11.0 FREQUENCY STABILITY - PART 2.1055 (d)(1) **(Voltage Variation)**

The frequency stability of Highway Information System DRTXM3 Transmitter was measured by varying the primary supply voltage from 85% to 115% of nominal value.

FREQUENCY STABILITY FOR VOLTAGE VARIATION:

From 100% to 85% = 2.00400802 Hz
(10 volts to 12 volts)

From 100% to 115% = 0 Hz

(14 volts to 12 volts)

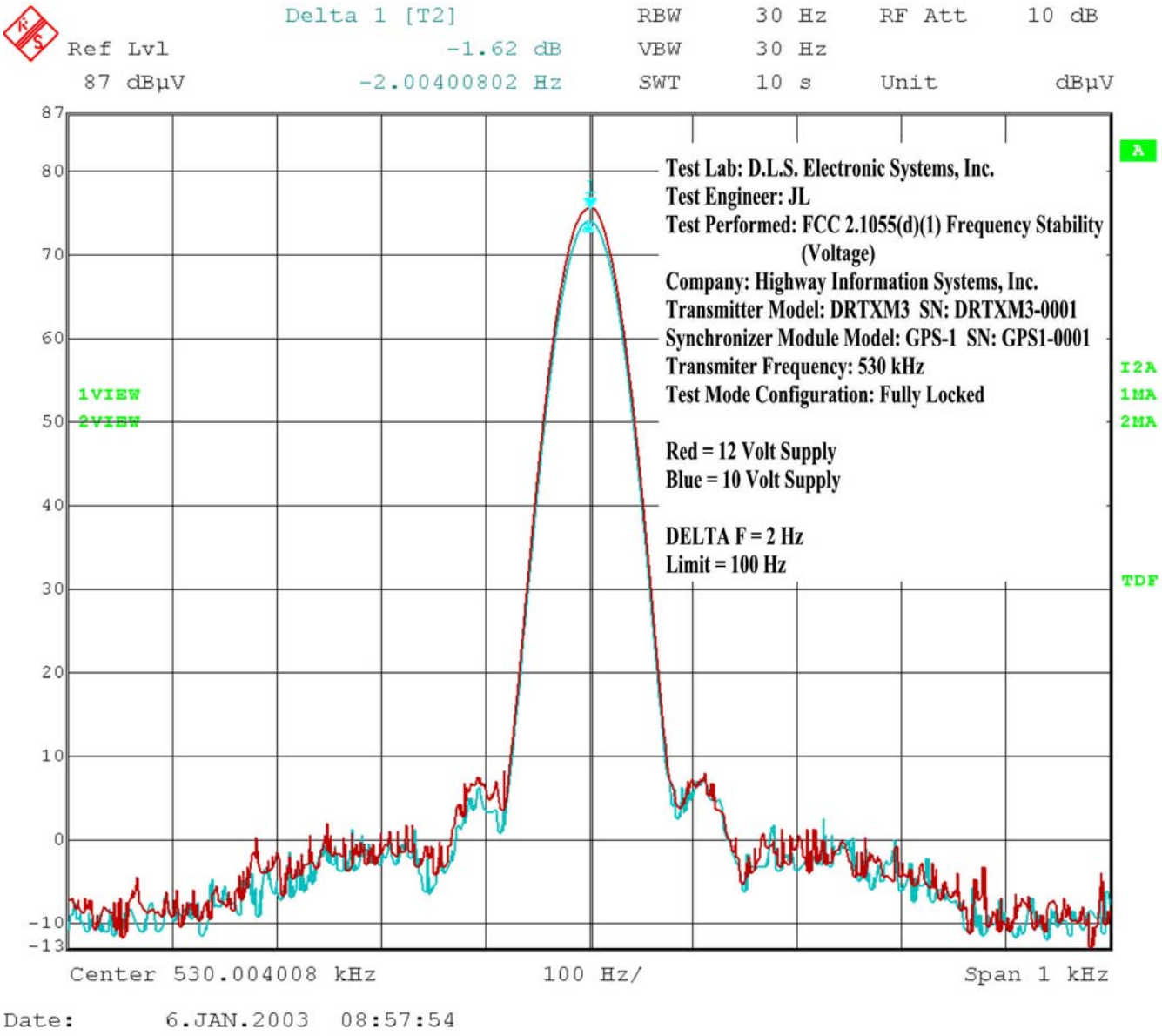
1250 Peterson Drive, Wheeling, Illinois 60090

