

TECHNICAL DOCUMENTATION

SUPPLEMENT
FREQUENCIES 2018

Farnsworth Peak



BROADCAST

773941



UHF Auxiliary Antenna
04.04.2018

KATHREIN

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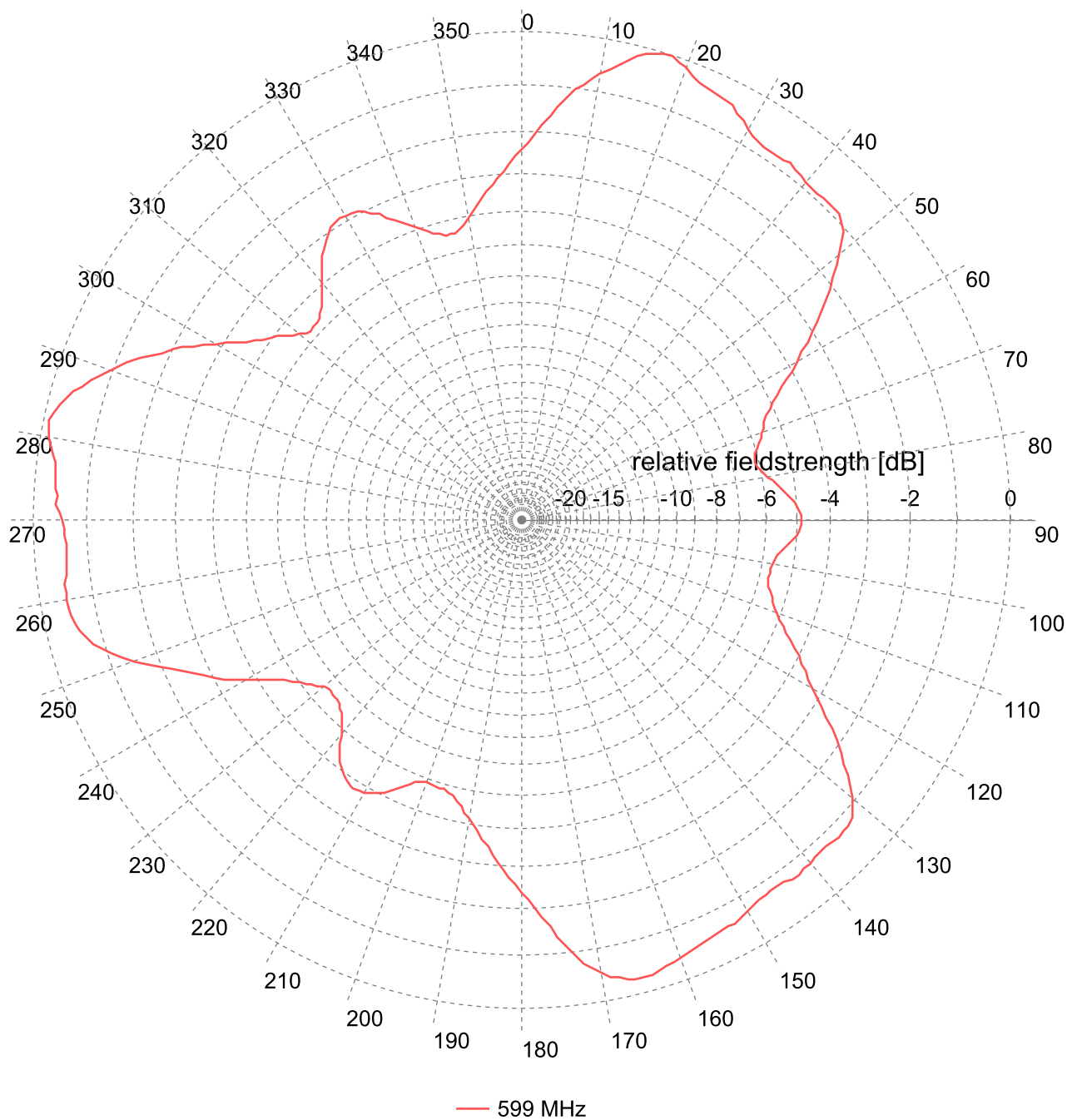
Operating channel 17 / 19 / 23 / 27 / 30 / 34 / 35 / 36

