

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-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] MX4WUDC-4-00-L15-950U-L15-950D-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 | 10881 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 106 |
| 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 | 14623 | 14257 | 14094 |
| 55 | 13442 | 13116 | 12978 |
| 65 | 12398 | 12099 | 11968 |
| 75 | 10514 | 10508 | 10502 |
| 85 | 8211 | 8541 | 8788 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-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 | 2121.760 | 2121.760 | 2121.760 | 2121.760 | 2121.760 |
| 0.5 | 2153.800 | 2123.540 | 2112.860 | 2117.310 | 2110.190 |
| 1.0 | 2153.800 | 2122.650 | 2112.860 | 2117.310 | 2110.190 |
| 1.5 | 2152.910 | 2121.760 | 2111.970 | 2117.310 | 2109.300 |
| 2.0 | 2152.020 | 2120.870 | 2111.080 | 2116.420 | 2109.300 |
| 2.5 | 2151.130 | 2119.980 | 2109.300 | 2115.530 | 2108.410 |
| 3.0 | 2149.350 | 2118.200 | 2108.410 | 2114.640 | 2106.630 |
| 3.5 | 2147.570 | 2116.420 | 2106.630 | 2112.860 | 2104.850 |
| 4.0 | 2145.790 | 2114.640 | 2104.850 | 2111.080 | 2103.070 |
| 4.5 | 2144.010 | 2111.970 | 2103.070 | 2109.300 | 2100.400 |
| 5.0 | 2142.230 | 2110.190 | 2100.400 | 2106.630 | 2097.730 |
| 5.5 | 2139.560 | 2107.520 | 2097.730 | 2103.960 | 2095.060 |
| 6.0 | 2136.890 | 2103.960 | 2095.060 | 2101.290 | 2091.500 |
| 6.5 | 2133.330 | 2101.290 | 2091.500 | 2097.730 | 2088.830 |
| 7.0 | 2130.660 | 2097.730 | 2088.830 | 2094.170 | 2085.270 |
| 7.5 | 2127.990 | 2094.170 | 2085.270 | 2090.610 | 2082.600 |
| 8.0 | 2123.540 | 2090.610 | 2080.820 | 2087.050 | 2079.040 |
| 8.5 | 2119.980 | 2086.160 | 2076.370 | 2082.600 | 2074.590 |
| 9.0 | 2115.530 | 2082.600 | 2072.810 | 2078.150 | 2070.140 |
| 9.5 | 2111.080 | 2078.150 | 2067.470 | 2072.810 | 2065.690 |
| 10.0 | 2106.630 | 2073.700 | 2063.020 | 2068.360 | 2060.350 |
| 10.5 | 2101.290 | 2068.360 | 2057.680 | 2063.020 | 2055.900 |
| 11.0 | 2096.840 | 2063.020 | 2052.340 | 2057.680 | 2049.670 |
| 11.5 | 2090.610 | 2057.680 | 2047.000 | 2052.340 | 2044.330 |
| 12.0 | 2085.270 | 2052.340 | 2041.660 | 2046.110 | 2038.100 |
| 12.5 | 2079.930 | 2046.110 | 2035.430 | 2039.880 | 2031.870 |
| 13.0 | 2073.700 | 2040.770 | 2029.200 | 2033.650 | 2025.640 |
| 13.5 | 2067.470 | 2033.650 | 2022.970 | 2026.530 | 2019.410 |
| 14.0 | 2061.240 | 2027.420 | 2015.850 | 2020.300 | 2013.180 |
| 14.5 | 2055.010 | 2021.190 | 2008.730 | 2013.180 | 2006.060 |
| 15.0 | 2048.780 | 2014.070 | 2001.610 | 2006.060 | 1998.940 |
| 15.5 | 2040.770 | 2007.840 | 1994.490 | 1998.050 | 1990.930 |
| 16.0 | 2031.870 | 2000.720 | 1986.480 | 1990.930 | 1983.810 |
| 16.5 | 2022.970 | 1992.710 | 1978.470 | 1982.920 | 1975.800 |
| 17.0 | 2014.960 | 1984.700 | 1970.460 | 1974.910 | 1967.790 |
| 17.5 | 2006.060 | 1975.800 | 1961.560 | 1966.010 | 1958.890 |
| 18.0 | 1997.160 | 1966.900 | 1952.660 | 1957.110 | 1949.990 |
| 18.5 | 1988.260 | 1958.000 | 1943.760 | 1947.320 | 1941.090 |
| 19.0 | 1979.360 | 1949.100 | 1935.750 | 1938.420 | 1930.410 |
| 19.5 | 1969.570 | 1940.200 | 1926.850 | 1927.740 | 1919.730 |
| 20.0 | 1960.670 | 1930.410 | 1918.840 | 1917.950 | 1909.050 |
| 20.5 | 1950.880 | 1921.510 | 1909.940 | 1907.270 | 1898.370 |
| 21.0 | 1941.090 | 1911.720 | 1900.150 | 1896.590 | 1886.800 |
| 21.5 | 1930.410 | 1901.930 | 1889.470 | 1885.910 | 1875.230 |
| 22.0 | 1920.620 | 1891.250 | 1877.900 | 1874.340 | 1864.550 |
