

The EFTX MIMO VHF Pol. H/V Panel Antenna is designed for demanding TV 3.0 transmissions, featuring a flexible, robust, and lightweight single-panel or composite design. Its dual-polarization MIMO arrangement ensures high spectral efficiency and interference robustness, with over 35 dB cross-polarization isolation. Offering 7.9 dBd gain, it provides broad, uniform coverage with excellent VSWR (<1.05 for 174-186 MHz, <1.2 for up to 216 MHz). It features a polished aluminum finish and silver-plated brass connections for durability in harsh environments.



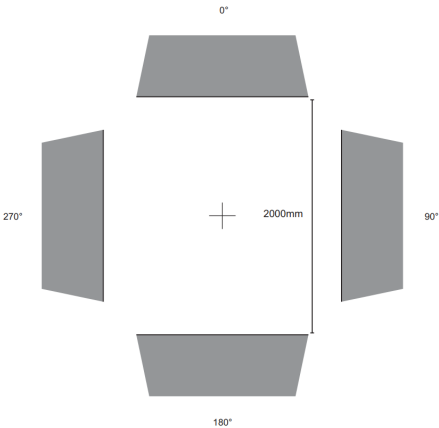
Características elétricas

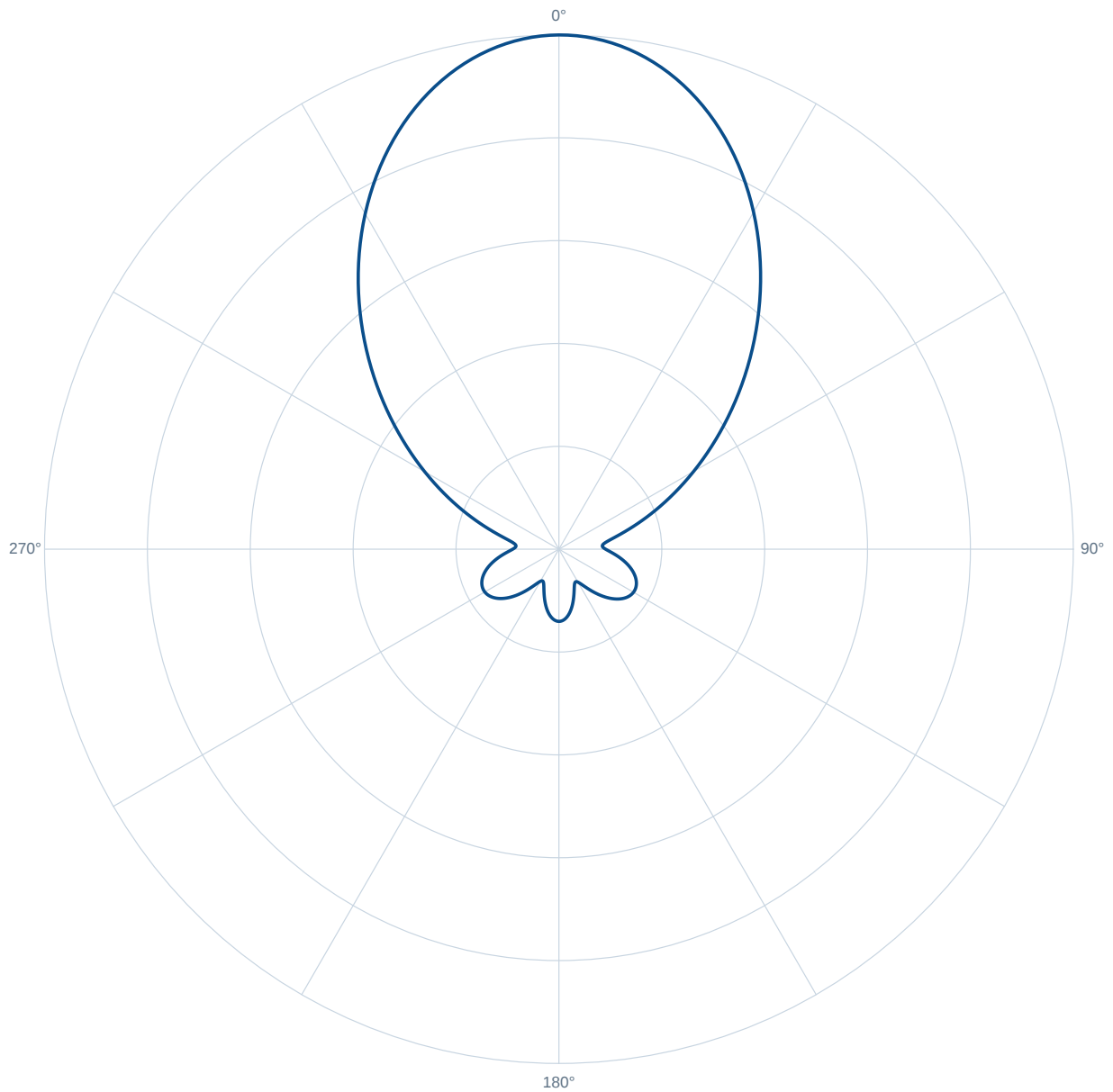
Item	Valor
Ganho cadastrado (referência)	7.90 dBd
HPBW horizontal	66.52°
HPBW vertical	69.58°
Faixa de frequência	174.00 – 216.00 MHz
Polarização	Horizontal / Vertical (MIMO)
Fabricante	EFTX Broadcast & Telecom
Categoria	TV
Cross-Pol Isolation	> 35 dB at 360°
RF Input Connector	EIA 1 5/8 inch
Maximum Power	5 kW per port
VSWR (Channels 7 & 8)	$< 1.06:1$
VSWR (up to Channel 13)	$< 1.20:1$



