

Test Location: CKC Laboratories, Inc. • 1653 Los Viboras Rd., Site A • Hollister, Ca 95023 • (831) 637-0485

Customer: **Davis Instruments**  
 Specification: **FCC 15.249(a)**  
 Work Order #: **72312** Date: Fri Aug-06-1999  
 Test Type: **Maximized Emissions** Time: 14:38:48  
 Equipment: **Weather Data Telemetry** Sequence#: 6  
 Manufacturer: Davis Instruments Tested By: Wes Norris  
 Model: 7617  
 S/N: Prototype

**Equipment Under Test (\* = EUT):**

Function	Manufacturer	Model #	S/N
Weather Data Telemetry*	Davis Instruments	7617	Prototype

**Support Devices:**

Function	Manufacturer	Model #	S/N
Weather Console	Davis Instruments	7425	WC80921B67
PC Link	Davis Instruments	7862	LC90802A32

**Test Conditions / Notes:**

The EUT is fully operational, with Wind Vane and Rain Collector connected. The EUT is transmitting continuously, at full power, in CW Mode. The EUT is receiving its power from the AC Adaptor, which is powered from a 115V/60Hz source. The on time of the transmitter in a 100ms period was measured. This on time divided by the 100ms period is the duty cycle. A 20Log(duty cycle) calculation is then performed and this factor (not to exceed 20dB) is then taken into consideration. This method is specified in CFR 47 Section 15.35(c).

**Measurement Data:** Reading listed by order taken. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	AMP LOG CABLE 15.35				Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	916.513M	79.1	-27.1	+22.5	+4.8	+0.0	+0.0	79.3	93.9	-14.6	Vert
2	916.510M	71.3	-27.1	+22.5	+4.8	+0.0	+0.0	71.5	93.9	-22.4	Horiz
3	916.522M Ave	79.1	-27.1	+22.5	+4.8	-20.0	+0.0	59.3	93.9	-34.6	Vert
4	916.523M Ave	71.3	-27.1	+22.5	+4.8	-20.0	+0.0	51.5	93.9	-42.4	Horiz

Test Location: CKC Laboratories, Inc. • 1653 Los Viboras Rd., Site A • Hollister, Ca 95023 • (831) 637-0485

Customer: **Davis Instruments**  
 Specification: **FCC 15.249(C) / 15.209**  
 Work Order #: **72312**  
 Test Type: **Maximized Emissions**  
 Equipment: **Weather Data Telemetry**  
 Manufacturer: Davis Instruments  
 Model: 7617  
 S/N: Prototype

Date: Mon Oct-25-1999  
 Time: 07:19:04  
 Sequence#: 2  
 Tested By: Wes Norris

**Equipment Under Test (\* = EUT):**

Function	Manufacturer	Model #	S/N
Weather Data Telemetry*	Davis Instruments	7617	Prototype

**Support Devices:**

Function	Manufacturer	Model #	S/N
Weather Console	Davis Instruments	7425	WC80921B67
PC Link	Davis Instruments	7862	LC90802A32
AC Adaptor	Ablex	7916	N/A

**Test Conditions / Notes:**

The EUT is fully operational, receiving weather data from the Weather Console. The EUT is transmitting continuously, at full power, in CW Mode. The EUT is receiving its power from the Weather Console, which is powered from the AC Adaptor, which is powered from a 115V/60Hz source. The on time of the transmitter in a 100ms period was measured. This on time divided by the 100ms period is the duty cycle. A 20Log(duty cycle) calculation is then performed and this factor (not to exceed 20dB) is then taken into consideration. This method is specified in CFR 47 Section 15.35(c).

**Measurement Data:** Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Reading listed by margin.				Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
			Horn 15.35 dB	Amp_2 1-12. dB	1-12. dB	1-12. dB					
1	1833.000M	73.9	+26.5	-38.6	+0.3	+3.9	+0.0	66.0	54.0	+12.0	Horiz
	See #7 for average		+0.0								
2	1833.000M	66.8	+26.5	-38.6	+0.3	+3.9	+0.0	58.9	54.0	+4.9	Vert
	See #9 for average		+0.0								
3	5499.000M	51.2	+34.9	-39.9	+0.4	+7.3	+0.0	53.9	54.0	-0.1	Vert
	See #17 for average		+0.0								
4	5499.000M	50.5	+34.9	-39.9	+0.4	+7.3	+0.0	53.2	54.0	-0.8	Horiz
	See #19 for average		+0.0								
5	6415.500M	47.7	+35.4	-40.3	+0.6	+7.9	+0.0	51.3	54.0	-2.7	Vert
	See #21 for average		+0.0								
6	6415.500M	46.0	+35.4	-40.3	+0.6	+7.9	+0.0	49.6	54.0	-4.4	Horiz
	See #22 for average		+0.0								
7	1833.000M	73.9	+26.5	-38.6	+0.3	+3.9	+0.0	46.0	54.0	-8.0	Horiz
	Ave		-20.0								
8	3666.000M	62.5	+32.4	-38.9	+0.5	+5.8	+0.0	42.3	54.0	-11.7	Horiz
			-20.0								
9	1833.000M	66.8	+26.5	-38.6	+0.3	+3.9	+0.0	38.9	54.0	-15.1	Vert
	Ave		-20.0								
10	9165.000M	47.8	+38.5	-39.0	+0.6	+9.4	+0.0	37.3	54.0	-16.7	Vert
			-20.0								

11	4582.500M	57.1	+32.3 -20.0	-39.7	+0.6	+6.6	+0.0	36.9	54.0	-17.1	Horiz
12	9165.100M	46.5	+38.5 -20.0	-39.0	+0.6	+9.4	+0.0	36.0	54.0	-18.0	Horiz
13	4582.500M	55.9	+32.3 -20.0	-39.7	+0.6	+6.6	+0.0	35.7	54.0	-18.3	Vert
14	7332.000M	49.0	+36.6 -20.0	-39.2	+0.3	+8.3	+0.0	35.0	54.0	-19.0	Vert
15	8248.500M	47.2	+37.6 -20.0	-40.2	+0.8	+9.1	+0.0	34.5	54.0	-19.5	Horiz
16	8248.500M	46.8	+37.6 -20.0	-40.2	+0.8	+9.1	+0.0	34.1	54.0	-19.9	Vert
17	5499.000M Ave	51.2	+34.9 -20.0	-39.9	+0.4	+7.3	+0.0	33.9	54.0	-20.1	Vert
18	7332.000M	47.3	+36.6 -20.0	-39.2	+0.3	+8.3	+0.0	33.3	54.0	-20.7	Horiz
19	5499.000M Ave	50.5	+34.9 -20.0	-39.9	+0.4	+7.3	+0.0	33.2	54.0	-20.8	Horiz
20	3666.000M	52.3	+32.4 -20.0	-38.9	+0.5	+5.8	+0.0	32.1	54.0	-21.9	Vert
21	6415.500M Ave	47.7	+35.4 -20.0	-40.3	+0.6	+7.9	+0.0	31.3	54.0	-22.7	Vert
22	6415.500M Ave	46.0	+35.4 -20.0	-40.3	+0.6	+7.9	+0.0	29.6	54.0	-24.4	Horiz
23	2749.500M	52.0	+29.7 -20.0	-37.6	+0.4	+5.0	+0.0	29.5	54.0	-24.5	Horiz
24	2749.500M	49.9	+29.7 -20.0	-37.6	+0.4	+5.0	+0.0	27.4	54.0	-26.6	Vert