

Breitband TEM Hornantenne *Broadband TEM Horn Antenna*



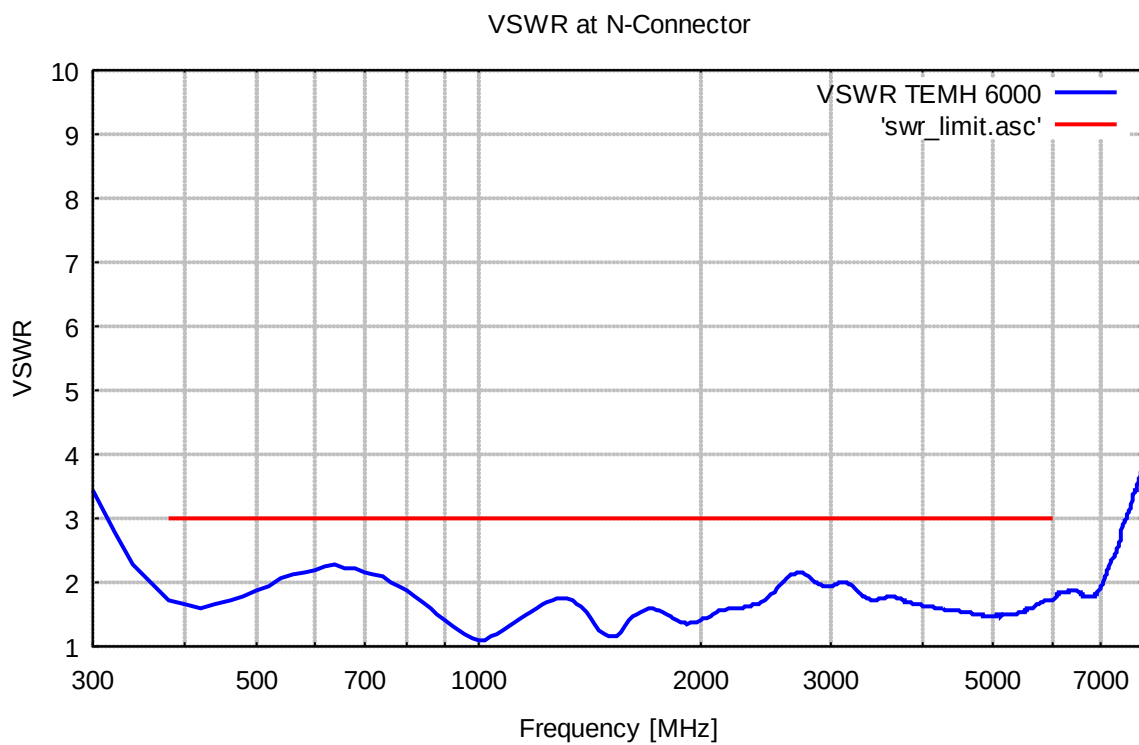
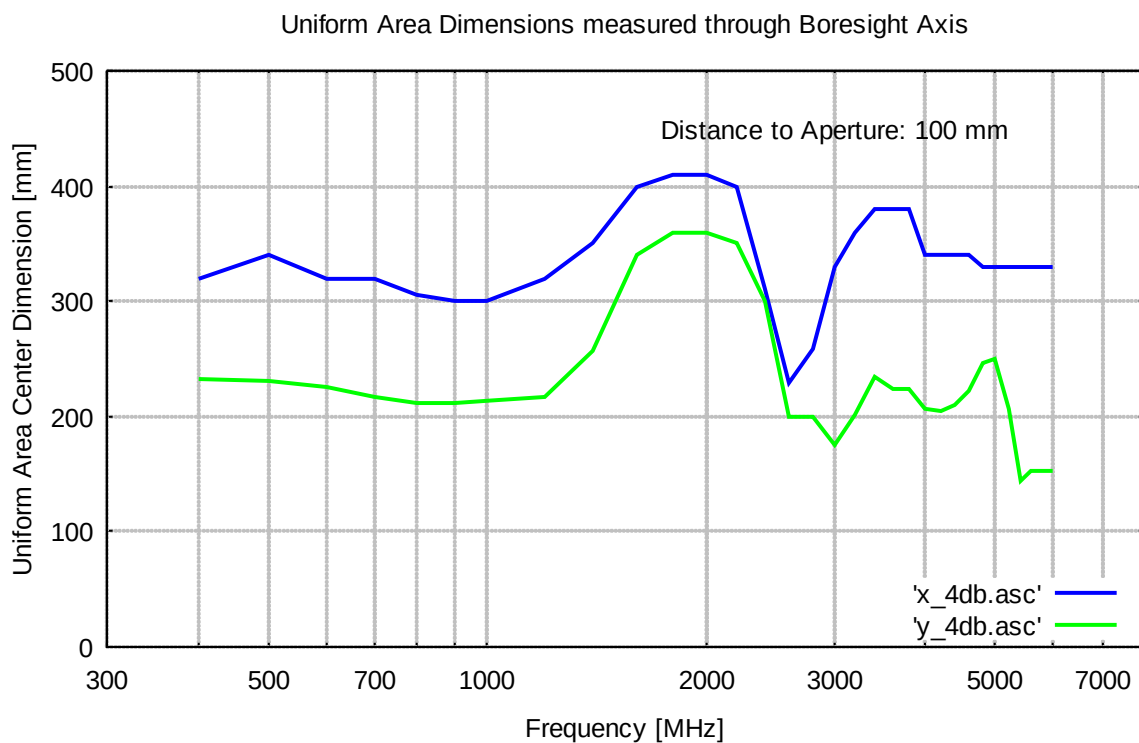
Beschreibung:

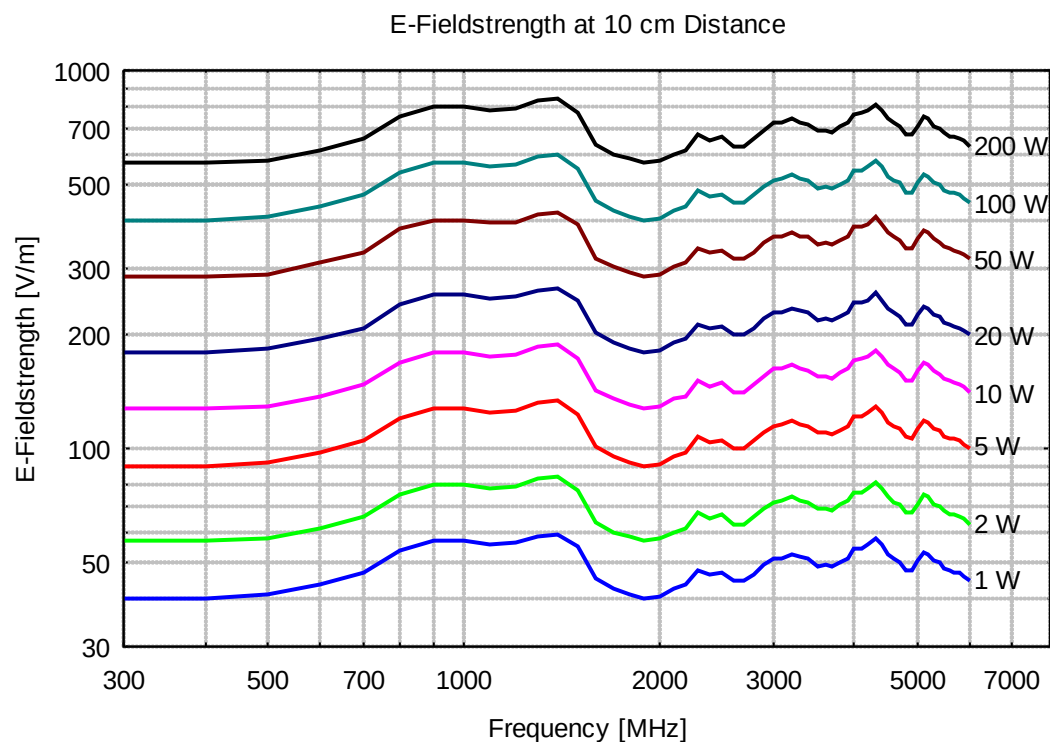
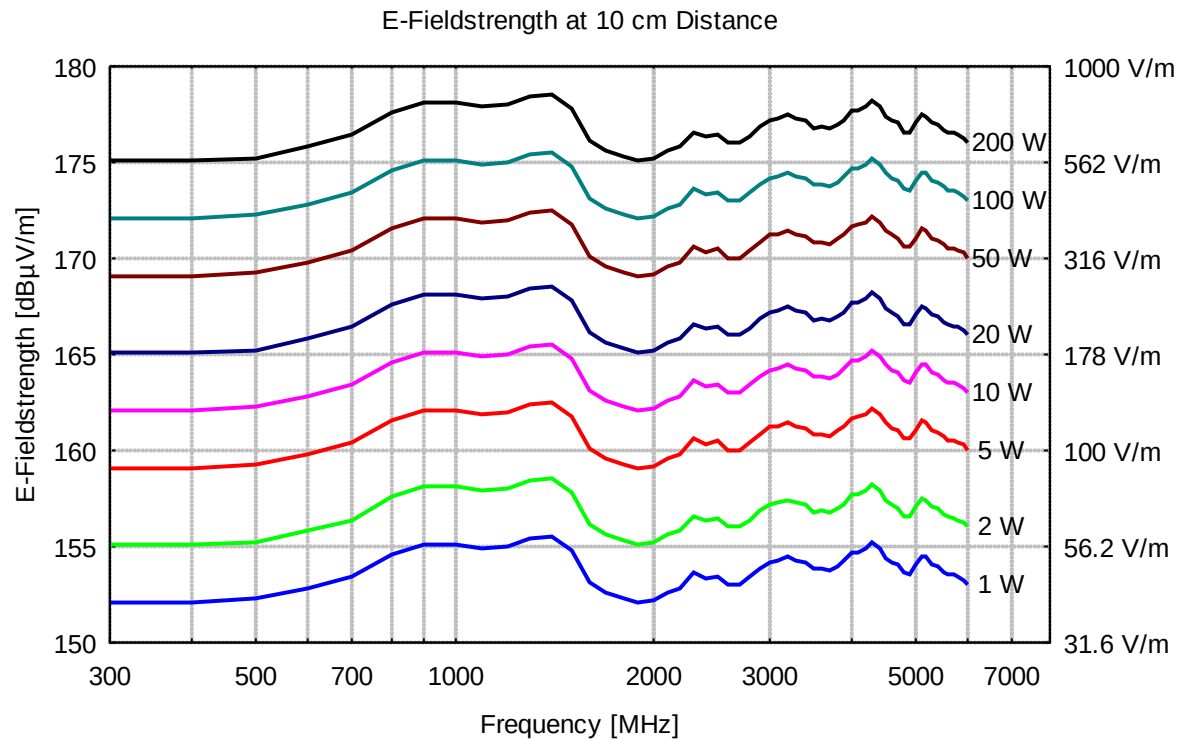
Linear polarisierte Breitband TEM Hornantenne in Aluminiumausführung für Empfangs- und Sendeanwendungen, insbesondere für Immunitätsprüfungen bei kurzen Messentfernungen und UWB-Anwendungen (Ultrabreitband). Eine typische Anwendung ist die IEC 61000-4-39: Erzeugung gestrahlter Felder im Nahbereich.

