

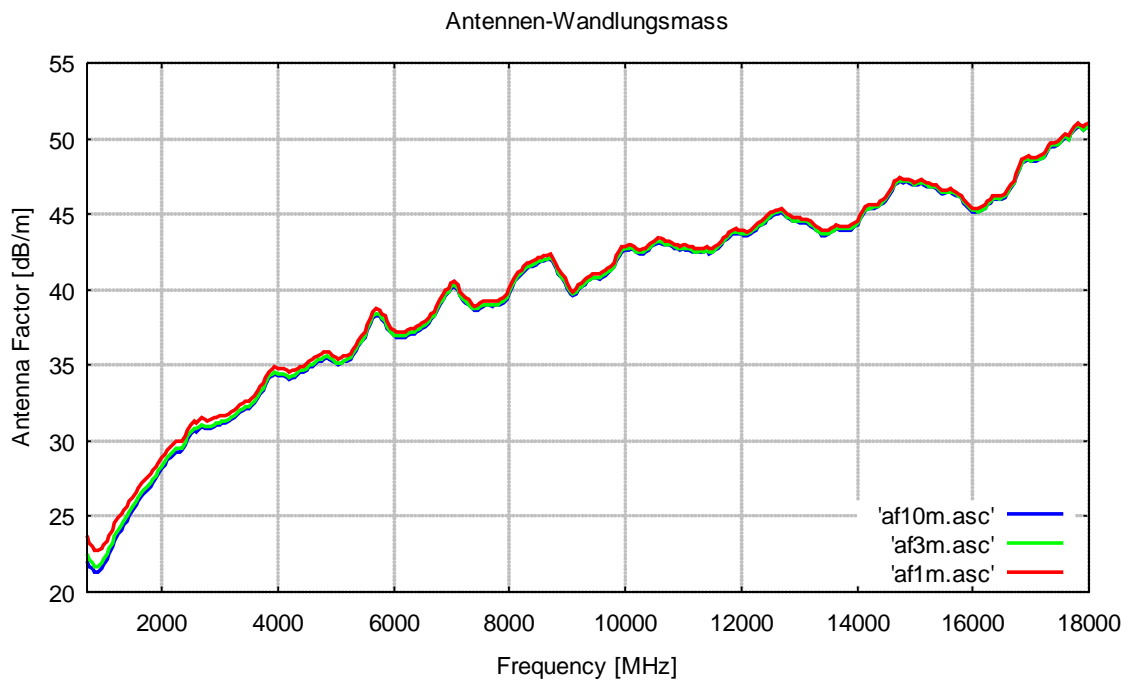
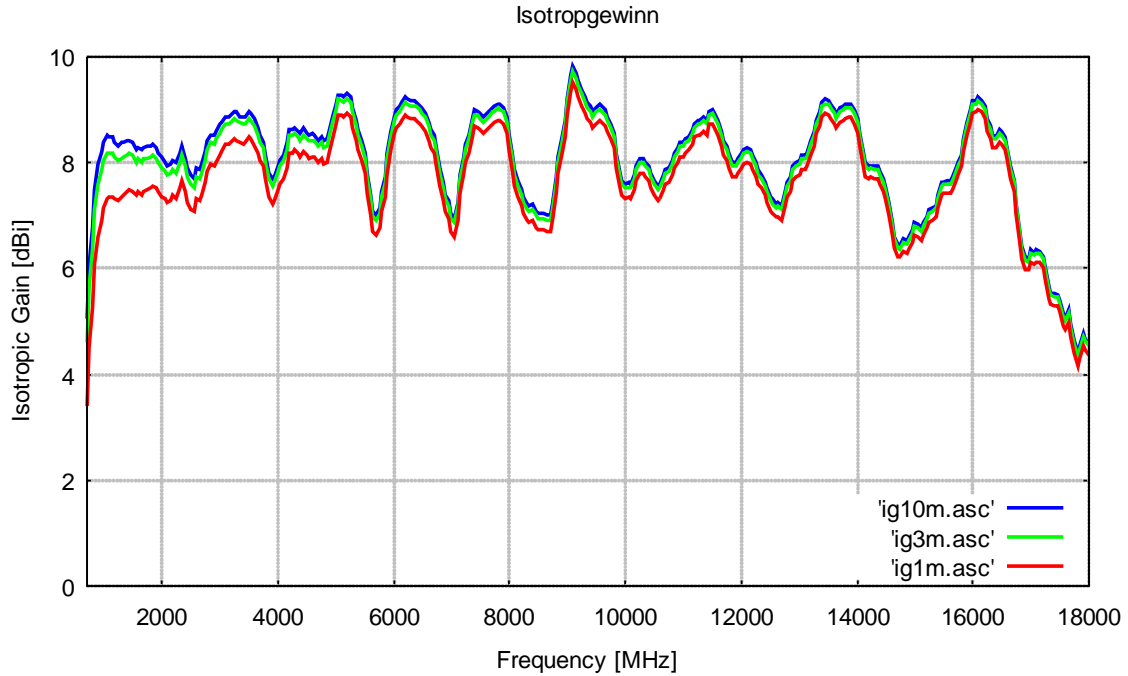
**Gewinn und Antennenfaktor für kurze Messentfernung**  
**Gain and Antenna Factor for short Measuring Distances**

Frequency	Gain(Iso.) Farfield	Ant.-Fact k Farfield	gi (10 m) Tip	k (10m) Tip	gi (3m) Tip	k (3m) Tip	gi (1m) Tip	k (1m) Tip
MHz	dBi	dB/m	dBi	dB/m	dBi	dB/m	dBi	dB/m
700.0	5.26	21.86	5.05	22.07	4.59	22.53	3.39	23.73
750.0	6.25	21.47	6.06	21.66	5.62	22.10	4.49	23.23
800.0	6.95	21.33	6.77	21.52	6.35	21.93	5.26	23.02
850.0	7.67	21.14	7.50	21.31	7.11	21.70	6.09	22.72
900.0	8.12	21.18	7.96	21.35	7.59	21.72	6.61	22.70
950.0	8.38	21.39	8.22	21.55	7.86	21.91	6.91	22.87
1000.0	8.53	21.69	8.38	21.84	8.04	22.18	7.13	23.09
1200.0	8.52	23.28	8.39	23.41	8.10	23.71	7.31	24.50
1400.0	8.52	24.62	8.41	24.73	8.15	24.99	7.46	25.68
1600.0	8.39	25.91	8.29	26.01	8.06	26.24	7.44	26.86
1800.0	8.41	26.92	8.32	27.01	8.11	27.21	7.54	27.78
2000.0	8.19	28.05	8.10	28.14	7.91	28.34	7.36	28.88
2200.0	8.13	28.94	8.05	29.02	7.87	29.20	7.38	29.69
2400.0	8.16	29.66	8.09	29.74	7.92	29.91	7.45	30.37
2600.0	7.97	30.55	7.90	30.62	7.74	30.78	7.30	31.22
2800.0	8.47	30.69	8.41	30.76	8.26	30.91	7.84	31.32
3000.0	8.78	30.98	8.72	31.05	8.57	31.20	8.15	31.61
3200.0	8.97	31.35	8.91	31.41	8.77	31.55	8.38	31.94
3400.0	8.91	31.94	8.85	32.00	8.72	32.13	8.36	32.49
3600.0	8.88	32.47	8.82	32.52	8.69	32.65	8.33	33.01
3800.0	8.19	33.63	8.14	33.68	8.02	33.80	7.68	34.13
4000.0	7.99	34.27	7.94	34.32	7.82	34.44	7.48	34.78
4200.0	8.68	34.00	8.63	34.06	8.51	34.18	8.17	34.51
4400.0	8.59	34.50	8.54	34.55	8.43	34.66	8.12	34.96
4600.0	8.59	34.89	8.54	34.93	8.43	35.04	8.12	35.35
4800.0	8.45	35.39	8.40	35.44	8.29	35.55	7.98	35.86
5000.0	9.15	35.05	9.11	35.09	9.01	35.19	8.73	35.47
5200.0	9.34	35.20	9.30	35.24	9.20	35.34	8.92	35.62
