Measurement of RF Emissions from a 50T0157 Trapeze Mobile Ticketing Device

For	Trapeze 5265 Rockwell Drive Northeast Cedar Rapids, IA 52402
P.O. Number	PO0011716
Date Tested	June 16, 2014 through July 2, 2014
Test Personnel	Mark Longinotti
Test Specification	FCC "Code of Federal Regulations" Title 47, Part 15, Subpart C, Section 15.247 for Digital Modulation Intentional Radiators Operating within the 2400-2483.5MHz Band Industry Canada RSS-GEN Industry Canada RSS-210

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REVISION HISTORY

Revision	Date	Description
—	31 July 2014	Initial release

Measurement of RF Emissions from a Trapeze Mobile Ticketing Device, Model No. 50T0157

1. INTRODUCTION

1.1. Scope of Tests

This report represents the results of the series of radio interference measurements performed on a Trapeze Mobile Ticketing Device, Model No. 50T0157, hereinafter referred to as the Equipment Under Test (EUT). No Serial Number was assigned to the EUT. The EUT contains a digital modulation WiFi module that was designed to transmit in the 2400-2483.5 MHz, band using an integral antenna. The EUT was manufactured and submitted for testing by Trapeze located in Cedar Rapids, IA.

1.2. Purpose

The WiFi module was designed by BlueGiga Technologies Inc. The WiFi module originally received a Grant of Equipment Authorization from the FCC, FCC Identifier: QOQWF111, and a Technical Acceptance Certificate from Industry Canada, IC: 5123A-BGTWF111, for modular approval using a different antenna.

The purpose of this test was to determine if the BlueGiga Technologies Inc. WiFi module, meets the radiated emissions in restricted bands, 6 dB bandwidth, EIRP, and power spectral density requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart C, Section 15.247 for Intentional Radiators Operating within the 2400-2483.5 MHz band when tested with a different antenna than that used during modular approval testing.

The purpose of this test was also to determine if the BlueGiga Technologies Inc. WiFi module meets the radiated emissions in restricted bands, 6 dB bandwidth, EIRP, and power spectral density requirements of the Industry Canada Radio Standards Specification, RSS-210 Annex 8, for transmitters when tested with a different antenna than that used during modular approval testing.

Testing was performed in accordance with ANSI C63.4-2009.

1.3. Deviations, Additions and Exclusions

There were no deviations, additions to, or exclusions from the test specification during this test series.

1.4. EMC Laboratory Identification

This series of tests was performed by Elite Electronic Engineering Incorporated of Downers Grove, Illinois. The laboratory is accredited by The American Association for Laboratory Accreditation (A2LA). A2LA Certificate Number: 1786.01.

1.5. Laboratory Conditions

The temperature at the time of the test was 23°C and the relative humidity was 45%.

2. 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 2013
- ANSI C63.4-2009, "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"
- Federal Communications Commission Office of Engineering and Technology Laboratory Division

Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under Section 15.247, June 5, 2014

- Industry Canada Radio Standards Specification, RSS-Gen, "General Requirements and Information for the Certification of Radiocommunication Equipment", Issue 3, December 2010

- Industry Canada Radio Standards Specification, RSS-210, "Low-power License-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment", Issue 8, December 2010

3. EUT Setup and Operation

3.1. General Description

The EUT is a Trapeze Mobile Ticketing Device, Model No. 50T0157. Block diagrams of the EUT setup are shown as Figure 1 and Figure 2.

3.1.1. Power Input

The EUT obtained 13.5VDC through 4 leads of the 24 wire, 50 foot long wiring harness.

3.1.2. Peripheral Equipment

The following peripheral equipment was submitted with the EUT:

Item	Description
Termination Box	Used to provide loopback for the Ethernet, grounding for the discrete I/O, and resistive termination of the serial communication lines. The Termination Box was external to the test chamber for all tests.
Laptop Computer	Used to program the EUT to operate in the proper test mode.
Micro SD card	Installed in the EUT. The card has all the test application software loaded onto it.

3.1.3. Signal Input/Output Leads

The following interconnect cables were submitted with the EUT:

Item	Description
Ethernet Cable	50 foot long – terminated at Termination Box
Serial Cable	50 foot long – terminated at Termination Box
Discrete I/O Cable	50 foot long – terminated at Termination Box
WiFi Programming Cable	1 foot long - unterminated
Ethernet Cable	50 foot long – terminated at Termination Box

3.1.4. Grounding

The EUT was not grounded during the tests.

3.2. Software

For all tests the EUT had Firmware Version 603X.A10.1177 loaded onto the device to provide correct load characteristics.

3.3. Operational Mode

For all tests the EUT was placed on an 80cm high non-conductive stand. The EUT and all peripheral equipment were energized. Once the EUT was energized, all installed components of the EUT were exercised. The laptop computer was connected to the EUT and the "UniTest" software was used to place the

EUT in one of the following modes:

- Transmit at 2412MHz 802.11b 11Mb/sec
- Transmit at 2412MHz 802.11g 54Mb/sec
- Transmit at 2412MHz 802.11n 65Mb/sec
- Transmit at 2437MHz 802.11b 11Mb/sec
- Transmit at 2437MHz 802.11g 54Mb/sec
- Transmit at 2437MHz 802.11n 65Mb/sec
- Transmit at 2462MHz 802.11b 11Mb/sec
- Transmit at 2462MHz 802.11g 54Mb/sec
- Transmit at 2462MHz 802.11n 65Mb/sec

3.4. EUT Modifications

The following modifications were performed to the EUT:

No modifications were required for compliance.

4. TEST FACILITY AND TEST INSTRUMENTATION

4.1. Shielded Enclosure

All tests were performed in a 32ft. x 20ft. x 18ft. hybrid ferrite-tile/anechoic absorber lined 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. Anechoic absorber material is installed over the ferrite tile. The floor of the chamber is used as the ground plane. The chamber complies with ANSI C63.4-2009 for site attenuation.

4.2. Test Instrumentation

The test instrumentation and auxiliary equipment used during the tests are listed in Table 9-1.

Conducted and radiated emission measurements were performed with a spectrum analyzer. This receiver allows measurements with the bandwidths and detector functions specified in the requirements.

4.3. 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).

4.4. Measurement Uncertainty

All measurements are an estimate of their true value. The measurement uncertainty characterizes, with a specified confidence level, the spread of values which may be possible for a given measurement system.

The measurement uncertainty for these tests is presented below:

Conducted Emissions Measurements		
Combined Standard Uncertainty	1.07	-1.07
Expanded Uncertainty (95% confidence)	2.1	-2.1

Radiated Emissions Measurements		
Combined Standard Uncertainty	2.26	-2.18
Expanded Uncertainty (95% confidence)	4.5	-4.4

5. TEST PROCEDURES

5.1. Powerline Conducted Emissions

5.1.1.Requirements

In normal operation, the EUT is powered by 8 – 36 VDC from the vehicle battery in which it is installed. Since the EUT does not connect to AC power, the conducted emission measurements are not required.

5.2. 6dB Bandwidth

5.2.1.Requirement

Per 15.247(a)(2),the minimum 6dB bandwidth shall be at least 500kHz for all systems using digital modulation techniques.

5.2.2.Procedures

The EUT was setup inside the chamber. The EUT was allowed to transmit continuously. The transmit channel was set separately to low, middle, and high channels. The resolution bandwidth (RBW) was set to 100kHz and the span was set to greater than the RBW.

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.

5.2.3.Results

The plots on pages 19 through 27 show that the minimum 6 dB bandwidth was 10.05MHz which is greater than the minimum allowable 6dB bandwidth requirement of 500kHz for systems using digital modulation techniques. The 99% bandwidth was measured to be 17.56MHz.

5.3. Peak Output Power

5.3.1.Requirements

Per section 15.247(b)(3), for systems using digital modulation the maximum peak output conducted power shall not be greater than 1.0W (30dBm). Per section 15.247(b)(4), this limit is based on the use of antennas with directional gains that do not exceed 6dBi. Since the limit allows for a 6dBi antenna gain, the maximum EIRP can be increased by 6dB to 4 Watt (36dBm).

5.3.2.Procedures

The EUT was set to transmit separately at the low, middle, and high channels. The receiver was setup as specified in the knowledge database FCC document D01 DTS Meas Guidance v03r01, paragraph 9.1.2 for Integrated Band Power Measurements. The 'Max-Hold' function was engaged.

The EUT was placed on the non-conductive stand and set to transmit. A double ridged waveguide antenna was placed at a test distance of 3 meters from the EUT. The EUT 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 channels.

The equivalent power was determined from the field intensity levels measured at 3 meters using the substitution method. To determine the emission power, a second double ridged waveguide antenna was then set in place of the EUT 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 and antenna gain for all measurements above 1GHz, as required. The peak power output was calculated for low, middle, and high frequencies.

5.3.3. Results

The results are presented on pages 28 through 30. The maximum EIRP measured from the transmitter was 25.3dBm which is below the 36dBm limit.

5.4. Radiated Spurious Emissions Measurements

5.4.1. Requirements

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).

Paragraph 15.209(a) has the following radiated emission limits:

Frequency MHz	Field Strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	3
30.0-88.0	100	3
88.0-216.0	150	3
216.0-960.0	200	3
Above 960	500	3

5.4.2. Procedures

All tests were performed in a 32ft. x 20ft. x 18ft. hybrid ferrite-tile/anechoic absorber lined test chamber. The walls and ceiling of the shielded chamber are lined with ferrite tiles. Anechoic absorber material is installed over the ferrite tile. The floor of the chamber is used as the ground plane. The chamber complies with ANSI C63.4-2009 for site attenuation.

The shielded enclosure prevents emissions from other sources, such as radio and TV stations from interfering with the measurements. All powerlines and signal lines entering the enclosure pass through filters on the enclosure wall. The powerline filters prevent extraneous signals from entering the enclosure on these leads.

Preliminary radiated emissions tests were performed to determine the emission characteristics of the EUT. For the preliminary test, a broadband measuring antenna was positioned at a 3 meter distance from the EUT. The entire frequency range from 30MHz to 25GHz was investigated using a peak detector function. The resultant field strength (FS) is a summation in decibels (dB) of the receiver meter reading (MTR), the antenna correction factor (AF), and the cable loss factor (CF). If an external pre-amplifier is used, the total is reduced by its gain (-PA). If a distance correction (DC) is required, it is added to the total.

Formula 1: FS (dBuV/m) = MTR (dBuV) + AF (dB/m) + CF (dB) + (- PA (dB)) + DC (dB)

To convert the Field Strength dBuV/m term to uV/m, the dBuV/m is first divided by 20. The Base 10 AntiLog is taken of this quotient. The result is the Field Strength value in uV/m terms.

Formula 2: FS (uV/m) = AntiLog [(FS (dBuV/m))/20]

The final open field emission tests were then manually performed over the frequency range of 30MHz to 25GHz.

For all emissions in the restricted bands, the following procedure was used:

a) The field strengths of all emissions below 1 GHz were measured using a bi-log antenna. The bi-log antenna was positioned at a 3 meter distance from the EUT. A peak detector with a resolution bandwidth of 100 kHz was used on the spectrum analyzer.

b) The field strengths of all emissions above 1 GHz were measured using a double-ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. A peak detector with a resolution bandwidth of 1 MHz was used on the spectrum analyzer.
c) To ensure that maximum or worst case emission levels were measured, the following steps were taken when taking all measurements:
   i) The EUT was rotated so that all of its sides were exposed to the receiving antenna.
   ii) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
   iii) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.
   iv) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer, the measuring antenna was not raised or lowered to ensure maximized readings. Instead the EUT was rotated through all axes to ensure the maximum readings were recorded for the EUT.
d) For all radiated emissions measurements below 1 GHz, if the peak reading is below the limits listed in 15.209(a), no further measurements are required. If however, the peak readings exceed the limits listed in 15.209(a), then the emissions are remeasured using a quasi-peak detector.
e) For all radiated emissions measurements above 1 GHz, the peak readings must comply with the 15.35(b) limits. 15.35(b) states that when average radiated emissions measurements are specified, there also is a limit on the peak level of the radiated emissions. The limit on the peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. Therefore, all peak readings above 1 GHz must be no greater than 20 dB above the limits specified in 15.209(a).

f) Next, for all radiated emissions measurements above 1GHz, the resolution bandwidth was set to 1MHz. The analyzer was set to linear mode with a 10Hz video bandwidth in order to simulate an average detector. An average reading was taken.

5.4.3. Results

Preliminary radiated emissions plots with the EUT transmitting at Low Frequency, Middle Frequency, and High Frequency are shown on pages 31 through 102. Final radiated emissions data are presented on data pages 103 through 120. As can be seen from the data, all emissions measured from the EUT were within the specification limits. Photographs of the test configuration which yielded the highest, or worst case, radiated emission levels are shown on Figures 2 through 4.

5.5. Band Edge Compliance

5.5.1. Requirement

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).

5.5.2. Procedures

5.4.2.1 Low Band Edge

1) The EUT was setup inside the test chamber on a non-conductive stand.
2) A broadband measuring antenna was placed at a test distance of 3 meters from the EUT.
3) The EUT was set to transmit continuously at the channel closest to the low band-edge.
4) The EUT was maximized for worst case emissions at the measuring antenna. The maximum meter reading was recorded.
5) To determine the band edge compliance, the following spectrum analyzer settings were used:

   a. Center frequency = low band-edge frequency.

b. Span = Wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation.
c. Resolution bandwidth (RBW) ≥ 1% of the span.
d. The 'Max-Hold' function was engaged. The analyzer was allowed to scan until the envelope of the transmitter bandwidth was defined.
e. The marker was set on the peak of the in-band emissions. A display line was placed 20dB down from the peak of the in-band emissions. All emissions which fall outside of the authorized band of operation must be below the 20dB down display line. (All emissions to the left of the center frequency (band-edge) must be below the display line.)
f. The analyzer's display was plotted using a 'screen dump' utility.

5.4.2.2 High Band Edge

1) The EUT was set to transmit continuously at the channel closest to the high band-edge.
2) A double ridged waveguide was placed 3 meters away from the EUT. The antenna was connected to the input of a spectrum analyzer.
3) The center frequency of the analyzer was set to the high band edge (2483.5MHz)
4) The resolution bandwidth was set to 1MHz.
5) To ensure that the maximum or worst case emission level was measured, the following steps were taken:

   a. The EUT was rotated so that all of its sides were exposed to the receiving antenna.
   b. Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
   c. The measuring antenna was raised and lowered from 1 to 4 meters for each antenna polarization to maximize the readings.

6) The highest measured peak reading was recorded.
7) The highest measured average reading was recorded.

5.5.3.Results

Pages 121 through 129 show the radiated band-edge compliance results. As can be seen from these plots, the radiated emissions at the low end band edge are within the 20 dB down limits. The radiated emissions at the high end band edge are within the general limits.

5.6. Power Spectral Density

5.6.1.Requirements

Per section 15.247(d), the peak power spectral density from the intentional radiator shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

5.6.2.Procedures

1) The EUT was placed on the non-conductive stand and set to transmit at the low channel.
2) A broadband measuring antenna was placed near the EUT.
3) To determine the power spectral density, the following spectrum analyzer settings were used for Channel 1:
   a. Center frequency = transmit frequency
   b. Span = 1.5 time the bandwidth
   c. Resolution bandwidth (RBW) greater than the 6dB bandwidth.
   d. Sweep time = auto
   e. The peak detector and 'Max-Hold' function was engaged. The analyzer was allowed to scan until the envelope of the transmitter bandwidth was defined.
   f. Channel 1 of the spectrum analyzer was placed in ‘View’ mode.

4) This reading corresponds to the peak output power measured for the low channel.
5) Turn on the display line and place it at the corresponding +8dBm level. (e.g. if the peak output power is +18dBm then the +8dBm level will be 10dB down from the radiated level and if the peak output power is +6dBm then the +8dBm level will be 2dB above the radiated level.)
6) The EUT was then placed in the normal operation mode (for DTS devices)
7) To determine the power spectral density, the following spectrum analyzer settings were used for Channel 2:
    a. Center frequency = transmit frequency
    b. Span = 1.5 time the bandwidth
    c. Resolution bandwidth (RBW) = 3kHz < RBW < 100kHz
    d. Sweep time = auto couple
    e. The peak detector and 'Max-Hold' function was engaged.
    f. The display line represents the 8 dBm limit
    g. The analyzer's display was plotted using a 'screen dump' utility.
8) Steps (2) through (7) were repeated for the middle and high channels.

5.6.3. Results

Pages 130 through 138 show the power spectral density results. As can be seen from the plots, the peak power density is less than 8dBm in a 3kHz band during any time interval of continuous transmission.

6. Other Test Conditions

6.1. Test Personnel and Witnesses

All tests were performed by qualified personnel from Elite Electronic Engineering Incorporated.

6.2. Disposition of the EUT

The EUT and all associated equipment were returned to Trapeze upon completion of the tests.

7. Conclusions

It was determined that the Trapeze Mobile Ticketing Device, Model No. 50T0157, digital modulation transmitter, Serial No. None Assigned, did fully meet the conducted and radiated emission requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart C, Sections 15.207 and 15.247 for Intentional Radiators Operating within the 2400-2483.5 MHz band, when tested per ANSI C63.4-2009.

It was also determined that the Trapeze Mobile Ticketing Device, Model No. 50T0157, digital modulation transmitter, Serial No. None Assigned, did fully meet the conducted and radiated RF emission requirements of the Industry Canada Radio Standards Specification, RSS-Gen Section 7.2.4 and RSS-210 Annex 8, for transmitters, when tested per ANSI C63.4-2009.

8. 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 EUT at the test date. Any electrical or mechanical modification made to the EUT subsequent to the specified test date will serve to invalidate the data and void this certification.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the Federal Government.

9. EQUIPMENT LIST

Table 9-1 Equipment List

Eq ID	Equipment Description	Manufacturer	Model No.	Serial No.	Frequency Range	Cal Date	Due Date
APW0	PREAMPLIFIER	PLANAR ELECTRONICS	PE2-30-20G20R6G	PL2926/0646	20GHZ-26.5GHZ	3/11/2014	3/11/2015
APW11	PREAMPLIFIER	PMI	PE2-35-120-5R0-10-12-SFF	PL11685/1241	1GHZ-20GHZ	3/11/2014	3/11/2015
CDX1	COMPUTER	ELITE	WORKSTATION	---	---	N/A	
CDX7	COMPUTER	ELITE	WORKSTATION			N/A	
CMA1	Controllers	EMCO	2090	9701-1213	---	N/A	
NHG1	STANDARD GAIN HORN ANTENNA	NARDA	638	---	18-26.5GHZ	NOTE 1	
NTA2	BILOG ANTENNA	TESEQ	6112D	28040	25-1000MHz	8/30/2013	8/30/2014
NTA3	BILOG ANTENNA	TESEQ	6112D	28040	25-1000MHz	2/19/2014	2/19/2015
NWQ0	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS LINDGREN	3117	66657	1GHZ-18GHZ	3/11/2014	3/11/2015
NWQ1	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS-LINDGREN	3117	66655	1GHZ-18GHZ	3/11/2014	3/11/2015
RBA0	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESIB26	100145	20HZ-26.5GHZ	3/7/2014	3/7/2015
RBB0	EMI TEST RECEIVER 20HZ TO 40GHZ	ROHDE & SCHWARZ	ESIB40	100250	20 HZ TO 40GHZ	3/11/2014	3/11/2015
XPR0	HIGH PASS FILTER	K&L MICROWAVE	11SH10-4800/X20000	001	4.8-20GHZ	9/12/2013	9/12/2014

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.

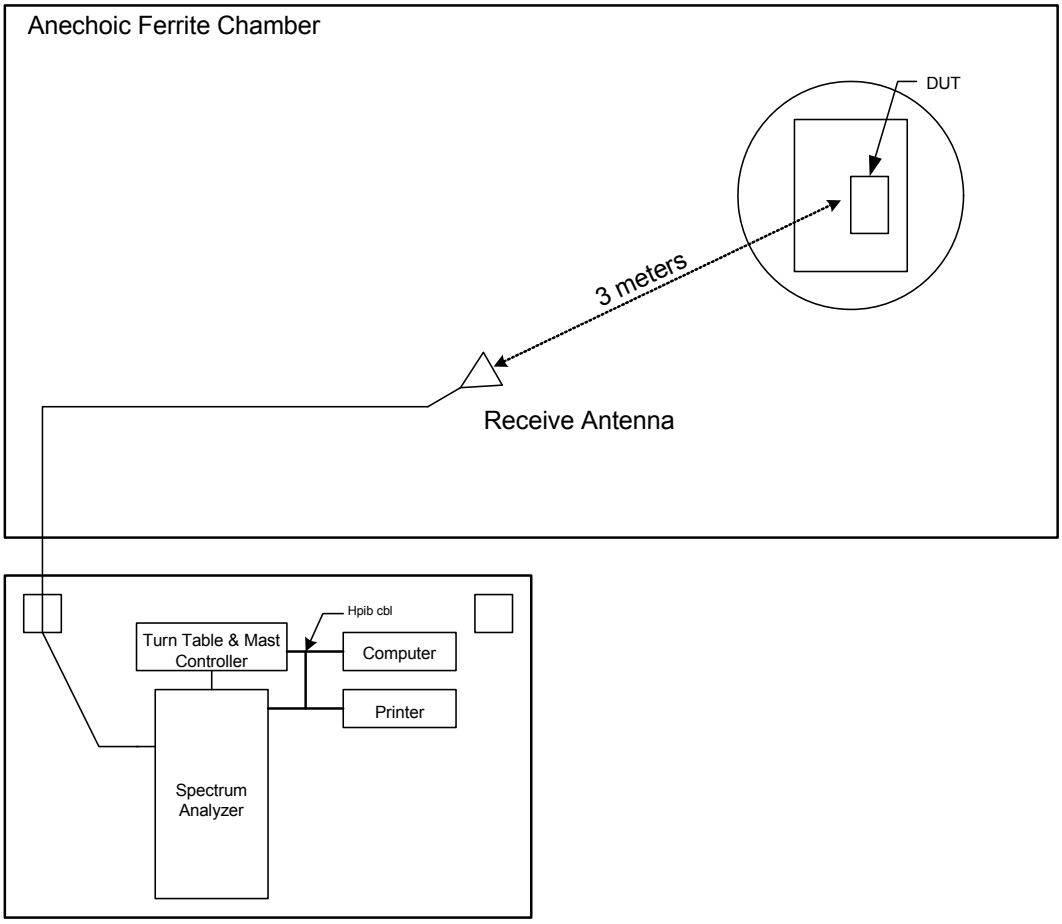


FIGURE 1 BLOCKDIAGRAM OF TEST SETUP

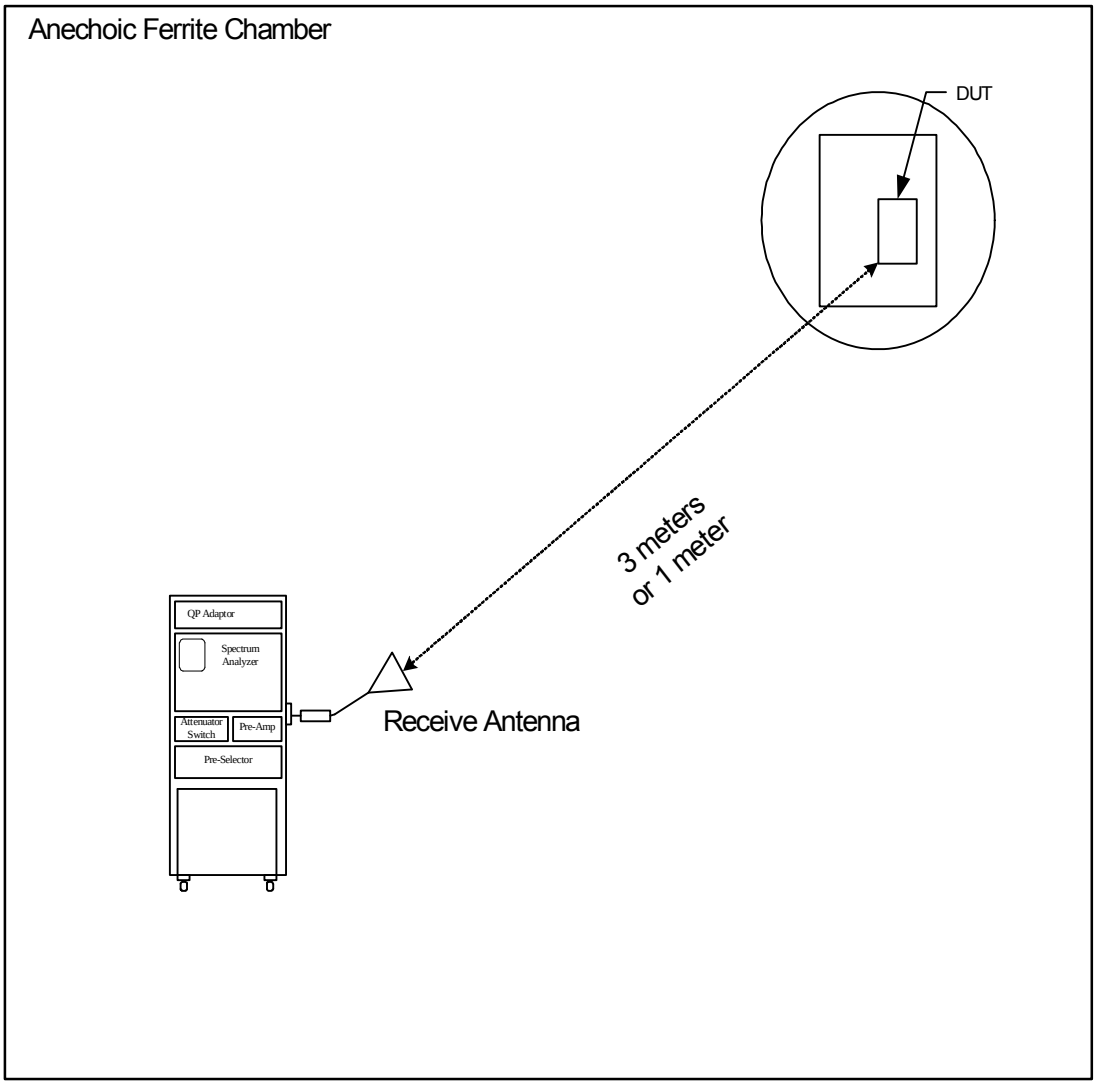
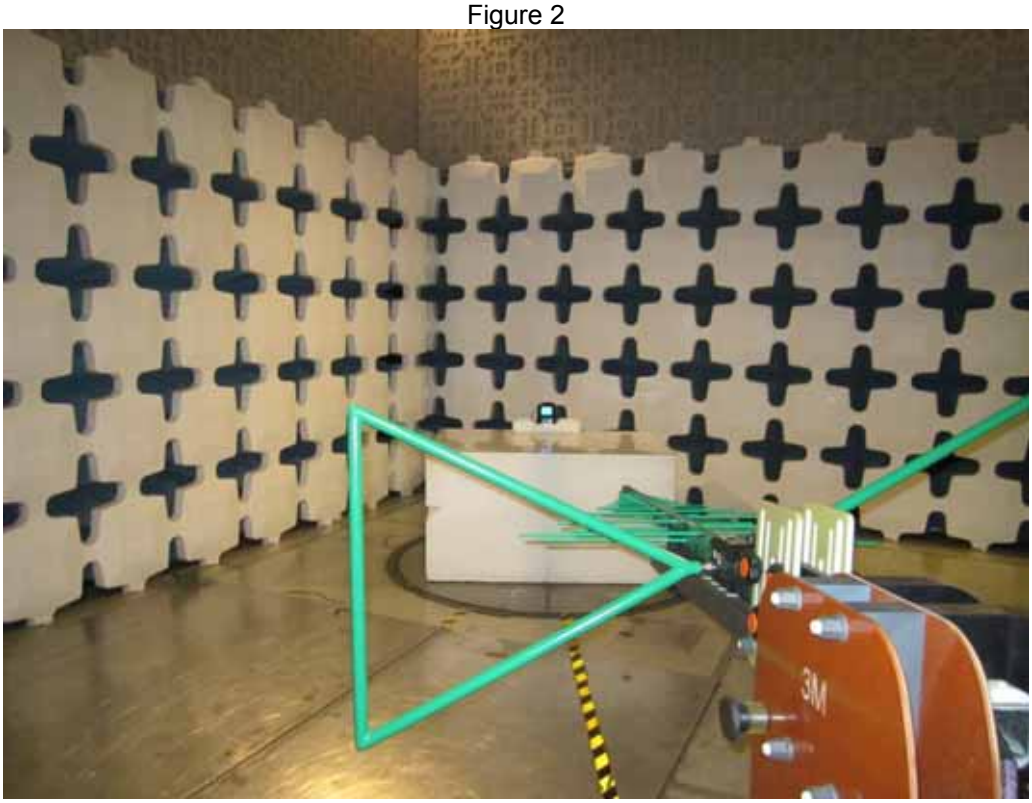

Anechoic Ferrite Chamber
DUT
3 meters
or 1 meter
QP Adaptor
Spectrum
Analyzer
Attenuator
Switch
Pre-Amp
Pre-Selector
Receive Antenna

Figure 2

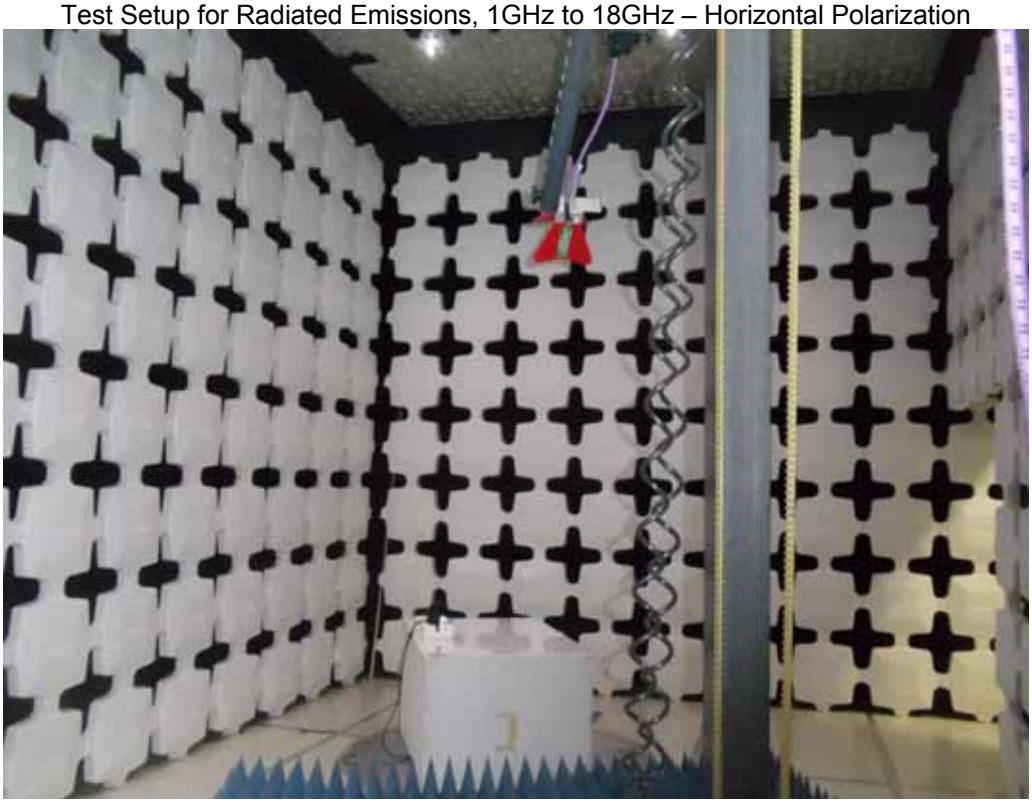


Test Setup for Radiated Emissions, 30MHz to 1GHz – Horizontal Polarization

Test Setup for Radiated Emissions, 30MHz to 1GHz – Vertical Polarization

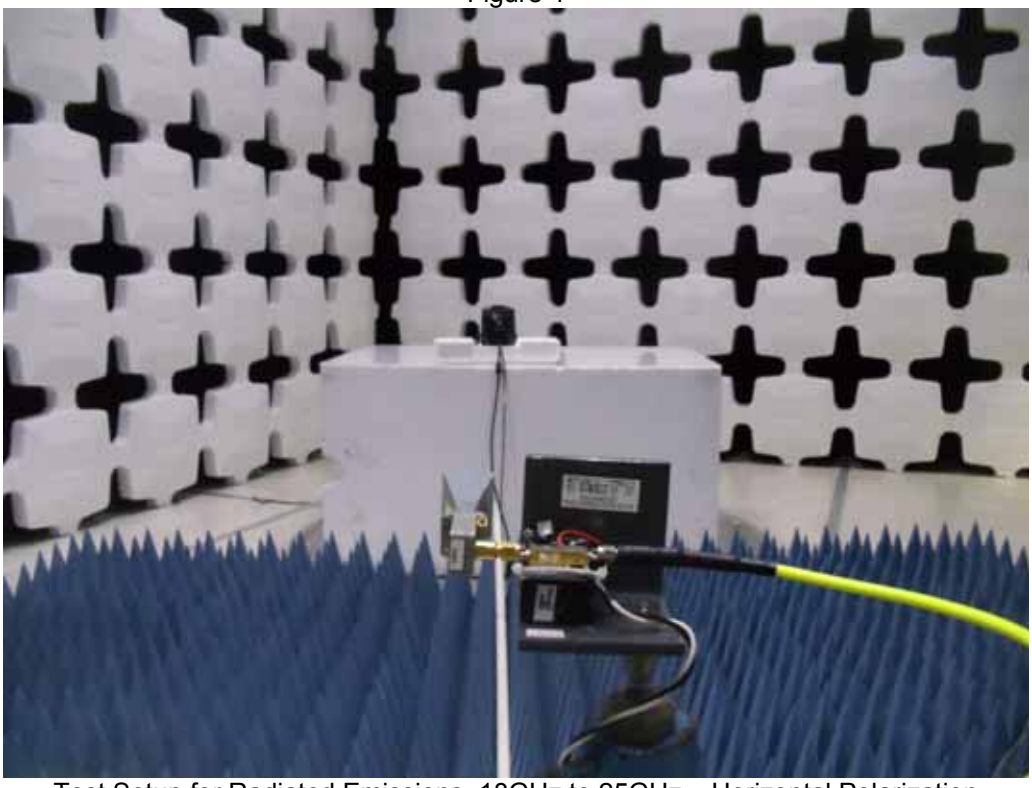
Figure 3

Test Setup for Radiated Emissions, 1GHz to 18GHz – Horizontal Polarization



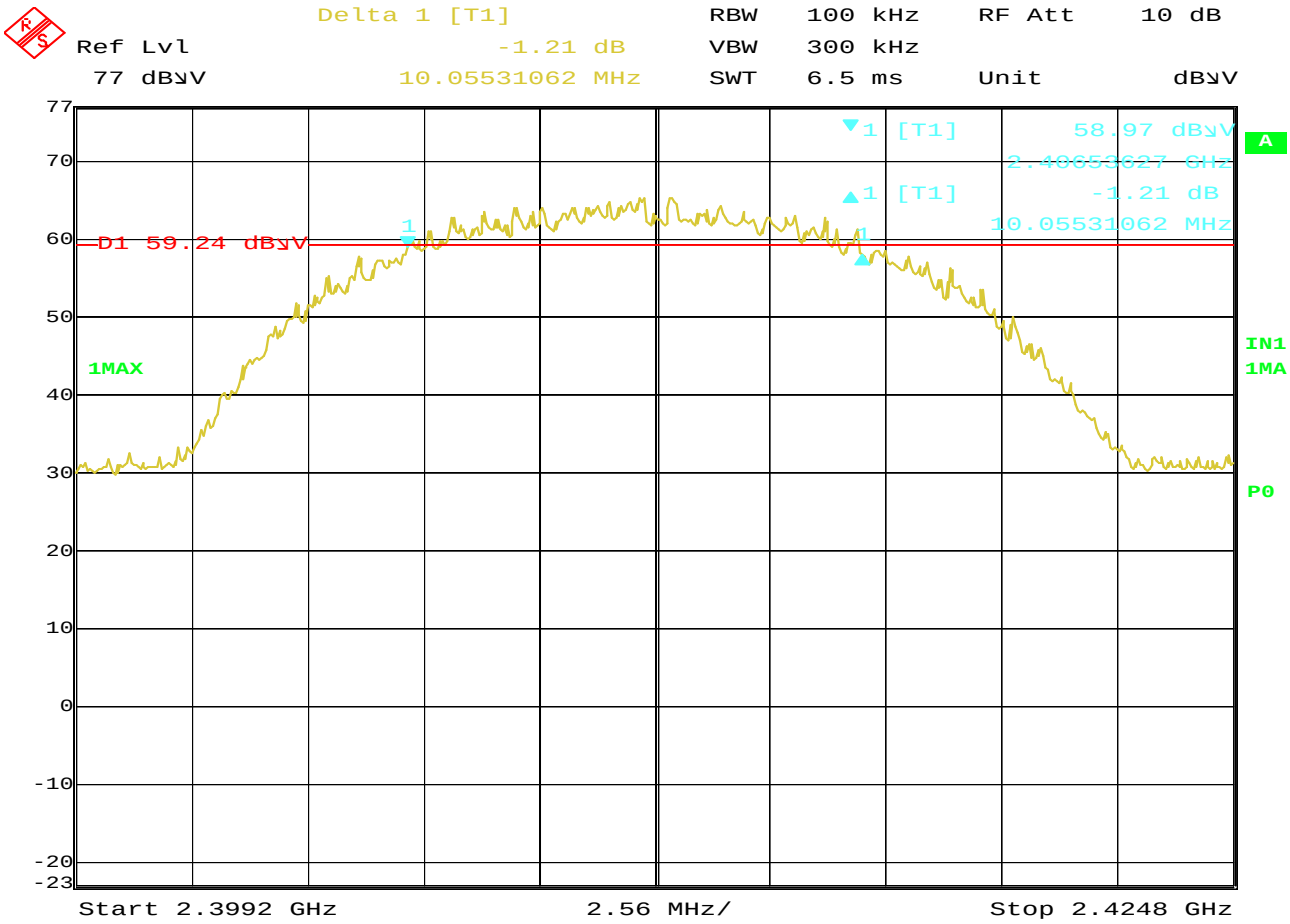
Test Setup for Radiated Emissions, 1GHz to 18GHz – Vertical Polarization

Figure 4



Test Setup for Radiated Emissions, 18GHz to 25GHz – Horizontal Polarization

Test Setup for Radiated Emissions, 18GHz to 25GHz – Vertical Polarization

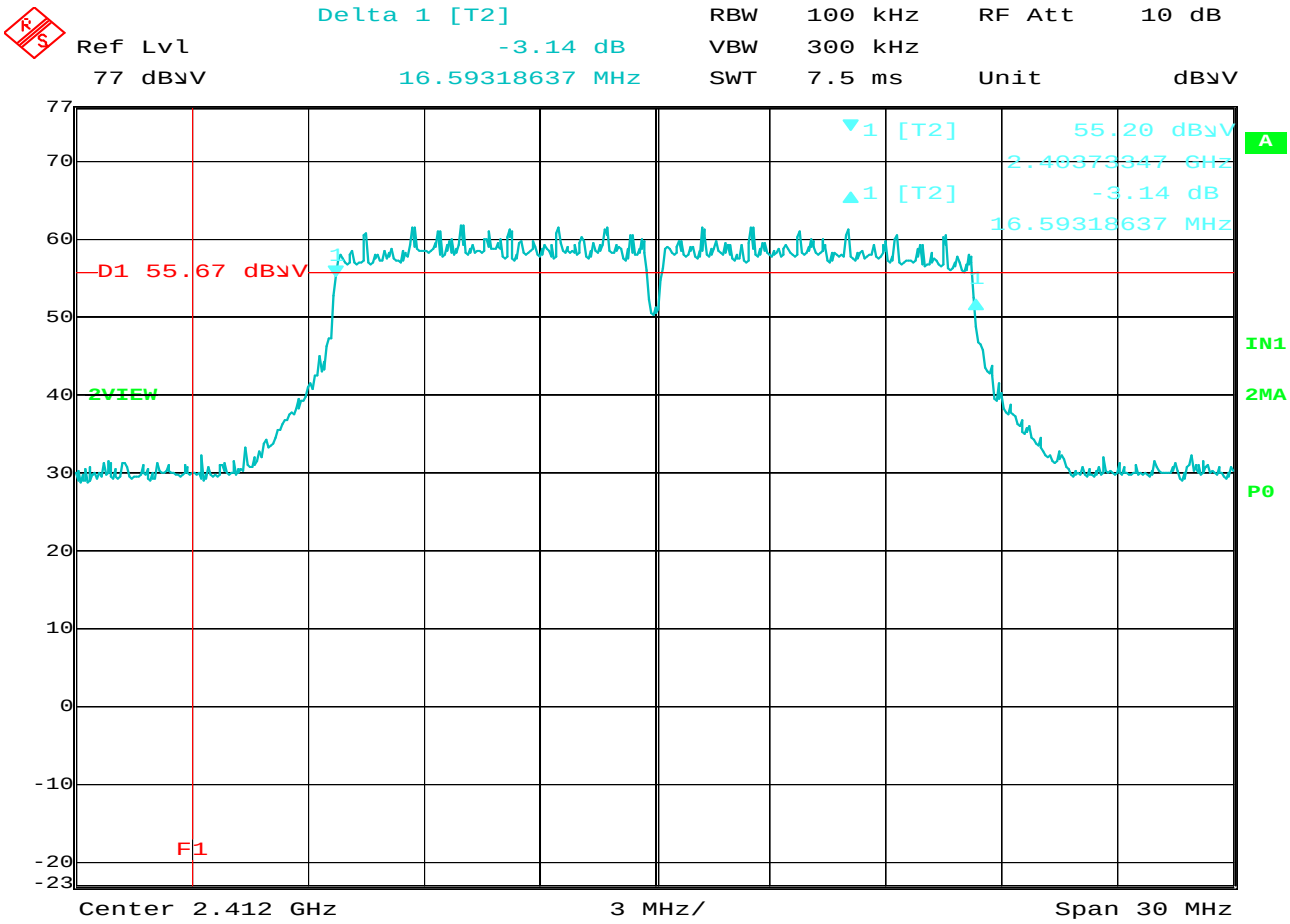


Date: 16.JUN.2014 09:31:36

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 10.05MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

