

|                         |           |
|-------------------------|-----------|
| Ganancia antena tx      | 5         |
| Campo minimo Servicio   | 42,395757 |
| Campo minimo proteccion | 30,375157 |
| Limite de Perfil        | 15,00     |

| Distancia (d) | Altura (h) | Altura de tx efectiva valida | Ganancia real (Gi) | Atenuación de Espacio Libre (Ael) | Lb Hata (LbH) | E (LbH)   | Potencia Rx (LbH) | Distancia (d) |
|---------------|------------|------------------------------|--------------------|-----------------------------------|---------------|-----------|-------------------|---------------|
| 0             | 2056,9     | 45                           | 5                  | 0                                 | 0             | 171,32266 | 42,3169           | 0             |
| 0,1459        | 1996,8     | 105,1                        | -9                 | 67,61686241                       | 82,947863     | 74,374794 | -54,63096         | 0,1459        |
| 0,2917        | 1959,5     | 142,4                        | -2                 | 73,63448516                       | 91,112641     | 73,210015 | -55,79574         | 0,2917        |
| 0,4376        | 1940,5     | 161,4                        | 1                  | 77,15730284                       | 95,912971     | 71,409686 | -57,59607         | 0,4376        |
| 0,5835        | 1930,5     | 171,4                        | 2,5                | 79,65657378                       | 99,395845     | 69,426811 | -59,57895         | 0,5835        |
| 0,7294        | 1907,5     | 194,4                        | 3                  | 81,59507175                       | 101,62282     | 67,699832 | -61,30592         | 0,7294        |
| 0,8752        | 1869,2     | 200                          | 3                  | 83,17790275                       | 103,8241      | 65,498559 | -63,5072          | 0,8752        |
| 1,0211        | 1825,9     | 183,34286                    | 3                  | 84,5171221                        | 106,3456      | 62,977061 | -66,0287          | 1,0211        |
| 1,167         | 1770,1     | 200                          | 2,5                | 85,67717369                       | 107,55154     | 61,271115 | -67,73464         | 1,167         |
| 1,3129        | 1725,4     | 200                          | 2,5                | 86,70038954                       | 109,07758     | 59,745078 | -69,26068         | 1,3129        |
| 1,4587        | 1709,7     | 200                          | 3                  | 87,61507623                       | 110,44175     | 58,880903 | -70,12485         | 1,4587        |
| 1,6046        | 1663,1     | 200                          | 3                  | 88,44309233                       | 111,67667     | 57,645989 | -71,35977         | 1,6046        |
