

TECHNICAL DOCUMENTATION

SUPPLEMENT
FREQUENCIES 2018

Farnsworth Peak



BROADCAST

773941



UHF Auxiliary Antenna
04.04.2018

KATHREIN

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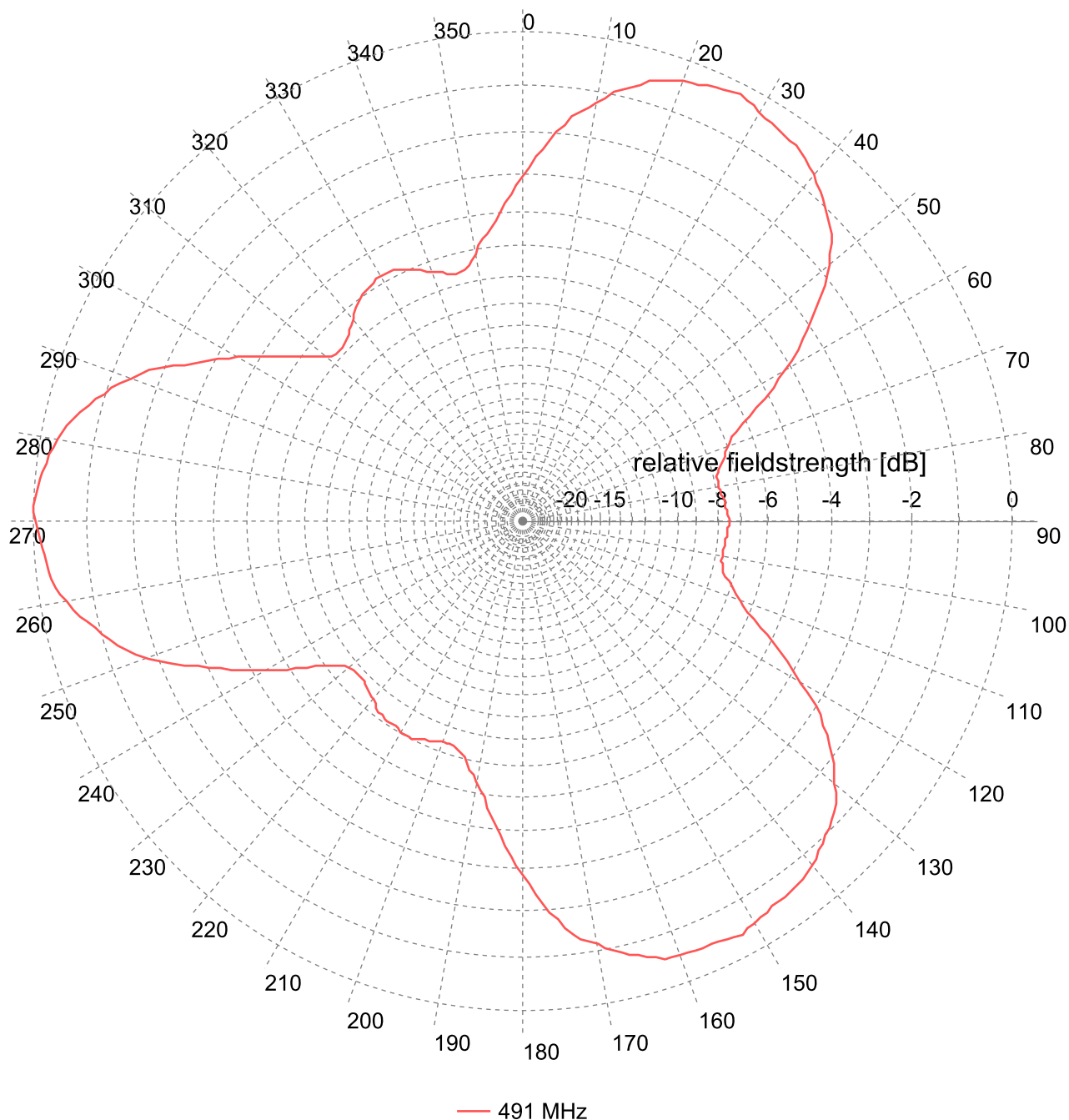
Operating channel 17 / 19 / 23 / 27 / 30 / 34 / 35 / 36

Gain* (reference: $\lambda/2$ dipole) in dB 14.5 / 14.4 / 14.4 / 14.2 / 14.0 / 14.4 / 14.3 / 14.3

Max. power rate at feeder line input ATSC 1: 50 kW
(80 m 6 1/8" feeder line) ATSC 3: 48 kW