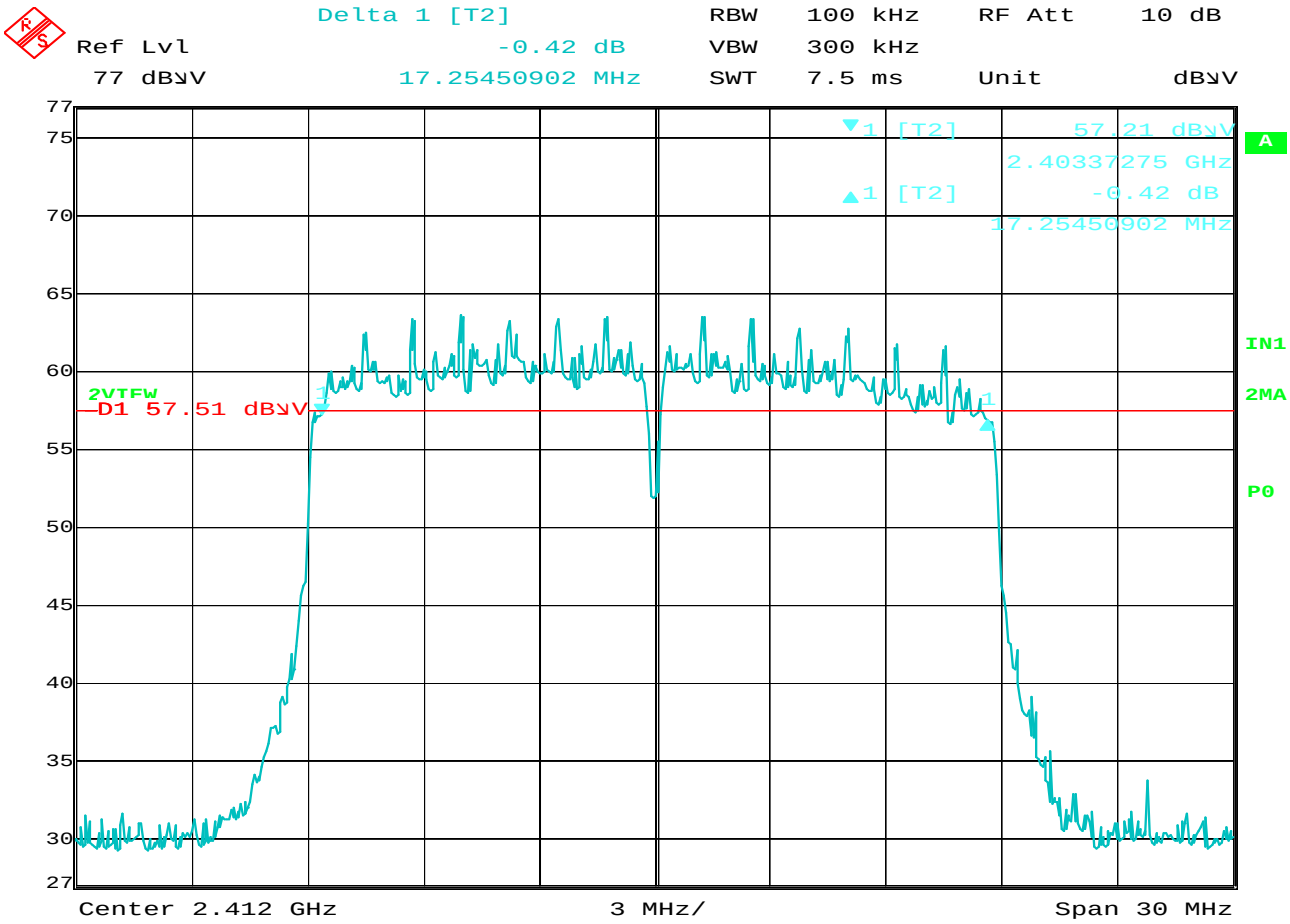


Date: 17.JUN.2014 11:26:12

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 16.59MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

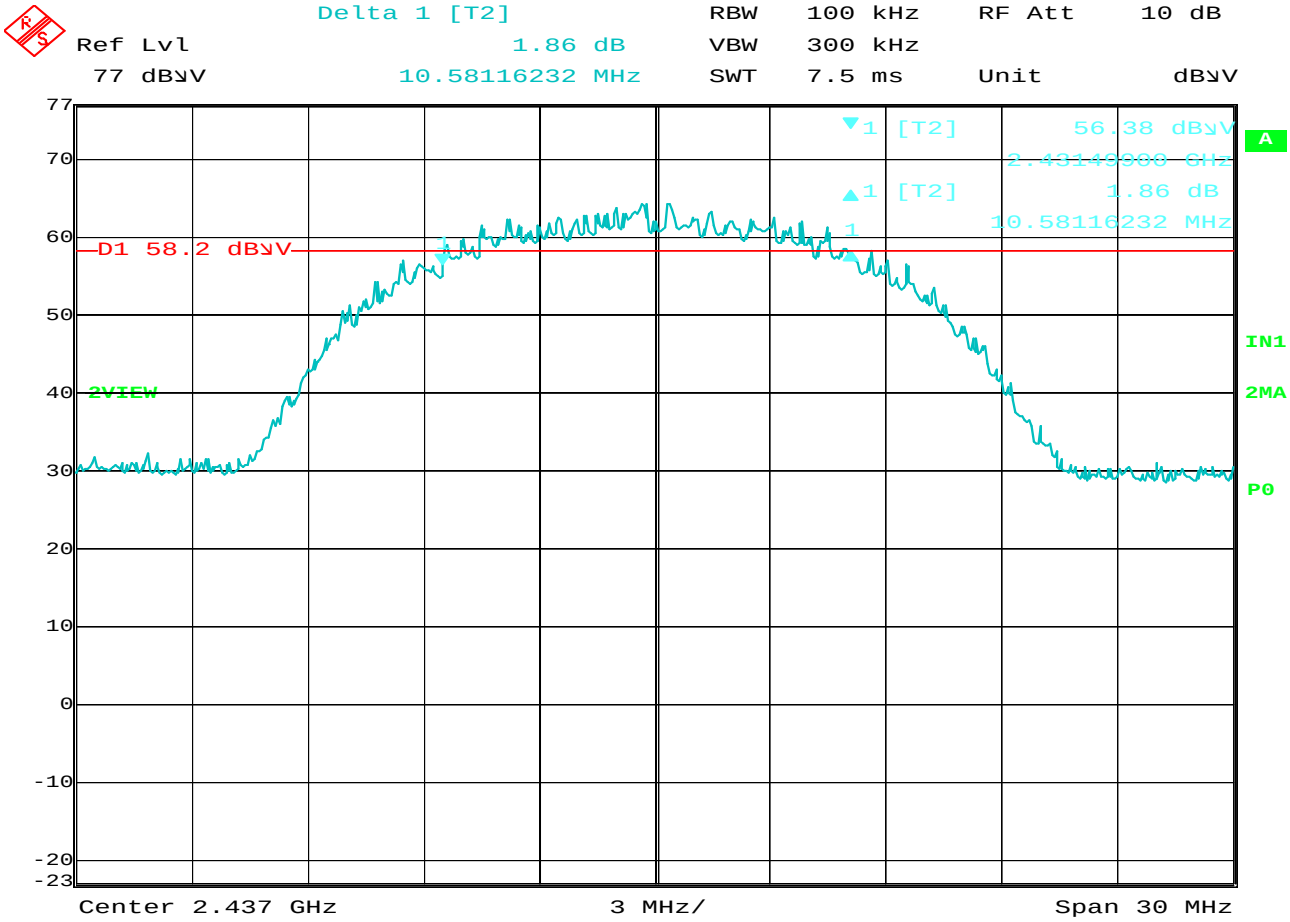


Date: 17.JUN.2014 14:28:26

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 17.25MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

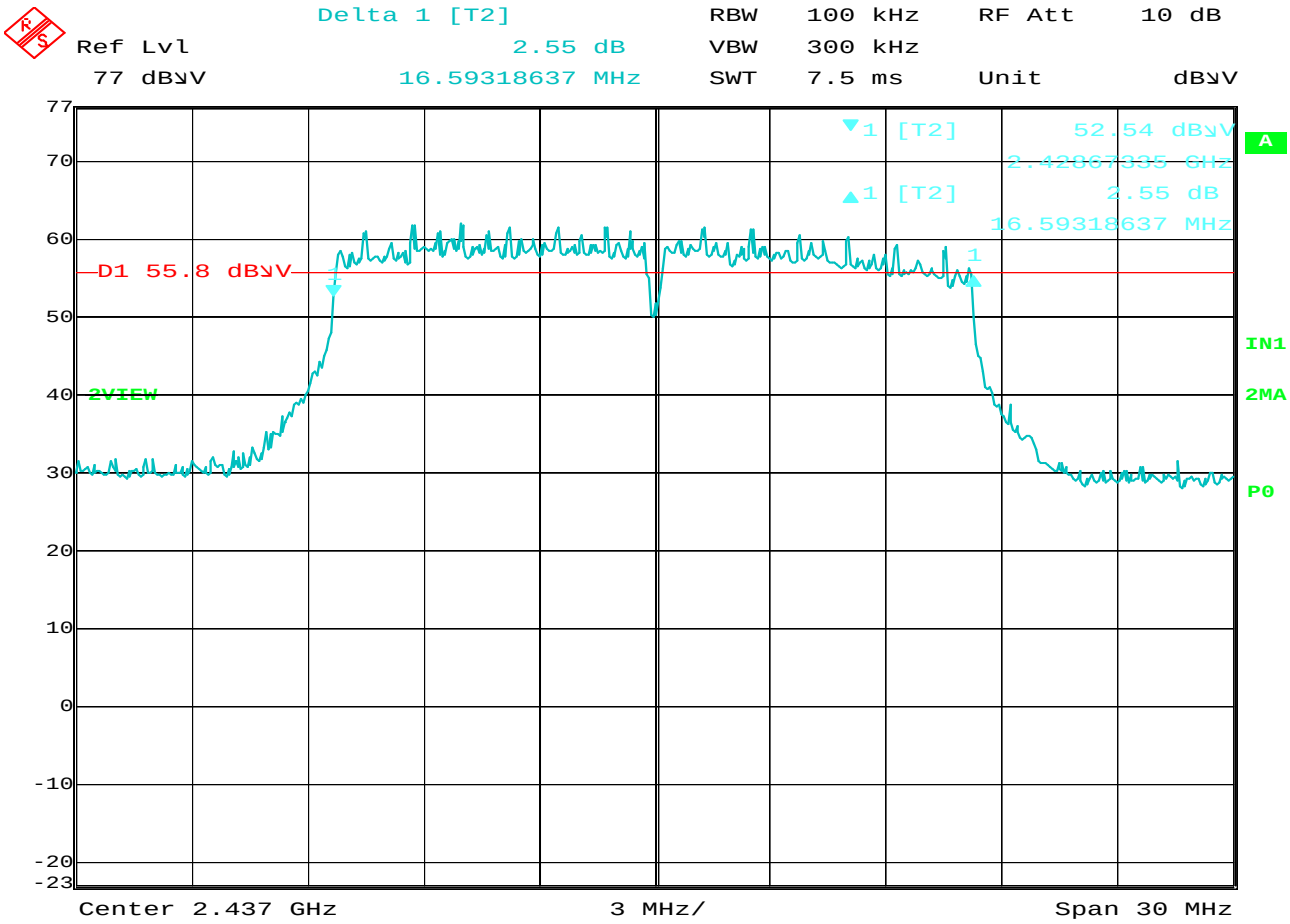


Date: 17.JUN.2014 10:39:06

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 10.58MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

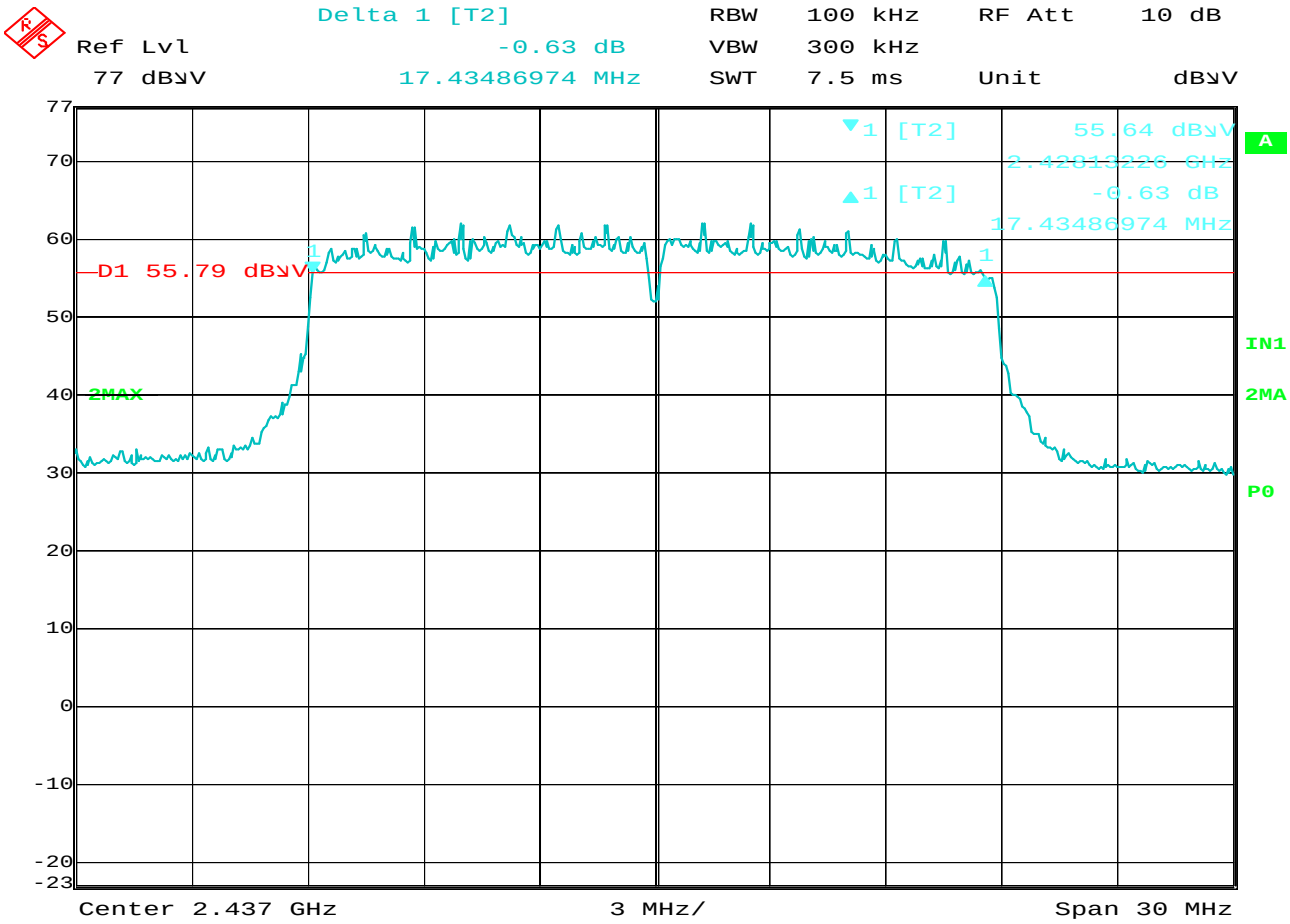


Date: 17.JUN.2014 11:44:27

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 16.59MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

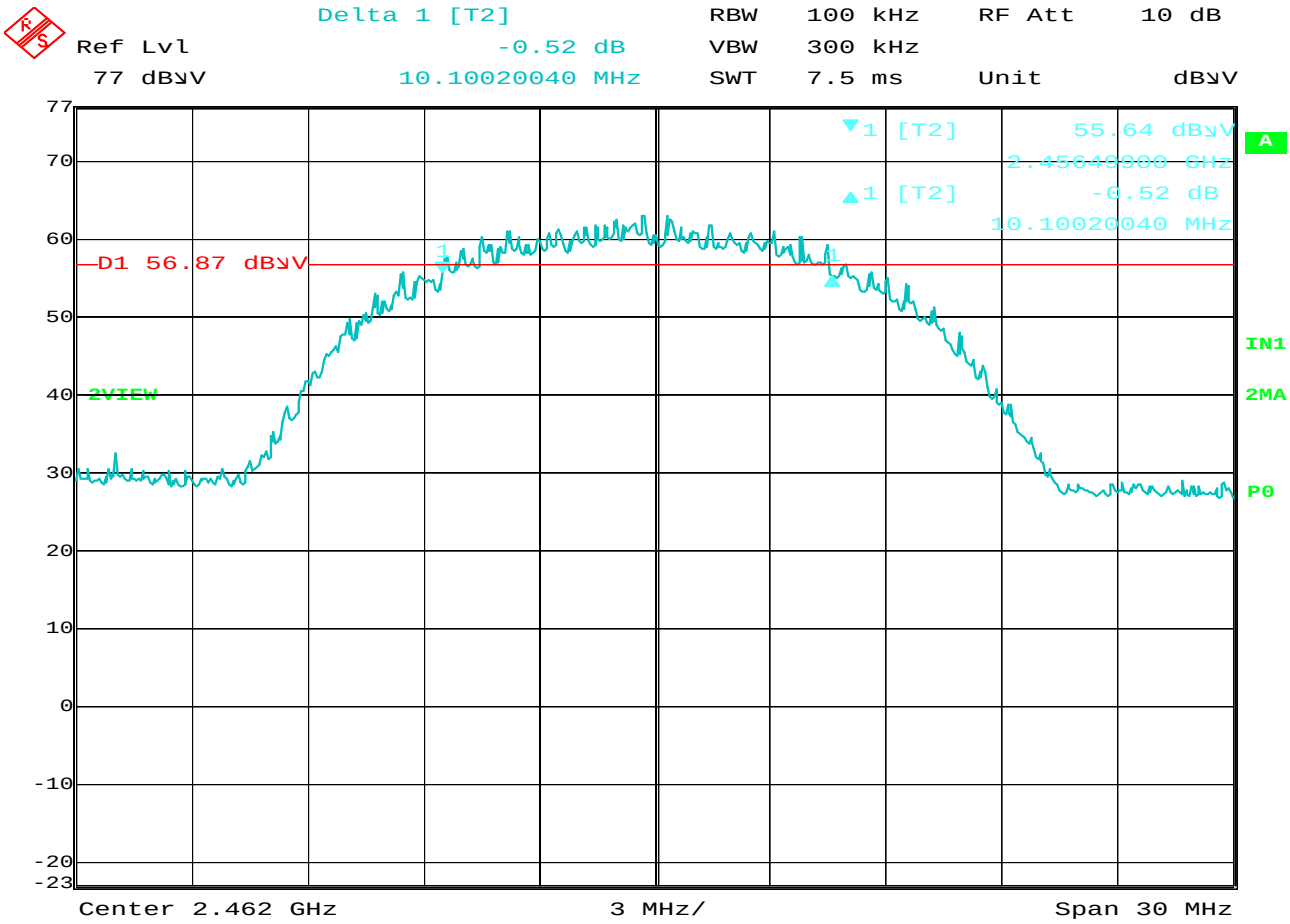


Date: 17.JUN.2014 13:48:52

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 17.43MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

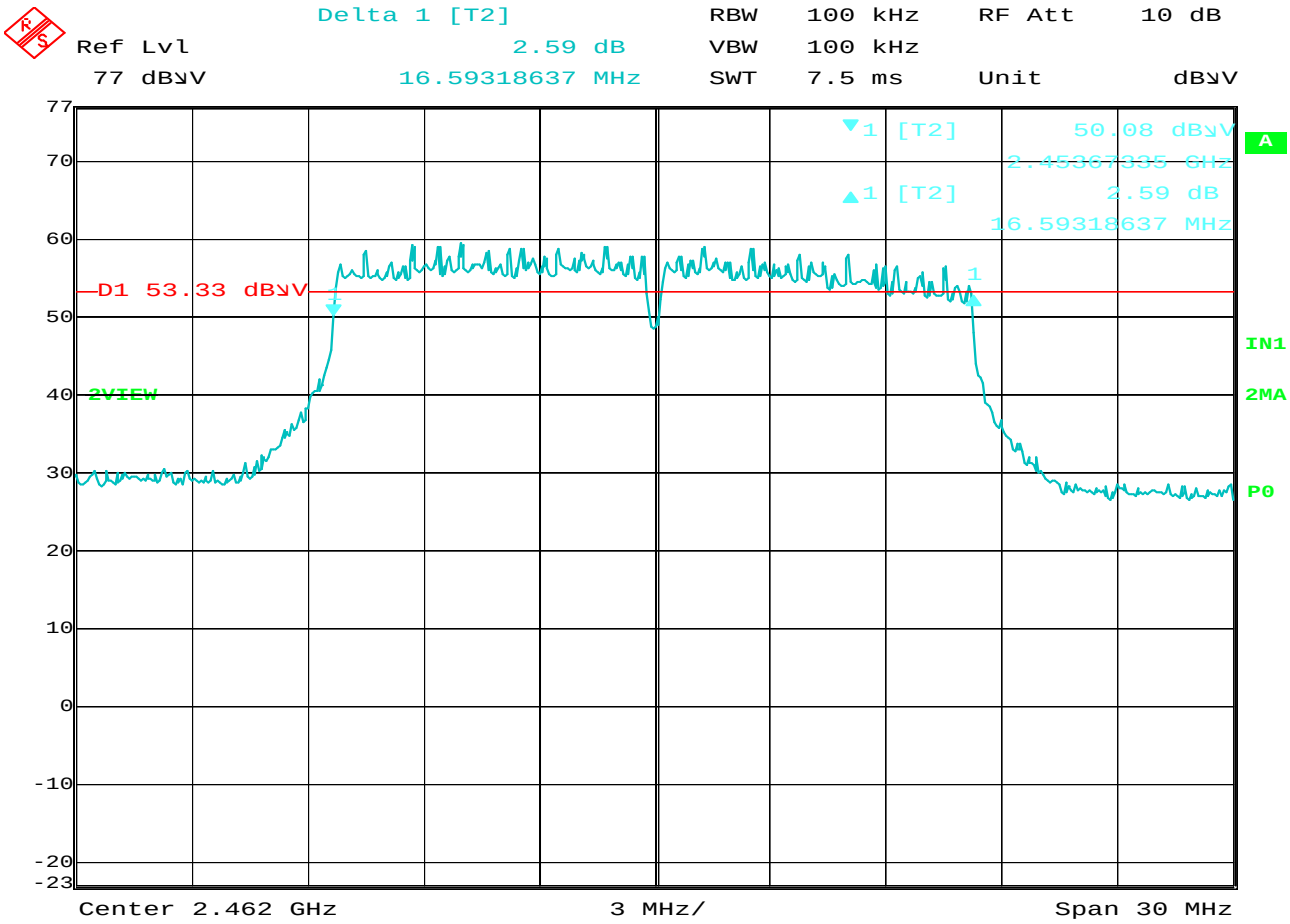


Date: 17.JUN.2014 09:20:54

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 10.1MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

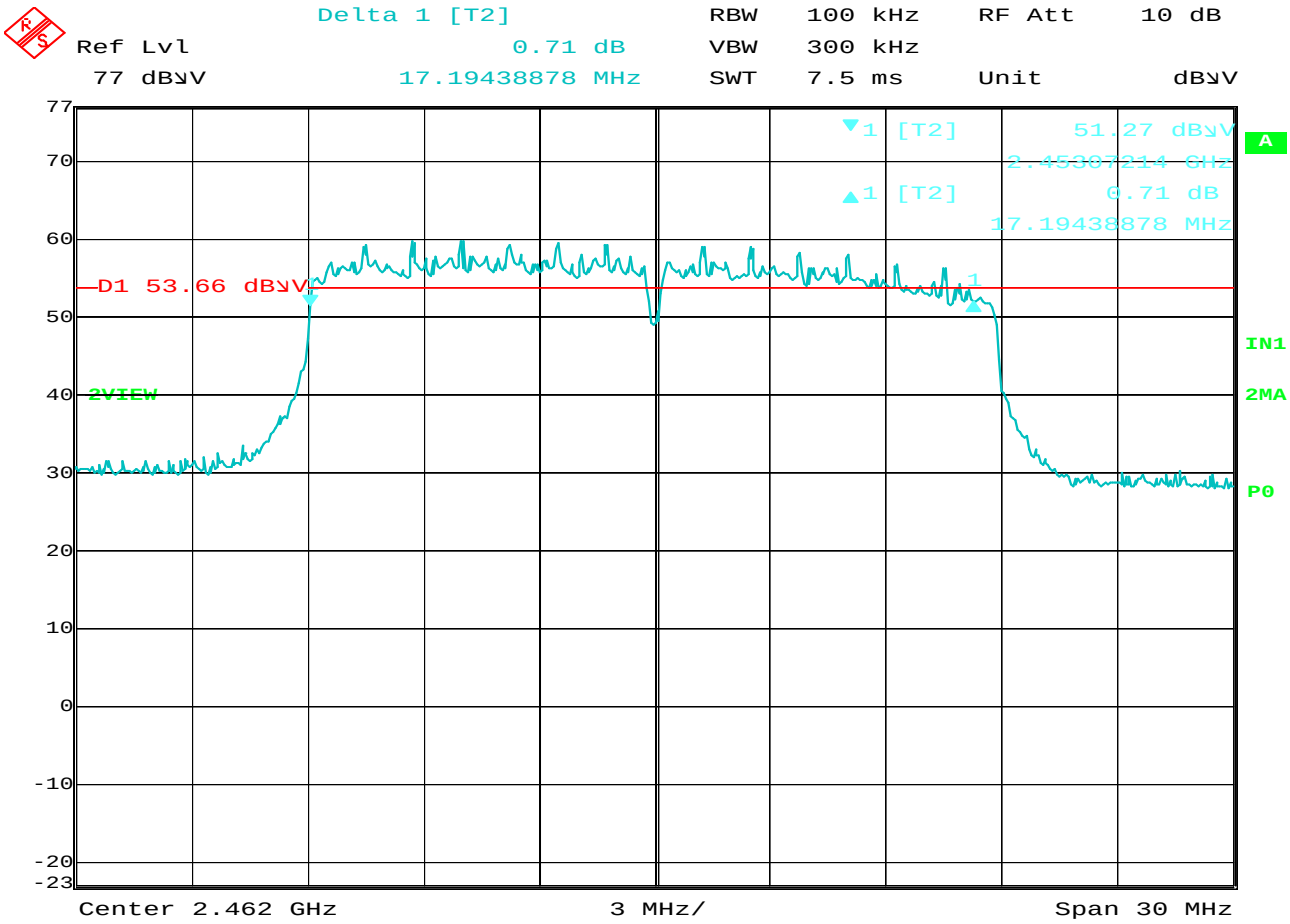


Date: 17.JUN.2014 12:22:00

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 16.59MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES



Date: 17.JUN.2014 13:15:57

FCC 15.247(a)(2), 6dB bandwidth

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11g, 65Mb/sec
TEST PARAMETERS	:	6dB bandwidth = 17.19MHz
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

Manufacturer : Trapeze
Model No. : 50T0157
EUT : Mobile Ticketing Device
Specification : FCC-15.247 Effective Isotropic Radiated Power (EIRP)
Date : June 17, 2014
Mode : 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters

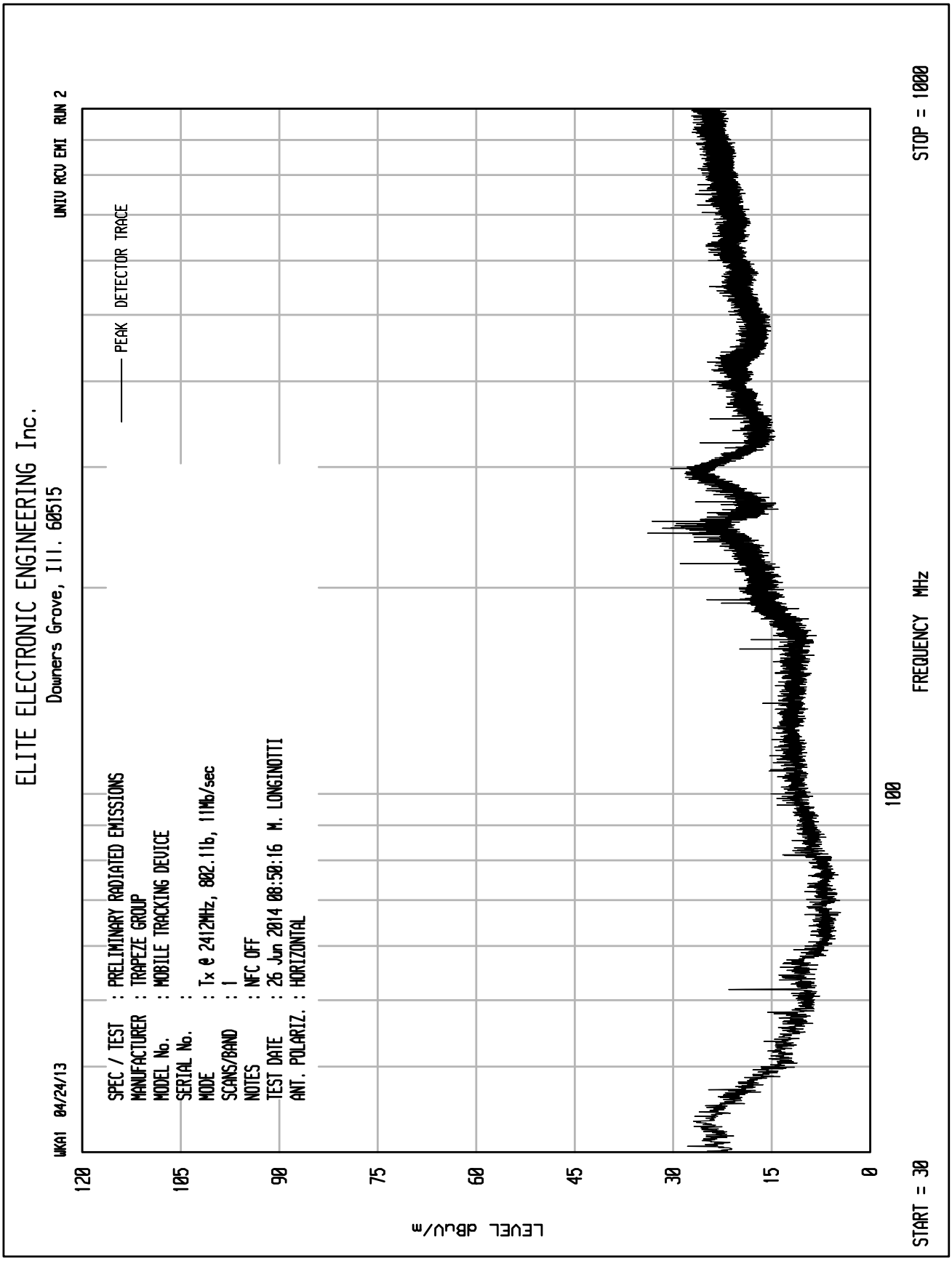
Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBm)	Matched Sig. Gen. Reading (dB)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
2412.00	H	-30.9	13.7	5.3	4.1	14.9	36.0
2412.00	V	-25.5	19.4	5.3	4.1	20.6	36.0
2437.00	H	-29.0	16.2	5.4	4.2	17.4	36.0
2437.00	V	-27.4	18.7	5.4	4.2	19.9	36.0
2462.00	H	-32.1	14.3	5.4	4.2	15.6	36.0
2462.00	V	-28.1	19.3	5.4	4.2	20.6	36.0

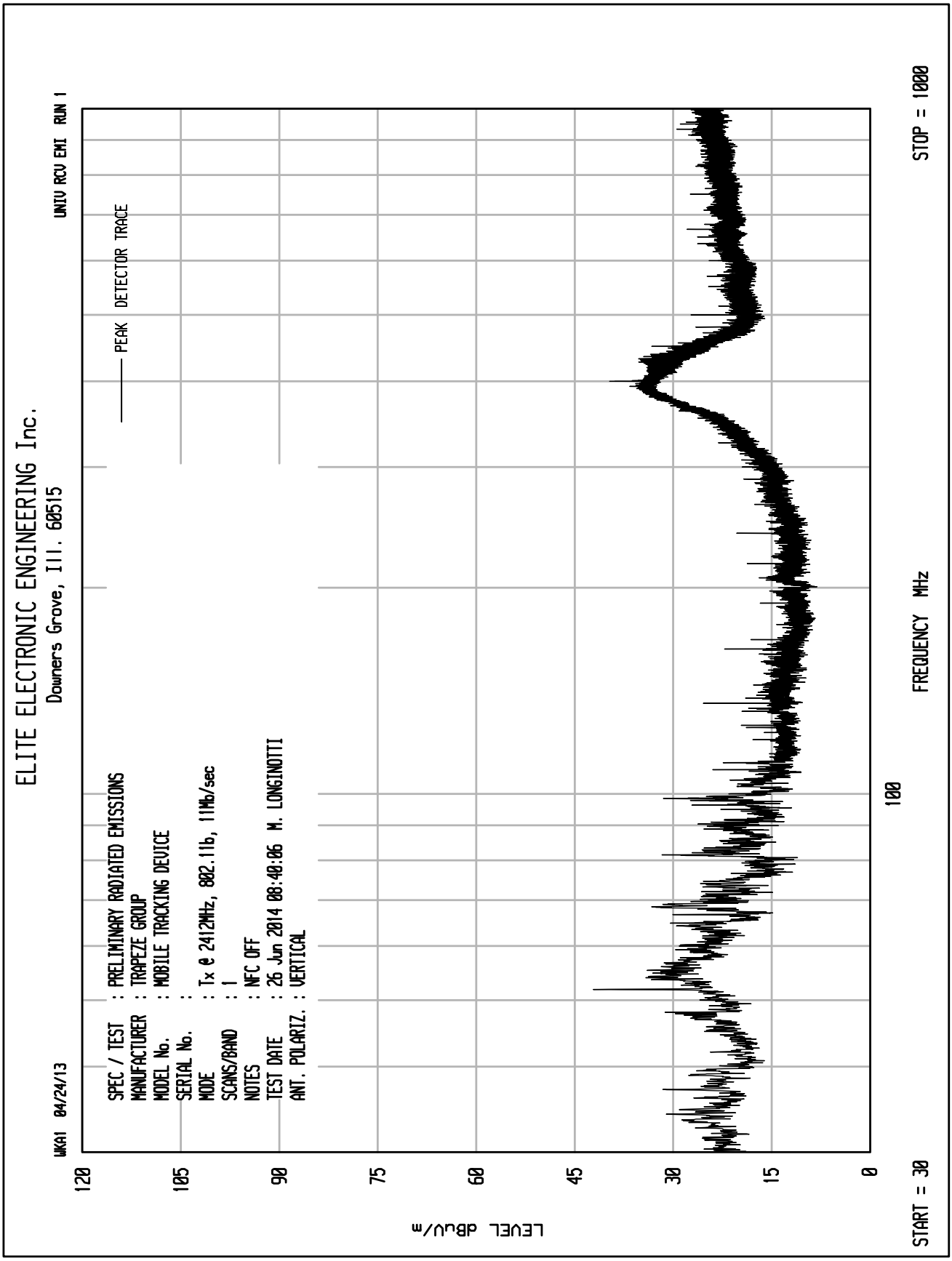
Manufacturer : Trapeze
Model No. : 50T0157
EUT : Mobile Ticketing Device
Specification : FCC-15.247 Effective Isotropic Radiated Power (EIRP)
Date : June 17, 2014
Mode : 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters

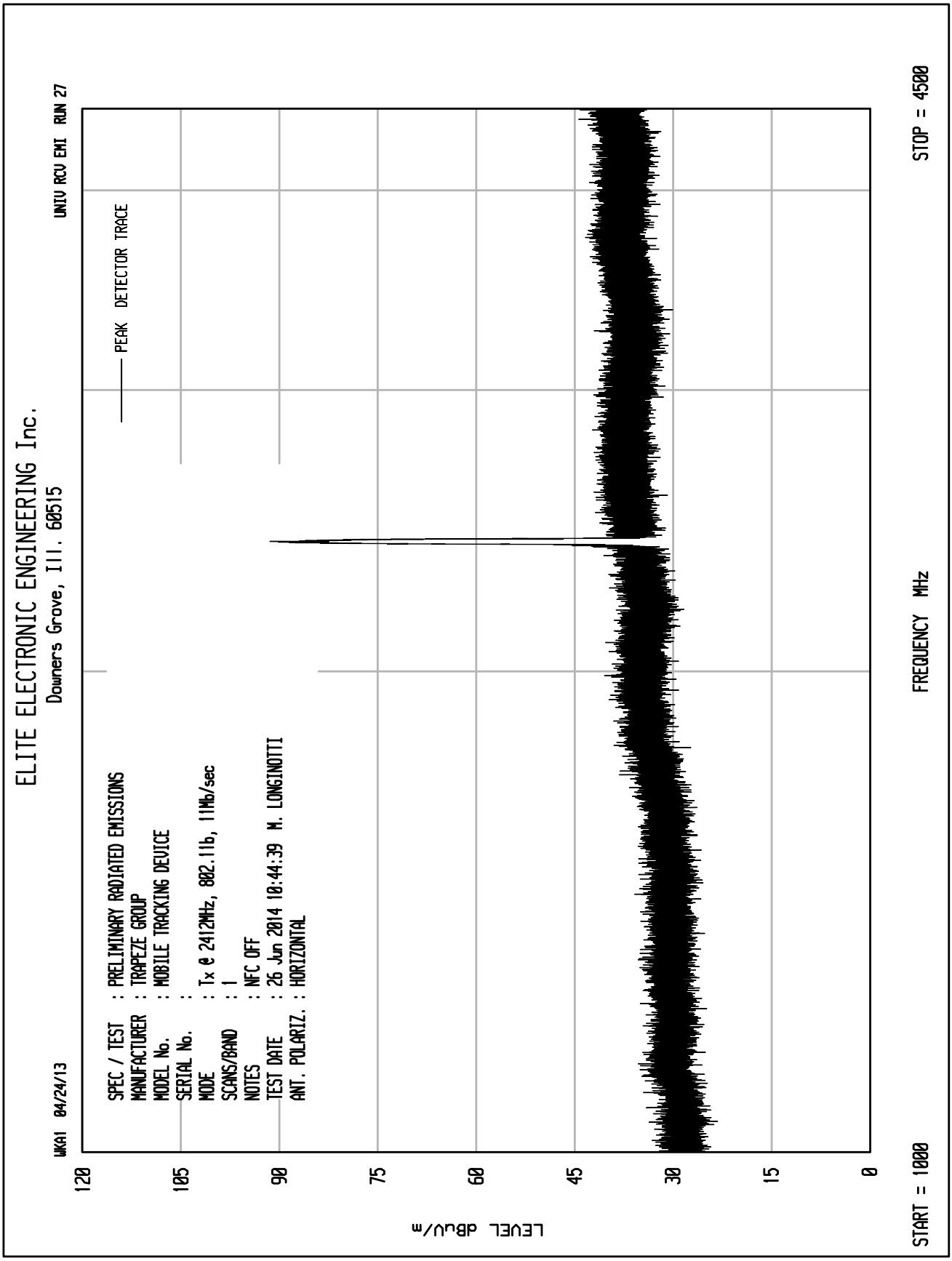
Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBm)	Matched Sig. Gen. Reading (dB)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
2412.00	H	-23.3	21.1	5.3	4.1	22.3	36.0
2412.00	V	-21.2	24.1	5.3	4.1	25.3	36.0
2437.00	H	-30.2	15.1	5.4	4.2	16.3	36.0
2437.00	V	-26.5	19.5	5.4	4.2	20.7	36.0
2462.00	H	-31.3	15.3	5.4	4.2	16.6	36.0
2462.00	V	-28.3	19.1	5.4	4.2	20.4	36.0

