

Doppelsteg Breitband-Hornantenne
Double Ridged Broadband Horn Antenna

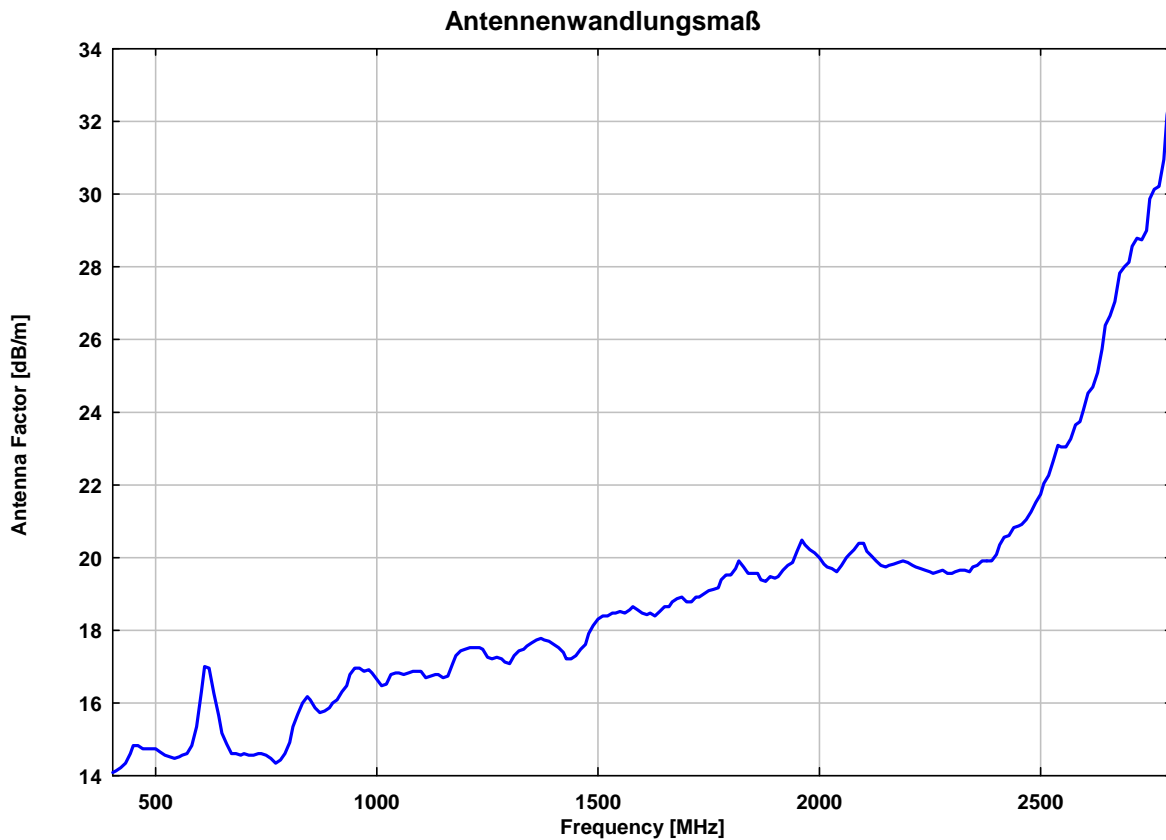
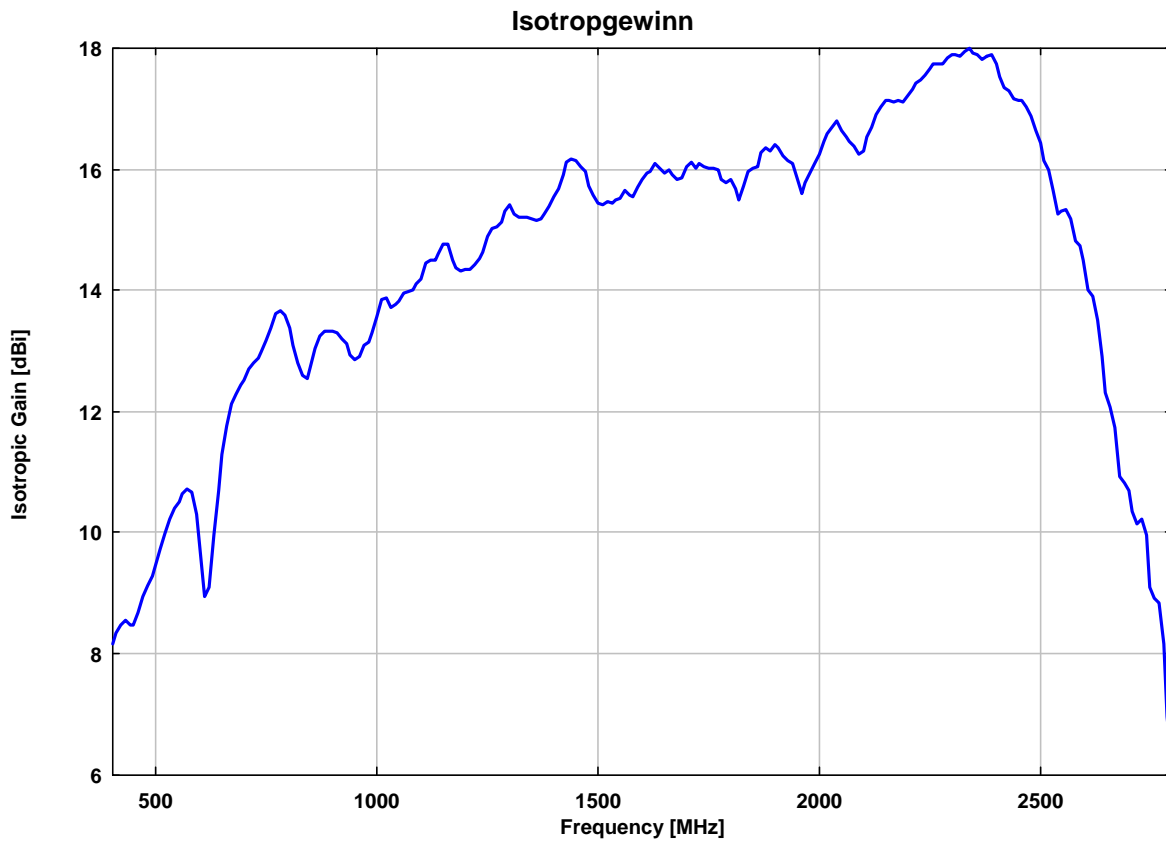

Beschreibung:

Linear polarisierte Doppelsteg Breitband Hornantenne in Aluminiumausführung für Empfangs- und Sendeanwendungen. Für den Betrieb bei hohen Leistungen ist die Antenne mit einer 7/16 Buchse ausgestattet.

