

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: INVUE

Report Number: P401794

Luminaire Tested: **ENT-SA1F-727-U-SL3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401794
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1F-727-U-SL3
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6388 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

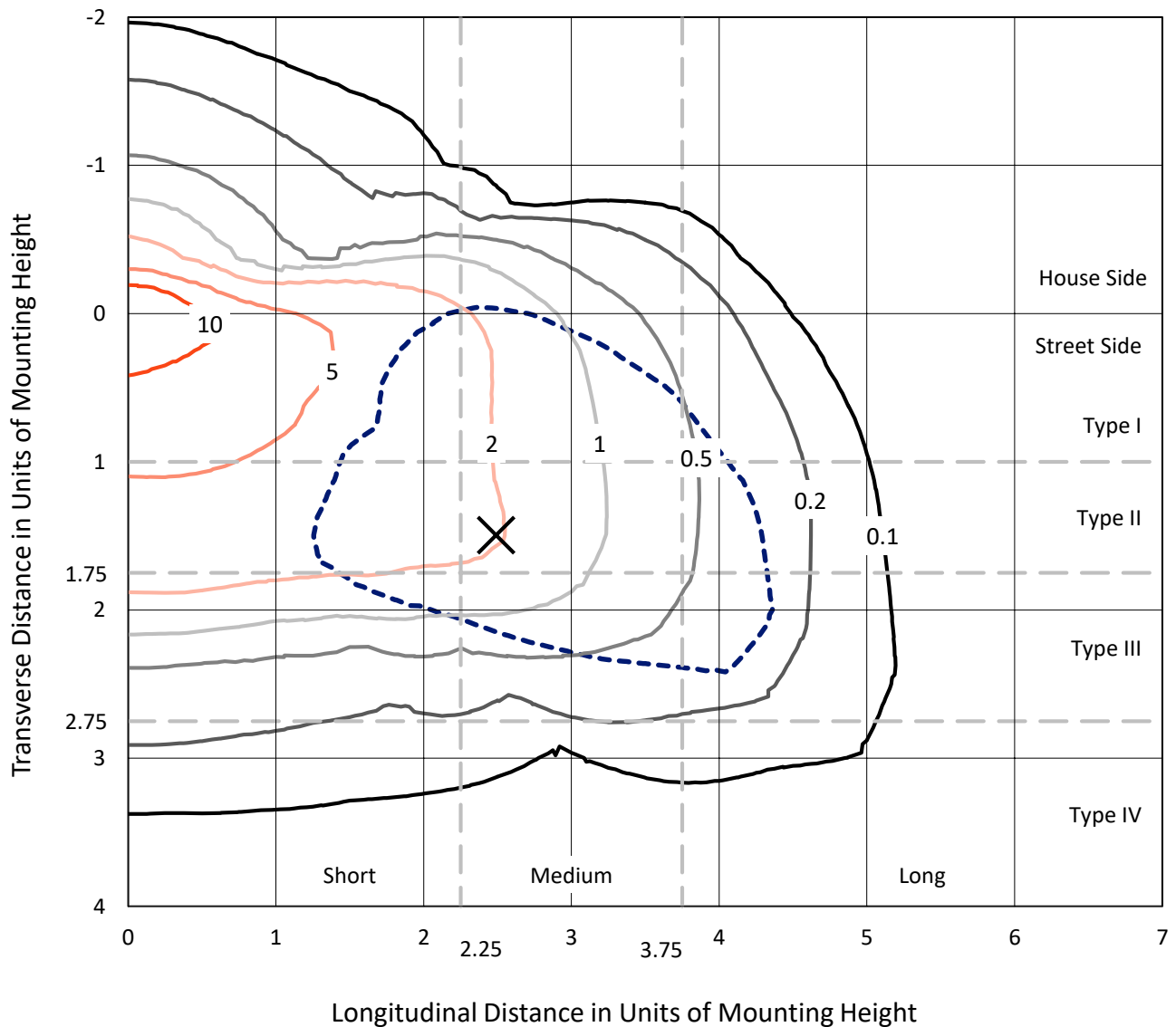
Input Watts (W): 66.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401794
 CATALOG NUMBER: ENT-SA1F-727-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

