

## General Notes

1. Review antenna elevation and plan the installation. The antenna bracket has been designed for tower leg mount.
2. The element is aligned to 270 degrees true.
3. Use the supplied mastic and electrical tape to seal all connectors.
4. Exercise care when assembling the inner conductors of the coaxial line. The bullet should fit firmly in the inner conductor in order to assure a proper connection.
5. The feed points are in the up position.
6. Install one bay assembly at a time.
7. Keep all transmission lines free from dirt and moisture. All Teflon insulators must be clean and dry.
8. The antenna does not require pressurization.
9. The antenna has been tuned at the factory and should not require field adjustment.
10. The antenna system should be tested before the erector leaves the premises to insure that the complete antenna system is functioning properly.

## Installation Instructions

### Step One

Review the enclosed drawings and read all steps for a general overview of the antenna installation. Hoist the antenna bay to the proper elevation above ground and secure to the north-west tower leg with the supplied 3/8-16 x 2-15/16" ID U-bolts, nuts and locks. The element feed point must be positioned with the Teflon insulator up. Position the element to 270°.

### Step Two

Check all bolted connections for tightness. Connect the main transmission line to the antenna input located at the end of the antenna boom. Use the supplied mastic and vinyl tape to seal the type "N" connection. Secure the feed line (not supplied) to the tower leg on the inside of the tower. The antenna system should be tested before the erector leaves the premises to insure that the complete antenna is functioning properly. The antenna has been tested and tuned at the factory. It should not require tuning, however if the antenna has a high VSWR, consult the factory immediately while the tower crew is still on site.

Prepared By



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# ERP TABULATION

Antenna Model: PSIFLV-1-DA

Station Call: WODC

Location: Virginia Beach, VA

Frequency: 97.9 MHz

## Measured Vertical Polarization

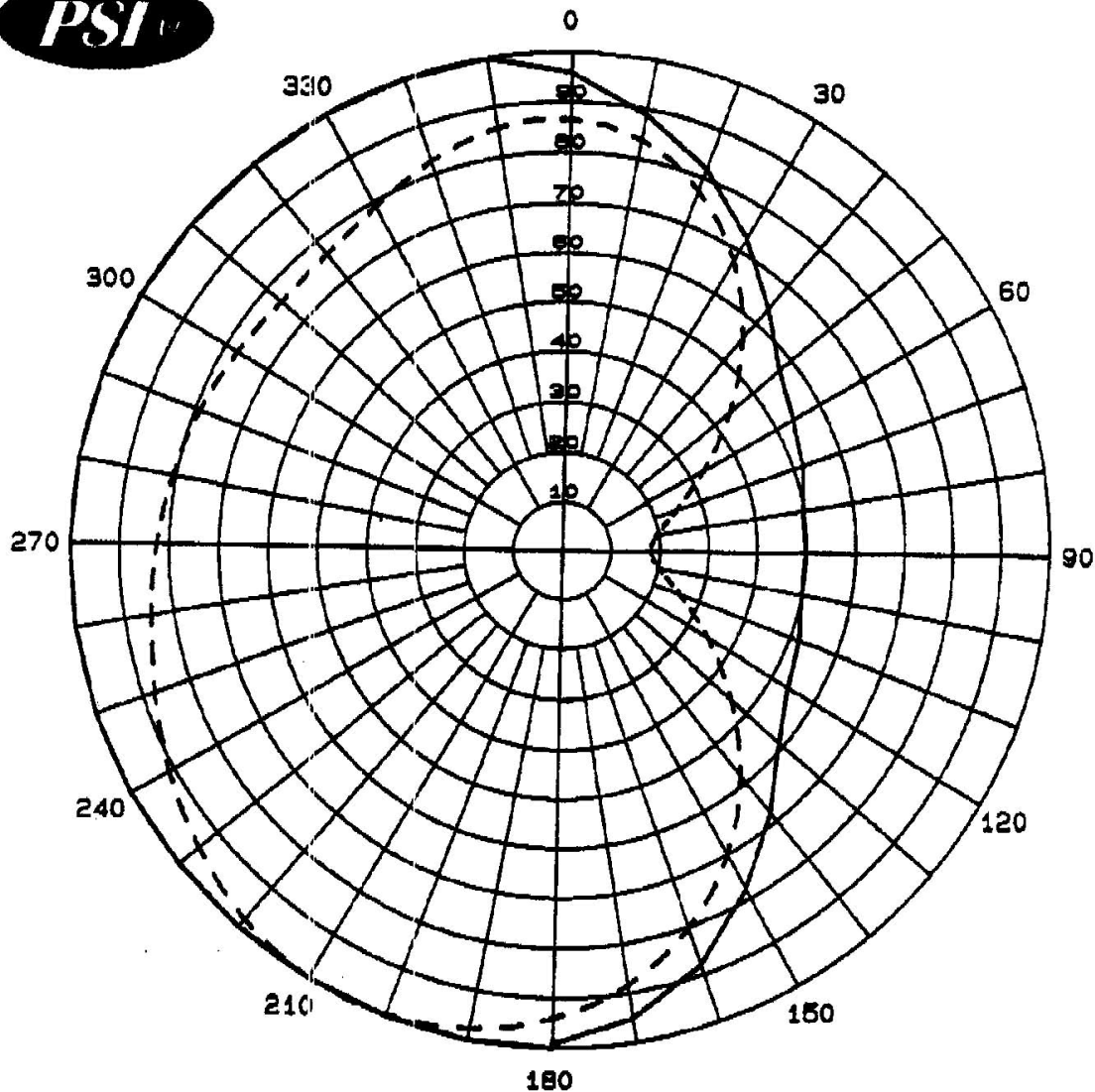
Angle	Relative Field	ERP Watts	ERP dBk
0	0.867	187.9	-7.28
10	0.839	176.0	-7.55
20	0.774	149.8	-8.25
30	0.878	114.9	-9.40
40	0.562	79.0	-11.03
50	0.442	48.8	-13.11
60	0.332	27.6	-15.80
70	0.247	15.3	-18.17
80	0.196	9.6	-20.18
90	0.182	8.3	-20.82
100	0.203	10.3	-19.87
110	0.260	16.9	-17.72
120	0.349	30.5	-15.18
130	0.462	53.4	-12.73
140	0.584	85.3	-10.69
150	0.702	123.2	-9.09
160	0.804	161.6	-7.92
170	0.883	194.9	-7.10
180	0.940	220.9	-6.56
190	0.977	238.6	-6.22
200	0.998	249.0	-6.04
210	1.000	250.0	-6.02
220	0.999	249.5	-6.03
230	0.981	240.6	-6.19
240	0.948	224.7	-6.48
250	0.911	207.5	-6.83
260	0.875	191.4	-7.18
270	0.848	178.9	-7.47
280	0.825	170.2	-7.69
290	0.807	162.8	-7.88
300	0.790	156.0	-8.07
310	0.773	149.4	-8.26
320	0.761	144.8	-8.39
330	0.766	146.7	-8.34
340	0.790	156.0	-8.07
350	0.827	171.0	-7.67

### Maximum ERP

Field 1.00  
ERP 250 watts (-6.02 dBk)  
Azimuth 205 degrees

### Minimum ERP

Field 0.182  
ERP 8.3 watts (-20.82 dBk)  
Azimuth 90 degrees



Measured Relative Field and  
Envelope Pattern  
Antenna: PSIFLV-1-DA  
Type: 1-Bay Directional FM  
Polarization: Vertical  
Peak Gain: 1.69 (2.279 dB)  
Station: WODC  
Virginia Beach, VA

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