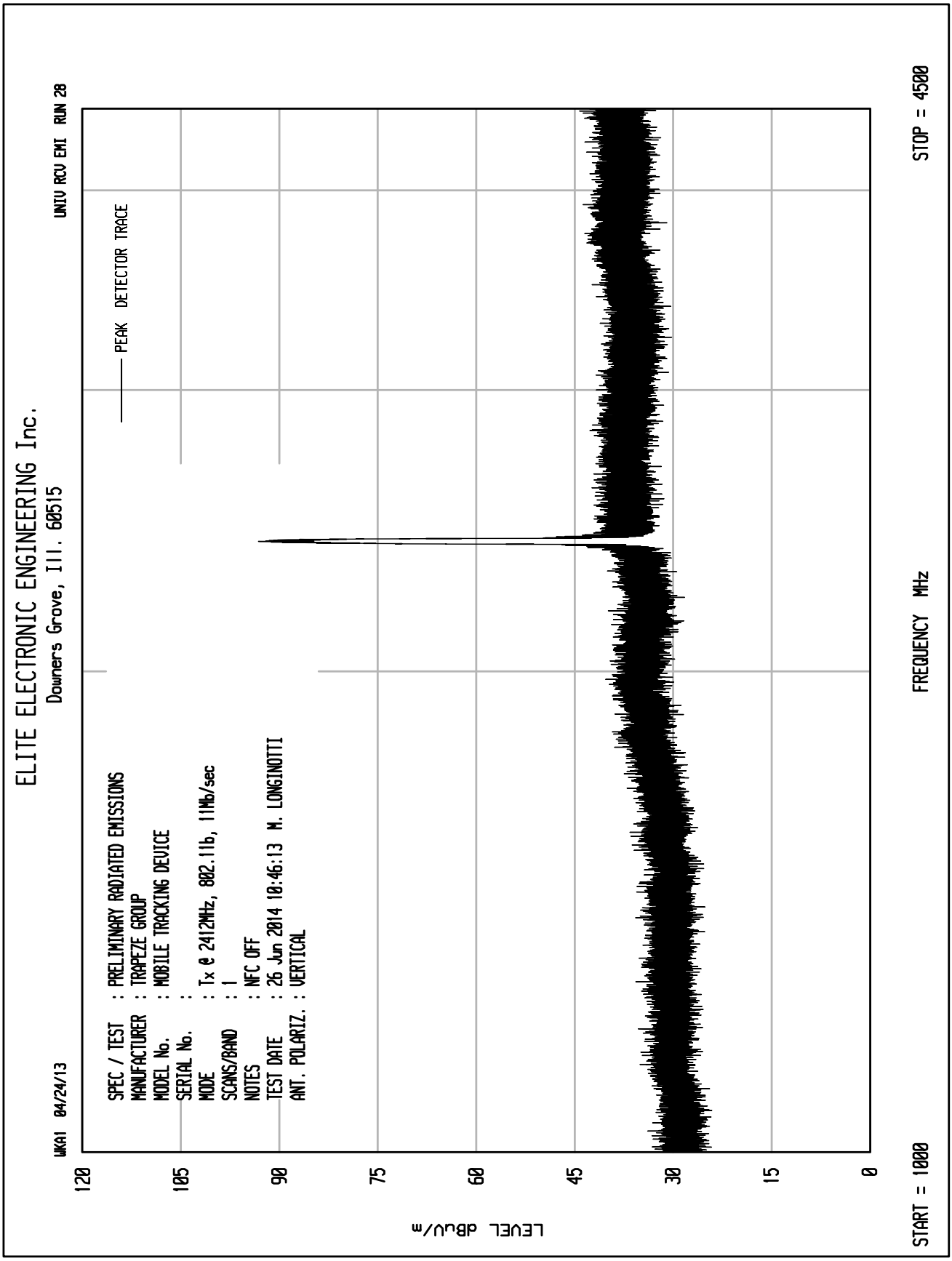
Manufacturer : Trapeze
Model No. : 50T0157
EUT : Mobile Ticketing Device
Specification : FCC-15.247 Effective Isotropic Radiated Power (EIRP)
Date : June 17, 2014
Mode : 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters

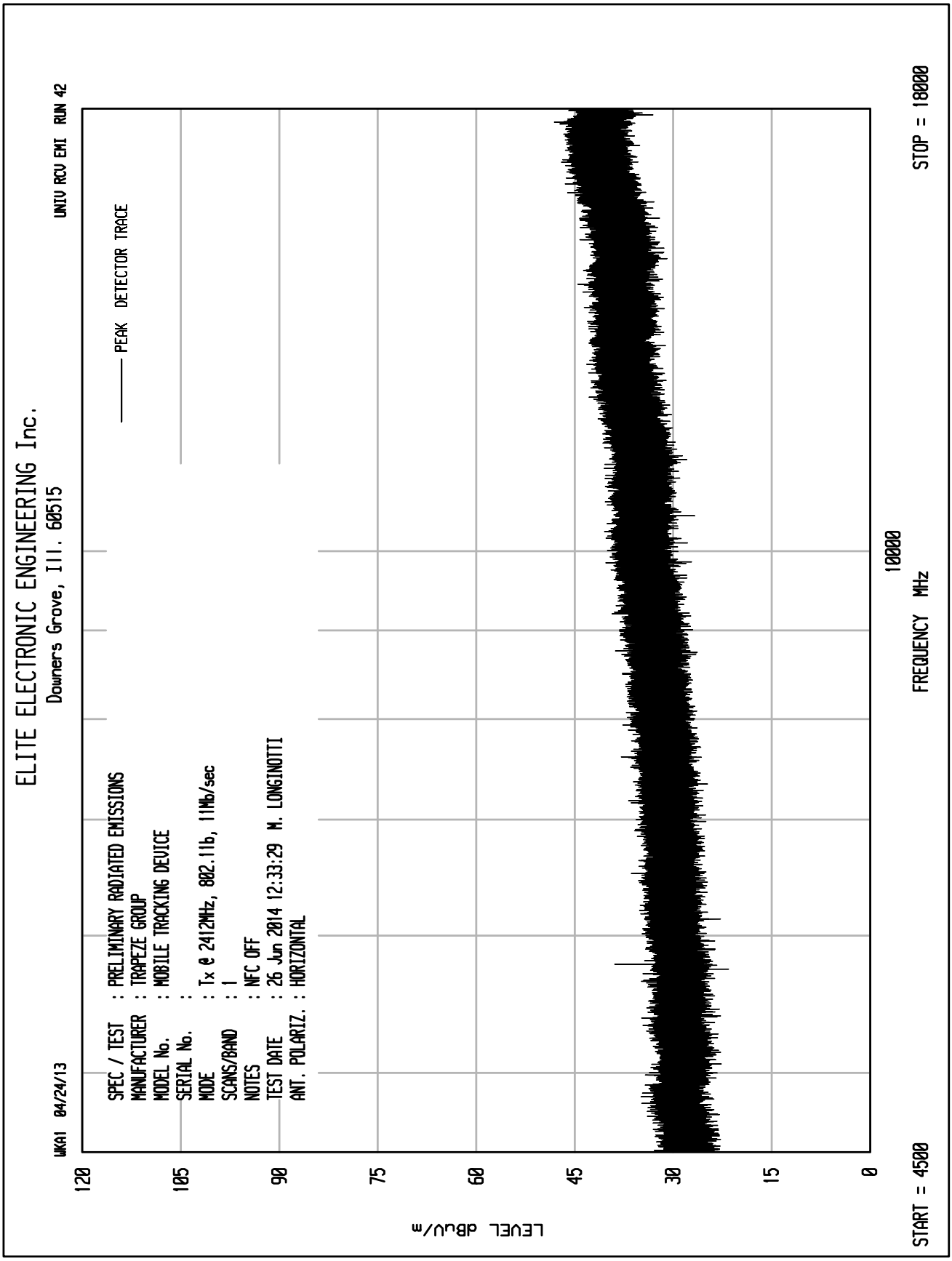
Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBm)	Matched Sig. Gen. Reading (dB)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
2412.00	H	-28.5	15.9	5.3	4.1	17.1	36.0
2412.00	V	-24.5	20.7	5.3	4.1	21.9	36.0
2437.00	H	-29.6	15.6	5.4	4.2	16.8	36.0
2437.00	V	-26.4	19.7	5.4	4.2	20.9	36.0
2462.00	H	-31.0	15.7	5.4	4.2	17.0	36.0
2462.00	V	-29.0	18.4	5.4	4.2	19.7	36.0

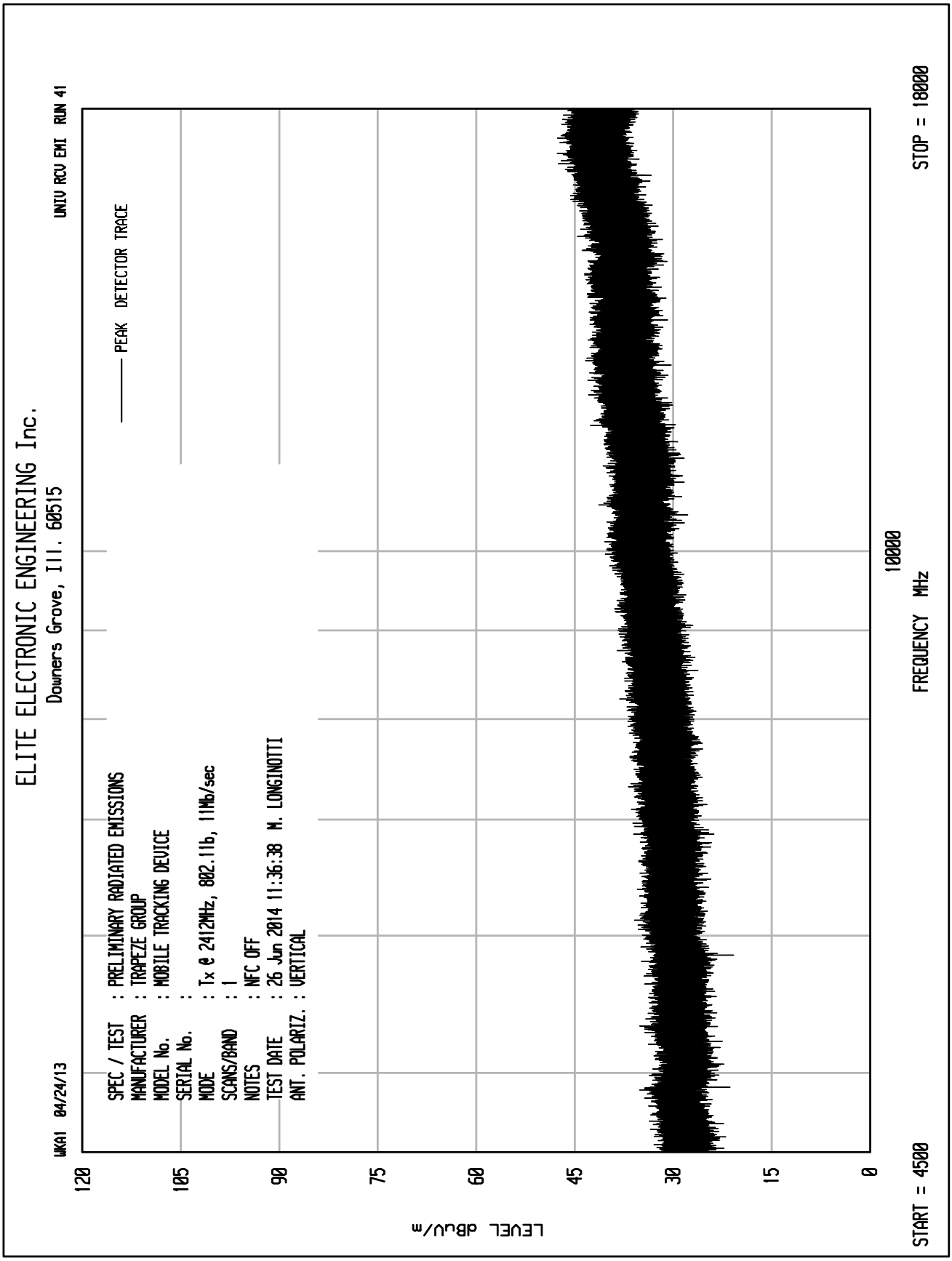

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 2
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 08:50:16 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

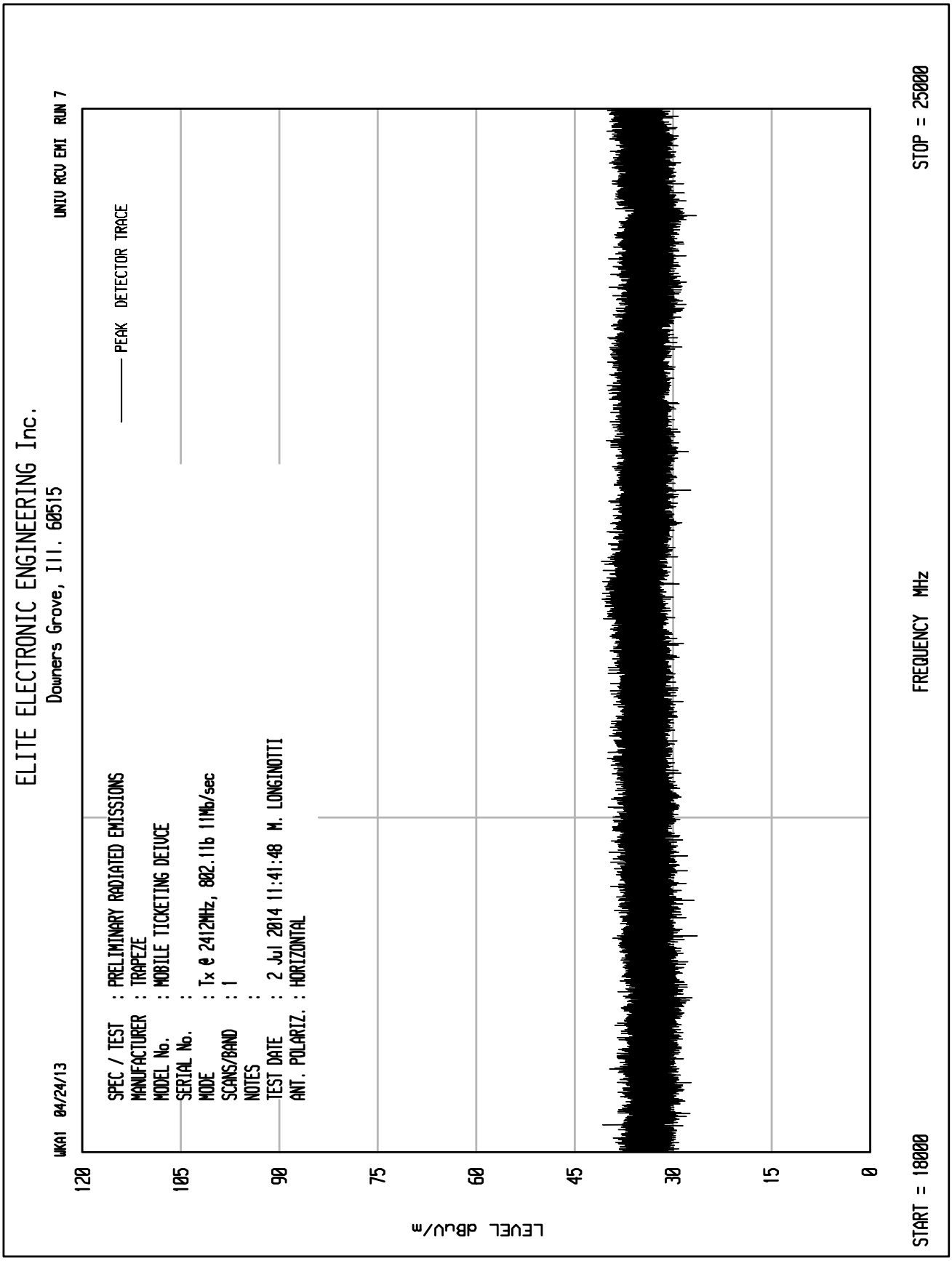

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 1
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 08:40:06 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

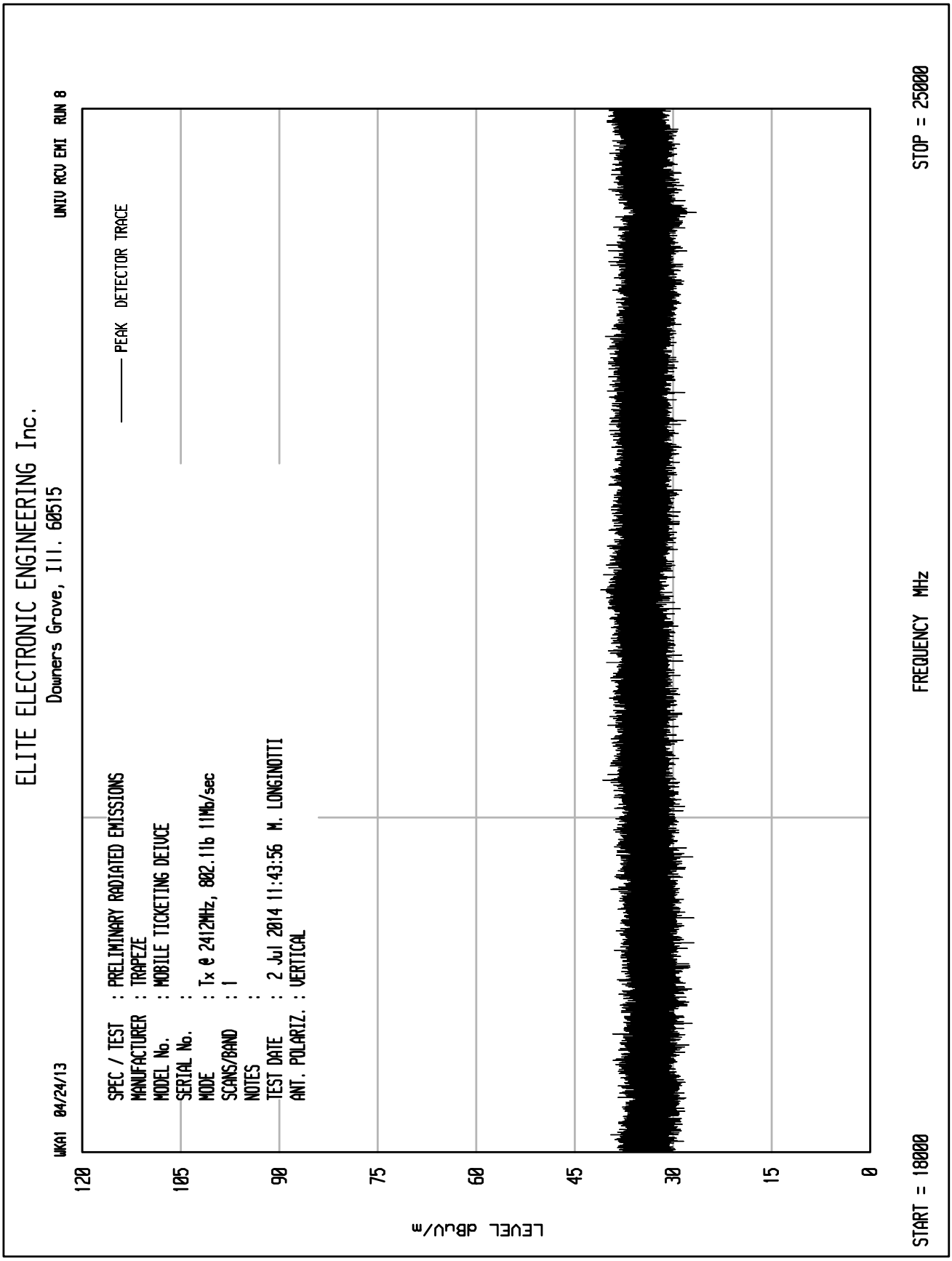

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 27
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:44:39 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

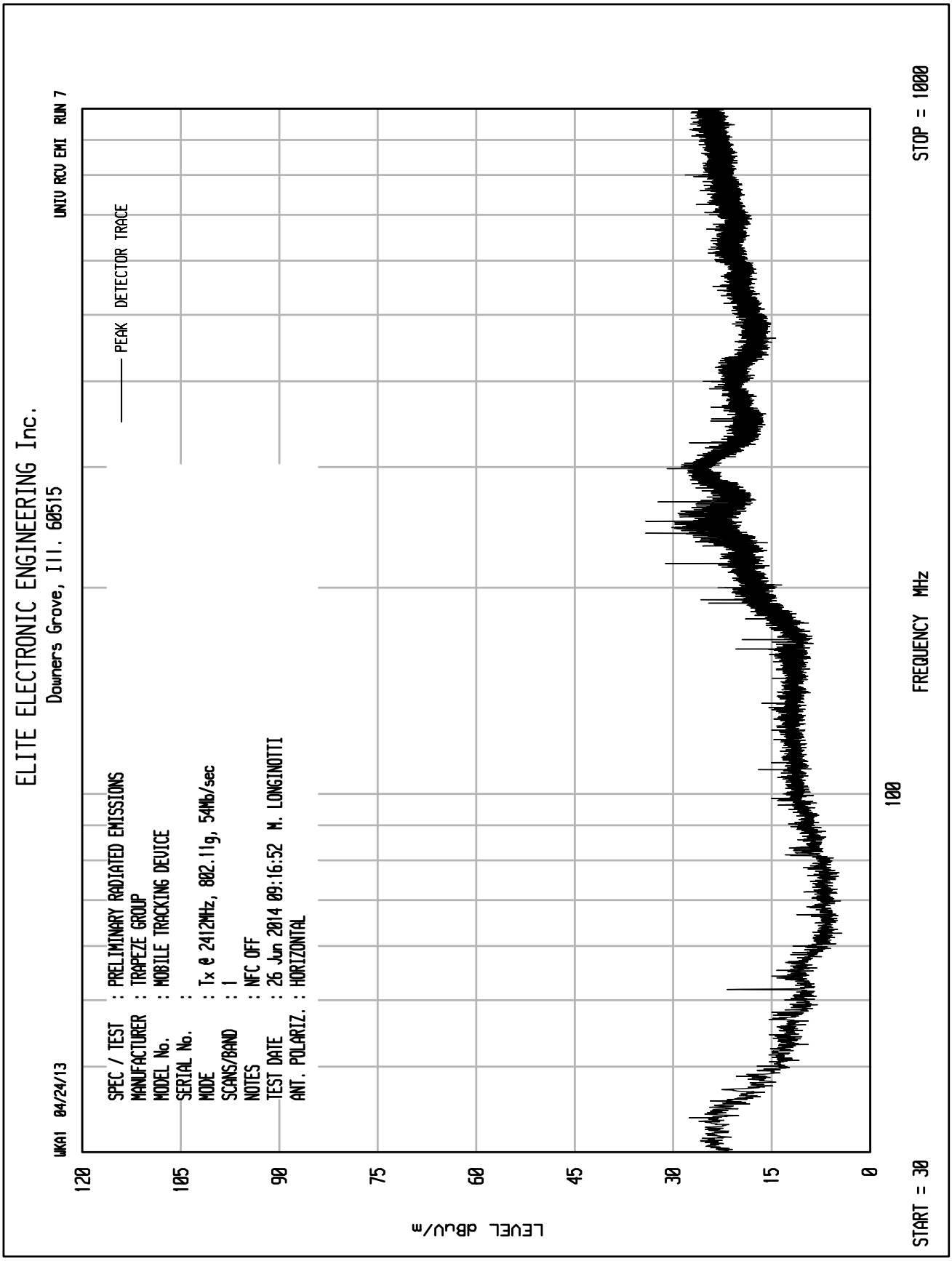

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 28
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:46:13 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

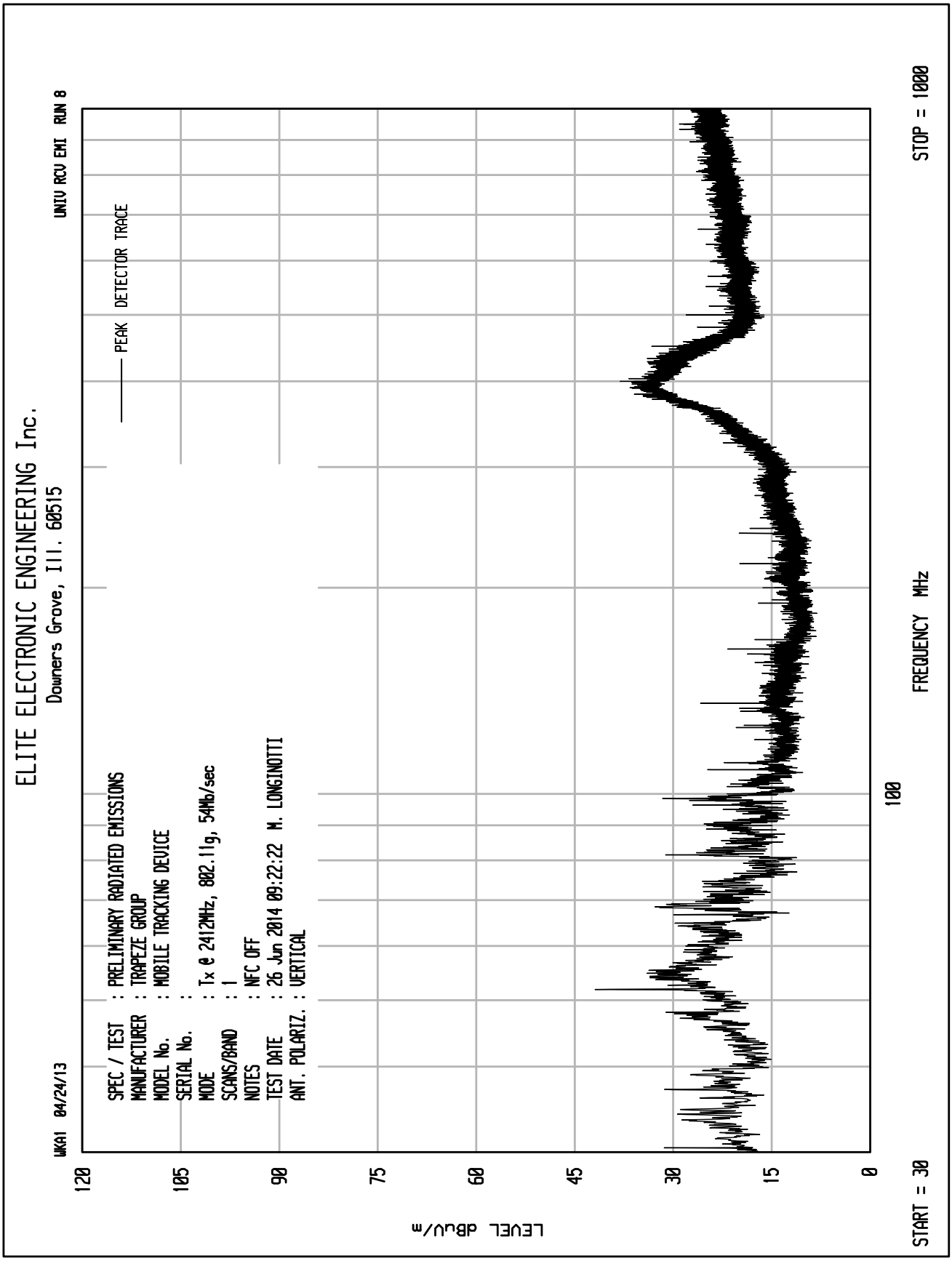

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 42
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 12:33:29 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

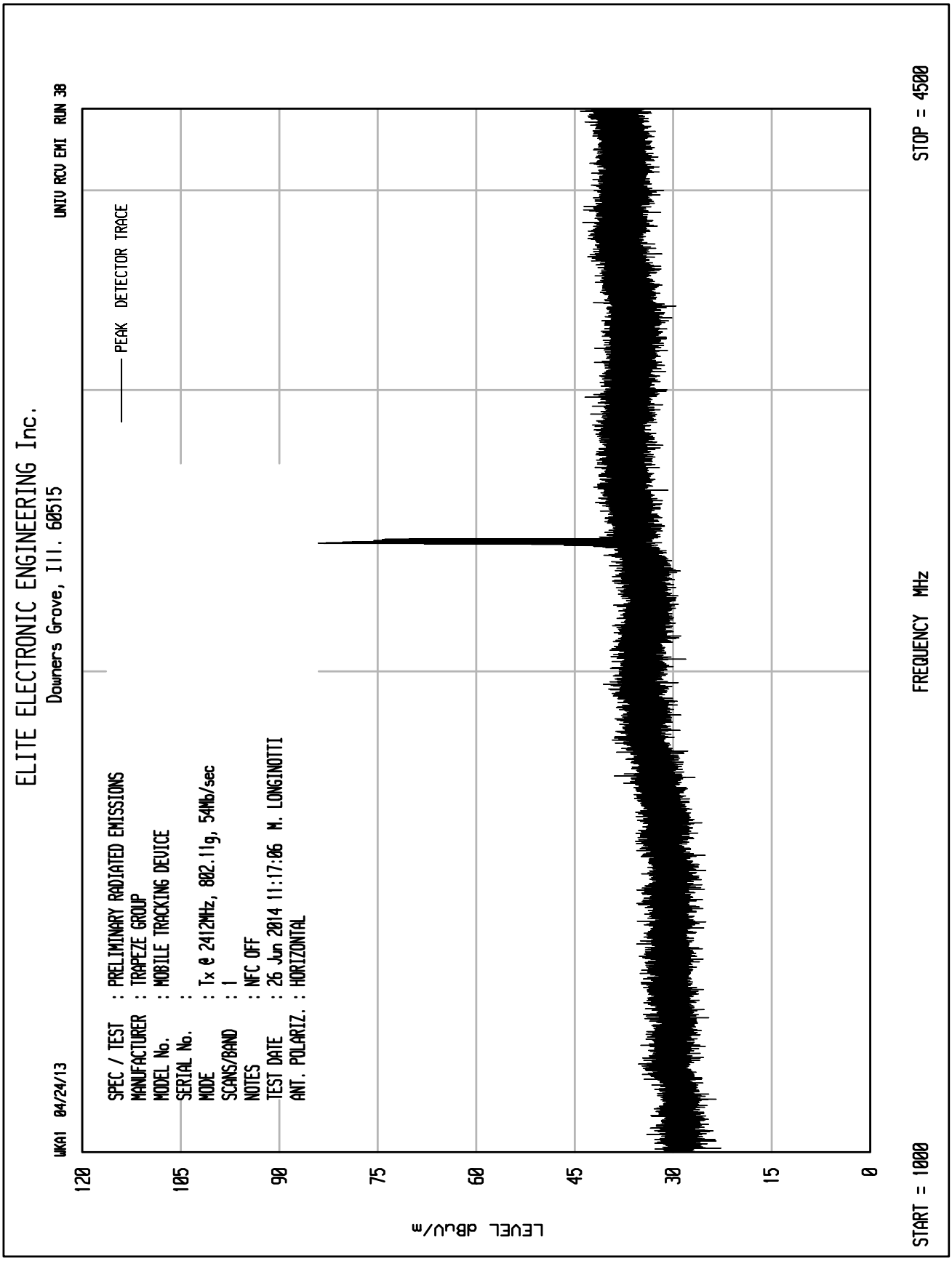

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 41
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:36:38 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

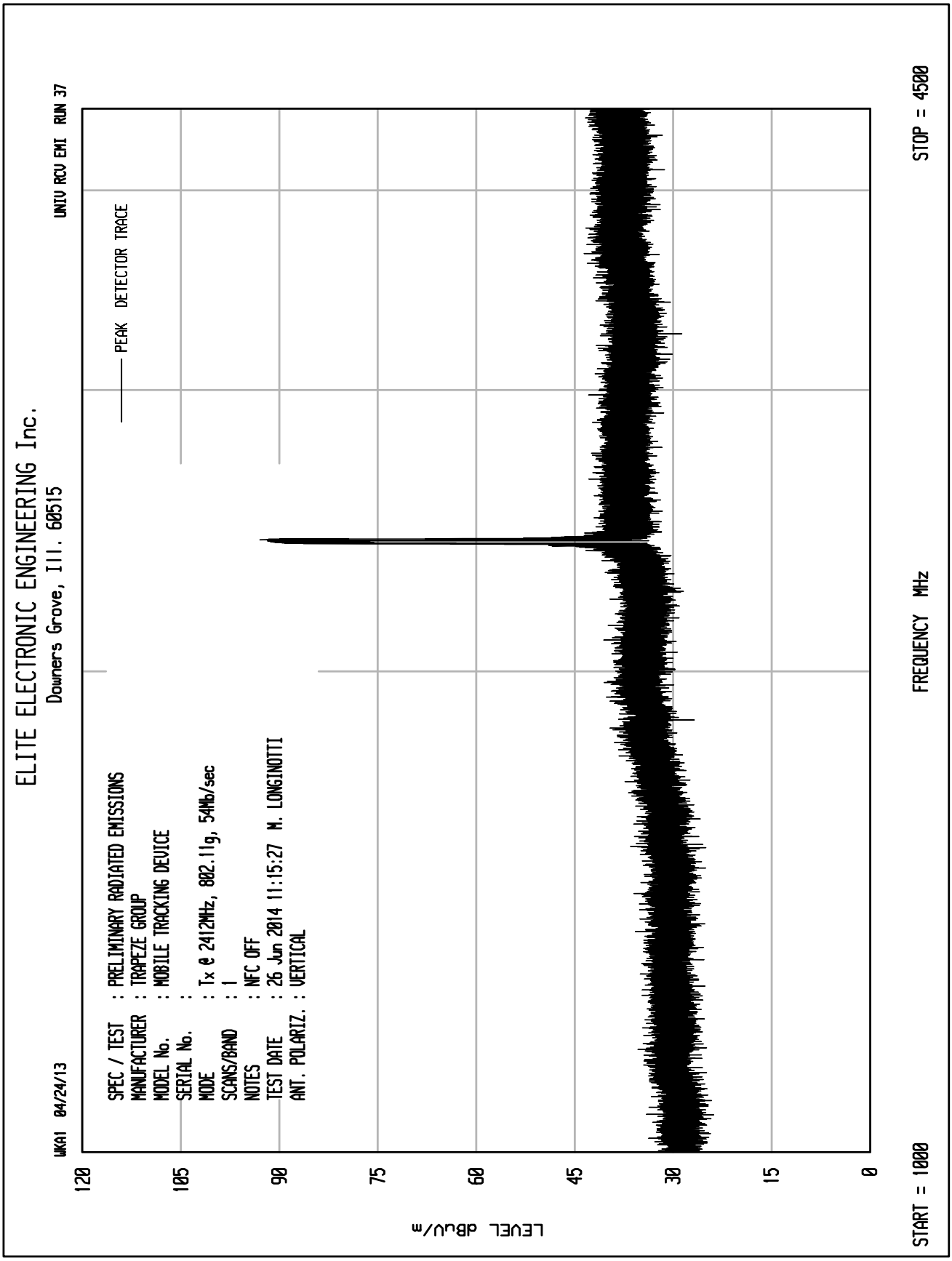

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 7
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 11:41:48 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

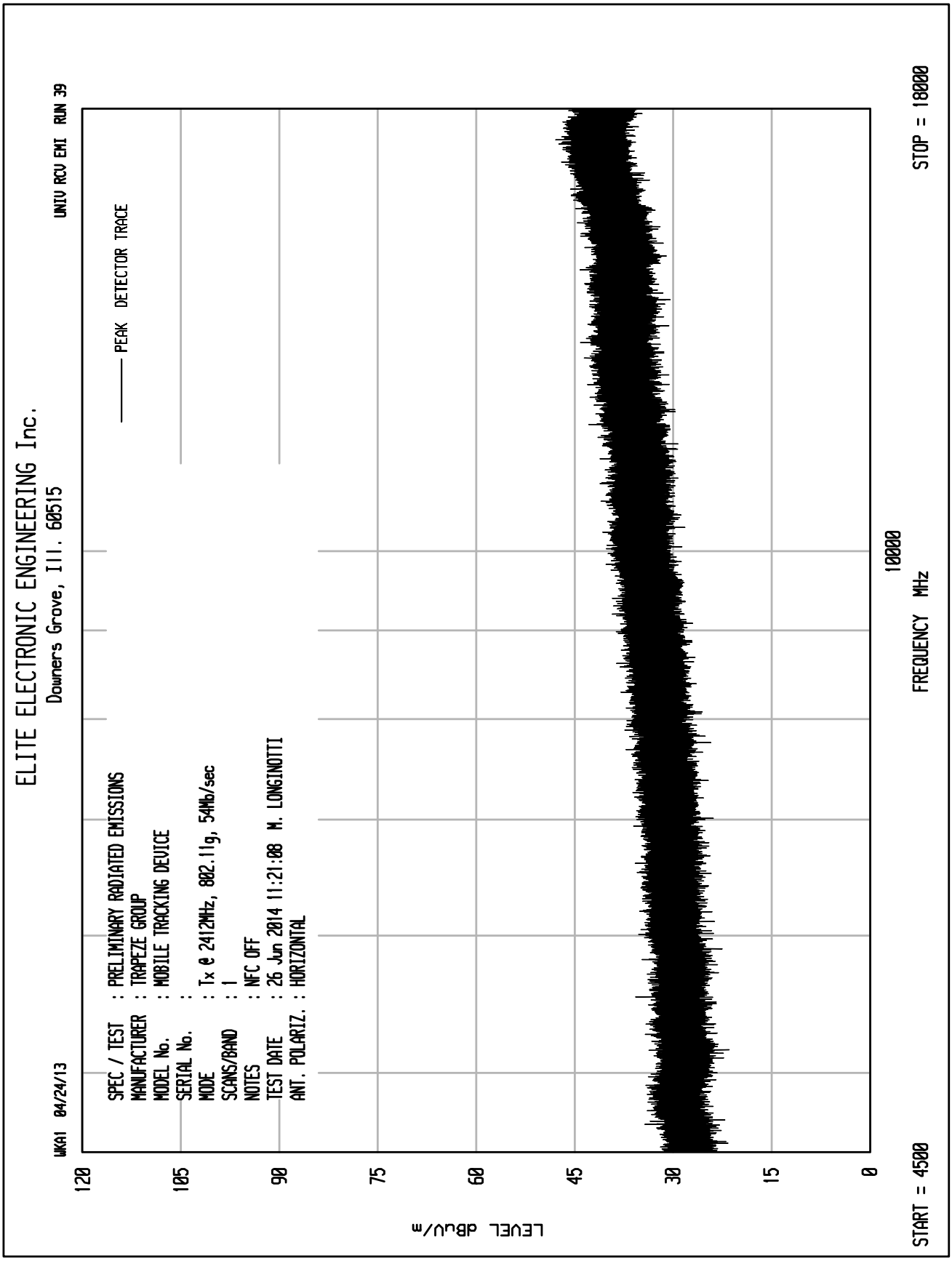

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 8
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 11:43:56 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