Description:

Linear polarized Broadband TEM Horn Antenna (Aluminium) for receive and transmit applications, especially for generating radiated fields in close proximity immunity tests and UWB (ultra wide-band) measurements. A typical application is the IEC 61000-4-39 standard.

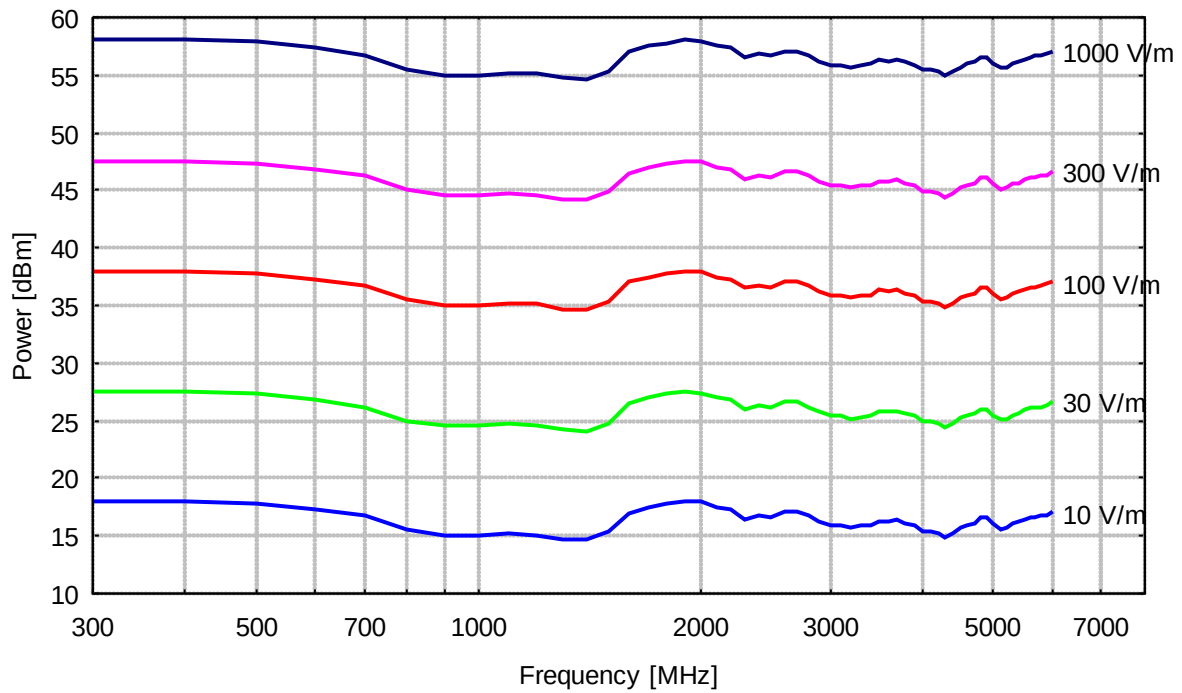
Technische Daten:		Specifications:
Frequenzbereich, nominell:	380 MHz...6 GHz	Nominal Frequency Range:
Nutzbarer Frequenzbereich:	300 MHz ... 8 GHz	Usable Frequency Range:
Impedanz, nominell:	50 Ω	Nominal Impedance:
Stehwellenverhältnis SWR typisch:	< 2	Standing Wave Ratio SWR typical:
Symmetriefehler:	< 1.0 dB, typ. < 0.5 dB	Unbalance:
Polarisationsentkopplung:	typ. > 20 dB	Cross Polarisation Rejection:
0...-4 dB Feldhomogenität bei 10 cm Abstand:	x ~ 30 cm y ~ 20 cm	0...-4 dB Uniform Area Dimension in 10 cm Distance:
Max. Eingangsleistung:	300 W	Max. Input Power:
Isotropgewinn:	2...10 dBi	Isotropic Gain:
Antennenfaktor:	20...38 dB/m	Antenna Factor:
3 dB Öffnungswinkel E-Ebene:	typ. 30° ... 68°	3 dB Half-Power-Beamwidth E-Plane:
3 dB Öffnungswinkel H-Ebene:	typ. 40°... 61°	3 dB Half-Power-Beamwidth H-plane:
Anschlußart: N-Buchse		N-Connector female
Halterung: 22 mm Rohr, Rastring		Mount: 22 mm Tube, Indexing Ring
Breite x Länge x Höhe:	260 x 300 (500) x 210 mm	Width x Length x Height:
Gewicht:	1.4 kg	Weight:
Optionales Zubehör:	Spacer 100	Optional Accessories:



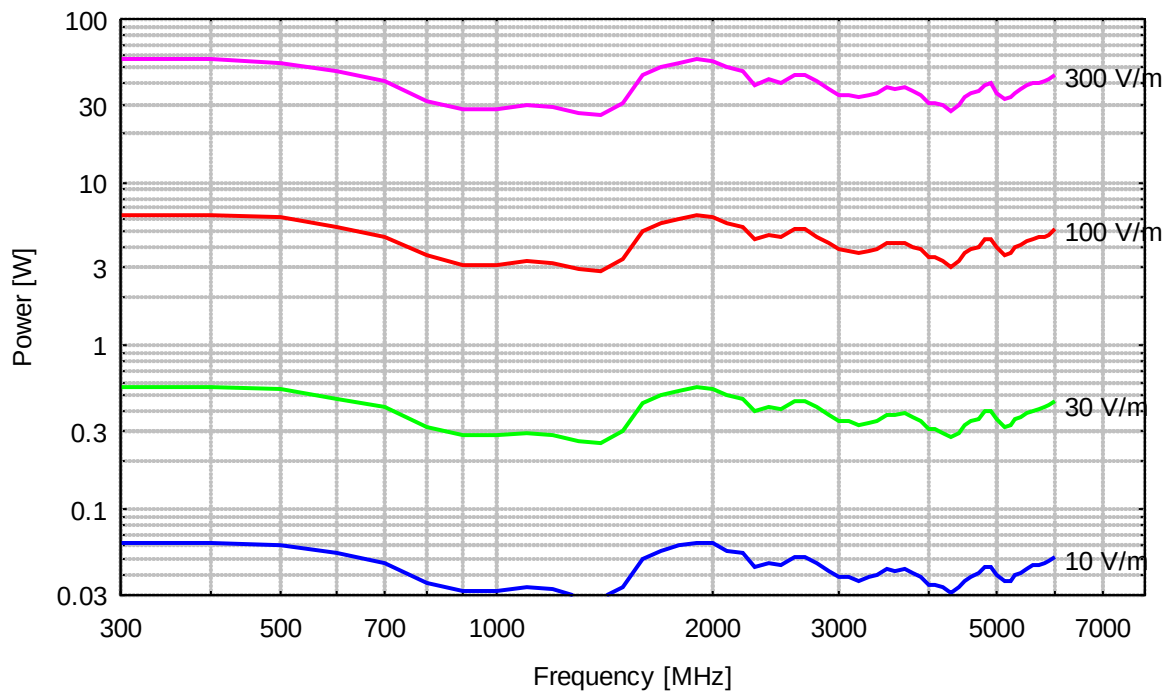




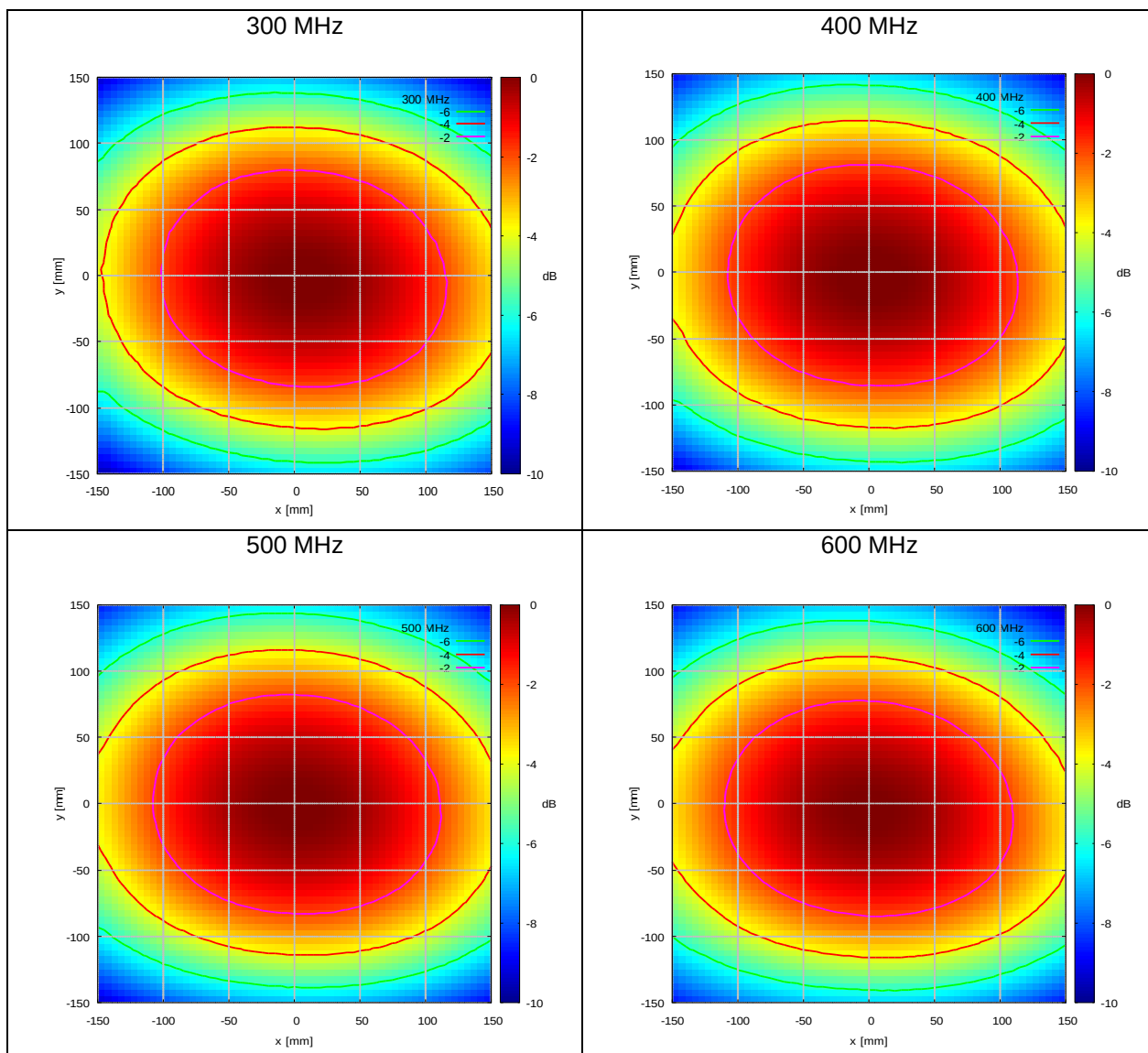
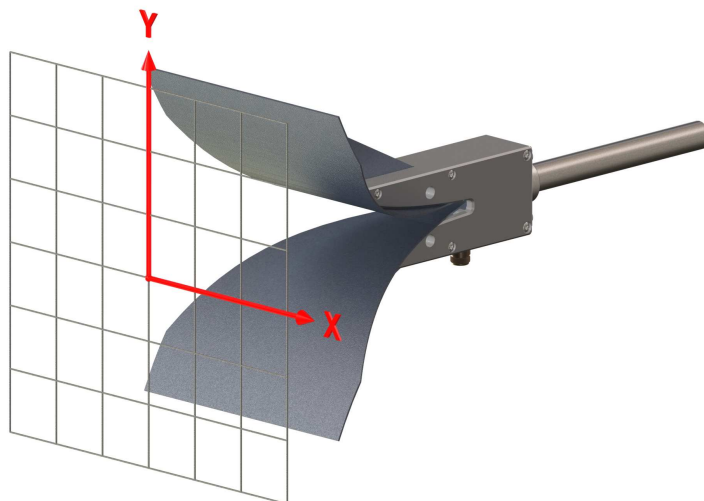
Power Requirement for constant Fieldstrength at 10 cm Distance

