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Figure 9:
Distances to Relevant Contours of KHPA, Hope, AR

'ID'	'Site Latitude'	'Site Longitude'		
KHPA (FM)	33-43-12 N	93-29-11 W		
'Antenna'	'Radials Used'	'Antenna AMSL'	ERP (kW)	
Omni	360	195	6.0	
	60dBu (F 50:50)	54 dBu (F 50:10)	Height of	
'Bearing'	'To-Contour (km)'	'To-Contour (km)'	Average Terrain (m)	'HAAT (meters)'
0	26.827	41.419	105.678	89.322
1	26.808	41.388	105.814	89.187
2	26.884	41.511	105.280	89.720
3	27.180	41.987	103.176	91.824
4	27.197	42.015	103.052	91.948
5	27.074	41.818	103.931	91.069
6	27.003	41.703	104.440	90.560
7	27.119	41.890	103.613	91.387
8	27.144	41.930	103.434	91.566
9	27.028	41.744	104.258	90.742
10	27.096	41.853	103.777	91.223
11	27.181	41.989	103.166	91.834
12	27.002	41.701	104.449	90.551
13	27.170	41.971	103.249	91.751
14	27.090	41.844	103.818	91.182
15	26.843	41.446	105.563	89.438
16	26.655	41.141	106.873	88.127
17	26.592	41.038	107.310	87.690
18	26.678	41.178	106.714	88.286
19	26.778	41.339	106.024	88.977
20	26.831	41.426	105.649	89.351
21	26.864	41.479	105.418	89.582
22	26.853	41.462	105.495	89.505
23	26.800	41.376	105.867	89.133
24	26.764	41.318	106.117	88.883
25	26.748	41.291	106.233	88.767
26	26.815	41.400	105.764	89.236
27	26.898	41.533	105.183	89.817
28	27.017	41.726	104.337	90.663
29	27.159	41.954	103.327	91.673
30	27.278	42.148	102.464	92.536
31	27.431	42.395	101.348	93.652
32	27.527	42.547	100.655	94.345
33	27.592	42.648	100.192	94.808
34	27.701	42.816	99.410	95.590
35	27.762	42.910	98.966	96.034
36	27.886	43.101	98.069	96.931
37	28.019	43.308	97.088	97.912
38	28.139	43.494	96.191	98.809
39	28.263	43.685	95.257	99.743
40	28.404	43.900	94.185	100.815
41	28.554	44.128	93.038	101.962
42	28.694	44.334	91.988	103.012

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43	28.819	44.517	91.038	103.962
44	28.921	44.667	90.247	104.753
45	28.988	44.765	89.724	105.276
46	29.063	44.873	89.139	105.861
47	29.072	44.887	89.065	105.935
48	29.095	44.921	88.881	106.120
49	29.128	44.969	88.619	106.381
50	29.177	45.040	88.228	106.772
51	29.257	45.158	87.587	107.413
52	29.313	45.240	87.129	107.871
53	29.376	45.333	86.616	108.384
54	29.427	45.407	86.198	108.802
55	29.469	45.468	85.852	109.149
56	29.518	45.539	85.445	109.555
57	29.577	45.620	84.977	110.023
58	29.652	45.723	84.378	110.622
59	29.790	45.914	83.247	111.754
60	29.914	46.084	82.222	112.778
61	30.030	46.246	81.236	113.764
62	30.121	46.371	80.456	114.544
63	30.188	46.464	79.871	115.129
64	30.245	46.544	79.365	115.635
65	30.283	46.596	79.031	115.969
66	30.330	46.660	78.613	116.387
67	30.372	46.718	78.232	116.768
68	30.413	46.774	77.865	117.135
69	30.455	46.832	77.478	117.522
70	30.487	46.876	77.181	117.819
71	30.505	46.900	77.018	117.982
72	30.505	46.899	77.025	117.975
73	30.506	46.901	77.015	117.985
74	30.523	46.923	76.864	118.136
75	30.547	46.955	76.649	118.351
76	30.564	46.976	76.504	118.496
77	30.598	47.021	76.201	118.799
78	30.613	47.040	76.066	118.934
79	30.620	47.049	76.010	118.990
80	30.627	47.059	75.940	119.060
81	30.643	47.080	75.798	119.202
82	30.709	47.166	75.204	119.796
83	30.830	47.324	74.100	120.900
84	30.968	47.504	72.799	122.201
85	31.085	47.656	71.688	123.312
86	31.148	47.738	71.092	123.908
87	31.175	47.773	70.834	124.166
88	31.194	47.797	70.657	124.343
89	31.195	47.798	70.652	124.348
90	31.176	47.774	70.825	124.175
91	31.143	47.732	71.138	123.862
92	31.090	47.662	71.646	123.354
93	31.003	47.549	72.469	122.531
94	30.917	47.437	73.288	121.712

