

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #15177918.03 & #15177918.01

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 2026-03-03

[TEST DATE] 2/19/2024

[MANUFAC] H E Williams Inc

[LUMCAT] MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_

[LUMINAIRE] White linear extruded luminaire with up and downlight

[LAMP] 144 LEDs (2 LED boards with 72 LEDs per board)

[OTHER] This test was performed using the calibrated photodetector

[MORE] method of absolute photometry.

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 10148 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 99 |
| Total Luminaire Watts | 102.3 |
| Ballast Factor | 1.00 |
| CIE Type | General Diffuse |
| Spacing Criterion (0-180) | N.A. |
| Spacing Criterion (90-270) | N.A. |
| Spacing Criterion (Diagonal) | N.A. |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 4.00 ft |
| Luminous Width (90-270) | 0.33 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 13637 | 13296 | 13144 |
| 55 | 12536 | 12232 | 12103 |
| 65 | 11562 | 11283 | 11161 |
| 75 | 9805 | 9800 | 9794 |
| 85 | 7658 | 7965 | 8196 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES****CANDELA TABULATION**

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-------------|------------|-------------|-------------|-------------|-------------|
| 0.0 | 1978.720 | 1978.720 | 1978.720 | 1978.720 | 1978.720 |
| 0.5 | 2008.600 | 1980.380 | 1970.420 | 1974.570 | 1967.930 |
| 1.0 | 2008.600 | 1979.550 | 1970.420 | 1974.570 | 1967.930 |
| 1.5 | 2007.770 | 1978.720 | 1969.590 | 1974.570 | 1967.100 |
| 2.0 | 2006.940 | 1977.890 | 1968.760 | 1973.740 | 1967.100 |
| 2.5 | 2006.110 | 1977.060 | 1967.100 | 1972.910 | 1966.270 |
| 3.0 | 2004.450 | 1975.400 | 1966.270 | 1972.080 | 1964.610 |
| 3.5 | 2002.790 | 1973.740 | 1964.610 | 1970.420 | 1962.950 |
| 4.0 | 2001.130 | 1972.080 | 1962.950 | 1968.760 | 1961.290 |
| 4.5 | 1999.470 | 1969.590 | 1961.290 | 1967.100 | 1958.800 |
| 5.0 | 1997.810 | 1967.930 | 1958.800 | 1964.610 | 1956.310 |
| 5.5 | 1995.320 | 1965.440 | 1956.310 | 1962.120 | 1953.820 |
| 6.0 | 1992.830 | 1962.120 | 1953.820 | 1959.630 | 1950.500 |
| 6.5 | 1989.510 | 1959.630 | 1950.500 | 1956.310 | 1948.010 |
| 7.0 | 1987.020 | 1956.310 | 1948.010 | 1952.990 | 1944.690 |
| 7.5 | 1984.530 | 1952.990 | 1944.690 | 1949.670 | 1942.200 |
| 8.0 | 1980.380 | 1949.670 | 1940.540 | 1946.350 | 1938.880 |
| 8.5 | 1977.060 | 1945.520 | 1936.390 | 1942.200 | 1934.730 |
| 9.0 | 1972.910 | 1942.200 | 1933.070 | 1938.050 | 1930.580 |
| 9.5 | 1968.760 | 1938.050 | 1928.090 | 1933.070 | 1926.430 |
| 10.0 | 1964.610 | 1933.900 | 1923.940 | 1928.920 | 1921.450 |
| 10.5 | 1959.630 | 1928.920 | 1918.960 | 1923.940 | 1917.300 |
| 11.0 | 1955.480 | 1923.940 | 1913.980 | 1918.960 | 1911.490 |
| 11.5 | 1949.670 | 1918.960 | 1909.000 | 1913.980 | 1906.510 |
| 12.0 | 1944.690 | 1913.980 | 1904.020 | 1908.170 | 1900.700 |
| 12.5 | 1939.710 | 1908.170 | 1898.210 | 1902.360 | 1894.890 |
| 13.0 | 1933.900 | 1903.190 | 1892.400 | 1896.550 | 1889.080 |
| 13.5 | 1928.090 | 1896.550 | 1886.590 | 1889.910 | 1883.270 |
| 14.0 | 1922.280 | 1890.740 | 1879.950 | 1884.100 | 1877.460 |
| 14.5 | 1916.470 | 1884.930 | 1873.310 | 1877.460 | 1870.820 |
| 15.0 | 1910.660 | 1878.290 | 1866.670 | 1870.820 | 1864.180 |
| 15.5 | 1903.190 | 1872.480 | 1860.030 | 1863.350 | 1856.710 |
| 16.0 | 1894.890 | 1865.840 | 1852.560 | 1856.710 | 1850.070 |
| 16.5 | 1886.590 | 1858.370 | 1845.090 | 1849.240 | 1842.600 |
| 17.0 | 1879.120 | 1850.900 | 1837.620 | 1841.770 | 1835.130 |
| 17.5 | 1870.820 | 1842.600 | 1829.320 | 1833.470 | 1826.830 |
| 18.0 | 1862.520 | 1834.300 | 1821.020 | 1825.170 | 1818.530 |
| 18.5 | 1854.220 | 1826.000 | 1812.720 | 1816.040 | 1810.230 |
| 19.0 | 1845.920 | 1817.700 | 1805.250 | 1807.740 | 1800.270 |
| 19.5 | 1836.790 | 1809.400 | 1796.950 | 1797.780 | 1790.310 |
| 20.0 | 1828.490 | 1800.270 | 1789.480 | 1788.650 | 1780.350 |
| 20.5 | 1819.360 | 1791.970 | 1781.180 | 1778.690 | 1770.390 |
| 21.0 | 1810.230 | 1782.840 | 1772.050 | 1768.730 | 1759.600 |
| 21.5 | 1800.270 | 1773.710 | 1762.090 | 1758.770 | 1748.810 |
| 22.0 | 1791.140 | 1763.750 | 1751.300 | 1747.980 | 1738.850 |
| 22.5 | 1781.180 | 1753.790 | 1741.340 | 1737.190 | 1728.060 |
| 23.0 | 1771.220 | 1743.830 | 1731.380 | 1725.570 | 1717.270 |
| 23.5 | 1761.260 | 1733.870 | 1720.590 | 1714.780 | 1707.310 |
| 24.0 | 1750.470 | 1723.910 | 1710.630 | 1703.990 | 1696.520 |
| 24.5 | 1739.680 | 1713.120 | 1699.840 | 1693.200 | 1685.730 |
| 25.0 | 1729.720 | 1702.330 | 1689.050 | 1682.410 | 1674.940 |
| 25.5 | 1718.930 | 1691.540 | 1677.430 | 1671.620 | 1663.320 |
| 26.0 | 1707.310 | 1679.920 | 1666.640 | 1660.830 | 1652.530 |
| 26.5 | 1696.520 | 1669.130 | 1655.020 | 1650.040 | 1641.740 |

