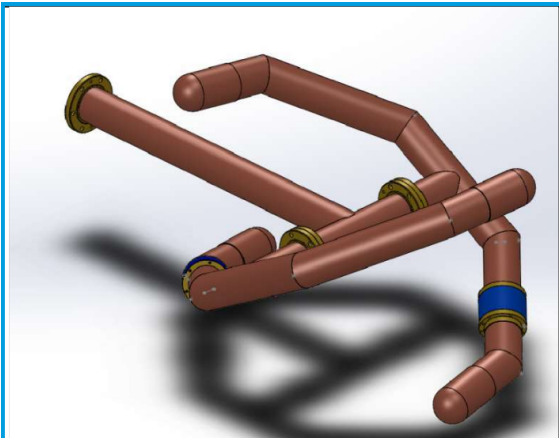


An FM circular high power antenna series (AFHP) designed for broadcasting applications. It features a robust construction with brass and copper elements, stainless steel fasteners, PTFE insulators, and a galvanized steel support structure. The antenna is finished with anti-corrosive orange paint and supports 1 to 6 levels, offering variable gain.



Características elétricas

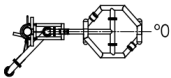
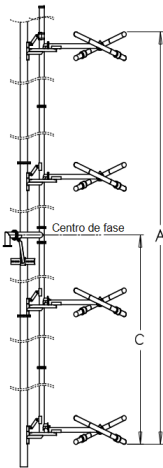
Item	Valor
Ganho cadastrado (referência)	-3.03 dBd
HPBW horizontal	359.00°
HPBW vertical	68.06°
Faixa de frequência	76.10 – 107.90 MHz
Polarização	Circular Right
Fabricante	EFTX Broadcast & Telecom
Categoria	FM
Max Power per Element	15 kW
Gain	Varies by number of levels (1 to 6), from -3.01 dBd to 5.4 dBd
Circular Polarization Purity	< 1 dB (free space)
Vertical Pattern	On Demand
Input Impedance	50 ohms
Max VSWR (in channel)	1.05:1
Input Connector	EIA 3-1/8", 4-1/16"
Number of Levels	1, 2, 3, 4, 5, 6