5400.0	8.67	36.20	8.63	36.24	8.53	36.34	8.25	36.62
5600.0	7.44	37.74	7.40	37.79	7.30	37.89	7.02	38.17
5800.0	7.49	38.00	7.45	38.04	7.35	38.14	7.07	38.42
6000.0	8.92	36.86	8.88	36.90	8.79	36.99	8.54	37.25
6200.0	9.27	36.80	9.23	36.84	9.14	36.93	8.89	37.18
6400.0	9.19	37.15	9.15	37.19	9.06	37.28	8.81	37.54
6600.0	8.81	37.80	8.77	37.84	8.68	37.93	8.43	38.18
6800.0	7.94	38.93	7.90	38.97	7.81	39.06	7.56	39.31
7000.0	7.07	40.05	7.03	40.09	6.94	40.18	6.69	40.43
7200.0	8.13	39.24	8.09	39.28	8.00	39.37	7.75	39.62
7400.0	9.02	38.58	8.99	38.62	8.90	38.70	8.68	38.93
7600.0	8.92	38.92	8.89	38.95	8.80	39.03	8.58	39.26
7800.0	9.14	38.92	9.11	38.96	9.02	39.04	8.80	39.26
8000.0	8.57	39.71	8.54	39.75	8.45	39.83	8.23	40.05
8200.0	7.51	40.99	7.48	41.02	7.39	41.10	7.17	41.33
8400.0	7.23	41.48	7.20	41.51	7.11	41.59	6.89	41.82
8600.0	7.06	41.85	7.03	41.88	6.94	41.97	6.72	42.19
8800.0	7.76	41.35	7.73	41.38	7.64	41.46	7.42	41.69
9000.0	9.25	40.05	9.22	40.09	9.13	40.17	8.91	40.40
9200.0	9.58	39.92	9.55	39.95	9.46	40.03	9.24	40.26
9400.0	9.09	40.59	9.06	40.63	8.97	40.71	8.75	40.93
9600.0	9.10	40.77	9.07	40.80	8.98	40.88	8.76	41.11

Frequency	Gain(Iso.) Farfield	Ant.-Fact k Farfield	gi (10 m) Tip	k (10m) Tip	gi (3m) Tip	k (3m) Tip	gi (1m) Tip	k (1m) Tip
MHz	dBi	dB/m	dBi	dB/m	dBi	dB/m	dBi	dB/m
9800.0	8.58	41.46	8.55	41.49	8.48	41.57	8.28	41.76
10000.0	7.63	42.59	7.60	42.62	7.53	42.69	7.33	42.89
10200.0	7.96	42.43	7.93	42.46	7.86	42.53	7.66	42.73
10400.0	7.95	42.61	7.92	42.64	7.85	42.71	7.65	42.91
10600.0	7.62	43.11	7.59	43.14	7.52	43.21	7.32	43.40
10800.0	8.08	42.81	8.05	42.84	7.98	42.91	7.78	43.11
11000.0	8.41	42.64	8.38	42.67	8.31	42.74	8.11	42.94
11200.0	8.77	42.43	8.74	42.46	8.67	42.54	8.47	42.73
11400.0	8.83	42.53	8.80	42.56	8.73	42.63	8.53	42.83
11600.0	8.81	42.70	8.78	42.73	8.71	42.80	8.51	43.00
