

Breitband Hochgewinn Horn Antenne BBHA 9120 J
Broadband High Gain Horn Antenna BBHA 9120 J


Beschreibung:

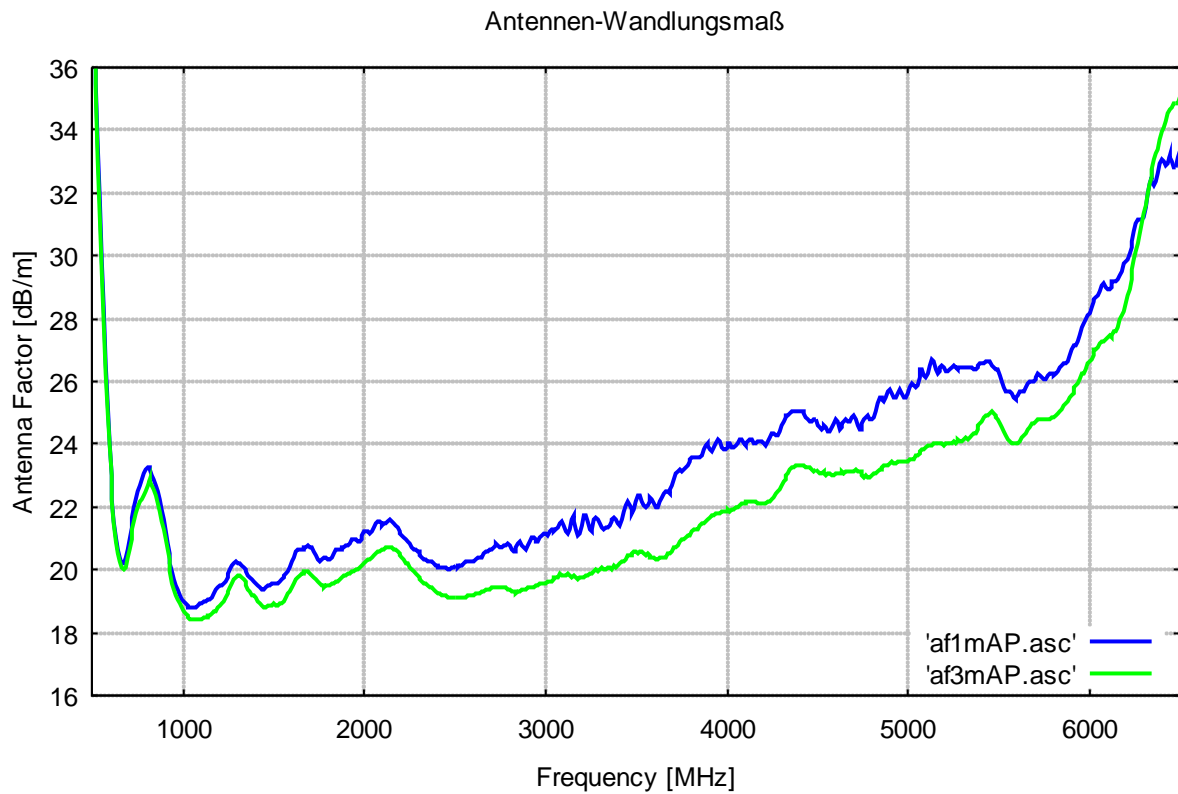
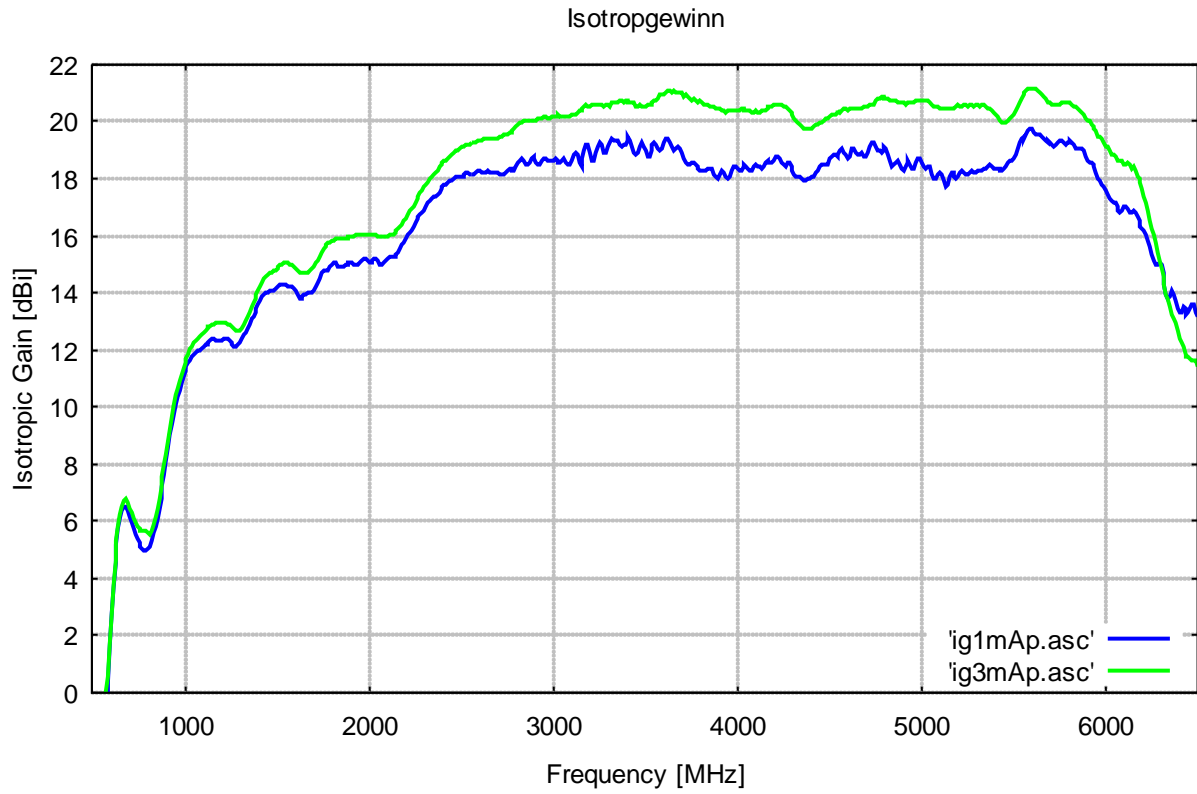
Die Breitband Hornantenne BBHA 9120 J ist eine linear polarisierte Hochgewinnantenne für den Frequenzbereich 800 MHz bis 6.2 GHz. Der Gewinn beträgt bei 1 GHz min. 11 dBi und steigt mit zunehmender Frequenz auf über 20 dBi an.