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| | | | | | |
|------|----------|----------|----------|----------|----------|
| 27.0 | 1684.900 | 1657.510 | 1643.400 | 1639.250 | 1630.120 |
| 27.5 | 1673.280 | 1645.890 | 1632.610 | 1628.460 | 1619.330 |
| 28.0 | 1661.660 | 1633.440 | 1620.160 | 1616.840 | 1607.710 |
| 28.5 | 1649.210 | 1620.990 | 1608.540 | 1606.050 | 1596.090 |
| 29.0 | 1636.760 | 1609.370 | 1596.920 | 1594.430 | 1584.470 |
| 29.5 | 1625.140 | 1596.920 | 1585.300 | 1581.980 | 1573.680 |
| 30.0 | 1612.690 | 1584.470 | 1573.680 | 1570.360 | 1562.060 |
| 30.5 | 1600.240 | 1572.020 | 1561.230 | 1558.740 | 1550.440 |
| 31.0 | 1586.960 | 1560.400 | 1548.780 | 1546.290 | 1538.820 |
| 31.5 | 1574.510 | 1547.950 | 1536.330 | 1533.840 | 1526.370 |
| 32.0 | 1561.230 | 1534.670 | 1523.880 | 1520.560 | 1513.920 |
| 32.5 | 1547.950 | 1522.220 | 1511.430 | 1508.110 | 1500.640 |
| 33.0 | 1534.670 | 1509.770 | 1498.980 | 1495.660 | 1487.360 |
| 33.5 | 1522.220 | 1496.490 | 1485.700 | 1482.380 | 1474.910 |
| 34.0 | 1508.110 | 1483.210 | 1473.250 | 1469.100 | 1461.630 |
| 34.5 | 1494.830 | 1469.930 | 1459.140 | 1455.820 | 1447.520 |
| 35.0 | 1481.550 | 1457.480 | 1445.860 | 1442.540 | 1433.410 |
| 35.5 | 1467.440 | 1443.370 | 1432.580 | 1429.260 | 1419.300 |
| 36.0 | 1453.330 | 1430.090 | 1419.300 | 1415.150 | 1406.020 |
| 36.5 | 1440.050 | 1416.810 | 1406.020 | 1401.870 | 1392.740 |
| 37.0 | 1425.940 | 1402.700 | 1391.910 | 1387.760 | 1378.630 |
| 37.5 | 1411.830 | 1388.590 | 1378.630 | 1373.650 | 1365.350 |
| 38.0 | 1396.890 | 1374.480 | 1364.520 | 1359.540 | 1351.240 |
| 38.5 | 1382.780 | 1360.370 | 1350.410 | 1346.260 | 1337.130 |
| 39.0 | 1369.500 | 1346.260 | 1336.300 | 1332.150 | 1323.850 |
| 39.5 | 1354.560 | 1332.150 | 1323.020 | 1318.040 | 1308.910 |
| 40.0 | 1340.450 | 1317.210 | 1308.910 | 1303.930 | 1295.630 |
| 40.5 | 1325.510 | 1303.100 | 1294.800 | 1289.820 | 1281.520 |
| 41.0 | 1311.400 | 1288.160 | 1280.690 | 1274.880 | 1266.580 |
| 41.5 | 1296.460 | 1274.050 | 1265.750 | 1260.770 | 1251.640 |
| 42.0 | 1282.350 | 1259.110 | 1251.640 | 1246.660 | 1237.530 |
| 42.5 | 1268.240 | 1245.000 | 1237.530 | 1231.720 | 1223.420 |
| 43.0 | 1253.300 | 1230.890 | 1223.420 | 1217.610 | 1208.480 |
| 43.5 | 1239.190 | 1215.950 | 1208.480 | 1203.500 | 1194.370 |
| 44.0 | 1224.250 | 1201.010 | 1193.540 | 1188.560 | 1180.260 |
| 44.5 | 1209.310 | 1186.070 | 1178.600 | 1173.620 | 1165.320 |
| 45.0 | 1194.370 | 1171.960 | 1164.490 | 1158.680 | 1151.210 |
| 45.5 | 1180.260 | 1157.020 | 1149.550 | 1144.570 | 1137.100 |
| 46.0 | 1165.320 | 1142.080 | 1134.610 | 1129.630 | 1122.990 |
| 46.5 | 1150.380 | 1127.140 | 1120.500 | 1115.520 | 1108.880 |
| 47.0 | 1135.440 | 1112.200 | 1105.560 | 1100.580 | 1093.940 |
| 47.5 | 1119.670 | 1097.260 | 1090.620 | 1085.640 | 1079.830 |
| 48.0 | 1104.730 | 1082.320 | 1075.680 | 1071.530 | 1064.890 |
| 48.5 | 1089.790 | 1067.380 | 1061.570 | 1056.590 | 1049.950 |
| 49.0 | 1074.020 | 1052.440 | 1046.630 | 1041.650 | 1035.840 |
| 49.5 | 1059.080 | 1037.500 | 1031.690 | 1027.540 | 1021.730 |
| 50.0 | 1043.310 | 1022.560 | 1016.750 | 1012.600 | 1006.790 |
| 50.5 | 1027.540 | 1007.620 | 1001.810 | 997.660 | 992.680 |
| 51.0 | 1011.770 | 992.680 | 986.870 | 982.720 | 977.740 |
| 51.5 | 996.830 | 977.740 | 971.930 | 968.610 | 962.800 |
| 52.0 | 981.890 | 962.800 | 956.990 | 953.670 | 948.690 |
| 52.5 | 966.120 | 947.860 | 942.050 | 939.560 | 933.750 |
| 53.0 | 951.180 | 932.920 | 927.110 | 924.620 | 918.810 |
| 53.5 | 935.410 | 917.980 | 912.170 | 909.680 | 903.870 |
| 54.0 | 920.470 | 903.040 | 898.060 | 895.570 | 888.930 |
| 54.5 | 905.530 | 888.930 | 883.120 | 880.630 | 873.990 |

