



Measurement of RF Interference from a Model Meridia Base Unit Spread Spectrum Transceiver

For : Fleetwood Group, Inc.
11832 James Street
Holland, MI 49424

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Test Personnel: Mark E. Longinotti
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Subpart B, for receivers and
Subpart C, Section 15.247 for Frequency Hopping
Spread Spectrum Intentional Radiators Operating within
the 2400-2483.5MHz band.

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Revision History

Revision	Date	Description
—	June 7, 2006	Initial release

Measurement of RF Interference from a Meridia Base Unit Spread Spectrum Transceiver

1.0 INTRODUCTION:

1.1 Description of Test Item - This document represents the results of the series of radio interference measurements performed on a Meridia Base Unit, Serial No. 1, (hereinafter referred to as the test item). The test item is a frequency hopping spread spectrum transceiver. It transmits and receives in the 2400.0MHz to 2483.5MHz band. The test item can use either an internal antenna or an 11-cm long external antenna. The test item was manufactured and submitted for testing by Fleetwood Group, Inc. located in Holland, MI.

1.2 Purpose - The test series was performed to determine if the test item meets the conducted and radiated RF emission requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart B, Sections 15.107 and 15.109 for receivers and Subpart C, Section 15.247 for Intentional Radiators. Testing was performed in accordance with ANSI C63.4-2003.

1.3 Deviations, Additions and Exclusions - There were no deviations, additions to, or exclusions from the test specification during this test series.

1.4 Applicable Documents - The following documents of the exact issue designated form part of this document to the extent specified herein:

- Federal Communications Commission "Code of Federal Regulations", Title 47, Part 15, Subpart C, dated 1 October 2005
- FCC Public Notice, DA 00-705, "Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems", Released March 30, 2000
- ANSI C63.4-2003, "American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz"

1.5 Subcontractor Identification - This series of tests was performed by Elite Electronic Engineering Incorporated of Downers Grove, Illinois. The laboratory is accredited by the National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP Lab Code: 100278-0.

1.6 Laboratory Conditions - The temperature at the time of the test was 21°C and the relative humidity was 43%.

2.0 TEST ITEM SET-UP AND OPERATION:

The test item is a Meridia Base Unit spread spectrum transceiver. A block diagram of the test item set-up is shown as Figure 1.

2.1 Power Input - The test item obtained 5 VDC power over Ethernet (PoE) or 5 VDC power over USB.

In the PoE mode, an ITE Power Supply, Model Number PW130, was powered with 115V, 60Hz via a 0.5 meter long 3-wire unshielded power cable. The ITE Power Supply output 48VDC over the J1 data and power port. (J2 port of the ITE Power Supply was unterminated.) A 3 meter long CAT 5 cable was used to connect the J1 port of the ITE Power Supply to the P + Data In port of the D-Link Power Over Ethernet Adapter, Model Number DWL-P50, Serial Number BH4A163000076. The DC Out port of the Power Over Ethernet Adapter output 5VDC over the DC out port. The DC out port was connected to the power in port of the test item via a 60 cm long 2 wire cable. The LAN OUT port of the Power Over Ethernet Adapter was connected to the test item via a 60 cm long CAT 5 Cable.

In the power over USB mode, a Sony AC Adapter, Model Number PCGA-AC19V9, was powered with 115V, 60Hz via a 70cm long 2-wire unshielded power cable. The Sony AC Adapter output 19.5VDC to a Sony laptop computer, Model Number PCG-GRT390ZP. The laptop computer output 5VDC over the USB Port. The USB Port of the laptop computer was connected to the USB port of the test item via a 1.7 meter long USB cable.

Power line conducted emissions tests were performed separately with the test item operated in the PoE mode and the power over USB mode. In the PoE mode, power line conducted emissions tests were performed separately on the AC input power to the ITE Power Supply with the test item connected and with the test item disconnected. In the power over USB mode, power line conducted emissions tests were performed separately on the AC input to the Sony AC Adapter with the test item connected and with the test item disconnected.

All radiated emissions tests and antenna conducted emissions tests were performed with the test item operated in the PoE mode.

2.2 Grounding - The test item was ungrounded during the tests.

2.3 Support Equipment - See paragraph 2.1 for a description of all support equipment used during testing.

2.4 Interconnect Cables - See paragraph 2.1 for a description of all interconnect cables used during testing.

2.5 Operational Mode - The test item and all support equipment were placed on an 80cm high non-conductive stand. The test item and all support equipment were energized.

The normal mode of operation for the test item is to act as a frequency hopping spread spectrum transceiver. No testing was performed on the receiver function of the test item. (See 4.2 for more information.) For some tests, the frequency hopping function was disabled. With the hopping disabled, the test item was set to transmit at frequencies of 2401MHz, 2435MHz or 2475MHz.

The test item could be configured to transmit in one of the following modes:

- high power, internal antenna
- high power, external antenna
- low power, internal antenna
- low power, external antenna

3.0 TEST EQUIPMENT:

3.1 Test Equipment List - A list of the test equipment used can be found on Table I. All equipment was calibrated per the instruction manuals supplied by the manufacturer.

3.2 Calibration Traceability - Test equipment is maintained and calibrated on a regular basis. All calibrations are traceable to the National Institute of Standards and Technology (NIST).

4.0 REQUIREMENTS, PROCEDURES AND RESULTS:

4.1 Transmitter

4.1.1 Powerline Conducted Emissions

4.1.1.1 Requirements – All radio frequency voltages on the power lines of an intentional radiator shall be below the values shown below when using a quasi-peak detector:

CONDUCTED LIMITS FOR INTENTIONAL RADIATORS

Frequency MHz	RFI Voltage dBuV(QP)	RFI Voltage dBuV(Average)
0.15-0.5	66 decreasing with logarithm of frequency to 56	56 decreasing with logarithm of frequency to 46
0.5-5	56	46
5-30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: If the levels measured using the QP detector meet both the QP and the Average limits, the test

item is considered to have met both requirements and measurements do not need to be performed using the Average detector.

4.1.1.2 Procedures - The test item was set to operate in the frequency hopping mode. The interference on each power lead was measured by connecting the measuring equipment to the appropriate meter terminal of the LISN. The meter terminal of the LISN not under test was terminated with 50 ohms. Measurements were first made over the entire frequency range from 150kHz through 30MHz with a peak detector and the results were automatically plotted. The data thus obtained was then searched by the computer for the highest levels. Quasi-peak measurements were automatically performed at the frequencies selected from the highest peak measurements, and the results printed.

4.1.1.3 Results - The plots of the peak preliminary conducted voltage levels on each power line of the ITE Power Supply with the test item disconnected are presented on pages 20 and 21. The conducted limit is shown as a reference. The final quasi-peak results are presented on pages 22 and 23.

The plots of the peak preliminary conducted voltage levels on each power line of the ITE Power Supply with the test item connected are presented on pages 24 and 25. The conducted limit is shown as a reference. The final quasi-peak results are presented on pages 26 and 27.

The plots of the peak preliminary conducted voltage levels on each power line of the Sony AC Adapter with the test item disconnected are presented on pages 28 and 29. The conducted limit is shown as a reference. The final quasi-peak results are presented on pages 30 and 31.

The plots of the peak preliminary conducted voltage levels on each power line of the Sony AC Adapter with the test item connected are presented on pages 32 and 33. The conducted limit is shown as a reference. The final quasi-peak results are presented on pages 34 and 35.

The emissions level closest to the limit (worst case) occurred at 206kHz. The emissions level at this frequency was 2.2dB within the limit. Photographs of the test configuration which yielded the highest or worst case, conducted emission levels are shown on Figure 2.

4.1.2 20dB Bandwidth

4.1.2.1 Requirements - Per section 15.247(a)(1), for frequency hopping systems operating in the 2400-2483.5MHz band, the 20dB bandwidth shall be measured for determination of the carrier frequency separation limits.

4.1.2.2 Procedures - The test item was setup inside the chamber. With the hopping function disabled, the test item was allowed to transmit continuously. The frequency hopping

channel was set separately to low, middle, and high hopping channels. The resolution bandwidth (RBW) was set to $\geq$ to 1% of the 20 dB BW.

The 'Max-Hold' function was engaged. The analyzer was allowed to scan until the envelope of the transmitter bandwidth was defined. The analyzer's display was plotted using a 'screen dump' utility.

4.1.2.3 Results - The plots on pages 36 through 47 show that the maximum 20 dB bandwidth was 811.6 kHz.

4.1.3 Carrier Frequency Separation

4.1.3.1 Requirements - Per section 15.247 (a)(1), frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater.

4.1.3.2 Procedures - The test item was set up inside the chamber. With the hopping function enabled, the test item was allowed to transmit continuously.

The resolution bandwidth (RBW) was set to $\geq$ to 1% of the span. The peak detector and 'Max-Hold' function were engaged. The span was set wide enough to capture the peaks of at least two adjacent channels.

When the trace had stabilized after multiple scans, the marker-delta function was used to determine the separation between the peaks of the adjacent channels. The analyzer's display was plotted using a 'screen dump' utility.

4.1.3.3 Results - Page 48 shows the carrier frequency separation. As can be seen from this plot, the separation is 1.01MHz which is greater than the 20dB bandwidth (811.6 kHz).

4.1.4 Number of Hopping Frequencies

4.1.4.1 Requirements - Per section 15.247(a)(1)(iii), for frequency hopping systems operating in the 2400-2483.5MHz band, the frequency hopping systems shall use at least 15 non-overlapping channels.

4.1.4.2 Procedures - The test item was set up inside the chamber. The output of the test item was connected to the spectrum analyzer. With the hopping function enabled, the test item was allowed to transmit continuously.

The resolution bandwidth (RBW) was set to $\geq$ to 1% of the span. The peak detector and 'Max-Hold' function were engaged. The span was set wide enough to capture the entire frequency band of operation.

The test item's signal was allowed to stabilize after multiple scans. The number of hopping

frequencies was counted. The analyzer's display was plotted using a 'screen dump' utility.

4.1.4.3 Results - Page 49 shows the number of hopping frequencies. As can be seen from this plot, the number of frequencies is 75, which is greater than the minimum required.

4.1.5 Time of Occupancy

4.1.5.1 Requirements - Per section 15.247(a)(1)(iii), for frequency hopping systems operating in the 2400-2483.5MHz band, the average time of occupancy shall not be greater than 0.4 seconds within a 0.4 second period multiplied by the number of hopping channels employed.

4.1.5.2 Procedures - The test item was setup inside the chamber. With the hopping function enabled, the test item was allowed to transmit continuously.

The resolution bandwidth (RBW) was set to 1 MHz. The peak detector and 'Max-Hold' function were engaged. With the span set to 0Hz, the sweep time was adjusted to capture a single event in order to measure the dwell time per hop. Then, the sweep time was increased to a 0.4 second period multiplied by the number of hopping channels. The number of hops was counted. The analyzer's display was plotted using a 'screen dump' utility.

The dwell time was then calculated from dwell time per hop multiplied by the number of hops.

4.1.5.3 Results - Pages 50 and 51 show the plots for the time of occupancy (dwell time). As can be seen from the plots, the time of occupancy can be determined by a 951usec pulse multiplied by 68 hops. This calculated value is equal to 0.0647 seconds which is less than the 0.4 seconds maximum allowed.

4.1.6 Peak Output Power - Internal Antenna

4.1.6.1 Requirements - Per section 15.247(b)(1), for frequency hopping systems operating in the 2400-2483.5MHz band and employing at least 75 hopping channels, the peak output power shall not be greater than 1 watt.

4.1.6.2 Procedures - The test item was placed on the non-conductive stand and set to transmit using the internal antenna. A broadband measuring antenna was placed at a test distance of 3 meters from the test item. The test item was maximized for worst case emissions (or maximum output power) at the measuring antenna. The maximum meter reading was recorded. The peak power output was measured for the low, middle and high hopping frequencies.

The equivalent power was determined from the field intensity levels measured at 3 meters using the substitution method. To determine the emission power, another double ridged waveguide antenna was then set in place of test item and connected to a calibrated signal generator. The output of the signal

generator was adjusted to match the received level at the spectrum analyzer. The signal level was recorded. The reading was then corrected to compensate for cable loss, as required. The peak power output was calculated for the low, middle and high hopping frequencies.

4.1.6.3 Results - The results are presented on pages 52 and 53. The maximum EIRP measured from the transmitter was 3.0dBm which meets the 36dBm de facto limit.

4.1.7 Peak Output Power - External Antenna

4.1.7.1 Requirements - Per section 15.247(b)(1), for frequency hopping systems operating in the 2400-2483.5MHz band and employing at least 75 hopping channels, the peak output power shall not be greater than 1 watt.

4.1.7.2 Procedures - The external antenna of the test item was removed and the antenna port of the test item was connected to the input of the spectrum analyzer. 30dB of attenuation was used on the input of the spectrum analyzer when measuring peak output power when in high power mode. The test item was set to transmit.

The resolution bandwidth (RBW) was set to $>$ the 20dB bandwidth of the emission being measured. The span was set to approximately 5 times the 20dB bandwidth. The peak detector and 'Max-Hold' function were engaged.

When the trace had stabilized after multiple scans, the marker-to-peak function was used to set the marker to the peak of the emission. The analyzer's display was plotted using a 'screen dump' utility.

4.1.7.3 Results - The plots of the maximum peak conducted output power are presented on pages 54 through 59. The maximum peak conducted output power is presented in a tabular format on pages 60 and 61. The maximum peak conducted output power measured from the transmitter was -3.67dBm which meets the 30dBm limit.

4.1.8 Bandedge Compliance

4.1.8.1 Requirements - Per section 15.247(d), the emissions at the band-edges must be at least 20dB below the highest level measured within the band but attenuation below the general limits listed in 15.209(a) is not required. In addition, the radiated emissions which fall in the restricted band beginning at 2483.5 MHz, must meet the general limits of 15.209(a).

4.1.8.2 Procedures - The test item was setup inside the chamber. With the hopping function disabled, the test item was allowed to transmit continuously. The transmit frequency was set separately to low and high channels. The resolution bandwidth (RBW) was set to 100 kHz.

The 'Max-Hold' function was engaged. The analyzer was allowed to scan until the envelope of

the transmitter bandwidth was defined. The analyzer's display was plotted using a 'screen dump' utility. The measurement was repeated with the frequency hopping function enabled.

For the emissions which fall in the restricted band the "marker-delta" method described in Public Notice DA 00-705 was used. Initially radiated measurements were performed at the fundamentals of the highest hopping frequencies using 1 MHz bandwidth. For the measurements the "delta" required to meet the general limit was calculated.

Next, the band-edge emissions were plotted using peak detector and 100 kHz bandwidth. The "delta" limit was applied to this plot to determine compliance at the band-edge.

The test item was placed on the non-conductive stand and set to transmit. A broadband measuring antenna was placed at a test distance of 3 meters from the test item. The test item was maximized for worst case emissions (or maximum output power) at the measuring antenna. The maximum meter reading was recorded.

4.1.8.3 Results - Pages 62 through 65 show the radiated band-edge compliance results using the 20dB down method and the marker-delta method with the test item operating at high power with internal antenna. (The test item software was setup so that the test item would only enable the frequency hopping function in high power mode with internal antenna.) As can be seen from these plots, the emissions at the 2.4GHz band edge are within the 20dB down limits and the emissions at the 2.4835GHz restricted band edge are within the general limits.

Pages 66 and 67 show the radiated band-edge compliance results using the 20dB down method and the marker-delta method with the test time operating at high power with external antenna. As can be seen from these plots, the emissions at the 2.4GHz band edge are within the 20dB down limits and the emissions at the 2.4835GHz restricted band edge are within the general limits.

Pages 68 and 69 show the radiated band-edge compliance results using the marker-delta method with the test time operating at low power with internal antenna. As can be seen from these plots, the emissions at the 2.4GHz band edge and the emissions at the 2.4835GHz restricted band edge are within the general limits.

Pages 70 and 71 show the radiated band-edge compliance results using the marker-delta method with the test time operating at low power with external antenna. As can be seen from these plots, the emissions at the 2.4GHz band edge and the emissions at the 2.4835GHz restricted band edge are within the general limits.

4.1.9 Spurious RF Conducted Emissions

4.1.9.1 Requirements – Per section 15.247(c), in any 100 kHz bandwidth outside the frequency band in which the test item is operating, the spurious RF conducted emissions shall be at least 20dB down from the highest level of power but attenuation below the general limits listed in 15.209(a) is not required.

4.1.9.2 Procedures – The external antenna of the test item was removed and the antenna port of the test item was connected to the input of the spectrum analyzer. 30dB of attenuation was used on the input of the spectrum analyzer when measuring peak output power when in high power mode. The test item was set to transmit.

The resolution bandwidth (RBW) was set 100kHz. The peak detector and 'Max-Hold' function were engaged. When the trace had stabilized after multiple scans, the marker-to-peak function was used to set the marker to the peak of the emission. The display line was set to 20dB down from the peak of the transmit frequency. Three separate plots were taken for each transmit frequency: 30MHz to 1GHz, 1GHz to 10GHz, and 10GHz to 25GHz. The analyzer's display was plotted using a 'screen dump' utility.

4.1.9.3 Results – The plots of the spurious RF conducted emissions with the test item operating at high power with external antenna are shown on pages 72 through 80. As can be seen from the plots, all spurious emissions were at least 20dB down from the highest level of power.

The plots of the spurious RF conducted emissions with the test item operating at low power with external antenna are shown on pages 81 through 89. As can be seen from the plots, all spurious emissions were at least 20dB down from the highest level of power.

4.1.10 Radiated Spurious Emissions

4.1.10.1 Requirements – Per section 15.247(c), in any 100 kHz bandwidth outside the frequency band in which the test item is operating, the spurious emissions shall be at least 20dB down from the highest level of power but attenuation below the general limits listed in 15.209(a) is not required. In addition, the radiated emissions which fall in the restricted bands must meet the general limits of 15.209(a).

4.1.10.2 Procedures – The radiated tests were performed in a 32ft. x 20ft. x 18ft. hybrid absorber lined semi-anechoic test chamber. With the exception of the floor, the reflective surfaces of the shielded chamber are lined with ferrite tiles on the walls and ceiling. The floor of the chamber is used as the ground plane. The chamber complies with ANSI 63.4 requirements for site attenuation.

Preliminary radiated measurements are performed to determine the frequencies where the

significant emissions might be found. With the test item at one set position and the measurement antenna at a set height (i.e. without maximizing), the radiated emissions were measured using peak detection with 100 kHz BW. This data was then automatically plotted up through 18 GHz. The frequency range from 18 to 25 GHz was checked manually but not plotted.

Next, the harmonic or spurious emissions falling in the restricted bands were measured up through the 10th harmonic. For the measurements above 1GHz, the measurement bandwidth was set to 1 MHz RBW and 3MHz VBW and a peak reading was taken. Then analyzer was set to **linear mode** with 10 Hz VBW in order to simulate an average detector and an average reading was taken. A pre-amplifier was used to increase the receiver sensitivity.

For harmonics or spurious emissions that fell in the restricted bands, a duty cycle correction factor (D.C. Corr. Fac.) was applied to the average reading per the procedures of Public Notice DA 00-705. Per Public Notice DA 00-705, if the dwell time per channel of the hopping signal is less than 100msec, then the reading obtained with the 10Hz VBW may be further adjusted by a duty cycle correction factor derived from $20 \cdot \log((\text{dwell time})/100\text{msec})$. Based on a dwell time of 64.67msec, the duty cycle correction factor was $20 \cdot \log(64.67/100) = -3.8\text{dB}$.

For harmonics or spurious emissions readings above 18GHz, measurements were made at a 1 meter distance. For these readings, a distance correction factor of -9.5dB was applied to the readings using linear extrapolation: $-9.5\text{dB} (-9.5\text{dB} = 20 \cdot \text{Log} (1\text{m}/3\text{m}))$.

4.1.10.3 Results - The preliminary emissions plots up to 18GHz (taken with 100 kHz BW), with the test item transmitting using the internal antenna, are shown on pages 90 through 107. The plots indicated that the radiated spurious emissions were below the 20dBc limit for the high power transmit mode. The plots indicated that the radiated spurious emissions were below the general limit for the low power transmit mode. A highpass filter with 2.4 GHz cutoff frequency was used when measuring above 2GHz to prevent overloading the preamplifier.

Radiated emissions measurements on all harmonics and any other emissions from the test item (transmitting using the internal antenna) that fell in the restricted frequency bands are shown on pages 126 through 131. All emissions were within the general limit. The emissions level closest to the limit (worst case) occurred at 7.305GHz. The emissions level at this frequency was 0.2dB within the limit. Photographs of the test configuration which yielded the highest or worst case, conducted emission levels are shown on Figure 3.

The preliminary emissions plots up to 18GHz (taken with 100 kHz BW), with the test item

transmitting using the external antenna, are shown on pages 108 through 125. A highpass filter with 2.4 GHz cutoff frequency was used when measuring above 2GHz to prevent overloading the preamplifier.

Radiated emissions measurements on all harmonics and any other emissions from the test item (transmitting using the external antenna) that fell in the restricted frequency bands are shown on pages 132 through 137. All emissions were within the general limit. The emissions level closest to the limit (worst case) occurred at 7.305GHz. The emissions level at this frequency was 0.7dB within the limit. Photographs of the test configuration which yielded the highest or worst case, conducted emission levels are shown on Figure 3.

4.2 Receiver

4.2.1 Requirements - Per section 15.101(b), receivers operating above 960MHz or below 30MHz are exempt from complying with the technical provisions of CFR Title 47, Part 15, Subpart B. Therefore no testing was performed on the receiver portion of the test item.

5.0 CONCLUSIONS:

It was determined that the Fleetwood Group, Inc. Meridia Base Unit spread spectrum transceiver, Serial No. 1, did fully meet the conducted and radiated emission requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart B, Section 15.107 and 15.109 for receivers and Subpart C, Section 15.247 for spread spectrum transmitters.

6.0 CERTIFICATION:

Elite Electronic Engineering Incorporated certifies that the information contained in this report was obtained under conditions which meet or exceed those specified in the test specifications.

The data presented in this test report pertains to the test item at the test date. Any electrical or mechanical modification made to the test item subsequent to the specified test date will serve to invalidate the data and void this certification.

7.0 ENDORSEMENT DISCLAIMER:

This report must not be used to claim product endorsement by NVLAP or any agency of the US Government.



TABLE I: TEST EQUIPMENT LIST

ELITE ELECTRONIC ENG. INC.							Page: 1	
Eq ID	Equipment Description	Manufacturer	Model No.	Serial No.	Frequency Range	Cal Date	Cal Inv	Due Date
Equipment Type: ACCESSORIES, MISCELLANEOUS								
XPR0	HIGH PASS FILTER	K&L MICROWAVE	11SH10-4800/	001	4.8-20GHZ	07/27/05	12	07/27/06
XZG0	ATTENUATOR/SWITCH DRIVER	HEWLETT PACKARD	11713A	3439A02724	---		N/A	
XZG2	ATTENUATOR/SWITCH DRIVER	HEWLETT PACKARD	11713A	2223A01751	---		N/A	
Equipment Type: AMPLIFIERS								
APK0	PRE-AMPLIFIER	HEWLETT PACKARD	8449B	3008A00662	1-26.5GHZ	03/06/06	12	03/06/07
APK2	PREAMPLIFIER	AGILENT TECHNOL	8449B	3008A01595	1-26.5GHZ	04/10/06	12	04/10/07
Equipment Type: ANTENNAS								
NWI0	RIDGED WAVE GUIDE	AEL	H1498	153	2-18GHZ	10/01/05	12	10/01/06
NWI1	RIDGED WAVE GUIDE	AEL	H1498	154	2-18GHZ	10/01/05	12	10/01/06
Equipment Type: ATTENUATORS								
T1E8	10DB, 25W ATTENUATOR	WEINSCHTEL CORP.	46-10-34	BH7996	DC-18GHZ	12/05/05	12	12/05/06
T1N1	10DB 20W ATTENUATOR	NARDA	766-10		DC-4GHZ	09/07/05	12	09/07/06
T2D9	20DB, 25W ATTENUATOR	WEINSCHTEL	46-20-34	BH5445	DC-18GHZ	12/05/05	12	12/05/06
Equipment Type: CONTROLLERS								
CDN1	COMPUTER	GATEWAY	PROV700C	022368720	700MHZ		N/A	
Equipment Type: PROBES; CLAMP-ON & LISNS								
PLL9	50UH LISN 462D	ELITE	462D/70A	010	0.01-400MHZ	03/06/06	12	03/06/07
PLLA	50UH LISN 462D	ELITE	462D/70A	011	0.01-400MHZ	03/06/06	12	03/06/07
Equipment Type: PRINTERS AND PLOTTERS								
HRG6	LASERJET 2100	HEWLETT PACKARD	C1470A	USGG109744	---		N/A	
Equipment Type: RECEIVERS								
RAC0	SPECTRUM ANALYZER	HEWLETT PACKARD	85660B	2449A01117	100HZ-22GHZ	02/11/06	12	02/11/07
RAC1	SPECTRUM ANALYZER	HEWLETT PACKARD	85660B	3407A08369	100HZ-22GHZ	02/13/06	12	02/13/07
RACB	RF PRESELECTOR	HEWLETT PACKARD	85685A	3506A01491	20HZ-2GHZ	02/13/06	12	02/13/07
RACE	RF PRESELECTOR W/ RECEIVER	HEWLETT PACKARD	85685A	3010A01194	20HZ-2GHZ	08/26/05	12	08/26/06
RAF1	QUASIPeAK ADAPTER	HEWLETT PACKARD	85650A	2043A00271	0.01-1000MHZ	02/13/06	12	02/13/07
RAF3	QUASIPeAK ADAPTER	HEWLETT PACKARD	85650A	3303A01775	0.01-1000MHZ	02/13/06	12	02/13/07
RBA0	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESIB26	100145	20HZ-26.5GHZ	03/25/06	12	03/25/07
Equipment Type: SIGNAL GENERATORS								
GBR2	SIGNAL GENERATOR	HEWLETT PACKARD	8648D	3847U00488	0.009-4000MHZ	02/15/06	12	02/15/07
GBX1	SYNTHESIZED SWEEPER	HEWLETT PACKARD	83630A	3420A00857	10MHZ-26.5GHZ	02/15/06	12	02/15/07

Cal. Interval: Listed in Months I/O: Initial Only N/A: Not Applicable
Note 1: For the purpose of this test, the equipment was calibrated over the specified frequency range, pulse rate, or modulation prior to the test or monitored by a calibrated instrument.



ELITE ELECTRONIC ENGINEERING INC.
Radiated Emissions Test Setup Anechoic Ferrite Chamber

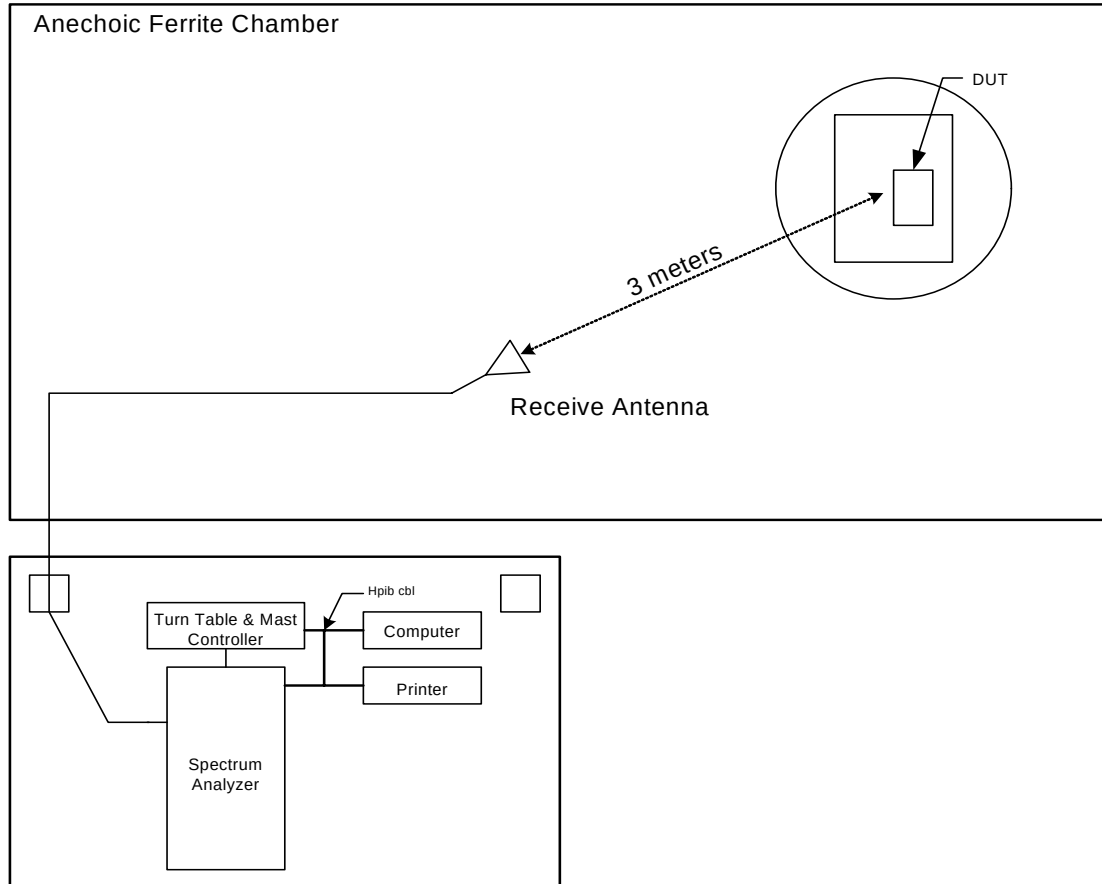
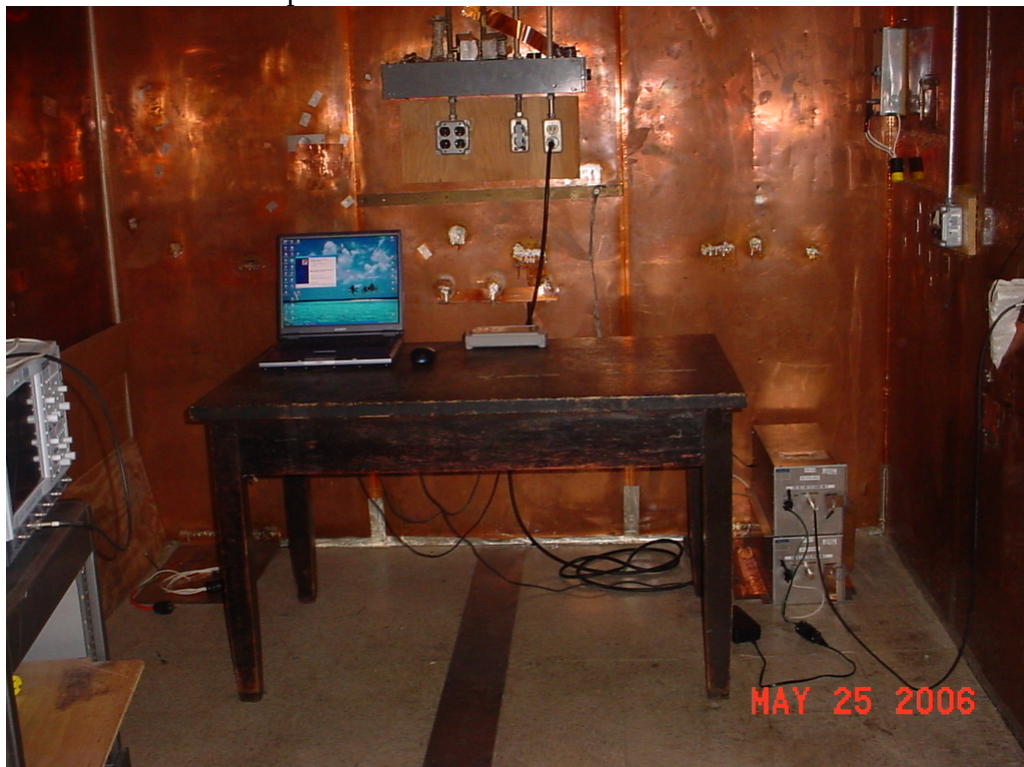


FIGURE 1 BLOCKDIAGRAM OF TEST SETUP

Figure 2



Test Setup for Power Line Conducted Emissions - PoE

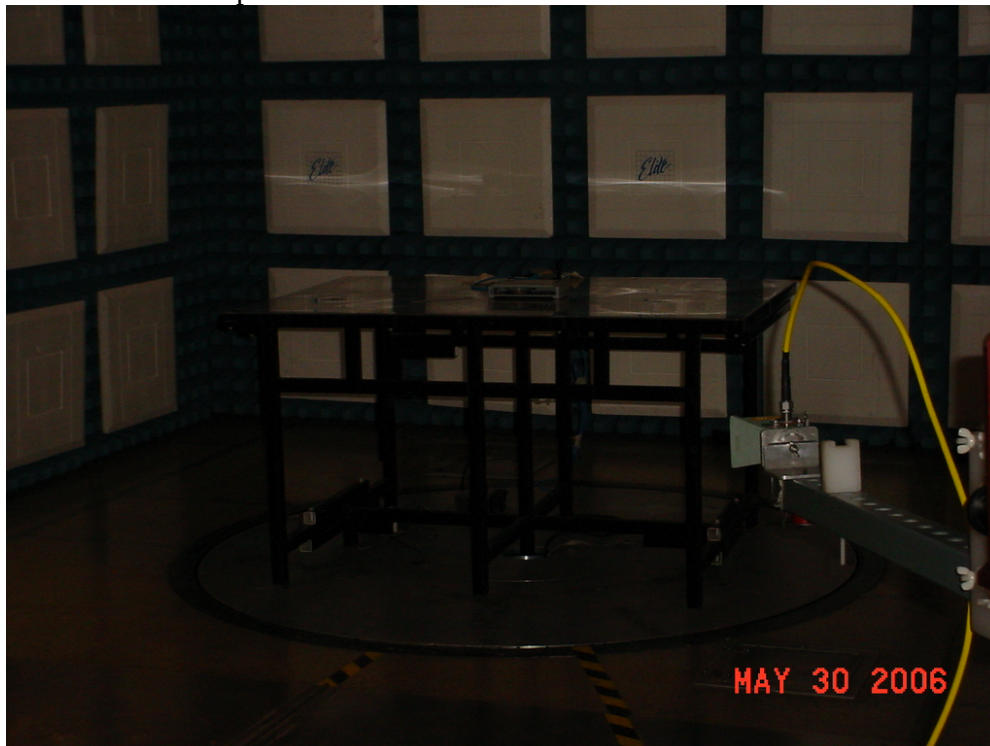


Test Setup for Power Line Conducted Emissions – Power over USB

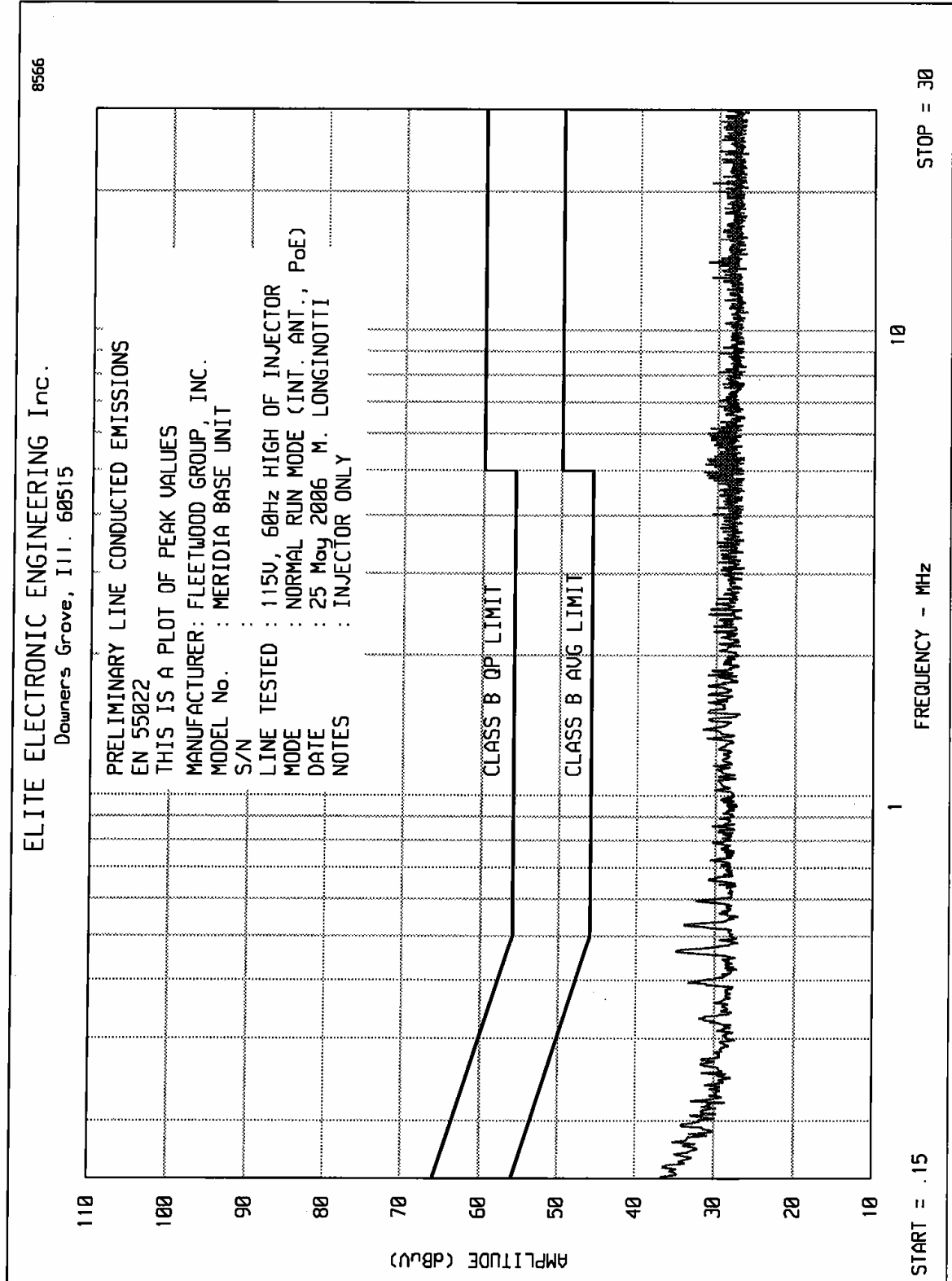
Figure 3

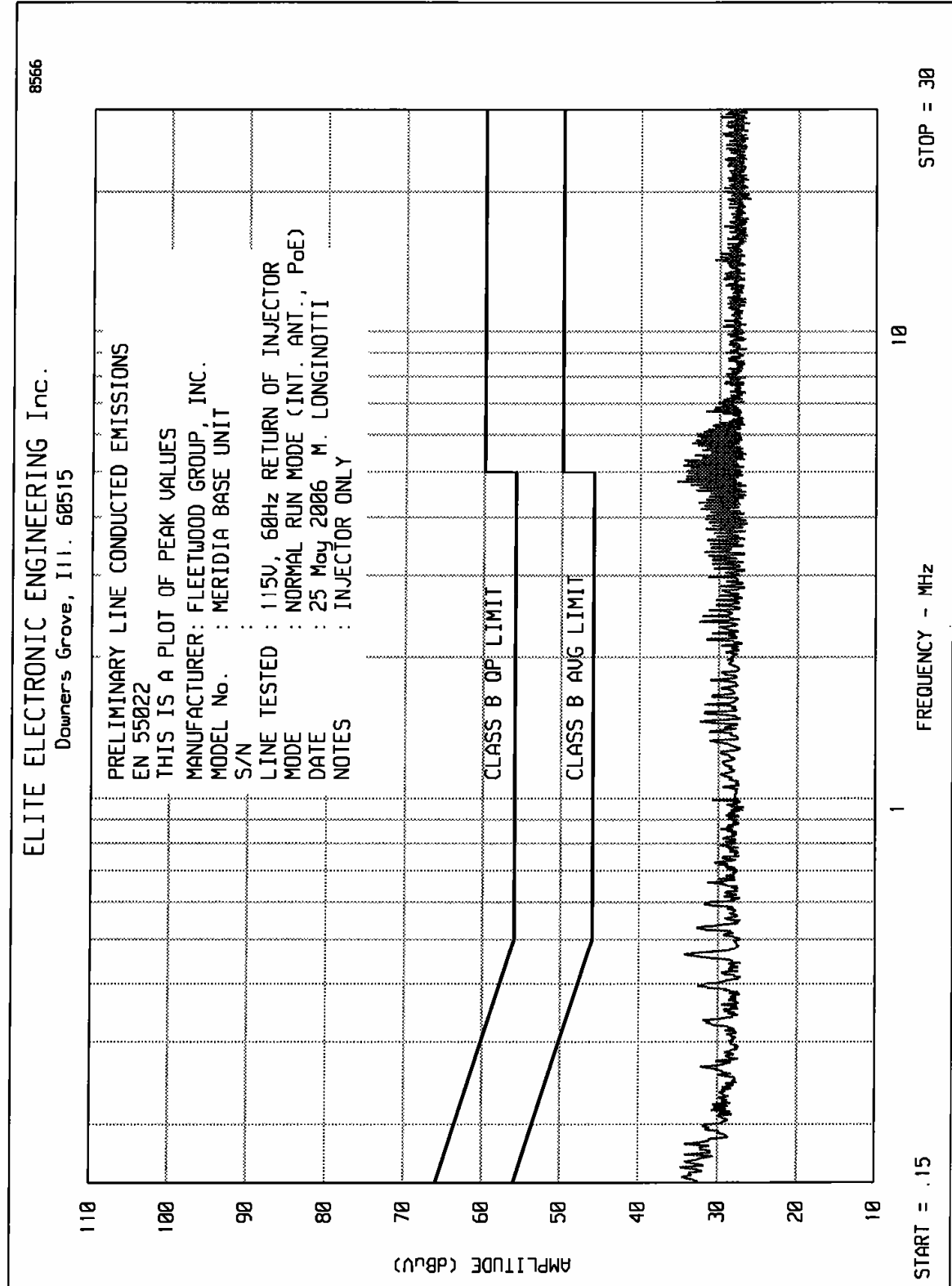


Test Setup for Radiated Emissions – Horizontal Polarization



Test Setup for Radiated Emissions – Vertical Polarization





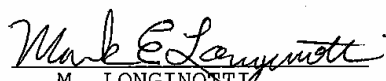


ETR No.
ELITE ELECTRONIC ENGINEERING CO.

MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz HIGH OF INJECTOR
MODE : NORMAL RUN MODE (INT. ANT., PoE)
DATE : 25 May 2006
NOTES : INJECTOR ONLY
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.331	27.2	59.4		49.4	
.463	31.8	56.6		46.6	
.661	27.5	56.0		46.0	
1.807	24.8	56.0		46.0	
3.236	27.1	56.0		46.0	
4.954	28.7	56.0		46.0	
6.802	26.0	60.0		50.0	
9.241	23.4	60.0		50.0	
13.009	25.6	60.0		50.0	
15.322	24.6	60.0		50.0	
18.425	23.6	60.0		50.0	
22.026	23.4	60.0		50.0	
24.363	24.6	60.0		50.0	
28.002	24.0	60.0		50.0	

CHECKED BY:


M. LONGINOTTI

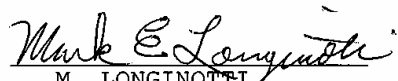


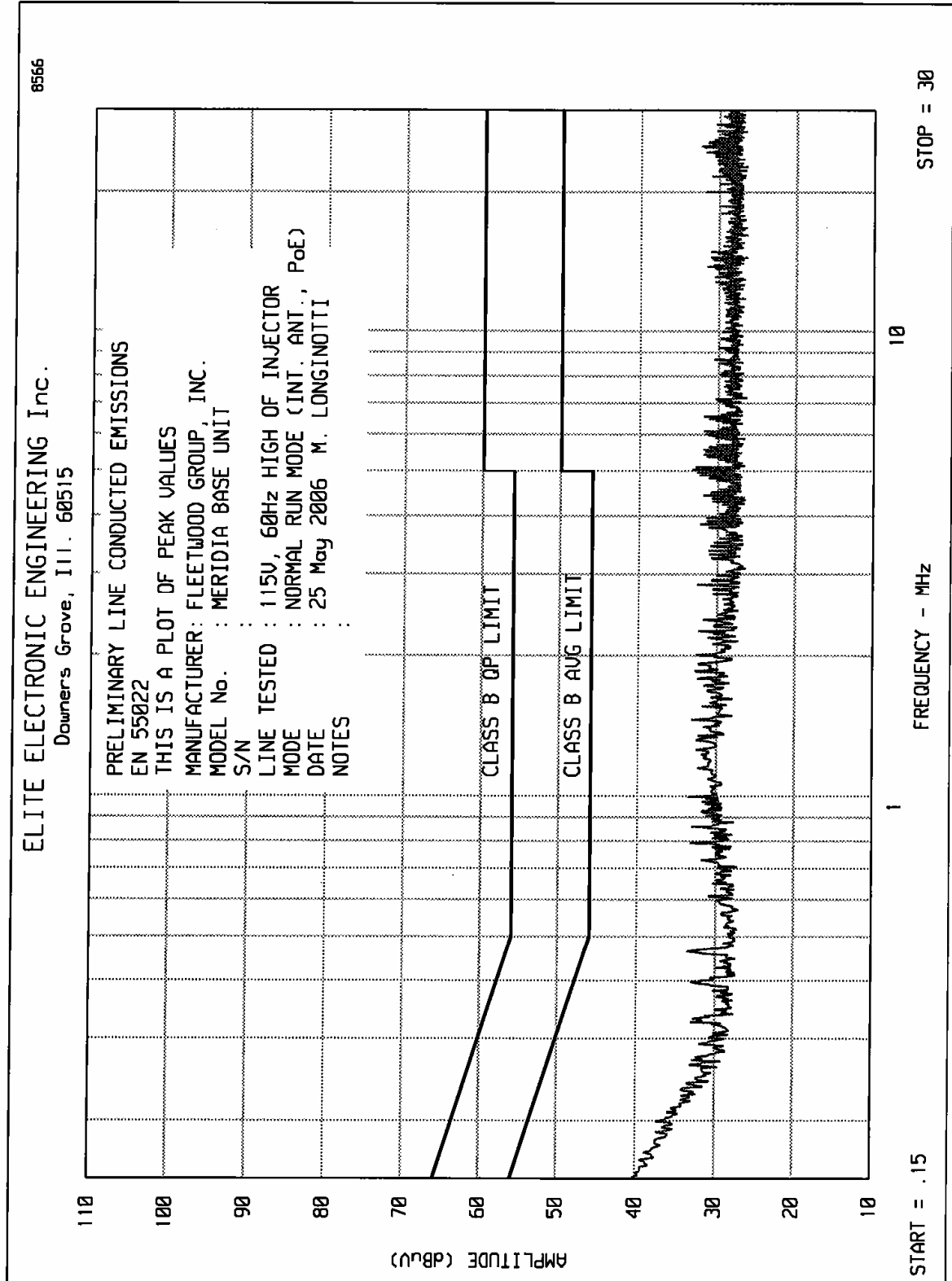
ETR No.
ELITE ELECTRONIC ENGINEERING CO.

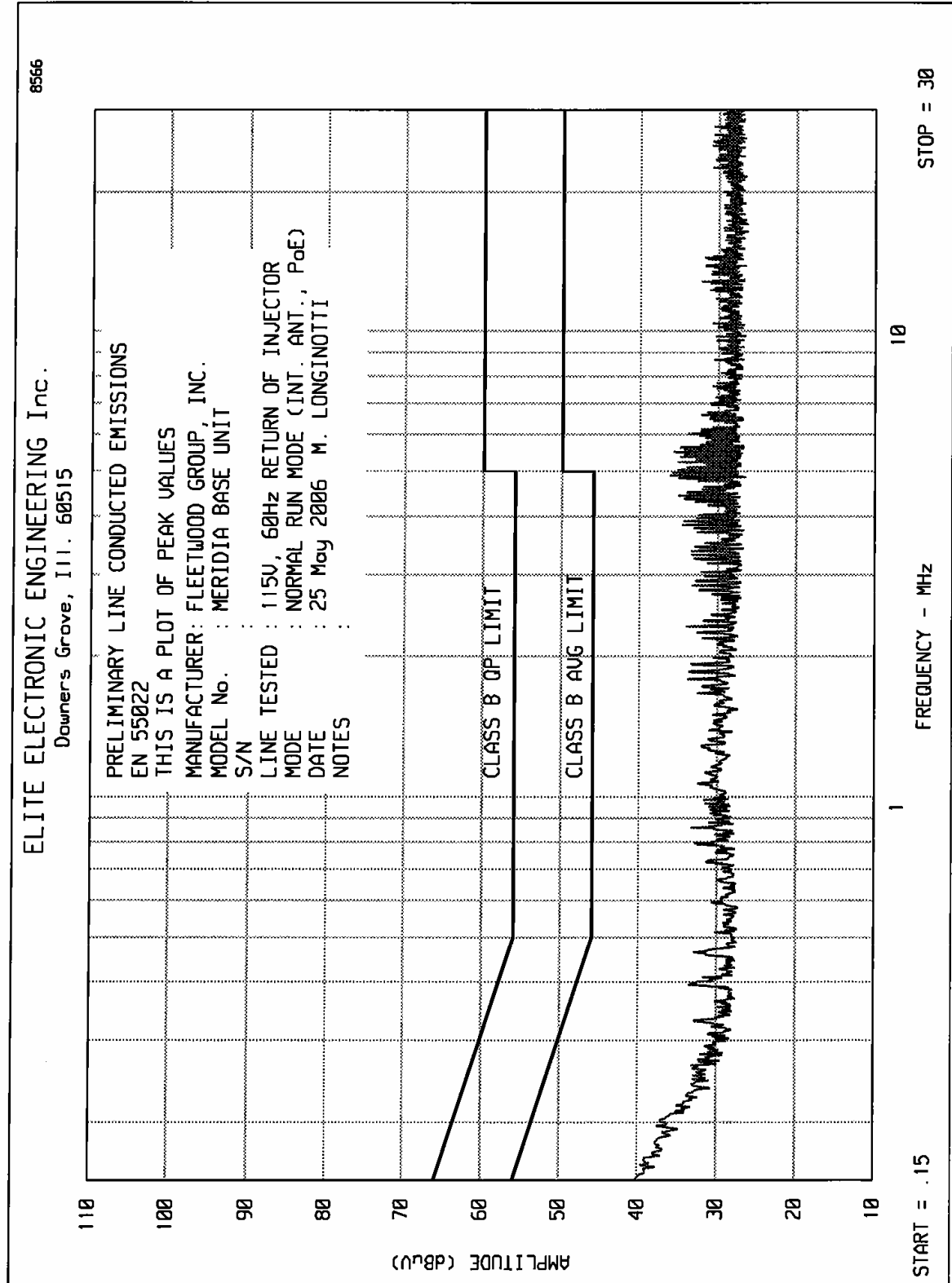
MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz RETURN OF INJECTOR
MODE : NORMAL RUN MODE (INT. ANT., PoE)
DATE : 25 May 2006
NOTES : INJECTOR ONLY
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.157	21.0	65.6		55.6	
.463	30.9	56.6		46.6	
.992	24.8	56.0		46.0	
2.180	26.9	56.0		46.0	
3.369	29.0	56.0		46.0	
4.755	31.6	56.0		46.0	
5.020	31.8	60.0		50.0	
6.076	29.1	60.0		50.0	
9.972	24.3	60.0		50.0	
12.945	25.4	60.0		50.0	
15.053	24.5	60.0		50.0	
17.913	23.6	60.0		50.0	
21.910	23.4	60.0		50.0	
24.104	23.6	60.0		50.0	
27.733	23.6	60.0		50.0	

CHECKED BY:


M. LONGINOTTI







ETR No.
ELITE ELECTRONIC ENGINEERING CO.

MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz HIGH OF INJECTOR
MODE : NORMAL RUN MODE (INT. ANT., PoE)
DATE : 25 May 2006
NOTES :
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.164	26.3	65.3		55.3	
.398	29.3	57.9		47.9	
.795	28.6	56.0		46.0	
1.001	26.0	56.0		46.0	
1.454	25.9	56.0		46.0	
3.306	28.7	56.0		46.0	
5.024	29.1	60.0		50.0	
8.660	25.7	60.0		50.0	
11.502	25.1	60.0		50.0	
15.071	24.0	60.0		50.0	
18.634	23.4	60.0		50.0	
20.361	24.1	60.0		50.0	
24.919	26.6	60.0		50.0	
27.035	24.8	60.0		50.0	

CHECKED BY:


M. LONGINOTTI



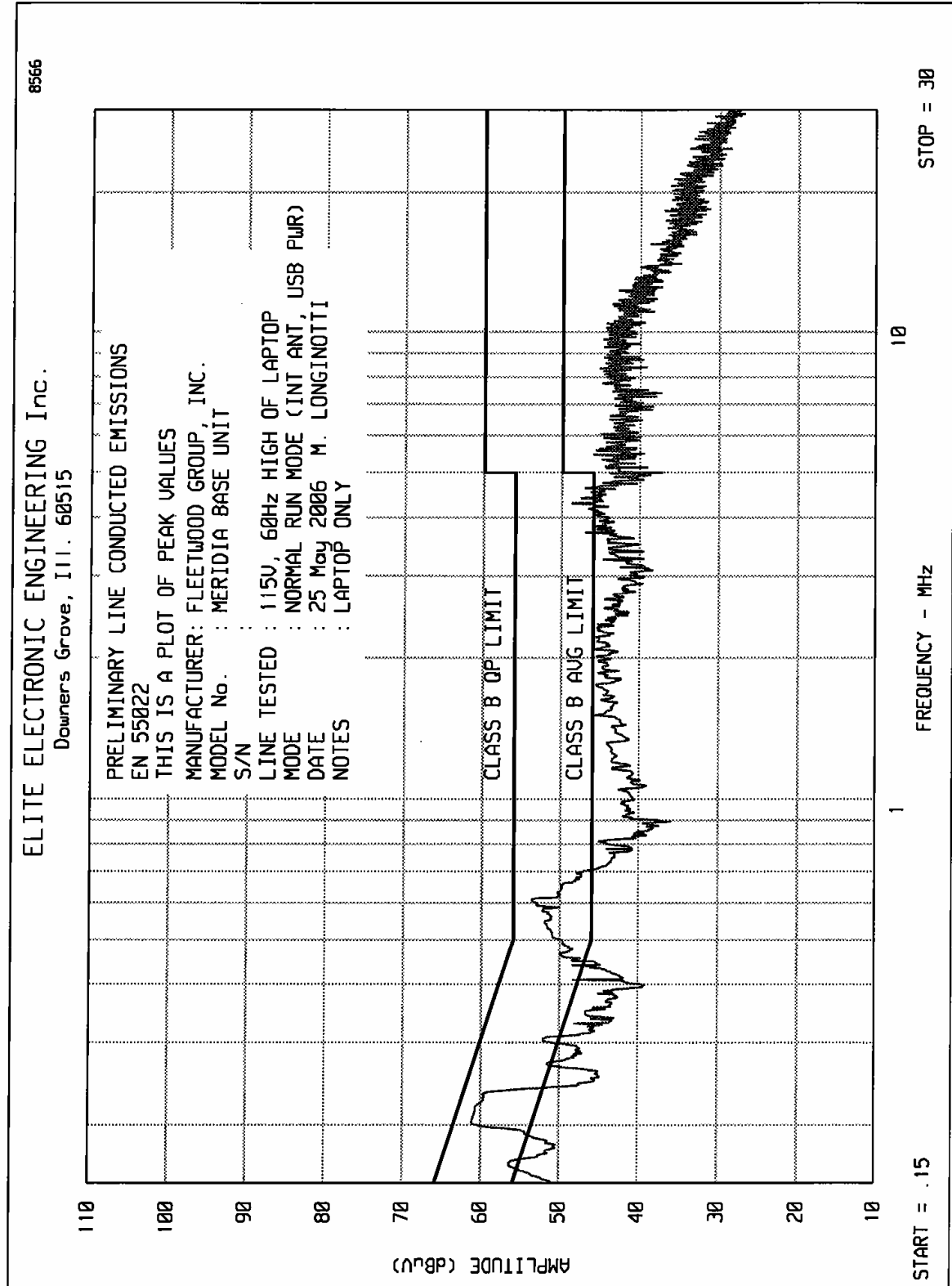
ETR No.
ELITE ELECTRONIC ENGINEERING CO.

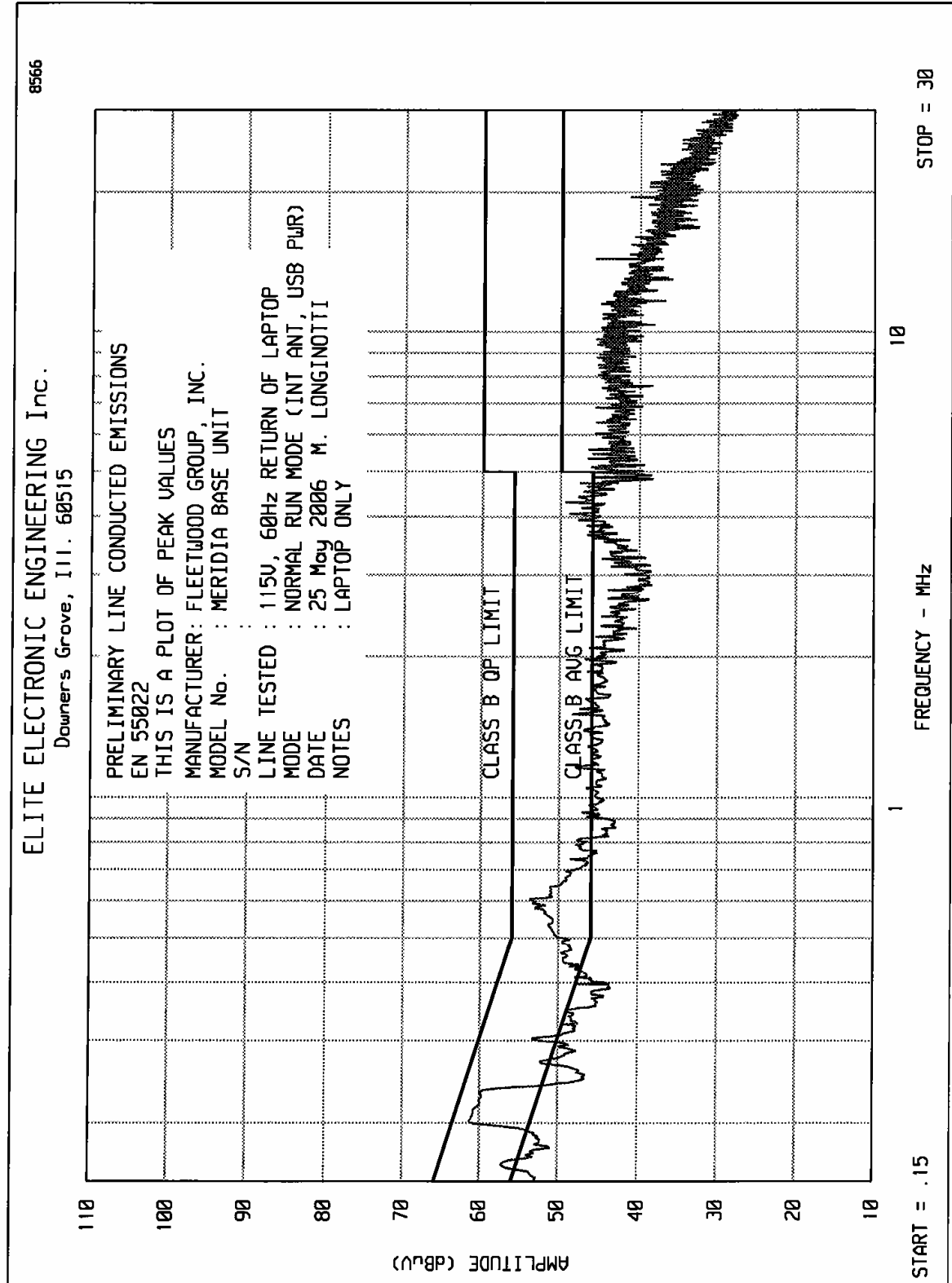
MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz RETURN OF INJECTOR
MODE : NORMAL RUN MODE (INT. ANT., PoE)
DATE : 25 May 2006
NOTES :
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.165	25.3	65.2		55.2	
.464	29.1	56.6		46.6	
.860	27.3	56.0		46.0	
1.655	26.3	56.0		46.0	
2.315	29.2	56.0		46.0	
2.844	30.4	56.0		46.0	
3.834	31.3	56.0		46.0	
4.429	32.4	56.0		46.0	
4.892	33.2	56.0		46.0	
4.958	34.0	56.0		46.0	
5.487	32.2	60.0		50.0	
8.659	25.7	60.0		50.0	
12.229	26.6	60.0		50.0	
14.346	27.4	60.0		50.0	
16.723	23.4	60.0		50.0	
20.000	24.3	60.0		50.0	
23.398	25.1	60.0		50.0	
27.630	24.3	60.0		50.0	

CHECKED BY:


M. LONGINOTTI







ETR No.
ELITE ELECTRONIC ENGINEERING CO.

MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz HIGH OF LAPTOP
MODE : NORMAL RUN MODE (INT ANT, USB PWR)
DATE : 25 May 2006
NOTES : LAPTOP ONLY
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.205	59.5	63.4	52.1	53.4	*
.305	50.1	60.1	39.3	50.1	*
.439	42.8	57.1		47.1	
.608	51.7	56.0	40.5	46.0	*
.637	46.7	56.0	29.7	46.0	*
.811	41.1	56.0		46.0	
1.306	39.2	56.0		46.0	
1.507	42.9	56.0		46.0	
2.086	42.5	56.0		46.0	
2.355	38.0	56.0		46.0	
3.706	42.7	56.0		46.0	
3.822	42.6	56.0		46.0	
4.286	43.5	56.0		46.0	
5.444	42.7	60.0		50.0	
6.023	40.7	60.0		50.0	
8.222	39.7	60.0		50.0	
8.339	40.7	60.0		50.0	
9.613	38.8	60.0		50.0	
10.192	38.6	60.0		50.0	
11.117	37.3	60.0		50.0	
11.695	36.6	60.0		50.0	
13.753	33.4	60.0		50.0	
15.087	31.4	60.0		50.0	
15.404	29.7	60.0		50.0	
18.418	30.8	60.0		50.0	
20.732	30.3	60.0		50.0	
24.782	26.0	60.0		50.0	
26.885	24.6	60.0		50.0	

* QP EXCEEDS AVG LIMIT, SEE DATA

CHECKED BY:

Mark E Longinotti
M. LONGINOTTI



ETR No.
ELITE ELECTRONIC ENGINEERING CO.

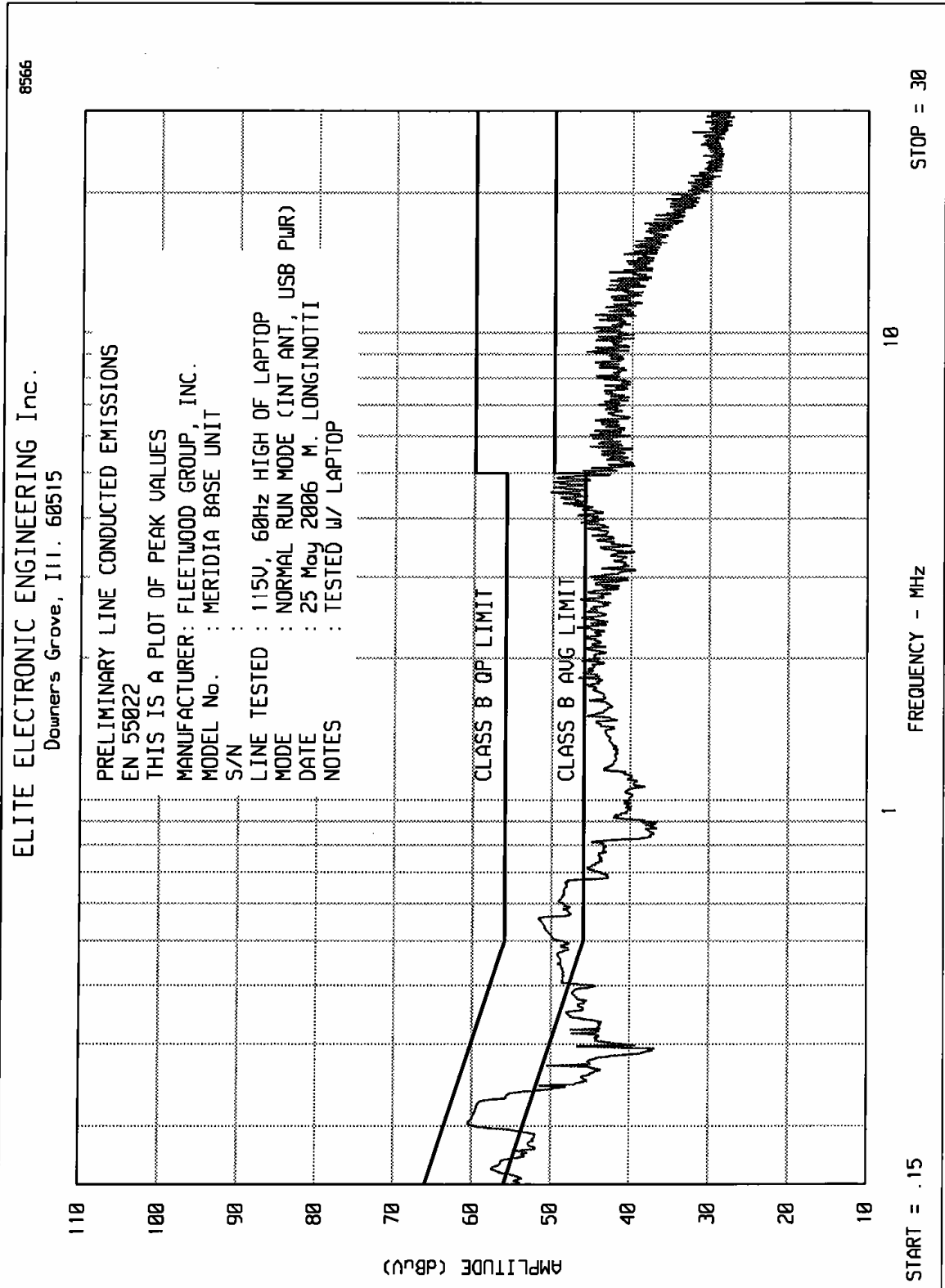
MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz RETURN OF LAPTOP
MODE : NORMAL RUN MODE (INT ANT, USB PWR)
DATE : 25 May 2006
NOTES : LAPTOP ONLY
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

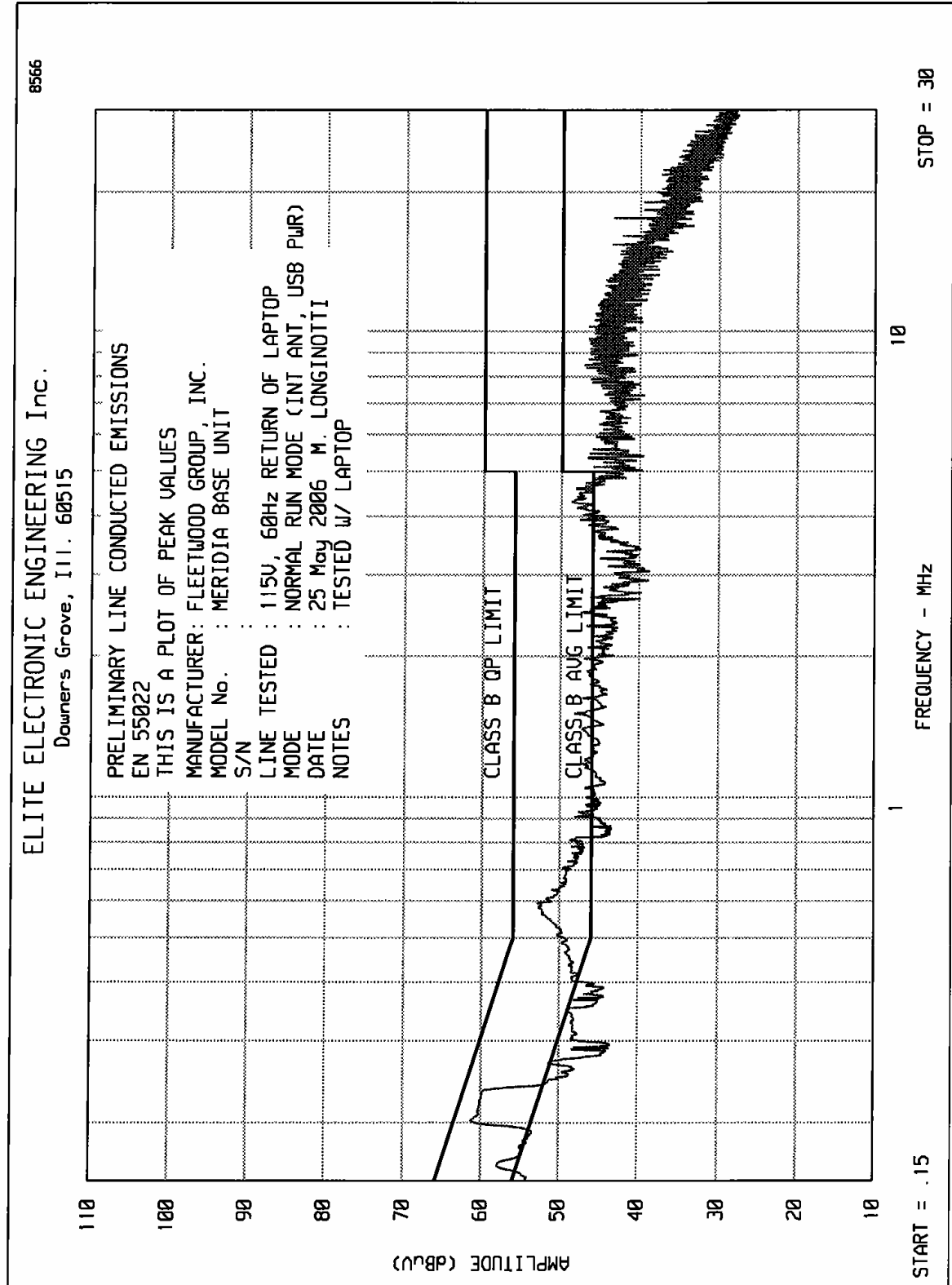
FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.204	59.8	63.4	52.0	53.4	*
.305	51.4	60.1	40.0	50.1	*
.348	46.9	59.0		49.0	
.456	46.7	56.8		46.8	
.608	51.6	56.0	40.6	46.0	*
.650	48.6	56.0	32.1	46.0	*
.812	45.4	56.0		46.0	
.928	44.1	56.0		46.0	
1.507	45.3	56.0		46.0	
1.970	43.6	56.0		46.0	
2.202	40.8	56.0		46.0	
2.433	40.4	56.0		46.0	
3.939	42.2	56.0		46.0	
4.287	42.8	56.0		46.0	
4.421	42.0	56.0		46.0	
4.633	40.3	56.0		46.0	
5.328	41.8	60.0		50.0	
6.025	41.5	60.0		50.0	
6.142	41.3	60.0		50.0	
8.055	40.5	60.0		50.0	
9.386	40.4	60.0		50.0	
9.616	40.5	60.0		50.0	
10.080	40.3	60.0		50.0	
11.470	39.4	60.0		50.0	
11.931	38.2	60.0		50.0	
12.629	36.1	60.0		50.0	
14.281	35.0	60.0		50.0	
15.358	32.4	60.0		50.0	
18.075	32.4	60.0		50.0	
19.115	32.5	60.0		50.0	
19.506	30.3	60.0		50.0	
20.506	31.7	60.0		50.0	
20.738	31.9	60.0		50.0	
22.128	31.1	60.0		50.0	
23.387	26.5	60.0		50.0	
27.142	25.0	60.0		50.0	

* QP EXCEEDS AVG LIMIT, SEE DATA

CHECKED BY:

Mark E Longinotti
M. LONGINOTTI







ETR No.
ELITE ELECTRONIC ENGINEERING CO.

MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz HIGH OF LAPTOP
MODE : NORMAL RUN MODE (INT ANT, USB PWR)
DATE : 25 May 2006
NOTES : TESTED W/ LAPTOP
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.206	58.0	63.4	48.9	53.4	*
.273	41.8	61.0		51.0	
.455	45.4	56.8		46.8	
.567	49.3	56.0	36.7	46.0	*
.637	44.9	56.0		46.0	
.812	41.1	56.0		46.0	
1.514	41.5	56.0		46.0	
1.914	39.3	56.0		46.0	
2.320	41.9	56.0		46.0	
2.668	40.5	56.0		46.0	
3.912	41.4	56.0		46.0	
4.331	41.9	56.0		46.0	
4.522	41.4	56.0		46.0	
4.639	41.9	56.0		46.0	
5.021	36.5	60.0		50.0	
6.040	39.6	60.0		50.0	
8.623	37.2	60.0		50.0	
8.930	36.0	60.0		50.0	
9.110	35.9	60.0		50.0	
10.205	35.3	60.0		50.0	
12.411	39.5	60.0		50.0	
13.455	37.1	60.0		50.0	
15.310	35.0	60.0		50.0	
17.167	31.0	60.0		50.0	
17.514	31.7	60.0		50.0	
21.225	29.5	60.0		50.0	
24.010	27.8	60.0		50.0	
27.025	26.5	60.0		50.0	

* QP EXCEEDS AVG LIMIT, SEE DATA

CHECKED BY:

Mark E. Longinotti
M. LONGINOTTI



ETR No.
ELITE ELECTRONIC ENGINEERING CO.

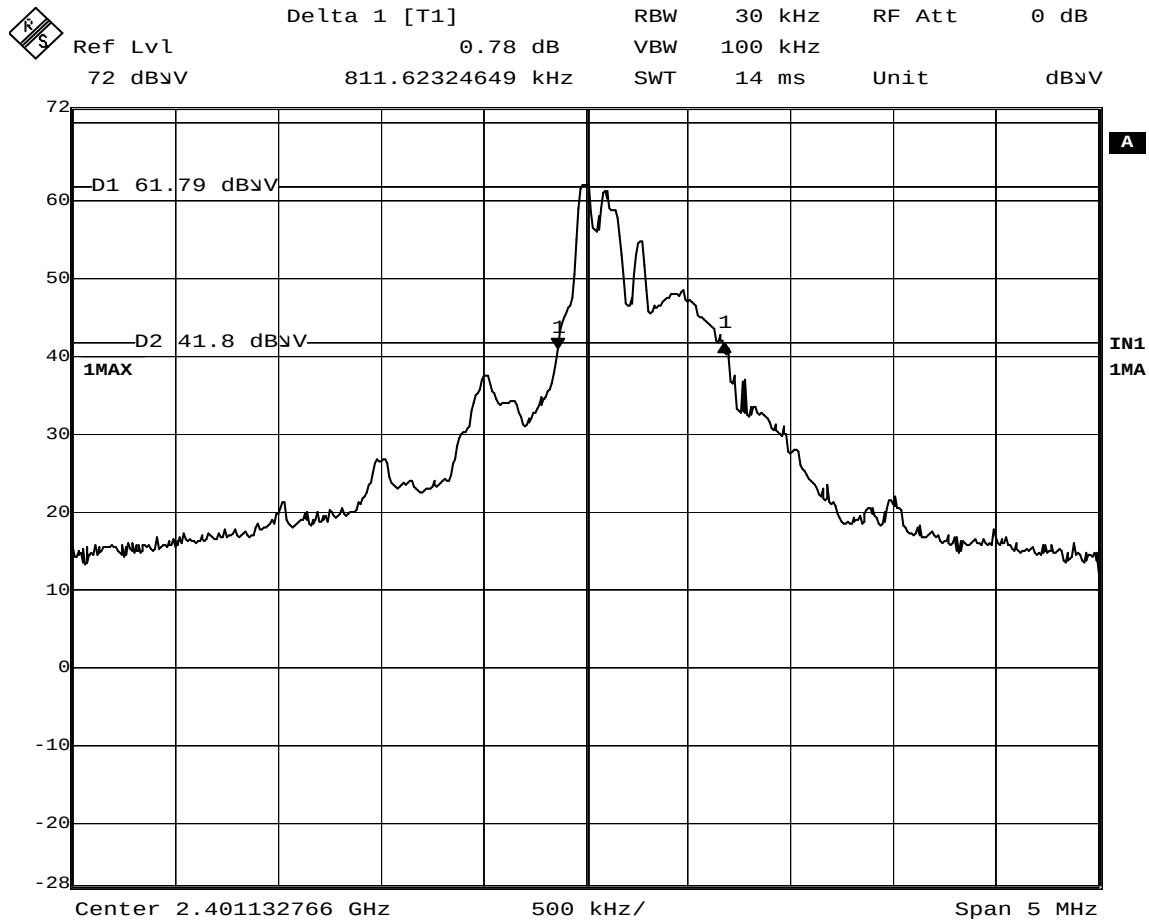
MANUFACTURER : FLEETWOOD GROUP, INC.
MODEL : MERIDIA BASE UNIT
S/N :
SPECIFICATION : EN 55022, CLASS B
TEST : LINE CONDUCTED EMISSIONS
LINE TESTED : 115V, 60Hz RETURN OF LAPTOP
MODE : NORMAL RUN MODE (INT ANT, USB PWR)
DATE : 25 May 2006
NOTES : TESTED W/ LAPTOP
RECEIVER : HP 8566 w/ HP85650A QP ADAPTOR
VALUES MEASURED WITH QP DETECTOR USING 9kHz BANDWIDTH

FREQUENCY MHz	METER RDG. dBuV	QP LIMIT dBuV	AVG RDG dBuV	AVG LIMIT dBuV	NOTES
.206	59.5	63.4	51.2	53.4	*
.271	50.0	61.1		51.1	
.308	46.0	60.0		50.0	
.429	46.1	57.3		47.3	
.595	51.2	56.0	40.2	46.0	*
.625	46.9	56.0	32.0	46.0	*
.812	45.4	56.0		46.0	
.917	42.8	56.0		46.0	
1.160	44.0	56.0		46.0	
1.508	46.0	56.0		46.0	
1.972	44.5	56.0		46.0	
2.088	43.7	56.0		46.0	
2.482	39.6	56.0		46.0	
3.131	41.5	56.0		46.0	
3.929	42.6	56.0		46.0	
4.266	43.0	56.0		46.0	
5.332	42.2	60.0		50.0	
5.565	42.7	60.0		50.0	
6.029	42.4	60.0		50.0	
8.463	42.9	60.0		50.0	
8.694	41.2	60.0		50.0	
9.043	42.8	60.0		50.0	
10.201	42.4	60.0		50.0	
11.477	41.4	60.0		50.0	
11.705	39.8	60.0		50.0	
13.328	37.9	60.0		50.0	
13.570	36.2	60.0		50.0	
15.067	35.8	60.0		50.0	
15.299	34.7	60.0		50.0	
17.587	30.3	60.0		50.0	
18.894	32.4	60.0		50.0	
19.009	32.2	60.0		50.0	
20.283	32.1	60.0		50.0	
20.517	32.4	60.0		50.0	
21.793	31.0	60.0		50.0	
23.761	28.4	60.0		50.0	
26.926	24.8	60.0		50.0	

* QP EXCEEDS AVG LIMIT, SEE DATA

CHECKED BY:

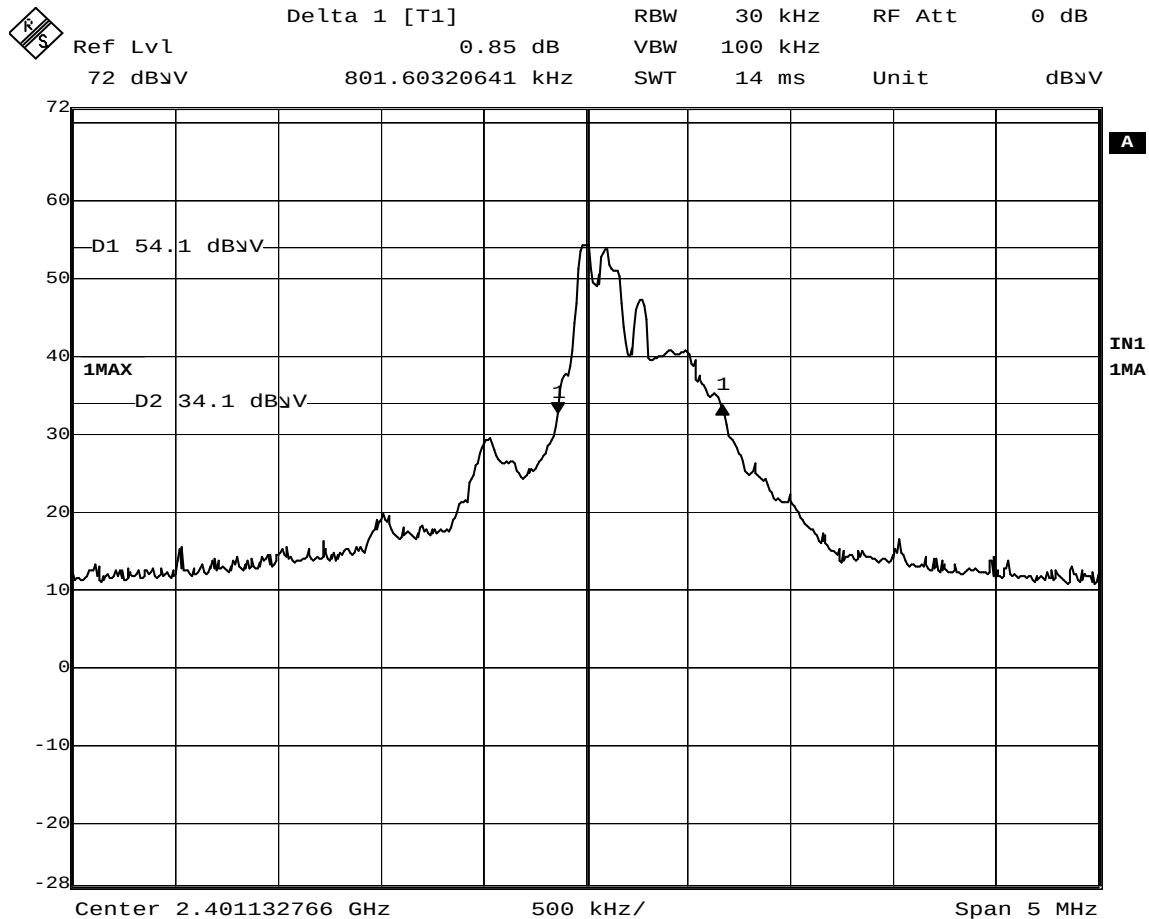
Mark E Longinotti
M. LONGINOTTI



Date: 1.JUN.2006 08:23:32

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.401GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

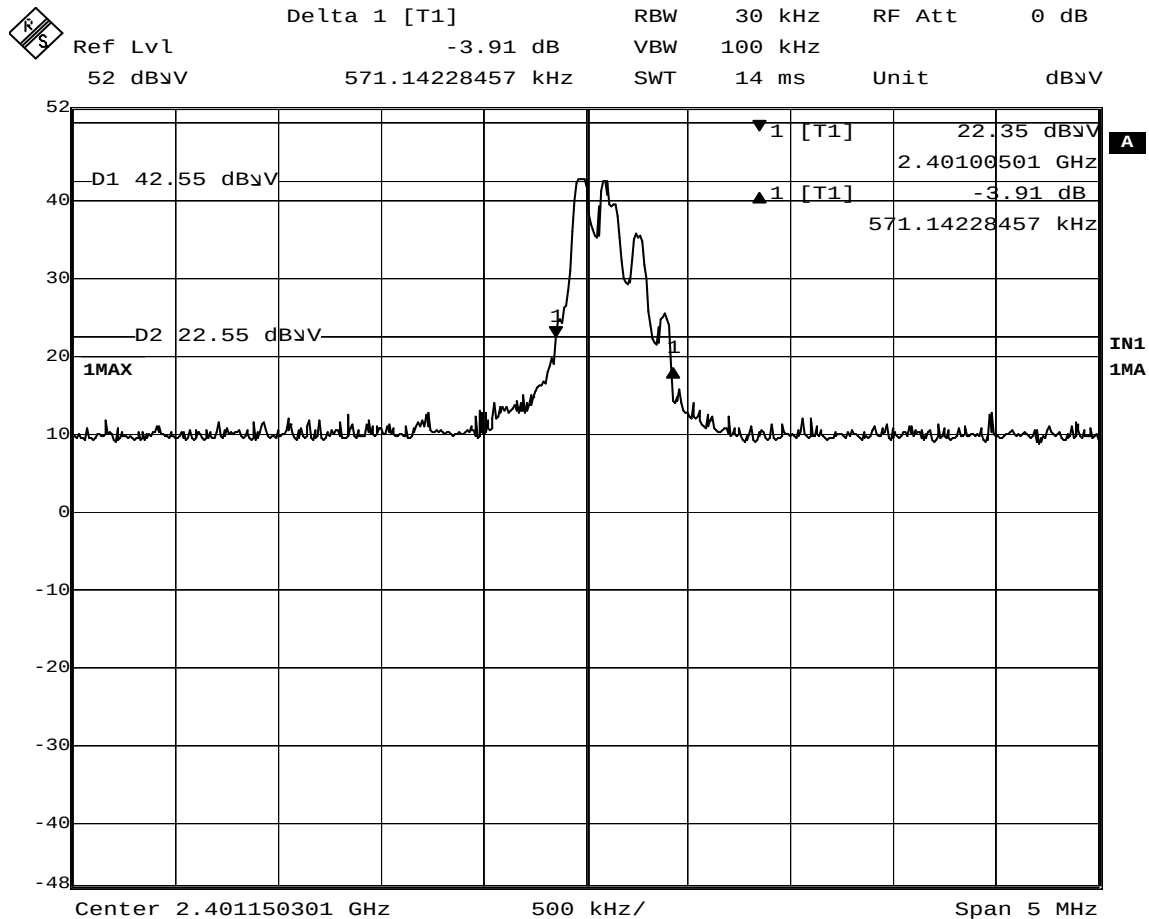
NOTES



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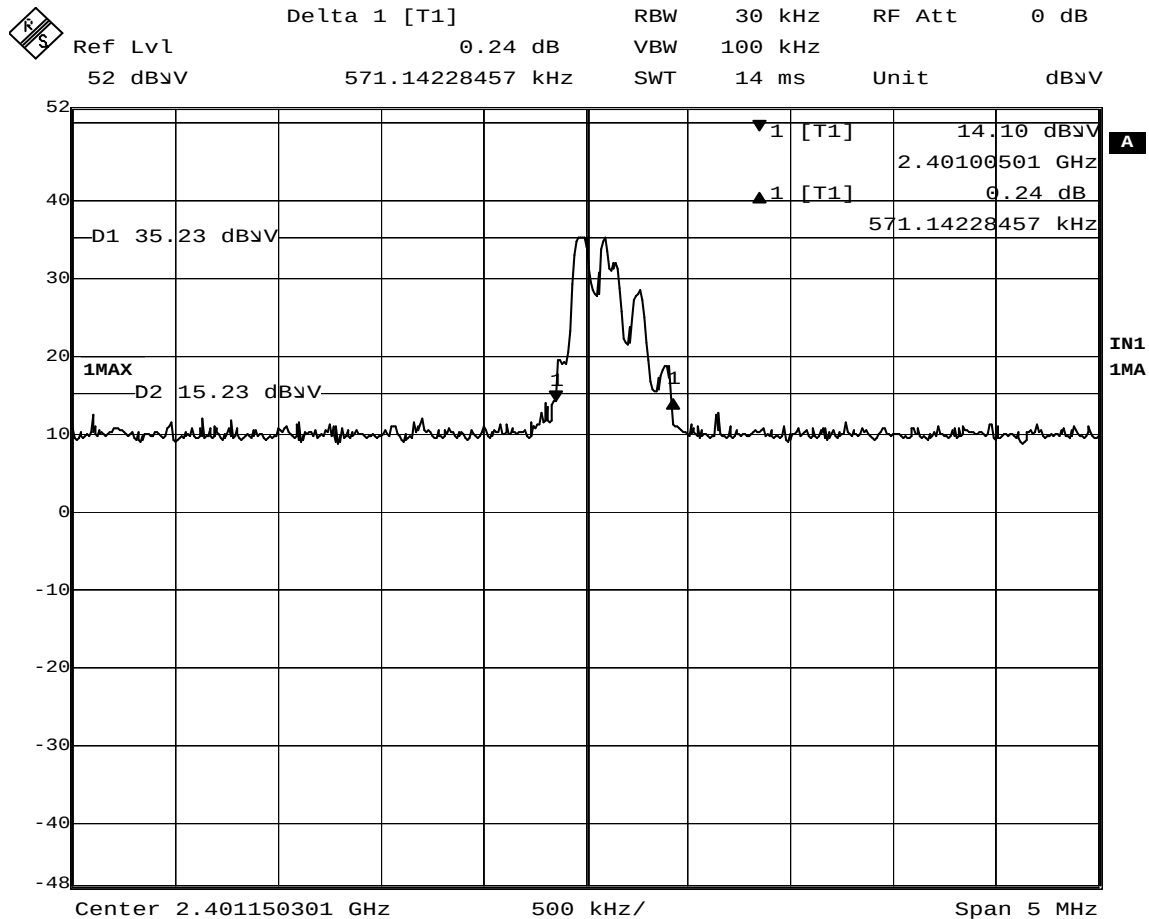
MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : 20dB Bandwidth
 TEST PARAMETERS : Tx @ 2.401GHz, High Power, Int. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

NOTES



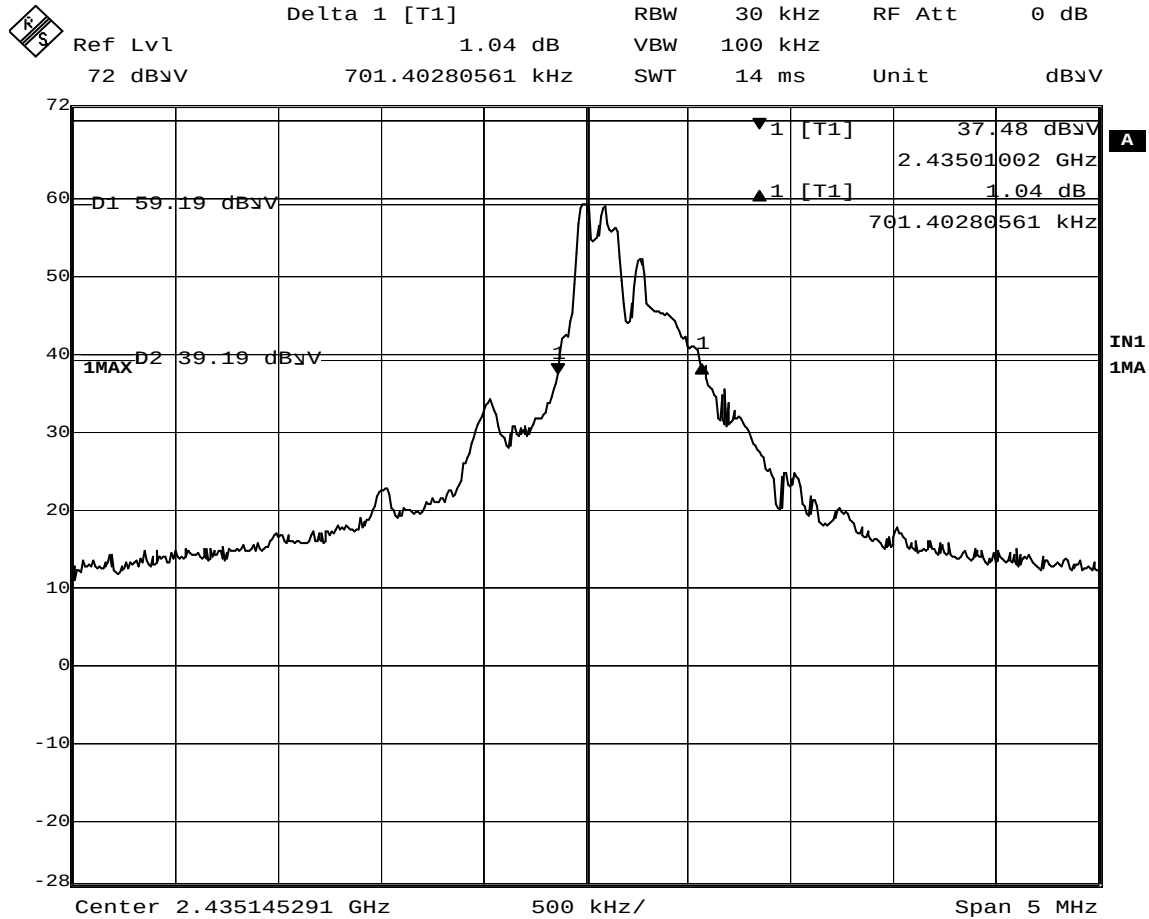
Date: 1 JUN 2006 09:05:14
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES:



Date: 1 JUN 2006 09:07:42
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Int. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

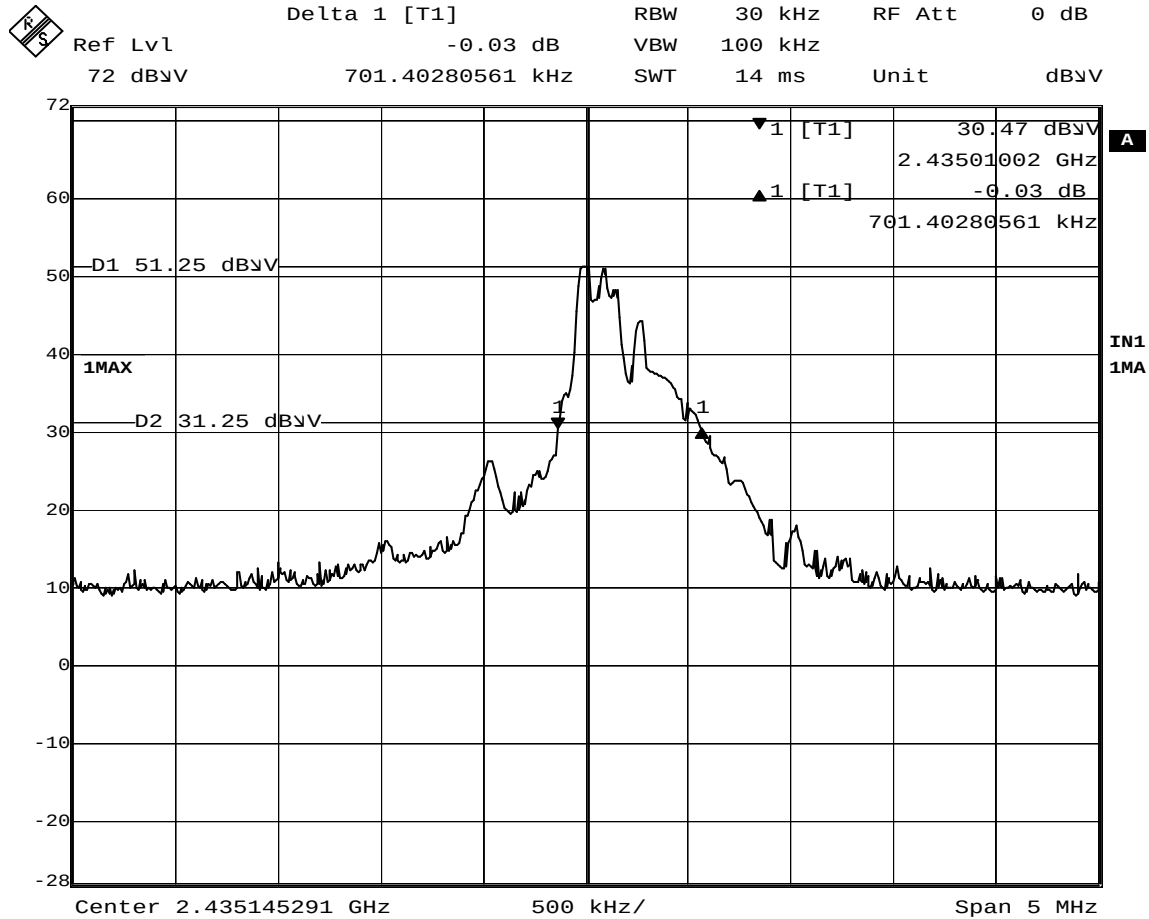
NOTES:



Date: 1.JUN.2006 08:34:15

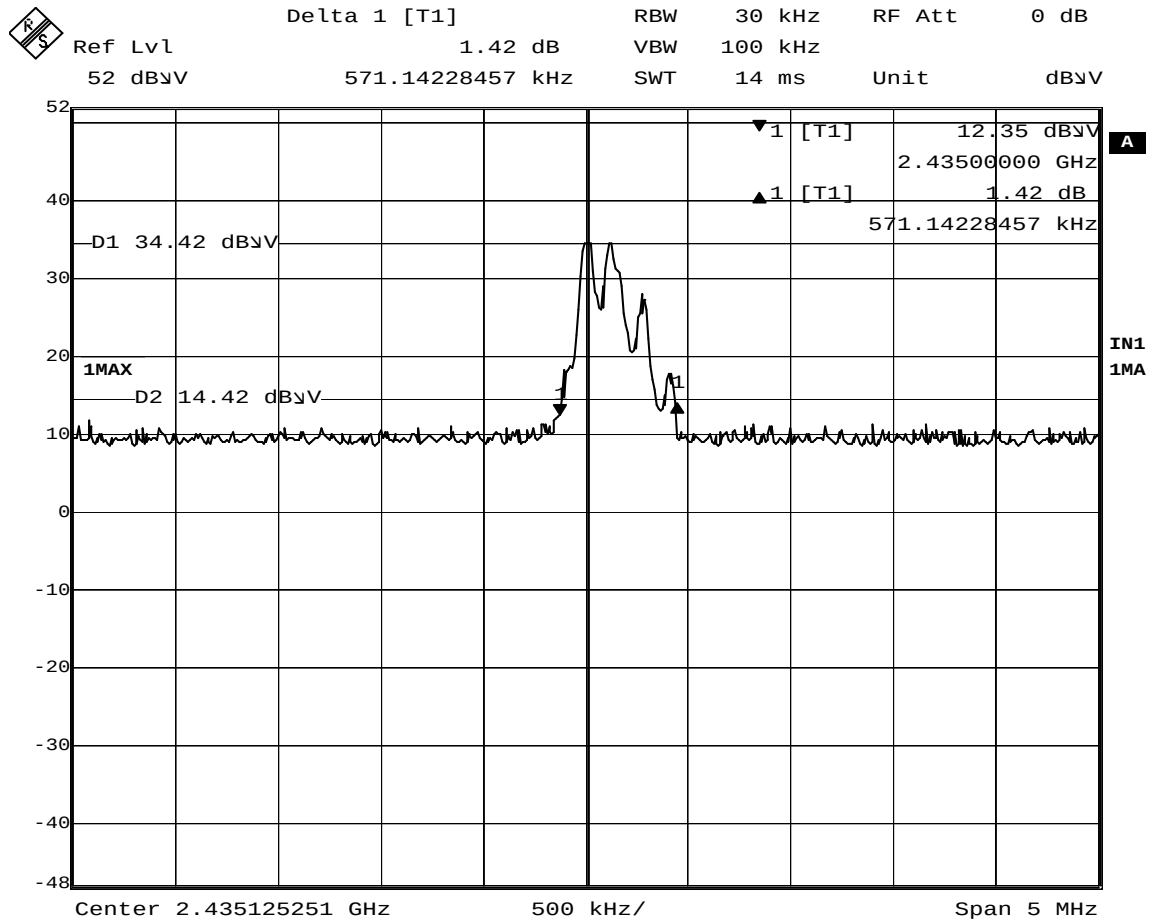
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.435GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES