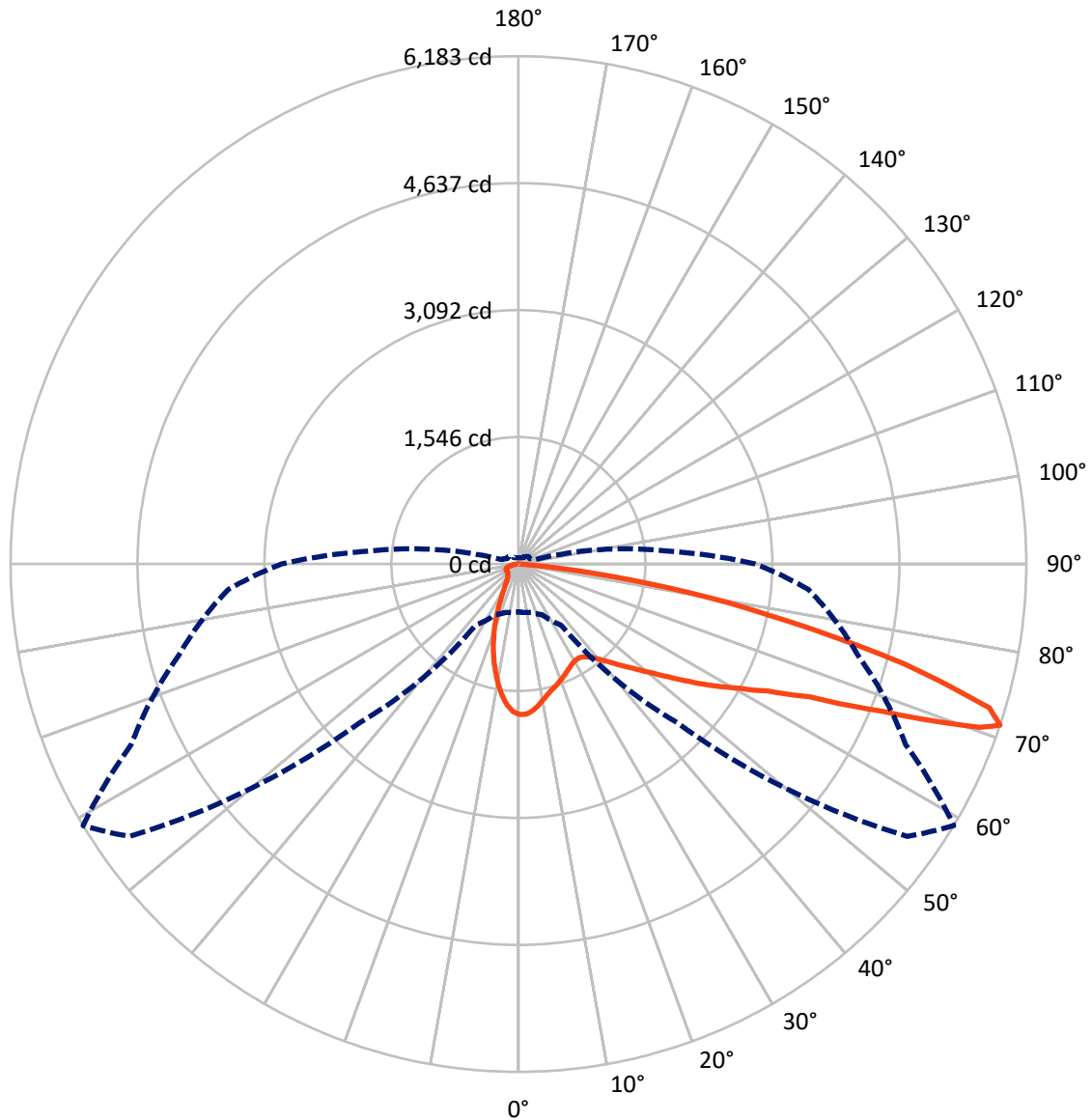
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.3 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401794
CATALOG NUMBER: ENT-SA1F-727-U-SL3