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| | | | | | |
|------|---------|---------|---------|---------|---------|
| 55.0 | 890.590 | 874.820 | 869.010 | 866.520 | 859.880 |
| 55.5 | 876.480 | 859.880 | 854.070 | 851.580 | 845.770 |
| 56.0 | 860.710 | 844.940 | 839.130 | 837.470 | 830.830 |
| 56.5 | 845.770 | 830.830 | 824.605 | 822.779 | 816.222 |
| 57.0 | 831.660 | 815.890 | 809.914 | 807.922 | 801.697 |
| 57.5 | 817.052 | 801.448 | 795.306 | 793.480 | 787.006 |
| 58.0 | 802.444 | 787.172 | 780.615 | 778.955 | 772.481 |
| 58.5 | 787.753 | 772.813 | 766.173 | 764.679 | 758.537 |
| 59.0 | 773.311 | 758.371 | 751.648 | 750.237 | 744.344 |
| 59.5 | 759.284 | 743.763 | 736.874 | 735.878 | 730.317 |
| 60.0 | 744.925 | 729.238 | 722.266 | 721.436 | 716.041 |
| 60.5 | 730.732 | 715.045 | 708.156 | 706.911 | 701.599 |
| 61.0 | 716.788 | 700.852 | 694.129 | 692.718 | 687.489 |
| 61.5 | 701.848 | 686.825 | 680.185 | 678.608 | 673.545 |
| 62.0 | 687.157 | 672.383 | 665.743 | 664.581 | 659.269 |
| 62.5 | 672.134 | 659.020 | 652.131 | 651.218 | 645.740 |
| 63.0 | 657.692 | 647.234 | 641.673 | 641.258 | 636.776 |
| 63.5 | 643.084 | 634.369 | 629.970 | 629.057 | 624.409 |
| 64.0 | 634.286 | 621.836 | 617.852 | 616.026 | 610.714 |
| 64.5 | 620.591 | 608.473 | 604.157 | 602.497 | 597.517 |
| 65.0 | 605.236 | 594.197 | 590.628 | 589.051 | 584.237 |
| 65.5 | 589.549 | 579.755 | 576.518 | 575.771 | 570.874 |
| 66.0 | 574.443 | 565.645 | 562.740 | 562.408 | 557.179 |
| 66.5 | 559.503 | 551.203 | 548.713 | 548.713 | 544.065 |
| 67.0 | 544.729 | 536.844 | 534.852 | 535.101 | 530.868 |
| 67.5 | 530.204 | 522.734 | 520.908 | 521.406 | 517.256 |
| 68.0 | 515.513 | 508.624 | 506.964 | 507.628 | 503.312 |
| 68.5 | 500.739 | 494.265 | 492.937 | 493.850 | 489.617 |
| 69.0 | 485.467 | 479.823 | 478.827 | 479.325 | 475.424 |
| 69.5 | 470.610 | 465.630 | 464.468 | 465.049 | 461.480 |
| 70.0 | 455.919 | 451.271 | 450.441 | 450.690 | 447.536 |
| 70.5 | 441.477 | 436.829 | 436.248 | 436.497 | 433.509 |
| 71.0 | 426.703 | 422.470 | 422.304 | 422.636 | 419.399 |
| 71.5 | 411.929 | 408.111 | 408.443 | 408.692 | 405.870 |
| 72.0 | 397.570 | 393.669 | 394.333 | 394.665 | 392.258 |
| 72.5 | 383.211 | 379.476 | 380.555 | 380.887 | 378.895 |
| 73.0 | 369.018 | 365.615 | 367.109 | 367.524 | 365.781 |
| 73.5 | 355.240 | 351.920 | 353.663 | 354.410 | 352.501 |
| 74.0 | 341.628 | 338.225 | 340.383 | 340.964 | 339.719 |
| 74.5 | 328.016 | 324.779 | 327.186 | 327.767 | 326.854 |
| 75.0 | 314.321 | 311.416 | 314.155 | 314.736 | 313.989 |
| 75.5 | 300.792 | 298.053 | 301.207 | 301.954 | 301.124 |
| 76.0 | 287.097 | 285.188 | 288.425 | 289.255 | 288.591 |
| 76.5 | 274.149 | 272.489 | 275.726 | 276.639 | 276.058 |
| 77.0 | 261.533 | 259.707 | 263.276 | 264.106 | 263.193 |
| 77.5 | 248.502 | 247.257 | 250.826 | 251.490 | 250.577 |
| 78.0 | 235.803 | 234.807 | 238.376 | 239.372 | 238.459 |
| 78.5 | 223.187 | 222.689 | 226.092 | 227.254 | 226.507 |
| 79.0 | 211.069 | 210.571 | 214.057 | 215.468 | 214.887 |
| 79.5 | 198.951 | 198.702 | 202.188 | 203.682 | 203.184 |
| 80.0 | 186.999 | 187.082 | 190.319 | 192.394 | 191.730 |
| 80.5 | 174.964 | 175.711 | 179.031 | 181.023 | 180.525 |
| 81.0 | 163.427 | 164.589 | 167.826 | 169.901 | 169.569 |
| 81.5 | 152.305 | 153.550 | 156.870 | 158.945 | 158.696 |
| 82.0 | 141.930 | 142.760 | 146.163 | 148.321 | 148.072 |
| 82.5 | 131.555 | 132.302 | 135.622 | 137.780 | 137.614 |