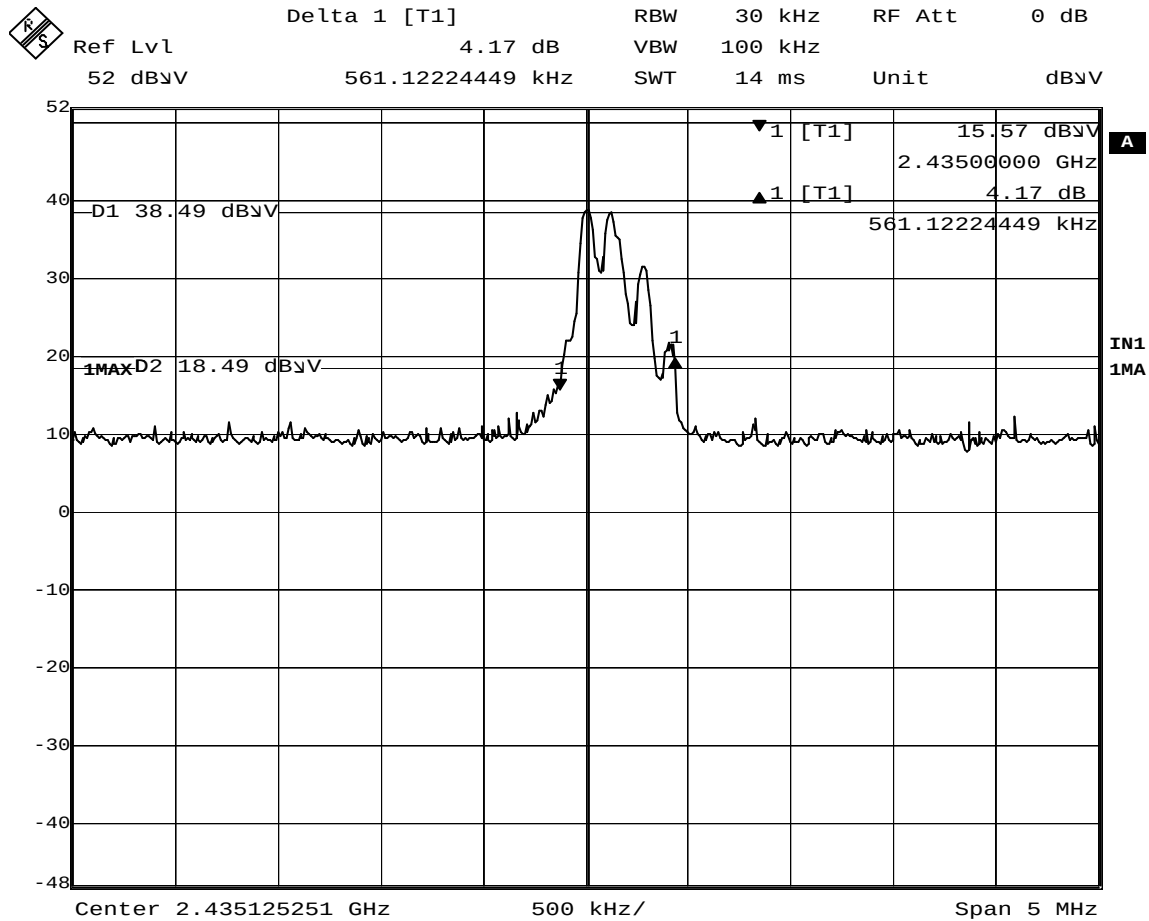
Date: 1.JUN.2006 08:39:29
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.435GHz, High Power, Int. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES



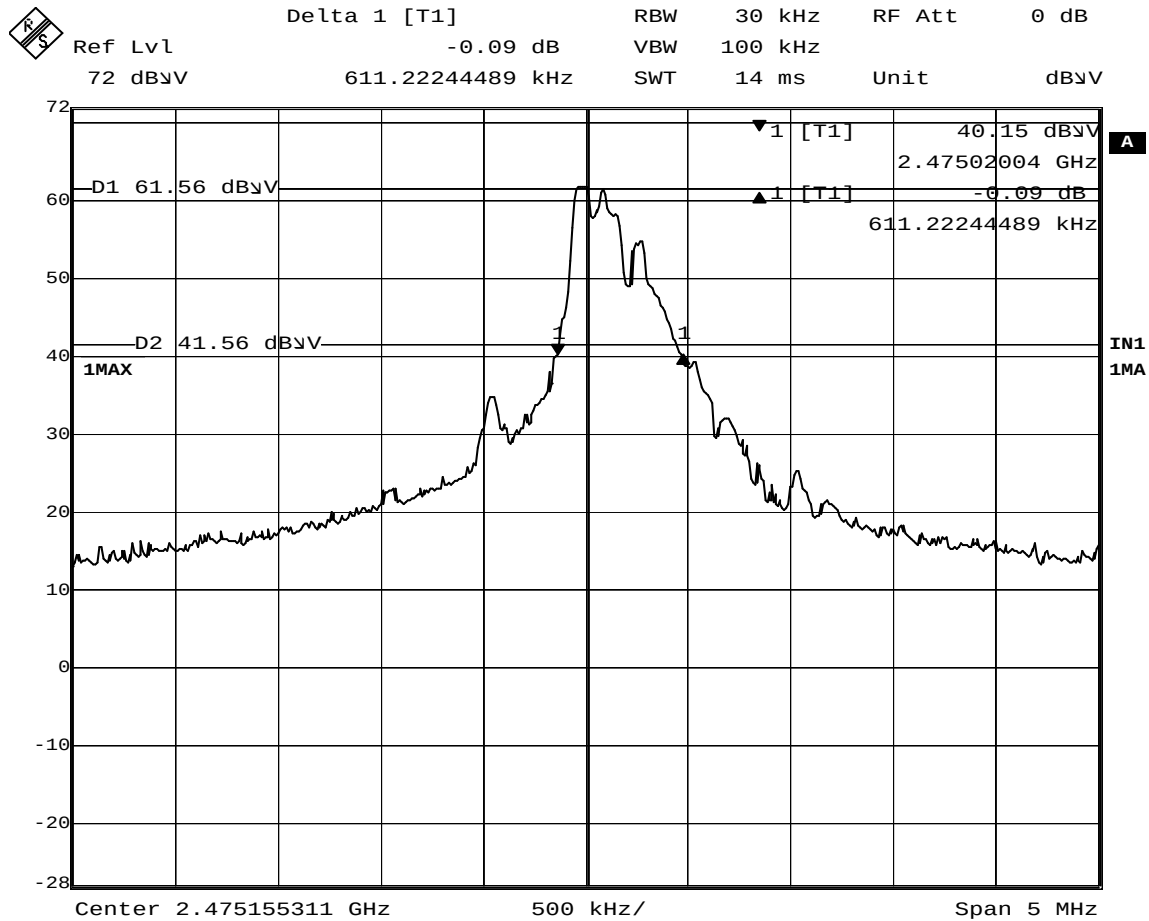
Date: 1 JUN 2006 09:14:54
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES:



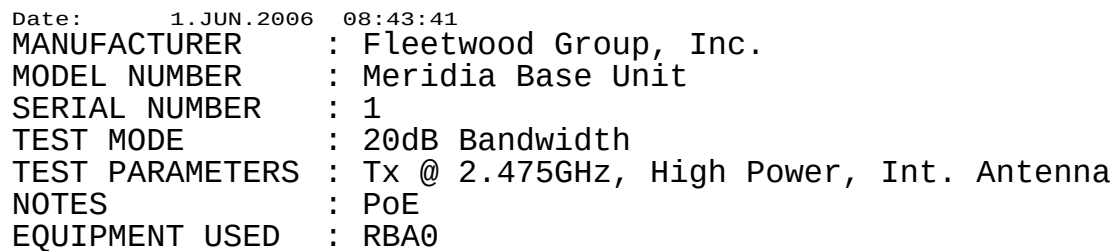
Date: 1 JUN. 2006 09:12:01
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Int. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES:

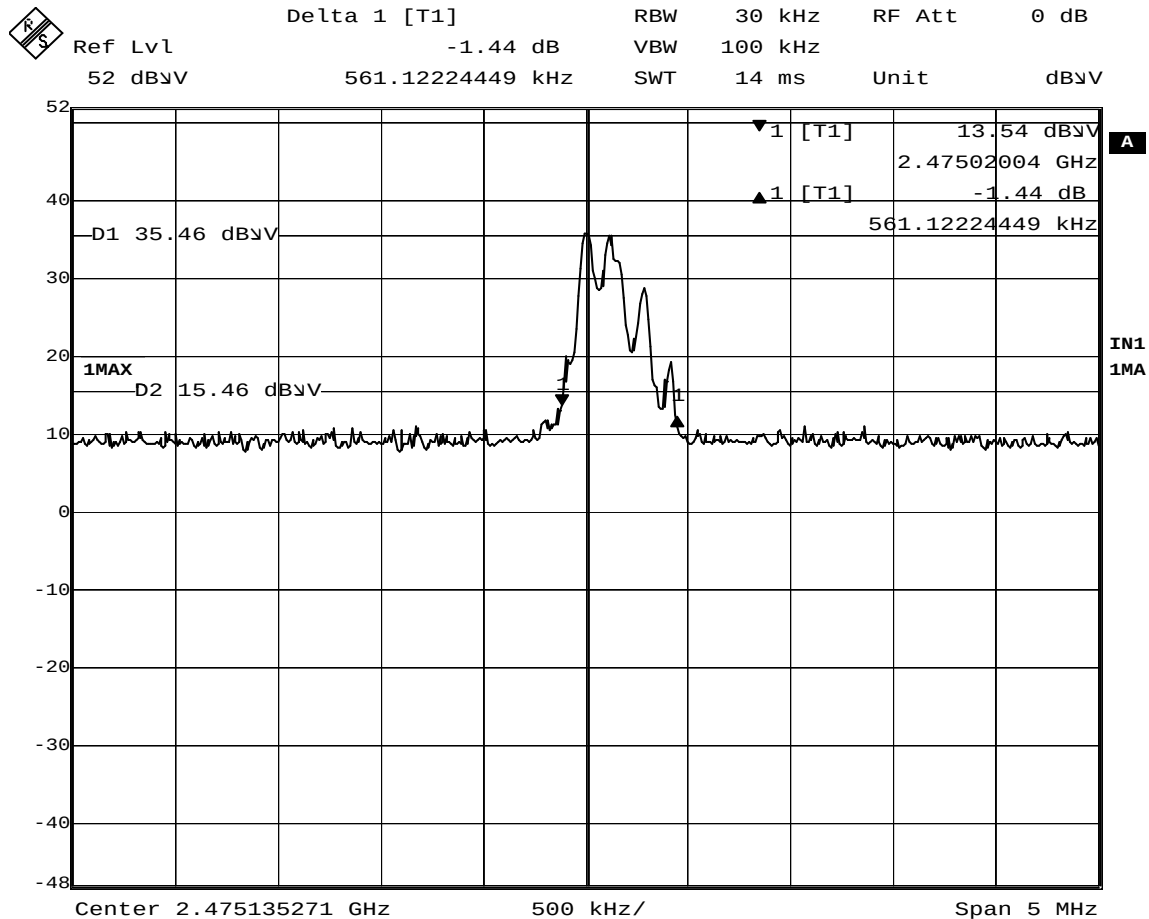


Date: 1 JUN 2006 08:48:11
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.475GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES

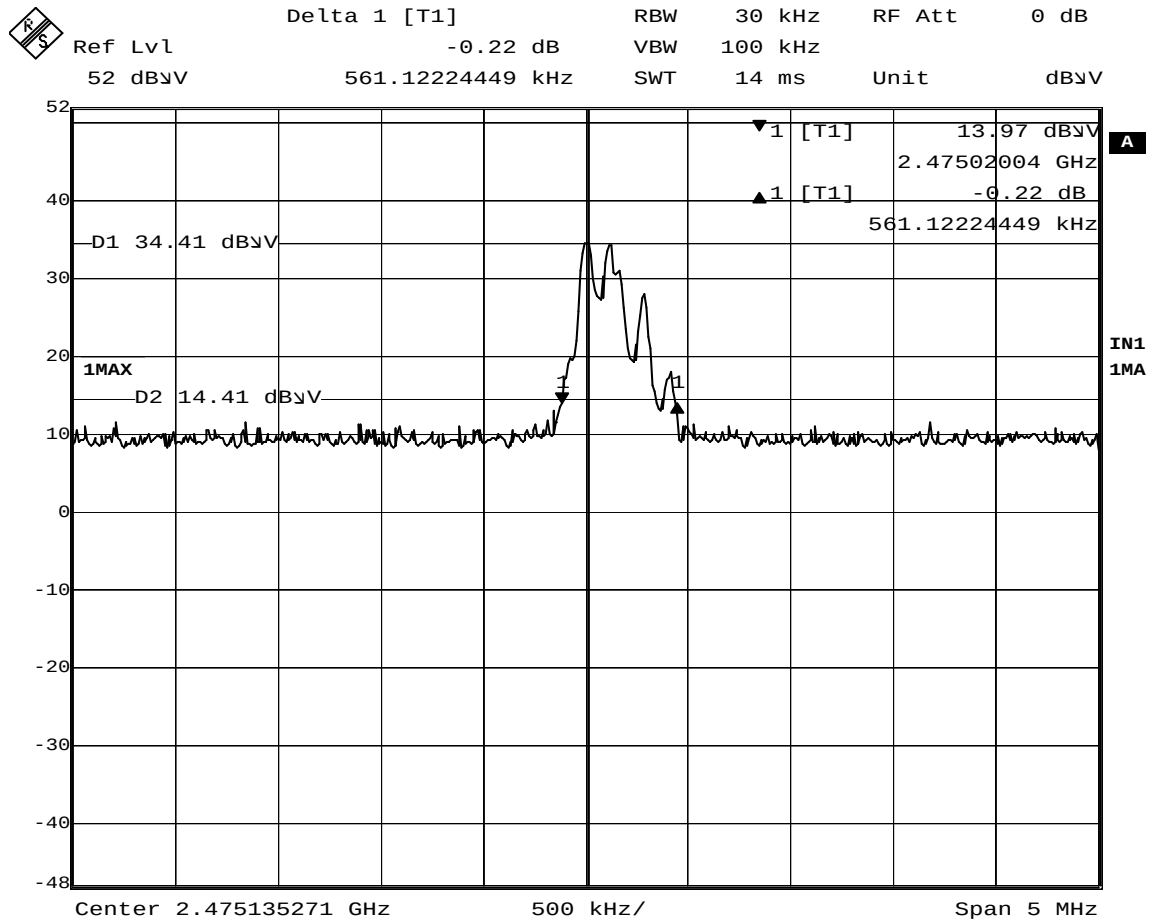


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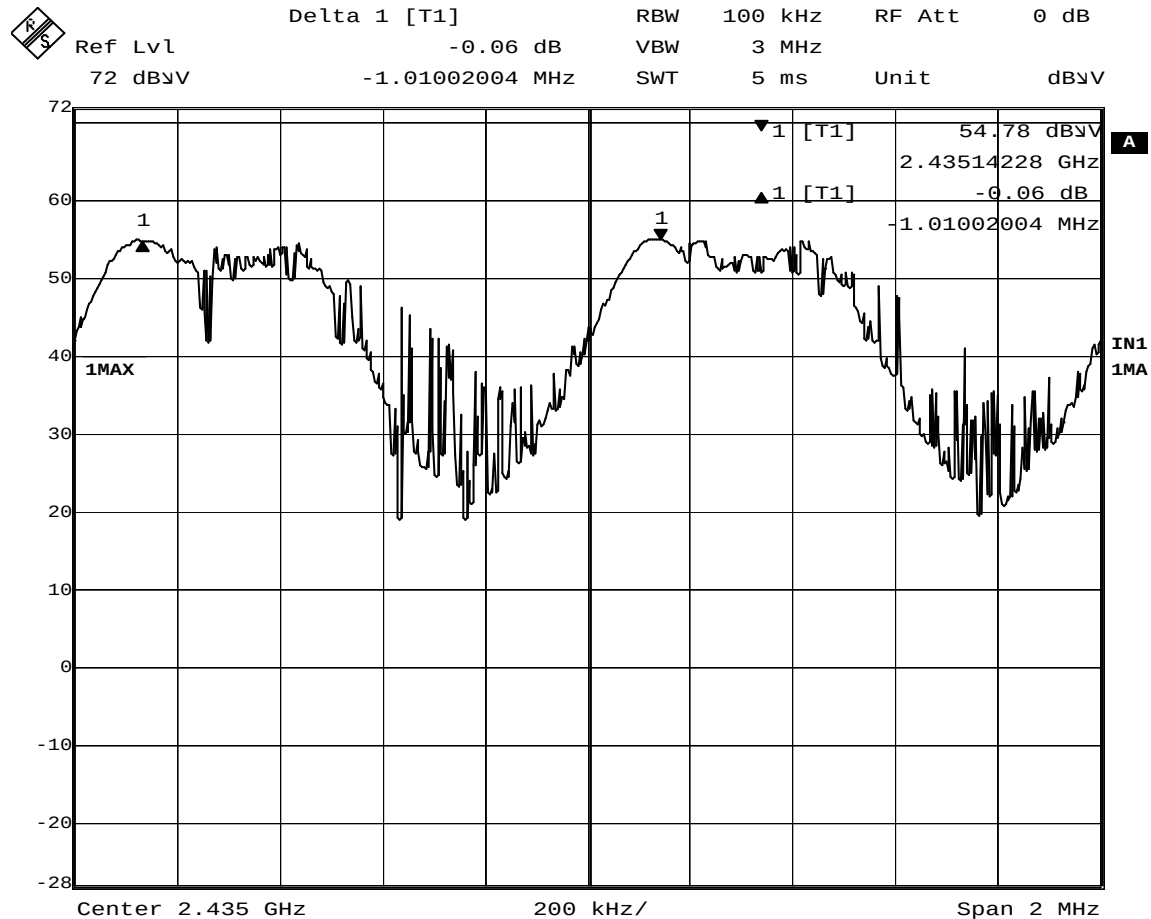
Date: 1 JUN 2006 09:17:55
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES:



Date: 1 JUN 2006 09:20:52
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : 20dB Bandwidth
TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Int. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

NOTES:

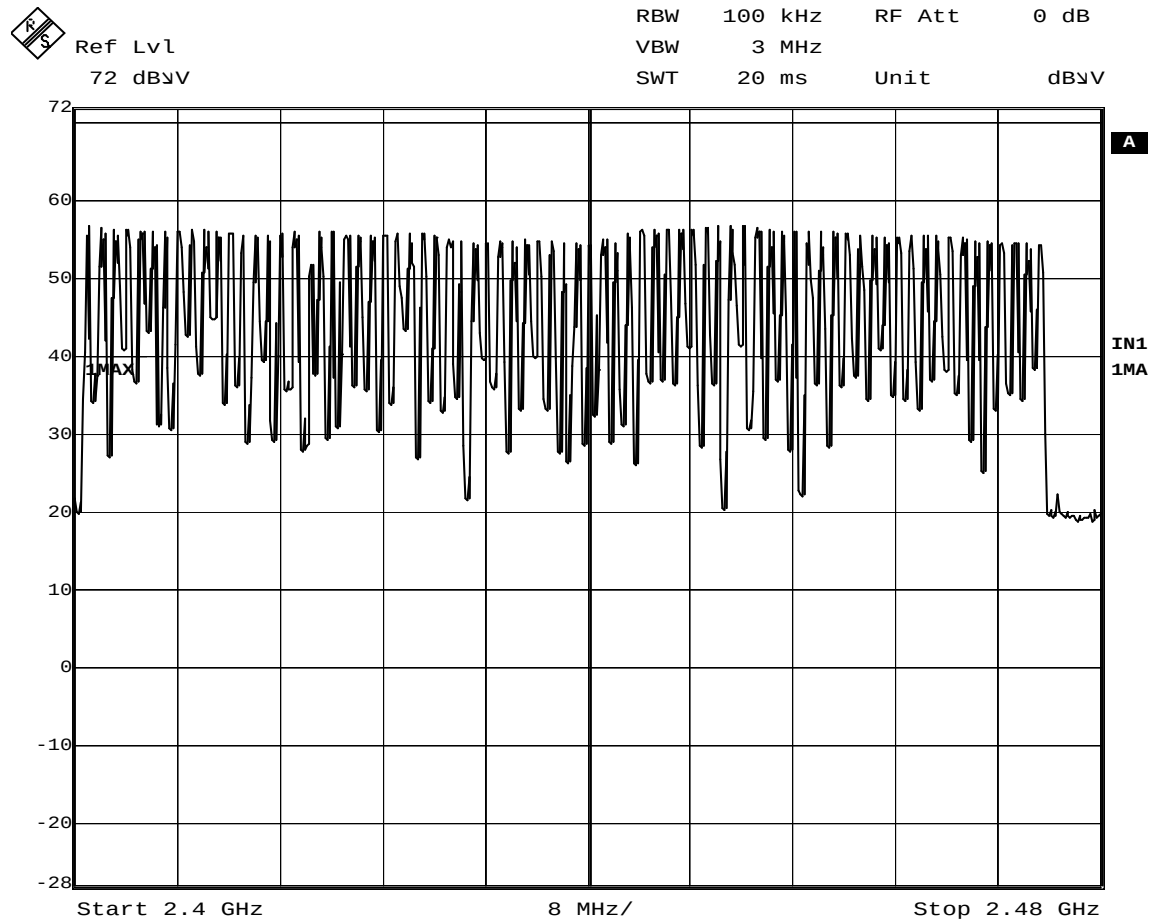


Date: 1.JUN.2006 10:18:24

Carrier Frequency Separation = 1.01MHz

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Frequency Hopping Enabled
 TEST PARAMETERS : Carrier Frequency Separation
 NOTES :
 EQUIPMENT USED : RBA0

NOTES:

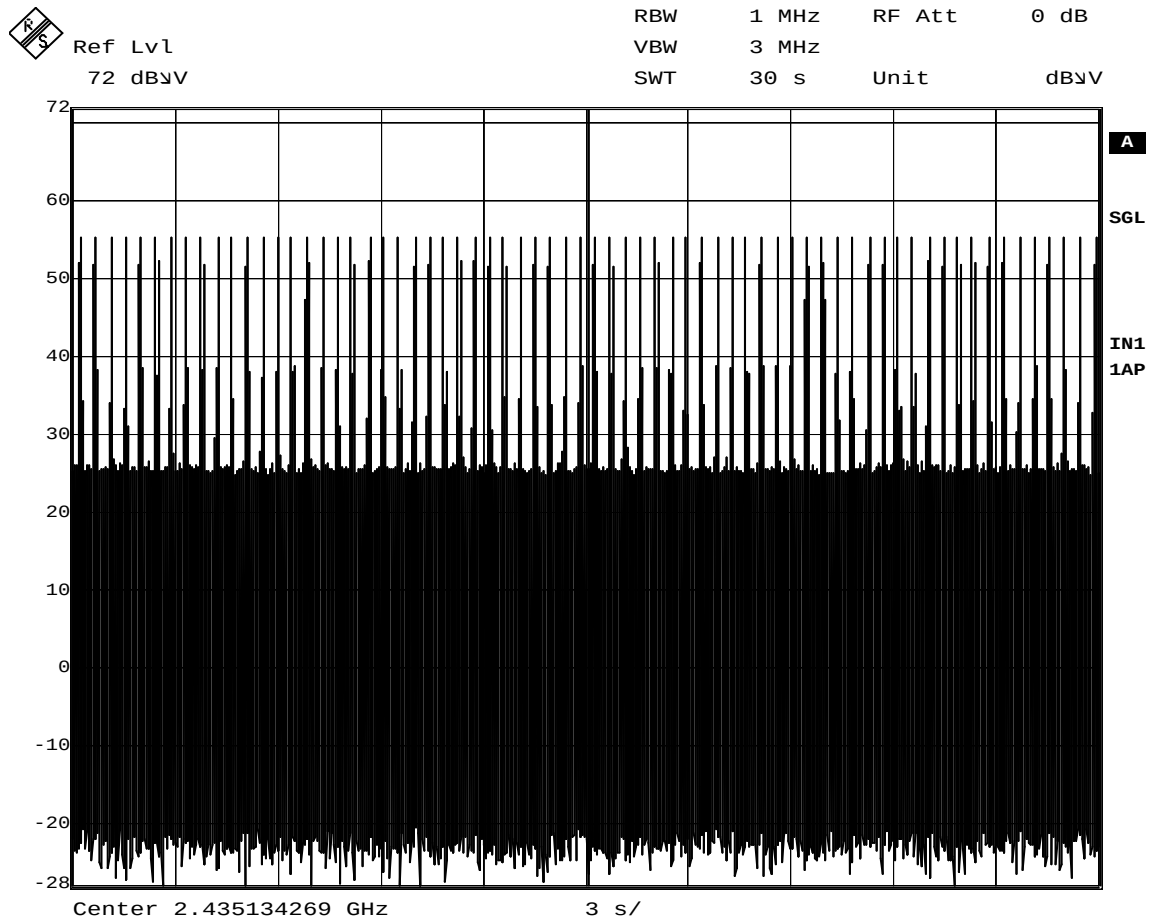


Date: 1.JUN.2006 10:08:58

Number of Hopping Frequencies = 75

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Frequency Hopping Enabled
TEST PARAMETERS : Number of Hopping Frequencies
NOTES :
EQUIPMENT USED : RBA0

NOTES:

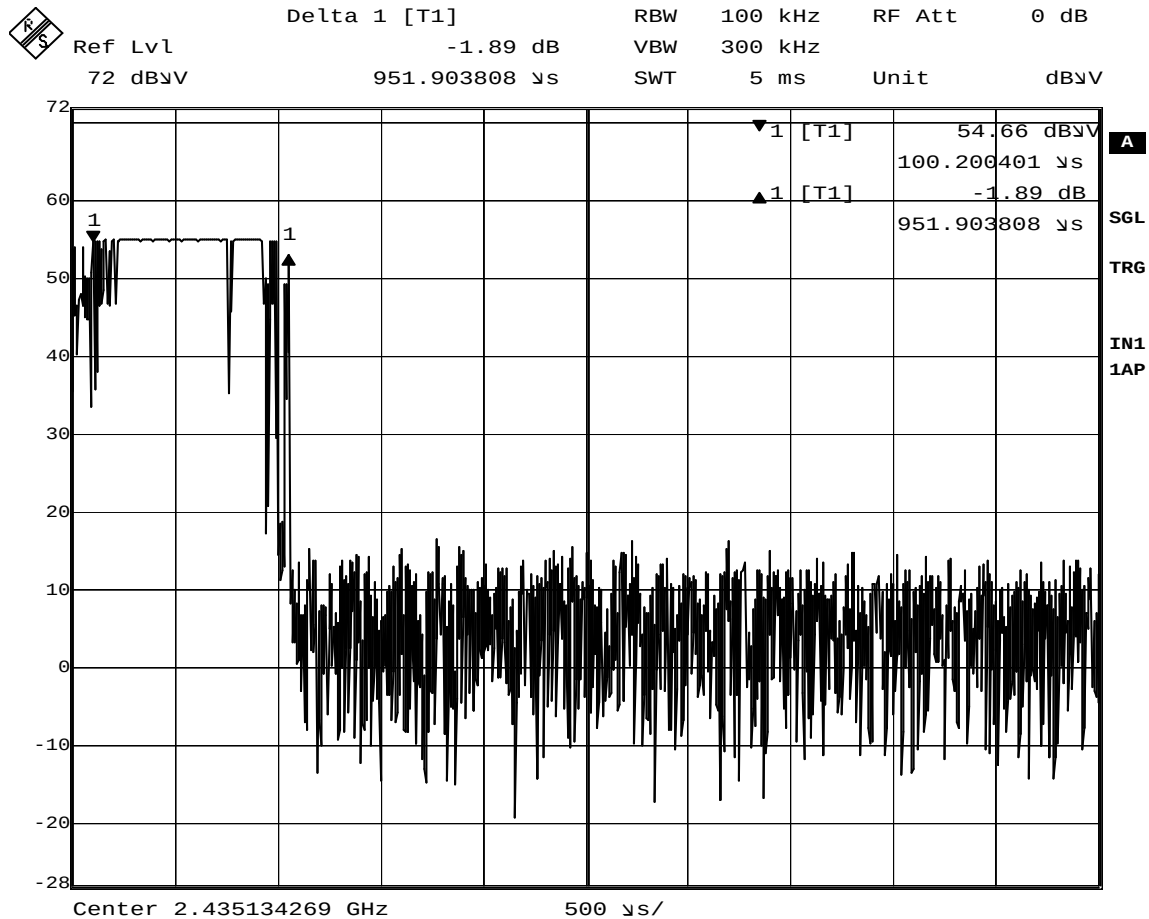


Date: 1.JUN.2006 10:37:51

Number of Pulses in a 30 second window = 68

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Frequency Hopping Enabled
TEST PARAMETERS : Dwell Time
NOTES :
EQUIPMENT USED : RBA0

NOTES:



Date: 1.JUN.2006 10:50:42

Dwell Time = (# of Pulses) * (Pulse Width) =
68 * 951μsec = 64.67msec = 0.06467sec

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Frequency Hopping Enabled
TEST PARAMETERS : Dwell Time
NOTES :
EQUIPMENT USED : RBA0

NOTES:



DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Peak Output Power - Radiated Measurement
DATE : May 29, 2006
NOTES : Internal Antenna, High Power
: TEST DISTANCE IS 3 METERS

FREQ. (MHz)	ANT POL	SPECTRUM ANALYZER RDG(dBuV)	MATCHED SIGNAL GENERATOR RDG (dBm)	CABLE LOSS (dB)	ANTENNA GAIN (dB)	EIRP TOTAL (dBm)	DeFacto EIRP Limit (dBm)
2401	V	92.5	-9.1	2.8	6.5	-5.4	36
2401	H	100.3	-0.7	2.8	6.5	3.0	36
2435	V	91	-11	2.8	6.6	-7.2	36
2435	H	99.7	-1.7	2.8	6.6	2.1	36
2475	V	92.3	-9.7	2.9	6.7	-5.9	36
2475	H	99.1	-1.6	2.9	6.7	2.2	36

EIRP = S.G. RDG - Cable Loss + Antenna Gain

Checked By: MARK E. LONGINOTTI



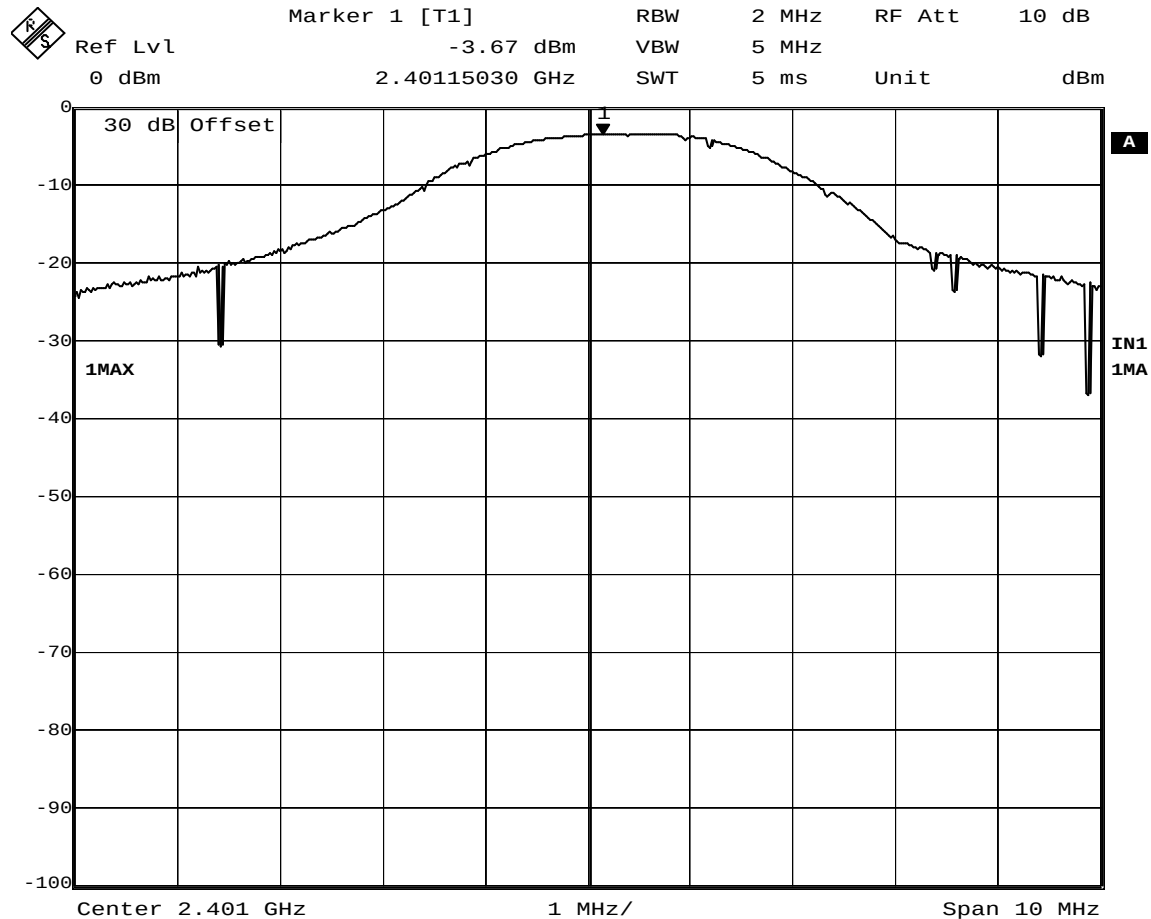
DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Peak Output Power - Radiated Measurement
DATE : May 29, 2006
NOTES : Internal Antenna, Low Power
: TEST DISTANCE IS 3 METERS

FREQ. (MHz)	ANT POL	SPECTRUM ANALYZER RDG(dBuV)	MATCHED SIGNAL GENERATOR RDG (dBm)	CABLE LOSS (dB)	ANTENNA GAIN (dB)	EIRP TOTAL (dBm)	DeFacto EIRP Limit (dBm)
2401	V	63.2	-39.2	2.8	6.5	-35.5	36
2401	H	65.4	-36.3	2.8	6.5	-32.6	36
2435	V	63.3	-39.2	2.8	6.6	-35.4	36
2435	H	66.1	-35.8	2.8	6.6	-32.0	36
2475	V	60.4	-42.1	2.9	6.7	-38.3	36
2475	H	66.3	-34.7	2.9	6.7	-30.9	36

EIRP = S.G. RDG - Cable Loss + Antenna Gain

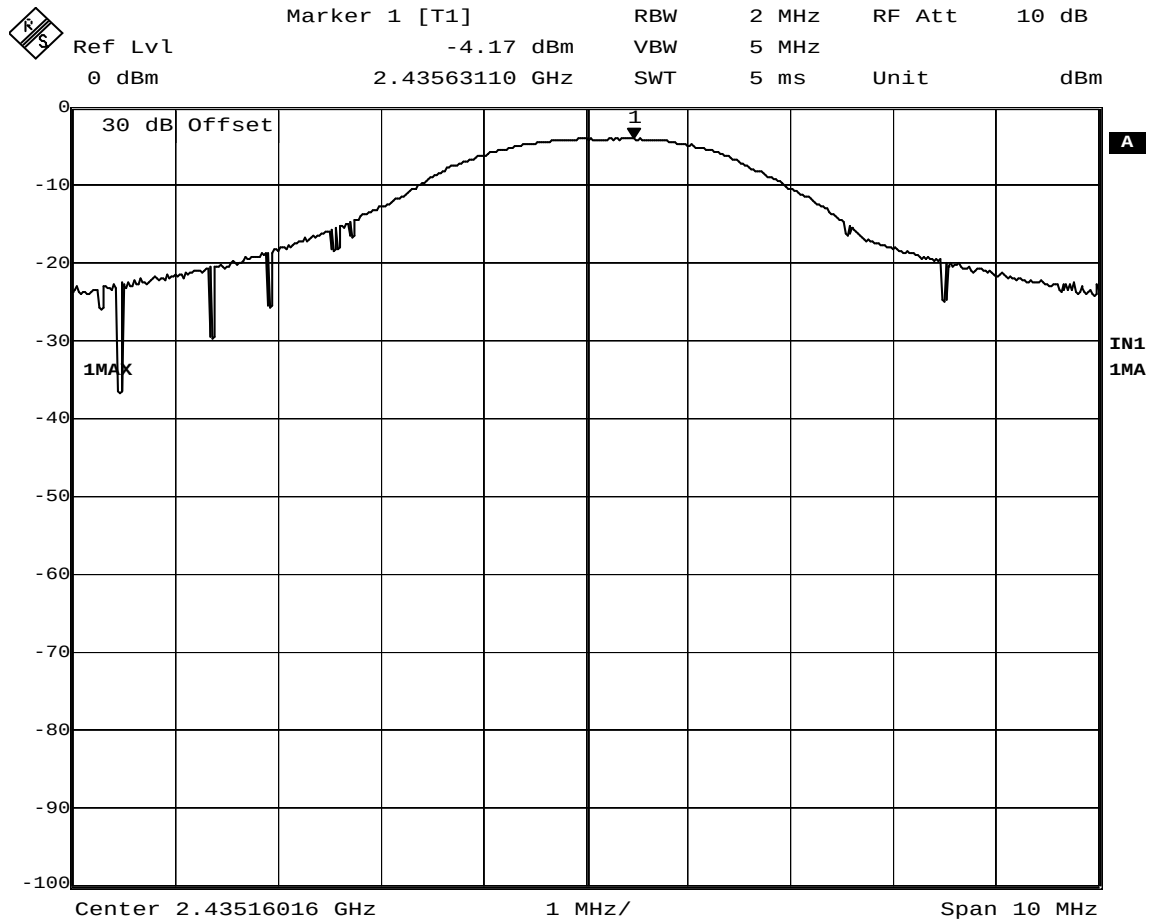
Checked By: MARK E. LONGINOTTI



Date: 25.MAY.2006 15:54:08

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.401GHz, High Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0,T1E8,T2D9

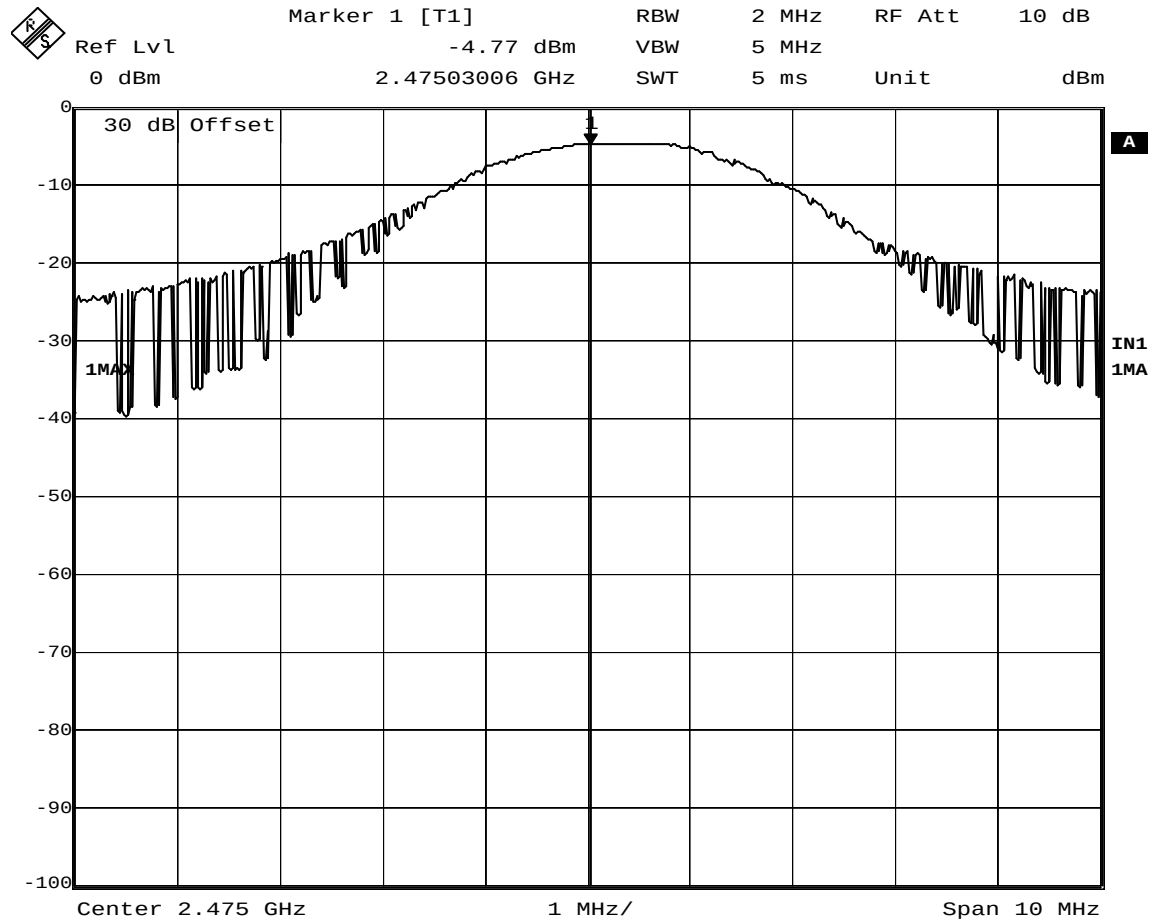
NOTES



Date: 25.MAY.2006 15:52:08

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.435GHz, High Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0,T1E8,T2D9

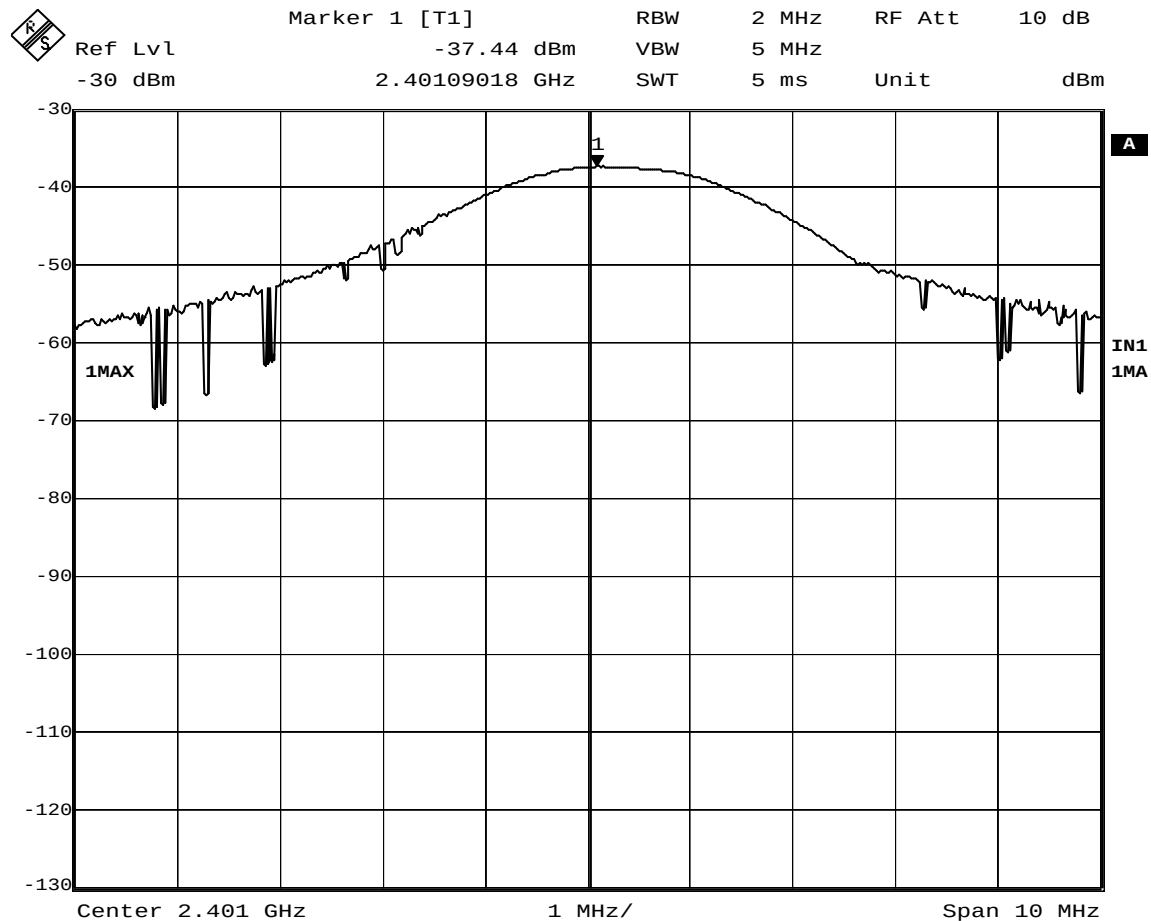
NOTES



Date: 25.MAY.2006 15:55:25

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.475GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9

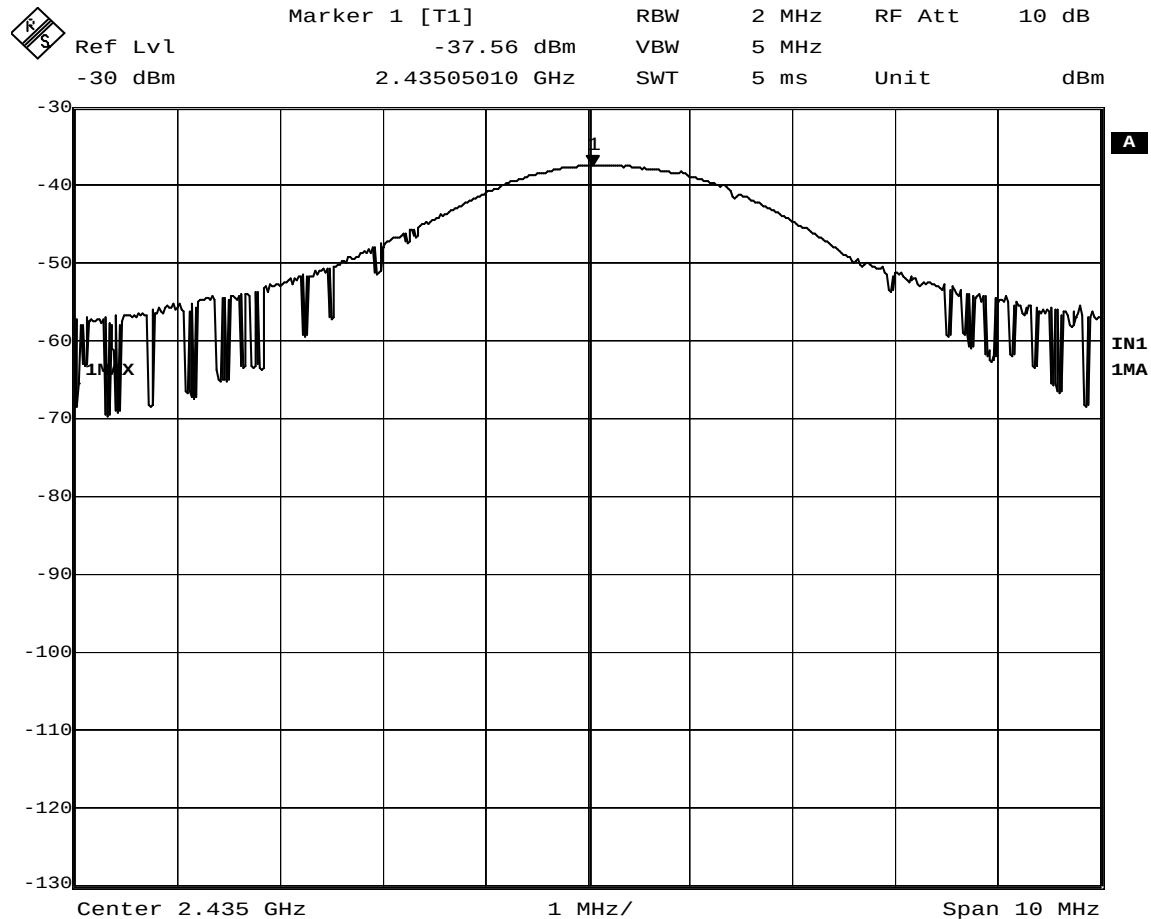
NOTES



Date: 25.MAY.2006 16:11:07

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

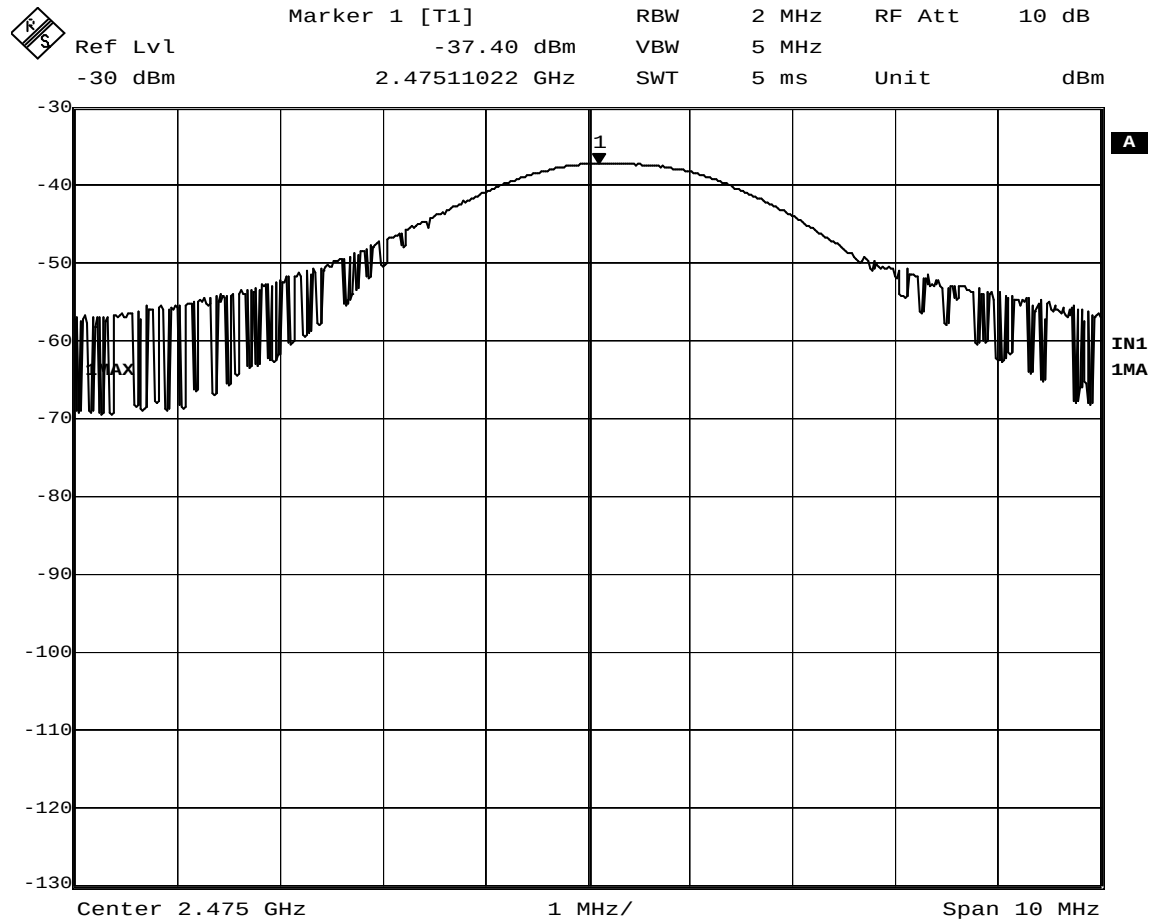
NOTES



Date: 25.MAY.2006 16:12:33

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

NOTES



Date: 25.MAY.2006 16:13:43

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

NOTES



DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Peak Output Power - Conducted Measurement
DATE : May 25, 2006
NOTES : External Antenna, High Power
: 30dB external attenuation

