

Exhibit #1  
KWBP-DT Salem, OR

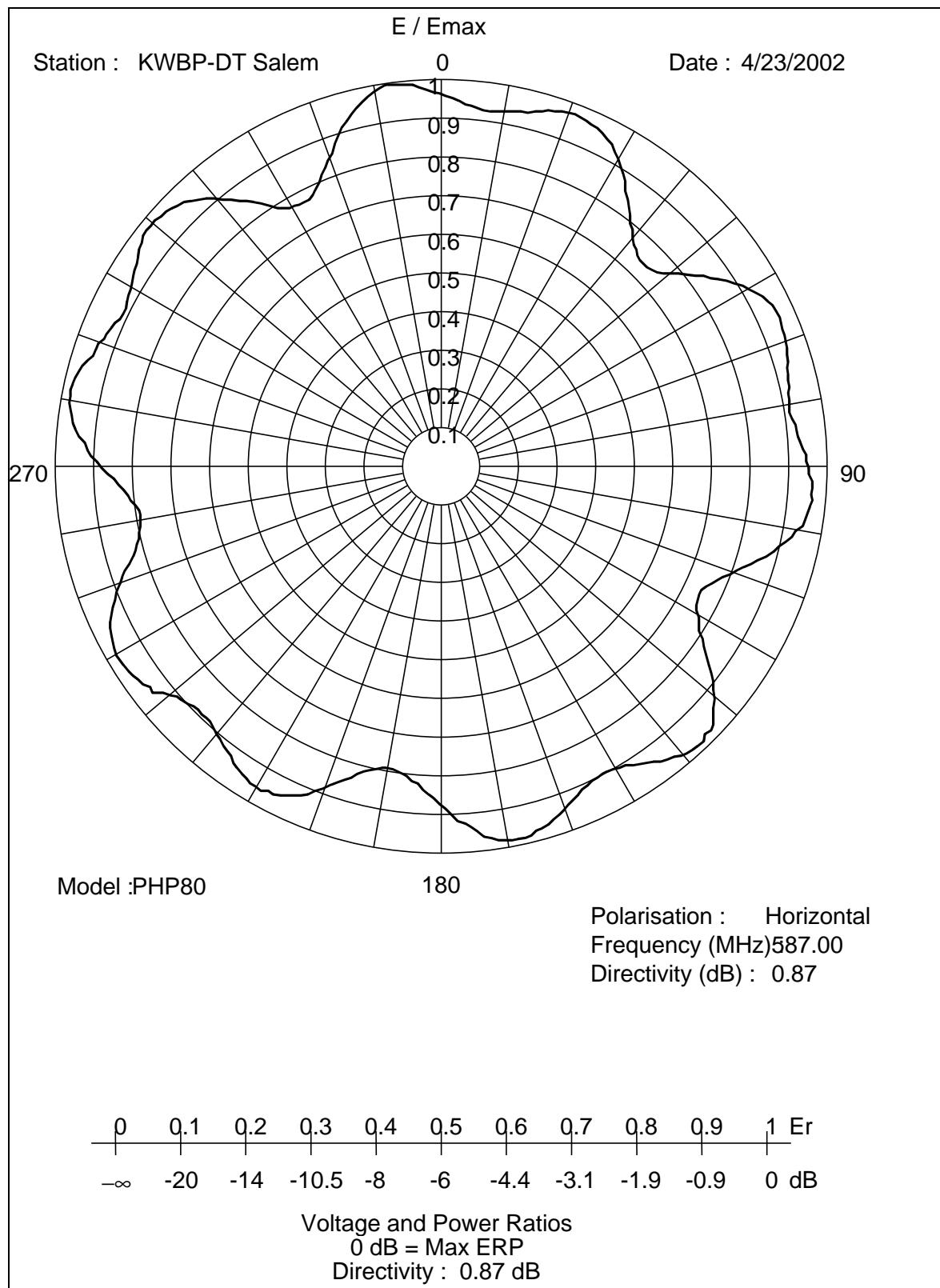
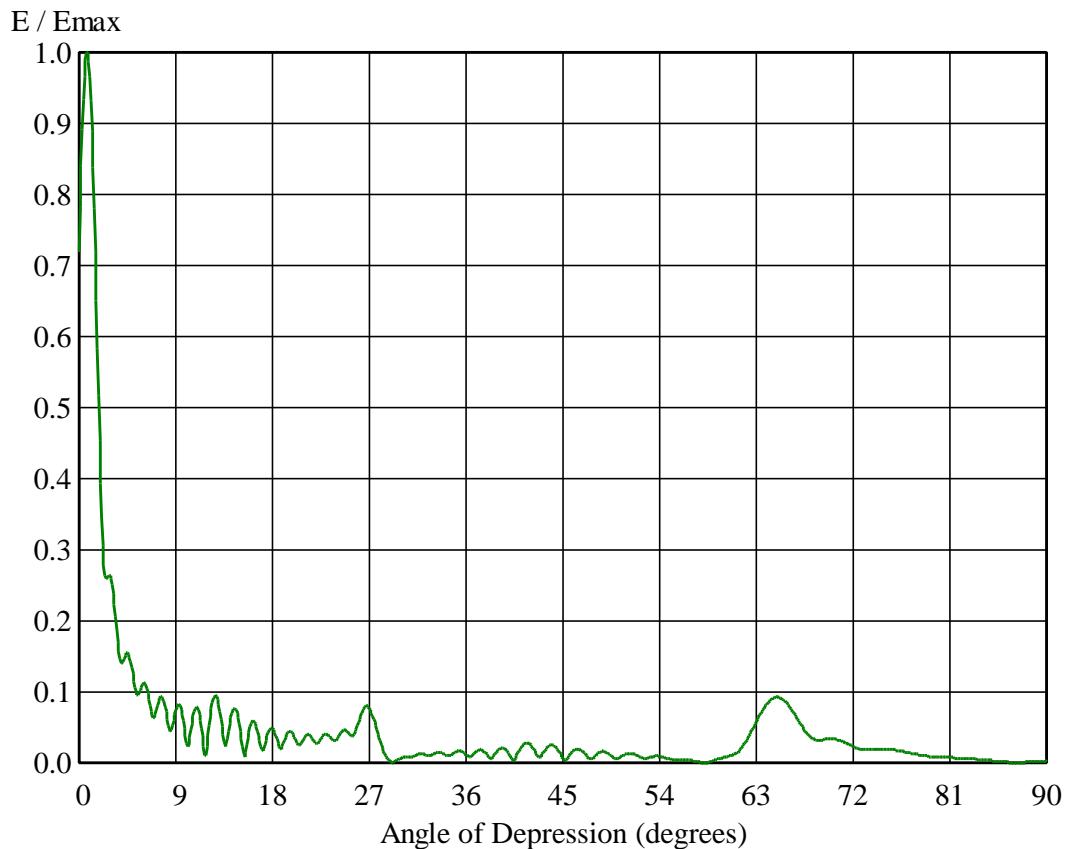


