



DAVIS INSTRUMENTS TEST REPORT

FOR THE

VANTAGE PRO 2 CONSOLE, 6312

FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS B AND SUBPART C SECTIONS 15.207, 15.209 & 15.247

COMPLIANCE

DATE OF ISSUE: SEPTEMBER 9, 2004

PREPARED FOR:

Davis Instruments 3465 Diablo Avenue Hayward, CA 94545

PREPARED BY:

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P.O. No.: 57173 W.O. No.: 82619 Date of test: August 27 – September 1, 2004

Report No.: FC04-068

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	August 27 – September 1, 2004
DATE OF RECEIPT:	August 27, 2004
PURPOSE OF TEST:	To demonstrate the compliance of the Vantage Pro 2 Console, 6312, with the requirements for FCC Part 15 Subpart B Sections 15.107 and 15.109 and Subpart C Sections 15.207, 15.209 & 15.247 devices.
TEST METHOD:	ANSI C63.4 (2001)
MANUFACTURER:	Davis Instruments 3465 Diablo Avenue Hayward, CA 94545
REPRESENTATIVE:	Perry Dillon
TEST LOCATION:	CKC Laboratories, Inc. 5473A Clouds Rest Mariposa, CA 95338



SUMMARY OF RESULTS

As received, the Davis Instruments Vantage Pro 2 Console, 6312 was found to be fully compliant with the following standards and specifications:

Canadian	Canadian	FCC		
Standard	Section	Standard	FCC Section	Test Description
RSS 210	5.5	47CFR	15.203	Antenna Connector Requirements
RSS 210	6.2.1	47CFR	15.209	General Radiated Emissions Requirement
RSS 210	6.3	47CFR	15.205	Restricted Bands of Operation
RSS 210	6.4	47CFR	15.215(c)	Frequency Stability Recommendation
RSS 210	6.5	47CFR	15.35(c)	Pulsed Operation
RSS 210	6.6	47CFR	15.207	AC Mains Conducted Emissions Requirement
RSS 210	6.2.2(o)(a1)	47CFR	15.247(a)(1)	Minimum Channel Bandwidth
RSS 210	6.2.2(o)(a1)	47CFR	15.247(g)	Hopping Sequence
RSS 210	6.2.2(o)(a1)	47CFR	15.247(h)	Incorporation of Intelligence
RSS 210	6.2.2(o)(a2)	47CFR	15.247(a)(1)(i)	Average Time of Occupancy
RSS 210	6.2.2(o)(a2)	47CFR	15.247(b)(2)	RF Power Output
RSS 210	6.2.2(o)(e1)	47CFR	15.247(c)	Spurious Emissions
	IC 3082-D		784962	Site Filing No.

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:

6. Bitter

Eric Battenberg, EMC Test Engineer

Randy Clark, EMC Engineer



EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was a production unit.

FCC 15.31(e) Voltage Variations

There was no change in the measured output power under voltage variations $\pm 15\%$ of nominal input.

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 – 1000 MHz 15.207 Conducted: 150 kHz – 30 MHz 15.209 Radiated: 30 MHz – 10 GHz

FCC SECTION 15.35:								
ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE								
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING					
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz					
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz					
RADIATED EMISSIONS	1000 MHz	10 GHz	1 MHz					

FCC 15.203 Antenna Requirements

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

FCC 15.205 Restricted Bands

The fundamental operating frequency lies outside the restricted bands and therefore complies with the requirements of Section 15.205 of the FCC rules. Any spurious emission coming from the EUT was investigated to determine if any portion lies inside the restricted band. If any portion of a spurious emissions signal was found to be within a restricted band, investigation was performed to ensure compliance with Section 15.209.

Eut Operating Frequency

The EUT was operating at 902-928 MHz.



EQUIPMENT UNDER TEST

Vantage Pro 2 Console

Manuf:	Davis Instruments
Model:	6312
Serial:	Davis 100
FCC ID:	Pending
	0

PERIPHERAL DEVICES

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

Power Supply

Manuf:	Davis Instruments
Model:	6625
Serial:	NA
FCC ID:	DoC

WeatherLink USB

Manuf:	Davis Instruments
Model:	6510USB
Serial:	Davis 104
FCC ID:	DoC



REPORT OF MEASUREMENTS

The following tables report the six highest worst case levels recorded during the tests performed on the EUT. All readings taken are peak readings unless otherwise noted. The data sheets from which these tables were compiled are contained in Appendix C.

Table 1: FCC 15.107 Six Highest Conducted Emission Levels											
FREQUENCY MHz	METER READING dBµV	COR Lisn dB	RECTIC HPF dB	ON FACT Cable dB	ORS dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES		
0.155818	38.6	0.3	2.2	0.1		41.2	55.7	-14.5	В		
0.274351	35.8	0.2	0.2	0.1		36.3	51.0	-14.7	В		
0.310711	35.3	0.3	0.2	0.1		35.9	50.0	-14.1	W		
0.473604	33.4	0.3	0.2	0.1		34.0	46.5	-12.5	W		
0.563050	31.4	0.2	0.2	0.1		31.9	46.0	-14.1	В		
0.592865	32.8	0.3	0.3	0.1		33.5	46.0	-12.5	W		

Test Method:ANSI C63.4 (2001)Spec Limit:FCC Part 15 Subpart B Section 15.107 Class B

NOTES: B =

B = Black Lead W = White Lead

COMMENTS: EUT is a console monitoring station. EUT is in receive mode. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.