Validar autenticidade · 1.0

Características mecânicas	
Item	Valor
Dimensions (LxHxD)	1300 mm x 1300 mm x 570 mm
Weight	26 kg
Wind Load (at 160 km/h)	Frontal: 810 N; Lateral: 700 N
Maximum Wind Speed	225 km/h





Parâmetros da configuração

HPBW HORIZONTAL

66.52°

GANHO

7.90 dBd

FRENTE/COSTAS

17.05 dB

RIPPLE

5.85 dB

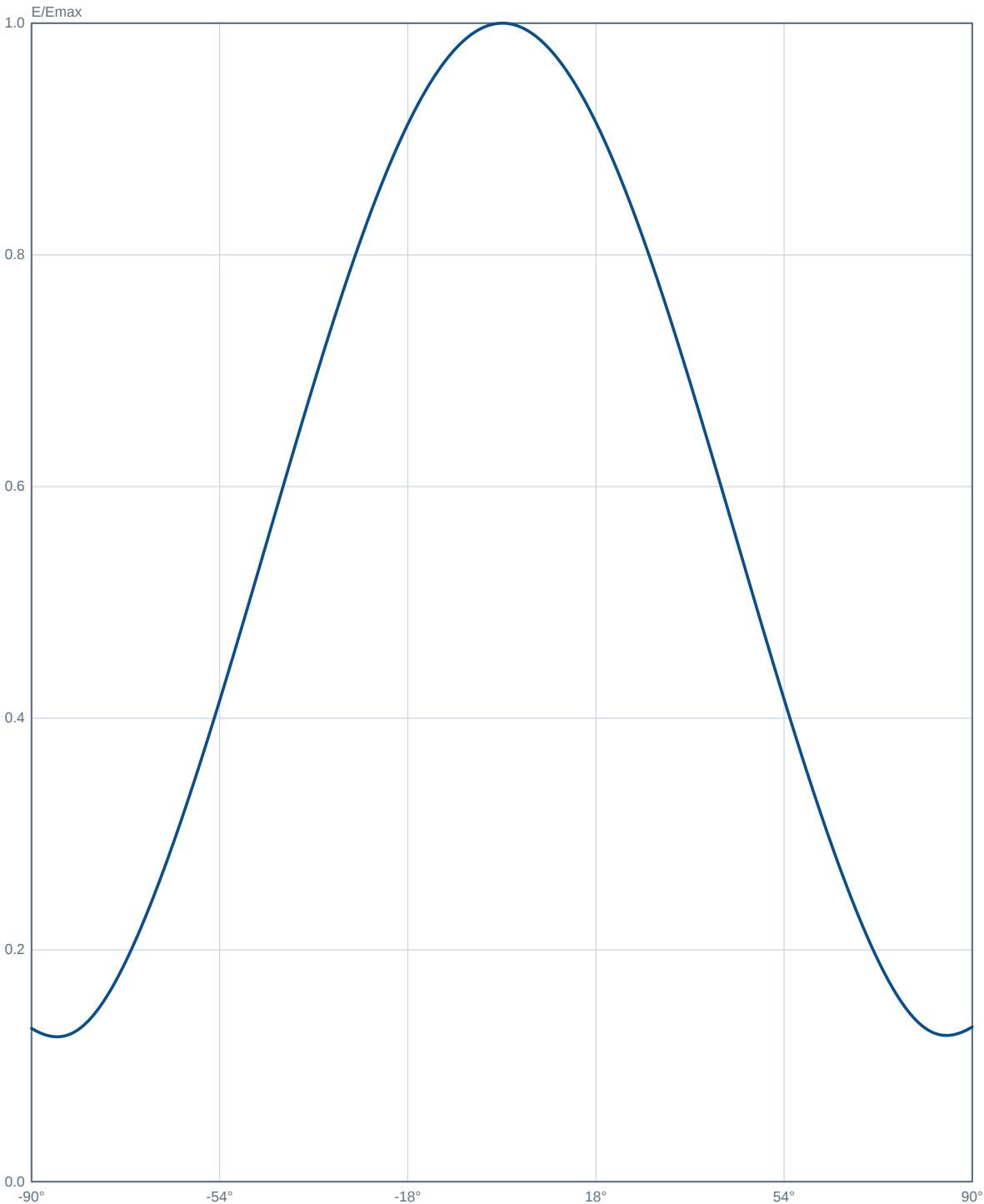
Tabela completa - Azimute



MIMO22 - Azimute

Ângulo	E/Emax	Aten. dB	Ângulo	E/Emax	Aten. dB	Ângulo	E/Emax	Aten. dB	Ângulo	E/Emax	Aten. dB	Ângulo	E/Emax	Aten. dB
0°	1.0000	-0.00	73°	0.1512	16.41	146°	0.0859	21.32	219°	0.1056	19.53	292°	0.2021	13.89
1°	0.9998	0.00	74°	0.1421	16.95	147°	0.0823	21.69	220°	0.1101	19.16	293°	0.2135	13.41
2°	0.9990	0.01	75°	0.1335	17.49	148°	0.0790	22.04	221°	0.1146	18.82	294°	0.2252	12.95
3°	0.9976	0.02	76°	0.1254	18.03	149°	0.0763	22.35	222°	0.1190	18.49	295°	0.2372	12.50
4°	0.9955	0.04	77°	0.1179	18.57	150°	0.0740	22.61	223°	0.1234	18.18	296°	0.2495	12.06
5°	0.9929	0.06	78°	0.1110	19.09	151°	0.0724	22.80	224°	0.1276	17.88	297°	0.2620	11.63
6°	0.9896	0.09	79°	0.1048	19.59	152°	0.0715	22.92	225°	0.1317	17.61	298°	0.2749	11.22
7°	0.9858	0.12	80°	0.0994	20.05	153°	0.0712	22.95	226°	0.1356	17.36	299°	0.2880	10.81
8°	0.9813	0.16	81°	0.0947	20.47	154°	0.0717	22.89	227°	0.1393	17.12	300°	0.3013	10.42
9°	0.9763	0.21	82°	0.0909	20.83	155°	0.0728	22.75	228°	0.1428	16.90	301°	0.3149	10.04
10°	0.9707	0.26	83°	0.0880	21.11	156°	0.0746	22.55	229°	0.1461	16.70	302°	0.3286	9.67
11°	0.9645	0.31	84°	0.0860	21.31	157°	0.0769	22.28	230°	0.1492	16.52	303°	0.3427	9.30
12°	0.9577	0.37	85°	0.0849	21.43	158°	0.0797	21.97	231°	0.1521	16.36	304°	0.3569	8.95
13°	0.9505	0.44	86°	0.0846	21.45	159°	0.0829	21.63	232°	0.1547	16.21	305°	0.3712	8.61