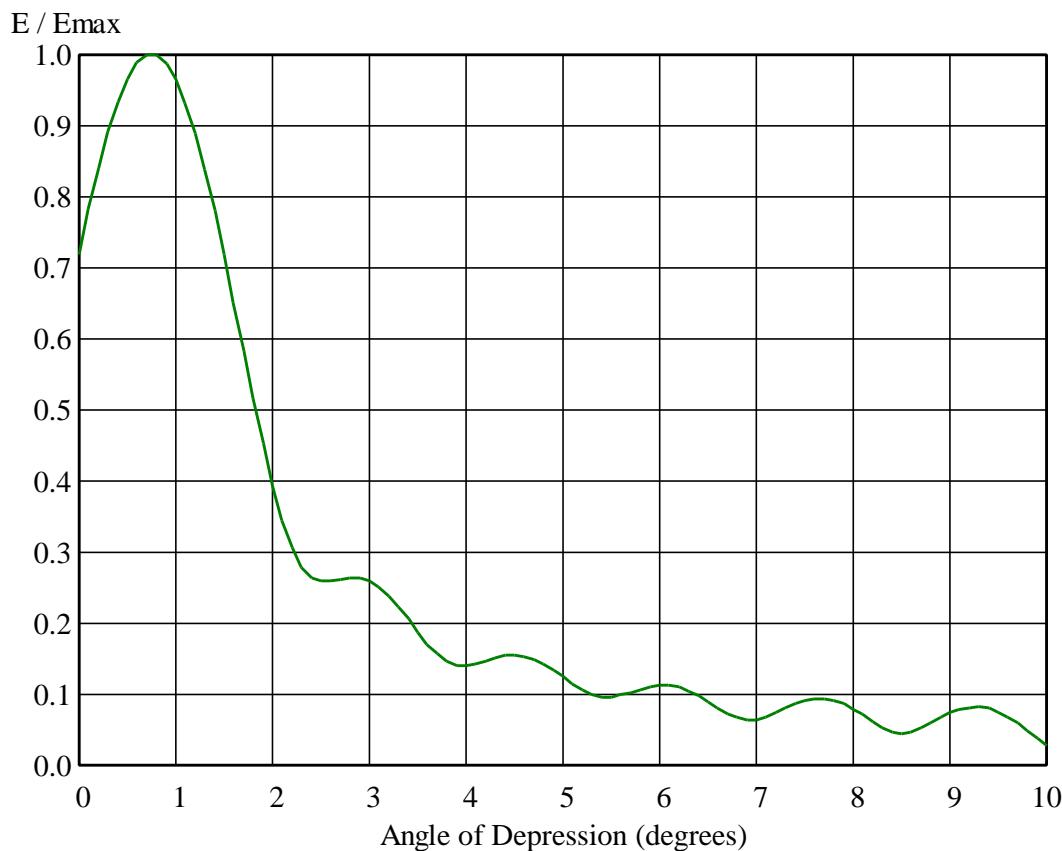
Exhibit #1  
KWBP-DT Salem , OR



PHP80 Portland Oregon. CH33 Elevation Radiation Pattern

Vertical Gain = 15.45 dBd

Exhibit #1  
KWBP-DT Salem, OR



PHP80 Portland Oregon. CH33 Elevation Radiation Pattern 0 to 10 degree scale.

Exhibit #1  
 KWBP-DT Salem, OR  
 Horizontal Antenna Pattern Tabulation  
 Antenna: RFS Model PHP80E for Channel 33

Angle	Field														
0	0.968	45	0.747	90	0.957	135	0.973	180	0.868	225	0.884	270	0.874	315	0.958
1	0.961	46	0.747	91	0.956	136	0.984	181	0.852	226	0.887	271	0.887	316	0.954
2	0.957	47	0.753	92	0.965	137	0.981	182	0.844	227	0.894	272	0.902	317	0.944
3	0.950	48	0.757	93	0.966	138	0.980	183	0.833	228	0.899	273	0.913	318	0.935
4	0.944	49	0.768	94	0.965	139	0.976	184	0.819	229	0.902	274	0.920	319	0.923
5	0.940	50	0.781	95	0.969	140	0.972	185	0.813	230	0.912	275	0.939	320	0.908
6	0.935	51	0.798	96	0.966	141	0.963	186	0.802	231	0.922	276	0.948	321	0.893
7	0.933	52	0.812	97	0.959	142	0.957	187	0.798	232	0.943	277	0.957	322	0.878
8	0.932	53	0.828	98	0.955	143	0.951	188	0.792	233	0.940	278	0.963	323	0.864
9	0.934	54	0.845	99	0.953	144	0.940	189	0.789	234	0.951	279	0.969	324	0.852
10	0.935	55	0.858	100	0.935	145	0.929	190	0.787	235	0.955	280	0.975	325	0.839
11	0.940	56	0.874	101	0.928	146	0.924	191	0.790	236	0.959	281	0.975	326	0.824
12	0.943	57	0.887	102	0.916	147	0.916	192	0.796	237	0.963	282	0.976	327	0.809
13	0.945	58	0.900	103	0.901	148	0.907	193	0.802	238	0.964	283	0.975	328	0.793
14	0.946	59	0.914	104	0.892	149	0.903	194	0.809	239	0.965	284	0.971	329	0.785
15	0.956	60	0.923	105	0.877	150	0.898	195	0.818	240	0.966	285	0.967	330	0.777
16	0.961	61	0.935	106	0.859	151	0.896	196	0.831	241	0.963	286	0.961	331	0.774
17	0.966	62	0.948	107	0.846	152	0.897	197	0.843	242	0.960	287	0.955	332	0.773
18	0.968	63	0.953	108	0.827	153	0.899	198	0.855	243	0.955	288	0.943	333	0.772
19	0.975	64	0.960	109	0.812	154	0.900	199	0.867	244	0.949	289	0.940	334	0.773
20	0.977	65	0.963	110	0.801	155	0.905	200	0.880	245	0.941	290	0.940	335	0.779
21	0.980	66	0.963	111	0.787	156	0.910	201	0.895	246	0.930	291	0.930	336	0.788
22	0.978	67	0.961	112	0.775	157	0.918	202	0.911	247	0.921	292	0.930	337	0.803
23	0.975	68	0.958	113	0.765	158	0.925	203	0.920	248	0.908	293	0.925	338	0.815
24	0.971	69	0.957	114	0.756	159	0.931	204	0.926	249	0.897	294	0.919	339	0.830
25	0.968	70	0.953	115	0.749	160	0.941	205	0.934	250	0.882	295	0.912	340	0.845
26	0.962	71	0.951	116	0.749	161	0.949	206	0.941	251	0.868	296	0.911	341	0.859
27	0.956	72	0.948	117	0.752	162	0.955	207	0.947	252	0.856	297	0.911	342	0.880
28	0.949	73	0.943	118	0.754	163	0.964	208	0.946	253	0.840	298	0.918	343	0.898
29	0.937	74	0.937	119	0.760	164	0.968	209	0.953	254	0.827	299	0.922	344	0.916
30	0.922	75	0.935	120	0.774	165	0.971	210	0.953	255	0.816	300	0.924	345	0.929
31	0.910	76	0.930	121	0.784	166	0.978	211	0.951	256	0.808	301	0.929	346	0.943
32	0.898	77	0.931	122	0.794	167	0.980	212	0.946	257	0.800	302	0.935	347	0.957
33	0.882	78	0.924	123	0.812	168	0.982	213	0.942	258	0.795	303	0.942	348	0.967
34	0.862	79	0.922	124	0.827	169	0.980	214	0.936	259	0.789	304	0.947	349	0.977
35	0.848	80	0.919	125	0.844	170	0.976	215	0.931	260	0.787	305	0.954	350	0.986
36	0.834	81	0.919	126	0.861	171	0.974	216	0.920	261	0.786	306	0.961	351	0.992
37	0.818	82	0.923	127	0.879	172	0.965	217	0.916	262	0.787	307	0.967	352	1.000
38	0.803	83	0.930	128	0.899	173	0.959	218	0.910	263	0.792	308	0.974	353	0.998
39	0.794	84	0.930	129	0.913	174	0.946	219	0.902	264	0.804	309	0.976	354	0.997
40	0.776	85	0.933	130	0.929	175	0.932	220	0.898	265	0.809	310	0.976	355	0.996
41	0.765	86	0.938	131	0.941	176	0.922	221	0.893	266	0.821	311	0.976	356	0.993
42	0.763	87	0.943	132	0.956	177	0.912	222	0.885	267	0.831	312	0.973	357	0.986
43	0.753	88	0.950	133	0.970	178	0.896	223	0.883	268	0.845	313	0.971	358	0.980
44	0.747	89	0.951	134	0.976	179	0.883	224	0.885	269	0.859	314	0.966	359	0.973