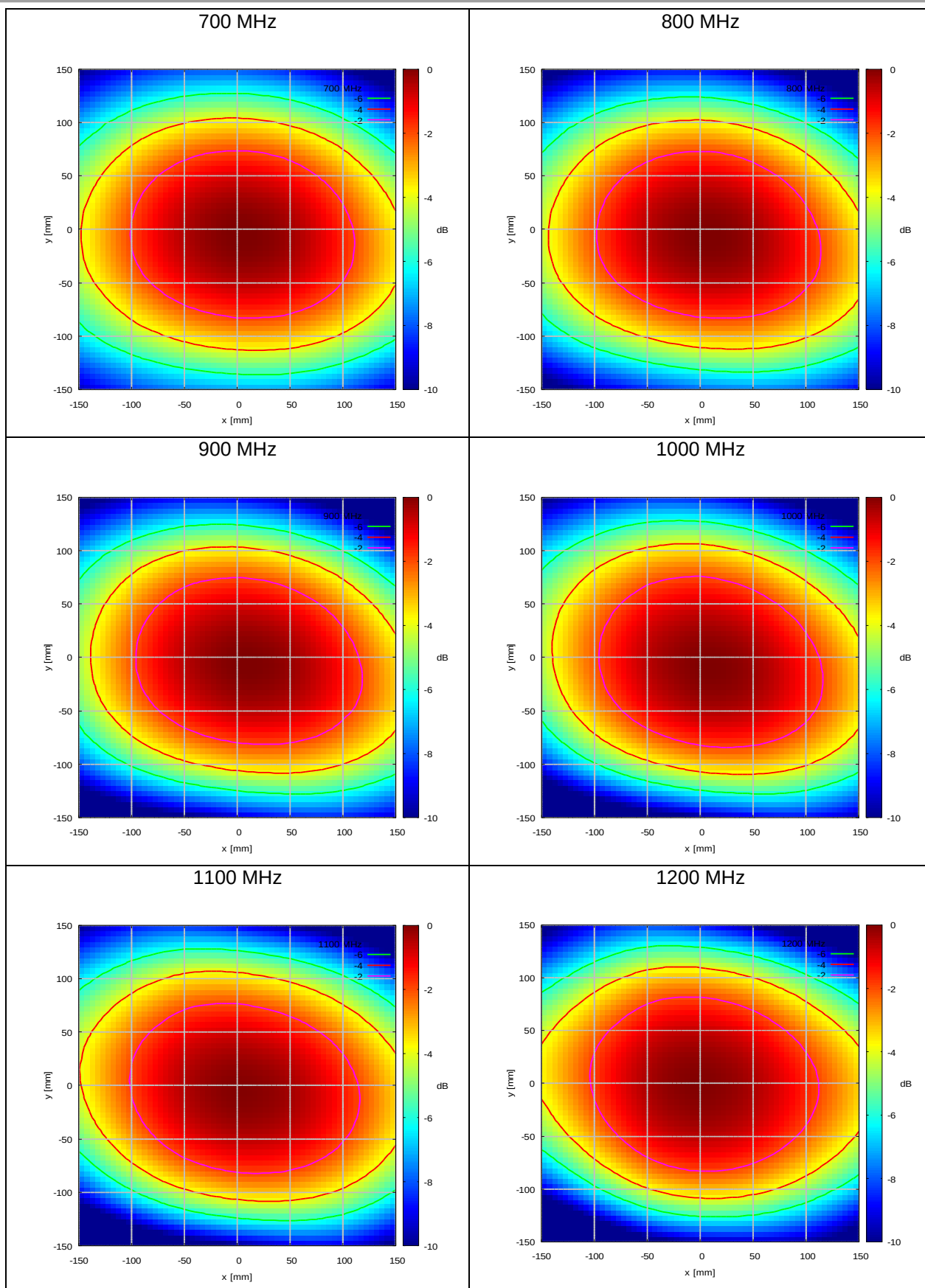


Power Requirement for constant Fieldstrength at 10 cm Distance

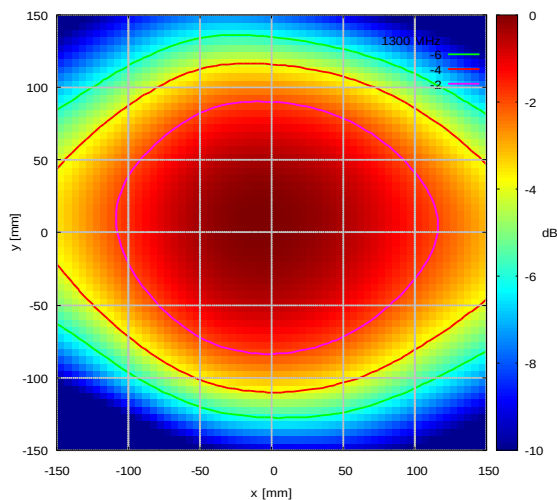


Feldhomogenität 10 cm vor der Apertur (Polarisationsrichtung: y)
Field Uniformity 10 cm in front of Antenna Aperture (Direction of Polarisation: y)

