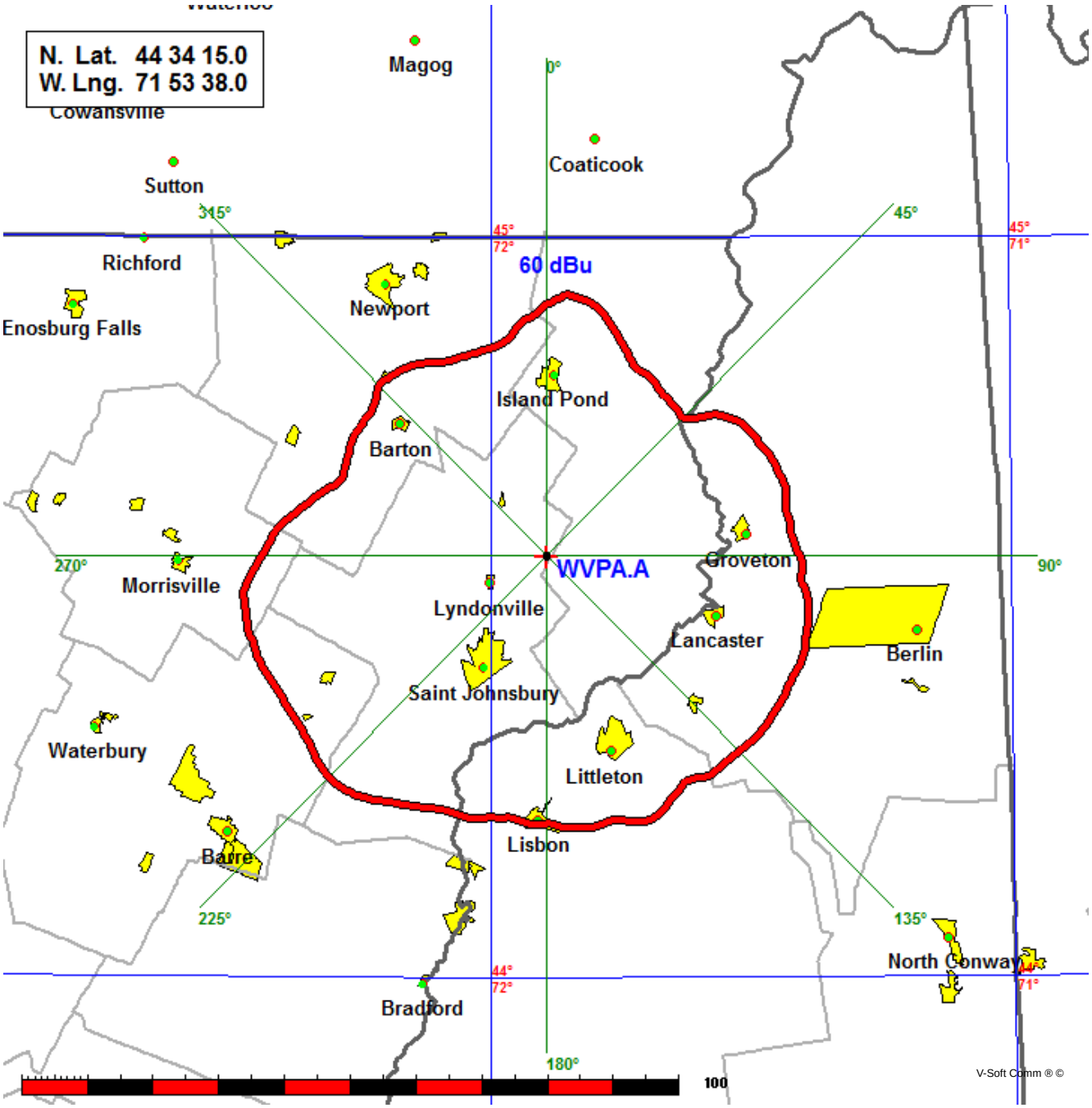
WVPA Amendment - Rotate antenna -10° - Coverage
Vermont Public Radio