Table 2: FCC 15.109 Six Highest Radiated Emission Levels											
FREQUENCY MHz	METER READING dBµV	COR Ant dB	RECTIO Amp dB	ON FACT Cable dB	CORS dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES		
144.086	30.1	10.7	-27.0	2.5		16.3	43.5	-27.2	V		
147.522	30.3	10.5	-27.0	2.5		16.3	43.5	-27.2	V		
304.197	28.3	12.9	-26.5	3.6		18.3	46.0	-27.7	Н		
304.224	28.1	12.9	-26.5	3.6		18.1	46.0	-27.9	V		
853.064	27.5	22.2	-27.7	7.2		29.2	46.0	-16.8	V		
855.878	27.6	22.2	-27.7	7.2		29.3	46.0	-16.7	Н		

Test Method: Spec Limit: Test Distance: ANSI C63.4 (2001) FCC Part 15 Subpart B Section 15.109 Class B 3 Meters NOTES:

H = Horizontal Polarization V = Vertical Polarization

COMMENTS: EUT is a console monitoring station. EUT is in receive mode. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 30-1000MHz. Temperature: 23°C, Relative Humidity: 50%.



Table 3: FCC 15.207 Six Highest Conducted Emission Levels											
FREQUENCY MHz	METER READING dBµV	COR Lisn dB	RECTIO HPF dB	DN FACT Cable dB	CORS dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES		
0.162362	40.0	0.4	1.6	0.1		42.1	55.3	-13.2	W		
0.163090	40.1	0.3	1.5	0.1		42.0	55.3	-13.3	В		
0.518690	37.8	0.3	0.3	0.1		38.5	46.0	-7.5	W		
0.518690	36.9	0.3	0.3	0.1		37.6	46.0	-8.4	В		
3.399029	25.1	0.3	0.1	0.3		25.8	46.0	-20.2	В		
4.364460	25.6	0.4	0.1	0.3		26.4	46.0	-19.6	W		

Test Method:ANSI C63.4 (2001)Spec Limit:FCC Part 15 Subpart C Section 15.207

NOTES: B = Black LeadW = White Lead

COMMENTS: EUT is a console monitoring station. EUT is in transmit mode modulated with a constant high value. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.



Table 4: FCC 15.209 Six Highest Radiated Emission Levels: 30-1000 MHz											
FREQUENCY MHz	METER READING dBµV	COR Ant dB	RECTIO Amp dB	ON FACT Cable dB	CORS dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES		
896.526	40.8	22.8	-27.3	7.5		43.8	46.0	-2.2	VQ		
900.995	39.4	22.8	-27.3	7.5		42.4	46.0	-3.6	VQ		
907.259	39.0	22.9	-27.3	7.5		42.1	46.0	-3.9	VQ		
908.369	40.7	22.9	-27.3	7.5		43.8	46.0	-2.2	VQ		
920.896	39.6	23.1	-27.3	7.4		42.8	46.0	-3.2	VQ		
934.140	39.5	23.3	-27.2	7.3		42.9	46.0	-3.1	VQ		

Test Method: Spec Limit: Test Distance:

Г

ANSI C63.4 (2001) FCC Part 15 Subpart C Section 15.209 3 Meters NOTES:

Q = Quasi Peak Reading V = Vertical Polarization

COMMENTS: EUT is a console monitoring station. EUT is in trasmit mode with constant carrier modulated with 1's. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 30-1000MHz. Temperature: 23°C, Relative Humidity: 50%.



Table 5: FCC 15.209 Six Highest Radiated Emission Levels: 1-10 GHz												
FREQUENCY MHz	METER READING dBµV	COR Ant dB	RECTIC Amp dB	ON FACT Cable dB	TORS DTCF dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES			
1001.820	64.8	24.2	-36.2	1.8	-11.3	43.3	54.0	-10.7	V			
1012.974	65.0	24.2	-36.2	1.8	-11.3	43.5	54.0	-10.5	V			
1804.720	67.6	26.4	-35.3	2.6	-11.3	50.0	54.0	-4.0	Н			
1804.772	67.3	26.4	-35.3	2.6	-11.3	49.7	54.0	-4.3	VA			
1829.720	64.1	26.5	-35.3	2.6	-11.3	46.6	54.0	-7.4	V			
1854.834	60.7	26.6	-35.3	2.6	-11.3	43.3	54.0	-10.7	V			

Test Method: Spec Limit: Test Distance: ANSI C63.4 (2001) FCC Part 15 Subpart C Section 15.209 3 Meters NOTES:

H = Horizontal Polarization V = Vertical Polarization A = Average Reading

COMMENTS: EUT is a console monitoring station. EUT is continuously transmitting data on the indicated channel. EUT is mounted vertically to simulate normal installation. Dwell time correction factor used in accordance with DA 00-705. Maximum packet length is 6.7ms which transmits once every 2.5625 seconds. Therefore, longest duration within a 100ms window is 7.4ms. Correction factor calculated as follows: 10*LOG(7.4/100) = -11.3dB. Dwell time correction factor applied only to those frequencies which are harmonics of the carrier. Frequency Range Investigated: 1-10GHz. Temperature: 22°C, Relative Humidity: 50%.