11800.0	8.20	43.46	8.17	43.49	8.10	43.56	7.90	43.76
12000.0	8.20	43.60	8.17	43.63	8.10	43.70	7.90	43.90
12200.0	8.18	43.77	8.15	43.80	8.08	43.87	7.88	44.07
12400.0	7.67	44.42	7.64	44.45	7.57	44.52	7.37	44.72
12600.0	7.26	44.97	7.23	45.00	7.16	45.07	6.96	45.27
12800.0	7.65	44.71	7.62	44.74	7.55	44.81	7.35	45.01
13000.0	8.07	44.43	8.04	44.46	7.97	44.53	7.77	44.73
13200.0	8.45	44.18	8.42	44.21	8.35	44.28	8.15	44.48
13400.0	9.18	43.58	9.15	43.61	9.08	43.68	8.88	43.88
13600.0	9.02	43.87	8.99	43.90	8.92	43.97	8.72	44.17
13800.0	9.12	43.90	9.09	43.93	9.02	44.00	8.82	44.20
14000.0	8.87	44.27	8.84	44.30	8.77	44.37	8.57	44.57
14200.0	7.98	45.29	7.95	45.32	7.88	45.39	7.68	45.58
14400.0	7.85	45.54	7.82	45.56	7.76	45.62	7.59	45.79
14600.0	6.90	46.61	6.87	46.63	6.81	46.69	6.64	46.86
14800.0	6.58	47.05	6.55	47.07	6.49	47.13	6.32	47.30
15000.0	6.89	46.85	6.86	46.88	6.80	46.94	6.63	47.11
15200.0	7.02	46.84	6.99	46.86	6.93	46.92	6.76	47.09
15400.0	7.41	46.56	7.38	46.59	7.32	46.65	7.15	46.82
15600.0	7.68	46.40	7.65	46.43	7.59	46.49	7.42	46.66
15800.0	8.18	46.01	8.15	46.04	8.09	46.10	7.92	46.27
16000.0	9.19	45.11	9.16	45.14	9.10	45.20	8.93	45.37
16200.0	9.09	45.32	9.06	45.35	9.00	45.41	8.83	45.58
16400.0	8.53	45.99	8.50	46.01	8.44	46.07	8.27	46.24
16600.0	8.32	46.30	8.29	46.33	8.23	46.39	8.06	46.56
16800.0	6.74	47.99	6.71	48.01	6.65	48.07	6.48	48.24
17000.0	6.38	48.45	6.35	48.47	6.29	48.54	6.12	48.71
17200.0	6.26	48.67	6.23	48.70	6.17	48.76	6.00	48.93
17400.0	5.55	49.48	5.52	49.51	5.46	49.57	5.29	49.74
17600.0	5.09	50.04	5.06	50.07	5.00	50.13	4.83	50.30
17800.0	4.42	50.81	4.39	50.83	4.33	50.89	4.16	51.07
18000.0	4.61	50.72	4.58	50.74	4.52	50.80	4.35	50.97
18200.0	5.74	49.68	5.71	49.71	5.65	49.77	5.48	49.94
18400.0	6.75	48.77	6.72	48.79	6.66	48.85	6.49	49.02



