

Exhibit 16-1  
Site to Site RSS Calculations  
KCTC-AM 1320 kHz West Sacramento, CA  
Proposed

Licensed

Point: KSDT		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KKSM	68.6	27.3	64.4	64.5	424.614	5.4808	5.4808
KFNZ	888.1	212.0	7.2	366.0	53.897	3.9452	6.7531
KYHN	2076.1	271.5	.0	1367.2	12.860	3.5162	7.6137
<b>KCTC-L</b>	<b>674.5</b>	<b>143.5</b>	<b>10.5</b>	<b>203.9</b>	<b>81.958</b>	<b>3.3429</b>	<b>8.3152</b>
KXYZ	2107.6	287.9	.0	1094.4	13.466	2.9474	8.8221
KWKW *	127.9	103.2	48.1	266.9	367.481	1.9617	
XESR	844.7	328.8	7.8	150.6	63.226	1.9048	
KOLT	1472.6	236.6	2.3	405.1	22.659	1.8359	

\* - indicates an adjacent channel station.

Point: KKSM		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KCTC-L	709.9	148.4	9.9	467.1	76.440	7.1405	7.1405
KSDT	68.6	207.5	64.4	71.6	424.614	6.0823	9.3798
KFNZ	956.6	211.9	6.4	367.3	48.246	3.5441	10.0270
KYHN	2119.8	270.0	.0	1407.1	12.469	3.5092	10.6234
KXYZ	2133.3	286.2	.0	1094.3	13.252	2.9003	11.0122
KWKW *	130.2	134.0	47.6	283.8	364.117	2.0669	
XESR	813.8	324.6	8.2	150.4	67.107	2.0188	
KOLT	1536.8	235.6	1.9	413.3	21.172	1.7499	

\* - indicates an adjacent channel station.

Point: PORTERV		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	800.5	233.1	8.4	748.5	62.192	9.3105	9.3105
KSDT	321.0	324.9	23.4	217.7	199.816	8.7018	12.7439
<b>KCTC-L</b>	<b>353.7</b>	<b>144.6</b>	<b>21.3</b>	<b>171.4</b>	<b>181.470</b>	<b>6.2217</b>	<b>14.1816</b>
KKSM	357.8	334.5	21.1	137.9	178.793	4.9294	15.0139
KYHN	2223.2	279.2	.0	1120.4	10.849	2.4310	
KXYZ	2331.9	294.0	.0	1083.7	10.849	2.3514	
KXRO	1270.3	160.2	3.6	319.7	27.894	1.7835	

Point: KSDT		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KKSM	68.6	27.3	64.4	64.5	424.614	5.4808	5.4808
KFNZ	888.1	212.0	7.2	366.0	53.897	3.9452	6.7531
KYHN	2076.1	271.5	.0	1367.2	12.860	3.5162	7.6137
KCTC-A	679.6	141.7	10.4	192.0	81.124	3.1147	8.2261
KXYZ	2107.6	287.9	.0	1094.4	13.466	2.9474	8.7382
KWKW *	127.9	103.2	48.1	266.9	367.481	1.9617	
XESR	844.7	328.8	7.8	150.6	63.226	1.9048	
KOLT	1472.6	236.6	2.3	405.1	22.659	1.8359	

\* - indicates an adjacent channel station.

Point: KKSM		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KSDT	68.6	207.5	64.4	71.6	424.614	6.0823	6.0823
KFNZ	956.6	211.9	6.4	367.3	48.246	3.5441	7.0395
KYHN	2119.8	270.0	.0	1407.1	12.469	3.5092	7.8657
KXYZ	2133.3	286.2	.0	1094.3	13.252	2.9003	8.3834
KCTC-A	713.2	146.6	9.8	189.4	75.958	2.8777	8.8635
KWKW *	130.2	134.0	47.6	283.8	364.117	2.0669	
XESR	813.8	324.6	8.2	150.4	67.107	2.0188	
KOLT	1536.8	235.6	1.9	413.3	21.172	1.7499	

\* - indicates an adjacent channel station.

