

Ganancia antena tx	11
Campo mínimo Servicio	42,395757
Campo mínimo 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)
0,00	1101,00	30,00	11	0	0	178,3952	49,3894	0
0,1413	1134,6	30,00	-14	67,3386	87,00123	66,39392	-62,61183	0,1413
0,2826	1168	30,00	-3	73,3592	97,60497	66,79018	-62,21557	0,2826
0,4238	1216	30,00	0,5	76,87898	103,8042	64,091	-64,91475	0,4238
0,5651	1240,9	30,00	1	79,37826	108,206	60,18915	-68,8166	0,5651
0,7064	1265,8	30,00	-1	81,31677	111,6202	54,77497	-74,23079	0,7064
0,8477	1271,7	30,00	-3	82,9006	114,4097	49,98546	-79,0203	0,8477
0,9889	1290,8	30,00	-5	84,2388	116,7666	45,62856	-83,3772	0,9889
1,1302	1296,5	30,00	-14	85,39886	118,8097	34,58541	-94,42034	1,1302
1,2715	1283,7	30,00	-8	86,42208	120,6119	38,78327	-90,22248	1,2715
1,4128	1292	30,00	-2	87,33737	122,2239	43,17123	-85,83452	1,4128
1,554	1283,1	30,00	2	88,16478	123,6812	45,71397	-83,29179	1,554
1,6953	1308,3	30,00	-2	88,92069	125,0125	40,38263	-88,62313	1,6953
1,8366	1375,5	30,00	-8	89,61605	126,2372	33,15793	-95,84783	1,8366
1,9779	1385,8	30,00	-8	90,25984	127,3711	32,02405	-96,98171	1,9779
2,1192	1368,8	30,00	-2	90,8592	128,4267	36,96844	-92,03731	2,1192
2,2604	1359,5	30,00	2	91,41946	129,4135	39,98168	-89,02408	2,2604
2,4017	1319,4	30,00	5	91,94613	130,3411	42,05408	-86,95167	2,4017
2,543	1288,2	30,00	8	92,44268	131,2156	44,17954	-84,82622	2,543
2,6843	1271,6	30,00	8,5	92,91238	132,0429	43,85229	-85,15347	2,6843
2,8255	1263,7	30,00	8,5	93,35766	132,8271	43,06804	-85,93772	2,8255
2,9668	1237,4	30,00	10	93,78152	133,5736	43,82152	-85,18424	2,9668
3,1081	1215,5	30,00	10	94,18566	134,2854	43,10974	-85,89602	3,1081
3,2494	1193,2	30,00	10,5	94,57182	134,9655	42,92961	-86,07615	3,2494
3,3906	1143,8	30,00	10,5	94,94129	135,6163	42,27889	-86,72687	3,3906
3,5319	1108	30,00	11	95,29592	136,2409	42,15429	-86,85147	3,5319
3,6732	1084,3	30,00	11	95,63665	136,841	41,55419	-87,45157	3,6732
3,8145	1051,6	30,00	10,5	95,96451	137,4184	40,47675	-88,52901	3,8145
3,9558	1023,4	30,00	10,5	96,28044	137,9748	39,92031	-89,08545	3,9558
4,097	988,9	30,00	10	96,58508	138,5114	38,88378	-90,12198	4,097

4,2383	957	30,00	10	96,87959	139,0301	38,36507	-90,64069	4,2383
4,3796	942,1	30,00	10	97,16445	139,5318	37,86337	-91,14239	4,3796
4,5209	918,9	30,00	10	97,44025	140,0176	37,3776	-91,62816	4,5209
4,6621	915,4	30,00	10	97,70739	140,488	36,90711	-92,09864	4,6621
4,8034	911,7	30,00	10	97,96673	140,9448	36,45035	-92,55541	4,8034
4,9447	907,6	30,00	10	98,21856	141,3883	36,00682	-92,99893	4,9447
5,086	906,7	30,00	10	98,46328	141,8194	35,5758	-93,42996	5,086
5,2272	906,7	30,00	10	98,70114	142,2383	35,15688	-93,84888	5,2272
5,3685	905,4	30,00	10	98,93282	142,6463	34,74884	-94,25692	5,3685
5,5098	905,8	30,00	10	99,15847	143,0438	34,3514	-94,65436	5,5098