FREQ. (MHz)	SPECTRUM ANALYZER RDG(dBm)	Peak Oupt Power (dBm)	Maximum Peak Conducted Output Power (dBm)
2401	-3.67	-3.67	30
2435	-4.17	-4.17	30
2475	-4.77	-4.77	30

Checked By: MARK E. LONGINOTTI

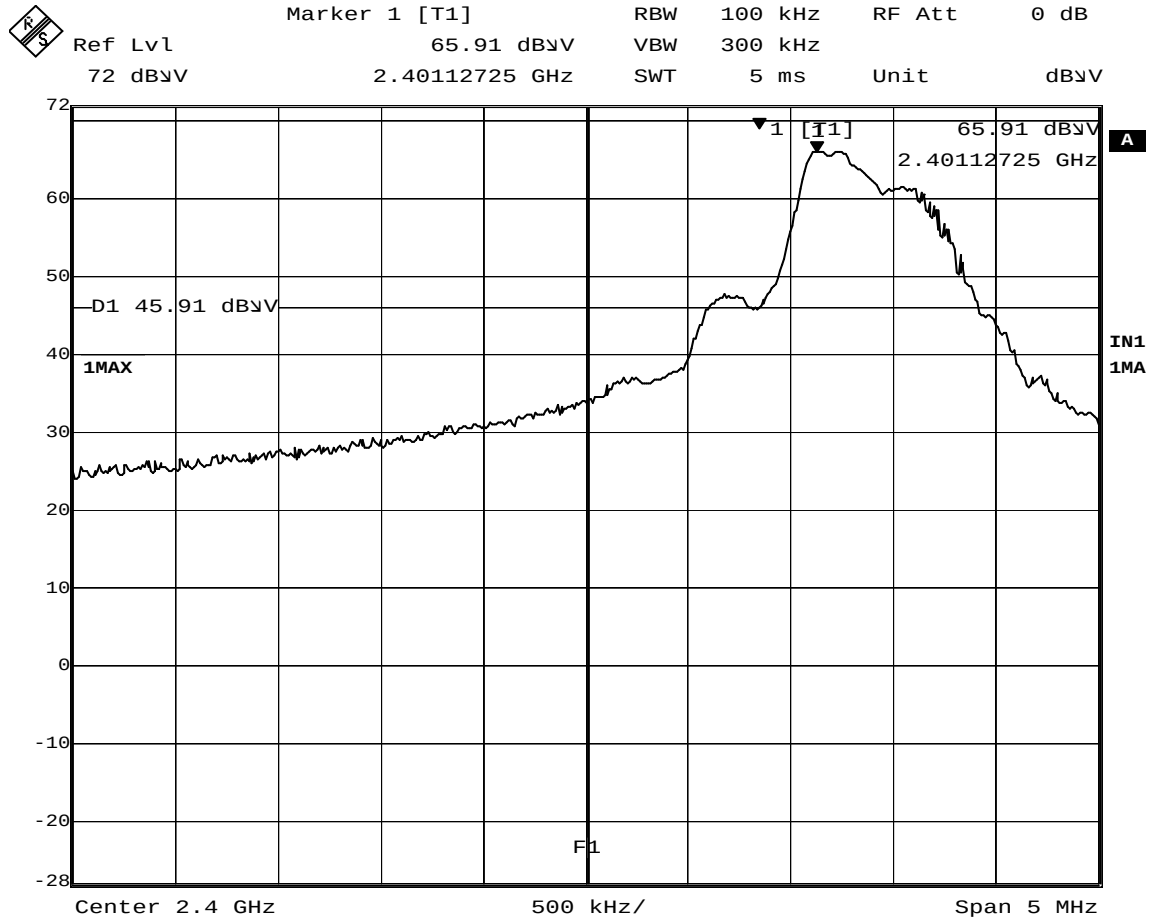


DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Peak Output Power - Conducted Measurement
DATE : May 25, 2006
NOTES : External Antenna, Low Power
: 0dB external attenuation

FREQ. (MHz)	SPECTRUM ANALYZER RDG(dBm)	Peak Oupt Power (dBm)	Maximum Peak Conducted Output Power (dBm)
2401	-37.44	-37.44	30
2435	-37.56	-37.56	30
2475	-37.40	-37.40	30

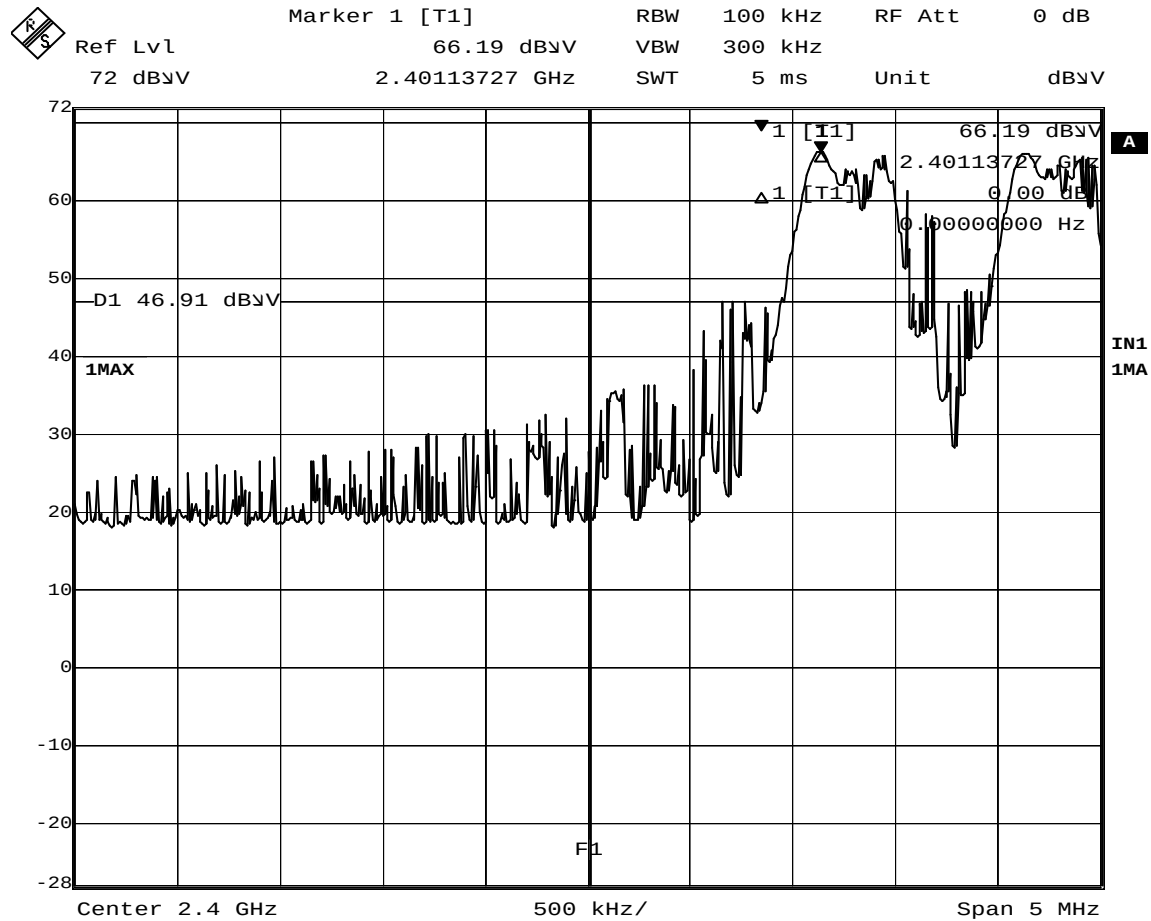
Checked By: MARK E. LONGINOTTI



Date: 1.JUN.2006 11:15:24

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.401GHz
TEST PARAMETERS : Bandedge compliance
NOTES : High power, int. antenna, PoE
EQUIPMENT USED : RBA0

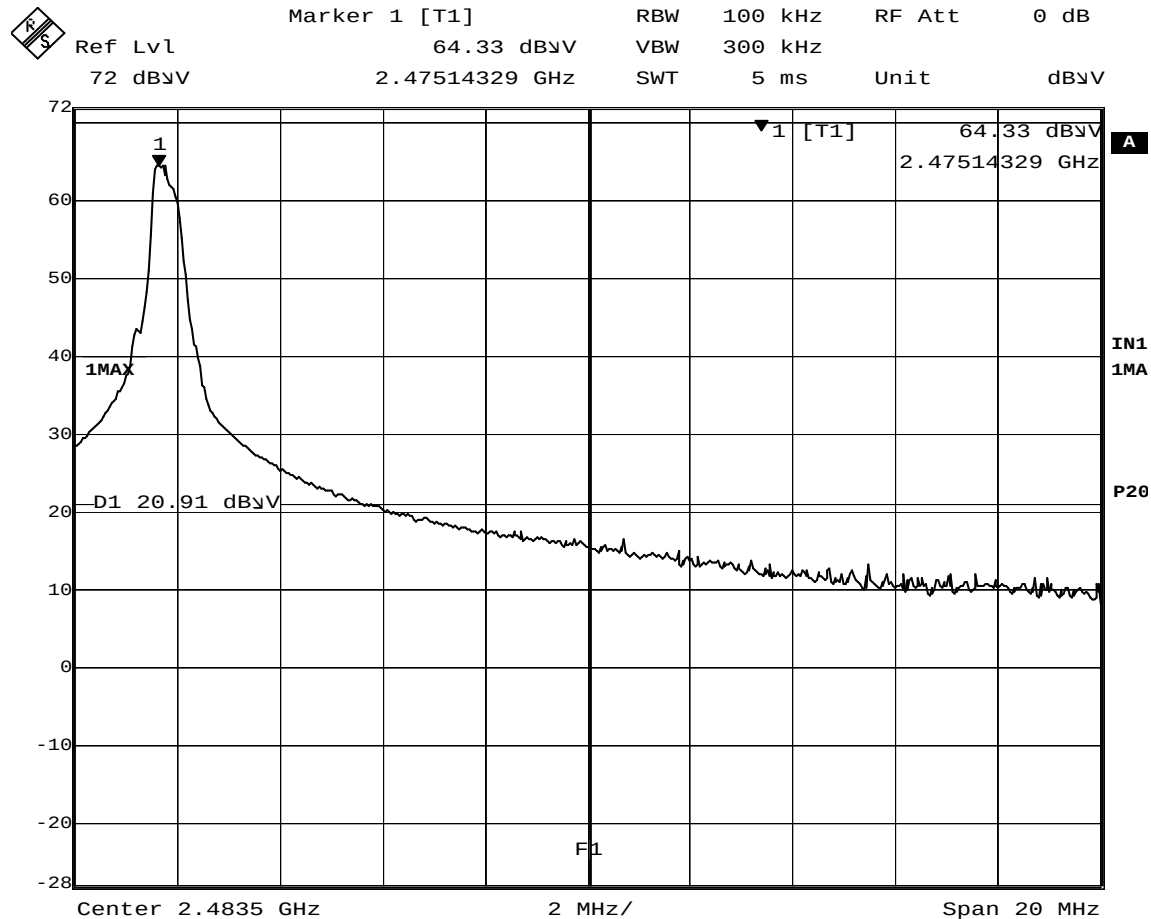
NOTES:



Date: 1.JUN.2006 11:22:28

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Frequency Hopping Enabled
TEST PARAMETERS : Bandedge compliance
NOTES :
EQUIPMENT USED : RBA0

NOTES:

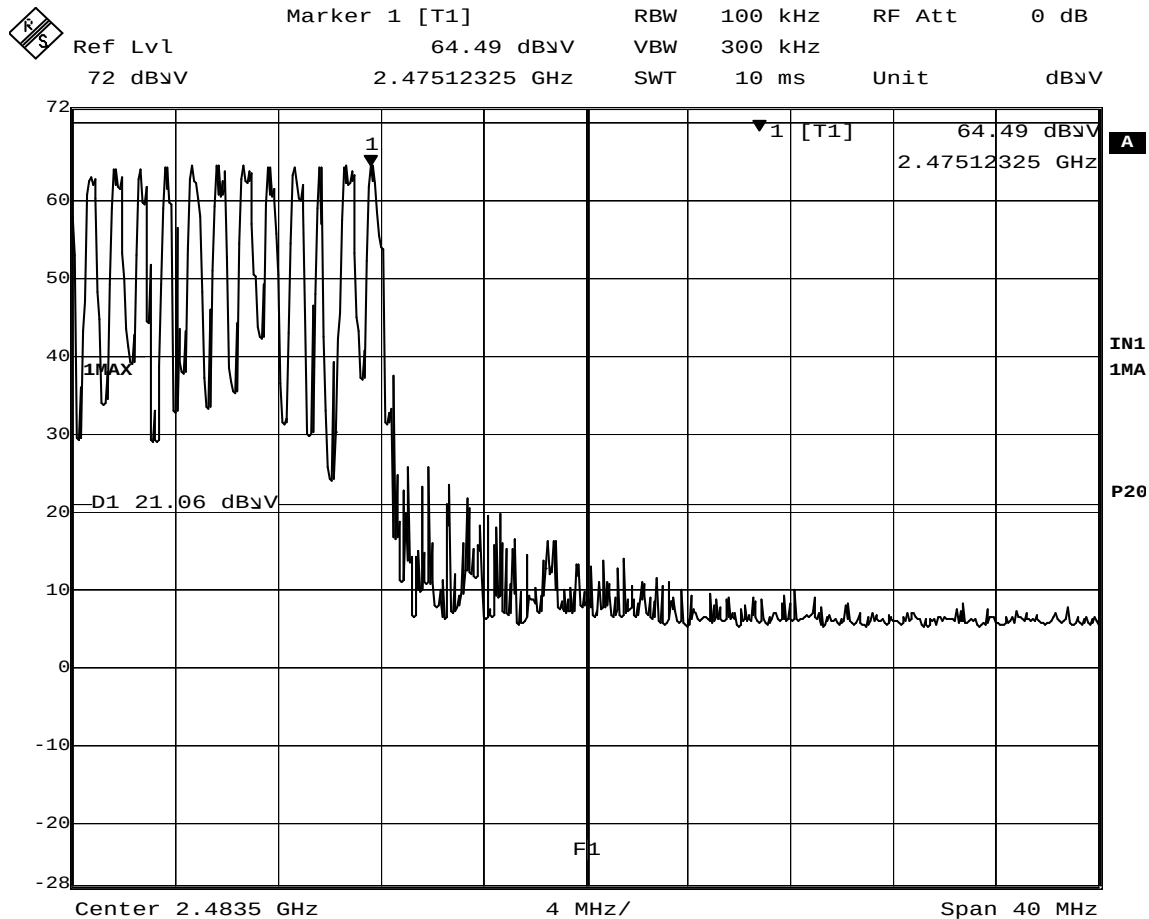


Date: 1.JUN.2006 11:43:58

Marker Delta Method: 97.4 dBuV/m - 54 dBuV/m = 43.4 dB down

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.475GHz
TEST PARAMETERS : Bandedge compliance
NOTES : High Power, int. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:

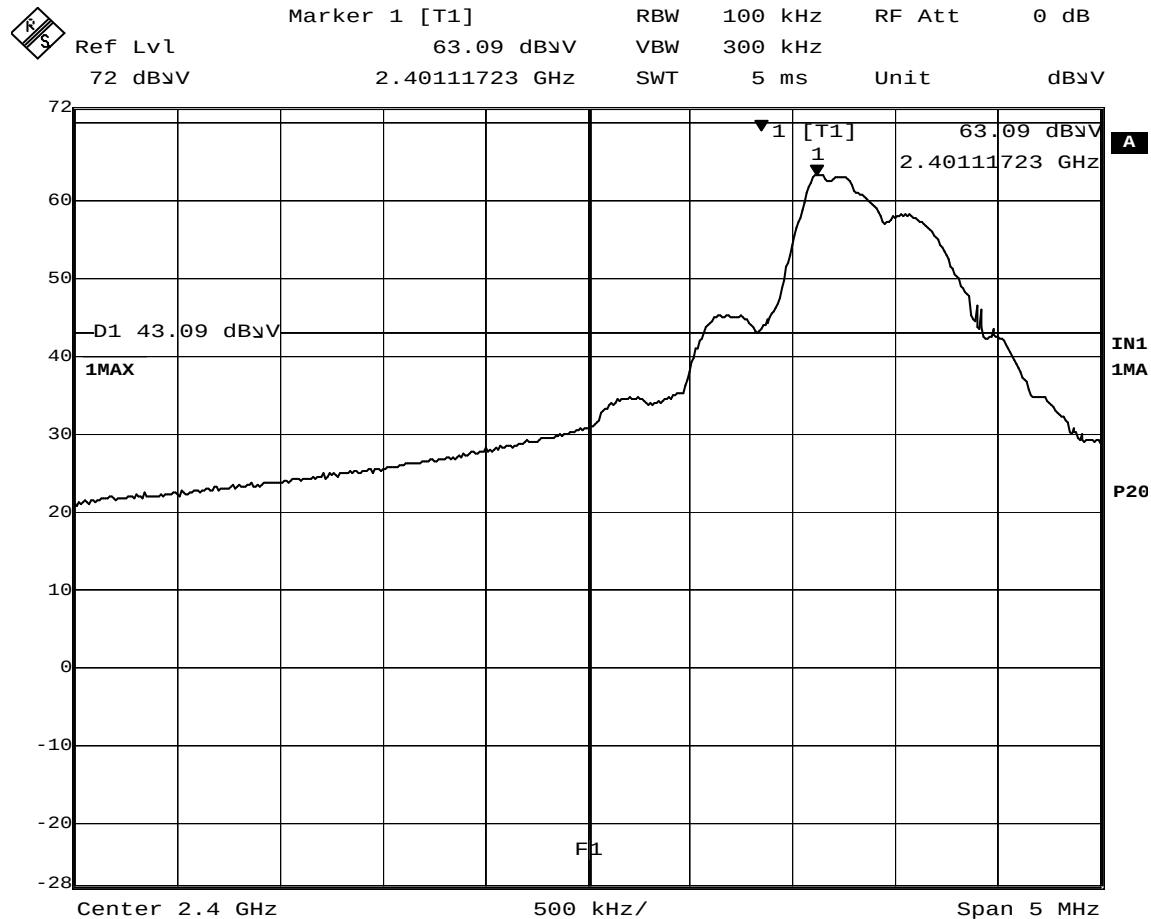


Date: 1.JUN.2006 12:41:55

Marker Delta Method: 97.4 dBμV/m - 54 dBμV/m = 43.4 dB down

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Frequency Hopping Enabled
TEST PARAMETERS : Bandedge compliance
NOTES :
EQUIPMENT USED : RBA0

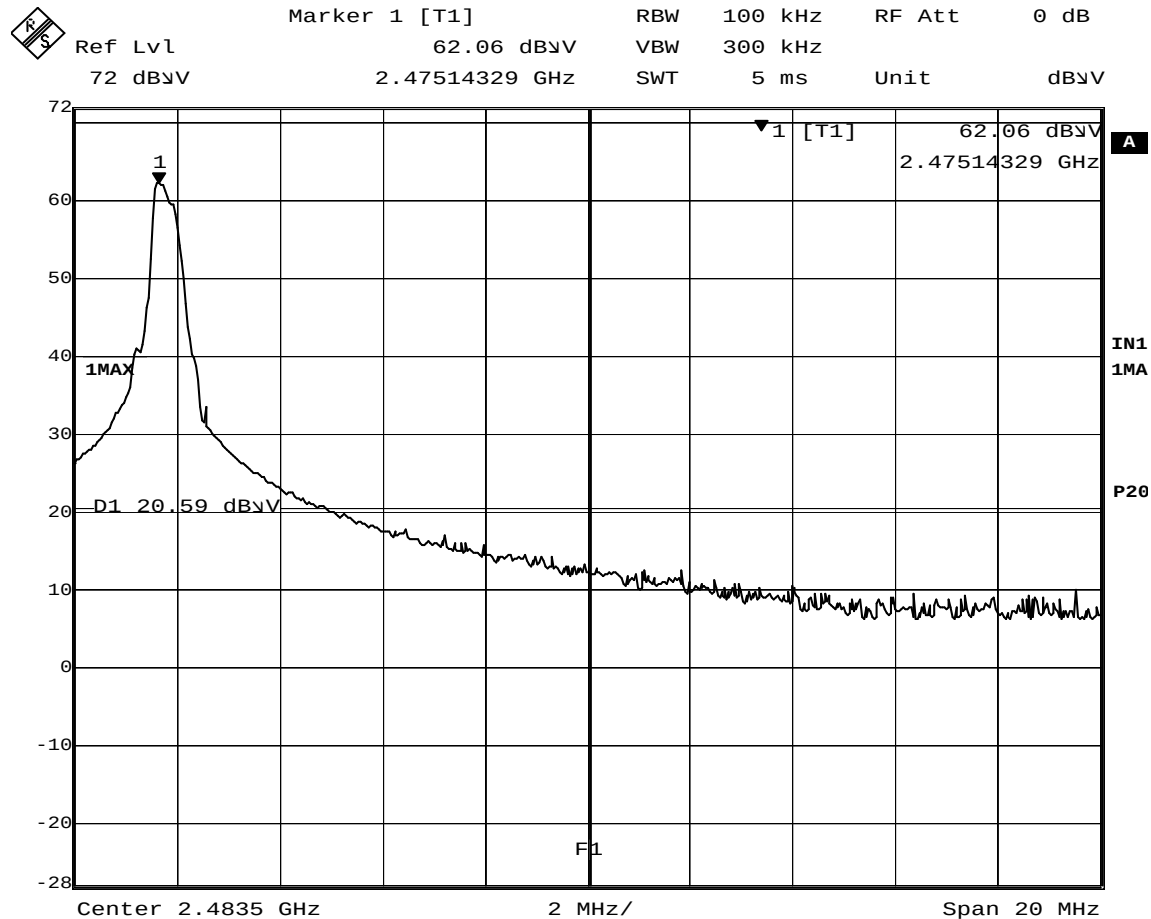
NOTES:



Date: 1.JUN.2006 13:07:03

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.401GHz
TEST PARAMETERS : Bandedge compliance
NOTES : High Power, ext. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:

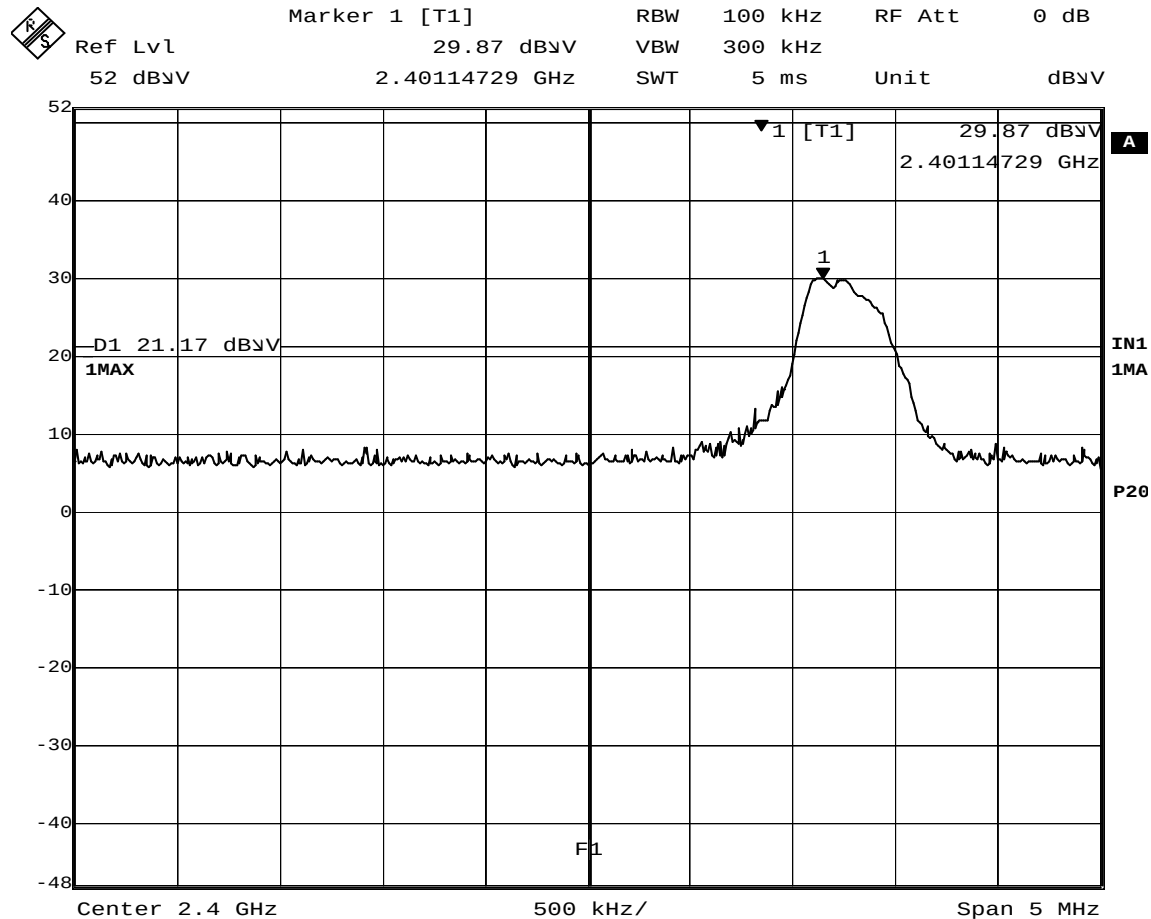


Date: 1.JUN.2006 13:17:10

Marker Delta Method: 95.4dBuV/m - 54 dBuV/m = 41.4 dB down

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.475GHz
TEST PARAMETERS : Bandedge compliance
NOTES : High Power, ext. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:

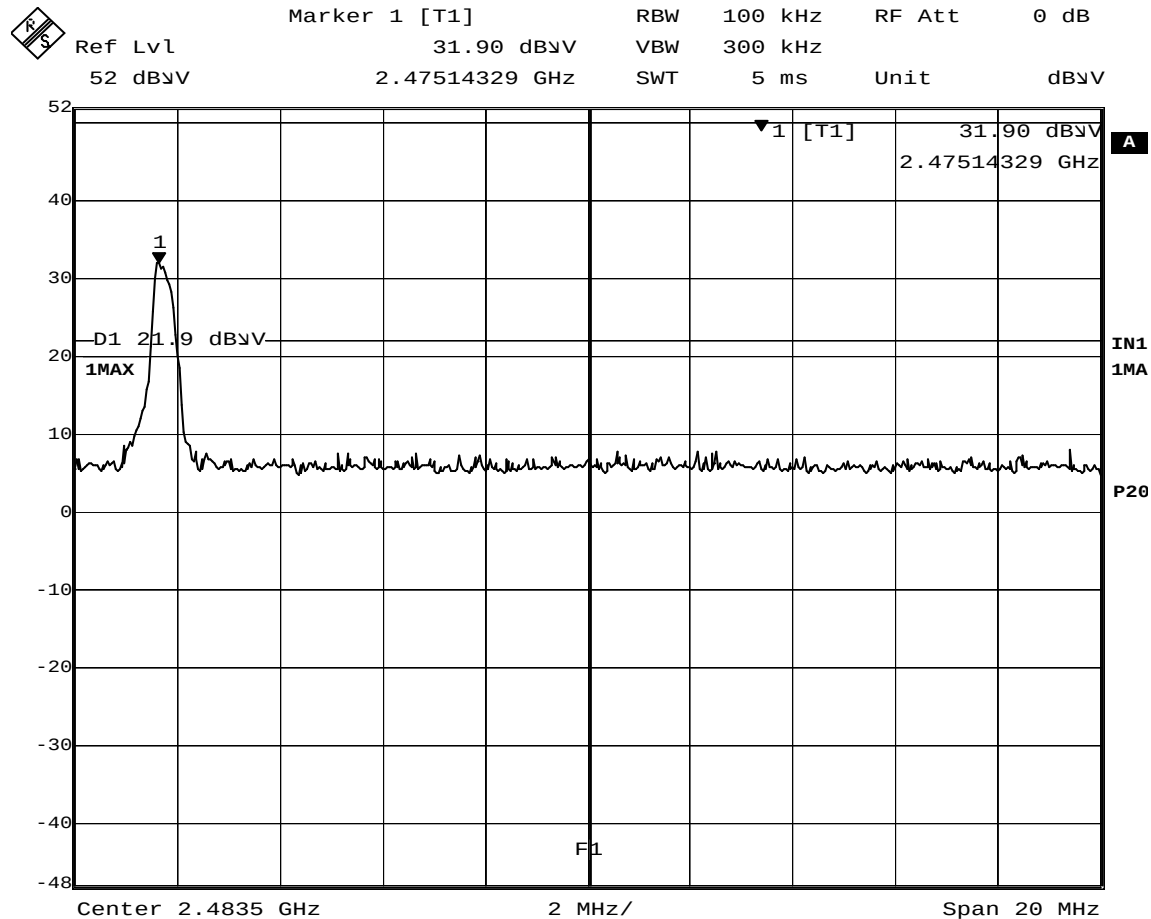


Date: 1.JUN.2006 12:52:36

Marker Delta Method: 62.7dBuV/m - 54 dBuV/m = 8.7 dB down

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.401GHz
TEST PARAMETERS : Bandedge compliance
NOTES : Low Power, int. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:

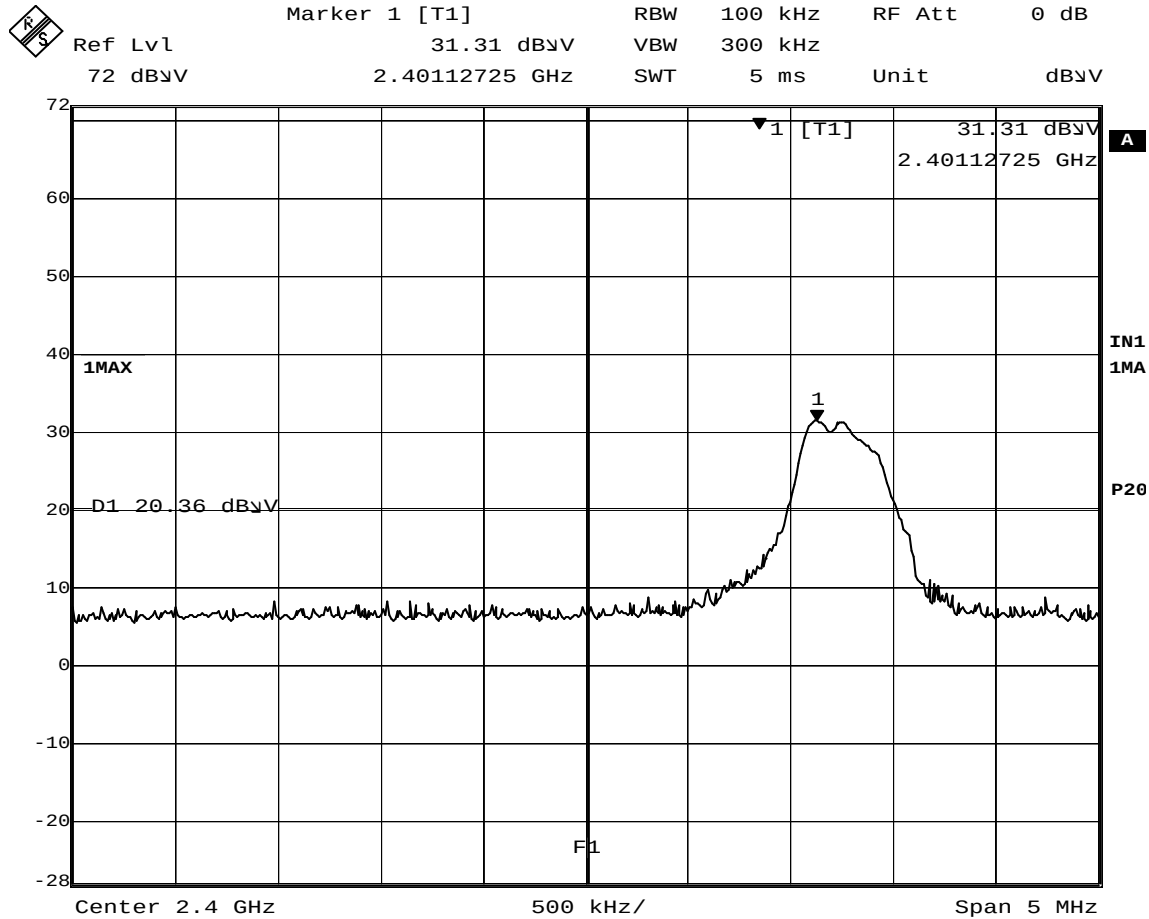


Date: 1.JUN.2006 12:47:36

Marker Delta Method: 64dBuV/m - 54 dBuV/m = 10 dB down

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.475GHz
TEST PARAMETERS : Bandedge compliance
NOTES : Low Power, int. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:

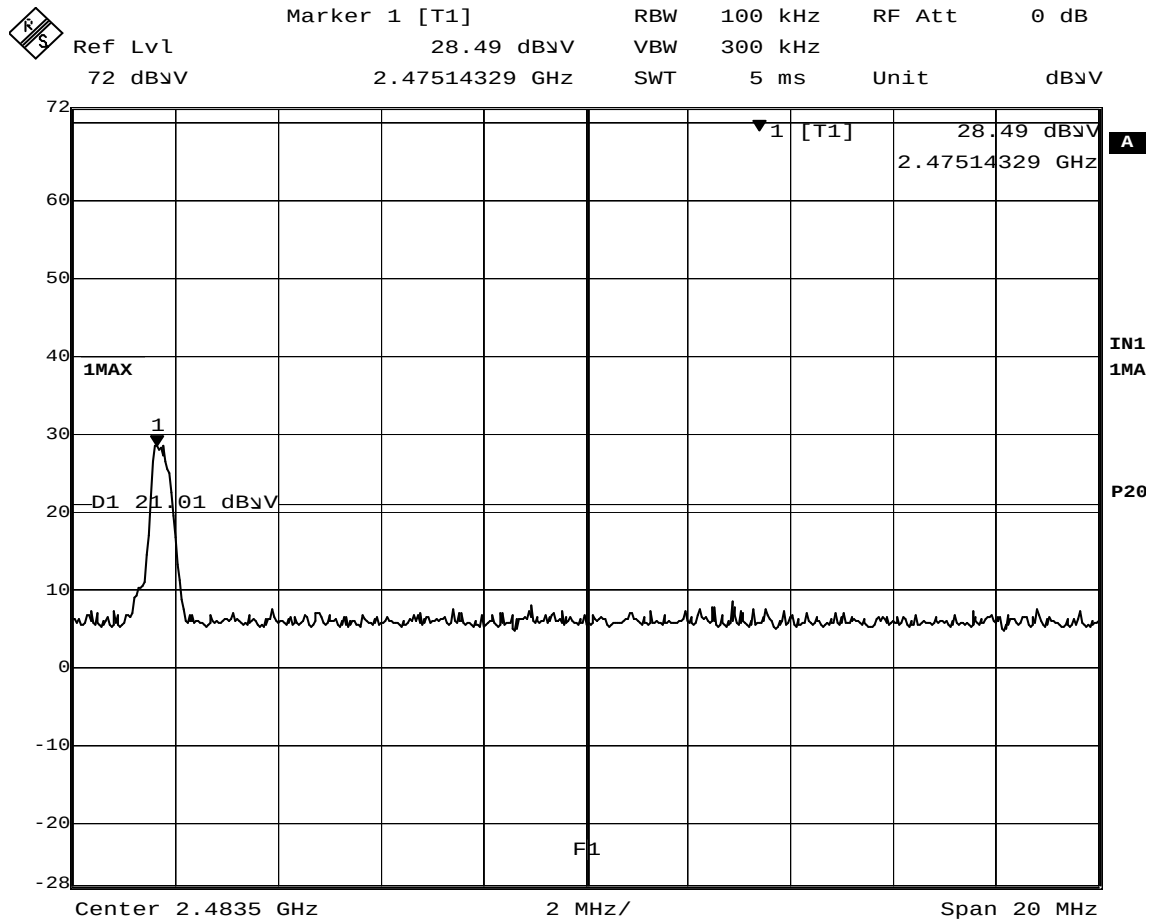


Date: 1.JUN.2006 13:42:33

Marker Delta Method: 64.9 dBuV/m - 54 dBuV/m = 10.9 dB down

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Tx @ 2.401GHz
 TEST PARAMETERS : Bandedge compliance
 NOTES : Low Power, ext. antenna, PoE
 EQUIPMENT USED : RBA0

NOTES:

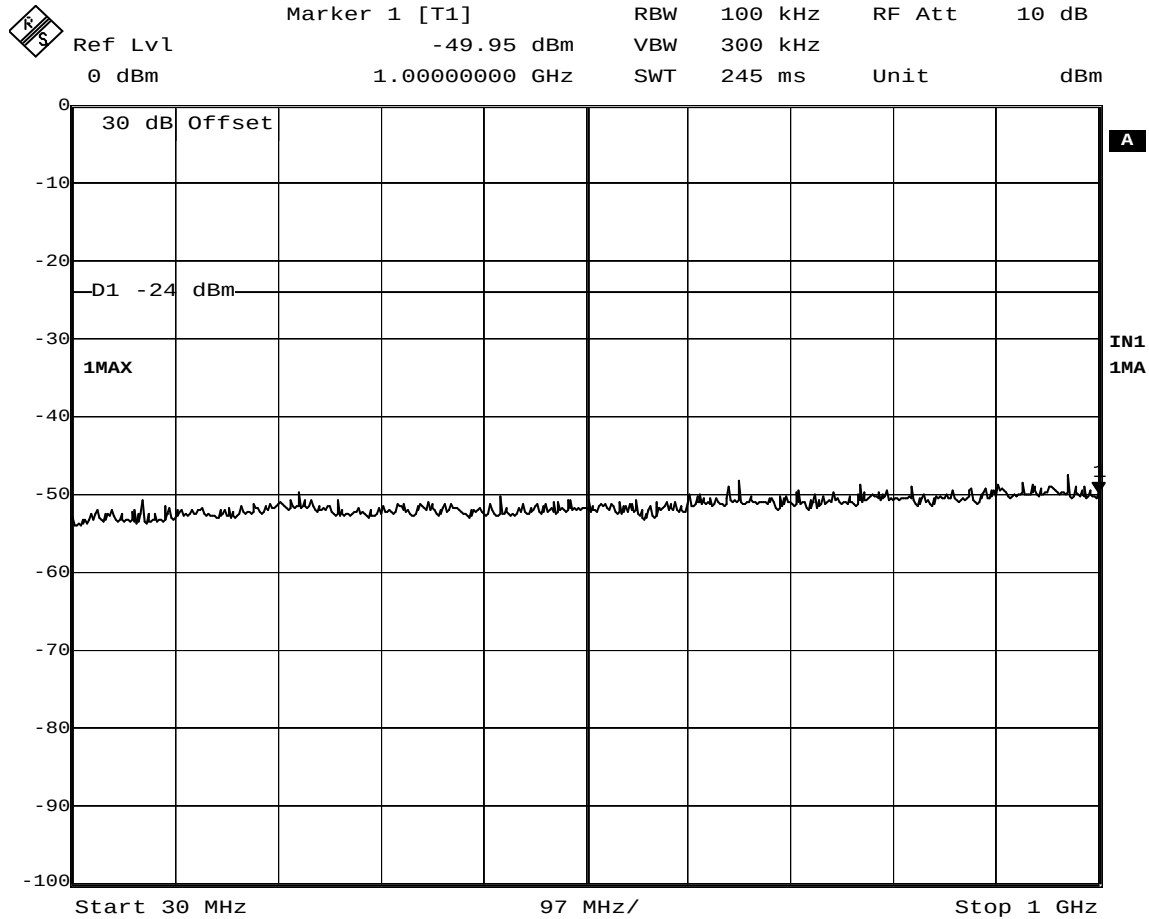


Date: 1.JUN.2006 13:30:34

Marker Delta Method: 61.3 dBμV/m - 54 dBμV/m = 7.3 dB down

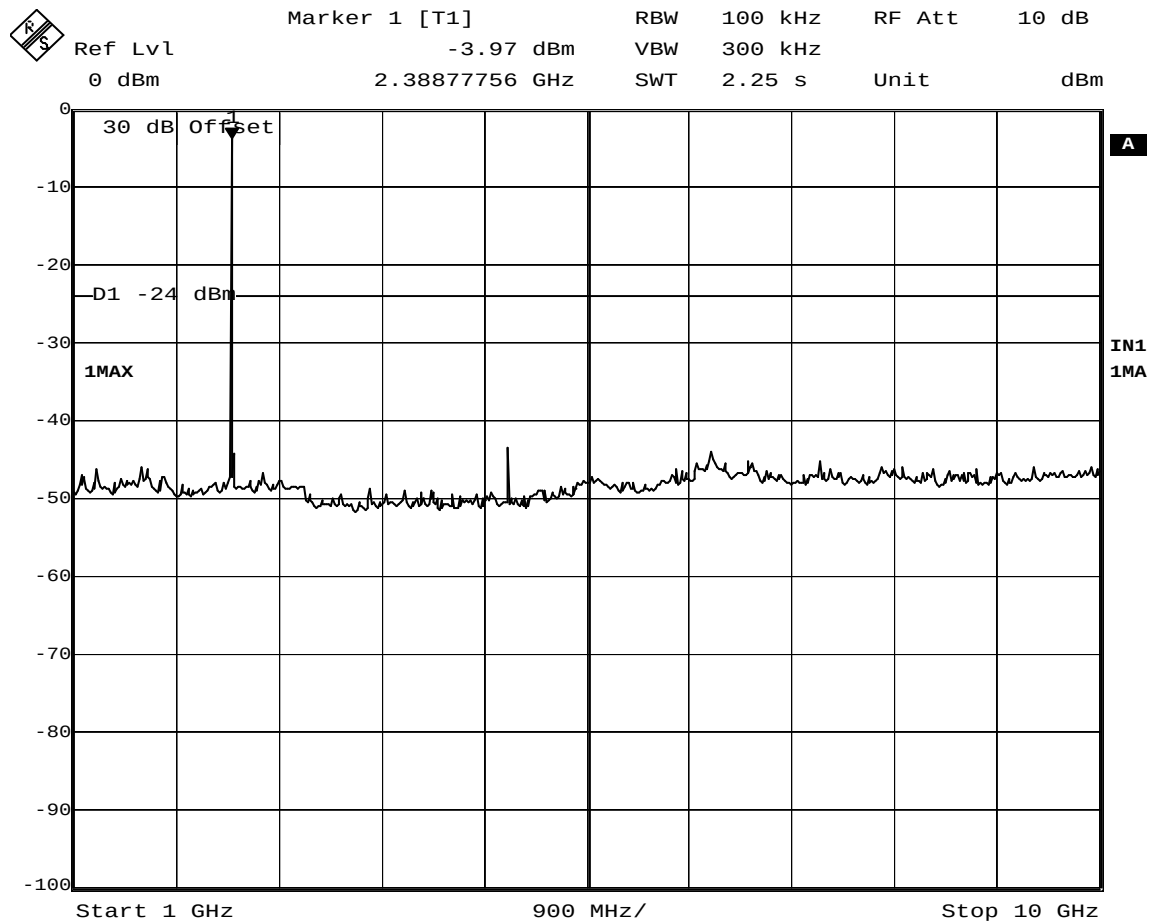
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Tx @ 2.475GHz
TEST PARAMETERS : Bandedge compliance
NOTES : Low Power, ext. antenna, PoE
EQUIPMENT USED : RBA0

NOTES:



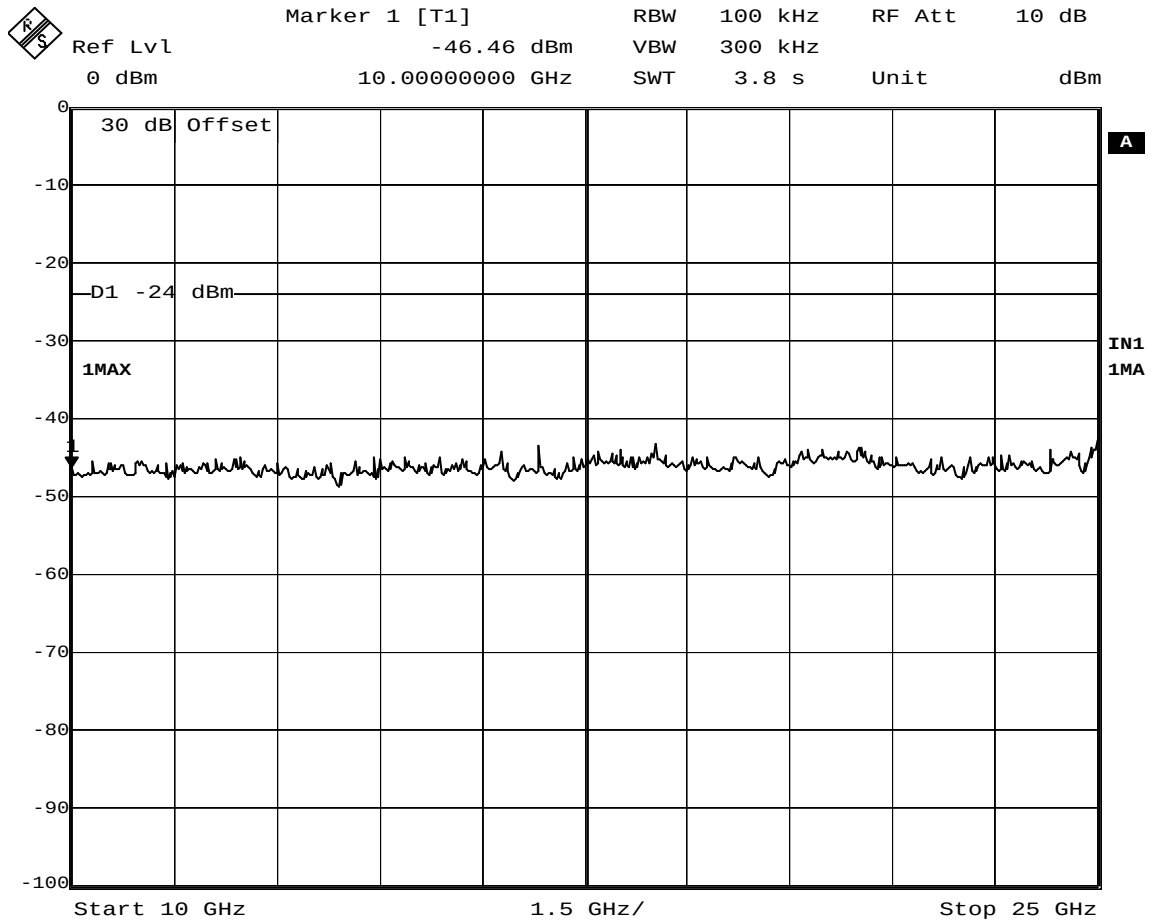
Date: 25.MAY.2006 15:21:13

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.401GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9



NOTES Date: 25.MAY.2006 15:19:45

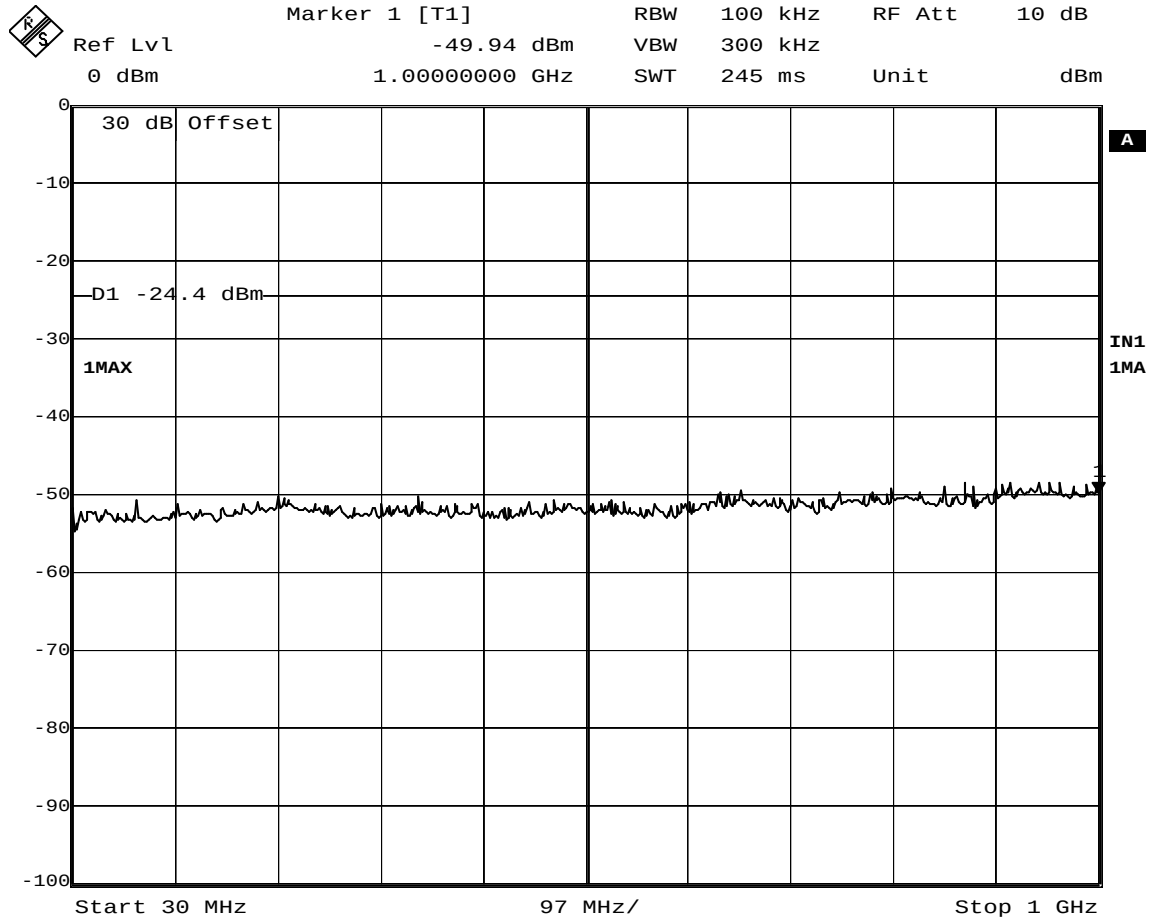
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.401GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9



NOTES Date: 25.MAY.2006 15:22:23

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.401GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9