Point: PORTERV		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	800.5	233.1	8.4	748.5	62.192	9.3105	9.3105
KSDT	321.0	324.9	23.4	217.7	199.816	8.7018	12.7439
<b>KCTC-A</b>	<b>358.7</b>	<b>141.2</b>	<b>21.1</b>	<b>157.5</b>	<b>178.764</b>	<b>5.6306</b>	<b>13.9324</b>
KKSM	357.8	334.5	21.1	137.9	178.793	4.9294	14.7787
KYHN	2223.2	279.2	.0	1120.4	10.849	2.4310	
KXYZ	2331.9	294.0	.0	1083.7	10.849	2.3514	
KXRO	1270.3	160.2	3.6	319.7	27.894	1.7835	

Hatfield & Dawson Consulting Engineers

Point: KSDT		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KKSM	91.1	9.0	57.5	83.2	404.707	6.7341	6.7341
KFNZ	871.3	213.9	7.4	405.5	55.400	4.4929	8.0953
KSDT	33.8	329.5	76.7	49.9	449.125	4.4838	9.2541
KYHN	2087.3	272.4	.0	1341.7	12.679	3.4023	9.8597
<b>KCTC-L</b>	<b>640.7</b>	<b>143.4</b>	<b>11.2</b>	<b>190.8</b>	<b>87.912</b>	<b>3.3547</b>	<b>10.4148</b>
KXYZ	2128.1	288.7	.0	1094.0	13.194	2.8869	10.8075
XESR	878.5	328.9	7.3	150.9	59.613	1.7986	
KOLT	1466.4	237.9	2.3	393.6	22.748	1.7908	
KWKW *	107.0	90.1	53.1	190.3	389.890	1.4843	

\* - indicates an adjacent channel station.

Point: SANTA M		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
<b>KCTC-L</b>	<b>427.2</b>	<b>168.6</b>	<b>17.7</b>	<b>1107.2</b>	<b>147.094</b>	<b>32.5730</b>	<b>32.5730</b>
KSDT	339.2	293.9	22.2	199.5	188.657	7.5261	
KFNZ	977.2	232.3	6.2	753.5	46.189	6.9610	
KKSM	341.9	305.3	22.1	79.2	186.940	2.9593	

\* - indicates an adjacent channel station.

Point: SANTA M		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
<b>KCTC-L</b>	<b>426.4</b>	<b>168.6</b>	<b>17.7</b>	<b>1106.8</b>	<b>147.416</b>	<b>32.6318</b>	<b>32.6318</b>
KSDT	339.7	294.1	22.2	199.8	188.377	7.5262	
KFNZ	976.8	232.3	6.2	754.1	46.214	6.9697	
KKSM	342.5	305.4	22.0	78.8	186.600	2.9395	

\* - indicates an adjacent channel station.

Point: KSDT		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KKSM	91.1	9.0	57.5	83.2	404.707	6.7341	6.7341
KFNZ	871.3	213.9	7.4	405.5	55.400	4.4929	8.0953
KSDT	33.8	329.5	76.7	49.9	449.125	4.4838	9.2541
KYHN	2087.3	272.4	.0	1341.7	12.679	3.4023	9.8597
<b>KCTC-A</b>	<b>645.9</b>	<b>141.4</b>	<b>11.1</b>	<b>190.3</b>	<b>86.968</b>	<b>3.3092</b>	<b>10.4002</b>
KXYZ	2128.1	288.7	.0	1094.0	13.194	2.8869	10.7935
XESR	878.5	328.9	7.3	150.9	59.613	1.7986	
KOLT	1466.4	237.9	2.3	393.6	22.748	1.7908	
KWKW *	107.0	90.1	53.1	190.3	389.890	1.4843	

\* - indicates an adjacent channel station.

Point: SANTA M		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KSDT	339.2	293.9	22.2	199.5	188.657	7.5261	7.5261
KFNZ	977.2	232.3	6.2	753.5	46.189	6.9610	10.2517
<b>KCTC-A</b>	<b>423.4</b>	<b>165.6</b>	<b>17.8</b>	<b>190.1</b>	<b>148.652</b>	<b>5.6526</b>	<b>11.7068</b>
KKSM	341.9	305.3	22.1	79.2	186.940	2.9593	12.0751
KWKW *	214.4	299.1	33.4	506.2	280.008	2.8350	
KYHN	2360.3	276.3	.0	1218.2	9.865	2.4035	
KXYZ	2433.0	290.4	.0	1092.2	10.173	2.2223	

\* - indicates an adjacent channel station.

