

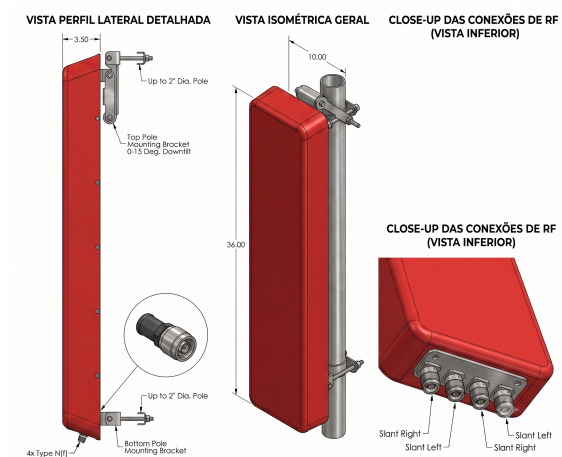
Descrição não informada.

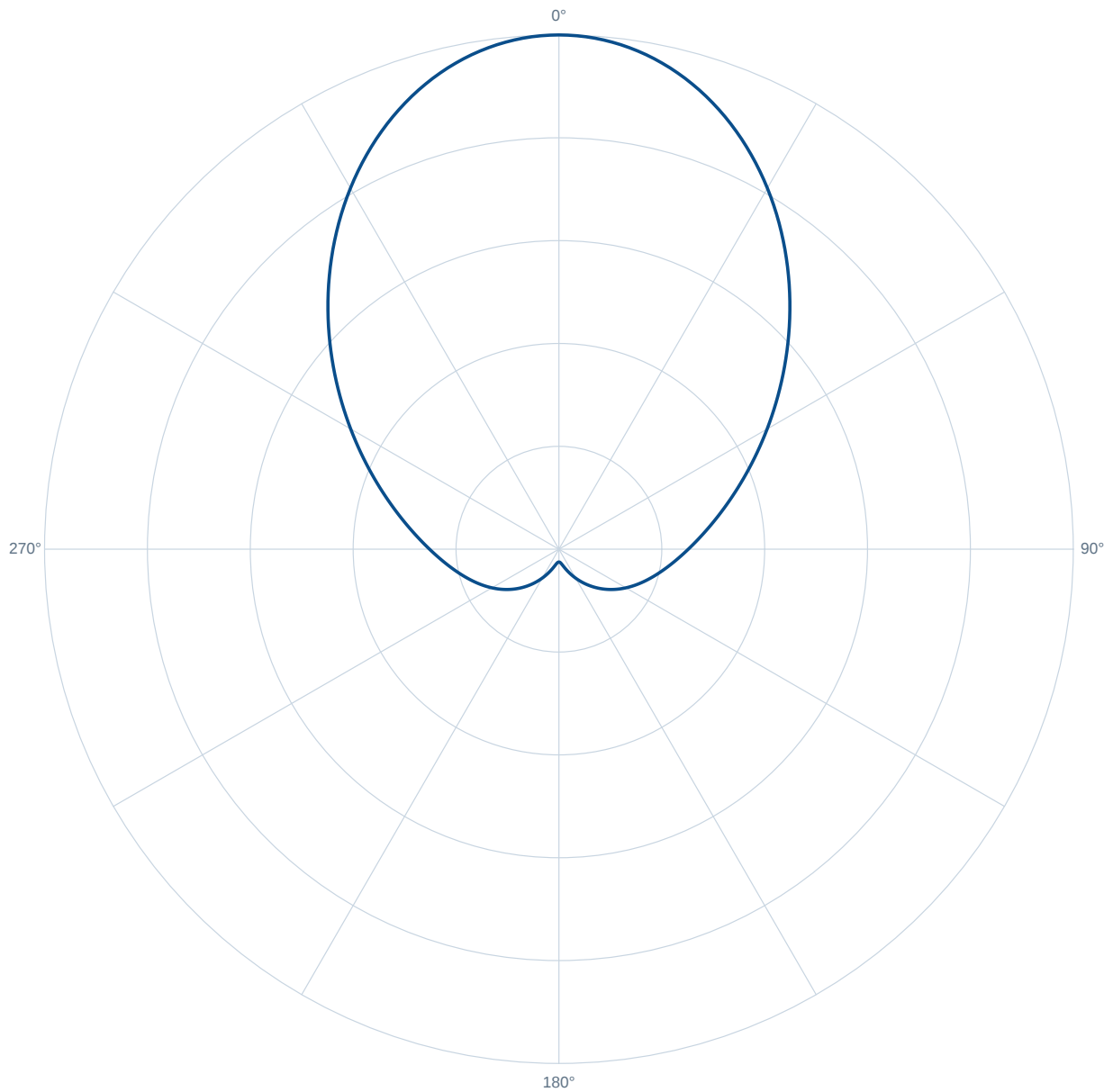


Características elétricas	
Item	Valor
Ganho cadastrado (referência)	19.00 dBd
HPBW horizontal	77.86°
HPBW vertical	3.07°
Faixa de frequência	76.10 – 6000.00 MHz
Polarização	H/V
Fabricante	EFTX Broadcast & Telecom
Categoria	Telecom