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| | | | | | |
|-------|---------|---------|---------|---------|---------|
| 83.0 | 121.180 | 122.342 | 125.247 | 127.488 | 127.654 |
| 83.5 | 110.971 | 112.382 | 115.204 | 117.362 | 117.860 |
| 84.0 | 101.426 | 102.588 | 105.244 | 107.319 | 108.066 |
| 84.5 | 91.715 | 92.960 | 95.450 | 97.525 | 98.272 |
| 85.0 | 82.668 | 83.664 | 85.988 | 87.814 | 88.478 |
| 85.5 | 73.870 | 74.368 | 76.360 | 78.269 | 78.933 |
| 86.0 | 65.238 | 65.404 | 67.147 | 68.890 | 69.720 |
| 86.5 | 56.689 | 56.689 | 58.266 | 59.843 | 60.590 |
| 87.0 | 48.057 | 48.057 | 49.219 | 51.211 | 51.792 |
| 87.5 | 39.508 | 39.591 | 40.670 | 42.662 | 43.409 |
| 88.0 | 31.374 | 31.291 | 32.370 | 34.528 | 35.358 |
| 88.5 | 23.572 | 23.074 | 24.485 | 26.394 | 27.556 |
| 89.0 | 15.272 | 15.023 | 16.932 | 18.758 | 20.003 |
| 89.5 | 7.055 | 8.383 | 10.126 | 11.537 | 11.952 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 90.5 | 5.221 | 2.751 | 2.540 | 2.469 | 2.681 |
| 91.0 | 11.500 | 6.067 | 4.938 | 4.868 | 4.797 |
| 91.5 | 18.484 | 12.346 | 7.337 | 7.267 | 7.196 |
| 92.0 | 25.539 | 20.530 | 10.582 | 9.454 | 9.454 |
| 92.5 | 32.876 | 28.996 | 16.368 | 11.852 | 11.641 |
| 93.0 | 40.496 | 37.109 | 23.140 | 15.733 | 14.181 |
| 93.5 | 48.186 | 44.870 | 30.407 | 21.236 | 18.484 |
| 94.0 | 55.734 | 52.489 | 38.450 | 27.797 | 24.340 |
| 94.5 | 63.495 | 60.109 | 46.845 | 34.569 | 30.689 |
| 95.0 | 71.114 | 67.940 | 55.100 | 41.483 | 36.968 |
| 95.5 | 78.734 | 75.277 | 63.142 | 48.609 | 43.600 |
| 96.0 | 86.000 | 82.755 | 71.044 | 56.017 | 50.373 |
| 96.5 | 93.338 | 90.233 | 78.945 | 63.566 | 57.357 |
| 97.0 | 100.463 | 97.571 | 86.776 | 71.114 | 64.765 |
| 97.5 | 107.800 | 104.978 | 94.678 | 78.804 | 72.173 |
| 98.0 | 115.067 | 112.245 | 102.368 | 86.424 | 79.651 |
| 98.5 | 122.334 | 119.582 | 109.776 | 94.184 | 87.129 |
| 99.0 | 129.741 | 127.131 | 117.325 | 101.592 | 94.678 |
| 99.5 | 137.220 | 134.609 | 124.944 | 109.000 | 102.086 |
| 100.0 | 144.557 | 142.158 | 132.563 | 116.619 | 109.352 |
| 100.5 | 152.176 | 149.707 | 140.183 | 124.521 | 116.690 |
| 101.0 | 160.007 | 157.256 | 147.943 | 132.493 | 124.662 |
| 101.5 | 167.980 | 164.946 | 155.845 | 140.465 | 132.916 |
| 102.0 | 175.740 | 172.918 | 163.747 | 148.437 | 141.100 |
| 102.5 | 183.853 | 180.820 | 171.930 | 156.409 | 149.213 |
| 103.0 | 192.178 | 189.003 | 180.044 | 164.311 | 157.468 |
| 103.5 | 200.503 | 197.328 | 188.651 | 172.777 | 165.651 |
| 104.0 | 209.040 | 205.724 | 197.399 | 181.525 | 174.188 |
| 104.5 | 217.858 | 214.472 | 206.147 | 190.485 | 182.724 |
| 105.0 | 226.889 | 223.432 | 214.825 | 199.304 | 191.402 |
| 105.5 | 236.131 | 232.533 | 223.785 | 208.193 | 200.009 |
| 106.0 | 245.514 | 241.704 | 232.886 | 217.223 | 208.616 |
| 106.5 | 254.968 | 251.158 | 242.410 | 226.324 | 217.294 |
| 107.0 | 265.056 | 261.035 | 252.569 | 235.990 | 226.748 |
| 107.5 | 275.498 | 271.194 | 262.869 | 246.219 | 236.977 |
| 108.0 | 285.869 | 281.636 | 273.381 | 257.296 | 247.489 |
| 108.5 | 296.804 | 292.289 | 283.893 | 268.372 | 258.354 |
| 109.0 | 308.021 | 303.153 | 294.687 | 279.590 | 269.360 |
| 109.5 | 319.521 | 314.441 | 306.046 | 290.737 | 280.507 |
| 110.0 | 331.797 | 326.012 | 317.687 | 302.166 | 292.148 |
| 110.5 | 344.355 | 337.864 | 329.610 | 314.441 | 304.212 |