Point: SANTA M		Frequency: 1320 kHz					
Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KSDT	339.7	294.1	22.2	199.8	188.377	7.5262	7.5262
KFNZ	976.8	232.3	6.2	754.1	46.214	6.9697	10.2578
<b>KCTC-A</b>	<b>422.6</b>	<b>165.6</b>	<b>17.9</b>	<b>190.1</b>	<b>148.979</b>	<b>5.6631</b>	<b>11.7172</b>
KKSM	342.5	305.4	22.0	78.8	186.600	2.9395	12.0803
KWKW *	215.0	299.3	33.3	507.5	279.497	2.8370	
KYHN	2360.4	276.4	.0	1217.5	9.863	2.4017	
KXYZ	2433.3	290.4	.0	1092.2	10.170	2.2215	

\* - indicates an adjacent channel station.

Hatfield & Dawson Consulting Engineers

Point: EWA BEA      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
<b>KCTC-L</b>	<b>3988.0</b>	<b>251.7</b>	<b>.0</b>	<b>1289.3</b>	<b>5.234</b>	<b>1.3498</b>	<b>1.3498</b>
KFNZ	4820.5	257.8	.0	949.6	3.172	.6024	1.4781
KKSM	4200.9	262.2	.0	419.7	5.086	.4269	1.5385
KYHN	6314.2	273.9	.0	1296.2	1.642	.4255	1.5963
KXYZ	6299.3	277.2	.0	1080.2	1.951	.4216	1.6510
KXRO	4187.6	239.0	.0	403.1	4.069	.3281	
OAX4I	9572.0	292.8	.0	978.6	1.499	.2934	
HCVG8	7814.9	293.1	.0	692.0	2.100	.2906	

\* - indicates an adjacent channel station.

Point: EWA BEA      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
<b>KCTC-L</b>	<b>3988.2</b>	<b>251.7</b>	<b>.0</b>	<b>1289.2</b>	<b>5.234</b>	<b>1.3494</b>	<b>1.3494</b>
KFNZ	4820.7	257.8	.0	949.6	3.171	.6023	1.4777
KKSM	4201.2	262.2	.0	419.7	5.085	.4268	1.5381
KYHN	6314.5	273.9	.0	1296.0	1.641	.4254	1.5958
KXYZ	6299.6	277.2	.0	1080.2	1.951	.4215	1.6506
KXRO	4187.6	239.0	.0	403.3	4.069	.3282	
OAX4I	9572.7	292.8	.0	978.6	1.499	.2933	
HCVG8	7815.6	293.1	.0	692.0	2.100	.2906	

\* - indicates an adjacent channel station.

Point: MERLIN      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	975.7	285.6	6.2	793.4	42.794	6.7901	6.7901
KXRO	503.4	176.3	14.8	267.7	111.476	5.9683	9.0403
<b>KCTC-L</b>	<b>450.0</b>	<b>337.7</b>	<b>26.9</b>	<b>172.8</b>	<b>136.001</b>	<b>4.6989</b>	<b>10.1885</b>
KKPZ *	342.3	192.0	34.1	503.1	181.332	1.8247	
KSDT	1116.3	331.8	4.8	226.4	37.535	1.6999	
CHMB	748.4	182.3	9.2	114.8	60.044	1.3785	

Point: EWA BEA      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	4820.5	257.8	.0	949.6	3.172	.6024	.6024
KKSM	4200.9	262.2	.0	419.7	5.086	.4269	.7384
KYHN	6314.2	273.9	.0	1296.2	1.642	.4255	.8522
KXYZ	6299.3	277.2	.0	1080.2	1.951	.4216	.9508
<b>KCTC-A</b>	<b>3966.9</b>	<b>251.6</b>	<b>.0</b>	<b>325.1</b>	<b>5.304</b>	<b>.3449</b>	<b>1.0114</b>
KXRO	4187.6	239.0	.0	403.1	4.069	.3281	1.0633
OAX4I	9572.0	292.8	.0	978.6	1.499	.2934	1.1031
HCVG8	7814.9	293.1	.0	692.0	2.100	.2906	1.1407
YSHQ	7286.2	287.5	.0	692.0	1.927	.2667	
CHMB	4365.3	237.5	.0	324.2	3.516	.2280	
CHQM	4365.3	237.5	.0	315.6	3.516	.2219	

\* - indicates an adjacent channel station.