5,6511	905,2	30,00	10	99,37842	143,4311	33,96403	-95,04173	5,6511
5,7924	904,1	30,00	10	99,59293	143,8089	33,58622	-95,41954	5,7924
5,9336	903,5	30,00	10	99,80212	144,1774	33,21778	-95,78798	5,9336
6,0749	901,8	30,00	10	100,0065	144,5374	32,85775	-96,14801	6,0749
6,2162	901,1	30,00	10	100,2063	144,8892	32,506	-96,49976	6,2162
6,3575	902,4	31,13	10	100,4015	144,9262	32,46895	-96,53681	6,3575
6,4987	899,7	36,19	10	100,5923	144,0091	33,3861	-95,61966	6,4987
6,64	897,9	41,03	10	100,7791	143,2872	34,10797	-94,89778	6,64
6,7813	901,1	51,35	10	100,962	141,7232	35,67199	-93,33377	6,7813
6,9226	905,6	55,46	10	101,1411	141,3793	36,01583	-92,98992	6,9226
7,0638	901,7	59,45	10	101,3165	141,0873	36,3079	-92,69785	7,0638
7,2051	894,7	63,43	10	101,4886	140,8277	36,56746	-92,43829	7,2051
7,3464	890,1	73,88	10	101,6572	139,8151	37,58004	-91,42572	7,3464
7,4877	889,5	77,53	10	101,8227	139,6761	37,71909	-91,28666	7,4877
7,629	890,4	80,98	10	101,9851	139,5691	37,82606	-91,1797	7,629
7,7702	894,1	84,19	10	102,1444	139,4956	37,89951	-91,10625	7,7702
7,9115	891,3	87,32	10	102,3009	139,4365	37,95868	-91,04707	7,9115
8,0528	888,6	156,62	10	102,4547	134,6715	42,72367	-86,28209	8,0528
8,1941	892,3	158,30	10	102,6058	134,81	42,5852	-86,42056	8,1941
8,3353	895,4	159,82	10,5	102,7542	134,9538	42,94135	-86,06441	8,3353
8,4766	898	161,20	10,5	102,9002	135,102	42,7932	-86,21255	8,4766
8,6179	902,8	162,40	10,5	103,0438	135,2565	42,63862	-86,36713	8,6179
8,7592	910,5	163,35	10,5	103,185	135,4205	42,47467	-86,53109	8,7592
8,9004	911,3	164,24	10,5	103,3239	135,5843	42,31089	-86,69487	8,9004
9,0417	916,4	164,98	10,5	103,4608	135,7532	42,14198	-86,86378	9,0417
9,183	929,1	165,40	10,5	103,5954	135,9355	41,95966	-87,0461	9,183
9,3243	938,5	165,60	10,5	103,7281	136,1264	41,76874	-87,23702	9,3243
9,4656	951,1	165,52	10,5	103,8587	136,3289	41,56622	-87,43953	9,4656
9,6068	959,5	165,27	10,5	103,9873	136,5375	41,35763	-87,64813	9,6068
9,7481	950,3	165,22	10,5	104,1142	136,7329	41,16225	-87,84351	9,7481
9,8894	923,4	165,70	10,5	104,2392	136,8967	40,99846	-88,0073	9,8894
10,0307	923,2	166,18	10,5	104,3624	137,0586	40,83658	-88,16918	10,0307
10,1719	933,1	166,44	10,5	104,4838	137,2288	40,66637	-88,33939	10,1719
10,3132	943	166,51	10,5	104,6036	137,407	40,48811	-88,51765	10,3132
10,4545	948,1	166,48	10,5	104,7218	137,588	40,30716	-88,6986	10,4545
10,5958	955,2	166,32	10,5	104,8384	137,7734	40,12175	-88,88401	10,5958
10,737	958,5	166,11	10,5	104,9534	137,9593	39,9359	-89,06986	10,737
10,8783	955,3	165,96	10,5	105,067	138,1396	39,75558	-89,25018	10,8783

11,0196	955,1	165,82	10,5	105,1791	138,3172	39,57791	-89,42785	11,0196
11,1609	955,4	165,68	10,5	105,2897	138,4928	39,40236	-89,6034	11,1609
11,3022	959,4	165,48	10,5	105,399	138,6696	39,22551	-89,78024	11,3022