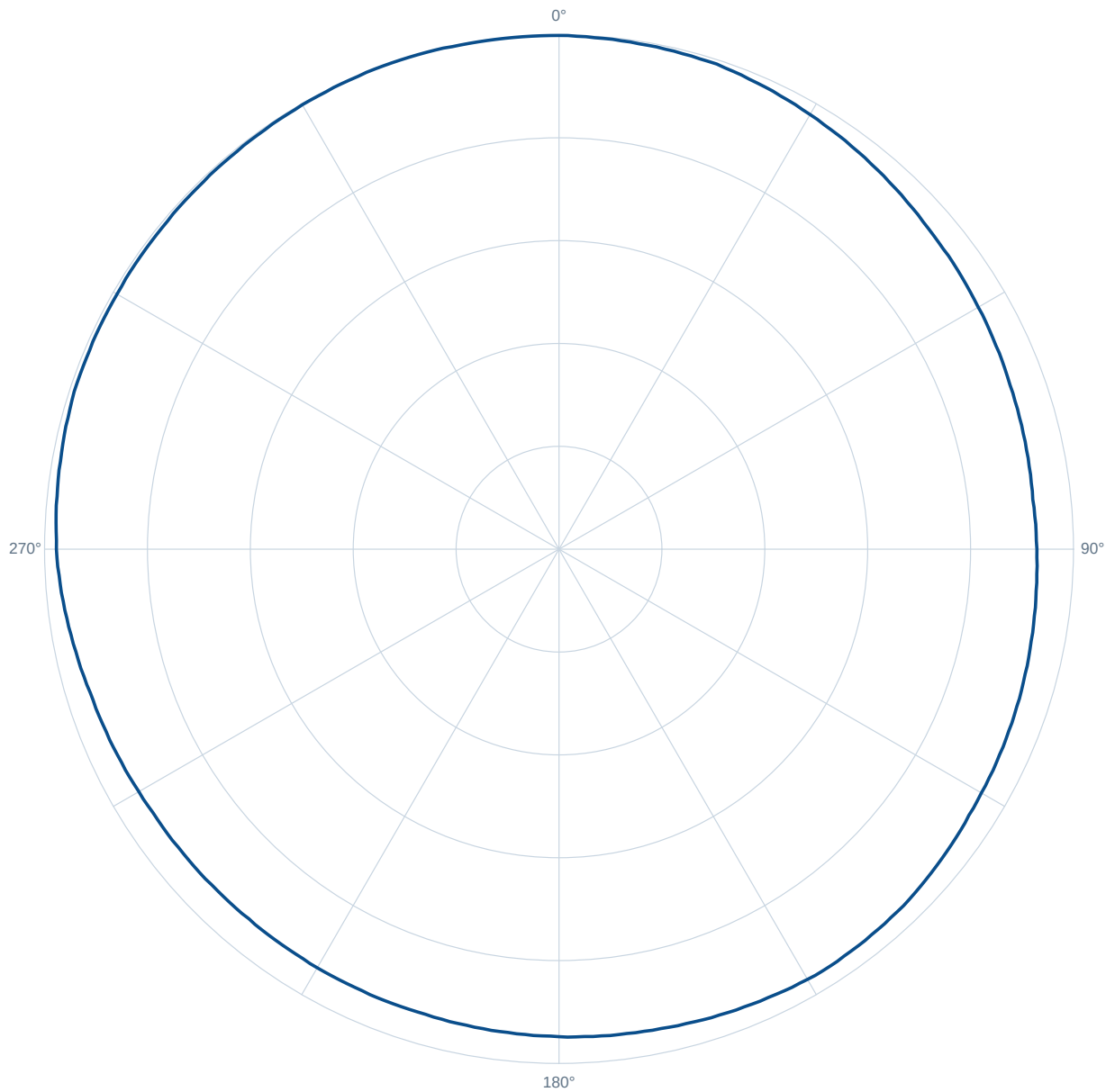


Validar autenticidade · 1.0

Página 1 · Código C601D14D

Características mecânicas	
Item	Valor
Materials Used	Brass and copper structure, stainless steel fasteners, PTFE insulators, galvanized steel support
Mounting	Supports compatible with 3.5" to 10" steel tubes
Finish	Anti-corrosive orange paint
Antenna Height (A)	Varies by model and frequency (mm)
Radiation Center (C)	Varies by model and frequency (mm)
Average Weight (P)	Varies by model and frequency (kg)
Exposure Area (AE)	Varies by model and frequency (m²)





