

INTERFERENCE EXHIBIT FOR HOUSTON, TX

The proposed facility is fully spaced to all relevant stations except KKBQ-FM and KROI. The instant application seeks a waiver of the minimum distance separation requirement of 47 C.F.R. Section 73.807 for second adjacent facilities. The proposed facility will not interfere with KKBQ-FM or KROI.

KKBQ-FM

As shown by the tabular and graphic analysis provided below using V-Soft's X-Field program, no population exists within the predicted region of interference with KKBQ-FM because the region does not extend far enough to reach any populated areas and/or the region exists above ground sufficiently to not interfere with any populated areas or structures. The closest the interfering contour comes to the ground is 39.7m at roughly 5.8m from the tower. This is inside the fenced compound. There are no multi-storey buildings in the area.

Tabular Analysis

1591000 Houston, TX

74.1204(d) Showing

LPFM Maximum Licensed ERP = 0.022

LPFM Antenna Height AG = 45 Meters

1591000 Antenna Model = 6812B 3 3-4

Protected Station's Contour = 80.38014 dBu

LPFM's full Interference contour 120.38014

Review Azimuth = 180 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

LPFM ERP on the horizon at Review Azimuth = 0.022 kW

Distance between stations = 43.4 km

Protected Station= KKBQ-F, 100 kW, 605 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw) Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
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00.00	1.0	1.0	0.0220	031.4923	031.4923	045.000
01.00	0.998	1.0	0.0219	031.4293	031.4245	044.451
02.00	0.99	1.0	0.0216	031.1774	031.1584	043.912
03.00	0.978	1.0	0.0210	030.7995	030.7573	043.388
04.00	0.962	1.0	0.0204	030.2956	030.2218	042.887
05.00	0.941	1.0	0.0195	029.6343	029.5215	042.417
06.00	0.916	1.0	0.0185	028.8469	028.6889	041.985
07.00	0.886	1.0	0.0173	027.9022	027.6942	041.600
08.00	0.853	1.0	0.0160	026.8629	026.6015	041.261
09.00	0.817	1.0	0.0147	025.7292	025.4124	040.975
10.00	0.777	1.0	0.0133	024.4695	024.0978	040.751
11.00	0.734	1.0	0.0119	023.1153	022.6907	040.589
12.00	0.689	1.0	0.0104	021.6982	021.2240	040.489
13.00	0.642	1.0	0.0091	020.2181	019.6999	040.452
14.00	0.593	1.0	0.0077	018.6749	018.1202	040.482
15.00	0.543	1.0	0.0065	017.1003	016.5176	040.574
16.00	0.492	1.0	0.0053	015.4942	014.8940	040.729
17.00	0.441	1.0	0.0043	013.8881	013.2813	040.940
18.00	0.389	1.0	0.0033	012.2505	011.6509	041.214
19.00	0.338	1.0	0.0025	010.6444	010.0645	041.535
20.00	0.287	1.0	0.0018	009.0383	008.4932	041.909
21.00	0.237	1.0	0.0012	007.4637	006.9679	042.325
22.00	0.189	1.0	0.0008	005.9520	005.5186	042.770
23.00	0.142	1.0	0.0004	004.4719	004.1164	043.253
24.00	0.097	1.0	0.0002	003.0548	002.7907	043.758
25.00	0.054	1.0	0.0001	001.7006	001.5413	044.281
26.00	0.014	1.0	0.0000	000.4409	000.3963	044.807
27.00	0.024	1.0	0.0000	000.7558	000.6734	044.657
28.00	0.06	1.0	0.0001	001.8895	001.6684	044.113
29.00	0.092	1.0	0.0002	002.8973	002.5340	043.595
30.00	0.122	1.0	0.0003	003.8421	003.3273	043.079
31.00	0.148	1.0	0.0005	004.6609	003.9951	042.599
32.00	0.172	1.0	0.0007	005.4167	004.5936	042.130