Description:

Linear polarized double ridged broadband horn antenna for receive and transmit applications made of aluminium. The antenna is equipped with a 7-16 connector to withstand high power for immunity testing.

Technische Daten:		Specifications:
Frequenzbereich, nominell:	400 MHz...2.8 GHz	Nominal Frequency Range:
Isotropgewinn (Fernfeld):	8 dBi18 dBi	Isotropic Gain (Farfield):
Antennenfaktor (Fernfeld):	14...32 dB/m	Antenna Factor (Farfield):
Impedanz, nominell:	50 Ω	Nominal Impedance:
Stehwellenverhältnis SWR typisch:	2	Standing Wave Ratio SWR typical:
Stehwellenverhältnis SWR max.:	3.5	Standing Wave Ratio SWR max.:
Vor- Rückverhältnis:	typ. 25 dB	Front to Back Ratio:
Polarisationsentkopplung:	typ. > 25 dB	Cross Polarisation:
3 dB Öffnungswinkel typ.(E-Ebene):	45°	3 dB Beamwidth typ. (E-Plane):
3 dB Öffnungswinkel typ.(H-Ebene):	45°	3 dB Beamwidth typ. (H-Plane):
Max. Eingangsleistung:	3 kW @ 400 MHz	Max. Input Power:
7-16 Buchse	1.5 kW @ 2 GHz	7-16 connector female
Halterung (Zentralbefestigung):	3/8", M12	Center Mount:
Breite x Länge x Dicke:	550 x 990 x 460 mm	Width x Length x Thickness:
Gewicht:	10 kg	Weight:
Empfohlenes Zubehör:	AM 9144 Mast	Recommended Accessories:



Antenna Reference Point: Center between Connector and Aperture, Test Distance 3 m