Exhibit #1  
KWBP-DT Salem, OR Channel 33

Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field												
-90.0	0.000	-85.6	0.002	-81.2	0.005	-76.8	0.012	-72.4	0.014	-68.0	0.020	-63.6	0.038
-89.9	0.003	-85.5	0.002	-81.1	0.005	-76.7	0.013	-72.3	0.014	-67.9	0.020	-63.5	0.039
-89.8	0.003	-85.4	0.002	-81.0	0.005	-76.6	0.013	-72.2	0.014	-67.8	0.021	-63.4	0.041
-89.7	0.003	-85.3	0.002	-80.9	0.005	-76.5	0.013	-72.1	0.015	-67.7	0.021	-63.3	0.043
-89.6	0.003	-85.2	0.002	-80.8	0.005	-76.4	0.013	-72.0	0.015	-67.6	0.022	-63.2	0.045
-89.5	0.003	-85.1	0.002	-80.7	0.005	-76.3	0.014	-71.9	0.016	-67.5	0.023	-63.1	0.047
-89.4	0.003	-85.0	0.003	-80.6	0.005	-76.2	0.014	-71.8	0.016	-67.4	0.024	-63.0	0.048
-89.3	0.003	-84.9	0.003	-80.5	0.005	-76.1	0.014	-71.7	0.017	-67.3	0.024	-62.9	0.050
-89.2	0.003	-84.8	0.003	-80.4	0.005	-76.0	0.014	-71.6	0.017	-67.2	0.025	-62.8	0.051
-89.1	0.003	-84.7	0.003	-80.3	0.005	-75.9	0.014	-71.5	0.018	-67.1	0.026	-62.7	0.052
-89.0	0.002	-84.6	0.003	-80.2	0.005	-75.8	0.014	-71.4	0.018	-67.0	0.026	-62.6	0.054
-88.9	0.002	-84.5	0.003	-80.1	0.005	-75.7	0.014	-71.3	0.019	-66.9	0.027	-62.5	0.055
-88.8	0.002	-84.4	0.003	-80.0	0.005	-75.6	0.014	-71.2	0.019	-66.8	0.028	-62.4	0.055
-88.7	0.002	-84.3	0.003	-79.9	0.005	-75.5	0.014	-71.1	0.020	-66.7	0.028	-62.3	0.056
-88.6	0.002	-84.2	0.004	-79.8	0.006	-75.4	0.014	-71.0	0.020	-66.6	0.028	-62.2	0.057
-88.5	0.002	-84.1	0.004	-79.7	0.006	-75.3	0.014	-70.9	0.020	-66.5	0.029	-62.1	0.057
-88.4	0.002	-84.0	0.004	-79.6	0.006	-75.2	0.014	-70.8	0.020	-66.4	0.029	-62.0	0.057
-88.3	0.002	-83.9	0.004	-79.5	0.006	-75.1	0.014	-70.7	0.021	-66.3	0.029	-61.9	0.057
-88.2	0.001	-83.8	0.004	-79.4	0.006	-75.0	0.014	-70.6	0.021	-66.2	0.029	-61.8	0.057
-88.1	0.001	-83.7	0.004	-79.3	0.006	-74.9	0.014	-70.5	0.021	-66.1	0.029	-61.7	0.056
-88.0	0.001	-83.6	0.004	-79.2	0.006	-74.8	0.014	-70.4	0.021	-66.0	0.029	-61.6	0.056
-87.9	0.001	-83.5	0.004	-79.1	0.006	-74.7	0.014	-70.3	0.021	-65.9	0.029	-61.5	0.055
-87.8	0.001	-83.4	0.004	-79.0	0.006	-74.6	0.014	-70.2	0.021	-65.8	0.029	-61.4	0.054
-87.7	0.001	-83.3	0.005	-78.9	0.007	-74.5	0.014	-70.1	0.021	-65.7	0.028	-61.3	0.053
-87.6	0.001	-83.2	0.005	-78.8	0.007	-74.4	0.013	-70.0	0.021	-65.6	0.028	-61.2	0.052
-87.5	0.001	-83.1	0.005	-78.7	0.007	-74.3	0.013	-69.9	0.021	-65.5	0.028	-61.1	0.050
-87.4	0.001	-83.0	0.005	-78.6	0.007	-74.2	0.013	-69.8	0.021	-65.4	0.027	-61.0	0.049
-87.3	0.000	-82.9	0.005	-78.5	0.007	-74.1	0.013	-69.7	0.020	-65.3	0.027	-60.9	0.047
-87.2	0.000	-82.8	0.005	-78.4	0.008	-74.0	0.013	-69.6	0.020	-65.2	0.026	-60.8	0.045
-87.1	0.000	-82.7	0.005	-78.3	0.008	-73.9	0.012	-69.5	0.020	-65.1	0.026	-60.7	0.043
-87.0	0.000	-82.6	0.005	-78.2	0.008	-73.8	0.012	-69.4	0.020	-65.0	0.026	-60.6	0.041
-86.9	0.000	-82.5	0.005	-78.1	0.009	-73.7	0.012	-69.3	0.019	-64.9	0.025	-60.5	0.039
-86.8	0.000	-82.4	0.005	-78.0	0.009	-73.6	0.012	-69.2	0.019	-64.8	0.025	-60.4	0.037
-86.7	0.000	-82.3	0.005	-77.9	0.009	-73.5	0.012	-69.1	0.019	-64.7	0.025	-60.3	0.035
-86.6	0.001	-82.2	0.005	-77.8	0.009	-73.4	0.012	-69.0	0.018	-64.6	0.026	-60.2	0.033
-86.5	0.001	-82.1	0.005	-77.7	0.010	-73.3	0.012	-68.9	0.018	-64.5	0.026	-60.1	0.030
-86.4	0.001	-82.0	0.005	-77.6	0.010	-73.2	0.012	-68.8	0.018	-64.4	0.027	-60.0	0.028
-86.3	0.001	-81.9	0.005	-77.5	0.010	-73.1	0.012	-68.7	0.018	-64.3	0.027	-59.9	0.026
-86.2	0.001	-81.8	0.005	-77.4	0.011	-73.0	0.012	-68.6	0.018	-64.2	0.028	-59.8	0.024
-86.1	0.001	-81.7	0.005	-77.3	0.011	-72.9	0.012	-68.5	0.018	-64.1	0.030	-59.7	0.022
-86.0	0.001	-81.6	0.005	-77.2	0.011	-72.8	0.012	-68.4	0.018	-64.0	0.031	-59.6	0.020
-85.9	0.001	-81.5	0.005	-77.1	0.012	-72.7	0.013	-68.3	0.018	-63.9	0.033	-59.5	0.018
-85.8	0.002	-81.4	0.005	-77.0	0.012	-72.6	0.013	-68.2	0.019	-63.8	0.034	-59.4	0.016
-85.7	0.002	-81.3	0.005	-76.9	0.012	-72.5	0.013	-68.1	0.019	-63.7	0.036	-59.3	0.014