Point: EWA BEA      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	4820.7	257.8	.0	949.6	3.171	.6023	.6023
KKSM	4201.2	262.2	.0	419.7	5.085	.4268	.7382
KYHN	6314.5	273.9	.0	1296.0	1.641	.4254	.8520
KXYZ	6299.6	277.2	.0	1080.2	1.951	.4215	.9506
<b>KCTC-A</b>	<b>3967.1</b>	<b>251.6</b>	<b>.0</b>	<b>325.2</b>	<b>5.303</b>	<b>.3449</b>	<b>1.0112</b>
KXRO	4187.6	239.0	.0	403.3	4.069	.3282	1.0631
OAX4I	9572.7	292.8	.0	978.6	1.499	.2933	1.1028
HCVG8	7815.6	293.1	.0	692.0	2.100	.2906	1.1405
YSHQ	7286.8	287.5	.0	692.0	1.926	.2666	
CHMB	4365.3	237.5	.0	324.6	3.516	.2282	
CHQM	4365.3	237.5	.0	315.9	3.516	.2222	

\* - indicates an adjacent channel station.

Point: MERLIN      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	975.7	285.6	6.2	793.4	42.794	6.7901	6.7901
KXRO	503.4	176.3	14.8	267.7	111.476	5.9683	9.0403
<b>KCTC-A</b>	<b>450.9</b>	<b>340.2</b>	<b>16.7</b>	<b>154.5</b>	<b>135.754</b>	<b>4.1951</b>	<b>9.9662</b>
KKPZ *	342.3	192.0	34.1	503.1	181.332	1.8247	
KSDT	1116.3	331.8	4.8	226.4	37.535	1.6999	
CHMB	748.4	182.3	9.2	114.8	60.044	1.3785	

Hatfield & Dawson Consulting Engineers

Point: MERLIN Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	969.7	285.8	6.3	789.9	43.208	6.8262	6.8262
KXRO	500.5	175.5	14.9	269.1	112.319	6.0459	9.1187
<b>KCTC-L</b>	<b>450.6</b>	<b>338.6</b>	<b>26.9</b>	<b>161.1</b>	<b>135.772</b>	<b>4.3748</b>	<b>10.1138</b>
KKPZ *	337.7	191.0	34.5	508.7	183.980	1.8718	
KSDT	1115.7	332.2	4.8	225.5	37.552	1.6938	
CHMB	744.8	181.8	9.3	114.9	60.464	1.3898	

\* - indicates an adjacent channel station.

Point: KFNZ Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KXYZ	1941.9	313.2	.0	960.7	14.260	2.7397	2.7397
KLIX *	293.8	135.4	38.5	446.8	214.172	1.9139	3.3420
KYHN	1641.1	296.0	1.3	445.8	17.692	1.5773	3.6956
KWKW *	929.3	35.7	6.7	1080.8	50.227	1.0857	3.8517
KOLT	699.9	261.6	10.0	74.6	70.361	1.0504	3.9924
KSDT	888.1	28.9	13.1	86.0	53.897	.9269	
<b>KCTC-L</b>	<b>832.5</b>	<b>72.1</b>	<b>7.9</b>	<b>75.2</b>	<b>57.449</b>	<b>.8637</b>	
XERJ	2005.5	346.3	.0	287.9	14.925	.8593	

\* - indicates an adjacent channel station.

Point: MERLIN Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KFNZ	969.7	285.8	6.3	789.9	43.208	6.8262	6.8262
KXRO	500.5	175.5	14.9	269.1	112.319	6.0459	9.1187
<b>KCTC-A</b>	<b>451.8</b>	<b>341.2</b>	<b>16.7</b>	<b>147.5</b>	<b>135.398</b>	<b>3.9931</b>	<b>9.9546</b>
KKPZ *	337.7	191.0	34.5	508.7	183.980	1.8718	
KSDT	1115.7	332.2	4.8	225.5	37.552	1.6938	
CHMB	744.8	181.8	9.3	114.9	60.464	1.3898	

\* - indicates an adjacent channel station.