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95	30.815	47.305	74.235	120.765
96	30.702	47.157	75.269	119.731
97	30.589	47.008	76.286	118.715
98	30.531	46.933	76.794	118.206
99	30.451	46.826	77.516	117.484
100	30.366	46.710	78.288	116.712
101	30.280	46.592	79.056	115.944
102	30.230	46.523	79.500	115.500
103	30.245	46.543	79.368	115.632
104	30.292	46.608	78.948	116.052
105	30.300	46.619	78.882	116.118
106	30.233	46.526	79.476	115.525
107	30.095	46.335	80.681	114.319
108	30.036	46.254	81.188	113.813
109	30.089	46.328	80.727	114.273
110	30.064	46.293	80.944	114.057
111	30.072	46.304	80.880	114.120
112	30.082	46.317	80.794	114.206
113	30.077	46.311	80.836	114.164
114	30.079	46.314	80.818	114.182
115	29.998	46.202	81.505	113.495
116	29.842	45.985	82.821	112.179
117	29.711	45.805	83.898	111.102
118	29.700	45.789	83.990	111.010
119	29.659	45.733	84.322	110.678
120	29.608	45.663	84.731	110.269
121	29.552	45.586	85.175	109.825
122	29.441	45.427	86.085	108.915
123	29.317	45.246	87.101	107.899
124	29.146	44.995	88.476	106.524
125	28.930	44.680	90.174	104.826
126	28.791	44.477	91.246	103.754
127	28.725	44.379	91.753	103.247
128	28.648	44.266	92.336	102.664
129	28.535	44.099	93.184	101.816
130	28.391	43.880	94.284	100.716
131	28.231	43.635	95.502	99.498
132	28.198	43.584	95.749	99.251
133	28.152	43.514	96.094	98.906
134	28.080	43.402	96.632	98.368
135	27.963	43.221	97.502	97.498
136	27.753	42.897	99.031	95.969
137	27.728	42.858	99.213	95.787
138	27.899	43.122	97.971	97.029
139	27.998	43.276	97.240	97.760
140	27.995	43.271	97.262	97.738
141	28.104	43.440	96.453	98.547
142	28.150	43.510	96.110	98.890
143	28.167	43.536	95.985	99.015
144	28.246	43.658	95.387	99.613
145	28.314	43.762	94.874	100.127
146	28.362	43.835	94.509	100.491

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147	28.362	43.836	94.505	100.495
148	28.351	43.820	94.586	100.414
149	28.342	43.805	94.658	100.343
150	28.349	43.816	94.604	100.396
151	28.346	43.812	94.627	100.373
152	28.231	43.636	95.498	99.502
153	28.079	43.401	96.639	98.361
154	27.953	43.205	97.576	97.424
155	27.832	43.017	98.462	96.538
156	27.730	42.860	99.202	95.798
157	27.658	42.749	99.722	95.278
158	27.597	42.655	100.157	94.843
159	27.624	42.698	99.959	95.041
160	27.627	42.703	99.937	95.063
161	27.640	42.723	99.845	95.155
162	27.656	42.747	99.731	95.269
163	27.671	42.770	99.625	95.375
164	27.690	42.800	99.486	95.515
165	27.694	42.806	99.457	95.543
166	27.685	42.791	99.528	95.472
167	27.666	42.762	99.662	95.338
168	27.658	42.750	99.716	95.284
169	27.682	42.786	99.549	95.451
170	27.743	42.881	99.104	95.896
171	27.851	43.047	98.324	96.676
172	27.986	43.257	97.330	97.670
173	28.077	43.397	96.658	98.342
174	28.107	43.443	96.435	98.565
175	28.094	43.424	96.531	98.469
176	27.990	43.262	97.304	97.696
177	27.830	43.014	98.478	96.522
178	27.709	42.829	99.349	95.651
179	27.589	42.644	100.210	94.790
180	27.556	42.593	100.446	94.554
181	27.605	42.667	100.101	94.899
182	27.631	42.709	99.910	95.090
183	27.582	42.633	100.260	94.740
184	27.552	42.586	100.479	94.521
185	27.552	42.587	100.473	94.527
186	27.618	42.687	100.008	94.992
187	27.601	42.662	100.128	94.872
188	27.561	42.600	100.414	94.586
189	27.489	42.489	100.923	94.077
190	27.453	42.430	101.192	93.809
191	27.426	42.387	101.388	93.612
192	27.460	42.442	101.136	93.864
193	27.487	42.485	100.940	94.060
194	27.372	42.299	101.786	93.214
195	27.093	41.848	103.801	91.199
196	26.948	41.616	104.824	90.176
197	26.791	41.361	105.931	89.070
198	26.788	41.357	105.949	89.051