Exhibit #1  
 KWBP-DT Salem, OR Channel 33  
 Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field												
-59.2	0.012	-54.8	0.008	-50.4	0.010	-46.0	0.013	-41.6	0.025	-37.2	0.018	-32.8	0.008
-59.1	0.010	-54.7	0.009	-50.3	0.010	-45.9	0.011	-41.5	0.023	-37.1	0.016	-32.7	0.008
-59.0	0.009	-54.6	0.009	-50.2	0.010	-45.8	0.009	-41.4	0.021	-37.0	0.014	-32.6	0.007
-58.9	0.008	-54.5	0.010	-50.1	0.010	-45.7	0.007	-41.3	0.019	-36.9	0.012	-32.5	0.008
-58.8	0.006	-54.4	0.010	-50.0	0.010	-45.6	0.006	-41.2	0.016	-36.8	0.010	-32.4	0.008
-58.7	0.005	-54.3	0.011	-49.9	0.011	-45.5	0.006	-41.1	0.013	-36.7	0.008	-32.3	0.009
-58.6	0.004	-54.2	0.011	-49.8	0.012	-45.4	0.006	-41.0	0.010	-36.6	0.006	-32.2	0.009
-58.5	0.003	-54.1	0.011	-49.7	0.012	-45.3	0.008	-40.9	0.008	-36.5	0.006	-32.1	0.010
-58.4	0.003	-54.0	0.011	-49.6	0.013	-45.2	0.009	-40.8	0.008	-36.4	0.007	-32.0	0.011
-58.3	0.002	-53.9	0.012	-49.5	0.014	-45.1	0.011	-40.7	0.008	-36.3	0.008	-31.9	0.011
-58.2	0.001	-53.8	0.012	-49.4	0.015	-45.0	0.013	-40.6	0.010	-36.2	0.010	-31.8	0.011
-58.1	0.001	-53.7	0.012	-49.3	0.015	-44.9	0.015	-40.5	0.013	-36.1	0.012	-31.7	0.011
-58.0	0.000	-53.6	0.012	-49.2	0.016	-44.8	0.017	-40.4	0.016	-36.0	0.014	-31.6	0.010
-57.9	0.000	-53.5	0.012	-49.1	0.016	-44.7	0.018	-40.3	0.018	-35.9	0.015	-31.5	0.010
-57.8	0.001	-53.4	0.011	-49.0	0.016	-44.6	0.020	-40.2	0.020	-35.8	0.016	-31.4	0.009
-57.7	0.001	-53.3	0.011	-48.9	0.016	-44.5	0.020	-40.1	0.022	-35.7	0.017	-31.3	0.009
-57.6	0.002	-53.2	0.011	-48.8	0.016	-44.4	0.021	-40.0	0.024	-35.6	0.017	-31.2	0.008
-57.5	0.002	-53.1	0.010	-48.7	0.016	-44.3	0.021	-39.9	0.025	-35.5	0.017	-31.1	0.007
-57.4	0.003	-53.0	0.010	-48.6	0.015	-44.2	0.021	-39.8	0.025	-35.4	0.017	-31.0	0.006
-57.3	0.003	-52.9	0.010	-48.5	0.014	-44.1	0.020	-39.7	0.026	-35.3	0.016	-30.9	0.006
-57.2	0.004	-52.8	0.010	-48.4	0.013	-44.0	0.019	-39.6	0.025	-35.2	0.015	-30.8	0.006
-57.1	0.004	-52.7	0.010	-48.3	0.012	-43.9	0.017	-39.5	0.024	-35.1	0.013	-30.7	0.006
-57.0	0.005	-52.6	0.010	-48.2	0.011	-43.8	0.015	-39.4	0.023	-35.0	0.012	-30.6	0.006
-56.9	0.005	-52.5	0.010	-48.1	0.010	-43.7	0.013	-39.3	0.021	-34.9	0.010	-30.5	0.006
-56.8	0.005	-52.4	0.010	-48.0	0.010	-43.6	0.011	-39.2	0.019	-34.8	0.009	-30.4	0.006
-56.7	0.006	-52.3	0.011	-47.9	0.009	-43.5	0.008	-39.1	0.017	-34.7	0.008	-30.3	0.006
-56.6	0.006	-52.2	0.011	-47.8	0.009	-43.4	0.005	-39.0	0.014	-34.6	0.007	-30.2	0.006
-56.5	0.007	-52.1	0.012	-47.7	0.009	-43.3	0.002	-38.9	0.011	-34.5	0.007	-30.1	0.006
-56.4	0.007	-52.0	0.012	-47.6	0.010	-43.2	0.002	-38.8	0.008	-34.4	0.008	-30.0	0.006
-56.3	0.007	-51.9	0.013	-47.5	0.011	-43.1	0.005	-38.7	0.005	-34.3	0.009	-29.9	0.005
-56.2	0.007	-51.8	0.013	-47.4	0.012	-43.0	0.008	-38.6	0.003	-34.2	0.010	-29.8	0.005
-56.1	0.007	-51.7	0.014	-47.3	0.013	-42.9	0.012	-38.5	0.004	-34.1	0.011	-29.7	0.004
-56.0	0.007	-51.6	0.014	-47.2	0.015	-42.8	0.015	-38.4	0.006	-34.0	0.013	-29.6	0.004
-55.9	0.007	-51.5	0.014	-47.1	0.016	-42.7	0.018	-38.3	0.009	-33.9	0.014	-29.5	0.003
-55.8	0.007	-51.4	0.014	-47.0	0.017	-42.6	0.020	-38.2	0.012	-33.8	0.014	-29.4	0.002
-55.7	0.007	-51.3	0.014	-46.9	0.017	-42.5	0.023	-38.1	0.014	-33.7	0.015	-29.3	0.002
-55.6	0.007	-51.2	0.014	-46.8	0.018	-42.4	0.025	-38.0	0.016	-33.6	0.015	-29.2	0.001
-55.5	0.007	-51.1	0.013	-46.7	0.018	-42.3	0.026	-37.9	0.018	-33.5	0.014	-29.1	0.001
-55.4	0.007	-51.0	0.013	-46.6	0.018	-42.2	0.028	-37.8	0.019	-33.4	0.014	-29.0	0.000
-55.3	0.007	-50.9	0.013	-46.5	0.018	-42.1	0.028	-37.7	0.020	-33.3	0.013	-28.9	0.000
-55.2	0.007	-50.8	0.012	-46.4	0.017	-42.0	0.029	-37.6	0.021	-33.2	0.012	-28.8	0.001
-55.1	0.007	-50.7	0.011	-46.3	0.017	-41.9	0.029	-37.5	0.020	-33.1	0.011	-28.7	0.002
-55.0	0.008	-50.6	0.011	-46.2	0.015	-41.8	0.028	-37.4	0.020	-33.0	0.010	-28.6	0.002
-54.9	0.008	-50.5	0.010	-46.1	0.014	-41.7	0.027	-37.3	0.019	-32.9	0.009	-28.5	0.003