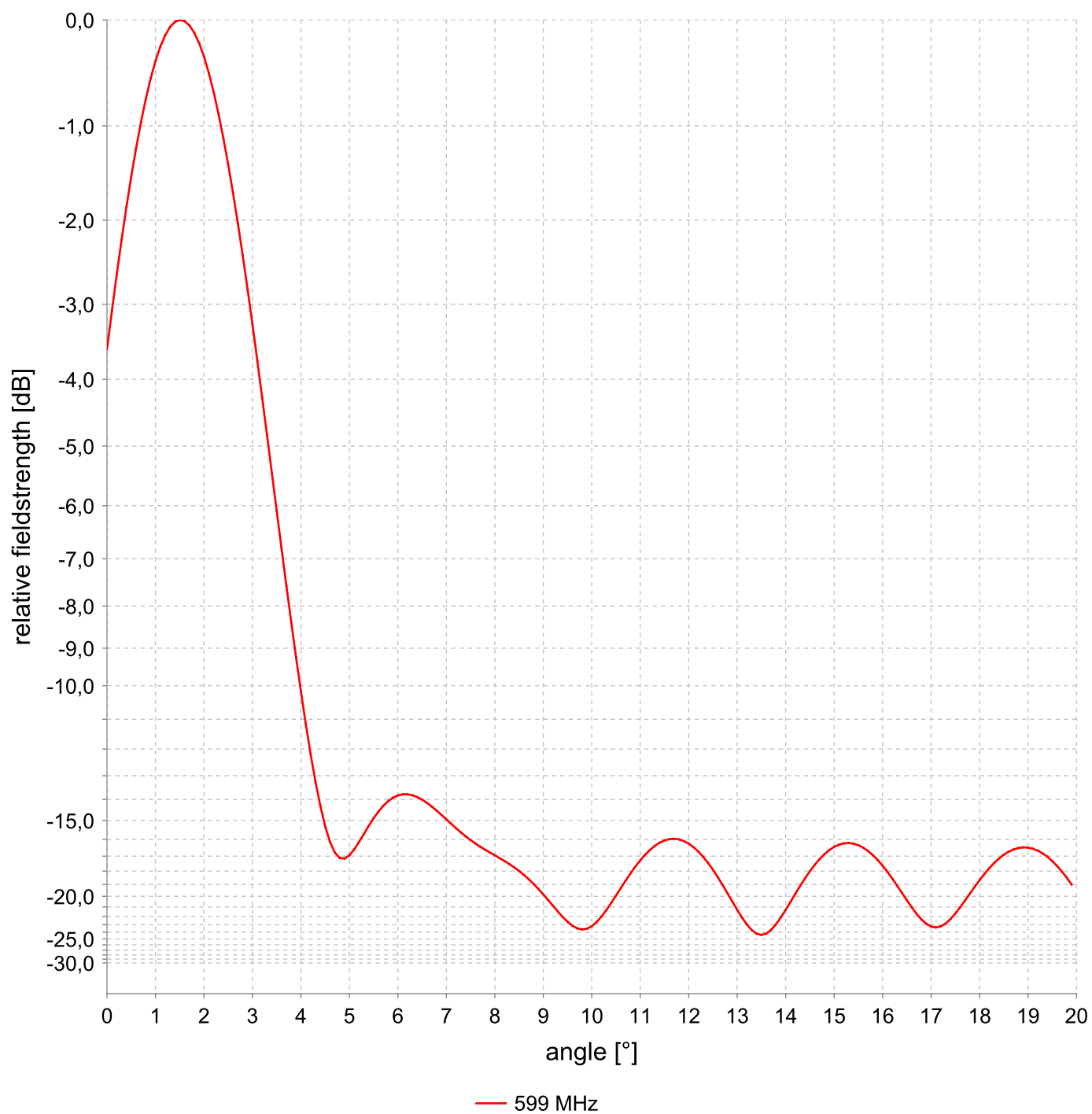
Gain* (reference: $\lambda/2$ dipole) in dB 14.5 / 14.4 / 14.4 / 14.2 / 14.0 / 14.4 / 14.3 / 14.3

