TESTING
CERT #803.01, 803.02, 803.05, 803.06

ADDENDUM TO DAVIS INSTRUMENTS TEST REPORT FC09-044

FOR THE

VANTAGE VUE WEATHER STATION CONSOLE, 06351

FCC PART 15 SUBPART B SECTIONS 15.107 & 15.109 CLASS B, SUBPART C SECTIONS 15.207 & 15.247 AND RSS-210 ISSUE 7

TESTING

DATE OF ISSUE: MAY 13, 2009

PREPARED FOR:

Davis Instruments
3465 Diablo Avenue
Hayward, CA 94545

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

P.O. No.: 67365
W.O. No.: 88538

Date of test: March 2-11, 2009

Report No.: FC09-044A

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ADMINISTRATIVE INFORMATION

DATE OF TEST: March 2-11, 2009

DATE OF RECEIPT: March 2, 2009

REPRESENTATIVE: Perry Dillon

MANUFACTURER:
Davis Instruments
3465 Diablo Avenue
Hayward, CA 94545

TEST LOCATION:
CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

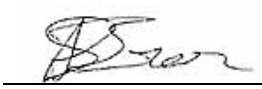
TEST METHOD: ANSI C63.4 (2003), RSS-210 Issue 7 and RSS GEN Issue 2

PURPOSE OF TEST:
Original Testing: To perform the testing of the Vantage VUE Weather Station Console, 06351 with the requirements for FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B, Subpart C Sections 15.207 & 15.247 and RSS-210 devices.
Addendum A: To replace an incorrect radiated spurious emissions data sheet and add an explanation of the calculation used for RF power output with no new testing.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Amrinder Brar, EMC Engineer/Lab Manager

TEST PERSONNEL:

Art Rice, Senior EMC Engineer

Norberto Gamez Jr., Test Technologist

SUMMARY OF RESULTS

Test	Specification/Method	Results
Voltage Variation	FCC 15.31(e)	Pass
Conducted Emissions	FCC 15.107 Class B	Pass
Radiated Emissions	FCC 15.109 Class B	Pass
Conducted Emissions	FCC 15.207	Pass
20dB Bandwidth	FCC 15.247(a) RSS-210	Pass
Carrier Frequency Separation	FCC 15.247(a)(1)	Pass
Number of Hopping Channels	FCC 15.247(a)(1)	Pass
Average Time of Occupancy	FCC 15.247(a)(1)	Pass
RF Output Power	FCC 15.247(b)(2)	Pass
OATS Spurious Emissions	FCC 15.247(d)	Pass
Bandedge	FCC 15.247(d)	Pass
99% Bandwidth	RSS-210 Issue 7 and RSS GEN Issue 2	Pass
Site File No.	FCC 958979 IC 3082B-1	

CONDITIONS DURING TESTING

Added ferrite at PC USB port and AC adapter for PC (support equipment) to reduce signals proven to come from support equipment, not EUT.

FCC 15.31(m) Number Of Channels
This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested
15.107 Conducted Emissions: 150 kHz – 30 MHz
15.109 Radiated Emissions: 30 MHz – 5000 MHz
15.207 Conducted Emissions: 150 kHz – 30 MHz
15.247 Radiated Emissions: 30 kHz – 9500 MHz

EUT Operating Frequency
The EUT was operating at 902 MHz – 928 MHz.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Vantage VUE Weather Station Console
Manuf: Davis Instruments
Model: 06351
Serial: Davis 1
FCC ID: pending

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Data Logger
Manuf: Davis Instruments
Model: 06510SER
Serial: NA

USB-Serial Adapter
Manuf: Keyspan
Model: USA-19HS
Serial: NA

Printer/Scanner
Manuf: HP
Model: C5316A
Serial: MY8C4C207Y

Laptop PC
Manuf: IBM
Model: Type 2373-BU6
Serial: 99-DCBYA

AC Adapter for Laptop
Manuf: IBM
Model: PN 08K8212
Serial: UB39P21R

5V 300mA AC Adapter
Manuf: Davis Instruments
Model: 06625
Serial: NA

MEASUREMENT UNCERTAINTIES

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Compliance is deemed to occur provided measurements are below the specified limits.

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

FCC 15.31(e) VOLTAGE VARIATIONS

Test Setup Photos

Test Data

Channel Frequency	DC Voltage Applied	Resulting Field Strength dBuV/m
902.361	3.8	99.3
902.341	4.5	99.4
902.356	5.2	99.3
914.897	3.8	101.9
914.902	4.5	101.9
914.902	5.2	101.9
927.437	3.8	101.4
927.436	4.5	101.4
927.428	5.2	101.4

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **FCC 15.247(b)(2) / 15.209 / 15.205**
Work Order #: **88538** Date: 3/5/2009
Test Type: **Voltage Variation on Power** Time: 11:06:51
Equipment: **Vantage VUE Weather Station Console** Sequence#: 23
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
Cable	None	04/02/2007	04/02/2009	P05299
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/21/2008	04/21/2010	P05440
Antenna	2630	12/22/2008	12/22/2010	00852
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
SA - Agilent E4446A	US44300438	07/23/2008	07/23/2010	02672
Tenma Power Supply	0201714	10/06/2008	10/06/2010	P05574
DMM, Fluke 85	65380320	07/17/2008	07/17/2010	02361

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting continuously on selected channel, with hopping disabled.
Using FSK modulation at maximum data rate.
The transmitter ERP limit is based on stated 2dBi gain antenna with maximum conducted power of 1 watt or 30 dBm.

RBW=100kHz, VBW=300kHz.

Radiated emissions 902-928 MHz.

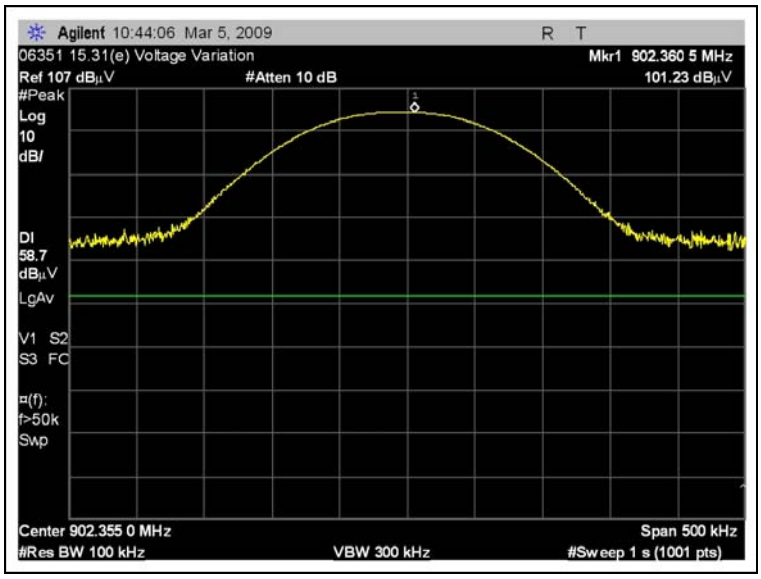
Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05440
T3=Cable Calibration ANP05299	T4=Cable Calibration ANP05300
T5=AMP-AN00730-020909 .01-1000	

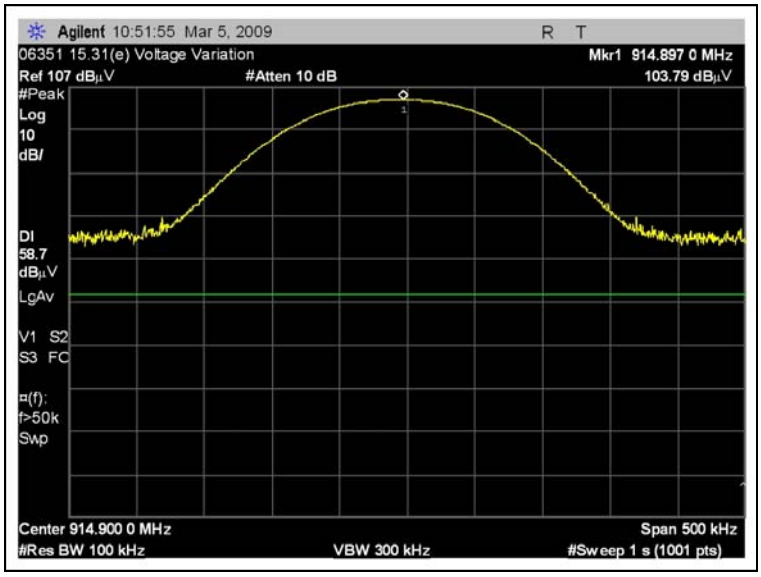
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	914.897M	103.8	+22.7 -27.4	+1.9	+0.2	+0.7	+0.0 56	101.9	127.2 Mid ch, 3.8V	-25.3	Vert 101
2	914.902M	103.8	+22.7 -27.4	+1.9	+0.2	+0.7	+0.0 56	101.9	127.2 Mid ch, 4.5V	-25.3	Vert 101
3	914.902M	103.8	+22.7 -27.4	+1.9	+0.2	+0.7	+0.0 56	101.9	127.2 Mid ch, 5.2V	-25.3	Vert 101
4	927.428M	103.1	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 56	101.4	127.2 High ch, 5.2V	-25.8	Vert 101
5	927.436M	103.1	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 56	101.4	127.2 High ch, 4.5V	-25.8	Vert 101
6	927.437M	103.1	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 56	101.4	127.2 High ch, 3.8V	-25.8	Vert 101
7	902.341M	101.3	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 56	99.4	127.2 Low ch, 4.5VDC, nominal	-27.8	Vert 101
8	902.356M	101.2	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 56	99.3	127.2 Low ch, 5.2V	-27.9	Vert 101
9	902.361M	101.2	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 56	99.3	127.2 Low ch, 3.8V	-27.9	Vert 101

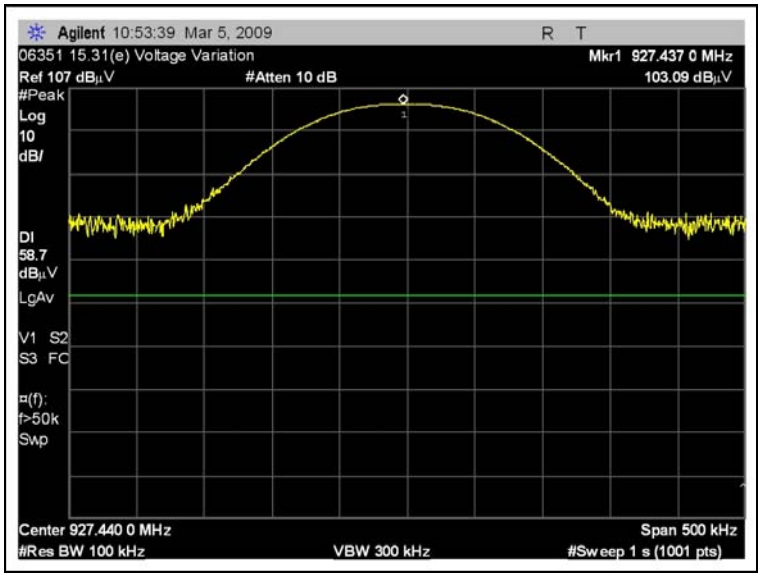
FCC 15.31(e) VOLTAGE VARIATIONS - LOW CHANNEL 3.8V



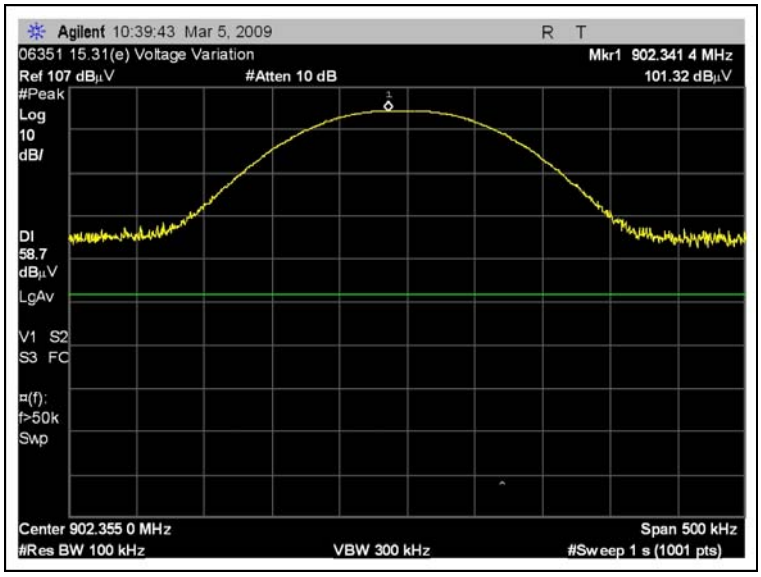
FCC 15.31(e) VOLTAGE VARIATIONS - MID CHANNEL 3.8V



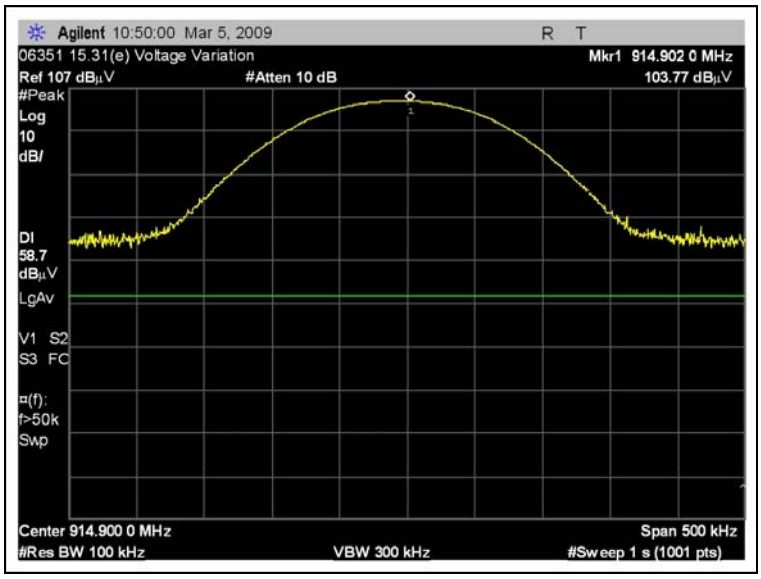
FCC 15.31(e) VOLTAGE VARIATIONS - HIGH CHANNEL 3.8V