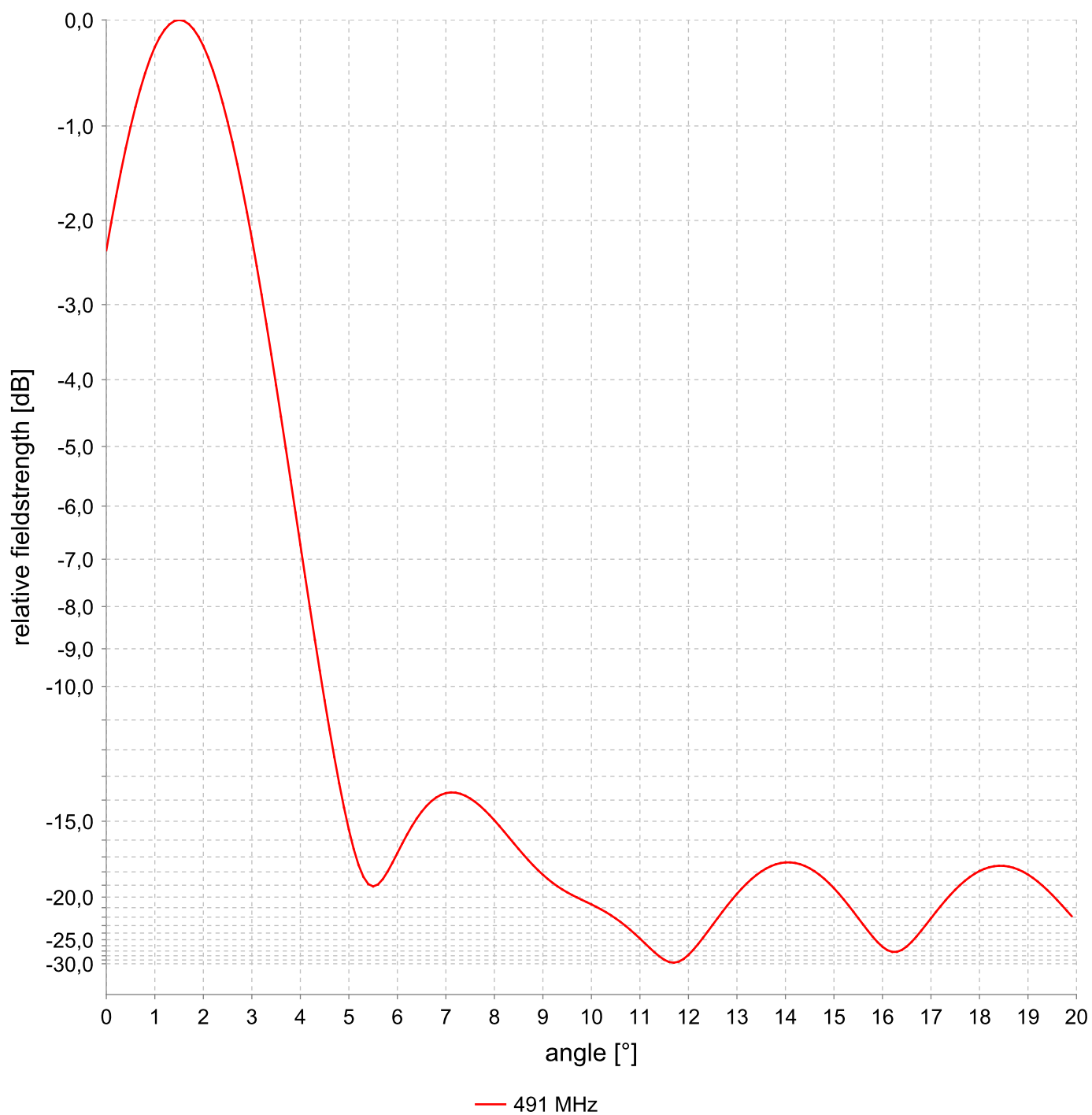
***Remark:** The gain figures are referred to input of main splitter level. Distribution cable losses have already been taken into consideration. Tolerance ± 0.3 dB.

KATHREIN	Date	UHF Auxiliary Antenna Farnsworth Peak Salt Lake City / Utah	Type No.:
	04.04.2018		773941
	Name		Sheet: 111
	Ge/BSR		



Note for all patterns:

The HRP is only valid for undisturbed propagation.
Due to side-mounting at the mast, shadowing and reflections from the mast will occur.



