HAAT Calculation

HAAT has been calculated for the application contemplated herein by using 8 evenly spaced radials as per FCC regulation. The 8 radials used to calculate HAAT for this application begin at 42 degrees azimuth and are evenly spaced from this azimuth. The result is shown in the chart below. Furthermore, a tabulation showing the HAAT for each of the 360 radials is shown at Exhibit 30-A. Also, the more accurate 3 second USGS terrain database was used.

Degree Azimuth	Distance	HAAT
44	28.86	219.6
89	25.01	162.3
134	11.25	29.9
179	26.35	181.3
224	21.33	96.1
269	34.94	323.3
314	36.2	340.3
359	34.58	310.4
		207.9 Average of 8 radials

Therefore, the HAAT of 207.9 meters has been used for all calculations in this application.

Exhibit 30-A

Distance to Contour Report

Type of contour: FCC
Location Variability: 50.0 %
Time Variability: 50.0 %
# of Radials Calculated: 360
FCC Matching HAAT Calculation Used
Field Strength: 60.00 dBuV/m

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Transmitter Information:

Call Letters: KLSI.A
File Number: BPED20121227AAJ
Latitude: 34-09-53 N
Longitude: 118-54-08 W
ERP: 1.40 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 505.0 m

Azimuth (deg)	Distance (km)	HAAT (m)
0.0	34.41	311.0
1.0	34.38	310.3
2.0	34.37	310.2
3.0	34.37	310.2
4.0	34.41	311.0
5.0	34.31	309.0
6.0	34.27	308.4
7.0	34.24	307.8
8.0	34.14	305.8
9.0	33.99	303.1
10.0	33.84	300.2
11.0	33.75	298.5
12.0	33.45	293.2
13.0	33.26	289.8
14.0	33.14	287.6
15.0	33.10	286.8
16.0	33.13	287.4
17.0	33.15	287.7
18.0	33.02	285.5
19.0	32.97	284.6
20.0	32.80	281.6
21.0	32.63	278.6
22.0	32.22	271.7
23.0	31.78	264.3

24.0	31.45	258.8
25.0	31.11	253.1
26.0	31.01	251.4
27.0	31.07	252.4
28.0	31.04	251.9
29.0	30.87	248.9
30.0	30.83	248.3
31.0	30.77	247.2
32.0	30.66	245.5
33.0	30.44	241.8
34.0	30.02	234.9
35.0	29.50	226.8
36.0	29.11	221.0
37.0	28.77	215.8
38.0	28.65	214.0
39.0	28.49	211.7
40.0	28.57	212.9
41.0	28.79	216.2
42.0	28.94	218.4
43.0	29.05	220.1
44.0	29.02	219.6
45.0	28.93	218.3
46.0	28.81	216.4
47.0	28.59	213.3
48.0	28.38	210.0
49.0	28.11	206.0
50.0	27.76	200.7
51.0	27.44	195.9
52.0	27.20	192.2
53.0	27.07	190.1
54.0	26.88	187.2
55.0	26.49	181.0
56.0	25.77	169.9
57.0	25.01	158.8
58.0	24.39	150.1
59.0	23.40	136.8
60.0	22.49	124.8
61.0	21.59	113.7
62.0	20.80	105.4
63.0	20.12	98.7
64.0	19.73	95.2
65.0	18.83	87.2
66.0	16.78	70.6
67.0	14.84	55.5
68.0	13.87	48.7
69.0	14.97	56.5
70.0	15.94	64.0
71.0	16.97	72.1
72.0	18.61	85.4
73.0	20.19	99.4
74.0	21.10	108.4
75.0	21.80	116.2
76.0	22.14	120.3