| 22.5 | 1909.940 | 1880.570 | 1867.220 | 1862.770 | 1852.980 |
| 23.0 | 1899.260 | 1869.890 | 1856.540 | 1850.310 | 1841.410 |
| 23.5 | 1888.580 | 1859.210 | 1844.970 | 1838.740 | 1830.730 |
| 24.0 | 1877.010 | 1848.530 | 1834.290 | 1827.170 | 1819.160 |
| 24.5 | 1865.440 | 1836.960 | 1822.720 | 1815.600 | 1807.590 |
| 25.0 | 1854.760 | 1825.390 | 1811.150 | 1804.030 | 1796.020 |
| 25.5 | 1843.190 | 1813.820 | 1798.690 | 1792.460 | 1783.560 |
| 26.0 | 1830.730 | 1801.360 | 1787.120 | 1780.890 | 1771.990 |
| 26.5 | 1819.160 | 1789.790 | 1774.660 | 1769.320 | 1760.420 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-F-F-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|------|----------|----------|----------|----------|----------|
| 27.0 | 1806.700 | 1777.330 | 1762.200 | 1757.750 | 1747.960 |
| 27.5 | 1794.240 | 1764.870 | 1750.630 | 1746.180 | 1736.390 |
| 28.0 | 1781.780 | 1751.520 | 1737.280 | 1733.720 | 1723.930 |
| 28.5 | 1768.430 | 1738.170 | 1724.820 | 1722.150 | 1711.470 |
| 29.0 | 1755.080 | 1725.710 | 1712.360 | 1709.690 | 1699.010 |
| 29.5 | 1742.620 | 1712.360 | 1699.900 | 1696.340 | 1687.440 |
| 30.0 | 1729.270 | 1699.010 | 1687.440 | 1683.880 | 1674.980 |
| 30.5 | 1715.920 | 1685.660 | 1674.090 | 1671.420 | 1662.520 |
| 31.0 | 1701.680 | 1673.200 | 1660.740 | 1658.070 | 1650.060 |
| 31.5 | 1688.330 | 1659.850 | 1647.390 | 1644.720 | 1636.710 |
| 32.0 | 1674.090 | 1645.610 | 1634.040 | 1630.480 | 1623.360 |
| 32.5 | 1659.850 | 1632.260 | 1620.690 | 1617.130 | 1609.120 |
| 33.0 | 1645.610 | 1618.910 | 1607.340 | 1603.780 | 1594.880 |
| 33.5 | 1632.260 | 1604.670 | 1593.100 | 1589.540 | 1581.530 |
| 34.0 | 1617.130 | 1590.430 | 1579.750 | 1575.300 | 1567.290 |
| 34.5 | 1602.890 | 1576.190 | 1564.620 | 1561.060 | 1552.160 |
| 35.0 | 1588.650 | 1562.840 | 1550.380 | 1546.820 | 1537.030 |
| 35.5 | 1573.520 | 1547.710 | 1536.140 | 1532.580 | 1521.900 |
| 36.0 | 1558.390 | 1533.470 | 1521.900 | 1517.450 | 1507.660 |
| 36.5 | 1544.150 | 1519.230 | 1507.660 | 1503.210 | 1493.420 |
| 37.0 | 1529.020 | 1504.100 | 1492.530 | 1488.080 | 1478.290 |
| 37.5 | 1513.890 | 1488.970 | 1478.290 | 1472.950 | 1464.050 |
| 38.0 | 1497.870 | 1473.840 | 1463.160 | 1457.820 | 1448.920 |
| 38.5 | 1482.740 | 1458.710 | 1448.030 | 1443.580 | 1433.790 |
| 39.0 | 1468.500 | 1443.580 | 1432.900 | 1428.450 | 1419.550 |
| 39.5 | 1452.480 | 1428.450 | 1418.660 | 1413.320 | 1403.530 |
| 40.0 | 1437.350 | 1412.430 | 1403.530 | 1398.190 | 1389.290 |
| 40.5 | 1421.330 | 1397.300 | 1388.400 | 1383.060 | 1374.160 |
| 41.0 | 1406.200 | 1381.280 | 1373.270 | 1367.040 | 1358.140 |
| 41.5 | 1390.180 | 1366.150 | 1357.250 | 1351.910 | 1342.120 |
| 42.0 | 1375.050 | 1350.130 | 1342.120 | 1336.780 | 1326.990 |
| 42.5 | 1359.920 | 1335.000 | 1326.990 | 1320.760 | 1311.860 |
| 43.0 | 1343.900 | 1319.870 | 1311.860 | 1305.630 | 1295.840 |
| 43.5 | 1328.770 | 1303.850 | 1295.840 | 1290.500 | 1280.710 |
| 44.0 | 1312.750 | 1287.830 | 1279.820 | 1274.480 | 1265.580 |
| 44.5 | 1296.730 | 1271.810 | 1263.800 | 1258.460 | 1249.560 |
| 45.0 | 1280.710 | 1256.680 | 1248.670 | 1242.440 | 1234.430 |
| 45.5 | 1265.580 | 1240.660 | 1232.650 | 1227.310 | 1219.300 |
| 46.0 | 1249.560 | 1224.640 | 1216.630 | 1211.290 | 1204.170 |
| 46.5 | 1233.540 | 1208.620 | 1201.500 | 1196.160 | 1189.040 |
| 47.0 | 1217.520 | 1192.600 | 1185.480 | 1180.140 | 1173.020 |