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33.00	0.192	1.0	0.0008	006.0465	005.0710	041.707
34.00	0.209	1.0	0.0010	006.5819	005.4566	041.319
35.00	0.224	1.0	0.0011	007.0543	005.7785	040.954
36.00	0.236	1.0	0.0012	007.4322	006.0128	040.631
37.00	0.244	1.0	0.0013	007.6841	006.1368	040.376
38.00	0.25	1.0	0.0014	007.8731	006.2041	040.153
39.00	0.254	1.0	0.0014	007.9990	006.2164	039.966
40.00	0.255	1.0	0.0014	008.0305	006.1517	039.838
41.00	0.254	1.0	0.0014	007.9990	006.0370	039.752
42.00	0.251	1.0	0.0014	007.9046	005.8742	039.711
43.00	0.245	1.0	0.0013	007.7156	005.6428	039.738
44.00	0.238	1.0	0.0012	007.4952	005.3916	039.793
45.00	0.23	1.0	0.0012	007.2432	005.1217	039.878
46.00	0.22	1.0	0.0011	006.9283	004.8128	040.016
47.00	0.209	1.0	0.0010	006.5819	004.4888	040.186
48.00	0.197	1.0	0.0009	006.2040	004.1513	040.390
49.00	0.184	1.0	0.0007	005.7946	003.8016	040.627
50.00	0.17	1.0	0.0006	005.3537	003.4413	040.899
51.00	0.156	1.0	0.0005	004.9128	003.0917	041.182
52.00	0.142	1.0	0.0004	004.4719	002.7532	041.476
53.00	0.127	1.0	0.0004	003.9995	002.4070	041.806
54.00	0.112	1.0	0.0003	003.5271	002.0732	042.146
55.00	0.098	1.0	0.0002	003.0862	001.7702	042.472
56.00	0.083	1.0	0.0002	002.6139	001.4617	042.833
57.00	0.069	1.0	0.0001	002.1730	001.1835	043.178
58.00	0.055	1.0	0.0001	001.7321	000.9179	043.531
59.00	0.042	1.0	0.0000	001.3227	000.6812	043.866
60.00	0.029	1.0	0.0000	000.9133	000.4566	044.209
61.00	0.018	1.0	0.0000	000.5669	000.2748	044.504
62.00	0.006	1.0	0.0000	000.1890	000.0887	044.833
63.00	0.004	1.0	0.0000	000.1260	000.0572	044.888
64.00	0.014	1.0	0.0000	000.4409	000.1933	044.604
65.00	0.023	1.0	0.0000	000.7243	000.3061	044.344