Validar autenticidade · 1.0





Parâmetros da configuração

HPBW HORIZONTAL

77.86°

GANHO

19.00 dBd

FRENTE/COSTAS

23.74 dB

RIPPLE

5.86 dB

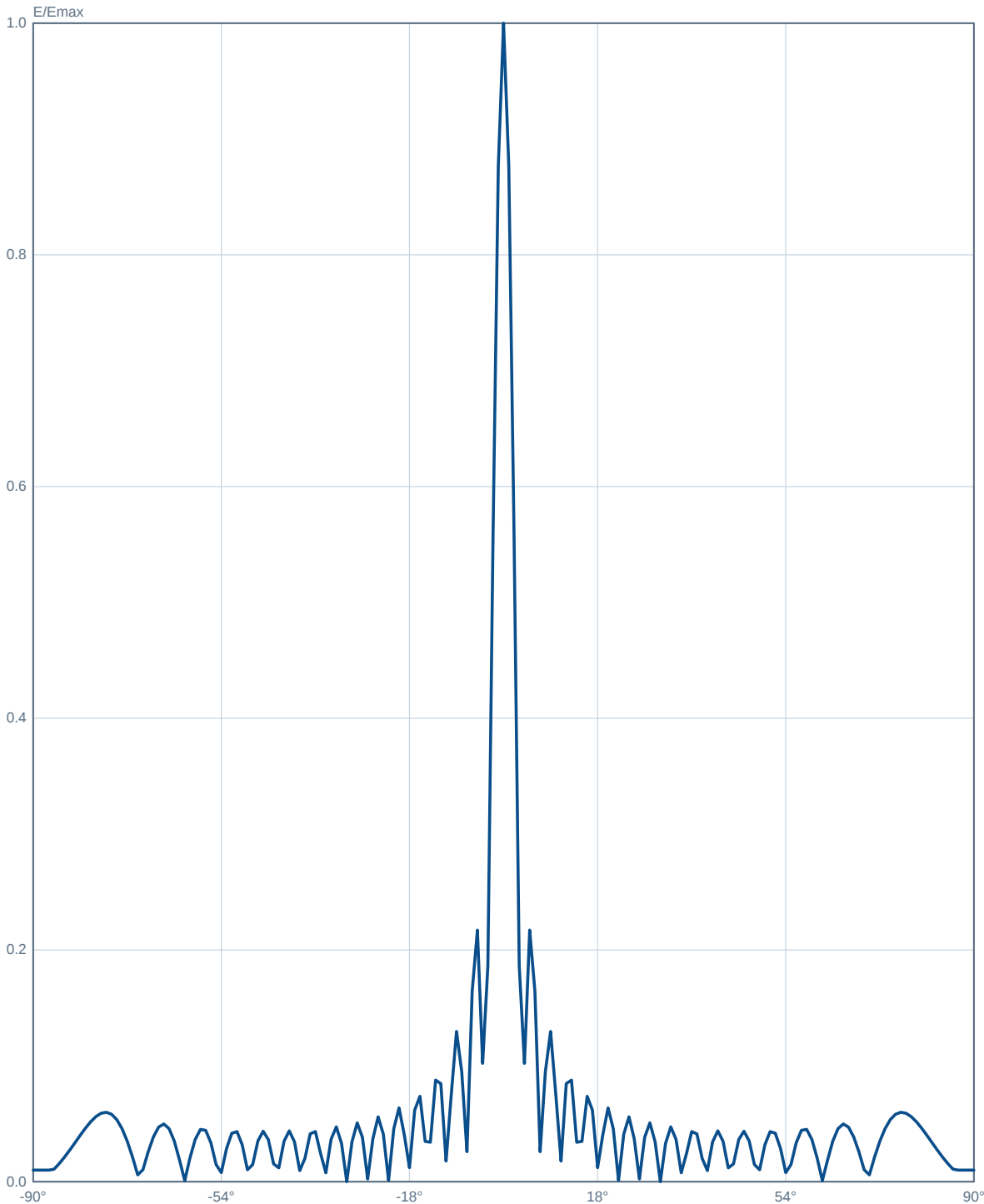
Tabela completa - Azimute



APTM-21-75-4-COPY · Azimute

Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB
0°	1.0000	-0.00	73°	0.3529	9.05	146°	0.0756	22.43	219°	0.0895	20.96	292°	0.3930	8.11
1°	0.9997	0.00	74°	0.3455	9.23	147°	0.0729	22.75	220°	0.0924	20.69	293°	0.4017	7.92
2°	0.9990	0.01	75°	0.3383	9.41	148°	0.0702	23.07	221°	0.0953	20.42	294°	0.4104	7.73
3°	0.9979	0.02	76°	0.3312	9.60	149°	0.0676	23.40	222°	0.0982	20.16	295°	0.4195	7.55
4°	0.9962	0.03	77°	0.3244	9.78	150°	0.0650	23.74	223°	0.1011	19.91	296°	0.4287	7.36
5°	0.9940	0.05	78°	0.3178	9.96	151°	0.0625	24.08	224°	0.1040	19.66	297°	0.4381	7.17
6°	0.9914	0.08	79°	0.3113	10.14	152°	0.0600	24.43	225°	0.1069	19.42	298°	0.4477	6.98
7°	0.9883	0.10	80°	0.3050	10.31	153°	0.0576	24.79	226°	0.1098	19.18	299°	0.4575	6.79
8°	0.9848	0.13	81°	0.2990	10.49	154°	0.0553	25.15	227°	0.1128	18.96	300°	0.4675	6.61
9°	0.9808	0.17	82°	0.2930	10.66	155°	0.0530	25.51	228°	0.1157	18.73	301°	0.4776	6.42
10°	0.9764	0.21	83°	0.2873	10.83	156°	0.0508	25.88	229°	0.1186	18.52	302°	0.4879	6.23
11°	0.9715	0.25	84°	0.2817	11.00	157°	0.0487	26.25	230°	0.1215	18.31	303°	0.4984	6.05
12°	0.9662	0.30	85°	0.2763	11.17	158°	0.0466	26.63	231°	0.1244	18.10	304°	0.5090	5.86
13°	0.9605	0.35	86°	0.2710	11.34	159°	0.0447	27.00	232°	0.1273	17.90	305°	0.5198	5.68
14°	0.9543	0.41	87°	0.2660	11.50	160°	0.0428	27.38	233°	0.1302	17.71	306°	0.5308	5.50
15°	0.9479	0.47	88°	0.2610	11.67	161°	0.0410	27.75	234°	0.1331	17.52	307°	0.5419	5.32