| 1,7505        | 1625,2     | 200                          | 3                  | 89,19899887                       | 112,80404     | 56,51862  | -72,48714         | 1,7505        |
| 1,8964        | 1574       | 200                          | 2,5                | 89,89435551                       | 113,8411      | 54,981557 | -74,0242          | 1,8964        |
| 2,0422        | 1505,3     | 200                          | 2,5                | 90,53772201                       | 114,80062     | 54,022032 | -74,98372         | 2,0422        |
| 2,1881        | 1422,5     | 200                          | 1,5                | 91,1370999                        | 115,69454     | 52,128112 | -76,87764         | 2,1881        |
| 2,334         | 1346,9     | 200                          | 1,5                | 91,69777361                       | 116,53074     | 51,291916 | -77,71384         | 2,334         |
| 2,4798        | 1283,6     | 200                          | 1,5                | 92,22408969                       | 117,3157      | 50,506962 | -78,49879         | 2,4798        |
| 2,6257        | 1208,6     | 200                          | 1                  | 92,72065866                       | 118,05628     | 49,266372 | -79,73938         | 2,6257        |
| 2,7716        | 1124,9     | 200                          | 1                  | 93,19036763                       | 118,75681     | 48,565842 | -80,43991         | 2,7716        |
| 2,9175        | 1054,5     | 200                          | 1                  | 93,63597387                       | 119,4214      | 47,90126  | -81,1045          | 2,9175        |
| 3,0633        | 992,6      | 200                          | 1                  | 94,05954719                       | 120,05312     | 47,269537 | -81,73622         | 3,0633        |
| 3,2092        | 969        | 200                          | 1                  | 94,46369224                       | 120,65587     | 46,66679  | -82,33897         | 3,2092        |
| 3,3551        | 963        | 200                          | 1                  | 94,84986595                       | 121,23181     | 46,090846 | -82,91491         | 3,3551        |
| 3,501         | 956        | 200                          | 1,5                | 95,21959879                       | 121,78324     | 46,039421 | -82,96634         | 3,501         |
| 3,6468        | 943,5      | 200                          | 1,5                | 95,5739955                        | 122,31179     | 45,51087  | -83,49489         | 3,6468        |
| 3,7927        | 933,6      | 200                          | 1,5                | 95,91472641                       | 122,81996     | 45,002699 | -84,00306         | 3,7927        |