Parâmetros da configuração

HPBW HORIZONTAL

359.00°

GANHO

-3.03 dBd

FRENTE/COSTAS

0.29 dB

RIPPLE

0.67 dB

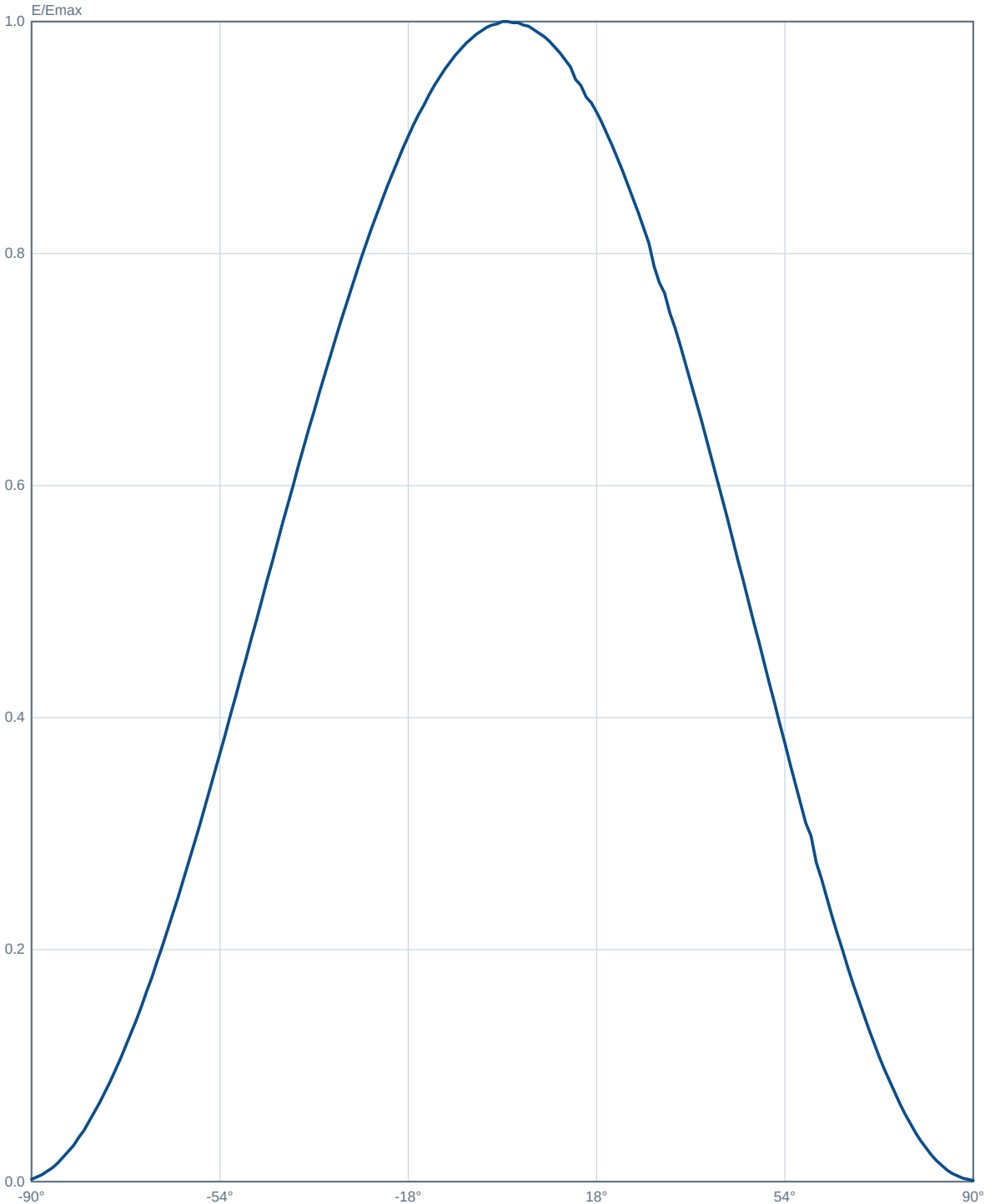
Tabela completa - Azimute



AFHP · 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°	0.9990	0.01	73°	0.9320	0.61	146°	0.9670	0.29	219°	0.9390	0.55	292°	0.9910	0.08
1°	0.9990	0.01	74°	0.9310	0.62	147°	0.9670	0.29	220°	0.9380	0.56	293°	0.9910	0.08
2°	0.9980	0.02	75°	0.9310	0.62	148°	0.9670	0.29	221°	0.9390	0.55	294°	0.9920	0.07
3°	0.9980	0.02	76°	0.9300	0.63	149°	0.9670	0.29	222°	0.9390	0.55	295°	0.9920	0.07
4°	0.9970	0.03	77°	0.9300	0.63	150°	0.9660	0.30	223°	0.9390	0.55	296°	0.9920	0.07
5°	0.9970	0.03	78°	0.9290	0.64	151°	0.9650	0.31	224°	0.9390	0.55	297°	0.9920	0.07
6°	0.9970	0.03	79°	0.9290	0.64	152°	0.9650	0.31	225°	0.9390	0.55	298°	0.9920	0.07
7°	0.9960	0.03	80°	0.9280	0.65	153°	0.9640	0.32	226°	0.9390	0.55	299°	0.9920	0.07
8°	0.9960	0.03	81°	0.9280	0.65	154°	0.9630	0.33	227°	0.9400	0.54	300°	0.9920	0.07
9°	0.9950	0.04	82°	0.9270	0.66	155°	0.9620	0.34	228°	0.9400	0.54	301°	0.9920	0.07
10°	0.9950	0.04	83°	0.9270	0.66	156°	0.9620	0.34	229°	0.9400	0.54	302°	0.9930	0.06
11°	0.9950	0.04	84°	0.9260	0.67	157°	0.9610	0.35	230°	0.9400	0.54	303°	0.9930	0.06
12°	0.9940	0.05	85°	0.9270	0.66	158°	0.9600	0.35	231°	0.9400	0.54	304°	0.9930	0.06
13°	0.9940	0.05	86°	0.9270	0.66	159°	0.9600	0.35	232°	0.9400	0.54	305°	0.9930	0.06
14°	0.9930	0.06	87°	0.9280	0.65	160°	0.9590	0.36	233°	0.9410	0.53	306°	0.9930	0.06
15°	0.9930	0.06	88°	0.9280	0.65	161°	0.9580	0.37	234°	0.9410	0.53	307°	0.9930	0.06
16°	0.9920	0.07	89°	0.9280	0.65	162°	0.9580	0.37	235°	0.9410	0.53	308°	0.9930	0.06
17°	0.9920	0.07	90°	0.9290	0.64	163°	0.9570	0.38	236°	0.9410	0.53	309°	0.9930	0.06
18°	0.9920	0.07	91°	0.9290	0.64	164°	0.9560	0.39	237°	0.9410	0.53	310°	0.9930	0.06
19°	0.9900	0.09	92°	0.9300	0.63	165°	0.9550	0.40	238°	0.9420	0.52	311°	0.9940	0.05
20°	0.9890	0.10	93°	0.9300	0.63	166°	0.9550	0.40	239°	0.9430	0.51	312°	0.9940	0.05
21°	0.9880	0.10	94°	0.9310	0.62	167°	0.9540	0.41	240°	0.9430	0.51	313°	0.9940	0.05