14°	0.9426	0.51	87°	0.0851	21.40	160°	0.0864	21.27	233°	0.1571	16.08	306°	0.3858	8.27
15°	0.9343	0.59	88°	0.0864	21.27	161°	0.0902	20.90	234°	0.1592	15.96	307°	0.4006	7.95
16°	0.9254	0.67	89°	0.0883	21.08	162°	0.0941	20.53	235°	0.1611	15.86	308°	0.4155	7.63
17°	0.9161	0.76	90°	0.0907	20.84	163°	0.0980	20.17	236°	0.1627	15.77	309°	0.4305	7.32
18°	0.9062	0.86	91°	0.0936	20.57	164°	0.1020	19.82	237°	0.1640	15.70	310°	0.4457	7.02
19°	0.8959	0.95	92°	0.0969	20.28	165°	0.1060	19.49	238°	0.1651	15.65	311°	0.4610	6.73
20°	0.8852	1.06	93°	0.1004	19.97	166°	0.1099	19.18	239°	0.1659	15.60	312°	0.4764	6.44
21°	0.8740	1.17	94°	0.1041	19.65	167°	0.1137	18.88	240°	0.1664	15.58	313°	0.4919	6.16
22°	0.8624	1.29	95°	0.1079	19.34	168°	0.1174	18.61	241°	0.1667	15.56	314°	0.5074	5.89
23°	0.8504	1.41	96°	0.1118	19.03	169°	0.1208	18.36	242°	0.1667	15.56	315°	0.5231	5.63
24°	0.8380	1.54	97°	0.1158	18.73	170°	0.1240	18.13	243°	0.1664	15.57	316°	0.5387	5.37
25°	0.8252	1.67	98°	0.1197	18.44	171°	0.1270	17.92	244°	0.1659	15.60	317°	0.5544	5.12
26°	0.8122	1.81	99°	0.1236	18.16	172°	0.1298	17.74	245°	0.1651	15.64	318°	0.5701	4.88
27°	0.7988	1.95	100°	0.1275	17.89	173°	0.1322	17.57	246°	0.1641	15.70	319°	0.5859	4.64
28°	0.7851	2.10	101°	0.1312	17.64	174°	0.1344	17.43	247°	0.1628	15.77	320°	0.6015	4.41
29°	0.7711	2.26	102°	0.1349	17.40	175°	0.1362	17.31	248°	0.1613	15.85	321°	0.6172	4.19
30°	0.7568	2.42	103°	0.1384	17.18	176°	0.1378	17.22	249°	0.1595	15.94	322°	0.6328	3.97
31°	0.7424	2.59	104°	0.1418	16.97	177°	0.1389	17.14	250°	0.1575	16.05	323°	0.6483	3.76
32°	0.7277	2.76	105°	0.1450	16.77	178°	0.1398	17.09	251°	0.1553	16.18	324°	0.6637	3.56