FCC 15.247(a)(1) FREQUENCY SEPARATION





FCC 15.247(a)(1) HOPPING CHANNELS





FCC 15.247(a)(1)(i) AVERAGE TIME OF OCCUPANCY 10 MIN





FCC 15.247(a)(1)(i) AVERAGE TIME OF OCCUPANCY 20 MS





Table 6: FCC 15.247(b)(3) Six Highest Radiated Emission Levels											
FREQUENCY MHz	METER READING dBµV	COR Ant dB	RECTIC Amp dB	ON FACT Cable dB	CORS dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES		
902.436	93.9	22.8	-27.3	7.5		96.9	127.0	-30.1	V		
902.440	86.9	22.8	-27.3	7.5		89.9	127.0	-37.1	Н		
914.979	94.0	23.0	-27.3	7.4		97.1	127.0	-29.9	V		
914.980	87.0	23.0	-27.3	7.4		90.1	127.0	-36.9	Н		
927.524	94.6	23.2	-27.2	7.3		97.9	127.0	-29.1	V		
927.525	86.8	23.2	-27.2	7.3		90.1	127.0	-36.9	Н		

Test Method: Spec Limit: Test Distance: ANSI C63.4 (2001) FCC Part 15 Subpart C Section 15.247 3 Meters NOTES: H = Horizontal Polarization V = Vertical Polarization

COMMENTS: EUT is a console monitoring station. EUT is in trasmit mode with constant carrier modulated with 1's (TX 3, HOP 0). EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: Carrier. Temperature: 30°C, Relative Humidity: 50%.



FCC 15.247(c) EMISSIONS MASK





20dB BANDWIDTH LOW CHANNEL





20dB BANDWIDTH MID CHANNEL





20dB BANDWIDTH HIGH CHANNEL





TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within $+15^{\circ}$ C and $+35^{\circ}$ C. The relative humidity was between 20% and 75%.

EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

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

The radiated and conducted emissions data of the EUT was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in Table A.

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 $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS							
	Meter reading	(dBµV)					
+	Antenna Factor	(dB)					
+	Cable Loss	(dB)					
-	Distance Correction	(dB)					
-	Preamplifier Gain	(dB)					
=	Corrected Reading	$(dB\mu V/m)$					



TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the EUT. For radiated measurements from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. Conducted emissions tests required the use of the FCC type LISNs.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBµV, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the 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 six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. 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 or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer 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 HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

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



EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. One wall of the room where the EUT was located has a minimum 2 meter by 2 meter conductive plane. The EUT was mounted on the wooden table 40 cm away from the conductive plane, and 80 cm from any other conductive surface.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were 50 μ H-/+50 ohms. Above 150 kHz, a 0.15 μ F series capacitor was added in-line prior to connecting the analyzer to restore the proper impedance for the range. A 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 500 kHz, and 500 kHz to 30 MHz. All readings within 20 dB of the limit were recorded, and those within 6 dB of the limit were examined with additional measurements using a slower sweep time.

Radiated Emissions

The EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable and raising and lowering the antenna from one to four meters as needed. The test engineer maximized the readings with respect to the table rotation, antenna height and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.



APPENDIX A

TEST SETUP PHOTOGRAPHS

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PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View



PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View



PHOTOGRAPH SHOWING CONDUCTED EMISSIONS



Conducted Emissions

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APPENDIX B

TEST EQUIPMENT LIST

FCC 15.107 & 15.207

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
150kHz HP Filter TTE	G7754	04/20/2004	04/20/2006	02608
LISN, 8028-50-TS-24-BNC	8379276, 280	06/05/2003	06/05/2005	1248 & 1249

FCC 15.109 & 15.209

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
Chase CBL6111C Bilog	2456	12/13/2002	12/13/2004	01991
HP 8447D Preamp	1937A02604	03/07/2003	03/07/2005	00099

FCC 15.209 1-10 GHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
HP 8449B Preamp	3008A00301	10/21/2002	10/18/2004	2010
Cable, Andrews Hardline HF-	NA	06/03/2003	06/03/2005	P04275
005-20				
Cable, WL Gore 2'	149047	04/10/2003	04/10/2005	P01527
EMCO 3115 Horn Antenna	9006-3413	04/15/2003	04/25/2005	327

FCC 15.247(b)(3)

Function	S/N	Calibration Date	Cal Due Date	Asset #
HP 8566B SA	2209A01404	02/26/2003	02/26/2005	00490
HP 8566B SA Display	2403A08241	02/26/2003	02/26/2005	00489
HP 85650A QPA	2811A01267	02/26/2003	02/26/2005	00478
Chase CBL6111C Bilog	2456	12/13/2002	12/13/2004	01991
HP 8447D Preamp	1937A02604	03/07/2003	03/07/2005	00099



APPENDIX C MEASUREMENT DATA SHEETS

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Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	Davis Instruments		
Specification:	FCC 15.107(a) Class B - AVE		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Conducted Emissions	Time:	8:41:51 AM
Equipment:	Console Monitoring Station	Sequence#:	16
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		120V 60Hz
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in receive mode. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.

Transducer Legend:

T1=Cable - Internal + cabT2=LISN Insertion Loss s/n280T3=HP Filter AN02608T2=LISN Insertion Loss s/n280