| 47.5 | 1200.610 | 1176.580 | 1169.460 | 1164.120 | 1157.890 |
| 48.0 | 1184.590 | 1160.560 | 1153.440 | 1148.990 | 1141.870 |
| 48.5 | 1168.570 | 1144.540 | 1138.310 | 1132.970 | 1125.850 |
| 49.0 | 1151.660 | 1128.520 | 1122.290 | 1116.950 | 1110.720 |
| 49.5 | 1135.640 | 1112.500 | 1106.270 | 1101.820 | 1095.590 |
| 50.0 | 1118.730 | 1096.480 | 1090.250 | 1085.800 | 1079.570 |
| 50.5 | 1101.820 | 1080.460 | 1074.230 | 1069.780 | 1064.440 |
| 51.0 | 1084.910 | 1064.440 | 1058.210 | 1053.760 | 1048.420 |
| 51.5 | 1068.890 | 1048.420 | 1042.190 | 1038.630 | 1032.400 |
| 52.0 | 1052.870 | 1032.400 | 1026.170 | 1022.610 | 1017.270 |
| 52.5 | 1035.960 | 1016.380 | 1010.150 | 1007.480 | 1001.250 |
| 53.0 | 1019.940 | 1000.360 | 994.130 | 991.460 | 985.230 |
| 53.5 | 1003.030 | 984.340 | 978.110 | 975.440 | 969.210 |
| 54.0 | 987.010 | 968.320 | 962.980 | 960.310 | 953.190 |
| 54.5 | 970.990 | 953.190 | 946.960 | 944.290 | 937.170 |

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| | | | | | |
|------|---------|---------|---------|---------|---------|
| 55.0 | 954.970 | 938.060 | 931.830 | 929.160 | 922.040 |
| 55.5 | 939.840 | 922.040 | 915.810 | 913.140 | 906.910 |
| 56.0 | 922.930 | 906.020 | 899.790 | 898.010 | 890.890 |
| 56.5 | 906.910 | 890.890 | 884.215 | 882.257 | 875.226 |
| 57.0 | 891.780 | 874.870 | 868.462 | 866.326 | 859.651 |
| 57.5 | 876.116 | 859.384 | 852.798 | 850.840 | 843.898 |
| 58.0 | 860.452 | 844.076 | 837.045 | 835.265 | 828.323 |
| 58.5 | 844.699 | 828.679 | 821.559 | 819.957 | 813.371 |
| 59.0 | 829.213 | 813.193 | 805.984 | 804.471 | 798.152 |
| 59.5 | 814.172 | 797.529 | 790.142 | 789.074 | 783.111 |
| 60.0 | 798.775 | 781.954 | 774.478 | 773.588 | 767.803 |
| 60.5 | 783.556 | 766.735 | 759.348 | 758.013 | 752.317 |
| 61.0 | 768.604 | 751.516 | 744.307 | 742.794 | 737.187 |
| 61.5 | 752.584 | 736.475 | 729.355 | 727.664 | 722.235 |
| 62.0 | 736.831 | 720.989 | 713.869 | 712.623 | 706.927 |
| 62.5 | 720.722 | 706.660 | 699.273 | 698.294 | 692.420 |
| 63.0 | 705.236 | 694.022 | 688.059 | 687.614 | 682.808 |
| 63.5 | 689.572 | 680.227 | 675.510 | 674.531 | 669.547 |
| 64.0 | 680.138 | 666.788 | 662.516 | 660.558 | 654.862 |
| 64.5 | 665.453 | 652.459 | 647.831 | 646.051 | 640.711 |
| 65.0 | 648.988 | 637.151 | 633.324 | 631.633 | 626.471 |
| 65.5 | 632.167 | 621.665 | 618.194 | 617.393 | 612.142 |
| 66.0 | 615.969 | 606.535 | 603.420 | 603.064 | 597.457 |
| 66.5 | 599.949 | 591.049 | 588.379 | 588.379 | 583.395 |
| 67.0 | 584.107 | 575.652 | 573.516 | 573.783 | 569.244 |
| 67.5 | 568.532 | 560.522 | 558.564 | 559.098 | 554.648 |
| 68.0 | 552.779 | 545.392 | 543.612 | 544.324 | 539.696 |
| 68.5 | 536.937 | 529.995 | 528.571 | 529.550 | 525.011 |
| 69.0 | 520.561 | 514.509 | 513.441 | 513.975 | 509.792 |
| 69.5 | 504.630 | 499.290 | 498.044 | 498.667 | 494.840 |
| 70.0 | 488.877 | 483.893 | 483.003 | 483.270 | 479.888 |
| 70.5 | 473.391 | 468.407 | 467.784 | 468.051 | 464.847 |
| 71.0 | 457.549 | 453.010 | 452.832 | 453.188 | 449.717 |
| 71.5 | 441.707 | 437.613 | 437.969 | 438.236 | 435.210 |
| 72.0 | 426.310 | 422.127 | 422.839 | 423.195 | 420.614 |
| 72.5 | 410.913 | 406.908 | 408.065 | 408.421 | 406.285 |
| 73.0 | 395.694 | 392.045 | 393.647 | 394.092 | 392.223 |
| 73.5 | 380.920 | 377.360 | 379.229 | 380.030 | 377.983 |
| 74.0 | 366.324 | 362.675 | 364.989 | 365.612 | 364.277 |
| 74.5 | 351.728 | 348.257 | 350.838 | 351.461 | 350.482 |