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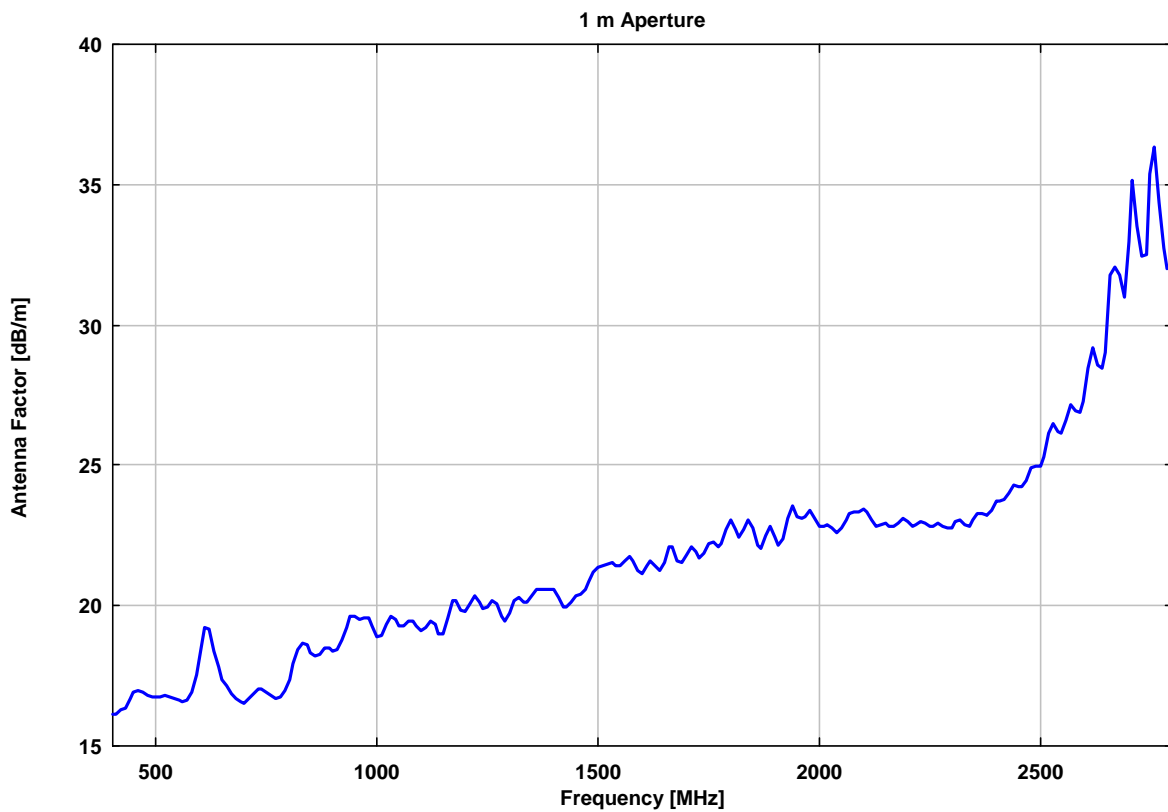
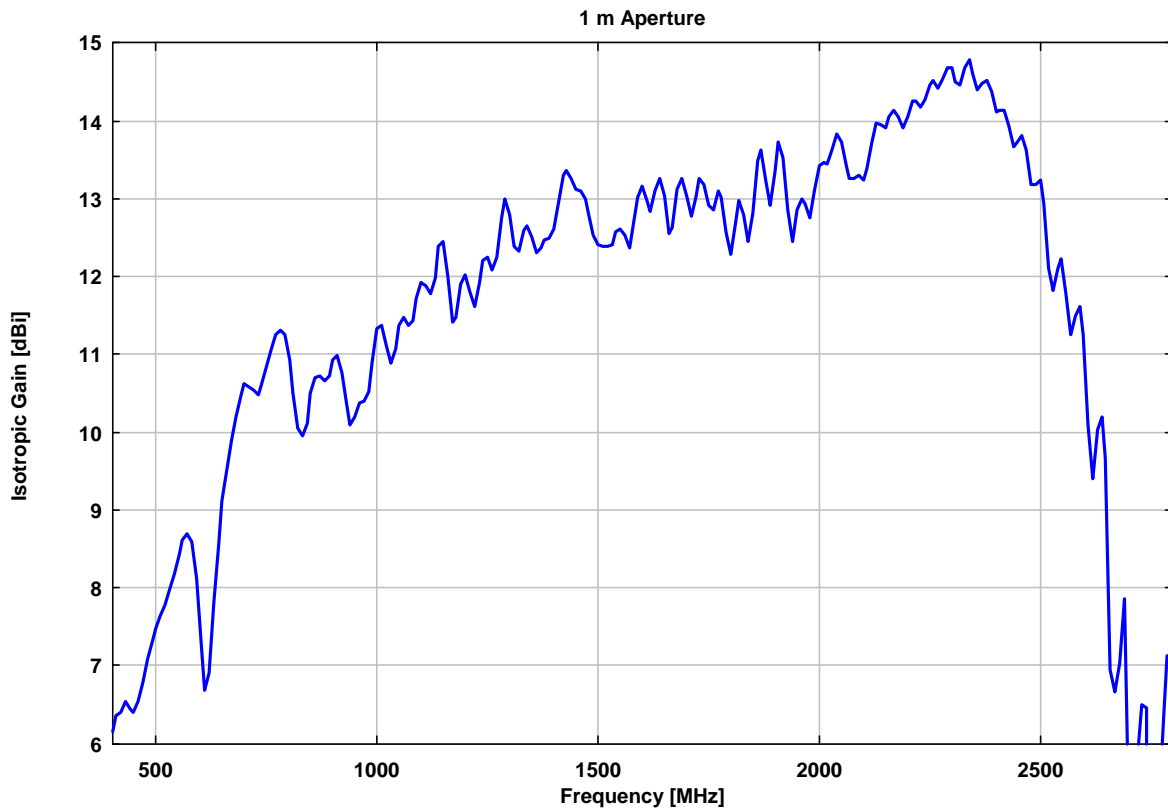
Frequency	Distance	Wavelength	Attenuation	Gain (Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
300.00	3.00	1.000	22.84	4.34	2.19	15.42
310.00	3.00	0.968	24.40	3.71	1.55	16.34
320.00	3.00	0.938	25.53	3.28	1.13	17.04
330.00	3.00	0.909	24.89	3.73	1.58	16.86
340.00	3.00	0.882	24.26	4.18	2.03	16.67
350.00	3.00	0.857	23.16	4.85	2.70	16.25
360.00	3.00	0.833	21.84	5.63	3.48	15.71
370.00	3.00	0.811	20.15	6.60	4.45	14.98
380.00	3.00	0.789	18.63	7.47	5.32	14.34
390.00	3.00	0.769	17.96	7.92	5.77	14.12
400.00	3.00	0.750	17.69	8.17	6.02	14.09
410.00	3.00	0.732	17.57	8.34	6.19	14.14
420.00	3.00	0.714	17.49	8.48	6.33	14.20
430.00	3.00	0.698	17.53	8.56	6.41	14.33
440.00	3.00	0.682	17.91	8.47	6.32	14.62
450.00	3.00	0.667	18.12	8.47	6.31	14.82
460.00	3.00	0.652	17.88	8.68	6.53	14.80
470.00	3.00	0.638	17.55	8.94	6.79	14.73
480.00	3.00	0.625	17.38	9.12	6.96	14.73
490.00	3.00	0.612	17.22	9.29	7.13	14.74
500.00	3.00	0.600	17.04	9.46	7.31	14.74
510.00	3.00	0.588	16.66	9.74	7.59	14.63
520.00	3.00	0.577	16.34	9.98	7.83	14.56
530.00	3.00	0.566	16.05	10.21	8.06	14.50
540.00	3.00	0.556	15.84	10.40	8.25	14.47
550.00	3.00	0.545	15.77	10.51	8.36	14.52
560.00	3.00	0.536	15.70	10.63	8.47	14.56
570.00	3.00	0.526	15.67	10.71	8.56	14.62
580.00	3.00	0.517	15.92	10.67	8.51	14.82
590.00	3.00	0.508	16.79	10.31	8.16	15.33
600.00	3.00	0.500	18.55	9.50	7.35	16.29
610.00	3.00	0.492	19.81	8.94	6.79	16.99
620.00	3.00	0.484	19.60	9.11	6.96	16.95
630.00	3.00	0.476	18.08	9.95	7.79	16.26
640.00	3.00	0.469	16.70	10.70	8.55	15.64
650.00	3.00	0.462	15.65	11.29	9.14	15.18
660.00	3.00	0.455	14.83	11.77	9.62	14.84
670.00	3.00	0.448	14.23	12.14	9.99	14.60
680.00	3.00	0.441	14.05	12.29	10.14	14.58
690.00	3.00	0.435	13.88	12.44	10.29	14.56
700.00	3.00	0.429	13.83	12.53	10.38	14.59
710.00	3.00	0.423	13.64	12.69	10.54	14.56
720.00	3.00	0.417	13.50	12.82	10.66	14.55
730.00	3.00	0.411	13.48	12.88	10.73	14.60
740.00	3.00	0.405	13.37	13.00	10.85	14.61
750.00	3.00	0.400	13.15	13.17	11.02	14.55
760.00	3.00	0.395	12.83	13.39	11.23	14.45
770.00	3.00	0.390	12.49	13.61	11.46	14.34
780.00	3.00	0.385	12.50	13.66	11.51	14.40
790.00	3.00	0.380	12.75	13.60	11.44	14.58
800.00	3.00	0.375	13.31	13.37	11.22	14.91