Measur	rement Data:	Re	eading lis	ted by ma	argin.			Test Lead	d: Black		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV	dBµV	dB	Ant
1	563.050k	31.4	+0.1	+0.2	+0.2		+0.0	31.9	46.0	-14.1	Black
2	155.818k	38.6	+0.1	+0.3	+2.2		+0.0	41.2	55.7	-14.5	Black
3	274.351k	35.8	+0.1	+0.2	+0.2		+0.0	36.3	51.0	-14.7	Black
4	500.510k	27.7	+0.1	+0.3	+0.2		+0.0	28.3	46.0	-17.7	Black
5	662.676k	27.5	+0.1	+0.2	+0.3		+0.0	28.1	46.0	-17.9	Black
6	401.611k	28.3	+0.1	+0.3	+0.1		+0.0	28.8	47.8	-19.0	Black
7	4.896M	25.5	+0.3	+0.3	+0.1		+0.0	26.2	46.0	-19.8	Black
8	337.618k	25.7	+0.1	+0.2	+0.1		+0.0	26.1	49.3	-23.2	Black
9	21.390M	25.5	+0.5	+0.4	+0.2		+0.0	26.6	50.0	-23.4	Black
10	25.045M	25.4	+0.5	+0.5	+0.2		+0.0	26.6	50.0	-23.4	Black
11	10.408M	25.1	+0.3	+0.4	+0.1		+0.0	25.9	50.0	-24.1	Black

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CKC Laboratories_Date:_08/31/2004_Time: 8:41:51_AM_Davis Instruments WO#: 82619 FCC 15.107(a) Class B - AVE_Test Lead: Black 120V 60Hz Sequence#: 16 Davis Intruments M/N 6312





Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	Davis Instruments		
Specification:	FCC 15.107(a) Class B - AVE		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Conducted Emissions	Time:	8:46:02 AM
Equipment:	Console Monitoring Station	Sequence#:	17
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		120V 60Hz
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:			
Function	Manufacturer	Model #	S/N
Power Supply	Davis Instruments	6625	NA
WeatherLink USB	Davis Instruments	6510USB	Davis 104

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in receive mode. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.

Transducer Legend:

0	
T1=Cable - Internal + cab	T2=LISN Insertion Loss s/n276
T3=HP Filter AN02608	

Measur	rement Data:	Re	eading lis	ted by ma	argin.			Test Lea	d: White		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV	dBµV	dB	Ant
1	473.604k	33.4	+0.1	+0.3	+0.2		+0.0	34.0	46.5	-12.5	White
2	592.865k	32.8	+0.1	+0.3	+0.3		+0.0	33.5	46.0	-12.5	White
3	310.711k	35.3	+0.1	+0.3	+0.2		+0.0	35.9	50.0	-14.1	White
4	344.890k	32.6	+0.1	+0.3	+0.1		+0.0	33.1	49.1	-16.0	White
5	179.815k	36.6	+0.1	+0.4	+0.4		+0.0	37.5	54.5	-17.0	White
6	536.870k	26.4	+0.1	+0.3	+0.3		+0.0	27.1	46.0	-18.9	White
7	2.229M	24.7	+0.2	+0.4	+0.1		+0.0	25.4	46.0	-20.6	White
8	255.444k	28.6	+0.1	+0.3	+0.3		+0.0	29.3	51.6	-22.3	White
9	293.986k	27.4	+0.1	+0.3	+0.2		+0.0	28.0	50.4	-22.4	White



10	26.327M	25.3	+0.5	+0.4	+0.2	+0.0	26.4	50.0	-23.6	White
11	12.516M	24.9	+0.4	+0.5	+0.1	+0.0	25.9	50.0	-24.1	White
12	21.832M	24.6	+0.5	+0.4	+0.2	+0.0	25.7	50.0	-24.3	White

CKC Laboratories_Date:_08/31/2004_Time: 8:46:02 AM_Davis Instruments WO#: 82619 FCC 15.107(a) Class B - AVE_Test Lead: White 120V 60Hz Sequence#: 17 Davis Intruments M/N 6312





Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	Davis Instruments		
Specification:	15.109 CLASS B		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Maximized Emissions	Time:	10:32:58
Equipment:	Console Monitoring Station	Sequence#:	20
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312	-	
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in receive mode. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 30-1000MHz. Temperature: 23°C, Relative Humidity: 50%.

Transducer Legend:

*	
T1=Amp - S/N 604	T2=Bilog Site B
T3=Cable - 3 Meter	

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Те	est Distanc	e: 3 Meters	1	
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	$dB\mu V/m$	dB	Ant
1	855.878M	27.6	-27.7	+22.2	+7.2		+0.0	29.3	46.0	-16.7	Horiz
											139
2	853.064M	27.5	-27.7	+22.2	+7.2		+0.0	29.2	46.0	-16.8	Verti
											139
3	144.086M	30.1	-27.0	+10.7	+2.5		+0.0	16.3	43.5	-27.2	Verti
											139
4	147.522M	30.3	-27.0	+10.5	+2.5		+0.0	16.3	43.5	-27.2	Verti
											139
5	304.197M	28.3	-26.5	+12.9	+3.6		+0.0	18.3	46.0	-27.7	Horiz
											139
6	304.224M	28.1	-26.5	+12.9	+3.6		+0.0	18.1	46.0	-27.9	Verti
											139
7	164.104M	28.2	-26.9	+9.6	+2.6		+0.0	13.5	43.5	-30.0	Verti
											139
8	242.011M	27.0	-26.5	+11.5	+3.2		+0.0	15.2	46.0	-30.8	Horiz
											139
9	145.251M	26.6	-27.0	+10.6	+2.5		+0.0	12.7	43.5	-30.8	Horiz
											139
10	221.933M	26.4	-26.5	+10.0	+3.1		+0.0	13.0	46.0	-33.0	Verti
											139



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	Davis Instruments		
Specification:	FCC 15.207 - AVE		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Conducted Emissions	Time:	9:09:49 AM
Equipment:	Console Monitoring Station	Sequence#:	18
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		120V 60Hz
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in transmit mode modulated with a constant high value. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.

