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## Antenna System Summary

**Customer:** WORO-DT

**Description:**

<b>Antenna Model:</b> TPV-SFN-CW-6	<b>Channel:</b> 13
<b>Azimuth Pattern:</b> CW: Wide Cardioid	<b>Rotation:</b> 330°
<b>Number of Bays:</b> 6	<b>Input Power:</b> 25.00 std/ 25.00 custom
<b>Elevation Pattern:</b> 6baySFN_1.5BT	<b>Beamtilt:</b> 0.00°

### Transmission System Information:

**Line Type:** Air Core Flexible 3" HJ8-50B

**Line Length (ft):** 226

**Line Efficiency (%):** 89.18

**Loss (dB):** -0.5

**Total System Efficiency (%):** 89.18

**Total System Loss (dB):** -0.5

**Transmitter Power Output (kW):** 4.270

**Transmitter Power Output (dBk):** 6.3

**Antenna Input Power (kW):** 3.81

**Antenna Input Power (dBk):** 5.81

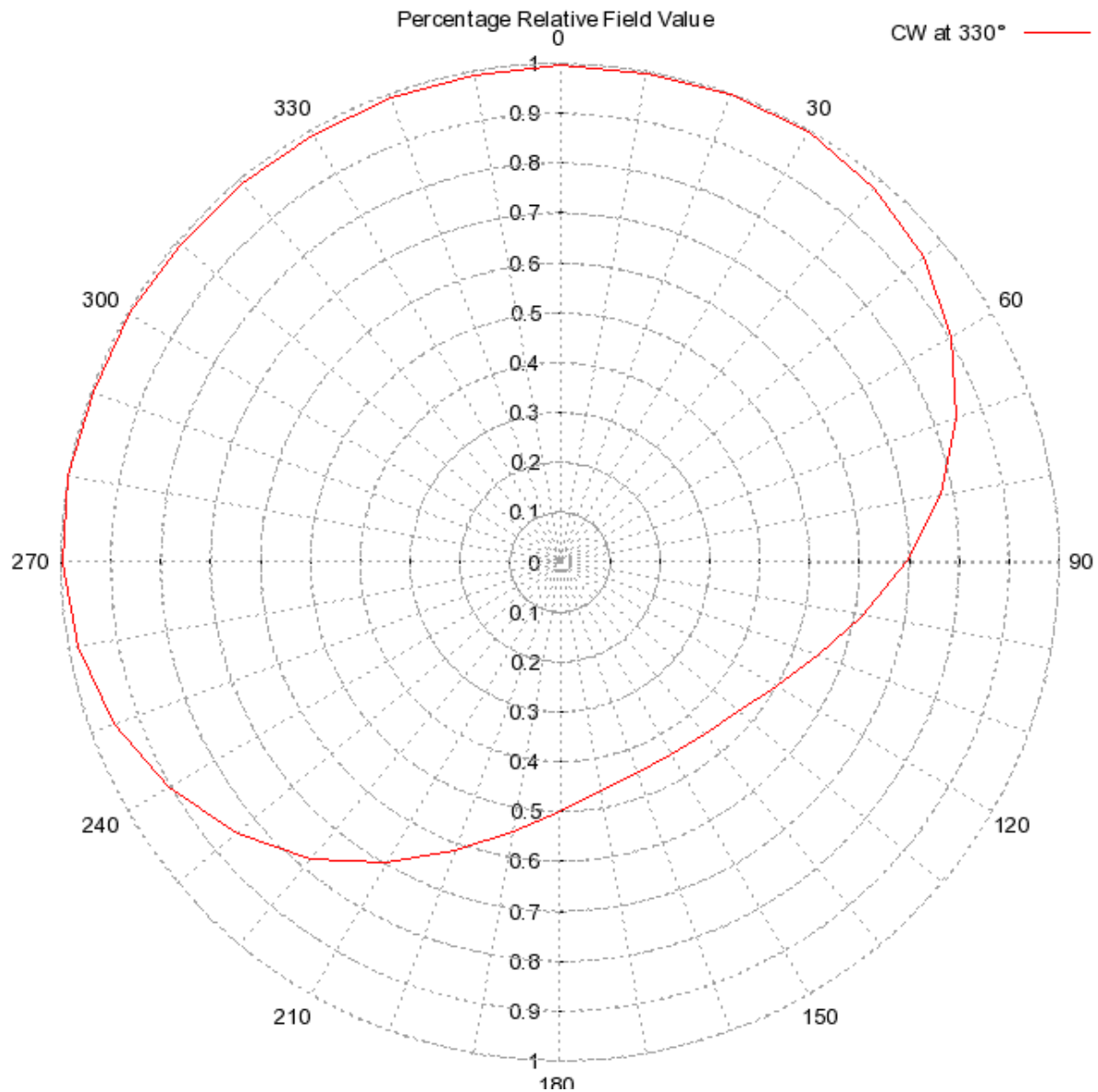
**Antenna Gain:** 9.975

**Antenna Gain (dB):** 9.99

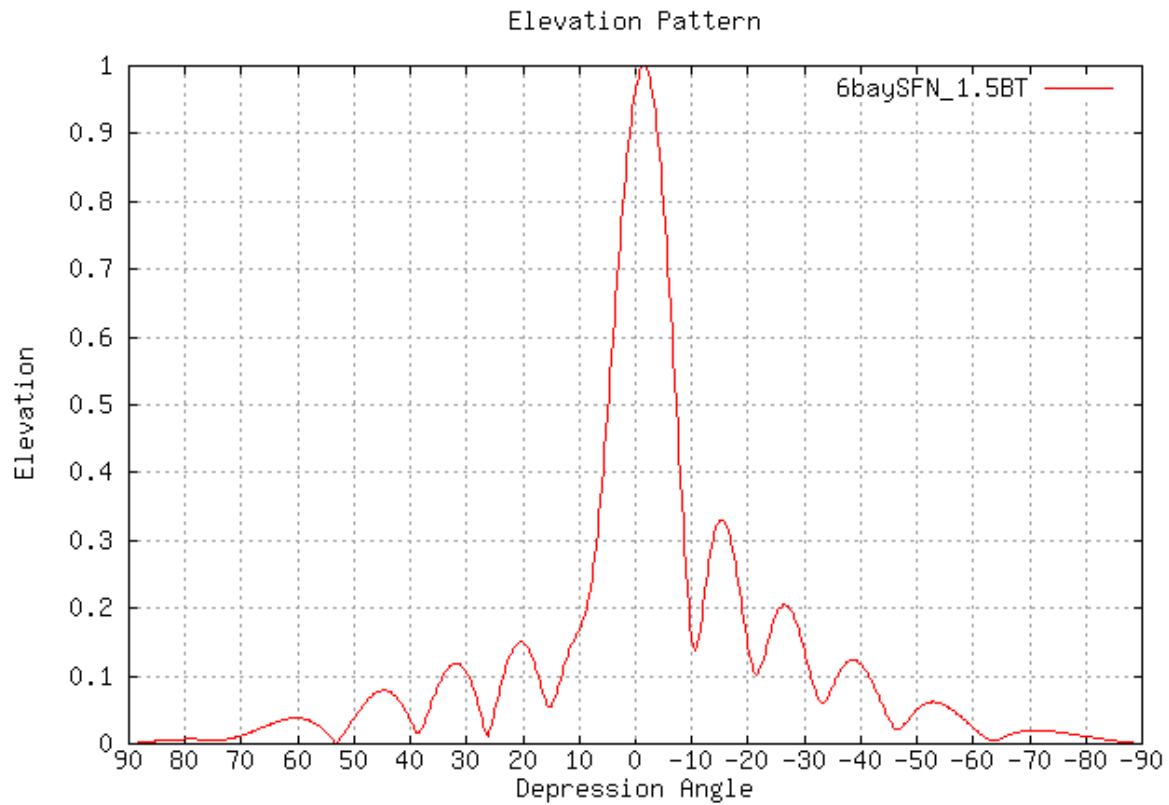
**Station ERP (kW):** 37.98

**Station ERP (dBk):** 15.8

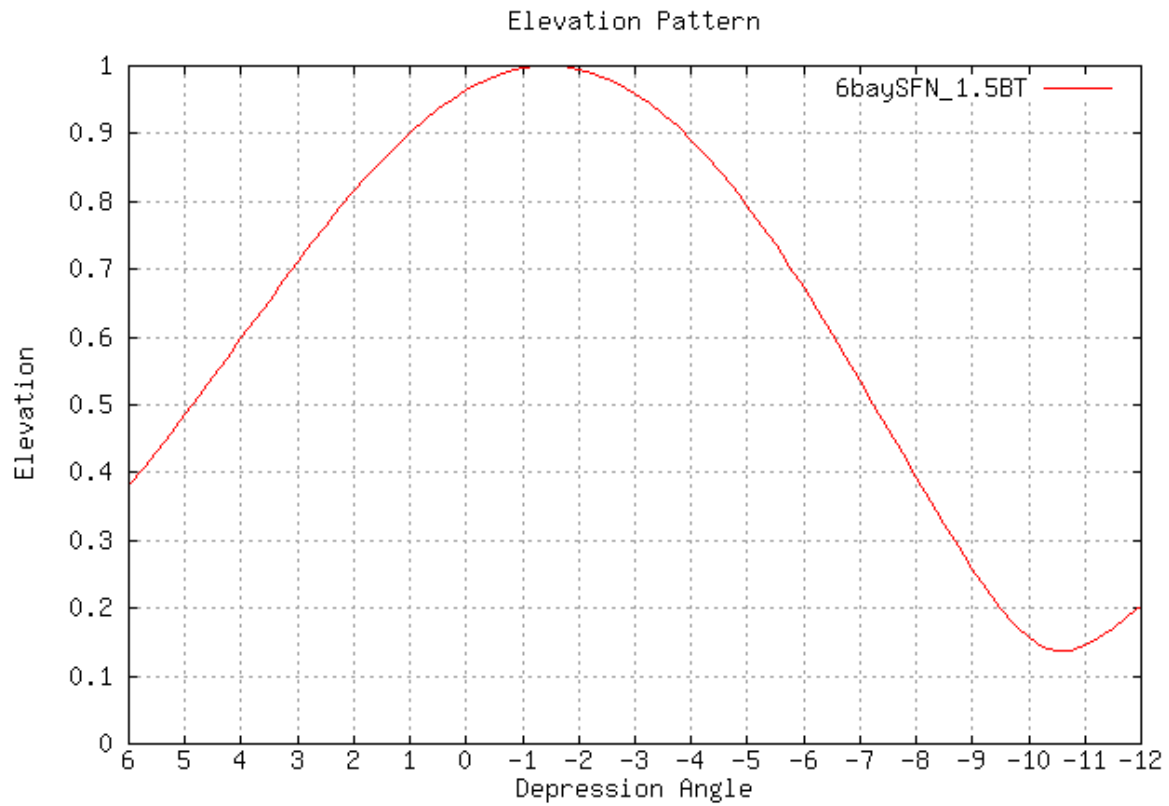
Prepared by Bob duTreil Jr. June 18th, 2008

**RF Technologies Azimuth Pattern CW: Wide Cardioid**

Azimuth Gain for CW: Wide Cardioid pattern is 1.50

**RF Technologies Elevation Pattern 6baySFN\_1.5BT**

Elevation Gain for 6baySFN\_1.5BT pattern is 6.65

**RF Technologies Elevation Pattern 6baySFN\_1.5BT from 6° above to 12° below horizon**

## Tabulated Azimuth Data for CW: Wide Cardioid

**CW: Wide Cardioid rotated 330 degrees**

Angle	Field	Angle	Field
0	0.995	180	0.500
10	0.995	190	0.550
20	1.000	200	0.615
30	0.995	210	0.695
40	0.980	220	0.775
50	0.950	230	0.845
60	0.905	240	0.905
70	0.845	250	0.950
80	0.775	260	0.980
90	0.695	270	0.995
100	0.615	280	1.000
110	0.550	290	0.995
120	0.500	300	0.995
130	0.465	310	0.990
140	0.450	320	0.990
150	0.445	330	0.990
160	0.450	340	0.990
170	0.465	350	0.990