**Bezugspunkt: Spitze**  
**Reference Point: Tip**



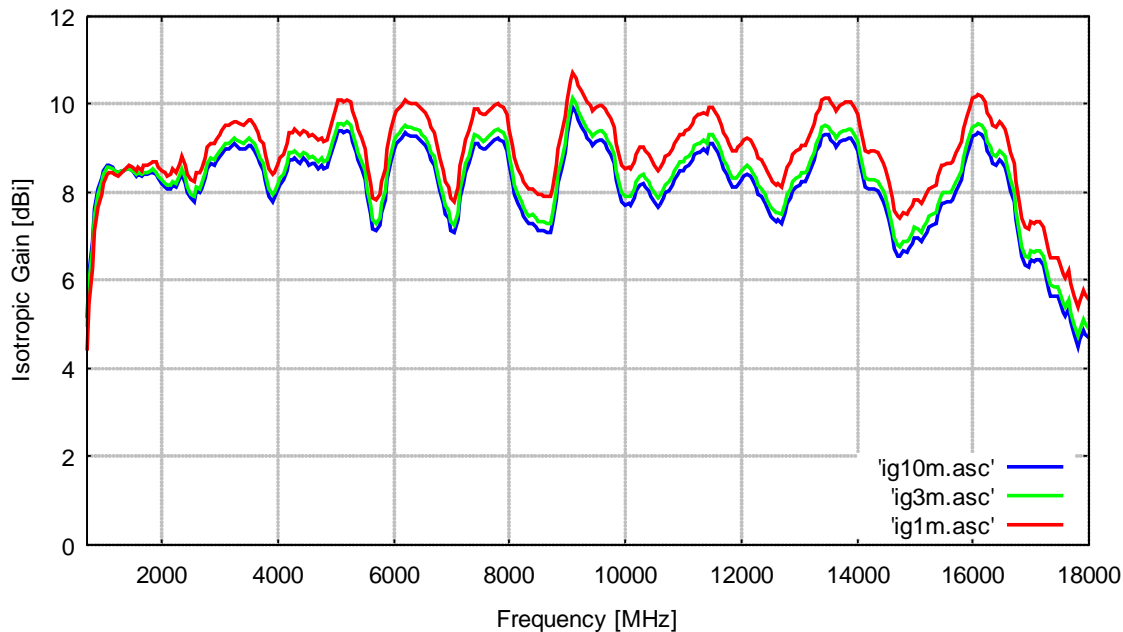
Frequency	Gain(Iso.) Farfield	Ant.-Fact k Farfield	gi (10 m) Center	k (10m) Center	gi (3m) Center	k (3m) Center	gi (1m) Center	k (1m) Center
MHz	dBi	dB/m	dBi	dB/m	dBi	dB/m	dBi	dB/m
700.0	5.26	21.86	5.17	21.95	4.96	22.16	4.39	22.73
750.0	6.25	21.47	6.17	21.55	5.99	21.73	5.50	22.22
800.0	6.95	21.33	6.88	21.40	6.72	21.56	6.28	22.00
850.0	7.67	21.14	7.61	21.19	7.48	21.32	7.12	21.69
900.0	8.12	21.18	8.07	21.23	7.96	21.34	7.65	21.65
950.0	8.38	21.39	8.34	21.44	8.24	21.54	7.96	21.82
1000.0	8.53	21.69	8.50	21.72	8.41	21.81	8.19	22.03
1200.0	8.52	23.28	8.51	23.30	8.48	23.33	8.39	23.41
1400.0	8.52	24.62	8.52	24.62	8.53	24.61	8.56	24.58
1600.0	8.39	25.91	8.41	25.90	8.45	25.85	8.57	25.74
1800.0	8.41	26.92	8.44	26.89	8.50	26.83	8.67	26.65
2000.0	8.19	28.05	8.22	28.02	8.29	27.95	8.50	27.74
2200.0	8.13	28.94	8.17	28.90	8.26	28.81	8.53	28.54
2400.0	8.16	29.66	8.20	29.62	8.31	29.52	8.61	29.22
2600.0	7.97	30.55	8.02	30.50	8.13	30.39	8.46	30.06
2800.0	8.47	30.69	8.52	30.64	8.65	30.52	9.01	30.16
3000.0	8.78	30.98	8.83	30.93	8.96	30.81	9.32	30.44
3200.0	8.97	31.35	9.03	31.30	9.16	31.16	9.55	30.77
3400.0	8.91	31.94	8.97	31.88	9.12	31.73	9.54	31.31
3600.0	8.88	32.47	8.94	32.41	9.09	32.26	9.51	31.84
3800.0	8.19	33.63	8.26	33.56	8.41	33.41	8.87	32.95
4000.0	7.99	34.27	8.06	34.21	8.21	34.05	8.67	33.59
4200.0	8.68	34.00	8.75	33.94	8.90	33.79	9.36	33.33
4400.0	8.59	34.50	8.66	34.43	8.82	34.26	9.31	33.77
4600.0	8.59	34.89	8.66	34.82	8.82	34.65	9.31	34.16
4800.0	8.45	35.39	8.52	35.33	8.68	35.16	9.17	34.67
5000.0	9.15	35.05	9.22	34.98	9.40	34.80	9.92	34.28
5200.0	9.34	35.20	9.41	35.13	9.59	34.95	10.11	34.43
5400.0	8.67	36.20	8.74	36.12	8.92	35.95	9.44	35.43
5600.0	7.44	37.74	7.51	37.67	7.69	37.49	8.21	36.97