77.0	22.68	127.3
78.0	23.02	131.8
79.0	23.33	135.8
80.0	23.86	143.0
81.0	24.16	147.0
82.0	24.31	149.1
83.0	24.37	149.9
84.0	24.35	149.6
85.0	24.39	150.2
86.0	24.40	150.4
87.0	24.74	155.0
88.0	25.09	159.9
89.0	25.25	162.3
90.0	25.16	161.0
91.0	25.36	163.9
92.0	25.68	168.6
93.0	26.08	174.6
94.0	26.44	180.1
95.0	26.75	185.1
96.0	26.84	186.5
97.0	26.90	187.4
98.0	26.99	188.8
99.0	27.05	189.9
100.0	27.14	191.2
101.0	26.93	188.0
102.0	26.49	180.9
103.0	26.04	173.9
104.0	25.03	159.1
105.0	23.97	144.5
106.0	24.34	149.5
107.0	25.38	164.1
108.0	25.82	170.6
109.0	26.20	176.3
110.0	26.94	188.1
111.0	27.53	197.2
112.0	27.78	201.0
113.0	27.88	202.6
114.0	27.91	203.0
115.0	28.45	211.1
116.0	28.53	212.4
117.0	28.08	205.5
118.0	27.19	192.0
119.0	26.21	176.5
120.0	25.74	169.3
121.0	24.65	153.8
122.0	23.50	138.2
123.0	22.69	127.5
124.0	21.16	109.1
125.0	18.53	84.7
126.0	16.41	67.7
127.0	15.33	59.2
128.0	13.75	47.9
129.0	11.13	30.7

130.0	11.03	21.0
131.0	11.03	18.5
132.0	11.03	23.0
133.0	11.03	29.2
134.0	11.03	29.9
135.0	11.30	31.8
136.0	11.03	29.4
137.0	11.03	25.2
138.0	11.03	29.2
139.0	12.49	39.5
140.0	14.63	54.0
141.0	15.75	62.6
142.0	15.00	56.7
143.0	13.83	48.4
144.0	14.37	52.1
145.0	17.05	72.6
146.0	19.73	95.2
147.0	19.88	96.5
148.0	20.09	98.5
149.0	19.74	95.3
150.0	19.26	90.9
151.0	19.52	93.2
152.0	20.49	102.2
153.0	21.80	116.2
154.0	22.99	131.4
155.0	24.28	148.7
156.0	25.79	170.1
157.0	26.64	183.3
158.0	26.21	176.5
159.0	24.89	157.1
160.0	23.32	135.8
161.0	22.12	120.0
162.0	21.70	115.0
163.0	22.30	122.4
164.0	23.01	131.7
165.0	23.80	142.1
166.0	24.29	148.8
167.0	24.99	158.6
168.0	25.35	163.7
169.0	25.37	163.9
170.0	25.32	163.2
171.0	25.71	168.9
172.0	26.16	175.8
173.0	26.77	185.5
174.0	27.20	192.3
175.0	27.45	196.0
176.0	27.53	197.3
177.0	27.50	196.8
178.0	27.25	193.0
179.0	26.51	181.3
180.0	26.08	174.5
181.0	25.93	172.2
182.0	26.46	180.5

183.0	26.98	188.8
184.0	27.19	192.1
185.0	26.53	181.6
186.0	26.37	179.0
187.0	26.29	177.8
188.0	26.50	181.1
189.0	27.00	189.1
190.0	27.59	198.2
191.0	28.11	206.0
192.0	29.00	219.4
193.0	29.31	224.0
194.0	28.57	212.8
195.0	27.24	192.8
196.0	25.91	171.9
197.0	24.37	149.9
198.0	23.31	135.7
199.0	22.56	125.7
200.0	22.31	122.5
201.0	22.48	124.7
202.0	22.83	129.3
203.0	23.36	136.3
204.0	23.90	143.6
205.0	24.42	150.6
206.0	24.83	156.3
207.0	24.28	148.7
208.0	22.82	129.2
209.0	22.09	119.7
210.0	21.04	107.9
211.0	19.52	93.3
212.0	18.36	83.2
213.0	18.41	83.6
214.0	19.30	91.3
215.0	20.14	98.9
216.0	20.53	102.7
217.0	20.19	99.4
218.0	18.86	87.5
219.0	18.20	81.9
220.0	17.78	78.5
221.0	17.57	76.8
222.0	17.08	72.9
223.0	18.01	80.4
224.0	19.84	96.1
225.0	22.22	121.4
226.0	24.39	150.2
227.0	26.35	178.7
228.0	28.02	204.7
229.0	29.30	223.8
230.0	29.71	230.1
231.0	29.84	232.2
232.0	29.66	229.3
233.0	29.37	224.8
234.0	29.55	227.6
235.0	29.88	232.8