|         |        |     |     |             |           |           |           |         |
|---------|--------|-----|-----|-------------|-----------|-----------|-----------|---------|
| 3,9386  | 924,9  | 200 | 1,5 | 96,2425941  | 123,30894 | 44,513713 | -84,49204 | 3,9386  |
| 4,0845  | 915,8  | 200 | 2,5 | 96,55853458 | 123,78014 | 45,042516 | -83,96324 | 4,0845  |
| 4,2303  | 910,1  | 200 | 2,5 | 96,86317992 | 124,23449 | 44,588164 | -84,41759 | 4,2303  |
| 4,3762  | 907,7  | 200 | 3   | 97,15769981 | 124,67374 | 44,648913 | -84,35684 | 4,3762  |
| 4,5221  | 903,5  | 200 | 3   | 97,44255981 | 125,09859 | 44,224069 | -84,78169 | 4,5221  |
| 4,6679  | 900,2  | 200 | 3   | 97,71818745 | 125,50966 | 43,812995 | -85,19276 | 4,6679  |
| 4,8138  | 893,7  | 200 | 3   | 97,98551742 | 125,90836 | 43,414295 | -85,59146 | 4,8138  |
| 4,9597  | 889,8  | 200 | 3   | 98,24486473 | 126,29516 | 43,027501 | -85,97826 | 4,9597  |
| 5,1056  | 886,1  | 200 | 3,5 | 98,49669231 | 126,67073 | 43,151923 | -85,85383 | 5,1056  |
| 5,2514  | 881,3  | 200 | 3,5 | 98,74125857 | 127,03548 | 42,787173 | -86,21858 | 5,2514  |
| 5,3973  | 877    | 200 | 3,5 | 98,97928774 | 127,39048 | 42,432174 | -86,57358 | 5,3973  |
| 5,5432  | 872,5  | 200 | 3,5 | 99,21096754 | 127,73601 | 42,086643 | -86,91911 | 5,5432  |
| 5,6891  | 867    | 200 | 3,5 | 99,43662793 | 128,07257 | 41,750091 | -87,25567 | 5,6891  |
| 5,8349  | 860,5  | 200 | 3,5 | 99,65642492 | 128,40037 | 41,422283 | -87,58347 | 5,8349  |
| 5,9808  | 862,3  | 200 | 3,5 | 99,87094217 | 128,72031 | 41,102349 | -87,90341 | 5,9808  |
| 6,1267  | 872,3  | 200 | 4   | 100,0802889 | 129,03253 | 41,290127 | -87,71563 | 6,1267  |
| 6,2726  | 904,3  | 200 | 4   | 100,2847084 | 129,3374  | 40,985253 | -88,0205  | 6,2726  |
| 6,4184  | 934,5  | 200 | 4   | 100,4842922 | 129,63507 | 40,687591 | -88,31817 | 6,4184  |
| 6,5643  | 942,8  | 200 | 4   | 100,679525  | 129,92624 | 40,396418 | -88,60934 | 6,5643  |
| 6,7102  | 961,3  | 200 | 4   | 100,8704659 | 130,21101 | 40,111647 | -88,89411 | 6,7102  |
| 6,856   | 966,2  | 200 | 4,5 | 101,0571728 | 130,48947 | 40,33319  | -88,67257 | 6,856   |
| 7,0019  | 966,3  | 200 | 4,5 | 101,2400747 | 130,76225 | 40,060407 | -88,94535 | 7,0019  |
| 7,1478  | 947,8  | 200 | 4,5 | 101,4192044 | 131,02941 | 39,793251 | -89,21251 | 7,1478  |
| 7,2937  | 922,5  | 200 | 4,5 | 101,5947145 | 131,29116 | 39,531493 | -89,47426 | 7,2937  |
| 7,4395  | 921,3  | 200 | 4,5 | 101,7666315 | 131,54756 | 39,275094 | -89,73066 | 7,4395  |
| 7,5854  | 942,9  | 200 | 4,5 | 101,9353263 | 131,79916 | 39,0235   | -89,98226 | 7,5854  |
| 7,7313  | 964,9  | 200 | 5   | 102,1008071 | 132,04596 | 39,2767   | -89,72906 | 7,7313  |
| 7,8772  | 958,9  | 200 | 5   | 102,263194  | 132,28814 | 39,034514 | -89,97124 | 7,8772  |