16°	0.9409	0.53	89°	0.2562	11.83	162°	0.0393	28.12	235°	0.1360	17.33	308°	0.5531	5.14
17°	0.9336	0.60	90°	0.2516	11.99	163°	0.0376	28.49	236°	0.1389	17.15	309°	0.5644	4.97
18°	0.9260	0.67	91°	0.2470	12.14	164°	0.0361	28.85	237°	0.1417	16.97	310°	0.5759	4.79
19°	0.9179	0.74	92°	0.2427	12.30	165°	0.0347	29.20	238°	0.1446	16.80	311°	0.5875	4.62
20°	0.9096	0.82	93°	0.2384	12.45	166°	0.0333	29.54	239°	0.1475	16.63	312°	0.5991	4.45
21°	0.9009	0.91	94°	0.2342	12.61	167°	0.0321	29.87	240°	0.1503	16.46	313°	0.6108	4.28
22°	0.8919	0.99	95°	0.2302	12.76	168°	0.0310	30.18	241°	0.1532	16.30	314°	0.6227	4.12
23°	0.8826	1.08	96°	0.2263	12.91	169°	0.0299	30.47	242°	0.1561	16.13	315°	0.6345	3.95
24°	0.8731	1.18	97°	0.2224	13.06	170°	0.0290	30.75	243°	0.1589	15.98	316°	0.6464	3.79
25°	0.8632	1.28	98°	0.2187	13.20	171°	0.0282	31.00	244°	0.1618	15.82	317°	0.6584	3.63
26°	0.8531	1.38	99°	0.2151	13.35	172°	0.0275	31.23	245°	0.1647	15.67	318°	0.6704	3.47
27°	0.8428	1.49	100°	0.2115	13.49	173°	0.0268	31.43	246°	0.1676	15.51	319°	0.6824	3.32
28°	0.8323	1.59	101°	0.2080	13.64	174°	0.0263	31.60	247°	0.1705	15.37	320°	0.6943	3.17
29°	0.8215	1.71	102°	0.2046	13.78	175°	0.0259	31.75	248°	0.1734	15.22	321°	0.7063	3.02
30°	0.8106	1.82	103°	0.2013	13.93	176°	0.0255	31.86	249°	0.1764	15.07	322°	0.7182	2.88
31°	0.7995	1.94	104°	0.1980	14.07	177°	0.0253	31.95	250°	0.1793	14.93	323°	0.7301	2.73
32°	0.7882	2.07	105°	0.1948	14.21	178°	0.0251	32.00	251°	0.1823	14.78	324°	0.7419	2.59
33°	0.7768	2.19	106°	0.1916	14.35	179°	0.0250	32.03	252°	0.1854	14.64	325°	0.7536	2.46
34°	0.7653	2.32	107°	0.1885	14.50	180°	0.0250	32.04	253°	0.1885	14.50	326°	0.7653	2.32