| 75.0 | 337.043 | 333.928 | 336.865 | 337.488 | 336.687 |
| 75.5 | 322.536 | 319.599 | 322.981 | 323.782 | 322.892 |
| 76.0 | 307.851 | 305.804 | 309.275 | 310.165 | 309.453 |
| 76.5 | 293.967 | 292.187 | 295.658 | 296.637 | 296.014 |
| 77.0 | 280.439 | 278.481 | 282.308 | 283.198 | 282.219 |
| 77.5 | 266.466 | 265.131 | 268.958 | 269.670 | 268.691 |
| 78.0 | 252.849 | 251.781 | 255.608 | 256.676 | 255.697 |
| 78.5 | 239.321 | 238.787 | 242.436 | 243.682 | 242.881 |
| 79.0 | 226.327 | 225.793 | 229.531 | 231.044 | 230.421 |
| 79.5 | 213.333 | 213.066 | 216.804 | 218.406 | 217.872 |
| 80.0 | 200.517 | 200.606 | 204.077 | 206.302 | 205.590 |
| 80.5 | 187.612 | 188.413 | 191.973 | 194.109 | 193.575 |
| 81.0 | 175.241 | 176.487 | 179.958 | 182.183 | 181.827 |
| 81.5 | 163.315 | 164.650 | 168.210 | 170.435 | 170.168 |
| 82.0 | 152.190 | 153.080 | 156.729 | 159.043 | 158.776 |
| 82.5 | 141.065 | 141.866 | 145.426 | 147.740 | 147.562 |

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| | | | | | |
|-------|---------|---------|---------|---------|---------|
| 83.0 | 129.940 | 131.186 | 134.301 | 136.704 | 136.882 |
| 83.5 | 118.993 | 120.506 | 123.532 | 125.846 | 126.380 |
| 84.0 | 108.758 | 110.004 | 112.852 | 115.077 | 115.878 |
| 84.5 | 98.345 | 99.680 | 102.350 | 104.575 | 105.376 |
| 85.0 | 88.644 | 89.712 | 92.204 | 94.162 | 94.874 |
| 85.5 | 79.210 | 79.744 | 81.880 | 83.927 | 84.639 |
| 86.0 | 69.954 | 70.132 | 72.001 | 73.870 | 74.760 |
| 86.5 | 60.787 | 60.787 | 62.478 | 64.169 | 64.970 |
| 87.0 | 51.531 | 51.531 | 52.777 | 54.913 | 55.536 |
| 87.5 | 42.364 | 42.453 | 43.610 | 45.746 | 46.547 |
| 88.0 | 33.642 | 33.553 | 34.710 | 37.024 | 37.914 |
| 88.5 | 25.276 | 24.742 | 26.255 | 28.302 | 29.548 |
| 89.0 | 16.376 | 16.109 | 18.156 | 20.114 | 21.449 |
| 89.5 | 7.565 | 8.989 | 10.858 | 12.371 | 12.816 |
| 90.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 90.5 | 5.598 | 2.950 | 2.723 | 2.648 | 2.875 |
| 91.0 | 12.331 | 6.506 | 5.295 | 5.220 | 5.144 |
| 91.5 | 19.820 | 13.239 | 7.868 | 7.792 | 7.716 |
| 92.0 | 27.385 | 22.014 | 11.347 | 10.137 | 10.137 |
| 92.5 | 35.253 | 31.092 | 17.551 | 12.709 | 12.482 |
| 93.0 | 43.423 | 39.792 | 24.813 | 16.870 | 15.206 |
| 93.5 | 51.669 | 48.113 | 32.605 | 22.771 | 19.820 |
| 94.0 | 59.763 | 56.284 | 41.229 | 29.806 | 26.099 |
| 94.5 | 68.085 | 64.454 | 50.232 | 37.068 | 32.908 |
| 95.0 | 76.255 | 72.851 | 59.083 | 44.482 | 39.641 |
| 95.5 | 84.425 | 80.719 | 67.707 | 52.123 | 46.752 |
| 96.0 | 92.217 | 88.737 | 76.180 | 60.066 | 54.014 |
| 96.5 | 100.085 | 96.756 | 84.652 | 68.161 | 61.503 |
| 97.0 | 107.726 | 104.624 | 93.049 | 76.255 | 69.447 |
| 97.5 | 115.593 | 112.567 | 101.522 | 84.501 | 77.390 |
| 98.0 | 123.385 | 120.359 | 109.768 | 92.671 | 85.409 |
| 98.5 | 131.177 | 128.227 | 117.711 | 100.993 | 93.428 |
| 99.0 | 139.120 | 136.321 | 125.806 | 108.936 | 101.522 |
| 99.5 | 147.139 | 144.340 | 133.976 | 116.879 | 109.466 |
| 100.0 | 155.007 | 152.435 | 142.146 | 125.049 | 117.257 |
| 100.5 | 163.177 | 160.529 | 150.317 | 133.522 | 125.125 |
| 101.0 | 171.574 | 168.624 | 158.638 | 142.071 | 133.674 |
| 101.5 | 180.123 | 176.870 | 167.111 | 150.619 | 142.525 |
| 102.0 | 188.444 | 185.418 | 175.584 | 159.168 | 151.300 |
| 102.5 | 197.144 | 193.891 | 184.359 | 167.716 | 160.000 |
| 103.0 | 206.071 | 202.666 | 193.059 | 176.189 | 168.851 |
| 103.5 | 214.997 | 211.593 | 202.288 | 185.267 | 177.626 |