GRAPH(S) TAKEN FOR FREQUENCY

STABILITY WHEN VARYING THE

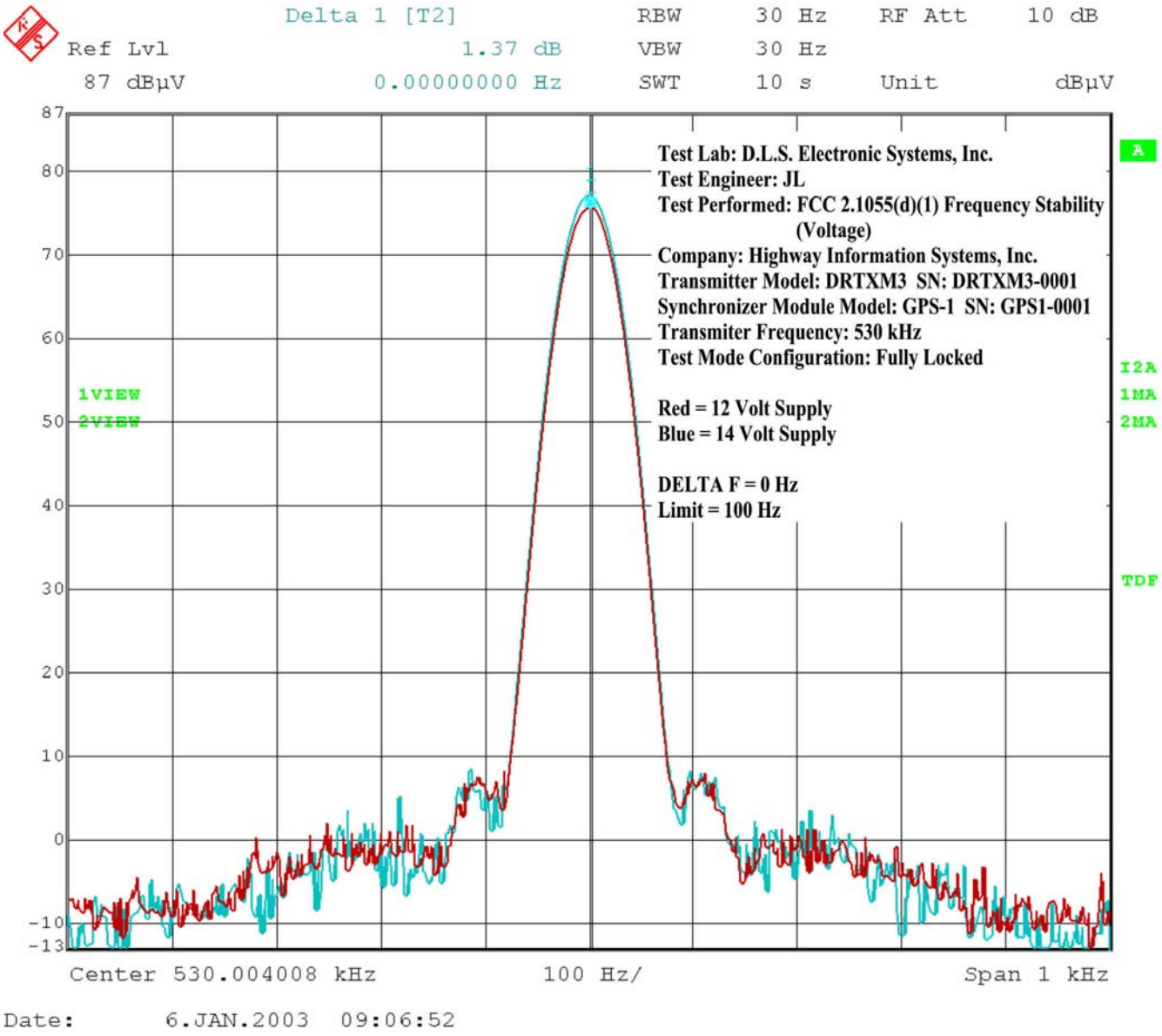
PRIMARY SUPPLY VOLTAGE

PART 2.1055d



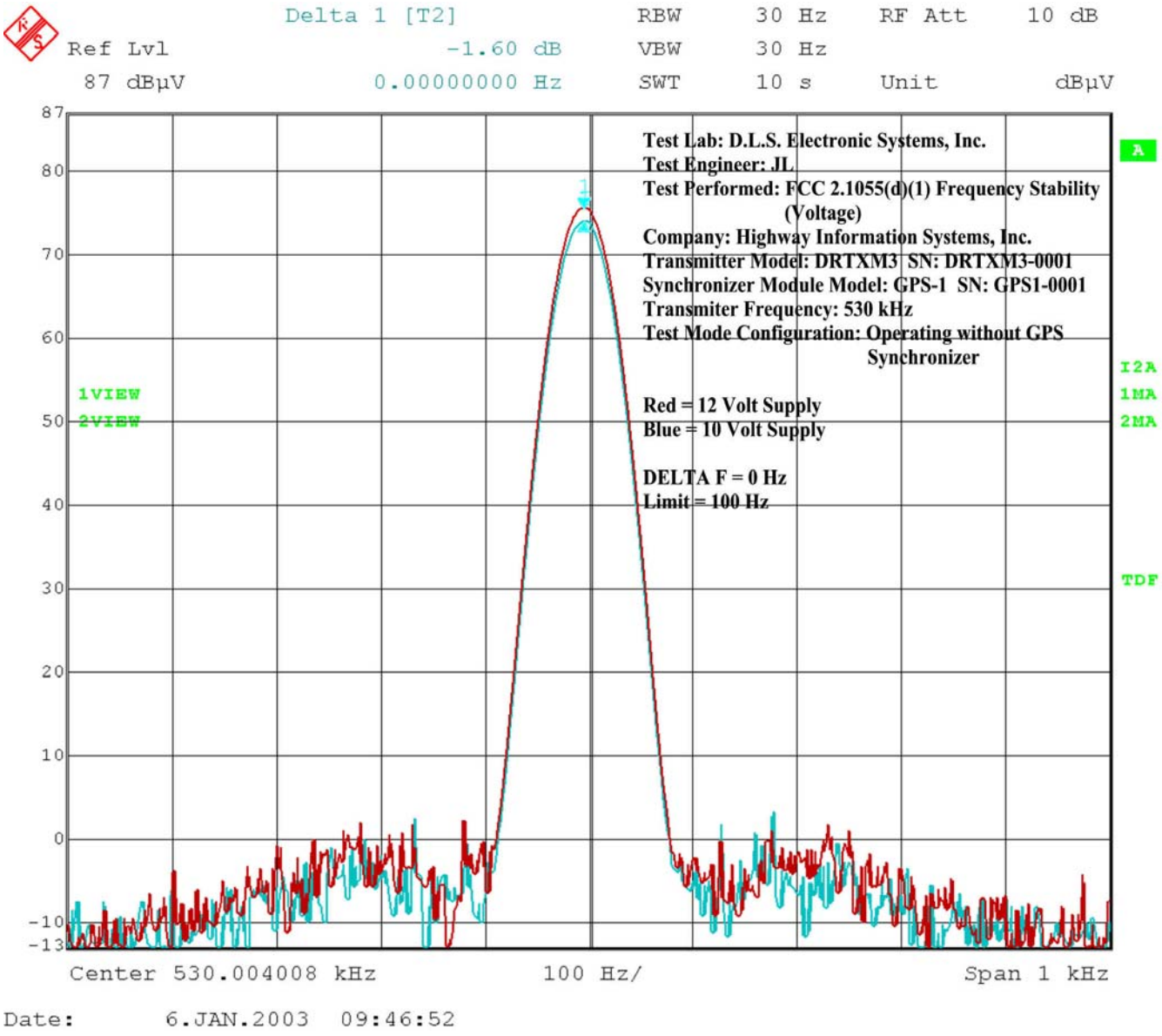
10 Volts vs 12 Volts (min)
Test Mode 1

(Fully Locked)



