 | 1516.5 | 1433.8 | 1389.3 |
| 52.5° | 1480.4 | 1480.4 | 1510.1 | 1552.5 | 1588.5 | 1599.1 | 1585.4 | 1544.0 | 1490.0 | 1394.6 | 1343.7 |
| 55° | 1431.7 | 1439.1 | 1469.8 | 1514.4 | 1553.6 | 1568.4 | 1549.3 | 1509.1 | 1446.5 | 1344.8 | 1288.6 |
| 57.5° | 1376.6 | 1378.7 | 1410.5 | 1463.5 | 1503.8 | 1513.3 | 1497.4 | 1449.7 | 1389.3 | 1285.5 | 1218.7 |
| 60° | 1297.1 | 1301.4 | 1341.6 | 1388.2 | 1431.7 | 1444.4 | 1424.3 | 1376.6 | 1313.0 | 1209.2 | 1141.3 |
| 62.5° | 1209.2 | 1215.5 | 1251.5 | 1299.2 | 1340.6 | 1360.7 | 1336.3 | 1286.5 | 1224.0 | 1118.0 | 1058.7 |
| 65° | 1103.2 | 1105.3 | 1144.5 | 1198.6 | 1239.9 | 1247.3 | 1226.1 | 1177.4 | 1114.8 | 1013.1 | 960.1 |
| 67.5° | 981.3 | 991.9 | 1030.1 | 1070.3 | 1106.4 | 1114.8 | 1100.0 | 1043.8 | 994.0 | 904.0 | 852.0 |
| 70° | 863.7 | 858.4 | 890.2 | 930.4 | 963.3 | 970.7 | 953.8 | 901.8 | 855.2 | 770.4 | 730.2 |
| 72.5° | 721.7 | 717.4 | 751.4 | 782.1 | 813.9 | 809.6 | 792.7 | 751.4 | 711.1 | 639.0 | 601.9 |
| 75° | 578.6 | 574.4 | 600.9 | 627.4 | 643.3 | 645.4 | 633.7 | 603.0 | 559.5 | 503.4 | 474.8 |
| 77.5° | 438.7 | 443.0 | 454.6 | 476.9 | 491.7 | 498.1 | 477.9 | 447.2 | 419.7 | 376.2 | 355.0 |
| 80° | 312.6 | 313.7 | 317.9 | 333.8 | 344.4 | 344.4 | 334.9 | 310.5 | 279.8 | 249.0 | 238.4 |
| 82.5° | 197.1 | 201.3 | 201.3 | 217.2 | 217.2 | 208.8 | 204.5 | 188.6 | 172.7 | 148.4 | 133.5 |
| 85° | 108.1 | 106.0 | 112.3 | 113.4 | 112.3 | 106.0 | 99.6 | 90.1 | 79.5 | 62.5 | 56.2 |
| 87.5° | 47.7 | 46.6 | 46.6 | 46.6 | 45.6 | 41.3 | 35.0 | 27.6 | 19.1 | 11.7 | 8.5 |
| 90° | 37.1 | 37.1 | 36.0 | 33.9 | 30.7 | 27.6 | 22.3 | 17.0 | 10.6 | 4.2 | 2.1 |
| 92.5° | 33.9 | 33.9 | 32.9 | 31.8 | 28.6 | 25.4 | 20.1 | 14.8 | 9.5 | 4.2 | 2.1 |
| 95° | 29.7 | 28.6 | 28.6 | 26.5 | 24.4 | 21.2 | 18.0 | 12.7 | 8.5 | 3.2 | 2.1 |
| 97.5° | 24.4 | 23.3 | 23.3 | 22.3 | 20.1 | 17.0 | 14.8 | 10.6 | 7.4 | 3.2 | 2.1 |
| 100° | 18.0 | 19.1 | 18.0 | 17.0 | 15.9 | 13.8 | 11.7 | 8.5 | 5.3 | 2.1 | 2.1 |
| 102.5° | 13.8 | 13.8 | 12.7 | 12.7 | 11.7 | 10.6 | 8.5 | 6.4 | 4.2 | 2.1 | 1.1 |
| 105° | 9.5 | 9.5 | 9.5 | 8.5 | 8.5 | 7.4 | 6.4 | 4.2 | 3.2 | 2.1 | 1.1 |
| 107.5° | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 4.2 | 3.2 | 2.1 | 1.1 | 1.1 |