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P401794

CATALOG NUMBER: ENT-SA1F-727-U-SL3

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1084.2 | 0.0 | 1084.2 |
| | % Fixture | 17.0 | 0.0 | 17.0 |
| Street Side | Lumens | 5303.8 | 0.0 | 5303.8 |
| | % Fixture | 83.0 | 0.0 | 83.0 |
| Total | Lumens | 6388.0 | 0.0 | 6388.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.3 | 2.5 |
| 10°-20° | 355.7 | 5.6 |
| 20°-30° | 452.1 | 7.1 |
| 30°-40° | 578.0 | 9.0 |
| 40°-50° | 802.1 | 12.6 |
| 50°-60° | 1187.6 | 18.6 |
| 60°-70° | 1605.2 | 25.1 |
| 70°-80° | 1138.3 | 17.8 |
| 80°-90° | 110.6 | 1.7 |
| 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° | 6388.0 | 100.0 |
| 0°-180° | 6388.0 | 100.0 |



REPORT NUMBER: P401794

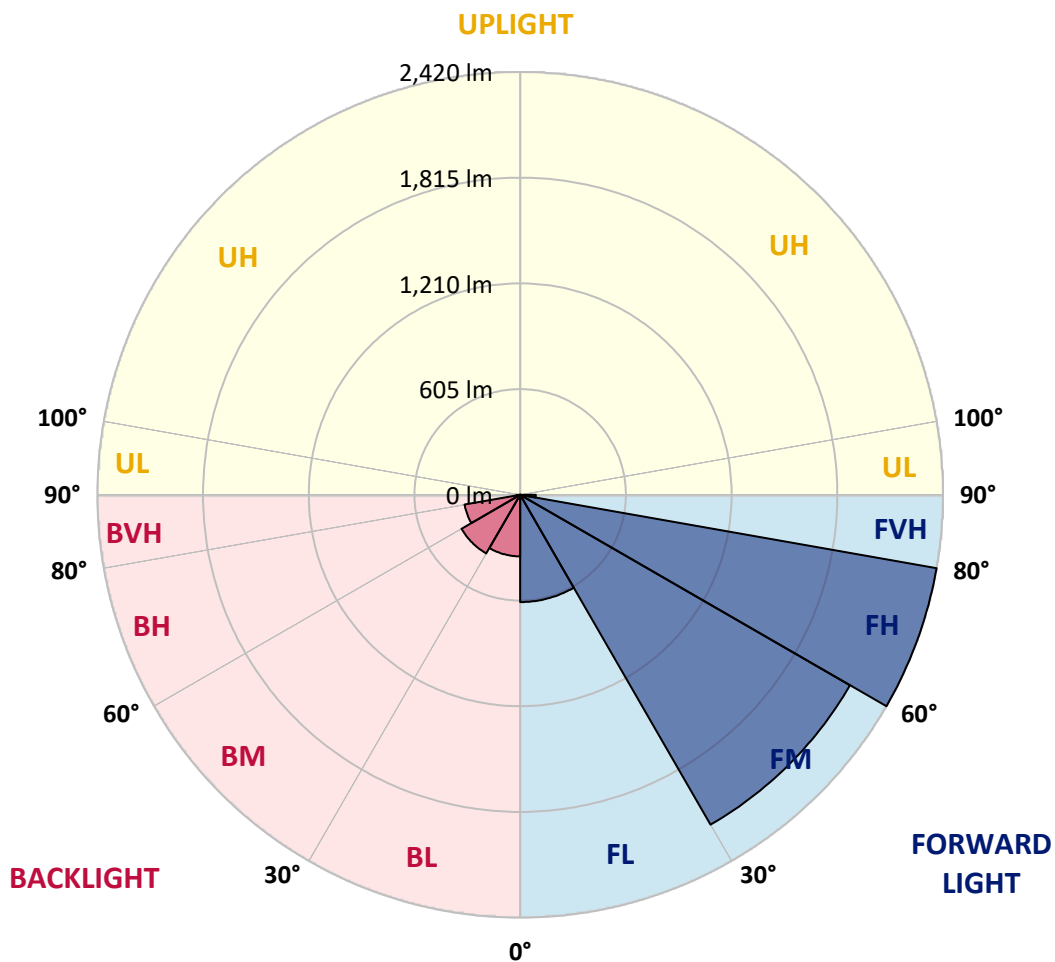
CATALOG NUMBER: ENT-SA1F-727-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 614.0 | 9.6 | | | |
| FM | (30°-60°) | 2179.9 | 34.1 | | | |
| FH | (60°-80°) | 2420.4 | 37.9 | | | G2/5000 |
| FVH | (80°-90°) | 89.5 | 1.4 | | | G1/100 |
| BL | (0°-30°) | 352.3 | 5.5 | B1/500 | | |
| BM | (30°-60°) | 387.8 | 6.1 | B1/1000 | | |
| BH | (60°-80°) | 323.1 | 5.1 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 21.1 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type III Medium