33°	0.7128	2.94	106°	0.1480	16.59	179°	0.1403	17.06	252°	0.1529	16.31	325°	0.6790	3.36
34°	0.6977	3.13	107°	0.1509	16.43	180°	0.1404	17.05	253°	0.1502	16.46	326°	0.6942	3.17
35°	0.6824	3.32	108°	0.1535	16.28	181°	0.1402	17.06	254°	0.1474	16.63	327°	0.7092	2.98
36°	0.6670	3.52	109°	0.1560	16.14	182°	0.1397	17.10	255°	0.1444	16.81	328°	0.7241	2.80
37°	0.6515	3.72	110°	0.1582	16.02	183°	0.1388	17.15	256°	0.1412	17.01	329°	0.7387	2.63
38°	0.6359	3.93	111°	0.1602	15.91	184°	0.1375	17.23	257°	0.1378	17.22	330°	0.7532	2.46
39°	0.6203	4.15	112°	0.1620	15.81	185°	0.1359	17.33	258°	0.1343	17.44	331°	0.7674	2.30
40°	0.6045	4.37	113°	0.1636	15.73	186°	0.1340	17.46	259°	0.1306	17.68	332°	0.7814	2.14
41°	0.5887	4.60	114°	0.1649	15.66	187°	0.1318	17.60	260°	0.1268	17.93	333°	0.7951	1.99
42°	0.5729	4.84	115°	0.1660	15.60	188°	0.1293	17.77	261°	0.1230	18.20	334°	0.8085	1.85
43°	0.5571	5.08	116°	0.1668	15.56	189°	0.1265	17.96	262°	0.1191	18.49	335°	0.8216	1.71
44°	0.5413	5.33	117°	0.1674	15.53	190°	0.1234	18.17	263°	0.1151	18.78	336°	0.8343	1.57
45°	0.5256	5.59	118°	0.1677	15.51	191°	0.1201	18.41	264°	0.1111	19.09	337°	0.8468	1.44
46°	0.5098	5.85	119°	0.1677	15.51	192°	0.1166	18.66	265°	0.1072	19.40	338°	0.8588	1.32
47°	0.4942	6.12	120°	0.1675	15.52	193°	0.1129	18.94	266°	0.1033	19.72	339°	0.8705	1.20
48°	0.4786	6.40	121°	0.1670	15.55	194°	0.1091	19.25	267°	0.0996	20.04	340°	0.8817	1.09
49°	0.4631	6.69	122°	0.1662	15.59	195°	0.1051	19.57	268°	0.0960	20.35	341°	0.8926	0.99
50°	0.4477	6.98	123°	0.1652	15.64	196°	0.1011	19.91	269°	0.0928	20.65	342°	0.9030	0.89
51°	0.4324	7.28	124°	0.1639	15.71	197°	0.0970	20.27	270°	0.0899	20.93	343°	0.9129	0.79
52°	0.4173	7.59	125°	0.1624	15.79	198°	0.0929	20.64	271°	0.0874	21.17	344°	0.9224	0.70