Coverage Study - FCC NGDC 30 Sec
05-06-2011

WVPA-A CH203 C2, 0.85 kW, 569.2M HAAT, 1002.0M COR AMSL
Service Contour = 60 dBu. Population = 66,464



N. Lat. = 443415.0   W. Lng. = 715338.0
HAAT and Distance to Contour,
FCC, FM 2-10 Mi, 51 pts Method - FCC 30 SEC
WVPA (Amendment) - Distance to 60 dBu Contour

Azi.	AV EL	HAAT	dBk	60-F5
000	398.6	603.4	-0.71	43.20
045	717.7	284.3	-0.71	29.27
090	511.9	490.1	-0.71	38.47
135	444.1	557.9	-0.71	41.49
180	470.4	531.6	-0.71	40.33
225	291.0	711.0	-0.71	46.91
270	307.6	694.4	-0.71	46.36
315	321.1	680.9	-0.71	45.90

Additional Radials: (Not Considered in Average):

263	300.4	701.6	-0.71	46.59

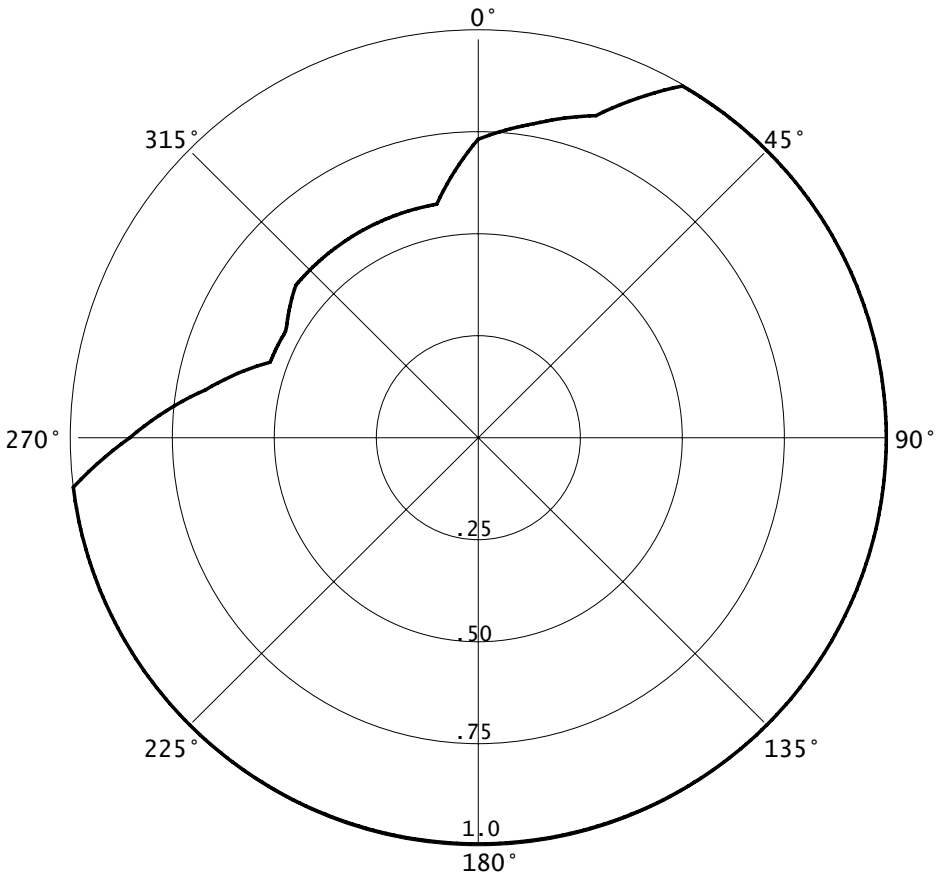
Ave El= 432.81 M HAAT= 569.19 M AMSL= 1002