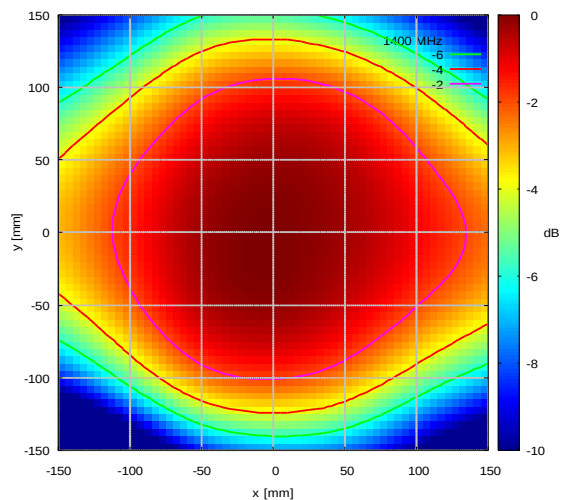




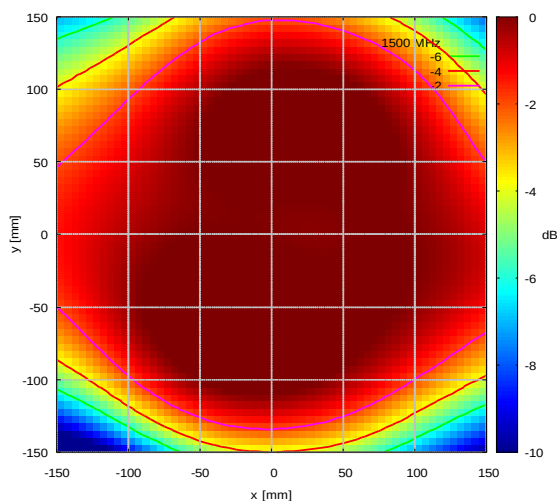
1300 MHz



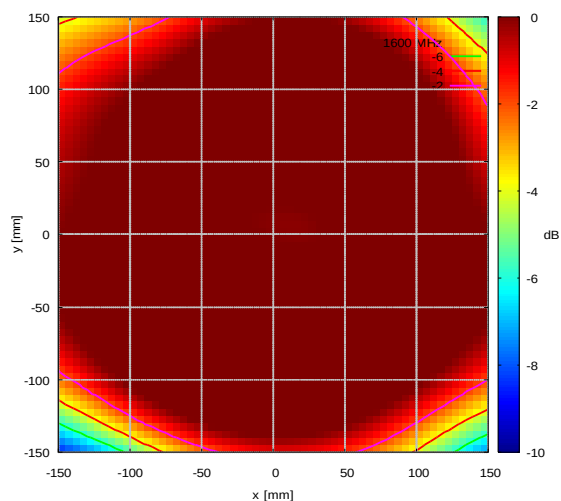
1400 MHz



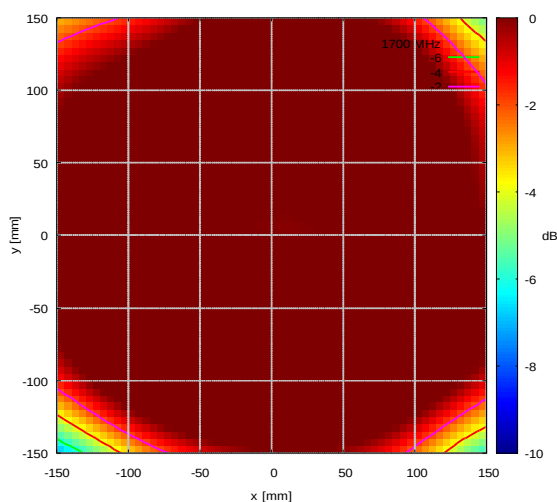
1500 MHz