35°	0.7536	2.46	108°	0.1854	14.64	181°	0.0250	32.03	254°	0.1916	14.35	327°	0.7768	2.19
36°	0.7419	2.59	109°	0.1823	14.78	182°	0.0251	32.00	255°	0.1948	14.21	328°	0.7882	2.07
37°	0.7301	2.73	110°	0.1793	14.93	183°	0.0253	31.95	256°	0.1980	14.07	329°	0.7995	1.94
38°	0.7182	2.88	111°	0.1764	15.07	184°	0.0255	31.86	257°	0.2013	13.93	330°	0.8106	1.82
39°	0.7063	3.02	112°	0.1734	15.22	185°	0.0259	31.75	258°	0.2046	13.78	331°	0.8215	1.71
40°	0.6943	3.17	113°	0.1705	15.37	186°	0.0263	31.60	259°	0.2080	13.64	332°	0.8323	1.59
41°	0.6824	3.32	114°	0.1676	15.51	187°	0.0268	31.43	260°	0.2115	13.49	333°	0.8428	1.49
42°	0.6704	3.47	115°	0.1647	15.67	188°	0.0275	31.23	261°	0.2151	13.35	334°	0.8531	1.38
43°	0.6584	3.63	116°	0.1618	15.82	189°	0.0282	31.00	262°	0.2187	13.20	335°	0.8632	1.28
44°	0.6464	3.79	117°	0.1589	15.98	190°	0.0290	30.75	263°	0.2224	13.06	336°	0.8731	1.18
45°	0.6345	3.95	118°	0.1561	16.13	191°	0.0299	30.47	264°	0.2263	12.91	337°	0.8826	1.08
46°	0.6227	4.12	119°	0.1532	16.30	192°	0.0310	30.18	265°	0.2302	12.76	338°	0.8919	0.99
47°	0.6108	4.28	120°	0.1503	16.46	193°	0.0321	29.87	266°	0.2342	12.61	339°	0.9009	0.91
48°	0.5991	4.45	121°	0.1475	16.63	194°	0.0333	29.54	267°	0.2384	12.45	340°	0.9096	0.82
49°	0.5875	4.62	122°	0.1446	16.80	195°	0.0347	29.20	268°	0.2427	12.30	341°	0.9179	0.74
50°	0.5759	4.79	123°	0.1417	16.97	196°	0.0361	28.85	269°	0.2470	12.14	342°	0.9260	0.67
51°	0.5644	4.97	124°	0.1389	17.15	197°	0.0376	28.49	270°	0.2516	11.99	343°	0.9336	0.60
52°	0.5531	5.14	125°	0.1360	17.33	198°	0.0393	28.12	271°	0.2562	11.83	344°	0.9409	0.53