Frequency	Distance	Wavelength	Attenuation	Gain (Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
810.00	3.00	0.370	13.99	13.08	10.93	15.31
820.00	3.00	0.366	14.64	12.81	10.66	15.68
830.00	3.00	0.361	15.17	12.60	10.45	16.00
840.00	3.00	0.357	15.38	12.55	10.40	16.16
850.00	3.00	0.353	15.11	12.73	10.58	16.08
860.00	3.00	0.349	14.59	13.04	10.89	15.87
870.00	3.00	0.345	14.26	13.26	11.11	15.75
880.00	3.00	0.341	14.22	13.33	11.18	15.78
890.00	3.00	0.337	14.29	13.34	11.19	15.86
900.00	3.00	0.333	14.40	13.33	11.18	15.97
910.00	3.00	0.330	14.54	13.31	11.16	16.09
920.00	3.00	0.326	14.84	13.21	11.06	16.29
930.00	3.00	0.323	15.13	13.11	10.96	16.48
940.00	3.00	0.319	15.60	12.93	10.77	16.76
950.00	3.00	0.316	15.84	12.85	10.70	16.93
960.00	3.00	0.313	15.82	12.91	10.76	16.96
970.00	3.00	0.309	15.55	13.09	10.93	16.87
980.00	3.00	0.306	15.53	13.14	10.99	16.90
990.00	3.00	0.303	15.28	13.31	11.16	16.82
1000.00	3.00	0.300	14.83	13.58	11.42	16.64
1010.00	3.00	0.297	14.39	13.84	11.69	16.47
1020.00	3.00	0.294	14.42	13.87	11.72	16.52
1030.00	3.00	0.291	14.78	13.73	11.58	16.75
1040.00	3.00	0.288	14.80	13.76	11.61	16.80
1050.00	3.00	0.286	14.76	13.82	11.67	16.82
1060.00	3.00	0.283	14.58	13.96	11.81	16.77
1070.00	3.00	0.280	14.61	13.98	11.83	16.83
1080.00	3.00	0.278	14.61	14.02	11.87	16.87
1090.00	3.00	0.275	14.53	14.10	11.95	16.87
1100.00	3.00	0.273	14.41	14.20	12.05	16.85
1110.00	3.00	0.270	14.01	14.44	12.29	16.68
1120.00	3.00	0.268	13.98	14.50	12.34	16.71
1130.00	3.00	0.265	14.02	14.51	12.36	16.77
1140.00	3.00	0.263	13.92	14.60	12.45	16.76
1150.00	3.00	0.261	13.69	14.76	12.60	16.68
1160.00	3.00	0.259	13.72	14.78	12.63	16.73
1170.00	3.00	0.256	14.33	14.51	12.36	17.08
1180.00	3.00	0.254	14.66	14.38	12.23	17.28
1190.00	3.00	0.252	14.83	14.33	12.18	17.40
1200.00	3.00	0.250	14.85	14.36	12.21	17.45
1210.00	3.00	0.248	14.92	14.36	12.21	17.51
1220.00	3.00	0.246	14.88	14.42	12.27	17.53
1230.00	3.00	0.244	14.73	14.52	12.37	17.49
1240.00	3.00	0.242	14.57	14.64	12.49	17.45
1250.00	3.00	0.240	14.14	14.89	12.74	17.27
1260.00	3.00	0.238	13.91	15.04	12.89	17.19
1270.00	3.00	0.236	13.96	15.05	12.90	17.25
1280.00	3.00	0.234	13.84	15.14	12.99	17.22
1290.00	3.00	0.233	13.59	15.30	13.15	17.13
1300.00	3.00	0.231	13.45	15.41	13.26	17.09
1310.00	3.00	0.229	13.78	15.27	13.12	17.29
1320.00	3.00	0.227	14.00	15.20	13.05	17.43
1330.00	3.00	0.226	14.01	15.22	13.07	17.47

Frequency	Distance	Wavelength	Attenuation	Gain (Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
1340.00	3.00	0.224	14.13	15.20	13.05	17.56
1350.00	3.00	0.222	14.24	15.18	13.03	17.65
1360.00	3.00	0.221	14.36	15.15	12.99	17.75
1370.00	3.00	0.219	14.33	15.19	13.04	17.76
1380.00	3.00	0.217	14.24	15.27	13.12	17.75
1390.00	3.00	0.216	14.06	15.39	13.24	17.69
1400.00	3.00	0.214	13.81	15.55	13.40	17.59
1410.00	3.00	0.213	13.59	15.69	13.54	17.52
1420.00	3.00	0.211	13.21	15.91	13.76	17.36
1430.00	3.00	0.210	12.86	16.12	13.97	17.21
1440.00	3.00	0.208	12.81	16.17	14.02	17.22
1450.00	3.00	0.207	12.89	16.16	14.01	17.28
1460.00	3.00	0.205	13.16	16.05	13.90	17.45
1470.00	3.00	0.204	13.39	15.97	13.82	17.60
1480.00	3.00	0.203	13.93	15.73	13.58	17.90
1490.00	3.00	0.201	14.28	15.58	13.43	18.10
1500.00	3.00	0.200	14.58	15.46	13.31	18.28
1510.00	3.00	0.199	14.70	15.43	13.28	18.37
1520.00	3.00	0.197	14.65	15.48	13.33	18.37
1530.00	3.00	0.196	14.76	15.46	13.31	18.45
1540.00	3.00	0.195	14.71	15.51	13.36	18.46
1550.00	3.00	0.194	14.73	15.53	13.38	18.50
1560.00	3.00	0.192	14.57	15.64	13.49	18.45
1570.00	3.00	0.191	14.75	15.57	13.42	18.56
1580.00	3.00	0.190	14.87	15.54	13.39	18.65
1590.00	3.00	0.189	14.59	15.71	13.56	18.54
1600.00	3.00	0.188	14.38	15.84	13.69	18.46
1610.00	3.00	0.186	14.24	15.94	13.79	18.42
1620.00	3.00	0.185	14.26	15.96	13.81	18.45
1630.00	3.00	0.184	14.05	16.09	13.94	18.38
1640.00	3.00	0.183	14.25	16.02	13.87	18.50
1650.00	3.00	0.182	14.45	15.94	13.79	18.63
1660.00	3.00	0.181	14.40	15.99	13.84	18.63
1670.00	3.00	0.180	14.59	15.92	13.77	18.75
1680.00	3.00	0.179	14.80	15.84	13.69	18.88
1690.00	3.00	0.178	14.83	15.86	13.71	18.92
1700.00	3.00	0.176	14.50	16.05	13.90	18.78
1710.00	3.00	0.175	14.39	16.12	13.97	18.76
1720.00	3.00	0.174	14.65	16.02	13.87	18.91
1730.00	3.00	0.173	14.56	16.09	13.94	18.89
1740.00	3.00	0.172	14.72	16.04	13.89	18.99
1750.00	3.00	0.171	14.80	16.02	13.87	19.06
1760.00	3.00	0.170	14.85	16.02	13.87	19.11
1770.00	3.00	0.169	14.96	15.99	13.84	19.19
1780.00	3.00	0.169	15.30	15.84	13.69	19.38
1790.00	3.00	0.168	15.48	15.78	13.63	19.49
1800.00	3.00	0.167	15.43	15.83	13.68	19.50
1810.00	3.00	0.166	15.80	15.67	13.52	19.70
1820.00	3.00	0.165	16.18	15.50	13.35	19.92
1830.00	3.00	0.164	15.77	15.73	13.58	19.74
1840.00	3.00	0.163	15.36	15.96	13.81	19.56
1850.00	3.00	0.162	15.30	16.01	13.86	19.55
1860.00	3.00	0.161	15.27	16.05	13.90	19.56