Exhibit #1  
KWBP-DT Salem, OR Channel 33

Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field												
-28.4	0.004	-24.0	0.063	-19.6	0.046	-15.2	0.042	-10.8	0.069	-6.4	0.096	-2.0	0.194
-28.3	0.006	-23.9	0.059	-19.5	0.044	-15.1	0.049	-10.7	0.058	-6.3	0.101	-1.9	0.213
-28.2	0.007	-23.8	0.056	-19.4	0.042	-15.0	0.055	-10.6	0.044	-6.2	0.102	-1.8	0.232
-28.1	0.008	-23.7	0.055	-19.3	0.039	-14.9	0.060	-10.5	0.030	-6.1	0.101	-1.7	0.248
-28.0	0.009	-23.6	0.056	-19.2	0.036	-14.8	0.062	-10.4	0.016	-6.0	0.097	-1.6	0.260
-27.9	0.010	-23.5	0.057	-19.1	0.033	-14.7	0.063	-10.3	0.011	-5.9	0.091	-1.5	0.268
-27.8	0.011	-23.4	0.059	-19.0	0.031	-14.6	0.061	-10.2	0.022	-5.8	0.083	-1.4	0.272
-27.7	0.012	-23.3	0.061	-18.9	0.030	-14.5	0.057	-10.1	0.036	-5.7	0.075	-1.3	0.272
-27.6	0.013	-23.2	0.062	-18.8	0.031	-14.4	0.051	-10.0	0.050	-5.6	0.068	-1.2	0.268
-27.5	0.014	-23.1	0.062	-18.7	0.034	-14.3	0.043	-9.9	0.062	-5.5	0.064	-1.1	0.263
-27.4	0.015	-23.0	0.062	-18.6	0.037	-14.2	0.033	-9.8	0.072	-5.4	0.064	-1.0	0.260
-27.3	0.016	-22.9	0.061	-18.5	0.040	-14.1	0.022	-9.7	0.080	-5.3	0.069	-0.9	0.263
-27.2	0.019	-22.8	0.058	-18.4	0.044	-14.0	0.011	-9.6	0.084	-5.2	0.078	-0.8	0.276
-27.1	0.022	-22.7	0.055	-18.3	0.046	-13.9	0.007	-9.5	0.086	-5.1	0.088	-0.7	0.302
-27.0	0.026	-22.6	0.052	-18.2	0.048	-13.8	0.019	-9.4	0.086	-5.0	0.098	-0.6	0.340
-26.9	0.031	-22.5	0.049	-18.1	0.049	-13.7	0.032	-9.3	0.082	-4.9	0.107	-0.5	0.391
-26.8	0.037	-22.4	0.045	-18.0	0.049	-13.6	0.045	-9.2	0.075	-4.8	0.114	-0.4	0.450
-26.7	0.044	-22.3	0.043	-17.9	0.047	-13.5	0.057	-9.1	0.067	-4.7	0.118	-0.3	0.515
-26.6	0.051	-22.2	0.041	-17.8	0.045	-13.4	0.068	-9.0	0.056	-4.6	0.119	-0.2	0.583
-26.5	0.059	-22.1	0.041	-17.7	0.041	-13.3	0.077	-8.9	0.045	-4.5	0.118	-0.1	0.651
-26.4	0.067	-22.0	0.041	-17.6	0.037	-13.2	0.085	-8.8	0.034	-4.4	0.115	0.0	0.719
-26.3	0.076	-21.9	0.043	-17.5	0.032	-13.1	0.090	-8.7	0.028	-4.3	0.109	0.1	0.782
-26.2	0.084	-21.8	0.045	-17.4	0.029	-13.0	0.092	-8.6	0.029	-4.2	0.102	0.2	0.840
-26.1	0.093	-21.7	0.047	-17.3	0.027	-12.9	0.092	-8.5	0.038	-4.1	0.096	0.3	0.891
-26.0	0.101	-21.6	0.049	-17.2	0.027	-12.8	0.089	-8.4	0.049	-4.0	0.091	0.4	0.934
-25.9	0.109	-21.5	0.050	-17.1	0.029	-12.7	0.084	-8.3	0.060	-3.9	0.090	0.5	0.967
-25.8	0.116	-21.4	0.051	-17.0	0.034	-12.6	0.077	-8.2	0.071	-3.8	0.094	0.6	0.989
-25.7	0.122	-21.3	0.050	-16.9	0.039	-12.5	0.067	-8.1	0.079	-3.7	0.102	0.7	1.000
-25.6	0.127	-21.2	0.049	-16.8	0.044	-12.4	0.056	-8.0	0.085	-3.6	0.113	0.8	1.000
-25.5	0.131	-21.1	0.048	-16.7	0.048	-12.3	0.044	-7.9	0.088	-3.5	0.125	0.9	0.988
-25.4	0.134	-21.0	0.045	-16.6	0.051	-12.2	0.033	-7.8	0.088	-3.4	0.137	1.0	0.966
-25.3	0.136	-20.9	0.043	-16.5	0.053	-12.1	0.026	-7.7	0.086	-3.3	0.147	1.1	0.933
-25.2	0.136	-20.8	0.040	-16.4	0.053	-12.0	0.028	-7.6	0.081	-3.2	0.155	1.2	0.890
-25.1	0.135	-20.7	0.038	-16.3	0.052	-11.9	0.037	-7.5	0.073	-3.1	0.160	1.3	0.839
-25.0	0.132	-20.6	0.037	-16.2	0.049	-11.8	0.048	-7.4	0.064	-3.0	0.162	1.4	0.782
-24.9	0.128	-20.5	0.036	-16.1	0.045	-11.7	0.060	-7.3	0.054	-2.9	0.161	1.5	0.718
-24.8	0.123	-20.4	0.037	-16.0	0.040	-11.6	0.071	-7.2	0.045	-2.8	0.158	1.6	0.652
-24.7	0.117	-20.3	0.038	-15.9	0.033	-11.5	0.080	-7.1	0.040	-2.7	0.152	1.7	0.584
-24.6	0.109	-20.2	0.040	-15.8	0.026	-11.4	0.086	-7.0	0.041	-2.6	0.147	1.8	0.517
-24.5	0.101	-20.1	0.043	-15.7	0.020	-11.3	0.090	-6.9	0.048	-2.5	0.144	1.9	0.453
-24.4	0.093	-20.0	0.045	-15.6	0.016	-11.2	0.092	-6.8	0.059	-2.4	0.144	2.0	0.394
-24.3	0.085	-19.9	0.046	-15.5	0.019	-11.1	0.090	-6.7	0.070	-2.3	0.150	2.1	0.345
-24.2	0.077	-19.8	0.047	-15.4	0.026	-11.0	0.086	-6.6	0.080	-2.2	0.161	2.2	0.305
-24.1	0.069	-19.7	0.047	-15.3	0.034	-10.9	0.079	-6.5	0.090	-2.1	0.176	2.3	0.279