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199	26.626	41.093	107.077	87.923
200	26.391	40.708	108.711	86.289
201	26.200	40.387	110.048	84.952
202	26.067	40.163	110.971	84.029
203	26.082	40.187	110.872	84.128
204	26.215	40.412	109.946	85.054
205	26.233	40.442	109.822	85.178
206	26.073	40.173	110.931	84.069
207	25.963	39.987	111.687	83.313
208	25.904	39.889	112.089	82.911
209	25.844	39.788	112.500	82.500
210	25.886	39.858	112.217	82.783
211	25.865	39.823	112.359	82.641
212	25.675	39.505	113.647	81.353
213	25.596	39.372	114.176	80.824
214	25.630	39.429	113.950	81.050
215	25.804	39.721	112.775	82.226
216	25.934	39.939	111.884	83.116
217	26.117	40.247	110.628	84.372
218	26.287	40.533	109.445	85.555
219	26.341	40.624	109.064	85.936
220	26.319	40.587	109.218	85.782
221	26.382	40.693	108.775	86.225
222	26.616	41.076	107.147	87.853
223	26.912	41.557	105.082	89.918
224	27.261	42.119	102.593	92.407
225	27.502	42.510	100.828	94.172
226	27.721	42.847	99.263	95.737
227	27.901	43.124	97.959	97.041
228	27.979	43.246	97.384	97.616
229	28.066	43.380	96.742	98.258
230	28.112	43.451	96.397	98.603
231	28.134	43.485	96.235	98.765
232	28.173	43.545	95.939	99.061
233	28.192	43.575	95.796	99.204
234	28.242	43.651	95.420	99.580
235	28.289	43.723	95.065	99.935
236	28.311	43.757	94.897	100.103
237	28.320	43.771	94.829	100.171
238	28.334	43.793	94.717	100.283
239	28.355	43.825	94.561	100.439
240	28.345	43.811	94.632	100.368
241	28.359	43.831	94.529	100.471
242	28.356	43.827	94.549	100.451
243	28.364	43.840	94.486	100.514
244	28.370	43.848	94.446	100.554
245	28.371	43.849	94.439	100.561
246	28.337	43.798	94.696	100.304
247	28.266	43.688	95.239	99.761
248	28.172	43.544	95.948	99.052
249	28.098	43.430	96.498	98.502
250	28.051	43.357	96.852	98.148