53°	0.4023	7.91	126°	0.1605	15.89	199°	0.0890	21.02	272°	0.0855	21.36	345°	0.9314	0.62
54°	0.3875	8.24	127°	0.1585	16.00	200°	0.0852	21.40	273°	0.0842	21.50	346°	0.9399	0.54
55°	0.3728	8.57	128°	0.1561	16.13	201°	0.0816	21.77	274°	0.0836	21.55	347°	0.9479	0.47
56°	0.3583	8.91	129°	0.1535	16.28	202°	0.0783	22.13	275°	0.0839	21.52	348°	0.9553	0.40
57°	0.3440	9.27	130°	0.1507	16.44	203°	0.0754	22.45	276°	0.0850	21.41	349°	0.9622	0.33
58°	0.3300	9.63	131°	0.1477	16.61	204°	0.0730	22.73	277°	0.0871	21.20	350°	0.9686	0.28
59°	0.3161	10.00	132°	0.1444	16.81	205°	0.0712	22.95	278°	0.0900	20.91	351°	0.9744	0.23
60°	0.3025	10.39	133°	0.1409	17.02	206°	0.0700	23.10	279°	0.0939	20.55	352°	0.9796	0.18
61°	0.2891	10.78	134°	0.1372	17.25	207°	0.0695	23.16	280°	0.0986	20.12	353°	0.9843	0.14
62°	0.2759	11.18	135°	0.1333	17.50	208°	0.0697	23.14	281°	0.1041	19.65	354°	0.9883	0.10
63°	0.2630	11.60	136°	0.1292	17.77	209°	0.0706	23.02	282°	0.1103	19.15	355°	0.9918	0.07
64°	0.2504	12.03	137°	0.1250	18.06	210°	0.0722	22.83	283°	0.1172	18.62	356°	0.9946	0.05
65°	0.2381	12.47	138°	0.1207	18.37	211°	0.0744	22.56	284°	0.1247	18.08	357°	0.9969	0.03
66°	0.2260	12.92	139°	0.1163	18.69	212°	0.0772	22.25	285°	0.1328	17.54	358°	0.9985	0.01
67°	0.2143	13.38	140°	0.1118	19.03	213°	0.0805	21.89	286°	0.1414	16.99	359°	0.9996	0.00
68°	0.2028	13.86	141°	0.1073	19.39	214°	0.0841	21.50	287°	0.1505	16.45	360°	1.0000	-0.00
69°	0.1918	14.34	142°	0.1028	19.76	215°	0.0881	21.11	288°	0.1600	15.92			
70°	0.1810	14.84	143°	0.0984	20.14	216°	0.0922	20.70	289°	0.1700	15.39			
71°	0.1707	15.36	144°	0.0940	20.54	217°	0.0966	20.30	290°	0.1803	14.88			
72°	0.1607	15.88	145°	0.0899	20.93	218°	0.1010	19.91	291°	0.1910	14.38			