Exhibit #1  
KWBP-DT Salem, OR Channel 33

Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field												
2.4	0.264	6.8	0.067	11.2	0.069	15.6	0.026	20.0	0.037	24.4	0.044	28.8	0.004
2.5	0.259	6.9	0.064	11.3	0.060	15.7	0.035	20.1	0.034	24.5	0.045	28.9	0.002
2.6	0.260	7.0	0.065	11.4	0.050	15.8	0.043	20.2	0.030	24.6	0.046	29.0	0.001
2.7	0.263	7.1	0.069	11.5	0.037	15.9	0.050	20.3	0.027	24.7	0.047	29.1	0.000
2.8	0.265	7.2	0.075	11.6	0.024	16.0	0.055	20.4	0.025	24.8	0.046	29.2	0.001
2.9	0.264	7.3	0.081	11.7	0.010	16.1	0.058	20.5	0.025	24.9	0.045	29.3	0.002
3.0	0.260	7.4	0.087	11.8	0.010	16.2	0.059	20.6	0.026	25.0	0.044	29.4	0.002
3.1	0.251	7.5	0.091	11.9	0.024	16.3	0.058	20.7	0.029	25.1	0.042	29.5	0.003
3.2	0.239	7.6	0.093	12.0	0.039	16.4	0.055	20.8	0.032	25.2	0.040	29.6	0.004
3.3	0.224	7.7	0.093	12.1	0.053	16.5	0.051	20.9	0.035	25.3	0.039	29.7	0.005
3.4	0.206	7.8	0.091	12.2	0.065	16.6	0.045	21.0	0.037	25.4	0.038	29.8	0.006
3.5	0.188	7.9	0.086	12.3	0.076	16.7	0.039	21.1	0.039	25.5	0.039	29.9	0.007
3.6	0.171	8.0	0.080	12.4	0.084	16.8	0.031	21.2	0.040	25.6	0.041	30.0	0.007
3.7	0.157	8.1	0.071	12.5	0.091	16.9	0.024	21.3	0.041	25.7	0.044	30.1	0.008
3.8	0.146	8.2	0.063	12.6	0.094	17.0	0.019	21.4	0.040	25.8	0.048	30.2	0.008
3.9	0.141	8.3	0.054	12.7	0.095	17.1	0.017	21.5	0.039	25.9	0.053	30.3	0.008
4.0	0.140	8.4	0.048	12.8	0.093	17.2	0.020	21.6	0.037	26.0	0.058	30.4	0.008
4.1	0.143	8.5	0.045	12.9	0.089	17.3	0.026	21.7	0.035	26.1	0.062	30.5	0.008
4.2	0.147	8.6	0.047	13.0	0.082	17.4	0.032	21.8	0.032	26.2	0.067	30.6	0.008
4.3	0.152	8.7	0.053	13.1	0.073	17.5	0.037	21.9	0.030	26.3	0.071	30.7	0.008
4.4	0.155	8.8	0.060	13.2	0.063	17.6	0.042	22.0	0.028	26.4	0.075	30.8	0.008
4.5	0.156	8.9	0.068	13.3	0.051	17.7	0.046	22.1	0.027	26.5	0.077	30.9	0.008
4.6	0.154	9.0	0.074	13.4	0.039	17.8	0.048	22.2	0.027	26.6	0.079	31.0	0.009
4.7	0.150	9.1	0.079	13.5	0.029	17.9	0.049	22.3	0.029	26.7	0.080	31.1	0.009
4.8	0.143	9.2	0.082	13.6	0.024	18.0	0.048	22.4	0.031	26.8	0.080	31.2	0.010
4.9	0.134	9.3	0.082	13.7	0.027	18.1	0.046	22.5	0.034	26.9	0.079	31.3	0.011
5.0	0.125	9.4	0.080	13.8	0.035	18.2	0.042	22.6	0.036	27.0	0.077	31.4	0.012
5.1	0.115	9.5	0.076	13.9	0.045	18.3	0.038	22.7	0.038	27.1	0.074	31.5	0.012
5.2	0.106	9.6	0.069	14.0	0.055	18.4	0.033	22.8	0.040	27.2	0.071	31.6	0.013
5.3	0.100	9.7	0.060	14.1	0.063	18.5	0.028	22.9	0.041	27.3	0.067	31.7	0.013
5.4	0.097	9.8	0.049	14.2	0.070	18.6	0.023	23.0	0.041	27.4	0.063	31.8	0.013
5.5	0.097	9.9	0.038	14.3	0.074	18.7	0.020	23.1	0.040	27.5	0.058	31.9	0.013
5.6	0.099	10.0	0.028	14.4	0.077	18.8	0.020	23.2	0.039	27.6	0.052	32.0	0.012
5.7	0.103	10.1	0.023	14.5	0.077	18.9	0.023	23.3	0.038	27.7	0.047	32.1	0.012
5.8	0.107	10.2	0.026	14.6	0.074	19.0	0.027	23.4	0.036	27.8	0.042	32.2	0.012
5.9	0.111	10.3	0.035	14.7	0.070	19.1	0.031	23.5	0.034	27.9	0.036	32.3	0.011
6.0	0.113	10.4	0.046	14.8	0.063	19.2	0.036	23.6	0.032	28.0	0.031	32.4	0.011
6.1	0.112	10.5	0.056	14.9	0.055	19.3	0.040	23.7	0.032	28.1	0.026	32.5	0.011
6.2	0.110	10.6	0.065	15.0	0.045	19.4	0.042	23.8	0.032	28.2	0.022	32.6	0.011
6.3	0.105	10.7	0.072	15.1	0.034	19.5	0.044	23.9	0.033	28.3	0.017	32.7	0.011
6.4	0.098	10.8	0.077	15.2	0.023	19.6	0.045	24.0	0.034	28.4	0.014	32.8	0.011
6.5	0.090	10.9	0.079	15.3	0.012	19.7	0.044	24.1	0.037	28.5	0.011	32.9	0.012
6.6	0.082	11.0	0.078	15.4	0.008	19.8	0.043	24.2	0.039	28.6	0.008	33.0	0.013
6.7	0.073	11.1	0.075	15.5	0.016	19.9	0.040	24.3	0.042	28.7	0.006	33.1	0.014

