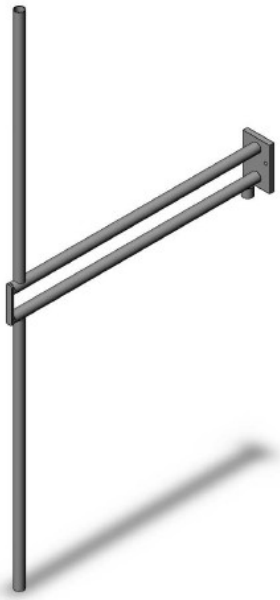
ANTENA FM DIPOLO VERTICAL LH



Especificações:

Potência Max por elemento ..... 1.2 Kw
Ganho ..... Vide Tabela
Faixa de Frequência..... 76,1 a 107,9 MHz
Polarização..... Vertical
Diagrama vertical..... Sob Demanda
Impedância de entrada..... 50 ohms
VSWR Max no canal.....1,05 : 1
Conector de entrada..... N , Din 7/16 ,EIA 7/8"
Quantidade de Níveis.....1,2,3,4,6,8

Montagem com cabo e divisores.

Ganho						
Modelo	ADVLH-1	ADVLH-2	ADVLH-3	ADVLH-4	ADVLH-6	ADVLH-8
Vezes	1	2	3	4	6	8
dBd	1	3.0	4.77	6.0	7.76	9.03

Características Construtivas

Material Empregado:

Estrutura em alumínio , latão e cobre
Fixadores em aço inox e isoladores em PTFE
Estrutura de sustentação em aço galvanizado

Montagem:

Fornecida com suportes compatíveis com tubos de 2,5" a 6" em aço

Modelo:
ADVLH-(Nº NÍVEIS) - (FREQUÊNCIA) - (POTÊNCIA)
1 - 8 76.1 - 107.9Mhz Kw

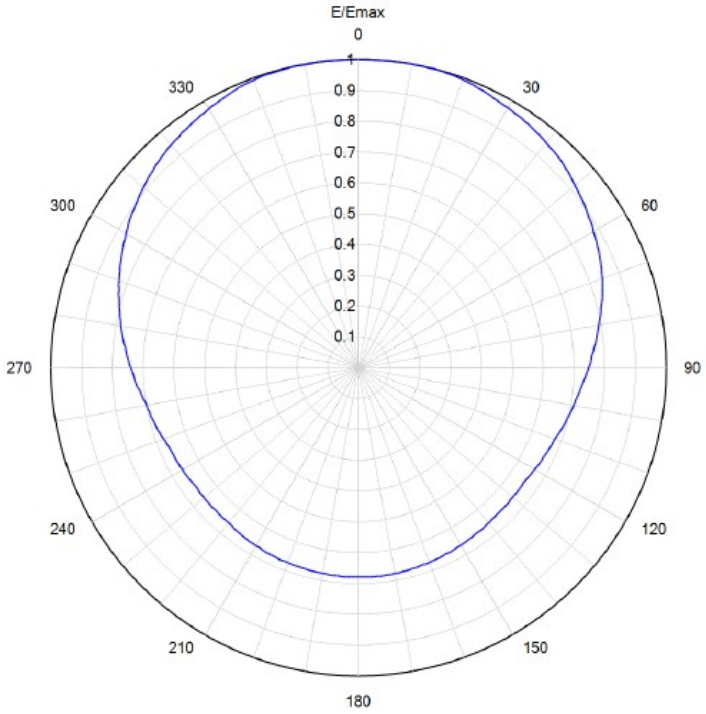
Rua Higino Guilherme Costato 298 - Jardim Pinheiros - Valinhos - SP CEP 13.274-410 Tel. +(55)19 4117-0270

Características Mecânicas

Modelo >	ADVLH-1			ADVLH-2			ADVLH-3			ADVLH-4			ADVLH-5			ADVLH-6		
Frequência	A	C	P	A	C	P	A	C	P	A	C	P	A	C	P	A	C	P
76.1 a 77.9	1756	878		5659	2830		9562	4781		13465	6732		17367	8684		21270	10635	
78.1 a 80.9	1711	856		5514	2757		9317	4658		13120	6560		16923	8461		20725	10363	
80.1 a 81.9	1669	834		5376	2688		9084	4542		12792	6396		16500	8250		20208	10104	
82.1 a 83.9	1628	814		5245	2623		8863	4431		12481	6240		16098	8049		19716	9858	
84.1 a 85.9	1589	795		5121	2560		8652	4326		12184	6092		15715	7858		19247	9623	
86.1 a 87.9	1552	776		5002	2501		8451	4226		11901	5950		15350	7675		18800	9400	
88.1 a 89.9	1517	759		4888	2444		8259	4130		11631	5815		15002	7501		18373	9186	
90.1 a 91.9	1483	742	2	4780	2390	4	8076	4038	6	11372	5686	8	14669	7334	10	17965	8983	12
92.1 a 93.9	1451	726		4676	2338		7901	3950		11125	5563		14350	7175		17575	8787	
94.1 a 95.9	1420	710		4577	2288		7733	3866		10889	5444		14045	7023		17201	8601	
96.1 a 97.9	1391	695		4481	2241		7572	3786		10662	5331		13753	6876		16843	8422	
98.1 a 99.9	1362	681		4390	2195		7417	3709		10445	5222		13472	6736		16500	8250	
100.1-101.9	1335	668		4302	2151		7269	3635		10236	5118		13203	6602		16170	8085	
102.1-103.9	1309	655		4218	2109		7127	3563		10036	5018		12945	6472		15854	7927	
104.1-105.9	1284	642		4137	2068		6990	3495		9843	4921		12696	6348		15549	7774	
106.1-107.9	1260	630		4059	2029		6858	3429		9657	4829		12457	6228		15256	7628	