WVPA.A 04-25-2011 RMS(V)= .903

Azi	Field	dBk	kW
000	0.735	-03.380	0.459
010	0.785	-02.808	0.524
020	0.844	-02.179	0.605
030	1.000	-00.706	0.850
040	1.000	-00.706	0.850
050	1.000	-00.706	0.850
060	1.000	-00.706	0.850
070	1.000	-00.706	0.850
080	1.000	-00.706	0.850
090	1.000	-00.706	0.850
100	1.000	-00.706	0.850
110	1.000	-00.706	0.850
120	1.000	-00.706	0.850
130	1.000	-00.706	0.850
140	1.000	-00.706	0.850
150	1.000	-00.706	0.850
160	1.000	-00.706	0.850
170	1.000	-00.706	0.850
180	1.000	-00.706	0.850
190	1.000	-00.706	0.850
200	1.000	-00.706	0.850
210	1.000	-00.706	0.850
220	1.000	-00.706	0.850
230	1.000	-00.706	0.850
240	1.000	-00.706	0.850
250	1.000	-00.706	0.850
260	1.000	-00.706	0.850
270	0.854	-02.077	0.620
280	0.679	-04.068	0.392
290	0.543	-06.010	0.251
300	0.543	-06.010	0.251
310	0.584	-05.378	0.290
320	0.584	-05.378	0.290
330	0.584	-05.378	0.290
340	0.584	-05.378	0.290
350	0.584	-05.378	0.290