REPORT NUMBER: P436853
 CATALOG NUMBER: TT-D4-830-U-5CQ-PM-HSS

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 2.1 | 2.1 | 1.1 | 1.1 | 1.1 |
| 112.5° | 1.1 | 1.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 115° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 117.5° | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 120° | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 122.5° | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 125° | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 127.5° | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 130° | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 145° | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 147.5° | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 150° | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 180° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |



REPORT NUMBER: P436853

CATALOG NUMBER: TT-D4-830-U-5CQ-PM-HSS

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 | 1641.5 |
| 2.5° | 1639.4 | 1636.2 | 1638.3 | 1637.3 | 1638.3 | 1636.2 | 1636.2 | 1636.2 | 1637.3 | 1635.2 |
| 4° | 1638.3 | 1636.2 | 1636.2 | 1636.2 | 1636.2 | 1634.1 | 1634.1 | 1634.1 | 1633.0 | 1634.1 |
| 5° | 1636.2 | 1635.2 | 1634.1 | 1633.0 | 1634.1 | 1632.0 | 1630.9 | 1630.9 | 1630.9 | 1632.0 |
| 7.5° | 1632.0 | 1628.8 | 1628.8 | 1625.6 | 1626.7 | 1625.6 | 1624.6 | 1625.6 | 1624.6 | 1624.6 |
| 10° | 1624.6 | 1622.4 | 1621.4 | 1619.3 | 1619.3 | 1617.2 | 1616.1 | 1616.1 | 1616.1 | 1615.0 |
| 12.5° | 1617.2 | 1615.0 | 1614.0 | 1611.9 | 1610.8 | 1608.7 | 1607.6 | 1608.7 | 1606.6 | 1606.6 |
| 15° | 1608.7 | 1606.6 | 1605.5 | 1605.5 | 1603.4 | 1601.3 | 1600.2 | 1598.1 | 1598.1 | 1598.1 |
| 17.5° | 1601.3 | 1599.1 | 1600.2 | 1598.1 | 1597.0 | 1594.9 | 1594.9 | 1590.7 | 1590.7 | 1589.6 |
| 20° | 1593.8 | 1591.7 | 1591.7 | 1590.7 | 1590.7 | 1588.5 | 1585.4 | 1583.2 | 1582.2 | 1582.2 |
| 22.5° | 1584.3 | 1581.1 | 1575.8 | 1568.4 | 1564.2 | 1561.0 | 1559.9 | 1556.7 | 1555.7 | 1553.6 |
| 25° | 1569.5 | 1561.0 | 1549.3 | 1536.6 | 1523.9 | 1517.5 | 1515.4 | 1511.2 | 1511.2 | 1511.2 |
| 27.5° | 1551.4 | 1535.6 | 1519.7 | 1500.6 | 1481.5 | 1468.8 | 1460.3 | 1456.1 | 1454.0 | 1454.0 |
| 30° | 1528.1 | 1508.0 | 1485.7 | 1461.4 | 1440.2 | 1416.9 | 1402.0 | 1393.5 | 1389.3 | 1390.4 |
| 32.5° | 1506.9 | 1481.5 | 1456.1 | 1425.3 | 1396.7 | 1369.2 | 1343.7 | 1331.0 | 1325.7 | 1323.6 |
| 35° | 1485.7 | 1457.1 | 1426.4 | 1393.5 | 1356.5 | 1316.2 | 1282.3 | 1263.2 | 1252.6 | 1253.7 |
| 37.5° | 1469.8 | 1435.9 | 1402.0 | 1361.8 | 1319.4 | 1270.6 | 1227.2 | 1196.4 | 1183.7 | 1185.8 |
| 40° | 1452.9 | 1414.7 | 1377.7 | 1331.0 | 1281.2 | 1222.9 | 1166.8 | 1125.4 | 1110.6 | 1107.4 |
| 42.5° | 1437.0 | 1392.5 | 1350.1 | 1300.3 | 1237.8 | 1172.1 | 1103.2 | 1054.4 | 1032.2 | 1029.0 |
| 45° | 1416.9 | 1367.1 | 1321.5 | 1264.3 | 1195.4 | 1113.8 | 1033.2 | 969.7 | 946.3 | 936.8 |