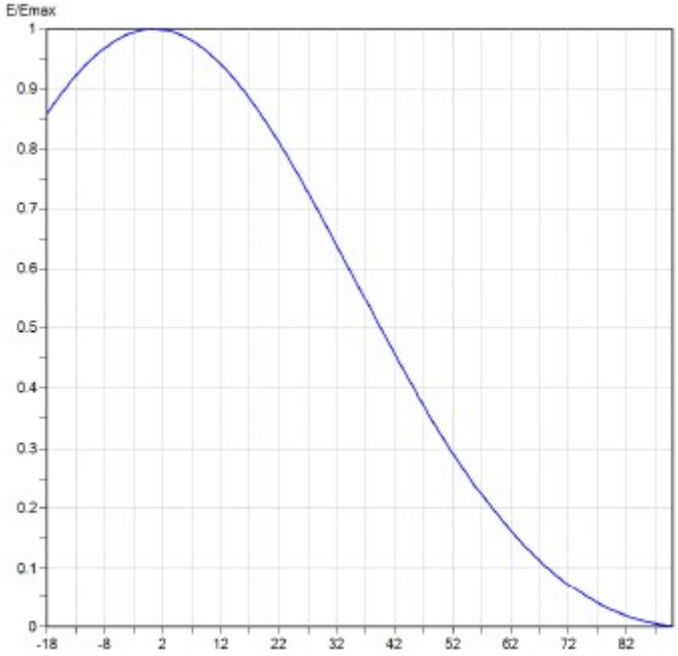
A Altura da antena em mm
C Centro de radiação em mm
P Peso médio da antena em Kg

Diagramas de Radiação Horizontal - Escala E/Emáx



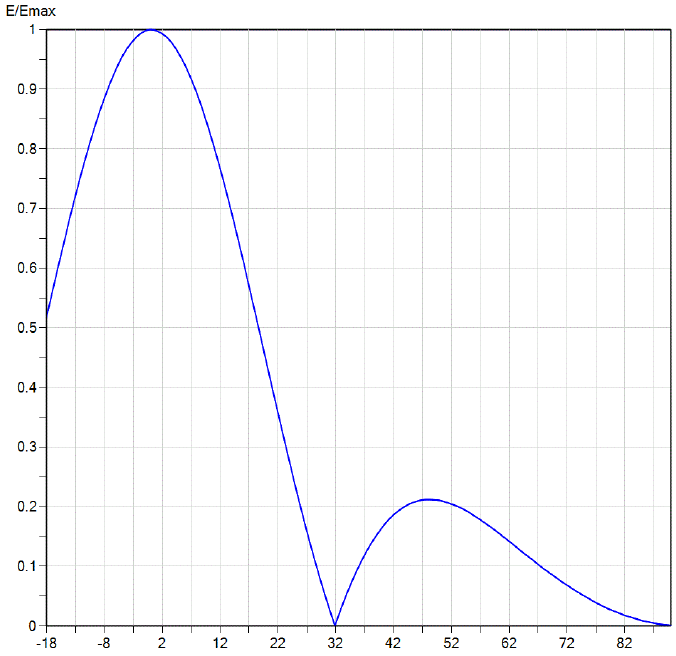
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	1.000	45	0.938	90	0.748	135	0.655	180	0.680	225	0.656	270	0.740	315	0.930
1	1.000	46	0.934	91	0.743	136	0.655	181	0.680	226	0.656	271	0.745	316	0.933
2	1.000	47	0.931	92	0.739	137	0.655	182	0.680	227	0.656	272	0.749	317	0.937
3	1.000	48	0.927	93	0.735	138	0.656	183	0.680	228	0.656	273	0.753	318	0.940
4	1.000	49	0.923	94	0.730	139	0.657	184	0.680	229	0.656	274	0.757	319	0.943
5	1.000	50	0.919	95	0.726	140	0.658	185	0.679	230	0.656	275	0.762	320	0.945
6	1.000	51	0.916	96	0.722	141	0.658	186	0.679	231	0.655	276	0.766	321	0.948
7	1.000	52	0.912	97	0.719	142	0.659	187	0.679	232	0.655	277	0.771	322	0.950
8	1.000	53	0.908	98	0.716	143	0.660	188	0.678	233	0.655	278	0.775	323	0.953
9	1.000	54	0.905	99	0.713	144	0.660	189	0.678	234	0.655	279	0.779	324	0.955
10	1.000	55	0.901	100	0.710	145	0.661	190	0.678	235	0.656	280	0.784	325	0.958
11	1.000	56	0.897	101	0.706	146	0.662	191	0.677	236	0.657	281	0.788	326	0.961
12	1.000	57	0.893	102	0.703	147	0.663	192	0.677	237	0.658	282	0.792	327	0.963
13	1.000	58	0.890	103	0.700	148	0.663	193	0.677	238	0.659	283	0.797	328	0.966
14	1.000	59	0.886	104	0.697	149	0.664	194	0.676	239	0.660	284	0.801	329	0.968
15	1.000	60	0.882	105	0.694	150	0.665	195	0.676	240	0.661	285	0.806	330	0.971
16	0.999	61	0.878	106	0.691	151	0.665	196	0.675	241	0.662	286	0.810	331	0.973
17	0.998	62	0.875	107	0.688	152	0.666	197	0.675	242	0.663	287	0.815	332	0.976
18	0.997	63	0.871	108	0.685	153	0.667	198	0.674	243	0.664	288	0.819	333	0.978
19	0.995	64	0.867	109	0.682	154	0.668	199	0.674	244	0.665	289	0.824	334	0.981
20	0.994	65	0.863	110	0.678	155	0.668	200	0.673	245	0.665	290	0.828	335	0.984
21	0.993	66	0.859	111	0.677	156	0.669	201	0.673	246	0.666	291	0.833	336	0.986
22	0.991	67	0.855	112	0.675	157	0.670	202	0.673	247	0.667	292	0.837	337	0.989
23	0.988	68	0.851	113	0.673	158	0.670	203	0.672	248	0.670	293	0.842	338	0.990
24	0.986	69	0.847	114	0.671	159	0.671	204	0.671	249	0.672	294	0.846	339	0.991
25	0.983	70	0.843	115	0.670	160	0.672	205	0.671	250	0.675	295	0.851	340	0.993
26	0.981	71	0.839	116	0.668	161	0.673	206	0.670	251	0.678	296	0.855	341	0.994
27	0.978	72	0.834	117	0.666	162	0.673	207	0.669	252	0.680	297	0.859	342	0.996
28	0.976	73	0.829	118	0.665	163	0.674	208	0.668	253	0.683	298	0.864	343	0.997
29	0.975	74	0.824	119	0.663	164	0.675	209	0.667	254	0.685	299	0.868	344	0.998
30	0.973	75	0.818	120	0.661	165	0.675	210	0.667	255	0.688	300	0.873	345	0.998
31	0.971	76	0.813	121	0.659	166	0.676	211	0.666	256	0.690	301	0.877	346	0.999
32	0.969	77	0.808	122	0.658	167	0.676	212	0.665	257	0.693	302	0.881	347	0.999
33	0.967	78	0.803	123	0.656	168	0.677	213	0.664	258	0.695	303	0.885	348	0.999
34	0.965	79	0.798	124	0.654	169	0.678	214	0.663	259	0.698	304	0.889	349	0.999
35	0.963	80	0.793	125	0.654	170	0.678	215	0.662	260	0.700	305	0.893	350	0.999
36	0.962	81	0.788	126	0.654	171	0.679	216	0.661	261	0.703	306	0.896	351	0.999
37	0.959	82	0.784	127	0.654	172	0.679	217	0.660	262	0.707	307	0.900	352	1.000
38	0.956	83	0.779	128	0.654	173	0.680	218	0.659	263	0.711	308	0.904	353	1.000
39	0.954	84	0.774	129	0.654	174	0.680	219	0.658	264	0.715	309	0.908	354	1.000
40	0.951	85	0.769	130	0.654	175	0.680	220	0.657	265	0.720	310	0.912	355	1.000
41	0.949	86	0.765	131	0.654	176	0.680	221	0.657	266	0.724	311	0.916	356	1.000
42	0.946	87	0.760	132	0.655	177	0.680	222	0.657	267	0.728	312	0.919	357	1.000
43	0.943	88	0.756	133	0.655	178	0.680	223	0.657	268	0.732	313	0.923	358	1.000
44	0.941	89	0.752	134	0.655	179	0.680	224	0.657	269	0.736	314	0.926	359	1.000

