TECHNICAL DOCUMENTATION

SUPPLEMENT
FREQUENCIES 2018

Farnsworth Peak

773941 | UHF Auxiliary Antenna
04.04.2018

BROADCAST

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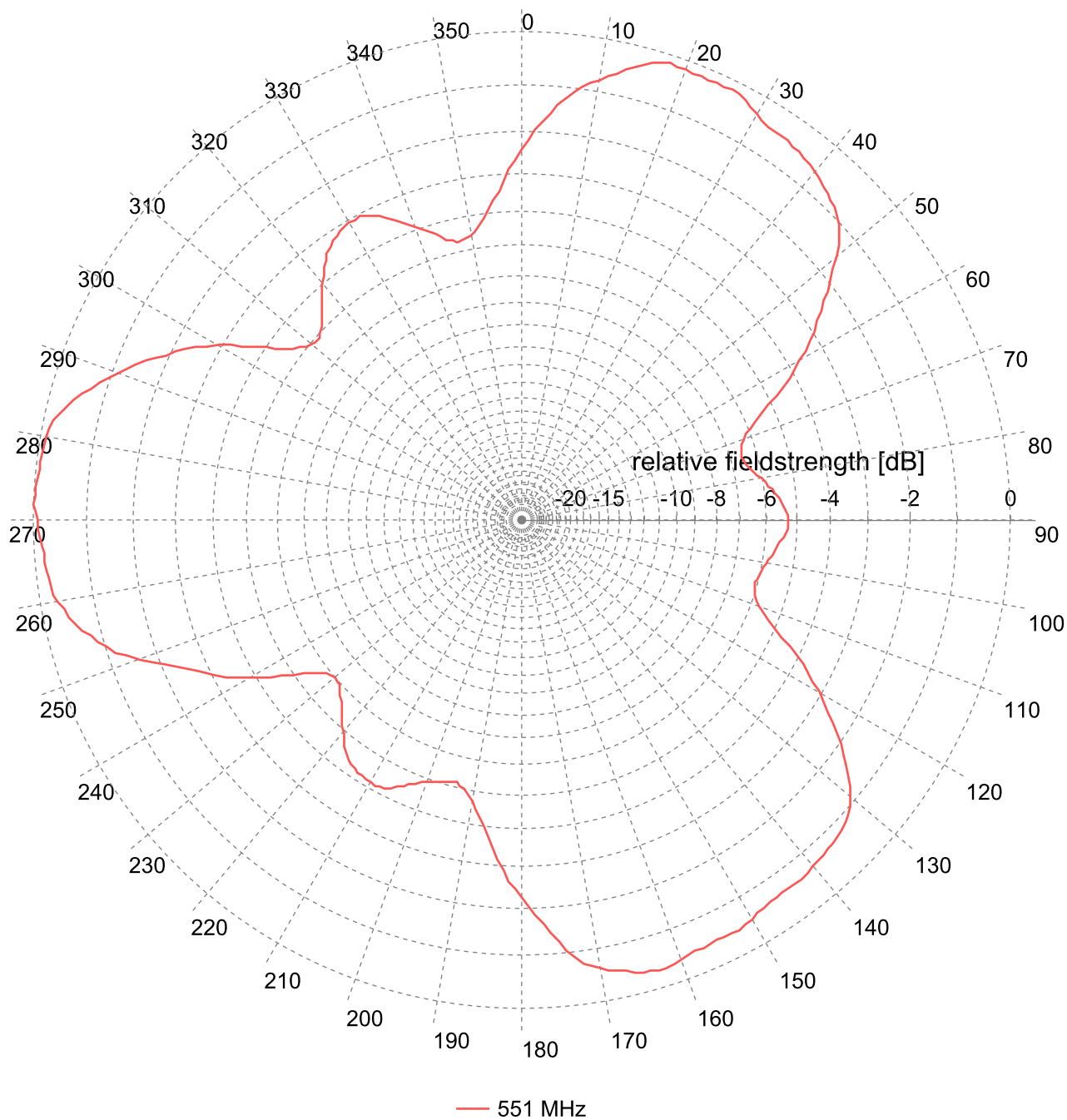
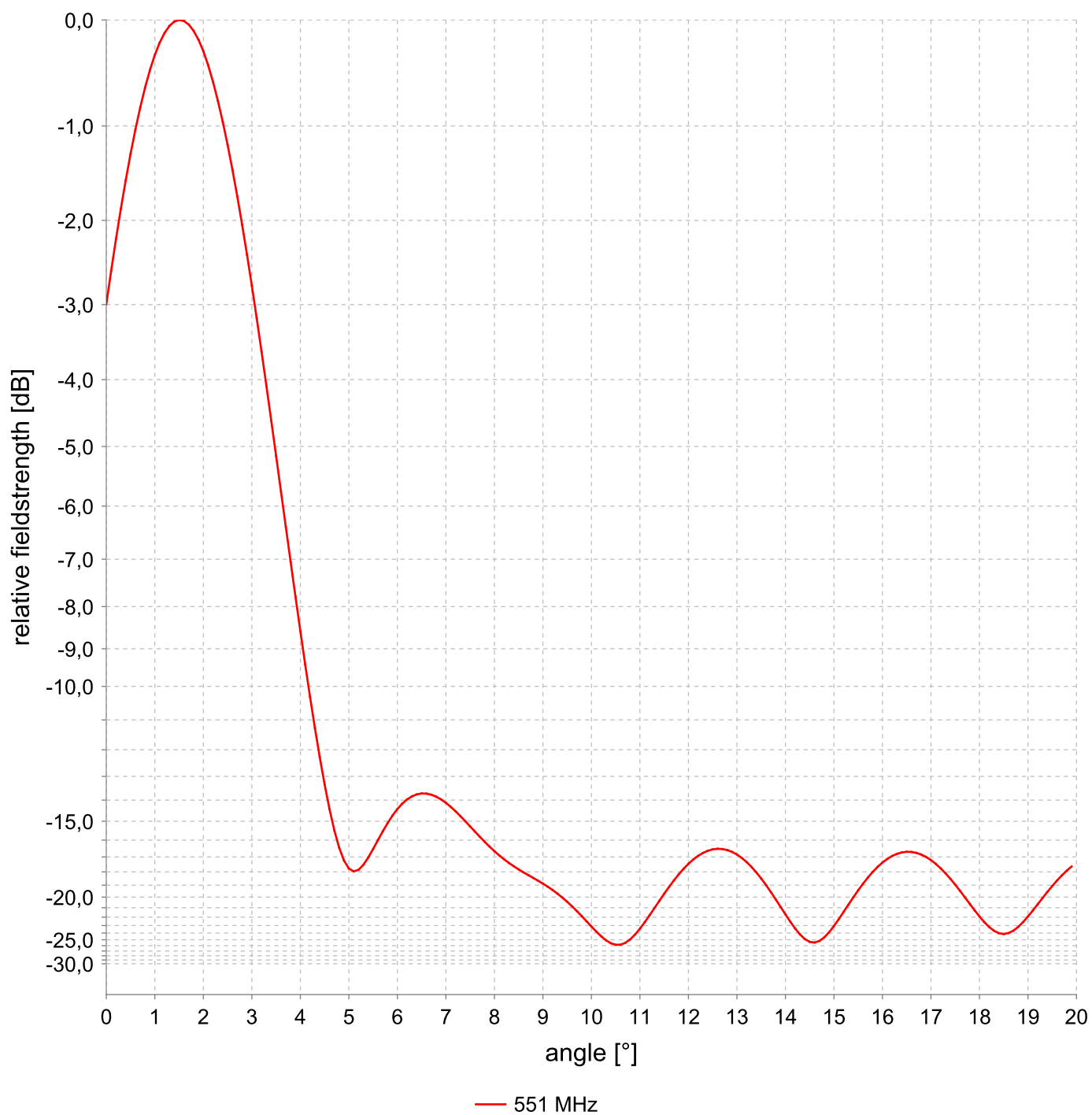Operating channel   17 / 19 / 23 / 27 / 30 / 34 / 35 / 36