REPORT NUMBER: P401794

CATALOG NUMBER: ENT-SA1F-727-U-SL3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 |
| 2.5° | 1817.0 | 1823.4 | 1826.2 | 1830.9 | 1830.9 | 1832.7 | 1830.9 | 1829.9 | 1833.6 | 1829.9 | 1819.7 |
| 5° | 1736.4 | 1739.2 | 1747.5 | 1756.8 | 1766.1 | 1785.5 | 1791.1 | 1794.8 | 1803.1 | 1804.9 | 1794.8 |
| 7.5° | 1627.2 | 1637.4 | 1648.5 | 1660.5 | 1680.0 | 1706.8 | 1730.0 | 1739.2 | 1755.0 | 1764.2 | 1749.4 |
| 10° | 1534.7 | 1540.2 | 1545.8 | 1567.1 | 1597.6 | 1634.6 | 1658.7 | 1676.3 | 1701.3 | 1713.3 | 1699.4 |
| 12.5° | 1442.1 | 1446.7 | 1457.8 | 1486.5 | 1518.0 | 1562.4 | 1605.9 | 1619.8 | 1649.4 | 1673.5 | 1662.4 |
| 15° | 1370.8 | 1370.8 | 1379.2 | 1410.6 | 1443.9 | 1503.2 | 1554.1 | 1575.4 | 1612.4 | 1646.7 | 1632.8 |
| 17.5° | 1307.9 | 1310.7 | 1316.2 | 1336.6 | 1382.9 | 1444.9 | 1509.7 | 1536.5 | 1582.8 | 1627.2 | 1608.7 |
| 20° | 1272.7 | 1270.9 | 1274.6 | 1284.7 | 1321.8 | 1387.5 | 1465.2 | 1496.7 | 1554.1 | 1615.2 | 1585.6 |
| 22.5° | 1260.7 | 1258.8 | 1256.0 | 1255.1 | 1279.2 | 1334.7 | 1418.0 | 1456.9 | 1528.2 | 1608.7 | 1564.3 |
| 25° | 1269.9 | 1269.9 | 1261.6 | 1245.9 | 1257.0 | 1294.9 | 1375.5 | 1417.1 | 1499.5 | 1604.1 | 1544.8 |
| 27.5° | 1294.9 | 1294.9 | 1282.9 | 1262.5 | 1257.9 | 1274.6 | 1338.4 | 1382.9 | 1475.4 | 1606.9 | 1529.1 |
| 30° | 1329.2 | 1328.2 | 1316.2 | 1298.6 | 1284.7 | 1279.2 | 1320.8 | 1361.6 | 1458.8 | 1618.9 | 1521.7 |
| 32.5° | 1368.0 | 1366.2 | 1360.6 | 1348.6 | 1331.9 | 1307.9 | 1322.7 | 1358.8 | 1455.1 | 1640.2 | 1522.6 |
| 35° | 1414.3 | 1411.6 | 1414.3 | 1407.8 | 1392.1 | 1366.2 | 1356.9 | 1385.6 | 1473.6 | 1680.0 | 1538.4 |
| 37.5° | 1455.1 | 1453.2 | 1467.1 | 1470.8 | 1467.1 | 1432.8 | 1420.8 | 1439.3 | 1517.1 | 1742.9 | 1570.8 |
| 40° | 1489.3 | 1491.2 | 1516.1 | 1543.0 | 1548.5 | 1518.9 | 1510.6 | 1526.3 | 1587.4 | 1819.7 | 1629.1 |
| 42.5° | 1527.3 | 1532.8 | 1569.8 | 1618.0 | 1636.5 | 1617.0 | 1621.7 | 1632.8 | 1676.3 | 1924.3 | 1713.3 |