Description:

The broadband horn antenna BBHA 9120 J is a linear polarized high gain antenna for the frequency range 800 MHz to 6.2 GHz.

The gain increases from 11 dBi at 1GHz up to more than 20 dBi at higher frequencies.

Technische Daten:		Specifications:	
Frequenzbereich:	800 MHz ... 6.2 GHz	Frequency Range:	
Isotropgewinn:	min 11dBi (f>1GHz)	Isotropic Gain:	
Antennenfaktor:	see data below	Antenna Factor:	
Impedanz, nominell:	50 Ω	Nominal Impedance:	
Stehwellenverhältnis SWR max:	<2.3 (f > 1 GHz)	Standing Wave Ratio SWR max:	
Stehwellenverhältnis SWR typisch:	1.3 (f > 1 GHz)	Standing Wave Ratio SWR typical:	
Polarisation:	linear	Polarisation:	
3 dB Öffnungswinkel typ. (E-Ebene):	48° .. 11°	3 dB Beamwidth typ. (E-Plane):	
3 dB Öffnungswinkel typ. (H-Ebene):	48° .. 12°	3 dB Beamwidth typ. (H-Plane):	
Max. Eingangsleistung:	1 kW @ 1 GHz	Max. Input Power:	
Anschlußart: N-Buchse		N-Connector female	
Max. Eingangsleistung:	1.7 kW @ 1 GHz	Max. Input Power:	
Option: 7-16 Buchse		Option: 7-16 connector female	
Halterung (Zentralbefestigung):	3/8" + M12	Center Mount:	
Länge x Breite x Höhe:	680 x 435 x 440 mm	Width x Length x Height:	
Gewicht:	7.6 kg	Weight:	



Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
600.00	2.79	22.99	2.76	23.02	4.17	21.61
610.00	3.71	22.22	3.77	22.16	5.41	20.51
620.00	4.52	21.55	4.62	21.45	6.30	19.77
630.00	5.18	21.03	5.29	20.92	6.87	19.34
640.00	5.71	20.63	5.82	20.52	7.23	19.12
650.00	6.11	20.37	6.23	20.25	7.31	19.17
660.00	6.39	20.22	6.53	20.08	7.26	19.35
670.00	6.54	20.20	6.73	20.01	7.01	19.73
680.00	6.51	20.36	6.77	20.10	6.61	20.26
690.00	6.38	20.62	6.63	20.37	6.21	20.79
700.00	6.18	20.94	6.45	20.67	5.83	21.29
710.00	5.93	21.32	6.27	20.98	5.52	21.73
720.00	5.71	21.66	6.11	21.26	5.31	22.06
730.00	5.51	21.98	5.97	21.52	5.28	22.20
740.00	5.37	22.23	5.80	21.80	5.22	22.39
750.00	5.25	22.47	5.71	22.01	5.27	22.45
760.00	5.13	22.71	5.68	22.16	5.38	22.45
770.00	5.05	22.90	5.70	22.25	5.56	22.39
780.00	4.98	23.08	5.68	22.38	5.67	22.39
790.00	4.98	23.19	5.65	22.52	5.85	22.32
800.00	5.01	23.27	5.57	22.71	5.92	22.36
810.00	5.13	23.26	5.53	22.86	6.02	22.37
820.00	5.32	23.18	5.67	22.83	5.93	22.56
830.00	5.57	23.03	5.91	22.69	5.73	22.87
840.00	5.82	22.89	6.18	22.53	5.51	23.20
850.00	6.11	22.70	6.47	22.34	5.29	23.52
860.00	6.43	22.48	6.81	22.10	5.07	23.84
870.00	6.79	22.22	7.18	21.83	5.07	23.94
880.00	7.20	21.91	7.57	21.54	5.34	23.77
890.00	7.63	21.58	7.95	21.26	5.88	23.33
900.00	8.09	21.21	8.32	20.98	6.58	22.72
910.00	8.55	20.85	8.74	20.66	7.29	22.11
920.00	9.00	20.50	9.20	20.30	8.00	21.49
930.00	9.39	20.20	9.67	19.92	8.63	20.96
940.00	9.75	19.93	10.09	19.59	9.19	20.49
950.00	10.06	19.71	10.40	19.37	9.66	20.12
960.00	10.35	19.52	10.67	19.20	10.14	19.73
970.00	10.60	19.36	10.91	19.05	10.49	19.47
980.00	10.84	19.20	11.15	18.89	10.82	19.23
990.00	11.07	19.06	11.36	18.77	11.09	19.05
1000.00	11.25	18.97	11.54	18.68	11.36	18.86
1010.00	11.40	18.91	11.72	18.59	11.59	18.71
1020.00	11.54	18.85	11.86	18.53	11.82	18.57
1030.00	11.65	18.83	12.03	18.45	11.99	18.48
1040.00	11.76	18.80	12.15	18.41	12.18	18.38
1050.00	11.85	18.79	12.25	18.39	12.31	18.33
1060.00	11.92	18.81	12.32	18.41	12.48	18.24
1070.00	11.98	18.83	12.40	18.41	12.59	18.22
1080.00	12.01	18.88	12.47	18.42	12.70	18.19
1090.00	12.07	18.90	12.54	18.43	12.77	18.20
1100.00	12.12	18.93	12.61	18.44	12.83	18.21
1110.00	12.16	18.97	12.67	18.46	12.91	18.22