Gain[*] (reference: λ/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.

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

relative fieldstrength [dB]

— 551 MHz

KATHREIN

Vertical Radiation Pattern

773941 - Elevation

Gerl/BSR, 03.04.2018 16:24

KUED CH27 AUX ANT KAT 773941

Elevation Pattern

Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field	Angle	Relative Field
0.0	0.708	4.0	0.373	8.0	0.147	12.0	0.134	16.0	0.135
0.1	0.743	4.1	0.339	8.1	0.143	12.1	0.139	16.1	0.139
0.2	0.775	4.2	0.305	8.2	0.139	12.2	0.142	16.2	0.142
0.3	0.806	4.3	0.273	8.3	0.135	12.3	0.145	16.3	0.144
0.4	0.836	4.4	0.243	8.4	0.132	12.4	0.148	16.4	0.146
0.5	0.863	4.5	0.216	8.5	0.128	12.5	0.149	16.5	0.146
0.6	0.888	4.6	0.190	8.6	0.125	12.6	0.150	16.6	0.146
0.7	0.910	4.7	0.169	8.7	0.123	12.7	0.149	16.7	0.145
0.8	0.931	4.8	0.151	8.8	0.120	12.8	0.148	16.8	0.144
0.9	0.949	4.9	0.137	8.9	0.117	12.9	0.146	16.9	0.141
1.0	0.964	5.0	0.129	9.0	0.114	13.0	0.144	17.0	0.138
1.1	0.977	5.1	0.126	9.1	0.111	13.1	0.140	17.1	0.134
1.2	0.987	5.2	0.128	9.2	0.107	13.2	0.136	17.2	0.130
1.3	0.994	5.3	0.133	9.3	0.104	13.3	0.131	17.3	0.124
1.4	0.998	5.4	0.141	9.4	0.100	13.4	0.125	17.4	0.119
1.5	1.000	5.5	0.149	9.5	0.095	13.5	0.119	17.5	0.113
1.6	0.999	5.6	0.159	9.6	0.091	13.6	0.112	17.6	0.106
1.7	0.995	5.7	0.168	9.7	0.086	13.7	0.105	17.7	0.100
1.8	0.989	5.8	0.176	9.8	0.080	13.8	0.098	17.8	0.093
1.9	0.980	5.9	0.184	9.9	0.075	13.9	0.090	17.9	0.086
2.0	0.968	6.0	0.190	10.0	0.070	14.0	0.082	18.0	0.080
2.1	0.953	6.1	0.196	10.1	0.065	14.1	0.075	18.1	0.074
2.2	0.936	6.2	0.200	10.2	0.060	14.2	0.068	18.2	0.069
2.3	0.917	6.3	0.203	10.3	0.056	14.3	0.062	18.3	0.065
2.4	0.896	6.4	0.205	10.4	0.053	14.4	0.057	18.4	0.063
2.5	0.872	6.5	0.206	10.5	0.051	14.5	0.054	18.5	0.062
2.6	0.846	6.6	0.206	10.6	0.051	14.6	0.053	18.6	0.063
2.7	0.819	6.7	0.205	10.7	0.053	14.7	0.055	18.7	0.066
2.8	0.790	6.8	0.203	10.8	0.057	14.8	0.059	18.8	0.070
2.9	0.759	6.9	0.200	10.9	0.062	14.9	0.064	18.9	0.074
3.0	0.727	7.0	0.197	11.0	0.068	15.0	0.070	19.0	0.080
3.1	0.694	7.1	0.193	11.1	0.074	15.1	0.077	19.1	0.086
3.2	0.660	7.2	0.188	11.2	0.081	15.2	0.085	19.2	0.093
3.3	0.625	7.3	0.183	11.3	0.089	15.3	0.092	19.3	0.099
3.4	0.589	7.4	0.178	11.4	0.096	15.4	0.100	19.4	0.105
3.5	0.553	7.5	0.173	11.5	0.103	15.5	0.107	19.5	0.111
3.6	0.516	7.6	0.167	11.6	0.110	15.6	0.114	19.6	0.117
3.7	0.480	7.7	0.162	11.7	0.117	15.7	0.120	19.7	0.122
3.8	0.444	7.8	0.157	11.8	0.123	15.8	0.126	19.8	0.127
3.9	0.408	7.9	0.152	11.9	0.129	15.9	0.131	19.9	0.131