Transducer Legend:

T1=Cable - Internal + cab T3=HP Filter AN02608 T2=LISN Insertion Loss s/n280

Measurement Data:Reading listed by margin.Test Lead: Black											
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV	dBµV	dB	Ant
1	518.690k	36.9	+0.1	+0.3	+0.3		+0.0	37.6	46.0	-8.4	Black
2	163.090k	40.1	+0.1	+0.3	+1.5		+0.0	42.0	55.3	-13.3	Black
3	3.399M	25.1	+0.3	+0.3	+0.1		+0.0	25.8	46.0	-20.2	Black
4	25.648M	25.5	+0.5	+0.5	+0.2		+0.0	26.7	50.0	-23.3	Black
5	17.102M	25.6	+0.4	+0.4	+0.1		+0.0	26.5	50.0	-23.5	Black
6	7.868M	25.2	+0.3	+0.5	+0.1		+0.0	26.1	50.0	-23.9	Black



CKC Laboratories_Date:_08/31/2004_Time: 9:09:49 AM_Davis Instruments WO#: 82619 FCC 15.207 - AVE_Test Lead: Black 120V 60Hz Sequence#: 18 Davis Intruments M/N 6312





Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer:	Davis Instruments		
Specification:	FCC 15.207 - AVE		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Conducted Emissions	Time:	9:15:39 AM
Equipment:	Console Monitoring Station	Sequence#:	19
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		120V 60Hz
S/N:	Davis 100		

Equipment Under Test (* = EUT):

1 1				
Function	Manufacturer	Model #	S/N	
Console Monitoring	Davis Instruments	6312	Davis 100	
Station*				
Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in transmit mode modulated with a constant high value. EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 150kHz-30MHz. Temperature: 22°C, Relative Humidity: 40%.

Transducer Legend:

T1=Cable - Internal + cab T3=HP Filter AN02608

T2=LISN Insertion Loss s/n276

Measur	Measurement Data:Reading listed by margin.Test Lead: White										
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV	dBµV	dB	Ant
1	518.690k	37.8	+0.1	+0.3	+0.3		+0.0	38.5	46.0	-7.5	White
2	162.362k	40.0	+0.1	+0.4	+1.6		+0.0	42.1	55.3	-13.2	White
3	4.364M	25.6	+0.3	+0.4	+0.1		+0.0	26.4	46.0	-19.6	White
4	25.073M	25.9	+0.5	+0.4	+0.2		+0.0	27.0	50.0	-23.0	White
5	26.621M	25.6	+0.5	+0.4	+0.2		+0.0	26.7	50.0	-23.3	White
6	14.021M	25.6	+0.4	+0.5	+0.1		+0.0	26.6	50.0	-23.4	White
7	16.219M	25.7	+0.4	+0.4	+0.1		+0.0	26.6	50.0	-23.4	White
8	25.950M	25.4	+0.5	+0.4	+0.2		+0.0	26.5	50.0	-23.5	White



CKC Laboratories_Date:_08/31/2004_Time: 9:15:39 AM_Davis Instruments WO#: 82619 FCC 15:207 - AVE_Test Lead: White 120V 60Hz Sequence#: 19 Davis Intruments M/N 6312





Test Location:	CKC Laboratories	•5473A Clouds Rest •	Mariposa, CA 95338	• 1-800-500-4EMC (4362)
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Customer:	Davis Instruments		
Specification:	FCC 15.209		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Maximized Emissions	Time:	15:27:58
Equipment:	Console Monitoring Station	Sequence#:	21
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in trasmit mode with constant carrier modulated with 1's . EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: 30-1000MHz. Temperature: 23°C, Relative Humidity: 50%.

Transducer Legend:

	<u> </u>	
T1=Amp	- S/N 604	
T3=Cable	- 3 Meter	

T2=Bilog Site B

<i>Measurement Data:</i> Reading listed by margin.				argin.	Test Distance: 3 Meters						
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	927.521M	94.7	-27.2	+23.2	+7.3		+0.0	98.0	46.0	+52.0	Verti
									Tx 3, Ch.	50,	106
									Carrier		
2	914.976M	94.4	-27.3	+23.0	+7.4		+0.0	97.5	46.0	+51.5	Verti
									Tx 3, Ch.	25,	100
									Carrier		
3	902.448M	94.2	-27.3	+22.8	+7.5		+0.0	97.2	46.0	+51.2	Verti
									Tx, 1, Ch.	0, Carrier	170
4	927.519M	86.7	-27.2	+23.2	+7.3		+0.0	90.0	46.0	+44.0	Horiz
									Tx 3, Ch.	50,	100
									Carrier		
5	902.446M	86.7	-27.3	+22.8	+7.5		+0.0	89.7	46.0	+43.7	Horiz
									Tx, 1, Ch.	0, Carrier	220
6	914.983M	86.3	-27.3	+23.0	+7.4		+0.0	89.4	46.0	+43.4	Horiz
									Tx 3, Ch.	25,	208
									Carrier		
7	908.369M	40.7	-27.3	+22.9	+7.5		+0.0	43.8	46.0	-2.2	Verti
	QP								Tx 1, Ch.	0	167
^	908.356M	44.1	-27.3	+22.9	+7.5		+0.0	47.2	46.0	+1.2	Verti
									Tx 1, Ch.	0	167