| 8,023   | 954,1  | 200 | 5   | 102,4224924 | 132,52572 | 38,796934 | -90,20882 | 8,023   |
| 8,1689  | 953,1  | 200 | 5   | 102,5790282 | 132,75918 | 38,563475 | -90,44228 | 8,1689  |
| 8,3148  | 939    | 200 | 5   | 102,7327927 | 132,98851 | 38,334149 | -90,67161 | 8,3148  |
| 8,4606  | 919,3  | 200 | 5   | 102,8837798 | 133,21369 | 38,108965 | -90,89679 | 8,4606  |
| 8,6065  | 915    | 200 | 5   | 103,032288  | 133,43518 | 37,887478 | -91,11828 | 8,6065  |
| 8,7524  | 925,7  | 200 | 5   | 103,1782997 | 133,65294 | 37,669714 | -91,33604 | 8,7524  |
| 8,8983  | 946,9  | 200 | 5   | 103,3218974 | 133,86711 | 37,45555  | -91,55021 | 8,8983  |
| 9,0441  | 939,1  | 200 | 5   | 103,4630637 | 134,07764 | 37,245013 | -91,76074 | 9,0441  |
| 9,19    | 920,1  | 200 | 5   | 103,6020668 | 134,28495 | 37,037702 | -91,96805 | 9,19    |
| 9,3359  | 904,8  | 200 | 5   | 103,7388804 | 134,489   | 36,833657 | -92,1721  | 9,3359  |
| 9,4818  | 926,6  | 200 | 5   | 103,8735724 | 134,68988 | 36,632775 | -92,37298 | 9,4818  |
| 9,6276  | 945,6  | 200 | 5   | 104,0061173 | 134,88756 | 36,435096 | -92,57066 | 9,6276  |
| 9,7735  | 952,8  | 200 | 5   | 104,1367589 | 135,0824  | 36,240256 | -92,7655  | 9,7735  |
| 9,9194  | 952,4  | 200 | 5   | 104,2654646 | 135,27435 | 36,048302 | -92,95745 | 9,9194  |
| 10,0653 | 963    | 200 | 5   | 104,392291  | 135,4635  | 35,859152 | -93,1466  | 10,0653 |
| 10,2111 | 968,1  | 200 | 5   | 104,5172072 | 135,64981 | 35,67285  | -93,33291 | 10,2111 |
| 10,357  | 979    | 200 | 5   | 104,6404361 | 135,83359 | 35,489065 | -93,51669 | 10,357  |
| 10,5029 | 997,2  | 200 | 5   | 104,7619412 | 136,01481 | 35,307851 | -93,69791 | 10,5029 |
| 10,6487 | 1021,3 | 200 | 5   | 104,8816884 | 136,1934  | 35,129258 | -93,8765  | 10,6487 |
| 10,7946 | 1040,2 | 200 | 5   | 104,9998877 | 136,36968 | 34,952975 | -94,05278 | 10,7946 |

|         |        |     |   |             |           |           |           |         |
|---------|--------|-----|---|-------------|-----------|-----------|-----------|---------|
| 10,9405 | 1050,3 | 200 | 5 | 105,1165    | 136,5436  | 34,779057 | -94,2267  | 10,9405 |
| 11,0864 | 1048,6 | 200 | 5 | 105,2315675 | 136,71521 | 34,607444 | -94,39831 | 11,0864 |
| 11,2322 | 1031,9 | 200 | 5 | 105,3450531 | 136,88447 | 34,43819  | -94,56757 | 11,2322 |
| 11,3781 | 1011,6 | 200 | 5 | 105,4571515 | 137,05165 | 34,271005 | -94,73475 | 11,3781 |
| 11,524  | 982,7  | 200 | 5 | 105,5678216 | 137,21671 | 34,105951 | -94,89981 | 11,524  |
| 11,6699 | 976,5  | 200 | 5 | 105,6770993 | 137,37968 | 33,942973 | -95,06278 | 11,6699 |
| 11,8157 | 975,7  | 200 | 5 | 105,7849457 | 137,54053 | 33,782129 | -95,22363 | 11,8157 |
| 11,9616 | 975,5  | 200 | 5 | 105,8915421 | 137,69951 | 33,62315  | -95,38261 | 11,9616 |