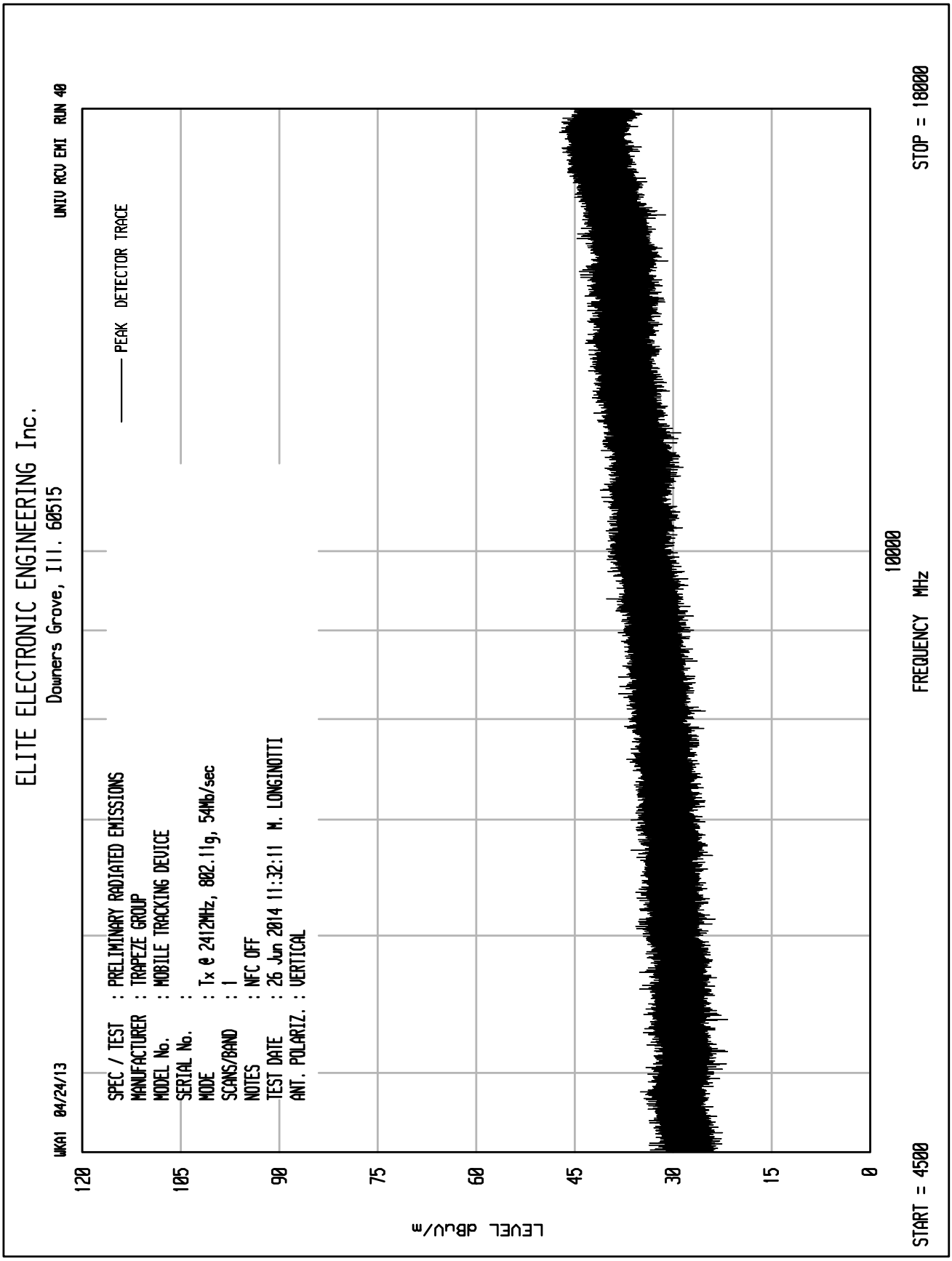

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 7
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:16:52 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

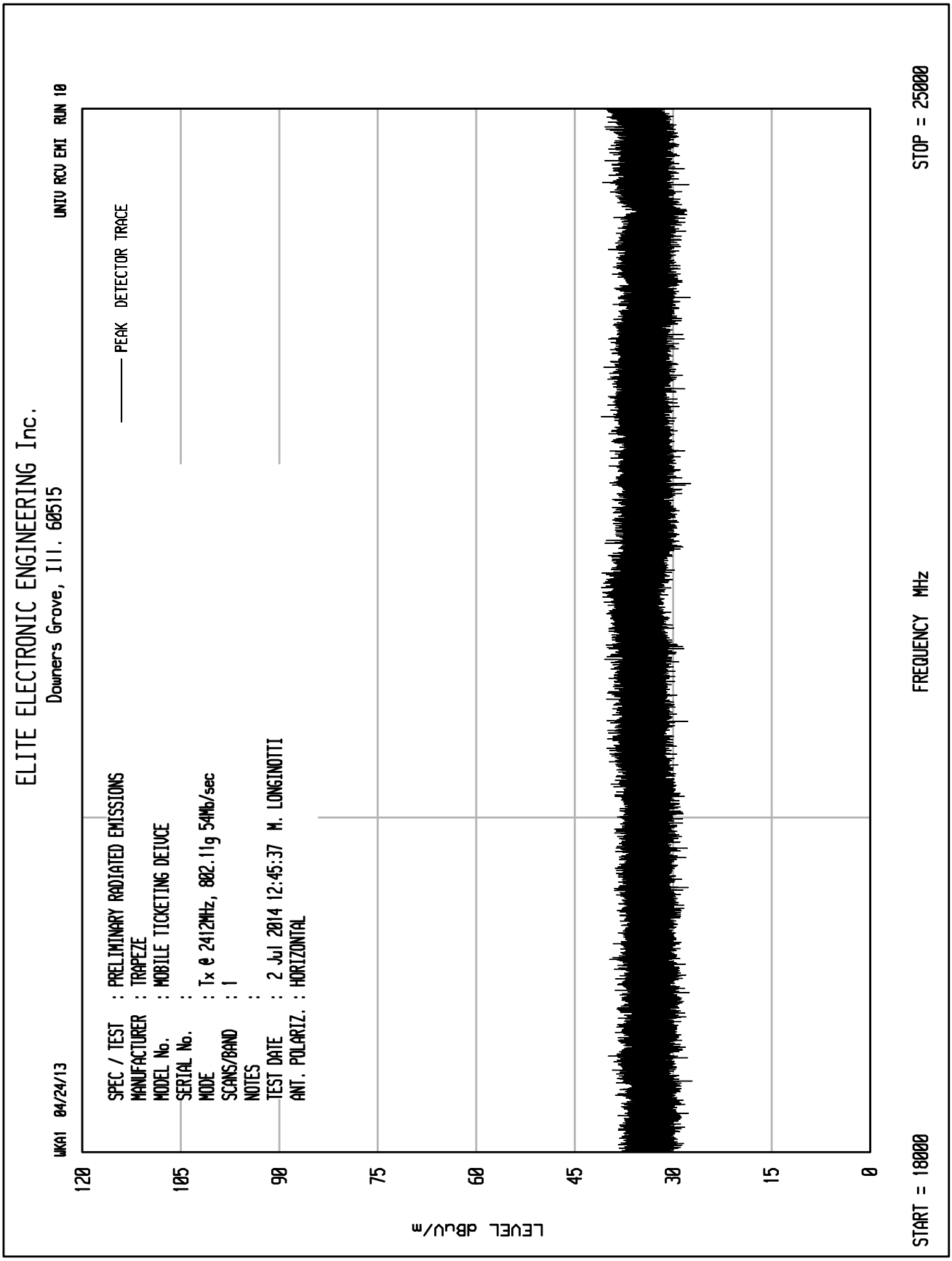

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 8
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:22:22 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

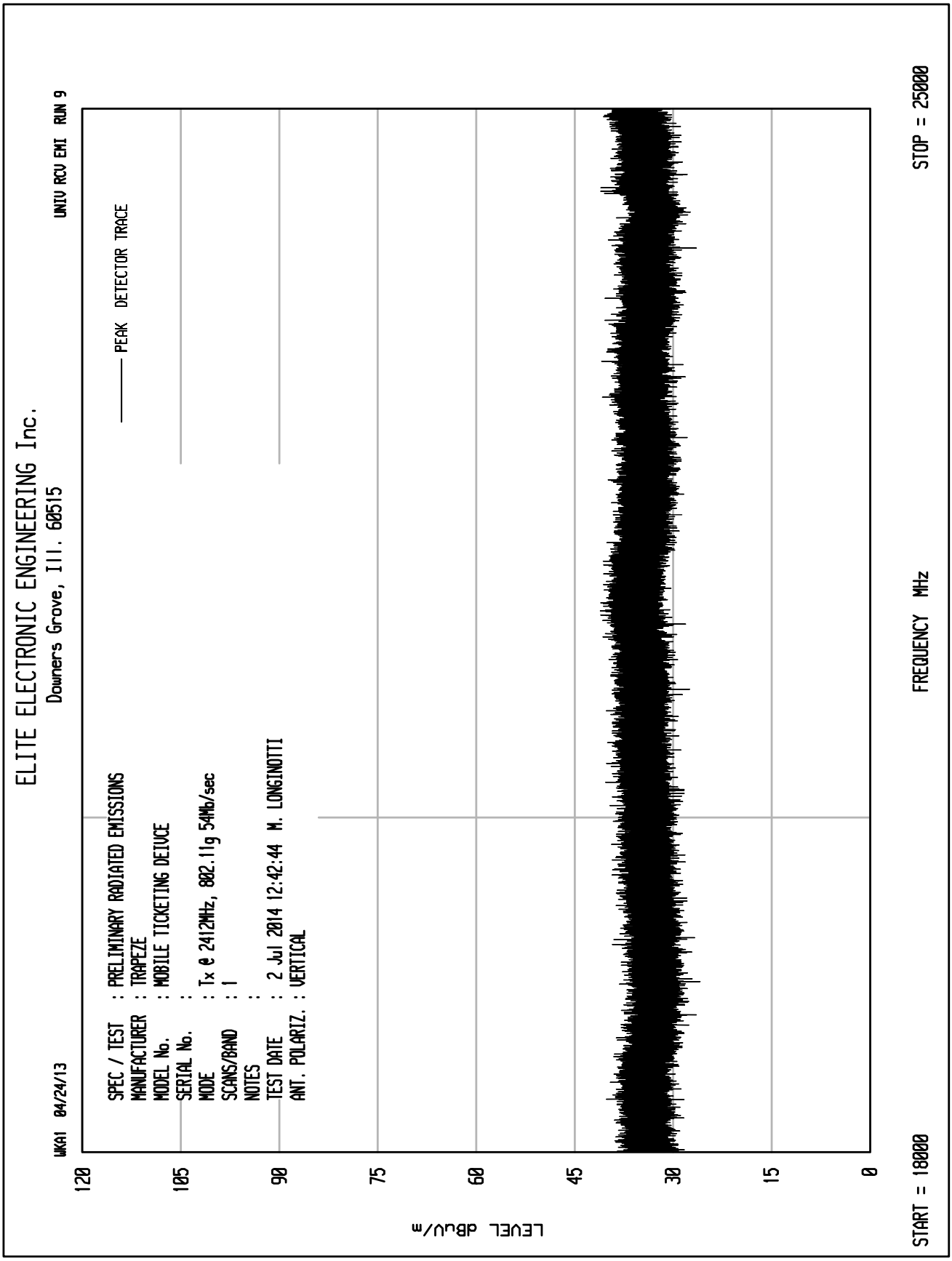

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 38
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:17:06 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

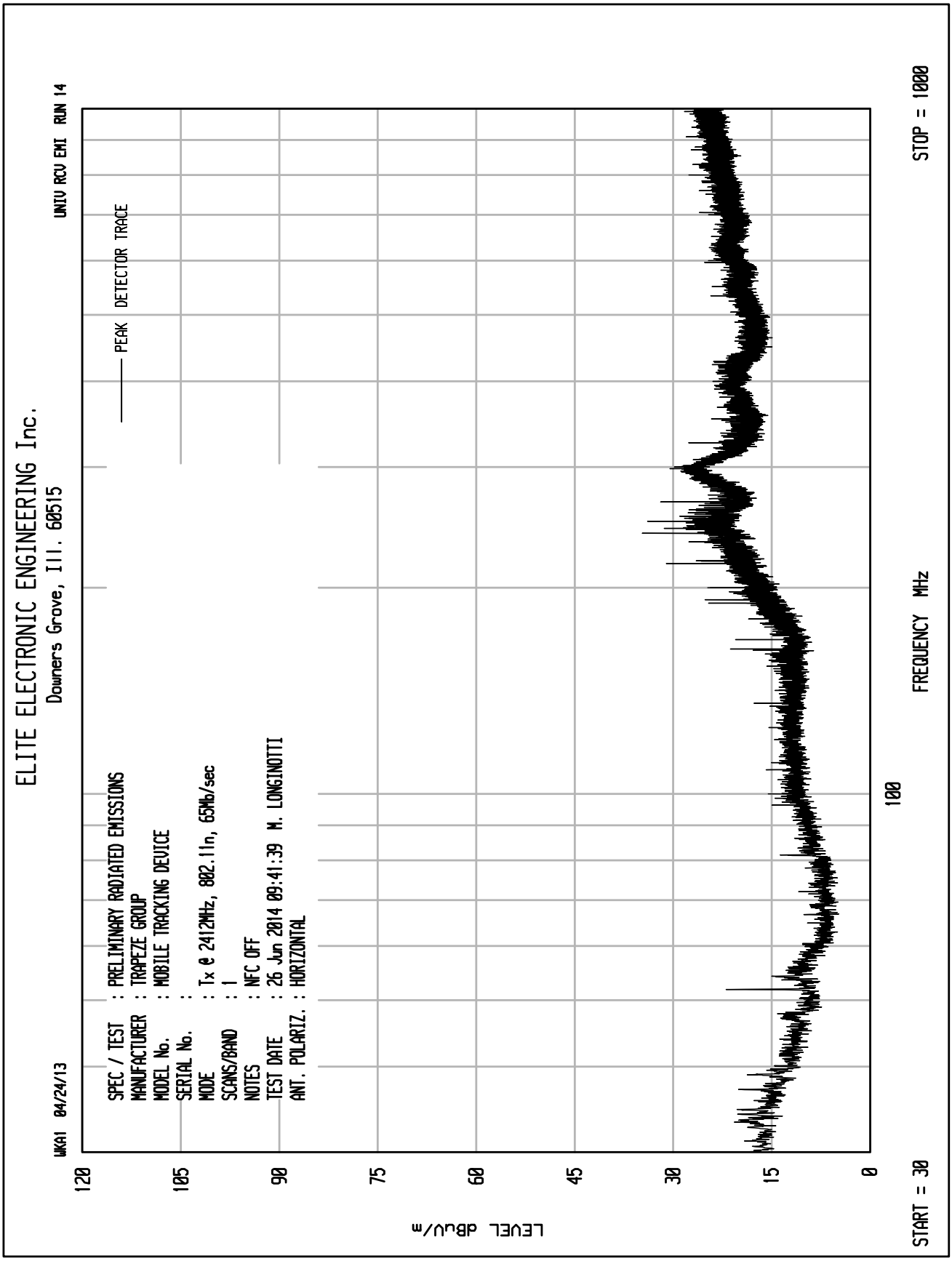

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 37
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:15:27 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

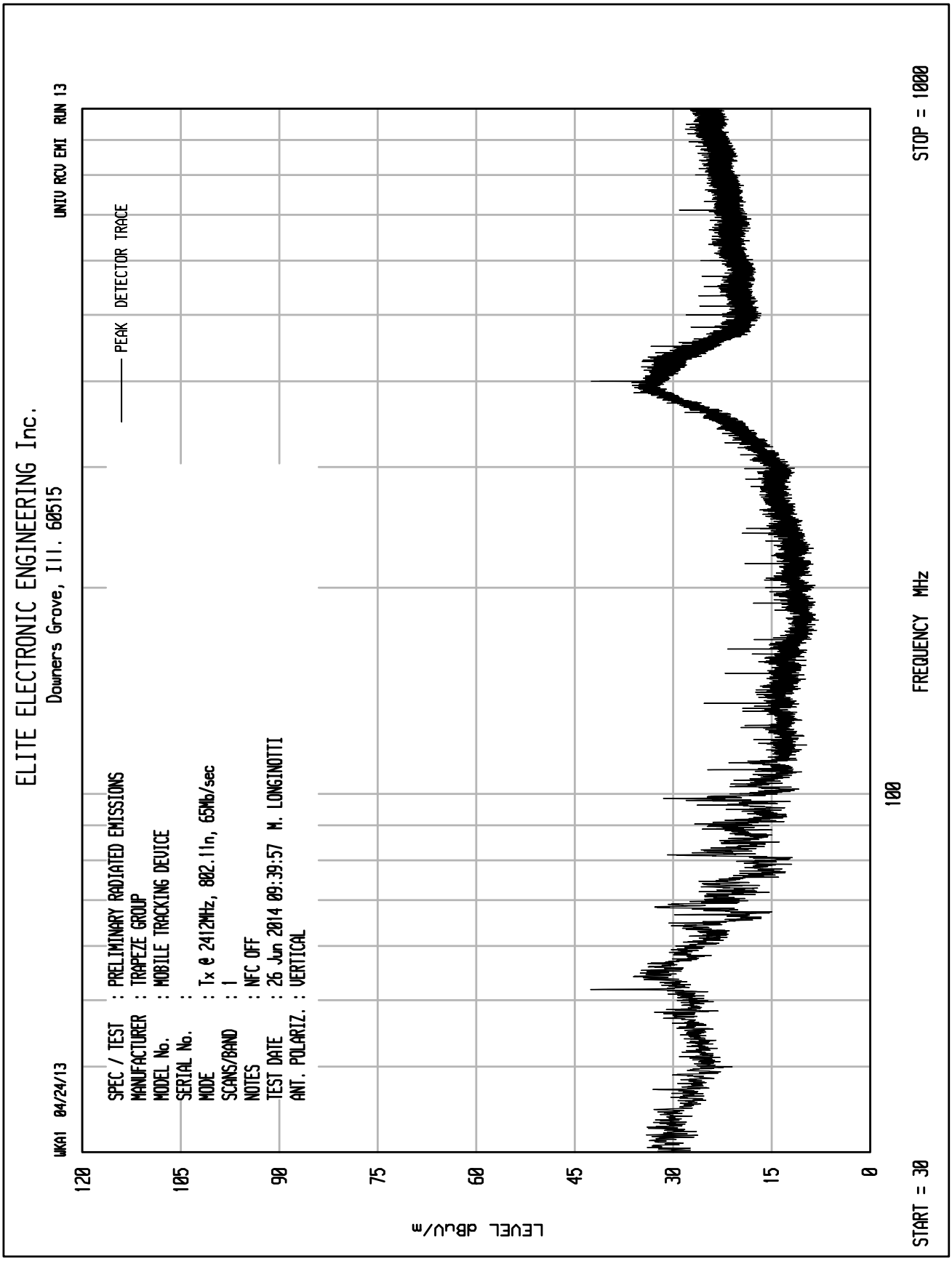

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 39
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:21:08 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

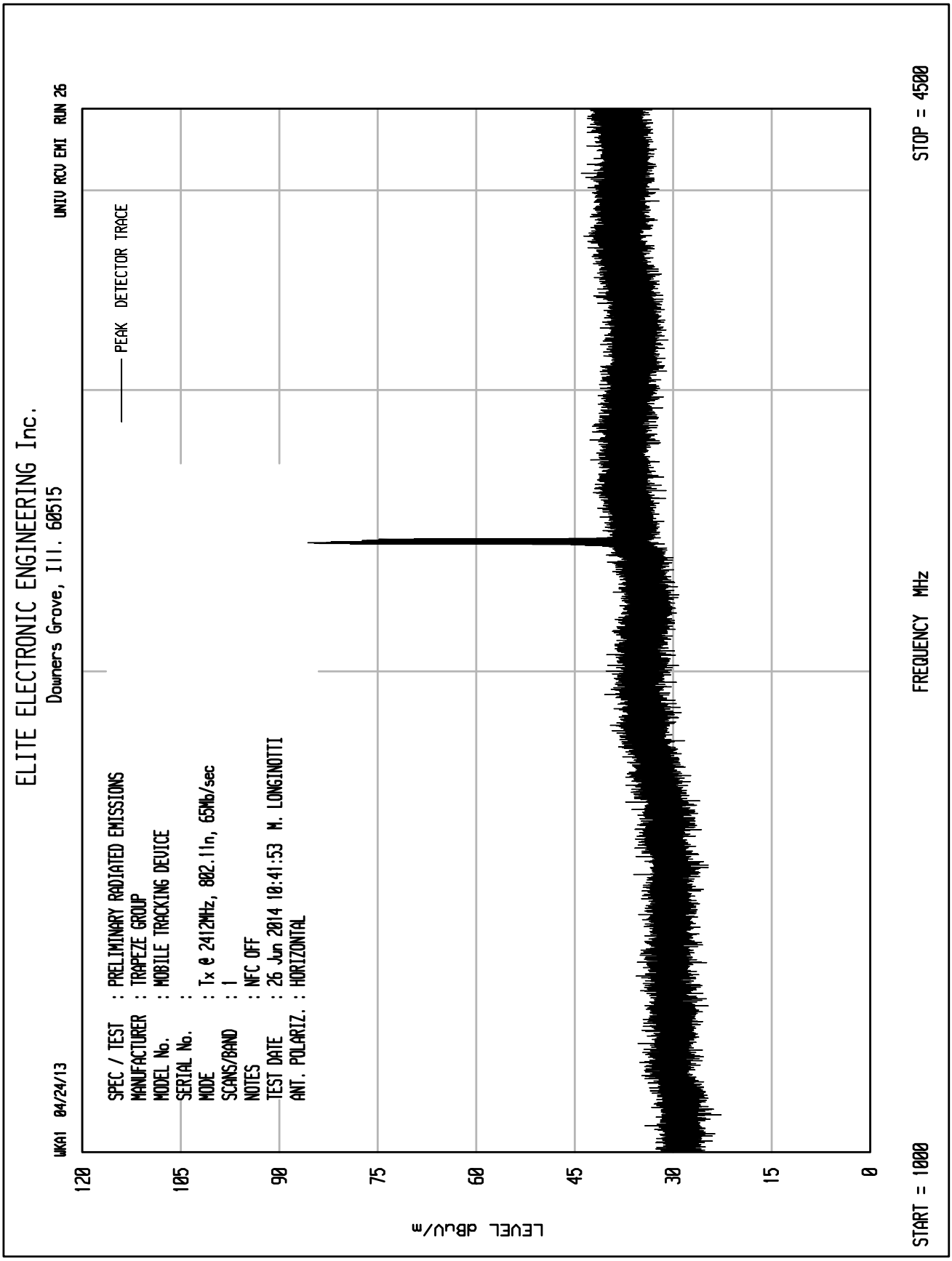

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 40
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:32:11 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

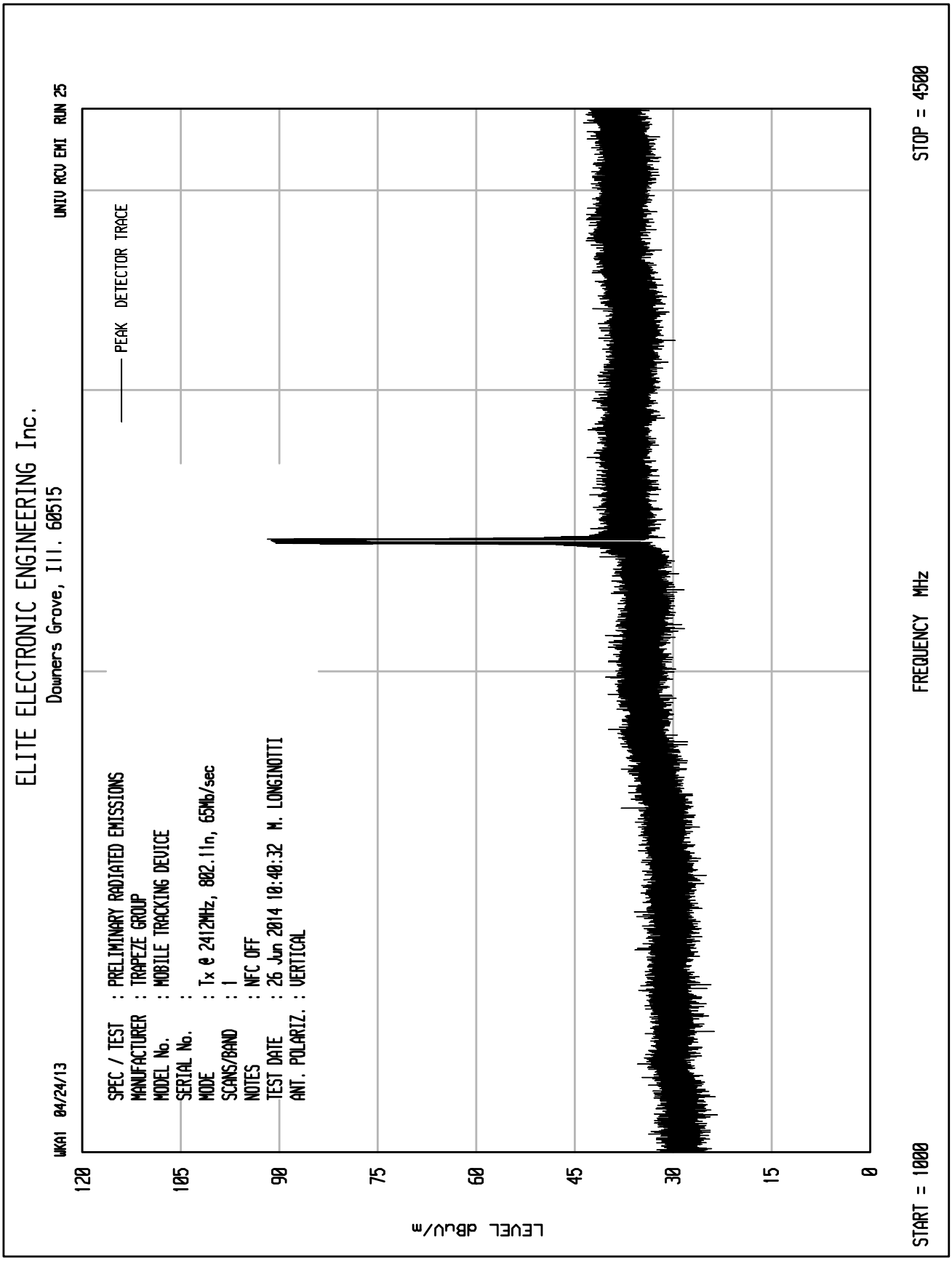

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 10
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 12:45:37 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

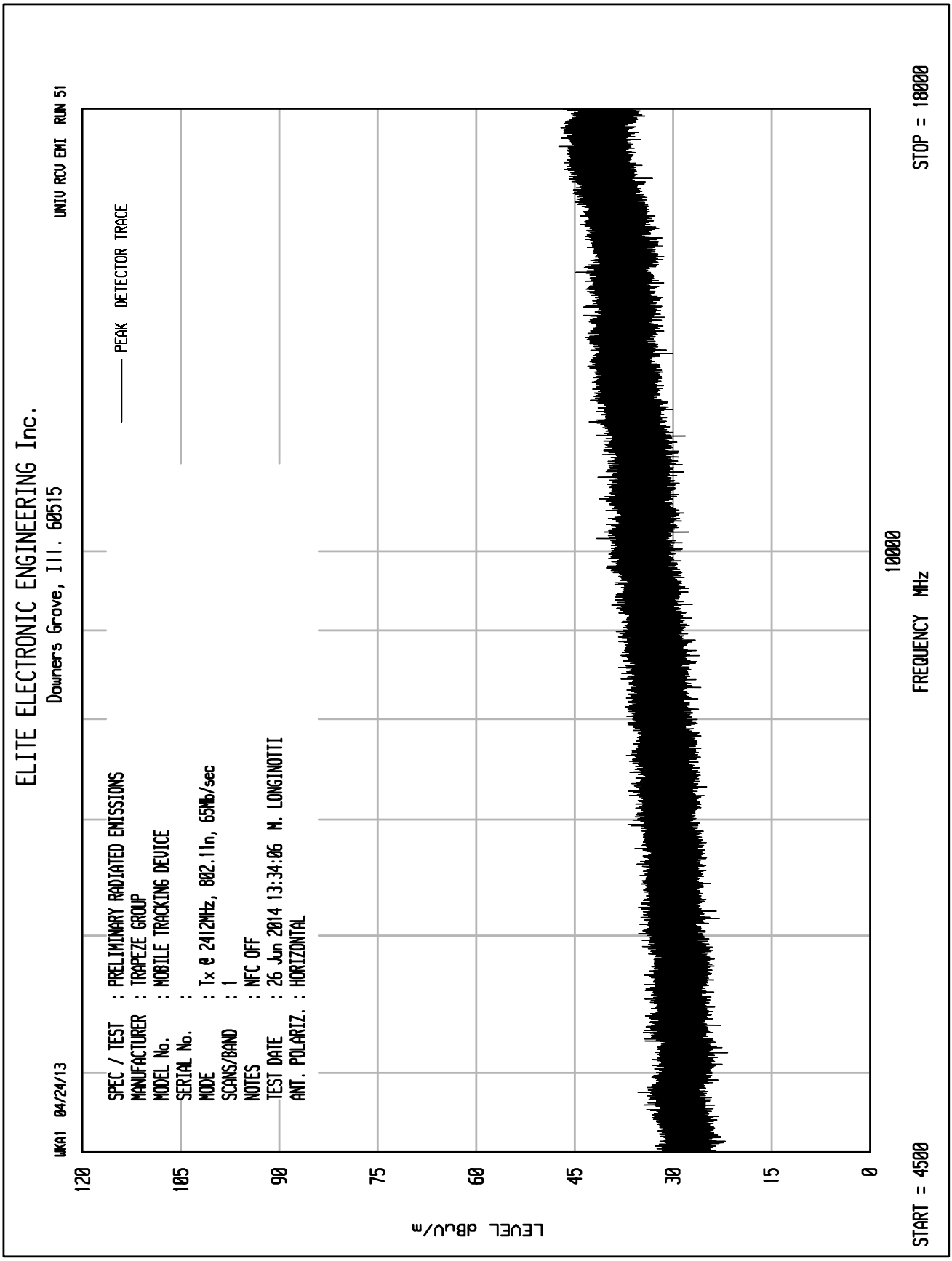

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 9
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 12:42:44 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

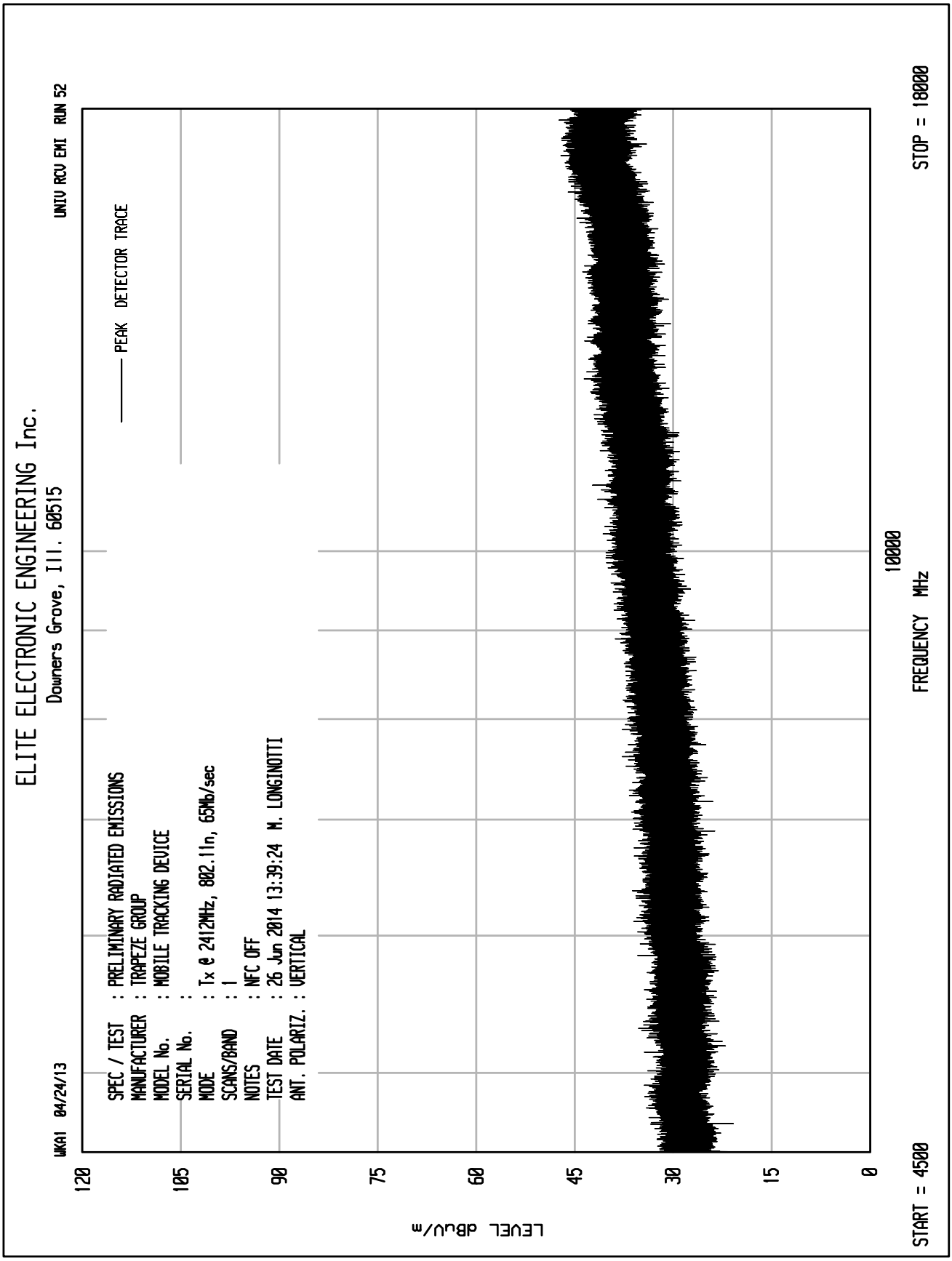

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 14
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:41:39 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

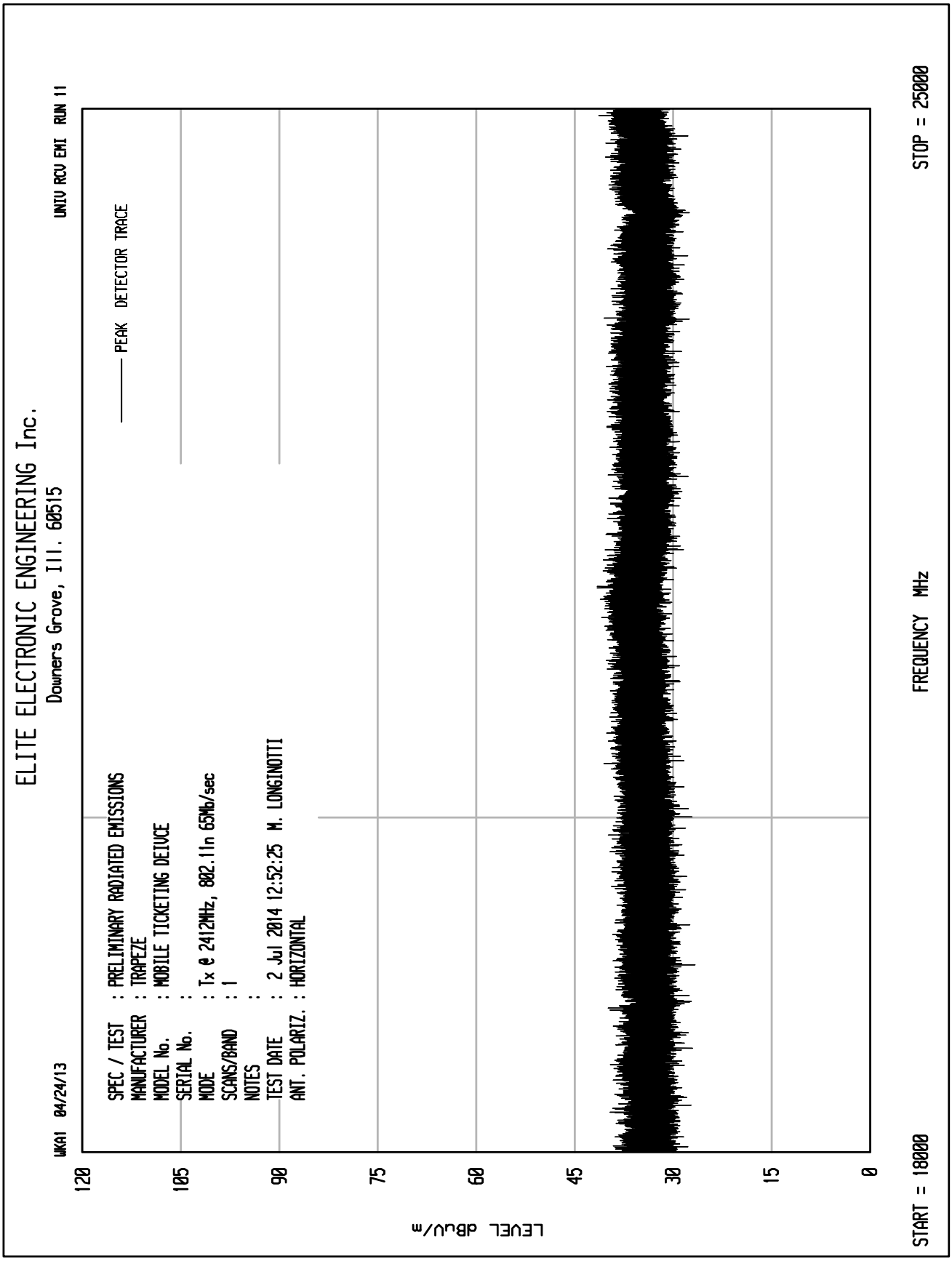

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 13
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:39:57 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

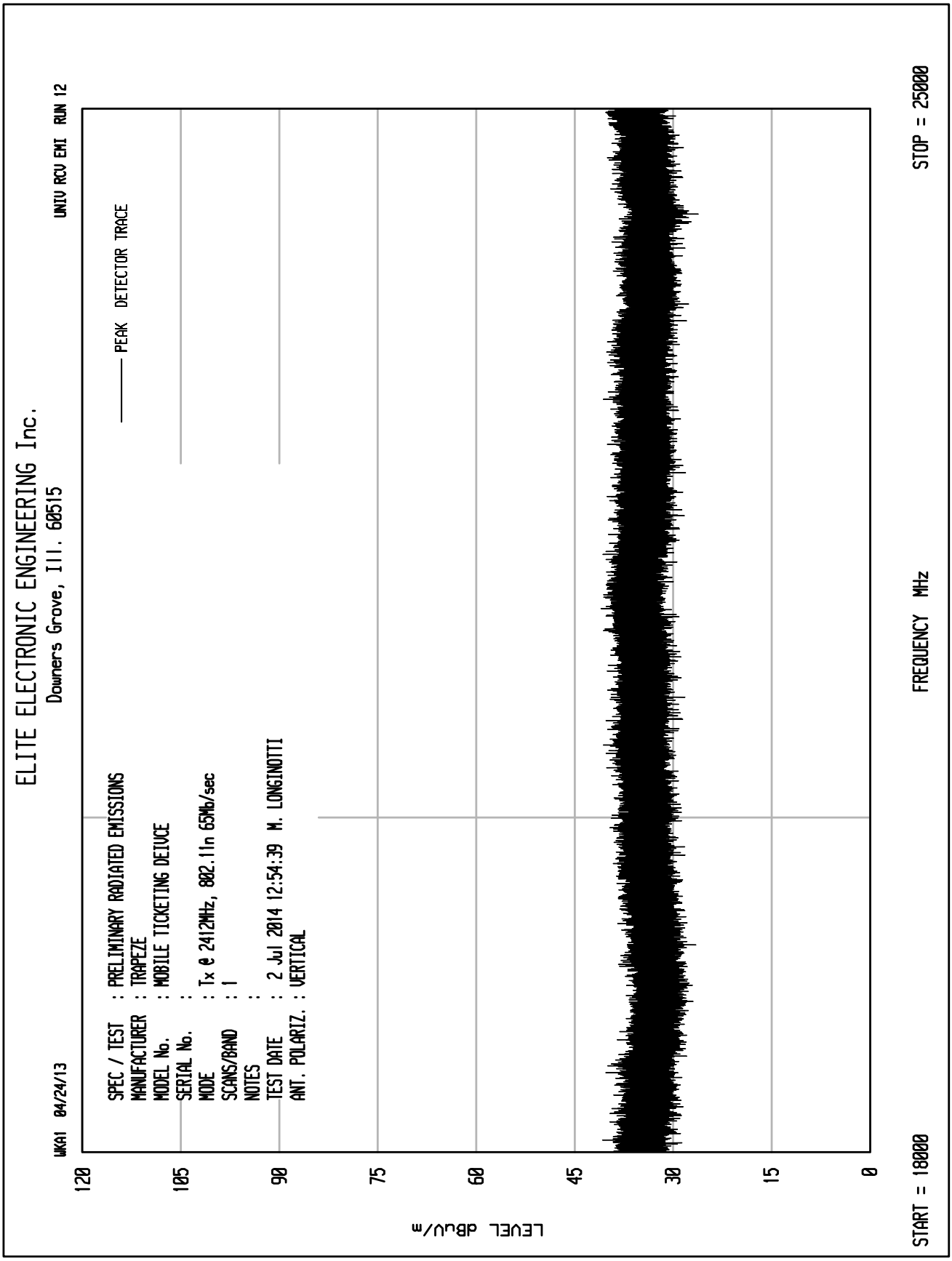

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 26
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:41:53 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