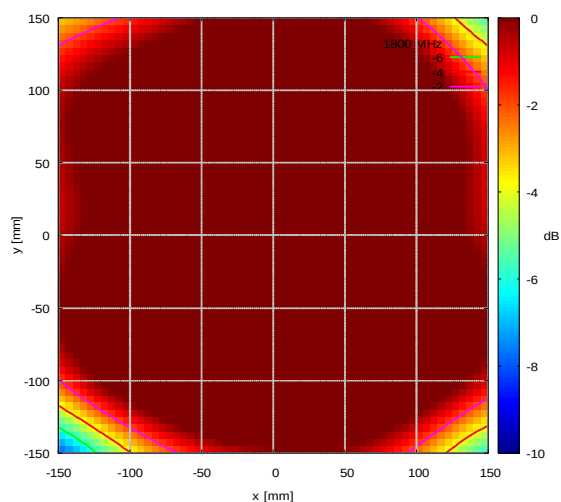
1600 MHz

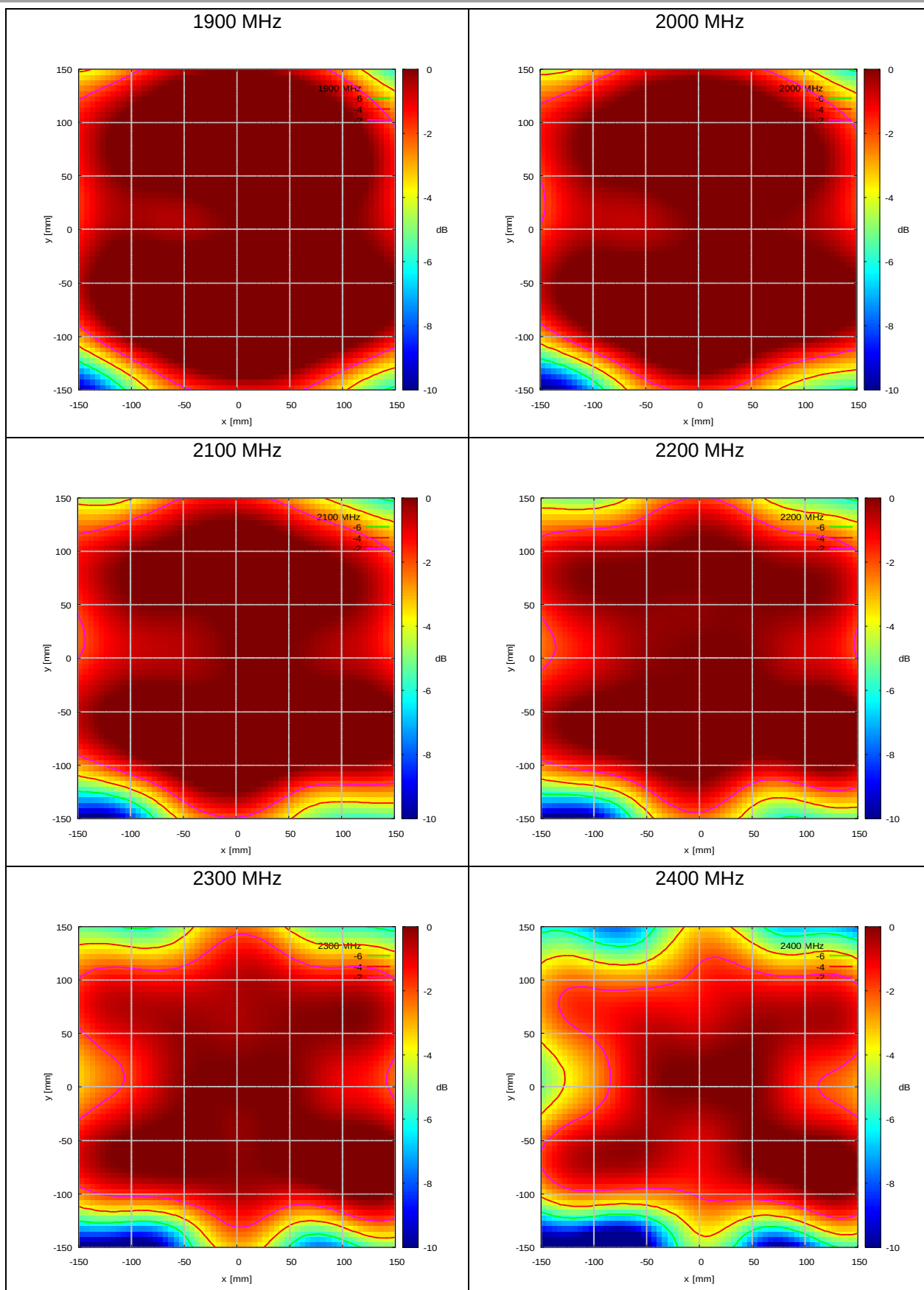


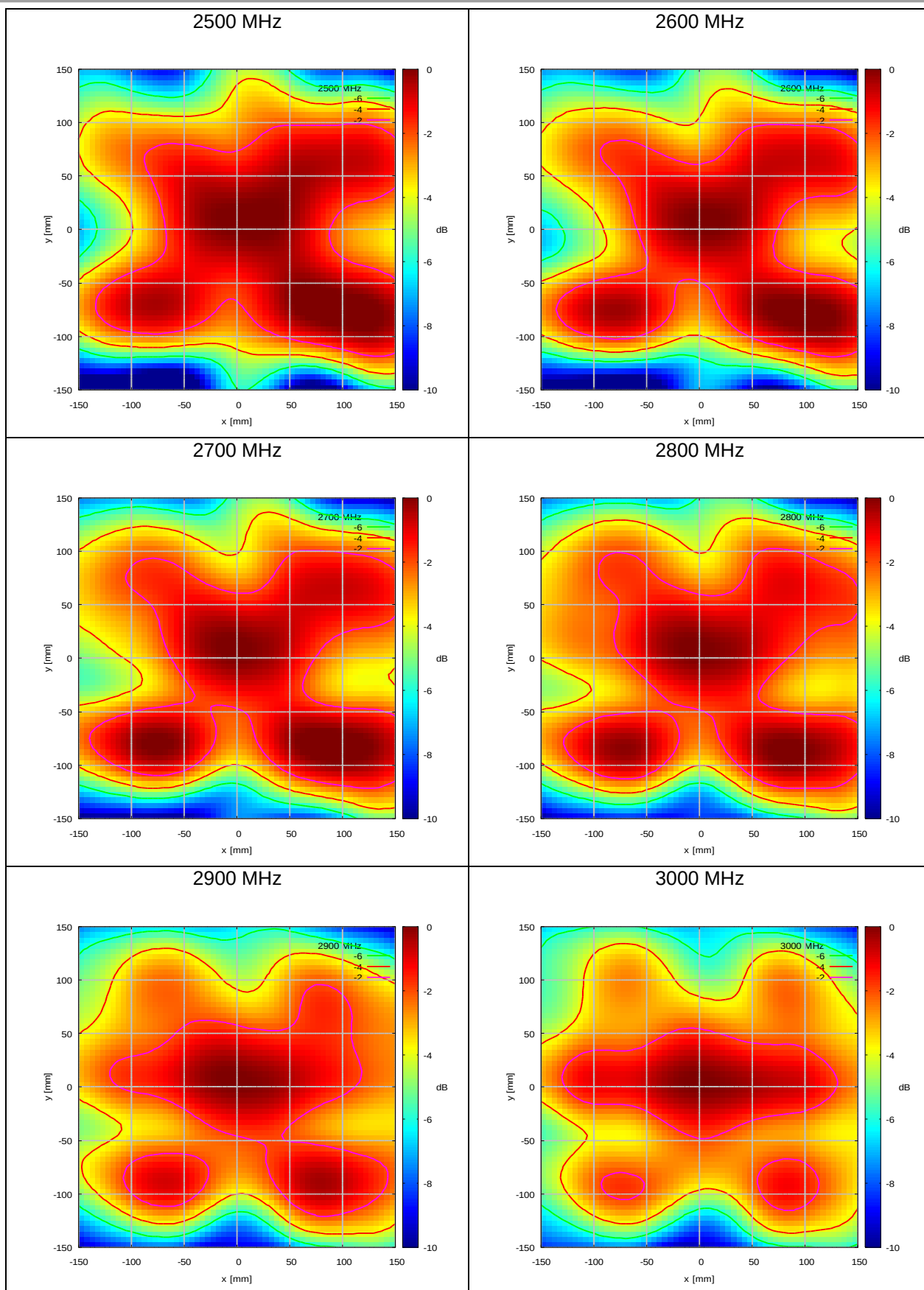
1700 MHz

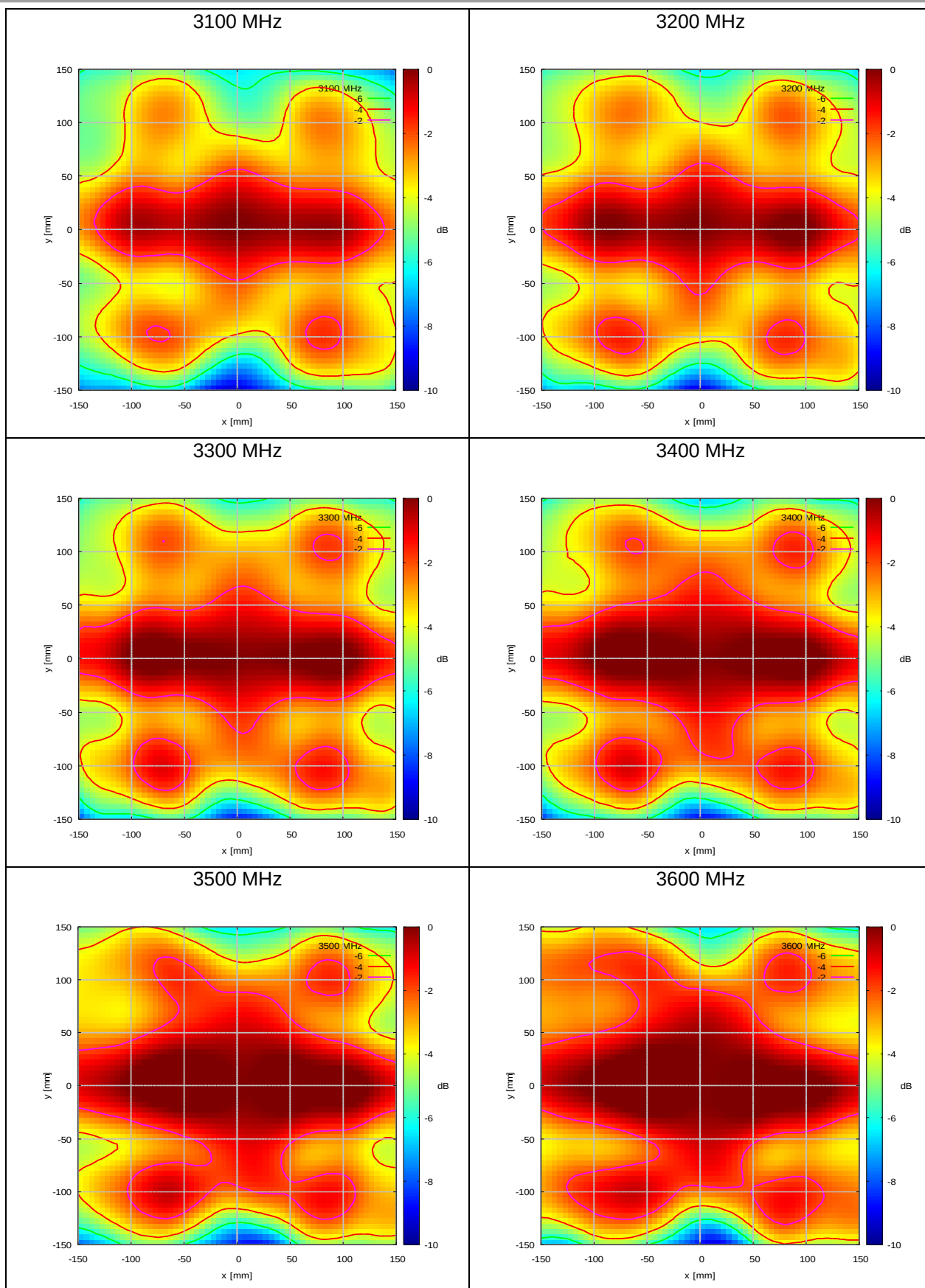


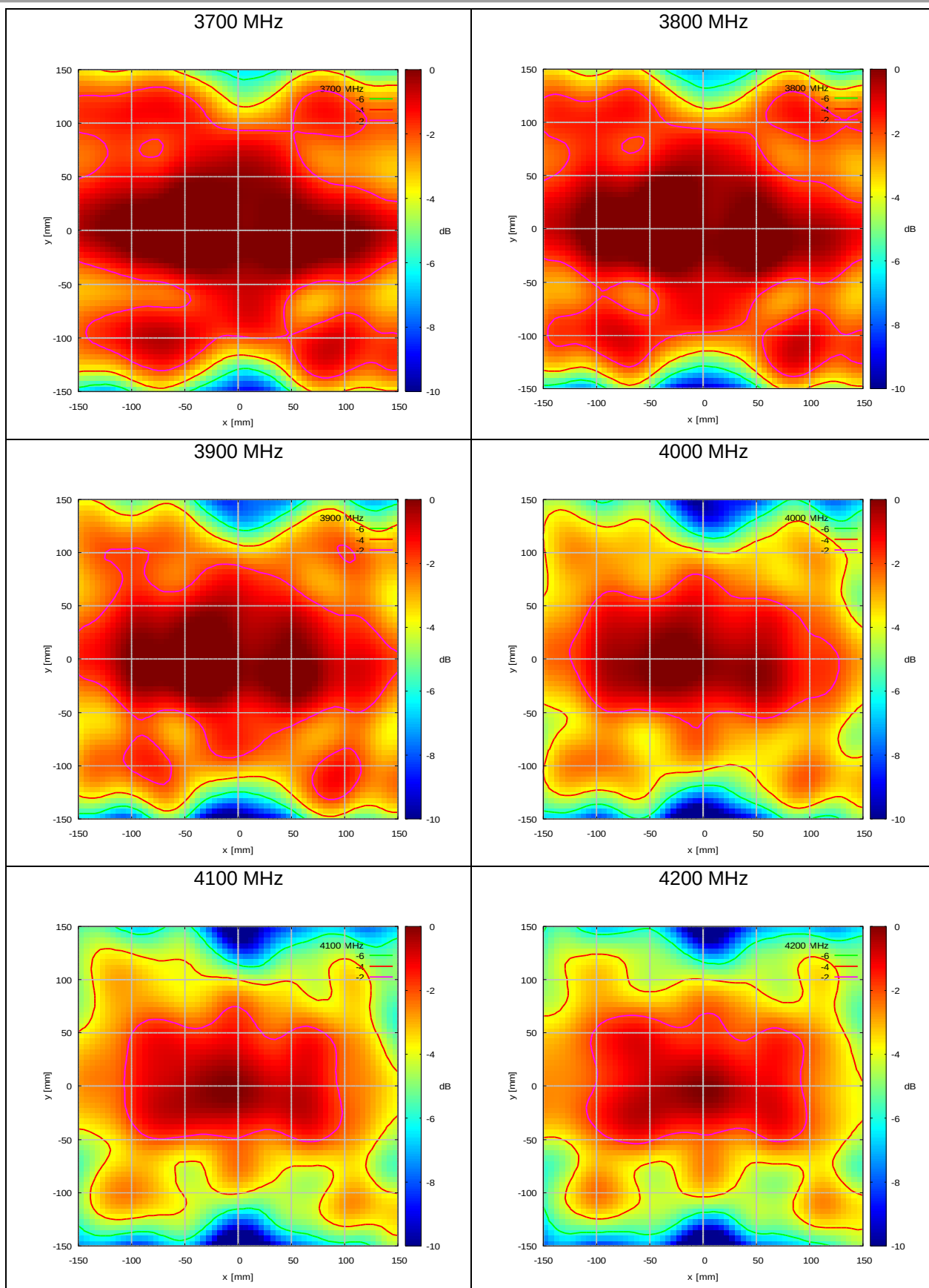
1800 MHz

