TEST RESULTS

The attached calculations verify that the **RMS** value of this antenna is ***91.35 %*** of the **RMS** value of the pattern authorized in the related construction permit **BPH20000907AAC**. The vertical component **RMS** value is ***0.81*** and the horizontal component **RMS** value is also **0.78**.

Azimuth and elevation plots and associated tabulations of this antenna are included with this package.

Measured horizontal polarized directivity	:	***1.647 / 2.17 dB***
Measured vertical polarized directivity	:	***1.522 / 1.82 dB***
Measured composite azimuth pattern directivity	:	***1.642 / 2.15 dB***

Gain in each polarization was calculated using the following relation:

GAIN = *Azimuth Directivity x Elevation Directivuty x Power Ratio Between Polarizations*

Using this relationship along with ratio measured at our testing facilities:

H-Pol. Gain = (1.647)(0.48)(2.991)(0.95) = **2.248 / 3.52 dB**
V-Pol. Gain = (1.522)(0.52)(2.991)(0.95) = **2.248 / 3.52 dB**

INSTALLATION AND MOUNTING

The antenna is to be mounted in accordance with the supplied drawings. The antenna center of radiation is to be ***24 meters*** above ground level. The antenna aperture is ***221.65 inches***. The antenna is to be oriented ***243.5 degrees*** true north.

The antenna system is custom designed to shape and direct the antenna pattern as required. The system orientation and the mounting details are described in the following drawings:

DRAWING NO.	**TITLE**
0342-C	ANTENNA ORIENTATION
0341-C	ANTENNA ELEVATION