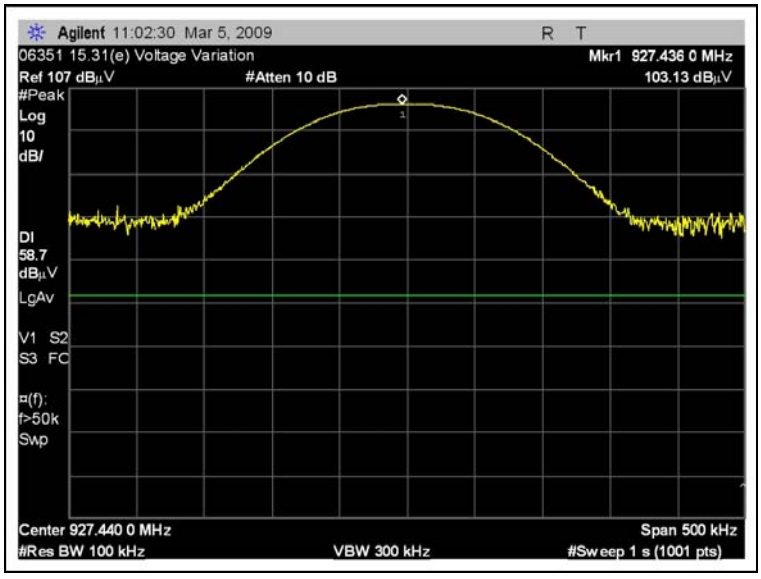
FCC 15.31(e) VOLTAGE VARIATIONS - LOW CHANNEL 4.5V



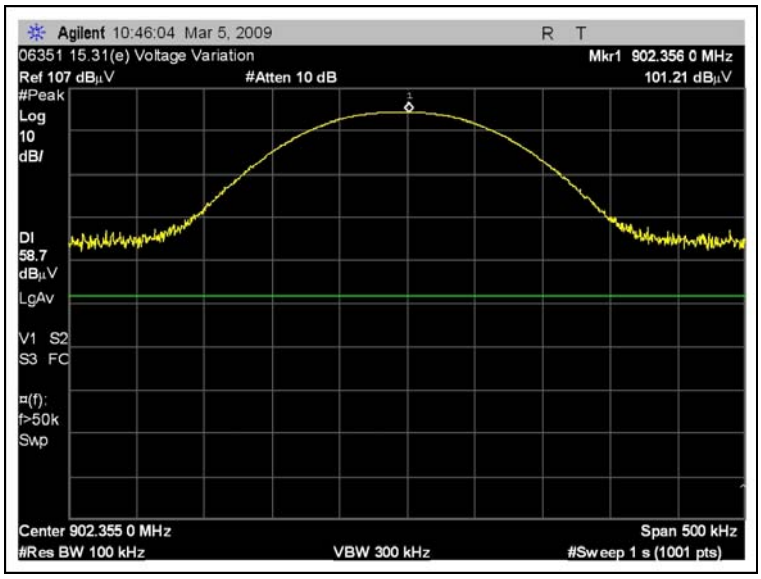
FCC 15.31(e) VOLTAGE VARIATIONS - MID CHANNEL 4.5V



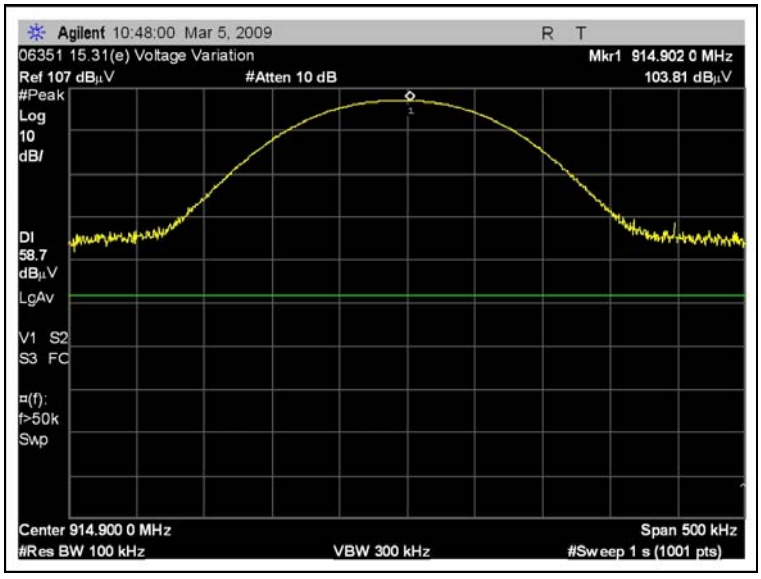
FCC 15.31(e) VOLTAGE VARIATIONS - HIGH CHANNEL 4.5V



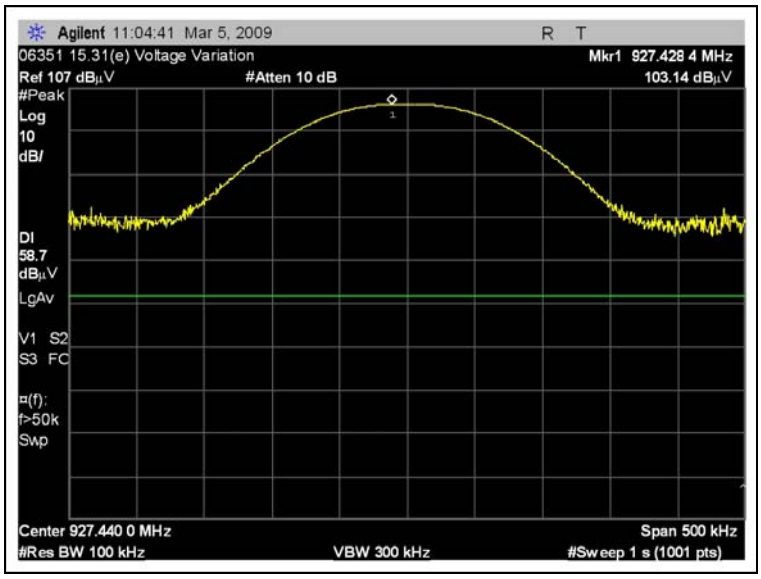
FCC 15.31(e) VOLTAGE VARIATIONS - LOW CHANNEL 5.2V



FCC 15.31(e) VOLTAGE VARIATIONS - HIGH CHANNEL 5.2V



FCC 15.31(e) VOLTAGE VARIATIONS - HIGH CHANNEL 5.2V



FCC 15.107 AC CONDUCTED EMISSIONS

Test Setup Photos

Test Data Sheets

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer:	**Davis Instruments**		
Specification:	**FCC 15.107 B COND [AVE]**		
Work Order #:	**88538**	Date:	3/5/2009
Test Type:	**Conducted Emissions**	Time:	5:53:44 PM
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	26
Manufacturer:	Davis Instruments	Tested By:	Art Rice
Model:	06351		120V 60Hz
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	01/06/2009	01/06/2011	02663
S.A., Display HP-85662A	2542A12169	01/06/2009	01/06/2011	02662
QP Adapter HP-85650A	2521A00909	01/07/2009	01/07/2011	00683
TTE High Pass Filter	H4120	12/18/2008	12/18/2010	05258
Cable	None	05/13/2008	05/13/2010	00880
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1006	04/02/2007	04/02/2009	00493

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
Data Logger	Davis Instruments	06510SER	n/a
Printer/Scanner	HP	C5316A	MY8C4C207Y
5V 300mA AC adapter	Davis Instruments	06625	none
Laptop PC	Impression	N30W-14	0038760B110236A
AC adapter for laptop	Acbel Polytech	API-7629	061629

Test Conditions / Notes:

The EUT is placed on top of the wooden test table. The EUT antenna is placed in the vertical position.
Data logger is installed on the bottom of the EUT, and is connected to the serial port of the laptop. Hyperterminal program is running on the PC.
Printer/Scanner is connected to the parallel port of the PC.
AC adapter for the laptop is on the floor.

Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)

Receiving on all channels in hop mode.
Conducted emissions 0.15-30 MHz.

Transducer Legend:

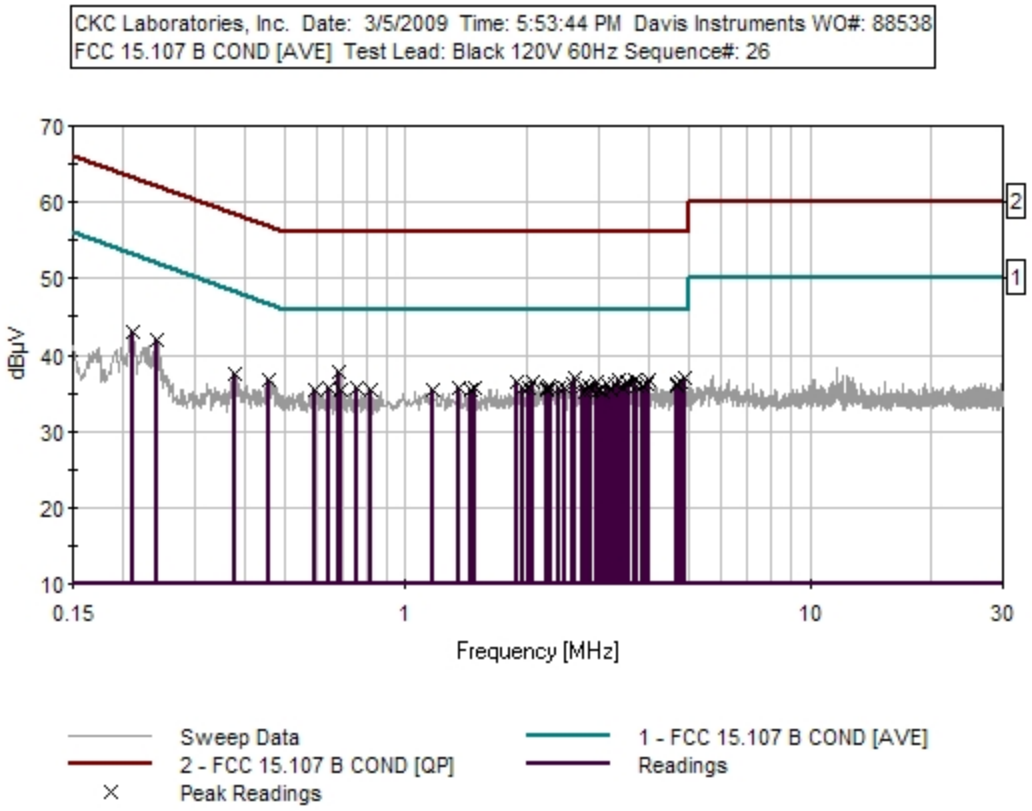
T1=LISN - AN00493 - Black - ELC "OUT"	T2=AN P00081 10dB Attenuator
T3=FIL-ANP05258-121808 CE HP Filter	T4=Cable Calibration ANP00880

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	684.492k	27.5	+0.0	+10.1	+0.0	+0.1	+0.0	37.7	46.0	-8.3	Black
2	2.608M	26.8	-0.1	+10.0	+0.1	+0.2	+0.0	37.0	46.0	-9.0	Black
3	4.888M	26.5	+0.1	+10.0	+0.1	+0.2	+0.0	36.9	46.0	-9.1	Black
4	3.352M	26.5	-0.1	+10.0	+0.1	+0.2	+0.0	36.7	46.0	-9.3	Black
5	4.003M	26.3	+0.0	+10.1	+0.1	+0.2	+0.0	36.7	46.0	-9.3	Black
6	3.692M	26.2	+0.0	+10.1	+0.1	+0.2	+0.0	36.6	46.0	-9.4	Black
7	2.064M	26.2	+0.0	+10.0	+0.1	+0.2	+0.0	36.5	46.0	-9.5	Black
8	3.531M	26.1	+0.0	+10.1	+0.1	+0.2	+0.0	36.5	46.0	-9.5	Black
9	4.807M	26.1	+0.1	+10.0	+0.1	+0.2	+0.0	36.5	46.0	-9.5	Black
10	1.872M	26.2	+0.0	+10.0	+0.1	+0.1	+0.0	36.4	46.0	-9.6	Black
11	2.969M	26.3	-0.1	+10.0	+0.1	+0.1	+0.0	36.4	46.0	-9.6	Black
12	2.578M	26.1	-0.1	+10.0	+0.1	+0.2	+0.0	36.3	46.0	-9.7	Black
13	3.565M	25.9	+0.0	+10.1	+0.1	+0.2	+0.0	36.3	46.0	-9.7	Black
14	3.969M	25.9	+0.0	+10.1	+0.1	+0.1	+0.0	36.2	46.0	-9.8	Black
15	4.688M	25.8	+0.1	+10.0	+0.1	+0.2	+0.0	36.2	46.0	-9.8	Black
16	459.787k	26.6	+0.1	+10.1	+0.0	+0.0	+0.0	36.8	46.7	-9.9	Black
17	3.135M	26.0	-0.1	+10.0	+0.1	+0.1	+0.0	36.1	46.0	-9.9	Black
18	3.293M	26.0	-0.1	+10.0	+0.1	+0.1	+0.0	36.1	46.0	-9.9	Black
19	243.082k	31.9	+0.0	+10.0	+0.1	+0.0	+0.0	42.0	52.0	-10.0	Black
20	2.263M	25.7	+0.0	+10.0	+0.1	+0.2	+0.0	36.0	46.0	-10.0	Black
21	2.753M	25.9	-0.1	+10.0	+0.1	+0.1	+0.0	36.0	46.0	-10.0	Black
22	3.718M	25.6	+0.0	+10.1	+0.1	+0.2	+0.0	36.0	46.0	-10.0	Black
23	3.867M	25.7	+0.0	+10.1	+0.1	+0.1	+0.0	36.0	46.0	-10.0	Black