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| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 111.0 | 357.054 | 350.281 | 341.956 | 327.211 | 316.346 |
| 111.5 | 370.035 | 363.050 | 354.514 | 340.192 | 328.834 |
| 112.0 | 383.510 | 376.173 | 367.001 | 353.173 | 340.756 |
| 112.5 | 397.055 | 389.648 | 379.630 | 366.084 | 353.385 |
| 113.0 | 411.236 | 403.546 | 392.963 | 379.418 | 366.578 |
| 113.5 | 425.840 | 418.079 | 407.073 | 393.810 | 380.758 |
| 114.0 | 440.655 | 432.895 | 422.030 | 409.119 | 396.491 |
| 114.5 | 455.965 | 448.204 | 437.269 | 425.064 | 413.211 |
| 115.0 | 471.486 | 463.937 | 453.072 | 441.149 | 430.143 |
| 115.5 | 487.712 | 479.811 | 469.299 | 457.164 | 446.864 |
| 116.0 | 504.080 | 496.319 | 486.089 | 474.025 | 463.866 |
| 116.5 | 521.364 | 513.251 | 503.445 | 491.310 | 481.998 |
| 117.0 | 539.355 | 530.536 | 520.941 | 509.935 | 500.693 |
| 117.5 | 552.618 | 544.011 | 536.956 | 527.079 | 519.671 |
| 118.0 | 569.550 | 559.744 | 553.394 | 544.787 | 536.533 |
| 118.5 | 589.234 | 578.510 | 570.185 | 561.225 | 551.701 |
| 119.0 | 608.494 | 596.994 | 589.234 | 579.850 | 568.562 |
| 119.5 | 627.966 | 616.678 | 609.411 | 598.758 | 587.470 |
| 120.0 | 648.072 | 637.066 | 629.659 | 619.429 | 607.435 |
| 120.5 | 668.038 | 657.738 | 650.542 | 641.370 | 628.742 |
| 121.0 | 688.991 | 678.832 | 671.565 | 663.241 | 651.388 |
| 121.5 | 709.733 | 699.715 | 692.519 | 685.393 | 673.541 |
| 122.0 | 731.603 | 721.021 | 714.671 | 707.616 | 695.764 |
| 122.5 | 752.768 | 742.186 | 736.542 | 729.487 | 716.788 |
| 123.0 | 774.639 | 764.762 | 759.118 | 753.474 | 740.069 |
| 123.5 | 797.215 | 787.338 | 783.105 | 777.461 | 764.056 |
| 124.0 | 819.791 | 810.619 | 806.386 | 801.448 | 788.749 |
| 124.5 | 842.367 | 833.195 | 829.668 | 824.729 | 812.736 |
| 125.0 | 864.943 | 855.771 | 852.244 | 848.011 | 836.017 |
| 125.5 | 888.224 | 879.053 | 875.525 | 871.292 | 858.593 |
| 126.0 | 910.800 | 901.629 | 899.512 | 894.574 | 881.169 |
| 126.5 | 933.376 | 924.205 | 923.499 | 919.266 | 905.156 |
| 127.0 | 956.658 | 947.486 | 947.486 | 943.959 | 930.554 |
| 127.5 | 979.939 | 970.062 | 970.062 | 967.946 | 955.952 |
| 128.0 | 1002.515 | 992.638 | 993.344 | 991.933 | 979.939 |
| 128.5 | 1025.091 | 1014.509 | 1015.920 | 1015.920 | 1003.221 |
| 129.0 | 1047.667 | 1036.379 | 1038.496 | 1039.201 | 1027.208 |
| 129.5 | 1070.243 | 1058.955 | 1061.777 | 1063.188 | 1051.900 |
| 130.0 | 1092.819 | 1081.531 | 1085.059 | 1087.175 | 1078.004 |
| 130.5 | 1115.395 | 1103.402 | 1109.046 | 1110.457 | 1102.696 |
| 131.0 | 1137.971 | 1125.272 | 1131.622 | 1133.033 | 1125.272 |
| 131.5 | 1159.136 | 1146.437 | 1154.198 | 1154.198 | 1147.143 |
| 132.0 | 1181.007 | 1167.602 | 1176.068 | 1176.774 | 1168.308 |
| 132.5 | 1202.172 | 1189.473 | 1197.939 | 1198.644 | 1189.473 |
| 133.0 | 1223.337 | 1211.343 | 1219.104 | 1220.515 | 1209.932 |
| 133.5 | 1244.502 | 1232.508 | 1240.974 | 1242.385 | 1231.803 |
| 134.0 | 1265.667 | 1252.968 | 1261.434 | 1263.550 | 1252.968 |
| 134.5 | 1284.715 | 1273.427 | 1281.188 | 1282.599 | 1273.427 |
| 135.0 | 1303.764 | 1293.181 | 1300.236 | 1301.647 | 1291.770 |
| 135.5 | 1322.107 | 1313.641 | 1319.285 | 1319.990 | 1310.113 |
| 136.0 | 1340.450 | 1332.689 | 1336.922 | 1339.039 | 1329.162 |
| 136.5 | 1359.498 | 1351.032 | 1354.560 | 1358.087 | 1348.916 |
| 137.0 | 1377.136 | 1369.375 | 1372.903 | 1375.725 | 1367.259 |
| 137.5 | 1394.773 | 1386.307 | 1389.835 | 1391.951 | 1383.485 |
| 138.0 | 1411.705 | 1403.239 | 1406.061 | 1407.472 | 1399.006 |
| 138.5 | 1428.637 | 1419.466 | 1422.288 | 1422.993 | 1413.822 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 139.0 | 1444.864 | 1435.692 | 1438.514 | 1438.514 | 1428.637 |
| 139.5 | 1461.090 | 1451.919 | 1454.035 | 1453.330 | 1442.747 |
| 140.0 | 1476.611 | 1466.734 | 1469.556 | 1468.851 | 1458.268 |