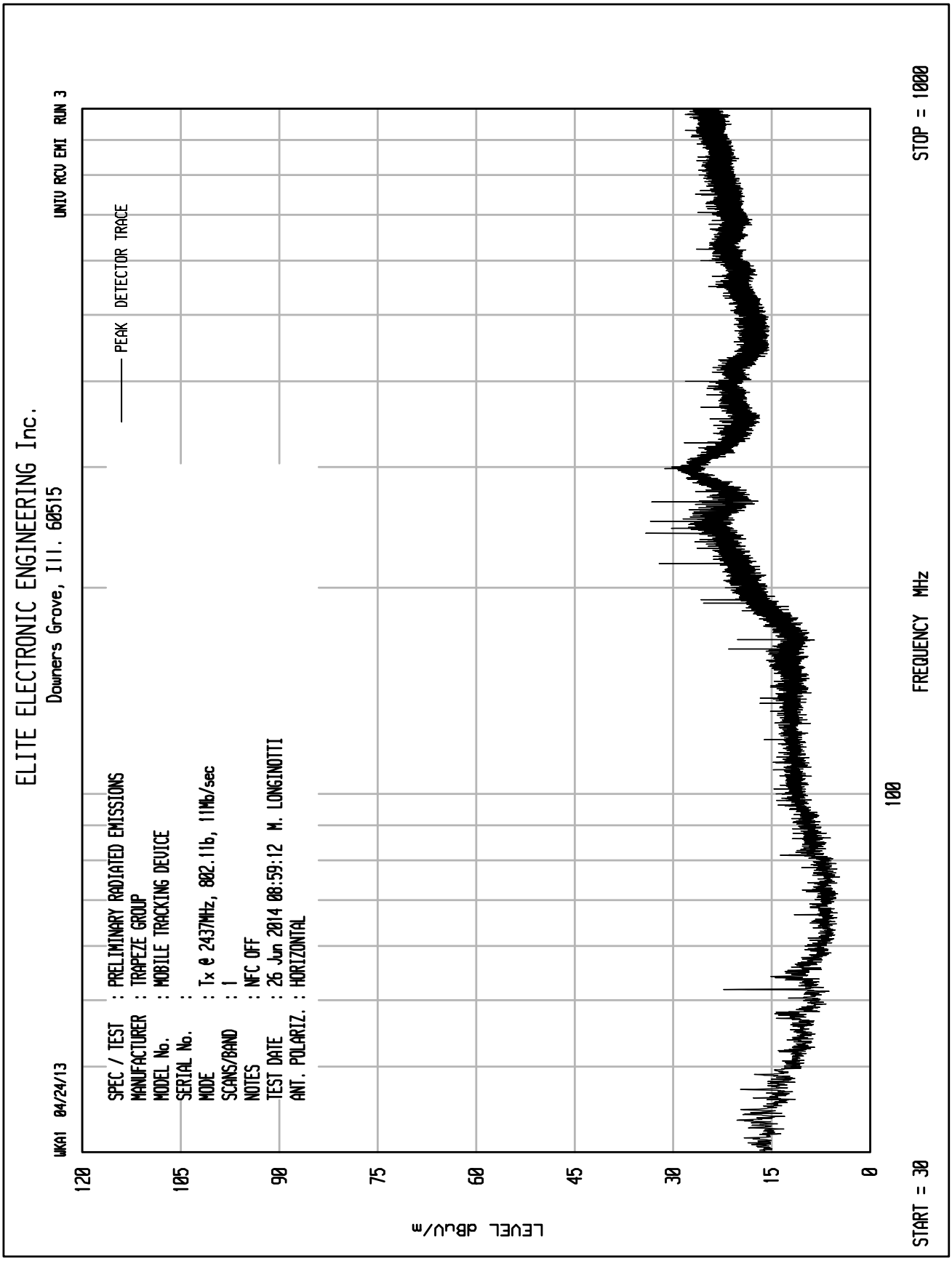

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 25
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:40:32 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

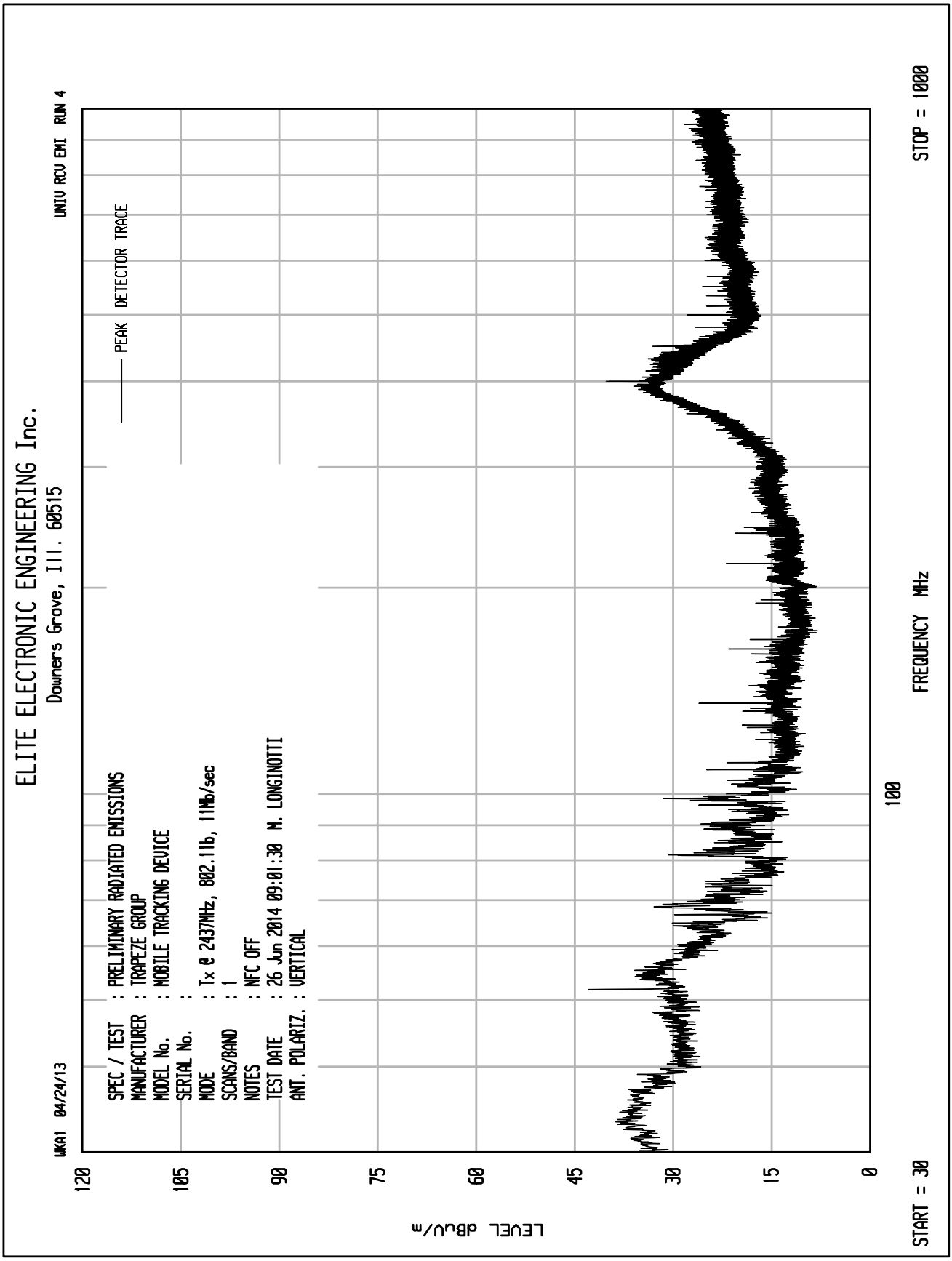

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 51
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:34:06 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

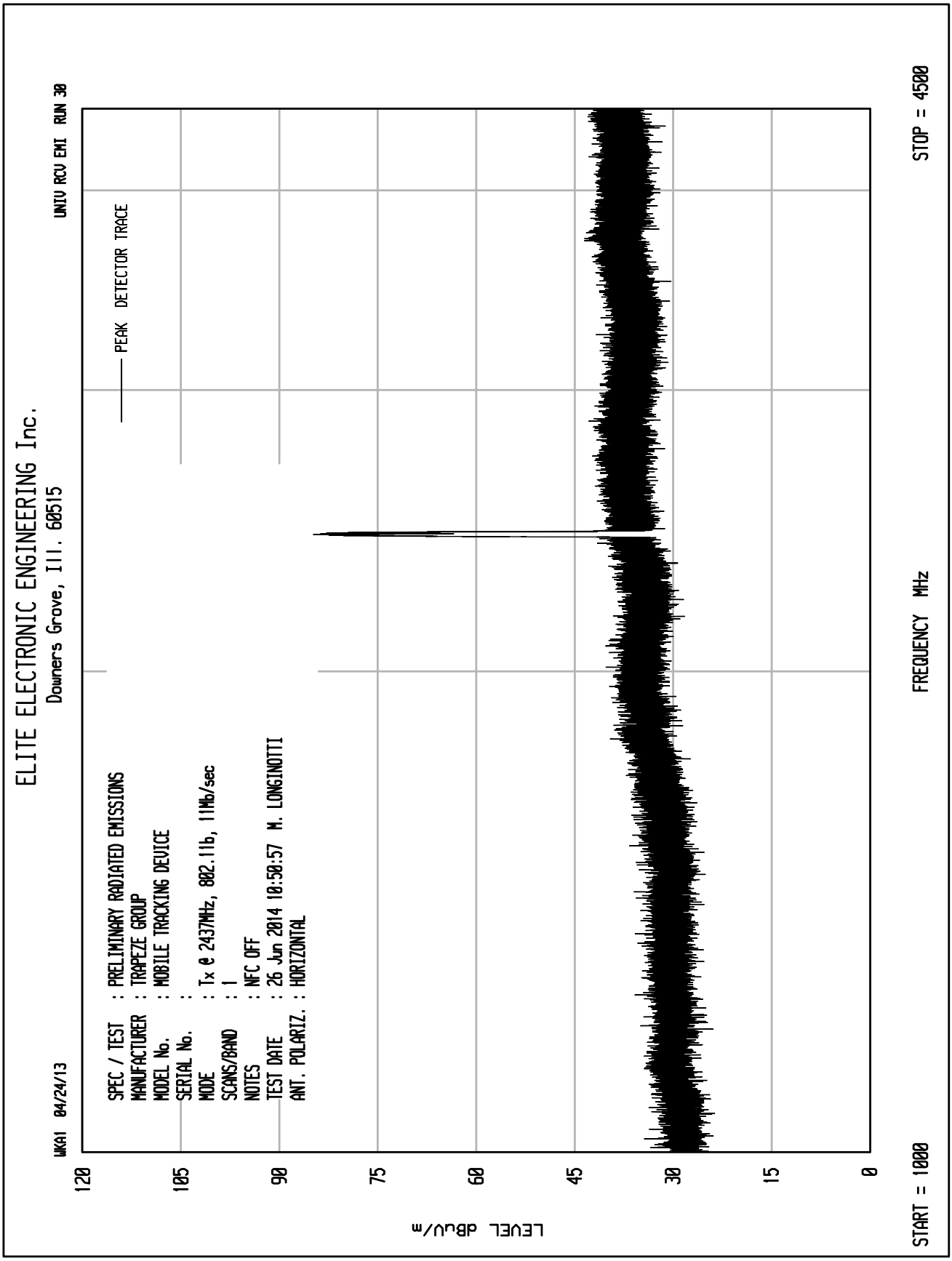

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 52
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:39:24 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

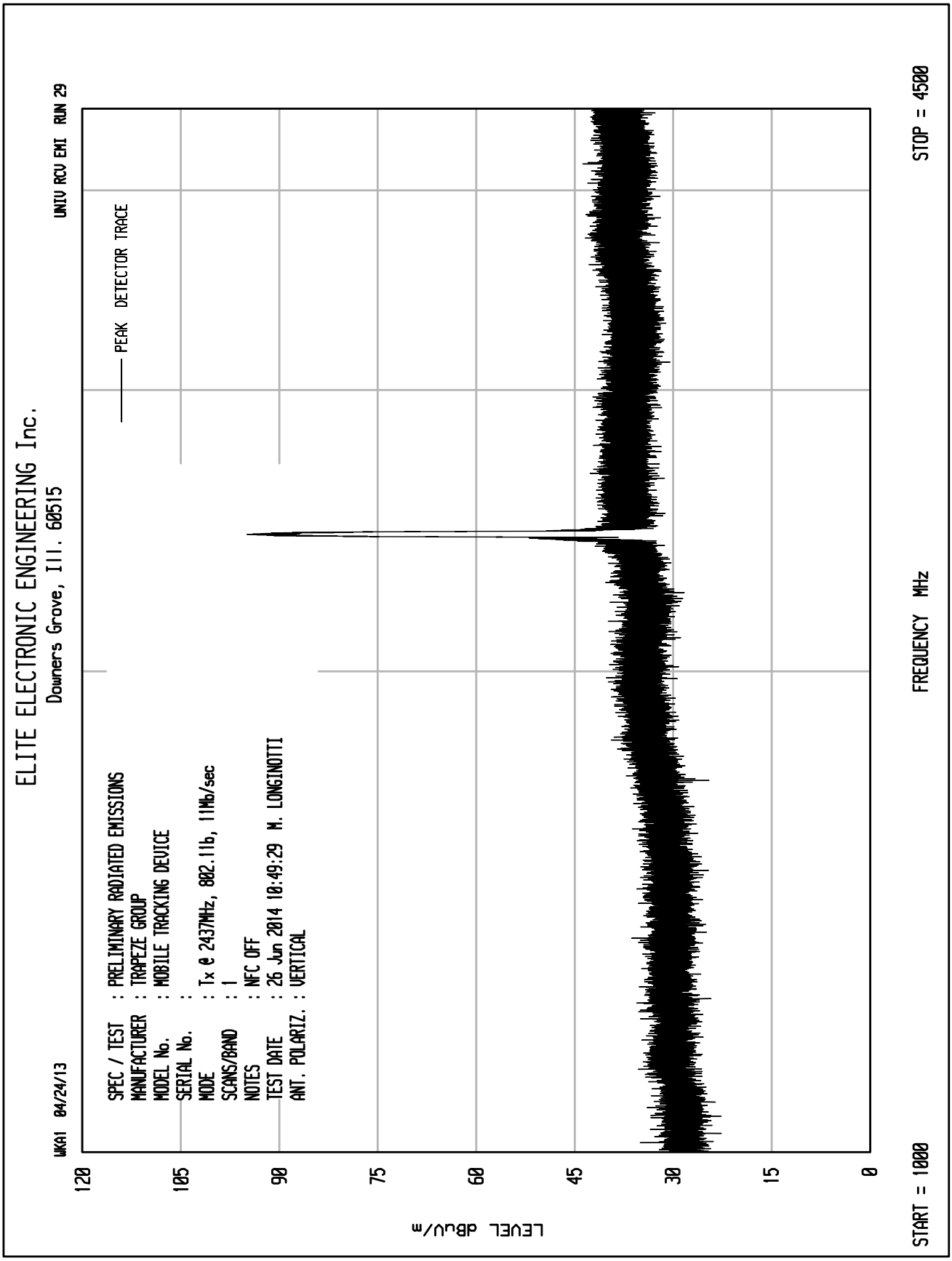

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 11
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 12:52:25 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

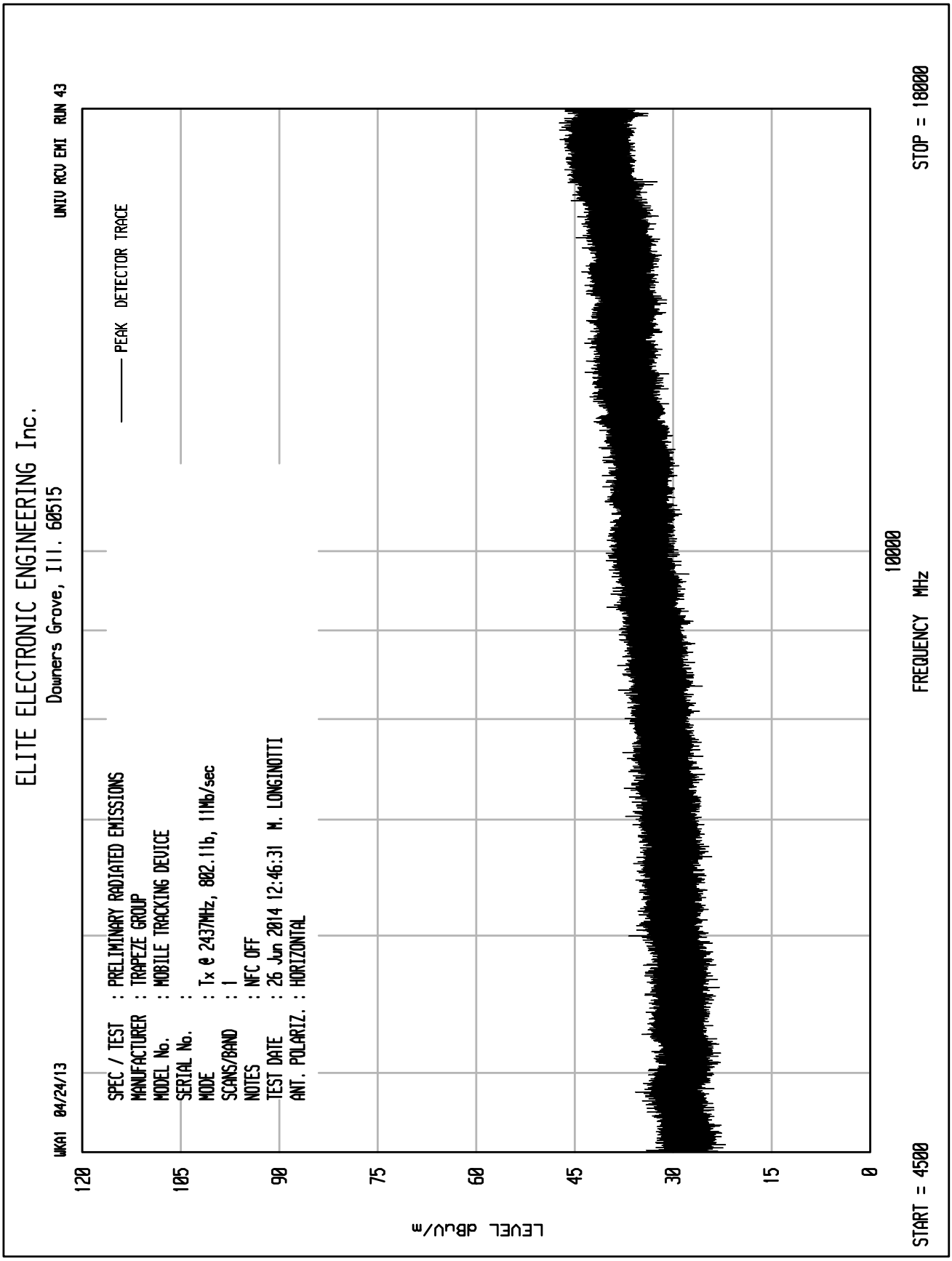

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 12
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2412MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 12:54:39 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

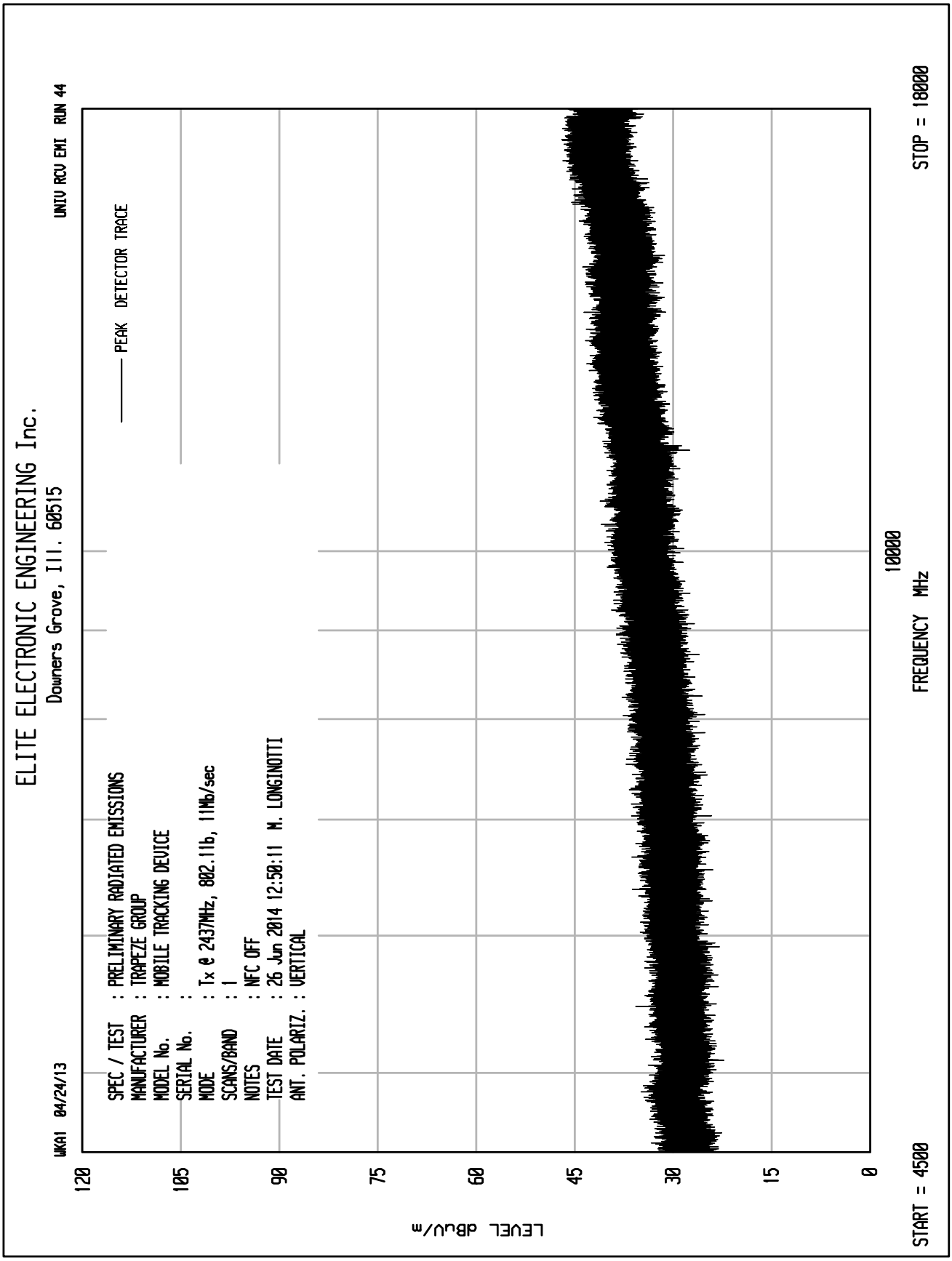

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 3
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 08:59:12 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

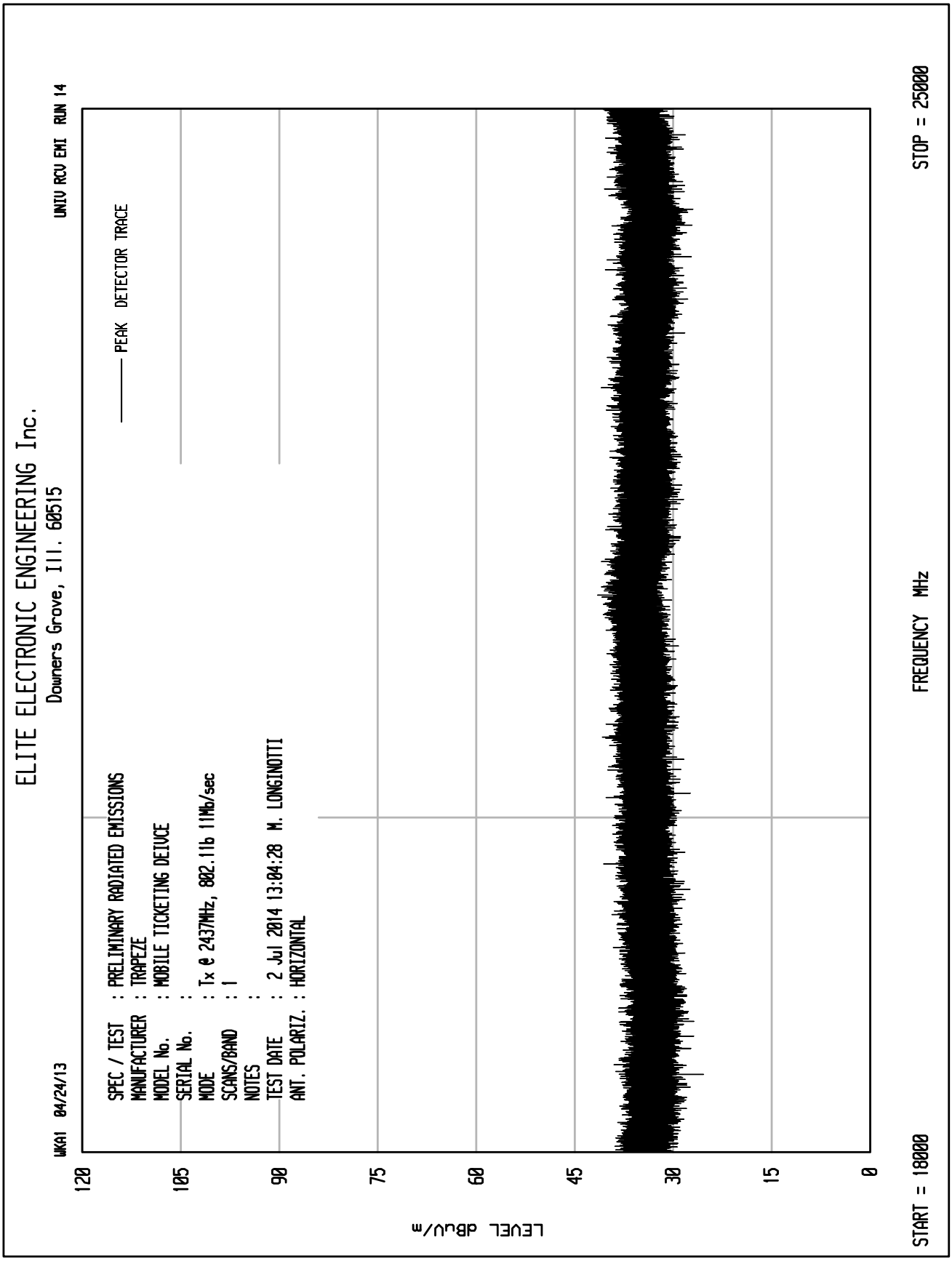

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 4
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:01:30 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

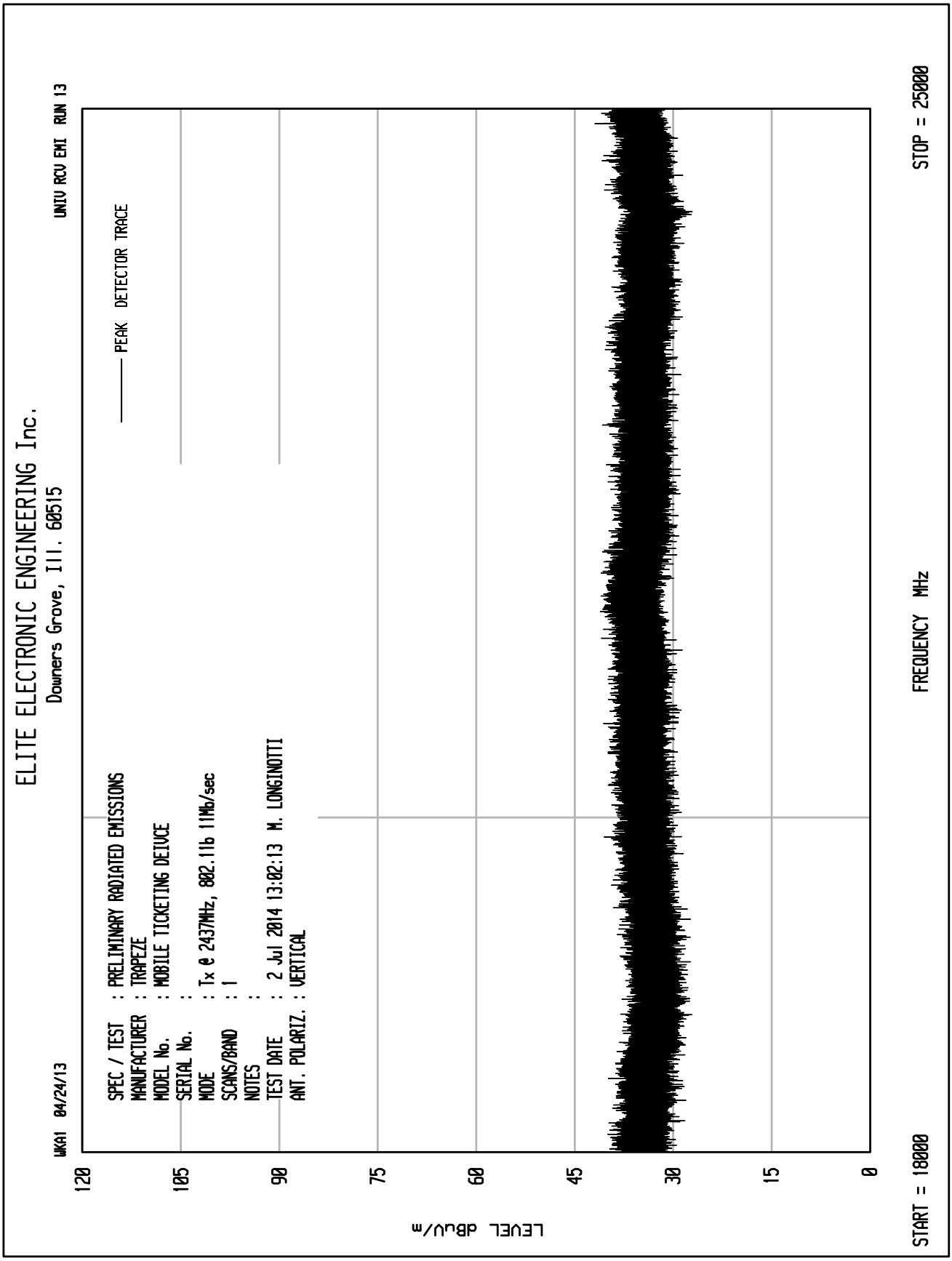

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 30
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:50:57 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

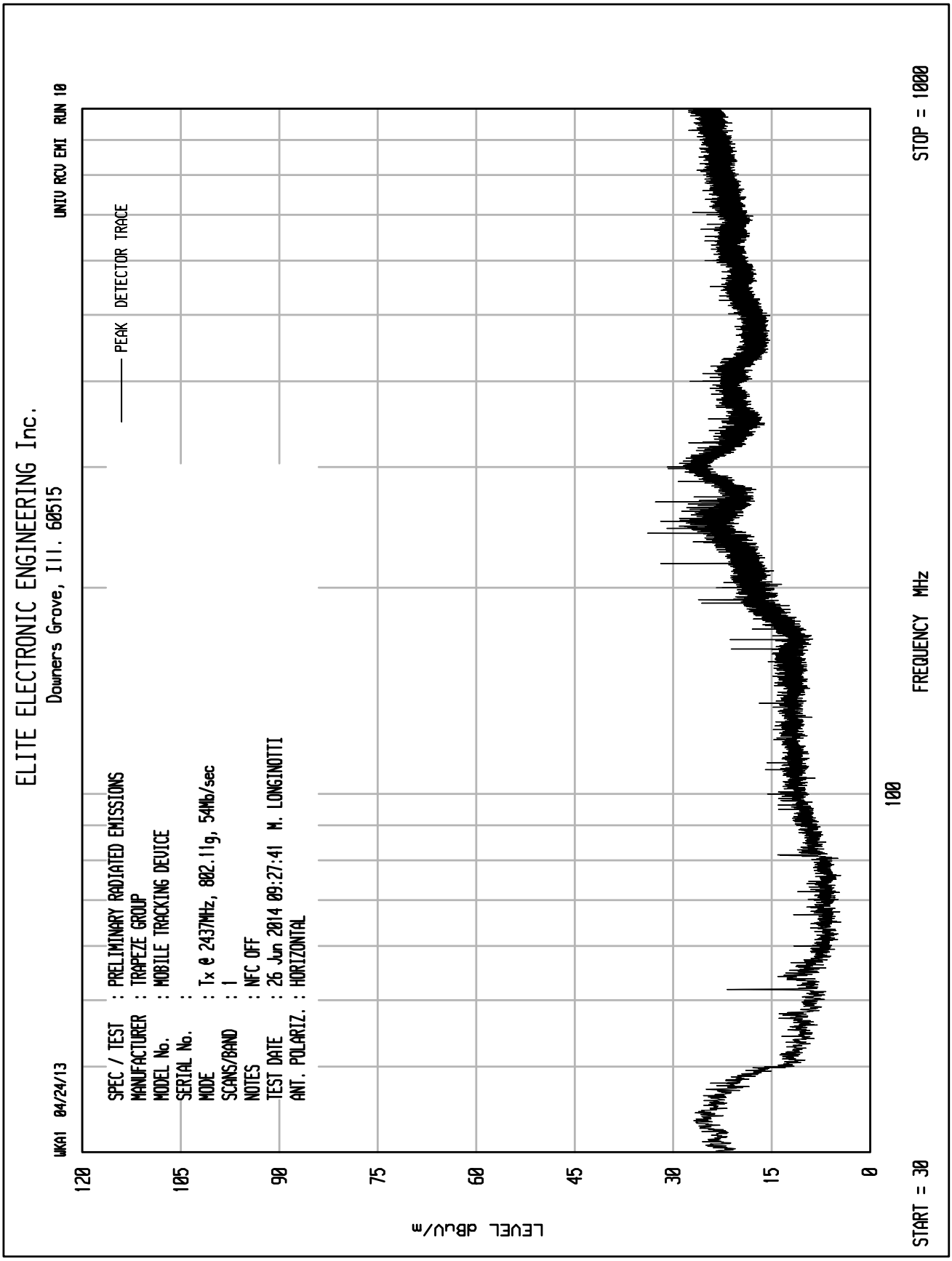

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 29
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:49:29 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

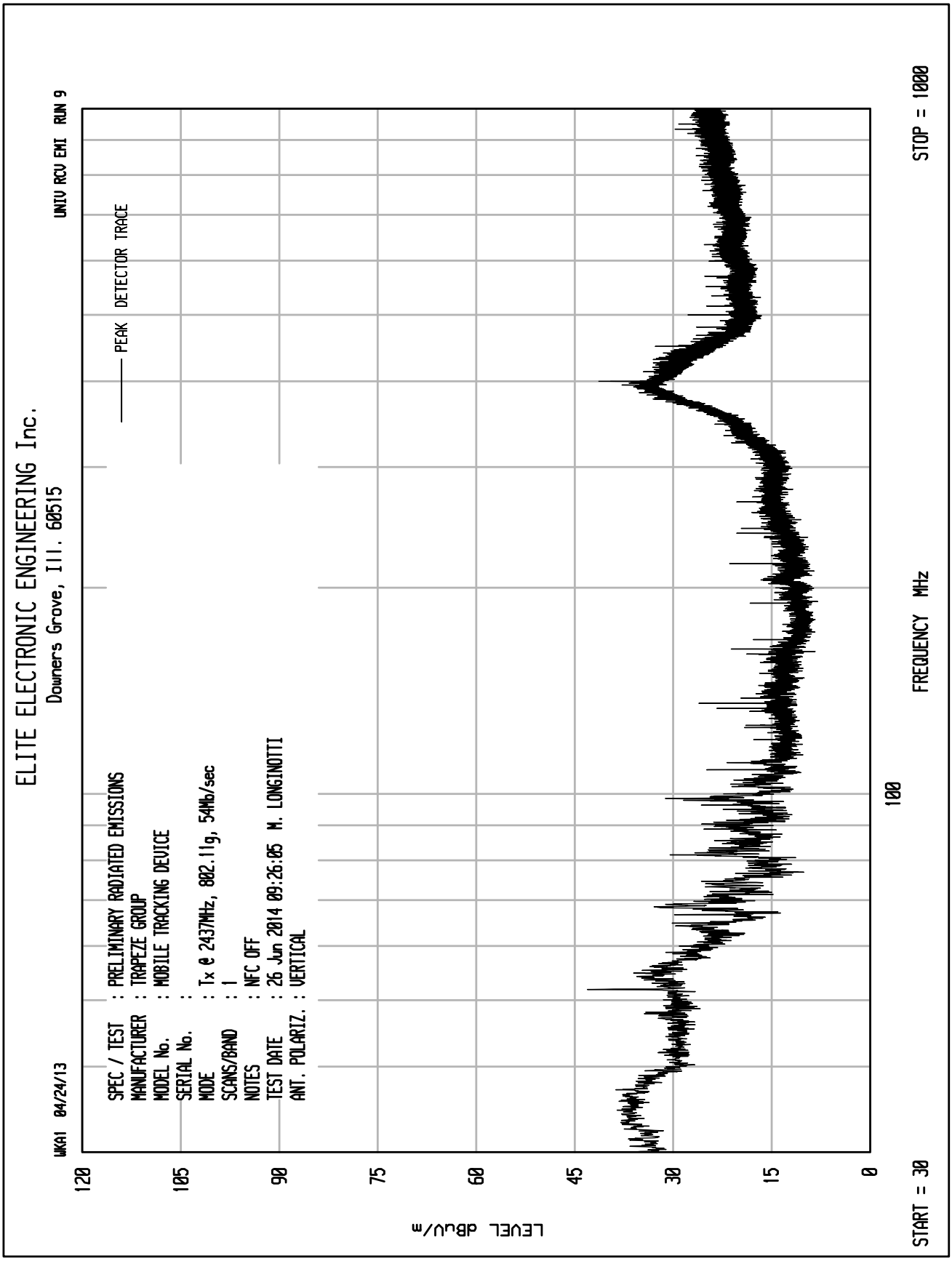

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 43
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 12:46:31 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

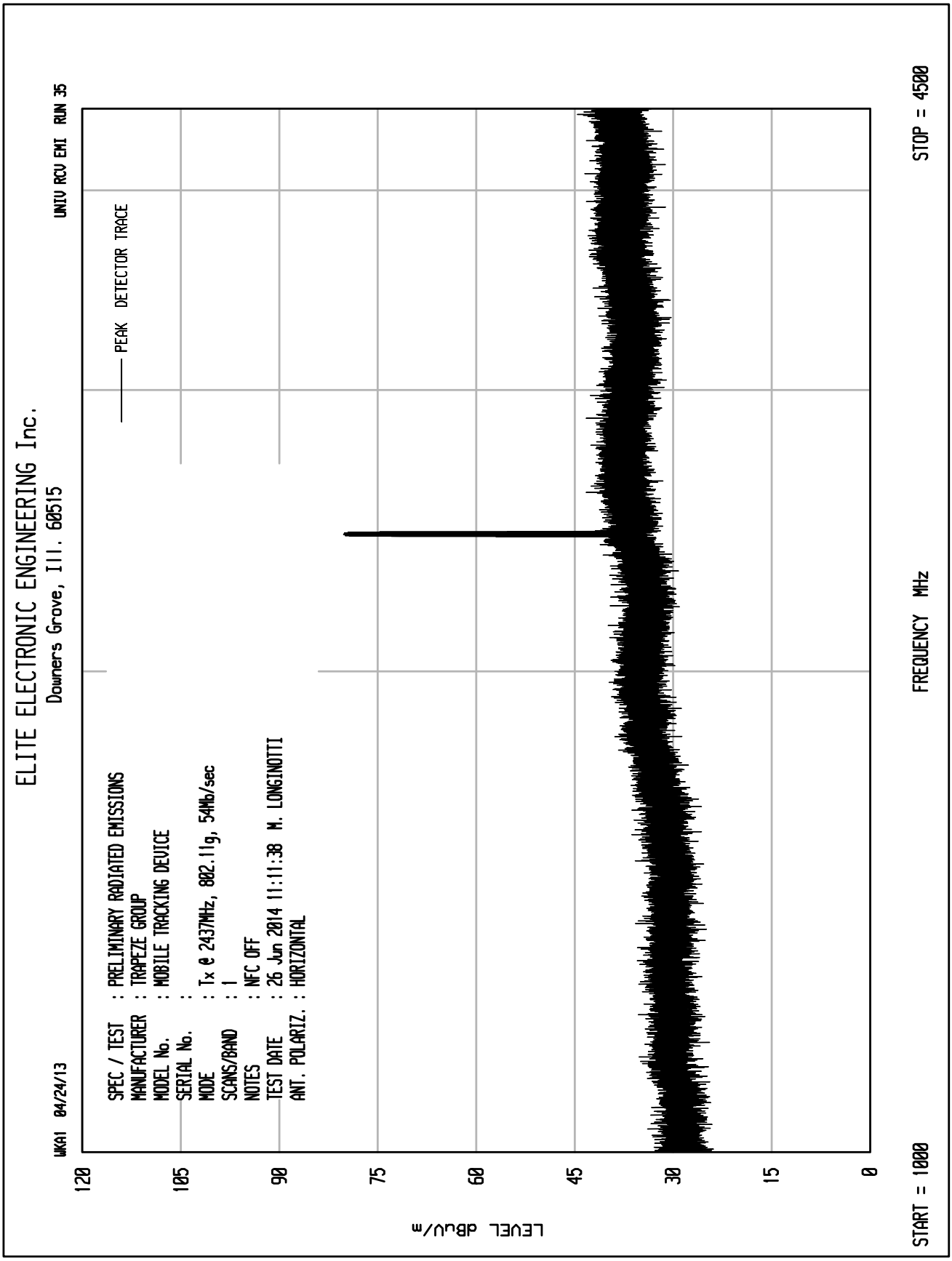

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 44
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 12:50:11 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

