12-09-2009   RMS(V)= .395

Bearing   Field % Voltage   Graph is Percent Relative Field Voltage

Bearing	Field % Voltage	Watts
000	= 0.010	0.02 Watts
010	= 0.010	
020	= 0.035	
030	= 0.110	
040	= 0.280	
050	= 0.460	37.0 Watts
060	= 0.641	
070	= 0.812	
080	= 0.944	
090	= 1.000	175.0 Watts
100	= 0.944	
110	= 0.812	
120	= 0.641	
130	= 0.460	37.0 Watts
140	= 0.280	
150	= 0.110	
160	= 0.035	
170	= 0.010	0.02 Watts
180	= 0.010	
190	= 0.010	
200	= 0.010	0.02 Watts
210	= 0.030	
220	= 0.055	
230	= 0.090	
240	= 0.120	
250	= 0.138	
260	= 0.140	3.4 Watts
270	= 0.135	
280	= 0.140	3.4 Watts
290	= 0.138	
300	= 0.120	
310	= 0.090	
320	= 0.055	
330	= 0.030	
340	= 0.010	
350	= 0.010	0.02 Watts
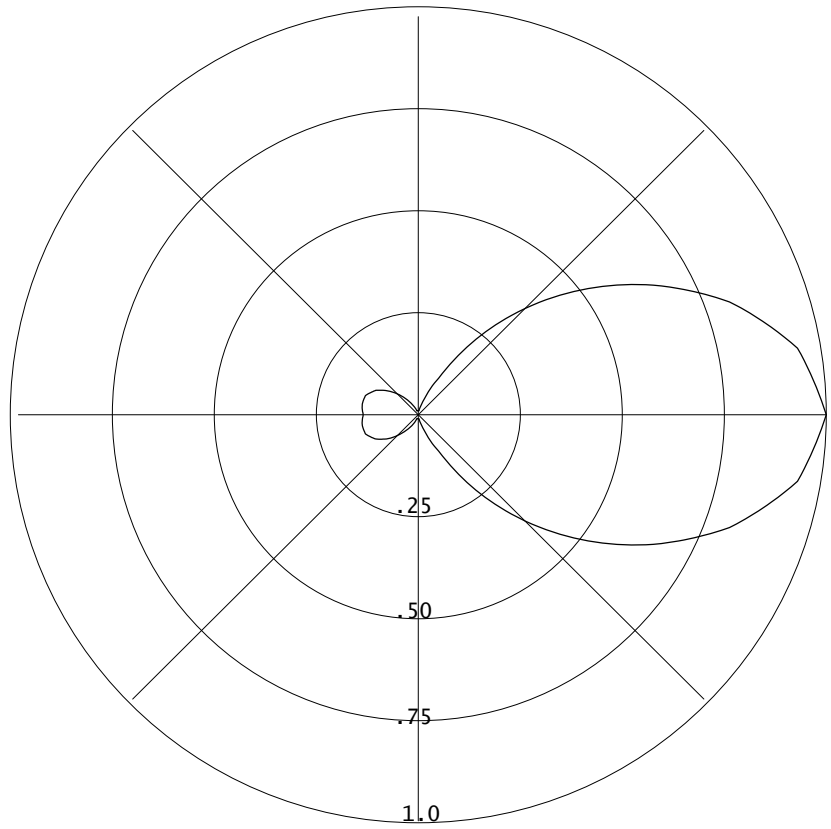
**W222AN presently operates with an ERP of 10 watts.
This application proposes to use a directional antenna
Scala - HDCA-5 - 7.5 dB Gain. The Maximum ERP will be 175 watts.**

RF Exposure Analysis
**The antenna will be mounted 12.2 m (40') AGL on an existing 101.5 m (333') AGL tower (ASR: 1223888).
The site is fenced and posted with warning signs.
The site is also located in a remote area unlikely to be visited by the general public.**

**The minimum separation for the general public based upon a Power Density of 0.2 mW/cm.sq is 5.5 m or 18'.
Given that the antenna is 12.2 m (40') AGL
there is no potential general public exposure.**

Exposure at ground level is less than 1% with inclusion of elevation pattern.

FIGURE 4 - Antenna Pattern & RF Exposure
**increase ERP to 175 w at lower antenna height
from existing licensed site**

Mullaney
Engineering, Inc.

Bristol Broadcasting - **W222AN** - Jefferson City, TN
December 2009