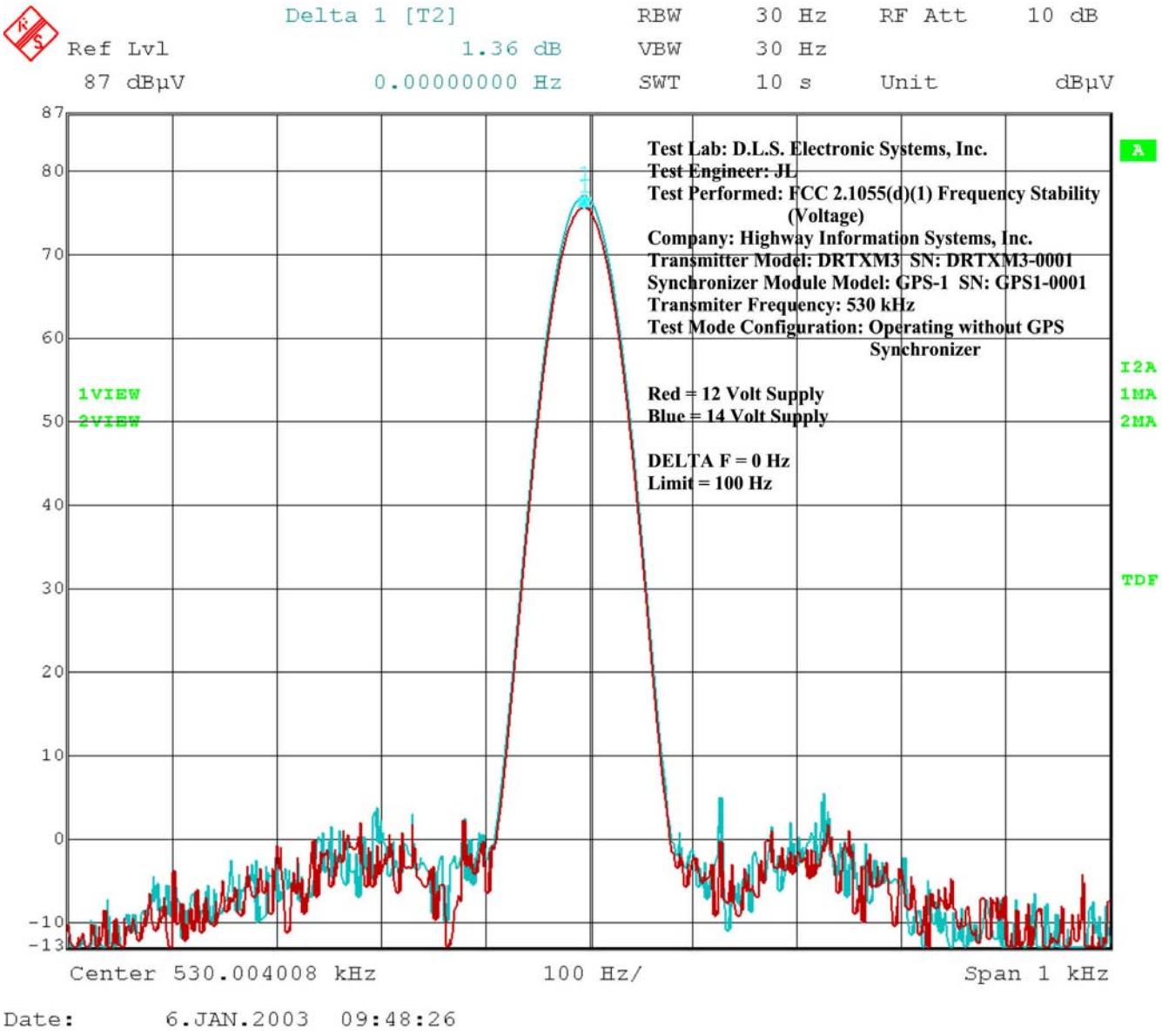
14 Volts vs 12 Volts (max)
Test Mode 1

(Fully Locked)