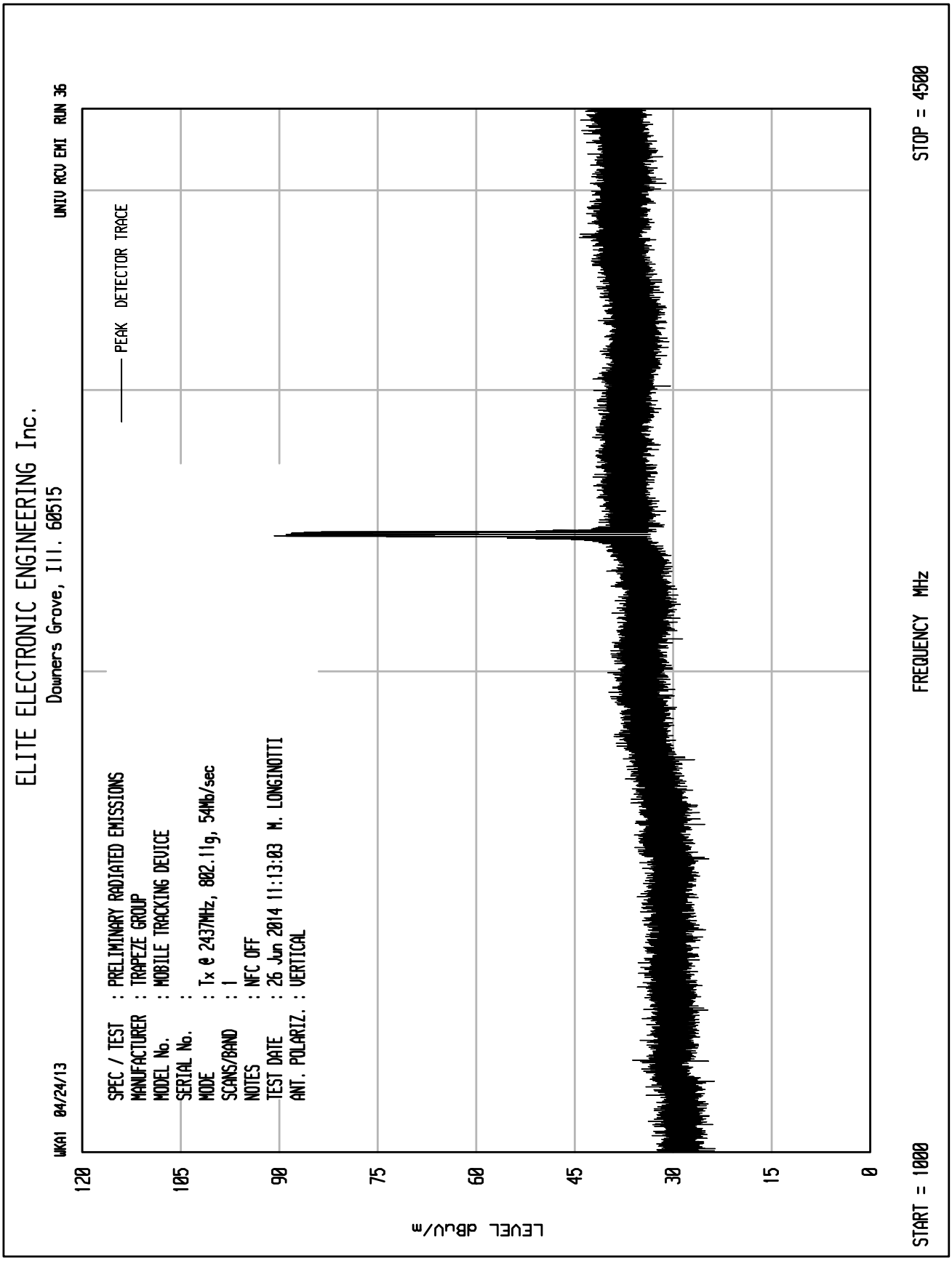

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 14
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:04:28 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

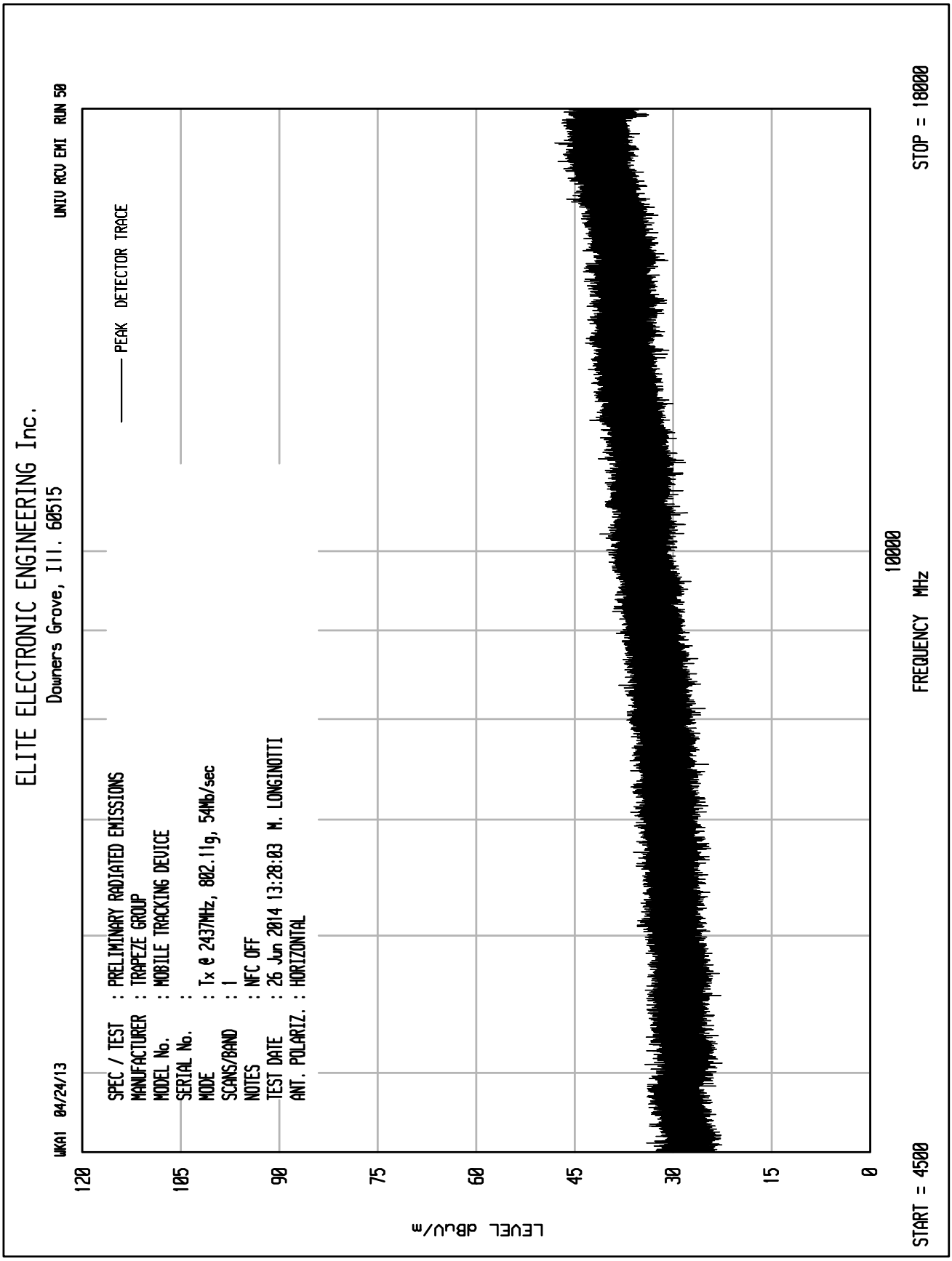

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 13
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:02:13 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

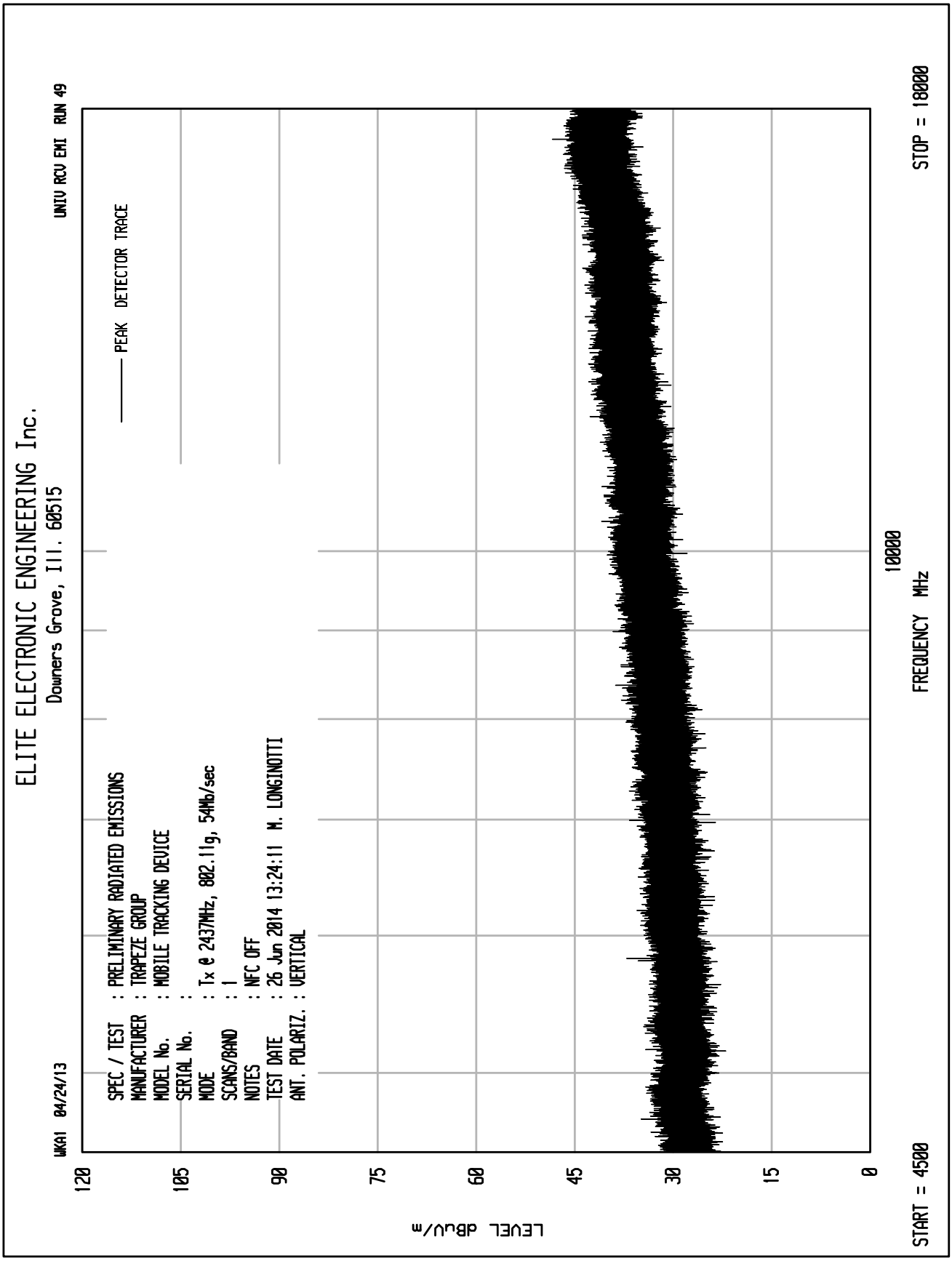

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 10
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:27:41 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

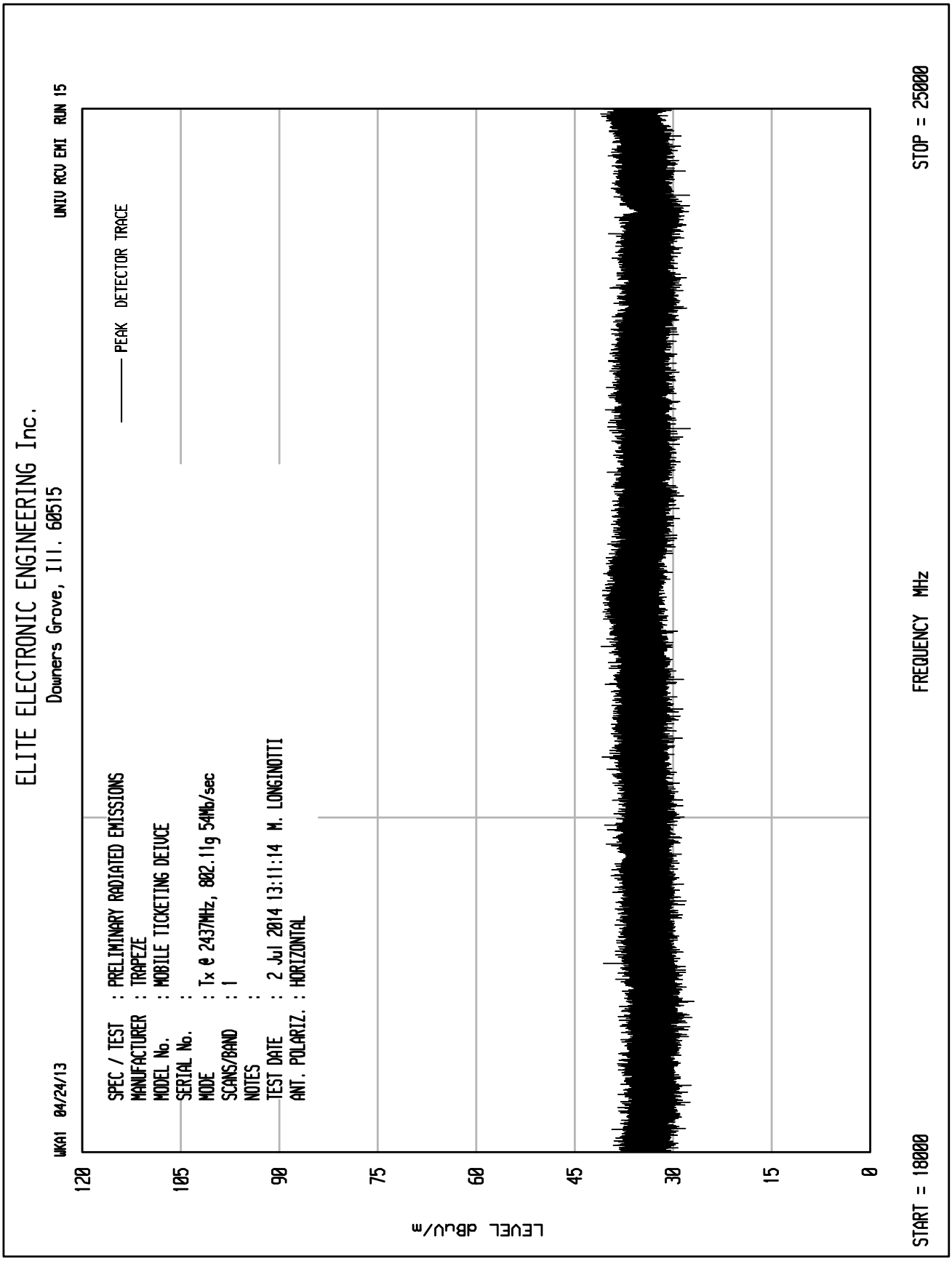

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 9
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:26:05 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

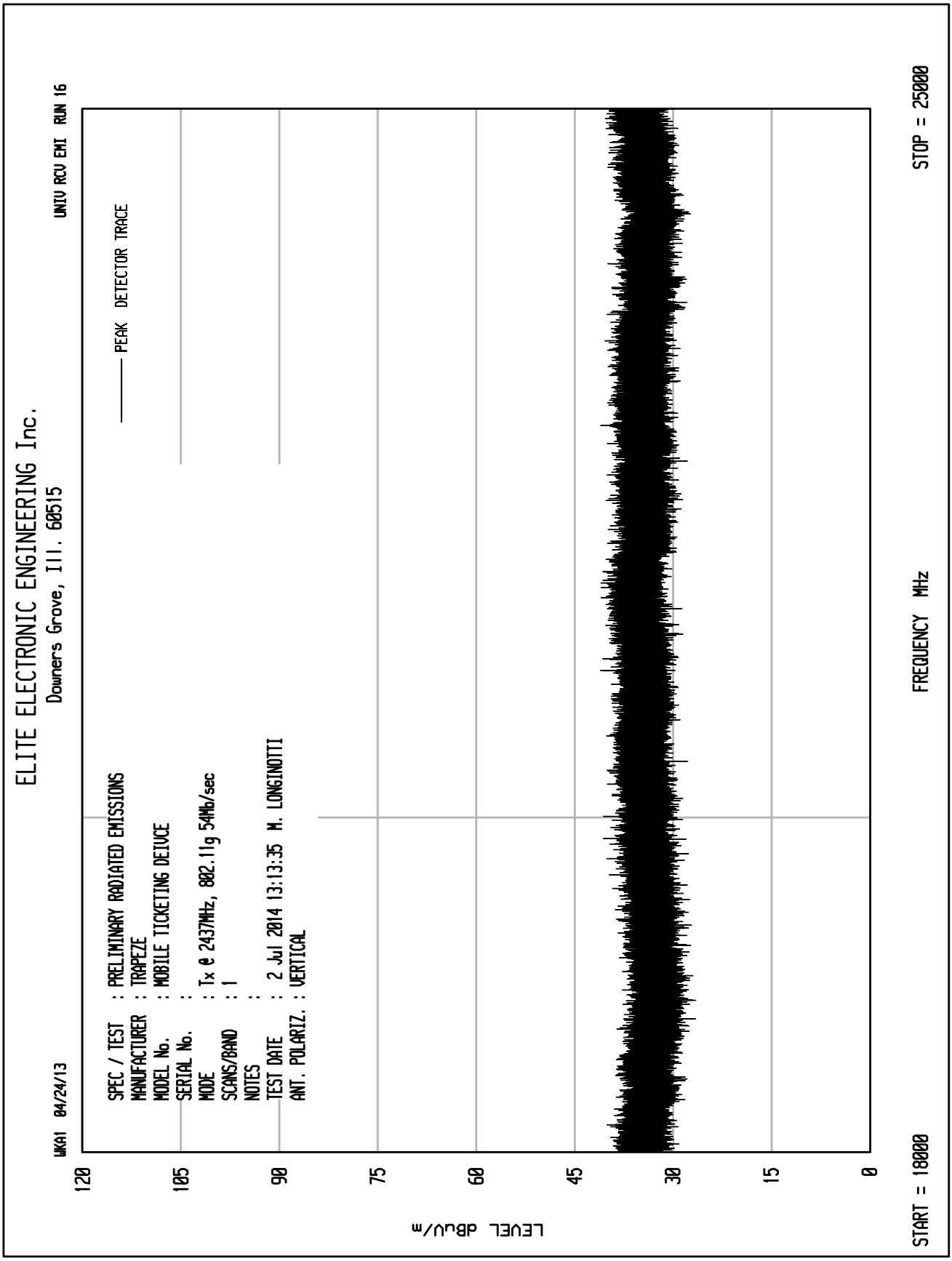

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 35
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:11:38 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

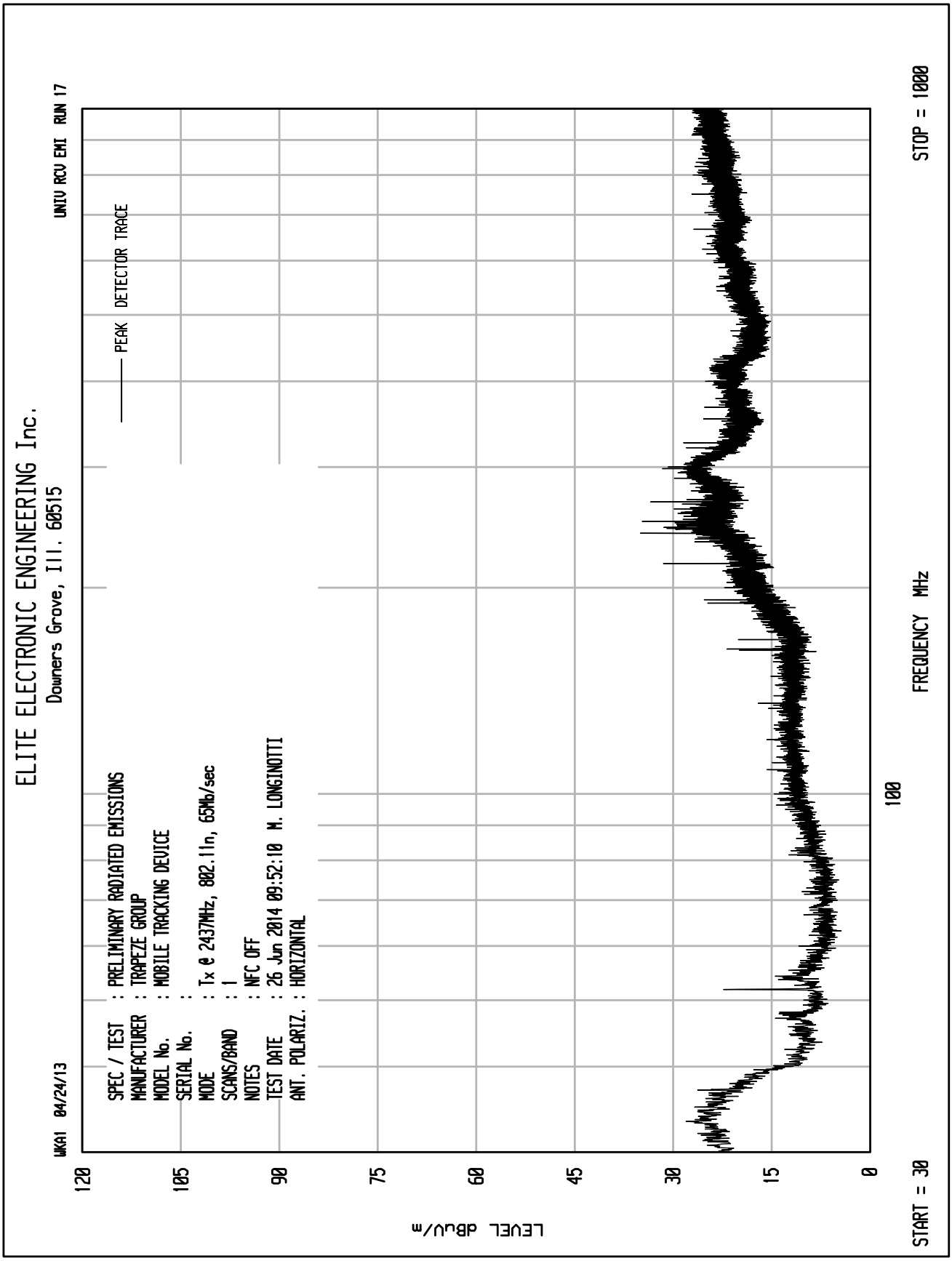

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 36
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:13:03 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

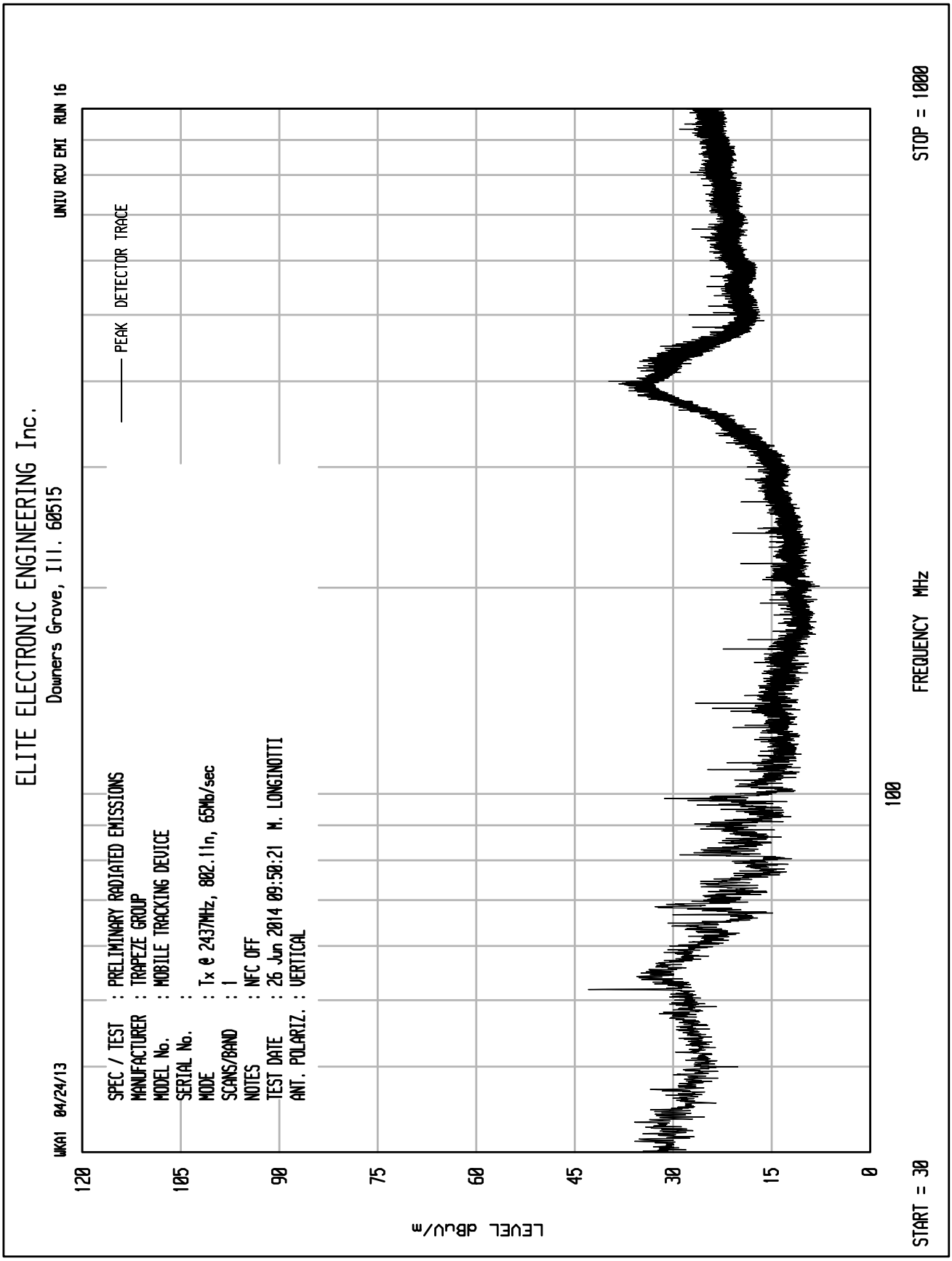

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 50
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:28:03 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

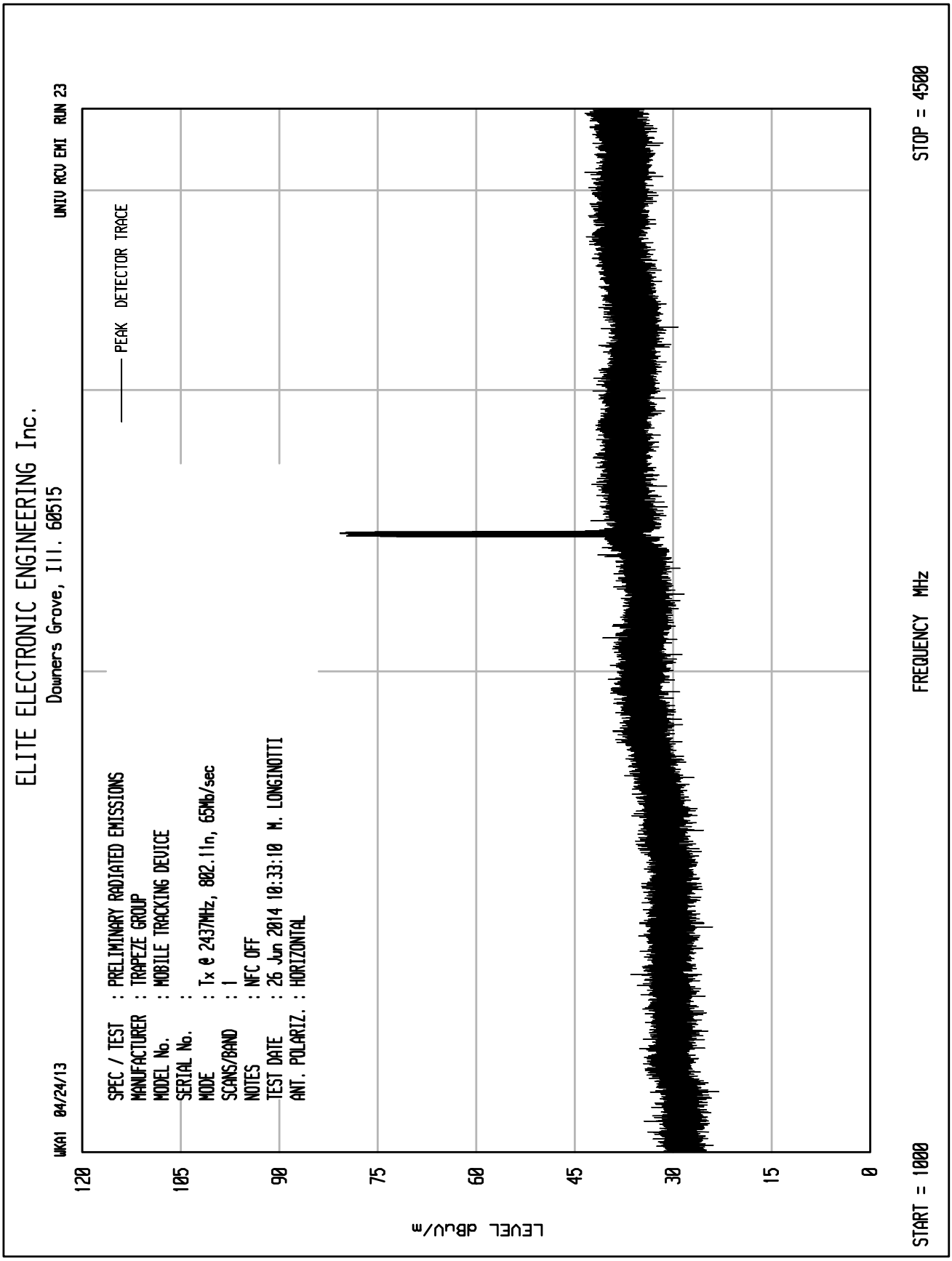

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 49
WKA1 04/24/13
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:24:11 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

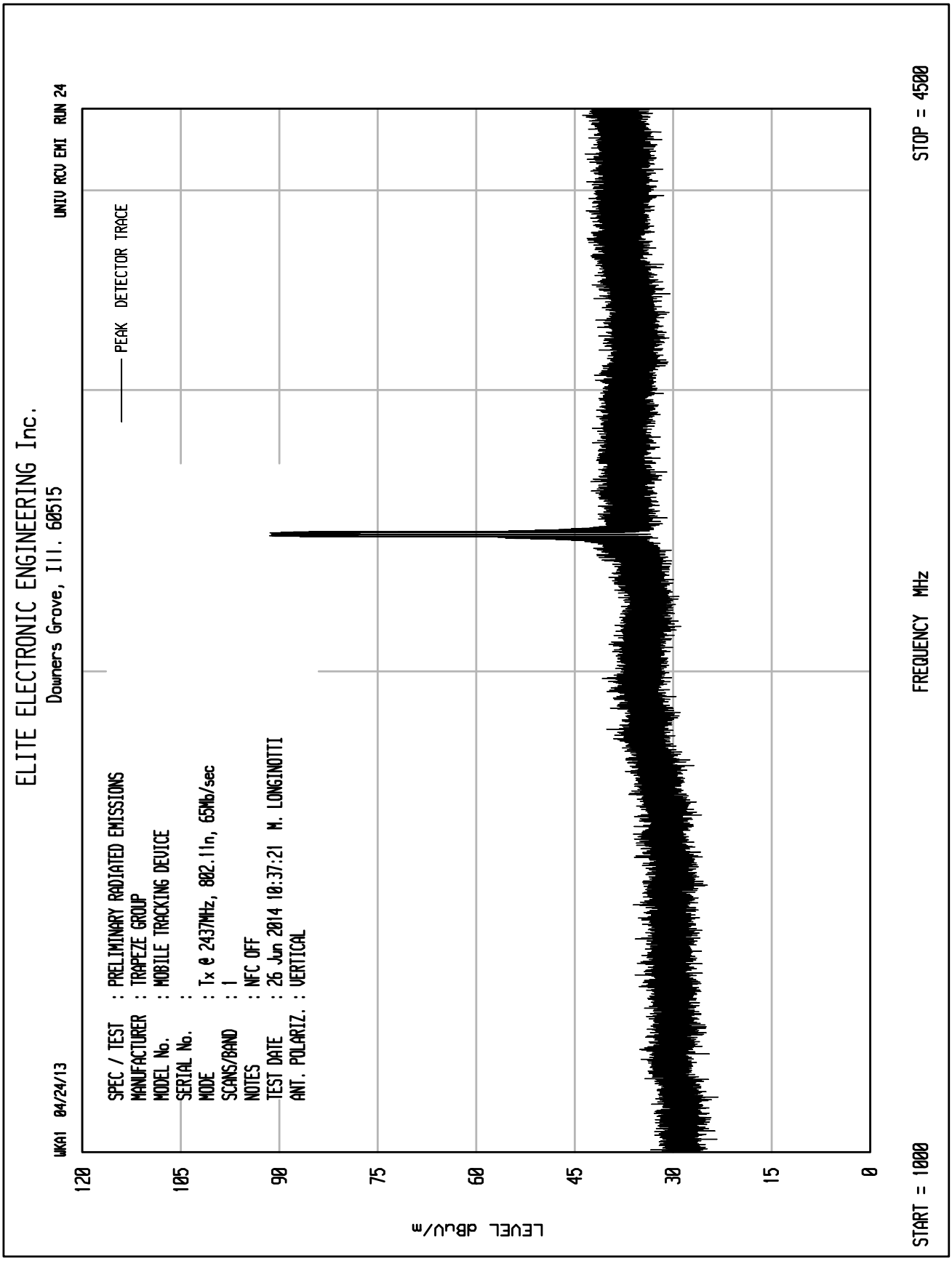

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 15
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:11:14 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

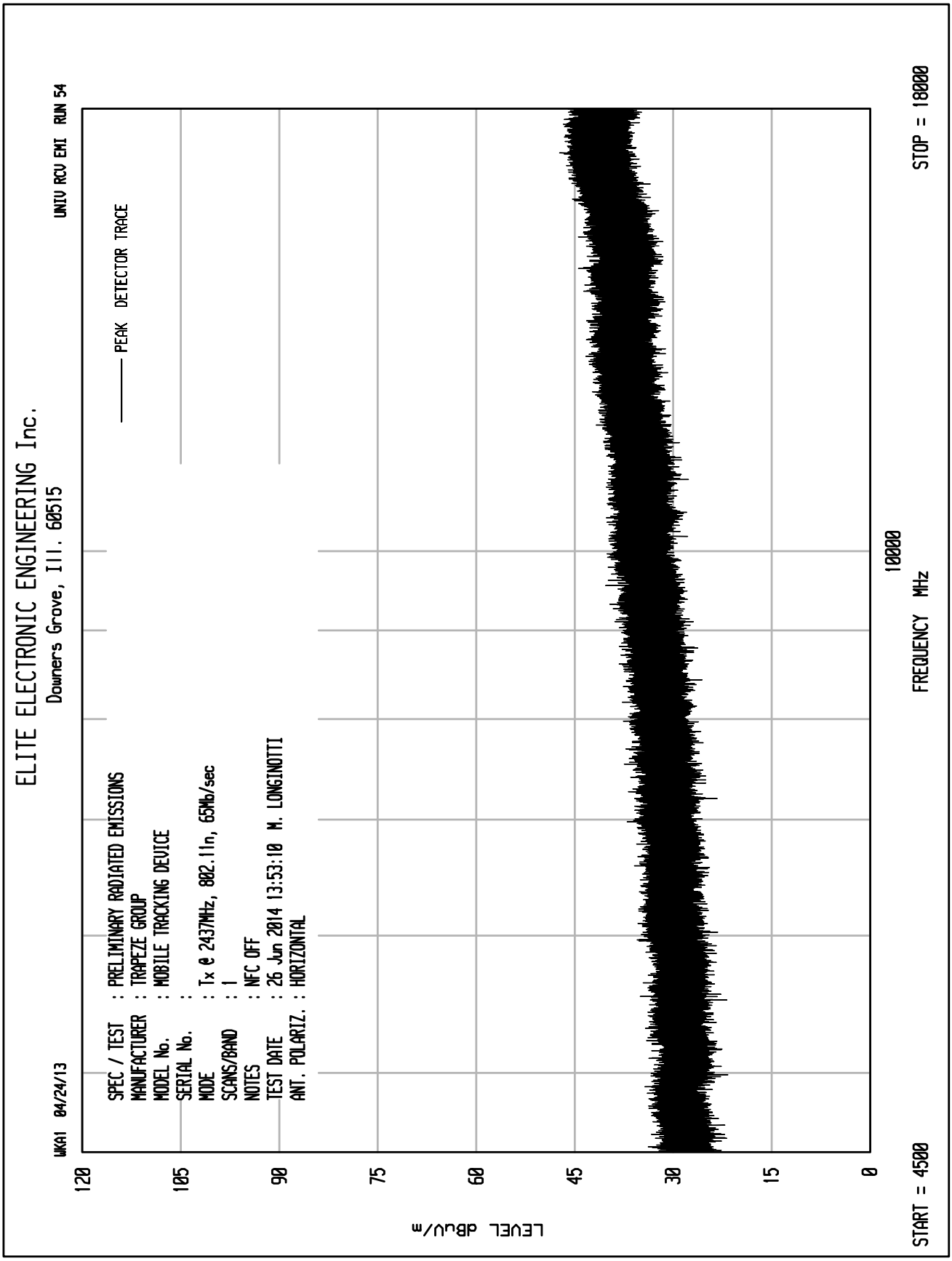

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 16
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:13:35 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

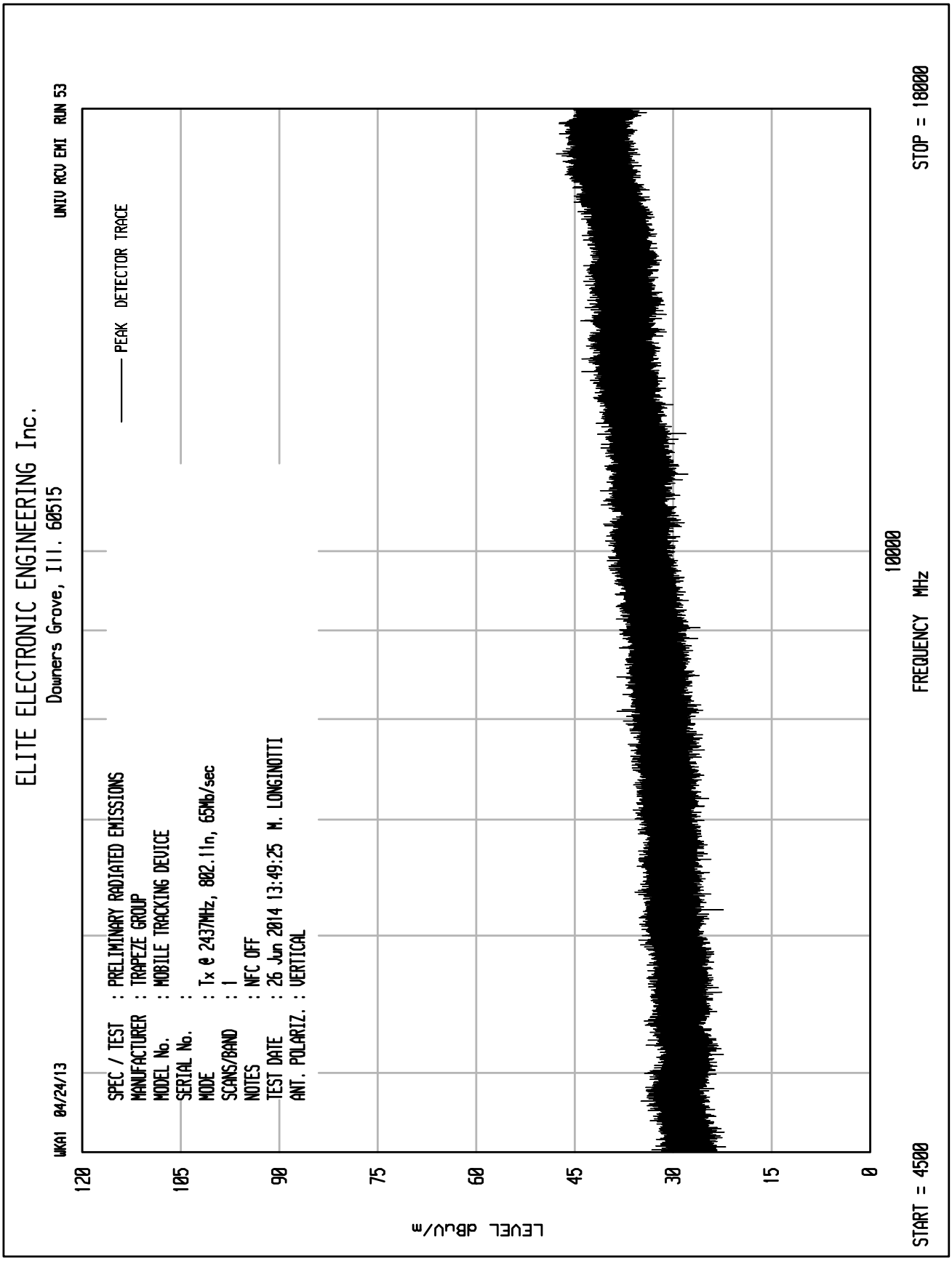

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 17
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:52:10 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