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
1120.00	12.21	18.99	12.73	18.47	12.96	18.24
1130.00	12.26	19.02	12.80	18.48	12.99	18.29
1140.00	12.33	19.03	12.84	18.52	13.03	18.33
1150.00	12.37	19.06	12.91	18.52	13.07	18.37
1160.00	12.38	19.13	12.92	18.59	13.10	18.41
1170.00	12.36	19.22	12.94	18.64	13.12	18.46
1180.00	12.32	19.34	12.96	18.70	13.14	18.52
1190.00	12.30	19.43	12.96	18.77	13.17	18.56
1200.00	12.32	19.48	12.96	18.84	13.18	18.62
1210.00	12.37	19.51	12.97	18.91	13.19	18.68
1220.00	12.39	19.56	12.93	19.02	13.18	18.77
1230.00	12.38	19.64	12.92	19.10	13.16	18.86
1240.00	12.36	19.73	12.87	19.22	13.16	18.92
1250.00	12.29	19.87	12.83	19.33	13.15	19.01
1260.00	12.22	20.01	12.81	19.42	13.12	19.11
1270.00	12.15	20.15	12.76	19.54	13.07	19.23
1280.00	12.15	20.21	12.69	19.67	13.03	19.33
1290.00	12.20	20.23	12.65	19.78	12.97	19.46
1300.00	12.28	20.22	12.68	19.82	12.89	19.61
1310.00	12.38	20.19	12.74	19.83	12.77	19.79
1320.00	12.52	20.11	12.86	19.77	12.71	19.93
1330.00	12.63	20.07	13.00	19.70	12.81	19.89
1340.00	12.74	20.02	13.16	19.60	13.01	19.75
1350.00	12.91	19.92	13.34	19.49	13.27	19.55
1360.00	13.07	19.82	13.50	19.39	13.56	19.34
1370.00	13.20	19.75	13.67	19.28	13.85	19.10
1380.00	13.33	19.69	13.81	19.21	14.14	18.88
1390.00	13.46	19.62	13.92	19.16	14.39	18.69
1400.00	13.60	19.54	14.05	19.09	14.54	18.61
1410.00	13.73	19.47	14.22	18.98	14.62	18.58
1420.00	13.84	19.43	14.37	18.90	14.67	18.60
1430.00	13.96	19.37	14.49	18.84	14.72	18.61
1440.00	14.00	19.39	14.58	18.81	14.77	18.62
1450.00	14.04	19.41	14.64	18.81	14.83	18.62
1460.00	14.06	19.45	14.68	18.83	14.88	18.63
1470.00	14.10	19.47	14.72	18.85	14.94	18.63
1480.00	14.10	19.53	14.77	18.86	14.97	18.66
1490.00	14.15	19.53	14.81	18.87	15.01	18.67
1500.00	14.20	19.54	14.84	18.90	15.04	18.70
1510.00	14.25	19.55	14.91	18.89	15.08	18.72
1520.00	14.29	19.57	14.97	18.89	15.11	18.75
1530.00	14.29	19.62	15.02	18.89	15.15	18.76
1540.00	14.26	19.71	15.05	18.92	15.18	18.79
1550.00	14.26	19.77	15.07	18.96	15.23	18.80
1560.00	14.24	19.84	15.07	19.01	15.27	18.81
1570.00	14.25	19.89	15.02	19.12	15.29	18.85
1580.00	14.22	19.97	14.96	19.23	15.30	18.89
1590.00	14.17	20.08	14.92	19.33	15.30	18.94
1600.00	14.07	20.23	14.86	19.44	15.26	19.04
1610.00	13.95	20.41	14.77	19.59	15.17	19.18
1620.00	13.83	20.58	14.74	19.67	15.05	19.36
1630.00	13.82	20.64	14.73	19.73	14.93	19.53
1640.00	13.87	20.65	14.70	19.82	14.81	19.71

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
1650.00	13.92	20.65	14.70	19.87	14.72	19.85
1660.00	13.97	20.65	14.72	19.90	14.65	19.97
1670.00	13.99	20.68	14.73	19.94	14.65	20.03
1680.00	13.99	20.74	14.77	19.96	14.70	20.02
1690.00	14.01	20.77	14.83	19.95	14.85	19.93
1700.00	14.09	20.74	14.93	19.90	14.96	19.87
1710.00	14.19	20.69	15.04	19.84	15.13	19.75
1720.00	14.34	20.59	15.16	19.77	15.27	19.66
1730.00	14.51	20.47	15.29	19.69	15.42	19.56
1740.00	14.68	20.35	15.43	19.60	15.56	19.47
1750.00	14.79	20.29	15.53	19.55	15.70	19.38
1760.00	14.80	20.33	15.61	19.52	15.80	19.33
1770.00	14.79	20.39	15.69	19.49	15.89	19.29
1780.00	14.81	20.42	15.77	19.46	15.97	19.26
1790.00	14.89	20.39	15.79	19.49	16.03	19.25
1800.00	15.01	20.32	15.82	19.51	16.07	19.26
1810.00	15.07	20.30	15.85	19.52	16.10	19.28
1820.00	15.03	20.39	15.88	19.54	16.12	19.30
1830.00	14.94	20.53	15.88	19.59	16.12	19.34
1840.00	14.90	20.62	15.89	19.63	16.14	19.37
1850.00	14.91	20.65	15.91	19.65	16.16	19.40
1860.00	14.95	20.66	15.90	19.71	16.18	19.43
1870.00	15.01	20.65	15.90	19.76	16.21	19.45
1880.00	15.02	20.68	15.92	19.78	16.23	19.47
1890.00	15.03	20.72	15.95	19.80	16.25	19.50
1900.00	15.03	20.77	15.95	19.85	16.30	19.50
1910.00	15.04	20.80	15.95	19.89	16.32	19.52
1920.00	15.02	20.87	15.99	19.90	16.36	19.53
1930.00	15.00	20.93	16.01	19.92	16.41	19.52
1940.00	15.02	20.96	16.01	19.97	16.44	19.54
1950.00	15.06	20.96	16.03	19.99	16.48	19.54
1960.00	15.15	20.92	16.05	20.02	16.52	19.54
1970.00	15.19	20.92	16.05	20.06	16.53	19.58
1980.00	15.17	20.98	16.04	20.11	16.56	19.59
1990.00	15.11	21.09	16.06	20.14	16.57	19.63
2000.00	15.05	21.19	16.07	20.17	16.55	19.69
2010.00	15.06	21.22	16.03	20.25	16.53	19.75
2020.00	15.14	21.19	16.01	20.32	16.49	19.83
2030.00	15.19	21.18	16.02	20.35	16.45	19.92
2040.00	15.19	21.22	16.01	20.40	16.41	20.00
2050.00	15.11	21.35	15.98	20.48	16.36	20.10
2060.00	15.02	21.48	15.96	20.54	16.31	20.18
2070.00	14.99	21.55	15.97	20.57	16.28	20.26
2080.00	15.05	21.53	15.98	20.60	16.24	20.34
2090.00	15.16	21.46	15.99	20.63	16.22	20.40
2100.00	15.23	21.43	15.99	20.67	16.21	20.45
2110.00	15.26	21.45	16.04	20.67	16.20	20.50
2120.00	15.25	21.50	16.05	20.70	16.21	20.54
2130.00	15.24	21.55	16.07	20.72	16.23	20.55
2140.00	15.26	21.57	16.13	20.70	16.26	20.57
2150.00	15.32	21.55	16.19	20.68	16.30	20.57
2160.00	15.42	21.49	16.24	20.67	16.38	20.53
2170.00	15.55	21.40	16.31	20.64	16.43	20.52