22°	0.9880	0.12	95°	0.9310	0.62	168°	0.9530	0.42	241°	0.9440	0.50	314°	0.9940	0.05
23°	0.9850	0.13	96°	0.9320	0.61	169°	0.9530	0.42	242°	0.9450	0.49	315°	0.9940	0.05
24°	0.9840	0.14	97°	0.9330	0.60	170°	0.9520	0.43	243°	0.9460	0.48	316°	0.9940	0.05
25°	0.9830	0.15	98°	0.9330	0.60	171°	0.9520	0.43	244°	0.9460	0.48	317°	0.9950	0.04
26°	0.9810	0.17	99°	0.9340	0.59	172°	0.9510	0.44	245°	0.9470	0.47	318°	0.9950	0.04
27°	0.9800	0.18	100°	0.9350	0.58	173°	0.9510	0.44	246°	0.9480	0.46	319°	0.9950	0.04
28°	0.9790	0.18	101°	0.9350	0.58	174°	0.9510	0.44	247°	0.9490	0.45	320°	0.9950	0.04
29°	0.9770	0.20	102°	0.9360	0.57	175°	0.9500	0.45	248°	0.9490	0.45	321°	0.9950	0.04
30°	0.9760	0.21	103°	0.9370	0.57	176°	0.9500	0.45	249°	0.9500	0.45	322°	0.9960	0.03
31°	0.9750	0.22	104°	0.9380	0.56	177°	0.9490	0.45	250°	0.9510	0.44	323°	0.9960	0.03
32°	0.9730	0.24	105°	0.9380	0.56	178°	0.9490	0.45	251°	0.9520	0.43	324°	0.9960	0.03
33°	0.9720	0.25	106°	0.9390	0.55	179°	0.9490	0.45	252°	0.9520	0.43	325°	0.9960	0.03
34°	0.9710	0.26	107°	0.9400	0.54	180°	0.9480	0.46	253°	0.9530	0.42	326°	0.9970	0.03
35°	0.9700	0.26	108°	0.9410	0.53	181°	0.9470	0.47	254°	0.9550	0.40	327°	0.9970	0.03
36°	0.9680	0.28	109°	0.9410	0.53	182°	0.9470	0.47	255°	0.9560	0.39	328°	0.9970	0.03
37°	0.9670	0.29	110°	0.9420	0.52	183°	0.9470	0.47	256°	0.9580	0.37	329°	0.9970	0.03
38°	0.9660	0.30	111°	0.9430	0.51	184°	0.9460	0.48	257°	0.9590	0.36	330°	0.9980	0.02
39°	0.9640	0.32	112°	0.9430	0.51	185°	0.9460	0.48	258°	0.9600	0.35	331°	0.9980	0.02
40°	0.9630	0.33	113°	0.9440	0.50	186°	0.9450	0.49	259°	0.9620	0.34	332°	0.9980	0.02
41°	0.9620	0.34	114°	0.9450	0.49	187°	0.9450	0.49	260°	0.9630	0.33	333°	0.9980	0.02
42°	0.9600	0.35	115°	0.9450	0.49	188°	0.9450	0.49	261°	0.9650	0.31	334°	0.9990	0.01
43°	0.9590	0.36	116°	0.9460	0.48	189°	0.9440	0.50	262°	0.9660	0.30	335°	0.9990	0.01
44°	0.9580	0.37	117°	0.9470	0.47	190°	0.9440	0.50	263°	0.9680	0.28	336°	0.9990	0.01
45°	0.9560	0.39	118°	0.9470	0.47	191°	0.9430	0.51	264°	0.9690	0.27	337°	0.9990	0.01
46°	0.9550	0.40	119°	0.9480	0.46	192°	0.9430	0.51	265°	0.9710	0.26	338°	1.0000	-0.00