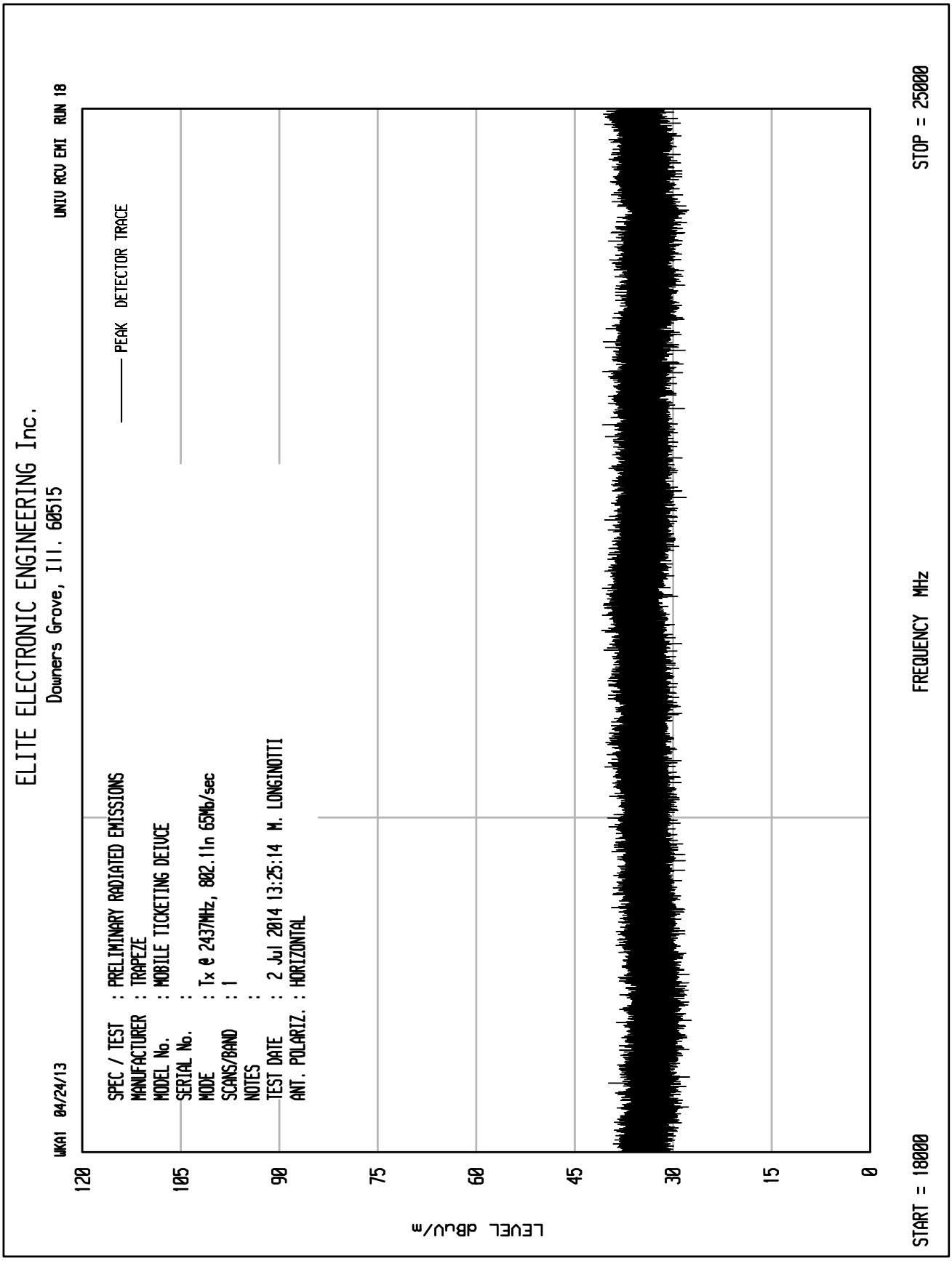

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 16
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:50:21 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

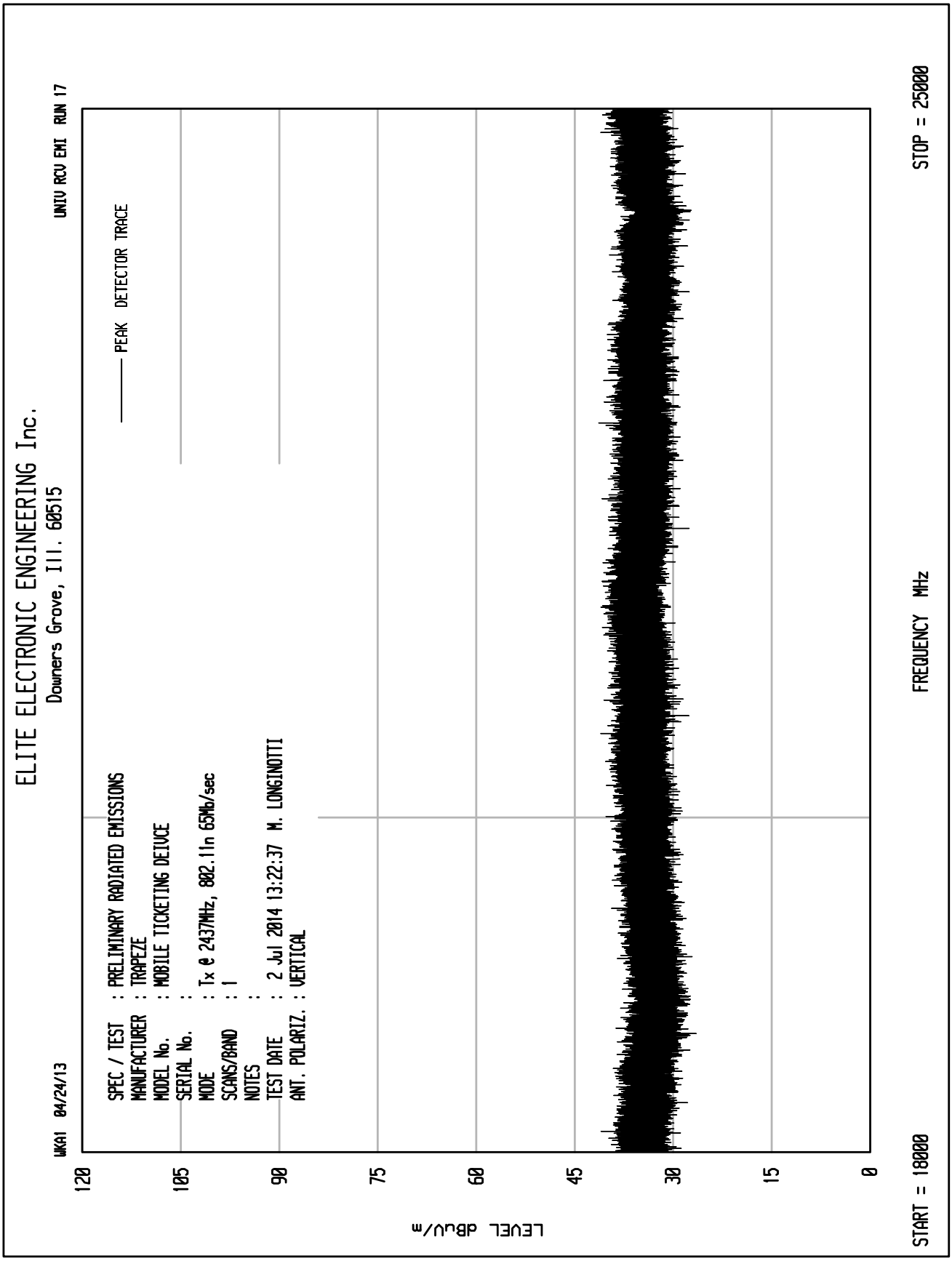

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 23
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:33:10 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

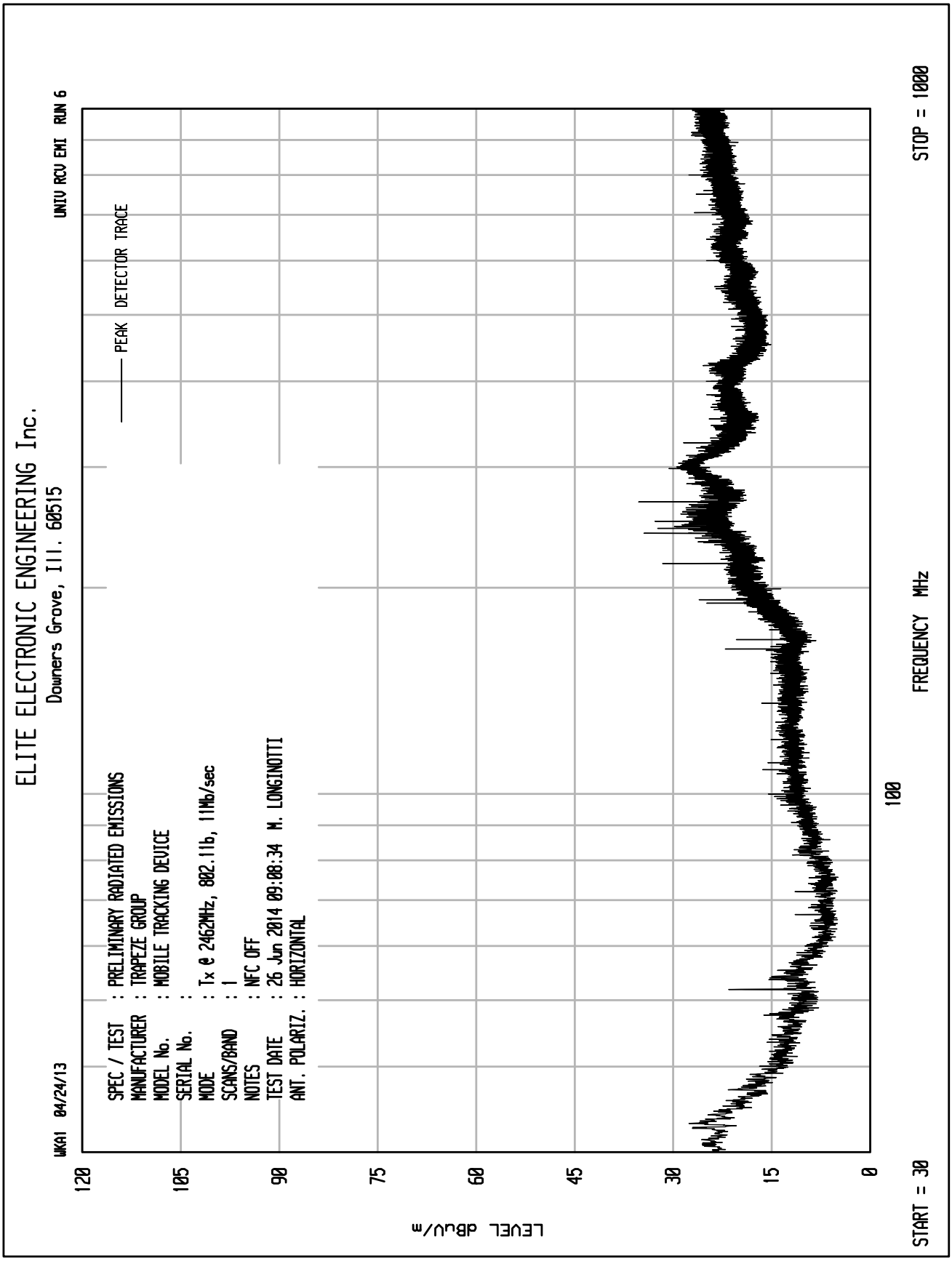

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 24
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:37:21 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

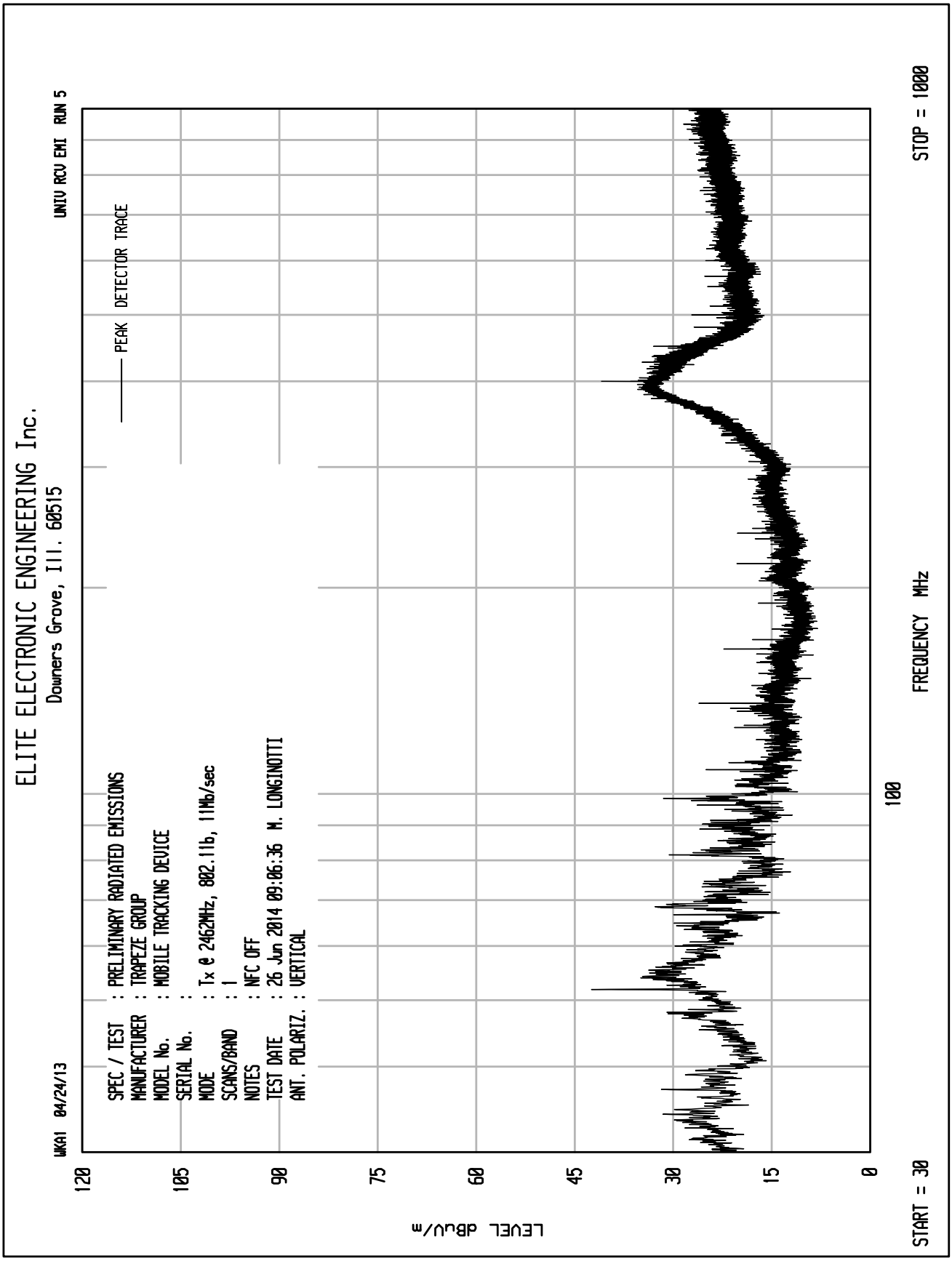

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 54
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:53:10 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

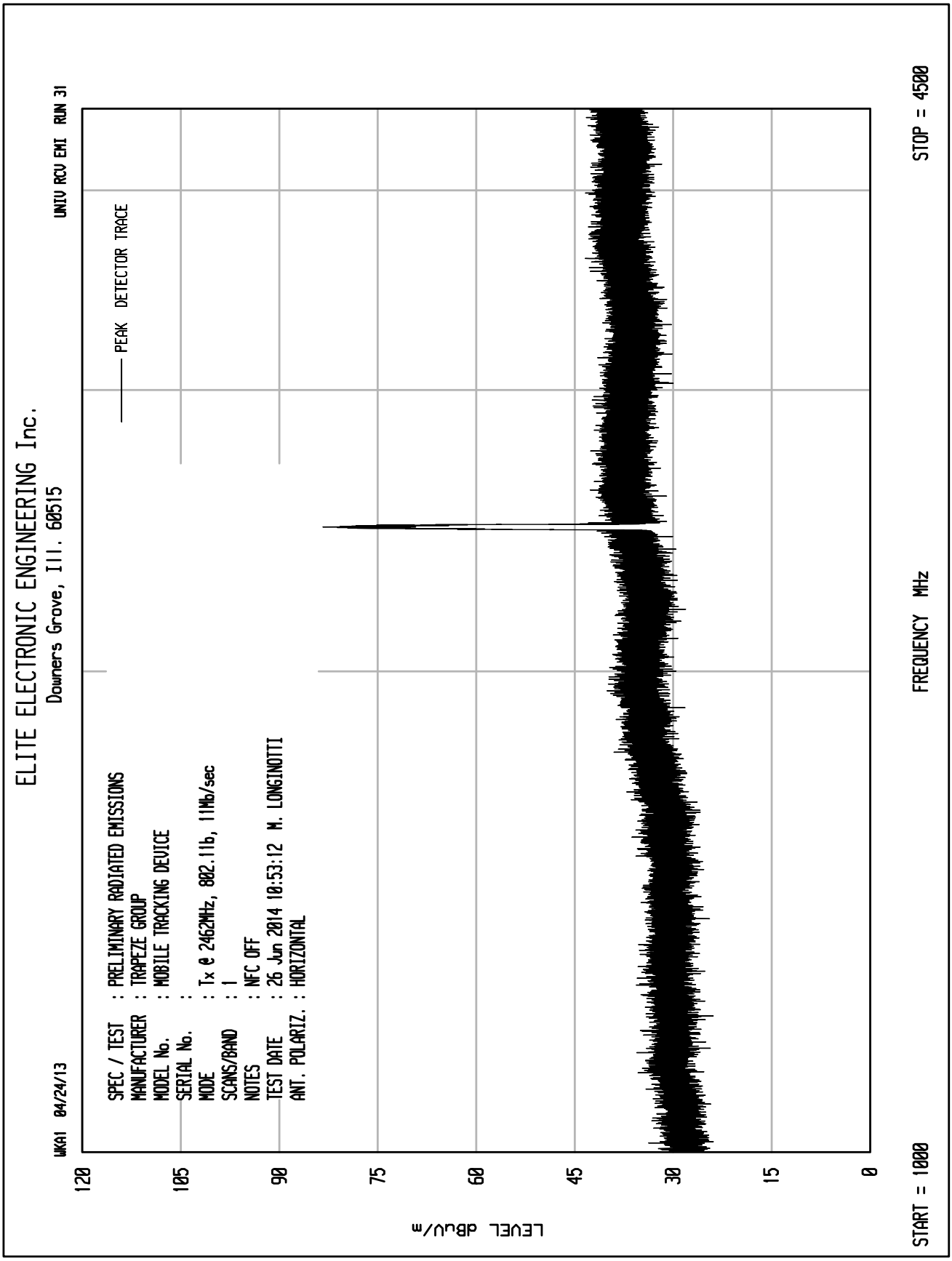

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 53
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:49:25 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

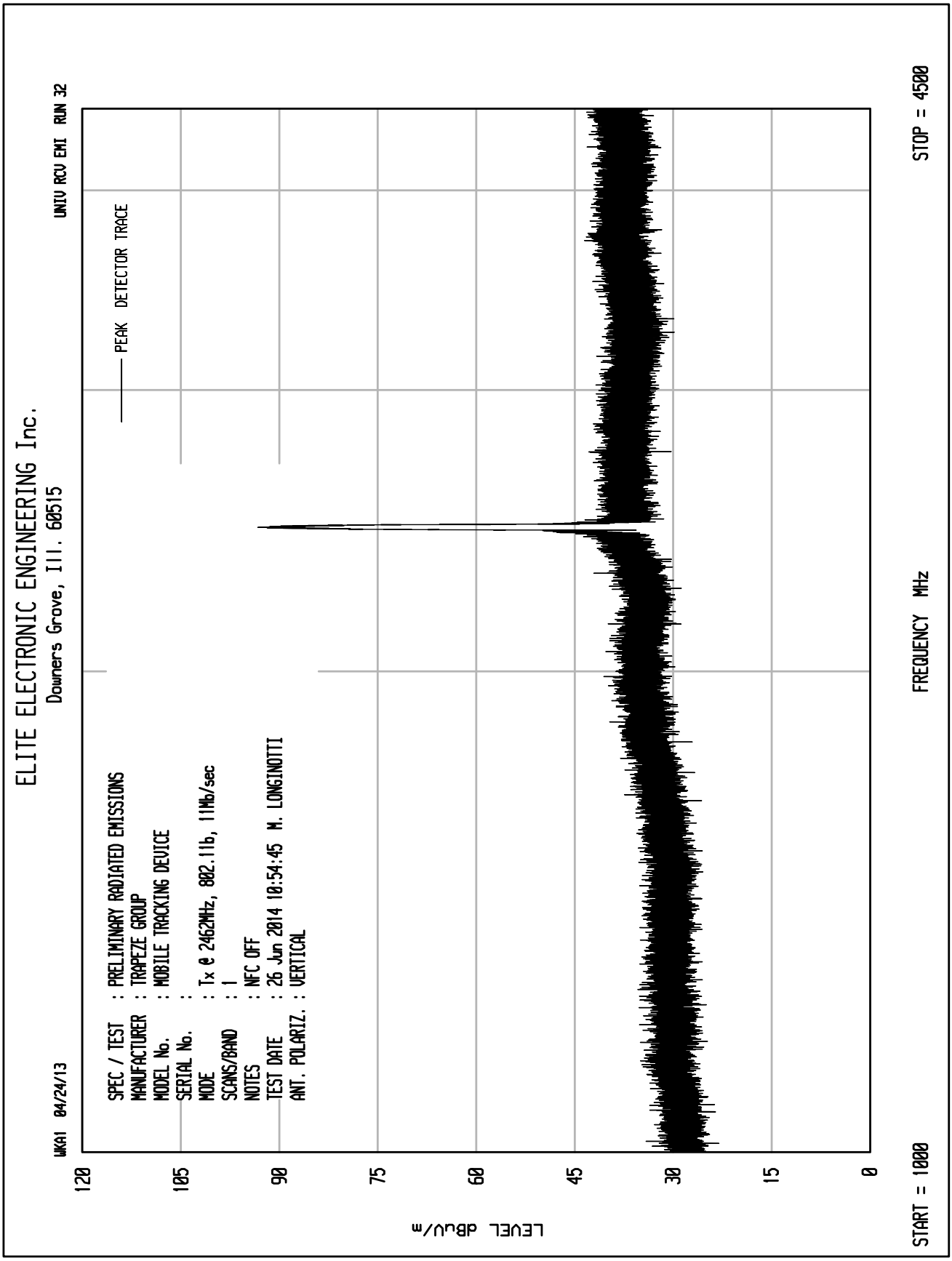

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 18
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:25:14 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

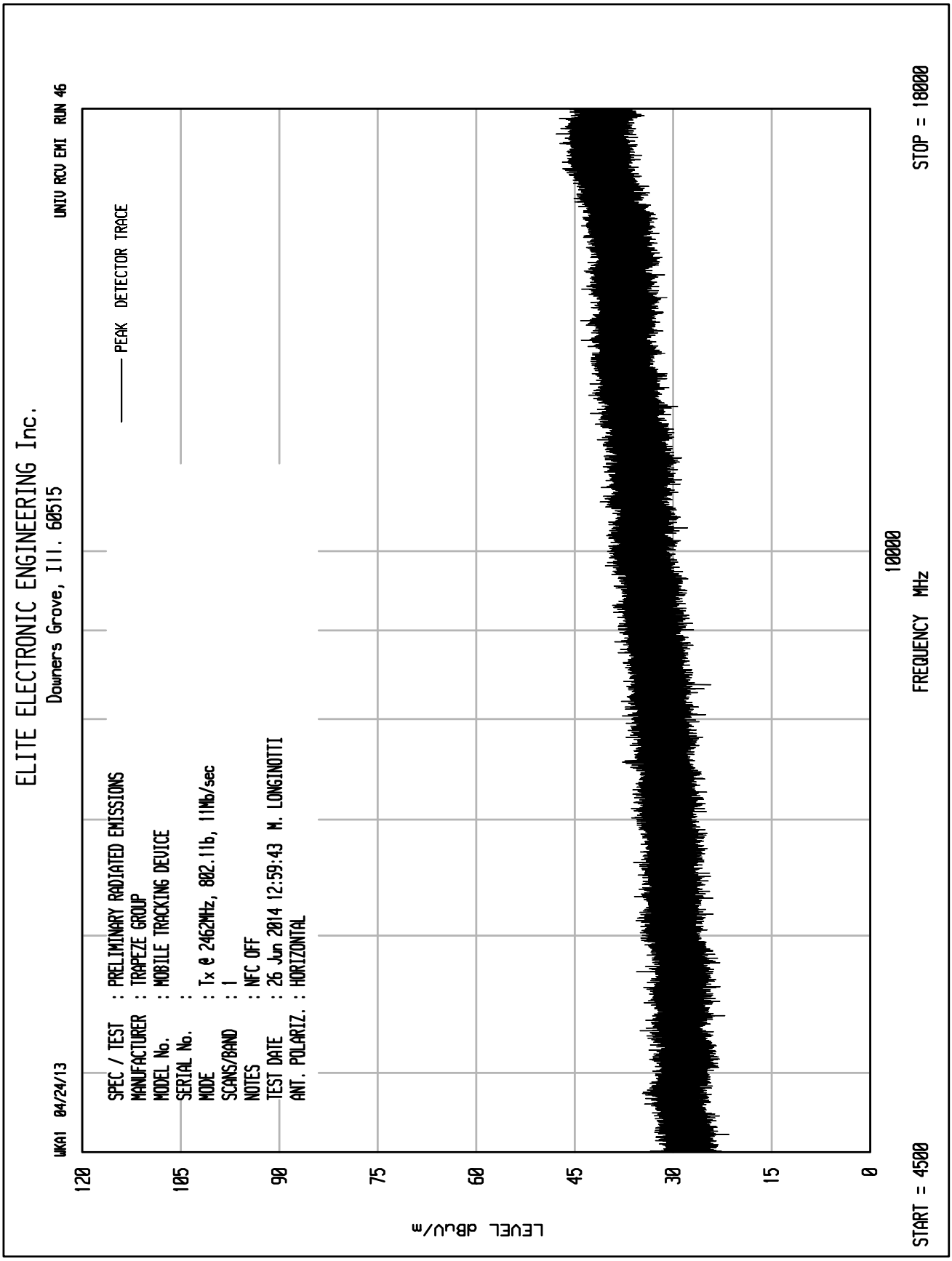

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 17
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2437MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 13:22:37 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

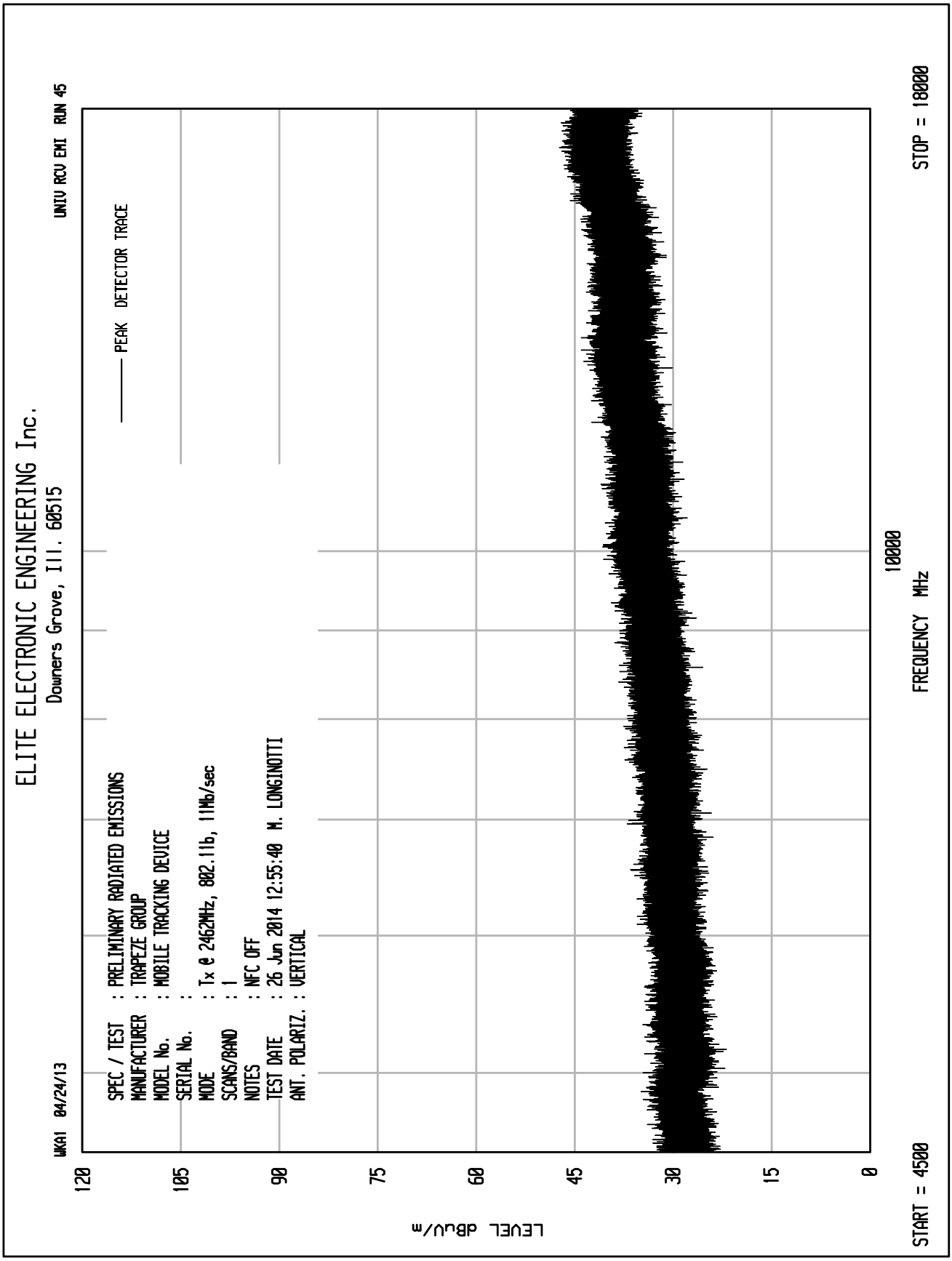

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 6
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:08:34 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

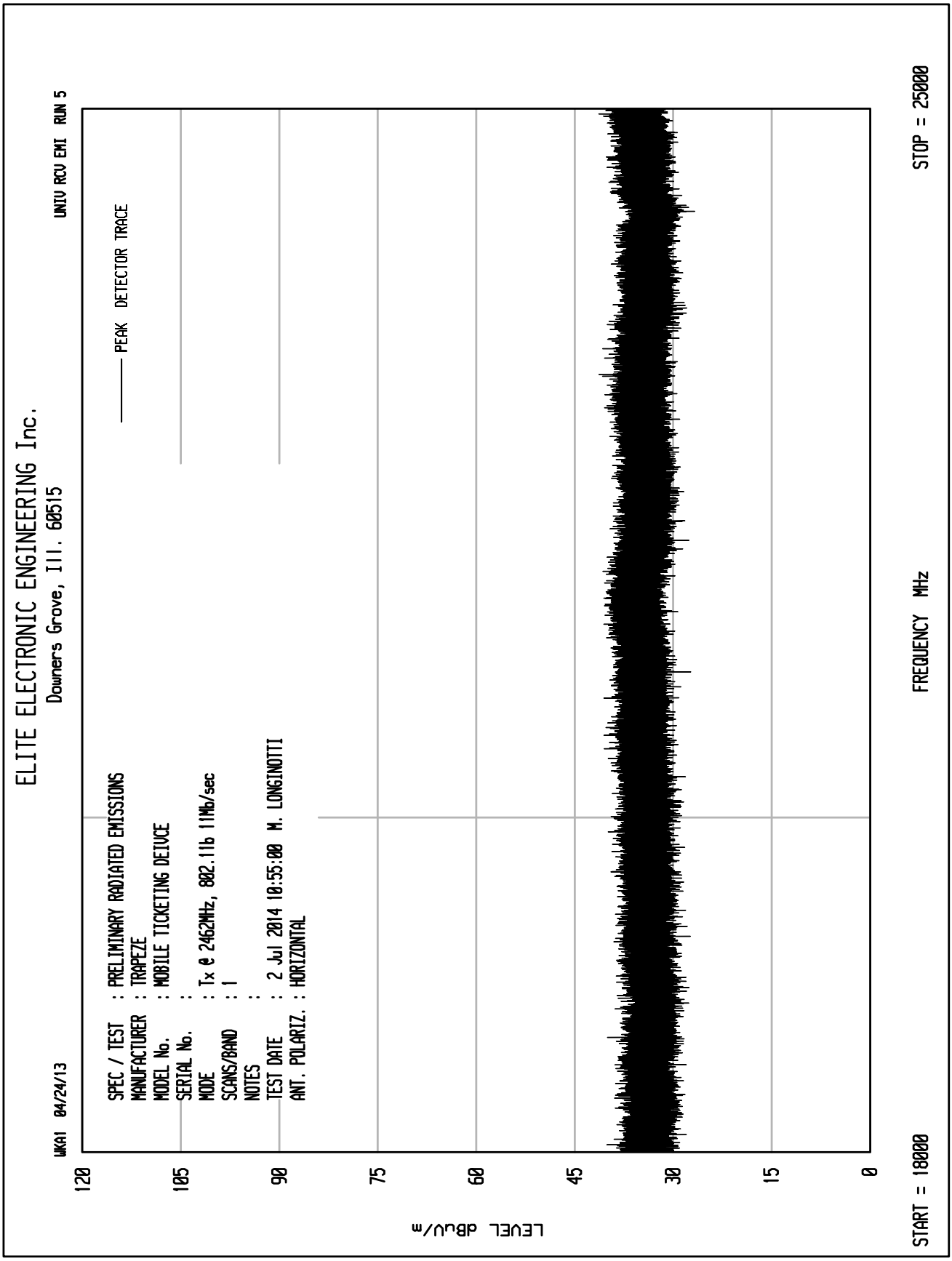

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 5
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:06:36 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

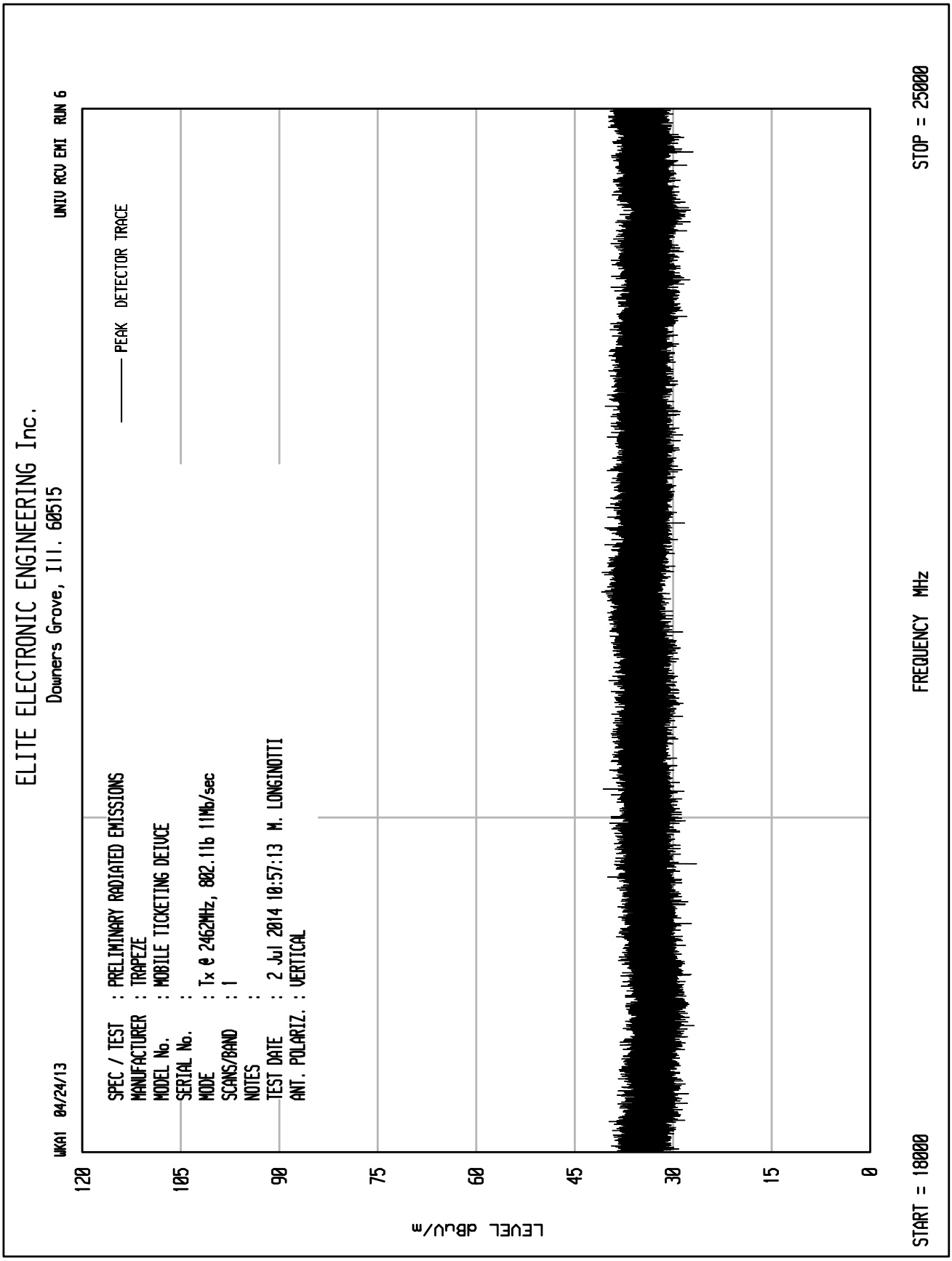

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 31
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:53:12 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