| 12,1075 | 985,8  | 200 | 5 | 105,9968461 | 137,85656 | 33,466098 | -95,53966 | 12,1075 |
| 12,2534 | 1007,2 | 200 | 5 | 106,1008888 | 138,01173 | 33,310928 | -95,69483 | 12,2534 |
| 12,3992 | 1040,8 | 200 | 5 | 106,2036299 | 138,16496 | 33,157698 | -95,84806 | 12,3992 |
| 12,5451 | 1073,6 | 200 | 5 | 106,3052391 | 138,3165  | 33,006157 | -95,9996  | 12,5451 |
| 12,691  | 1097,5 | 200 | 5 | 106,4056735 | 138,46629 | 32,856368 | -96,14939 | 12,691  |
| 12,8368 | 1117,8 | 200 | 5 | 106,5048921 | 138,61426 | 32,708392 | -96,29736 | 12,8368 |
| 12,9827 | 1149,6 | 200 | 5 | 106,603057  | 138,76067 | 32,561987 | -96,44377 | 12,9827 |
| 13,1286 | 1177   | 200 | 5 | 106,7001249 | 138,90544 | 32,417219 | -96,58854 | 13,1286 |
| 13,2745 | 1183,8 | 200 | 5 | 106,79612   | 139,04861 | 32,274051 | -96,73171 | 13,2745 |
| 13,4203 | 1180   | 200 | 5 | 106,8910011 | 139,19011 | 32,132544 | -96,87321 | 13,4203 |
| 13,5662 | 1172,7 | 200 | 5 | 106,9849209 | 139,33019 | 31,992471 | -97,01329 | 13,5662 |
| 13,7121 | 1166,9 | 200 | 5 | 107,077836  | 139,46876 | 31,853896 | -97,15186 | 13,7121 |
| 13,858  | 1158,2 | 200 | 5 | 107,1697677 | 139,60587 | 31,716788 | -97,28897 | 13,858  |
| 14,0038 | 1164,8 | 200 | 5 | 107,2606746 | 139,74145 | 31,581208 | -97,42455 | 14,0038 |
| 14,1497 | 1181   | 200 | 5 | 107,3507012 | 139,87572 | 31,446941 | -97,55882 | 14,1497 |
| 14,2956 | 1217,9 | 200 | 5 | 107,4398043 | 140,0086  | 31,314052 | -97,6917  | 14,2956 |
| 14,4415 | 1265,7 | 200 | 5 | 107,5280027 | 140,14014 | 31,182512 | -97,82324 | 14,4415 |
| 14,5873 | 1301,1 | 200 | 5 | 107,6152549 | 140,27027 | 31,052383 | -97,95337 | 14,5873 |
| 14,7332 | 1306,6 | 200 | 5 | 107,7016983 | 140,3992  | 30,92346  | -98,0823  | 14,7332 |
| 14,8791 | 1257,7 | 200 | 5 | 107,7872898 | 140,52685 | 30,795808 | -98,20995 | 14,8791 |
| 15,0249 | 1191,8 | 200 | 5 | 107,8719884 | 140,65317 | 30,669487 | -98,33627 | 15,0249 |
| 15,1708 | 1126,7 | 200 | 5 | 107,9559262 | 140,77836 | 30,544301 | -98,46146 | 15,1708 |
| 15,3167 | 1075,4 | 200 | 5 | 108,0390607 | 140,90234 | 30,420313 | -98,58544 | 15,3167 |
| 15,4626 | 1049,7 | 200 | 5 | 108,121407  | 141,02516 | 30,297501 | -98,70826 | 15,4626 |
| 15,6084 | 1040,1 | 200 | 5 | 108,2029243 | 141,14673 | 30,175925 | -98,82983 | 15,6084 |
| 15,7543 | 1024   | 200 | 5 | 108,2837388 | 141,26726 | 30,055397 | -98,95036 | 15,7543 |
| 15,9002 | 998,7  | 200 | 5 | 108,3638083 | 141,38668 | 29,935981 | -99,06978 | 15,9002 |
| 16,0461 | 952,5  | 200 | 5 | 108,4431465 | 141,505   | 29,817655 | -99,1881  | 16,0461 |
| 16,1919 | 891,2  | 200 | 5 | 108,5217128 | 141,62218 | 29,70048  | -99,30528 | 16,1919 |
| 16,3378 | 874,7  | 200 | 5 | 108,5996281 | 141,73838 | 29,584276 | -99,42148 | 16,3378 |
| 16,4837 | 912,1  | 200 | 5 | 108,6768506 | 141,85355 | 29,469105 | -99,53665 | 16,4837 |