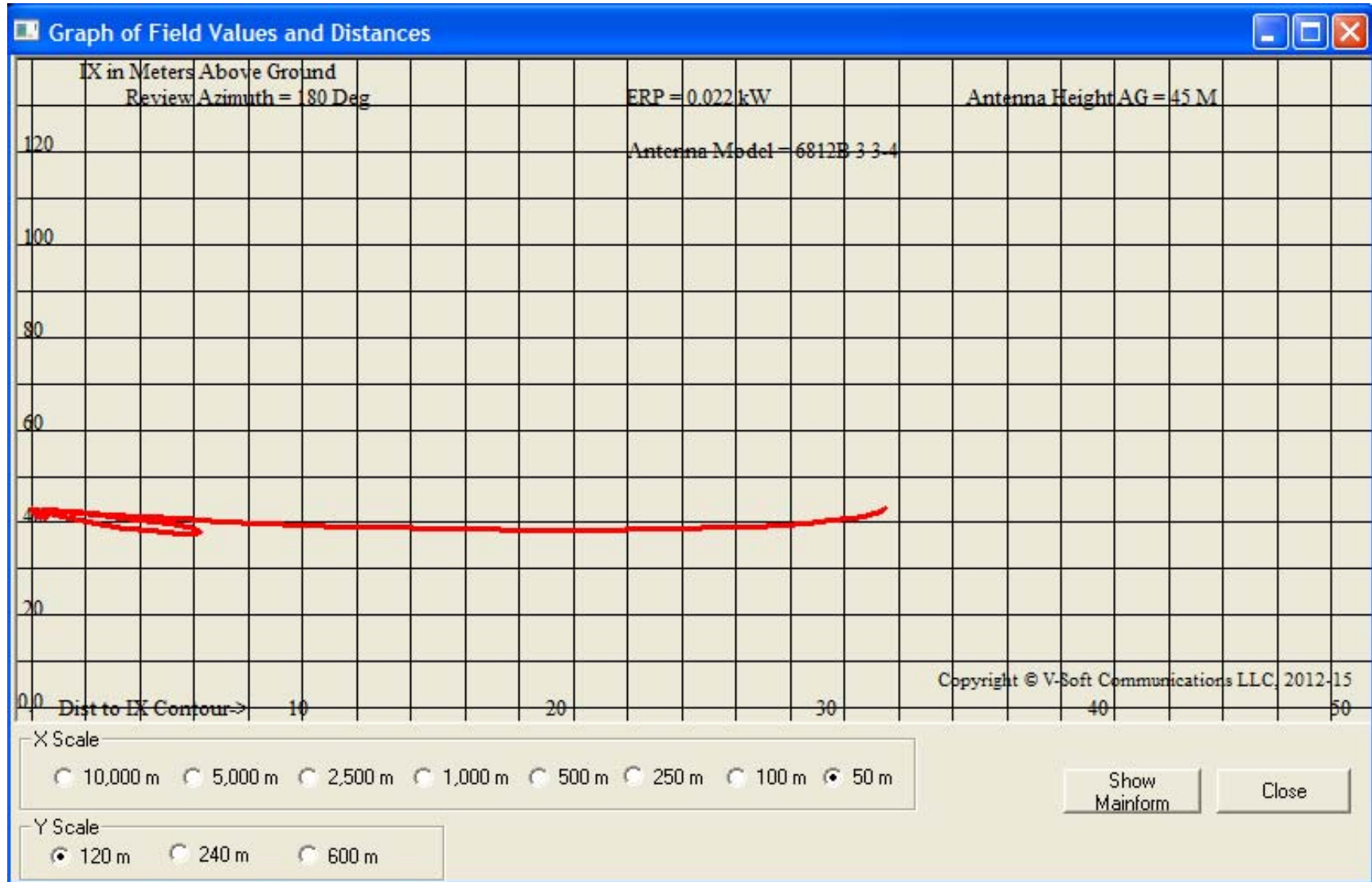
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66.00	0.031	1.0	0.0000	000.9763	000.3971	044.108
67.00	0.038	1.0	0.0000	001.1967	000.4676	043.898
68.00	0.044	1.0	0.0000	001.3857	000.5191	043.715
69.00	0.049	1.0	0.0001	001.5431	000.5530	043.559
70.00	0.054	1.0	0.0001	001.7006	000.5816	043.402
71.00	0.057	1.0	0.0001	001.7951	000.5844	043.303
72.00	0.06	1.0	0.0001	001.8895	000.5839	043.203
73.00	0.062	1.0	0.0001	001.9525	000.5709	043.133
74.00	0.063	1.0	0.0001	001.9840	000.5469	043.093
75.00	0.063	1.0	0.0001	001.9840	000.5135	043.084
76.00	0.063	1.0	0.0001	001.9840	000.4800	043.075
77.00	0.061	1.0	0.0001	001.9210	000.4321	043.128
78.00	0.059	1.0	0.0001	001.8580	000.3863	043.183
79.00	0.057	1.0	0.0001	001.7951	000.3425	043.238
80.00	0.054	1.0	0.0001	001.7006	000.2953	043.325
81.00	0.05	1.0	0.0001	001.5746	000.2463	043.445
82.00	0.046	1.0	0.0000	001.4486	000.2016	043.565
83.00	0.042	1.0	0.0000	001.3227	000.1612	043.687
84.00	0.037	1.0	0.0000	001.1652	000.1218	043.841
85.00	0.031	1.0	0.0000	000.9763	000.0851	044.027
86.00	0.026	1.0	0.0000	000.8188	000.0571	044.183
87.00	0.02	1.0	0.0000	000.6298	000.0330	044.371
88.00	0.013	1.0	0.0000	000.4094	000.0143	044.591
89.00	0.007	1.0	0.0000	000.2204	000.0038	044.780
90.00	0.001	1.0	0.0000	000.0315	000.0000	044.969