## Exhibit #1

KWBP-DT Salem, OR Channel 33  
Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field												
33.2	0.014	37.6	0.017	42.0	0.026	46.4	0.020	50.8	0.012	55.2	0.005	59.6	0.006
33.3	0.015	37.7	0.016	42.1	0.024	46.5	0.020	50.9	0.013	55.3	0.005	59.7	0.007
33.4	0.015	37.8	0.014	42.2	0.022	46.6	0.019	51.0	0.013	55.4	0.005	59.8	0.007
33.5	0.015	37.9	0.012	42.3	0.019	46.7	0.018	51.1	0.014	55.5	0.005	59.9	0.008
33.6	0.015	38.0	0.010	42.4	0.016	46.8	0.017	51.2	0.014	55.6	0.005	60.0	0.008
33.7	0.014	38.1	0.008	42.5	0.014	46.9	0.015	51.3	0.014	55.7	0.005	60.1	0.009
33.8	0.014	38.2	0.007	42.6	0.011	47.0	0.014	51.4	0.013	55.8	0.005	60.2	0.009
33.9	0.013	38.3	0.006	42.7	0.009	47.1	0.012	51.5	0.013	55.9	0.005	60.3	0.009
34.0	0.012	38.4	0.006	42.8	0.008	47.2	0.010	51.6	0.012	56.0	0.005	60.4	0.010
34.1	0.011	38.5	0.008	42.9	0.008	47.3	0.009	51.7	0.012	56.1	0.005	60.5	0.010
34.2	0.011	38.6	0.010	43.0	0.010	47.4	0.007	51.8	0.011	56.2	0.005	60.6	0.010
34.3	0.010	38.7	0.012	43.1	0.012	47.5	0.006	51.9	0.010	56.3	0.005	60.7	0.011
34.4	0.010	38.8	0.014	43.2	0.014	47.6	0.006	52.0	0.010	56.4	0.005	60.8	0.011
34.5	0.011	38.9	0.016	43.3	0.017	47.7	0.006	52.1	0.009	56.5	0.005	60.9	0.012
34.6	0.011	39.0	0.018	43.4	0.019	47.8	0.007	52.2	0.008	56.6	0.005	61.0	0.013
34.7	0.012	39.1	0.020	43.5	0.021	47.9	0.009	52.3	0.008	56.7	0.004	61.1	0.013
34.8	0.013	39.2	0.021	43.6	0.023	48.0	0.010	52.4	0.007	56.8	0.004	61.2	0.015
34.9	0.014	39.3	0.021	43.7	0.024	48.1	0.012	52.5	0.007	56.9	0.004	61.3	0.016
35.0	0.015	39.4	0.021	43.8	0.025	48.2	0.013	52.6	0.007	57.0	0.003	61.4	0.017
35.1	0.016	39.5	0.021	43.9	0.025	48.3	0.014	52.7	0.007	57.1	0.003	61.5	0.019
35.2	0.017	39.6	0.020	44.0	0.025	48.4	0.015	52.8	0.007	57.2	0.003	61.6	0.021
35.3	0.017	39.7	0.019	44.1	0.025	48.5	0.016	52.9	0.007	57.3	0.002	61.7	0.023
35.4	0.017	39.8	0.017	44.2	0.024	48.6	0.016	53.0	0.008	57.4	0.002	61.8	0.025
35.5	0.017	39.9	0.015	44.3	0.023	48.7	0.016	53.1	0.008	57.5	0.002	61.9	0.027
35.6	0.016	40.0	0.013	44.4	0.021	48.8	0.016	53.2	0.009	57.6	0.002	62.0	0.030
35.7	0.015	40.1	0.010	44.5	0.019	48.9	0.016	53.3	0.009	57.7	0.001	62.1	0.032
35.8	0.014	40.2	0.007	44.6	0.017	49.0	0.015	53.4	0.009	57.8	0.001	62.2	0.035
35.9	0.013	40.3	0.004	44.7	0.015	49.1	0.015	53.5	0.010	57.9	0.001	62.3	0.038
36.0	0.012	40.4	0.002	44.8	0.012	49.2	0.014	53.6	0.010	58.0	0.000	62.4	0.041
36.1	0.011	40.5	0.004	44.9	0.009	49.3	0.013	53.7	0.010	58.1	0.000	62.5	0.043
36.2	0.010	40.6	0.007	45.0	0.007	49.4	0.012	53.8	0.010	58.2	0.000	62.6	0.046
36.3	0.009	40.7	0.011	45.1	0.004	49.5	0.010	53.9	0.010	58.3	0.000	62.7	0.049
36.4	0.010	40.8	0.014	45.2	0.003	49.6	0.009	54.0	0.009	58.4	0.001	62.8	0.052
36.5	0.010	40.9	0.017	45.3	0.004	49.7	0.008	54.1	0.009	58.5	0.001	62.9	0.056
36.6	0.012	41.0	0.020	45.4	0.006	49.8	0.007	54.2	0.009	58.6	0.001	63.0	0.059
36.7	0.013	41.1	0.022	45.5	0.009	49.9	0.007	54.3	0.008	58.7	0.002	63.1	0.062
36.8	0.015	41.2	0.024	45.6	0.011	50.0	0.006	54.4	0.008	58.8	0.002	63.2	0.064
36.9	0.016	41.3	0.026	45.7	0.013	50.1	0.007	54.5	0.007	58.9	0.003	63.3	0.067
37.0	0.017	41.4	0.028	45.8	0.015	50.2	0.007	54.6	0.007	59.0	0.003	63.4	0.070
37.1	0.018	41.5	0.028	45.9	0.017	50.3	0.008	54.7	0.006	59.1	0.004	63.5	0.073
37.2	0.019	41.6	0.029	46.0	0.018	50.4	0.009	54.8	0.006	59.2	0.004	63.6	0.075
37.3	0.019	41.7	0.029	46.1	0.019	50.5	0.010	54.9	0.006	59.3	0.005	63.7	0.078
37.4	0.019	41.8	0.028	46.2	0.020	50.6	0.011	55.0	0.005	59.4	0.005	63.8	0.080
37.5	0.018	41.9	0.027	46.3	0.020	50.7	0.012	55.1	0.005	59.5	0.006	63.9	0.082