Elevação 1



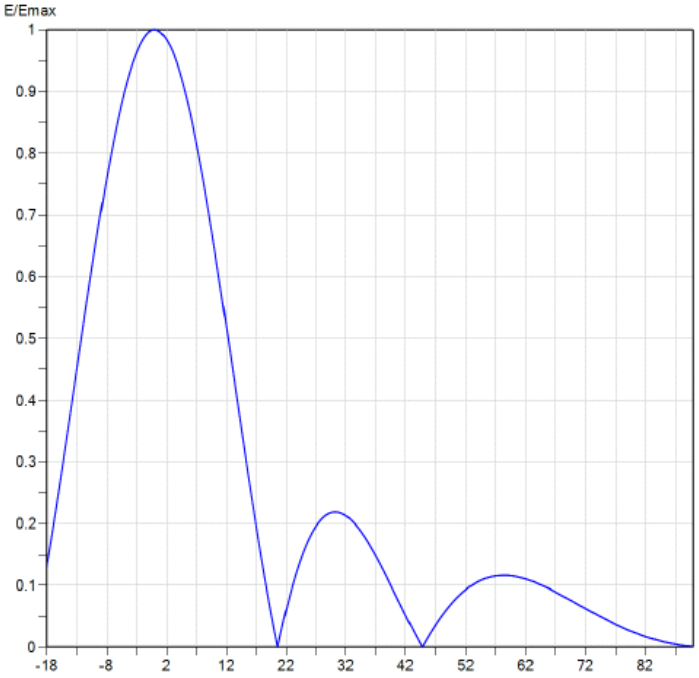
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.952	2.4	0.998	10.6	0.954	30.5	0.665	51.0	0.307	71.5	0.076
-9.5	0.957	2.6	0.997	10.8	0.952	31.0	0.656	51.5	0.300	72.0	0.072
-9.0	0.961	2.8	0.997	11.0	0.950	31.5	0.647	52.0	0.292	72.5	0.069
-8.5	0.965	3.0	0.997	11.5	0.946	32.0	0.638	52.5	0.285	73.0	0.065
-8.0	0.968	3.2	0.996	12.0	0.941	32.5	0.629	53.0	0.278	73.5	0.061
-7.5	0.972	3.4	0.996	12.5	0.936	33.0	0.619	53.5	0.271	74.0	0.058
-7.0	0.975	3.6	0.995	13.0	0.931	33.5	0.610	54.0	0.264	74.5	0.055
-6.5	0.978	3.8	0.995	13.5	0.926	34.0	0.601	54.5	0.257	75.0	0.052
-6.0	0.981	4.0	0.994	14.0	0.920	34.5	0.592	55.0	0.250	75.5	0.049
-5.5	0.984	4.2	0.993	14.5	0.914	35.0	0.583	55.5	0.243	76.0	0.046
-5.0	0.987	4.4	0.992	15.0	0.908	35.5	0.574	56.0	0.236	76.5	0.043
-4.5	0.989	4.6	0.992	15.5	0.902	36.0	0.564	56.5	0.230	77.0	0.040
-4.0	0.991	4.8	0.991	16.0	0.896	36.5	0.555	57.0	0.223	77.5	0.038
-3.5	0.993	5.0	0.990	16.5	0.890	37.0	0.546	57.5	0.217	78.0	0.035
-3.0	0.994	5.2	0.989	17.0	0.883	37.5	0.537	58.0	0.210	78.5	0.033
-2.8	0.995	5.4	0.988	17.5	0.877	38.0	0.528	58.5	0.204	79.0	0.030
-2.6	0.995	5.6	0.988	18.0	0.870	38.5	0.519	59.0	0.198	79.5	0.028
-2.4	0.996	5.8	0.987	18.5	0.863	39.0	0.509	59.5	0.192	80.0	0.026
-2.2	0.996	6.0	0.986	19.0	0.856	39.5	0.500	60.0	0.186	80.5	0.024
-2.0	0.997	6.2	0.985	19.5	0.849	40.0	0.491	60.5	0.180	81.0	0.022
-1.8	0.997	6.4	0.984	20.0	0.841	40.5	0.483	61.0	0.174	81.5	0.020
-1.6	0.998	6.6	0.982	20.5	0.834	41.0	0.474	61.5	0.169	82.0	0.018
-1.4	0.998	6.8	0.981	21.0	0.826	41.5	0.465	62.0	0.163	82.5	0.017
-1.2	0.999	7.0	0.980	21.5	0.819	42.0	0.456	62.5	0.158	83.0	0.015
-1.0	0.999	7.2	0.979	22.0	0.811	42.5	0.447	63.0	0.152	83.5	0.014
-0.8	0.999	7.4	0.978	22.5	0.803	43.0	0.438	63.5	0.147	84.0	0.012
-0.6	0.999	7.6	0.976	23.0	0.795	43.5	0.430	64.0	0.141	84.5	0.011
-0.4	1.000	7.8	0.975	23.5	0.787	44.0	0.421	64.5	0.136	85.0	0.009
-0.2	1.000	8.0	0.974	24.0	0.778	44.5	0.413	65.0	0.131	85.5	0.008
0.0	1.000	8.2	0.973	24.5	0.770	45.0	0.404	65.5	0.127	86.0	0.007
0.2	1.000	8.4	0.971	25.0	0.762	45.5	0.396	66.0	0.122	86.5	0.006
0.4	1.000	8.6	0.970	25.5	0.754	46.0	0.387	66.5	0.117	87.0	0.005
0.6	0.999	8.8	0.968	26.0	0.745	46.5	0.379	67.0	0.112	87.5	0.004
0.8	0.999	9.0	0.967	26.5	0.736	47.0	0.371	67.5	0.108	88.0	0.003
1.0	0.999	9.2	0.965	27.0	0.727	47.5	0.363	68.0	0.103	88.5	0.003
1.2	0.999	9.4	0.964	27.5	0.719	48.0	0.354	68.5	0.099	89.0	0.002
1.4	0.999	9.6	0.962	28.0	0.710	48.5	0.346	69.0	0.095	89.5	0.002
1.6	0.998	9.8	0.961	28.5	0.701	49.0	0.338	69.5	0.091	90.0	0.001
1.8	0.998	10.0	0.959	29.0	0.692	49.5	0.331	70.0	0.087		
2.0	0.998	10.2	0.957	29.5	0.683	50.0	0.323	70.5	0.083		
2.2	0.998	10.4	0.955	30.0	0.674	50.5	0.315	71.0	0.079		