53°	0.5419	5.32	126°	0.1331	17.52	199°	0.0410	27.75	272°	0.2610	11.67	345°	0.9479	0.47
54°	0.5308	5.50	127°	0.1302	17.71	200°	0.0428	27.38	273°	0.2660	11.50	346°	0.9543	0.41
55°	0.5198	5.68	128°	0.1273	17.90	201°	0.0447	27.00	274°	0.2710	11.34	347°	0.9605	0.35
56°	0.5090	5.86	129°	0.1244	18.10	202°	0.0466	26.63	275°	0.2763	11.17	348°	0.9662	0.30
57°	0.4984	6.05	130°	0.1215	18.31	203°	0.0487	26.25	276°	0.2817	11.00	349°	0.9715	0.25
58°	0.4879	6.23	131°	0.1186	18.52	204°	0.0508	25.88	277°	0.2873	10.83	350°	0.9764	0.21
59°	0.4776	6.42	132°	0.1157	18.73	205°	0.0530	25.51	278°	0.2930	10.66	351°	0.9808	0.17
60°	0.4675	6.61	133°	0.1128	18.96	206°	0.0553	25.15	279°	0.2990	10.49	352°	0.9848	0.13
61°	0.4575	6.79	134°	0.1098	19.18	207°	0.0576	24.79	280°	0.3050	10.31	353°	0.9883	0.10
62°	0.4477	6.98	135°	0.1069	19.42	208°	0.0600	24.43	281°	0.3113	10.14	354°	0.9914	0.08
63°	0.4381	7.17	136°	0.1040	19.66	209°	0.0625	24.08	282°	0.3178	9.96	355°	0.9940	0.05
64°	0.4287	7.36	137°	0.1011	19.91	210°	0.0650	23.74	283°	0.3244	9.78	356°	0.9962	0.03
65°	0.4195	7.55	138°	0.0982	20.16	211°	0.0676	23.40	284°	0.3312	9.60	357°	0.9979	0.02
66°	0.4104	7.73	139°	0.0953	20.42	212°	0.0702	23.07	285°	0.3383	9.41	358°	0.9990	0.01
67°	0.4017	7.92	140°	0.0924	20.69	213°	0.0729	22.75	286°	0.3455	9.23	359°	0.9997	0.00
68°	0.3930	8.11	141°	0.0895	20.96	214°	0.0756	22.43	287°	0.3529	9.05	360°	1.0000	-0.00
69°	0.3846	8.30	142°	0.0867	21.24	215°	0.0783	22.12	288°	0.3605	8.86			
70°	0.3764	8.49	143°	0.0839	21.53	216°	0.0811	21.82	289°	0.3684	8.67			
71°	0.3684	8.67	144°	0.0811	21.82	217°	0.0839	21.53	290°	0.3764	8.49			
72°	0.3605	8.86	145°	0.0783	22.12	218°	0.0867	21.24	291°	0.3846	8.30			