47°	0.9540	0.41	120°	0.9480	0.46	193°	0.9430	0.51	266°	0.9720	0.25	339°	1.0000	-0.00
48°	0.9520	0.43	121°	0.9490	0.45	194°	0.9420	0.52	267°	0.9730	0.24	340°	1.0000	-0.00
49°	0.9510	0.44	122°	0.9500	0.45	195°	0.9420	0.52	268°	0.9750	0.22	341°	1.0000	-0.00
50°	0.9500	0.45	123°	0.9500	0.45	196°	0.9410	0.53	269°	0.9760	0.21	342°	1.0000	-0.00
51°	0.9490	0.45	124°	0.9520	0.43	197°	0.9410	0.53	270°	0.9770	0.20	343°	1.0000	-0.00
52°	0.9480	0.46	125°	0.9530	0.42	198°	0.9410	0.53	271°	0.9770	0.20	344°	1.0000	-0.00
53°	0.9480	0.46	126°	0.9540	0.41	199°	0.9410	0.53	272°	0.9780	0.19	345°	1.0000	-0.00
54°	0.9470	0.47	127°	0.9550	0.40	200°	0.9410	0.53	273°	0.9790	0.18	346°	1.0000	-0.00
55°	0.9460	0.48	128°	0.9560	0.39	201°	0.9410	0.53	274°	0.9800	0.18	347°	1.0000	-0.00
56°	0.9450	0.49	129°	0.9570	0.38	202°	0.9410	0.53	275°	0.9810	0.17	348°	0.9990	0.01
57°	0.9440	0.50	130°	0.9580	0.37	203°	0.9410	0.53	276°	0.9810	0.17	349°	0.9990	0.01
58°	0.9430	0.51	131°	0.9590	0.36	204°	0.9400	0.54	277°	0.9820	0.16	350°	0.9990	0.01
59°	0.9420	0.52	132°	0.9600	0.35	205°	0.9400	0.54	278°	0.9830	0.15	351°	0.9990	0.01
60°	0.9410	0.53	133°	0.9610	0.35	206°	0.9400	0.54	279°	0.9840	0.14	352°	0.9990	0.01
61°	0.9410	0.53	134°	0.9620	0.34	207°	0.9400	0.54	280°	0.9840	0.14	353°	0.9990	0.01
62°	0.9400	0.54	135°	0.9630	0.33	208°	0.9400	0.54	281°	0.9850	0.13	354°	0.9990	0.01
63°	0.9390	0.55	136°	0.9640	0.32	209°	0.9400	0.54	282°	0.9860	0.12	355°	0.9990	0.01
64°	0.9380	0.56	137°	0.9640	0.32	210°	0.9400	0.54	283°	0.9870	0.11	356°	0.9990	0.01
65°	0.9370	0.57	138°	0.9640	0.32	211°	0.9400	0.54	284°	0.9880	0.10	357°	0.9990	0.01
66°	0.9370	0.57	139°	0.9650	0.31	212°	0.9390	0.55	285°	0.9880	0.10	358°	0.9990	0.01
67°	0.9360	0.57	140°	0.9650	0.31	213°	0.9390	0.55	286°	0.9890	0.10	359°	0.9990	0.01
68°	0.9350	0.58	141°	0.9650	0.31	214°	0.9390	0.55	287°	0.9900	0.09	360°	0.9990	0.01
69°	0.9340	0.59	142°	0.9660	0.30	215°	0.9390	0.55	288°	0.9910	0.08			
70°	0.9330	0.60	143°	0.9660	0.30	216°	0.9390	0.55	289°	0.9910	0.08			
71°	0.9330	0.60	144°	0.9660	0.30	217°	0.9390	0.55	290°	0.9910	0.08			
72°	0.9320	0.61	145°	0.9660	0.30	218°	0.9390	0.55	291°	0.9910	0.08			