24	2.821M	25.8	-0.1	+10.0	+0.1	+0.1	+0.0	35.9	46.0	-10.1	Black
25	4.696M	25.5	+0.1	+10.0	+0.1	+0.2	+0.0	35.9	46.0	-10.1	Black
26	210.358k	32.8	+0.0	+10.0	+0.1	+0.1	+0.0	43.0	53.2	-10.2	Black
27	752.849k	25.7	+0.0	+10.0	+0.1	+0.0	+0.0	35.8	46.0	-10.2	Black
28	2.387M	25.5	+0.0	+10.0	+0.1	+0.2	+0.0	35.8	46.0	-10.2	Black
29	2.463M	25.6	-0.1	+10.0	+0.1	+0.2	+0.0	35.8	46.0	-10.2	Black
30	1.349M	25.4	+0.0	+10.1	+0.1	+0.1	+0.0	35.7	46.0	-10.3	Black
31	1.485M	25.5	+0.0	+10.0	+0.1	+0.1	+0.0	35.7	46.0	-10.3	Black
32	1.957M	25.4	+0.0	+10.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	Black
33	2.229M	25.5	+0.0	+10.0	+0.1	+0.1	+0.0	35.7	46.0	-10.3	Black
34	2.293M	25.4	+0.0	+10.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	Black
35	3.433M	25.5	-0.1	+10.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	Black
36	641.587k	25.4	+0.0	+10.1	+0.0	+0.1	+0.0	35.6	46.0	-10.4	Black
37	2.025M	25.3	+0.0	+10.0	+0.1	+0.2	+0.0	35.6	46.0	-10.4	Black
38	3.033M	25.4	-0.1	+10.0	+0.1	+0.1	+0.0	35.5	46.0	-10.5	Black
39	3.229M	25.4	-0.1	+10.0	+0.1	+0.1	+0.0	35.5	46.0	-10.5	Black
40	592.865k	25.1	+0.1	+10.1	+0.0	+0.1	+0.0	35.4	46.0	-10.6	Black
41	693.218k	25.2	+0.0	+10.1	+0.0	+0.1	+0.0	35.4	46.0	-10.6	Black
42	816.842k	25.2	+0.0	+10.0	+0.1	+0.1	+0.0	35.4	46.0	-10.6	Black
43	1.166M	25.1	+0.0	+10.1	+0.1	+0.1	+0.0	35.4	46.0	-10.6	Black
44	377.614k	27.3	+0.1	+10.1	+0.0	+0.1	+0.0	37.6	48.3	-10.7	Black
45	1.443M	25.1	+0.0	+10.0	+0.1	+0.1	+0.0	35.3	46.0	-10.7	Black
46	2.242M	25.0	+0.0	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black

47	2.863M	25.2	-0.1	+10.0	+0.1	+0.1	+0.0	35.3	46.0	-10.7	Black
48	2.991M	25.2	-0.1	+10.0	+0.1	+0.1	+0.0	35.3	46.0	-10.7	Black
49	2.787M	25.1	-0.1	+10.0	+0.1	+0.1	+0.0	35.2	46.0	-10.8	Black
50	3.067M	25.1	-0.1	+10.0	+0.1	+0.1	+0.0	35.2	46.0	-10.8	Black



Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer:	**Davis Instruments**		
Specification:	**FCC 15.107 B COND [AVE]**		
Work Order #:	**88538**	Date:	3/5/2009
Test Type:	**Conducted Emissions**	Time:	5:58:45 PM
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	27
Manufacturer:	Davis Instruments	Tested By:	Art Rice
Model:	06351		120V 60Hz
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	01/06/2009	01/06/2011	02663
S.A., Display HP-85662A	2542A12169	01/06/2009	01/06/2011	02662
QP Adapter HP-85650A	2521A00909	01/07/2009	01/07/2011	00683
TTE High Pass Filter	H4120	12/18/2008	12/18/2010	05258
Cable	None	05/13/2008	05/13/2010	00880
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1006	04/02/2007	04/02/2009	00493

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
Data Logger	Davis Instruments	06510SER	n/a
Printer/Scanner	HP	C5316A	MY8C4C207Y
5V 300mA AC adapter	Davis Instruments	06625	none
Laptop PC	Impression	N30W-14	0038760B110236A
AC adapter for laptop	Acbel Polytech	API-7629	061629

Test Conditions / Notes:

The EUT is placed on top of the wooden test table. The EUT antenna is placed in the vertical position.
Data logger is installed on the bottom of the EUT, and is connected to the serial port of the laptop. Hyperterminal program is running on the PC.
Printer/Scanner is connected to the parallel port of the PC.
AC adapter for the laptop is on the floor.

Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)

Receiving on all channels in hop mode.

Conducted emissions 0.15-30 MHz.

Transducer Legend:

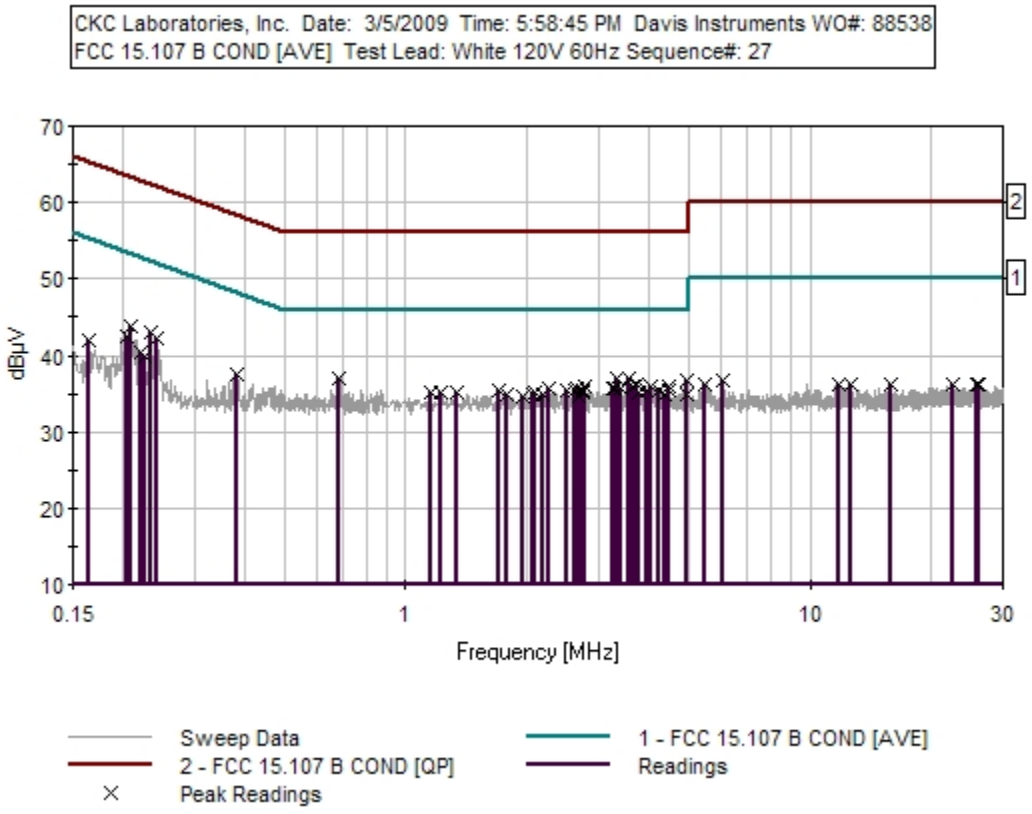
T1=LISN - AN00493 - White - ELC "OUT"	T2=AN P00081 10dB Attenuator
T3=FIL-ANP05258-121808 CE HP Filter	T4=Cable Calibration ANP00880

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	684.492k	26.9	+0.0	+10.1	+0.0	+0.1	+0.0	37.1	46.0	-8.9	White
2	3.327M	26.7	+0.1	+10.0	+0.1	+0.1	+0.0	37.0	46.0	-9.0	White
3	3.569M	26.5	+0.1	+10.1	+0.1	+0.2	+0.0	37.0	46.0	-9.0	White
4	233.628k	32.9	+0.0	+10.0	+0.1	+0.0	+0.0	43.0	52.3	-9.3	White
5	4.943M	26.4	+0.0	+10.0	+0.1	+0.2	+0.0	36.7	46.0	-9.3	White
6	208.176k	33.8	+0.0	+10.0	+0.1	+0.0	+0.0	43.9	53.3	-9.4	White
7	243.082k	32.2	+0.0	+10.0	+0.1	+0.0	+0.0	42.3	52.0	-9.7	White
8	3.718M	25.8	+0.1	+10.1	+0.1	+0.2	+0.0	36.3	46.0	-9.7	White
9	2.774M	25.7	+0.1	+10.0	+0.1	+0.1	+0.0	36.0	46.0	-10.0	White
10	4.479M	25.7	+0.0	+10.0	+0.1	+0.2	+0.0	36.0	46.0	-10.0	White
11	3.654M	25.4	+0.1	+10.1	+0.1	+0.2	+0.0	35.9	46.0	-10.1	White
12	4.033M	25.4	+0.1	+10.1	+0.1	+0.2	+0.0	35.9	46.0	-10.1	White
13	3.395M	25.4	+0.1	+10.0	+0.1	+0.2	+0.0	35.8	46.0	-10.2	White
14	3.246M	25.4	+0.1	+10.0	+0.1	+0.1	+0.0	35.7	46.0	-10.3	White
15	3.271M	25.4	+0.1	+10.0	+0.1	+0.1	+0.0	35.7	46.0	-10.3	White
16	2.263M	25.3	+0.0	+10.0	+0.1	+0.2	+0.0	35.6	46.0	-10.4	White
17	2.659M	25.3	+0.1	+10.0	+0.1	+0.1	+0.0	35.6	46.0	-10.4	White
18	1.698M	25.3	+0.0	+10.0	+0.1	+0.1	+0.0	35.5	46.0	-10.5	White
19	3.956M	25.1	+0.1	+10.1	+0.1	+0.1	+0.0	35.5	46.0	-10.5	White
20	2.510M	25.0	+0.1	+10.0	+0.1	+0.2	+0.0	35.4	46.0	-10.6	White
21	2.629M	24.9	+0.1	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White
22	2.727M	25.0	+0.1	+10.0	+0.1	+0.1	+0.0	35.3	46.0	-10.7	White
23	4.224M	24.8	+0.1	+10.1	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White

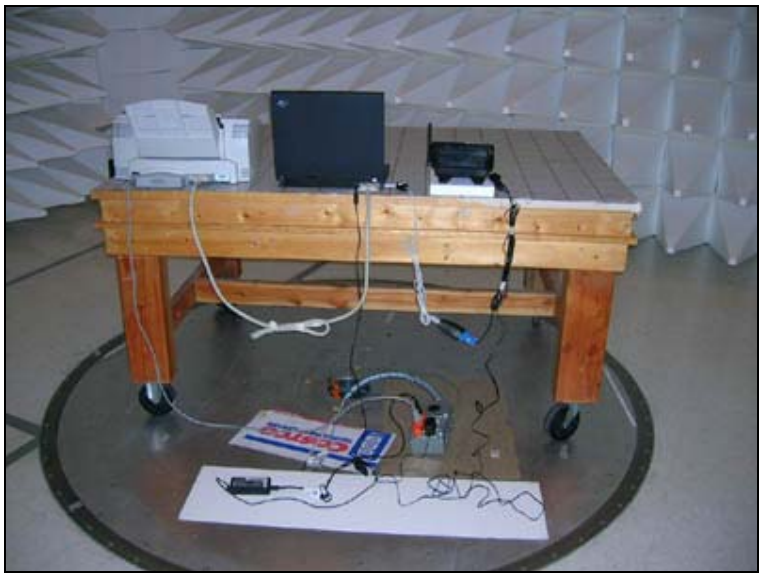
24	4.462M	24.8	+0.1	+10.1	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White
25	379.795k	27.2	+0.1	+10.1	+0.0	+0.1	+0.0	37.5	48.3	-10.8	White
26	1.149M	24.9	+0.0	+10.1	+0.1	+0.1	+0.0	35.2	46.0	-10.8	White
27	2.093M	24.9	+0.0	+10.0	+0.1	+0.2	+0.0	35.2	46.0	-10.8	White
28	2.748M	24.9	+0.1	+10.0	+0.1	+0.1	+0.0	35.2	46.0	-10.8	White
29	3.752M	24.7	+0.1	+10.1	+0.1	+0.2	+0.0	35.2	46.0	-10.8	White
30	1.221M	24.8	+0.0	+10.1	+0.1	+0.1	+0.0	35.1	46.0	-10.9	White
31	1.336M	24.8	+0.0	+10.1	+0.1	+0.1	+0.0	35.1	46.0	-10.9	White
32	4.352M	24.5	+0.1	+10.1	+0.1	+0.2	+0.0	35.0	46.0	-11.0	White
33	203.813k	32.3	+0.0	+10.0	+0.1	+0.0	+0.0	42.4	53.5	-11.1	White
34	1.783M	24.7	+0.0	+10.0	+0.1	+0.1	+0.0	34.9	46.0	-11.1	White
35	2.191M	24.7	+0.0	+10.0	+0.1	+0.1	+0.0	34.9	46.0	-11.1	White
36	2.051M	24.5	+0.0	+10.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	White
37	4.973M	24.5	+0.0	+10.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	White
38	1.957M	24.4	+0.0	+10.0	+0.1	+0.2	+0.0	34.7	46.0	-11.3	White
39	2.693M	24.4	+0.1	+10.0	+0.1	+0.1	+0.0	34.7	46.0	-11.3	White
40	219.811k	30.1	+0.0	+10.0	+0.1	+0.1	+0.0	40.3	52.8	-12.5	White
41	224.902k	29.9	+0.0	+10.0	+0.1	+0.0	+0.0	40.0	52.6	-12.6	White
42	6.058M	26.3	+0.1	+10.1	+0.1	+0.2	+0.0	36.8	50.0	-13.2	White
43	164.544k	31.4	+0.0	+10.0	+0.4	+0.1	+0.0	41.9	55.2	-13.3	White
44	5.517M	25.8	+0.1	+10.1	+0.1	+0.2	+0.0	36.3	50.0	-13.7	White
45	11.734M	25.9	+0.0	+10.0	+0.1	+0.3	+0.0	36.3	50.0	-13.7	White
46	26.142M	25.3	+0.4	+10.0	+0.2	+0.4	+0.0	36.3	50.0	-13.7	White
47	15.887M	25.5	+0.1	+10.1	+0.2	+0.3	+0.0	36.2	50.0	-13.8	White

48	12.562M	25.7	+0.0	+10.0	+0.1	+0.3	+0.0	36.1	50.0	-13.9	White
49	22.671M	25.0	+0.4	+10.1	+0.2	+0.4	+0.0	36.1	50.0	-13.9	White
50	25.793M	25.1	+0.4	+10.0	+0.2	+0.4	+0.0	36.1	50.0	-13.9	White



FCC 15.109 RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location:	CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170		
Customer:	**Davis Instruments**		
Specification:	**FCC 15.109 Class B Radiated**		
Work Order #:	**88538**	Date:	3/5/2009
Test Type:	**Maximized Emissions**	Time:	19:39:40
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	30
Manufacturer:	Davis Instruments	Tested By:	Art Rice
Model:	06351		
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299
SA - Agilent E4446A	US44300438	07/23/2008	07/23/2010	02672
Horn - DRG-118A	1064	01/09/2009	01/09/2011	02061
HF Pre-Amp - 83051A	00323	02/05/2008	02/05/2010	02810
Cable - HF - 32022-2-29094K-24TC	n/a	02/04/2008	02/04/2010	03015
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none
Data Logger	Davis Instruments	06510SER	n/a
USB-Serial adapter	Keyspan	USA-19HS	
Printer/Scanner	HP	C5316A	MY8C4C207Y
Laptop PC	IBM	Type 2373-BU6	99-DCBYA
AC adapter for laptop	IBM	PN 08K8212	...UB39P21R

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Data logger is installed on the bottom of the EUT, and is connected to the serial port of the USB-Serial Adapter. USB-Serial adapter is connected to the USB port of the laptop. Hyperterminal program is running on the PC.
Printer/Scanner is connected to the parallel port of the PC.
AC adapter for the laptop is on the floor.
Added ferrite at PC USB port and AC adapter for PC (support equipment) to reduce signals proven to come from support equipment, not EUT.

Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)

Receiving on mid channel.

Radiated emissions 30MHz-5GHz

Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05440
T3=Cable Calibration ANP05299	T4=Cable Calibration ANP05300
T5=AMP-AN00730-020909 .01-1000	T6=AMP-AN02810-020508
T7=ANT AN02061 900MHz-18.5GHz	T8=CAB-AN03015-020408
T9=CAB-ANP04241-050608	T10=CAB-ANP05138-050608

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

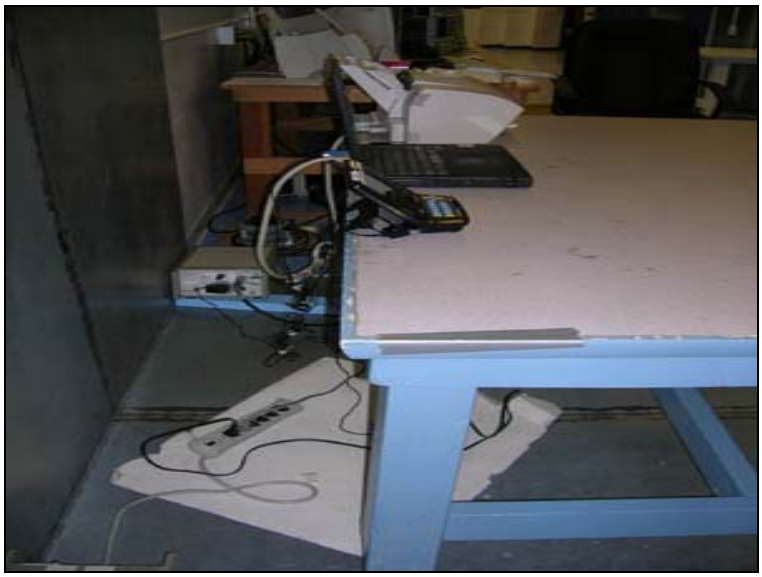
#	Freq	Rdng	T1 T5 T9	T2 T6 T10	T3 T7	T4 T8	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	30.313M	45.0	+18.9	+0.4	+0.0	+0.1	+0.0	37.0	40.0	-3.0	Vert
	QP		-27.4	+0.0	+0.0	+0.0	157				101
			+0.0	+0.0							
^	30.363M	50.2	+18.8	+0.4	+0.0	+0.1	+0.0	42.1	40.0	+2.1	Vert
			-27.4	+0.0	+0.0	+0.0	157				101
			+0.0	+0.0							
3	58.801M	56.9	+5.8	+0.5	+0.1	+0.2	+0.0	36.2	40.0	-3.8	Vert
	QP		-27.3	+0.0	+0.0	+0.0	113				103
			+0.0	+0.0							
^	58.724M	61.6	+5.9	+0.5	+0.1	+0.2	+0.0	41.0	40.0	+1.0	Vert
			-27.3	+0.0	+0.0	+0.0	113				103
			+0.0	+0.0							
^	58.752M	56.7	+5.8	+0.5	+0.1	+0.2	+0.0	36.0	40.0	-4.0	Vert
			-27.3	+0.0	+0.0	+0.0	300				103
			+0.0	+0.0							
6	37.998M	47.8	+14.9	+0.4	+0.1	+0.1	+0.0	35.9	40.0	-4.1	Vert
	QP		-27.4	+0.0	+0.0	+0.0	208				103
			+0.0	+0.0							
^	38.016M	50.9	+14.9	+0.4	+0.1	+0.1	+0.0	39.0	40.0	-1.0	Vert
			-27.4	+0.0	+0.0	+0.0	208				103
			+0.0	+0.0							
8	61.526M	56.8	+5.6	+0.4	+0.1	+0.2	+0.0	35.8	40.0	-4.2	Vert
	QP		-27.3	+0.0	+0.0	+0.0	111				103
			+0.0	+0.0							
^	61.521M	61.1	+5.6	+0.4	+0.1	+0.2	+0.0	40.1	40.0	+0.1	Vert
			-27.3	+0.0	+0.0	+0.0	111				103
			+0.0	+0.0							
10	46.321M	51.3	+10.4	+0.4	+0.1	+0.1	+0.0	35.0	40.0	-5.0	Vert
	QP		-27.3	+0.0	+0.0	+0.0	98				103
			+0.0	+0.0							
^	46.254M	55.4	+10.4	+0.4	+0.1	+0.1	+0.0	39.1	40.0	-0.9	Vert
			-27.3	+0.0	+0.0	+0.0	98				103
			+0.0	+0.0							

12	729.013M QP	44.0	+20.7 -27.1 +0.0	+1.7 +0.0 +0.0	+0.3 +0.0	+0.7 +0.0	+0.0 358	40.3	46.0	-5.7	Vert 121
^	728.988M	44.8	+20.7 -27.1 +0.0	+1.7 +0.0 +0.0	+0.3 +0.0	+0.7 +0.0	+0.0 358	41.1	46.0	-4.9	Vert 121
14	4782.887M	36.5	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0 -2	48.2	54.0 Noise floor	-5.8	Horiz 101
15	4746.618M	35.9	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0	47.6	54.0 Noise floor	-6.4	Horiz 101
16	928.508M	41.2	+23.0 -27.5 +0.0	+1.9 +0.0 +0.0	+0.2 +0.0	+0.7 +0.0	+0.0 150	39.5	46.0	-6.5	Vert 122
17	4764.283M	35.7	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0 -2	47.4	54.0 Noise floor	-6.6	Horiz 101
18	4775.492M	35.3	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0	47.0	54.0 Noise floor	-7.0	Vert 101
19	4782.258M	35.2	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0	46.9	54.0 Noise floor	-7.1	Vert 101
20	4927.850M	33.9	+0.0 +0.0 +1.2	+0.0 -26.3 +3.7	+0.0 +33.2	+0.0 +0.7	+0.0 -2	46.4	54.0 Noise floor	-7.6	Vert 101
21	4921.101M	33.9	+0.0 +0.0 +1.2	+0.0 -26.3 +3.7	+0.0 +33.2	+0.0 +0.7	+0.0 -2	46.4	54.0 Noise floor	-7.6	Vert 101
22	931.990M	39.9	+23.0 -27.5 +0.0	+1.9 +0.0 +0.0	+0.2 +0.0	+0.7 +0.0	+0.0 101	38.2	46.0	-7.8	Horiz 133
23	4766.933M	34.4	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0	46.1	54.0 Noise floor	-7.9	Horiz 101
24	4762.031M	34.2	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0 -2	45.9	54.0 Noise floor	-8.1	Horiz 101
25	4764.895M	33.7	+0.0 +0.0 +1.1	+0.0 -26.6 +3.6	+0.0 +32.9	+0.0 +0.7	+0.0	45.4	54.0 Noise floor	-8.6	Vert 101
26	114.009M QP	49.5	+11.1 -27.2 +0.0	+0.6 +0.0 +0.0	+0.1 +0.0	+0.3 +0.0	+0.0 301	34.4	43.5	-9.1	Vert 101
^	113.995M	53.3	+11.0 -27.2 +0.0	+0.6 +0.0 +0.0	+0.1 +0.0	+0.3 +0.0	+0.0 301	38.1	43.5	-5.4	Vert 101

28	88.085M	52.5	+8.3	+0.6	+0.0	+0.2	+0.0	34.3	43.5	-9.2	Vert
	QP		-27.3	+0.0	+0.0	+0.0	310				103
			+0.0	+0.0							
^	88.081M	56.1	+8.3	+0.6	+0.0	+0.2	+0.0	37.9	43.5	-5.6	Vert
			-27.3	+0.0	+0.0	+0.0	310				103
			+0.0	+0.0							
30	54.400M	48.7	+7.1	+0.4	+0.0	+0.2	+0.0	29.1	40.0	-10.9	Vert
	QP		-27.3	+0.0	+0.0	+0.0	131				101
			+0.0	+0.0							
^	54.313M	55.0	+7.1	+0.4	+0.0	+0.2	+0.0	35.4	40.0	-4.6	Vert
			-27.3	+0.0	+0.0	+0.0	131				101
			+0.0	+0.0							
32	664.303M	29.9	+20.0	+1.6	+0.2	+0.7	+0.0	25.4	46.0	-20.6	Vert
	QP		-27.0	+0.0	+0.0	+0.0	171				116
			+0.0	+0.0							
^	664.271M	45.5	+20.0	+1.6	+0.2	+0.7	+0.0	41.0	46.0	-5.0	Vert
			-27.0	+0.0	+0.0	+0.0	171				116
			+0.0	+0.0							
34	1194.713M	26.2	+0.0	+0.0	+0.0	+0.0	+0.0	25.1	54.0	-28.9	Vert
	Ave		+0.0	-27.7	+24.1	+0.3	179				101
			+0.5	+1.7							
^	1194.741M	55.8	+0.0	+0.0	+0.0	+0.0	+0.0	54.7	54.0	+0.7	Vert
			+0.0	-27.7	+24.1	+0.3	179				101
			+0.5	+1.7							

FCC 15.207 AC CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer:	**Davis Instruments**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**88538**	Date:	3/11/2009
Test Type:	**Conducted Emissions**	Time:	08:57:32
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	38
Manufacturer:	Davis Instruments	Tested By:	N. Gamez
Model:	06351		120V 60Hz
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	01/06/2009	01/06/2011	02663
S.A., Display HP-85662A	2542A12169	01/06/2009	01/06/2011	02662
QP Adapter HP-85650A	2521A00909	01/07/2009	01/07/2011	00683
TTE High Pass Filter	H4120	12/18/2008	12/18/2010	05258
Cable	None	05/13/2008	05/13/2010	00880
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1006	04/02/2007	04/02/2009	00493

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
Data Logger	Davis Instruments	06510SER	n/a
Printer/Scanner	HP	C5316A	MY8C4C207Y
5V 300mA AC adapter	Davis Instruments	06625	none
Laptop PC	Impression	N30W-14	0038760B110236A
AC adapter for laptop	Acbel Polytech	API-7629	061629

Test Conditions / Notes:

The EUT is placed on top of the wooden test table. The EUT antenna is placed in the vertical position.
Data logger is installed on the bottom of the EUT, and is connected to the serial port of the laptop. Hyperterminal program is running on the PC.
Printer/Scanner is connected to the parallel port of the PC.
AC adapter for the laptop is on the floor.

Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)
Transmitting continuously with modulation on worst case channel.

Conducted emissions 0.15-30 MHz.

Transducer Legend:

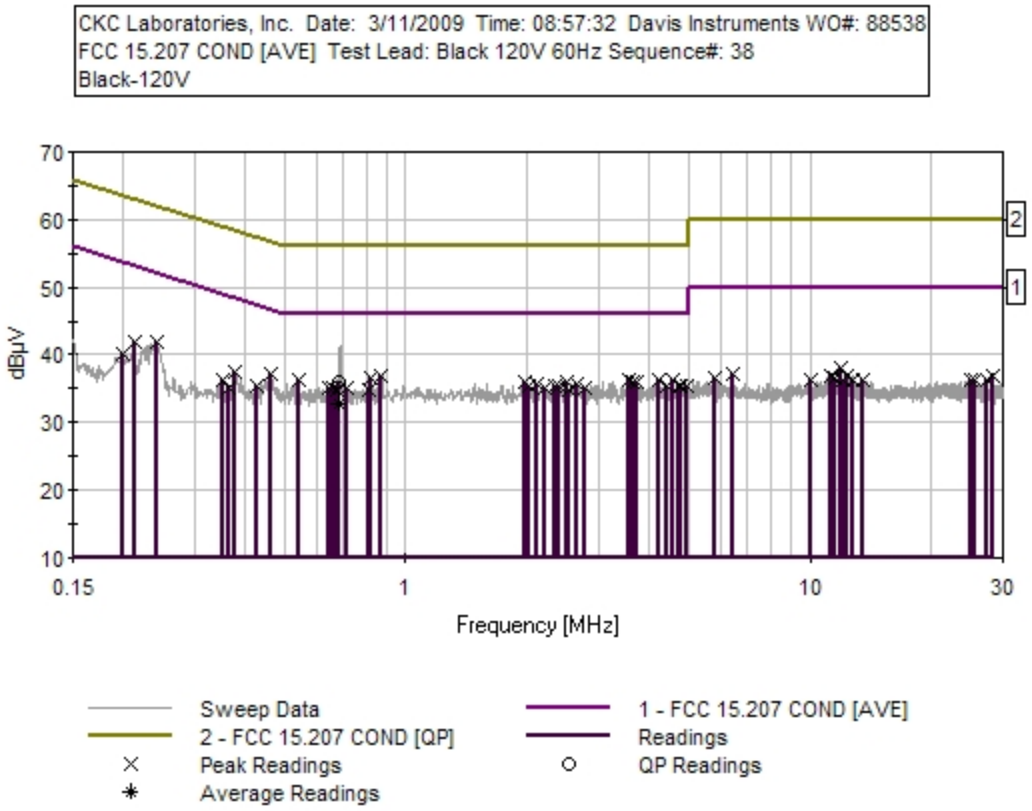
T1=LISN - AN00493 - Black - ELC "OUT"	T2=AN P00081 10dB Attenuator
T3=FIL-ANP05258-121808 CE HP Filter	T4=Cable Calibration ANP00880