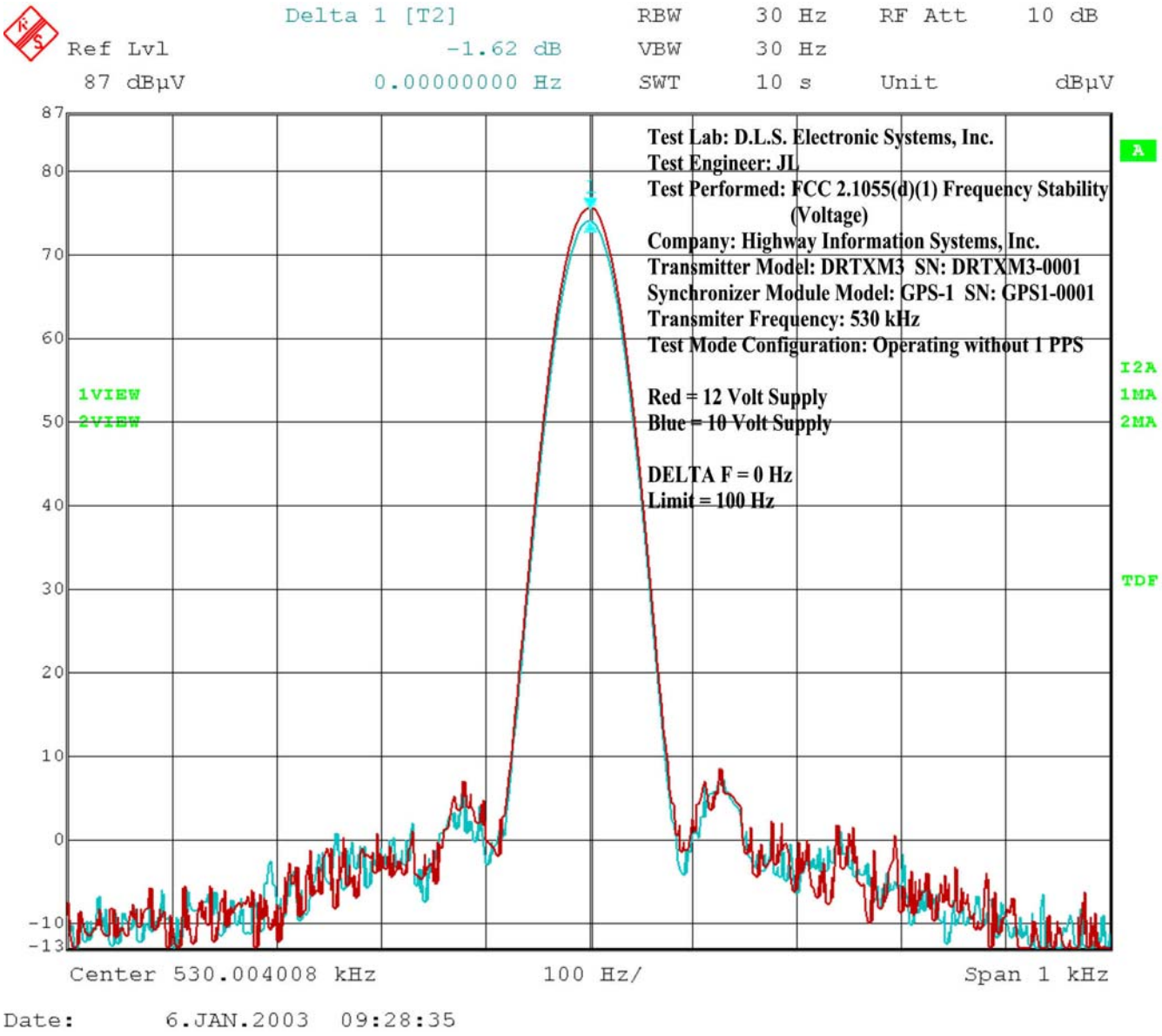
10 Volts vs 12 Volts (min)
Test Mode 2

(Without GPS-1 Synchronizer)



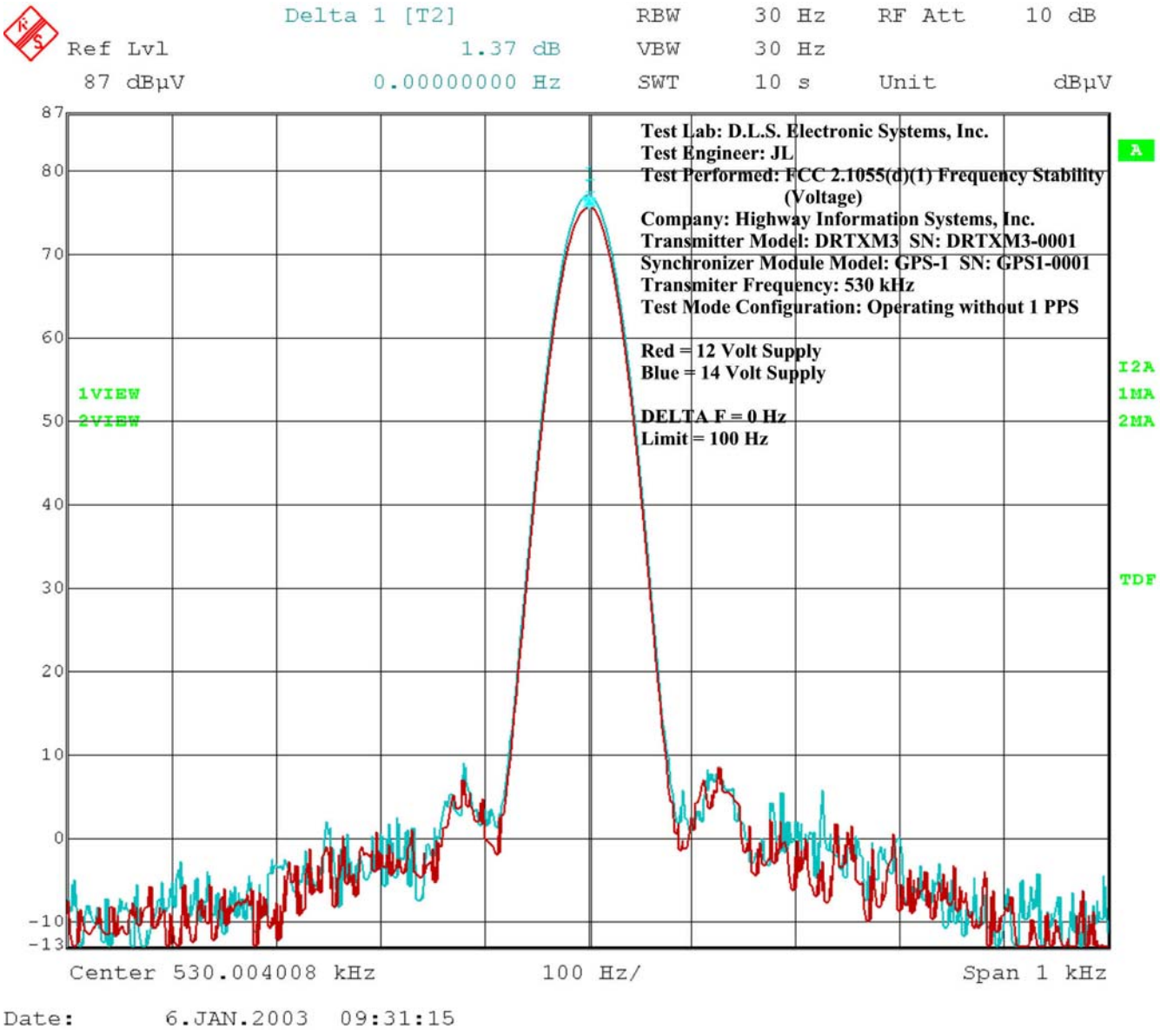
14 Volts vs 12 Volts (max)
Test Mode 2

(Without GPS-1 Synchronizer)