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



Parâmetros da configuração

ELEMENTOS

N/D

HPBW VERTICAL

68.06°

GANHO

-3.03 dBd

PRIMEIRO NULO

78.00°

Tabela completa - Elevação



AFHP · 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°	0.0020	53.98	-53.5°	0.3770	8.47	-17°	0.9110	0.81	19.5°	0.9080	0.84	56°	0.3430	9.29
-89.5°	0.0030	50.46	-53°	0.3850	8.29	-16.5°	0.9155	0.77	20°	0.9030	0.89	56.5°	0.3345	9.51
-89°	0.0040	47.96	-52.5°	0.3935	8.10	-16°	0.9200	0.72	20.5°	0.8980	0.93	57°	0.3260	9.74
-88.5°	0.0050	46.02	-52°	0.4020	7.92	-15.5°	0.9240	0.69	21°	0.8930	0.98	57.5°	0.3175	9.97
-88°	0.0060	44.44	-51.5°	0.4100	7.74	-15°	0.9280	0.65	21.5°	0.8875	1.04	58°	0.3090	10.20
-87.5°	0.0075	42.50	-51°	0.4180	7.58	-14.5°	0.9325	0.61	22°	0.8820	1.09	58.5°	0.3005	10.36
-87°	0.0090	40.92	-50.5°	0.4265	7.40	-14°	0.9370	0.57	22.5°	0.8765	1.14	59°	0.2980	10.52
-86.5°	0.0105	39.58	-50°	0.4350	7.23	-13.5°	0.9410	0.53	23°	0.8710	1.20	59.5°	0.2865	10.86
-86°	0.0120	38.42	-49.5°	0.4430	7.07	-13°	0.9450	0.49	23.5°	0.8650	1.26	60°	0.2750	11.21
-85.5°	0.0140	37.08	-49°	0.4510	6.92	-12.5°	0.9485	0.46	24°	0.8590	1.32	60.5°	0.2680	11.44
-85°	0.0160	35.92	-48.5°	0.4595	6.75	-12°	0.9520	0.43	24.5°	0.8530	1.38	61°	0.2610	11.67
-84.5°	0.0185	34.66	-48°	0.4680	6.60	-11.5°	0.9555	0.40	25°	0.8470	1.44	61.5°	0.2530	11.94
-84°	0.0210	33.56	-47.5°	0.4760	6.45	-11°	0.9590	0.36	25.5°	0.8410	1.50	62°	0.2450	12.22
-83.5°	0.0235	32.58	-47°	0.4840	6.30	-10.5°	0.9620	0.34	26°	0.8350	1.57	62.5°	0.2370	12.51
-83°	0.0260	31.70	-46.5°	0.4925	6.15	-10°	0.9650	0.31	26.5°	0.8285	1.63	63°	0.2290	12.80
-82.5°	0.0285	30.90	-46°	0.5010	6.00	-9.5°	0.9680	0.28	27°	0.8220	1.70	63.5°	0.2215	13.09
-82°	0.0310	30.17	-45.5°	0.5095	5.86	-9°	0.9710	0.26	27.5°	0.8155	1.77	64°	0.2140	13.39
-81.5°	0.0345	29.24	-45°	0.5180	5.71	-8.5°	0.9735	0.23	28°	0.8090	1.84	64.5°	0.2070	13.68
-81°	0.0380	28.40	-44.5°	0.5260	5.58	-8°	0.9760	0.21	28.5°	0.7990	1.95	65°	0.2000	13.98
-80.5°	0.0410	27.74	-44°	0.5340	5.45	-7.5°	0.9785	0.19	29°	0.7890	2.06	65.5°	0.1925	14.31
-80°	0.0440	27.13	-43.5°	0.5425	5.31	-7°	0.9810	0.17	29.5°	0.7820	2.14	66°	0.1850	14.66
-79.5°	0.0480	26.38	-43°	0.5510	5.18	-6.5°	0.9830	0.15	30°	0.7750	2.21	66.5°	0.1780	14.99