Point: KFNZ Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
KXYZ	1941.9	313.2	.0	960.7	14.260	2.7397	2.7397
KLIX *	293.8	135.4	38.5	446.8	214.172	1.9139	3.3420
KYHN	1641.1	296.0	1.3	445.8	17.692	1.5773	3.6956
KWKW *	929.3	35.7	6.7	1080.8	50.227	1.0857	3.8517
KOLT	699.9	261.6	10.0	74.6	70.361	1.0504	3.9924
<b>KCTC-A</b>	<b>853.6</b>	<b>71.8</b>	<b>7.6</b>	<b>89.4</b>	<b>55.321</b>	<b>.9893</b>	
KSDT	888.1	28.9	13.1	86.0	53.897	.9269	
XERJ	2005.5	346.3	.0	287.9	14.925	.8593	

\* - indicates an adjacent channel station.

Exhibit 16-2  
RSS Calculations for Proposed Operation

Point: KCTC                      Frequency: 1320 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
-----	-----	-----	-----	-----	-----	-----	-----
KFNZ	832.5	258.1	7.9	913.9	57.449	10.5001	<b>10.5001*</b>
KSDT	674.5	326.1	10.5	234.4	81.958	3.8425	11.1811
KXRO	938.7	166.7	6.6	324.3	45.263	2.9361	11.5601
KKSM	709.9	330.8	9.9	130.5	76.440	1.9958	
KXYZ	2592.9	299.7	.0	1057.1	8.481	1.7930	

\* Nighttime Interference-free contour level

# Tabulation of Directional Antenna Pattern KCTC-AM 1320 kHz West Sacramento, CA

## STANDARD RADIATION PATTERN

(MV/M AT ONE KILOMETER)

AZIMUTH	.00	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
*****													
.00	18.43	16.10	11.38	14.41	26.61	40.47	52.60	61.14	65.21	64.82	60.74	54.23	46.64
5.00	48.63	45.31	36.08	23.43	15.42	23.85	37.54	48.91	55.94	58.23	56.39	51.60	45.24
10.00	79.77	76.05	65.58	50.37	34.28	25.05	29.85	40.27	48.61	52.72	52.62	49.27	43.99
15.00	107.61	103.55	92.03	74.98	55.62	38.90	31.95	36.27	43.58	48.42	49.48	47.27	42.89
20.00	131.56	127.22	114.83	96.31	74.68	54.06	39.95	36.79	40.92	45.34	46.99	45.60	41.97
25.00	151.32	146.74	133.68	114.03	90.72	67.57	49.19	40.18	40.26	43.38	45.10	44.25	41.21
30.00	166.63	161.89	148.35	127.90	103.43	78.57	57.53	44.54	40.91	42.31	43.74	43.19	40.62
35.00	177.23	172.42	158.62	137.71	112.57	86.71	64.06	48.54	42.11	41.83	42.78	42.40	40.19
40.00	182.89	178.07	164.24	143.26	117.95	91.74	68.35	51.47	43.22	41.61	42.11	41.82	39.90
45.00	183.37	178.62	165.02	144.37	119.43	93.51	70.18	52.89	43.78	41.40	41.60	41.40	39.73
50.00	178.47	173.89	160.79	140.90	116.89	91.92	69.42	52.61	43.54	40.99	41.15	41.11	39.68
55.00	168.11	163.80	151.48	132.81	110.30	86.97	66.02	50.53	42.35	40.25	40.69	40.90	39.73
60.00	152.36	148.43	137.18	120.18	99.75	78.70	60.05	46.68	40.19	39.15	40.17	40.77	39.87
65.00	131.56	128.10	118.21	103.29	85.47	67.31	51.64	41.17	37.15	37.71	39.59	40.69	40.09
70.00	106.52	103.60	95.28	82.78	67.96	53.14	41.04	34.26	33.46	36.04	38.99	40.67	40.40
75.00	79.00	76.66	69.98	59.98	48.22	36.85	28.69	26.48	29.51	34.32	38.43	40.73	40.78
80.00	53.84	51.99	46.69	38.68	29.16	20.16	15.67	19.00	26.00	32.83	38.00	40.90	41.25
85.00	45.31	43.73	39.15	32.02	23.11	13.84	9.13	15.07	23.93	31.88	37.83	41.23	41.81
90.00	64.07	62.34	57.31	49.44	39.54	28.98	20.43	18.71	24.31	31.81	38.03	41.74	42.48
95.00	94.87	92.59	85.97	75.63	62.62	48.48	35.49	27.35	27.39	32.85	38.74	42.50	43.27
100.00	127.24	124.30	115.77	102.51	85.89	67.75	50.51	37.52	32.51	35.07	40.02	43.55	44.19
105.00	157.14	153.58	143.26	127.27	107.29	85.52	64.60	47.82	38.84	38.37	41.93	44.91	45.25
110.00	182.43	178.36	166.59	148.38	125.71	101.04	77.26	57.68	45.73	42.57	44.47	46.60	46.46
115.00	201.77	197.36	184.61	164.92	140.45	113.87	88.23	66.82	52.85	47.46	47.59	48.63	47.81
120.00	214.50	209.94	196.77	176.45	151.21	123.84	97.42	75.18	60.00	52.86	51.23	50.98	49.31
125.00	220.62	216.12	203.11	183.04	158.13	131.11	105.00	82.83	67.12	58.63	55.30	53.61	50.94
130.00	220.83	216.58	204.29	185.32	161.75	136.14	111.30	89.95	74.22	64.67	59.70	56.48	52.68