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	872.110k	26.7	+0.0	+10.0	+0.1	+0.2	+0.0	37.0	46.0	-9.0	Black
2	817.570k	26.4	+0.0	+10.0	+0.1	+0.1	+0.0	36.6	46.0	-9.4	Black
3	464.878k	26.9	+0.1	+10.1	+0.0	+0.0	+0.0	37.1	46.6	-9.5	Black
4	4.586M	26.0	+0.1	+10.0	+0.1	+0.2	+0.0	36.4	46.0	-9.6	Black
5	3.573M	25.9	+0.0	+10.1	+0.1	+0.2	+0.0	36.3	46.0	-9.7	Black
6	4.224M	25.9	+0.0	+10.1	+0.1	+0.2	+0.0	36.3	46.0	-9.7	Black
7	541.234k	26.0	+0.0	+10.1	+0.0	+0.1	+0.0	36.2	46.0	-9.8	Black
8	1.966M	25.8	+0.0	+10.0	+0.1	+0.2	+0.0	36.1	46.0	-9.9	Black
9	242.354k	31.9	+0.0	+10.0	+0.1	+0.0	+0.0	42.0	52.0	-10.0	Black
10	3.731M	25.6	+0.0	+10.1	+0.1	+0.2	+0.0	36.0	46.0	-10.0	Black
11	2.502M	25.7	-0.1	+10.0	+0.1	+0.2	+0.0	35.9	46.0	-10.1	Black
12	3.646M	25.5	+0.0	+10.1	+0.1	+0.2	+0.0	35.9	46.0	-10.1	Black
13	2.655M	25.5	-0.1	+10.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	Black
14	2.115M	25.4	+0.0	+10.0	+0.1	+0.1	+0.0	35.6	46.0	-10.4	Black
15	2.013M	25.2	+0.0	+10.0	+0.1	+0.2	+0.0	35.5	46.0	-10.5	Black
16	4.420M	25.1	+0.0	+10.1	+0.1	+0.2	+0.0	35.5	46.0	-10.5	Black
17	2.391M	25.1	+0.0	+10.0	+0.1	+0.2	+0.0	35.4	46.0	-10.6	Black
18	2.344M	25.0	+0.0	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black
19	4.756M	24.9	+0.1	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black
20	4.811M	24.9	+0.1	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black
21	4.964M	24.9	+0.1	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black
22	378.341k	27.2	+0.1	+10.1	+0.0	+0.1	+0.0	37.5	48.3	-10.8	Black
23	648.132k	25.0	+0.0	+10.1	+0.0	+0.1	+0.0	35.2	46.0	-10.8	Black

24	656.131k	25.0	+0.0	+10.1	+0.0	+0.1	+0.0	35.2	46.0	-10.8	Black
25	2.195M	25.0	+0.0	+10.0	+0.1	+0.1	+0.0	35.2	46.0	-10.8	Black
26	713.580k	25.0	+0.0	+10.1	+0.0	+0.0	+0.0	35.1	46.0	-10.9	Black
27	2.765M	24.9	-0.1	+10.0	+0.1	+0.1	+0.0	35.0	46.0	-11.0	Black
28	213.994k	31.7	+0.0	+10.0	+0.1	+0.1	+0.0	41.9	53.0	-11.1	Black
29	672.857k	24.7	+0.0	+10.1	+0.0	+0.1	+0.0	34.9	46.0	-11.1	Black
30	806.662k	24.7	+0.0	+10.0	+0.1	+0.1	+0.0	34.9	46.0	-11.1	Black
31	2.527M	24.5	-0.1	+10.0	+0.1	+0.2	+0.0	34.7	46.0	-11.3	Black
32	11.914M	27.6	+0.1	+10.0	+0.1	+0.3	+0.0	38.1	50.0	-11.9	Black
33	427.063k	25.1	+0.1	+10.1	+0.0	+0.0	+0.0	35.3	47.3	-12.0	Black
34	351.434k	26.2	+0.0	+10.1	+0.1	+0.0	+0.0	36.4	48.9	-12.5	Black
35	6.409M	26.7	+0.1	+10.1	+0.1	+0.2	+0.0	37.2	50.0	-12.8	Black
36	11.301M	26.6	+0.0	+10.0	+0.1	+0.3	+0.0	37.0	50.0	-13.0	Black
37	28.493M	26.2	+0.1	+10.0	+0.2	+0.4	+0.0	36.9	50.0	-13.1	Black
38	12.400M	26.3	+0.1	+10.0	+0.1	+0.3	+0.0	36.8	50.0	-13.2	Black
39	683.000k Ave	22.6	+0.0	+10.1	+0.0	+0.1	+0.0	32.7	46.0	-13.3	Black
^	683.000k	31.1	+0.0	+10.1	+0.0	+0.1	+0.0	41.3	46.0	-4.7	Black
41	11.508M	26.2	+0.1	+10.0	+0.1	+0.3	+0.0	36.7	50.0	-13.3	Black
42	199.450k	30.1	+0.0	+10.0	+0.1	+0.0	+0.0	40.2	53.6	-13.4	Black
43	366.706k	25.0	+0.0	+10.1	+0.1	+0.0	+0.0	35.2	48.6	-13.4	Black
44	5.797M	26.1	+0.1	+10.1	+0.1	+0.2	+0.0	36.6	50.0	-13.4	Black
45	12.112M	25.9	+0.1	+10.0	+0.1	+0.3	+0.0	36.4	50.0	-13.6	Black
46	24.991M	25.4	+0.2	+10.0	+0.2	+0.5	+0.0	36.3	50.0	-13.7	Black
47	25.628M	25.5	+0.2	+10.0	+0.2	+0.4	+0.0	36.3	50.0	-13.7	Black
48	10.103M	25.8	+0.0	+10.1	+0.1	+0.2	+0.0	36.2	50.0	-13.8	Black

49	12.725M	25.8	+0.0	+10.0	+0.1	+0.3	+0.0	36.2	50.0	-13.8	Black
50	13.463M	25.6	+0.0	+10.1	+0.2	+0.3	+0.0	36.2	50.0	-13.8	Black
51	27.246M	25.4	+0.2	+10.0	+0.2	+0.4	+0.0	36.2	50.0	-13.8	Black
52	683.000k QP	25.8	+0.0	+10.1	+0.0	+0.1	+0.0	36.0	56.0	-20.0	Black



Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer:	**Davis Instruments**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**88538**	Date:	3/11/2009
Test Type:	**Conducted Emissions**	Time:	8:44:06 AM
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	37
Manufacturer:	Davis Instruments	Tested By:	N. Gamez
Model:	06351		120V 60Hz
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	01/06/2009	01/06/2011	02663
S.A., Display HP-85662A	2542A12169	01/06/2009	01/06/2011	02662
QP Adapter HP-85650A	2521A00909	01/07/2009	01/07/2011	00683
TTE High Pass Filter	H4120	12/18/2008	12/18/2010	05258
Cable	None	05/13/2008	05/13/2010	00880
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1006	04/02/2007	04/02/2009	00493

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
Data Logger	Davis Instruments	06510SER	n/a
Printer/Scanner	HP	C5316A	MY8C4C207Y
5V 300mA AC adapter	Davis Instruments	06625	none
Laptop PC	Impression	N30W-14	0038760B110236A
AC adapter for laptop	Acbel Polytech	API-7629	061629

Test Conditions / Notes:

The EUT is placed on top of the wooden test table. The EUT antenna is placed in the vertical position.
Data logger is installed on the bottom of the EUT, and is connected to the serial port of the laptop. Hyperterminal program is running on the PC.
Printer/Scanner is connected to the parallel port of the PC.
AC adapter for the laptop is on the floor.

Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)
Transmitting continuously with modulation on worst case channel.

Conducted emissions 0.15-30 MHz.

Transducer Legend:

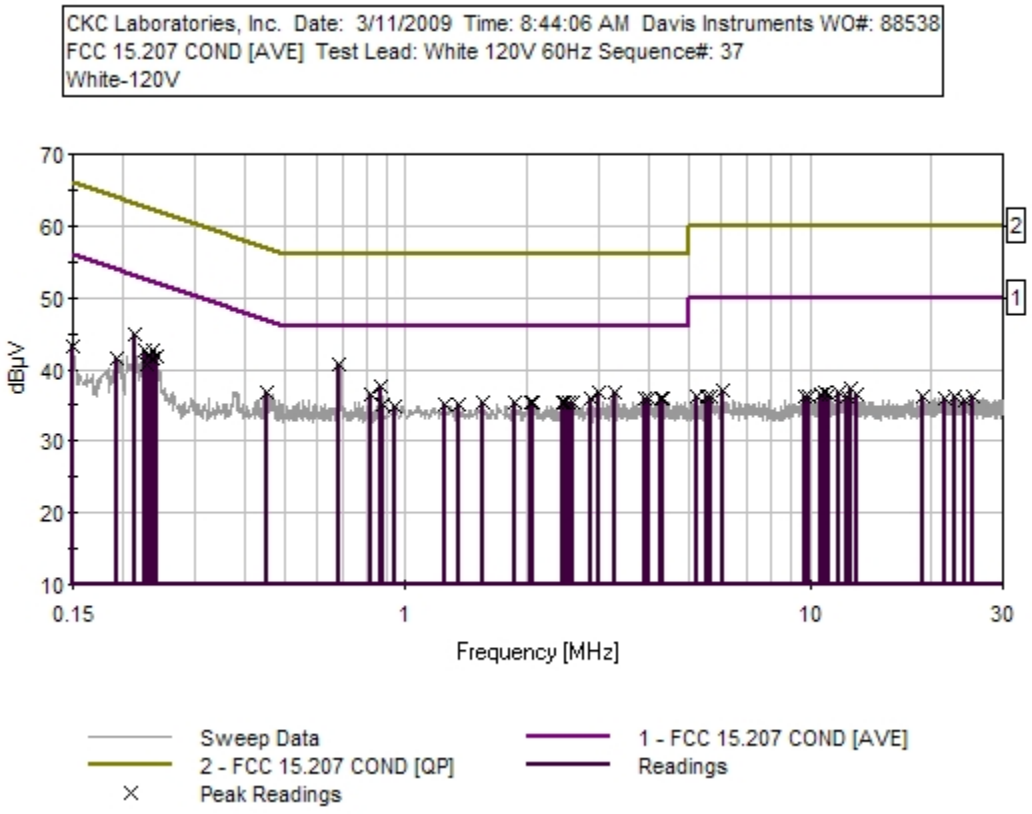
T1=LISN - AN00493 - White - ELC "OUT"	T2=AN P00081 10dB Attenuator
T3=FIL-ANP05258-121808 CE HP Filter	T4=Cable Calibration ANP00880

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	685.946k	30.6	+0.0	+10.1	+0.0	+0.1	+0.0	40.8	46.0	-5.2	White
2	213.994k	34.6	+0.0	+10.0	+0.1	+0.1	+0.0	44.8	53.0	-8.2	White
3	870.655k	27.4	+0.0	+10.0	+0.1	+0.2	+0.0	37.7	46.0	-8.3	White
4	3.305M	26.6	+0.1	+10.0	+0.1	+0.1	+0.0	36.9	46.0	-9.1	White
5	2.991M	26.5	+0.1	+10.0	+0.1	+0.1	+0.0	36.8	46.0	-9.2	White
6	819.751k	26.3	+0.0	+10.0	+0.1	+0.1	+0.0	36.5	46.0	-9.5	White
7	235.810k	32.5	+0.0	+10.0	+0.1	+0.0	+0.0	42.6	52.2	-9.6	White
8	224.902k	32.5	+0.0	+10.0	+0.1	+0.0	+0.0	42.6	52.6	-10.0	White
9	452.515k	26.7	+0.0	+10.1	+0.0	+0.0	+0.0	36.8	46.8	-10.0	White
10	3.977M	25.6	+0.1	+10.1	+0.1	+0.1	+0.0	36.0	46.0	-10.0	White
11	4.279M	25.5	+0.1	+10.1	+0.1	+0.2	+0.0	36.0	46.0	-10.0	White
12	4.305M	25.5	+0.1	+10.1	+0.1	+0.2	+0.0	36.0	46.0	-10.0	White
13	2.855M	25.6	+0.1	+10.0	+0.1	+0.1	+0.0	35.9	46.0	-10.1	White
14	3.897M	25.5	+0.1	+10.1	+0.1	+0.1	+0.0	35.9	46.0	-10.1	White
15	241.627k	31.6	+0.0	+10.0	+0.1	+0.0	+0.0	41.7	52.0	-10.3	White
16	1.855M	25.3	+0.0	+10.0	+0.1	+0.1	+0.0	35.5	46.0	-10.5	White
17	229.992k	31.8	+0.0	+10.0	+0.1	+0.0	+0.0	41.9	52.5	-10.6	White
18	237.264k	31.5	+0.0	+10.0	+0.1	+0.0	+0.0	41.6	52.2	-10.6	White
19	2.038M	25.1	+0.0	+10.0	+0.1	+0.2	+0.0	35.4	46.0	-10.6	White
20	2.480M	25.0	+0.1	+10.0	+0.1	+0.2	+0.0	35.4	46.0	-10.6	White
21	2.523M	25.0	+0.1	+10.0	+0.1	+0.2	+0.0	35.4	46.0	-10.6	White
22	1.545M	25.1	+0.0	+10.0	+0.1	+0.1	+0.0	35.3	46.0	-10.7	White
23	2.051M	25.0	+0.0	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White