236.0	30.25	238.7
237.0	30.28	239.1
238.0	30.05	235.4
239.0	30.10	236.2
240.0	30.06	235.6
241.0	30.54	243.5
242.0	31.13	253.3
243.0	31.66	262.4
244.0	31.90	266.3
245.0	31.63	261.8
246.0	31.04	251.8
247.0	30.67	245.7
248.0	30.41	241.2
249.0	30.99	251.0
250.0	31.80	264.6
251.0	32.46	275.7
252.0	32.83	282.1
253.0	32.97	284.6
254.0	33.49	293.8
255.0	34.08	304.7
256.0	34.56	313.7
257.0	34.78	317.8
258.0	34.81	318.4
259.0	34.66	315.6
260.0	34.51	312.7
261.0	34.47	312.0
262.0	34.56	313.7
263.0	34.83	318.7
264.0	35.18	325.2
265.0	35.63	333.8
266.0	35.89	338.6
267.0	35.83	337.6
268.0	35.55	332.1
269.0	35.08	323.3
270.0	34.77	317.5
271.0	34.51	312.7
272.0	34.53	313.1
273.0	34.68	315.9
274.0	34.84	318.8
275.0	35.18	325.3
276.0	35.70	334.9
277.0	36.31	346.7
278.0	36.68	354.3
279.0	37.04	361.6
280.0	37.28	366.8
281.0	37.38	369.0
282.0	37.33	367.8
283.0	37.30	367.2
284.0	37.28	366.8
285.0	37.25	366.2
286.0	37.05	361.9
287.0	36.64	353.4
288.0	36.20	344.6

289.0	35.92	339.2
290.0	35.75	336.0
291.0	35.97	340.1
292.0	36.32	347.0
293.0	36.77	355.9
294.0	37.28	366.8
295.0	37.65	375.2
296.0	37.91	381.2
297.0	38.08	385.4
298.0	38.13	386.6
299.0	38.10	385.9
300.0	38.04	384.4
301.0	37.97	382.7
302.0	37.90	381.0
303.0	37.96	382.5
304.0	37.98	383.0
305.0	37.96	382.5
306.0	37.89	380.9
307.0	37.82	379.1
308.0	37.55	372.8
309.0	37.14	363.8
310.0	36.80	356.7
311.0	36.43	349.1
312.0	36.19	344.4
313.0	36.00	340.8
314.0	35.98	340.3
315.0	36.05	341.8
316.0	36.00	340.8
317.0	36.11	342.9
318.0	36.23	345.2
319.0	36.42	349.0
320.0	36.62	353.0
321.0	36.68	354.2
322.0	36.56	351.7
323.0	36.48	350.1
324.0	36.50	350.5
325.0	36.64	353.3
326.0	36.71	354.7
327.0	36.71	354.7
328.0	36.70	354.6
329.0	36.68	354.3
330.0	36.61	352.7
331.0	36.70	354.6
332.0	36.77	356.0
333.0	36.73	355.2
334.0	36.60	352.5
335.0	36.60	352.6
336.0	36.75	355.6
337.0	36.72	355.0
338.0	36.61	352.9
339.0	36.57	352.0
340.0	36.53	351.1
341.0	36.32	347.1

342.0	36.14	343.4
343.0	35.98	340.4
344.0	35.90	338.9
345.0	35.96	340.0
346.0	36.06	342.0
347.0	36.11	342.9
348.0	36.05	341.7
349.0	35.94	339.6
350.0	35.83	337.5
351.0	35.75	336.0
352.0	35.65	334.1
353.0	35.53	331.9
354.0	35.45	330.2
355.0	35.26	326.8
356.0	35.06	323.0
357.0	34.87	319.4
358.0	34.59	314.3
359.0	34.38	310.4