| 104.0 | 224.151 | 220.595 | 211.669 | 194.647 | 186.780 |
| 104.5 | 233.607 | 229.976 | 221.049 | 204.255 | 195.933 |
| 105.0 | 243.290 | 239.584 | 230.354 | 213.711 | 205.238 |
| 105.5 | 253.201 | 249.342 | 239.962 | 223.243 | 214.468 |
| 106.0 | 263.262 | 259.177 | 249.721 | 232.926 | 223.697 |
| 106.5 | 273.399 | 269.314 | 259.933 | 242.685 | 233.002 |
| 107.0 | 284.217 | 279.905 | 270.827 | 253.049 | 243.139 |
| 107.5 | 295.413 | 290.799 | 281.872 | 264.018 | 254.108 |
| 108.0 | 306.534 | 301.995 | 293.144 | 275.896 | 265.380 |
| 108.5 | 318.260 | 313.418 | 304.416 | 287.773 | 277.030 |
| 109.0 | 330.288 | 325.068 | 315.990 | 299.801 | 288.832 |
| 109.5 | 342.619 | 337.172 | 328.170 | 311.754 | 300.784 |
| 110.0 | 355.782 | 349.579 | 340.652 | 324.009 | 313.267 |
| 110.5 | 369.248 | 362.288 | 353.437 | 337.172 | 326.203 |

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| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 111.0 | 382.865 | 375.602 | 366.676 | 350.865 | 339.215 |
| 111.5 | 396.784 | 389.295 | 380.141 | 364.784 | 352.605 |
| 112.0 | 411.233 | 403.366 | 393.531 | 378.704 | 365.389 |
| 112.5 | 425.758 | 417.815 | 407.073 | 392.548 | 378.931 |
| 113.0 | 440.964 | 432.718 | 421.370 | 406.846 | 393.077 |
| 113.5 | 456.623 | 448.302 | 436.500 | 422.278 | 408.283 |
| 114.0 | 472.510 | 464.188 | 452.538 | 438.694 | 425.153 |
| 114.5 | 488.926 | 480.604 | 468.879 | 455.791 | 443.082 |
| 115.0 | 505.569 | 497.474 | 485.824 | 473.039 | 461.238 |
| 115.5 | 522.968 | 514.496 | 503.224 | 490.212 | 479.167 |
| 116.0 | 540.519 | 532.198 | 521.228 | 508.292 | 497.399 |
| 116.5 | 559.053 | 550.354 | 539.838 | 526.827 | 516.841 |
| 117.0 | 578.344 | 568.888 | 558.600 | 546.798 | 536.888 |
| 117.5 | 592.566 | 583.337 | 575.772 | 565.181 | 557.238 |
| 118.0 | 610.722 | 600.207 | 593.399 | 584.169 | 575.318 |
| 118.5 | 631.829 | 620.330 | 611.403 | 601.796 | 591.583 |
| 119.0 | 652.481 | 640.150 | 631.829 | 621.767 | 609.663 |
| 119.5 | 673.361 | 661.257 | 653.465 | 642.042 | 629.938 |
| 120.0 | 694.921 | 683.119 | 675.176 | 664.207 | 651.346 |
| 120.5 | 716.330 | 705.285 | 697.569 | 687.734 | 674.193 |
| 121.0 | 738.798 | 727.904 | 720.112 | 711.186 | 698.476 |
| 121.5 | 761.039 | 750.297 | 742.580 | 734.940 | 722.231 |
| 122.0 | 784.490 | 773.143 | 766.334 | 758.769 | 746.060 |
| 122.5 | 807.185 | 795.838 | 789.786 | 782.221 | 768.604 |
| 123.0 | 830.637 | 820.046 | 813.994 | 807.942 | 793.568 |
| 123.5 | 854.845 | 844.254 | 839.715 | 833.663 | 819.289 |
| 124.0 | 879.053 | 869.218 | 864.679 | 859.384 | 845.767 |
| 124.5 | 903.261 | 893.426 | 889.644 | 884.348 | 871.488 |
| 125.0 | 927.469 | 917.634 | 913.852 | 909.313 | 896.452 |
| 125.5 | 952.433 | 942.599 | 938.816 | 934.277 | 920.660 |
| 126.0 | 976.641 | 966.807 | 964.537 | 959.242 | 944.868 |
| 126.5 | 1000.849 | 991.015 | 990.258 | 985.719 | 970.589 |
| 127.0 | 1025.814 | 1015.979 | 1015.979 | 1012.197 | 997.823 |
| 127.5 | 1050.778 | 1040.187 | 1040.187 | 1037.918 | 1025.057 |
| 128.0 | 1074.986 | 1064.395 | 1065.152 | 1063.639 | 1050.778 |
| 128.5 | 1099.194 | 1087.847 | 1089.360 | 1089.360 | 1075.743 |
| 129.0 | 1123.402 | 1111.298 | 1113.568 | 1114.324 | 1101.464 |
| 129.5 | 1147.610 | 1135.506 | 1138.532 | 1140.045 | 1127.941 |
| 130.0 | 1171.818 | 1159.714 | 1163.497 | 1165.766 | 1155.932 |
| 130.5 | 1196.026 | 1183.166 | 1189.218 | 1190.731 | 1182.409 |