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		





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Elevation Pattern									
Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field
0.0	0.662	4.0	0.310	8.0	0.142	12.0	0.154	16.0	0.131
0.1	0.701	4.1	0.277	8.1	0.139	12.1	0.150	16.1	0.125
0.2	0.738	4.2	0.246	8.2	0.136	12.2	0.146	16.2	0.118
0.3	0.774	4.3	0.218	8.3	0.133	12.3	0.140	16.3	0.111
0.4	0.808	4.4	0.193	8.4	0.130	12.4	0.134	16.4	0.103
0.5	0.839	4.5	0.172	8.5	0.126	12.5	0.127	16.5	0.096
0.6	0.868	4.6	0.156	8.6	0.122	12.6	0.120	16.6	0.089
0.7	0.895	4.7	0.145	8.7	0.117	12.7	0.112	16.7	0.082
0.8	0.919	4.8	0.139	8.8	0.113	12.8	0.103	16.8	0.076
0.9	0.940	4.9	0.139	8.9	0.107	12.9	0.095	16.9	0.072
1.0	0.958	5.0	0.142	9.0	0.102	13.0	0.086	17.0	0.069
1.1	0.973	5.1	0.148	9.1	0.096	13.1	0.078	17.1	0.068
1.2	0.984	5.2	0.156	9.2	0.090	13.2	0.071	17.2	0.069
1.3	0.993	5.3	0.164	9.3	0.084	13.3	0.065	17.3	0.072
1.4	0.998	5.4	0.172	9.4	0.079	13.4	0.062	17.4	0.077
1.5	1.000	5.5	0.180	9.5	0.074	13.5	0.060	17.5	0.082
1.6	0.999	5.6	0.187	9.6	0.070	13.6	0.062	17.6	0.089
1.7	0.994	5.7	0.193	9.7	0.067	13.7	0.066	17.7	0.096
1.8	0.987	5.8	0.198	9.8	0.066	13.8	0.071	17.8	0.103
1.9	0.976	5.9	0.201	9.9	0.067	13.9	0.078	17.9	0.110
2.0	0.962	6.0	0.204	10.0	0.069	14.0	0.086	18.0	0.117
2.1	0.945	6.1	0.205	10.1	0.074	14.1	0.094	18.1	0.123
2.2	0.926	6.2	0.205	10.2	0.079	14.2	0.103	18.2	0.129
2.3	0.903	6.3	0.204	10.3	0.086	14.3	0.111	18.3	0.134
2.4	0.879	6.4	0.202	10.4	0.093	14.4	0.119	18.4	0.139
2.5	0.851	6.5	0.199	10.5	0.101	14.5	0.126	18.5	0.143
2.6	0.822	6.6	0.196	10.6	0.109	14.6	0.132	18.6	0.146
2.7	0.791	6.7	0.192	10.7	0.116	14.7	0.138	18.7	0.148
2.8	0.758	6.8	0.188	10.8	0.124	14.8	0.143	18.8	0.150
2.9	0.723	6.9	0.184	10.9	0.131	14.9	0.147	18.9	0.150
3.0	0.687	7.0	0.179	11.0	0.137	15.0	0.151	19.0	0.150
3.1	0.650	7.1	0.174	11.1	0.143	15.1	0.153	19.1	0.149
3.2	0.612	7.2	0.170	11.2	0.148	15.2	0.154	19.2	0.147
3.3	0.574	7.3	0.166	11.3	0.152	15.3	0.155	19.3	0.144
3.4	0.535	7.4	0.162	11.4	0.155	15.4	0.154	19.4	0.141
3.5	0.496	7.5	0.158	11.5	0.157	15.5	0.152	19.5	0.136
3.6	0.457	7.6	0.154	11.6	0.159	15.6	0.150	19.6	0.131
3.7	0.419	7.7	0.151	11.7	0.159	15.7	0.146	19.7	0.125
3.8	0.382	7.8	0.148	11.8	0.158	15.8	0.142	19.8	0.119
3.9	0.345	7.9	0.145	11.9	0.157	15.9	0.137	19.9	0.112