24	2.438M	25.0	+0.0	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White
25	2.591M	24.9	+0.1	+10.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White
26	1.353M	24.8	+0.0	+10.1	+0.1	+0.1	+0.0	35.1	46.0	-10.9	White
27	877.000k	24.8	+0.0	+10.0	+0.1	+0.1	+0.0	35.0	46.0	-11.0	White
28	1.247M	24.7	+0.0	+10.1	+0.1	+0.1	+0.0	35.0	46.0	-11.0	White
29	940.795k	24.6	+0.0	+10.0	+0.1	+0.1	+0.0	34.8	46.0	-11.2	White
30	228.538k	30.5	+0.0	+10.0	+0.1	+0.0	+0.0	40.6	52.5	-11.9	White
31	192.178k	31.3	+0.0	+10.0	+0.2	+0.0	+0.0	41.5	53.9	-12.4	White
32	12.580M	27.0	+0.0	+10.0	+0.1	+0.3	+0.0	37.4	50.0	-12.6	White
33	150.000k	29.7	+0.0	+10.0	+3.4	+0.0	+0.0	43.1	56.0	-12.9	White
34	6.094M	26.5	+0.1	+10.1	+0.1	+0.2	+0.0	37.0	50.0	-13.0	White
35	10.842M	26.3	+0.0	+10.1	+0.1	+0.2	+0.0	36.7	50.0	-13.3	White
36	11.815M	26.3	+0.0	+10.0	+0.1	+0.3	+0.0	36.7	50.0	-13.3	White
37	10.680M	26.1	+0.0	+10.1	+0.1	+0.2	+0.0	36.5	50.0	-13.5	White
38	13.013M	25.9	+0.0	+10.1	+0.2	+0.3	+0.0	36.5	50.0	-13.5	White
39	11.184M	26.1	+0.0	+10.0	+0.1	+0.2	+0.0	36.4	50.0	-13.6	White
40	5.220M	26.0	+0.0	+10.0	+0.1	+0.2	+0.0	36.3	50.0	-13.7	White
41	9.662M	25.7	+0.1	+10.1	+0.1	+0.3	+0.0	36.3	50.0	-13.7	White
42	12.319M	25.9	+0.0	+10.0	+0.1	+0.3	+0.0	36.3	50.0	-13.7	White
43	25.156M	25.2	+0.4	+10.0	+0.2	+0.5	+0.0	36.3	50.0	-13.7	White
44	5.544M	25.6	+0.1	+10.1	+0.1	+0.2	+0.0	36.1	50.0	-13.9	White
45	5.716M	25.6	+0.1	+10.1	+0.1	+0.2	+0.0	36.1	50.0	-13.9	White
46	9.878M	25.5	+0.1	+10.1	+0.1	+0.3	+0.0	36.1	50.0	-13.9	White
47	18.941M	25.4	+0.2	+10.0	+0.2	+0.3	+0.0	36.1	50.0	-13.9	White

48	22.941M	25.0	+0.4	+10.1	+0.2	+0.4	+0.0	36.1	50.0	-13.9	White
49	21.517M	25.0	+0.3	+10.1	+0.2	+0.4	+0.0	36.0	50.0	-14.0	White
50	24.176M	24.7	+0.4	+10.0	+0.2	+0.5	+0.0	35.8	50.0	-14.2	White



FCC PART 15.247(a)/RSS-210 20dB BANDWIDTH

Test Conditions

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer:	**Davis Instruments**		
Specification:	**FCC 15.247(a)**		
Work Order #:	**88538**	Date:	3/2/2009
Test Type:	**20dB BW**	Time:	10:50:00
Equipment:	**Vantage VUE Weather Station Console**	Sequence#:	
Manufacturer:	Davis Instruments	Tested By:	Art Rice
Model:	06351		
S/N:	Davis 1		

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable	None	04/02/2007	04/02/2009	P05299
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/21/2008	04/21/2010	P05440
Antenna	2630	12/22/2008	12/22/2010	00852
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

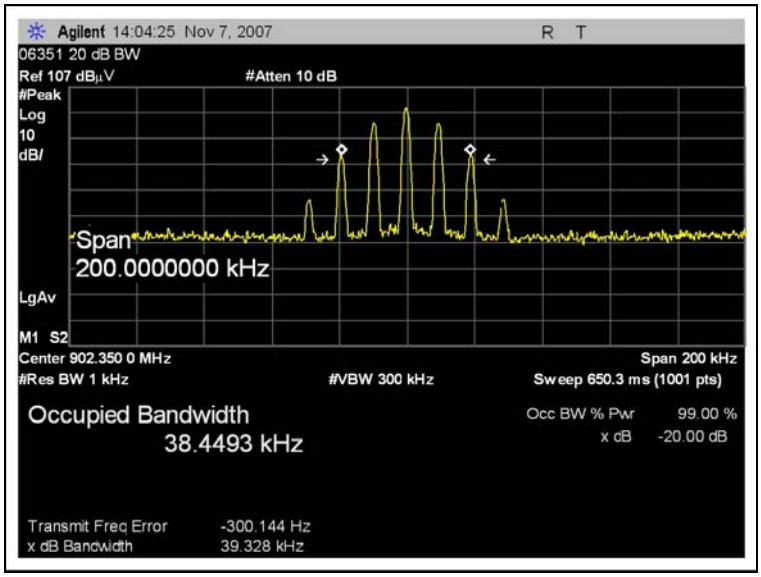
Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position. AC adapter is plugged into the outlet located on the turntable floor. Transmitting continuously on selected channel, with hopping disabled. Using FSK modulation at maximum data rate. RBW=1kHz, VBW=300kHz. Radiated emissions 902-928 MHz.

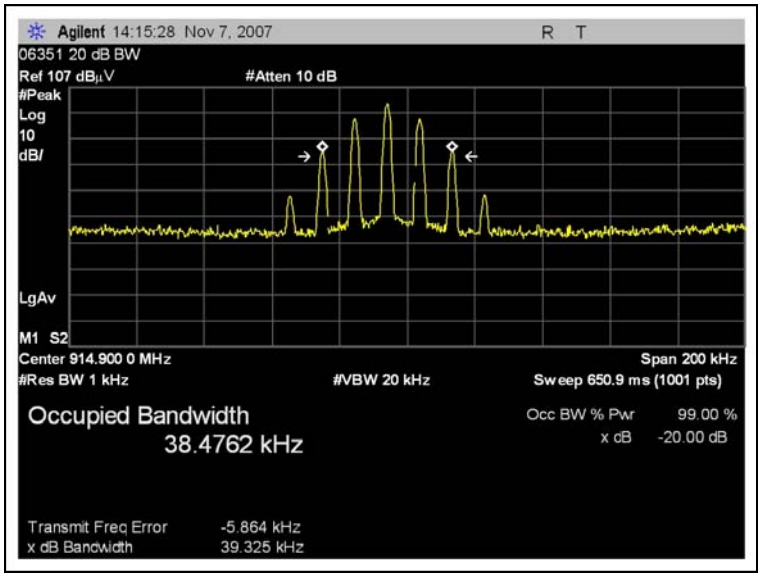
Test Setup Photos

Test Plots

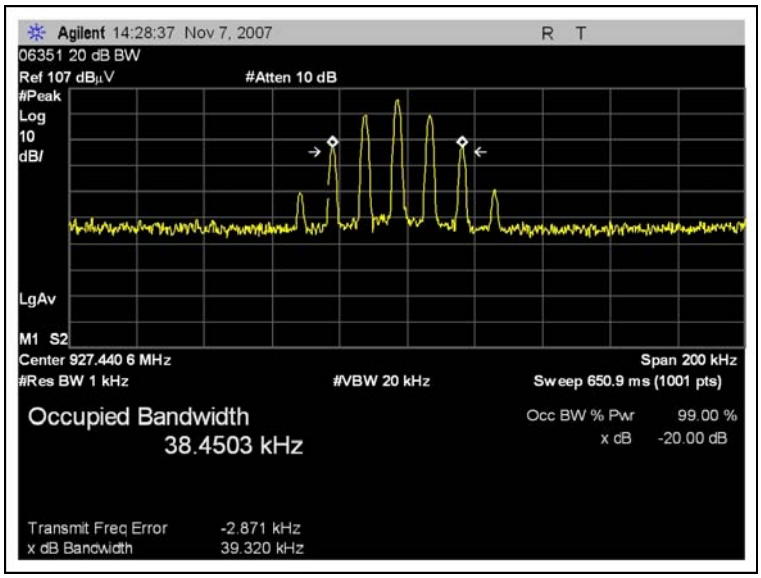
FCC 15.247(a) 20dB BANDWIDTH - LOW CHANNEL



FCC 15.247(a) 20dB BANDWIDTH - MID CHANNEL



FCC 15.247(a) 20dB BANDWIDTH - HIGH CHANNEL



FCC PART 15.247(a)(1) CARRIER FREQUENCY SEPARATION

Test Conditions

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **06351 FCC 15.247(d) spurious +15.205 bands Rad-dBuV 902-928MHz**
Work Order #: **88538** Date: 3/3/2009
Test Type: **Frequency hopping tests** Time: 15:00:17
Equipment: **Vantage VUE Weather Station Console** Sequence#: 15
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting normally with "fast hopping" enabled.
Using FSK modulation at maximum data rate.
Low channel = 902.355835 MHz (Ch 0)
Mid channel = 914.899597 MHz (Ch 25)
High channel = 927.443359 MHz (Ch 50)

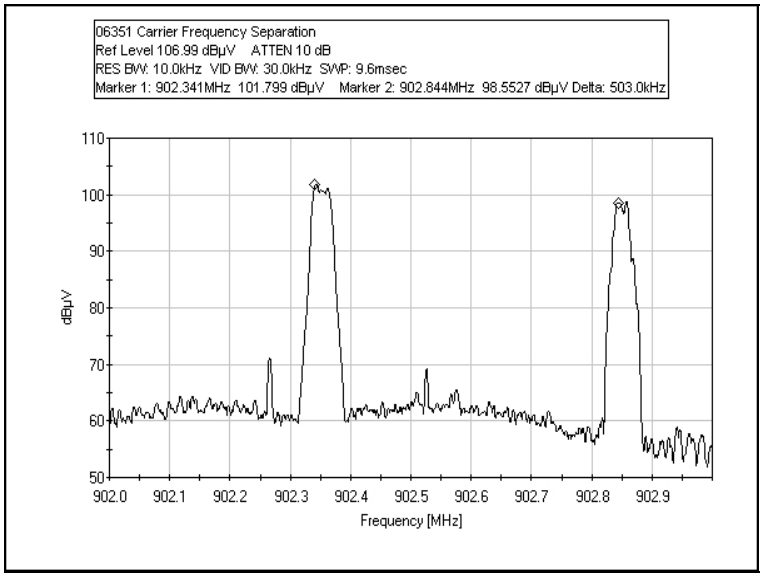
Note: For Time of occupancy testing (dwell time) the EUT was set for 0.5 seconds between channels in the pseudo-random hop table. Normal operation would be 2.625 seconds.

Radiated emissions 902-928 MHz.

Test Setup Photos

Test Plots

FCC 15.247(a)(1) CARRIER FREQUENCY SEPARATION



FCC PART 15.247(a)(1) NUMBER OF HOPPING CHANNELS

Test Conditions

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **06351 FCC 15.247(d) spurious +15.205 bands Rad-dBuV 902-928MHz**
Work Order #: **88538** Date: 3/3/2009
Test Type: **Frequency hopping tests** Time: 15:00:17
Equipment: **Vantage VUE Weather Station Console** Sequence#: 15
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting normally with "fast hopping" enabled.
Using FSK modulation at maximum data rate.
Low channel = 902.355835 MHz (Ch 0)
Mid channel = 914.899597 MHz (Ch 25)
High channel = 927.443359 MHz (Ch 50)

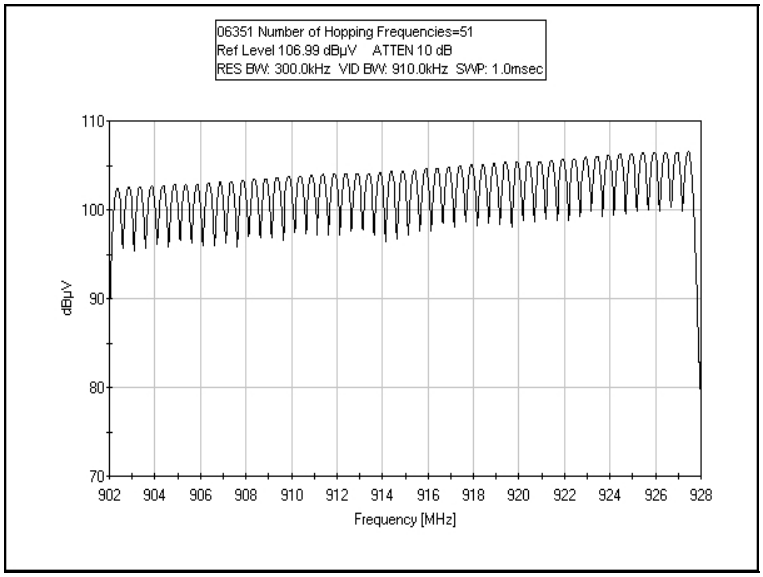
Note: For Time of occupancy testing (dwell time) the EUT was set for 0.5 seconds between channels in the pseudo-random hop table. Normal operation would be 2.625 seconds.

Radiated emissions 902-928 MHz.

Test Setup Photos

Test Plots

FCC 15.247(a)(1) NUMBER OF HOPPING FREQUENCIES



FCC PART 15.247(a)(1) AVERAGE TIME OF OCCUPANCY

Test Conditions

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **06351 FCC 15.247(d) spurious +15.205 bands Rad-dBuV 902-928MHz**
Work Order #: **88538** Date: 3/3/2009
Test Type: **Frequency hopping tests** Time: 15:00:17
Equipment: **Vantage VUE Weather Station Console** Sequence#: 15
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting normally with "fast hopping" enabled.
Using FSK modulation at maximum data rate.
Low channel = 902.355835 MHz (Ch 0)
Mid channel = 914.899597 MHz (Ch 25)
High channel = 927.443359 MHz (Ch 50)

Note: For Time of occupancy testing (dwell time) the EUT was set for 0.5 seconds between channels in the pseudo-random hop table. Normal operation would be 2.625 seconds.

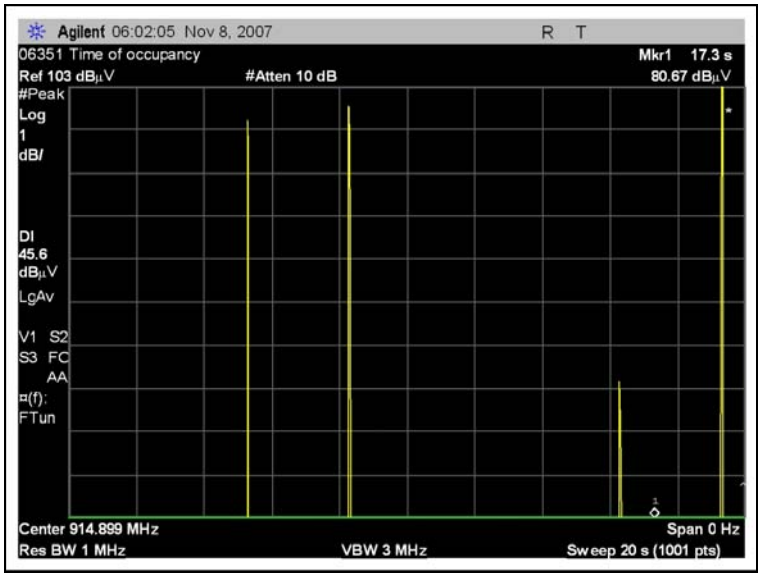
Radiated emissions 902-928 MHz.