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251	28.004	43.284	97.200	97.800
252	27.983	43.252	97.352	97.648
253	27.955	43.208	97.563	97.437
254	27.967	43.227	97.472	97.528
255	27.975	43.239	97.415	97.585
256	27.964	43.223	97.493	97.507
257	27.957	43.211	97.547	97.453
258	27.957	43.212	97.545	97.455
259	27.968	43.228	97.466	97.534
260	27.975	43.240	97.412	97.588
261	28.011	43.295	97.149	97.851
262	28.049	43.353	96.869	98.131
263	28.079	43.400	96.644	98.356
264	28.092	43.421	96.544	98.456
265	28.061	43.372	96.779	98.221
266	28.007	43.289	97.177	97.823
267	27.976	43.241	97.406	97.594
268	27.923	43.159	97.793	97.207
269	27.864	43.068	98.225	96.775
270	27.800	42.968	98.692	96.308
271	27.756	42.901	99.010	95.990
272	27.708	42.827	99.359	95.641
273	27.670	42.769	99.631	95.369
274	27.635	42.715	99.880	95.120
275	27.579	42.628	100.284	94.716
276	27.510	42.522	100.771	94.229
277	27.465	42.450	101.101	93.899
278	27.475	42.466	101.027	93.974
279	27.453	42.431	101.187	93.813
280	27.419	42.375	101.442	93.558
281	27.392	42.332	101.636	93.364
282	27.335	42.239	102.054	92.946
283	27.235	42.076	102.781	92.219
284	27.137	41.919	103.481	91.519
285	27.095	41.851	103.784	91.216
286	27.041	41.764	104.170	90.830
287	26.950	41.618	104.813	90.187
288	26.920	41.570	105.022	89.978
289	26.866	41.483	105.404	89.596
290	26.787	41.355	105.956	89.045
291	26.746	41.288	106.244	88.756
292	26.861	41.474	105.442	89.558
293	27.081	41.829	103.882	91.118
294	27.399	42.342	101.589	93.411
295	27.417	42.372	101.456	93.544
296	27.401	42.346	101.572	93.429
297	27.289	42.164	102.391	92.609
298	27.065	41.803	104.000	91.000
299	26.862	41.477	105.430	89.570
300	26.685	41.190	106.665	88.335
301	26.529	40.936	107.743	87.257
302	26.405	40.731	108.615	86.386

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303	26.264	40.495	109.603	85.397
304	26.145	40.294	110.434	84.566
305	26.033	40.106	111.203	83.797
306	25.904	39.888	112.094	82.906
307	25.836	39.775	112.554	82.446
308	25.743	39.618	113.190	81.810
309	25.617	39.408	114.035	80.965
310	25.593	39.368	114.194	80.806
311	25.684	39.520	113.584	81.417
312	25.716	39.573	113.371	81.630
313	25.763	39.653	113.048	81.952
314	25.822	39.752	112.649	82.351
315	25.866	39.824	112.353	82.647
316	26.009	40.064	111.373	83.627
317	26.225	40.430	109.873	85.127
318	26.246	40.465	109.729	85.271
319	26.127	40.264	110.557	84.443
320	25.862	39.819	112.375	82.625
321	25.610	39.395	114.085	80.915
322	25.633	39.434	113.930	81.070
323	25.752	39.634	113.125	81.875
324	26.007	40.061	111.388	83.612
325	26.405	40.732	108.611	86.389
326	26.706	41.223	106.524	88.476
327	27.005	41.707	104.424	90.576
328	27.139	41.923	103.466	91.534
329	27.073	41.817	103.938	91.062
330	26.851	41.458	105.513	89.487
331	26.640	41.116	106.976	88.024
332	26.522	40.924	107.792	87.208
333	26.214	40.411	109.950	85.050
334	26.199	40.386	110.055	84.945
335	26.201	40.389	110.042	84.958
336	26.218	40.417	109.927	85.073
337	26.264	40.495	109.602	85.398
338	26.344	40.628	109.046	85.955
339	26.455	40.814	108.260	86.740
340	26.576	41.011	107.423	87.577
341	26.729	41.261	106.361	88.640
342	26.796	41.369	105.898	89.102
343	26.686	41.191	106.660	88.340
344	26.827	41.419	105.680	89.320
345	26.977	41.661	104.624	90.377
346	26.983	41.671	104.581	90.419
347	26.969	41.649	104.678	90.322
348	26.858	41.470	105.459	89.541
349	26.946	41.612	104.842	90.158
350	26.934	41.593	104.925	90.076
351	26.777	41.339	106.025	88.976
352	26.667	41.161	106.788	88.212
353	26.686	41.191	106.660	88.340
354	26.723	41.251	106.404	88.596

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355	26.752	41.298	106.202	88.798
356	26.683	41.185	106.683	88.317
357	26.659	41.146	106.849	88.151
358	26.876	41.499	105.333	89.667
359	26.860	41.473	105.445	89.555