| 131.0 | 1220.234 | 1206.617 | 1213.426 | 1214.939 | 1206.617 |
| 131.5 | 1242.929 | 1229.312 | 1237.634 | 1237.634 | 1230.069 |
| 132.0 | 1266.381 | 1252.007 | 1261.085 | 1261.842 | 1252.764 |
| 132.5 | 1289.076 | 1275.459 | 1284.537 | 1285.293 | 1275.459 |
| 133.0 | 1311.771 | 1298.910 | 1307.232 | 1308.745 | 1297.397 |
| 133.5 | 1334.466 | 1321.605 | 1330.683 | 1332.196 | 1320.849 |
| 134.0 | 1357.161 | 1343.544 | 1352.622 | 1354.891 | 1343.544 |
| 134.5 | 1377.586 | 1365.482 | 1373.804 | 1375.317 | 1365.482 |
| 135.0 | 1398.012 | 1386.664 | 1394.229 | 1395.742 | 1385.151 |
| 135.5 | 1417.681 | 1408.603 | 1414.655 | 1415.411 | 1404.820 |
| 136.0 | 1437.350 | 1429.028 | 1433.567 | 1435.837 | 1425.246 |
| 136.5 | 1457.775 | 1448.697 | 1452.480 | 1456.262 | 1446.428 |
| 137.0 | 1476.688 | 1468.366 | 1472.149 | 1475.175 | 1466.097 |
| 137.5 | 1495.600 | 1486.522 | 1490.305 | 1492.574 | 1483.496 |
| 138.0 | 1513.756 | 1504.678 | 1507.704 | 1509.217 | 1500.139 |
| 138.5 | 1531.912 | 1522.078 | 1525.104 | 1525.860 | 1516.026 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-F-F-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 139.0 | 1549.312 | 1539.477 | 1542.503 | 1542.503 | 1531.912 |
| 139.5 | 1566.711 | 1556.877 | 1559.146 | 1558.390 | 1547.042 |
| 140.0 | 1583.354 | 1572.763 | 1575.789 | 1575.033 | 1563.685 |
| 140.5 | 1599.241 | 1587.893 | 1590.919 | 1590.163 | 1578.059 |
| 141.0 | 1615.127 | 1603.780 | 1606.049 | 1604.536 | 1592.432 |
| 141.5 | 1629.501 | 1618.153 | 1621.179 | 1618.910 | 1605.293 |
| 142.0 | 1644.631 | 1633.283 | 1635.553 | 1632.527 | 1618.910 |
| 142.5 | 1659.004 | 1647.657 | 1649.926 | 1646.900 | 1631.770 |
| 143.0 | 1673.378 | 1661.274 | 1663.543 | 1660.517 | 1645.387 |
| 143.5 | 1686.995 | 1675.647 | 1677.160 | 1674.134 | 1658.248 |
| 144.0 | 1699.855 | 1689.264 | 1690.021 | 1686.238 | 1670.352 |
| 144.5 | 1712.716 | 1702.125 | 1702.881 | 1698.342 | 1682.456 |
| 145.0 | 1724.820 | 1714.985 | 1714.985 | 1709.690 | 1693.803 |
| 145.5 | 1737.680 | 1727.846 | 1727.089 | 1722.550 | 1705.907 |
| 146.0 | 1749.784 | 1739.950 | 1739.193 | 1733.898 | 1718.011 |
| 146.5 | 1761.888 | 1752.054 | 1750.541 | 1746.002 | 1730.115 |
| 147.0 | 1773.236 | 1764.158 | 1761.132 | 1758.106 | 1742.219 |
| 147.5 | 1784.583 | 1775.505 | 1772.479 | 1769.453 | 1753.567 |
| 148.0 | 1795.931 | 1786.853 | 1782.314 | 1780.044 | 1765.671 |
| 148.5 | 1807.278 | 1798.200 | 1792.148 | 1790.635 | 1777.775 |
| 149.0 | 1817.869 | 1809.548 | 1801.983 | 1801.226 | 1789.879 |
| 149.5 | 1828.460 | 1820.139 | 1811.061 | 1811.817 | 1801.226 |
| 150.0 | 1839.051 | 1830.730 | 1820.895 | 1821.652 | 1811.817 |
| 150.5 | 1849.642 | 1841.321 | 1829.973 | 1830.730 | 1822.408 |
| 151.0 | 1859.477 | 1851.155 | 1839.051 | 1839.808 | 1832.243 |
| 151.5 | 1870.068 | 1860.990 | 1848.886 | 1848.886 | 1841.321 |
| 152.0 | 1879.902 | 1870.824 | 1857.964 | 1857.207 | 1850.399 |
| 152.5 | 1889.737 | 1879.902 | 1867.042 | 1866.285 | 1858.720 |
| 153.0 | 1899.571 | 1888.980 | 1876.120 | 1875.363 | 1866.285 |
| 153.5 | 1908.649 | 1898.058 | 1885.198 | 1884.441 | 1873.094 |
| 154.0 | 1917.727 | 1907.136 | 1895.032 | 1893.519 | 1880.659 |
| 154.5 | 1927.562 | 1915.458 | 1904.110 | 1901.841 | 1888.224 |
| 155.0 | 1936.640 | 1923.779 | 1913.188 | 1910.919 | 1896.545 |
| 155.5 | 1944.961 | 1931.344 | 1922.266 | 1919.997 | 1904.867 |
| 156.0 | 1953.283 | 1939.666 | 1932.101 | 1928.318 | 1913.188 |