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
2180.00	15.67	21.32	16.41	20.58	16.52	20.47
2190.00	15.78	21.25	16.54	20.49	16.62	20.41
2200.00	15.89	21.18	16.62	20.45	16.70	20.37
2210.00	16.01	21.10	16.73	20.38	16.80	20.30
2220.00	16.11	21.04	16.85	20.30	16.92	20.23
2230.00	16.21	20.98	16.97	20.22	17.00	20.19
2240.00	16.34	20.88	17.05	20.17	17.10	20.12
2250.00	16.45	20.81	17.18	20.08	17.19	20.07
2260.00	16.57	20.73	17.30	20.00	17.28	20.02
2270.00	16.68	20.66	17.40	19.94	17.38	19.96
2280.00	16.75	20.63	17.49	19.89	17.47	19.91
2290.00	16.82	20.60	17.61	19.81	17.56	19.86
2300.00	16.89	20.56	17.71	19.74	17.65	19.80
2310.00	17.01	20.48	17.80	19.69	17.74	19.75
2320.00	17.14	20.39	17.89	19.64	17.84	19.69
2330.00	17.24	20.33	17.98	19.59	17.93	19.64
2340.00	17.31	20.29	18.05	19.55	18.03	19.58
2350.00	17.36	20.28	18.16	19.48	18.13	19.51
2360.00	17.39	20.29	18.24	19.44	18.22	19.45
2370.00	17.46	20.25	18.31	19.40	18.32	19.39
2380.00	17.54	20.21	18.39	19.36	18.43	19.33
2390.00	17.63	20.16	18.48	19.31	18.53	19.26
2400.00	17.70	20.12	18.55	19.27	18.62	19.21
2410.00	17.76	20.10	18.60	19.26	18.70	19.16
2420.00	17.80	20.10	18.65	19.25	18.78	19.11
2430.00	17.86	20.07	18.73	19.20	18.86	19.07
2440.00	17.92	20.05	18.80	19.17	18.91	19.05
2450.00	17.96	20.04	18.84	19.16	18.97	19.04
2460.00	18.02	20.02	18.91	19.13	19.01	19.03
2470.00	18.05	20.02	18.96	19.11	19.04	19.03
2480.00	18.05	20.06	19.00	19.11	19.08	19.03
2490.00	18.05	20.09	19.04	19.10	19.11	19.03
2500.00	18.06	20.12	19.09	19.09	19.14	19.04
2510.00	18.10	20.11	19.12	19.09	19.17	19.05
2520.00	18.15	20.10	19.15	19.10	19.19	19.06
2530.00	18.18	20.10	19.17	19.11	19.21	19.07
2540.00	18.18	20.14	19.21	19.11	19.24	19.08
2550.00	18.17	20.18	19.22	19.13	19.27	19.08
2560.00	18.12	20.26	19.24	19.14	19.28	19.11
2570.00	18.14	20.28	19.24	19.18	19.30	19.12
2580.00	18.20	20.25	19.29	19.16	19.32	19.13
2590.00	18.25	20.24	19.32	19.17	19.34	19.15
2600.00	18.26	20.26	19.31	19.21	19.37	19.15
2610.00	18.22	20.33	19.34	19.21	19.40	19.16
2620.00	18.20	20.39	19.37	19.22	19.42	19.17
2630.00	18.24	20.38	19.37	19.25	19.46	19.16
2640.00	18.27	20.38	19.39	19.26	19.50	19.15
2650.00	18.28	20.40	19.40	19.28	19.55	19.13
2660.00	18.23	20.49	19.41	19.31	19.60	19.12
2670.00	18.18	20.57	19.40	19.35	19.64	19.11
2680.00	18.18	20.60	19.40	19.38	19.67	19.11
2690.00	18.19	20.63	19.42	19.40	19.69	19.13
2700.00	18.20	20.65	19.43	19.42	19.69	19.16

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
2710.00	18.16	20.72	19.44	19.44	19.68	19.20
2720.00	18.12	20.79	19.47	19.44	19.66	19.25
2730.00	18.13	20.81	19.51	19.43	19.64	19.30
2740.00	18.20	20.78	19.53	19.45	19.62	19.35
2750.00	18.29	20.72	19.56	19.45	19.63	19.38
2760.00	18.32	20.72	19.62	19.42	19.65	19.39
2770.00	18.32	20.75	19.64	19.43	19.68	19.39
2780.00	18.30	20.80	19.69	19.41	19.72	19.38
2790.00	18.31	20.82	19.76	19.37	19.79	19.34
2800.00	18.39	20.77	19.82	19.34	19.85	19.32
2810.00	18.53	20.66	19.88	19.31	19.91	19.29
2820.00	18.63	20.59	19.93	19.29	19.97	19.26
2830.00	18.68	20.58	19.97	19.29	20.01	19.24
2840.00	18.61	20.68	20.02	19.27	20.06	19.23
2850.00	18.50	20.82	20.04	19.28	20.10	19.22
2860.00	18.48	20.87	20.03	19.32	20.12	19.23
2870.00	18.58	20.80	20.04	19.34	20.14	19.23
2880.00	18.71	20.70	20.05	19.36	20.16	19.25
2890.00	18.77	20.67	20.05	19.39	20.16	19.28
2900.00	18.72	20.75	20.04	19.43	20.16	19.31
2910.00	18.57	20.93	20.05	19.45	20.15	19.35
2920.00	18.49	21.04	20.08	19.45	20.13	19.40
2930.00	18.50	21.06	20.10	19.46	20.12	19.44
2940.00	18.62	20.97	20.09	19.50	20.11	19.47
2950.00	18.73	20.89	20.15	19.47	20.11	19.51
2960.00	18.72	20.93	20.15	19.50	20.10	19.55
2970.00	18.62	21.06	20.13	19.55	20.12	19.56
2980.00	18.60	21.10	20.12	19.58	20.13	19.57
2990.00	18.61	21.12	20.20	19.53	20.14	19.59
3000.00	18.62	21.14	20.17	19.59	20.17	19.60
3010.00	18.67	21.12	20.15	19.64	20.19	19.60
3020.00	18.63	21.19	20.19	19.63	20.19	19.63
3030.00	18.55	21.30	20.24	19.61	20.21	19.64
3040.00	18.58	21.30	20.19	19.69	20.22	19.66
3050.00	18.66	21.25	20.17	19.74	20.22	19.69
3060.00	18.67	21.26	20.19	19.74	20.24	19.70
3070.00	18.59	21.37	20.19	19.77	20.25	19.71
3080.00	18.52	21.47	20.14	19.85	20.25	19.74
3090.00	18.48	21.54	20.19	19.83	20.28	19.74
3100.00	18.64	21.41	20.23	19.82	20.32	19.73
3110.00	18.83	21.25	20.25	19.83	20.33	19.74
3120.00	18.93	21.17	20.23	19.87	20.37	19.73
3130.00	18.83	21.30	20.33	19.80	20.41	19.72
3140.00	18.59	21.57	20.39	19.77	20.43	19.72
3150.00	18.45	21.74	20.40	19.79	20.47	19.71
3160.00	18.68	21.53	20.42	19.79	20.52	19.69
3170.00	18.98	21.26	20.51	19.73	20.55	19.69
3180.00	19.17	21.10	20.56	19.71	20.59	19.68
3190.00	19.16	21.14	20.53	19.77	20.63	19.66
3200.00	18.94	21.38	20.55	19.77	20.67	19.66
3210.00	18.60	21.75	20.59	19.76	20.70	19.65
3220.00	18.63	21.75	20.59	19.79	20.72	19.66
3230.00	18.88	21.52	20.56	19.84	20.73	19.67