5800.0	7.49	38.00	7.56	37.92	7.74	37.75	8.26	37.23
6000.0	8.92	36.86	9.00	36.78	9.18	36.60	9.74	36.04
6200.0	9.27	36.80	9.35	36.72	9.53	36.53	10.09	35.98
6400.0	9.19	37.15	9.27	37.08	9.45	36.89	10.01	36.33
6600.0	8.81	37.80	8.89	37.72	9.07	37.54	9.63	36.98
6800.0	7.94	38.93	8.02	38.85	8.20	38.67	8.76	38.11
7000.0	7.07	40.05	7.15	39.97	7.33	39.79	7.89	39.23
7200.0	8.13	39.24	8.21	39.16	8.39	38.97	8.95	38.42
7400.0	9.02	38.58	9.10	38.50	9.30	38.31	9.89	37.72
7600.0	8.92	38.92	9.00	38.83	9.20	38.64	9.79	38.05
7800.0	9.14	38.92	9.22	38.84	9.42	38.64	10.01	38.05
8000.0	8.57	39.71	8.65	39.63	8.85	39.43	9.44	38.84
8200.0	7.51	40.99	7.59	40.90	7.79	40.71	8.38	40.12
8400.0	7.23	41.48	7.31	41.39	7.51	41.20	8.10	40.61
8600.0	7.06	41.85	7.14	41.77	7.34	41.57	7.93	40.98
8800.0	7.76	41.35	7.84	41.27	8.04	41.07	8.63	40.48
9000.0	9.25	40.05	9.33	39.97	9.53	39.78	10.12	39.19
9200.0	9.58	39.92	9.66	39.83	9.86	39.64	10.45	39.05
9400.0	9.09	40.59	9.17	40.51	9.37	40.31	9.96	39.73
9600.0	9.10	40.77	9.18	40.68	9.38	40.49	9.97	39.90
9800.0	8.58	41.46	8.67	41.38	8.87	41.17	9.50	40.55
10000.0	7.63	42.59	7.72	42.50	7.92	42.30	8.55	41.67
10200.0	7.96	42.43	8.05	42.34	8.25	42.14	8.88	41.52

Frequency	Gain(Iso.) Farfield	Ant.-Fact k Farfield	gi (10 m) Center	k (10m) Center	gi (3m) Center	k (3m) Center	gi (1m) Center	k (1m) Center
MHz	dBi	dB/m	dBi	dB/m	dBi	dB/m	dBi	dB/m
10400.0	7.95	42.61	8.04	42.52	8.24	42.32	8.87	41.70
10600.0	7.62	43.11	7.71	43.02	7.91	42.81	8.54	42.19
10800.0	8.08	42.81	8.17	42.72	8.37	42.51	9.00	41.89
11000.0	8.41	42.64	8.50	42.55	8.70	42.34	9.33	41.72
11200.0	8.77	42.43	8.86	42.35	9.06	42.14	9.69	41.52
11400.0	8.83	42.53	8.92	42.44	9.12	42.23	9.75	41.61
11600.0	8.81	42.70	8.90	42.61	9.10	42.40	9.73	41.78
11800.0	8.20	43.46	8.29	43.37	8.49	43.16	9.12	42.54