Exhibit #1  
KWBP-DT Salem, OR Channel 33

Vertical Antenna Pattern Tabulation RFS Model PHP80E

Angle	Field										
64.0	0.084	68.4	0.033	72.8	0.019	77.2	0.014	81.6	0.007	86.0	0.002
64.1	0.086	68.5	0.033	72.9	0.019	77.3	0.014	81.7	0.007	86.1	0.002
64.2	0.087	68.6	0.032	73.0	0.019	77.4	0.014	81.8	0.007	86.2	0.001
64.3	0.089	68.7	0.032	73.1	0.018	77.5	0.013	81.9	0.007	86.3	0.001
64.4	0.090	68.8	0.032	73.2	0.018	77.6	0.013	82.0	0.007	86.4	0.001
64.5	0.091	68.9	0.032	73.3	0.018	77.7	0.013	82.1	0.007	86.5	0.001
64.6	0.092	69.0	0.032	73.4	0.018	77.8	0.012	82.2	0.007	86.6	0.001
64.7	0.092	69.1	0.033	73.5	0.018	77.9	0.012	82.3	0.007	86.7	0.001
64.8	0.093	69.2	0.033	73.6	0.018	78.0	0.012	82.4	0.007	86.8	0.001
64.9	0.093	69.3	0.033	73.7	0.018	78.1	0.012	82.5	0.007	86.9	0.000
65.0	0.093	69.4	0.033	73.8	0.018	78.2	0.011	82.6	0.006	87.0	0.000
65.1	0.092	69.5	0.034	73.9	0.019	78.3	0.011	82.7	0.006	87.1	0.000
65.2	0.092	69.6	0.034	74.0	0.019	78.4	0.011	82.8	0.006	87.2	0.000
65.3	0.091	69.7	0.034	74.1	0.019	78.5	0.011	82.9	0.006	87.3	0.000
65.4	0.090	69.8	0.034	74.2	0.019	78.6	0.010	83.0	0.006	87.4	0.000
65.5	0.089	69.9	0.034	74.3	0.019	78.7	0.010	83.1	0.006	87.5	0.000
65.6	0.088	70.0	0.034	74.4	0.019	78.8	0.010	83.2	0.006	87.6	0.001
65.7	0.087	70.1	0.034	74.5	0.019	78.9	0.010	83.3	0.006	87.7	0.001
65.8	0.085	70.2	0.034	74.6	0.019	79.0	0.010	83.4	0.005	87.8	0.001
65.9	0.083	70.3	0.034	74.7	0.019	79.1	0.009	83.5	0.005	87.9	0.001
66.0	0.081	70.4	0.033	74.8	0.019	79.2	0.009	83.6	0.005	88.0	0.001
66.1	0.079	70.5	0.033	74.9	0.019	79.3	0.009	83.7	0.005	88.1	0.001
66.2	0.077	70.6	0.032	75.0	0.019	79.4	0.009	83.8	0.005	88.2	0.001
66.3	0.075	70.7	0.032	75.1	0.019	79.5	0.009	83.9	0.005	88.3	0.001
66.4	0.073	70.8	0.031	75.2	0.019	79.6	0.009	84.0	0.005	88.4	0.002
66.5	0.070	70.9	0.031	75.3	0.019	79.7	0.009	84.1	0.004	88.5	0.002
66.6	0.068	71.0	0.030	75.4	0.019	79.8	0.009	84.2	0.004	88.6	0.002
66.7	0.065	71.1	0.030	75.5	0.019	79.9	0.008	84.3	0.004	88.7	0.002
66.8	0.063	71.2	0.029	75.6	0.019	80.0	0.008	84.4	0.004	88.8	0.002
66.9	0.060	71.3	0.028	75.7	0.019	80.1	0.008	84.5	0.004	88.9	0.002
67.0	0.058	71.4	0.028	75.8	0.018	80.2	0.008	84.6	0.004	89.0	0.002
67.1	0.055	71.5	0.027	75.9	0.018	80.3	0.008	84.7	0.004	89.1	0.002
67.2	0.053	71.6	0.026	76.0	0.018	80.4	0.008	84.8	0.003	89.2	0.002
67.3	0.050	71.7	0.025	76.1	0.018	80.5	0.008	84.9	0.003	89.3	0.003
67.4	0.048	71.8	0.025	76.2	0.018	80.6	0.008	85.0	0.003	89.4	0.003
67.5	0.046	71.9	0.024	76.3	0.017	80.7	0.008	85.1	0.003	89.5	0.003
67.6	0.044	72.0	0.023	76.4	0.017	80.8	0.008	85.2	0.003	89.6	0.003
67.7	0.042	72.1	0.023	76.5	0.017	80.9	0.008	85.3	0.003	89.7	0.003
67.8	0.040	72.2	0.022	76.6	0.016	81.0	0.008	85.4	0.003	89.8	0.003
67.9	0.038	72.3	0.021	76.7	0.016	81.1	0.008	85.5	0.002	89.9	0.003
68.0	0.037	72.4	0.021	76.8	0.016	81.2	0.008	85.6	0.002	90.0	0.003
68.1	0.036	72.5	0.020	76.9	0.015	81.3	0.008	85.7	0.002		
68.2	0.035	72.6	0.020	77.0	0.015	81.4	0.007	85.8	0.002		
68.3	0.034	72.7	0.019	77.1	0.015	81.5	0.007	85.9	0.002		