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
3240.00	19.13	21.30	20.57	19.86	20.74	19.69
3250.00	19.25	21.21	20.60	19.86	20.74	19.72
3260.00	19.18	21.30	20.59	19.89	20.73	19.76
3270.00	18.94	21.57	20.55	19.96	20.72	19.79
3280.00	18.89	21.65	20.56	19.98	20.72	19.82
3290.00	18.94	21.62	20.62	19.94	20.71	19.86
3300.00	19.12	21.47	20.58	20.01	20.70	19.89
3310.00	19.29	21.33	20.55	20.07	20.71	19.91
3320.00	19.37	21.27	20.64	20.00	20.71	19.93
3330.00	19.34	21.33	20.67	20.00	20.72	19.95
3340.00	19.35	21.34	20.64	20.05	20.74	19.95
3350.00	19.30	21.42	20.68	20.04	20.76	19.97
3360.00	19.19	21.56	20.76	19.99	20.76	19.99
3370.00	19.15	21.62	20.74	20.03	20.79	19.98
3380.00	19.16	21.64	20.69	20.11	20.80	20.00
3390.00	19.20	21.62	20.74	20.08	20.80	20.02
3400.00	19.36	21.49	20.74	20.11	20.81	20.04
3410.00	19.44	21.44	20.67	20.21	20.81	20.06
3420.00	19.33	21.57	20.63	20.27	20.79	20.11
3430.00	19.09	21.84	20.66	20.27	20.78	20.14
3440.00	18.89	22.06	20.63	20.32	20.76	20.19
3450.00	18.81	22.17	20.55	20.43	20.72	20.25
3460.00	18.94	22.06	20.55	20.45	20.69	20.31
3470.00	19.14	21.89	20.56	20.47	20.65	20.38
3480.00	19.24	21.81	20.51	20.54	20.61	20.44
3490.00	19.14	21.94	20.49	20.59	20.58	20.50
3500.00	18.95	22.15	20.54	20.56	20.57	20.53
3510.00	18.79	22.34	20.60	20.53	20.56	20.57
3520.00	18.79	22.36	20.58	20.57	20.58	20.57
3530.00	18.99	22.19	20.62	20.56	20.62	20.56
3540.00	19.17	22.03	20.69	20.51	20.67	20.53
3550.00	19.27	21.95	20.76	20.46	20.73	20.49
3560.00	19.22	22.03	20.76	20.49	20.80	20.45
3570.00	19.08	22.19	20.82	20.45	20.86	20.41
3580.00	19.01	22.29	20.91	20.39	20.94	20.36
3590.00	19.08	22.24	20.95	20.37	20.99	20.33
3600.00	19.25	22.10	20.97	20.38	21.05	20.30
3610.00	19.38	21.99	21.04	20.33	21.10	20.27
3620.00	19.39	22.00	21.10	20.29	21.13	20.26
3630.00	19.27	22.15	21.06	20.36	21.15	20.27
3640.00	19.11	22.33	21.03	20.41	21.18	20.26
3650.00	19.01	22.46	21.09	20.38	21.18	20.28
3660.00	18.99	22.50	21.07	20.42	21.17	20.32
3670.00	19.05	22.46	21.00	20.51	21.18	20.33
3680.00	19.09	22.45	21.00	20.54	21.17	20.37
3690.00	19.03	22.53	21.03	20.53	21.13	20.43
3700.00	18.90	22.68	20.98	20.60	21.14	20.45
3710.00	18.73	22.88	20.90	20.71	21.12	20.49
3720.00	18.59	23.04	20.91	20.72	21.07	20.56
3730.00	18.50	23.15	20.89	20.76	21.06	20.59
3740.00	18.51	23.17	20.79	20.89	21.04	20.64
3750.00	18.56	23.14	20.75	20.95	20.99	20.71
3760.00	18.55	23.17	20.77	20.95	20.99	20.74