E/Emax de campo normalizado - atenuação positiva em dB



Parâmetros da configuração

ELEMENTOS

N/D

HPBW VERTICAL

69.58°

GANHO

7.90 dBd

PRIMEIRO NULO

N/D

Tabela completa - Elevação



MIMO22 · 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°	0.1323	17.57	-53.5°	0.4226	7.48	-17°	0.9219	0.71	19.5°	0.8999	0.92	56°	0.3873	8.24
-89.5°	0.1310	17.65	-53°	0.4301	7.33	-16.5°	0.9262	0.67	20°	0.8949	0.96	56.5°	0.3902	8.40
-89°	0.1299	17.73	-52.5°	0.4375	7.18	-16°	0.9305	0.63	20.5°	0.8898	1.01	57°	0.3730	8.56
-88.5°	0.1288	17.80	-52°	0.4450	7.03	-15.5°	0.9346	0.59	21°	0.8845	1.07	57.5°	0.3660	8.73
-88°	0.1278	17.87	-51.5°	0.4525	6.89	-15°	0.9386	0.55	21.5°	0.8792	1.12	58°	0.3589	8.90
-87.5°	0.1270	17.92	-51°	0.4600	6.74	-14.5°	0.9425	0.51	22°	0.8738	1.17	58.5°	0.3520	9.07
-87°	0.1263	17.97	-50.5°	0.4676	6.60	-14°	0.9463	0.48	22.5°	0.8683	1.23	59°	0.3450	9.24
-86.5°	0.1258	18.01	-50°	0.4752	6.46	-13.5°	0.9500	0.45	23°	0.8627	1.28	59.5°	0.3382	9.42
-86°	0.1254	18.04	-49.5°	0.4828	6.33	-13°	0.9535	0.41	23.5°	0.8570	1.34	60°	0.3314	9.59
-85.5°	0.1251	18.05	-49°	0.4904	6.19	-12.5°	0.9569	0.38	24°	0.8512	1.40	60.5°	0.3246	9.77
-85°	0.1251	18.06	-48.5°	0.4980	6.05	-12°	0.9602	0.35	24.5°	0.8453	1.46	61°	0.3179	9.95
-84.5°	0.1252	18.05	-48°	0.5057	5.92	-11.5°	0.9634	0.32	25°	0.8394	1.52	61.5°	0.3113	10.14
-84°	0.1255	18.03	-47.5°	0.5134	5.79	-11°	0.9664	0.30	25.5°	0.8333	1.58	62°	0.3047	10.32
-83.5°	0.1260	17.99	-47°	0.5211	5.66	-10.5°	0.9693	0.27	26°	0.8272	1.65	62.5°	0.2982	10.51
-83°	0.1267	17.94	-46.5°	0.5288	5.53	-10°	0.9721	0.25	26.5°	0.8209	1.71	63°	0.2918	10.70
-82.5°	0.1276	17.88	-46°	0.5365	5.41	-9.5°	0.9748	0.22	27°	0.8146	1.78	63.5°	0.2854	10.89
-82°	0.1287	17.81	-45.5°	0.5442	5.29	-9°	0.9773	0.20	27.5°	0.8083	1.85	64°	0.2792	11.08
-81.5°	0.1300	17.72	-45°	0.5519	5.16	-8.5°	0.9797	0.18	28°	0.8018	1.92	64.5°	0.2730	11.28
-81°	0.1315	17.62	-44.5°	0.5596	5.04	-8°	0.9820	0.16	28.5°	0.7953	1.99	65°	0.2668	11.48
-80.5°	0.1332	17.51	-44°	0.5673	4.92	-7.5°	0.9841	0.14	29°	0.7887	2.06	65.5°	0.2608	11.67
-80°	0.1351	17.39	-43.5°	0.5750	4.81	-7°	0.9861	0.12	29.5°	0.7820	2.14	66°	0.2548	11.87
-79.5°	0.1372	17.25	-43°	0.5827	4.69	-6.5°	0.9880	0.10	30°	0.7753	2.21	66.5°	0.2490	12.08