Elevação 2



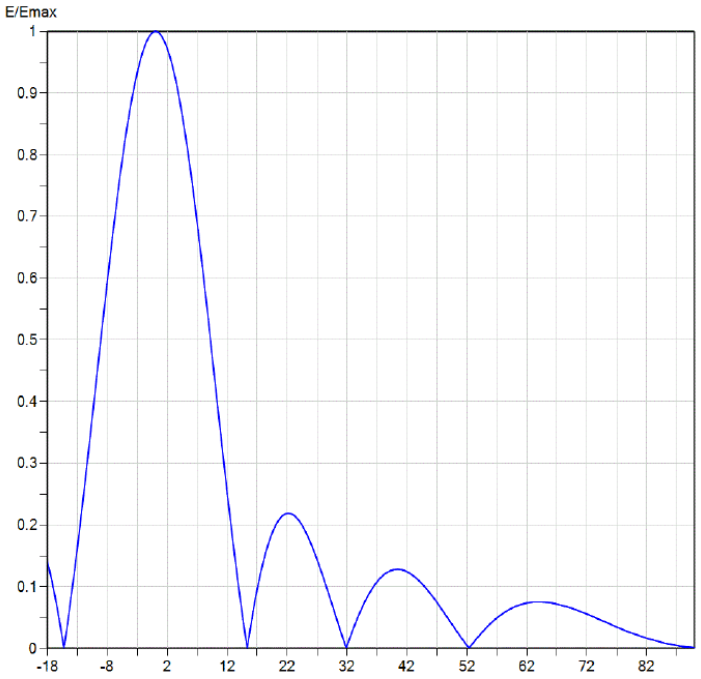
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.828	2.4	0.990	10.6	0.814	30.5	0.040	51.0	0.207	71.5	0.072
-9.5	0.843	2.6	0.988	10.8	0.808	31.0	0.025	51.5	0.206	72.0	0.069
-9.0	0.859	2.8	0.987	11.0	0.801	31.5	0.010	52.0	0.204	72.5	0.065
-8.5	0.873	3.0	0.985	11.5	0.784	32.0	0.004	52.5	0.203	73.0	0.062
-8.0	0.886	3.2	0.983	12.0	0.767	32.5	0.018	53.0	0.201	73.5	0.059
-7.5	0.899	3.4	0.980	12.5	0.748	33.0	0.031	53.5	0.198	74.0	0.056
-7.0	0.912	3.6	0.978	13.0	0.730	33.5	0.044	54.0	0.196	74.5	0.053
-6.5	0.923	3.8	0.975	13.5	0.711	34.0	0.056	54.5	0.193	75.0	0.050
-6.0	0.934	4.0	0.973	14.0	0.692	34.5	0.068	55.0	0.191	75.5	0.047
-5.5	0.944	4.2	0.970	14.5	0.672	35.0	0.079	55.5	0.188	76.0	0.045
-5.0	0.954	4.4	0.967	15.0	0.652	35.5	0.090	56.0	0.184	76.5	0.042
-4.5	0.962	4.6	0.963	15.5	0.631	36.0	0.100	56.5	0.181	77.0	0.039
-4.0	0.970	4.8	0.960	16.0	0.611	36.5	0.110	57.0	0.178	77.5	0.036
-3.5	0.976	5.0	0.957	16.5	0.590	37.0	0.119	57.5	0.175	78.0	0.034
-3.0	0.982	5.2	0.953	17.0	0.569	37.5	0.128	58.0	0.171	78.5	0.032
-2.8	0.984	5.4	0.950	17.5	0.548	38.0	0.137	58.5	0.168	79.0	0.029
-2.6	0.986	5.6	0.946	18.0	0.527	38.5	0.144	59.0	0.164	79.5	0.027
-2.4	0.988	5.8	0.943	18.5	0.506	39.0	0.151	59.5	0.161	80.0	0.025
-2.2	0.990	6.0	0.939	19.0	0.485	39.5	0.158	60.0	0.157	80.5	0.023
-2.0	0.992	6.2	0.934	19.5	0.463	40.0	0.165	60.5	0.153	81.0	0.022
-1.8	0.993	6.4	0.930	20.0	0.442	40.5	0.171	61.0	0.149	81.5	0.020
-1.6	0.994	6.6	0.925	20.5	0.420	41.0	0.177	61.5	0.146	82.0	0.018
-1.4	0.996	6.8	0.921	21.0	0.399	41.5	0.182	62.0	0.142	82.5	0.016
-1.2	0.997	7.0	0.916	21.5	0.378	42.0	0.186	62.5	0.138	83.0	0.015
-1.0	0.998	7.2	0.911	22.0	0.357	42.5	0.190	63.0	0.134	83.5	0.013
-0.8	0.998	7.4	0.907	22.5	0.336	43.0	0.194	63.5	0.130	84.0	0.012
-0.6	0.999	7.6	0.902	23.0	0.315	43.5	0.198	64.0	0.126	84.5	0.010
-0.4	0.999	7.8	0.897	23.5	0.295	44.0	0.201	64.5	0.122	85.0	0.009
-0.2	1.000	8.0	0.892	24.0	0.274	44.5	0.203	65.0	0.118	85.5	0.008
0.0	1.000	8.2	0.886	24.5	0.254	45.0	0.206	65.5	0.115	86.0	0.007
0.2	1.000	8.4	0.881	25.0	0.235	45.5	0.207	66.0	0.111	86.5	0.006
0.4	0.999	8.6	0.875	25.5	0.215	46.0	0.209	66.5	0.107	87.0	0.005
0.6	0.999	8.8	0.870	26.0	0.196	46.5	0.210	67.0	0.103	87.5	0.004
0.8	0.998	9.0	0.864	26.5	0.177	47.0	0.211	67.5	0.099	88.0	0.003
1.0	0.998	9.2	0.858	27.0	0.158	47.5	0.212	68.0	0.096	88.5	0.002
1.2	0.997	9.4	0.852	27.5	0.140	48.0	0.212	68.5	0.092	89.0	0.002
1.4	0.996	9.6	0.846	28.0	0.123	48.5	0.212	69.0	0.089	89.5	0.001
1.6	0.995	9.8	0.840	28.5	0.105	49.0	0.211	69.5	0.085	90.0	0.001
1.8	0.994	10.0	0.834	29.0	0.088	49.5	0.211	70.0	0.082		
2.0	0.993	10.2	0.827	29.5	0.072	50.0	0.210	70.5	0.078		
2.2	0.991	10.4	0.821	30.0	0.056	50.5	0.209	71.0	0.075		