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
3770.00	18.50	23.25	20.75	21.00	20.97	20.77
3780.00	18.42	23.35	20.68	21.09	20.95	20.82
3790.00	18.37	23.42	20.69	21.10	20.95	20.84
3800.00	18.31	23.51	20.71	21.11	20.96	20.86
3810.00	18.28	23.56	20.64	21.20	20.95	20.89
3820.00	18.28	23.58	20.60	21.26	20.96	20.91
3830.00	18.29	23.59	20.61	21.27	20.96	20.93
3840.00	18.35	23.56	20.61	21.30	20.94	20.97
3850.00	18.38	23.55	20.55	21.38	20.94	20.99
3860.00	18.32	23.63	20.51	21.44	20.92	21.03
3870.00	18.17	23.80	20.50	21.47	20.88	21.09
3880.00	18.05	23.95	20.47	21.53	20.85	21.15
3890.00	18.00	24.02	20.42	21.60	20.82	21.20
3900.00	18.11	23.93	20.42	21.62	20.78	21.26
3910.00	18.26	23.80	20.39	21.67	20.74	21.32
3920.00	18.31	23.78	20.38	21.71	20.71	21.37
3930.00	18.21	23.90	20.35	21.76	20.69	21.41
3940.00	18.08	24.05	20.34	21.79	20.67	21.46
3950.00	18.00	24.15	20.35	21.80	20.68	21.48
3960.00	18.09	24.08	20.37	21.80	20.68	21.49
3970.00	18.28	23.92	20.36	21.84	20.69	21.51
3980.00	18.42	23.80	20.37	21.85	20.71	21.51
3990.00	18.42	23.82	20.40	21.84	20.73	21.51
4000.00	18.36	23.90	20.41	21.85	20.73	21.53
4010.00	18.28	24.00	20.39	21.89	20.76	21.52
4020.00	18.30	24.00	20.42	21.88	20.76	21.55
4030.00	18.41	23.92	20.43	21.90	20.74	21.58
4040.00	18.48	23.87	20.41	21.94	20.74	21.61
4050.00	18.44	23.93	20.39	21.98	20.71	21.66
4060.00	18.36	24.03	20.40	21.99	20.67	21.72
4070.00	18.28	24.13	20.38	22.03	20.65	21.76
4080.00	18.27	24.16	20.34	22.09	20.61	21.82
4090.00	18.42	24.03	20.34	22.11	20.59	21.86
4100.00	18.50	23.98	20.35	22.13	20.60	21.87
4110.00	18.45	24.05	20.32	22.18	20.59	21.90
4120.00	18.42	24.10	20.33	22.19	20.63	21.89
4130.00	18.38	24.16	20.36	22.18	20.67	21.87
4140.00	18.41	24.15	20.39	22.17	20.70	21.86
4150.00	18.56	24.02	20.38	22.20	20.76	21.82
4160.00	18.60	24.00	20.44	22.16	20.82	21.78
4170.00	18.54	24.08	20.50	22.12	20.86	21.76
4180.00	18.54	24.10	20.51	22.13	20.93	21.72
4190.00	18.57	24.09	20.54	22.12	20.97	21.70
4200.00	18.65	24.03	20.59	22.09	21.00	21.68
4210.00	18.78	23.93	20.61	22.10	21.04	21.67
4220.00	18.80	23.93	20.60	22.13	21.04	21.69
4230.00	18.67	24.08	20.58	22.17	21.03	21.71
4240.00	18.54	24.23	20.59	22.18	21.02	21.75
4250.00	18.46	24.33	20.54	22.25	20.98	21.81
4260.00	18.44	24.37	20.49	22.32	20.92	21.89
4270.00	18.53	24.30	20.43	22.40	20.85	21.98
4280.00	18.56	24.29	20.38	22.47	20.77	22.08
4290.00	18.45	24.42	20.30	22.57	20.69	22.18

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
4300.00	18.29	24.60	20.21	22.68	20.59	22.30
4310.00	18.16	24.75	20.11	22.80	20.49	22.42
4320.00	18.07	24.86	20.03	22.90	20.41	22.52
4330.00	18.06	24.89	19.95	23.00	20.32	22.63
4340.00	18.05	24.92	19.88	23.09	20.25	22.72
4350.00	18.00	24.99	19.80	23.19	20.20	22.79
4360.00	17.96	25.05	19.78	23.23	20.14	22.87
4370.00	17.96	25.07	19.75	23.28	20.12	22.91
4380.00	17.98	25.07	19.73	23.32	20.12	22.92
4390.00	18.03	25.04	19.72	23.35	20.12	22.95
4400.00	18.07	25.02	19.78	23.31	20.16	22.93
4410.00	18.07	25.04	19.79	23.32	20.21	22.90
4420.00	18.10	25.03	19.80	23.33	20.25	22.87
4430.00	18.19	24.96	19.86	23.29	20.32	22.83
4440.00	18.31	24.86	19.92	23.25	20.38	22.78
4450.00	18.43	24.76	19.93	23.26	20.43	22.76
4460.00	18.51	24.70	19.97	23.24	20.48	22.72
4470.00	18.52	24.71	20.03	23.20	20.53	22.70
4480.00	18.48	24.77	20.10	23.15	20.56	22.69
4490.00	18.49	24.77	20.09	23.17	20.58	22.68
4500.00	18.67	24.61	20.14	23.14	20.61	22.68
4510.00	18.79	24.51	20.22	23.08	20.64	22.67
4520.00	18.83	24.49	20.24	23.08	20.67	22.66
4530.00	18.81	24.53	20.23	23.11	20.71	22.64
4540.00	18.74	24.62	20.30	23.06	20.74	22.62
4550.00	18.82	24.56	20.37	23.01	20.78	22.60
4560.00	19.01	24.39	20.34	23.06	20.81	22.59
4570.00	19.04	24.38	20.36	23.06	20.82	22.60
4580.00	18.93	24.51	20.43	23.01	20.82	22.62
4590.00	18.81	24.65	20.44	23.02	20.80	22.65
4600.00	18.70	24.78	20.40	23.08	20.76	22.71
4610.00	18.80	24.69	20.45	23.04	20.72	22.77
4620.00	19.03	24.48	20.45	23.06	20.67	22.85
4630.00	19.02	24.51	20.44	23.09	20.60	22.93
4640.00	18.91	24.64	20.44	23.11	20.59	22.96
4650.00	18.87	24.70	20.48	23.09	20.55	23.02
4660.00	18.83	24.76	20.46	23.13	20.55	23.04
4670.00	18.89	24.72	20.47	23.14	20.60	23.01
4680.00	18.93	24.69	20.48	23.14	20.62	23.01
4690.00	18.79	24.85	20.53	23.11	20.70	22.95
4700.00	18.75	24.91	20.52	23.14	20.79	22.87
4710.00	18.92	24.76	20.49	23.19	20.85	22.83
4720.00	19.10	24.60	20.56	23.14	20.95	22.75
4730.00	19.25	24.47	20.62	23.10	21.04	22.68
4740.00	19.29	24.45	20.61	23.13	21.07	22.66
4750.00	19.11	24.64	20.73	23.02	21.15	22.60
4760.00	18.96	24.81	20.81	22.96	21.18	22.59
4770.00	18.95	24.84	20.77	23.02	21.19	22.60
4780.00	18.92	24.89	20.84	22.97	21.22	22.59
4790.00	19.01	24.82	20.89	22.94	21.21	22.62
4800.00	19.09	24.75	20.82	23.02	21.20	22.65
4810.00	19.03	24.83	20.80	23.06	21.19	22.67
4820.00	18.84	25.04	20.82	23.06	21.16	22.72