| 140.5 | 1491.427 | 1480.844 | 1483.666 | 1482.961 | 1471.673 |
| 141.0 | 1506.242 | 1495.660 | 1497.776 | 1496.365 | 1485.077 |
| 141.5 | 1519.647 | 1509.064 | 1511.886 | 1509.770 | 1497.071 |
| 142.0 | 1533.757 | 1523.174 | 1525.291 | 1522.469 | 1509.770 |
| 142.5 | 1547.161 | 1536.579 | 1538.695 | 1535.873 | 1521.763 |
| 143.0 | 1560.566 | 1549.278 | 1551.394 | 1548.572 | 1534.462 |
| 143.5 | 1573.265 | 1562.682 | 1564.093 | 1561.271 | 1546.456 |
| 144.0 | 1585.258 | 1575.381 | 1576.087 | 1572.559 | 1557.744 |
| 144.5 | 1597.252 | 1587.375 | 1588.080 | 1583.847 | 1569.032 |
| 145.0 | 1608.540 | 1599.368 | 1599.368 | 1594.430 | 1579.614 |
| 145.5 | 1620.533 | 1611.362 | 1610.656 | 1606.423 | 1590.902 |
| 146.0 | 1631.821 | 1622.650 | 1621.944 | 1617.006 | 1602.190 |
| 146.5 | 1643.109 | 1633.938 | 1632.527 | 1628.294 | 1613.478 |
| 147.0 | 1653.692 | 1645.226 | 1642.404 | 1639.582 | 1624.766 |
| 147.5 | 1664.274 | 1655.808 | 1652.986 | 1650.164 | 1635.349 |
| 148.0 | 1674.857 | 1666.391 | 1662.158 | 1660.041 | 1646.637 |
| 148.5 | 1685.439 | 1676.973 | 1671.329 | 1669.918 | 1657.925 |
| 149.0 | 1695.316 | 1687.556 | 1680.501 | 1679.795 | 1669.213 |
| 149.5 | 1705.193 | 1697.433 | 1688.967 | 1689.672 | 1679.795 |
| 150.0 | 1715.070 | 1707.310 | 1698.138 | 1698.844 | 1689.672 |
| 150.5 | 1724.947 | 1717.187 | 1706.604 | 1707.310 | 1699.549 |
| 151.0 | 1734.119 | 1726.358 | 1715.070 | 1715.776 | 1708.721 |
| 151.5 | 1743.996 | 1735.530 | 1724.242 | 1724.242 | 1717.187 |
| 152.0 | 1753.167 | 1744.701 | 1732.708 | 1732.002 | 1725.653 |
| 152.5 | 1762.339 | 1753.167 | 1741.174 | 1740.468 | 1733.413 |
| 153.0 | 1771.510 | 1761.633 | 1749.640 | 1748.934 | 1740.468 |
| 153.5 | 1779.976 | 1770.099 | 1758.106 | 1757.400 | 1746.818 |
| 154.0 | 1788.442 | 1778.565 | 1767.277 | 1765.866 | 1753.873 |
| 154.5 | 1797.614 | 1786.326 | 1775.743 | 1773.627 | 1760.928 |
| 155.0 | 1806.080 | 1794.086 | 1784.209 | 1782.093 | 1768.688 |
| 155.5 | 1813.840 | 1801.141 | 1792.675 | 1790.559 | 1776.449 |
| 156.0 | 1821.601 | 1808.902 | 1801.847 | 1798.319 | 1784.209 |
| 156.5 | 1829.361 | 1816.662 | 1810.313 | 1806.785 | 1791.970 |
| 157.0 | 1837.122 | 1824.423 | 1818.779 | 1815.251 | 1799.730 |
| 157.5 | 1844.177 | 1831.478 | 1826.539 | 1823.012 | 1807.491 |
| 158.0 | 1851.232 | 1838.533 | 1834.300 | 1830.772 | 1815.251 |
| 158.5 | 1858.992 | 1846.293 | 1842.060 | 1838.533 | 1823.717 |
| 159.0 | 1865.342 | 1853.348 | 1849.115 | 1846.293 | 1831.478 |
| 159.5 | 1872.397 | 1860.403 | 1856.170 | 1854.054 | 1839.238 |
| 160.0 | 1878.746 | 1866.753 | 1863.225 | 1861.109 | 1846.999 |
| 160.5 | 1885.096 | 1873.102 | 1869.575 | 1868.164 | 1854.759 |
| 161.0 | 1891.445 | 1879.452 | 1875.924 | 1875.219 | 1862.520 |
| 161.5 | 1897.795 | 1886.507 | 1881.568 | 1882.274 | 1870.280 |
| 162.0 | 1904.850 | 1892.856 | 1887.212 | 1889.329 | 1877.335 |
| 162.5 | 1911.199 | 1899.206 | 1892.856 | 1895.678 | 1883.685 |
| 163.0 | 1917.549 | 1905.555 | 1898.500 | 1902.028 | 1890.034 |
| 163.5 | 1923.898 | 1911.199 | 1904.144 | 1908.377 | 1895.678 |
| 164.0 | 1930.248 | 1916.843 | 1909.083 | 1914.021 | 1901.322 |
| 164.5 | 1935.186 | 1922.487 | 1914.021 | 1919.665 | 1906.966 |
| 165.0 | 1940.830 | 1928.131 | 1918.960 | 1925.309 | 1911.905 |
| 165.5 | 1946.474 | 1933.070 | 1923.898 | 1930.248 | 1916.843 |
| 166.0 | 1952.118 | 1938.008 | 1928.837 | 1935.186 | 1921.076 |
| 166.5 | 1957.762 | 1942.947 | 1933.775 | 1939.419 | 1926.015 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 167.0 | 1962.701 | 1947.180 | 1938.008 | 1943.652 | 1930.248 |
| 167.5 | 1967.639 | 1951.413 | 1942.947 | 1947.885 | 1935.186 |
| 168.0 | 1972.578 | 1955.646 | 1947.180 | 1952.118 | 1939.419 |
| 168.5 | 1977.516 | 1959.879 | 1951.413 | 1956.351 | 1944.358 |