Elevação 3



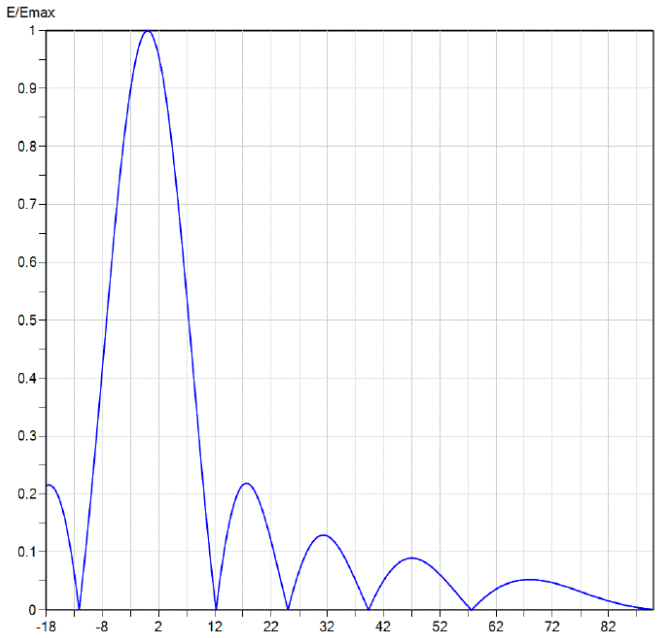
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.642	2.4	0.977	10.6	0.609	30.5	0.218	51.0	0.085	71.5	0.066
-9.5	0.673	2.6	0.973	10.8	0.596	31.0	0.217	51.5	0.089	72.0	0.063
-9.0	0.703	2.8	0.969	11.0	0.584	31.5	0.215	52.0	0.093	72.5	0.060
-8.5	0.731	3.0	0.965	11.5	0.551	32.0	0.213	52.5	0.097	73.0	0.058
-8.0	0.759	3.2	0.960	12.0	0.519	32.5	0.209	53.0	0.100	73.5	0.055
-7.5	0.786	3.4	0.955	12.5	0.486	33.0	0.204	53.5	0.103	74.0	0.052
-7.0	0.811	3.6	0.949	13.0	0.453	33.5	0.199	54.0	0.106	74.5	0.050
-6.5	0.836	3.8	0.944	13.5	0.420	34.0	0.193	54.5	0.108	75.0	0.047
-6.0	0.858	4.0	0.938	14.0	0.387	34.5	0.187	55.0	0.110	75.5	0.045
-5.5	0.880	4.2	0.931	14.5	0.354	35.0	0.180	55.5	0.112	76.0	0.042
-5.0	0.900	4.4	0.925	15.0	0.321	35.5	0.172	56.0	0.113	76.5	0.040
-4.5	0.918	4.6	0.918	15.5	0.289	36.0	0.164	56.5	0.115	77.0	0.037
-4.0	0.935	4.8	0.911	16.0	0.257	36.5	0.156	57.0	0.115	77.5	0.035
-3.5	0.949	5.0	0.903	16.5	0.226	37.0	0.147	57.5	0.116	78.0	0.033
-3.0	0.962	5.2	0.896	17.0	0.195	37.5	0.138	58.0	0.116	78.5	0.030
-2.8	0.967	5.4	0.888	17.5	0.165	38.0	0.129	58.5	0.116	79.0	0.028
-2.6	0.971	5.6	0.880	18.0	0.136	38.5	0.119	59.0	0.116	79.5	0.026
-2.4	0.975	5.8	0.871	18.5	0.108	39.0	0.110	59.5	0.116	80.0	0.024
-2.2	0.979	6.0	0.863	19.0	0.081	39.5	0.100	60.0	0.115	80.5	0.023
-2.0	0.983	6.2	0.854	19.5	0.054	40.0	0.090	60.5	0.114	81.0	0.021
-1.8	0.986	6.4	0.844	20.0	0.029	40.5	0.080	61.0	0.113	81.5	0.019
-1.6	0.989	6.6	0.835	20.5	0.005	41.0	0.070	61.5	0.112	82.0	0.017
-1.4	0.991	6.8	0.825	21.0	0.018	41.5	0.060	62.0	0.110	82.5	0.016
-1.2	0.993	7.0	0.816	21.5	0.040	42.0	0.051	62.5	0.109	83.0	0.014
-1.0	0.995	7.2	0.805	22.0	0.061	42.5	0.041	63.0	0.107	83.5	0.013
-0.8	0.997	7.4	0.795	22.5	0.080	43.0	0.031	63.5	0.105	84.0	0.011
-0.6	0.998	7.6	0.785	23.0	0.098	43.5	0.022	64.0	0.103	84.5	0.010
-0.4	0.999	7.8	0.774	23.5	0.115	44.0	0.013	64.5	0.101	85.0	0.009
-0.2	1.000	8.0	0.764	24.0	0.130	44.5	0.004	65.0	0.099	85.5	0.008
0.0	1.000	8.2	0.753	24.5	0.145	45.0	0.005	65.5	0.097	86.0	0.007
0.2	1.000	8.4	0.741	25.0	0.158	45.5	0.013	66.0	0.095	86.5	0.006
0.4	0.999	8.6	0.730	25.5	0.169	46.0	0.021	66.5	0.092	87.0	0.005
0.6	0.998	8.8	0.719	26.0	0.180	46.5	0.029	67.0	0.089	87.5	0.004
0.8	0.997	9.0	0.707	26.5	0.189	47.0	0.037	67.5	0.087	88.0	0.003
1.0	0.995	9.2	0.695	27.0	0.196	47.5	0.044	68.0	0.084	88.5	0.002
1.2	0.994	9.4	0.683	27.5	0.203	48.0	0.051	68.5	0.082	89.0	0.002
1.4	0.992	9.6	0.671	28.0	0.208	48.5	0.057	69.0	0.079	89.5	0.001
1.6	0.989	9.8	0.659	28.5	0.213	49.0	0.063	69.5	0.076	90.0	0.001
1.8	0.987	10.0	0.647	29.0	0.216	49.5	0.069	70.0	0.074		
2.0	0.984	10.2	0.634	29.5	0.218	50.0	0.075	70.5	0.071		
2.2	0.981	10.4	0.622	30.0	0.219	50.5	0.080	71.0	0.068		