CKC AM Testing the Future

9	896.526M	40.8	-27.3	+22.8	+7.5	+0.0	43.8	46.0 -2	2.2 Verti
	<u>QP</u>	44.4	27.2	122.8	.7.5		17 1	1x 1, Ch. 0	1/3
Λ	896.534M	44.4	-27.3	+22.8	+7.5	+0.0	47.4	$40.0 + T_{v} + C_{h} 0$	-1.4 Verti 173
11	93/ 1/0M	39.5	_27.2	±23.3	±7.3	+0.0	12.9	<u>1 x 1, Cli. 0</u> <u>460</u>	3.1 Verti
11	OP	59.5	-27.2	723.3	+1.5	+0.0	42.9	+0.0	3.1 VCIU 157
^	934 148M	43.9	-27.2	+23.3	+7.3	+0.0	47.3	$\frac{1 \times 3, \text{ cm} \cdot 30}{46.0}$ +	13 Verti
	<i>y y y y y y y y y y</i>	1517	27.2	120.0	17.5	10.0	17.5	Tx 3. Ch. 50	157
13	920.896M	39.6	-27.3	+23.1	+7.4	+0.0	42.8	46.0	3.2 Verti
	QP							Tx 3, Ch. 50	100
^	920.859M	43.4	-27.3	+23.1	+7.4	+0.0	46.6	46.0 +	0.6 Verti
								Tx 3, Ch. 50	100
15	900.995M	39.4	-27.3	+22.8	+7.5	+0.0	42.4	46.0 -2	3.6 Verti
	QP							Tx 1, Ch. 0	173
^	900.991M	43.7	-27.3	+22.8	+7.5	+0.0	46.7	46.0 +	0.7 Verti
								Tx 1, Ch. 0	173
17	907.259M	39.0	-27.3	+22.9	+7.5	+0.0	42.1	46.0	3.9 Verti
	QP							Tx 3, Ch. 25	100
^	907.250M	42.9	-27.3	+22.9	+7.5	+0.0	46.0	46.0 +	0.0 Verti
10	000 00714	20.6	07.0	. 22.0	.7.5		41 6	1x 3, Ch. 25	100
19	900.98/M	38.6	-27.3	+22.8	+7.5	+0.0	41.6	46.0 -4	4.4 Horiz
20	002 2001	27.0	27.2	122.0	.75		41.0	1x 1, Ch. 0	100 5.0 Verti
20	905.899M	57.9	-21.5	+22.9	+7.5	+0.0	41.0	40.0	3.0 Veru 167
^	<u>003 855M</u>	12.5	27.3	±22.0	+7.5	+0.0	15.6	<u>1 x 1, Cli. 0</u>	0.4 Verti
	905.855IVI	42.5	-27.5	722.9	± 1.5	+0.0	45.0	-40.0 $-40.$	0.4 VCIII 167
22	935 645M	37.0	-27.2	+233	+7.3	+0.0	40.4	46.0 -4	5.6 Verti
22	OP	57.0	27.2	120.0	17.5	10.0	10.1	Tx 3. Ch. 50	100
^	935.629M	41.7	-27.2	+23.3	+7.3	+0.0	45.1	46.0 -(0.9 Verti
								Tx 3, Ch. 50	100
24	889.150M	37.6	-27.4	+22.7	+7.4	+0.0	40.3	46.0 -:	5.7 Verti
	QP							Tx 1, Ch. 0	197
^	889.130M	42.8	-27.4	+22.7	+7.4	+0.0	45.5	46.0 -0	0.5 Verti
								Tx 1, Ch. 0	197
26	922.703M	37.1	-27.3	+23.1	+7.3	+0.0	40.2	46.0 -:	5.8 Verti
	QP							Tx 3, Ch. 25	164
^	922.697M	40.6	-27.3	+23.1	+7.3	+0.0	43.7	46.0 -2	2.3 Verti
•	00505435	261						Tx 3, Ch. 25	164
28	907.954M	36.1	-27.3	+22.9	+7.5	+0.0	39.2	46.0 -(6.8 Verti
	<u>QP</u>	42.2	27.2	122.0	.75		15 1	1x 3, Ch. 25	100 0.6 Venti
~	907.943M	42.3	-27.3	+22.9	+7.5	+0.0	45.4	40.0 - 0	0.6 Verti
30	067 072M	42.0	27.1	123.8	17.4		47.0	<u>54.0</u>	7.0 Vorti
30	907.072IVI	42.9	-27.1	+23.8	+7.4	± 0.0	47.0	$T_{x} = 1 Ch 0$	100 veru
31	922.003M	35 3	-273	+23.1	+7.3	+0.0	38.4	46.0 -'	7.6 Verti
51	OP	55.5	21.5	123.1	11.5	10.0	50.7	Tx 3. Ch. 25	100
٨	921.979M	39.2	-27.3	+23.1	+7.3	+0.0	42.3	46.0 -2	3.7 Verti
								Tx 3, Ch. 25	100
ı								/	