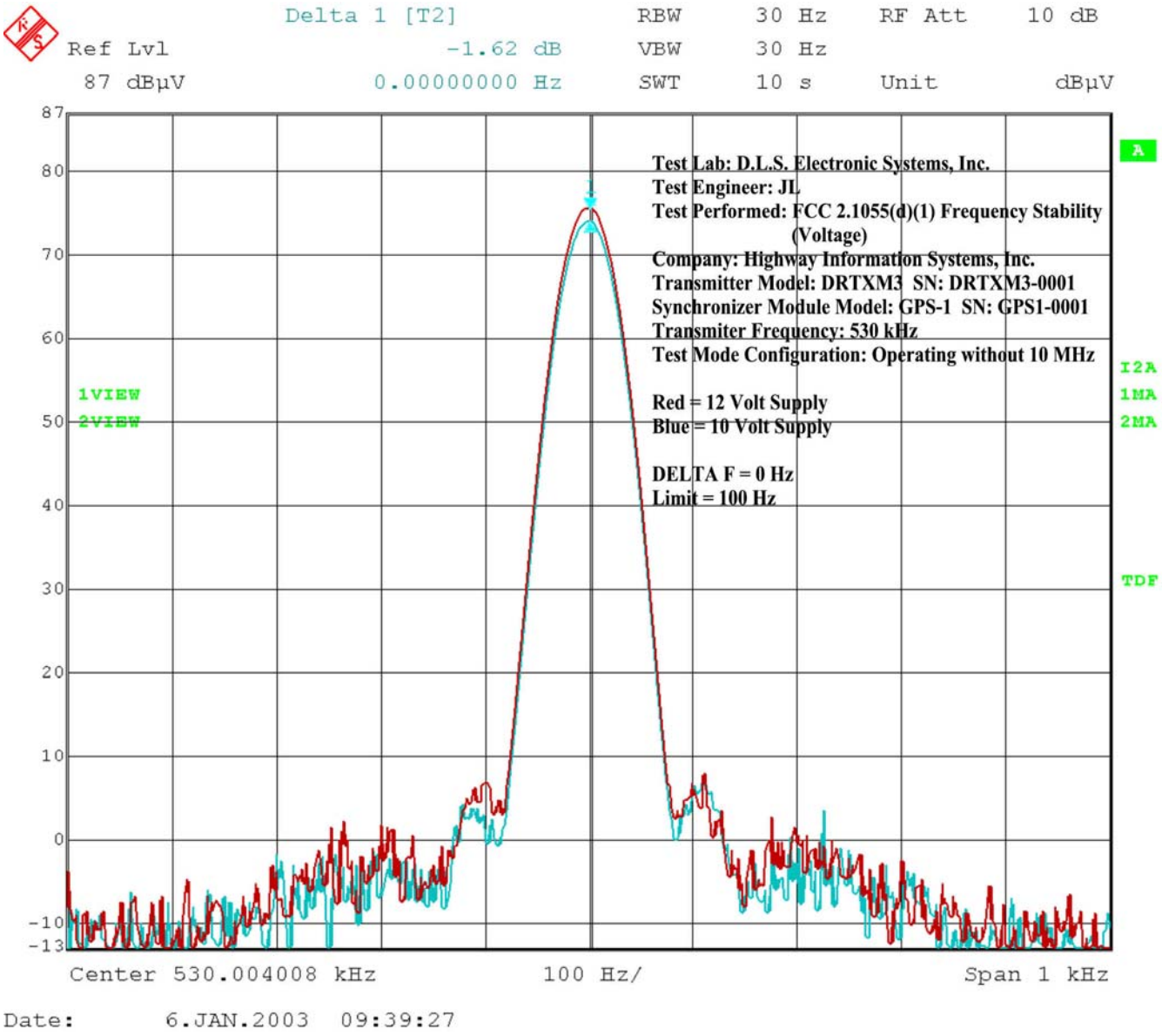
10 Volts vs 12 Volts (min)
Test Mode 3

(Without 1 PPS Timing Signal)



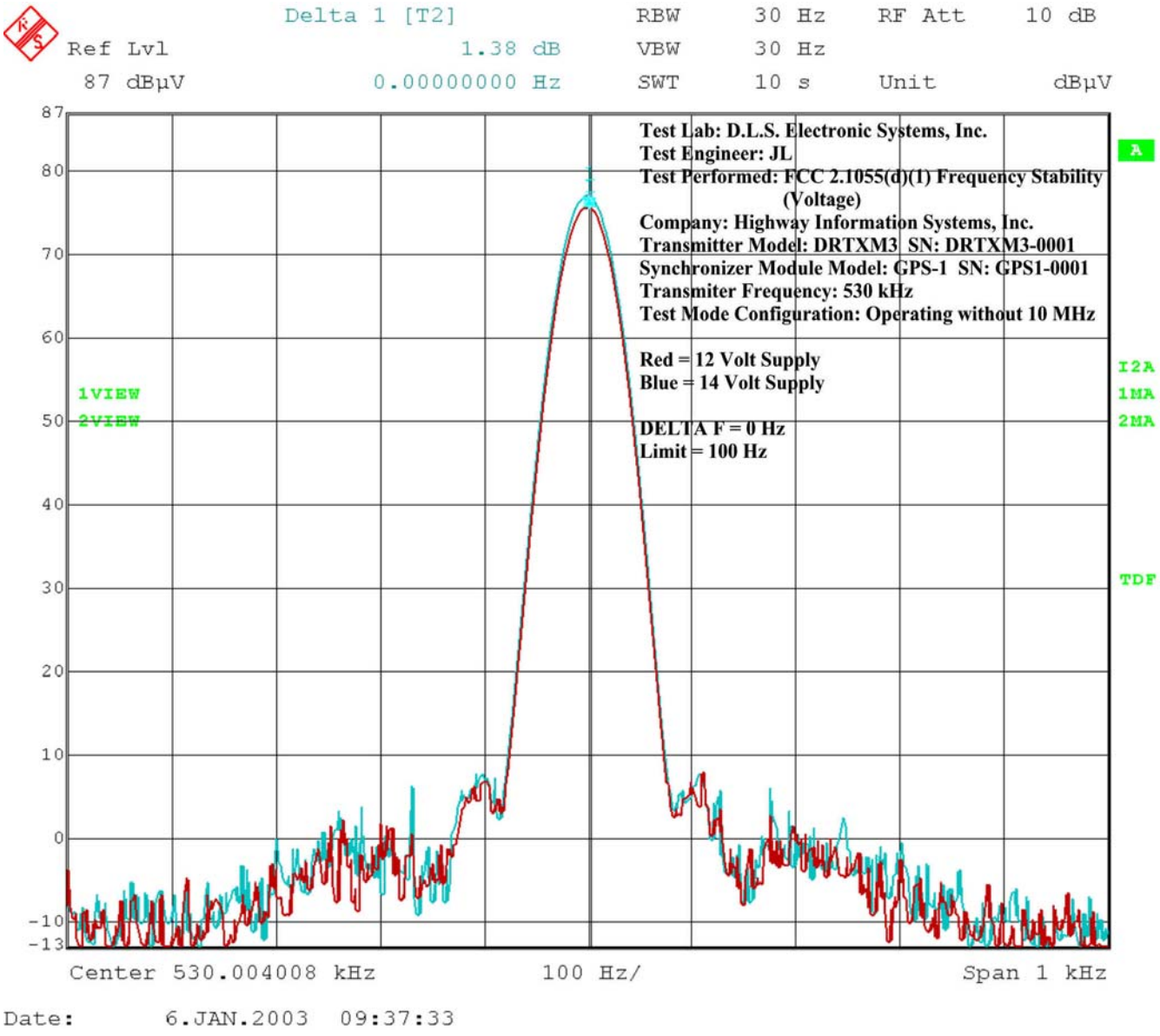
14 Volts vs 12 Volts (max)
Test Mode 3

(Without 1 PPS Timing Signal)