11,4434	966	165,18	10,5	105,5069	138,8499	39,04525	-89,9605	11,4434
11,5847	953,7	165,08	10,5	105,6135	139,017	38,87819	-90,12756	11,5847
11,726	954,7	164,98	10,5	105,7188	139,1828	38,71237	-90,29339	11,726
11,8673	950,4	164,94	10,5	105,8228	139,3428	38,55231	-90,45344	11,8673
12,0085	943	165,02	10,5	105,9255	139,4946	38,40056	-90,6052	12,0085
12,1498	959,1	164,85	10,5	106,0271	139,6582	38,23696	-90,7688	12,1498
12,2911	965,7	164,59	10,5	106,1276	139,8252	38,06994	-90,93582	12,2911
12,4324	968,3	164,29	10,5	106,2269	139,9923	37,9029	-91,10285	12,4324
12,5736	990,2	163,69	10,5	106,3249	140,1748	37,72038	-91,28537	12,5736
12,7149	1051,5	162,23	11	106,422	140,4042	37,99094	-91,01482	12,7149
12,8562	1119	159,86	11	106,518	140,685	37,71019	-91,29557	12,8562
12,9975	1176,6	156,76	11	106,613	141,0094	37,38577	-91,61998	12,9975
13,1388	1241,9	152,85	10,5	106,7069	141,3849	36,51029	-92,49547	13,1388
13,28	1302,5	148,22	10,5	106,7997	141,8096	36,08559	-92,92017	13,28
13,4213	1342,2	143,19	10,5	106,8916	142,2687	35,62644	-93,37932	13,4213
13,5626	1371,8	137,90	10,5	106,9826	142,7559	35,1393	-93,86646	13,5626
13,7039	1409,9	132,25	10,5	107,0726	143,281	34,61412	-94,39164	13,7039
13,8451	1415,4	126,68	10,5	107,1617	143,8172	34,07795	-94,9278	13,8451
13,9864	1453,6	120,76	10,5	107,2499	144,3973	33,49785	-95,50791	13,9864
14,1277	1505,7	114,35	10	107,3372	145,0402	32,35493	-96,65083	14,1277
14,269	1567,4	107,32	10	107,4236	145,7645	31,63067	-97,37509	14,269
14,4102	1629,4	99,72	10	107,5092	146,5831	30,81205	-98,19371	14,4102
14,5515	1692,9	91,53	10	107,5939	147,5156	29,87957	-99,12619	14,5515
14,6928	1738,6	82,99	10	107,6778	148,5628	28,83231	-100,1734	14,6928
14,8341	1787,5	74,08	8,5	107,761	149,7575	26,13767	-102,8681	14,8341
14,9754	1830,1	64,88	8,5	107,8433	151,1311	24,76402	-104,2417	14,9754
15,1166	1878,3	64,88	8,5	107,9248	151,2658	24,6294	-104,3764	15,1166
15,2579	1932,9	64,88	8,5	108,0057	151,3992	24,49593	-104,5098	15,2579
15,3992	1978,2	64,88	8,5	108,0857	151,5315	24,3637	-104,6421	15,3992
15,5405	1994,1	64,88	8,5	108,1651	151,6625	24,23267	-104,7731	15,5405
15,6817	1944,7	64,88	8,5	108,2436	151,7922	24,10292	-104,9028	15,6817
15,823	1900,2	64,88	8,5	108,3215	151,9209	23,97424	-105,0315	15,823
15,9643	1853,8	64,88	8,5	108,3988	152,0484	23,84671	-105,159	15,9643
16,1056	1791,5	64,88	10	108,4753	152,1749	25,2203	-103,7855	16,1056
16,2468	1694,3	64,88	10	108,5511	152,3001	25,09508	-103,9107	16,2468
16,3881	1656,6	64,88	10	108,6263	152,4243	24,97086	-104,0349	16,3881
16,5294	1641,1	64,88	10	108,7009	152,5474	24,84771	-104,158	16,5294
16,6707	1631,6	64,88	10	108,7748	152,6696	24,7256	-104,2802	16,6707
16,812	1672,4	64,88	10	108,8481	152,7906	24,60453	-104,4012	16,812