CKC -M Testing the Future

33 874.894M	35.6	-27.5	+22.5	+7.4	+0.0	38.0	46.0 -8.	0 Verti
QP							Tx 1, Ch. 0	162
^ 874.894M	41.4	-27.5	+22.5	+7.4	+0.0	43.8	46.0 -2.	2 Verti
							Tx 1, Ch. 0	162
35 869.816M	35.1	-27.5	+22.4	+7.3	+0.0	37.3	46.0 -8.	7 Verti
QP							Tx 1, Ch. 0	164
^ 869.816M	41.4	-27.5	+22.4	+7.3	+0.0	43.6	46.0 -2.	4 Verti
							Tx 1, Ch. 0	164
37 876.298M	34.7	-27.5	+22.5	+7.4	+0.0	37.1	46.0 -8.	9 Verti
QP							Tx 1, Ch. 0	181
^ 876.298M	42.8	-27.5	+22.5	+7.4	+0.0	45.2	46.0 -0.	8 Verti
							Tx 1, Ch. 0	181
39 889.580M	33.1	-27.4	+22.7	+7.4	+0.0	35.8	46.0 -10	.2 Verti
QP							Tx 1, Ch. 0	99
^ 889.610M	39.7	-27.4	+22.7	+7.4	+0.0	42.4	46.0 -3.	6 Verti
							Tx 1, Ch. 0	99
41 867.806M	33.5	-27.6	+22.4	+7.3	+0.0	35.6	46.0 -10	.4 Verti
QP							Tx 1, Ch. 0	134
^ 867.867M	39.8	-27.6	+22.4	+7.3	+0.0	41.9	46.0 -4.	1 Verti
							Tx 1, Ch. 0	134
43 451.249M	41.5	-27.5	+16.5	+4.8	+0.0	35.3	46.0 -10	.7 Verti
							Tx 1, Ch. 0	145
44 866.467M	33.1	-27.6	+22.3	+7.3	+0.0	35.1	46.0 -10	.9 Verti
QP							Tx 1, Ch. 0	100
^ 866.533M	40.4	-27.6	+22.3	+7.3	+0.0	42.4	46.0 -3.	6 Verti
							Tx 1, Ch. 0	100
46 911.442M	31.6	-27.3	+23.0	+7.4	+0.0	34.7	46.0 -11	.3 Verti
QP							Tx 3, Ch. 25	100
^ 911.405M	40.0	-27.3	+23.0	+7.4	+0.0	43.1	46.0 -2.	9 Verti
							Tx 3, Ch. 25	100
48 449.809M	40.5	-27.5	+16.5	+4.8	+0.0	34.3	46.0 -11	.7 Verti
							Tx 1, Ch. 0	145
49 451.244M	40.3	-27.5	+16.5	+4.8	+0.0	34.1	46.0 -11	.9 Horiz
							Tx 1, Ch. 0	178
50 449.809M	39.2	-27.5	+16.5	+4.8	+0.0	33.0	46.0 -13	.0 Horiz
							Tx 1, Ch. 0	221
51 450.481M	38.1	-27.5	+16.5	+4.8	+0.0	31.9	46.0 -14	.1 Verti
							Tx 3, Ch. 25	144
52 450.499M	36.6	-27.5	+16.5	+4.8	+0.0	30.4	46.0 -15	.6 Horiz
							Tx 3, Ch. 25	181
53 309.742M	38.1	-26.6	+13.1	+3.7	+0.0	28.3	46.0 -17	.7 Horiz
							Tx 1, Ch. 0	100
54 302.344M	37.5	-26.5	+12.9	+3.6	+0.0	27.5	46.0 -18	.5 Horiz
							Tx 3, Ch. 50	100
55 309.740M	36.5	-26.6	+13.1	+3.7	+0.0	26.7	46.0 -19	.3 Verti
							Tx 1, Ch. 0	100
P								



Test Location:	CKC Laboratories	•5473A Clouds Rest •	Mariposa, CA 95338	• 1-800-500-4EMC (4362)
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Customer: Specification:	Davis Instruments FCC 15.209		
Work Order #:	82619	Date:	08/27/2004
Test Type:	Maximized Emissions	Time:	12:27:03
Equipment:	Console Monitoring Station	Sequence#:	6
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Davis Instruments	6625	NA
WeatherLink USB	Davis Instruments	6510USB	Davis 104

Test Conditions / Notes:

EUT is a console monitoring station. EUT is continuously transmitting data on the indicated channel. EUT is mounted vertically to simulate normal installation. Dwell time correction factor used in accordance with DA 00-705. Maximum packet length is 6.7ms which transmits once every 2.5625 seconds. Therefore, longest duration within a 100ms window is 7.4ms. Correction factor calculated as follows: 10*LOG(7.4/100) = -11.3dB. Dwell time correction factor applied only to those frequencies which are harmonics of the carrier. Frequency Range Investigated: 1-10GHz. Temperature: 22°C, Relative Humidity: 50%.

Transducer Legend:	
T1=Horn AN 00327 1-18GHz	T2=Cable HF P01527
T3=WL Gore SN 1065 AN P004301	T4=Cable HF-005-20
T5=Amp - S/N 301	T6=DTCF

Measu	rement Data:	Re	eading lis	ted by ma	argin.	Test Distance: 3 Meters					
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dBµV	dB	dB	dB	dB	Table	$dB\mu V/m$	dBµV/m	dB	Ant
1	1804.720M	67.6	+26.4	+0.3	+0.6	+1.7	+0.0	50.0	54.0	-4.0	Horiz
			-35.3	-11.3							170
2	1804.772M	67.3	+26.4	+0.3	+0.6	+1.7	+0.0	49.7	54.0	-4.3	Vert
	Ave		-35.3	-11.3					2nd Harmo	onic Ch. 0	136
^	1804.722M	67.9	+26.4	+0.3	+0.6	+1.7	+0.0	50.3	54.0	-3.7	Vert
			-35.3	-11.3					2nd Harmo	onic Ch. 0	136
4	1829.720M	64.1	+26.5	+0.3	+0.6	+1.7	+0.0	46.6	54.0	-7.4	Vert
			-35.3	-11.3					2nd Harmo	onic Ch.	135
									25		
5	1012.974M	65.0	+24.2	+0.2	+0.4	+1.2	+0.0	43.5	54.0	-10.5	Vert
			-36.2	-11.3							136
6	1854.834M	60.7	+26.6	+0.3	+0.6	+1.7	+0.0	43.3	54.0	-10.7	Vert
			-35.3	-11.3					2nd Harmo	onic, Ch.	100
									50		
7	1001.820M	64.8	+24.2	+0.2	+0.4	+1.2	+0.0	43.3	54.0	-10.7	Vert
			-36.2	-11.3							212