| 45° | 1564.3 | 1576.3 | 1627.2 | 1689.2 | 1736.4 | 1736.4 | 1752.2 | 1763.3 | 1791.1 | 2055.8 | 1836.4 |
| 47.5° | 1629.1 | 1637.4 | 1692.9 | 1767.9 | 1840.1 | 1863.2 | 1906.8 | 1903.0 | 1924.3 | 2200.2 | 1980.8 |
| 50° | 1713.3 | 1727.2 | 1783.6 | 1861.4 | 1953.0 | 2018.7 | 2068.7 | 2076.1 | 2084.5 | 2348.3 | 2152.0 |
| 52.5° | 1829.9 | 1846.6 | 1892.9 | 1965.1 | 2073.4 | 2180.7 | 2286.2 | 2281.6 | 2270.5 | 2509.3 | 2348.3 |
| 55° | 1947.5 | 1965.1 | 2008.6 | 2066.9 | 2194.6 | 2359.4 | 2531.5 | 2525.1 | 2474.1 | 2674.1 | 2529.7 |
| 57.5° | 2066.9 | 2081.7 | 2127.0 | 2178.0 | 2328.8 | 2570.4 | 2790.7 | 2795.3 | 2690.7 | 2857.3 | 2709.3 |
| 60° | 2116.9 | 2139.1 | 2251.1 | 2349.2 | 2538.0 | 2804.6 | 3055.4 | 3067.5 | 2915.7 | 3042.5 | 2907.3 |
| 62.5° | 1891.0 | 1917.9 | 2103.0 | 2367.7 | 2825.0 | 3256.3 | 3399.8 | 3407.2 | 3186.9 | 3247.0 | 3123.9 |
| 65° | 1399.5 | 1398.6 | 1590.2 | 1986.4 | 2767.6 | 3862.6 | 4013.4 | 3896.8 | 3523.8 | 3518.2 | 3409.9 |
| 67.5° | 801.6 | 825.6 | 886.7 | 1184.8 | 2108.5 | 3974.6 | 5105.6 | 4801.1 | 4120.8 | 3940.3 | 3791.3 |
| 70° | 646.1 | 640.5 | 659.0 | 738.6 | 1149.6 | 3268.3 | 5817.4 | 5956.3 | 4968.7 | 4284.6 | 3705.2 |
| 71° | 582.2 | 590.5 | 609.0 | 681.2 | 907.1 | 2726.8 | 5782.3 | 6183.1 | 5200.1 | 4275.4 | 3541.4 |
| 72.5° | 500.8 | 502.6 | 545.2 | 630.3 | 745.1 | 1923.4 | 5346.3 | 5996.1 | 5442.6 | 4154.1 | 3300.7 |
| 75° | 340.6 | 345.3 | 411.9 | 507.2 | 680.3 | 913.6 | 3825.5 | 4850.2 | 4953.9 | 3882.0 | 2725.9 |
| 77.5° | 195.3 | 199.0 | 247.1 | 371.2 | 579.4 | 644.2 | 2348.3 | 3351.6 | 3561.7 | 2838.8 | 1461.5 |
| 80° | 100.9 | 105.5 | 137.0 | 234.2 | 442.4 | 521.1 | 1346.8 | 2107.6 | 2026.2 | 981.1 | 338.8 |
| 82.5° | 26.8 | 30.5 | 39.8 | 84.2 | 213.8 | 339.7 | 597.0 | 871.9 | 622.9 | 203.6 | 123.1 |
| 85° | 0.0 | 0.0 | 0.0 | 0.9 | 1.9 | 47.2 | 125.9 | 156.4 | 87.0 | 39.8 | 33.3 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.8 | 3.7 |
| 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: P401794