-79°	0.0520	25.68	-42.5°	0.5595	5.04	-6°	0.9850	0.13	30.5°	0.7705	2.26	67°	0.1710	15.34
-78.5°	0.0560	25.04	-42°	0.5680	4.91	-5.5°	0.9870	0.11	31°	0.7660	2.32	67.5°	0.1645	15.68
-78°	0.0600	24.44	-41.5°	0.5760	4.79	-5°	0.9890	0.10	31.5°	0.7575	2.41	68°	0.1580	16.03
-77.5°	0.0640	23.88	-41°	0.5840	4.67	-4.5°	0.9905	0.08	32°	0.7490	2.51	68.5°	0.1515	16.39
-77°	0.0680	23.35	-40.5°	0.5920	4.55	-4°	0.9920	0.07	32.5°	0.7425	2.59	69°	0.1450	16.77
-76.5°	0.0725	22.79	-40°	0.6000	4.44	-3.5°	0.9935	0.06	33°	0.7360	2.66	69.5°	0.1385	17.17
-76°	0.0770	22.27	-39.5°	0.6085	4.31	-3°	0.9950	0.04	33.5°	0.7285	2.75	70°	0.1320	17.59
-75.5°	0.0815	21.78	-39°	0.6170	4.19	-2.5°	0.9960	0.03	34°	0.7210	2.84	70.5°	0.1260	17.99
-75°	0.0860	21.31	-38.5°	0.6250	4.08	-2°	0.9970	0.03	34.5°	0.7130	2.94	71°	0.1200	18.42
-74.5°	0.0910	20.82	-38°	0.6330	3.97	-1.5°	0.9975	0.02	35°	0.7050	3.04	71.5°	0.1140	18.86
-74°	0.0960	20.35	-37.5°	0.6410	3.86	-1°	0.9980	0.02	35.5°	0.6970	3.14	72°	0.1080	19.33
-73.5°	0.1010	19.91	-37°	0.6490	3.76	-0.5°	0.9990	0.01	36°	0.6890	3.24	72.5°	0.1025	19.79
-73°	0.1060	19.49	-36.5°	0.6565	3.66	0°	1.0000	-0.00	36.5°	0.6810	3.34	73°	0.0970	20.26
-72.5°	0.1115	19.05	-36°	0.6640	3.56	0.5°	1.0000	-0.00	37°	0.6730	3.44	73.5°	0.0920	20.72
-72°	0.1170	18.64	-35.5°	0.6720	3.45	1°	1.0000	-0.00	37.5°	0.6650	3.54	74°	0.0870	21.21
-71.5°	0.1225	18.24	-35°	0.6800	3.35	1.5°	0.9995	0.00	38°	0.6570	3.65	74.5°	0.0820	21.72
-71°	0.1280	17.86	-34.5°	0.6875	3.25	2°	0.9990	0.01	38.5°	0.6485	3.76	75°	0.0770	22.27
-70.5°	0.1335	17.49	-34°	0.6950	3.16	2.5°	0.9990	0.01	39°	0.6400	3.88	75.5°	0.0720	22.85
-70°	0.1390	17.14	-33.5°	0.7025	3.07	3°	0.9990	0.01	39.5°	0.6315	3.99	76°	0.0670	23.48
-69.5°	0.1450	16.77	-33°	0.7100	2.97	3.5°	0.9980	0.02	40°	0.6230	4.11	76.5°	0.0625	24.08
-69°	0.1510	16.42	-32.5°	0.7175	2.88	4°	0.9970	0.03	40.5°	0.6145	4.23	77°	0.0580	24.73
-68.5°	0.1575	16.05	-32°	0.7250	2.79	4.5°	0.9965	0.03	41°	0.6060	4.35	77.5°	0.0540	25.35
-68°	0.1640	15.70	-31.5°	0.7325	2.70	5°	0.9960	0.03	41.5°	0.5975	4.47	78°	0.0500	26.02
-67.5°	0.1700	15.39	-31°	0.7400	2.62	5.5°	0.9945	0.05	42°	0.5890	4.60	78.5°	0.0460	26.74
-67°	0.1760	15.09	-30.5°	0.7470	2.53	6°	0.9930	0.06	42.5°	0.5805	4.72	79°	0.0420	27.53
-66.5°	0.1830	14.75	-30°	0.7540	2.45	6.5°	0.9915	0.07	43°	0.5720	4.85	79.5°	0.0385	28.29