Hatfield & Dawson Consulting Engineers

(MV/M AT ONE KILOMETER)

AZIMUTH	.00	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00
*****													
135.00	216.51	212.68	201.59	184.44	163.06	139.70	116.83	96.80	81.33	70.90	64.35	59.54	54.51
140.00	209.70	206.40	196.84	181.98	163.31	142.69	122.16	103.63	88.50	77.24	69.14	62.72	56.41
145.00	202.85	200.13	192.19	179.74	163.90	146.06	127.81	110.64	95.72	83.61	74.00	65.96	58.34
150.00	198.46	196.24	189.75	179.43	166.04	150.55	134.11	117.92	102.98	89.92	78.83	69.21	60.28
155.00	198.40	196.53	191.04	182.19	170.46	156.52	141.20	125.45	110.18	96.10	83.55	72.40	62.18
160.00	203.33	201.61	196.53	188.30	177.26	163.94	148.97	133.12	117.23	102.05	88.09	75.50	64.04
165.00	212.59	210.82	205.60	197.19	185.96	172.41	157.11	140.72	124.00	107.68	92.38	78.44	65.81
170.00	224.62	222.65	216.91	207.75	195.71	181.34	165.25	148.04	130.36	112.93	96.39	81.19	67.48
175.00	237.59	235.38	228.93	218.76	205.59	190.12	173.01	154.84	136.20	117.72	100.06	83.74	69.02
180.00	249.95	247.48	240.31	229.12	214.78	198.19	180.06	160.96	141.43	122.02	103.37	86.05	70.43
185.00	260.52	257.84	250.07	238.01	222.70	205.15	186.15	166.29	146.01	125.82	106.32	88.13	71.70
190.00	268.62	265.78	257.60	244.95	228.97	210.77	191.18	170.77	149.94	129.12	108.91	89.96	72.82
195.00	273.93	271.03	262.66	249.74	233.47	214.99	195.14	174.44	153.24	131.95	111.15	91.55	73.78
200.00	276.51	273.62	265.30	252.45	236.28	217.90	198.11	177.38	156.00	134.37	113.09	92.92	74.59
205.00	276.68	273.89	265.83	253.39	237.68	219.76	200.31	179.75	158.33	136.45	114.75	94.08	75.26
210.00	275.04	272.40	264.81	253.04	238.11	220.91	202.02	181.76	160.36	138.26	116.18	95.05	75.78
215.00	272.40	269.99	263.00	252.11	238.16	221.84	203.59	183.64	162.25	139.90	117.43	95.85	76.17
220.00	269.83	267.66	261.36	251.44	238.51	223.07	205.40	185.66	164.15	141.47	118.54	96.50	76.43
225.00	268.56	266.63	260.99	251.97	239.95	225.19	207.85	188.07	166.23	143.04	119.55	97.02	76.56
230.00	269.93	268.20	263.06	254.68	243.22	228.74	211.30	191.10	168.61	144.68	120.51	97.42	76.58
235.00	275.20	273.56	268.64	260.46	248.98	234.17	216.05	194.92	171.38	146.45	121.44	97.72	76.49
240.00	285.31	283.62	278.51	269.90	257.67	241.76	222.26	199.61	174.59	148.36	122.34	97.93	76.30
245.00	300.65	298.73	292.96	283.21	269.40	251.56	229.95	205.17	178.22	150.41	123.21	98.04	76.00
250.00	320.92	318.62	311.69	300.11	283.93	263.37	238.93	211.48	182.21	152.56	124.05	98.06	75.62
255.00	345.21	342.37	333.89	319.89	300.65	276.71	248.89	218.32	186.41	154.73	124.82	97.98	75.14
260.00	372.08	368.61	358.28	341.44	318.70	290.93	259.33	225.36	190.63	156.82	125.46	97.79	74.57
265.00	399.80	395.63	383.32	363.45	336.97	305.19	269.67	232.21	194.64	158.70	125.93	97.45	73.91
270.00	426.46	421.60	407.32	384.45	354.29	318.58	279.26	238.45	198.16	160.24	126.16	96.97	73.15
275.00	450.16	444.68	428.59	402.96	369.45	330.17	287.43	243.62	200.93	161.27	126.08	96.31	72.31
280.00	469.14	463.12	445.52	417.60	381.31	339.08	293.54	247.29	202.68	161.65	125.62	95.45	71.37
285.00	481.83	475.43	456.73	427.16	388.87	344.55	297.03	249.09	203.18	161.26	124.72	94.37	70.34
290.00	487.04	480.43	461.15	430.69	391.36	345.95	297.44	248.70	202.22	159.97	123.33	93.04	69.21
295.00	483.98	477.37	458.06	427.58	388.24	342.88	294.48	245.92	199.67	157.72	121.40	91.46	67.99
300.00	472.35	465.93	447.18	417.56	379.31	335.16	288.01	240.63	195.46	154.44	118.91	89.61	66.66