E/E_{max} de campo normalizado · atenuação positiva em dB



Parâmetros da configuração

ELEMENTOS	HPBW VERTICAL	GANHO	PRIMEIRO NULO
N/D	3.07°	19.00 dBd	6.90°

Tabela completa - Elevação



APTM-21-75-4-COPY · Elevação

Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB	Ângulo	E/E _{max}	Aten. dB
-90°	0.0100	40.00	-53.5°	0.0182	34.79	-17°	0.0618	24.18	19.5°	0.0522	25.65	56°	0.0336	29.47
-89.5°	0.0100	40.00	-53°	0.0286	30.87	-16.5°	0.0677	23.38	20°	0.0637	23.92	56.5°	0.0390	28.19
-89°	0.0100	40.00	-52.5°	0.0352	29.07	-16°	0.0737	22.65	20.5°	0.0547	25.24	57°	0.0443	27.06
-88.5°	0.0100	40.00	-52°	0.0418	27.57	-15.5°	0.0542	25.31	21°	0.0457	26.80	57.5°	0.0447	26.99
-88°	0.0100	40.00	-51.5°	0.0425	27.43	-15°	0.0348	29.17	21.5°	0.0234	32.60	58°	0.0451	26.91
-87.5°	0.0100	40.00	-51°	0.0432	27.29	-14.5°	0.0344	29.26	22°	0.0012	58.58	58.5°	0.0408	27.79
-87°	0.0100	40.01	-50.5°	0.0375	28.53	-14°	0.0340	29.36	22.5°	0.0211	33.52	59°	0.0364	28.77
-86.5°	0.0104	39.67	-50°	0.0317	29.97	-13.5°	0.0609	24.31	23°	0.0410	27.75	59.5°	0.0285	30.91
-86°	0.0108	39.34	-49.5°	0.0210	33.55	-13°	0.0877	21.14	23.5°	0.0485	26.29	60°	0.0205	33.75
-85.5°	0.0132	37.56	-49°	0.0103	39.76	-12.5°	0.0862	21.29	24°	0.0560	25.04	60.5°	0.0107	39.40
-85°	0.0157	36.08	-48.5°	0.0125	38.05	-12°	0.0847	21.44	24.5°	0.0465	26.65	61°	0.0009	60.83
-84.5°	0.0185	34.67	-48°	0.0148	36.62	-11.5°	0.0512	25.81	25°	0.0371	28.62	61.5°	0.0098	40.17
-84°	0.0212	33.46	-47.5°	0.0250	32.05	-11°	0.0178	35.01	25.5°	0.0197	34.12	62°	0.0187	34.56
-83.5°	0.0243	32.30	-47°	0.0352	29.08	-10.5°	0.0465	26.65	26°	0.0023	52.67	62.5°	0.0269	31.42
-83°	0.0273	31.28	-46.5°	0.0394	28.10	-10°	0.0753	22.47	26.5°	0.0203	33.85	63°	0.0350	29.11
-82.5°	0.0305	30.33	-46°	0.0436	27.22	-9.5°	0.1025	19.79	27°	0.0383	28.34	63.5°	0.0404	27.87
-82°	0.0336	29.47	-45.5°	0.0399	27.97	-9°	0.1297	17.74	27.5°	0.0445	27.03	64°	0.0458	26.78
-81.5°	0.0368	28.68	-45°	0.0363	28.80	-8.5°	0.1123	18.99	28°	0.0508	25.89	64.5°	0.0478	26.41
-81°	0.0400	27.95	-44.5°	0.0258	31.75	-8°	0.0949	20.45	28.5°	0.0426	27.41	65°	0.0498	26.05
-80.5°	0.0431	27.31	-44°	0.0154	36.28	-7.5°	0.0604	24.38	29°	0.0345	29.25	65.5°	0.0485	26.29
-80°	0.0462	26.71	-43.5°	0.0136	37.31	-7°	0.0259	31.74	29.5°	0.0172	35.28	66°	0.0471	26.53
-79.5°	0.0490	26.20	-43°	0.0119	38.47	-6.5°	0.0952	20.43	30°	0.0000	80.00	66.5°	0.0429	27.36