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
4830.00	18.60	25.30	20.76	23.14	21.15	22.75
4840.00	18.44	25.48	20.73	23.19	21.11	22.81
4850.00	18.46	25.47	20.74	23.19	21.08	22.85
4860.00	18.56	25.39	20.72	23.23	21.05	22.90
4870.00	18.60	25.37	20.67	23.30	21.00	22.97
4880.00	18.50	25.49	20.66	23.33	20.97	23.02
4890.00	18.34	25.67	20.67	23.34	20.93	23.07
4900.00	18.29	25.73	20.65	23.37	20.89	23.13
4910.00	18.42	25.62	20.62	23.42	20.88	23.16
4920.00	18.56	25.50	20.65	23.41	20.86	23.20
4930.00	18.61	25.47	20.67	23.41	20.85	23.23
4940.00	18.51	25.58	20.64	23.45	20.85	23.24
4950.00	18.37	25.74	20.67	23.44	20.84	23.27
4960.00	18.36	25.77	20.69	23.44	20.84	23.29
4970.00	18.53	25.62	20.70	23.45	20.83	23.31
4980.00	18.69	25.47	20.71	23.45	20.81	23.36
4990.00	18.72	25.46	20.73	23.45	20.80	23.39
5000.00	18.59	25.61	20.73	23.47	20.76	23.44
5010.00	18.41	25.81	20.72	23.50	20.72	23.49
5020.00	18.32	25.91	20.73	23.50	20.71	23.53
5030.00	18.39	25.86	20.71	23.54	20.66	23.59
5040.00	18.45	25.82	20.64	23.63	20.60	23.67
5050.00	18.39	25.90	20.64	23.65	20.56	23.72
5060.00	18.16	26.14	20.60	23.70	20.48	23.82
5070.00	17.97	26.35	20.53	23.79	20.39	23.93
5080.00	17.98	26.36	20.51	23.83	20.34	24.00
5090.00	18.17	26.18	20.51	23.84	20.24	24.11
5100.00	18.22	26.15	20.47	23.90	20.17	24.20
5110.00	18.13	26.26	20.43	23.96	20.15	24.24
5120.00	17.93	26.48	20.45	23.96	20.11	24.30
5130.00	17.75	26.67	20.45	23.97	20.11	24.31
5140.00	17.82	26.62	20.42	24.02	20.15	24.29
5150.00	18.06	26.40	20.42	24.04	20.16	24.30
5160.00	18.23	26.24	20.45	24.02	20.22	24.26
5170.00	18.20	26.29	20.48	24.01	20.26	24.23
5180.00	18.07	26.44	20.46	24.05	20.28	24.23
5190.00	18.01	26.51	20.52	24.00	20.34	24.19
5200.00	18.10	26.44	20.56	23.98	20.34	24.20
5210.00	18.24	26.32	20.53	24.03	20.36	24.20
5220.00	18.26	26.31	20.55	24.02	20.41	24.16
5230.00	18.21	26.38	20.60	23.99	20.41	24.18
5240.00	18.15	26.46	20.58	24.03	20.44	24.17
5250.00	18.11	26.51	20.54	24.08	20.48	24.14
5260.00	18.18	26.46	20.59	24.05	20.48	24.16
5270.00	18.25	26.41	20.58	24.08	20.51	24.14
5280.00	18.24	26.43	20.54	24.13	20.54	24.13
5290.00	18.24	26.45	20.58	24.11	20.53	24.16
5300.00	18.28	26.43	20.61	24.10	20.57	24.13
5310.00	18.28	26.44	20.58	24.14	20.60	24.12
5320.00	18.29	26.45	20.55	24.19	20.60	24.14
5330.00	18.30	26.45	20.60	24.15	20.63	24.13
5340.00	18.32	26.45	20.57	24.20	20.64	24.13
5350.00	18.37	26.42	20.49	24.30	20.62	24.16

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
5360.00	18.44	26.36	20.47	24.33	20.61	24.20
5370.00	18.46	26.36	20.46	24.36	20.55	24.27
5380.00	18.40	26.44	20.37	24.47	20.47	24.36
5390.00	18.35	26.50	20.28	24.57	20.37	24.48
5400.00	18.33	26.54	20.22	24.65	20.25	24.62
5410.00	18.34	26.54	20.17	24.71	20.11	24.77
5420.00	18.35	26.55	20.06	24.84	19.97	24.93
5430.00	18.31	26.61	20.00	24.92	19.85	25.07
5440.00	18.28	26.65	19.99	24.94	19.77	25.16
5450.00	18.34	26.61	19.95	25.00	19.72	25.22
5460.00	18.45	26.51	19.94	25.02	19.74	25.22
5470.00	18.54	26.44	20.01	24.97	19.81	25.17
5480.00	18.62	26.38	20.08	24.92	19.93	25.07
5490.00	18.64	26.37	20.16	24.85	20.09	24.92
5500.00	18.67	26.36	20.26	24.77	20.28	24.75
5510.00	18.85	26.19	20.40	24.64	20.47	24.57
5520.00	19.08	25.98	20.55	24.51	20.66	24.40
5530.00	19.28	25.79	20.68	24.39	20.84	24.24
5540.00	19.40	25.69	20.82	24.27	20.99	24.10
5550.00	19.44	25.67	20.96	24.15	21.12	23.99
5560.00	19.42	25.70	21.03	24.09	21.23	23.89
5570.00	19.54	25.60	21.09	24.05	21.29	23.84
5580.00	19.67	25.48	21.16	23.99	21.33	23.82
5590.00	19.73	25.44	21.18	23.99	21.33	23.84
5600.00	19.72	25.46	21.16	24.02	21.28	23.91
5610.00	19.63	25.57	21.15	24.05	21.21	23.99
5620.00	19.53	25.68	21.12	24.09	21.13	24.09
5630.00	19.56	25.67	21.05	24.18	20.99	24.24
5640.00	19.57	25.68	20.99	24.26	20.87	24.38
5650.00	19.48	25.78	20.91	24.35	20.76	24.50
5660.00	19.37	25.91	20.84	24.44	20.62	24.66
5670.00	19.31	25.98	20.77	24.52	20.52	24.77
5680.00	19.29	26.02	20.68	24.63	20.45	24.86
5690.00	19.32	26.00	20.65	24.67	20.35	24.97
5700.00	19.29	26.05	20.64	24.70	20.33	25.00
5710.00	19.20	26.15	20.61	24.74	20.34	25.01
5720.00	19.15	26.22	20.60	24.77	20.33	25.04
5730.00	19.19	26.19	20.60	24.78	20.38	25.00
5740.00	19.28	26.12	20.61	24.79	20.44	24.96
5750.00	19.36	26.05	20.62	24.79	20.46	24.95
5760.00	19.36	26.07	20.63	24.80	20.50	24.93
5770.00	19.28	26.16	20.66	24.78	20.52	24.92
5780.00	19.22	26.24	20.66	24.80	20.50	24.96
5790.00	19.23	26.24	20.65	24.82	20.48	24.99
5800.00	19.27	26.22	20.65	24.84	20.45	25.04
5810.00	19.30	26.20	20.64	24.86	20.40	25.10
5820.00	19.28	26.24	20.60	24.92	20.34	25.18
5830.00	19.19	26.34	20.55	24.98	20.27	25.26
5840.00	19.08	26.47	20.51	25.04	20.22	25.33
5850.00	19.03	26.53	20.45	25.11	20.15	25.41
5860.00	19.04	26.54	20.37	25.21	20.07	25.50
5870.00	19.04	26.55	20.31	25.28	20.04	25.55
5880.00	18.97	26.64	20.22	25.39	19.93	25.68