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INTERFERENCE EXHIBIT FOR HOUSTON, TX

Graphic Analysis



INTERFERENCE EXHIBIT FOR HOUSTON, TX

KROI

As shown by the tabular and graphic analysis provided below using V-Soft's X-Field program, no population exists within the predicted region of interference with KKBQ-FM because the region does not extend far enough to reach any populated areas and/or the region exists above ground sufficiently to not interfere with any populated areas or structures. The closest the interfering contour comes to the ground is 6m at roughly 43m from the tower. There are no multi-storey buildings in the area.

Tabular Analysis

1591000 Houston, TX

74.1204(d) Showing

LPFM Maximum Licensed ERP = 0.022

LPFM Antenna Height AG = 45 Meters

1591000 Antenna Model = 6812B 3 3-4

Protected Station's Contour = 63.02551 dBu

LPFM's full Interference contour 103.02551

Review Azimuth = 180 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.022 kW

Distance between stations = 64.9 km

Protected Station= KROI, 22 kW, 537.4 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0220	232.2394	232.2394	045.000
01.00	0.998	1.0	0.0219	231.7749	231.7396	040.955
02.00	0.99	1.0	0.0216	229.9170	229.7769	036.976
03.00	0.978	1.0	0.0210	227.1301	226.8188	033.113

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04.00	0.962	1.0	0.0204	223.4143	222.8700	029.415
05.00	0.941	1.0	0.0195	218.5372	217.7056	025.953
06.00	0.916	1.0	0.0185	212.7313	211.5659	022.764
07.00	0.886	1.0	0.0173	205.7641	204.2303	019.924
08.00	0.853	1.0	0.0160	198.1002	196.1723	017.430
09.00	0.817	1.0	0.0147	189.7396	187.4035	015.318
10.00	0.777	1.0	0.0133	180.4500	177.7086	013.665
11.00	0.734	1.0	0.0119	170.4637	167.3318	012.474
12.00	0.689	1.0	0.0104	160.0129	156.5163	011.731
13.00	0.642	1.0	0.0091	149.0977	145.2763	011.460
14.00	0.593	1.0	0.0077	137.7179	133.6271	011.683
15.00	0.543	1.0	0.0065	126.1060	121.8090	012.361
16.00	0.492	1.0	0.0053	114.2618	109.8355	013.505
17.00	0.441	1.0	0.0043	102.4176	097.9424	015.056
18.00	0.389	1.0	0.0033	090.3411	085.9195	017.083
19.00	0.338	1.0	0.0025	078.4969	074.2203	019.444
20.00	0.287	1.0	0.0018	066.6527	062.6330	022.203
21.00	0.237	1.0	0.0012	055.0407	051.3849	025.275
22.00	0.189	1.0	0.0008	043.8932	040.6971	028.557
23.00	0.142	1.0	0.0004	032.9780	030.3564	032.114
24.00	0.097	1.0	0.0002	022.5272	020.5796	035.837
25.00	0.054	1.0	0.0001	012.5409	011.3659	039.700
26.00	0.014	1.0	0.0000	003.2514	002.9223	043.575
27.00	0.024	1.0	0.0000	005.5737	004.9662	042.470
28.00	0.06	1.0	0.0001	013.9344	012.3033	038.458
29.00	0.092	1.0	0.0002	021.3660	018.6871	034.642
30.00	0.122	1.0	0.0003	028.3332	024.5373	030.833
31.00	0.148	1.0	0.0005	034.3714	029.4621	027.297
32.00	0.172	1.0	0.0007	039.9452	033.8754	023.832
33.00	0.192	1.0	0.0008	044.5900	037.3963	020.715
34.00	0.209	1.0	0.0010	048.5380	040.2398	017.858
35.00	0.224	1.0	0.0011	052.0216	042.6136	015.162
36.00	0.236	1.0	0.0012	054.8085	044.3410	012.784