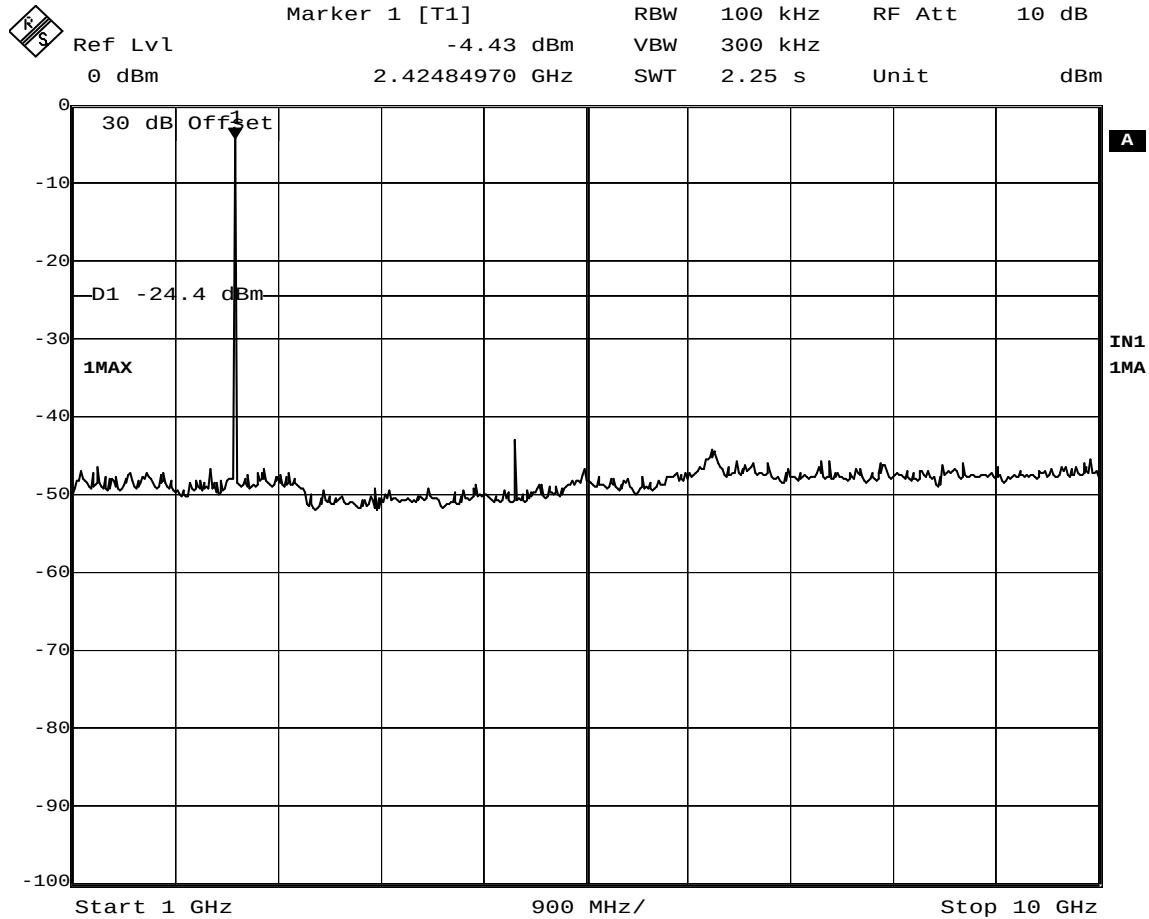
NOTES



Date: 25.MAY.2006 15:25:13

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.435GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9

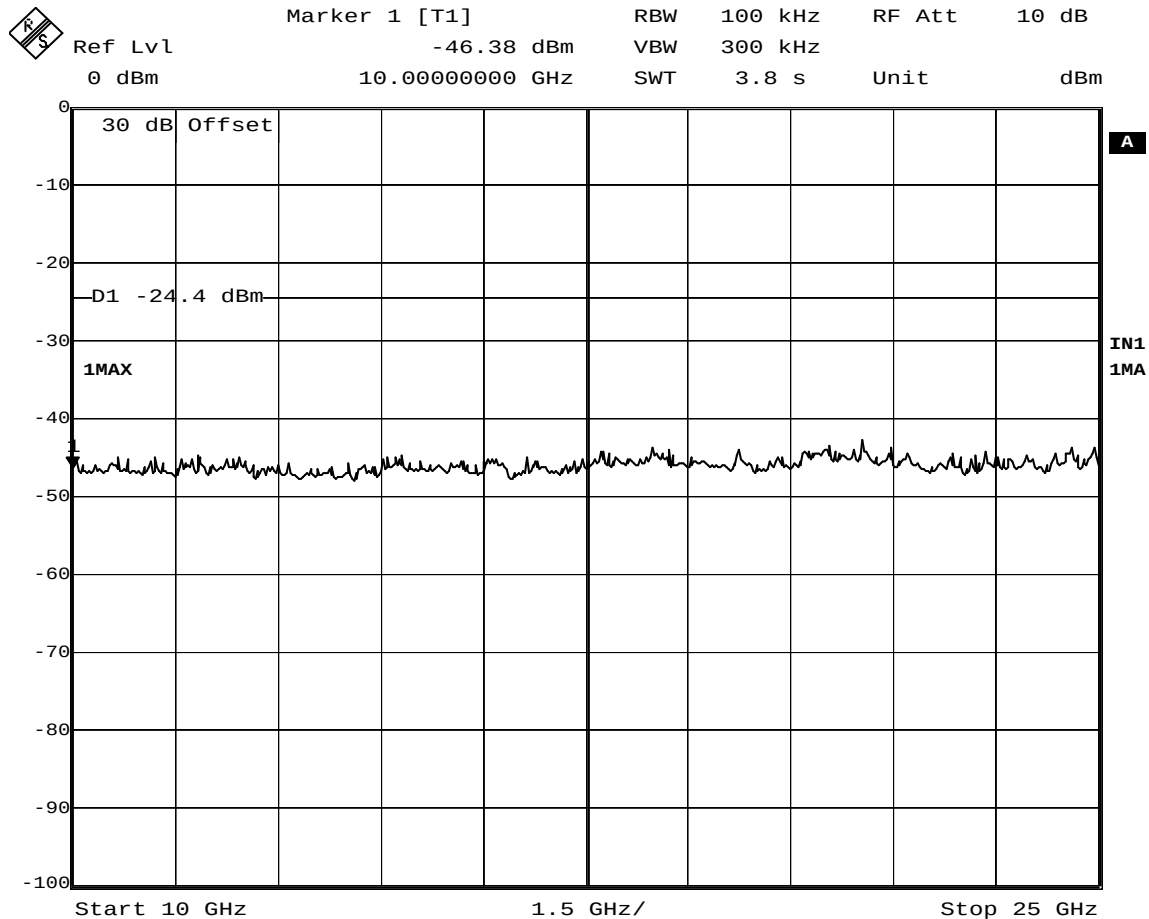
NOTES



Date: 25.MAY.2006 15:24:03

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.435GHz, High Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0,T1E8,T2D9

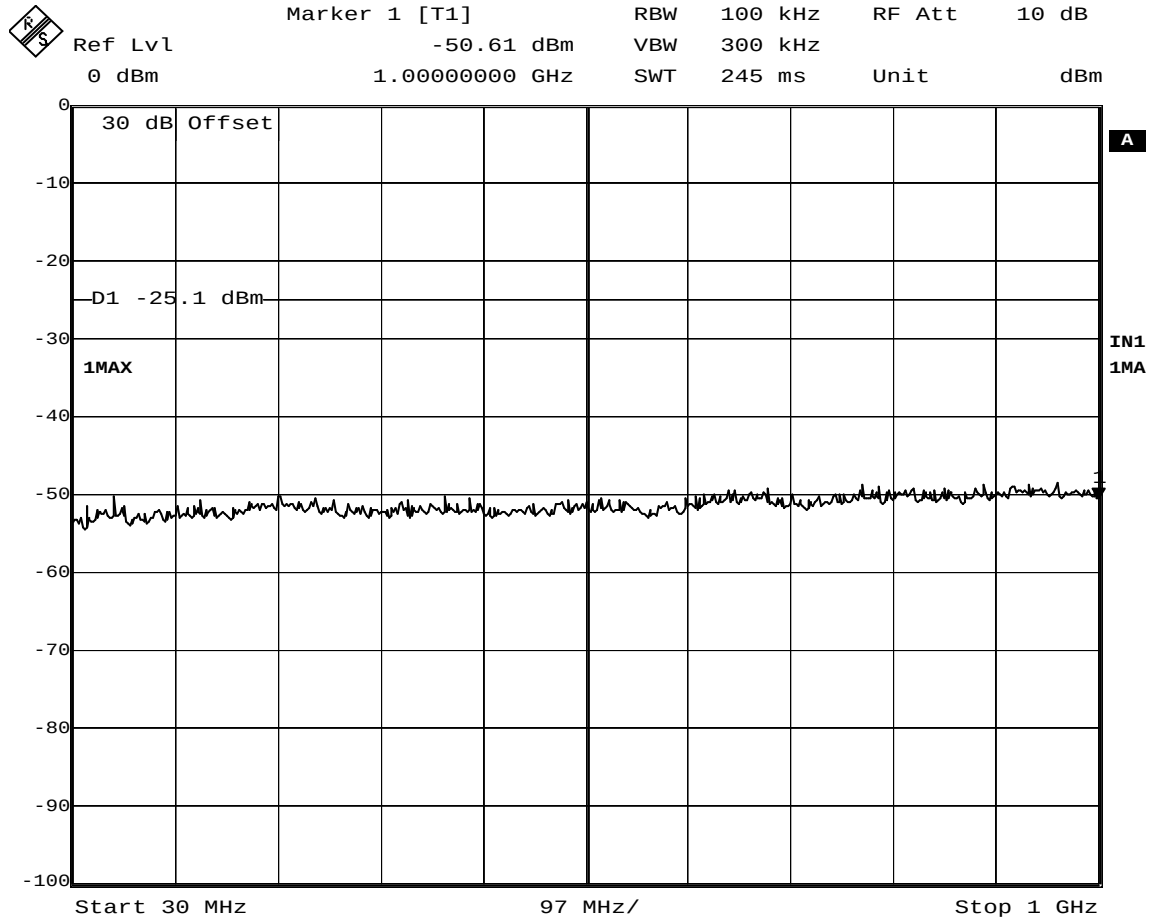
NOTES



Date: 25.MAY.2006 15:26:40

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.435GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9

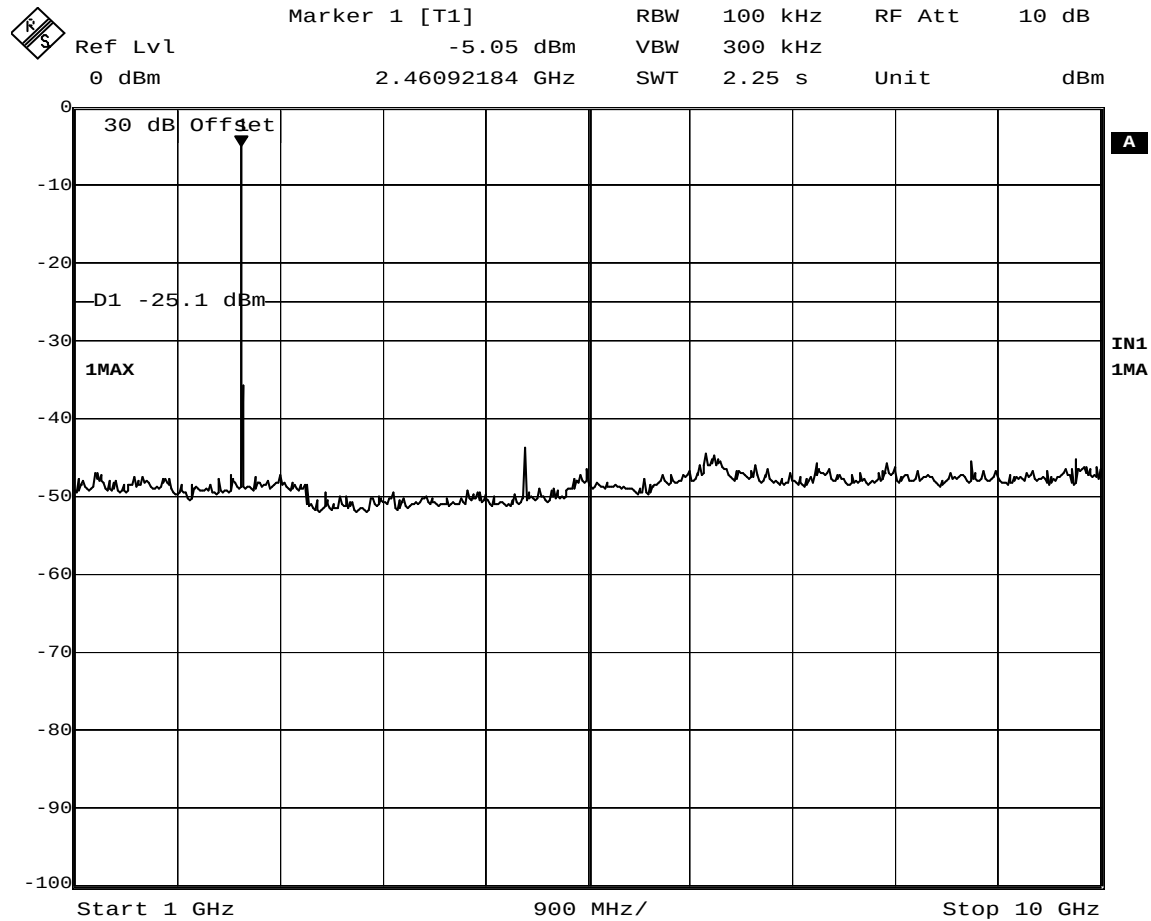
NOTES



Date: 25.MAY.2006 15:29:48

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.475GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9

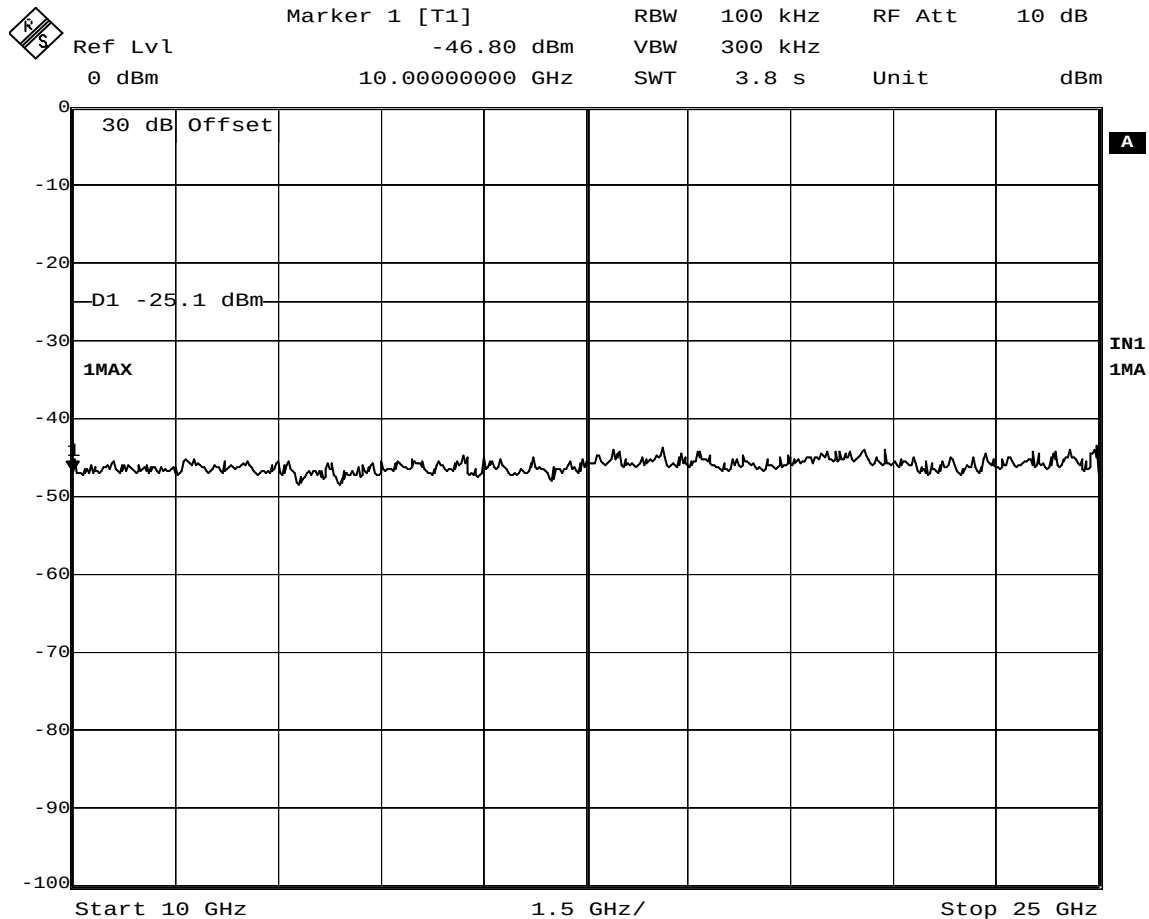
NOTES



Date: 25.MAY.2006 15:28:18

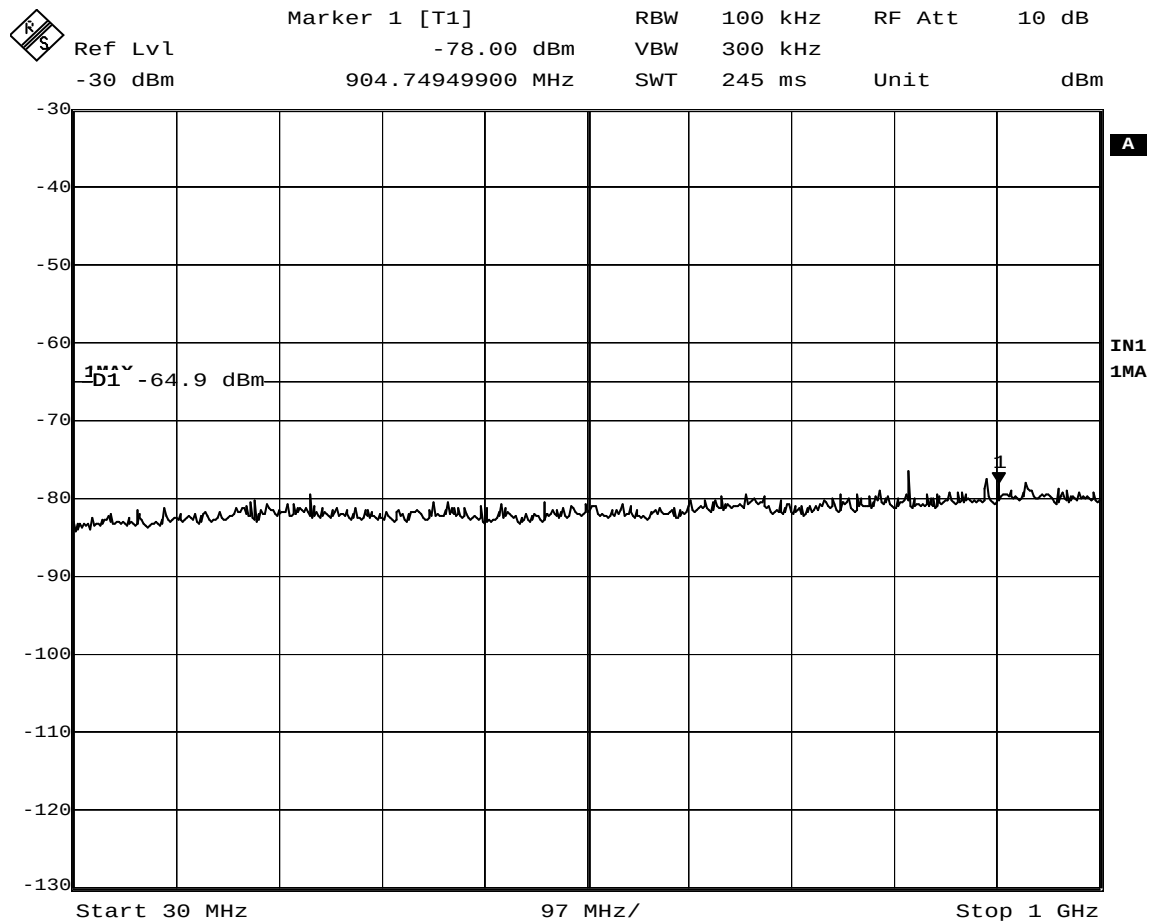
MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.475GHz, High Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0,T1E8,T2D9

NOTES



Date: 25.MAY.2006 15:31:27

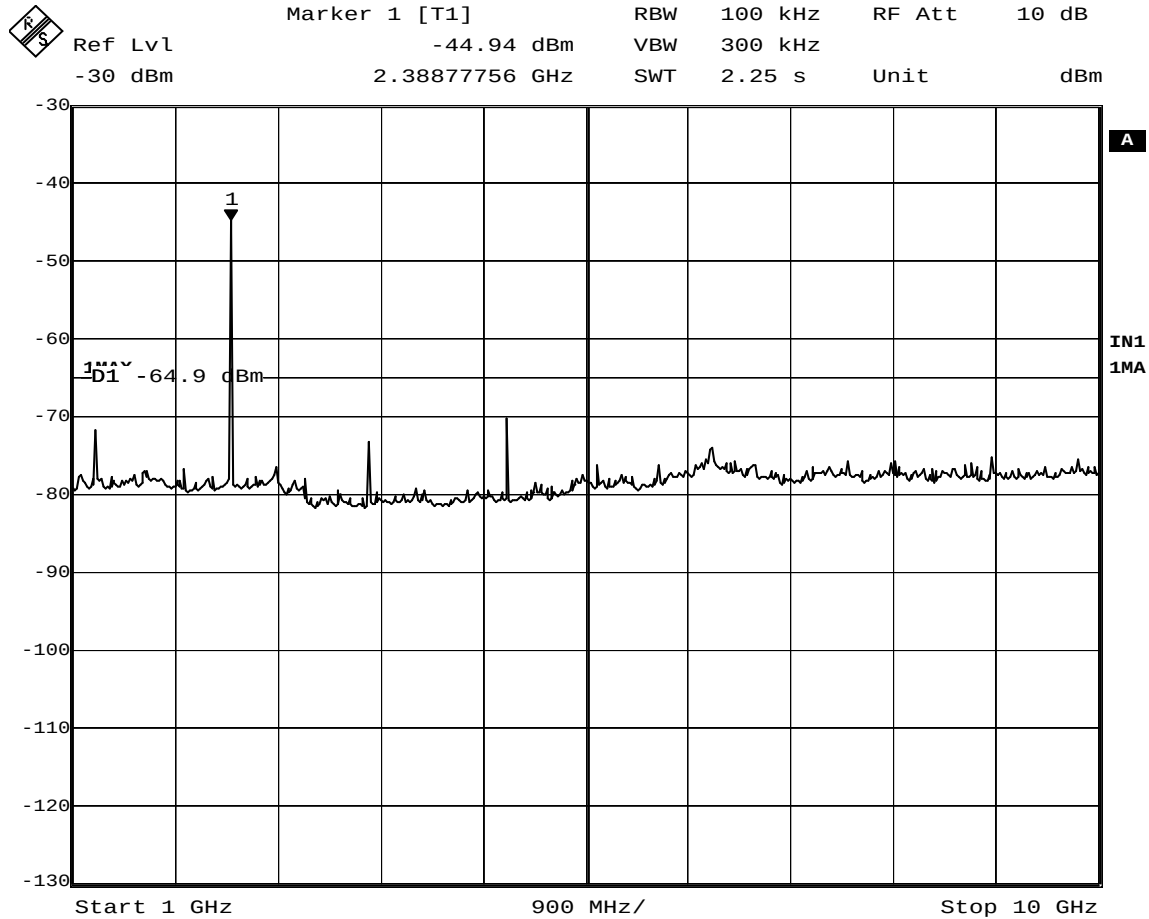
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.475GHz, High Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0,T1E8,T2D9



NOTES Date: 25.MAY.2006 14:13:43

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

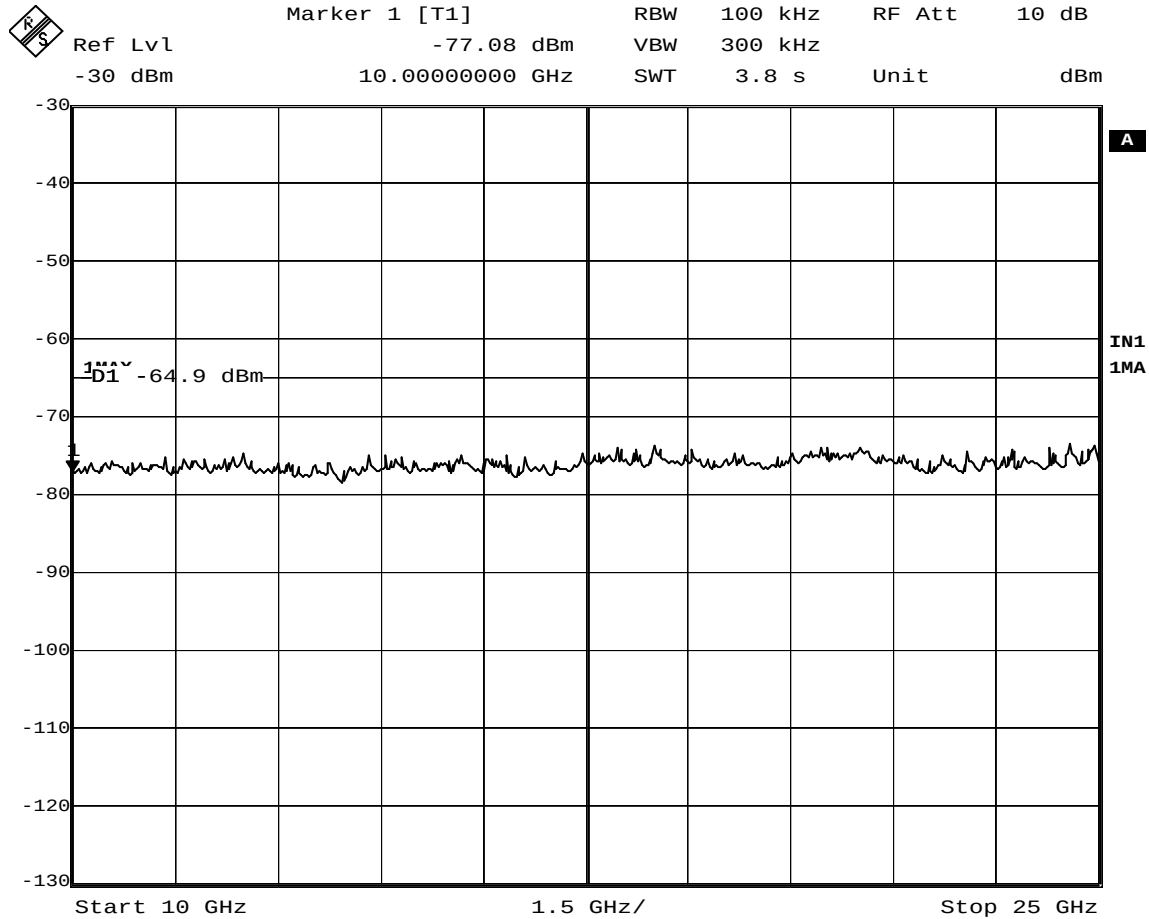
NOTES



Date: 25.MAY.2006 14:12:21

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

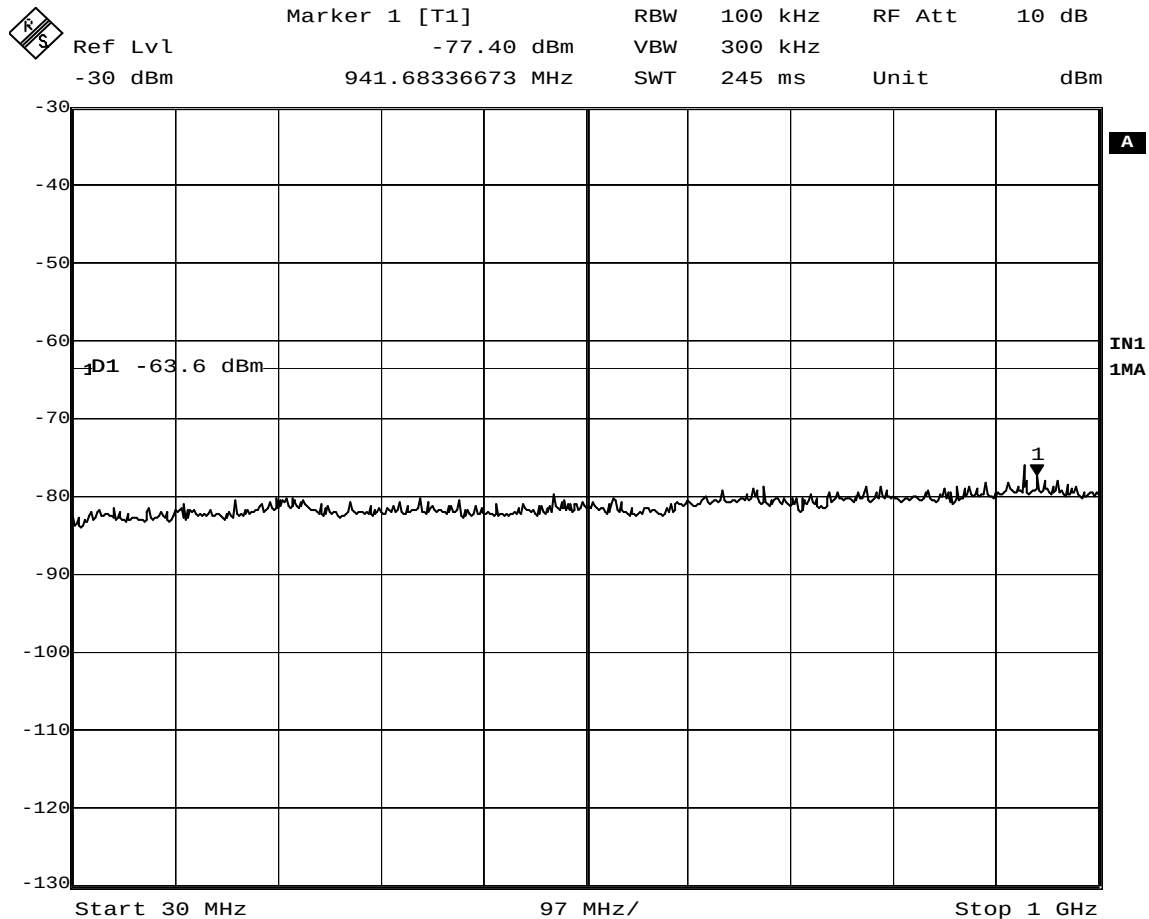
NOTES



Date: 25.MAY.2006 14:15:27

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.401GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

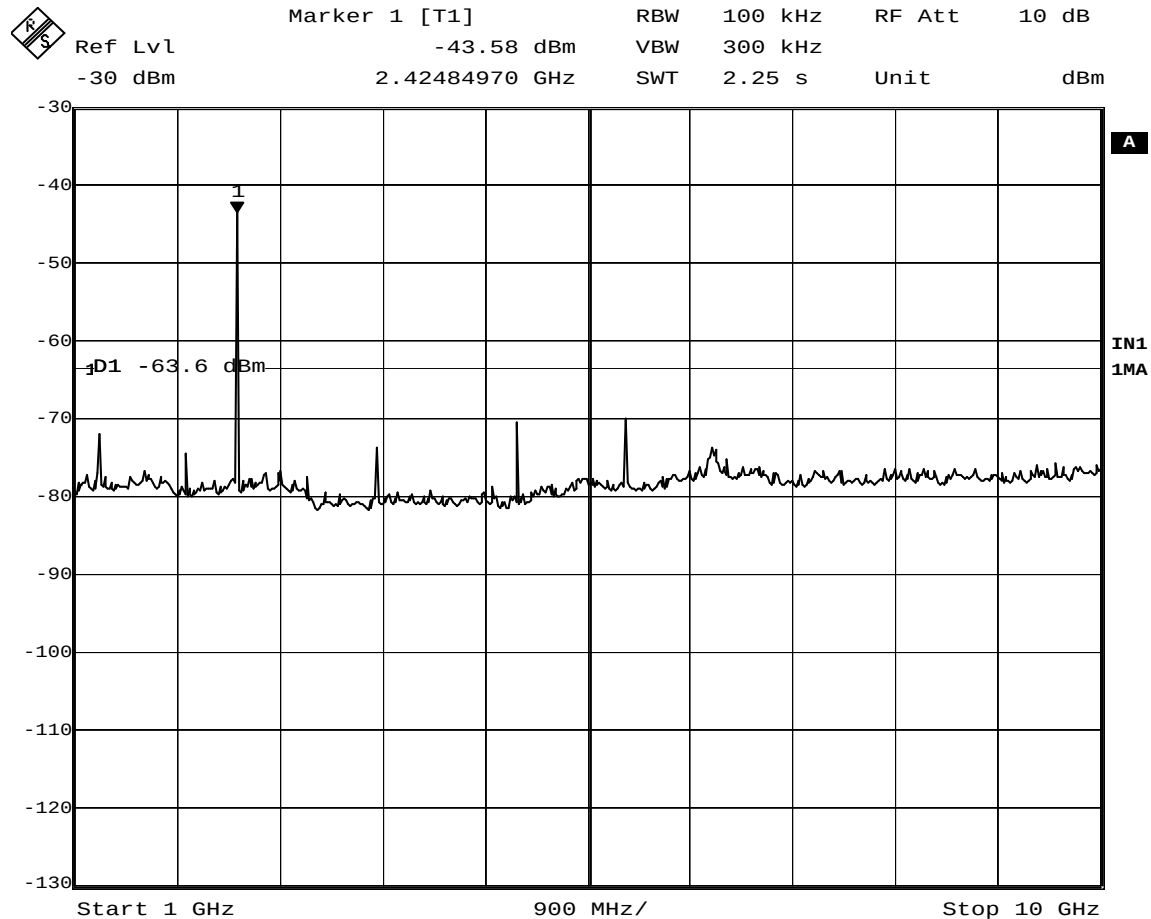
NOTES



Date: 25.MAY.2006 14:19:15

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

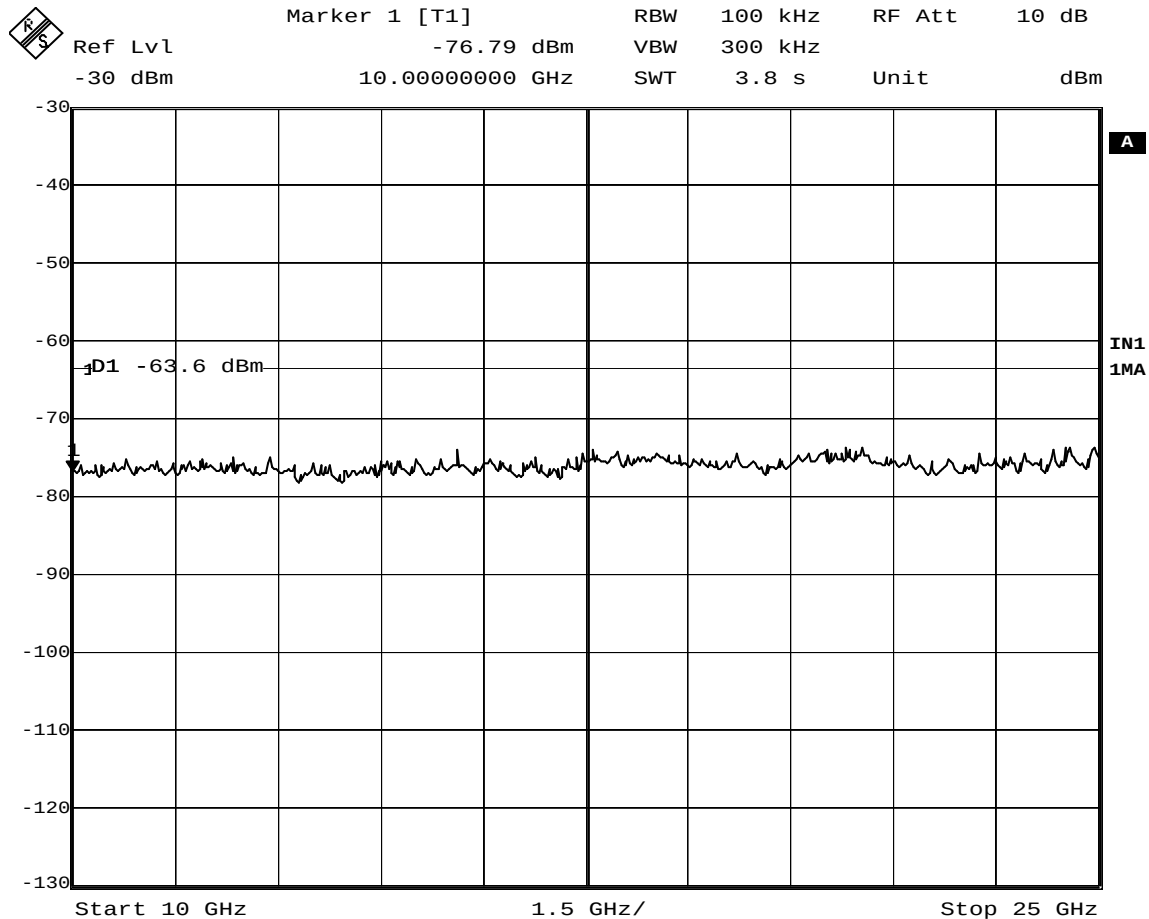
NOTES



Date: 25.MAY.2006 14:17:26

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

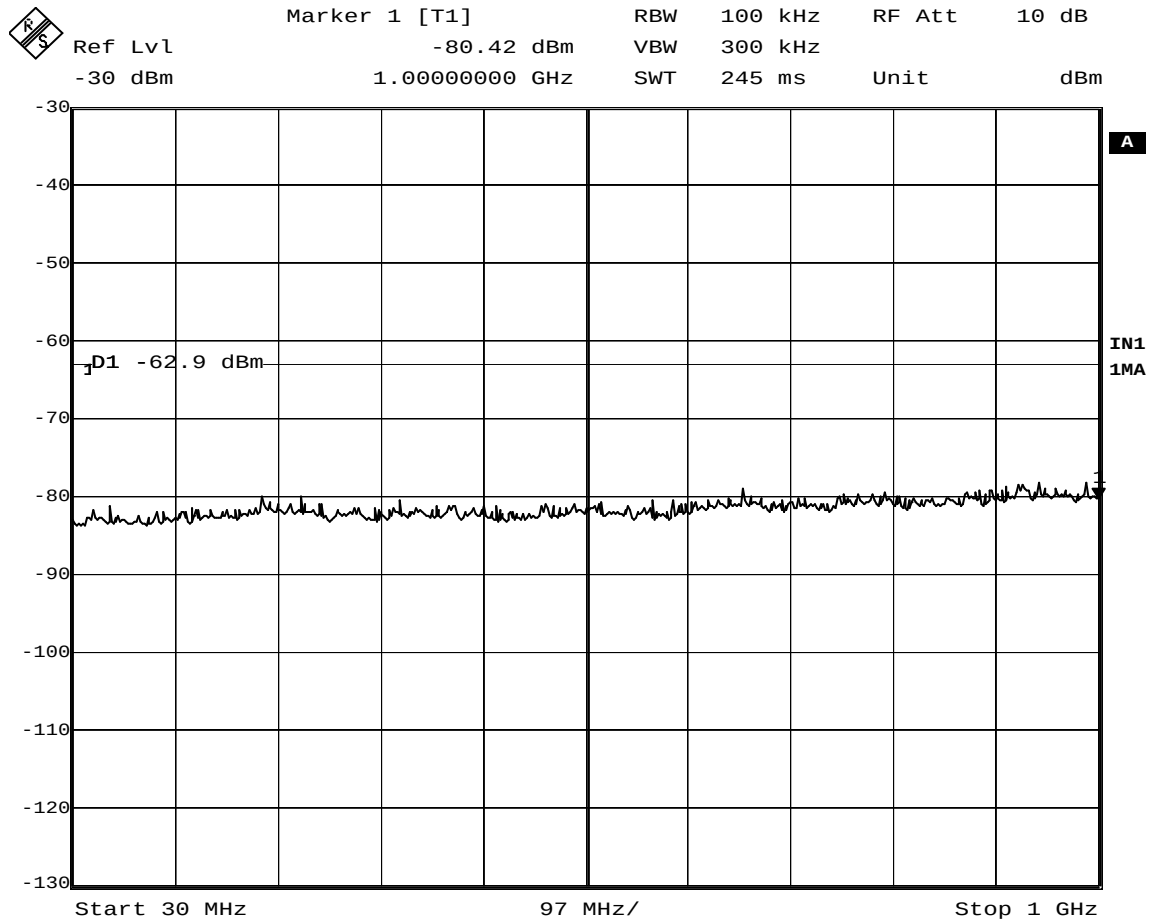
NOTES



Date: 25.MAY.2006 14:20:42

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.435GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

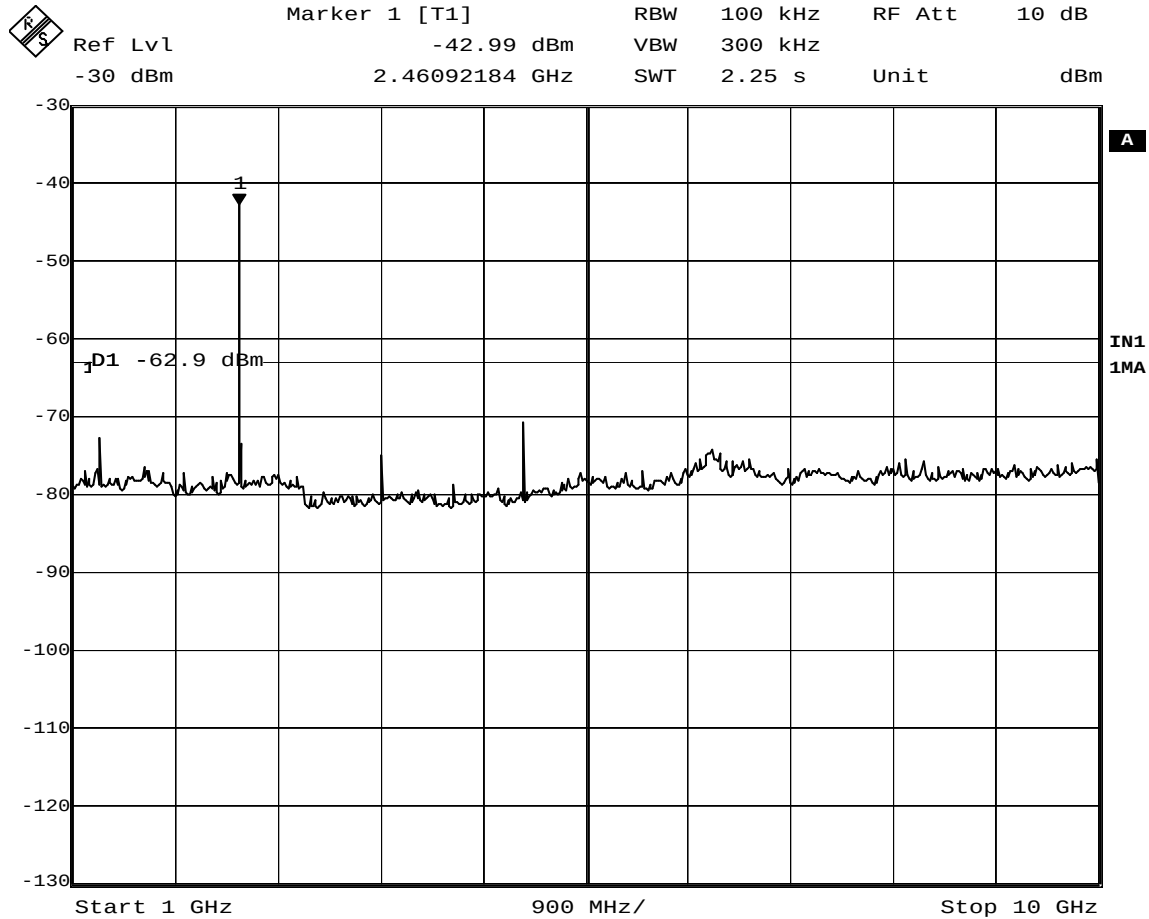
NOTES



Date: 25.MAY.2006 14:23:51

MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

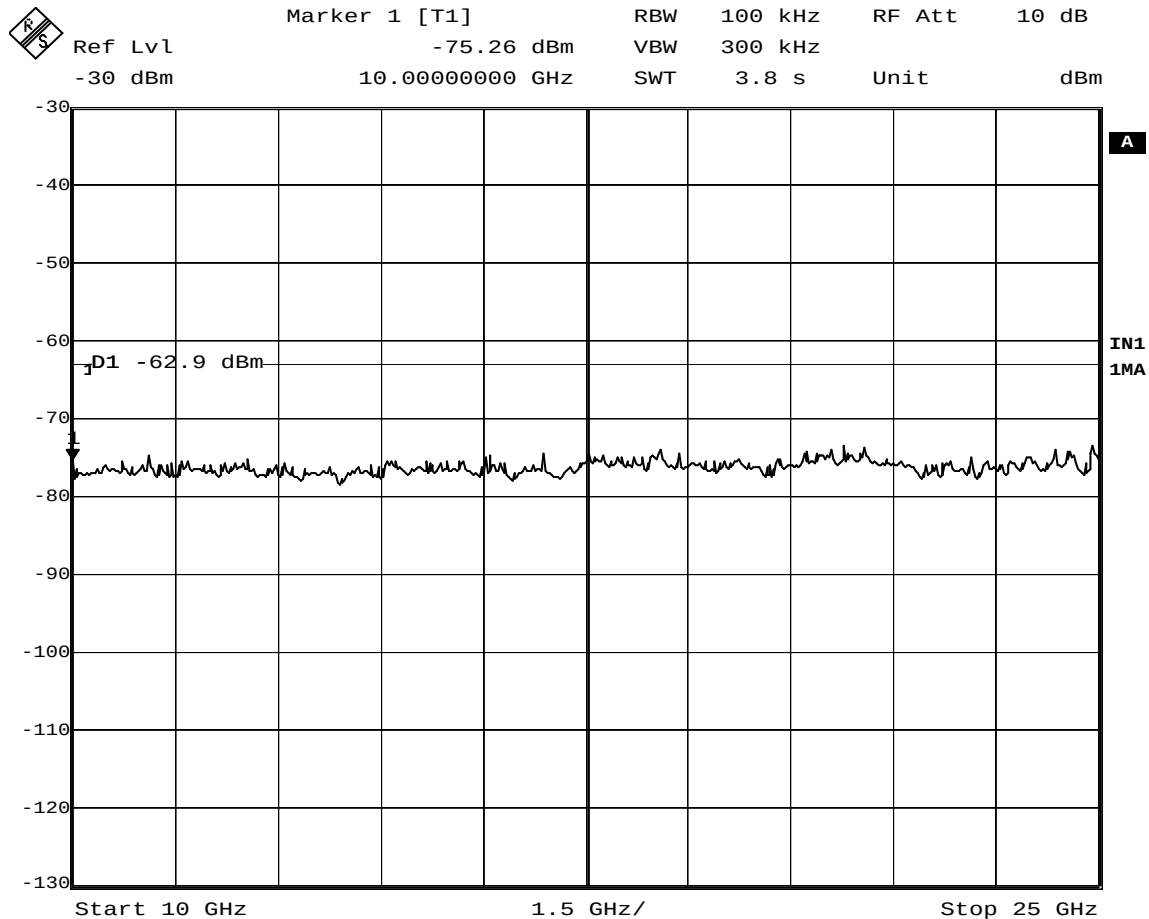
NOTES



Date: 25.MAY.2006 14:22:37

MANUFACTURER : Fleetwood Group, Inc.
 MODEL NUMBER : Meridia Base Unit
 SERIAL NUMBER : 1
 TEST MODE : Spurious RF Conducted Emissions
 TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Ext. Antenna
 NOTES : PoE
 EQUIPMENT USED : RBA0