Hatfield & Dawson Consulting Engineers

(MV/M AT ONE KILOMETER)

AZIMUTH        .00        5.00        10.00        15.00        20.00        25.00        30.00        35.00        40.00        45.00        50.00        55.00        60.00

\*\*\*\*\*

305.00	452.33	446.29	428.66	400.76	364.65	322.84	278.03	232.84	189.58	150.14	115.85	87.50	65.24
310.00	424.53	419.06	403.05	377.64	344.63	306.19	264.74	222.66	182.09	144.84	112.24	85.12	63.73
315.00	389.97	385.21	371.24	348.97	319.85	285.67	248.46	210.30	173.11	138.60	108.10	82.49	62.13
320.00	349.93	345.98	334.36	315.72	291.11	261.88	229.62	196.04	162.83	131.54	103.49	79.63	60.45
325.00	305.83	302.76	293.70	279.01	259.32	235.52	208.73	180.24	151.45	123.77	98.48	76.59	58.71
330.00	259.14	256.99	250.56	239.97	225.43	207.34	186.33	163.27	139.25	115.46	93.15	73.39	56.93
335.00	211.28	210.03	206.23	199.73	190.37	178.08	163.01	145.56	126.48	106.78	87.61	70.10	55.13
340.00	163.53	163.14	161.84	159.30	155.01	148.47	139.32	127.52	113.46	97.91	81.96	66.76	53.32
345.00	116.99	117.39	118.41	119.58	120.14	119.16	115.81	109.58	100.48	89.07	76.32	63.44	51.54
350.00	72.74	73.78	76.80	81.35	86.47	90.82	93.06	92.19	87.88	80.46	70.82	60.20	49.82
355.00	32.62	33.89	38.08	45.40	54.75	64.18	71.68	75.84	76.00	72.30	65.59	57.11	48.18

RSS USED IN COMPUTING Q = 285.7646

Q USED FOR HORIZONTAL PATTERN = 10.000 (CALCULATED Q IS 10.000)

CORRESPONDING STANDARD PATTERN RMS = 263.3872 MV/M AT ONE KILOMETER

SHORTEST TOWER IS TOWER 3; IT IS < 180 DEGREES

1

INPUT PARAMETERS:

FIELD				TOW REF									
RATIO	PHASING	SPACING	ORIENT	SWITCH	HEIGHT	TL/SEC	A	B	C	D	Z	SUB	0
1.0000	.000	.000	.000	0	181.2	0	.00	.00	.00	.00	.00	.00	
.4600	22.000	214.500	27.500	0	196.6	0	.00	.00	.00	.00	.00	.00	
.6000	101.000	125.500	61.800	0	90.8	0	.00	.00	.00	.00	.00	.00	