| 16,6296 | 938,5  | 200 | 5 | 108,7533926 | 141,96771 | 29,35495  | -99,65081 | 16,6296 |
| 16,7754 | 936,9  | 200 | 5 | 108,8292143 | 142,08079 | 29,241868 | -99,76389 | 16,7754 |
| 16,9213 | 984,1  | 200 | 5 | 108,9044311 | 142,19297 | 29,129689 | -99,87607 | 16,9213 |
| 17,0672 | 1019,4 | 200 | 5 | 108,9790021 | 142,30418 | 29,018473 | -99,98728 | 17,0672 |
| 17,213  | 1042,2 | 200 | 5 | 109,0528879 | 142,41438 | 28,908279 | -100,0975 | 17,213  |
| 17,3589 | 1023,5 | 200 | 5 | 109,1262006 | 142,52372 | 28,798939 | -100,2068 | 17,3589 |
| 17,5048 | 993,9  | 200 | 5 | 109,1988996 | 142,63214 | 28,690515 | -100,3152 | 17,5048 |
| 17,6507 | 963,6  | 200 | 5 | 109,2709952 | 142,73967 | 28,582991 | -100,4228 | 17,6507 |
| 17,7965 | 916,6  | 200 | 5 | 109,3424486 | 142,84623 | 28,476424 | -100,5293 | 17,7965 |

|         |        |     |   |             |           |           |           |         |
|---------|--------|-----|---|-------------|-----------|-----------|-----------|---------|
| 17,9424 | 855,5  | 200 | 5 | 109,4133673 | 142,952   | 28,370655 | -100,6351 | 17,9424 |
| 18,0883 | 807,8  | 200 | 5 | 109,4837116 | 143,05691 | 28,265743 | -100,74   | 18,0883 |
| 18,2342 | 784    | 200 | 5 | 109,5534909 | 143,16098 | 28,161673 | -100,8441 | 18,2342 |
| 18,38   | 791,3  | 200 | 5 | 109,6226667 | 143,26415 | 28,058503 | -100,9473 | 18,38   |
| 18,5259 | 800    | 200 | 5 | 109,6913429 | 143,36658 | 27,956079 | -101,0497 | 18,5259 |
| 18,6718 | 820,8  | 200 | 5 | 109,7594803 | 143,4682  | 27,854458 | -101,1513 | 18,6718 |
| 18,8177 | 813,2  | 200 | 5 | 109,8270874 | 143,56903 | 27,753628 | -101,2521 | 18,8177 |
| 18,9635 | 851,4  | 200 | 5 | 109,8941265 | 143,66901 | 27,653645 | -101,3521 | 18,9635 |
| 19,1094 | 908    | 200 | 5 | 109,9606976 | 143,7683  | 27,55436  | -101,4514 | 19,1094 |
| 19,2553 | 946    | 200 | 5 | 110,0267624 | 143,86683 | 27,45583  | -101,5499 | 19,2553 |
| 19,4011 | 975,9  | 200 | 5 | 110,0922837 | 143,96455 | 27,358111 | -101,6476 | 19,4011 |
| 19,547  | 1010,2 | 200 | 5 | 110,1573588 | 144,0616  | 27,261057 | -101,7447 | 19,547  |
| 19,6929 | 1052,9 | 200 | 5 | 110,2219501 | 144,15793 | 27,164724 | -101,841  | 19,6929 |
| 19,8388 | 1064,8 | 200 | 5 | 110,2860646 | 144,25355 | 27,069103 | -101,9367 | 19,8388 |
| 19,9846 | 1013,5 | 200 | 5 | 110,3496658 | 144,34841 | 26,974248 | -102,0315 | 19,9846 |
| 20,1305 | 944,7  | 200 | 5 | 110,4128478 | 144,44264 | 26,880017 | -102,1257 | 20,1305 |
| 20,2764 | 878,1  | 200 | 5 | 110,4755736 | 144,53619 | 26,786467 | -102,2193 | 20,2764 |
| 20,4223 | 808,8  | 200 | 5 | 110,5378496 | 144,62907 | 26,693588 | -102,3122 | 20,4223 |
| 20,5681 | 737,8  | 200 | 5 | 110,5996401 | 144,72122 | 26,601433 | -102,4043 | 20,5681 |