-79°	0.0517	25.73	-42.5°	0.0234	32.61	-6°	0.1645	15.68	30.5°	0.0165	35.64	67°	0.0386	28.27
-78.5°	0.0540	25.36	-42°	0.0349	29.14	-5.5°	0.1908	14.39	31°	0.0330	29.62	67.5°	0.0322	29.85
-78°	0.0562	25.01	-41.5°	0.0394	28.09	-5°	0.2172	13.26	31.5°	0.0402	27.92	68°	0.0257	31.79
-77.5°	0.0576	24.79	-41°	0.0439	27.15	-4.5°	0.1596	15.94	32°	0.0473	26.50	68.5°	0.0180	34.88
-77°	0.0591	24.57	-40.5°	0.0391	28.15	-4°	0.1021	19.82	32.5°	0.0420	27.54	69°	0.0103	39.73
-76.5°	0.0595	24.51	-40°	0.0344	29.27	-3.5°	0.1442	16.82	33°	0.0366	28.73	69.5°	0.0081	41.82
-76°	0.0599	24.45	-39.5°	0.0220	33.17	-3°	0.1863	14.60	33.5°	0.0221	33.10	70°	0.0059	44.60
-75.5°	0.0590	24.58	-39°	0.0095	40.40	-2.5°	0.3737	8.55	34°	0.0077	42.33	70.5°	0.0136	37.31
-75°	0.0582	24.70	-38.5°	0.0149	36.56	-2°	0.5610	5.02	34.5°	0.0159	35.97	71°	0.0214	33.41
-74.5°	0.0559	25.06	-38°	0.0202	33.90	-1.5°	0.7189	2.87	35°	0.0242	32.33	71.5°	0.0281	31.01
-74°	0.0535	25.43	-37.5°	0.0307	30.25	-1°	0.8768	1.14	35.5°	0.0337	29.44	72°	0.0349	29.14
-73.5°	0.0497	26.08	-37°	0.0413	27.68	-0.5°	0.9384	0.55	36°	0.0433	27.27	72.5°	0.0403	27.89
-73°	0.0458	26.79	-36.5°	0.0423	27.48	0°	1.0000	-0.00	36.5°	0.0423	27.48	73°	0.0458	26.79
-72.5°	0.0403	27.89	-36°	0.0433	27.27	0.5°	0.9384	0.55	37°	0.0413	27.68	73.5°	0.0497	26.08
-72°	0.0349	29.14	-35.5°	0.0337	29.44	1°	0.8768	1.14	37.5°	0.0307	30.25	74°	0.0535	25.43
-71.5°	0.0281	31.01	-35°	0.0242	32.33	1.5°	0.7189	2.87	38°	0.0202	33.90	74.5°	0.0559	25.06
-71°	0.0214	33.41	-34.5°	0.0159	35.97	2°	0.5610	5.02	38.5°	0.0149	36.56	75°	0.0582	24.70
-70.5°	0.0136	37.31	-34°	0.0077	42.33	2.5°	0.3737	8.55	39°	0.0095	40.40	75.5°	0.0590	24.58
-70°	0.0059	44.60	-33.5°	0.0221	33.10	3°	0.1863	14.60	39.5°	0.0220	33.17	76°	0.0599	24.45
-69.5°	0.0081	41.82	-33°	0.0366	28.73	3.5°	0.1442	16.82	40°	0.0344	29.27	76.5°	0.0595	24.51
-69°	0.0103	39.73	-32.5°	0.0420	27.54	4°	0.1021	19.82	40.5°	0.0391	28.15	77°	0.0591	24.57
-68.5°	0.0180	34.88	-32°	0.0473	26.50	4.5°	0.1596	15.94	41°	0.0439	27.15	77.5°	0.0576	24.79
-68°	0.0257	31.79	-31.5°	0.0402	27.92	5°	0.2172	13.26	41.5°	0.0394	28.09	78°	0.0562	25.01
-67.5°	0.0322	29.85	-31°	0.0330	29.62	5.5°	0.1908	14.39	42°	0.0349	29.14	78.5°	0.0540	25.36
-67°	0.0386	28.27	-30.5°	0.0165	35.64	6°	0.1645	15.68	42.5°	0.0234	32.61	79°	0.0517	25.73
-66.5°	0.0429	27.36	-30°	0.0000	80.00	6.5°	0.0952	20.43	43°	0.0119	38.47	79.5°	0.0490	26.20