CKC AM Testing the Future

8	1804.660M	60.8	+26.4	+0.3	+0.6	+1.7	+0.0	43.2	54.0	-10.8	Vert
			-35.3	-11.3							122
9	1829.740M	60.2	+26.5	+0.3	+0.6	+1.7	+0.0	42.7	54.0	-11.3	Vert
			-35.3	-11.3							136
10	1804.738M	59.5	+26.4	+0.3	+0.6	+1.7	+0.0	41.9	54.0	-12.1	Horiz
			-35.3	-11.3					2nd Harmo	onic, Ch.	216
									0		
11	1000.653M	62.2	+24.2	+0.2	+0.4	+1.2	+0.0	40.7	54.0	-13.3	Vert
			-36.2	-11.3							229
12	1829.900M	57.8	+26.5	+0.3	+0.6	+1.7	+0.0	40.3	54.0	-13.7	Horiz
			-35.3	-11.3					2nd Harmo	onic, Ch.	219
									25		
13	1854.903M	57.2	+26.6	+0.3	+0.6	+1.7	+0.0	39.8	54.0	-14.2	Horiz
			-35.3	-11.3							210
14	1000.690M	60.4	+24.2	+0.2	+0.4	+1.2	+0.0	38.9	54.0	-15.1	Vert
			-36.2	-11.3							109
15	1949.310M	50.4	+27.0	+0.4	+0.6	+1.8	+0.0	33.7	54.0	-20.3	Vert
			-35.2	-11.3							179
16	2342.061M	47.9	+28.1	+0.4	+0.6	+1.9	+0.0	32.5	54.0	-21.5	Vert
			-35.1	-11.3							100
17	2334.778M	47.7	+28.1	+0.4	+0.6	+1.9	+0.0	32.3	54.0	-21.7	Vert
			-35.1	-11.3							137
18	2342.180M	47.6	+28.1	+0.4	+0.6	+1.9	+0.0	32.2	54.0	-21.8	Vert
			-35.1	-11.3							109
19	2334.450M	47.6	+28.1	+0.4	+0.6	+1.9	+0.0	32.2	54.0	-21.8	Vert
			-35.1	-11.3							109
20	2335.001M	47.4	+28.1	+0.4	+0.6	+1.9	+0.0	32.0	54.0	-22.0	Vert
			-35.1	-11.3							153
21	2707.188M	45.8	+29.2	+0.4	+0.7	+2.1	+0.0	31.9	54.0	-22.1	Vert
			-35.0	-11.3							110
22	2343.276M	47.3	+28.1	+0.4	+0.6	+1.9	+0.0	31.9	54.0	-22.1	Vert
			-35.1	-11.3							110
23	2335.412M	46.5	+28.1	+0.4	+0.6	+1.9	+0.0	31.1	54.0	-22.9	Horiz
			-35.1	-11.3							100
24	2341.831M	46.4	+28.1	+0.4	+0.6	+1.9	+0.0	31.0	54.0	-23.0	Horiz
			-35.1	-11.3							100
25	1013.031M	51.7	+24.2	+0.2	+0.4	+1.2	+0.0	30.2	54.0	-23.8	Vert
			-36.2	-11.3							100



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: Specification:	Davis Instruments 15.247(b)(3)		
Work Order #:	82619	Date:	08/31/2004
Test Type:	Maximized Emissions	Time:	16:41:29
Equipment:	Console Monitoring Station	Sequence#:	22
Manufacturer:	Davis Instruments	Tested By:	Randal Clark
Model:	6312		
S/N:	Davis 100		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Console Monitoring	Davis Instruments	6312	Davis 100
Station*			

Support Devices:				
Function	Manufacturer	Model #	S/N	
Power Supply	Davis Instruments	6625	NA	
WeatherLink USB	Davis Instruments	6510USB	Davis 104	

Test Conditions / Notes:

EUT is a console monitoring station. EUT is in trasmit mode with constant carrier modulated with 1's (TX 3, HOP 0). EUT is mounted vertically to simulate normal installation. Frequency Range Investigated: Carrier. Temperature: 30°C, Relative Humidity: 50%.

Transducer Legend:

T1=Amp - S/N 604 T3=Cable - 3 Meter T2=Bilog Site B

Measurement Data: Reading listed by margin. Test Distance: 3 Meters											
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	$dB\mu V/m$	dB	Ant
1	927.524M	94.6	-27.2	+23.2	+7.3		+0.0	97.9	127.0	-29.1	Verti
											101
2	914.979M	94.0	-27.3	+23.0	+7.4		+0.0	97.1	127.0	-29.9	Verti
											100
3	902.436M	93.9	-27.3	+22.8	+7.5		+0.0	96.9	127.0	-30.1	Verti
											100
4	914.980M	87.0	-27.3	+23.0	+7.4		+0.0	90.1	127.0	-36.9	Horiz
											100
5	927.525M	86.8	-27.2	+23.2	+7.3		+0.0	90.1	127.0	-36.9	Horiz
											100
6	902.440M	86.9	-27.3	+22.8	+7.5		+0.0	89.9	127.0	-37.1	Horiz
											209