Note this was tested in “fast hopping mode” which has 0.5 sec delay between the channels in the pseudo-random hop table. In normal operation that value would be 2.625 seconds. It appears that the maximum number of full amplitude transmissions was 3 in a 20 second period. The other pulses were at lower amplitude, so were probably adjacent channel noise, due to the RBW=1 MHz. 3 x 6.74mS=20.22mS. The limit is 0.4 seconds, so the 06351 passes this test. Plot #10 is a representative sample.

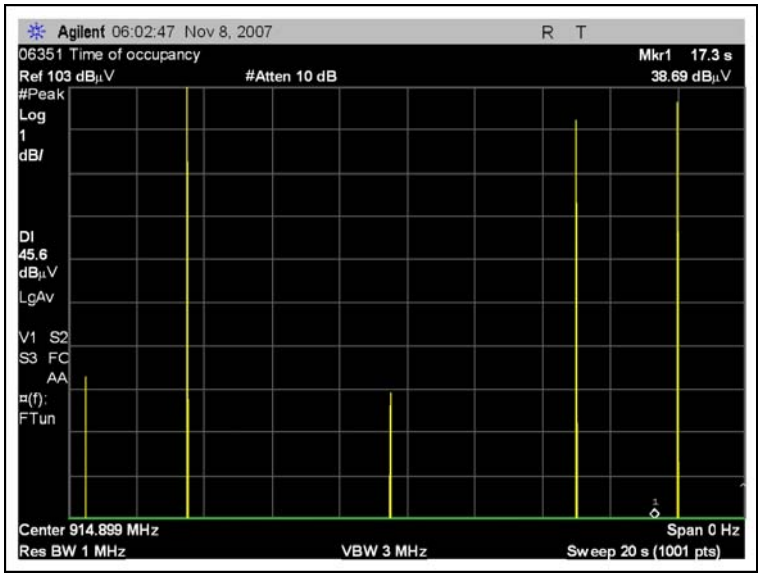
Test Setup Photos

Test Plots

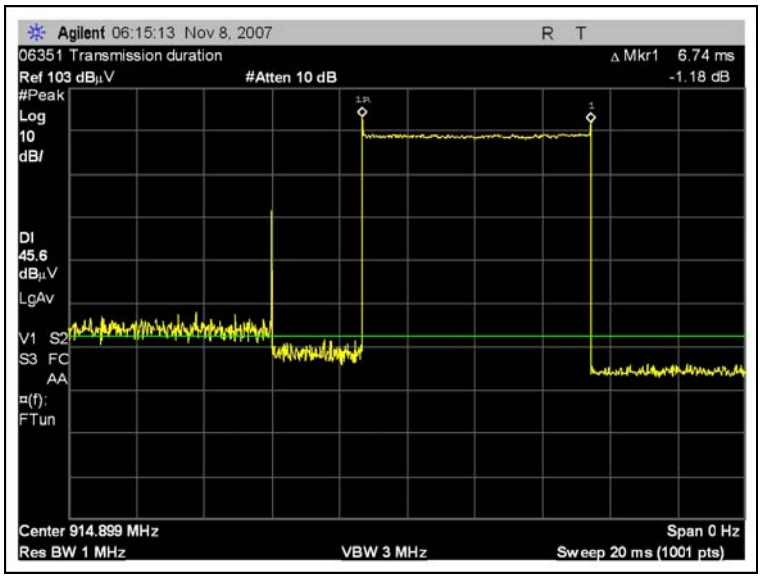
FCC 15.247(a)(1) AVERAGE TIME OF OCCUPANCY



FCC 15.247(a)(1) AVERAGE TIME OF OCCUPANCY

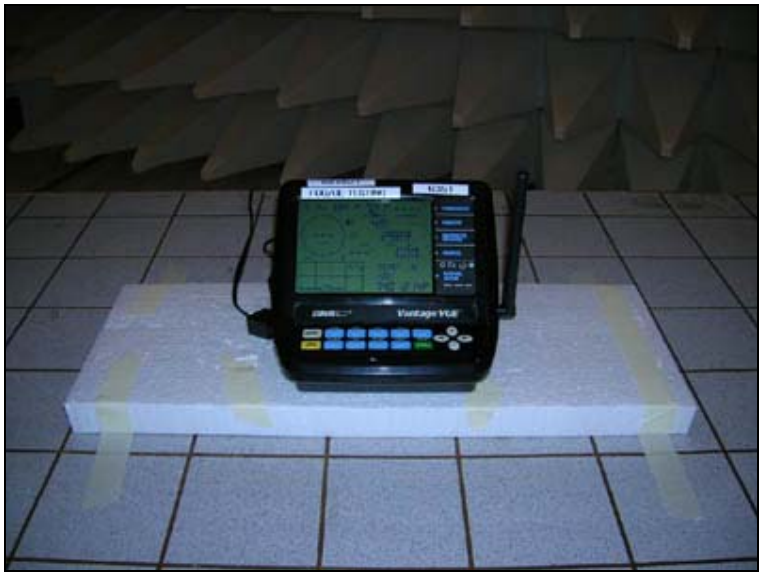


FCC 15.247(a)(1) TRANSMISSION DURATION



FCC 15.247(b)(2) RF POWER OUTPUT

Test Setup Photos



Test Data

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **FCC 15.247(b)(2) / 15.209 / 15.205**
Work Order #: **88538** Date: 3/2/2009
Test Type: **Transmitter ERP** Time: 10:50:00
Equipment: **Vantage VUE Weather Station Console** Sequence#: 1
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable	None	04/02/2007	04/02/2009	P05299
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/21/2008	04/21/2010	P05440
Antenna	2630	12/22/2008	12/22/2010	00852
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting continuously on selected channel, with hopping disabled.
Using FSK modulation at maximum data rate.
The transmitter ERP limit is based on stated 2dBi gain antenna with maximum conducted power of 1 watt or 30 dBm.

RBW=100kHz, VBW=300kHz.

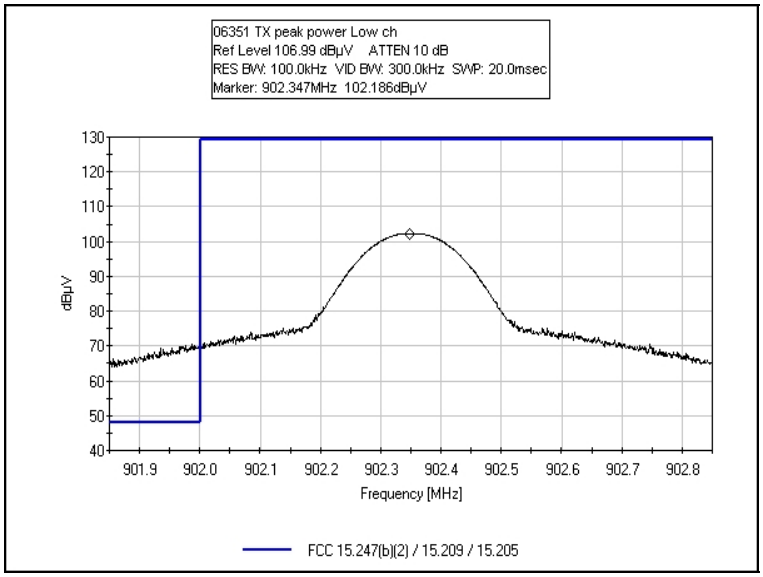
Radiated emissions 902-928 MHz.

Test Calculations
The following calculation was used in accordance with DA 00-705 procedures in order to obtain the transmitter conducted output power:
P = (E*d)^2 / (30*G)
E: Is the field strength in V/m
G: Is the numeric gain of the transmitting antenna with reference to an isotropic radiator.
d: Is the distance at which the measurement is being executed.
The antenna gain used for this calculation was 2.0 dBi.

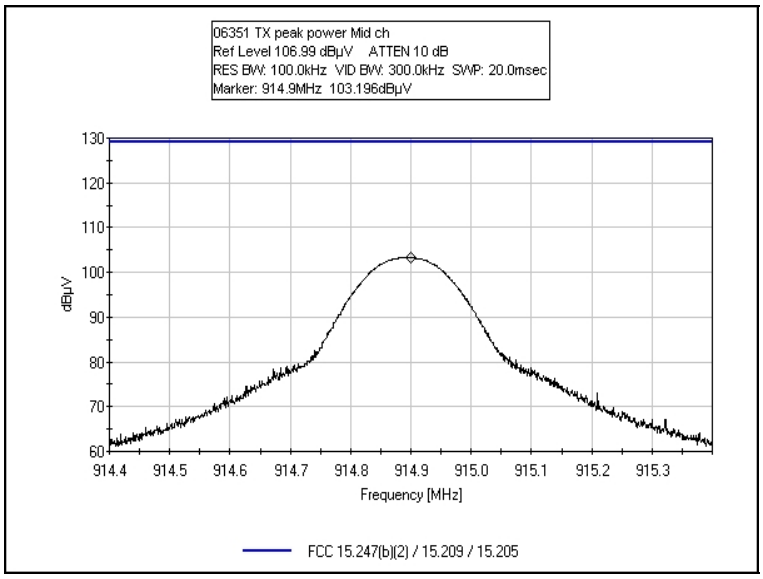
Frequency	dBm	Limit	Results
902.347	2.923	30	Pass
914.900	3.923	30	Pass
927.428	5.623	30	Pass

Antenna polarity: Vertical

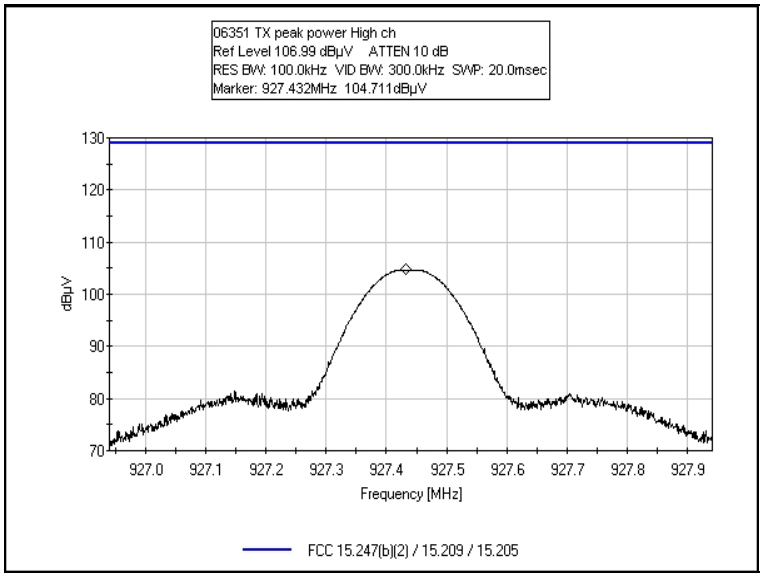
FCC 15.247(b) TX POWER - LOW CHANNEL



FCC 15.247(b) TX POWER - MID CHANNEL

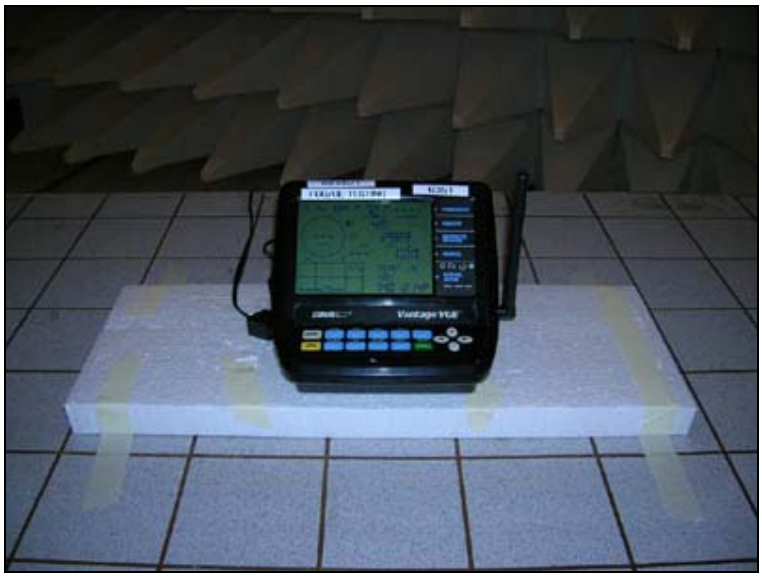


FCC 15.247(b) TX POWER - HIGH CHANNEL



FCC 15.247(d) OATS RADIATED SPURIOUS EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **FCC 15.247(b)(2) / 15.209 / 15.205**
Work Order #: **88538** Date: 3/3/2009
Test Type: **Maximized Emissions** Time: 11:19:40
Equipment: **Vantage VUE Weather Station Console** Sequence#: 14
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Horn - DRG-118A	1064	01/09/2009	01/09/2011	02061
Cable - HF - 32022-2-29094K-24TC	n/a	02/04/2008	02/04/2010	03015
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
HF Pre-Amp - 83051A	00323	02/05/2008	02/05/2010	02810
1.5GHz HP Filter	PN 84300-80037	04/01/2008	04/01/2010	P01415
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299
Mag Loop - 6502	2078	06/11/2007	06/11/2009	00432

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Transmitting continuously on selected channel, with hopping disabled.
Using FSK modulation at maximum data rate.
Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)

RBW=100kHz, VBW=300kHz except in restricted bands, where CISPR BW are used for final measurements.
10-150kHz RBW=200Hz, 0.15-30MHz RBW=9kHz
FCC 15.209 spec limit used below 30 MHz. Transmitting on worst case TX output high channel for readings below 30 MHz.
Transmitting on Low, Mid or High channel

Radiated emissions 30kHz-9500 MHz.

Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05440
T3=Cable Calibration ANP05299	T4=Cable Calibration ANP05300
T5=AMP-AN00730-020909 .01-1000	T6=AMP-AN02810-020508
T7=ANT AN02061 900MHz-18.5GHz	T8=CAB-AN03015-020408
T9=CAB-ANP04241-050608	T10=CAB-ANP05138-050608
T11=HPF AN01415 1.5GHz	T12=Mag Loop - AN 00432- 9kHz-30M

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

#	Freq	Rdng	T1 T5 T9	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	5414.115M	38.4	+0.0	+0.0	+0.0	+0.0	+0.0	52.7	54.0	-1.3	Vert
	Ave		+0.0	-26.2	+34.2	+0.8	350		Low ch,		109
			+1.3	+4.0	+0.2				RBW=1MHz		
^	5414.104M	41.2	+0.0	+0.0	+0.0	+0.0	+0.0	55.5	54.0	+1.5	Vert
			+0.0	-26.2	+34.2	+0.8	350		Low ch,		109
			+1.3	+4.0	+0.2				RBW=1MHz		
3	8121.159M	29.3	+0.0	+0.0	+0.0	+0.0	+0.0	50.8	54.0	-3.2	Vert
	Ave		+0.0	-24.8	+38.6	+0.9	21		Low ch,		143
			+1.5	+4.9	+0.4				RBW=1MHz		
^	8121.156M	34.8	+0.0	+0.0	+0.0	+0.0	+0.0	56.3	54.0	+2.3	Vert
			+0.0	-24.8	+38.6	+0.9	21		Low ch,		143
			+1.5	+4.9	+0.4				RBW=1MHz		

5	8234.063M Ave	26.7	+0.0 +0.0 +1.5	+0.0 -24.8 +5.0	+0.0 +38.5 +0.4	+0.0 +1.0	+0.0 333	48.3	54.0 Mid ch, RBW=1MHz	-5.7	Vert 130
^	8233.991M	33.3	+0.0 +0.0 +1.5	+0.0 -24.8 +5.0	+0.0 +38.5 +0.4	+0.0 +1.0	+0.0 333	54.9	54.0 Mid ch, RBW=1MHz	+0.9	Vert 131
7	8346.951M Ave	24.0	+0.0 +0.0 +1.5	+0.0 -24.8 +4.9	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0 329	45.5	54.0 High ch, RBW=1MHz	-8.5	Vert 132
^	8346.869M	32.0	+0.0 +0.0 +1.5	+0.0 -24.8 +4.9	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0 329	53.5	54.0 High ch, RBW=1MHz	-0.5	Vert 132
9	37.670M	40.6	+15.1 -27.4 +0.0	+0.4 +0.0 +0.0	+0.1 +0.0 +0.0	+0.1 +0.0	+0.0 24	28.9	40.0 RBW=120kHz	-11.1	Vert 102
10	8423.500M Ave	19.9	+0.0 +0.0 +1.6	+0.0 -24.8 +5.0	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0 28	41.6	54.0 Mid ch, noise floor, RBW=1MHz	-12.4	Vert 130
^	8423.502M	30.3	+0.0 +0.0 +1.6	+0.0 -24.8 +5.0	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0 28	52.0	54.0 Mid ch, noise floor, RBW=1MHz	-2.0	Vert 130
12	8405.800M Ave	19.8	+0.0 +0.0 +1.6	+0.0 -24.8 +5.0	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0	41.5	54.0 High ch, noise floor, RBW=1MHz	-12.5	Vert 132
^	8405.813M	31.5	+0.0 +0.0 +1.6	+0.0 -24.8 +5.0	+0.0 +38.4 +0.5	+0.0 +1.0	+0.0	53.2	54.0 High ch, noise floor, RBW=1MHz	-0.8	Vert 132
14	610.306k QP	33.8	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.9	-40.0 180	3.7	31.9	-28.2	Vert 100
^	610.333k	38.8	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.9	-40.0 180	8.7	31.9	-23.2	Vert 100
16	533.500k QP	35.1	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.7	-40.0 73	4.8	33.1	-28.3	Vert 100
^	533.336k	40.1	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.7	-40.0 73	9.8	33.1	-23.3	Vert 100
18	491.605k QP	35.8	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.6	-40.0 104	5.5	33.8	-28.3	Horiz 100
^	491.457k	41.6	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +9.6	-40.0 104	11.3	33.8	-22.5	Horiz 100

20	529.450k	35.0	+0.0	+0.0	+0.0	+0.0	-40.0	4.7	33.1	-28.4	Horiz
	QP		+0.0	+0.0	+0.0	+0.0	358				100
			+0.0	+0.0	+0.0	+9.7					
^	529.432k	40.3	+0.0	+0.0	+0.0	+0.0	-40.0	10.0	33.1	-23.1	Horiz
			+0.0	+0.0	+0.0	+0.0	358				100
			+0.0	+0.0	+0.0	+9.7					
22	980.344k	27.6	+0.0	+0.1	+0.1	+0.0	-40.0	-1.8	27.7	-29.5	Horiz
	QP		+0.0	+0.0	+0.0	+0.0	249				100
			+0.0	+0.0	+0.0	+10.4					
^	980.232k	32.4	+0.0	+0.1	+0.1	+0.0	-40.0	3.0	27.7	-24.7	Horiz
			+0.0	+0.0	+0.0	+0.0	250				100
			+0.0	+0.0	+0.0	+10.4					
24	402.453k	37.1	+0.0	+0.1	+0.1	+0.0	-80.0	-33.0	15.5	-48.5	Horiz
	QP		+0.0	+0.0	+0.0	+0.0	108				100
			+0.0	+0.0	+0.0	+9.7					
^	402.398k	42.3	+0.0	+0.1	+0.1	+0.0	-80.0	-27.8	15.5	-43.3	Horiz
			+0.0	+0.0	+0.0	+0.0	107				100
			+0.0	+0.0	+0.0	+9.7					
26	233.715k	41.7	+0.0	+0.1	+0.0	+0.1	-80.0	-28.3	20.2	-48.5	Vert
	QP		+0.0	+0.0	+0.0	+0.0	295				100
			+0.0	+0.0	+0.0	+9.8					
^	233.734k	46.8	+0.0	+0.1	+0.0	+0.1	-80.0	-23.2	20.2	-43.4	Vert
			+0.0	+0.0	+0.0	+0.0	295				100
			+0.0	+0.0	+0.0	+9.8					
28	209.403k	42.4	+0.0	+0.1	+0.0	+0.1	-80.0	-27.5	21.2	-48.7	Vert
	QP		+0.0	+0.0	+0.0	+0.0	228				100
			+0.0	+0.0	+0.0	+9.9					
^	209.328k	47.6	+0.0	+0.1	+0.0	+0.1	-80.0	-22.3	21.2	-43.5	Vert
			+0.0	+0.0	+0.0	+0.0	228				100
			+0.0	+0.0	+0.0	+9.9					
30	372.850k	37.6	+0.0	+0.1	+0.1	+0.0	-80.0	-32.5	16.2	-48.7	Vert
	QP		+0.0	+0.0	+0.0	+0.0	73				100
			+0.0	+0.0	+0.0	+9.7					
^	372.721k	42.6	+0.0	+0.1	+0.1	+0.0	-80.0	-27.5	16.2	-43.7	Vert
			+0.0	+0.0	+0.0	+0.0	73				100
			+0.0	+0.0	+0.0	+9.7					
32	255.345k	40.8	+0.0	+0.1	+0.1	+0.0	-80.0	-29.3	19.5	-48.8	Horiz
	QP		+0.0	+0.0	+0.0	+0.0	4				100
			+0.0	+0.0	+0.0	+9.7					
^	255.320k	45.7	+0.0	+0.1	+0.1	+0.0	-80.0	-24.4	19.5	-43.9	Horiz
			+0.0	+0.0	+0.0	+0.0	4				100
			+0.0	+0.0	+0.0	+9.7					

FCC PART 15.247(d) BANDEDGE

Test Setup Photos

Test Data

Test Location: CKC Laboratories, Inc. •1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Davis Instruments**
Specification: **06351 FCC 15.247(d) spurious +15.205 bands Rad-dBuV 902-928MHz**
Work Order #: **88538** Date: 3/3/2009
Test Type: **Band Edge Measurements** Time: 09:26:02
Equipment: **Vantage VUE Weather Station Console** Sequence#: 10
Manufacturer: Davis Instruments Tested By: Art Rice
Model: 06351
S/N: Davis 1

***Test Equipment*:**

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Preamp, HP8447D	2443A03707	02/09/2009	02/09/2011	00730
Antenna, Bilog	2630	12/22/2008	12/22/2010	00852
Cable	None	04/21/2008	04/21/2010	P05440
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299

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

Function	Manufacturer	Model #	S/N
Vantage VUE Weather Station Console*	Davis Instruments	06351	Davis 1

Support Devices:

Function	Manufacturer	Model #	S/N
5V 300mA AC adapter	Davis Instruments	06625	none

Test Conditions / Notes:

The EUT is placed on a 1 inch thick styrofoam block on top of the wooden test table. The EUT antenna is placed in the vertical position.
AC adapter is plugged into the outlet located on the turntable floor.
Using FSK modulation at maximum data rate.
Low channel=902.355835 MHz (Ch 0)
Mid channel=914.899597 MHz (Ch 25)
High channel=927.443359 MHz (Ch 50)

Band edges checked in two modes per FCC DA 00-705:
1) Transmitting continuously on selected channel, with hopping disabled.
2) Transmitting while hopping: "Fast FCC hop mode" with 0.5 sec between hops.

RBW=30kHz, VBW=91kHz.

Radiated emissions 898-932 MHz.

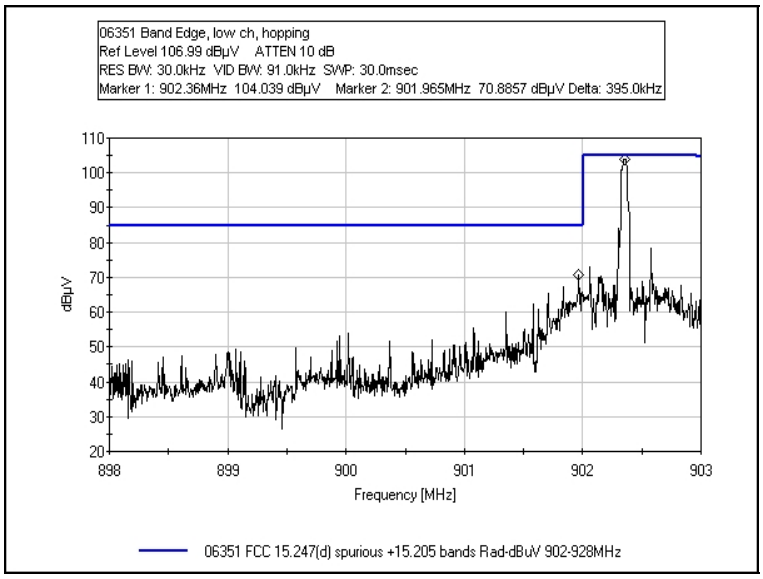
Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05440
T3=Cable Calibration ANP05299	T4=Cable Calibration ANP05300
T5=AMP-AN00730-020909 .01-1000	

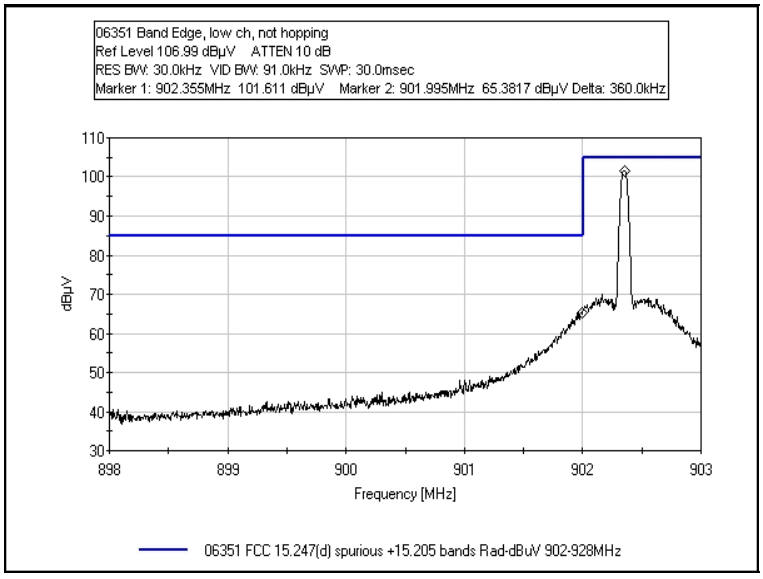
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	927.435M	105.8	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 113	104.1	104.2 High ch, hopping	-0.1	Vert 112
2	902.360M	104.0	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 113	102.1	103.0 Low ch, hopping	-0.9	Vert 112
3	927.445M	101.9	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 113	100.2	103.0 High ch, not hopping	-2.8	Vert 112
4	902.355M	101.6	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 114	99.7	103.0 Low ch, not hopping	-3.3	Vert 112
5	901.965M	70.9	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 113	69.0	83.0 Low ch, band edge, hopping.	-14.0	Vert 112
6	901.995M	65.4	+22.5 -27.4	+1.9	+0.3	+0.8	+0.0 114	63.5	83.0 Low ch, band edge, not hopping	-19.5	Vert 112
7	928.005M	62.5	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 113	60.8	83.0 High ch, band edge, not hopping	-22.2	Vert 112
8	928.400M	61.9	+23.0 -27.5	+1.9	+0.2	+0.7	+0.0 113	60.2	83.0 High ch, band edge, hopping	-22.8	Vert 112

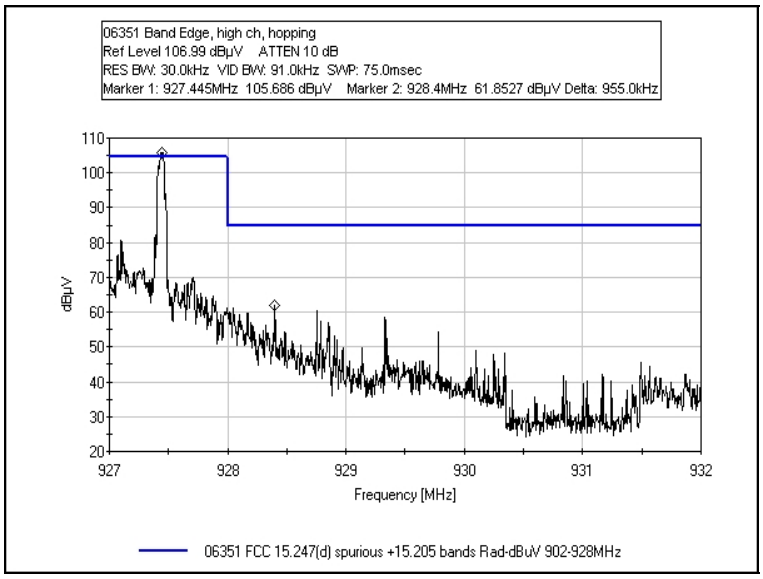
FCC 15.247(d) BANDEDGE - LOW CHANNEL, HOPPING



FCC 15.247(d) BANDEDGE - LOW CHANNEL, NOT HOPPING



FCC 15.247(d) BANDEDGE - HIGH CHANNEL, HOPPING



FCC 15.247(d) BANDEDGE - HIGH CHANNEL, NOT HOPPING