-79°	0.1395	17.11	-42.5°	0.5904	4.58	-6°	0.9898	0.09	30.5°	0.7685	2.29	67°	0.2432	12.28
-78.5°	0.1419	16.96	-42°	0.5981	4.46	-5.5°	0.9914	0.08	31°	0.7616	2.37	67.5°	0.2375	12.49
-78°	0.1446	16.80	-41.5°	0.6058	4.35	-5°	0.9928	0.06	31.5°	0.7547	2.44	68°	0.2319	12.69
-77.5°	0.1475	16.63	-41°	0.6134	4.24	-4.5°	0.9942	0.05	32°	0.7477	2.53	68.5°	0.2264	12.90
-77°	0.1505	16.45	-40.5°	0.6211	4.14	-4°	0.9954	0.04	32.5°	0.7407	2.61	69°	0.2210	13.11
-76.5°	0.1537	16.26	-40°	0.6287	4.03	-3.5°	0.9964	0.03	33°	0.7336	2.69	69.5°	0.2157	13.32
-76°	0.1571	16.07	-39.5°	0.6363	3.93	-3°	0.9973	0.02	33.5°	0.7264	2.78	70°	0.2105	13.54
-75.5°	0.1607	15.88	-39°	0.6439	3.82	-2.5°	0.9981	0.02	34°	0.7192	2.86	70.5°	0.2054	13.75
-75°	0.1644	15.68	-38.5°	0.6514	3.72	-2°	0.9988	0.01	34.5°	0.7120	2.95	71°	0.2005	13.96
-74.5°	0.1683	15.48	-38°	0.6589	3.62	-1.5°	0.9993	0.01	35°	0.7047	3.04	71.5°	0.1956	14.17
-74°	0.1723	15.27	-37.5°	0.6664	3.52	-1°	0.9997	0.00	35.5°	0.6974	3.13	72°	0.1909	14.38
-73.5°	0.1765	15.07	-37°	0.6739	3.43	-0.5°	0.9999	0.00	36°	0.6900	3.22	72.5°	0.1863	14.60
-73°	0.1808	14.86	-36.5°	0.6813	3.33	0°	1.0000	0.00	36.5°	0.6826	3.32	73°	0.1819	14.81
-72.5°	0.1853	14.64	-36°	0.6887	3.24	0.5°	1.0000	0.00	37°	0.6752	3.41	73.5°	0.1775	15.01
-72°	0.1898	14.43	-35.5°	0.6961	3.15	1°	0.9998	0.00	37.5°	0.6677	3.51	74°	0.1734	15.22
-71.5°	0.1945	14.22	-35°	0.7034	3.06	1.5°	0.9995	0.00	38°	0.6602	3.61	74.5°	0.1693	15.43
-71°	0.1994	14.01	-34.5°	0.7107	2.97	2°	0.9990	0.01	38.5°	0.6526	3.71	75°	0.1655	15.63
-70.5°	0.2043	13.79	-34°	0.7179	2.88	2.5°	0.9984	0.01	39°	0.6451	3.81	75.5°	0.1617	15.82
-70°	0.2094	13.58	-33.5°	0.7251	2.79	3°	0.9977	0.02	39.5°	0.6375	3.91	76°	0.1582	16.02
-69.5°	0.2146	13.37	-33°	0.7322	2.71	3.5°	0.9968	0.03	40°	0.6299	4.01	76.5°	0.1548	16.21
-69°	0.2199	13.16	-32.5°	0.7393	2.62	4°	0.9958	0.04	40.5°	0.6223	4.12	77°	0.1516	16.39
-68.5°	0.2253	12.95	-32°	0.7463	2.54	4.5°	0.9947	0.05	41°	0.6146	4.23	77.5°	0.1485	16.56
-68°	0.2308	12.74	-31.5°	0.7533	2.46	5°	0.9934	0.06	41.5°	0.6069	4.34	78°	0.1457	16.73
-67.5°	0.2363	12.53	-31°	0.7602	2.38	5.5°	0.9920	0.07	42°	0.5993	4.45	78.5°	0.1430	16.89
-67°	0.2420	12.32	-30.5°	0.7671	2.30	6°	0.9904	0.08	42.5°	0.5916	4.56	79°	0.1405	17.05
-66.5°	0.2478	12.12	-30°	0.7739	2.23	6.5°	0.9887	0.10	43°	0.5839	4.67	79.5°	0.1382	17.19