| 20,714  | 725    | 200 | 5 | 110,661036  | 144,81279 | 26,509866 | -102,4959 | 20,714  |
| 20,8599 | 768    | 200 | 5 | 110,722001  | 144,90371 | 26,418942 | -102,5868 | 20,8599 |
| 21,0058 | 808,3  | 200 | 5 | 110,7825411 | 144,994   | 26,328652 | -102,6771 | 21,0058 |
| 21,1516 | 851,4  | 200 | 5 | 110,8426211 | 145,08361 | 26,239048 | -102,7667 | 21,1516 |
| 21,2975 | 907,1  | 200 | 5 | 110,9023291 | 145,17266 | 26,149999 | -102,8558 | 21,2975 |
| 21,4434 | 949,7  | 200 | 5 | 110,9616295 | 145,2611  | 26,061557 | -102,9442 | 21,4434 |
| 21,5892 | 986,2  | 200 | 5 | 111,0204876 | 145,34888 | 25,973776 | -103,032  | 21,5892 |
| 21,7351 | 1040,9 | 200 | 5 | 111,0789894 | 145,43613 | 25,886525 | -103,1192 | 21,7351 |
| 21,881  | 1105,3 | 200 | 5 | 111,1370999 | 145,5228  | 25,799858 | -103,2059 | 21,881  |
| 22,0269 | 1147,2 | 200 | 5 | 111,1948242 | 145,60889 | 25,713768 | -103,292  | 22,0269 |
| 22,1727 | 1178,6 | 200 | 5 | 111,2521282 | 145,69435 | 25,628304 | -103,3775 | 22,1727 |
| 22,3186 | 1182,5 | 200 | 5 | 111,3090955 | 145,77931 | 25,543342 | -103,4624 | 22,3186 |
| 22,4645 | 1155,5 | 200 | 5 | 111,3656917 | 145,86372 | 25,458934 | -103,5468 | 22,4645 |
| 22,6104 | 1133,5 | 200 | 5 | 111,4219215 | 145,94758 | 25,375072 | -103,6307 | 22,6104 |
| 22,7562 | 1105   | 200 | 5 | 111,4777514 | 146,03085 | 25,291806 | -103,714  | 22,7562 |
| 22,9021 | 1055,4 | 200 | 5 | 111,5332627 | 146,11364 | 25,209016 | -103,7967 | 22,9021 |
| 23,048  | 1006,5 | 200 | 5 | 111,5884215 | 146,1959  | 25,126752 | -103,879  | 23,048  |
| 23,1939 | 970,6  | 200 | 5 | 111,6432322 | 146,27765 | 25,045006 | -103,9608 | 23,1939 |
| 23,3397 | 971,6  | 200 | 5 | 111,697662  | 146,35883 | 24,963829 | -104,0419 | 23,3397 |
| 23,4856 | 951,4  | 200 | 5 | 111,7517898 | 146,43955 | 24,883102 | -104,1227 | 23,4856 |
| 23,6315 | 872,6  | 200 | 5 | 111,8055824 | 146,51978 | 24,802875 | -104,2029 | 23,6315 |
| 23,7773 | 793,8  | 200 | 5 | 111,8590073 | 146,59946 | 24,723197 | -104,2826 | 23,7773 |
| 23,9232 | 727,3  | 200 | 5 | 111,912142  | 146,67871 | 24,643951 | -104,3618 | 23,9232 |
| 24,0691 | 672,2  | 200 | 5 | 111,9649536 | 146,75747 | 24,565187 | -104,4406 | 24,0691 |
| 24,215  | 644,9  | 200 | 5 | 112,017446  | 146,83576 | 24,486899 | -104,5189 | 24,215  |
| 24,3608 | 631    | 200 | 5 | 112,0695875 | 146,91352 | 24,409135 | -104,5966 | 24,3608 |
| 24,5067 | 657    | 200 | 5 | 112,1214533 | 146,99088 | 24,331781 | -104,674  | 24,5067 |
| 24,6526 | 697,5  | 200 | 5 | 112,1730112 | 147,06777 | 24,254887 | -104,7509 | 24,6526 |
| 24,7985 | 730,9  | 200 | 5 | 112,2242648 | 147,14421 | 24,178447 | -104,8273 | 24,7985 |

|         |       |     |   |             |           |           |           |         |
|---------|-------|-----|---|-------------|-----------|-----------|-----------|---------|