-66°	0.1900	14.42	-29.5°	0.7610	2.37	7°	0.9900	0.09	43.5°	0.5630	4.99	80°	0.0350	29.12
-65.5°	0.1965	14.13	-29°	0.7680	2.29	7.5°	0.9885	0.10	44°	0.5540	5.13	80.5°	0.0320	29.90
-65°	0.2030	13.85	-28.5°	0.7750	2.21	8°	0.9870	0.11	44.5°	0.5450	5.27	81°	0.0290	30.75
-64.5°	0.2100	13.56	-28°	0.7820	2.14	8.5°	0.9850	0.13	45°	0.5360	5.42	81.5°	0.0260	31.70
-64°	0.2170	13.27	-27.5°	0.7890	2.06	9°	0.9830	0.15	45.5°	0.5275	5.56	82°	0.0230	32.77
-63.5°	0.2240	13.00	-27°	0.7960	1.98	9.5°	0.9805	0.17	46°	0.5190	5.70	82.5°	0.0205	33.76
-63°	0.2310	12.73	-26.5°	0.8025	1.91	10°	0.9780	0.19	46.5°	0.5100	5.85	83°	0.0180	34.89
-62.5°	0.2380	12.47	-26°	0.8090	1.84	10.5°	0.9755	0.22	47°	0.5010	6.00	83.5°	0.0160	35.92
-62°	0.2450	12.22	-25.5°	0.8155	1.77	11°	0.9730	0.24	47.5°	0.4920	6.16	84°	0.0140	37.08
-61.5°	0.2525	11.95	-25°	0.8220	1.70	11.5°	0.9700	0.26	48°	0.4830	6.32	84.5°	0.0120	38.42
-61°	0.2600	11.70	-24.5°	0.8280	1.64	12°	0.9670	0.29	48.5°	0.4745	6.48	85°	0.0100	40.00
-60.5°	0.2675	11.45	-24°	0.8340	1.58	12.5°	0.9640	0.32	49°	0.4660	6.63	85.5°	0.0085	41.41
-60°	0.2750	11.21	-23.5°	0.8400	1.51	13°	0.9610	0.35	49.5°	0.4570	6.80	86°	0.0070	43.10
-59.5°	0.2825	10.98	-23°	0.8460	1.45	13.5°	0.9555	0.40	50°	0.4480	6.97	86.5°	0.0060	44.44
-59°	0.2900	10.75	-22.5°	0.8520	1.39	14°	0.9500	0.45	50.5°	0.4390	7.15	87°	0.0050	46.02
-58.5°	0.2975	10.53	-22°	0.8580	1.33	14.5°	0.9475	0.47	51°	0.4300	7.33	87.5°	0.0040	47.96
-58°	0.3050	10.31	-21.5°	0.8635	1.27	15°	0.9450	0.49	51.5°	0.4215	7.50	88°	0.0030	50.46
-57.5°	0.3130	10.09	-21°	0.8690	1.22	15.5°	0.9400	0.54	52°	0.4130	7.68	88.5°	0.0025	52.04
-57°	0.3210	9.87	-20.5°	0.8745	1.16	16°	0.9350	0.58	52.5°	0.4040	7.87	89°	0.0020	53.98
-56.5°	0.3290	9.66	-20°	0.8800	1.11	16.5°	0.9325	0.61	53°	0.3950	8.07	89.5°	0.0015	56.48
-56°	0.3370	9.45	-19.5°	0.8855	1.06	17°	0.9300	0.63	53.5°	0.3865	8.26	90°	0.0010	60.00
-55.5°	0.3450	9.24	-19°	0.8910	1.00	17.5°	0.9260	0.67	54°	0.3780	8.45			
-55°	0.3530	9.04	-18.5°	0.8960	0.95	18°	0.9220	0.71	54.5°	0.3690	8.66			
-54.5°	0.3610	8.85	-18°	0.9010	0.91	18.5°	0.9175	0.75	55°	0.3600	8.87			
-54°	0.3690	8.66	-17.5°	0.9060	0.86	19°	0.9130	0.79	55.5°	0.3515	9.08			

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