Frequency	Distance	Wavelength	Attenuation	Gain (Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
1870.00	3.00	0.160	14.86	16.28	14.13	19.37
1880.00	3.00	0.160	14.77	16.35	14.20	19.36
1890.00	3.00	0.159	14.91	16.30	14.15	19.45
1900.00	3.00	0.158	14.76	16.40	14.25	19.40
1910.00	3.00	0.157	14.89	16.36	14.21	19.48
1920.00	3.00	0.156	15.17	16.24	14.09	19.65
1930.00	3.00	0.155	15.41	16.14	13.99	19.79
1940.00	3.00	0.155	15.53	16.10	13.95	19.87
1950.00	3.00	0.154	16.06	15.86	13.71	20.16
1960.00	3.00	0.153	16.60	15.61	13.46	20.45
1970.00	3.00	0.152	16.32	15.78	13.63	20.33
1980.00	3.00	0.152	16.05	15.94	13.79	20.22
1990.00	3.00	0.151	15.78	16.09	13.94	20.11
2000.00	3.00	0.150	15.46	16.27	14.12	19.97
2010.00	3.00	0.149	15.12	16.46	14.31	19.82
2020.00	3.00	0.149	14.90	16.59	14.44	19.73
2030.00	3.00	0.148	14.76	16.69	14.54	19.68
2040.00	3.00	0.147	14.58	16.80	14.65	19.62
2050.00	3.00	0.146	14.90	16.66	14.51	19.79
2060.00	3.00	0.146	15.21	16.53	14.38	19.97
2070.00	3.00	0.145	15.38	16.46	14.31	20.08
2080.00	3.00	0.144	15.57	16.39	14.24	20.19
2090.00	3.00	0.144	15.87	16.26	14.11	20.36
2100.00	3.00	0.143	15.83	16.30	14.15	20.37
2110.00	3.00	0.142	15.41	16.53	14.38	20.18
2120.00	3.00	0.142	15.14	16.69	14.53	20.06
2130.00	3.00	0.141	14.75	16.90	14.75	19.89
2140.00	3.00	0.140	14.49	17.05	14.90	19.78
2150.00	3.00	0.140	14.37	17.13	14.98	19.74
2160.00	3.00	0.139	14.39	17.14	14.99	19.77
2170.00	3.00	0.138	14.48	17.11	14.96	19.83
2180.00	3.00	0.138	14.47	17.14	14.99	19.85
2190.00	3.00	0.137	14.55	17.12	14.97	19.91
2200.00	3.00	0.136	14.39	17.22	15.07	19.85
2210.00	3.00	0.136	14.21	17.33	15.18	19.78
2220.00	3.00	0.135	14.08	17.42	15.27	19.73
2230.00	3.00	0.135	13.97	17.49	15.34	19.70
2240.00	3.00	0.134	13.86	17.56	15.41	19.66
2250.00	3.00	0.133	13.73	17.65	15.50	19.61
2260.00	3.00	0.133	13.57	17.75	15.60	19.56
2270.00	3.00	0.132	13.60	17.75	15.60	19.59
2280.00	3.00	0.132	13.64	17.75	15.60	19.63
2290.00	3.00	0.131	13.48	17.85	15.70	19.57
2300.00	3.00	0.130	13.39	17.91	15.76	19.54
2310.00	3.00	0.130	13.47	17.89	15.74	19.60
2320.00	3.00	0.129	13.53	17.88	15.73	19.65
2330.00	3.00	0.129	13.46	17.94	15.78	19.63
2340.00	3.00	0.128	13.36	18.00	15.85	19.60
2350.00	3.00	0.128	13.55	17.93	15.78	19.71
2360.00	3.00	0.127	13.62	17.91	15.76	19.77
2370.00	3.00	0.127	13.83	17.82	15.67	19.89
2380.00	3.00	0.126	13.78	17.87	15.72	19.89
2390.00	3.00	0.126	13.77	17.89	15.74	19.90

Frequency	Distance	Wavelength	Attenuation	Gain (Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
2400.00	3.00	0.125	14.10	17.74	15.59	20.08
2410.00	3.00	0.124	14.57	17.53	15.38	20.33
2420.00	3.00	0.124	14.94	17.36	15.21	20.53
2430.00	3.00	0.123	15.08	17.31	15.16	20.62
2440.00	3.00	0.123	15.42	17.16	15.00	20.81
2450.00	3.00	0.122	15.50	17.13	14.98	20.87
2460.00	3.00	0.122	15.51	17.14	14.99	20.89
2470.00	3.00	0.121	15.75	17.04	14.89	21.03
2480.00	3.00	0.121	16.12	16.88	14.72	21.23
2490.00	3.00	0.120	16.61	16.65	14.50	21.50
2500.00	3.00	0.120	17.05	16.44	14.29	21.73
2510.00	3.00	0.120	17.65	16.16	14.01	22.05
2520.00	3.00	0.119	18.02	16.00	13.85	22.25
2530.00	3.00	0.119	18.76	15.64	13.49	22.64
2540.00	3.00	0.118	19.59	15.25	13.10	23.07
2550.00	3.00	0.118	19.50	15.31	13.16	23.04
2560.00	3.00	0.117	19.46	15.34	13.19	23.04
2570.00	3.00	0.117	19.82	15.18	13.03	23.24
2580.00	3.00	0.116	20.58	14.82	12.67	23.63
2590.00	3.00	0.116	20.80	14.73	12.58	23.76
2600.00	3.00	0.115	21.29	14.50	12.35	24.02
2610.00	3.00	0.115	22.27	14.02	11.87	24.53
2620.00	3.00	0.115	22.55	13.90	11.75	24.69
2630.00	3.00	0.114	23.35	13.52	11.37	25.10
2640.00	3.00	0.114	24.60	12.91	10.76	25.74
2650.00	3.00	0.113	25.81	12.32	10.17	26.37
2660.00	3.00	0.113	26.33	12.08	9.93	26.64
2670.00	3.00	0.112	27.06	11.73	9.58	27.02
2680.00	3.00	0.112	28.68	10.94	8.78	27.85
2690.00	3.00	0.112	28.91	10.83	8.68	27.98
2700.00	3.00	0.111	29.22	10.70	8.55	28.15
2710.00	3.00	0.111	29.97	10.34	8.18	28.54
2720.00	3.00	0.110	30.40	10.14	7.98	28.78
2730.00	3.00	0.110	30.28	10.21	8.06	28.73
2740.00	3.00	0.109	30.80	9.97	7.82	29.01
2750.00	3.00	0.109	32.54	9.11	6.96	29.89
2760.00	3.00	0.109	32.96	8.92	6.77	30.12
2770.00	3.00	0.108	33.15	8.84	6.69	30.23
2780.00	3.00	0.108	34.57	8.15	6.00	30.95
2790.00	3.00	0.108	36.98	6.96	4.81	32.18
2800.00	3.00	0.107	38.66	6.14	3.98	33.03