| 24,9443 | 768,1 | 200 | 5 | 112,275183  | 147,22015 | 24,102507 | -104,9032 | 24,9443 |
| 25,0902 | 809,6 | 200 | 5 | 112,325839  | 147,2957  | 24,026958 | -104,9788 | 25,0902 |
| 25,2361 | 854,5 | 200 | 5 | 112,3762014 | 147,37081 | 23,951847 | -105,0539 | 25,2361 |
| 25,3819 | 879,9 | 200 | 5 | 112,4262391 | 147,44544 | 23,87722  | -105,1285 | 25,3819 |
| 25,5278 | 854,1 | 200 | 5 | 112,4760243 | 147,51969 | 23,80297  | -105,2028 | 25,5278 |
| 25,6737 | 814,1 | 200 | 5 | 112,5255258 | 147,59351 | 23,729142 | -105,2766 | 25,6737 |
| 25,8196 | 760,3 | 200 | 5 | 112,5747468 | 147,66692 | 23,655734 | -105,35   | 25,8196 |
| 25,9654 | 699   | 200 | 5 | 112,6236569 | 147,73987 | 23,582788 | -105,423  | 25,9654 |
| 26,1113 | 653,9 | 200 | 5 | 112,6723265 | 147,81245 | 23,510202 | -105,4956 | 26,1113 |
| 26,2572 | 627,8 | 200 | 5 | 112,7207248 | 147,88464 | 23,43802  | -105,5677 | 26,2572 |
| 26,4031 | 614,6 | 200 | 5 | 112,768855  | 147,95642 | 23,366238 | -105,6395 | 26,4031 |
| 26,5489 | 614,5 | 200 | 5 | 112,8166872 | 148,02776 | 23,294901 | -105,7109 | 26,5489 |
| 26,6948 | 620,5 | 200 | 5 | 112,86429   | 148,09875 | 23,223905 | -105,7819 | 26,6948 |
| 26,8407 | 611,9 | 200 | 5 | 112,9116333 | 148,16936 | 23,153297 | -105,8525 | 26,8407 |
| 26,9866 | 571,1 | 200 | 5 | 112,95872   | 148,23959 | 23,083071 | -105,9227 | 26,9866 |
| 27,1324 | 524,5 | 200 | 5 | 113,0055208 | 148,30938 | 23,013272 | -105,9925 | 27,1324 |
| 27,2783 | 498,2 | 200 | 5 | 113,0521026 | 148,37886 | 22,943799 | -106,062  | 27,2783 |
| 27,4242 | 493,8 | 200 | 5 | 113,0984359 | 148,44796 | 22,874697 | -106,1311 | 27,4242 |
| 27,57   | 484,3 | 200 | 5 | 113,1444919 | 148,51665 | 22,806009 | -106,1997 | 27,57   |
| 27,7159 | 477,9 | 200 | 5 | 113,1903363 | 148,58502 | 22,737636 | -106,2681 | 27,7159 |
| 27,8618 | 497,1 | 200 | 5 | 113,23594   | 148,65303 | 22,669622 | -106,3361 | 27,8618 |
| 28,0077 | 541,6 | 200 | 5 | 113,2813055 | 148,72069 | 22,601963 | -106,4038 | 28,0077 |
| 28,1535 | 579,6 | 200 | 5 | 113,3264044 | 148,78795 | 22,534702 | -106,4711 | 28,1535 |
| 28,2994 | 569,8 | 200 | 5 | 113,3713011 | 148,85491 | 22,467742 | -106,538  | 28,2994 |
| 28,4453 | 528,7 | 200 | 5 | 113,4159669 | 148,92153 | 22,401127 | -106,6046 | 28,4453 |
| 28,5912 | 493,6 | 200 | 5 | 113,4604042 | 148,9878  | 22,334853 | -106,6709 | 28,5912 |
| 28,737  | 472,6 | 200 | 5 | 113,5045851 | 149,0537  | 22,268961 | -106,7368 | 28,737  |
| 28,8829 | 473,9 | 200 | 5 | 113,5485725 | 149,1193  | 22,203358 | -106,8024 | 28,8829 |
| 29,0288 | 454,5 | 200 | 5 | 113,5923382 | 149,18457 | 22,138085 | -106,8677 | 29,0288 |
| 29,1747 | 436   | 200 | 5 | 113,6358846 | 149,24952 | 22,073139 | -106,9326 | 29,1747 |

### Perfil Topográfico Estación Avila-5 180°