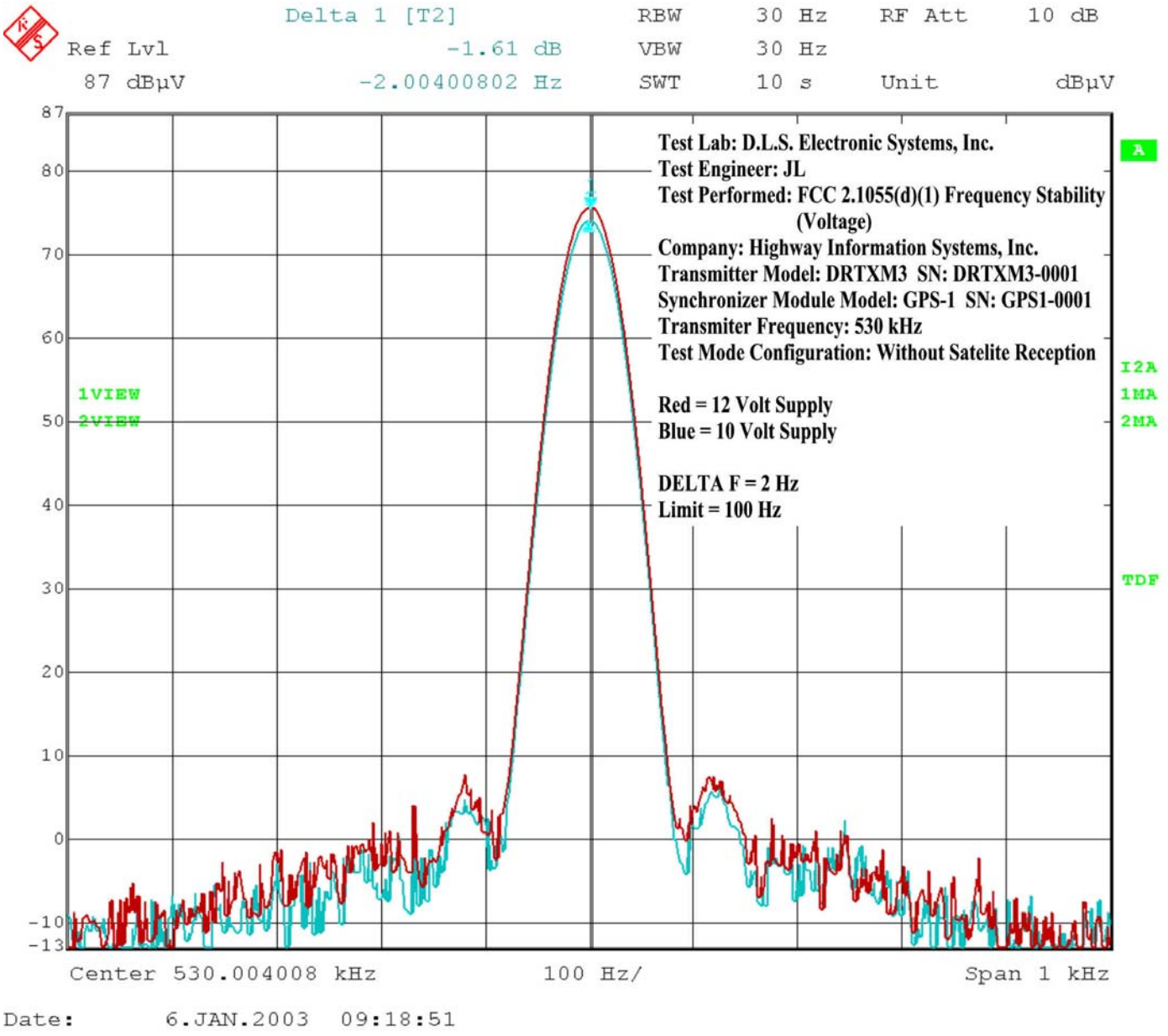
10 Volts vs 12 Volts (min)
Test Mode 4

(Without 10 MHz Timing Signal)