| 169.0 | 1981.749 | 1963.406 | 1955.646 | 1959.879 | 1948.591 |
| 169.5 | 1985.277 | 1966.934 | 1959.173 | 1963.406 | 1952.824 |
| 170.0 | 1988.804 | 1970.461 | 1962.701 | 1966.934 | 1957.762 |
| 170.5 | 1992.332 | 1973.989 | 1965.523 | 1970.461 | 1961.290 |
| 171.0 | 1995.859 | 1976.811 | 1968.345 | 1973.989 | 1964.817 |
| 171.5 | 1998.681 | 1979.633 | 1971.167 | 1977.516 | 1968.345 |
| 172.0 | 2001.503 | 1982.455 | 1973.283 | 1980.338 | 1971.167 |
| 172.5 | 2004.325 | 1985.277 | 1975.400 | 1982.455 | 1973.283 |
| 173.0 | 2007.147 | 1988.099 | 1977.516 | 1985.277 | 1974.694 |
| 173.5 | 2009.264 | 1990.215 | 1979.633 | 1986.688 | 1976.105 |
| 174.0 | 2011.380 | 1992.332 | 1981.749 | 1988.099 | 1976.811 |
| 174.5 | 2012.791 | 1993.743 | 1983.160 | 1989.510 | 1977.516 |
| 175.0 | 2014.202 | 1995.859 | 1984.571 | 1990.215 | 1977.516 |
| 175.5 | 2015.613 | 1997.270 | 1986.688 | 1990.921 | 1978.222 |
| 176.0 | 2017.024 | 1998.681 | 1988.099 | 1990.921 | 1978.222 |
| 176.5 | 2017.730 | 2000.092 | 1988.804 | 1991.626 | 1978.222 |
| 177.0 | 2018.435 | 2001.503 | 1990.215 | 1991.626 | 1977.516 |
| 177.5 | 2019.846 | 2002.914 | 1991.626 | 1991.626 | 1977.516 |
| 178.0 | 2020.552 | 2002.914 | 1992.332 | 1991.626 | 1978.222 |
| 178.5 | 2020.552 | 2003.620 | 1993.037 | 1991.626 | 1978.222 |
| 179.0 | 2021.257 | 2004.325 | 1993.037 | 1991.626 | 1978.222 |
| 179.5 | 2021.963 | 2004.325 | 1993.743 | 1991.626 | 1978.222 |
| 180.0 | 1997.270 | 1997.270 | 1997.270 | 1997.270 | 1997.270 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|----------|-------|--------|
| 0-20 | 715.12 | N.A. | 7.00 |
| 0-30 | 1495.07 | N.A. | 14.70 |
| 0-40 | 2401.86 | N.A. | 23.70 |
| 0-60 | 4081.29 | N.A. | 40.20 |
| 0-80 | 4998.00 | N.A. | 49.30 |
| 0-90 | 5094.86 | N.A. | 50.20 |
| 10-90 | 4908.2 | N.A. | 48.40 |
| 20-40 | 1686.74 | N.A. | 16.60 |
| 20-50 | 2586.9 | N.A. | 25.50 |
| 40-70 | 2263.1 | N.A. | 22.30 |
| 60-80 | 916.71 | N.A. | 9.00 |
| 70-80 | 333.05 | N.A. | 3.30 |
| 80-90 | 96.86 | N.A. | 1.00 |
| 90-110 | 289.04 | N.A. | 2.80 |
| 90-120 | 741.99 | N.A. | 7.30 |
| 90-130 | 1503.15 | N.A. | 14.80 |
| 90-150 | 3496.22 | N.A. | 34.50 |
| 90-180 | 5052.96 | N.A. | 49.80 |
| 110-180 | 4763.92 | N.A. | 46.90 |
| 0-180 | 10147.82 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 186.66 |
| 10-20 | 528.46 |
| 20-30 | 779.95 |
| 30-40 | 906.78 |
| 40-50 | 900.16 |
| 50-60 | 779.27 |
| 60-70 | 583.66 |
| 70-80 | 333.05 |
| 80-90 | 96.86 |
| 90-100 | 62.34 |
| 100-110 | 226.70 |
| 110-120 | 452.95 |
| 120-130 | 761.16 |
| 130-140 | 995.29 |
| 140-150 | 997.78 |
| 150-160 | 824.21 |
| 160-170 | 543.12 |
| 170-180 | 189.41 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| 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 | 0 |
| 0 | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 | 50 |
| 1 | 98 | 93 | 90 | 86 | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 61 | 59 | 58 | 50 | 49 | 47 | 42 |
| 2 | 89 | 82 | 75 | 70 | 82 | 76 | 70 | 66 | 64 | 60 | 57 | 54 | 51 | 48 | 44 | 42 | 40 | 35 |
| 3 | 81 | 72 | 64 | 59 | 75 | 66 | 60 | 55 | 57 | 52 | 48 | 47 | 44 | 41 | 39 | 36 | 34 | 30 |
| 4 | 74 | 63 | 56 | 50 | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 35 | 32 | 29 | 26 |
| 5 | 68 | 57 | 48 | 42 | 63 | 53 | 45 | 40 | 45 | 39 | 35 | 38 | 34 | 30 | 31 | 28 | 26 | 22 |
| 6 | 63 | 51 | 43 | 37 | 58 | 47 | 40 | 35 | 41 | 35 | 31 | 34 | 30 | 27 | 28 | 25 | 23 | 20 |
| 7 | 58 | 46 | 38 | 32 | 53 | 43 | 36 | 30 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 23 | 20 | 17 |
| 8 | 54 | 42 | 34 | 29 | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 16 |
| 9 | 50 | 38 | 31 | 25 | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 19 | 16 | 14 |
| 10 | 47 | 35 | 28 | 23 | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES