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Elevation Pattern									
Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field
0.0	0.764	4.0	0.462	8.0	0.179	12.0	0.041	16.0	0.049
0.1	0.792	4.1	0.429	8.1	0.173	12.1	0.046	16.1	0.046
0.2	0.819	4.2	0.396	8.2	0.167	12.2	0.052	16.2	0.044
0.3	0.844	4.3	0.364	8.3	0.161	12.3	0.058	16.3	0.044
0.4	0.868	4.4	0.332	8.4	0.155	12.4	0.065	16.4	0.046
0.5	0.890	4.5	0.302	8.5	0.149	12.5	0.072	16.5	0.049
0.6	0.911	4.6	0.272	8.6	0.144	12.6	0.078	16.6	0.054
0.7	0.929	4.7	0.244	8.7	0.138	12.7	0.085	16.7	0.059
0.8	0.945	4.8	0.217	8.8	0.133	12.8	0.091	16.8	0.066
0.9	0.960	4.9	0.192	8.9	0.128	12.9	0.097	16.9	0.072
1.0	0.972	5.0	0.169	9.0	0.123	13.0	0.103	17.0	0.078
1.1	0.982	5.1	0.149	9.1	0.119	13.1	0.109	17.1	0.085
1.2	0.990	5.2	0.133	9.2	0.115	13.2	0.114	17.2	0.091
1.3	0.995	5.3	0.121	9.3	0.111	13.3	0.118	17.3	0.097
1.4	0.999	5.4	0.113	9.4	0.108	13.4	0.123	17.4	0.102
1.5	1.000	5.5	0.111	9.5	0.105	13.5	0.126	17.5	0.108
1.6	0.999	5.6	0.113	9.6	0.102	13.6	0.129	17.6	0.112
1.7	0.996	5.7	0.118	9.7	0.100	13.7	0.132	17.7	0.117
1.8	0.990	5.8	0.126	9.8	0.097	13.8	0.134	17.8	0.121
1.9	0.983	5.9	0.135	9.9	0.095	13.9	0.135	17.9	0.124
2.0	0.973	6.0	0.145	10.0	0.093	14.0	0.136	18.0	0.127
2.1	0.962	6.1	0.155	10.1	0.090	14.1	0.136	18.1	0.129
2.2	0.948	6.2	0.164	10.2	0.087	14.2	0.135	18.2	0.131
2.3	0.932	6.3	0.173	10.3	0.085	14.3	0.134	18.3	0.132
2.4	0.915	6.4	0.181	10.4	0.081	14.4	0.132	18.4	0.132
2.5	0.896	6.5	0.188	10.5	0.078	14.5	0.130	18.5	0.132
2.6	0.875	6.6	0.194	10.6	0.075	14.6	0.127	18.6	0.131
2.7	0.852	6.7	0.198	10.7	0.071	14.7	0.123	18.7	0.130
2.8	0.828	6.8	0.202	10.8	0.066	14.8	0.119	18.8	0.128
2.9	0.803	6.9	0.205	10.9	0.062	14.9	0.114	18.9	0.126
3.0	0.776	7.0	0.207	11.0	0.057	15.0	0.109	19.0	0.123
3.1	0.747	7.1	0.207	11.1	0.053	15.1	0.104	19.1	0.120
3.2	0.718	7.2	0.207	11.2	0.048	15.2	0.098	19.2	0.116
3.3	0.688	7.3	0.206	11.3	0.043	15.3	0.092	19.3	0.112
3.4	0.657	7.4	0.204	11.4	0.039	15.4	0.085	19.4	0.107
3.5	0.625	7.5	0.201	11.5	0.036	15.5	0.079	19.5	0.102
3.6	0.593	7.6	0.198	11.6	0.033	15.6	0.072	19.6	0.097
3.7	0.560	7.7	0.194	11.7	0.033	15.7	0.065	19.7	0.092
3.8	0.528	7.8	0.189	11.8	0.034	15.8	0.059	19.8	0.086
3.9	0.495	7.9	0.184	11.9	0.036	15.9	0.054	19.9	0.080