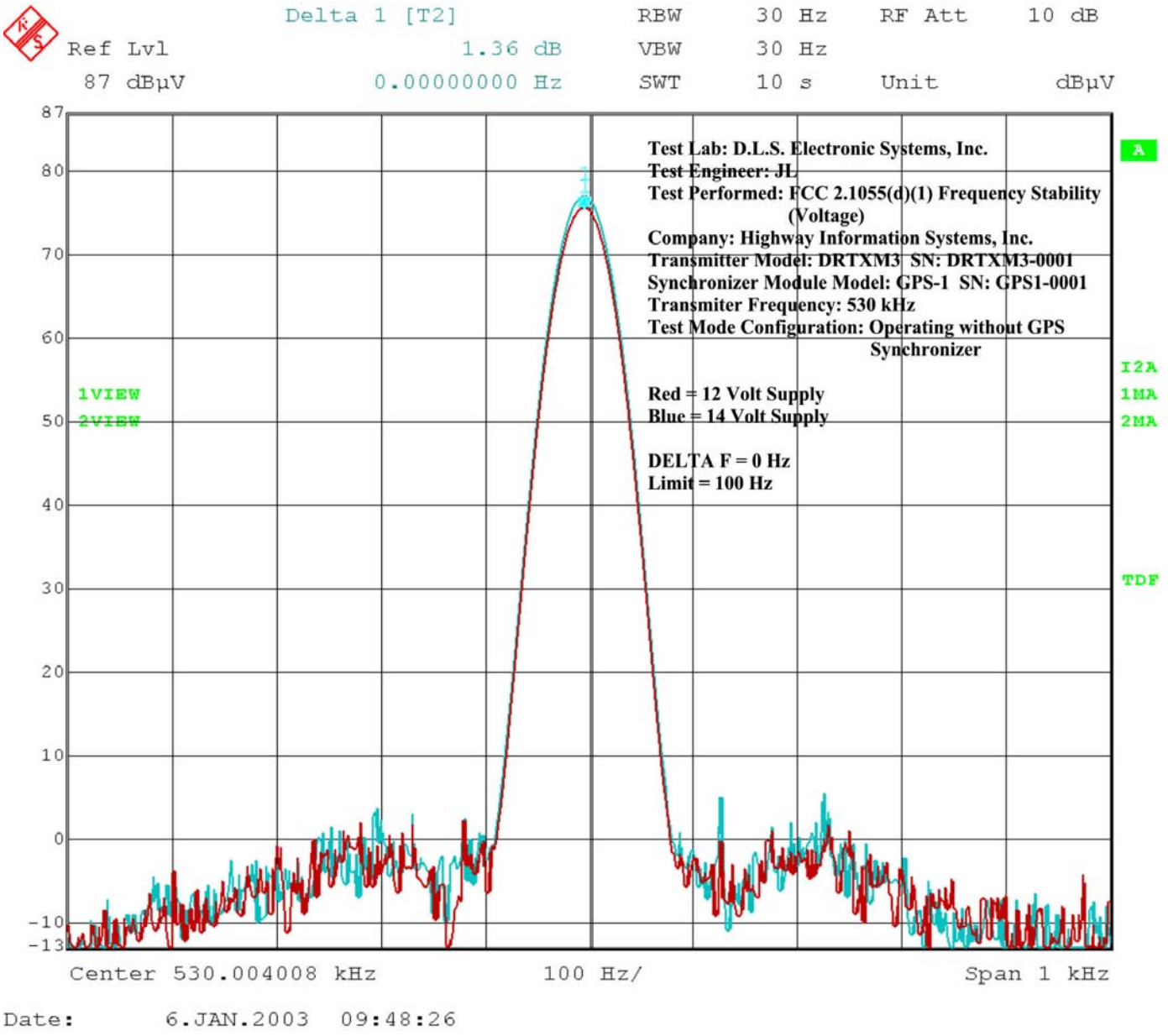
14 Volts vs 12 Volts (max)
Test Mode 4

(Without 10 MHz Timing Signal)



10 Volts vs 12 Volts (min)
Test Mode 5

(Without Satellite Reception)



14 Volts vs 12 Volts (max)
Test Mode 5

(Without Satellite Reception)

12.0 PHOTO INFORMATION AND TEST SET-UP

The test set-up can be seen on the accompanying photo page.

Item 0 Highway Information System DRTXM3 Transmitter
FCC ID#: O2Q-DRTXM3 SN: DRTXM3-0001