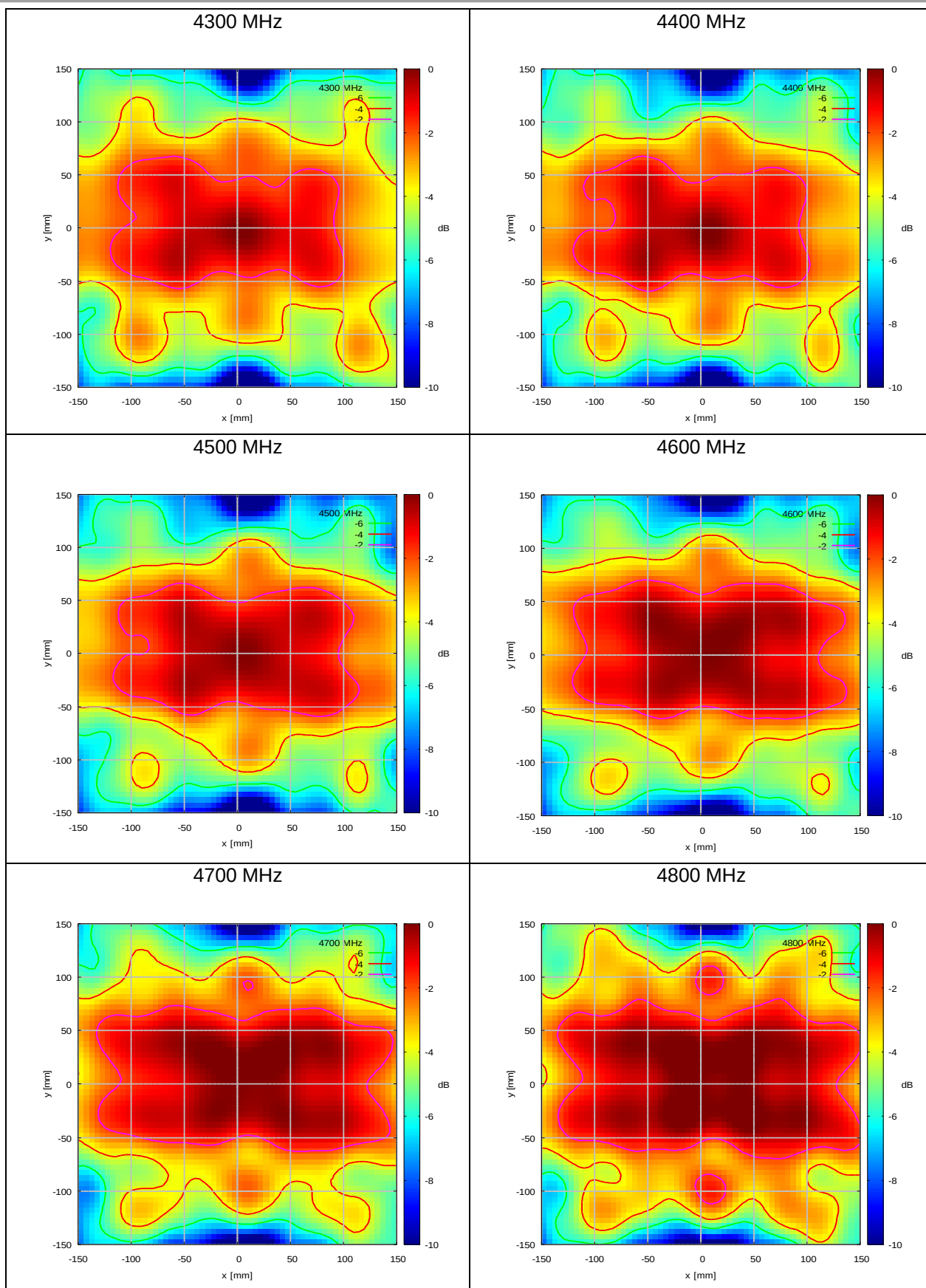


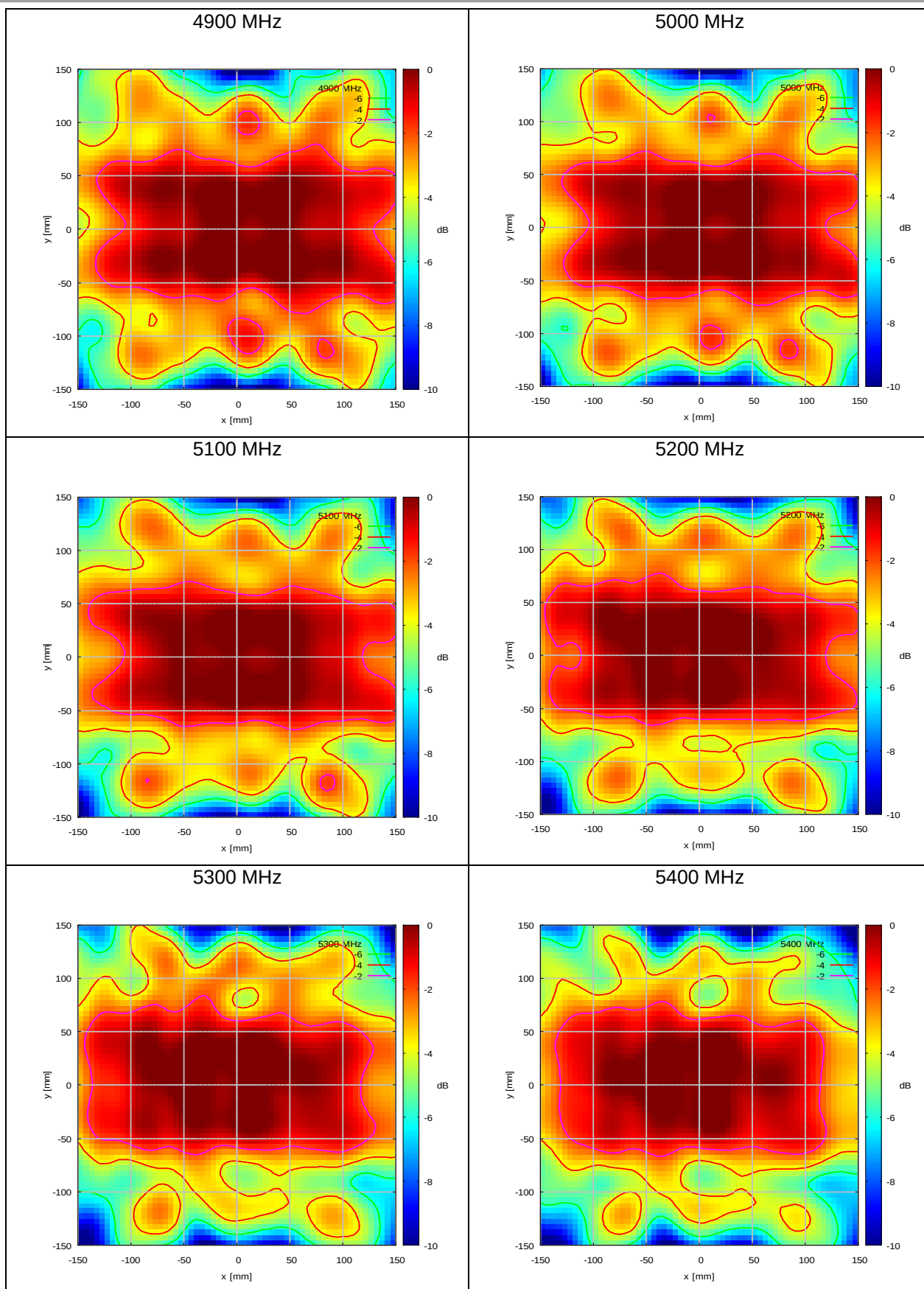


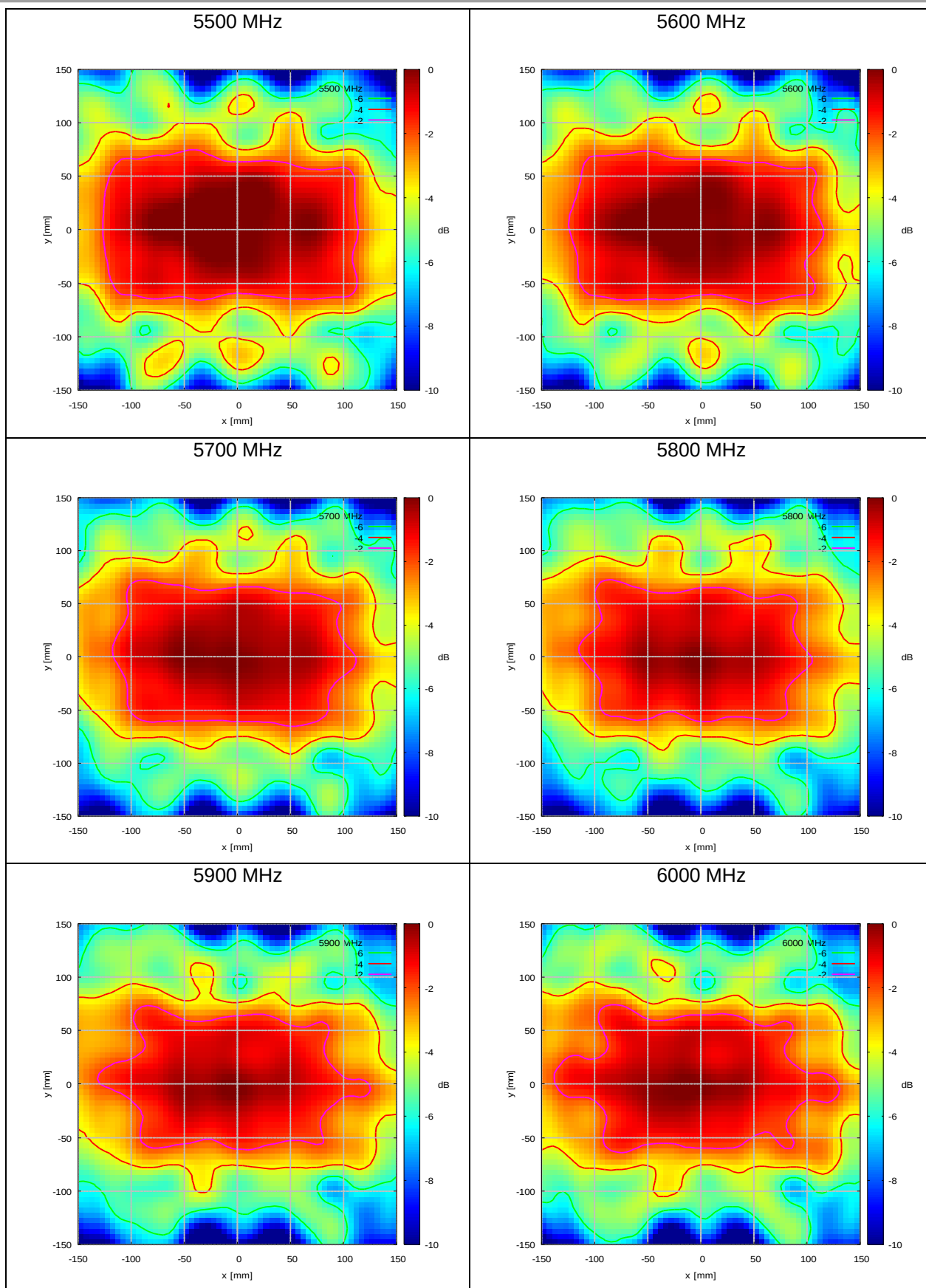


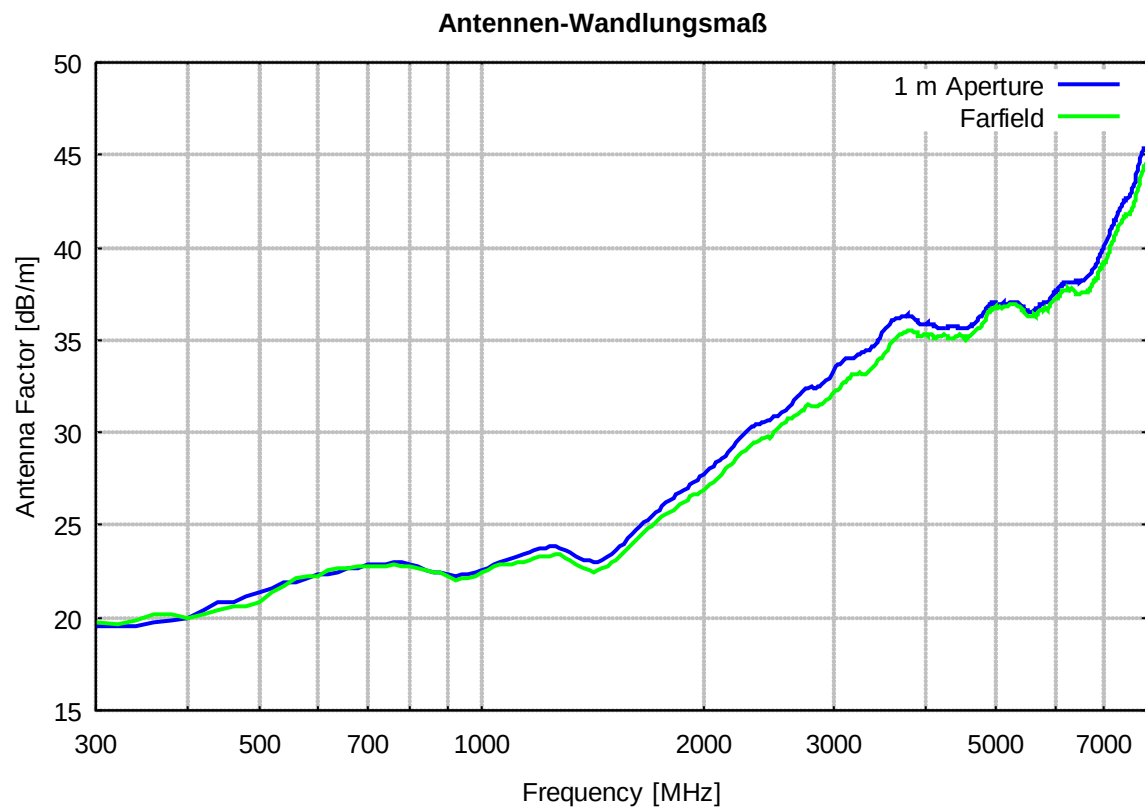
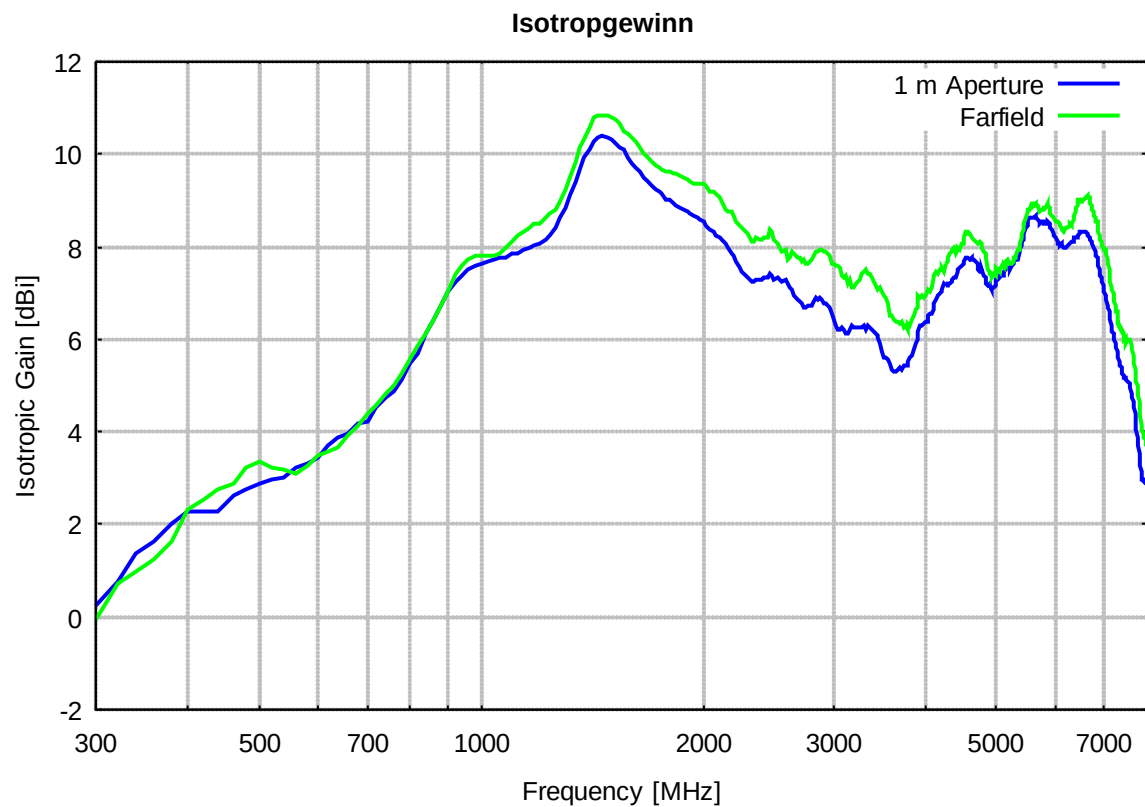














Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
300.00	0.24	19.53	-0.04	19.80
320.00	0.77	19.55	0.71	19.61
340.00	1.36	19.49	0.96	19.89
360.00	1.64	19.70	1.22	20.13
380.00	2.00	19.82	1.62	20.20
400.00	2.29	19.97	2.33	19.93
420.00	2.27	20.42	2.52	20.16
440.00	2.27	20.82	2.73	20.36
460.00	2.63	20.85	2.87	20.61
480.00	2.74	21.11	3.22	20.63
500.00	2.88	21.32	3.37	20.83
520.00	2.95	21.59	3.22	21.32
540.00	3.00	21.87	3.20	21.67
560.00	3.24	21.94	3.09	22.09
580.00	3.33	22.16	3.28	22.21
600.00	3.45	22.33	3.50	22.28
620.00	3.70	22.36	3.55	22.52
640.00	3.89	22.46	3.64	22.70
660.00	3.97	22.64	3.91	22.70
680.00	4.19	22.68	4.15	22.72
700.00	4.23	22.89	4.39	22.73
720.00	4.51	22.86	4.57	22.80
740.00	4.74	22.86	4.81	22.80
760.00	4.86	22.98	5.01	22.83
780.00	5.11	22.95	5.25	22.81
800.00	5.46	22.83	5.56	22.72
820.00	5.69	22.81	5.86	22.63
840.00	6.12	22.58	6.14	22.56
860.00	6.42	22.49	6.44	22.47
880.00	6.68	22.43	6.67	22.44
900.00	7.01	22.30	7.03	22.28
920.00	7.23	22.26	7.42	22.07
940.00	7.37	22.31	7.57	22.12
960.00	7.52	22.34	7.71	22.16
980.00	7.57	22.47	7.82	22.23
1000.00	7.65	22.57	7.79	22.43
1020.00	7.69	22.70	7.82	22.57
1040.00	7.72	22.84	7.81	22.75
1060.00	7.77	22.96	7.84	22.88
1080.00	7.77	23.12	7.97	22.92
1100.00	7.84	23.21	8.12	22.93
1120.00	7.86	23.34	8.22	22.98
1140.00	7.92	23.44	8.32	23.04
1160.00	7.97	23.54	8.41	23.10
1180.00	8.03	23.63	8.49	23.17
1200.00	8.05	23.75	8.50	23.31
1220.00	8.15	23.79	8.63	23.31
1240.00	8.23	23.85	8.73	23.36
1260.00	8.43	23.80	8.79	23.44
1280.00	8.61	23.76	8.97	23.39
1300.00	8.83	23.67	9.25	23.24
1320.00	9.10	23.53	9.50	23.13
1340.00	9.40	23.36	9.84	22.92



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
1360.00	9.68	23.21	10.13	22.76
1380.00	9.94	23.08	10.31	22.70
1400.00	10.10	23.05	10.58	22.56
1420.00	10.25	23.02	10.78	22.49
1440.00	10.36	23.03	10.84	22.54
1460.00	10.41	23.09	10.85	22.65
1480.00	10.37	23.26	10.84	22.78
1500.00	10.32	23.43	10.77	22.97
1520.00	10.24	23.62	10.74	23.12
1540.00	10.15	23.82	10.66	23.31
1560.00	10.08	24.01	10.50	23.58
1580.00	9.94	24.25	10.45	23.75
1600.00	9.79	24.51	10.37	23.93
1620.00	9.70	24.71	10.25	24.16
1640.00	9.62	24.90	10.15	24.36
1660.00	9.50	25.12	10.03	24.59
1680.00	9.42	25.31	9.91	24.81
1700.00	9.31	25.52	9.85	24.98
1720.00	9.22	25.71	9.77	25.16
1740.00	9.20	25.83	9.69	25.34
1760.00	9.13	26.00	9.68	25.45
1780.00	9.03	26.20	9.64	25.59
1800.00	9.01	26.32	9.62	25.71
1820.00	8.94	26.48	9.58	25.84
1840.00	8.88	26.63	9.56	25.96
1860.00	8.84	26.77	9.53	26.08
1880.00	8.79	26.91	9.49	26.21
1900.00	8.76	27.03	9.46	26.34
1920.00	8.71	27.18	9.39	26.50
1940.00	8.65	27.33	9.36	26.62
1960.00	8.61	27.45	9.36	26.71
1980.00	8.57	27.59	9.36	26.80
2000.00	8.52	27.72	9.36	26.88
2020.00	8.44	27.89	9.32	27.01
2040.00	8.36	28.05	9.20	27.21
2060.00	8.31	28.18	9.18	27.32
2080.00	8.25	28.34	9.14	27.44
2100.00	8.21	28.46	9.07	27.60
2120.00	8.16	28.59	8.96	27.79
2140.00	8.07	28.75	8.81	28.02
2160.00	7.98	28.93	8.74	28.17
2180.00	7.86	29.12	8.75	28.24
2200.00	7.79	29.27	8.65	28.42
2220.00	7.68	29.47	8.52	28.63
2240.00	7.56	29.67	8.45	28.78
2260.00	7.47	29.84	8.40	28.90
2280.00	7.38	30.00	8.34	29.04
2300.00	7.31	30.14	8.29	29.17
2320.00	7.24	30.29	8.13	29.40
2340.00	7.24	30.36	8.12	29.48
2360.00	7.29	30.39	8.18	29.50
2380.00	7.28	30.47	8.14	29.61
2400.00	7.29	30.53	8.14	29.68
2420.00	7.33	30.57	8.21	29.69

Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
2440.00	7.31	30.66	8.21	29.76
2460.00	7.40	30.64	8.35	29.68
2480.00	7.37	30.74	8.31	29.79
2500.00	7.29	30.89	8.14	30.04
2520.00	7.35	30.90	8.05	30.19
2540.00	7.29	31.03	7.99	30.32
2560.00	7.26	31.12	7.90	30.48
2580.00	7.28	31.18	7.92	30.54
2600.00	7.22	31.30	7.73	30.79
2620.00	7.13	31.46	7.77	30.82
2640.00	7.08	31.57	7.88	30.77
2660.00	6.95	31.77	7.85	30.87
2680.00	6.86	31.92	7.78	31.00
2700.00	6.81	32.04	7.75	31.10
2720.00	6.77	32.15	7.68	31.23
2740.00	6.67	32.30	7.73	31.24
2760.00	6.70	32.34	7.63	31.41
2780.00	6.72	32.38	7.63	31.47
2800.00	6.72	32.44	7.71	31.46
2820.00	6.81	32.41	7.82	31.41
2840.00	6.88	32.41	7.90	31.39
2860.00	6.84	32.50	7.91	31.43
2880.00	6.88	32.53	7.92	31.49
2900.00	6.86	32.61	7.93	31.54
2920.00	6.78	32.75	7.88	31.65
2940.00	6.77	32.82	7.88	31.70
2960.00	6.70	32.95	7.80	31.85
2980.00	6.55	33.16	7.65	32.05
3000.00	6.43	33.33	7.63	32.13
3020.00	6.30	33.52	7.58	32.24
3040.00	6.21	33.67	7.59	32.29
3060.00	6.21	33.72	7.55	32.38
3080.00	6.23	33.76	7.39	32.60
3100.00	6.19	33.86	7.35	32.69
3120.00	6.11	33.99	7.37	32.73
3140.00	6.14	34.02	7.22	32.94
3160.00	6.19	34.03	7.27	32.94
3180.00	6.28	33.99	7.12	33.15
3200.00	6.26	34.06	7.13	33.19
3220.00	6.24	34.13	7.21	33.16
3240.00	6.24	34.19	7.25	33.19
3260.00	6.24	34.24	7.27	33.22
3280.00	6.25	34.29	7.40	33.14
3300.00	6.28	34.31	7.48	33.11
3320.00	6.22	34.43	7.51	33.13
3340.00	6.30	34.40	7.43	33.27
3360.00	6.26	34.49	7.41	33.33
3380.00	6.20	34.60	7.33	33.47
3400.00	6.15	34.70	7.24	33.61
3420.00	6.13	34.77	7.17	33.73
3440.00	6.09	34.86	7.09	33.86
3460.00	6.04	34.96	7.06	33.94
3480.00	5.91	35.14	7.10	33.96
3500.00	5.74	35.36	7.05	34.06