-66°	0.2537	11.91	-29.5°	0.7806	2.15	7°	0.9869	0.11	43.5°	0.5762	4.79	80°	0.1361	17.32
-65.5°	0.2596	11.71	-29°	0.7873	2.08	7.5°	0.9849	0.13	44°	0.5685	4.91	80.5°	0.1343	17.44
-65°	0.2657	11.51	-28.5°	0.7938	2.01	8°	0.9829	0.15	44.5°	0.5608	5.02	81°	0.1326	17.55
-64.5°	0.2718	11.32	-28°	0.8004	1.93	8.5°	0.9806	0.17	45°	0.5530	5.14	81.5°	0.1311	17.65
-64°	0.2780	11.12	-27.5°	0.8068	1.86	9°	0.9783	0.19	45.5°	0.5453	5.27	82°	0.1298	17.73
-63.5°	0.2843	10.93	-27°	0.8132	1.80	9.5°	0.9758	0.21	46°	0.5376	5.39	82.5°	0.1287	17.81
-63°	0.2906	10.73	-26.5°	0.8195	1.73	10°	0.9732	0.24	46.5°	0.5299	5.52	83°	0.1278	17.87
-62.5°	0.2970	10.54	-26°	0.8257	1.66	10.5°	0.9704	0.26	47°	0.5222	5.64	83.5°	0.1272	17.91
-62°	0.3035	10.36	-25.5°	0.8318	1.60	11°	0.9675	0.29	47.5°	0.5146	5.77	84°	0.1267	17.95
-61.5°	0.3101	10.17	-25°	0.8379	1.54	11.5°	0.9645	0.31	48°	0.5069	5.90	84.5°	0.1264	17.97
-61°	0.3167	9.99	-24.5°	0.8438	1.47	12°	0.9614	0.34	48.5°	0.4992	6.03	85°	0.1263	17.98
-60.5°	0.3234	9.81	-24°	0.8497	1.41	12.5°	0.9581	0.37	49°	0.4916	6.17	85.5°	0.1263	17.97
-60°	0.3302	9.63	-23.5°	0.8555	1.36	13°	0.9547	0.40	49.5°	0.4840	6.30	86°	0.1265	17.95
-59.5°	0.3370	9.45	-23°	0.8612	1.30	13.5°	0.9512	0.43	50°	0.4764	6.44	86.5°	0.1269	17.93
-59°	0.3438	9.27	-22.5°	0.8668	1.24	14°	0.9476	0.47	50.5°	0.4688	6.58	87°	0.1275	17.89
-58.5°	0.3508	9.10	-22°	0.8723	1.19	14.5°	0.9438	0.50	51°	0.4612	6.72	87.5°	0.1282	17.84
-58°	0.3577	8.93	-21.5°	0.8777	1.13	15°	0.9400	0.54	51.5°	0.4537	6.87	88°	0.1290	17.79
-57.5°	0.3648	8.76	-21°	0.8830	1.08	15.5°	0.9360	0.57	52°	0.4462	7.01	88.5°	0.1300	17.72
-57°	0.3718	8.59	-20.5°	0.8883	1.03	16°	0.9319	0.61	52.5°	0.4387	7.16	89°	0.1311	17.65
-56.5°	0.3790	8.43	-20°	0.8934	0.98	16.5°	0.9276	0.65	53°	0.4313	7.31	89.5°	0.1323	17.57
-56°	0.3861	8.27	-19.5°	0.8984	0.93	17°	0.9233	0.69	53.5°	0.4238	7.46	90°	0.1336	17.48
-55.5°	0.3934	8.10	-19°	0.9033	0.88	17.5°	0.9188	0.74	54°	0.4165	7.61			
-55°	0.4006	7.95	-18.5°	0.9081	0.84	18°	0.9142	0.78	54.5°	0.4091	7.76			
-54.5°	0.4079	7.79	-18°	0.9128	0.79	18.5°	0.9096	0.82	55°	0.4018	7.92			
-54°	0.4153	7.63	-17.5°	0.9174	0.75	19°	0.9048	0.87	55.5°	0.3946	8.08			

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