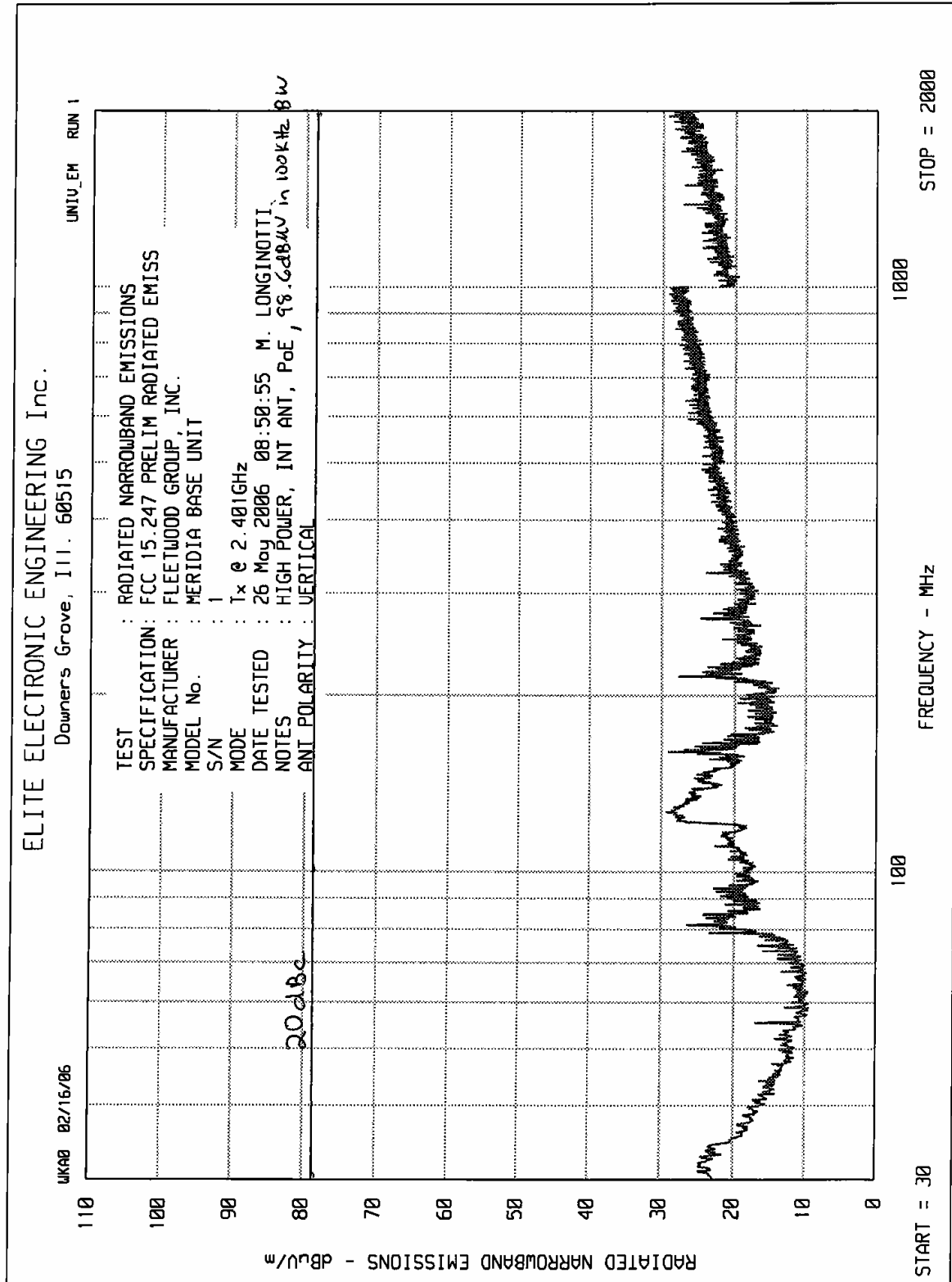
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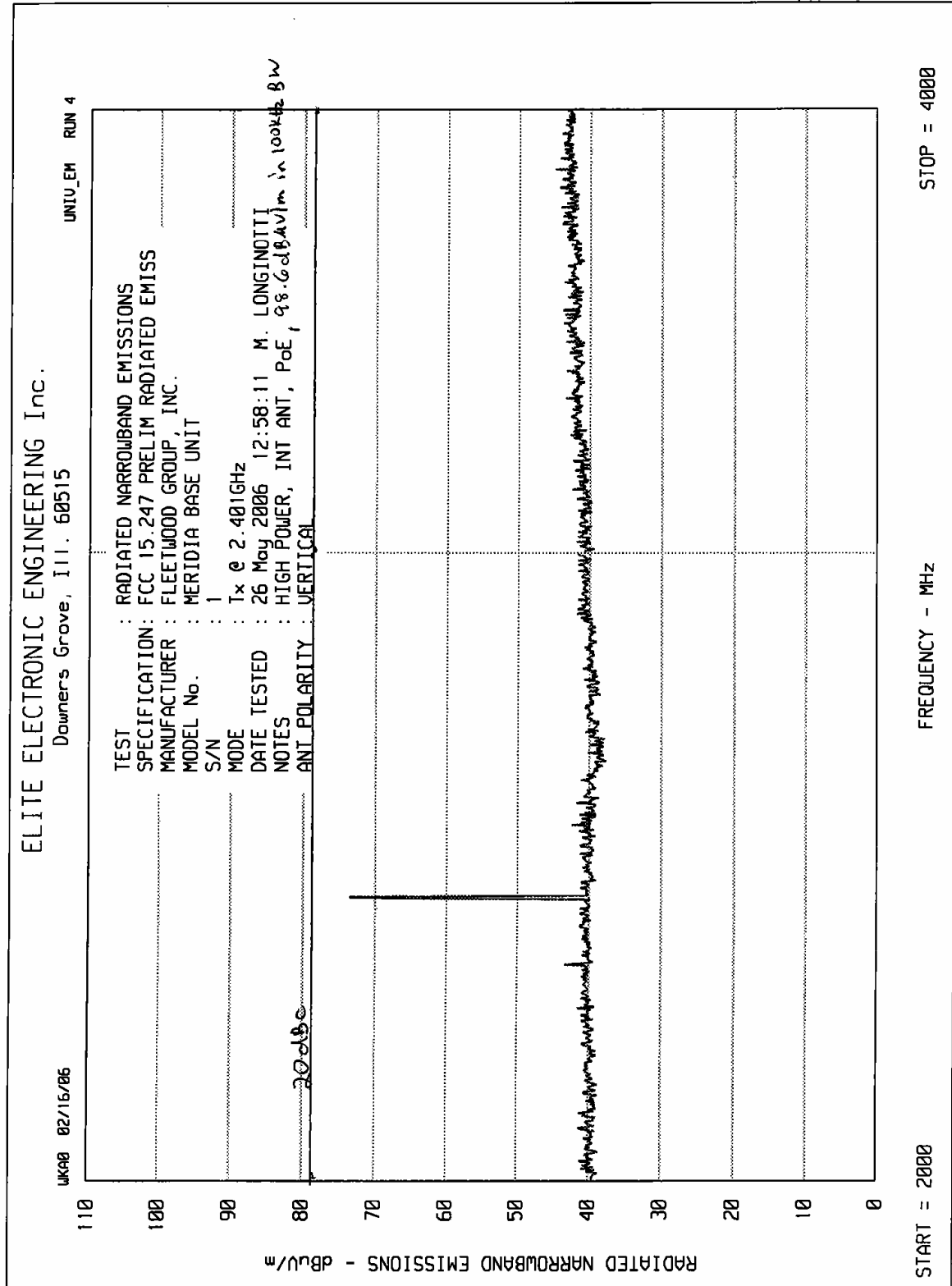


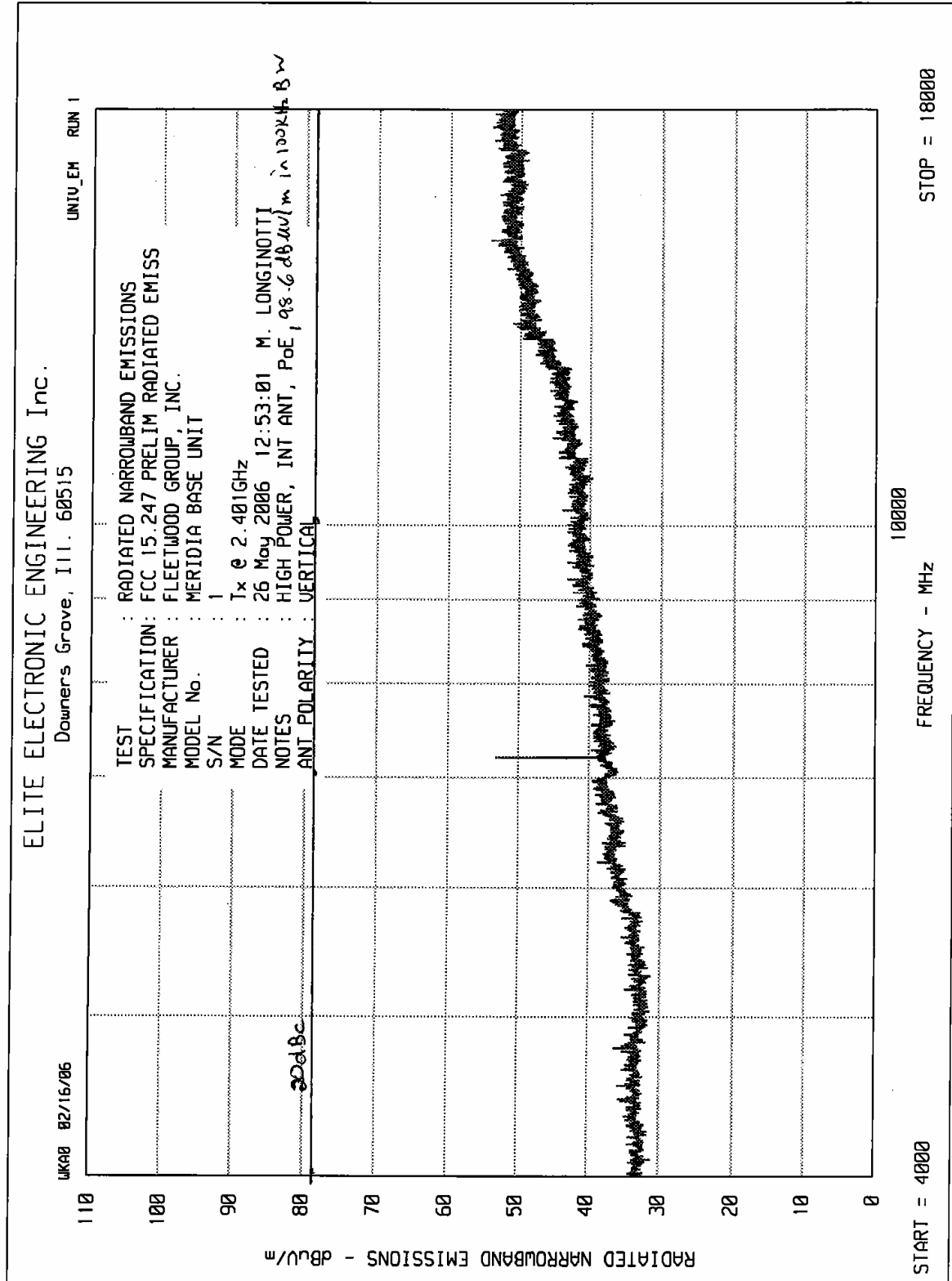
Date: 25.MAY.2006 14:25:01

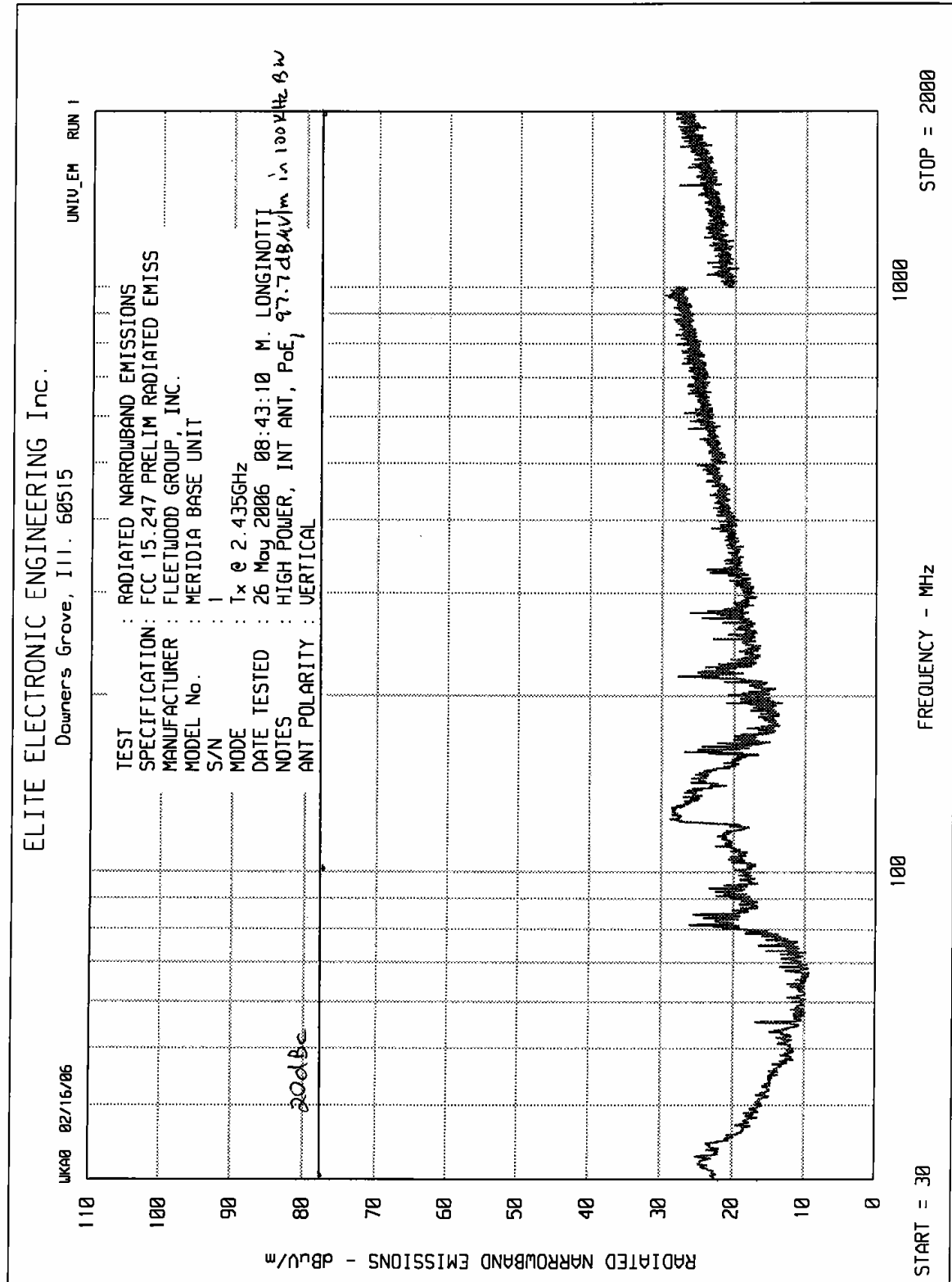
MANUFACTURER : Fleetwood Group, Inc.
MODEL NUMBER : Meridia Base Unit
SERIAL NUMBER : 1
TEST MODE : Spurious RF Conducted Emissions
TEST PARAMETERS : Tx @ 2.475GHz, Low Power, Ext. Antenna
NOTES : PoE
EQUIPMENT USED : RBA0