Elevação 4



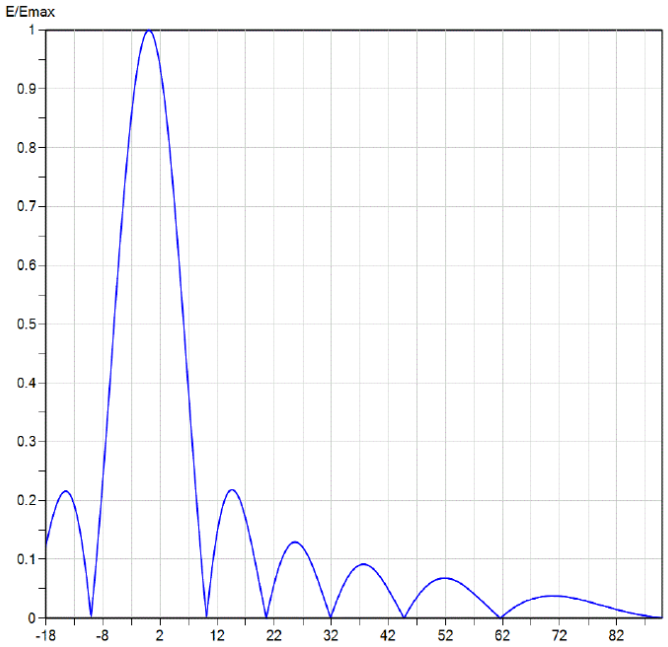
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.424	2.4	0.959	10.6	0.373	30.5	0.040	51.0	0.018	71.5	0.058
-9.5	0.468	2.6	0.953	10.8	0.355	31.0	0.025	51.5	0.011	72.0	0.056
-9.0	0.513	2.8	0.945	11.0	0.338	31.5	0.010	52.0	0.004	72.5	0.054
-8.5	0.556	3.0	0.938	11.5	0.294	32.0	0.004	52.5	0.002	73.0	0.052
-8.0	0.599	3.2	0.929	12.0	0.251	32.5	0.018	53.0	0.008	73.5	0.049
-7.5	0.641	3.4	0.920	12.5	0.209	33.0	0.031	53.5	0.014	74.0	0.047
-7.0	0.682	3.6	0.910	13.0	0.168	33.5	0.043	54.0	0.020	74.5	0.045
-6.5	0.721	3.8	0.900	13.5	0.128	34.0	0.055	54.5	0.026	75.0	0.043
-6.0	0.759	4.0	0.890	14.0	0.090	34.5	0.066	55.0	0.031	75.5	0.041
-5.5	0.795	4.2	0.879	14.5	0.054	35.0	0.076	55.5	0.036	76.0	0.039
-5.0	0.828	4.4	0.868	15.0	0.020	35.5	0.086	56.0	0.041	76.5	0.037
-4.5	0.859	4.6	0.856	15.5	0.013	36.0	0.094	56.5	0.045	77.0	0.034
-4.0	0.887	4.8	0.844	16.0	0.043	36.5	0.101	57.0	0.049	77.5	0.032
-3.5	0.912	5.0	0.831	16.5	0.071	37.0	0.108	57.5	0.053	78.0	0.031
-3.0	0.935	5.2	0.818	17.0	0.096	37.5	0.114	58.0	0.056	78.5	0.029
-2.8	0.943	5.4	0.805	17.5	0.119	38.0	0.118	58.5	0.060	79.0	0.026
-2.6	0.950	5.6	0.791	18.0	0.140	38.5	0.122	59.0	0.062	79.5	0.025
-2.4	0.958	5.8	0.777	18.5	0.158	39.0	0.125	59.5	0.065	80.0	0.023
-2.2	0.964	6.0	0.763	19.0	0.174	39.5	0.127	60.0	0.067	80.5	0.022
-2.0	0.970	6.2	0.748	19.5	0.187	40.0	0.128	60.5	0.069	81.0	0.020
-1.8	0.976	6.4	0.733	20.0	0.198	40.5	0.128	61.0	0.071	81.5	0.018
-1.6	0.981	6.6	0.717	20.5	0.207	41.0	0.128	61.5	0.072	82.0	0.016
-1.4	0.985	6.8	0.702	21.0	0.213	41.5	0.126	62.0	0.073	82.5	0.015
-1.2	0.989	7.0	0.686	21.5	0.217	42.0	0.124	62.5	0.074	83.0	0.014
-1.0	0.992	7.2	0.669	22.0	0.219	42.5	0.121	63.0	0.075	83.5	0.012
-0.8	0.995	7.4	0.653	22.5	0.218	43.0	0.118	63.5	0.075	84.0	0.011
-0.6	0.997	7.6	0.636	23.0	0.216	43.5	0.114	64.0	0.075	84.5	0.010
-0.4	0.999	7.8	0.620	23.5	0.212	44.0	0.110	64.5	0.075	85.0	0.008
-0.2	1.000	8.0	0.603	24.0	0.206	44.5	0.105	65.0	0.075	85.5	0.007
0.0	1.000	8.2	0.586	24.5	0.199	45.0	0.099	65.5	0.074	86.0	0.006
0.2	1.000	8.4	0.568	25.0	0.190	45.5	0.093	66.0	0.074	86.5	0.006
0.4	0.999	8.6	0.551	25.5	0.180	46.0	0.087	66.5	0.073	87.0	0.005
0.6	0.997	8.8	0.533	26.0	0.169	46.5	0.081	67.0	0.072	87.5	0.004
0.8	0.995	9.0	0.516	26.5	0.157	47.0	0.074	67.5	0.070	88.0	0.003
1.0	0.992	9.2	0.498	27.0	0.143	47.5	0.067	68.0	0.069	88.5	0.002
1.2	0.989	9.4	0.480	27.5	0.130	48.0	0.060	68.5	0.068	89.0	0.002
1.4	0.985	9.6	0.462	28.0	0.115	48.5	0.053	69.0	0.066	89.5	0.001
1.6	0.981	9.8	0.445	28.5	0.101	49.0	0.046	69.5	0.065	90.0	0.001
1.8	0.977	10.0	0.427	29.0	0.085	49.5	0.039	70.0	0.063		
2.0	0.971	10.2	0.409	29.5	0.070	50.0	0.032	70.5	0.061		
2.2	0.966	10.4	0.391	30.0	0.055	50.5	0.025	71.0	0.059		