16,9532	1727,1	64,88	10	108,9208	152,9106	24,48455	-104,5212	16,9532
17,0945	1772,4	64,88	10	108,9929	153,0297	24,36549	-104,6403	17,0945
17,2358	1810	64,88	10	109,0644	153,1478	24,2474	-104,7584	17,2358
17,3771	1870,9	64,88	10	109,1353	153,2649	24,13028	-104,8755	17,3771
17,5183	1887	64,88	8,5	109,2056	153,381	22,51419	-106,4916	17,5183
17,6596	1837	64,88	10	109,2754	153,4962	23,89895	-105,1068	17,6596

17,8009	1753,1	64,88	10	109,3446	153,6105	23,78462	-105,2211	17,8009
17,9422	1667,8	64,88	10	109,4133	153,724	23,67121	-105,3346	17,9422
18,0834	1590,9	64,88	10	109,4814	153,8364	23,55876	-105,447	18,0834
18,2247	1505,1	64,88	10,5	109,549	153,9481	23,9471	-105,0587	18,2247
18,366	1433,7	64,88	10,5	109,616	154,0588	23,83631	-105,1694	18,366
18,5073	1369,8	64,88	10,5	109,6826	154,1688	23,72637	-105,2794	18,5073
18,6486	1299,3	64,88	10,5	109,7487	154,2779	23,61726	-105,3885	18,6486
18,7898	1299	64,88	10,5	109,8142	154,3861	23,50906	-105,4967	18,7898
18,9311	1325,5	64,88	10,5	109,8793	154,4936	23,40159	-105,6042	18,9311
19,0724	1371,7	64,88	10,5	109,9439	154,6002	23,29491	-105,7108	19,0724
19,2137	1357,6	64,88	10,5	110,008	154,7061	23,18903	-105,8167	19,2137
19,3549	1341,8	64,88	10,5	110,0716	154,8112	23,08399	-105,9218	19,3549
19,4962	1354,7	64,88	10,5	110,1348	154,9155	22,97965	-106,0261	19,4962
19,6375	1367,6	64,88	10,5	110,1975	155,0191	22,87606	-106,1297	19,6375
19,7788	1330	64,88	10,5	110,2598	155,1219	22,77321	-106,2325	19,7788
19,92	1290,9	64,88	10,5	110,3215	155,224	22,67117	-106,3346	19,92
20,0613	1260,4	64,88	11	110,3829	155,3254	23,06977	-105,936	20,0613
20,2026	1218	64,88	11	110,4439	155,4261	22,96909	-106,0367	20,2026
20,3439	1158,3	64,88	11	110,5044	155,5261	22,8691	-106,1367	20,3439
20,4852	1089,3	64,88	11	110,5646	155,6253	22,76981	-106,2359	20,4852
20,6264	1025,9	64,88	11	110,6242	155,7239	22,67128	-106,3345	20,6264
20,7677	983,4	64,88	11	110,6835	155,8218	22,57334	-106,4324	20,7677
20,909	754,9	64,88	10,5	110,7424	155,9191	21,97607	-107,0297	20,909
21,0503	740,1	64,88	10,5	110,8009	156,0157	21,87946	-107,1263	21,0503
21,1915	689,8	64,88	10,5	110,859	156,1116	21,78355	-107,2222	21,1915
21,3328	596,7	64,88	10,5	110,9167	156,2069	21,68822	-107,3175	21,3328
21,4741	550,2	64,88	10	110,9741	156,3016	21,09352	-107,9122	21,4741
21,6154	580,2	64,88	10,5	111,031	156,3957	21,49944	-107,5063	21,6154
21,7566	597,6	64,88	10,5	111,0876	156,4891	21,40604	-107,5997	21,7566
21,8979	610,2	64,88	10,5	111,1438	156,582	21,31317	-107,6926	21,8979
22,0392	642,3	64,88	10,5	111,1997	156,6742	21,22091	-107,7848	22,0392
22,1805	650,2	64,88	10,5	111,2552	156,7659	21,12923	-107,8765	22,1805
22,3218	664,3	64,88	10,5	111,3103	156,857	21,03814	-107,9676	22,3218
22,463	678,3	64,88	10,5	111,3651	156,9475	20,94768	-108,0581	22,463