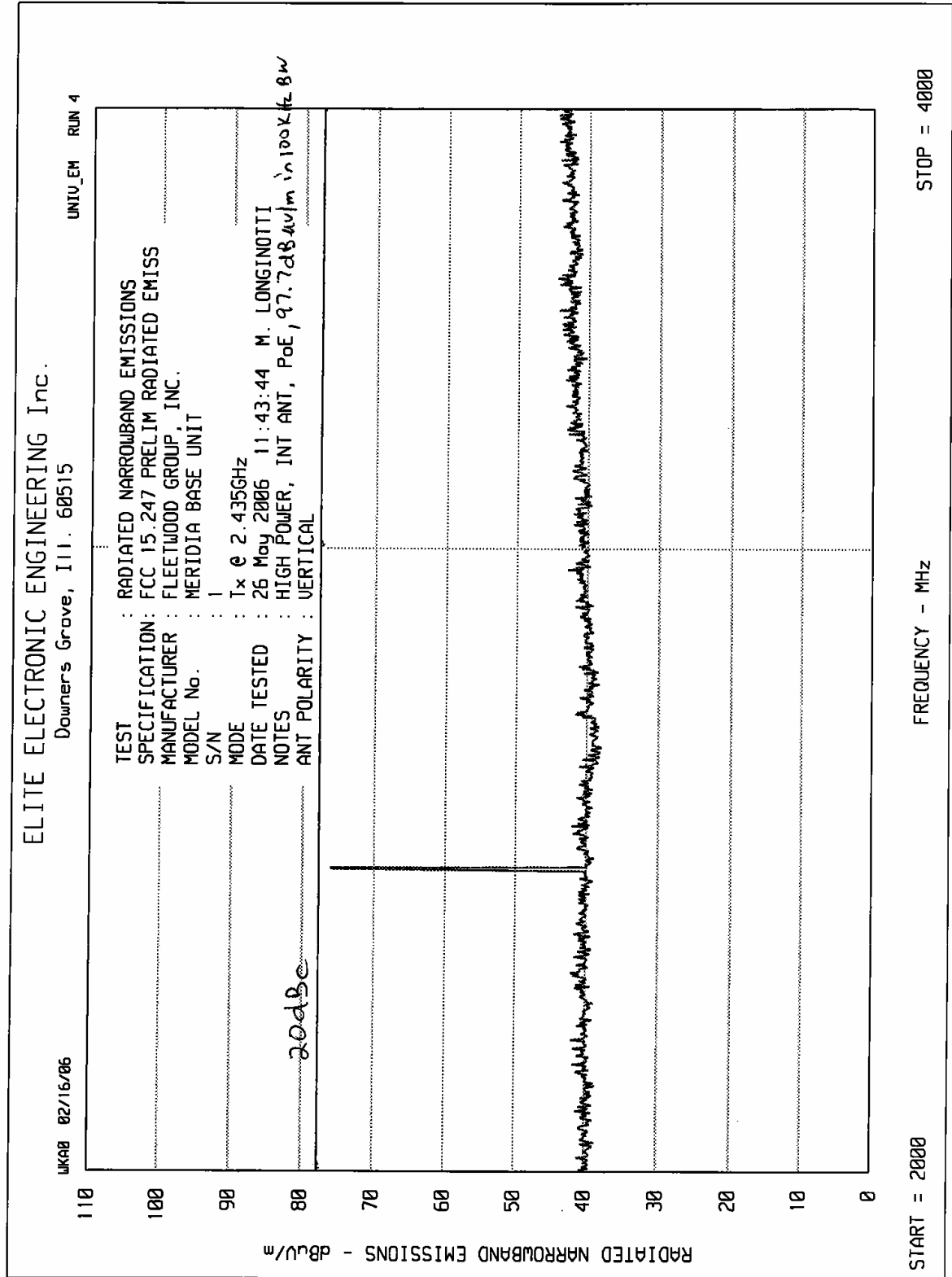
NOTES

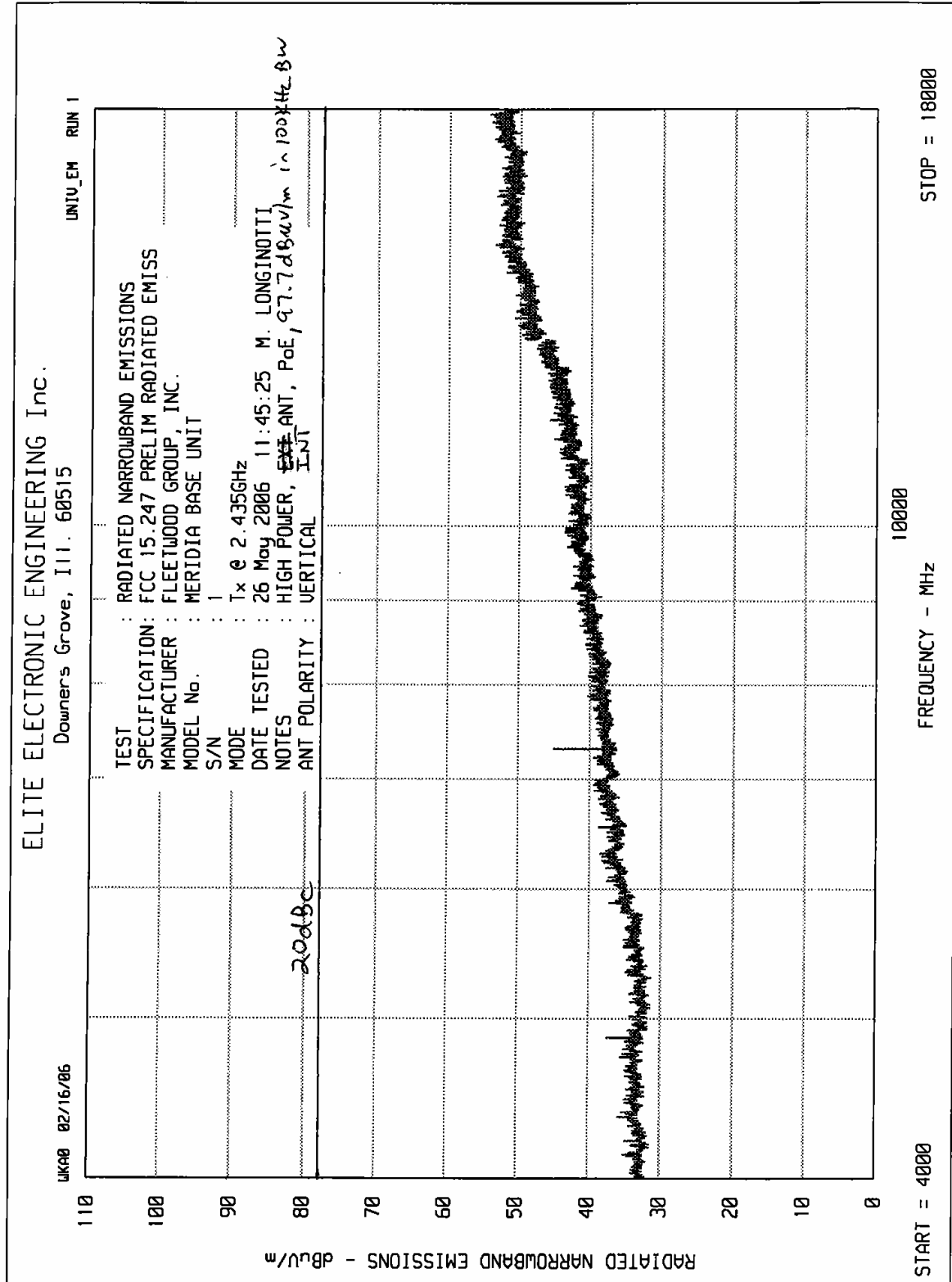


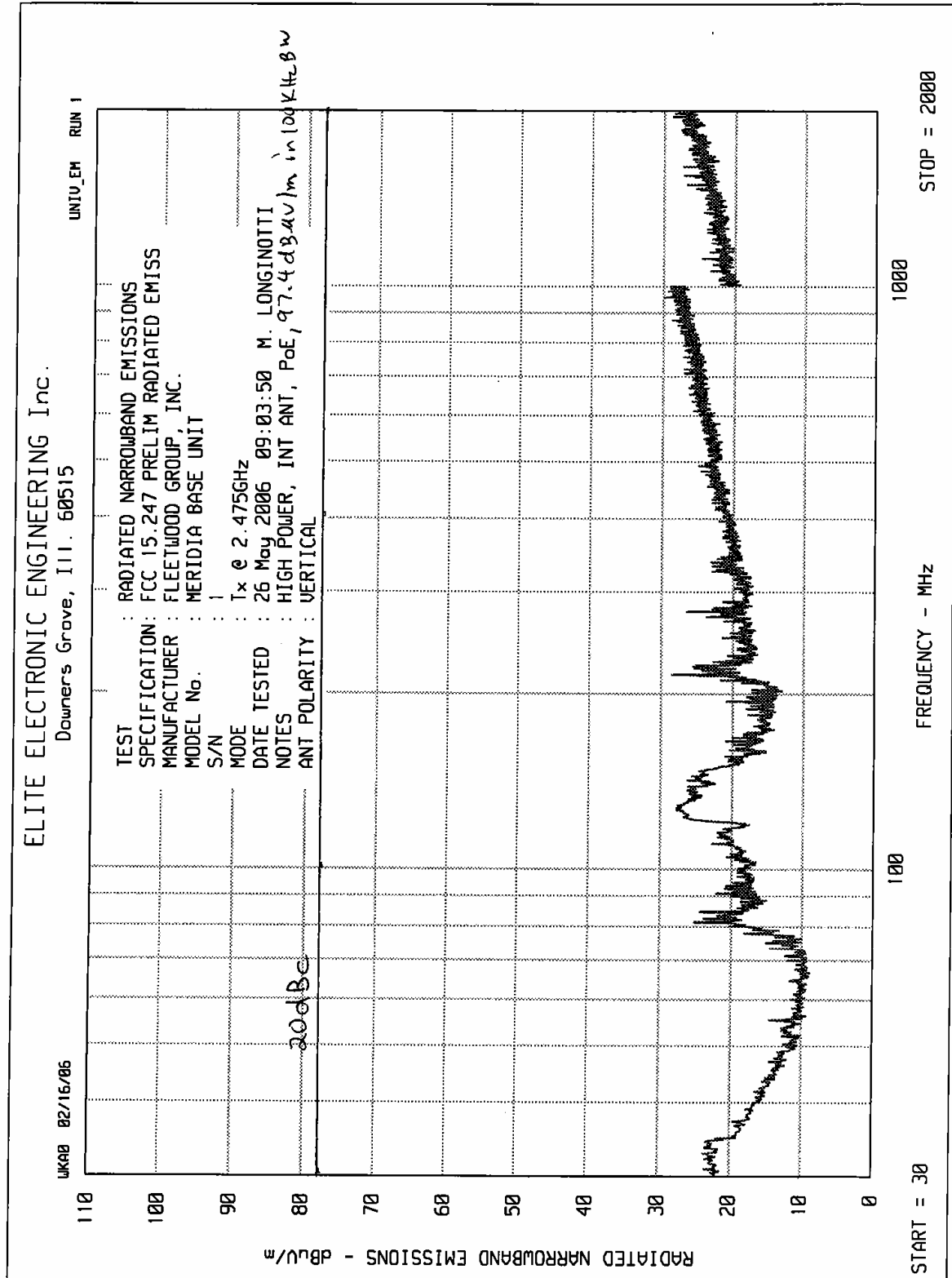


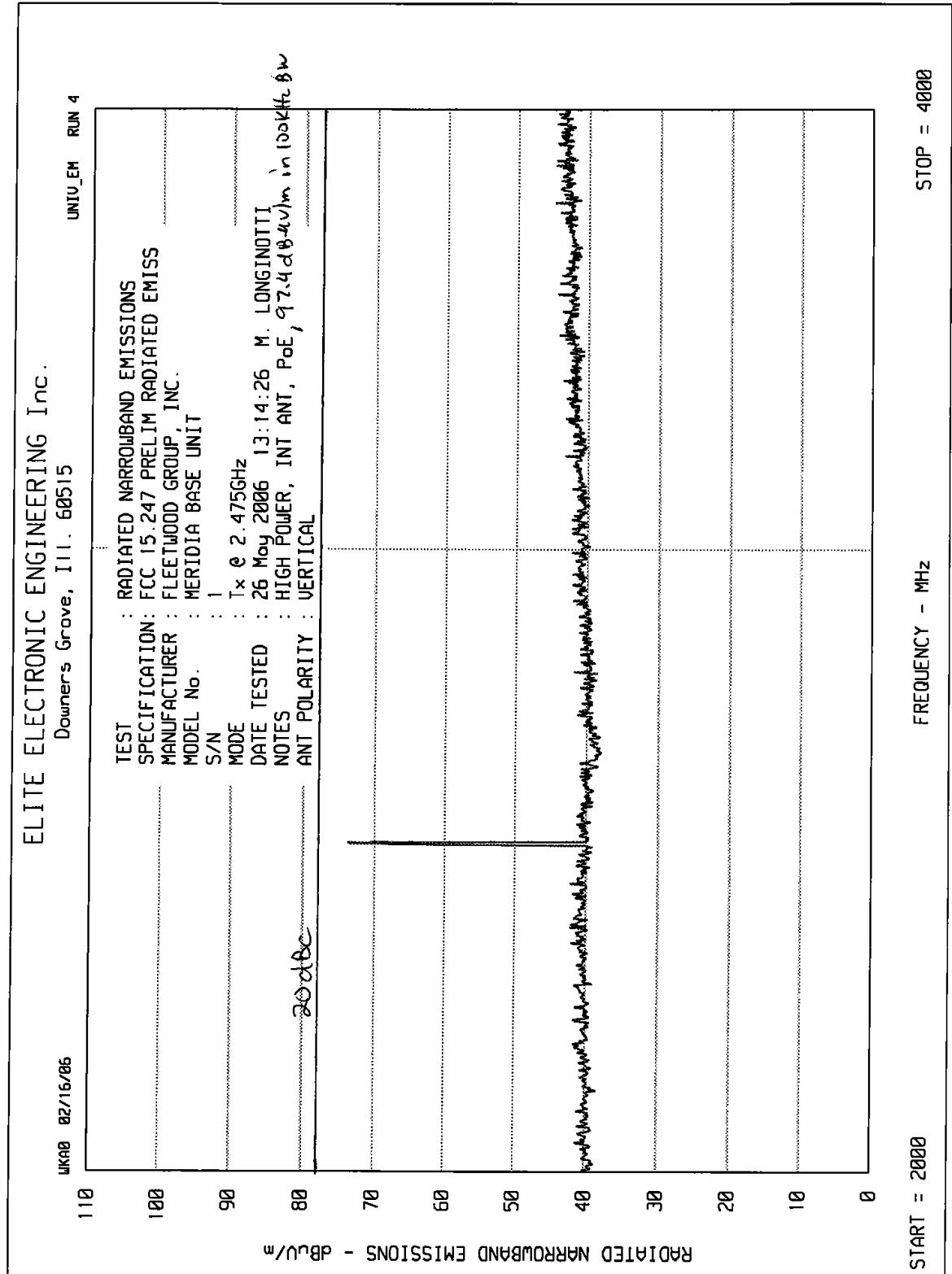


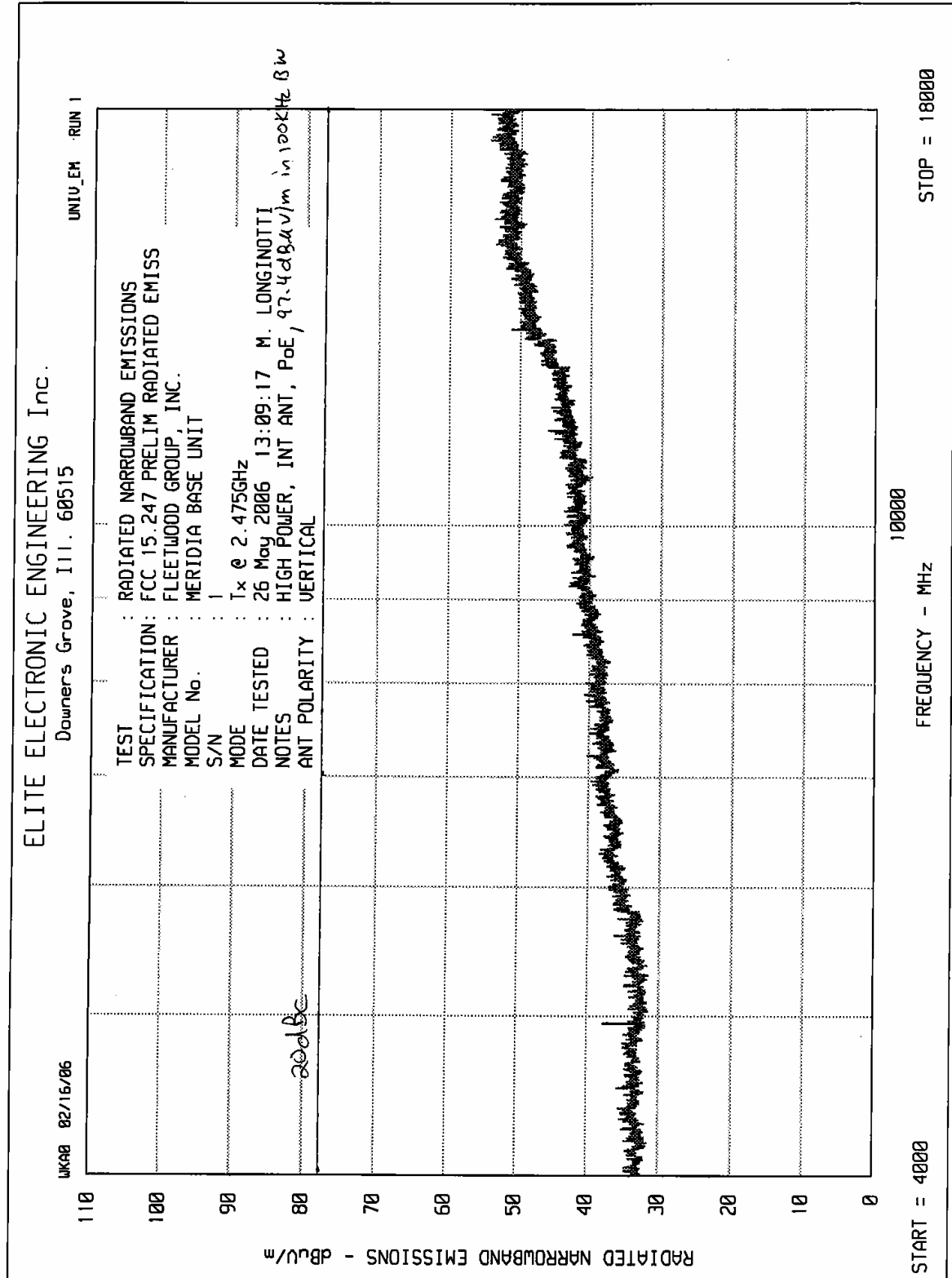


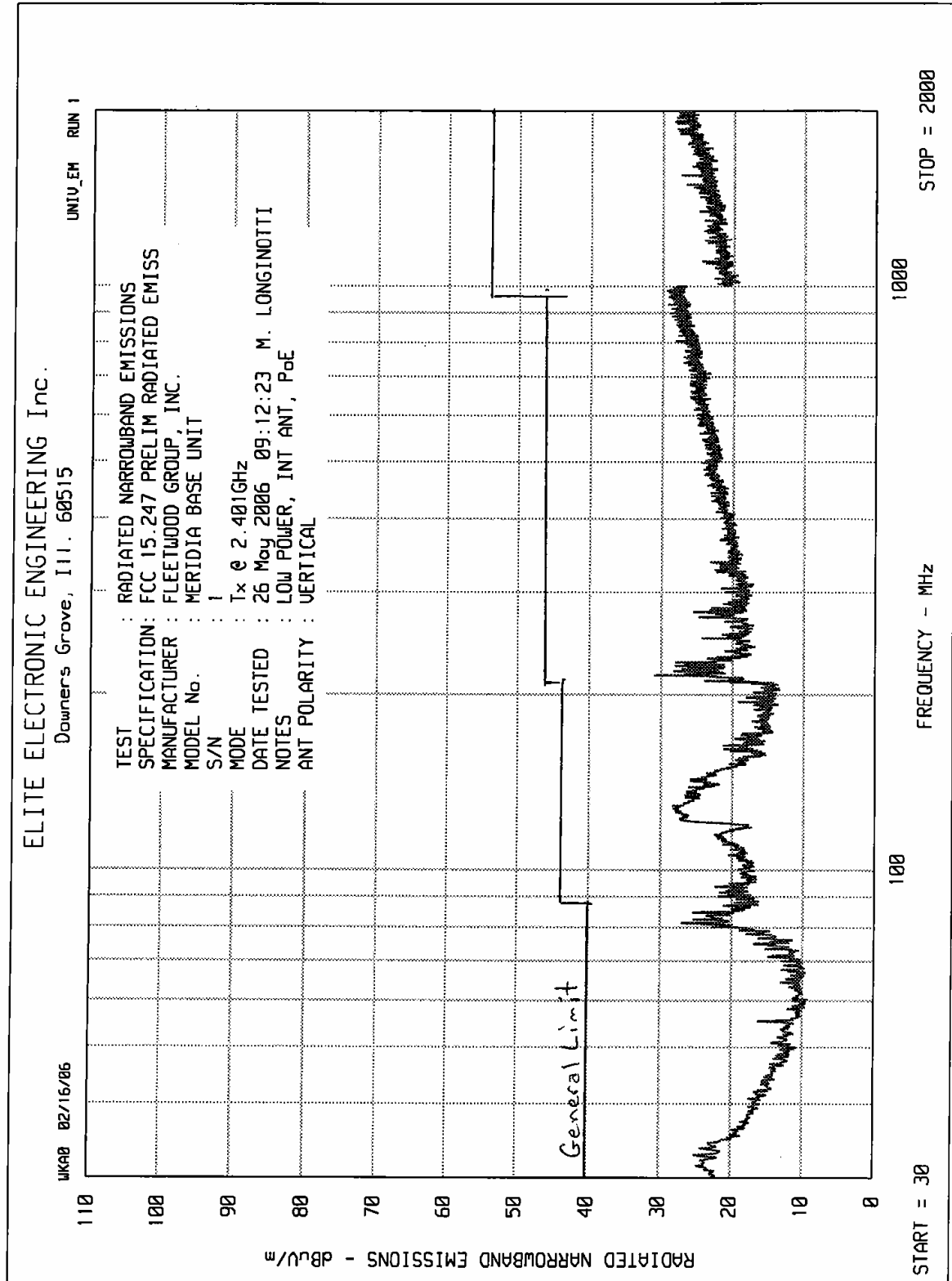


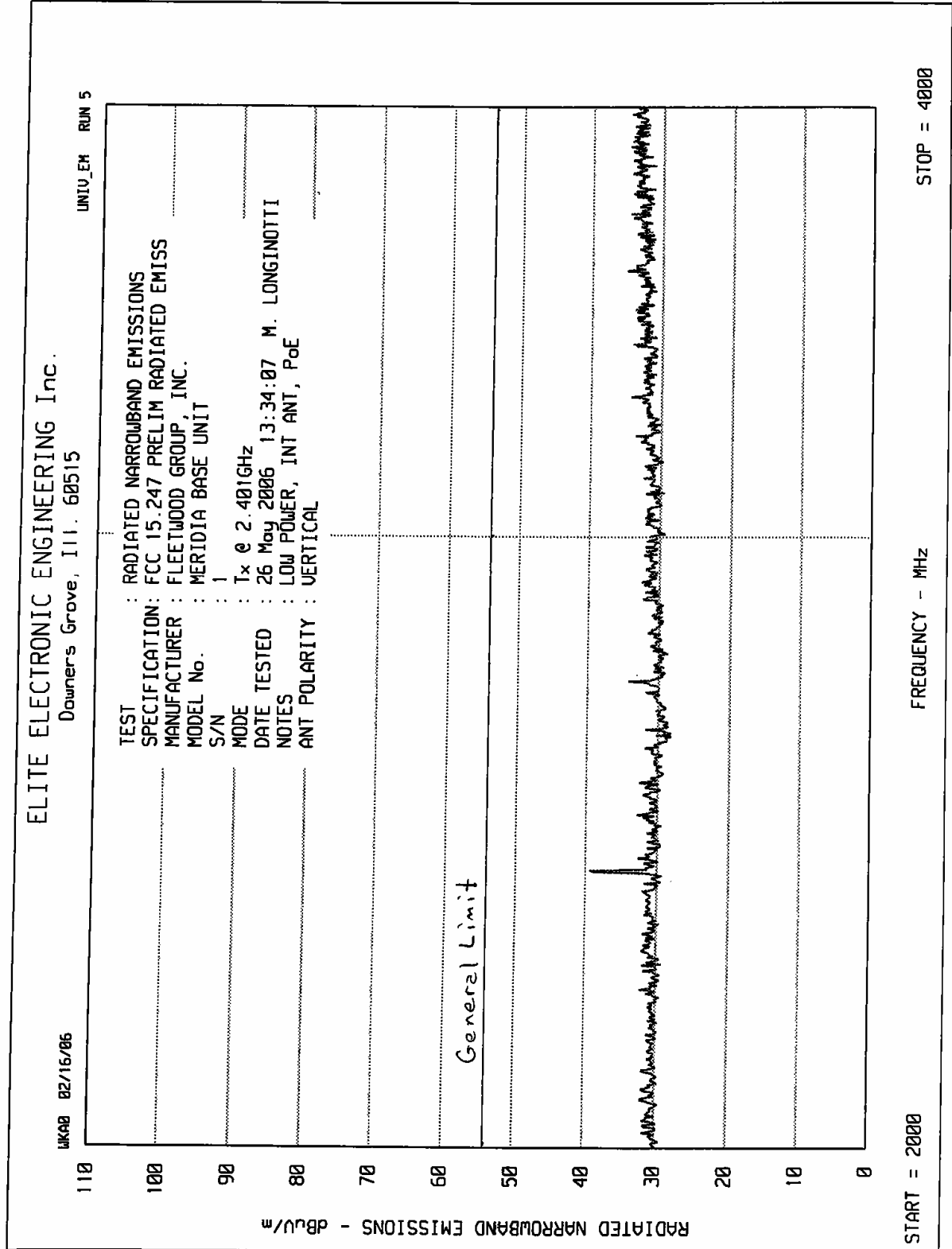


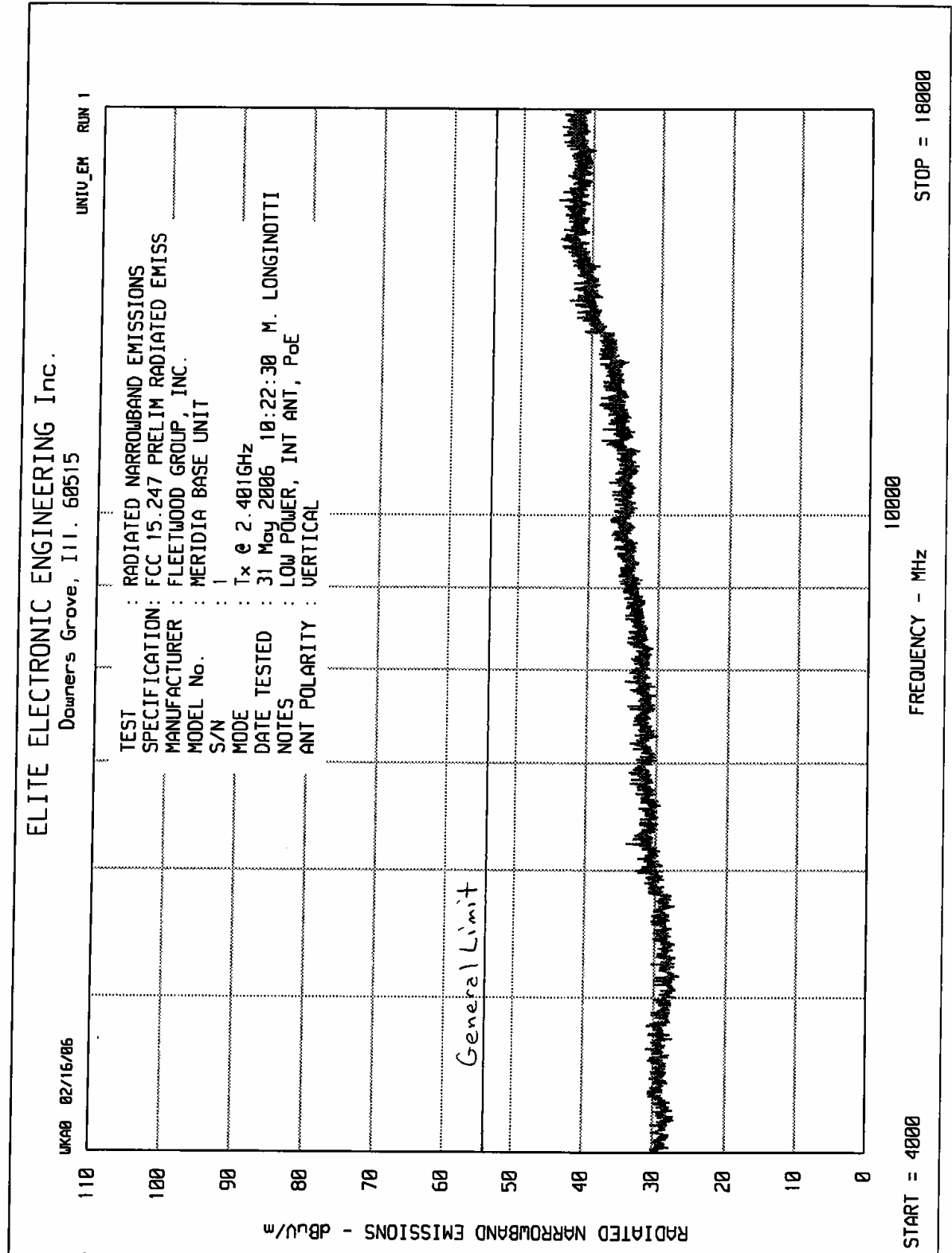


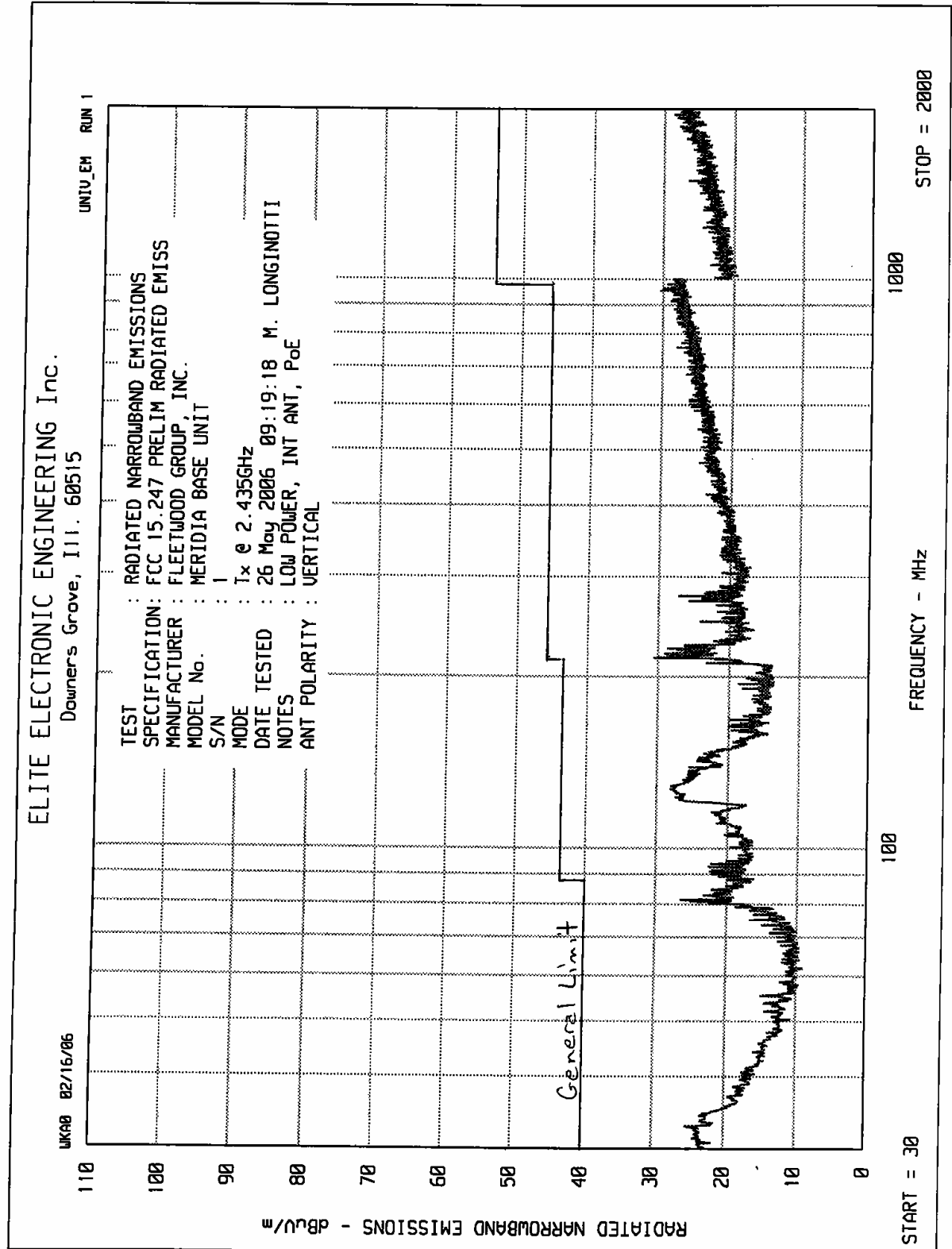


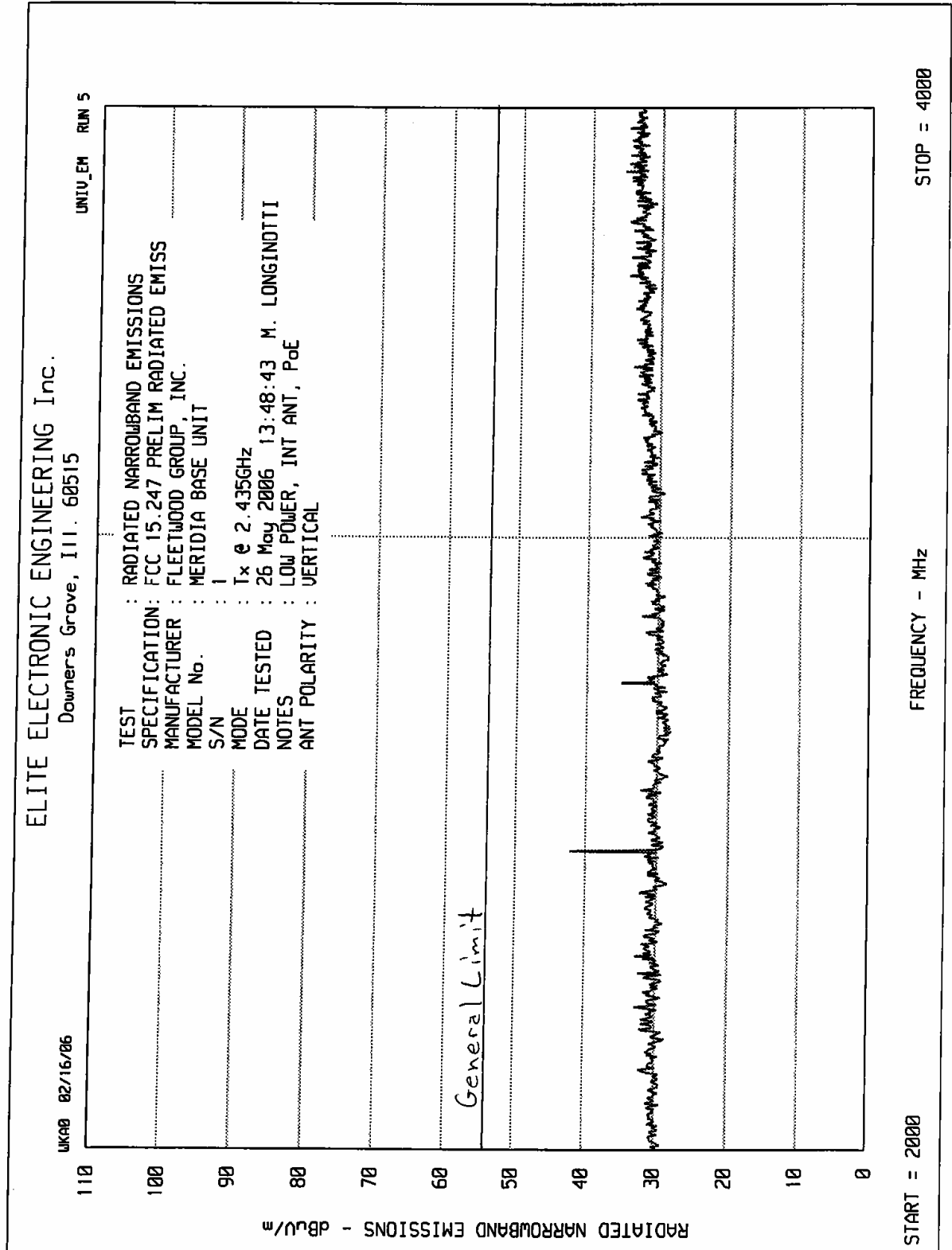


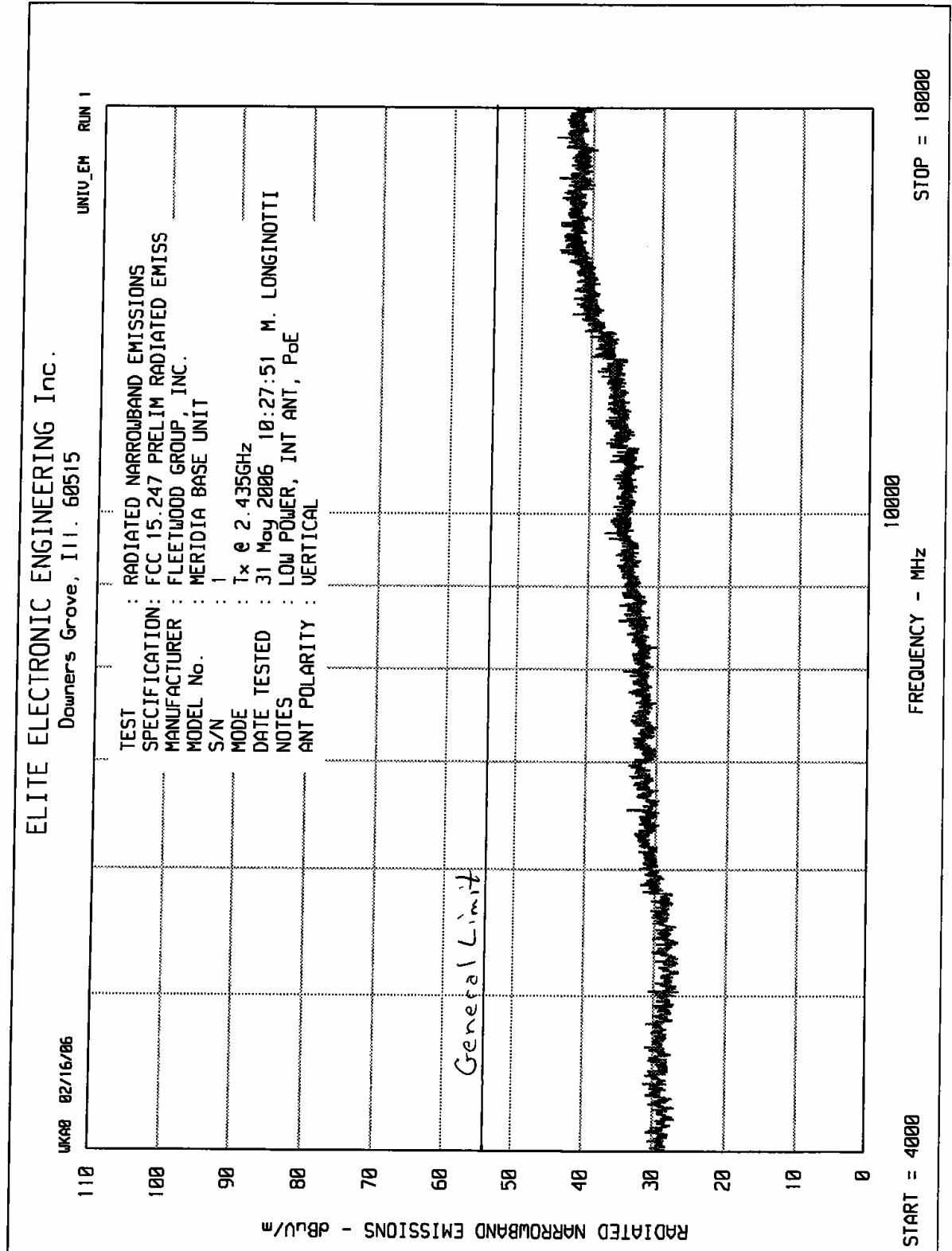


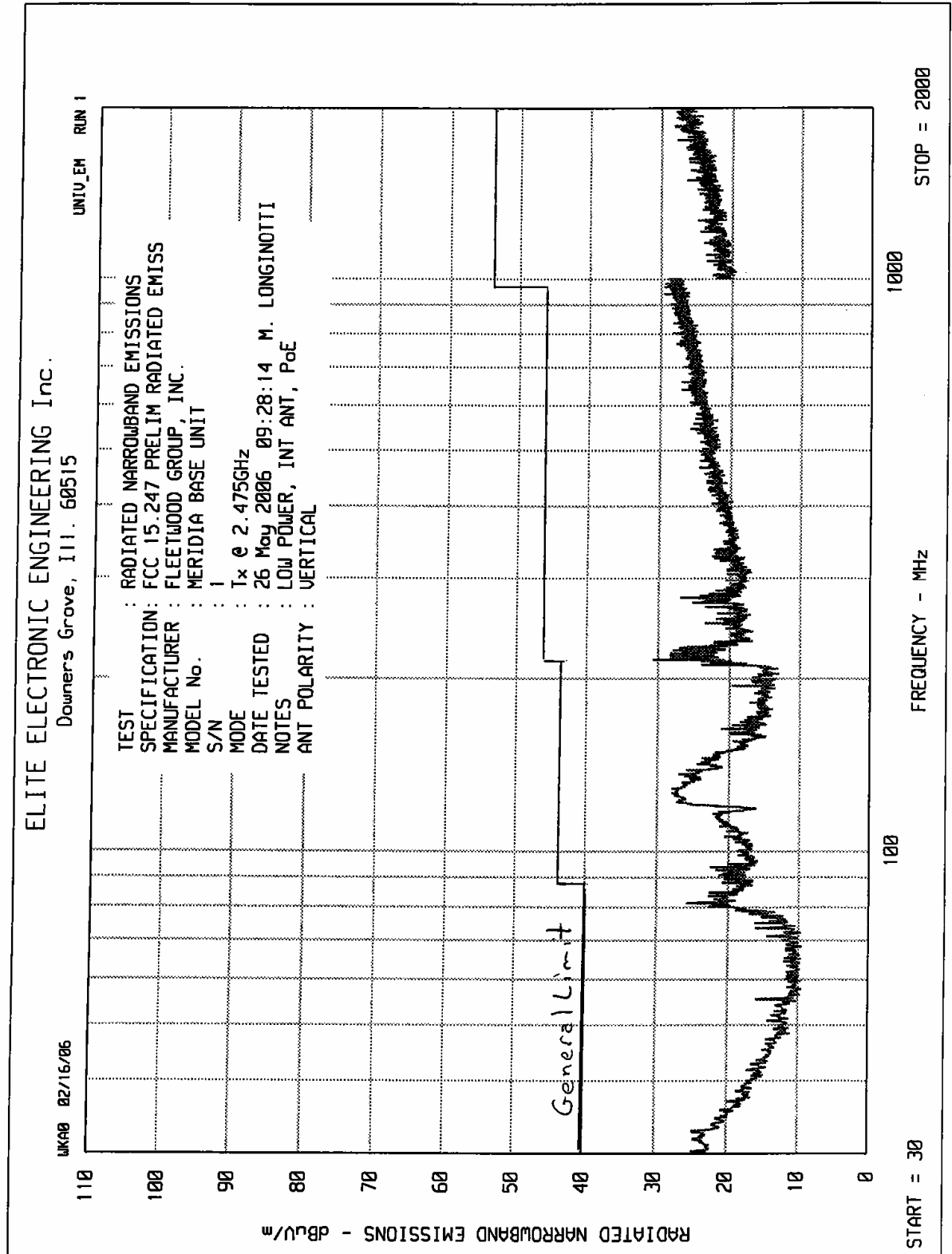


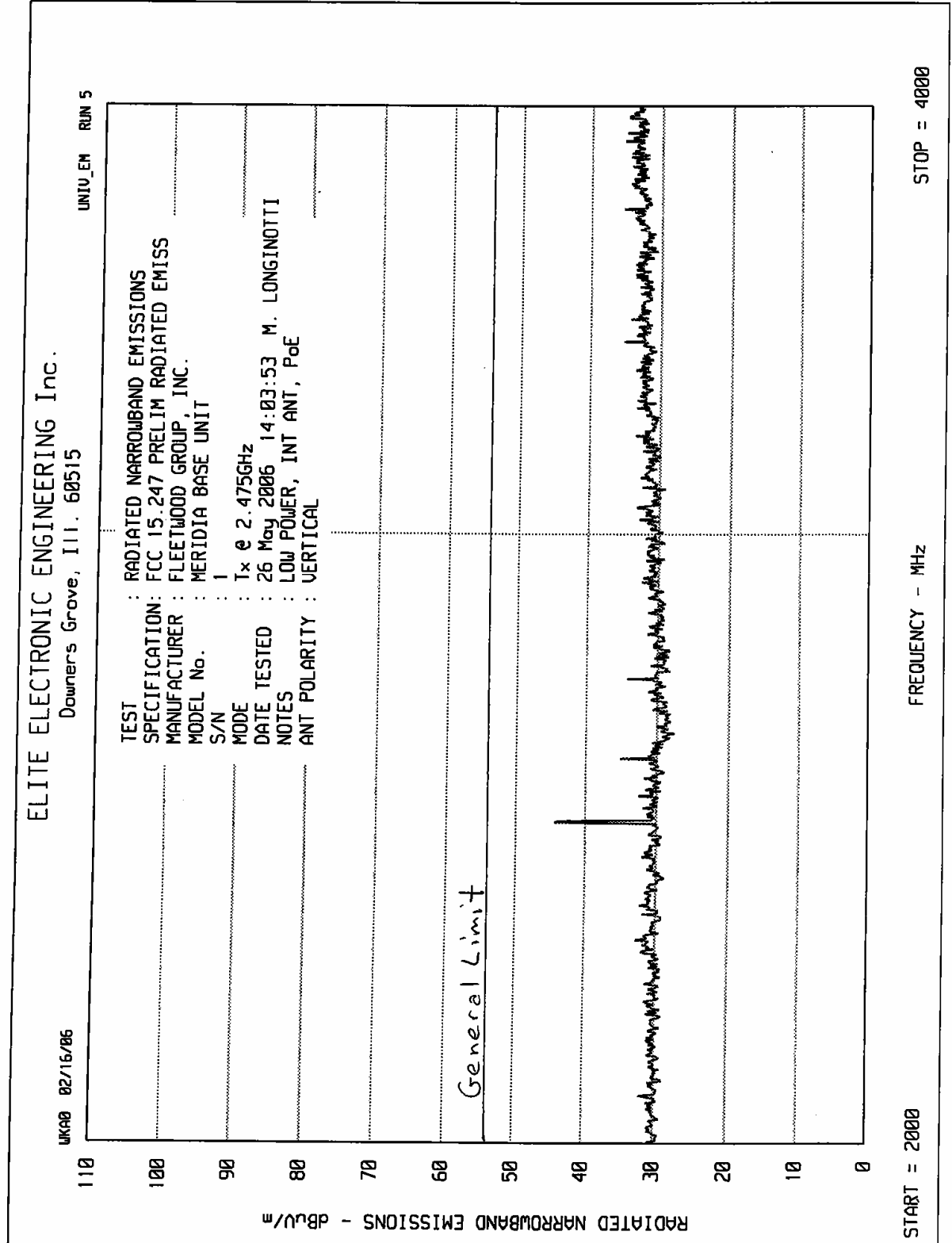


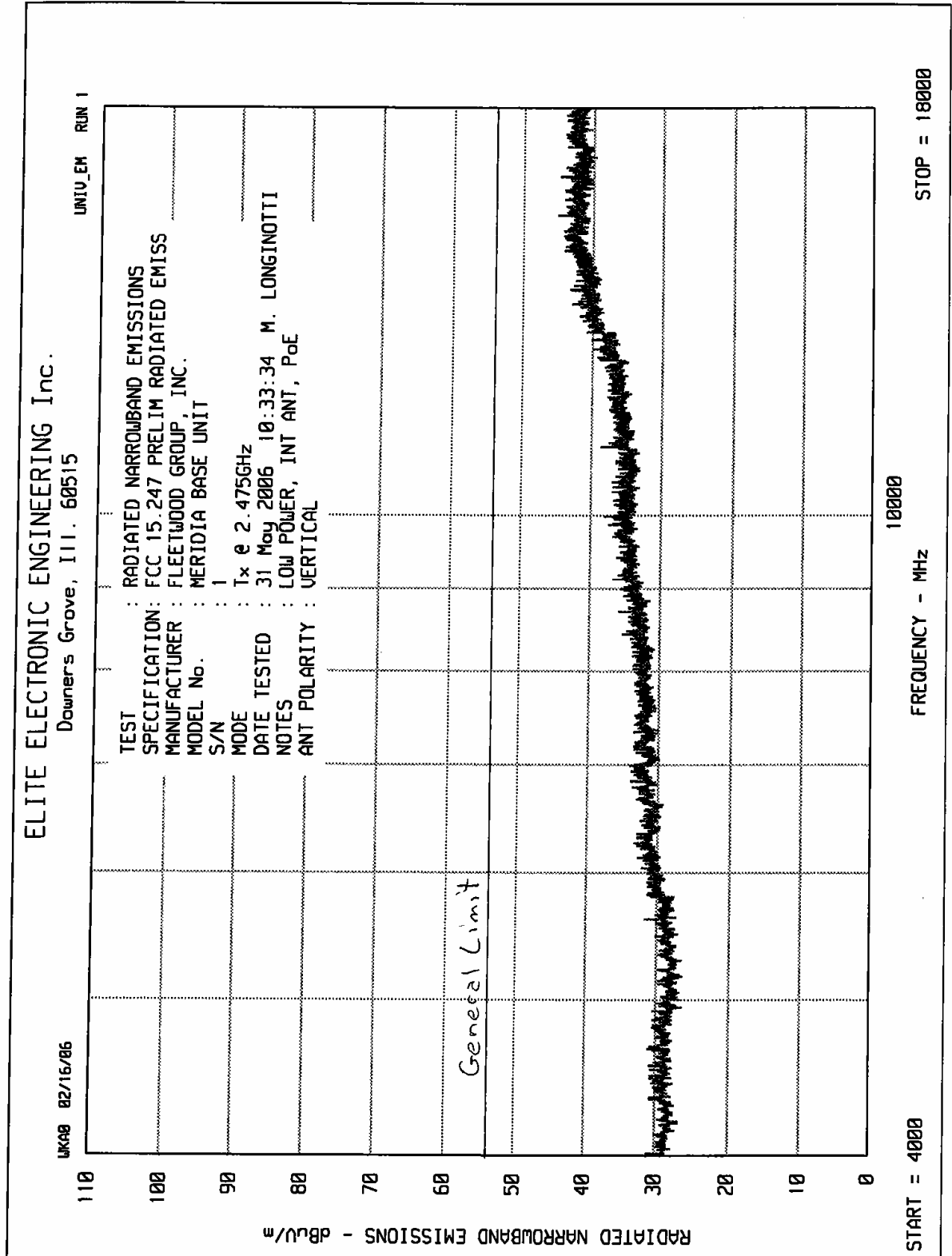


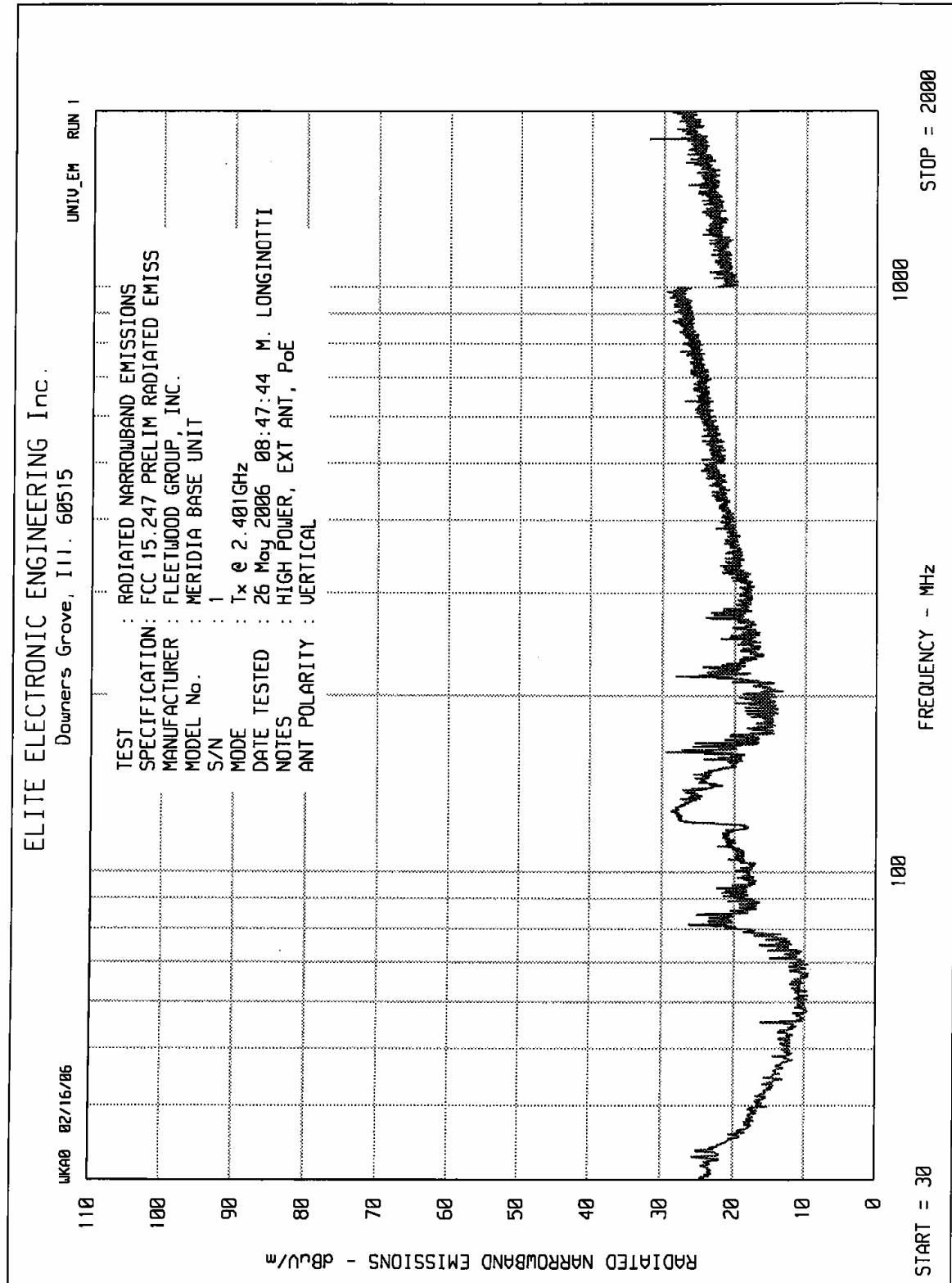


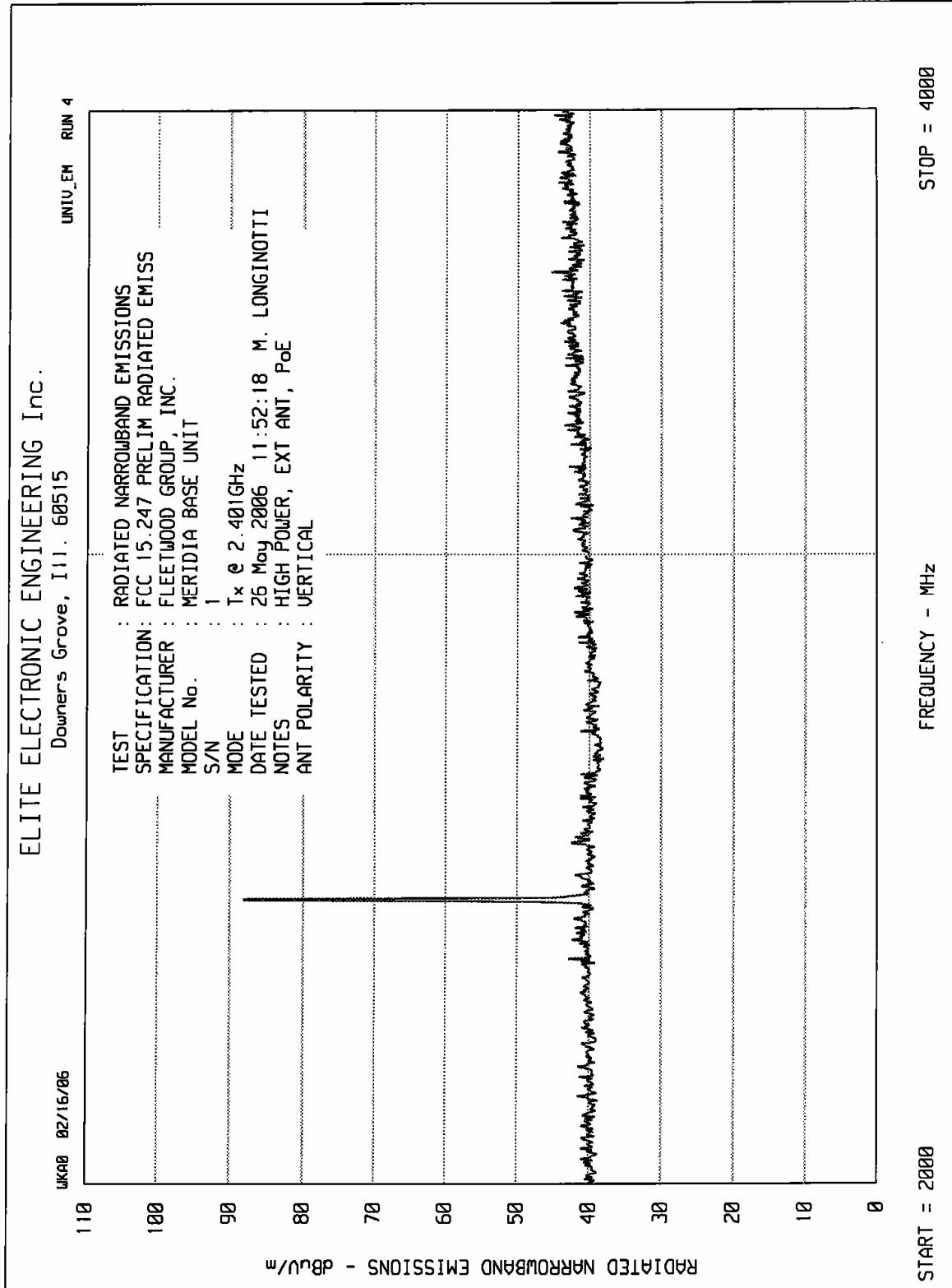


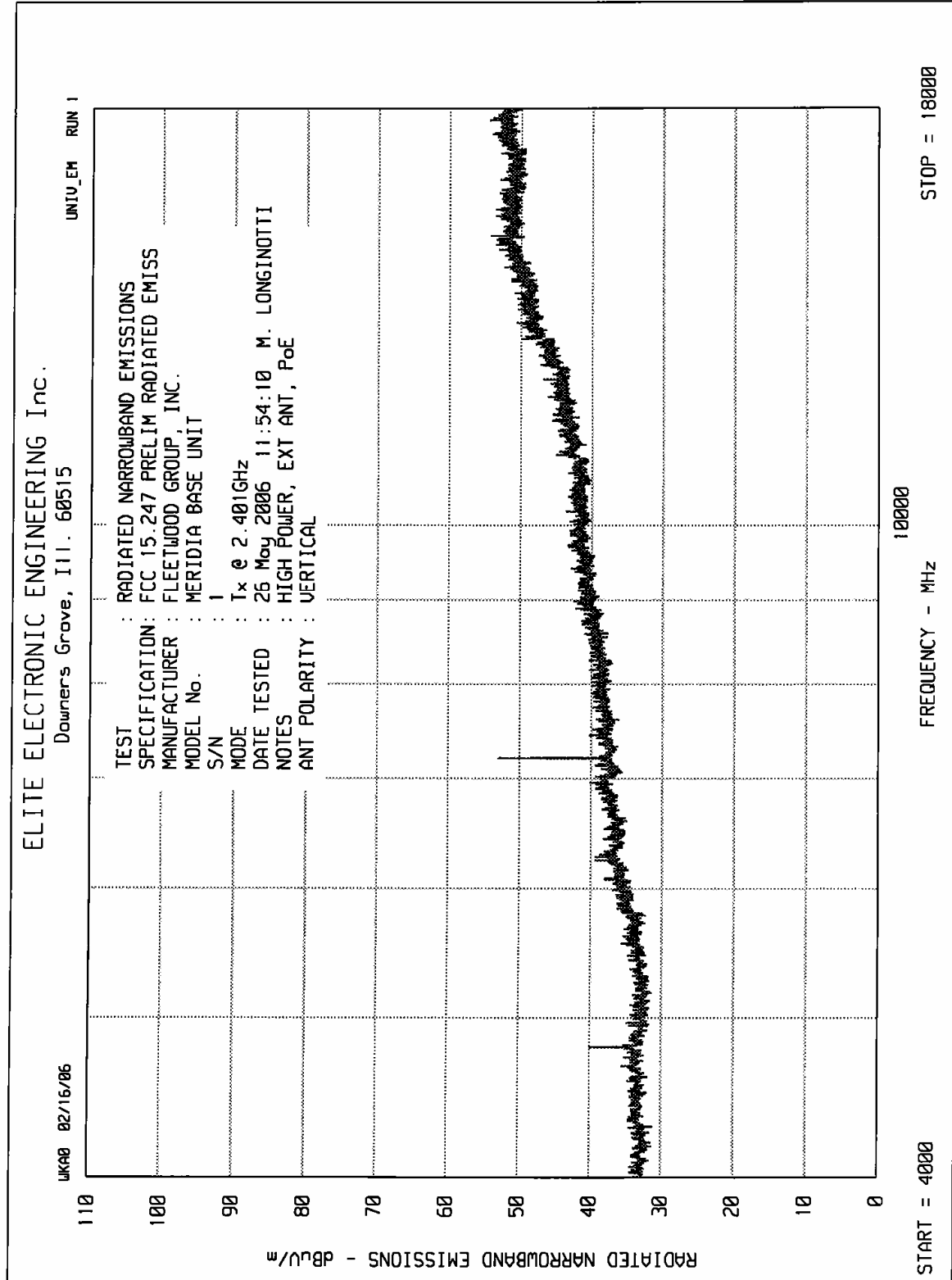


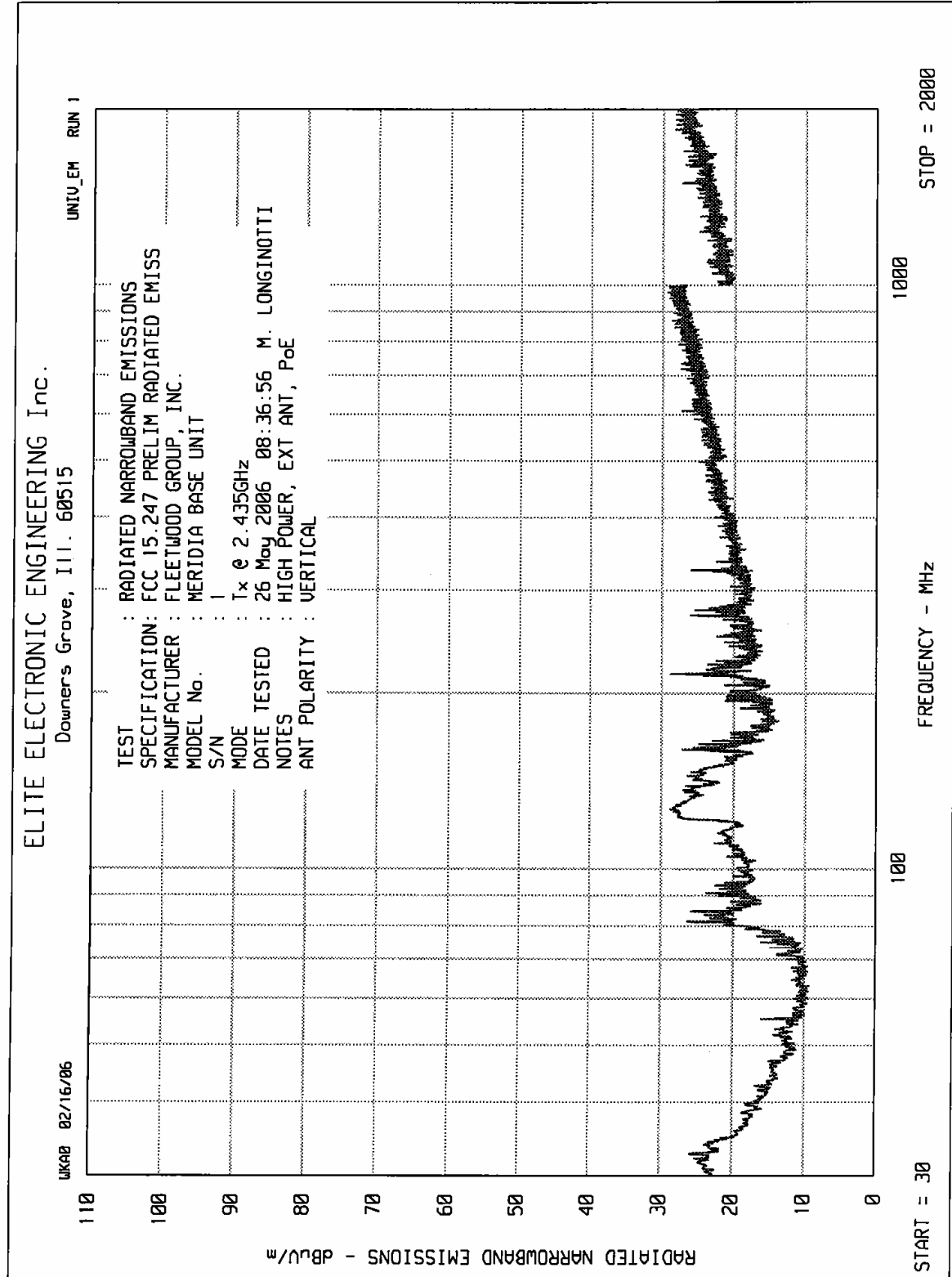


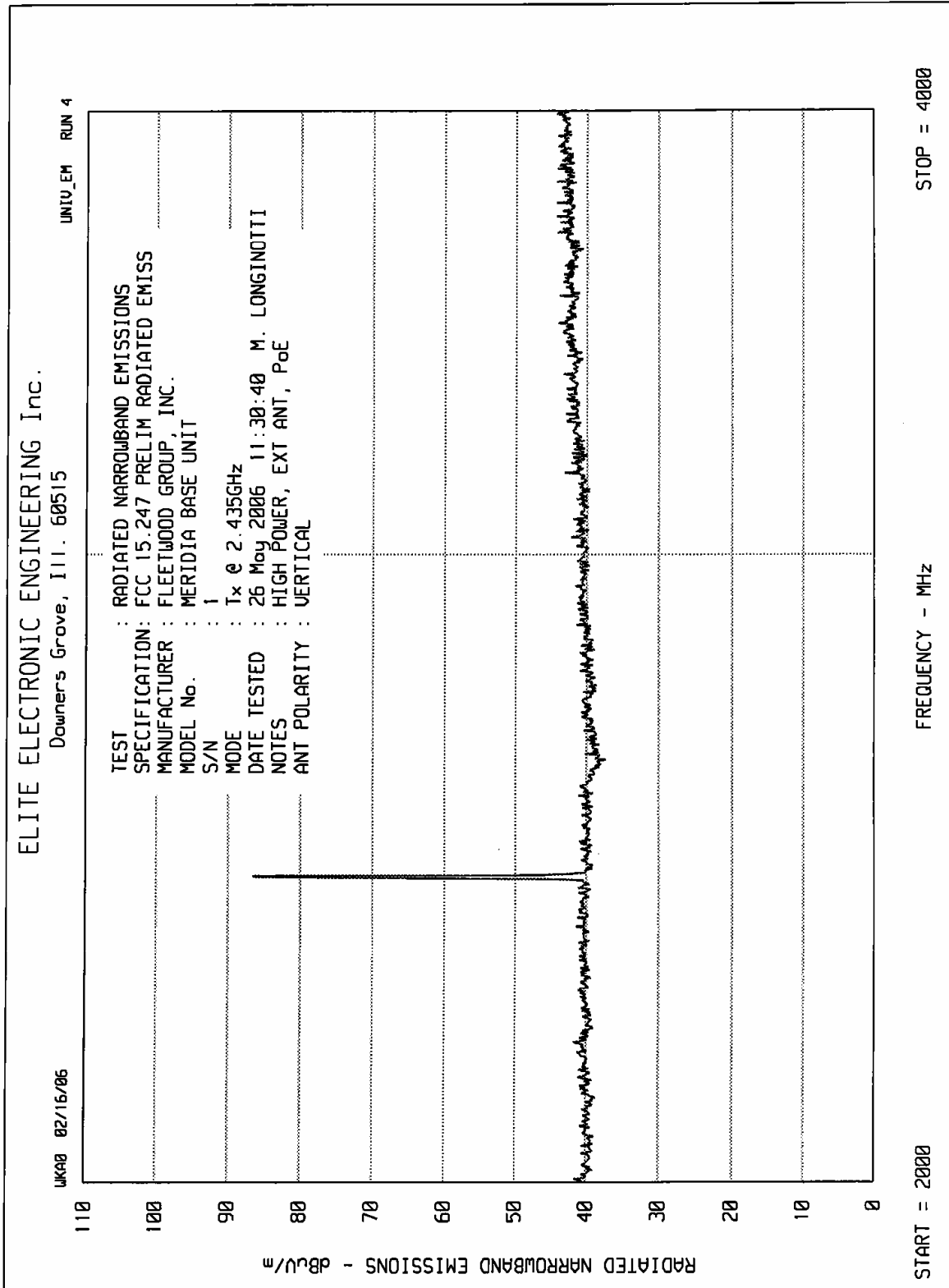


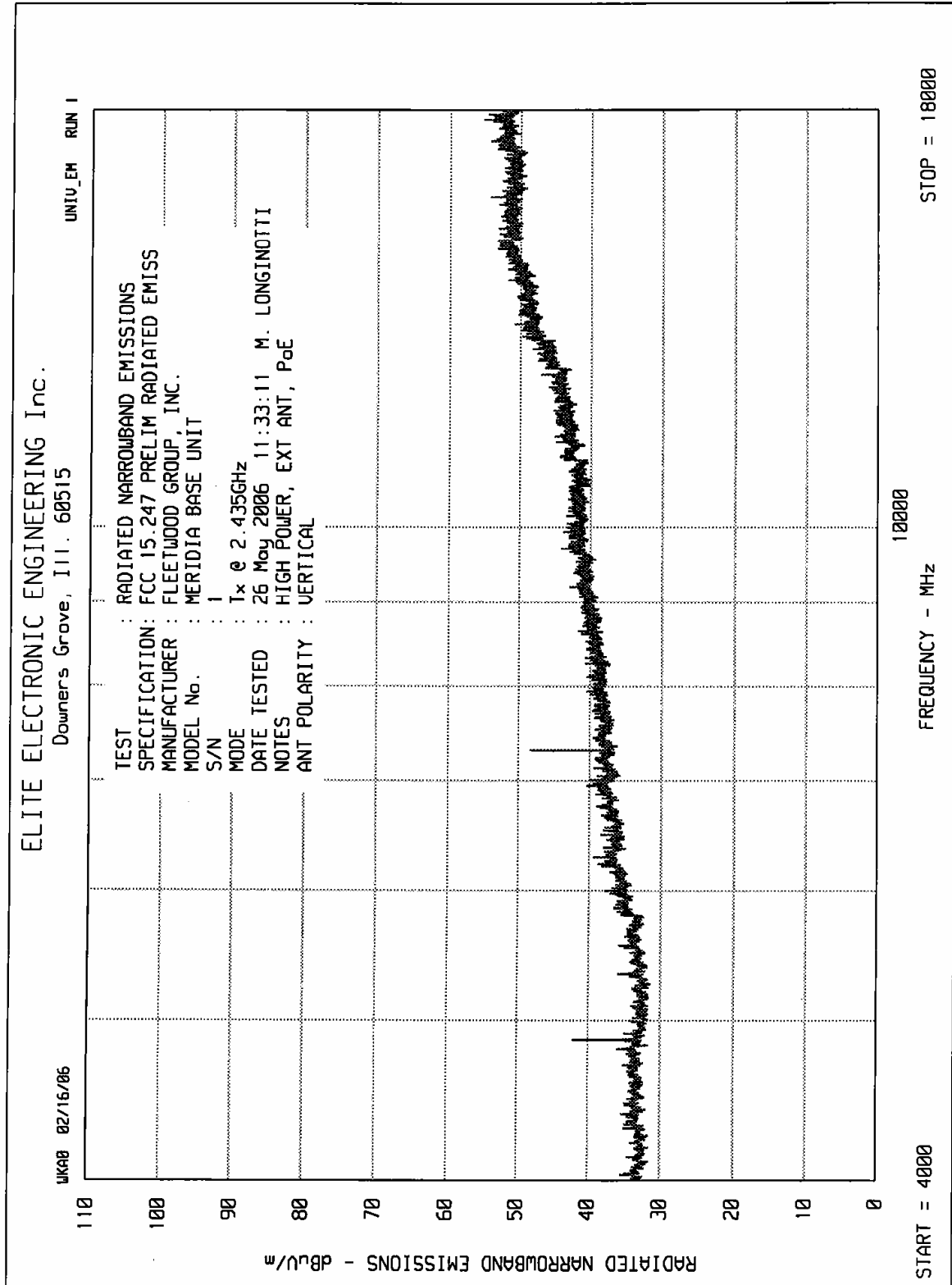


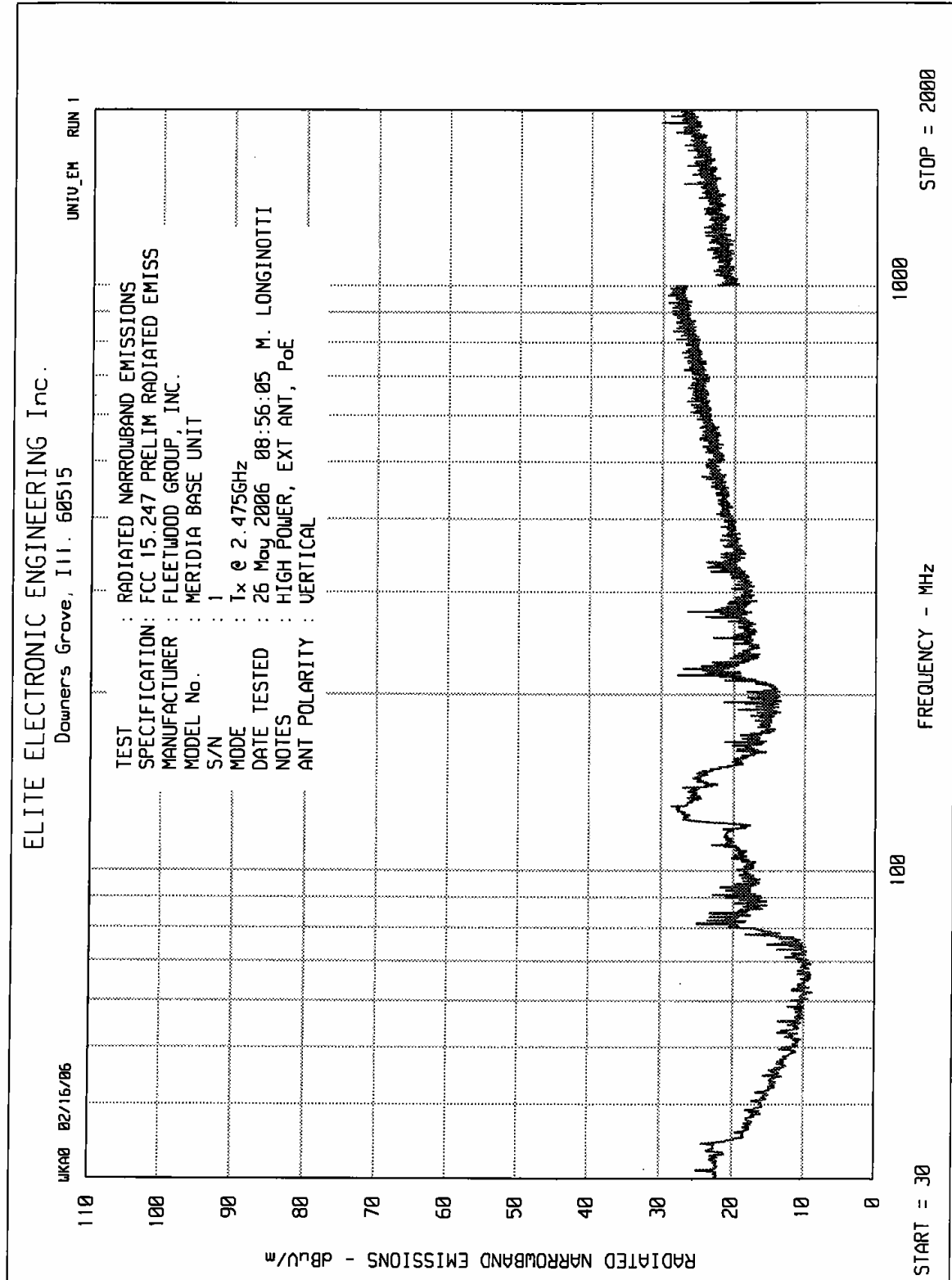


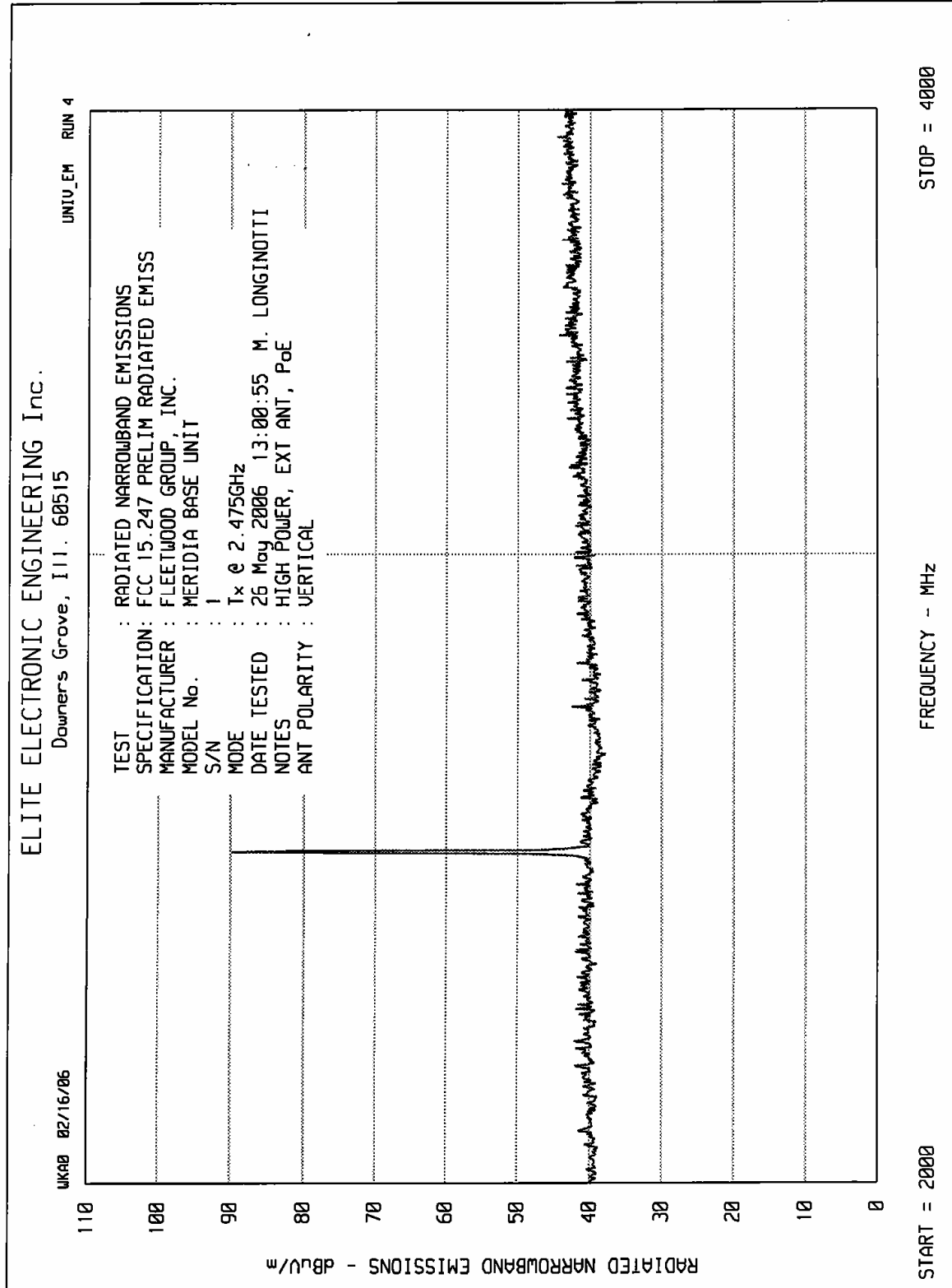


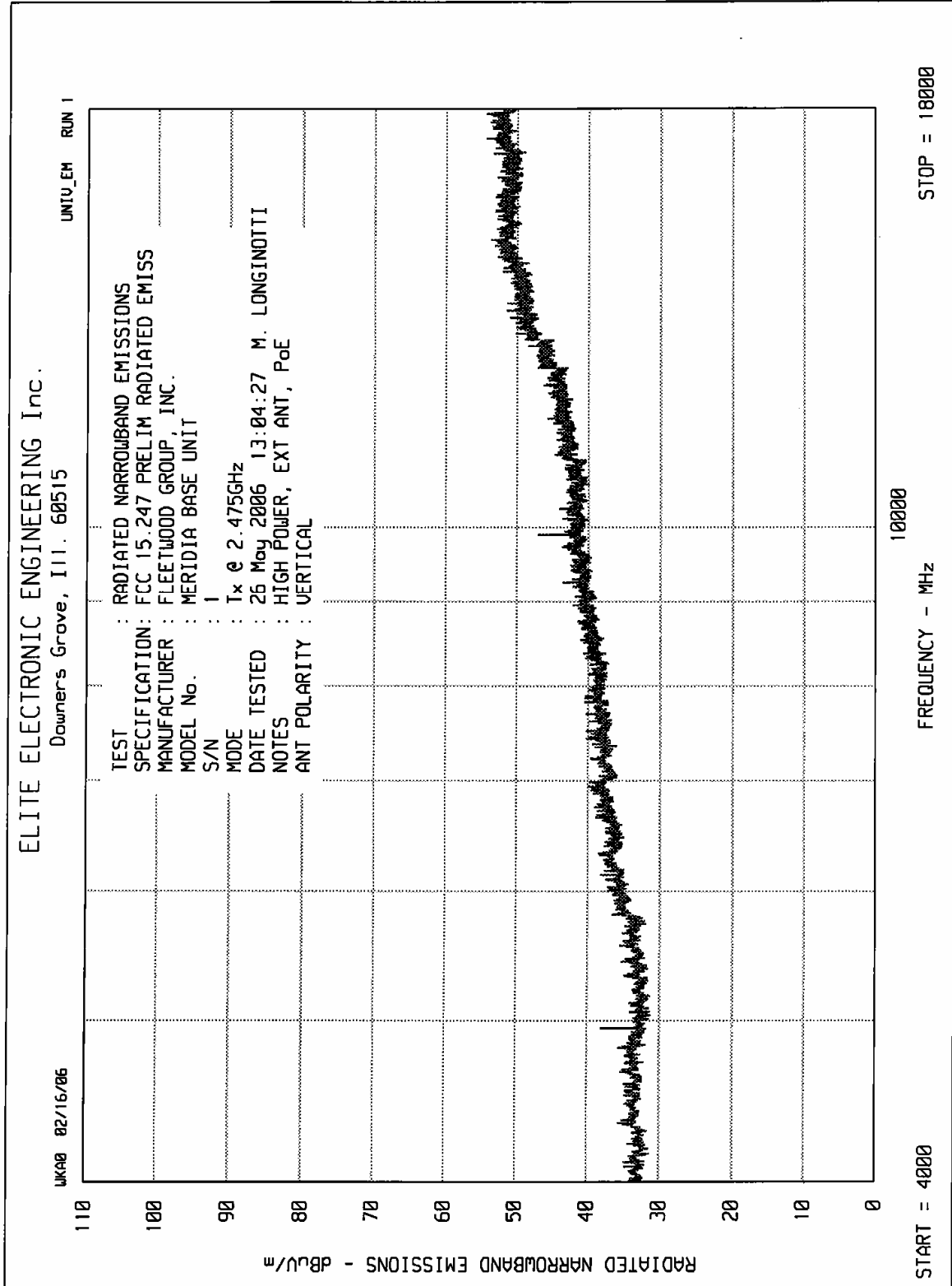


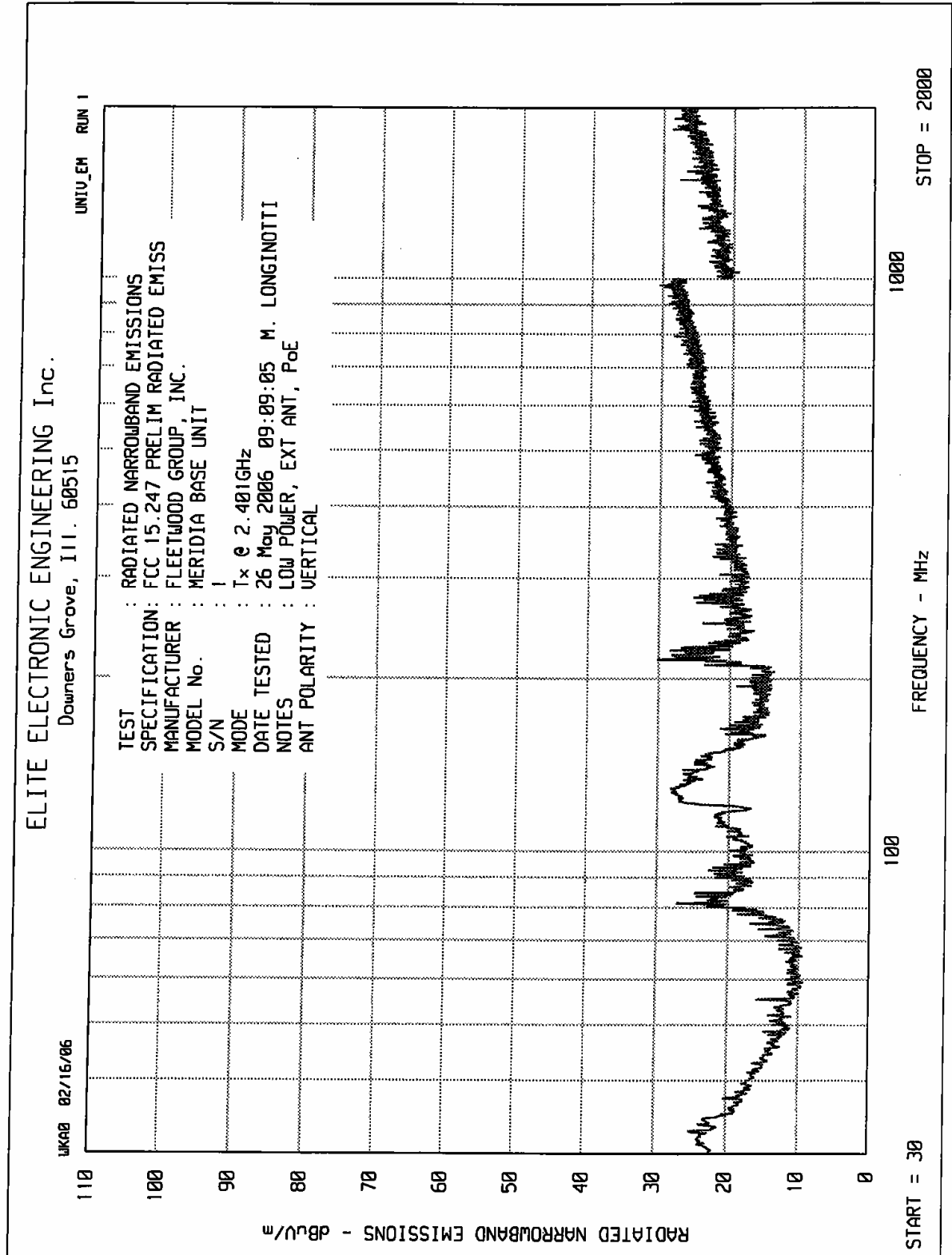


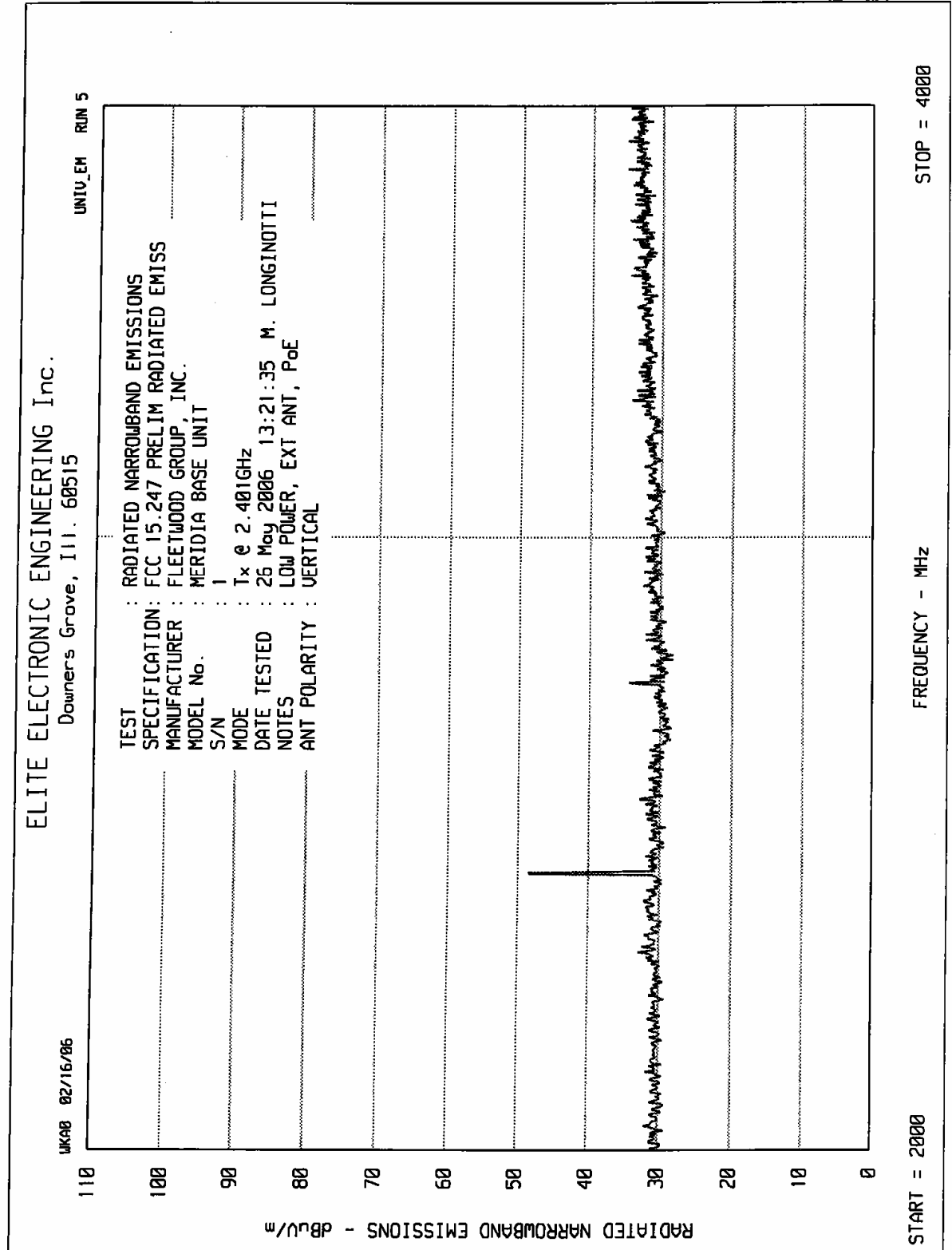


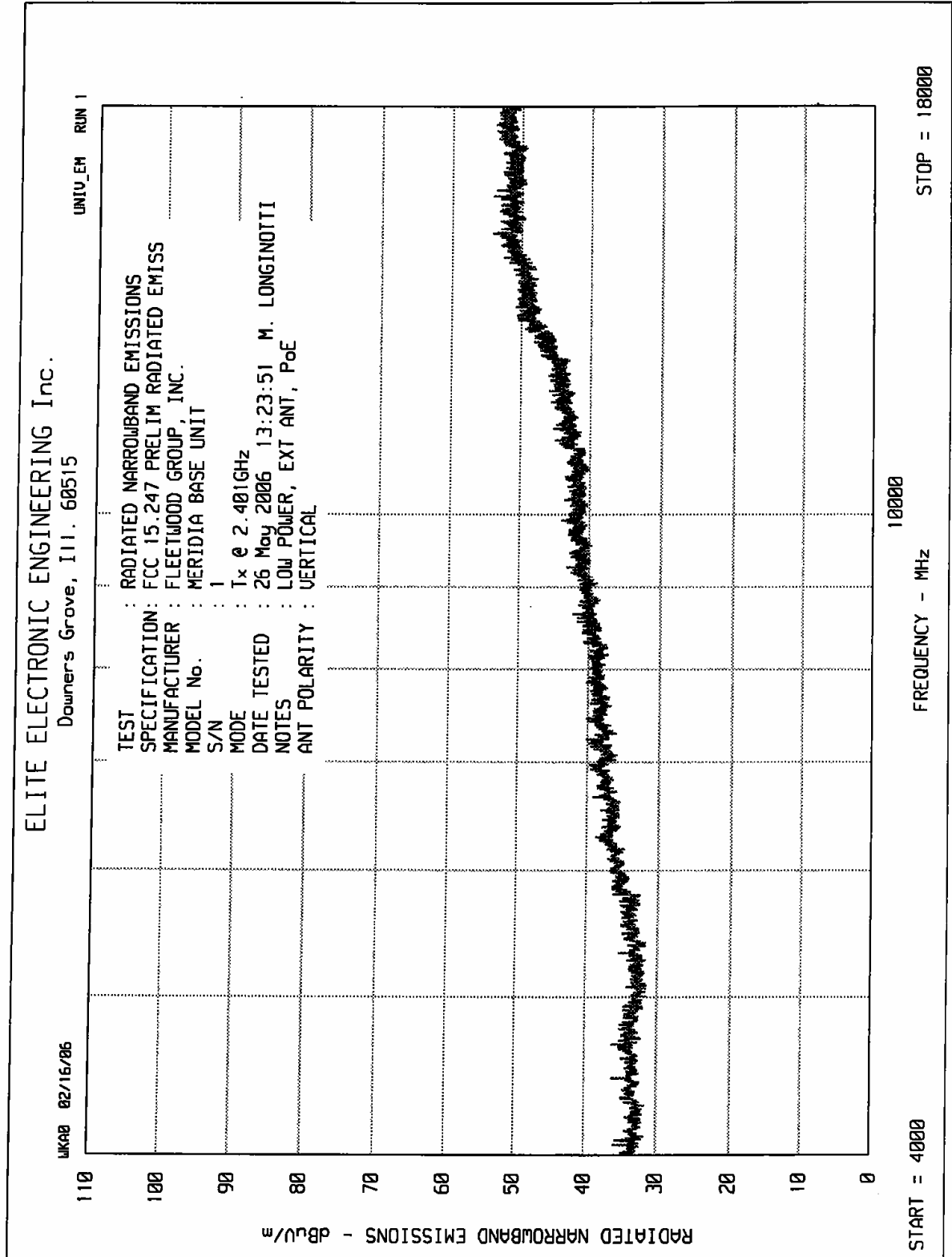


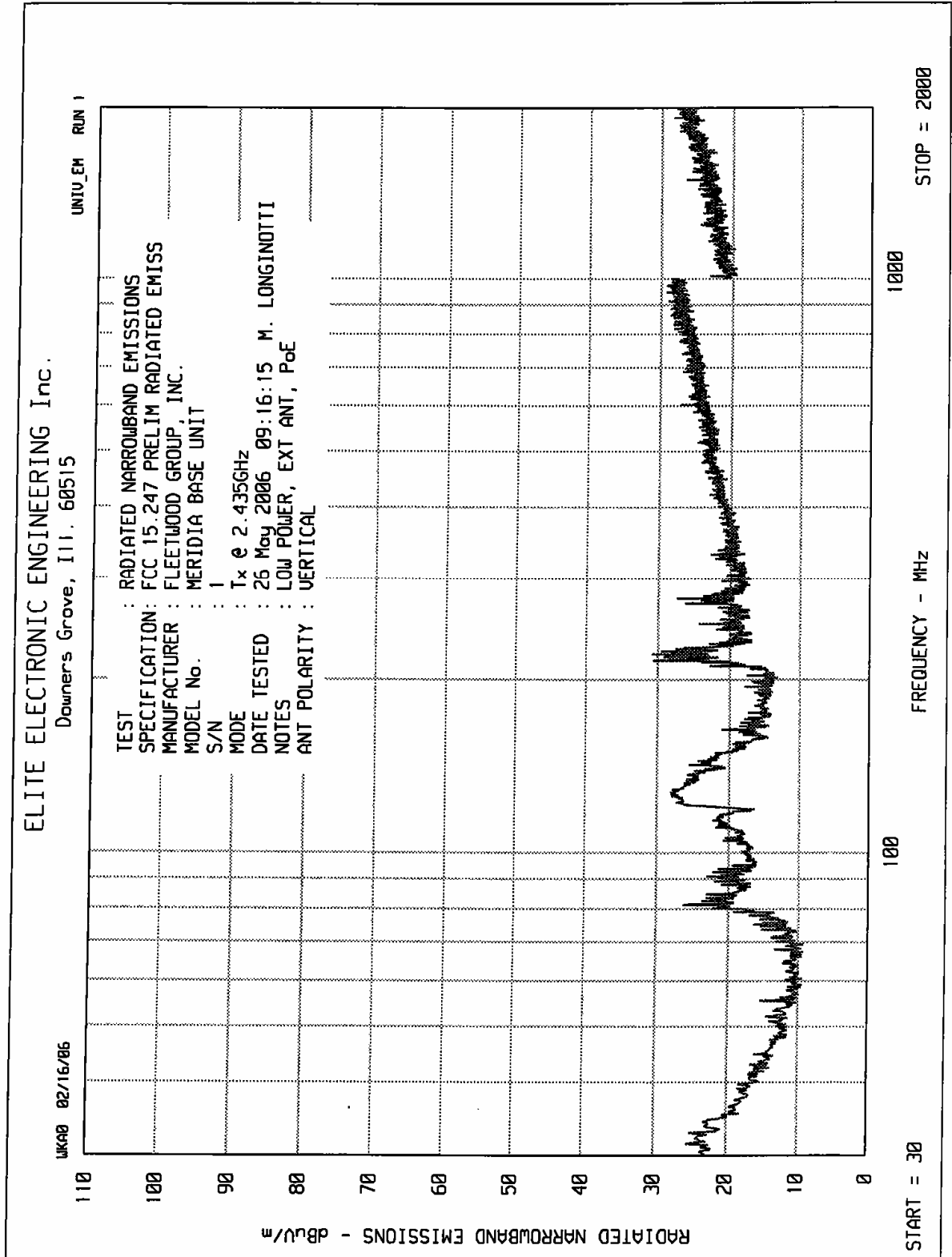


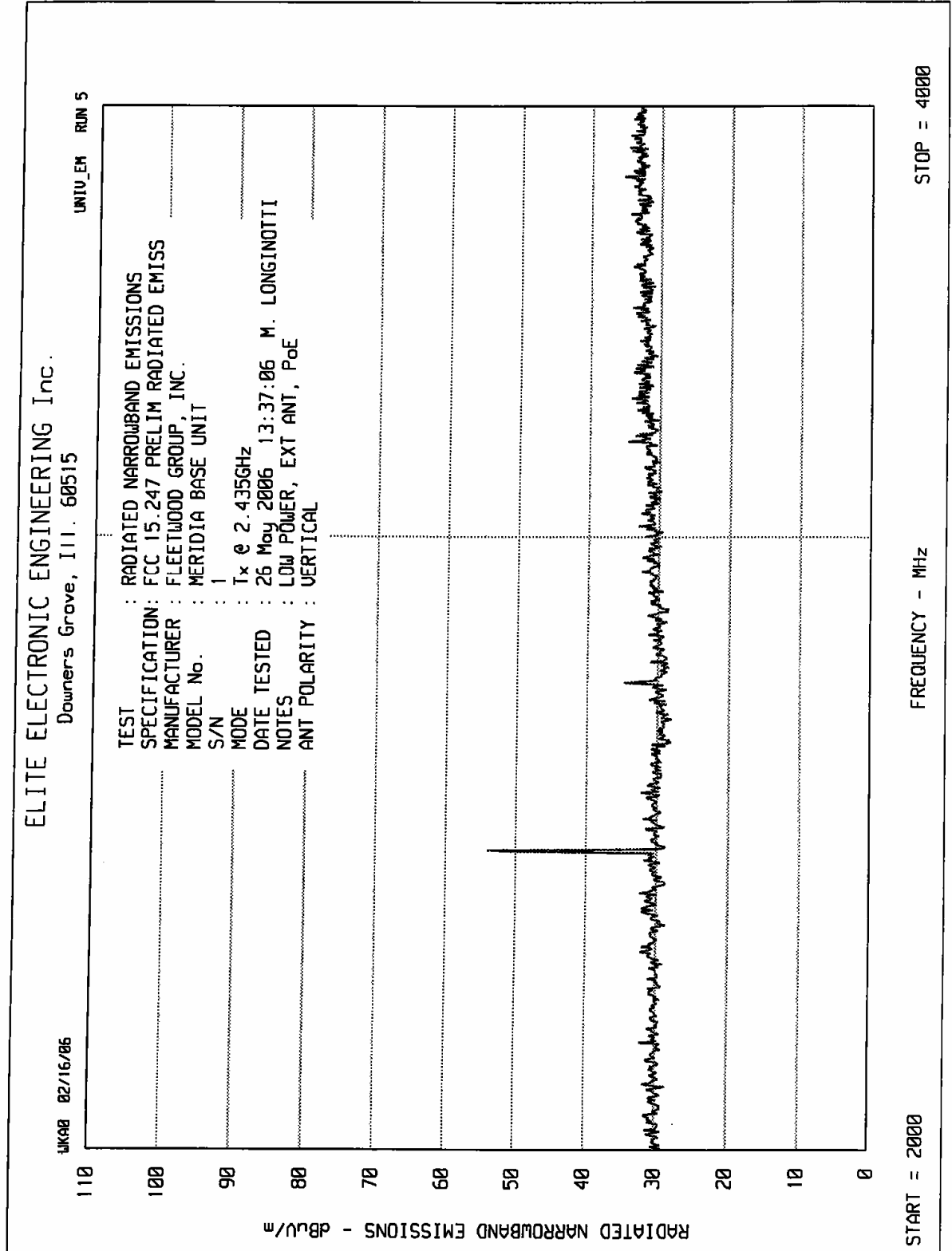


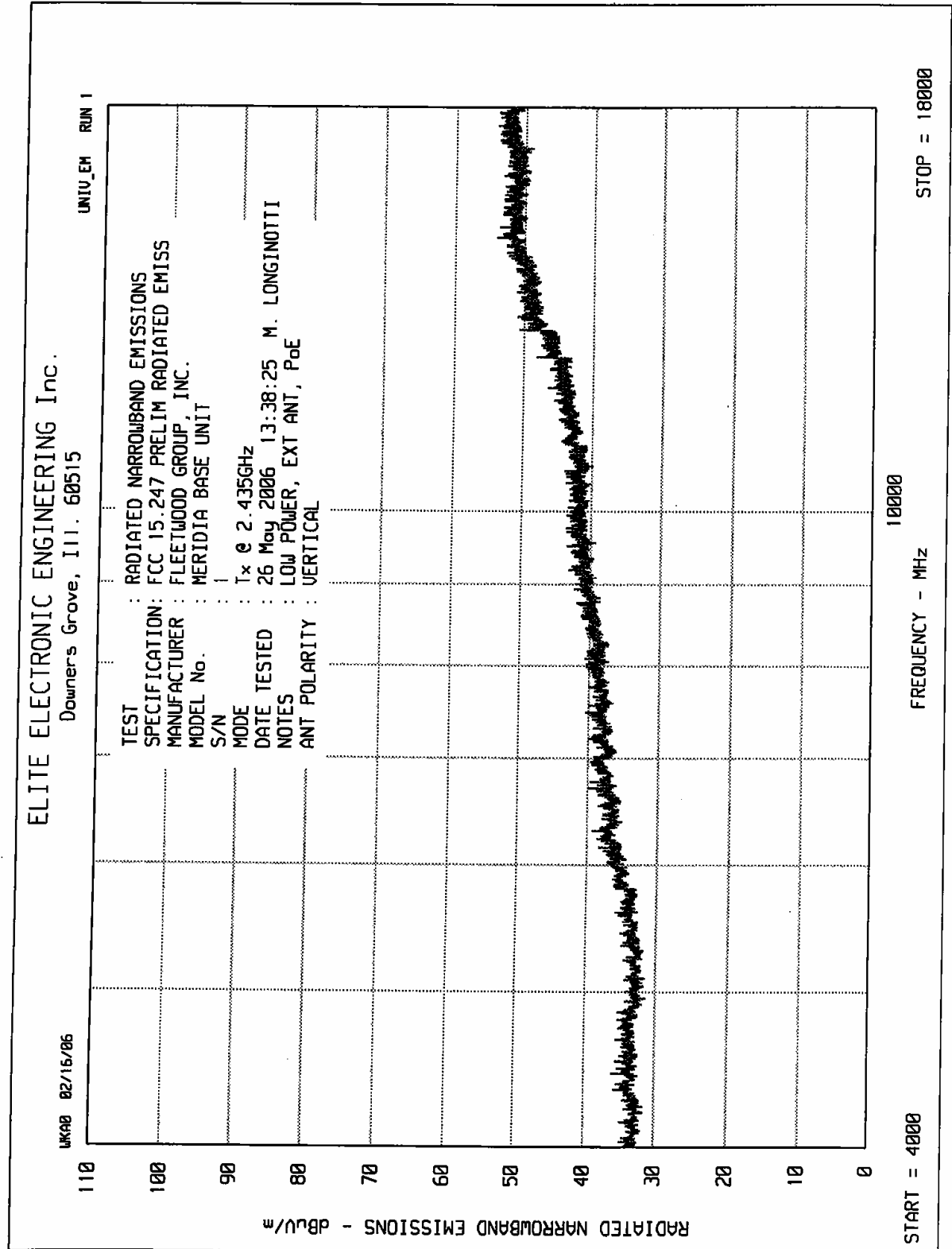


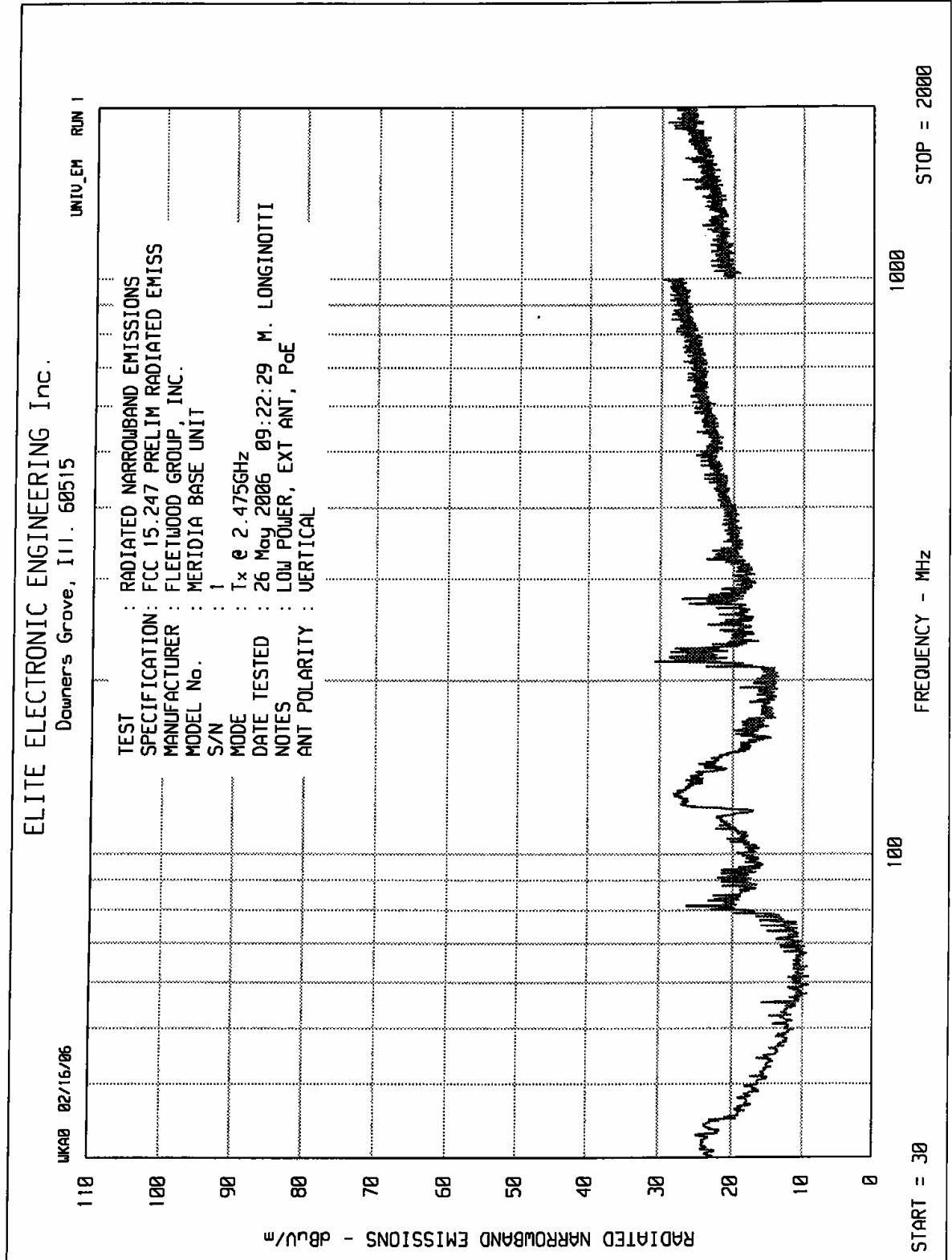


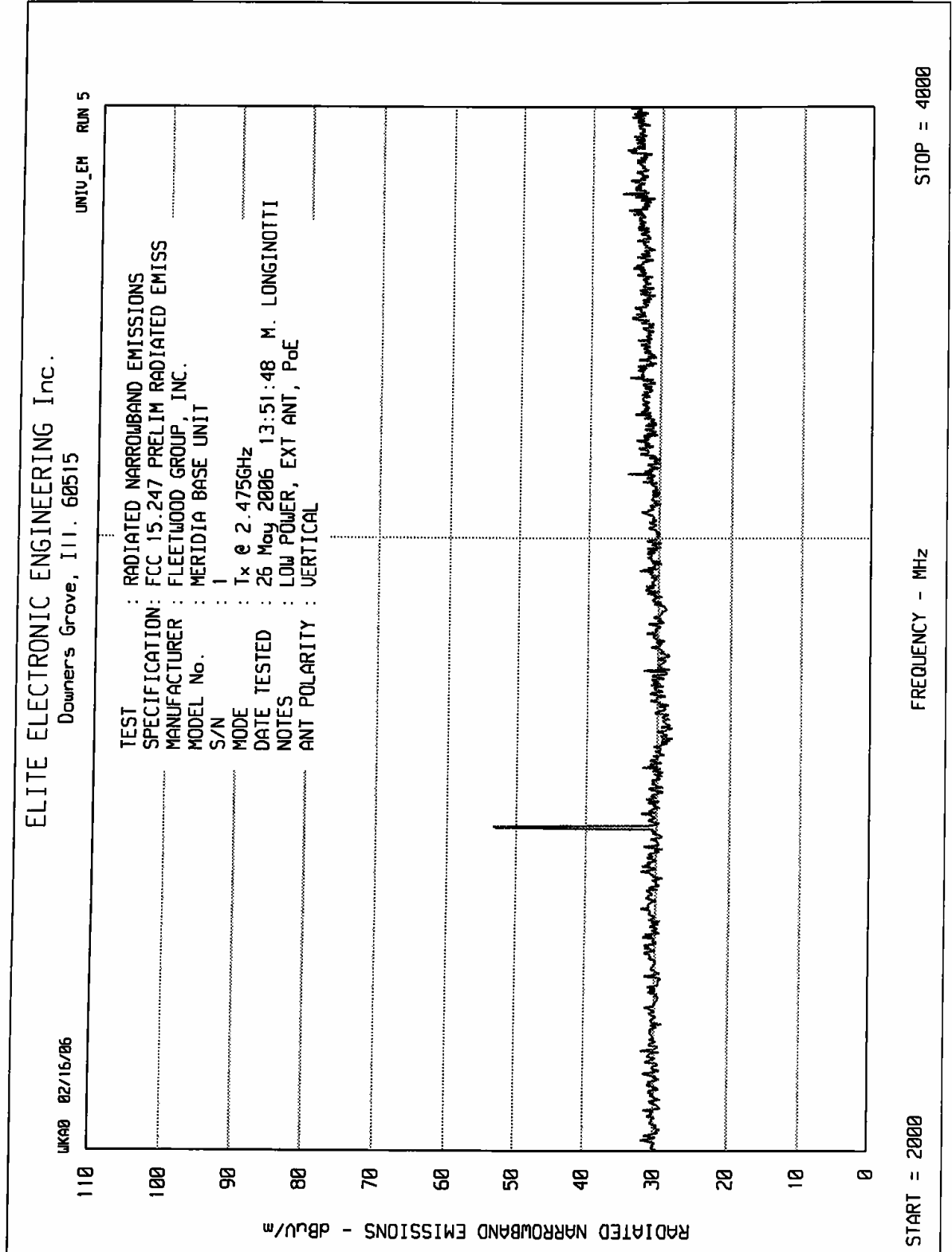


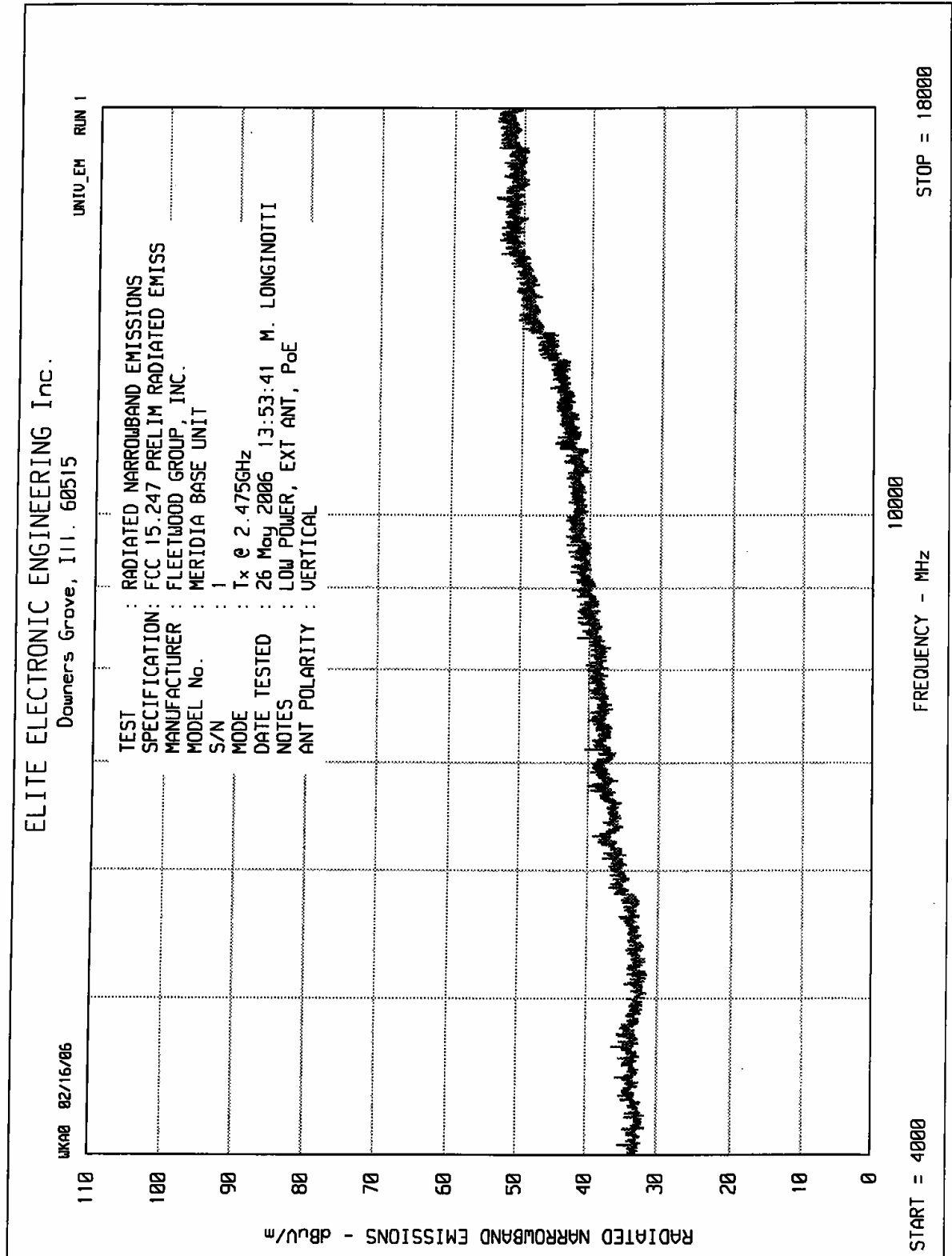












Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.401GHz, High Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2401	V	91.8		100k/300k	31.4	3.5	35.9			90.8	
2401	H	99.6		100k/300k	31.4	3.5	35.9			98.6	
4802	V	59.4		1M/3M	34.5	4.9	35.2			63.6	74
4802	V	53.1		1M/10	34.5	4.9	35.2	3.8		53.5	54
4802	H	55.5		1M/3M	34.5	4.9	35.2			59.7	74
4802	H	48.7		1M/10	34.5	4.9	35.2	3.8		49.1	54
7203	H	53.7		100k/300k	38	6.6	35.5			62.8	78.6
7203	V	53.2		100k/300k	38	6.6	35.5			62.3	78.6
12005	V	45.9		1M/3M	41.4	1.0	34.8			53.5	74
12005	V	36.6		1M/10	41.4	1.0	34.8	3.8		40.4	54
12005	H	43.6	Amb	1M/3M	41.4	1.0	34.8			51.2	74
12005	H	32.2	Amb	1M/10	41.4	1.0	34.8			39.8	54
19208	V	42	Amb	1M/3M	45.6	2.2	26.2		9.5	54.1	74
19208	V	28.7	Amb	1M/10	45.6	2.2	26.2		9.5	40.8	54
19208	H	40.5	Amb	1M/3M	45.6	2.2	26.2		9.5	52.6	74
19208	H	28.4	Amb	1M/10	45.6	2.2	26.2		9.5	40.5	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.435GHz, High Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2435	V	90.2		100k/300k	31.4	3.5	35.9			89.2	
2435	H	98.7		100k/300k	31.4	3.5	35.9			97.7	
4870	V	61.1		1M/3M	34.5	4.9	35.2			65.3	74
4870	V	53.2		1M/10	34.5	4.9	35.2	3.8		53.6	54
4870	H	56.6		1M/3M	34.5	4.9	35.2			60.8	74
4870	H	50.6		1M/10	34.5	4.9	35.2	3.8		51	54
7305	V	54.8		1M/3M	38.1	6.7	35.6			64	74
7305	V	48.4		1M/10	38.1	6.7	35.6	3.8		53.8	54
7305	H	52.5		1M/3M	38.1	6.7	35.6			61.7	74
7305	V	45.3		1M/10	38.1	6.7	35.6	3.8		50.7	54
12175	V	42.8	Amb	1M/3M	41.4	1	34.6			50.6	74
12175	V	32.9	Amb	1M/10	41.4	1	34.6			40.7	54
12175	H	41.6	Amb	1M/3M	41.4	1	34.6			49.4	74
12175	H	27.9	Amb	1M/10	41.4	1	34.6			35.7	54
19480	V	40.8	Amb	1M/3M	45.8	1.6	27		9.5	51.7	74
19480	V	28.2	Amb	1M/10	45.8	1.6	27		9.5	39.1	54
19480	H	41.3	Amb	1M/3M	45.8	1.6	27		9.5	52.2	74
19480	H	28.3	Amb	1M/10	45.8	1.6	27		9.5	39.2	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.475GHz, High Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2475	V	91.5		100k/300k	31.4	3.5	35.9			90.5	
2475	H	98.4		100k/300k	31.4	3.5	35.9			97.4	
4950	V	57.4		1M/3M	34.5	5	35.2			61.7	74
4950	V	51.6		1M/10	34.5	5	35.2	3.8		52.1	54
4950	H	54		1M/3M	34.5	5	35.2			58.3	74
4950	H	47.8		1M/10	34.5	5	35.2	3.8		48.3	54
7425	V	52.1		1M/3M	38.1	6.7	35.6			61.3	74
7425	V	45.1		1M/10	38.1	6.7	35.6	3.8		50.5	54
7425	H	50.9		1M/3M	38.1	6.7	35.6			60.1	74
7425	H	43.2		1M/10	38.1	6.7	35.6	3.8		48.6	54
12375	V	39.8	Amb	1M/3M	41.3	1.1	34.3			47.9	74
12375	V	27.7	Amb	1M/10	41.3	1.1	34.3			35.8	54
12375	H	40.4	Amb	1M/3M	41.3	1.1	34.3			48.5	74
12375	H	27.4	Amb	1M/10	41.3	1.1	34.3			35.5	54
19800	V	40.4	Amb	1M/3M	45.9	2.6	27.1		9.5	52.3	74
19800	V	28.3	Amb	1M/10	45.9	2.6	27.1		9.5	40.2	54
19800	H	40.4	Amb	1M/3M	45.9	2.6	27.1		9.5	52.3	74
19800	H	28.3	Amb	1M/10	45.9	2.6	27.1		9.5	40.2	54
22275	V	41	Amb	1M/3M	46.5	5	25.3		9.5	57.7	74
22275	V	28.9	Amb	1M/10	46.5	5	25.3		9.5	45.6	54
22275	H	41.1	Amb	1M/3M	46.5	5	25.3		9.5	57.8	74
22275	H	28.9	Amb	1M/10	46.5	5	25.3		9.5	45.6	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.401GHz, Low Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2401	V	61.1		100k/300k	31.4	3.5	35.9			60.1	
2401	H	63.7		100k/300k	31.4	3.5	35.9			62.7	
4802	V	42.3	Amb	1M/3M	34.5	4.9	35.2			46.5	74
4802	V	30	Amb	1M/10	34.5	4.9	35.2			34.2	54
4802	H	43.1	Amb	1M/3M	34.5	4.9	35.2			47.3	74
4802	H	29.9	Amb	1M/10	34.5	4.9	35.2			34.1	54
7203	V	32.3	Amb	100k/300k	38	6.6	35.5			41.4	54
7203	H	31.1	Amb	100k/300k	38	6.6	35.5			40.2	54
12005	V	40.4	Amb	1M/3M	41.4	1	34.8			48	74
12005	V	27.3	Amb	1M/10	41.4	1	34.8			34.9	54
12005	H	40.1	Amb	1M/3M	41.4	1	34.8			47.7	74
12005	H	27.3	Amb	1M/10	41.4	1	34.8			34.9	54
19208	V	40.6	Amb	1M/3M	45.6	2.2	26.2		9.5	52.7	74
19208	V	28.6	Amb	1M/10	45.6	2.2	26.2		9.5	40.7	54
19208	H	40.2	Amb	1M/3M	45.6	2.2	26.2		9.5	52.3	74
19208	H	28.7	Amb	1M/10	45.6	2.2	26.2		9.5	40.8	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.435GHz, Low Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2435	V	61.4		100k/300k	31.4	3.5	35.9			60.4	
2435	H	64.6		100k/300k	31.4	3.5	35.9			63.6	
4870	V	41.1	Amb	1M/3M	34.5	4.9	35.2			45.3	74
4870	V	29	Amb	1M/10	34.5	4.9	35.2			33.2	54
4870	H	41.9	Amb	1M/3M	34.5	4.9	35.2			46.1	74
4870	H	28.8	Amb	1M/10	34.5	4.9	35.2			33	54
7305	V	42	Amb	1M/3M	38.2	6.7	35.6			51.3	74
7305	V	29	Amb	1M/10	38.2	6.7	35.6			38.3	54
7305	H	42	Amb	1M/3M	38.2	6.7	35.6			51.3	74
7305	H	29	Amb	1M/10	38.2	6.7	35.6			38.3	54
12175	V	40.3	Amb	1M/3M	41.4	1	34.6			48.1	74
12175	V	26.9	Amb	1M/10	41.4	1	34.6			34.7	54
12175	H	40.2	Amb	1M/3M	41.4	1	34.6			48	74
12175	H	27	Amb	1M/10	41.4	1	34.6			34.8	54
19480	V	40.3	Amb	1M/3M	45.8	1.6	27		9.5	51.2	74
19480	V	28.2	Amb	1M/10	45.8	1.6	27		9.5	39.1	54
19480	H	40.5	Amb	1M/3M	45.8	1.6	27		9.5	51.4	74
19480	H	27.8	Amb	1M/10	45.8	1.6	27		9.5	38.7	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI

Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.475GHz, Low Power, Internal Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
2475	V	57.8		100k/300k	31.4	3.5	35.9			56.8	
2475	H	65		100k/300k	31.4	3.5	35.9			64	
4950	V	40.5	Amb	1M/3M	34.5	5	35.2			44.8	74
4950	V	27.3	Amb	1M/10	34.5	5	35.2			31.6	54
4950	H	40.1	Amb	1M/3M	34.5	5	35.2			44.4	74
4950	H	27	Amb	1M/10	34.5	5	35.2			31.3	54
7425	V	42.9	Amb	1M/3M	38.1	6.7	35.6			52.1	74
7425	V	30.2	Amb	1M/10	38.1	6.7	35.6			39.4	54
7425	H	42.2	Amb	1M/3M	38.1	6.7	35.6			51.4	74
7425	H	30.1	Amb	1M/10	38.1	6.7	35.6			39.3	54
12375	V	39.9	Amb	1M/3M	41.3	1.1	34.3			48	74
12375	V	27.6	Amb	1M/10	41.3	1.1	34.3			35.7	54
12375	H	40.5	Amb	1M/3M	41.3	1.1	34.3			48.6	74