12000.0	8.20	43.60	8.29	43.52	8.49	43.31	9.12	42.69
12200.0	8.18	43.77	8.27	43.68	8.47	43.47	9.10	42.85
12400.0	7.67	44.42	7.76	44.33	7.96	44.12	8.59	43.50
12600.0	7.26	44.97	7.35	44.88	7.55	44.67	8.18	44.05
12800.0	7.65	44.71	7.74	44.63	7.94	44.42	8.57	43.80
13000.0	8.07	44.43	8.16	44.34	8.36	44.13	8.99	43.51
13200.0	8.45	44.18	8.54	44.09	8.74	43.89	9.37	43.27
13400.0	9.18	43.58	9.27	43.49	9.47	43.29	10.10	42.67
13600.0	9.02	43.87	9.11	43.78	9.31	43.58	9.94	42.96
13800.0	9.12	43.90	9.21	43.81	9.41	43.60	10.04	42.98
14000.0	8.87	44.27	8.96	44.19	9.16	43.98	9.79	43.36
14200.0	7.98	45.29	8.07	45.20	8.27	44.99	8.90	44.37
14400.0	7.85	45.54	7.94	45.45	8.16	45.23	8.81	44.57
14600.0	6.90	46.61	6.99	46.52	7.21	46.30	7.86	45.64
14800.0	6.58	47.05	6.67	46.95	6.89	46.74	7.54	46.08
15000.0	6.89	46.85	6.98	46.76	7.20	46.54	7.85	45.89
15200.0	7.02	46.84	7.11	46.75	7.33	46.53	7.98	45.87
15400.0	7.41	46.56	7.50	46.47	7.72	46.25	8.37	45.60
15600.0	7.68	46.40	7.77	46.31	7.99	46.09	8.64	45.44
15800.0	8.18	46.01	8.27	45.92	8.49	45.70	9.14	45.05
16000.0	9.19	45.11	9.28	45.02	9.50	44.80	10.15	44.15
16200.0	9.09	45.32	9.18	45.23	9.40	45.01	10.05	44.36
16400.0	8.53	45.99	8.62	45.90	8.84	45.68	9.49	45.02
16600.0	8.32	46.30	8.41	46.21	8.63	45.99	9.28	45.34
16800.0	6.74	47.99	6.83	47.89	7.05	47.68	7.70	47.02
17000.0	6.38	48.45	6.47	48.36	6.69	48.14	7.34	47.49
17200.0	6.26	48.67	6.35	48.58	6.57	48.36	7.22	47.71
17400.0	5.55	49.48	5.64	49.39	5.86	49.17	6.51	48.52
17600.0	5.09	50.04	5.18	49.95	5.40	49.73	6.05	49.08
17800.0	4.42	50.81	4.51	50.72	4.73	50.50	5.38	49.84
18000.0	4.61	50.72	4.70	50.62	4.92	50.41	5.57	49.75
18200.0	5.74	49.68	5.83	49.59	6.05	49.37	6.70	48.72
18400.0	6.75	48.77	6.84	48.67	7.06	48.46	7.71	47.80



**Bezugspunkt: Mitte**  
**Reference Point: Center**

Isotropgewinn



Antennen-Wandlungsmass