| 47.5° | 1390.4 | 1335.3 | 1284.4 | 1218.7 | 1143.5 | 1051.3 | 950.6 | 872.2 | 842.5 | 835.1 |
| 50° | 1351.2 | 1287.6 | 1235.6 | 1161.5 | 1070.3 | 968.6 | 856.3 | 759.8 | 720.6 | 715.3 |
| 52.5° | 1299.2 | 1234.6 | 1176.3 | 1091.5 | 980.3 | 860.5 | 733.3 | 633.7 | 588.2 | 585.0 |
| 55° | 1236.7 | 1166.8 | 1103.2 | 1007.8 | 877.5 | 738.6 | 606.2 | 480.1 | 435.5 | 430.3 |
| 57.5° | 1163.6 | 1091.5 | 1022.6 | 905.0 | 754.5 | 599.8 | 446.1 | 325.3 | 282.9 | 272.4 |
| 60° | 1083.0 | 1008.9 | 931.5 | 788.4 | 589.2 | 425.0 | 270.2 | 172.7 | 140.9 | 130.3 |
| 62.5° | 1004.6 | 924.1 | 842.5 | 649.6 | 403.8 | 242.7 | 122.9 | 49.8 | 31.8 | 30.7 |
| 65° | 912.4 | 836.1 | 752.4 | 523.5 | 255.4 | 109.2 | 36.0 | 1.1 | 0.0 | 0.0 |
| 67.5° | 805.4 | 740.8 | 666.6 | 468.4 | 225.7 | 95.4 | 30.7 | 1.1 | 0.0 | 0.0 |
| 70° | 690.9 | 640.1 | 574.4 | 402.7 | 193.9 | 80.5 | 26.5 | 0.0 | 0.0 | 0.0 |
| 72.5° | 570.1 | 526.7 | 477.9 | 334.9 | 161.1 | 66.8 | 21.2 | 0.0 | 0.0 | 0.0 |
| 75° | 447.2 | 419.7 | 376.2 | 264.9 | 125.0 | 50.9 | 15.9 | 0.0 | 0.0 | 0.0 |
| 77.5° | 331.7 | 309.4 | 277.6 | 195.0 | 94.3 | 37.1 | 11.7 | 0.0 | 0.0 | 0.0 |
| 80° | 223.6 | 206.6 | 188.6 | 132.5 | 63.6 | 24.4 | 7.4 | 0.0 | 0.0 | 0.0 |
| 82.5° | 130.3 | 117.6 | 106.0 | 75.2 | 35.0 | 13.8 | 3.2 | 0.0 | 0.0 | 0.0 |
| 85° | 53.0 | 48.7 | 46.6 | 31.8 | 13.8 | 4.2 | 1.1 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.4 | 5.3 | 5.3 | 3.2 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 |
| 100° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 102.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 105° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 107.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |



REPORT NUMBER: P436853
 CATALOG NUMBER: TT-D4-830-U-5CQ-PM-HSS

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-----|------|------|------|------|------|------|------|------|------|
| 110° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 112.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 115° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 117.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 120° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 122.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 125° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 127.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 130° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 132.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 135° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 137.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 |
| 140° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 |
| 142.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 145° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 1.1 |
| 150° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |

(END OF REPORT)