CATALOG NUMBER: ENT-SA1F-727-U-SL3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 | 1832.7 |
| 2.5° | 1817.9 | 1817.9 | 1812.3 | 1804.0 | 1794.8 | 1773.5 | 1777.2 | 1760.5 | 1762.4 | 1760.5 | 1760.5 |
| 5° | 1786.4 | 1780.9 | 1767.0 | 1741.1 | 1712.4 | 1674.4 | 1668.9 | 1638.3 | 1620.7 | 1615.2 | 1621.7 |
| 7.5° | 1742.9 | 1727.2 | 1692.0 | 1646.7 | 1592.0 | 1543.0 | 1497.6 | 1456.9 | 1426.4 | 1413.4 | 1407.8 |
| 10° | 1685.5 | 1666.1 | 1608.7 | 1529.1 | 1454.1 | 1377.3 | 1306.0 | 1259.8 | 1198.7 | 1180.1 | 1174.6 |
| 12.5° | 1638.3 | 1605.0 | 1518.9 | 1407.8 | 1291.2 | 1189.4 | 1093.1 | 996.0 | 937.6 | 896.0 | 889.5 |
| 15° | 1597.6 | 1550.4 | 1427.3 | 1283.8 | 1138.5 | 997.8 | 867.3 | 736.8 | 654.4 | 619.2 | 594.2 |
| 17.5° | 1561.5 | 1500.4 | 1335.7 | 1149.6 | 970.0 | 784.0 | 624.8 | 499.8 | 448.0 | 421.2 | 422.1 |
| 20° | 1524.5 | 1446.7 | 1240.3 | 1015.4 | 803.4 | 597.0 | 441.5 | 383.2 | 357.3 | 351.7 | 349.0 |
| 22.5° | 1489.3 | 1385.6 | 1139.4 | 883.0 | 633.1 | 438.7 | 355.4 | 326.7 | 320.3 | 320.3 | 320.3 |
| 25° | 1449.5 | 1323.6 | 1037.6 | 747.9 | 479.5 | 346.2 | 305.5 | 295.3 | 297.1 | 300.8 | 301.7 |
| 27.5° | 1417.1 | 1269.9 | 936.7 | 591.5 | 372.1 | 294.3 | 273.1 | 271.2 | 278.6 | 286.9 | 286.9 |
| 30° | 1388.4 | 1220.9 | 827.5 | 461.9 | 296.2 | 258.2 | 250.8 | 253.6 | 261.0 | 268.4 | 271.2 |
| 32.5° | 1369.0 | 1176.4 | 729.4 | 359.1 | 252.7 | 233.3 | 231.4 | 235.1 | 242.5 | 246.2 | 249.0 |
| 35° | 1360.6 | 1144.1 | 623.9 | 289.7 | 224.9 | 214.7 | 213.8 | 216.6 | 220.3 | 221.2 | 220.3 |
| 37.5° | 1369.9 | 1121.8 | 515.6 | 245.3 | 207.3 | 201.8 | 200.9 | 200.9 | 200.9 | 201.8 | 200.9 |
| 40° | 1396.7 | 1113.5 | 418.4 | 216.6 | 196.2 | 191.6 | 188.8 | 186.0 | 184.2 | 184.2 | 183.3 |
| 42.5° | 1453.2 | 1126.5 | 336.0 | 199.9 | 187.9 | 182.3 | 176.8 | 173.1 | 170.3 | 169.4 | 169.4 |