KUED CH27 AUX ANT KAT 773941

Azimuth Pattern

AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD	AZIMUTH	RELATIVE FIELD
0	0.759	41	0.925	82	0.510	123	0.761	164	0.959	205	0.602	246	0.750	287	0.922	328	0.699
1	0.780	42	0.920	83	0.516	124	0.779	165	0.956	206	0.609	247	0.769	288	0.908	329	0.703
2	0.800	43	0.916	84	0.521	125	0.798	166	0.952	207	0.615	248	0.789	289	0.895	330	0.704
3	0.817	44	0.911	85	0.527	126	0.815	167	0.947	208	0.618	249	0.811	290	0.881	331	0.705
4	0.835	45	0.906	86	0.532	127	0.832	168	0.943	209	0.620	250	0.832	291	0.867	332	0.703
5	0.852	46	0.899	87	0.536	128	0.848	169	0.938	210	0.620	251	0.852	292	0.853	333	0.699
6	0.869	47	0.890	88	0.540	129	0.862	170	0.932	211	0.619	252	0.873	293	0.835	334	0.693
7	0.886	48	0.875	89	0.543	130	0.876	171	0.925	212	0.616	253	0.887	294	0.819	335	0.685
8	0.896	49	0.858	90	0.545	131	0.888	172	0.916	213	0.615	254	0.901	295	0.803	336	0.677
9	0.906	50	0.840	91	0.545	132	0.899	173	0.901	214	0.612	255	0.914	296	0.787	337	0.668
10	0.916	51	0.820	92	0.544	133	0.906	174	0.884	215	0.609	256	0.925	297	0.772	338	0.658
11	0.925	52	0.800	93	0.540	134	0.911	175	0.866	216	0.603	257	0.936	298	0.754	339	0.648
12	0.934	53	0.783	94	0.536	135	0.915	176	0.847	217	0.597	258	0.946	299	0.735	340	0.639
13	0.945	54	0.765	95	0.531	136	0.917	177	0.827	218	0.588	259	0.955	300	0.715	341	0.630
14	0.956	55	0.748	96	0.525	137	0.918	178	0.808	219	0.578	260	0.963	301	0.695	342	0.623
15	0.966	56	0.730	97	0.520	138	0.921	179	0.790	220	0.567	261	0.969	302	0.674	343	0.613
16	0.974	57	0.713	98	0.516	139	0.923	180	0.772	221	0.557	262	0.974	303	0.652	344	0.604
17	0.982	58	0.694	99	0.512	140	0.926	181	0.755	222	0.548	263	0.976	304	0.632	345	0.596
18	0.983	59	0.676	100	0.508	141	0.929	182	0.738	223	0.539	264	0.977	305	0.614	346	0.589
19	0.983	60	0.657	101	0.505	142	0.932	183	0.717	224	0.531	265	0.979	306	0.598	347	0.585
20	0.982	61	0.640	102	0.502	143	0.931	184	0.696	225	0.523	266	0.980	307	0.586	348	0.585
21	0.980	62	0.623	103	0.497	144	0.930	185	0.674	226	0.516	267	0.982	308	0.575	349	0.588
22	0.978	63	0.601	104	0.494	145	0.930	186	0.652	227	0.510	268	0.985	309	0.566	350	0.593
23	0.978	64	0.579	105	0.493	146	0.930	187	0.631	228	0.504	269	0.988	310	0.561	351	0.600
24	0.979	65	0.558	106	0.494	147	0.931	188	0.613	229	0.500	270	0.992	311	0.559	352	0.611
25	0.979	66	0.537	107	0.497	148	0.933	189	0.597	230	0.500	271	0.996	312	0.559	353	0.623
26	0.979	67	0.518	108	0.501	149	0.937	190	0.582	231	0.502	272	1.000	313	0.563	354	0.639
27	0.980	68	0.503	109	0.508	150	0.940	191	0.570	232	0.507	273	0.998	314	0.570	355	0.657
28	0.973	69	0.491	110	0.518	151	0.945	192	0.561	233	0.517	274	0.996	315	0.578	356	0.676
29	0.967	70	0.482	111	0.530	152	0.949	193	0.556	234	0.530	275	0.994	316	0.587	357	0.697
30	0.961	71	0.475	112	0.545	153	0.948	194	0.553	235	0.545	276	0.993	317	0.598	358	0.718
31	0.956	72	0.473	113	0.564	154	0.948	195	0.553	236	0.564	277	0.991	318	0.608	359	0.739
32	0.951	73	0.470	114	0.584	155	0.948	196	0.554	237	0.584	278	0.991	319	0.620		
33	0.949	74	0.469	115	0.604	156	0.948	197	0.558	238	0.604	279	0.990	320	0.632		
34	0.948	75	0.471	116	0.626	157	0.949	198	0.561	239	0.625	280	0.988	321	0.645		
35	0.947	76	0.474	117	0.646	158	0.951	199	0.564	240	0.646	281	0.984	322	0.658		
36	0.946	77	0.479	118	0.663	159	0.953	200	0.569	241	0.667	282	0.980	323	0.667		
37	0.945	78	0.485	119	0.681	160	0.955	201	0.575	242	0.687	283	0.970	324	0.676		
38	0.940	79	0.491	120	0.700	161	0.958	202	0.580	243	0.701	284	0.959	325	0.684		
39	0.935	80	0.498	121	0.720	162	0.961	203	0.587	244	0.717	285	0.948	326	0.690		
40	0.930	81	0.504	122	0.741	163	0.960	204	0.594	245	0.733	286	0.935	327	0.695		