Elevação 5



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.204	2.4	0.937	10.6	0.144	30.5	0.127	51.0	0.070	71.5	0.048
-9.5	0.257	2.6	0.926	10.8	0.124	31.0	0.129	51.5	0.066	72.0	0.047
-9.0	0.311	2.8	0.915	11.0	0.105	31.5	0.129	52.0	0.061	72.5	0.046
-8.5	0.366	3.0	0.903	11.5	0.059	32.0	0.128	52.5	0.056	73.0	0.044
-8.0	0.422	3.2	0.890	12.0	0.015	32.5	0.124	53.0	0.051	73.5	0.043
-7.5	0.478	3.4	0.876	12.5	0.025	33.0	0.120	53.5	0.045	74.0	0.041
-7.0	0.533	3.6	0.862	13.0	0.061	33.5	0.115	54.0	0.040	74.5	0.040
-6.5	0.588	3.8	0.847	13.5	0.094	34.0	0.108	54.5	0.034	75.0	0.038
-6.0	0.641	4.0	0.831	14.0	0.123	34.5	0.100	55.0	0.028	75.5	0.037
-5.5	0.692	4.2	0.814	14.5	0.149	35.0	0.091	55.5	0.023	76.0	0.035
-5.0	0.741	4.4	0.797	15.0	0.170	35.5	0.082	56.0	0.017	76.5	0.033
-4.5	0.786	4.6	0.780	15.5	0.187	36.0	0.072	56.5	0.012	77.0	0.031
-4.0	0.828	4.8	0.762	16.0	0.201	36.5	0.061	57.0	0.006	77.5	0.030
-3.5	0.866	5.0	0.743	16.5	0.210	37.0	0.051	57.5	0.001	78.0	0.028
-3.0	0.900	5.2	0.724	17.0	0.216	37.5	0.040	58.0	0.004	78.5	0.026
-2.8	0.913	5.4	0.705	17.5	0.218	38.0	0.028	58.5	0.009	79.0	0.024
-2.6	0.924	5.6	0.685	18.0	0.217	38.5	0.017	59.0	0.013	79.5	0.023
-2.4	0.935	5.8	0.665	18.5	0.213	39.0	0.006	59.5	0.018	80.0	0.022
-2.2	0.945	6.0	0.644	19.0	0.206	39.5	0.004	60.0	0.022	80.5	0.020
-2.0	0.955	6.2	0.623	19.5	0.196	40.0	0.015	60.5	0.026	81.0	0.019
-1.8	0.963	6.4	0.602	20.0	0.184	40.5	0.024	61.0	0.029	81.5	0.017
-1.6	0.970	6.6	0.580	20.5	0.170	41.0	0.034	61.5	0.033	82.0	0.015
-1.4	0.977	6.8	0.558	21.0	0.154	41.5	0.043	62.0	0.036	82.5	0.014
-1.2	0.983	7.0	0.536	21.5	0.136	42.0	0.051	62.5	0.039	83.0	0.013
-1.0	0.988	7.2	0.514	22.0	0.118	42.5	0.058	63.0	0.041	83.5	0.012
-0.8	0.992	7.4	0.492	22.5	0.098	43.0	0.065	63.5	0.043	84.0	0.010
-0.6	0.996	7.6	0.470	23.0	0.078	43.5	0.071	64.0	0.045	84.5	0.009
-0.4	0.998	7.8	0.447	23.5	0.058	44.0	0.076	64.5	0.047	85.0	0.008
-0.2	0.999	8.0	0.425	24.0	0.038	44.5	0.080	65.0	0.048	85.5	0.007
0.0	1.000	8.2	0.402	24.5	0.018	45.0	0.084	65.5	0.050	86.0	0.006
0.2	0.999	8.4	0.380	25.0	0.001	45.5	0.086	66.0	0.051	86.5	0.005
0.4	0.998	8.6	0.357	25.5	0.019	46.0	0.088	66.5	0.052	87.0	0.004
0.6	0.996	8.8	0.335	26.0	0.037	46.5	0.089	67.0	0.052	87.5	0.004
0.8	0.992	9.0	0.313	26.5	0.053	47.0	0.090	67.5	0.052	88.0	0.003
1.0	0.988	9.2	0.291	27.0	0.068	47.5	0.089	68.0	0.052	88.5	0.002
1.2	0.983	9.4	0.269	27.5	0.081	48.0	0.088	68.5	0.052	89.0	0.002
1.4	0.978	9.6	0.248	28.0	0.093	48.5	0.086	69.0	0.052	89.5	0.001
1.6	0.971	9.8	0.226	28.5	0.103	49.0	0.084	69.5	0.051	90.0	0.001
1.8	0.964	10.0	0.205	29.0	0.112	49.5	0.082	70.0	0.051		
2.0	0.955	10.2	0.185	29.5	0.119	50.0	0.078	70.5	0.050		
2.2	0.946	10.4	0.164	30.0	0.124	50.5	0.074	71.0	0.049		