Minima	
Angle	Field
150	0.445

Maxima	
Angle	Field
300	0.995
20	1.000
280	1.000

### Tabulated Elevation Data for RF Technologies Pattern 6baySFN\_1.5BT

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
10.00	0.169	-0.25	0.975	-10.50	0.137	-30.50	0.122	-50.50	0.055	-70.50	0.020
9.75	0.174	-0.50	0.984	-11.00	0.145	-31.00	0.105	-51.00	0.058	-71.00	0.020
9.50	0.179	-0.75	0.991	-11.50	0.171	-31.50	0.090	-51.50	0.060	-71.50	0.020
9.25	0.184	-1.00	0.996	-12.00	0.205	-32.00	0.076	-52.00	0.061	-72.00	0.020
9.00	0.191	-1.25	0.999	-12.50	0.238	-32.50	0.066	-52.50	0.062	-72.50	0.019
8.75	0.199	-1.50	1.000	-13.00	0.268	-33.00	0.061	-53.00	0.062	-73.00	0.019
8.50	0.208	-1.75	0.999	-13.50	0.292	-33.50	0.061	-53.50	0.061	-73.50	0.019
8.25	0.218	-2.00	0.995	-14.00	0.311	-34.00	0.067	-54.00	0.060	-74.00	0.018
8.00	0.230	-2.25	0.990	-14.50	0.324	-34.50	0.075	-54.50	0.059	-74.50	0.018
7.75	0.244	-2.50	0.982	-15.00	0.330	-35.00	0.084	-55.00	0.057	-75.00	0.017
7.50	0.259	-2.75	0.972	-15.50	0.330	-35.50	0.093	-55.50	0.054	-75.50	0.017
7.25	0.275	-3.00	0.960	-16.00	0.324	-36.00	0.102	-56.00	0.052	-76.00	0.016
7.00	0.294	-3.25	0.946	-16.50	0.312	-36.50	0.109	-56.50	0.049	-76.50	0.016
6.75	0.313	-3.50	0.929	-17.00	0.296	-37.00	0.115	-57.00	0.045	-77.00	0.015
6.50	0.335	-3.75	0.911	-17.50	0.276	-37.50	0.120	-57.50	0.042	-77.50	0.014
6.25	0.357	-4.00	0.891	-18.00	0.252	-38.00	0.123	-58.00	0.038	-78.00	0.014
6.00	0.381	-4.25	0.869	-18.50	0.226	-38.50	0.124	-58.50	0.035	-78.50	0.013
5.75	0.406	-4.50	0.846	-19.00	0.198	-39.00	0.123	-59.00	0.031	-79.00	0.012
5.50	0.431	-4.75	0.820	-19.50	0.170	-39.50	0.121	-59.50	0.027	-79.50	0.012
5.25	0.458	-5.00	0.793	-20.00	0.144	-40.00	0.117	-60.00	0.023	-80.00	0.011
5.00	0.485	-5.25	0.765	-20.50	0.122	-40.50	0.113	-60.50	0.020	-80.50	0.010
4.75	0.513	-5.50	0.735	-21.00	0.107	-41.00	0.106	-61.00	0.016	-81.00	0.010
4.50	0.541	-5.75	0.704	-21.50	0.102	-41.50	0.099	-61.50	0.013	-81.50	0.009
4.25	0.570	-6.00	0.672	-22.00	0.107	-42.00	0.091	-62.00	0.010	-82.00	0.008
4.00	0.598	-6.25	0.639	-22.50	0.119	-42.50	0.083	-62.50	0.007	-82.50	0.008
3.75	0.627	-6.50	0.605	-23.00	0.135	-43.00	0.074	-63.00	0.005	-83.00	0.007
3.50	0.655	-6.75	0.571	-23.50	0.152	-43.50	0.064	-63.50	0.004	-83.50	0.007
3.25	0.683	-7.00	0.535	-24.00	0.167	-44.00	0.055	-64.00	0.005	-84.00	0.006
3.00	0.711	-7.25	0.500	-24.50	0.181	-44.50	0.045	-64.50	0.007	-84.50	0.005
2.75	0.738	-7.50	0.464	-25.00	0.191	-45.00	0.036	-65.00	0.009	-85.00	0.005
2.50	0.765	-7.75	0.428	-25.50	0.199	-45.50	0.029	-65.50	0.010	-85.50	0.004
2.25	0.790	-8.00	0.393	-26.00	0.204	-46.00	0.023	-66.00	0.012	-86.00	0.004
2.00	0.815	-8.25	0.358	-26.50	0.205	-46.50	0.021	-66.50	0.014	-86.50	0.003
1.75	0.839	-8.50	0.323	-27.00	0.203	-47.00	0.022	-67.00	0.015	-87.00	0.003
1.50	0.861	-8.75	0.290	-27.50	0.198	-47.50	0.026	-67.50	0.016	-87.50	0.002
1.25	0.882	-9.00	0.258	-28.00	0.190	-48.00	0.032	-68.00	0.017	-88.00	0.002
1.00	0.902	-9.25	0.228	-28.50	0.180	-48.50	0.037	-68.50	0.018	-88.50	0.001
0.75	0.920	-9.50	0.200	-29.00	0.168	-49.00	0.042	-69.00	0.019	-89.00	0.001
0.50	0.936	-9.75	0.176	-29.50	0.153	-49.50	0.047	-69.50	0.019	-89.50	0.000
0.25	0.951	-10.00	0.157	-30.00	0.138	-50.00	0.051	-70.00	0.019	-90.00	0.000
0.00	0.964										