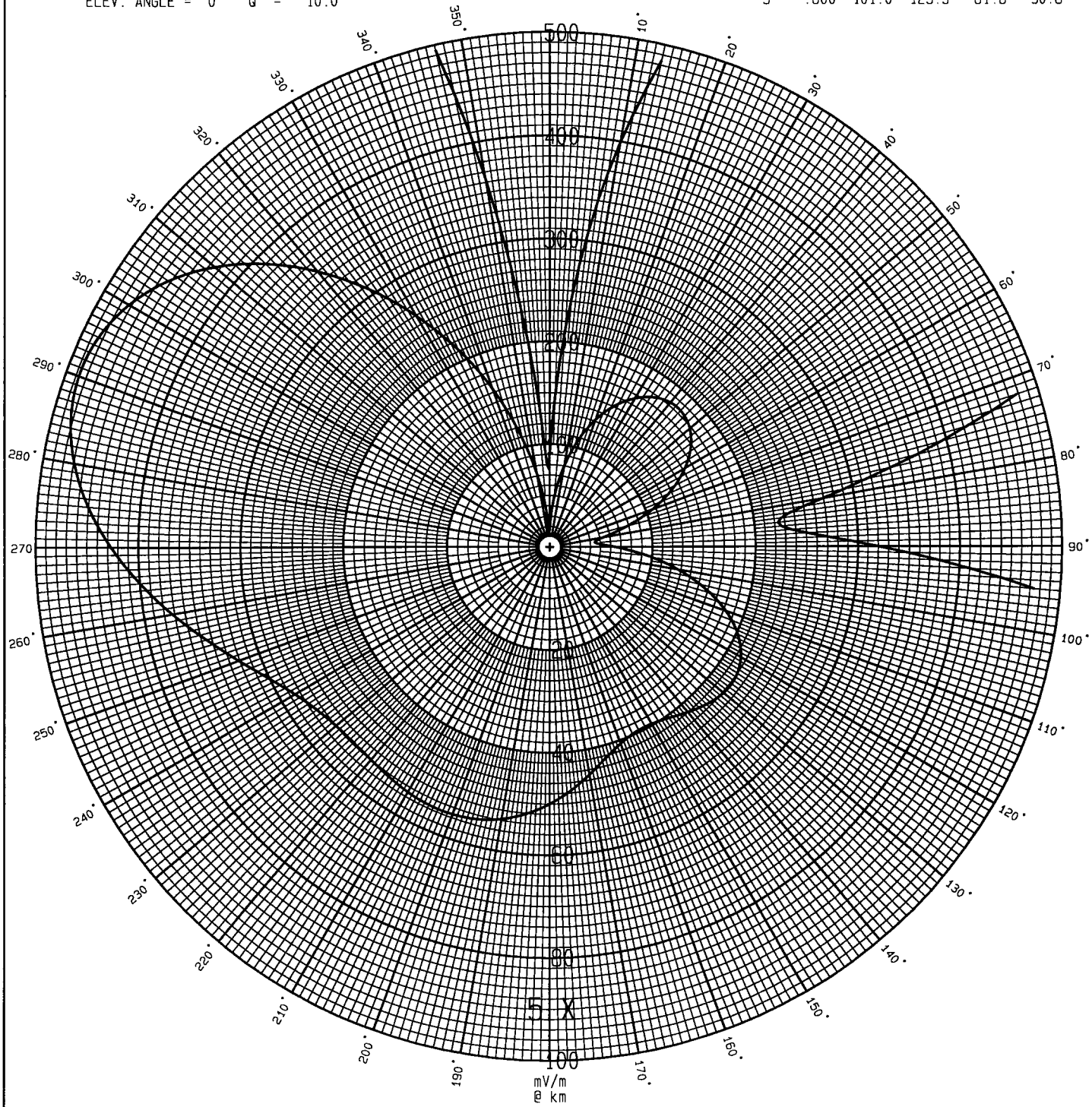
Hatfield & Dawson Consulting Engineers



1320 kHz      0.50 kW  
 N 38 38 11 W 121 33 9  
 RSS = 285.8      TH. RMS = 250.6  
 K = 225.7      S.P. RMS = 263.4  
 ELEV. ANGLE = 0°      Q = 10.0



ARRAY PARAMETERS					
#	F	PSI	S	PHI	G
1	1.00	0.0	0.0	0.0	181.2
2	.460	22.0	214.5	27.5	196.6
3	.600	101.0	125.5	61.8	90.8



HATFIELD & DAWSON  
 CONSULTING ENGINEERS

STANDARD PATTERN