| 45° | 1543.9 | 1162.6 | 279.5 | 188.8 | 180.5 | 172.2 | 165.7 | 162.0 | 159.2 | 160.1 | 159.2 |
| 47.5° | 1668.9 | 1222.7 | 247.1 | 181.4 | 173.1 | 162.0 | 155.5 | 151.8 | 150.9 | 153.7 | 154.6 |
| 50° | 1810.5 | 1307.9 | 227.7 | 175.9 | 167.5 | 153.7 | 146.2 | 143.5 | 144.4 | 149.9 | 150.9 |
| 52.5° | 1977.1 | 1418.0 | 219.4 | 172.2 | 162.9 | 146.2 | 139.8 | 137.0 | 138.8 | 145.3 | 146.2 |
| 55° | 2156.7 | 1543.9 | 231.4 | 174.0 | 158.3 | 141.6 | 134.2 | 130.5 | 133.3 | 138.8 | 139.8 |
| 57.5° | 2339.0 | 1699.4 | 272.1 | 174.9 | 152.7 | 137.9 | 128.7 | 123.1 | 125.0 | 129.6 | 130.5 |
| 60° | 2523.2 | 1854.0 | 342.5 | 175.9 | 150.9 | 134.2 | 124.0 | 115.7 | 116.6 | 119.4 | 120.3 |
| 62.5° | 2739.8 | 2050.2 | 435.0 | 179.6 | 152.7 | 131.4 | 115.7 | 106.4 | 106.4 | 108.3 | 108.3 |
| 65° | 3068.4 | 2342.7 | 496.1 | 177.7 | 157.4 | 128.7 | 107.4 | 98.1 | 97.2 | 98.1 | 98.1 |
| 67.5° | 3304.4 | 2381.6 | 346.2 | 167.5 | 160.1 | 129.6 | 102.7 | 90.7 | 88.9 | 87.9 | 87.9 |
| 70° | 3054.5 | 2003.9 | 228.6 | 158.3 | 155.5 | 131.4 | 99.0 | 86.1 | 82.4 | 79.6 | 78.7 |
| 71° | 2881.4 | 1805.9 | 212.0 | 154.6 | 151.8 | 129.6 | 97.2 | 83.3 | 79.6 | 77.8 | 76.8 |
| 72.5° | 2625.0 | 1611.5 | 195.3 | 149.0 | 143.5 | 125.9 | 94.4 | 80.5 | 75.9 | 73.1 | 72.2 |
| 75° | 2074.3 | 1235.7 | 171.2 | 137.0 | 124.0 | 103.7 | 87.0 | 75.0 | 70.3 | 66.6 | 65.7 |
| 77.5° | 937.6 | 491.5 | 131.4 | 118.5 | 100.9 | 82.4 | 75.9 | 69.4 | 63.9 | 61.1 | 60.2 |
| 80° | 261.9 | 187.0 | 96.3 | 93.5 | 75.9 | 63.9 | 61.1 | 59.2 | 57.4 | 53.7 | 53.7 |
| 82.5° | 121.3 | 109.2 | 68.5 | 65.7 | 51.8 | 45.4 | 48.1 | 49.1 | 49.1 | 45.4 | 44.4 |
| 85° | 33.3 | 36.1 | 31.5 | 35.2 | 33.3 | 30.5 | 35.2 | 37.9 | 39.8 | 36.1 | 33.3 |
| 87.5° | 2.8 | 6.5 | 8.3 | 13.9 | 16.7 | 17.6 | 22.2 | 26.8 | 27.8 | 22.2 | 23.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)