12375	H	27.6	Amb	1M/10	41.3	1.1	34.3			35.7	54
19800	V	41	Amb	1M/3M	45.9	2.6	27.1		9.5	52.9	74
19800	V	28.4	Amb	1M/10	45.9	2.6	27.1		9.5	40.3	54
19800	H	40	Amb	1M/3M	45.9	2.6	27.1		9.5	51.9	74
19800	H	27.9	Amb	1M/10	45.9	2.6	27.1		9.5	39.8	54
22275	V	41.5	Amb	1M/3M	46.5	5	25.3		9.5	58.2	74
22275	V	29	Amb	1M/10	46.5	5	25.3		9.5	45.7	54
22275	H	40.6	Amb	1M/3M	46.5	5	25.3		9.5	57.3	74
22275	H	28.4	Amb	1M/10	46.5	5	25.3		9.5	45.1	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$ Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI

Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.401GHz, High Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4802	V	57.5		1M/3M	34.5	4.9	35.2			61.7	74
4802	V	51.4		1M/10	34.5	4.9	35.2	3.8		51.8	54
4802	H	52		1M/3M	34.5	4.9	35.2			56.2	74
4802	H	45.2		1M/10	34.5	4.9	35.2	3.8		45.6	54
12005	V	43.2	Amb	1M/3M	41.4	1	34.8			50.8	74
12005	V	33.6	Amb	1M/10	41.4	1	34.8			41.2	54
12005	H	41.4	Amb	1M/3M	41.4	1	34.8			49	74
12005	H	30.1	Amb	1M/10	41.4	1	34.8			37.7	54
19208	V	39.9	Amb	1M/3M	45.6	2.2	26.2		9.5	52	74
19208	V	28.3	Amb	1M/10	45.6	2.2	26.2		9.5	40.4	54
19208	H	40.4	Amb	1M/3M	45.6	2.2	26.2		9.5	52.5	74
19208	H	28.4	Amb	1M/10	45.6	2.2	26.2		9.5	40.5	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$ Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.435GHz, High Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4870	V	54.5		1M/3M	34.5	4.9	35.2			58.7	74
4870	V	47.9		1M/10	34.5	4.9	35.2	3.8		48.3	54
4870	H	54.5		1M/3M	34.5	4.9	35.2			58.7	74
4870	H	48.1		1M/10	34.5	4.9	35.2	3.8		48.5	54
7305	V	53		1M/3M	38.1	6.7	35.6			62.2	74
7305	V	46.4		1M/10	38.1	6.7	35.6	3.8		51.8	54
7305	H	54.1		1M/3M	38.1	6.7	35.6			63.3	74
7305	H	47.9		1M/10	38.1	6.7	35.6	3.8		53.3	54
12175	V	41.5	Amb	1M/3M	41.4	1	34.6			49.3	74
12175	V	30.3	Amb	1M/10	41.4	1	34.6			38.1	54
12175	H	41.1	Amb	1M/3M	41.4	1	34.6			48.9	74
12175	H	28.3	Amb	1M/10	41.4	1	34.6			36.1	54
19480	V	41.6	Amb	1M/3M	45.8	1.6	27		9.5	52.5	74
19480	V	28.1	Amb	1M/10	45.8	1.6	27		9.5	39	54
19480	H	40	Amb	1M/3M	45.8	1.6	27		9.5	50.9	74
19480	H	27.7	Amb	1M/10	45.8	1.6	27		9.5	38.6	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI

Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
 MODEL : Meridia Base Unit
 S/N : 1
 SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
 Radiated Spurious Emissions Measurement
 DATE : May 30, 2006 through June 1, 2006
 NOTES : Transmitting at 2.475GHz, High Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4950	V	53.8		1M/3M	34.5	5	35.2			58.1	74
4950	V	47.9		1M/10	34.5	5	35.2	3.8		48.4	54
4950	H	53.5		1M/3M	34.5	5	35.2			57.8	74
4950	H	47.4		1M/10	34.5	5	35.2	3.8		47.9	54
7425	V	53.9		1M/3M	38.1	6.7	35.6			63.1	74
7425	V	47.3		1M/10	38.1	6.7	35.6	3.8		52.7	54
7425	H	51.6		1M/3M	38.1	6.7	35.6			60.8	74
7425	H	44.8		1M/10	38.1	6.7	35.6	3.8		50.2	54
12375	V	41	Amb	1M/3M	41.3	1.1	34.3			49.1	74
12375	V	28.3	Amb	1M/10	41.3	1.1	34.3			36.4	54
12375	H	40	Amb	1M/3M	41.3	1.1	34.3			48.1	74
12375	H	26.5	Amb	1M/10	41.3	1.1	34.3			34.6	54
19800	V	39.9	Amb	1M/3M	45.9	2.6	27.1		9.5	51.8	74
19800	V	28.1	Amb	1M/10	45.9	2.6	27.1		9.5	40	54
19800	H	40	Amb	1M/3M	45.9	2.6	27.1		9.5	51.9	74
19800	H	27.6	Amb	1M/10	45.9	2.6	27.1		9.5	39.5	54
22275	V	41.1	Amb	1M/3M	46.5	5	25.3		9.5	57.8	74
22275	V	28.6	Amb	1M/10	46.5	5	25.3		9.5	45.3	54
22275	H	41.5	Amb	1M/3M	46.5	5	25.3		9.5	58.2	74
22275	H	27.9	Amb	1M/10	46.5	5	25.3		9.5	44.6	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI

Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.401GHz, Low Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4802	V	41.7	Amb	1M/3M	34.5	4.9	35.2			45.9	74
4802	V	29.3	Amb	1M/10	34.5	4.9	35.2			33.5	54
4802	H	41.9	Amb	1M/3M	34.5	4.9	35.2			46.1	74
4802	H	29.2	Amb	1M/10	34.5	4.9	35.2			33.4	54
12005	V	40.3	Amb	1M/3M	41.4	1	34.8			47.9	74
12005	V	27.3	Amb	1M/10	41.4	1	34.8			34.9	54
12005	H	40.2	Amb	1M/3M	41.4	1	34.8			47.8	74
12005	H	27.5	Amb	1M/10	41.4	1	34.8			35.1	54
19208	V	40.6	Amb	1M/3M	45.6	2.2	26.2		9.5	52.7	74
19208	V	28.6	Amb	1M/10	45.6	2.2	26.2		9.5	40.7	54
19208	H	39.5	Amb	1M/3M	45.6	2.2	26.2		9.5	51.6	74
19208	H	28.2	Amb	1M/10	45.6	2.2	26.2		9.5	40.3	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$ Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.435GHz, Low Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4870	V	41.1	Amb	1M/3M	34.5	4.9	35.2			45.3	74
4870	V	27.9	Amb	1M/10	34.5	4.9	35.2			32.1	54
4870	H	40.1	Amb	1M/3M	34.5	4.9	35.2			44.3	74
4870	H	28	Amb	1M/10	34.5	4.9	35.2			32.2	54
7305	V	41.8	Amb	1M/3M	38.2	6.7	35.6			51.1	74
7305	V	29	Amb	1M/10	38.2	6.7	35.6			38.3	54
7305	H	42.7	Amb	1M/3M	38.2	6.7	35.6			52	74
7305	H	29	Amb	1M/10	38.2	6.7	35.6			38.3	54
12175	V	40.2	Amb	1M/3M	41.4	1	34.6			48	74
12175	V	27.1	Amb	1M/10	41.4	1	34.6			34.9	54
12175	H	39.6	Amb	1M/3M	41.4	1	34.6			47.4	74
12175	H	26.9	Amb	1M/10	41.4	1	34.6			34.7	54
19480	V	40.4	Amb	1M/3M	45.8	1.6	27		9.5	51.3	74
19480	V	27.9	Amb	1M/10	45.8	1.6	27		9.5	38.8	54
19480	H	41	Amb	1M/3M	45.8	1.6	27		9.5	51.9	74
19480	H	28.1	Amb	1M/10	45.8	1.6	27		9.5	39	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance correction factor

Checked By: MARK E. LONGINOTTI



Data Sheet

MANUFACTURER : Fleetwood Group, Inc.
MODEL : Meridia Base Unit
S/N : 1
SPECIFICATION : FCC Part 15, Subpart C, Section 15.247
Radiated Spurious Emissions Measurement
DATE : May 30, 2006 through June 1, 2006
NOTES : Transmitting at 2.475GHz, Low Power, External Antenna, PoE

Freq MHz	Ant Pol	Meter Rdg dBuV	Amb	BW RBW/VBW Hz	Ant Fac dB	Cable Loss dB	Pre Amp Gain dB	D.C. Corr. Factor dB	Distance Corr. Factor dB	Total dBuV/m	15.247 Limit dBuV/m
4950	V	40.7	Amb	1M/3M	34.5	5	35.2			45	74
4950	V	27.3	Amb	1M/10	34.5	5	35.2			31.6	54
4950	H	39.4	Amb	1M/3M	34.5	5	35.2			43.7	74
4950	H	27.2	Amb	1M/10	34.5	5	35.2			31.5	54
7425	V	42.8	Amb	1M/3M	38.1	6.7	35.6			52	74
7425	V	30.1	Amb	1M/10	38.1	6.7	35.6			39.3	54
7425	H	44.1	Amb	1M/3M	38.1	6.7	35.6			53.3	74
7425	H	30.1	Amb	1M/10	38.1	6.7	35.6			39.3	54
12375	V	41	Amb	1M/3M	41.3	1.1	34.3			49.1	74
12375	V	27.5	Amb	1M/10	41.3	1.1	34.3			35.6	54
12375	H	40.2	Amb	1M/3M	41.3	1.1	34.3			48.3	74
12375	H	27.3	Amb	1M/10	41.3	1.1	34.3			35.4	54
19800	V	40.3	Amb	1M/3M	45.9	2.6	27.1		9.5	52.2	74
19800	V	28.2	Amb	1M/10	45.9	2.6	27.1		9.5	40.1	54
19800	H	40.2	Amb	1M/3M	45.9	2.6	27.1		9.5	52.1	74
19800	H	28	Amb	1M/10	45.9	2.6	27.1		9.5	39.9	54
22275	V	40.2	Amb	1M/3M	46.5	5	25.3		9.5	56.9	74
22275	V	28	Amb	1M/10	46.5	5	25.3		9.5	44.7	54
22275	H	41.3	Amb	1M/3M	46.5	5	25.3		9.5	58	74
22275	H	28.4	Amb	1M/10	46.5	5	25.3		9.5	45.1	54

Amb = Ambient

D.C. = Duty Cycle Correction Factor = $20 \cdot \log((\text{dwell time})/100\text{msec}) = 20 \cdot \log(64.67/100) = -3.8\text{dB}$

Distance Correction Factor = $20 \cdot \log(1\text{m}/3\text{m}) = -9.5\text{dB}$

Total = Meter reading + antenna factor + cable loss – pre amp gain – D.C. correction factor – distance



correction factor

Checked By: MARK E. LONGINOTTI