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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	0.759	41	0.902	82	0.528	123	0.743	164	0.966	205	0.605	246	0.761	287	0.939	328	0.718
1	0.774	42	0.900	83	0.535	124	0.764	165	0.967	206	0.615	247	0.780	288	0.925	329	0.721
2	0.790	43	0.902	84	0.543	125	0.786	166	0.965	207	0.625	248	0.801	289	0.912	330	0.721
3	0.809	44	0.904	85	0.551	126	0.806	167	0.962	208	0.633	249	0.822	290	0.898	331	0.720
4	0.828	45	0.903	86	0.559	127	0.827	168	0.957	209	0.639	250	0.843	291	0.884	332	0.716
5	0.848	46	0.901	87	0.565	128	0.848	169	0.950	210	0.644	251	0.863	292	0.869	333	0.709
6	0.868	47	0.897	88	0.569	129	0.867	170	0.941	211	0.647	252	0.883	293	0.850	334	0.701
7	0.888	48	0.884	89	0.572	130	0.884	171	0.929	212	0.649	253	0.898	294	0.831	335	0.691
8	0.901	49	0.868	90	0.573	131	0.898	172	0.915	213	0.646	254	0.911	295	0.813	336	0.679
9	0.915	50	0.850	91	0.572	132	0.910	173	0.895	214	0.641	255	0.922	296	0.795	337	0.667
10	0.928	51	0.830	92	0.569	133	0.914	174	0.875	215	0.635	256	0.930	297	0.778	338	0.657
11	0.940	52	0.808	93	0.563	134	0.916	175	0.854	216	0.627	257	0.937	298	0.760	339	0.646
12	0.952	53	0.789	94	0.555	135	0.916	176	0.832	217	0.618	258	0.941	299	0.741	340	0.637
13	0.966	54	0.769	95	0.548	136	0.914	177	0.811	218	0.604	259	0.944	300	0.723	341	0.628
14	0.978	55	0.749	96	0.540	137	0.911	178	0.793	219	0.589	260	0.945	301	0.705	342	0.622
15	0.987	56	0.729	97	0.532	138	0.912	179	0.776	220	0.575	261	0.944	302	0.687	343	0.615
16	0.995	57	0.709	98	0.528	139	0.914	180	0.760	221	0.561	262	0.942	303	0.672	344	0.609
17	1.000	58	0.688	99	0.525	140	0.915	181	0.746	222	0.549	263	0.940	304	0.658	345	0.605
18	0.997	59	0.669	100	0.522	141	0.918	182	0.732	223	0.541	264	0.937	305	0.646	346	0.603
19	0.992	60	0.650	101	0.520	142	0.920	183	0.717	224	0.535	265	0.935	306	0.636	347	0.604
20	0.985	61	0.632	102	0.520	143	0.917	184	0.702	225	0.530	266	0.934	307	0.626	348	0.609
21	0.976	62	0.614	103	0.518	144	0.915	185	0.687	226	0.526	267	0.933	308	0.613	349	0.616
22	0.967	63	0.598	104	0.519	145	0.914	186	0.672	227	0.525	268	0.935	309	0.602	350	0.627
23	0.963	64	0.583	105	0.522	146	0.913	187	0.657	228	0.524	269	0.937	310	0.592	351	0.639
24	0.960	65	0.569	106	0.528	147	0.913	188	0.643	229	0.525	270	0.941	311	0.586	352	0.654
25	0.957	66	0.556	107	0.536	148	0.916	189	0.630	230	0.529	271	0.946	312	0.582	353	0.665
26	0.954	67	0.544	108	0.541	149	0.919	190	0.619	231	0.536	272	0.952	313	0.581	354	0.677
27	0.952	68	0.535	109	0.548	150	0.923	191	0.608	232	0.545	273	0.952	314	0.582	355	0.689
28	0.943	69	0.528	110	0.557	151	0.928	192	0.599	233	0.553	274	0.954	315	0.586	356	0.702
29	0.934	70	0.521	111	0.566	152	0.933	193	0.589	234	0.562	275	0.955	316	0.592	357	0.716
30	0.926	71	0.516	112	0.576	153	0.933	194	0.581	235	0.574	276	0.958	317	0.599	358	0.730
31	0.919	72	0.512	113	0.589	154	0.933	195	0.575	236	0.586	277	0.961	318	0.609	359	0.744
32	0.913	73	0.504	114	0.602	155	0.935	196	0.572	237	0.600	278	0.968	319	0.621		
33	0.912	74	0.498	115	0.615	156	0.937	197	0.572	238	0.618	279	0.975	320	0.635		
34	0.911	75	0.494	116	0.629	157	0.939	198	0.570	239	0.635	280	0.981	321	0.650		
35	0.911	76	0.493	117	0.644	158	0.943	199	0.570	240	0.653	281	0.985	322	0.665		
36	0.912	77	0.494	118	0.657	159	0.947	200	0.571	241	0.671	282	0.988	323	0.677		
37	0.914	78	0.498	119	0.671	160	0.951	201	0.574	242	0.690	283	0.982	324	0.688		
38	0.910	79	0.504	120	0.686	161	0.956	202	0.577	243	0.706	284	0.974	325	0.699		
39	0.907	80	0.511	121	0.703	162	0.960	203	0.586	244	0.724	285	0.964	326	0.707		
40	0.904	81	0.519	122	0.721	163	0.964	204	0.595	245	0.742	286	0.952	327	0.714		