| 156.5 | 1961.604 | 1947.987 | 1941.179 | 1937.396 | 1921.510 |
| 157.0 | 1969.926 | 1956.309 | 1950.257 | 1946.474 | 1929.831 |
| 157.5 | 1977.491 | 1963.874 | 1958.578 | 1954.796 | 1938.153 |
| 158.0 | 1985.056 | 1971.439 | 1966.900 | 1963.117 | 1946.474 |
| 158.5 | 1993.377 | 1979.760 | 1975.221 | 1971.439 | 1955.552 |
| 159.0 | 2000.186 | 1987.325 | 1982.786 | 1979.760 | 1963.874 |
| 159.5 | 2007.751 | 1994.890 | 1990.351 | 1988.082 | 1972.195 |
| 160.0 | 2014.559 | 2001.699 | 1997.916 | 1995.647 | 1980.517 |
| 160.5 | 2021.368 | 2008.507 | 2004.725 | 2003.212 | 1988.838 |
| 161.0 | 2028.176 | 2015.316 | 2011.533 | 2010.777 | 1997.160 |
| 161.5 | 2034.985 | 2022.881 | 2017.585 | 2018.342 | 2005.481 |
| 162.0 | 2042.550 | 2029.689 | 2023.637 | 2025.907 | 2013.046 |
| 162.5 | 2049.358 | 2036.498 | 2029.689 | 2032.715 | 2019.855 |
| 163.0 | 2056.167 | 2043.306 | 2035.741 | 2039.524 | 2026.663 |
| 163.5 | 2062.975 | 2049.358 | 2041.793 | 2046.332 | 2032.715 |
| 164.0 | 2069.784 | 2055.410 | 2047.089 | 2052.384 | 2038.767 |
| 164.5 | 2075.079 | 2061.462 | 2052.384 | 2058.436 | 2044.819 |
| 165.0 | 2081.131 | 2067.514 | 2057.680 | 2064.488 | 2050.115 |
| 165.5 | 2087.183 | 2072.810 | 2062.975 | 2069.784 | 2055.410 |
| 166.0 | 2093.235 | 2078.105 | 2068.271 | 2075.079 | 2059.949 |
| 166.5 | 2099.287 | 2083.401 | 2073.566 | 2079.618 | 2065.245 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-F-F-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

| | | | | | |
|-------|----------|----------|----------|----------|----------|
| 167.0 | 2104.583 | 2087.940 | 2078.105 | 2084.157 | 2069.784 |
| 167.5 | 2109.878 | 2092.479 | 2083.401 | 2088.696 | 2075.079 |
| 168.0 | 2115.174 | 2097.018 | 2087.940 | 2093.235 | 2079.618 |
| 168.5 | 2120.469 | 2101.557 | 2092.479 | 2097.774 | 2084.914 |
| 169.0 | 2125.008 | 2105.339 | 2097.018 | 2101.557 | 2089.453 |
| 169.5 | 2128.791 | 2109.122 | 2100.800 | 2105.339 | 2093.992 |
| 170.0 | 2132.573 | 2112.904 | 2104.583 | 2109.122 | 2099.287 |
| 170.5 | 2136.356 | 2116.687 | 2107.609 | 2112.904 | 2103.070 |
| 171.0 | 2140.138 | 2119.713 | 2110.635 | 2116.687 | 2106.852 |
| 171.5 | 2143.164 | 2122.739 | 2113.661 | 2120.469 | 2110.635 |
| 172.0 | 2146.190 | 2125.765 | 2115.930 | 2123.495 | 2113.661 |
| 172.5 | 2149.216 | 2128.791 | 2118.200 | 2125.765 | 2115.930 |
| 173.0 | 2152.242 | 2131.817 | 2120.469 | 2128.791 | 2117.443 |
| 173.5 | 2154.512 | 2134.086 | 2122.739 | 2130.304 | 2118.956 |
| 174.0 | 2156.781 | 2136.356 | 2125.008 | 2131.817 | 2119.713 |
| 174.5 | 2158.294 | 2137.869 | 2126.521 | 2133.330 | 2120.469 |
| 175.0 | 2159.807 | 2140.138 | 2128.034 | 2134.086 | 2120.469 |
| 175.5 | 2161.320 | 2141.651 | 2130.304 | 2134.843 | 2121.226 |
| 176.0 | 2162.833 | 2143.164 | 2131.817 | 2134.843 | 2121.226 |
| 176.5 | 2163.590 | 2144.677 | 2132.573 | 2135.599 | 2121.226 |
| 177.0 | 2164.346 | 2146.190 | 2134.086 | 2135.599 | 2120.469 |
| 177.5 | 2165.859 | 2147.703 | 2135.599 | 2135.599 | 2120.469 |
| 178.0 | 2166.616 | 2147.703 | 2136.356 | 2135.599 | 2121.226 |
| 178.5 | 2166.616 | 2148.460 | 2137.112 | 2135.599 | 2121.226 |
| 179.0 | 2167.372 | 2149.216 | 2137.112 | 2135.599 | 2121.226 |
| 179.5 | 2168.129 | 2149.216 | 2137.869 | 2135.599 | 2121.226 |
| 180.0 | 2141.651 | 2141.651 | 2141.651 | 2141.651 | 2141.651 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-F-F-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 766.82 | N.A. | 7.00 |