Elevação 6



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.013	2.4	0.910	10.6	0.044	30.5	0.039	51.0	0.067	71.5	0.038
-9.5	0.065	2.6	0.895	10.8	0.061	31.0	0.025	51.5	0.068	72.0	0.037
-9.0	0.122	2.8	0.879	11.0	0.077	31.5	0.010	52.0	0.068	72.5	0.037
-8.5	0.182	3.0	0.862	11.5	0.115	32.0	0.004	52.5	0.067	73.0	0.036
-8.0	0.245	3.2	0.843	12.0	0.146	32.5	0.018	53.0	0.066	73.5	0.036
-7.5	0.310	3.4	0.824	12.5	0.172	33.0	0.031	53.5	0.065	74.0	0.035
-7.0	0.377	3.6	0.804	13.0	0.192	33.5	0.043	54.0	0.063	74.5	0.034
-6.5	0.444	3.8	0.783	13.5	0.206	34.0	0.053	54.5	0.060	75.0	0.033
-6.0	0.511	4.0	0.762	14.0	0.215	34.5	0.063	55.0	0.057	75.5	0.032
-5.5	0.577	4.2	0.739	14.5	0.218	35.0	0.072	55.5	0.053	76.0	0.030
-5.0	0.641	4.4	0.716	15.0	0.216	35.5	0.078	56.0	0.050	76.5	0.029
-4.5	0.702	4.6	0.692	15.5	0.210	36.0	0.084	56.5	0.046	77.0	0.028
-4.0	0.759	4.8	0.668	16.0	0.200	36.5	0.088	57.0	0.041	77.5	0.026
-3.5	0.812	5.0	0.643	16.5	0.186	37.0	0.090	57.5	0.037	78.0	0.025
-3.0	0.859	5.2	0.618	17.0	0.168	37.5	0.091	58.0	0.032	78.5	0.024
-2.8	0.876	5.4	0.592	17.5	0.148	38.0	0.091	58.5	0.028	79.0	0.022
-2.6	0.893	5.6	0.566	18.0	0.126	38.5	0.089	59.0	0.023	79.5	0.021
-2.4	0.908	5.8	0.540	18.5	0.103	39.0	0.086	59.5	0.019	80.0	0.020
-2.2	0.922	6.0	0.514	19.0	0.078	39.5	0.082	60.0	0.014	80.5	0.018
-2.0	0.935	6.2	0.487	19.5	0.053	40.0	0.077	60.5	0.009	81.0	0.017
-1.8	0.947	6.4	0.460	20.0	0.029	40.5	0.071	61.0	0.005	81.5	0.016
-1.6	0.958	6.6	0.433	20.5	0.005	41.0	0.064	61.5	0.001	82.0	0.014
-1.4	0.968	6.8	0.406	21.0	0.018	41.5	0.056	62.0	0.003	82.5	0.013
-1.2	0.976	7.0	0.379	21.5	0.040	42.0	0.048	62.5	0.007	83.0	0.012
-1.0	0.983	7.2	0.352	22.0	0.059	42.5	0.040	63.0	0.011	83.5	0.011
-0.8	0.989	7.4	0.325	22.5	0.077	43.0	0.031	63.5	0.014	84.0	0.010
-0.6	0.994	7.6	0.298	23.0	0.092	43.5	0.022	64.0	0.017	84.5	0.009
-0.4	0.997	7.8	0.272	23.5	0.105	44.0	0.013	64.5	0.021	85.0	0.007
-0.2	0.999	8.0	0.246	24.0	0.115	44.5	0.004	65.0	0.023	85.5	0.007
0.0	1.000	8.2	0.221	24.5	0.122	45.0	0.005	65.5	0.026	86.0	0.006
0.2	0.999	8.4	0.195	25.0	0.127	45.5	0.013	66.0	0.028	86.5	0.005
0.4	0.997	8.6	0.170	25.5	0.129	46.0	0.021	66.5	0.030	87.0	0.004
0.6	0.994	8.8	0.146	26.0	0.129	46.5	0.029	67.0	0.032	87.5	0.003
0.8	0.989	9.0	0.122	26.5	0.126	47.0	0.036	67.5	0.033	88.0	0.003
1.0	0.983	9.2	0.099	27.0	0.120	47.5	0.042	68.0	0.035	88.5	0.002
1.2	0.976	9.4	0.077	27.5	0.113	48.0	0.048	68.5	0.036	89.0	0.002
1.4	0.968	9.6	0.055	28.0	0.104	48.5	0.053	69.0	0.037	89.5	0.001
1.6	0.959	9.8	0.034	28.5	0.093	49.0	0.057	69.5	0.037	90.0	0.001
1.8	0.948	10.0	0.013	29.0	0.081	49.5	0.061	70.0	0.038		
2.0	0.936	10.2	0.007	29.5	0.068	50.0	0.064	70.5	0.038		
2.2	0.923	10.4	0.025	30.0	0.054	50.5	0.066	71.0	0.038		