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Azimuth Pattern

AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH RELATIVE		AZIMUTH	RELATIVE
FIELD		FIELD		FIELD		FIELD		FIELD		FIELD		FIELD		FIELD			FIELD
0	0.705	41	0.917	82	0.410	123	0.724	164	0.924	205	0.490	246	0.728	287	0.894	328	0.576
1	0.725	42	0.909	83	0.411	124	0.742	165	0.917	206	0.493	247	0.751	288	0.881	329	0.578
2	0.745	43	0.900	84	0.413	125	0.759	166	0.910	207	0.496	248	0.772	289	0.867	330	0.579
3	0.762	44	0.891	85	0.415	126	0.775	167	0.902	208	0.497	249	0.793	290	0.852	331	0.579
4	0.780	45	0.882	86	0.416	127	0.791	168	0.893	209	0.497	250	0.813	291	0.837	332	0.577
5	0.798	46	0.872	87	0.417	128	0.804	169	0.885	210	0.496	251	0.833	292	0.821	333	0.575
6	0.815	47	0.862	88	0.419	129	0.818	170	0.877	211	0.494	252	0.852	293	0.800	334	0.573
7	0.833	48	0.847	89	0.421	130	0.832	171	0.869	212	0.491	253	0.865	294	0.779	335	0.569
8	0.845	49	0.832	90	0.421	131	0.846	172	0.862	213	0.492	254	0.877	295	0.759	336	0.564
9	0.857	50	0.816	91	0.421	132	0.861	173	0.848	214	0.492	255	0.889	296	0.740	337	0.559
10	0.870	51	0.800	92	0.419	133	0.869	174	0.832	215	0.491	256	0.901	297	0.723	338	0.553
11	0.882	52	0.783	93	0.419	134	0.877	175	0.816	216	0.490	257	0.912	298	0.705	339	0.547
12	0.895	53	0.763	94	0.418	135	0.884	176	0.799	217	0.487	258	0.924	299	0.688	340	0.542
13	0.905	54	0.743	95	0.417	136	0.891	177	0.781	218	0.483	259	0.934	300	0.671	341	0.538
14	0.915	55	0.723	96	0.416	137	0.898	178	0.760	219	0.480	260	0.945	301	0.654	342	0.535
15	0.925	56	0.703	97	0.414	138	0.904	179	0.740	220	0.476	261	0.955	302	0.638	343	0.530
16	0.934	57	0.684	98	0.414	139	0.910	180	0.720	221	0.472	262	0.964	303	0.618	344	0.527
17	0.944	58	0.662	99	0.413	140	0.916	181	0.702	222	0.469	263	0.969	304	0.600	345	0.525
18	0.948	59	0.640	100	0.413	141	0.922	182	0.684	223	0.465	264	0.972	305	0.584	346	0.525
19	0.952	60	0.619	101	0.414	142	0.929	183	0.663	224	0.461	265	0.976	306	0.571	347	0.527
20	0.956	61	0.599	102	0.416	143	0.930	184	0.642	225	0.459	266	0.980	307	0.560	348	0.534
21	0.959	62	0.579	103	0.419	144	0.932	185	0.623	226	0.458	267	0.983	308	0.545	349	0.544
22	0.963	63	0.555	104	0.423	145	0.933	186	0.604	227	0.458	268	0.987	309	0.533	350	0.555
23	0.966	64	0.532	105	0.429	146	0.935	187	0.587	228	0.457	269	0.991	310	0.524	351	0.569
24	0.969	65	0.510	106	0.438	147	0.937	188	0.570	229	0.459	270	0.994	311	0.517	352	0.585
25	0.972	66	0.491	107	0.448	148	0.939	189	0.554	230	0.463	271	0.997	312	0.513	353	0.593
26	0.975	67	0.473	108	0.454	149	0.942	190	0.540	231	0.470	272	1.000	313	0.511	354	0.605
27	0.978	68	0.461	109	0.461	150	0.946	191	0.528	232	0.480	273	0.996	314	0.512	355	0.618
28	0.974	69	0.451	110	0.471	151	0.949	192	0.519	233	0.489	274	0.992	315	0.514	356	0.634
29	0.970	70	0.443	111	0.483	152	0.953	193	0.507	234	0.501	275	0.988	316	0.518	357	0.652
30	0.966	71	0.439	112	0.497	153	0.951	194	0.497	235	0.515	276	0.984	317	0.522	358	0.668
31	0.962	72	0.437	113	0.512	154	0.949	195	0.490	236	0.532	277	0.980	318	0.527	359	0.686
32	0.959	73	0.427	114	0.530	155	0.947	196	0.484	237	0.551	278	0.975	319	0.532		
33	0.956	74	0.419	115	0.549	156	0.945	197	0.481	238	0.569	279	0.970	320	0.539		
34	0.954	75	0.413	116	0.569	157	0.944	198	0.478	239	0.587	280	0.964	321	0.545		
35	0.951	76	0.410	117	0.590	158	0.942	199	0.477	240	0.607	281	0.959	322	0.552		
36	0.949	77	0.408	118	0.611	159	0.941	200	0.478	241	0.628	282	0.952	323	0.558		
37	0.946	78	0.407	119	0.633	160	0.940	201	0.480	242	0.649	283	0.941	324	0.563		
38	0.939	79	0.407	120	0.657	161	0.939	202	0.483	243	0.667	284	0.930	325	0.567		
39	0.932	80	0.407	121	0.681	162	0.938	203	0.485	244	0.686	285	0.918	326	0.570		
40	0.924	81	0.408	122	0.705	163	0.931	204	0.487	245	0.706	286	0.906	327	0.572		