Item 1

Item 2

Item 3

Item 4

Item 5

Item 6

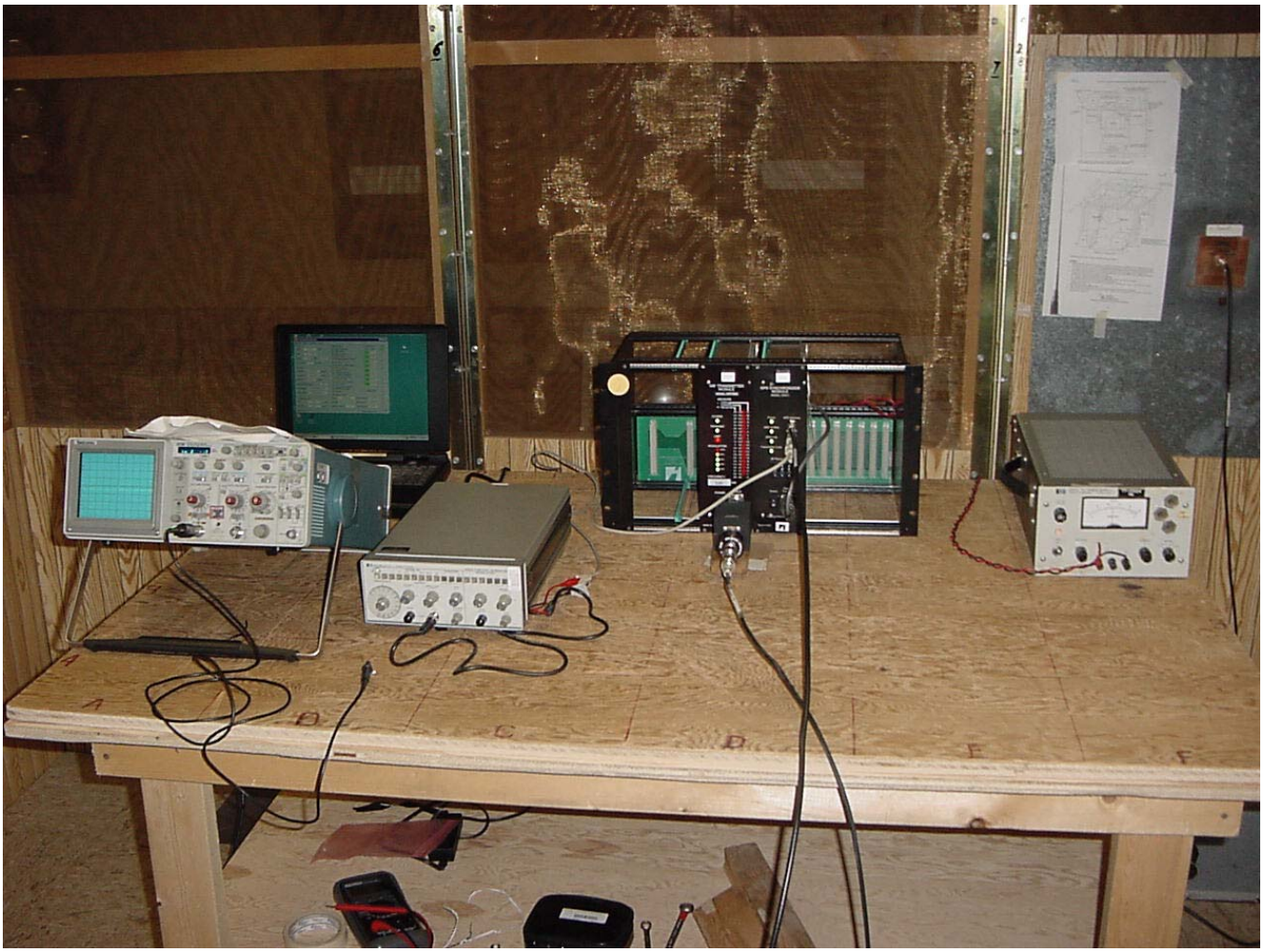
Item 7

Item 8

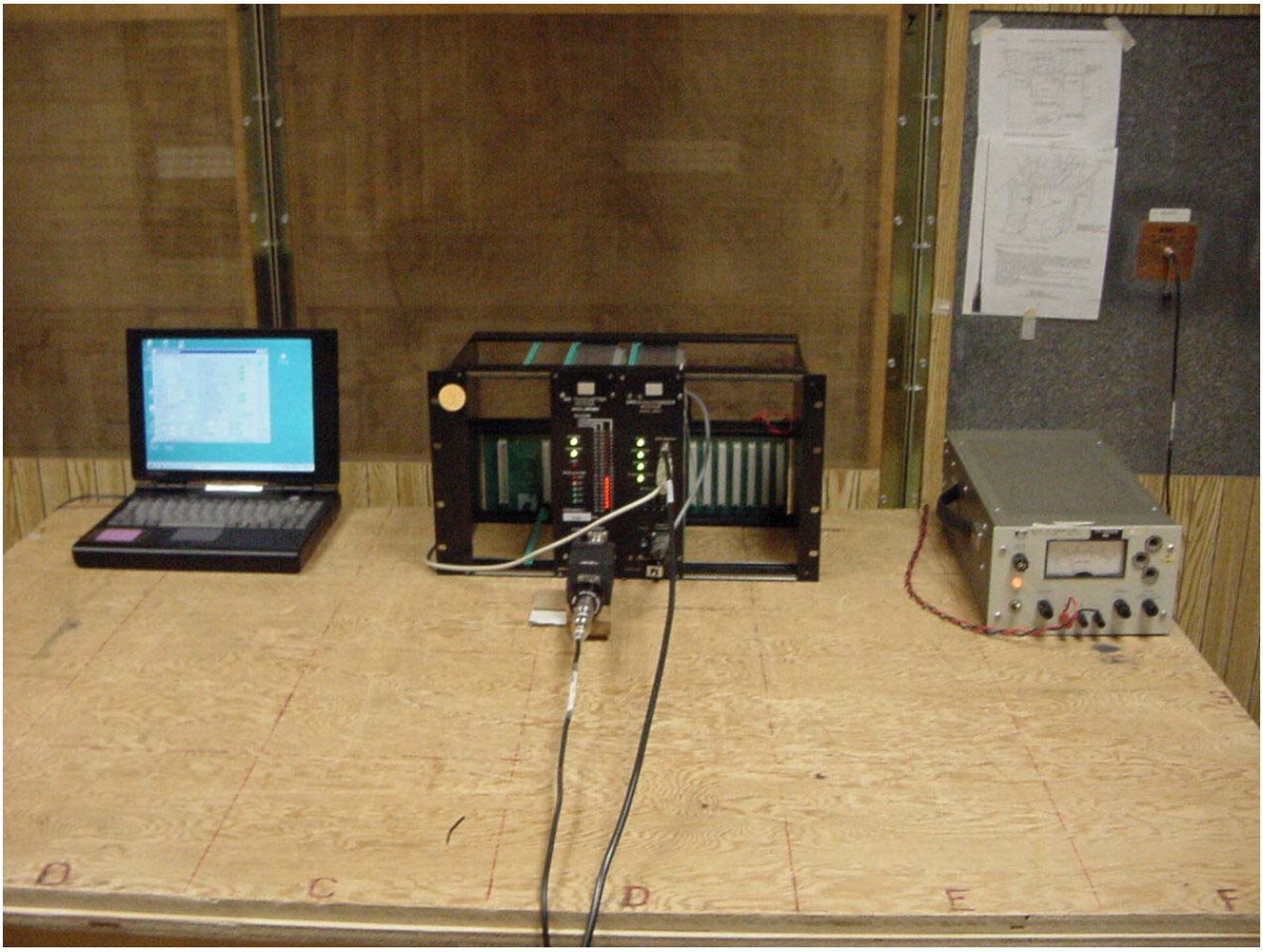
Item 9

Item 10

13.0 PHOTOS TAKEN DURING TESTING.



13.0 PHOTOS TAKEN DURING TESTING



14.0 CHANGE INFORMATION

The following changes were implemented during the testing and must be incorporated into the production units to ensure compliance.

Change 1.

Change 2.

Change 3.

Change 4.

Change 5.

14.0 CHANGE INFORMATION (CON'T)

Change 6.

Change 7.

Change 8.

Change 9.

Change 10.

NOTE:

Tested with the rack that it is normally installed in.

The responsibility of implementing the changes listed in this report is accepted or I certify that no changes were made.

by _____ _____
Signature Title

for _____ _____
Company Name Date

15.0 RESULTS OF TESTS

The emission test results can be seen on pages at the end of this report. Data sheets indicating the emission measurements can also be found with this report.

16.0 CONCLUSION

It was found that the Highway Information System DRTXM3 Transmitters, S/N: DRTXM3-0001 **meets** the requirements for conducted spurious emissions as specified in the FCC "Rules and Regulations", Part 90, Private Land Mobile Services, Subpart J, Sections 90.205 to 90.210 & 90.242 for Travelers' Information Stations, operating in the 530 kHz to 1700 kHz Frequency Band.

This test report relates only to the items tested and contains the following number of pages:

Text:	29 pages
Charts:	71 pages
Total Pages:	100 pages

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TABLE 1 - EQUIPMENT LIST

Test Equipment	Manufacturer/ Description	Model Number	Serial Number	Frequency Range	Cal Due Date
*Spectrum Analyzer	Hewlett/ Packard	8566B	2240A 02041	25 Hz –22 GHz	10/00
Quasi-Peak Adapter	Hewlett/ Packard	85650A	2043A 00121	10 kHz – 1 GHz	10/00
***Spectrum Analyzer	Hewlett/ Packard	8591A	3009A 00700	9 kHz- 1.8 GHz	3/01

*Firmware Version 29.9.86 Software Version 85864C Rev A
**Firmware Version 14.1.85 Software Version 85864C Rev A
***Firmware Version 5.1.3 Software Version 82301-12029 Rev C