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
3520.00	5.62	35.53	6.94	34.21
3540.00	5.62	35.58	6.92	34.28
3560.00	5.54	35.70	6.77	34.47
3580.00	5.46	35.83	6.52	34.78
3600.00	5.34	36.01	6.52	34.82
3620.00	5.29	36.10	6.41	34.98
3640.00	5.31	36.14	6.37	35.08
3660.00	5.32	36.17	6.38	35.11
3680.00	5.33	36.21	6.37	35.17
3700.00	5.39	36.19	6.33	35.25
3720.00	5.36	36.27	6.37	35.26
3740.00	5.42	36.26	6.26	35.42
3760.00	5.42	36.30	6.31	35.41
3780.00	5.41	36.36	6.22	35.55
3800.00	5.53	36.29	6.32	35.50
3820.00	5.59	36.27	6.30	35.56
3840.00	5.66	36.25	6.44	35.47
3860.00	5.76	36.19	6.51	35.44
3880.00	5.91	36.08	6.63	35.36
3900.00	6.00	36.04	6.69	35.36
3920.00	6.18	35.91	6.93	35.16
3940.00	6.28	35.85	6.90	35.23
3960.00	6.30	35.88	6.95	35.23
3980.00	6.33	35.89	6.91	35.31
4000.00	6.39	35.87	6.96	35.30
4020.00	6.40	35.90	7.07	35.24
4040.00	6.51	35.84	7.07	35.28
4060.00	6.55	35.84	7.04	35.35
4080.00	6.57	35.87	7.12	35.32
4100.00	6.64	35.83	7.32	35.16
4120.00	6.78	35.73	7.39	35.12
4140.00	6.86	35.70	7.44	35.12
4160.00	6.93	35.67	7.43	35.17
4180.00	7.00	35.65	7.49	35.16
4200.00	7.03	35.66	7.52	35.16
4220.00	7.06	35.66	7.55	35.18
4240.00	7.18	35.59	7.47	35.30
4260.00	7.16	35.65	7.63	35.18
4280.00	7.17	35.68	7.66	35.18
4300.00	7.19	35.70	7.78	35.11
4320.00	7.18	35.75	7.87	35.06
4340.00	7.25	35.72	7.88	35.09
4360.00	7.30	35.71	7.95	35.06
4380.00	7.31	35.74	7.96	35.09
4400.00	7.35	35.74	7.85	35.24
4420.00	7.44	35.69	7.94	35.18
4440.00	7.50	35.67	7.96	35.21
4460.00	7.56	35.65	7.92	35.29
4480.00	7.58	35.67	8.06	35.19
4500.00	7.62	35.67	8.08	35.20
4520.00	7.67	35.66	8.20	35.12
4540.00	7.76	35.60	8.34	35.02
4560.00	7.76	35.64	8.33	35.07
4580.00	7.76	35.67	8.26	35.17



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
4600.00	7.73	35.74	8.29	35.18
4620.00	7.76	35.76	8.19	35.32
4640.00	7.72	35.83	8.20	35.35
4660.00	7.74	35.85	8.15	35.44
4680.00	7.67	35.96	8.09	35.54
4700.00	7.64	36.02	8.05	35.61
4720.00	7.51	36.19	8.08	35.62
4740.00	7.48	36.26	8.09	35.65
4760.00	7.47	36.30	8.07	35.70
4780.00	7.49	36.32	7.99	35.82
4800.00	7.38	36.46	7.90	35.95
4820.00	7.32	36.56	7.86	36.02
4840.00	7.18	36.74	7.78	36.14
4860.00	7.17	36.79	7.51	36.44
4880.00	7.20	36.79	7.44	36.54
4900.00	7.14	36.88	7.41	36.62
4920.00	7.09	36.97	7.42	36.64
4940.00	7.10	36.99	7.34	36.75
4960.00	7.11	37.02	7.41	36.72
4980.00	7.16	37.00	7.37	36.80
5000.00	7.27	36.93	7.54	36.66
5020.00	7.27	36.96	7.52	36.72
5040.00	7.31	36.96	7.48	36.78
5060.00	7.36	36.94	7.49	36.81
5080.00	7.39	36.95	7.59	36.75
5100.00	7.38	37.00	7.56	36.81
5120.00	7.44	36.96	7.62	36.79
5140.00	7.51	36.93	7.61	36.83
5160.00	7.55	36.92	7.68	36.80
5180.00	7.56	36.95	7.70	36.81
5200.00	7.55	36.99	7.62	36.92
5220.00	7.52	37.05	7.65	36.92
5240.00	7.60	37.01	7.64	36.96
5260.00	7.65	36.99	7.69	36.95
5280.00	7.66	37.01	7.78	36.89
5300.00	7.72	36.98	7.78	36.92
5320.00	7.71	37.03	7.82	36.92
5340.00	7.73	37.04	7.94	36.83
5360.00	7.88	36.92	7.95	36.85
5380.00	7.95	36.88	8.07	36.77
5400.00	8.02	36.85	8.21	36.66
5420.00	8.10	36.80	8.30	36.60
5440.00	8.15	36.78	8.37	36.56
5460.00	8.30	36.67	8.50	36.46
5480.00	8.42	36.58	8.64	36.35
5500.00	8.46	36.57	8.77	36.26
5520.00	8.58	36.48	8.79	36.27
5540.00	8.64	36.45	8.78	36.31
5560.00	8.61	36.52	8.80	36.32
5580.00	8.62	36.53	8.93	36.23
5600.00	8.63	36.55	8.92	36.26
5620.00	8.63	36.58	8.88	36.33
5640.00	8.65	36.60	8.93	36.32
5660.00	8.61	36.67	8.88	36.40



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
5680.00	8.57	36.74	8.89	36.42
5700.00	8.58	36.75	8.87	36.47
5720.00	8.55	36.82	8.77	36.60
5740.00	8.50	36.89	8.77	36.63
5760.00	8.53	36.89	8.79	36.64
5780.00	8.54	36.92	8.78	36.68
5800.00	8.50	36.99	8.85	36.64
5820.00	8.51	37.01	8.84	36.68
5840.00	8.51	37.04	8.85	36.69
5860.00	8.50	37.07	8.93	36.65
5880.00	8.54	37.07	8.90	36.71
5900.00	8.51	37.13	8.83	36.80
5920.00	8.42	37.25	8.72	36.94
5940.00	8.35	37.35	8.68	37.01
5960.00	8.30	37.43	8.64	37.09
5980.00	8.22	37.53	8.63	37.13
6000.00	8.21	37.57	8.55	37.23
6020.00	8.18	37.63	8.56	37.25
6040.00	8.11	37.73	8.54	37.30
6060.00	8.07	37.80	8.54	37.33
6080.00	8.05	37.85	8.49	37.40
6100.00	8.02	37.91	8.47	37.46
6120.00	8.06	37.89	8.43	37.53
6140.00	8.02	37.96	8.36	37.63
6160.00	7.97	38.04	8.33	37.68
6180.00	7.98	38.06	8.34	37.70
6200.00	7.99	38.08	8.40	37.67
6220.00	7.98	38.11	8.39	37.70
6240.00	8.01	38.11	8.43	37.70
6260.00	8.03	38.12	8.40	37.75
6280.00	8.07	38.11	8.46	37.71
6300.00	8.08	38.12	8.48	37.73
6320.00	8.10	38.13	8.47	37.77
6340.00	8.11	38.15	8.51	37.75
6360.00	8.13	38.16	8.60	37.69
6380.00	8.19	38.13	8.67	37.64
6400.00	8.20	38.14	8.75	37.59
6420.00	8.18	38.19	8.86	37.51
6440.00	8.21	38.19	8.90	37.50
6460.00	8.23	38.19	9.02	37.41
6480.00	8.27	38.19	9.01	37.45
6500.00	8.34	38.14	8.99	37.49
6520.00	8.33	38.18	8.98	37.53
6540.00	8.31	38.22	9.01	37.52
6560.00	8.33	38.23	9.02	37.54
6580.00	8.32	38.27	9.03	37.55
6600.00	8.31	38.30	9.06	37.55
6620.00	8.31	38.33	9.06	37.57
6640.00	8.26	38.40	9.10	37.56
6660.00	8.24	38.45	9.05	37.64
6680.00	8.21	38.51	9.05	37.67
6700.00	8.16	38.58	8.93	37.81
6720.00	8.12	38.64	8.89	37.87
6740.00	8.07	38.72	8.80	37.99



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
6760.00	8.00	38.82	8.76	38.06
6780.00	7.97	38.87	8.67	38.17
6800.00	7.88	38.99	8.64	38.23
6820.00	7.79	39.11	8.56	38.33
6840.00	7.76	39.16	8.56	38.36
6860.00	7.69	39.25	8.47	38.48
6880.00	7.60	39.38	8.31	38.66
6900.00	7.50	39.50	8.24	38.75
6920.00	7.39	39.63	8.17	38.85
6940.00	7.31	39.73	8.12	38.92
6960.00	7.24	39.83	8.03	39.04
6980.00	7.15	39.95	7.97	39.13
7000.00	7.01	40.11	7.93	39.19
7020.00	6.93	40.22	7.94	39.21
7040.00	6.85	40.32	7.83	39.34
7060.00	6.74	40.45	7.70	39.50
7080.00	6.69	40.53	7.63	39.59
7100.00	6.59	40.66	7.52	39.73
7120.00	6.48	40.79	7.39	39.88
7140.00	6.41	40.88	7.23	40.06
7160.00	6.28	41.04	7.12	40.20
7180.00	6.18	41.16	7.06	40.28
7200.00	6.10	41.26	7.00	40.37
7220.00	5.99	41.41	6.82	40.57
7240.00	5.90	41.51	6.74	40.68
7260.00	5.82	41.62	6.60	40.84
7280.00	5.73	41.73	6.58	40.88
7300.00	5.66	41.83	6.49	41.00
7320.00	5.60	41.91	6.33	41.18
7340.00	5.50	42.04	6.27	41.26
7360.00	5.43	42.13	6.29	41.27
7380.00	5.37	42.21	6.20	41.38
7400.00	5.26	42.34	6.19	41.42
7420.00	5.20	42.43	6.11	41.52
7440.00	5.18	42.47	6.05	41.60
7460.00	5.15	42.53	6.01	41.66
7480.00	5.15	42.55	6.03	41.67
7500.00	5.12	42.60	5.92	41.80
7520.00	5.08	42.66	5.97	41.78
7540.00	5.10	42.66	6.01	41.75
7560.00	5.04	42.75	5.99	41.80
7580.00	5.01	42.80	5.98	41.84
7600.00	4.97	42.87	5.99	41.84
7620.00	4.83	43.02	5.86	42.00
7640.00	4.73	43.16	5.79	42.09
7660.00	4.65	43.26	5.66	42.25
7680.00	4.51	43.42	5.49	42.44
7700.00	4.40	43.55	5.36	42.59
7720.00	4.24	43.74	5.30	42.67
7740.00	4.03	43.96	5.10	42.89
7760.00	3.87	44.15	4.98	43.04
7780.00	3.69	44.35	4.80	43.24



Frequency	Gain(Isotr.) 1 m	Ant.-Factor 1 m	Gain(Isotr.) Farfield	Ant.-Factor Farfield
MHz	dBi	dB/m	dBi	dB/m
7800.00	3.52	44.54	4.65	43.41
7820.00	3.38	44.71	4.52	43.56
7840.00	3.26	44.85	4.37	43.73
7860.00	3.13	45.00	4.15	43.98
7880.00	2.98	45.17	4.06	44.09
7900.00	2.95	45.22	3.98	44.19
7920.00	2.97	45.23	3.91	44.28
7940.00	2.91	45.30	3.87	44.35
7960.00	2.89	45.35	3.82	44.42
7980.00	2.88	45.38	3.80	44.46
8000.00	2.88	45.40	3.83	44.45