Antenna Reference Point: Aperture, Test Distance 1 m

Antenna Reference Point: Aperture, Test Distance 1 m

Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
300.00	1.00	1.000	17.04	2.47	0.32	17.29
310.00	1.00	0.968	18.56	1.86	-0.29	18.19
320.00	1.00	0.938	20.14	1.20	-0.95	19.12
330.00	1.00	0.909	20.33	1.24	-0.91	19.35
340.00	1.00	0.882	19.55	1.76	-0.39	19.09
350.00	1.00	0.857	17.38	2.97	0.82	18.13
360.00	1.00	0.833	15.63	3.97	1.82	17.38
370.00	1.00	0.811	13.98	4.91	2.76	16.67
380.00	1.00	0.789	12.96	5.54	3.39	16.28
390.00	1.00	0.769	12.22	6.02	3.87	16.02
400.00	1.00	0.750	12.17	6.16	4.00	16.11
410.00	1.00	0.732	11.99	6.35	4.20	16.12
420.00	1.00	0.714	12.11	6.40	4.25	16.28
430.00	1.00	0.698	12.05	6.53	4.38	16.36
440.00	1.00	0.682	12.42	6.44	4.29	16.65
450.00	1.00	0.667	12.71	6.40	4.24	16.89
460.00	1.00	0.652	12.62	6.54	4.39	16.94
470.00	1.00	0.638	12.33	6.78	4.62	16.89
480.00	1.00	0.625	11.91	7.08	4.93	16.77
490.00	1.00	0.612	11.63	7.31	5.16	16.72
500.00	1.00	0.600	11.48	7.47	5.32	16.73
510.00	1.00	0.588	11.31	7.64	5.49	16.73
520.00	1.00	0.577	11.22	7.77	5.62	16.77
530.00	1.00	0.566	10.95	7.99	5.84	16.72
540.00	1.00	0.556	10.72	8.19	6.03	16.68
550.00	1.00	0.545	10.40	8.43	6.28	16.60
560.00	1.00	0.536	10.17	8.62	6.47	16.57
570.00	1.00	0.526	10.16	8.70	6.55	16.64
580.00	1.00	0.517	10.53	8.59	6.44	16.90
590.00	1.00	0.508	11.61	8.13	5.97	17.51
600.00	1.00	0.500	13.50	7.25	5.10	18.53
610.00	1.00	0.492	14.78	6.68	4.53	19.24
620.00	1.00	0.484	14.47	6.91	4.76	19.16
630.00	1.00	0.476	12.76	7.83	5.68	18.37
640.00	1.00	0.469	11.46	8.55	6.40	17.79
650.00	1.00	0.462	10.48	9.11	6.96	17.37
660.00	1.00	0.455	9.81	9.51	7.36	17.10
670.00	1.00	0.448	9.19	9.89	7.74	16.85
680.00	1.00	0.441	8.70	10.19	8.04	16.68
690.00	1.00	0.435	8.32	10.45	8.30	16.55
700.00	1.00	0.429	8.13	10.61	8.46	16.51
710.00	1.00	0.423	8.29	10.59	8.44	16.66
720.00	1.00	0.417	8.50	10.55	8.40	16.82
730.00	1.00	0.411	8.74	10.48	8.33	17.00
740.00	1.00	0.405	8.63	10.60	8.45	17.01
750.00	1.00	0.400	8.29	10.82	8.67	16.90
760.00	1.00	0.395	7.95	11.05	8.90	16.78
770.00	1.00	0.390	7.65	11.26	9.11	16.69
780.00	1.00	0.385	7.67	11.31	9.16	16.75
790.00	1.00	0.380	7.92	11.24	9.09	16.93

Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
800.00	1.00	0.375	8.64	10.93	8.78	17.35
810.00	1.00	0.370	9.63	10.49	8.34	17.90
820.00	1.00	0.366	10.61	10.06	7.90	18.44
830.00	1.00	0.361	10.94	9.94	7.79	18.66
840.00	1.00	0.357	10.69	10.12	7.97	18.59
850.00	1.00	0.353	10.03	10.50	8.35	18.31
860.00	1.00	0.349	9.73	10.70	8.55	18.21
870.00	1.00	0.345	9.78	10.73	8.58	18.28
880.00	1.00	0.341	10.04	10.65	8.50	18.46
890.00	1.00	0.337	9.97	10.73	8.58	18.48
900.00	1.00	0.333	9.67	10.93	8.78	18.38
910.00	1.00	0.330	9.64	10.99	8.84	18.41
920.00	1.00	0.326	10.21	10.76	8.61	18.74
930.00	1.00	0.323	11.12	10.35	8.20	19.24
940.00	1.00	0.319	11.70	10.10	7.95	19.58
950.00	1.00	0.316	11.60	10.20	8.05	19.58
960.00	1.00	0.313	11.33	10.38	8.23	19.48
970.00	1.00	0.309	11.37	10.40	8.25	19.55
980.00	1.00	0.306	11.23	10.52	8.37	19.52
990.00	1.00	0.303	10.58	10.89	8.74	19.25
1000.00	1.00	0.300	9.78	11.33	9.18	18.89
1010.00	1.00	0.297	9.77	11.38	9.23	18.93
1020.00	1.00	0.294	10.41	11.10	8.95	19.29
1030.00	1.00	0.291	10.95	10.88	8.72	19.60
1040.00	1.00	0.288	10.64	11.07	8.92	19.49
1050.00	1.00	0.286	10.13	11.37	9.22	19.28
1060.00	1.00	0.283	10.02	11.47	9.31	19.26
1070.00	1.00	0.280	10.27	11.38	9.23	19.43
1080.00	1.00	0.278	10.23	11.44	9.29	19.45
1090.00	1.00	0.275	9.76	11.72	9.57	19.25
1100.00	1.00	0.273	9.41	11.93	9.78	19.12
1110.00	1.00	0.270	9.58	11.88	9.73	19.24
1120.00	1.00	0.268	9.88	11.77	9.62	19.43
1130.00	1.00	0.265	9.54	11.98	9.83	19.30
1140.00	1.00	0.263	8.79	12.39	10.24	18.96
1150.00	1.00	0.261	8.78	12.44	10.28	19.00
1160.00	1.00	0.259	9.75	11.99	9.84	19.52
1170.00	1.00	0.256	10.97	11.42	9.27	20.17
1180.00	1.00	0.254	10.91	11.48	9.33	20.17
1190.00	1.00	0.252	10.15	11.90	9.75	19.83
1200.00	1.00	0.250	9.99	12.02	9.87	19.78
1210.00	1.00	0.248	10.50	11.80	9.65	20.08
1220.00	1.00	0.246	10.94	11.61	9.46	20.33
1230.00	1.00	0.244	10.40	11.92	9.77	20.10
1240.00	1.00	0.242	9.89	12.21	10.06	19.88
1250.00	1.00	0.240	9.89	12.25	10.10	19.91
1260.00	1.00	0.238	10.29	12.08	9.93	20.15
1270.00	1.00	0.236	10.04	12.24	10.09	20.06
1280.00	1.00	0.234	9.09	12.75	10.60	19.62
1290.00	1.00	0.233	8.67	12.99	10.84	19.44
1300.00	1.00	0.231	9.11	12.80	10.65	19.69
1310.00	1.00	0.229	10.00	12.39	10.24	20.17
1320.00	1.00	0.227	10.19	12.33	10.18	20.30

Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
1330.00	1.00	0.226	9.74	12.59	10.44	20.11
1340.00	1.00	0.224	9.68	12.65	10.50	20.11
1350.00	1.00	0.222	10.04	12.50	10.35	20.32
1360.00	1.00	0.221	10.52	12.30	10.15	20.59
1370.00	1.00	0.219	10.44	12.37	10.22	20.59
1380.00	1.00	0.217	10.33	12.46	10.31	20.56
1390.00	1.00	0.216	10.31	12.49	10.34	20.59
1400.00	1.00	0.214	10.14	12.61	10.46	20.53
1410.00	1.00	0.213	9.53	12.95	10.80	20.26
1420.00	1.00	0.211	8.89	13.30	11.15	19.96
1430.00	1.00	0.210	8.81	13.37	11.22	19.96
1440.00	1.00	0.208	9.08	13.26	11.11	20.12
1450.00	1.00	0.207	9.43	13.12	10.97	20.33
1460.00	1.00	0.205	9.52	13.10	10.95	20.40
1470.00	1.00	0.204	9.78	13.00	10.85	20.56
1480.00	1.00	0.203	10.27	12.79	10.64	20.84
1490.00	1.00	0.201	10.87	12.52	10.37	21.17
1500.00	1.00	0.200	11.17	12.40	10.25	21.34
1510.00	1.00	0.199	11.24	12.39	10.24	21.41
1520.00	1.00	0.197	11.29	12.39	10.24	21.46
1530.00	1.00	0.196	11.33	12.40	10.25	21.51
1540.00	1.00	0.195	11.04	12.57	10.42	21.40
1550.00	1.00	0.194	11.03	12.61	10.46	21.42
1560.00	1.00	0.192	11.27	12.52	10.36	21.57
1570.00	1.00	0.191	11.63	12.36	10.21	21.77
1580.00	1.00	0.190	11.17	12.62	10.47	21.57
1590.00	1.00	0.189	10.43	13.02	10.87	21.23
1600.00	1.00	0.188	10.20	13.16	11.01	21.14
1610.00	1.00	0.186	10.62	12.98	10.83	21.38
1620.00	1.00	0.185	10.98	12.83	10.68	21.58
1630.00	1.00	0.184	10.51	13.09	10.94	21.38
1640.00	1.00	0.183	10.22	13.26	11.11	21.26
1650.00	1.00	0.182	10.73	13.03	10.88	21.54
1660.00	1.00	0.181	11.75	12.54	10.39	22.08
1670.00	1.00	0.180	11.67	12.62	10.46	22.06
1680.00	1.00	0.179	10.71	13.12	10.97	21.61
1690.00	1.00	0.178	10.46	13.27	11.12	21.51
1700.00	1.00	0.176	11.00	13.03	10.88	21.80
1710.00	1.00	0.175	11.54	12.78	10.63	22.10
1720.00	1.00	0.174	11.11	13.02	10.87	21.91
1730.00	1.00	0.173	10.66	13.27	11.12	21.71
1740.00	1.00	0.172	10.90	13.18	11.03	21.85
1750.00	1.00	0.171	11.49	12.91	10.76	22.17
1760.00	1.00	0.170	11.64	12.85	10.70	22.28
1770.00	1.00	0.169	11.22	13.09	10.94	22.09
1780.00	1.00	0.169	11.41	13.02	10.87	22.21
1790.00	1.00	0.168	12.35	12.57	10.42	22.70
1800.00	1.00	0.167	12.98	12.29	10.13	23.04
1810.00	1.00	0.166	12.22	12.69	10.54	22.69
1820.00	1.00	0.165	11.70	12.97	10.82	22.45
1830.00	1.00	0.164	12.11	12.79	10.64	22.68
1840.00	1.00	0.163	12.84	12.45	10.30	23.07
1850.00	1.00	0.162	12.14	12.82	10.67	22.74

Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
1860.00	1.00	0.161	10.87	13.48	11.33	22.13
1870.00	1.00	0.160	10.62	13.63	11.48	22.03
1880.00	1.00	0.160	11.44	13.24	11.09	22.46
1890.00	1.00	0.159	12.15	12.91	10.76	22.84
1900.00	1.00	0.158	11.32	13.35	11.20	22.45
1910.00	1.00	0.157	10.60	13.73	11.58	22.11
1920.00	1.00	0.156	11.05	13.53	11.38	22.36
1930.00	1.00	0.155	12.46	12.85	10.70	23.08
1940.00	1.00	0.155	13.32	12.44	10.29	23.53
1950.00	1.00	0.154	12.52	12.86	10.71	23.16
1960.00	1.00	0.153	12.31	12.99	10.84	23.08
1970.00	1.00	0.152	12.47	12.93	10.78	23.18
1980.00	1.00	0.152	12.89	12.74	10.59	23.41
1990.00	1.00	0.151	12.18	13.12	10.97	23.08
2000.00	1.00	0.150	11.61	13.43	11.28	22.81
2010.00	1.00	0.149	11.58	13.46	11.31	22.82
2020.00	1.00	0.149	11.65	13.45	11.30	22.88
2030.00	1.00	0.148	11.34	13.62	11.47	22.75
2040.00	1.00	0.147	10.99	13.82	11.67	22.59
2050.00	1.00	0.146	11.22	13.73	11.58	22.73
2060.00	1.00	0.146	11.85	13.43	11.28	23.06
2070.00	1.00	0.145	12.26	13.25	11.10	23.29
2080.00	1.00	0.144	12.30	13.25	11.10	23.33
2090.00	1.00	0.144	12.27	13.29	11.14	23.33
2100.00	1.00	0.143	12.42	13.23	11.08	23.43
2110.00	1.00	0.142	12.17	13.38	11.23	23.33
2120.00	1.00	0.142	11.57	13.70	11.55	23.05
2130.00	1.00	0.141	11.08	13.97	11.82	22.82
2140.00	1.00	0.140	11.12	13.96	11.81	22.86
2150.00	1.00	0.140	11.26	13.92	11.77	22.95
2160.00	1.00	0.139	11.01	14.06	11.91	22.85
2170.00	1.00	0.138	10.89	14.14	11.99	22.81
2180.00	1.00	0.138	11.09	14.06	11.91	22.93
2190.00	1.00	0.137	11.42	13.92	11.77	23.11
2200.00	1.00	0.136	11.18	14.05	11.90	23.01
2210.00	1.00	0.136	10.81	14.26	12.11	22.85
2220.00	1.00	0.135	10.86	14.26	12.10	22.89
2230.00	1.00	0.135	11.05	14.18	12.03	23.01
2240.00	1.00	0.134	10.89	14.28	12.13	22.95
2250.00	1.00	0.133	10.58	14.45	12.30	22.81
2260.00	1.00	0.133	10.49	14.52	12.37	22.79
2270.00	1.00	0.132	10.72	14.42	12.27	22.92
2280.00	1.00	0.132	10.53	14.54	12.39	22.84
2290.00	1.00	0.131	10.26	14.69	12.54	22.73
2300.00	1.00	0.130	10.29	14.69	12.54	22.76
2310.00	1.00	0.130	10.70	14.51	12.36	22.99
2320.00	1.00	0.129	10.81	14.47	12.32	23.06
2330.00	1.00	0.129	10.41	14.69	12.54	22.88
2340.00	1.00	0.128	10.24	14.79	12.64	22.81
2350.00	1.00	0.128	10.66	14.60	12.45	23.04

Frequency	Distance	Wavelength	Attenuation	Gain(Isotr.)	Gain (Dipole)	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
2360.00	1.00	0.127	11.09	14.40	12.25	23.28
2370.00	1.00	0.127	10.98	14.48	12.33	23.24
2380.00	1.00	0.126	10.92	14.52	12.37	23.23
2390.00	1.00	0.126	11.26	14.38	12.23	23.41
2400.00	1.00	0.125	11.83	14.11	11.96	23.71
2410.00	1.00	0.124	11.79	14.14	11.99	23.72
2420.00	1.00	0.124	11.87	14.13	11.97	23.77
2430.00	1.00	0.123	12.29	13.93	11.78	24.00
2440.00	1.00	0.123	12.87	13.66	11.51	24.31
2450.00	1.00	0.122	12.72	13.75	11.60	24.25
2460.00	1.00	0.122	12.64	13.81	11.66	24.23
2470.00	1.00	0.121	13.05	13.63	11.47	24.45
2480.00	1.00	0.121	13.97	13.18	11.03	24.93
2490.00	1.00	0.120	14.02	13.17	11.02	24.97
2500.00	1.00	0.120	13.93	13.23	11.08	24.95
2510.00	1.00	0.120	14.58	12.93	10.78	25.28
2520.00	1.00	0.119	16.25	12.11	9.96	26.14
2530.00	1.00	0.119	16.88	11.81	9.66	26.47
2540.00	1.00	0.118	16.35	12.10	9.94	26.22
2550.00	1.00	0.118	16.12	12.23	10.08	26.12
2560.00	1.00	0.117	17.04	11.78	9.63	26.60
2570.00	1.00	0.117	18.13	11.26	9.10	27.16
2580.00	1.00	0.116	17.68	11.50	9.35	26.95
2590.00	1.00	0.116	17.50	11.61	9.45	26.88
2600.00	1.00	0.115	18.26	11.24	9.09	27.28
2610.00	1.00	0.115	20.58	10.10	7.95	28.46
2620.00	1.00	0.115	22.00	9.40	7.25	29.18
2630.00	1.00	0.114	20.79	10.03	7.88	28.59
2640.00	1.00	0.114	20.47	10.20	8.05	28.45
2650.00	1.00	0.113	21.57	9.67	7.52	29.02
2660.00	1.00	0.113	27.04	6.95	4.80	31.77
2670.00	1.00	0.112	27.63	6.67	4.52	32.08
2680.00	1.00	0.112	26.97	7.02	4.87	31.76
2690.00	1.00	0.112	25.34	7.85	5.70	30.97
2700.00	1.00	0.111	29.32	5.87	3.72	32.97
2710.00	1.00	0.111	33.71	3.70	1.55	35.18
2720.00	1.00	0.110	30.38	5.38	3.22	33.54
2730.00	1.00	0.110	28.19	6.49	4.34	32.46
2740.00	1.00	0.109	28.30	6.45	4.30	32.53
2750.00	1.00	0.109	34.06	3.59	1.44	35.42
2760.00	1.00	0.109	35.85	2.70	0.55	36.34
2770.00	1.00	0.108	31.86	4.72	2.57	34.35
2780.00	1.00	0.108	28.56	6.38	4.23	32.72
2790.00	1.00	0.108	27.12	7.12	4.97	32.02
2800.00	1.00	0.107	27.25	7.07	4.92	32.10