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
5890.00	18.78	26.84	20.11	25.51	19.85	25.77
5900.00	18.61	27.03	20.06	25.58	19.81	25.83
5910.00	18.54	27.11	20.02	25.63	19.67	25.98
5920.00	18.54	27.13	19.88	25.79	19.58	26.09
5930.00	18.52	27.16	19.81	25.87	19.52	26.16
5940.00	18.44	27.26	19.77	25.93	19.36	26.33
5950.00	18.24	27.47	19.65	26.06	19.29	26.42
5960.00	18.03	27.69	19.50	26.22	19.24	26.48
5970.00	17.92	27.82	19.46	26.28	19.09	26.65
5980.00	17.80	27.95	19.40	26.35	19.02	26.74
5990.00	17.69	28.08	19.23	26.54	18.96	26.81
6000.00	17.60	28.18	19.13	26.65	18.79	26.99
6010.00	17.42	28.38	19.10	26.70	18.71	27.09
6020.00	17.27	28.54	18.98	26.83	18.64	27.17
6030.00	17.23	28.60	18.84	26.99	18.47	27.36
6040.00	17.18	28.66	18.81	27.03	18.40	27.44
6050.00	17.13	28.73	18.77	27.09	18.37	27.49
6060.00	17.03	28.84	18.66	27.21	18.26	27.61
6070.00	16.85	29.03	18.60	27.28	18.26	27.62
6080.00	16.79	29.11	18.61	27.29	18.29	27.61
6090.00	16.90	29.01	18.60	27.31	18.27	27.64
6100.00	16.99	28.94	18.51	27.42	18.32	27.61
6110.00	17.03	28.91	18.49	27.45	18.37	27.58
6120.00	16.97	28.99	18.56	27.40	18.35	27.60
6130.00	16.82	29.15	18.48	27.49	18.36	27.61
6140.00	16.80	29.18	18.37	27.61	18.33	27.66
6150.00	16.85	29.15	18.39	27.61	18.22	27.77
6160.00	16.79	29.22	18.31	27.70	18.11	27.90
6170.00	16.67	29.36	18.08	27.95	17.96	28.07
6180.00	16.52	29.52	17.97	28.07	17.74	28.30
6190.00	16.32	29.73	17.86	28.19	17.49	28.57
6200.00	16.24	29.83	17.62	28.45	17.21	28.86
6210.00	16.19	29.89	17.34	28.74	16.87	29.21
6220.00	16.04	30.06	17.15	28.95	16.54	29.56
6230.00	15.86	30.25	16.87	29.24	16.19	29.92
6240.00	15.65	30.47	16.54	29.58	15.80	30.33
6250.00	15.36	30.78	16.25	29.89	15.46	30.68
6260.00	15.11	31.04	16.01	30.14	15.13	31.02
6270.00	15.02	31.15	15.75	30.42	14.79	31.38
6280.00	15.02	31.16	15.44	30.74	14.55	31.63
6290.00	15.06	31.13	15.15	31.04	14.36	31.84
6300.00	15.02	31.19	14.88	31.33	14.13	32.08
6310.00	14.70	31.52	14.59	31.63	13.97	32.25
6320.00	14.28	31.95	14.26	31.97	13.79	32.44
6330.00	13.96	32.29	13.96	32.29	13.53	32.71
6340.00	13.80	32.46	13.77	32.49	13.31	32.96
6350.00	13.88	32.40	13.55	32.73	13.03	33.24
6360.00	14.07	32.22	13.25	33.04	12.62	33.67
6370.00	13.97	32.33	13.07	33.23	12.26	34.04
6380.00	13.70	32.62	12.94	33.38	11.95	34.36
6390.00	13.42	32.91	12.65	33.68	11.61	34.72
6400.00	13.28	33.06	12.38	33.96	11.34	35.00
6410.00	13.33	33.03	12.26	34.10	11.17	35.18

Frequency	Isotropic gain 1 m Ap.	Antenna factor 1 m Ap.	Isotropic gain 3 m Ap.	Antenna factor 3 m Ap.	Isotropic gain farfield	Antenna factor farfield
[MHz]	[dBi]	[dB/m]	[dBi]	[dB/m]	dBi	dB/m
6420.00	13.49	32.88	12.11	34.26	10.95	35.42
6430.00	13.42	32.96	11.87	34.51	10.77	35.61
6440.00	13.21	33.19	11.74	34.66	10.59	35.80
6450.00	13.29	33.12	11.76	34.65	10.29	36.12
6460.00	13.42	33.00	11.70	34.72	9.90	36.53
6470.00	13.61	32.83	11.61	34.83	9.47	36.97
6480.00	13.62	32.83	11.62	34.83	9.19	37.26
6490.00	13.33	33.13	11.59	34.87	8.91	37.55
6500.00	13.16	33.32	11.43	35.05	8.56	37.92