-66°	0.0471	26.53	-29.5°	0.0172	35.28	7°	0.0259	31.74	43.5°	0.0136	37.31	80°	0.0462	26.71
-65.5°	0.0485	26.29	-29°	0.0345	29.25	7.5°	0.0604	24.38	44°	0.0154	36.28	80.5°	0.0431	27.31
-65°	0.0498	26.05	-28.5°	0.0426	27.41	8°	0.0949	20.45	44.5°	0.0258	31.75	81°	0.0400	27.95
-64.5°	0.0478	26.41	-28°	0.0508	25.89	8.5°	0.1123	18.99	45°	0.0363	28.80	81.5°	0.0368	28.68
-64°	0.0458	26.78	-27.5°	0.0445	27.03	9°	0.1297	17.74	45.5°	0.0399	27.97	82°	0.0336	29.47
-63.5°	0.0404	27.87	-27°	0.0383	28.34	9.5°	0.1025	19.79	46°	0.0436	27.22	82.5°	0.0305	30.33
-63°	0.0350	29.11	-26.5°	0.0203	33.85	10°	0.0753	22.47	46.5°	0.0394	28.10	83°	0.0273	31.28
-62.5°	0.0269	31.42	-26°	0.0023	52.67	10.5°	0.0465	26.65	47°	0.0352	29.08	83.5°	0.0243	32.30
-62°	0.0187	34.56	-25.5°	0.0197	34.12	11°	0.0178	35.01	47.5°	0.0250	32.05	84°	0.0212	33.46
-61.5°	0.0098	40.17	-25°	0.0371	28.62	11.5°	0.0512	25.81	48°	0.0148	36.62	84.5°	0.0185	34.67
-61°	0.0009	60.83	-24.5°	0.0465	26.65	12°	0.0847	21.44	48.5°	0.0125	38.05	85°	0.0157	36.08
-60.5°	0.0107	39.40	-24°	0.0560	25.04	12.5°	0.0862	21.29	49°	0.0103	39.76	85.5°	0.0132	37.56
-60°	0.0205	33.75	-23.5°	0.0485	26.29	13°	0.0877	21.14	49.5°	0.0210	33.55	86°	0.0108	39.34
-59.5°	0.0285	30.91	-23°	0.0410	27.75	13.5°	0.0609	24.31	50°	0.0317	29.97	86.5°	0.0104	39.67
-59°	0.0364	28.77	-22.5°	0.0211	33.52	14°	0.0340	29.36	50.5°	0.0375	28.53	87°	0.0100	40.01
-58.5°	0.0408	27.79	-22°	0.0012	58.58	14.5°	0.0344	29.26	51°	0.0432	27.29	87.5°	0.0100	40.00
-58°	0.0451	26.91	-21.5°	0.0234	32.60	15°	0.0348	29.17	51.5°	0.0425	27.43	88°	0.0100	40.00
-57.5°	0.0447	26.99	-21°	0.0457	26.80	15.5°	0.0542	25.31	52°	0.0418	27.57	88.5°	0.0100	40.00
-57°	0.0443	27.06	-20.5°	0.0547	25.24	16°	0.0737	22.65	52.5°	0.0352	29.07	89°	0.0100	40.00
-56.5°	0.0390	28.19	-20°	0.0637	23.92	16.5°	0.0677	23.38	53°	0.0286	30.87	89.5°	0.0100	40.00
-56°	0.0336	29.47	-19.5°	0.0522	25.65	17°	0.0618	24.18	53.5°	0.0182	34.79	90°	0.0100	40.00
-55.5°	0.0242	32.32	-19°	0.0407	27.82	17.5°	0.0370	28.65	54°	0.0078	42.14			
-55°	0.0148	36.59	-18.5°	0.0264	31.57	18°	0.0121	38.34	54.5°	0.0113	38.93			
-54.5°	0.0113	38.93	-18°	0.0121	38.34	18.5°	0.0264	31.57	55°	0.0148	36.59			
-54°	0.0078	42.14	-17.5°	0.0370	28.65	19°	0.0407	27.82	55.5°	0.0242	32.32			

E/E_{max} de campo normalizado · atenuação positiva em dB