| 0-30 | 1603.15 | N.A. | 14.70 |
| 0-40 | 2575.48 | N.A. | 23.70 |
| 0-60 | 4376.33 | N.A. | 40.20 |
| 0-80 | 5359.3 | N.A. | 49.30 |
| 0-90 | 5463.17 | N.A. | 50.20 |
| 10-90 | 5263.01 | N.A. | 48.40 |
| 20-40 | 1808.67 | N.A. | 16.60 |
| 20-50 | 2773.91 | N.A. | 25.50 |
| 40-70 | 2426.69 | N.A. | 22.30 |
| 60-80 | 982.98 | N.A. | 9.00 |
| 70-80 | 357.12 | N.A. | 3.30 |
| 80-90 | 103.86 | N.A. | 1.00 |
| 90-110 | 309.93 | N.A. | 2.80 |
| 90-120 | 795.63 | N.A. | 7.30 |
| 90-130 | 1611.81 | N.A. | 14.80 |
| 90-150 | 3748.95 | N.A. | 34.50 |
| 90-180 | 5418.23 | N.A. | 49.80 |
| 110-180 | 5108.3 | N.A. | 46.90 |
| 0-180 | 10881.4 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|---------|
| 0-10 | 200.15 |
| 10-20 | 566.66 |
| 20-30 | 836.33 |
| 30-40 | 972.33 |
| 40-50 | 965.24 |
| 50-60 | 835.61 |
| 60-70 | 625.85 |
| 70-80 | 357.12 |
| 80-90 | 103.86 |
| 90-100 | 66.85 |
| 100-110 | 243.09 |
| 110-120 | 485.69 |
| 120-130 | 816.19 |
| 130-140 | 1067.24 |
| 140-150 | 1069.9 |
| 150-160 | 883.79 |
| 160-170 | 582.38 |
| 170-180 | 203.10 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-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 | 48 | 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 | 54 | 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 : MX4WUDC-4-00-L15-950U-L15-950D-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 | 17.1 | 18.0 | 18.1 | 19.0 | 20.2 | 17.0 | 17.9 | 18.0 | 18.9 | 20.1 |
| | 3H | 18.9 | 19.7 | 19.9 | 20.6 | 21.9 | 18.8 | 19.6 | 19.8 | 20.6 | 21.8 |
| | 4H | 19.5 | 20.2 | 20.5 | 21.2 | 22.5 | 19.4 | 20.2 | 20.4 | 21.1 | 22.4 |
| | 6H | 19.9 | 20.6 | 20.9 | 21.6 | 22.9 | 19.9 | 20.6 | 20.9 | 21.6 | 22.9 |
| | 8H | 20.1 | 20.7 | 21.1 | 21.7 | 23.0 | 20.0 | 20.7 | 21.0 | 21.7 | 23.0 |
| | 12H | 20.1 | 20.8 | 21.1 | 21.8 | 23.1 | 20.1 | 20.7 | 21.1 | 21.7 | 23.1 |

UGR Viewed Endwise

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H | 2H | 17.7 | 18.4 | 18.7 | 19.4 | 20.7 | 17.6 | 18.3 | 18.6 | 19.3 | 20.6 |
| | 3H | 19.6 | 20.2 | 20.6 | 21.3 | 22.6 | 19.6 | 20.2 | 20.6 | 21.2 | 22.5 |
| | 4H | 20.4 | 20.9 | 21.4 | 21.9 | 23.3 | 20.3 | 20.9 | 21.3 | 21.9 | 23.2 |
| | 6H | 20.9 | 21.4 | 21.9 | 22.4 | 23.8 | 20.9 | 21.4 | 21.9 | 22.4 | 23.8 |
| | 8H | 21.1 | 21.6 | 22.1 | 22.6 | 23.9 | 21.1 | 21.6 | 22.1 | 22.6 | 23.9 |
| | 12H | 21.2 | 21.6 | 22.3 | 22.7 | 24.0 | 21.2 | 21.6 | 22.3 | 22.7 | 24.0 |

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 8H | 4H | 20.6 | 21.1 | 21.6 | 22.1 | 23.4 | 20.6 | 21.0 | 21.6 | 22.0 | 23.4 |
| | 6H | 21.3 | 21.7 | 22.3 | 22.7 | 24.1 | 21.3 | 21.7 | 22.3 | 22.7 | 24.1 |
| | 8H | 21.6 | 21.9 | 22.6 | 22.9 | 24.3 | 21.6 | 21.9 | 22.6 | 23.0 | 24.3 |
| | 12H | 21.8 | 22.0 | 22.8 | 23.1 | 24.5 | 21.8 | 22.1 | 22.9 | 23.1 | 24.5 |

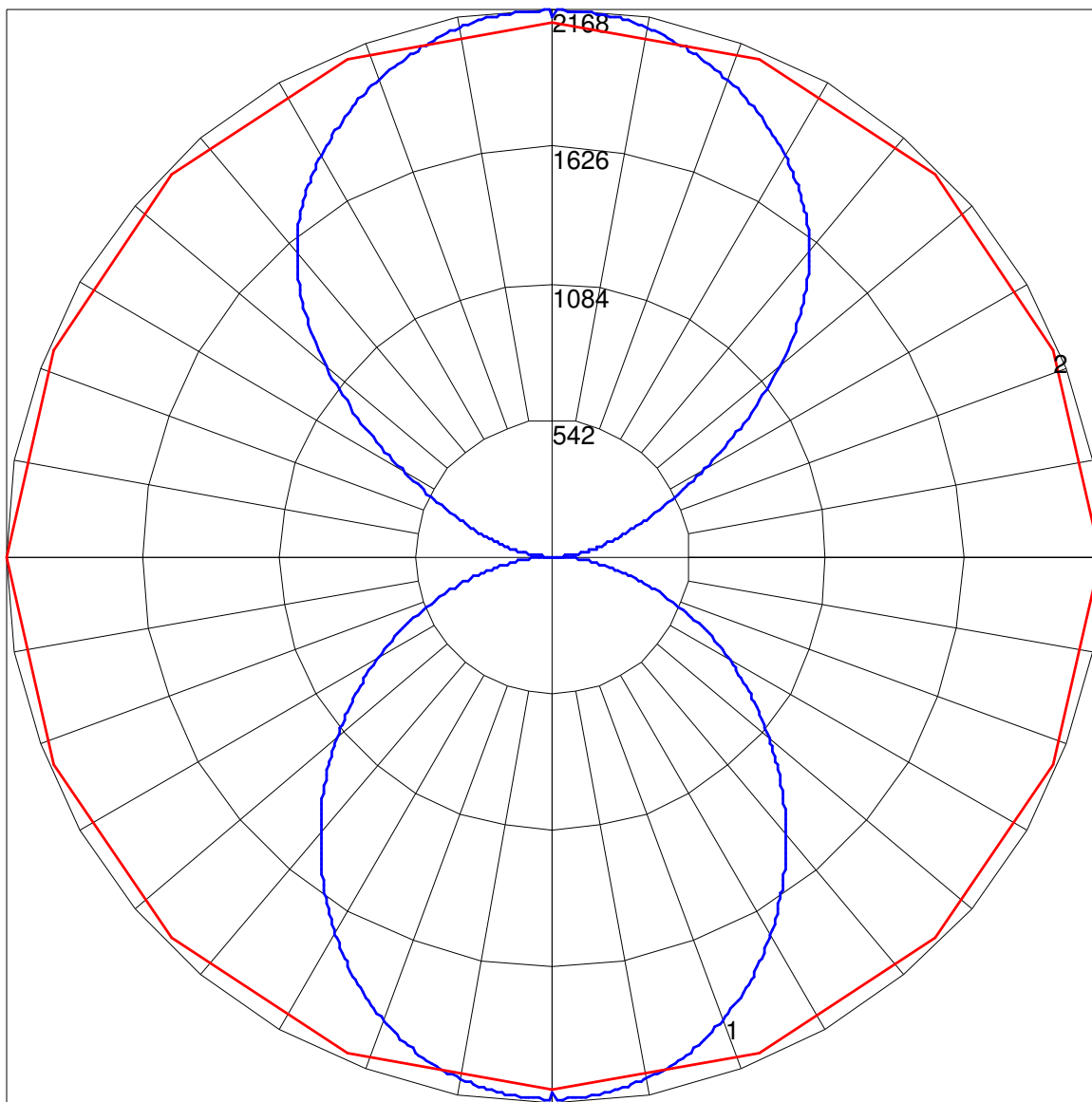
| | | | | | | | | | | | |
|-----|----|------|------|------|------|------|------|------|------|------|------|
| 12H | 4H | 20.6 | 21.0 | 21.6 | 22.1 | 23.4 | 20.6 | 21.0 | 21.6 | 22.0 | 23.4 |
| | 6H | 21.3 | 21.7 | 22.4 | 22.7 | 24.1 | 21.3 | 21.7 | 22.4 | 22.7 | 24.1 |
| | 8H | 21.6 | 21.9 | 22.7 | 23.0 | 24.4 | 21.7 | 21.9 | 22.7 | 23.0 | 24.4 |

Maximum UGR = 24.5

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4WUDC-4-00-L15-950U-L15-950D-F-F-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2168.129 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.)