22,6043	701,6	64,88	10,5	111,4196	157,0374	20,85773	-108,148	22,6043
22,7456	731,1	64,88	10,5	111,4737	157,1268	20,76834	-108,2374	22,7456
22,8869	718,5	64,88	10,5	111,5275	157,2157	20,6795	-108,3263	22,8869
23,0281	726,5	64,88	10,5	111,5809	157,3039	20,59127	-108,4145	23,0281
23,1694	689,5	64,88	10,5	111,6341	157,3916	20,50352	-108,5022	23,1694
23,3107	621,3	64,88	10,5	111,6869	157,4789	20,4163	-108,5895	23,3107
23,452	543	64,88	10,5	111,7394	157,5655	20,32961	-108,6761	23,452
23,5933	459,5	64,88	10	111,7915	157,6517	19,74344	-109,2623	23,5933
23,7345	363,6	64,88	10	111,8434	157,7373	19,65784	-109,3479	23,7345
23,8758	300,1	64,88	10	111,8949	157,8225	19,57269	-109,4331	23,8758
24,0171	247,7	64,88	10	111,9462	157,9071	19,48805	-109,5177	24,0171
24,1584	247,4	64,88	10	111,9971	157,9913	19,4039	-109,6019	24,1584
24,2996	297,4	64,88	10	112,0477	158,0749	19,3203	-109,6855	24,2996
24,4409	331,4	64,88	10	112,0981	158,158	19,23713	-109,7686	24,4409

24,5822	329,1	64,88	10	112,1482	158,2407	19,15443	-109,8513	24,5822
24,7235	281,3	64,88	10	112,198	158,3229	19,07221	-109,9335	24,7235
24,8647	191,4	64,88	10	112,2474	158,4046	18,99052	-110,0152	24,8647
25,006	119,5	64,88	10	112,2966	158,4859	18,90923	-110,0965	25,006
25,1473	54,8	64,88	10	112,3456	158,5668	18,8284	-110,1774	25,1473
25,2886	37,4	64,88	10	112,3943	158,6471	18,74802	-110,2577	25,2886
25,4299	65,9	64,88	10	112,4426	158,7271	18,66809	-110,3377	25,4299
25,5711	59,9	64,88	10	112,4907	158,8065	18,58866	-110,4171	25,5711
25,7124	33	64,88	10	112,5386	158,8855	18,50961	-110,4961	25,7124
25,8537	12,3	64,88	10	112,5862	158,9642	18,431	-110,5748	25,8537
25,995	5,9	64,88	10	112,6336	159,0423	18,35281	-110,6529	25,995
26,1362	0,7	64,88	10	112,6806	159,1201	18,2751	-110,7307	26,1362
26,2775	0	64,88	10	112,7274	159,1974	18,19776	-110,808	26,2775
26,4188	0	64,88	10	112,774	159,2743	18,12083	-110,8849	26,4188
26,5601	0	64,88	10	112,8204	159,3508	18,04431	-110,9614	26,5601
26,7013	0	64,88	10	112,8664	159,4269	17,96825	-111,0375	26,7013
26,8426	0	64,88	10	112,9122	159,5026	17,89254	-111,1132	26,8426
26,9839	0	64,88	10	112,9579	159,5779	17,81722	-111,1885	26,9839
27,1252	0	64,88	10	113,0032	159,6529	17,7423	-111,2635	27,1252
27,2665	0	64,88	10	113,0483	159,7274	17,66777	-111,338	27,2665
27,4077	0	64,88	10	113,0932	159,8015	17,59368	-111,4121	27,4077
27,549	0	64,88	10	113,1379	159,8752	17,51991	-111,4858	27,549
27,6903	0	64,88	10	113,1823	159,9486	17,44652	-111,5592	27,6903
27,8316	0	64,88	10	113,2265	160,0216	17,37351	-111,6322	27,8316
27,9728	0	64,88	10	113,2705	160,0942	17,30091	-111,7048	27,9728
28,1141	0	64,88	10	113,3142	160,1665	17,22863	-111,7771	28,1141
28,2554	0	64,88	10	113,3578	160,2384	17,15672	-111,849	28,2554

Perfil Topográfico Estación Caricuaao 50°