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37.00	0.244	1.0	0.0013	056.6664	045.2558	010.897
38.00	0.25	1.0	0.0014	058.0598	045.7518	009.255
39.00	0.254	1.0	0.0014	058.9888	045.8429	007.877
40.00	0.255	1.0	0.0014	059.2210	045.3659	006.933
41.00	0.254	1.0	0.0014	058.9888	044.5194	006.300
42.00	0.251	1.0	0.0014	058.2921	043.3195	005.995
43.00	0.245	1.0	0.0013	056.8986	041.6130	006.195
44.00	0.238	1.0	0.0012	055.2730	039.7600	006.604
45.00	0.23	1.0	0.0012	053.4151	037.7701	007.230
46.00	0.22	1.0	0.0011	051.0927	035.4919	008.247
47.00	0.209	1.0	0.0010	048.5380	033.1029	009.502
48.00	0.197	1.0	0.0009	045.7512	030.6135	011.000
49.00	0.184	1.0	0.0007	042.7320	028.0347	012.750
50.00	0.17	1.0	0.0006	039.4807	025.3777	014.756
51.00	0.156	1.0	0.0005	036.2293	022.7999	016.845
52.00	0.142	1.0	0.0004	032.9780	020.3033	019.013
53.00	0.127	1.0	0.0004	029.4944	017.7502	021.445
54.00	0.112	1.0	0.0003	026.0108	015.2888	023.957
55.00	0.098	1.0	0.0002	022.7595	013.0543	026.357
56.00	0.083	1.0	0.0002	019.2759	010.7789	029.020
57.00	0.069	1.0	0.0001	016.0245	008.7276	031.561
58.00	0.055	1.0	0.0001	012.7732	006.7687	034.168
59.00	0.042	1.0	0.0000	009.7541	005.0237	036.639
60.00	0.029	1.0	0.0000	006.7349	003.3675	039.167
61.00	0.018	1.0	0.0000	004.1803	002.0267	041.344
62.00	0.006	1.0	0.0000	001.3934	000.6542	043.770
63.00	0.004	1.0	0.0000	000.9290	000.4217	044.172
64.00	0.014	1.0	0.0000	003.2514	001.4253	042.078
65.00	0.023	1.0	0.0000	005.3415	002.2574	040.159
66.00	0.031	1.0	0.0000	007.1994	002.9283	038.423
67.00	0.038	1.0	0.0000	008.8251	003.4482	036.876
68.00	0.044	1.0	0.0000	010.2185	003.8279	035.526
69.00	0.049	1.0	0.0001	011.3797	004.0781	034.376

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70.00	0.054	1.0	0.0001	012.5409	004.2892	033.215
71.00	0.057	1.0	0.0001	013.2376	004.3098	032.484
72.00	0.06	1.0	0.0001	013.9344	004.3060	031.748
73.00	0.062	1.0	0.0001	014.3988	004.2098	031.230
74.00	0.063	1.0	0.0001	014.6311	004.0329	030.936
75.00	0.063	1.0	0.0001	014.6311	003.7868	030.867
76.00	0.063	1.0	0.0001	014.6311	003.5396	030.804
77.00	0.061	1.0	0.0001	014.1666	003.1868	031.196
78.00	0.059	1.0	0.0001	013.7021	002.8488	031.597
79.00	0.057	1.0	0.0001	013.2376	002.5259	032.006
80.00	0.054	1.0	0.0001	012.5409	002.1777	032.650
81.00	0.05	1.0	0.0001	011.6120	001.8165	033.531
82.00	0.046	1.0	0.0000	010.6830	001.4868	034.421
83.00	0.042	1.0	0.0000	009.7541	001.1887	035.319
84.00	0.037	1.0	0.0000	008.5929	000.8982	036.454
85.00	0.031	1.0	0.0000	007.1994	000.6275	037.828
86.00	0.026	1.0	0.0000	006.0382	000.4212	038.976
87.00	0.02	1.0	0.0000	004.6448	000.2431	040.362
88.00	0.013	1.0	0.0000	003.0191	000.1054	041.983
89.00	0.007	1.0	0.0000	001.6257	000.0284	043.375
90.00	0.001	1.0	0.0000	000.2322	000.0000	044.768

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Graphic Analysis