Extra Radial			
263	1.000	-00.706	0.850

Graph is Relative Field



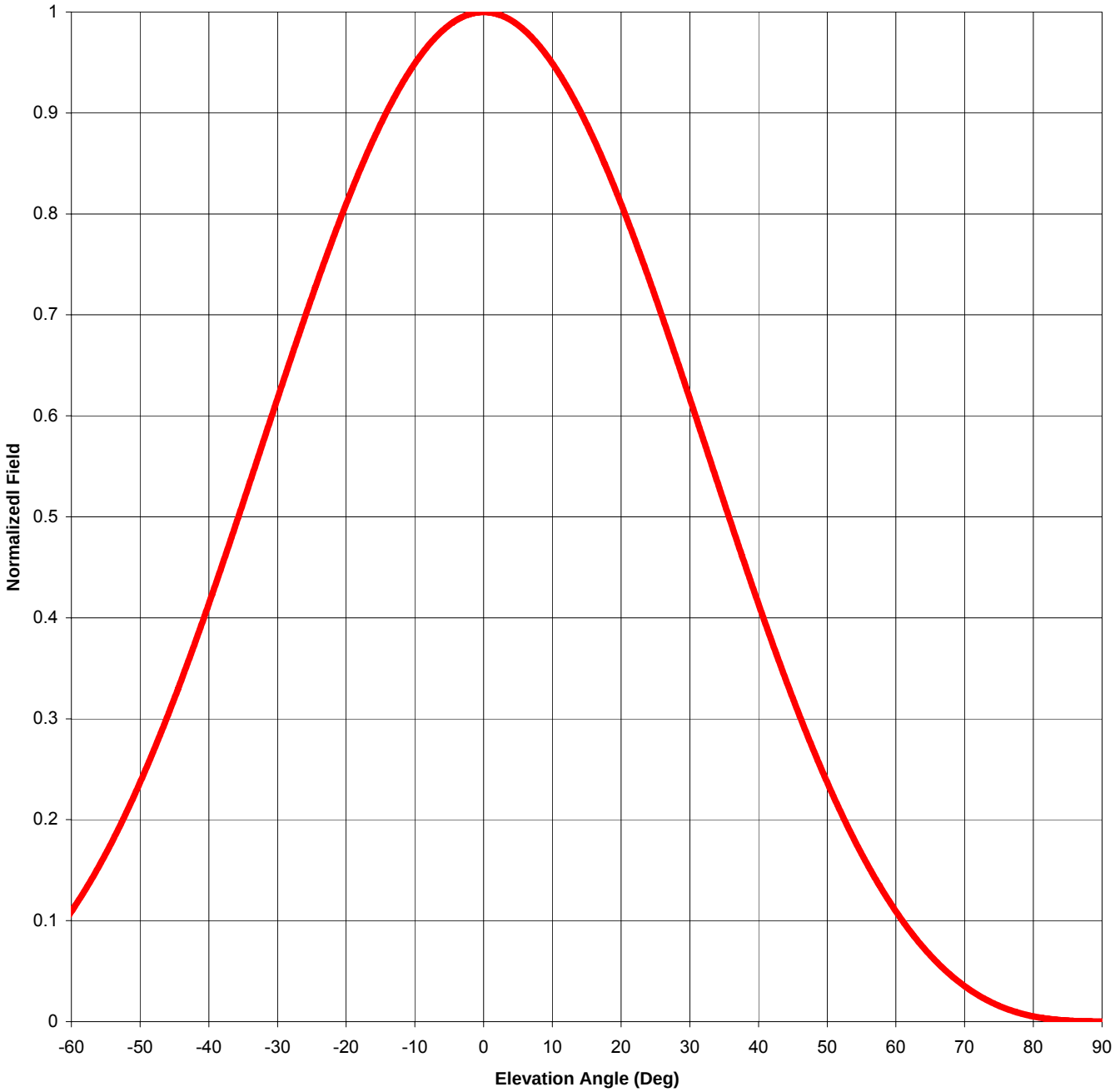
Shively Labs®

Antenna Mfr.: Shively Labs **Date: 12/30/2004**

Antenna Type: 6014, 6015, 6510, 6513, 6600, 68xx 2-Bay, 1/2-wave-spaced

Frequency: 98.1

6014, 6015, 68xx Gain (Max)	**0.71**	**-1.51 dB**
6510, 6513, 6600 Gain (Max)	**1.42**	**1.49 dB**



Elevation Pattern Tabulation, Sidemount 2-Bay Antennas, Half-Wave-Spaced

Includes Models 6014, 6015, 66xx series except 6602B, 65xx series, 68xx series except 6812B & 6832.

Relative Field at 0° Depression = 1.000

Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field
1	0.999	19	0.827	37	0.473	55	0.166	73	0.022
2	0.998	20	0.810	38	0.453	56	0.154	74	0.019
3	0.995	21	0.792	39	0.433	57	0.142	75	0.016
4	0.992	22	0.774	40	0.414	58	0.130	76	0.013
5	0.987	23	0.756	41	0.394	59	0.119	77	0.011
6	0.981	24	0.737	42	0.375	60	0.109	78	0.008
7	0.975	25	0.718	43	0.357	61	0.099	79	0.007
8	0.967	26	0.698	44	0.338	62	0.090	80	0.005
9	0.959	27	0.678	45	0.320	63	0.082	81	0.004
10	0.949	28	0.658	46	0.303	64	0.073	82	0.003
11	0.939	29	0.638	47	0.286	65	0.066	83	0.002
12	0.928	30	0.617	48	0.269	66	0.059	84	0.001
13	0.915	31	0.597	49	0.253	67	0.052	85	0.001
14	0.903	32	0.576	50	0.237	68	0.046	86	0.001
15	0.889	33	0.555	51	0.222	69	0.040	87	0.000
16	0.874	34	0.535	52	0.207	70	0.035	88	0.000
17	0.859	35	0.514	53	0.193	71	0.030	89	0.000
18	0.843	36	0.494	54	0.179	72	0.026	90	0.000

Directional Antenna

The proposed custom directional antenna pattern meets the Commission's rules in that the radio frequency emission does not change more than two dB for each ten degrees of azimuthal variation. Also, the maximum pattern attenuation in the deepest null is less than 15 dB. The pattern shown is a composite of the maximum field values in the horizontal and vertical planes.

The proposed antenna will be mounted on the sides of a post that has been specified by the antenna manufacturer in accordance with the instructions provided by the manufacturer. The antenna will not be mounted on the top of a tower that includes a top mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane. No other antennas of any type will be mounted at the same tower level as the directional antenna nor within the horizontal or vertical distance specified by the manufacturer as being necessary to maintain proper directional operation. The antenna will be designed and tested by a major manufacturer of broadcast antennas known to the Commission. The pattern will be achieved through traditional methods including power-splitting, resonators and phasing.