UGR TABLE - CORRECTED

Reflectances

| | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Ceiling Cavity | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Walls | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Floor Cavity | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

Room Size UGR Viewed Crosswise

| | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| X=2H | Y=2H | 16.9 | 17.8 | 17.9 | 18.8 | 20.0 | 16.8 | 17.7 | 17.8 | 18.7 | 19.9 |
| | 3H | 18.7 | 19.5 | 19.7 | 20.4 | 21.7 | 18.6 | 19.4 | 19.6 | 20.4 | 21.6 |
| | 4H | 19.3 | 20.0 | 20.3 | 21.0 | 22.3 | 19.2 | 20.0 | 20.2 | 20.9 | 22.2 |
| | 6H | 19.7 | 20.4 | 20.7 | 21.4 | 22.7 | 19.7 | 20.4 | 20.7 | 21.4 | 22.7 |
| | 8H | 19.9 | 20.5 | 20.9 | 21.5 | 22.8 | 19.8 | 20.5 | 20.8 | 21.5 | 22.8 |
| | 12H | 19.9 | 20.6 | 20.9 | 21.6 | 22.9 | 19.9 | 20.5 | 20.9 | 21.5 | 22.9 |

UGR Viewed Endwise

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H | 2H | 17.5 | 18.2 | 18.5 | 19.2 | 20.5 | 17.4 | 18.1 | 18.4 | 19.1 | 20.4 |
| | 3H | 19.4 | 20.0 | 20.4 | 21.1 | 22.4 | 19.4 | 20.0 | 20.4 | 21.0 | 22.3 |
| | 4H | 20.2 | 20.7 | 21.2 | 21.7 | 23.1 | 20.1 | 20.7 | 21.1 | 21.7 | 23.0 |
| | 6H | 20.7 | 21.2 | 21.7 | 22.2 | 23.6 | 20.7 | 21.2 | 21.7 | 22.2 | 23.6 |
| | 8H | 20.9 | 21.4 | 21.9 | 22.4 | 23.7 | 20.9 | 21.4 | 21.9 | 22.4 | 23.7 |
| | 12H | 21.0 | 21.4 | 22.1 | 22.5 | 23.8 | 21.0 | 21.4 | 22.1 | 22.5 | 23.8 |

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 8H | 4H | 20.4 | 20.9 | 21.4 | 21.9 | 23.2 | 20.4 | 20.8 | 21.4 | 21.8 | 23.2 |
| | 6H | 21.1 | 21.5 | 22.1 | 22.5 | 23.9 | 21.1 | 21.5 | 22.1 | 22.5 | 23.9 |
| | 8H | 21.4 | 21.7 | 22.4 | 22.7 | 24.1 | 21.4 | 21.7 | 22.4 | 22.8 | 24.1 |
| | 12H | 21.6 | 21.8 | 22.6 | 22.9 | 24.3 | 21.6 | 21.9 | 22.7 | 22.9 | 24.3 |

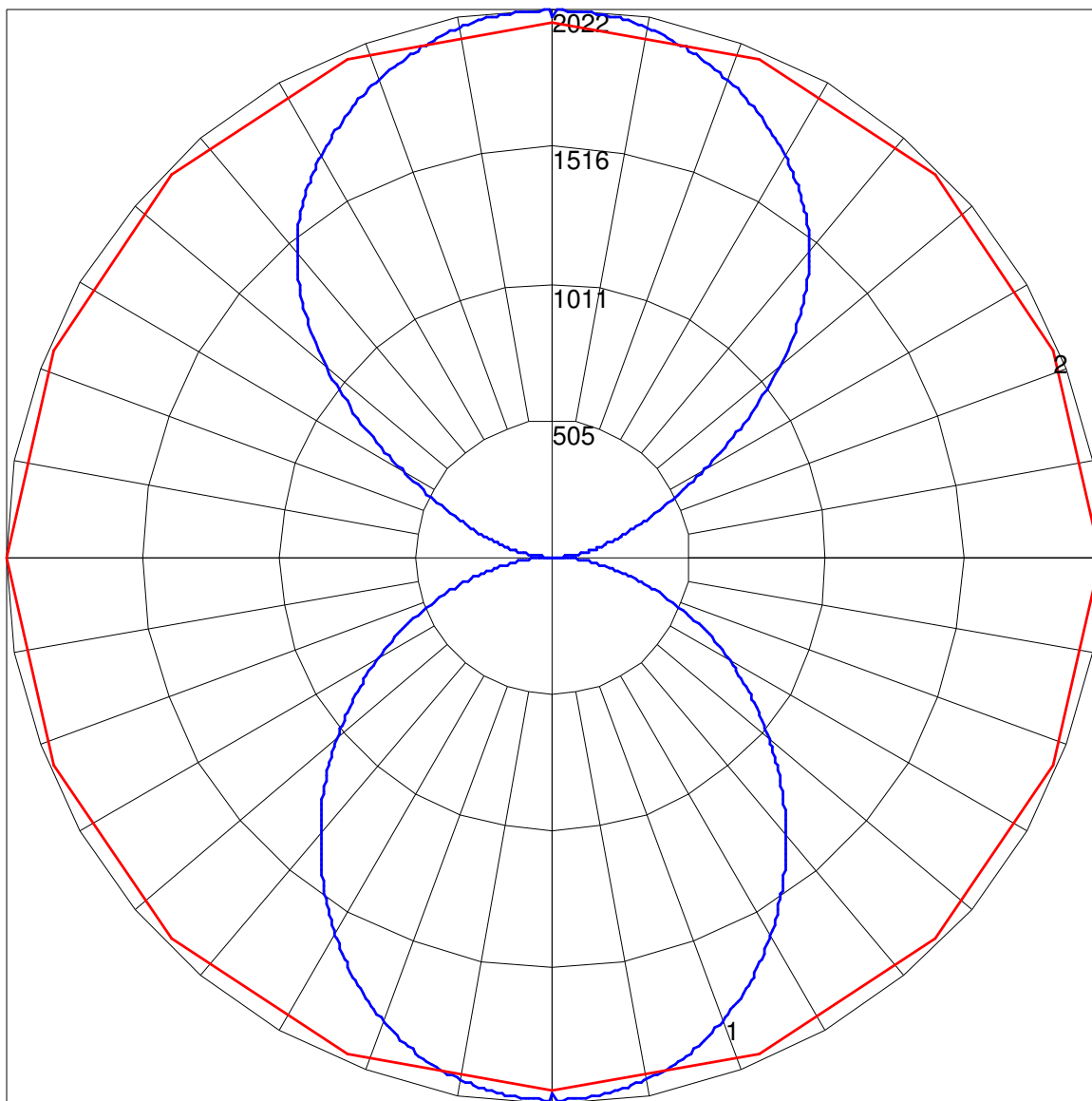
| | | | | | | | | | | | |
|-----|----|------|------|------|------|------|------|------|------|------|------|
| 12H | 4H | 20.4 | 20.8 | 21.4 | 21.9 | 23.2 | 20.4 | 20.8 | 21.4 | 21.8 | 23.2 |
| | 6H | 21.1 | 21.5 | 22.2 | 22.5 | 23.9 | 21.1 | 21.5 | 22.2 | 22.5 | 23.9 |
| | 8H | 21.4 | 21.7 | 22.5 | 22.8 | 24.2 | 21.5 | 21.7 | 22.5 | 22.8 | 24.2 |

Maximum UGR = 24.3

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4UDC-4-00-L15-935U-L15-935D-F-F-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2021.963 Located At Horizontal Angle = 0, Vertical Angle = 179.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (179.5) (Through Max. Cd.)