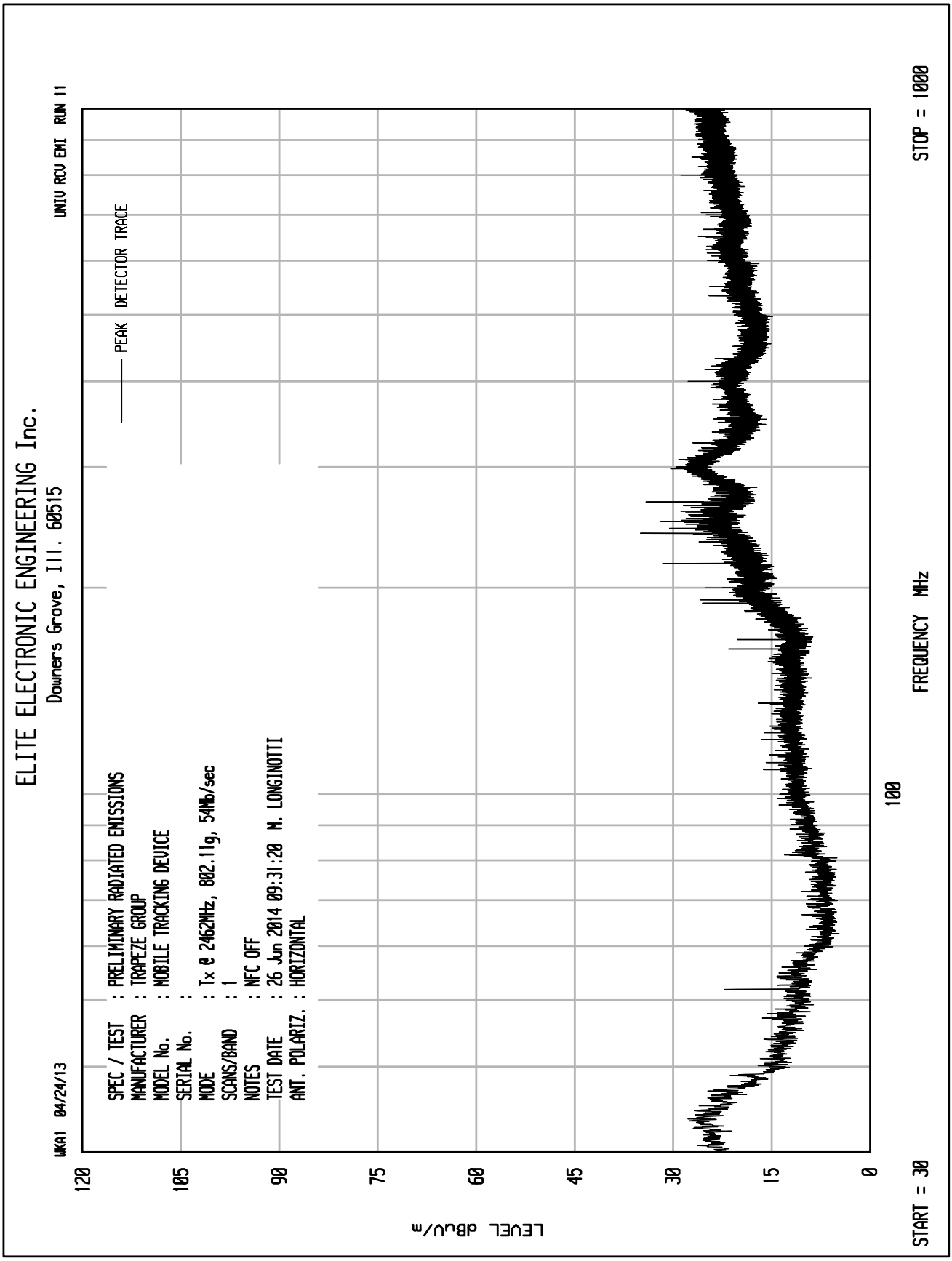

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 32
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:54:45 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

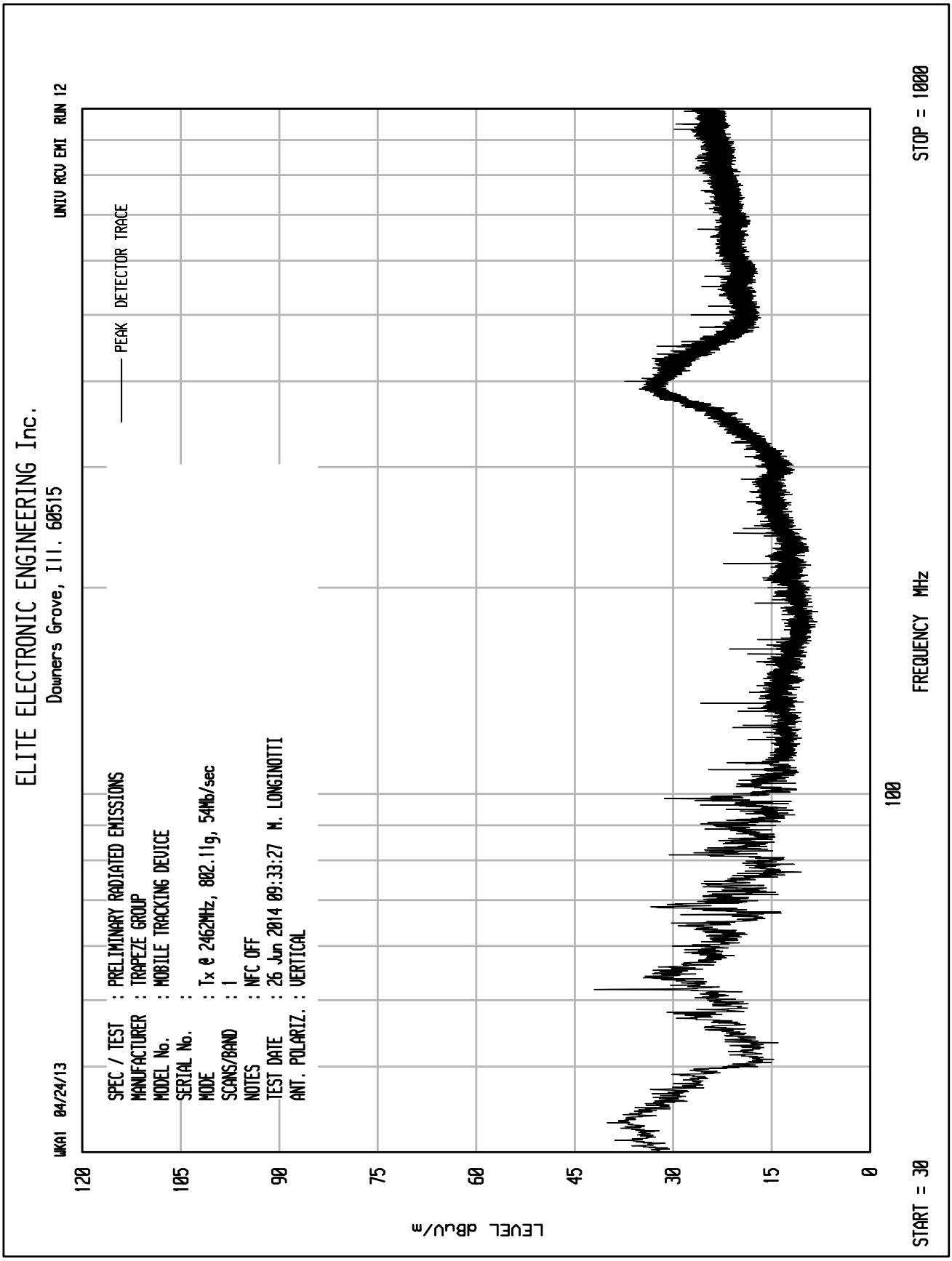

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 46
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 12:59:43 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

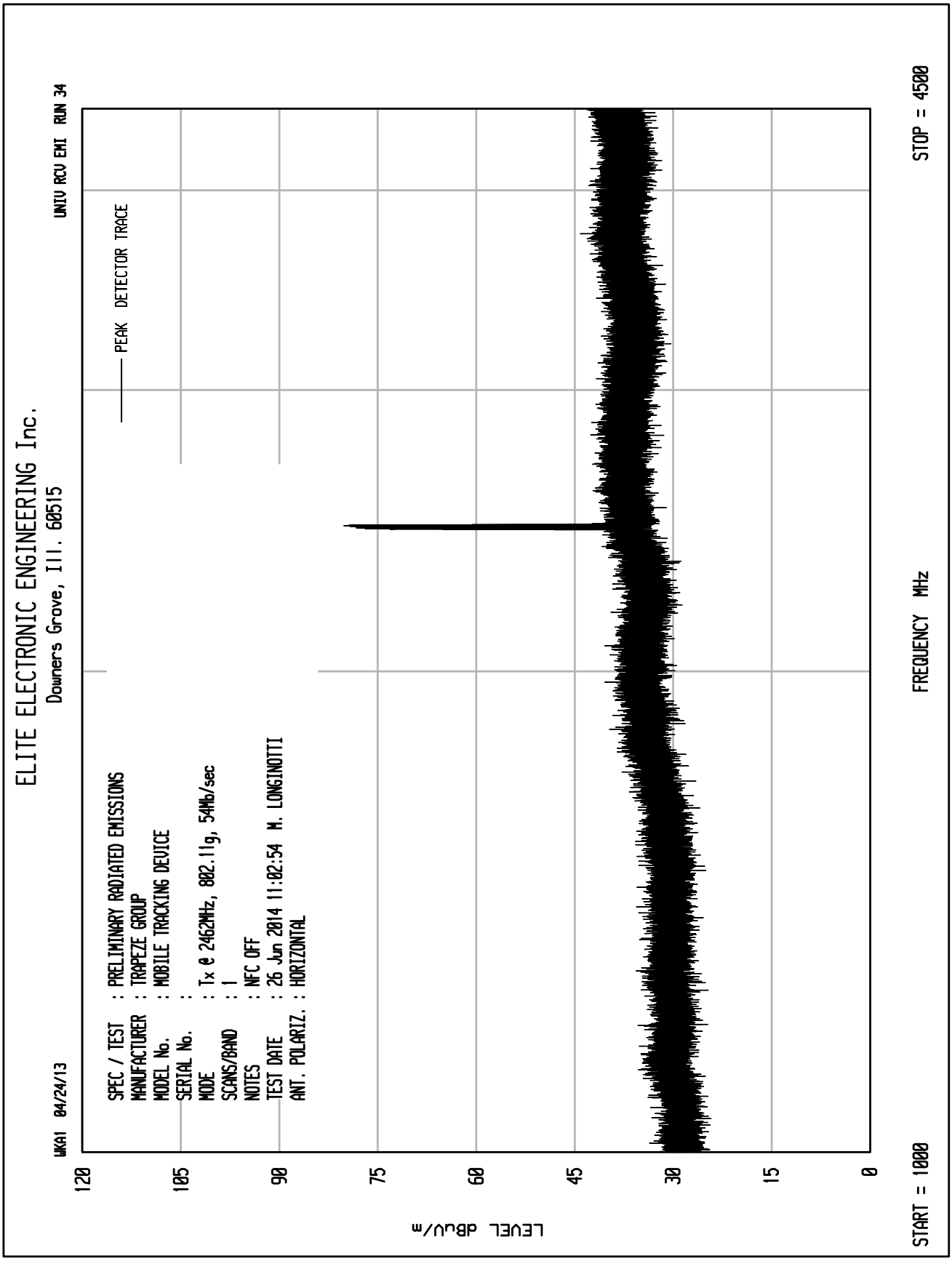

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 45
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b, 11Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 12:55:40 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

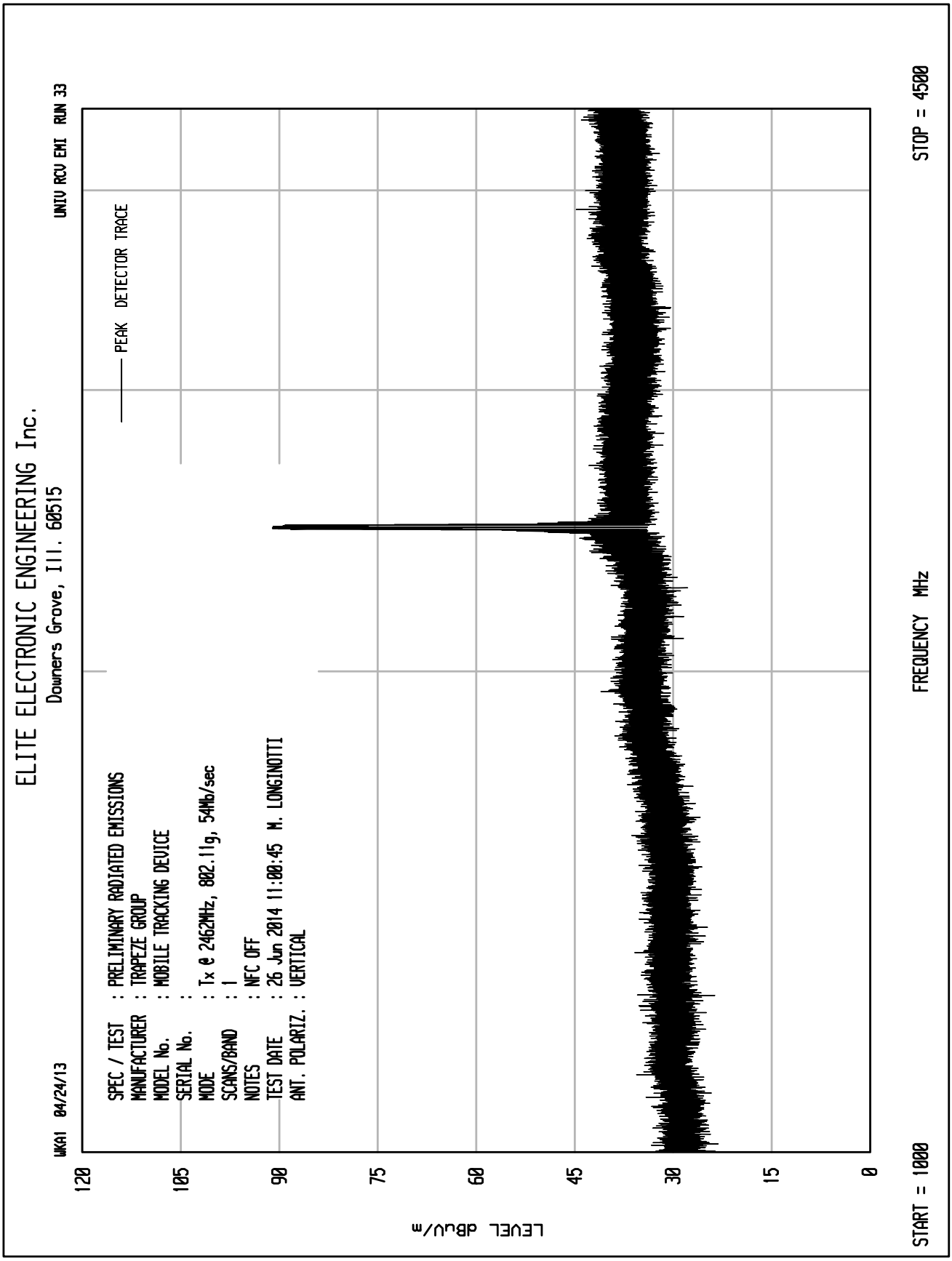

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 5
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:55:00 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

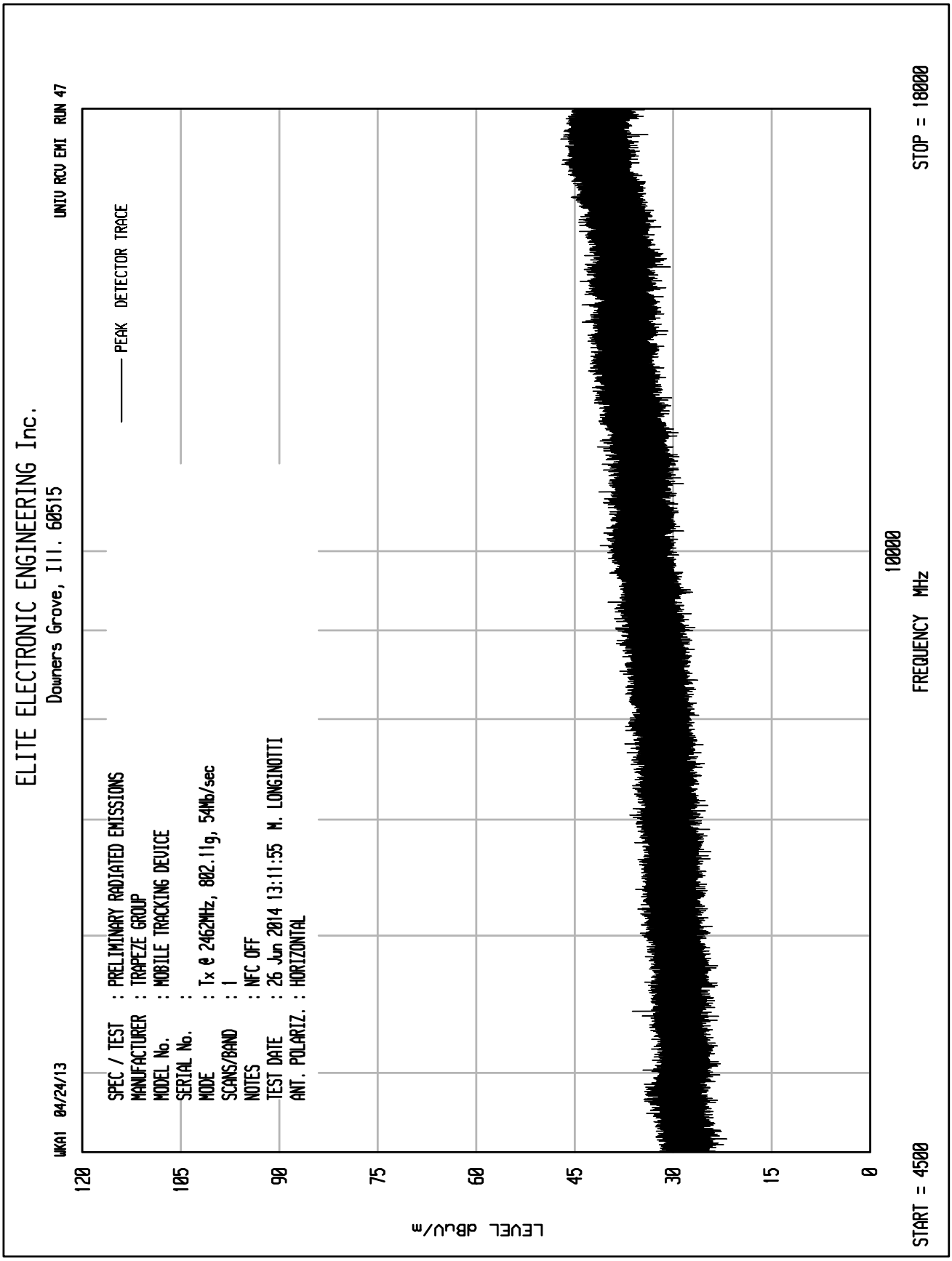

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 6
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11b 11Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:57:13 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

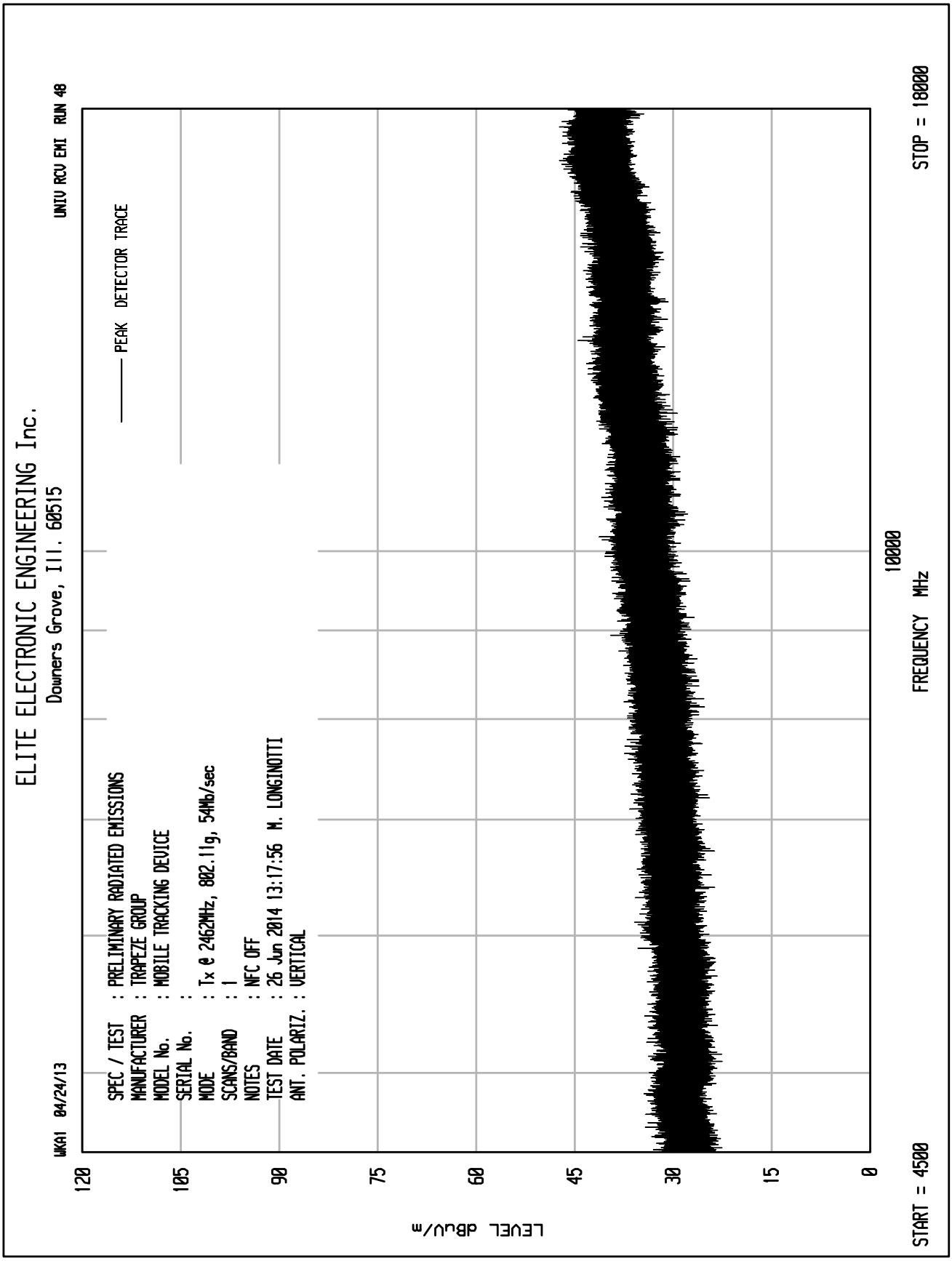

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 11
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:31:20 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

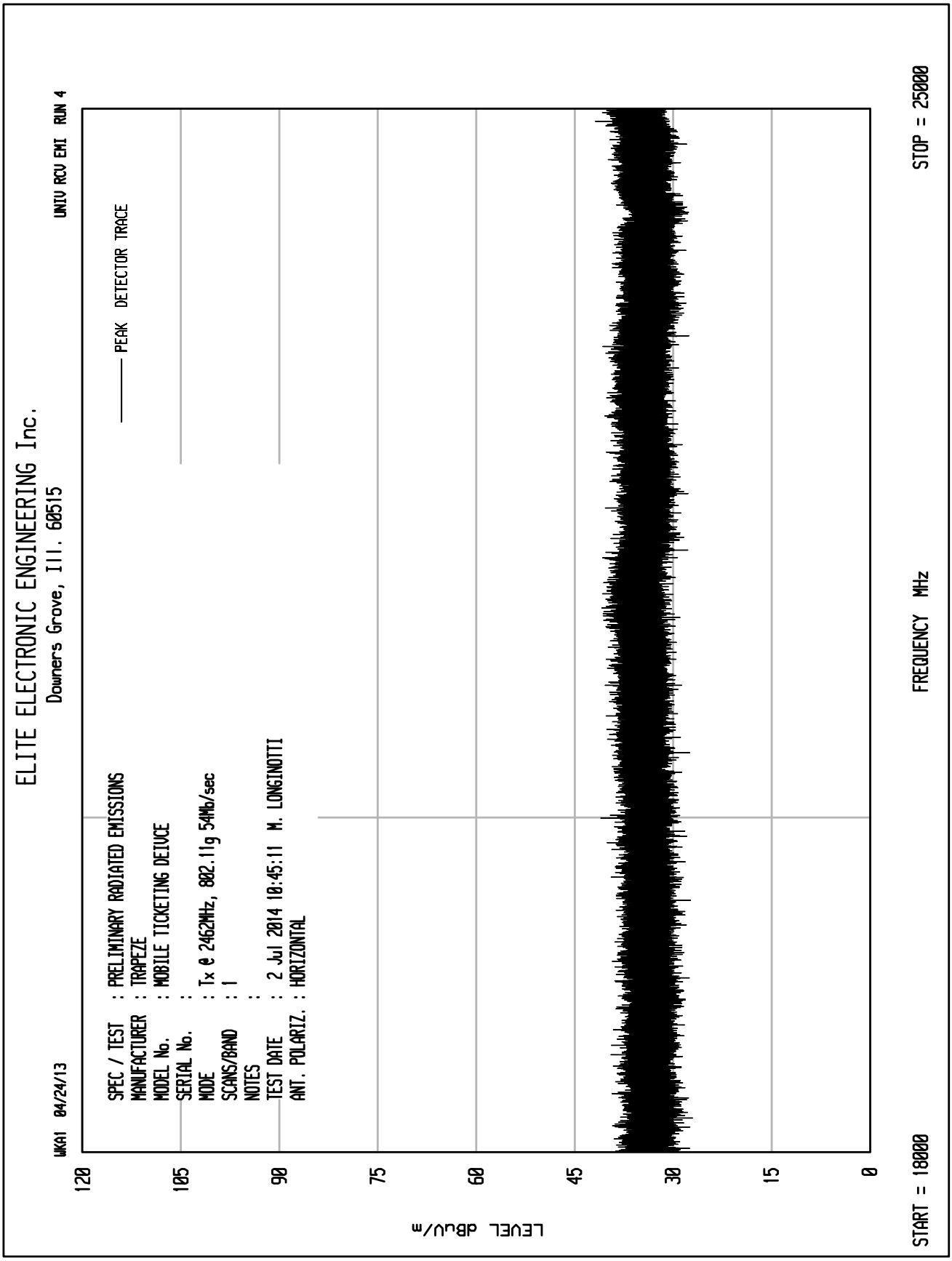

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 12
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:33:27 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

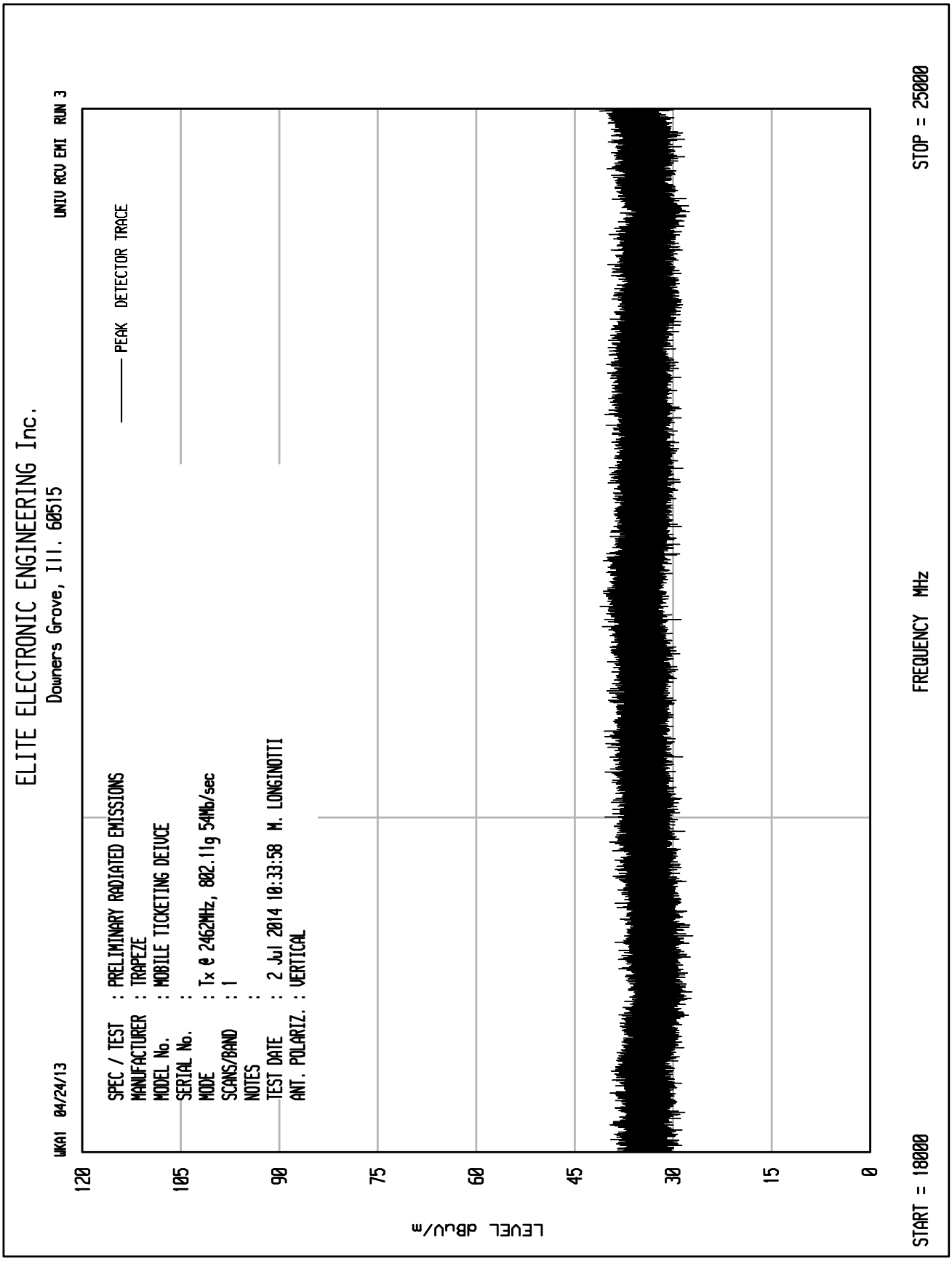

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 34
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:02:54 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

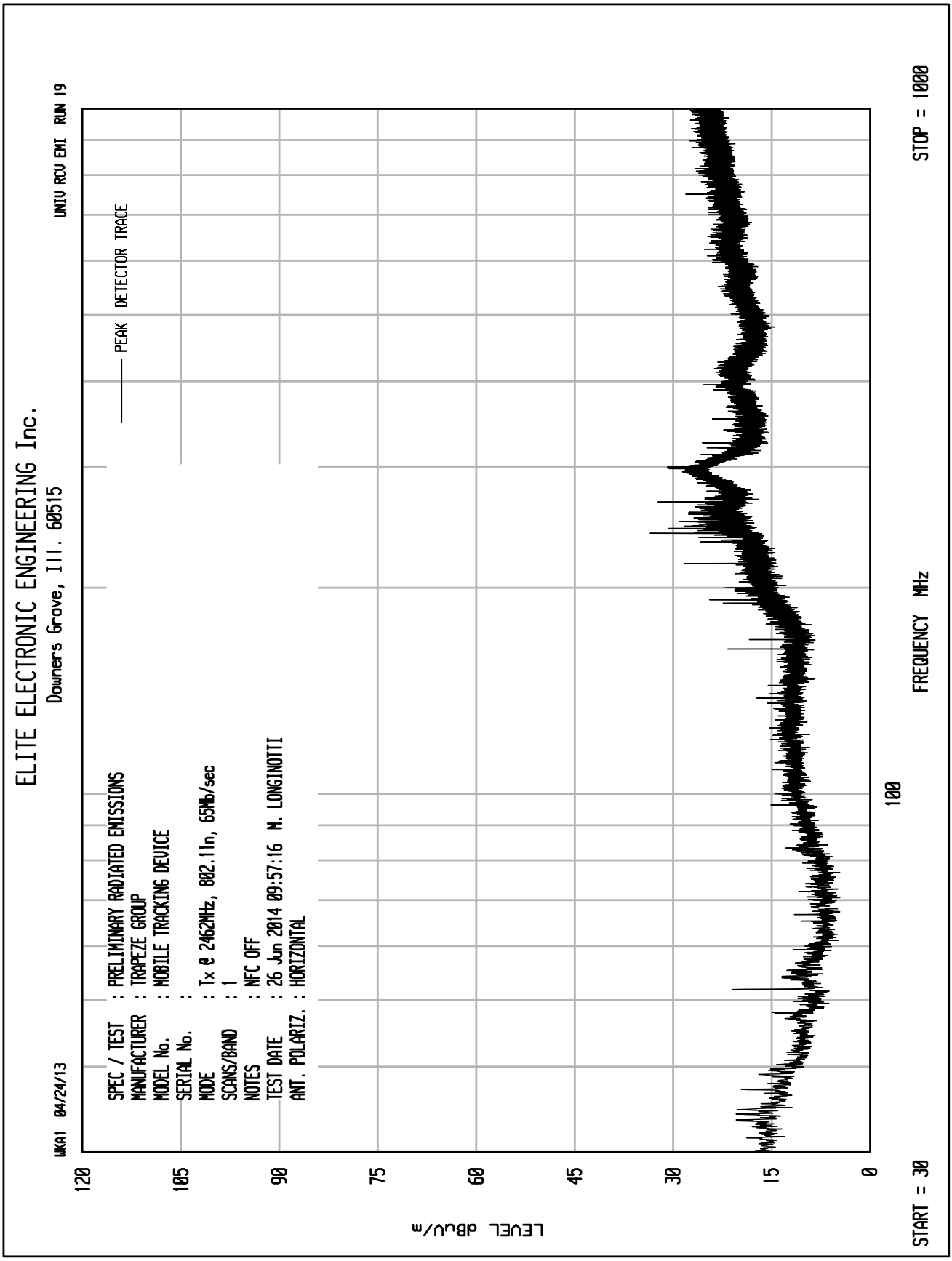

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 33
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 11:00:45 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500

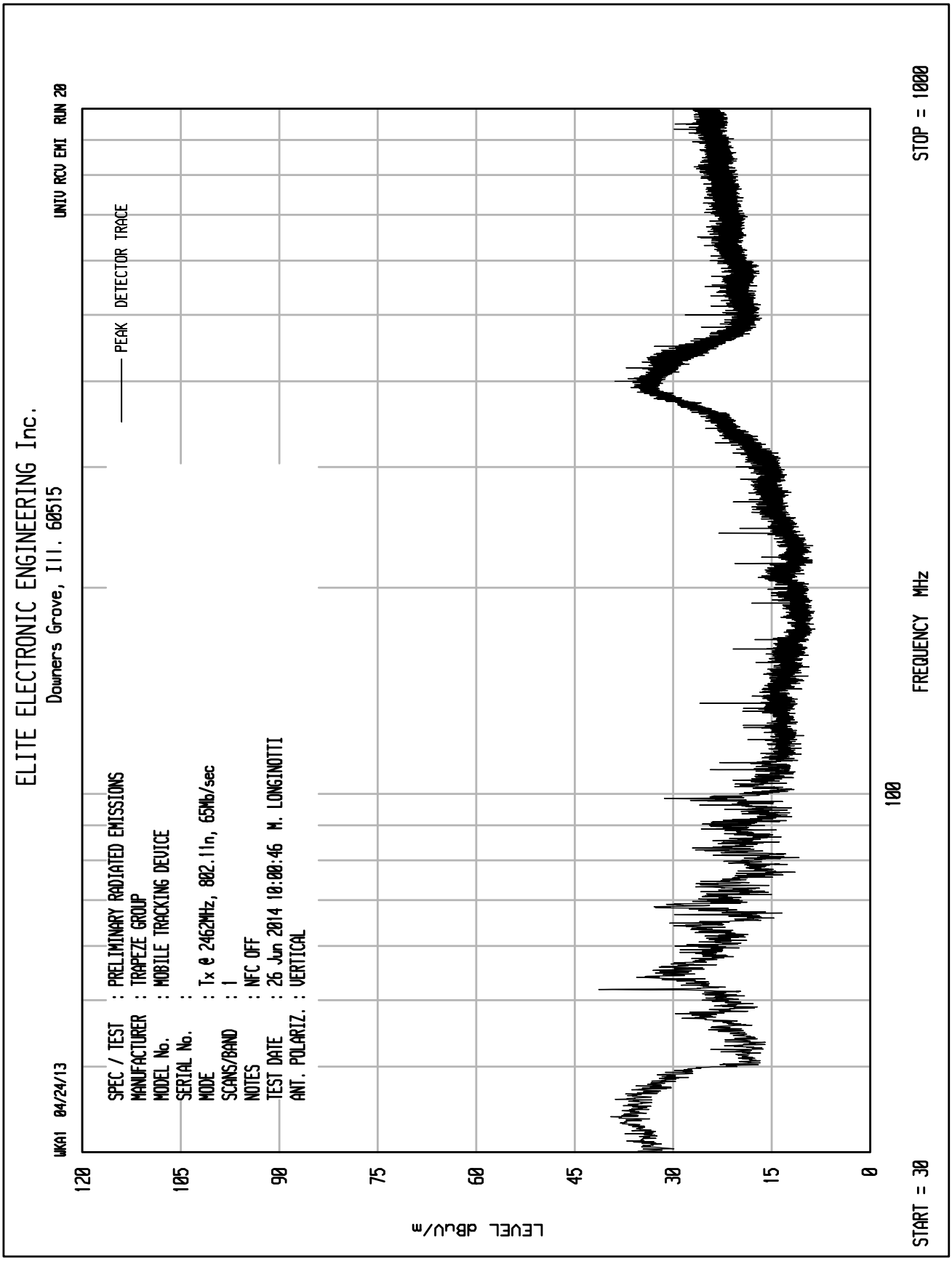

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 47
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:11:55 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

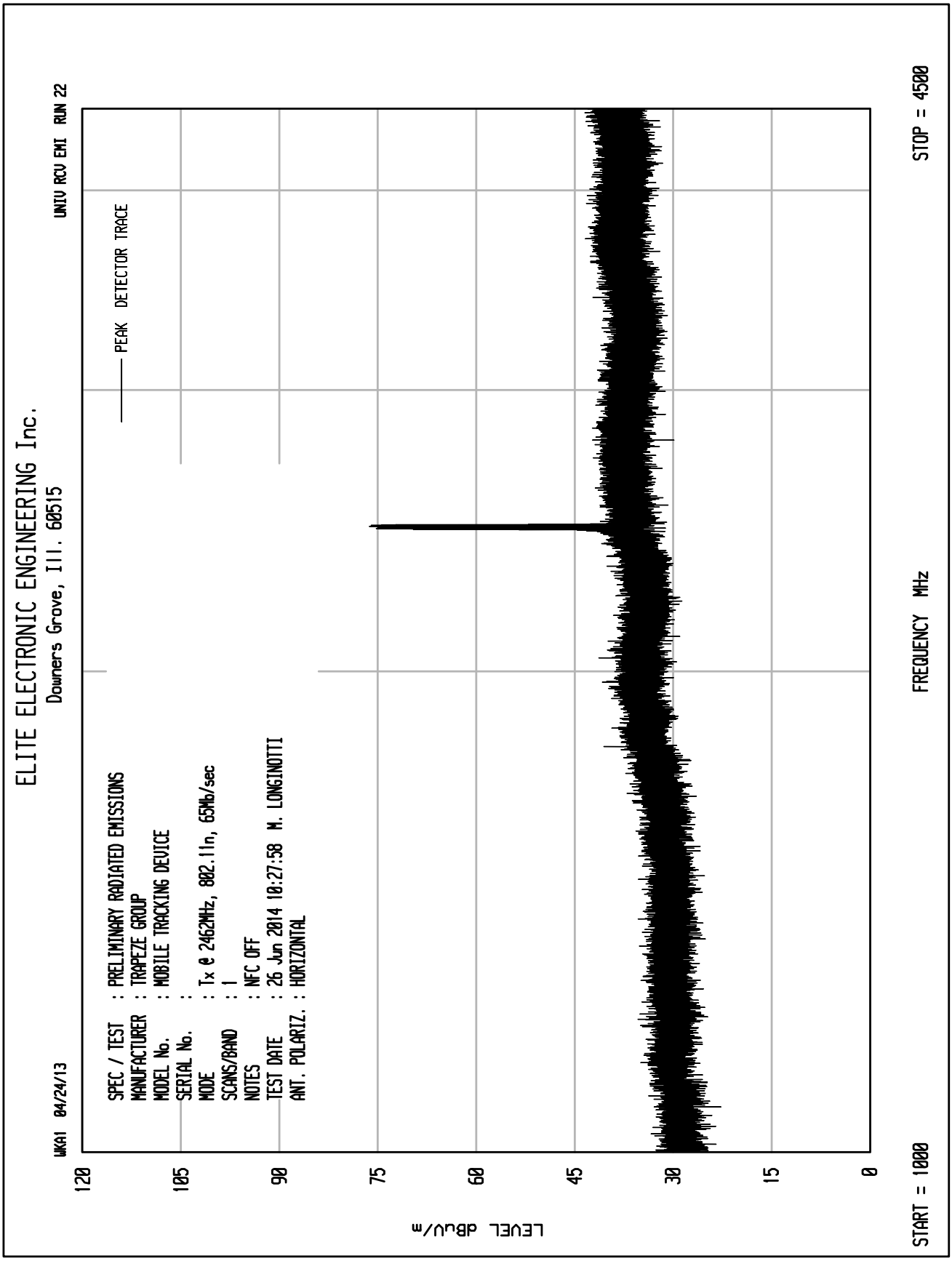

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 48
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g, 54Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:17:56 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000

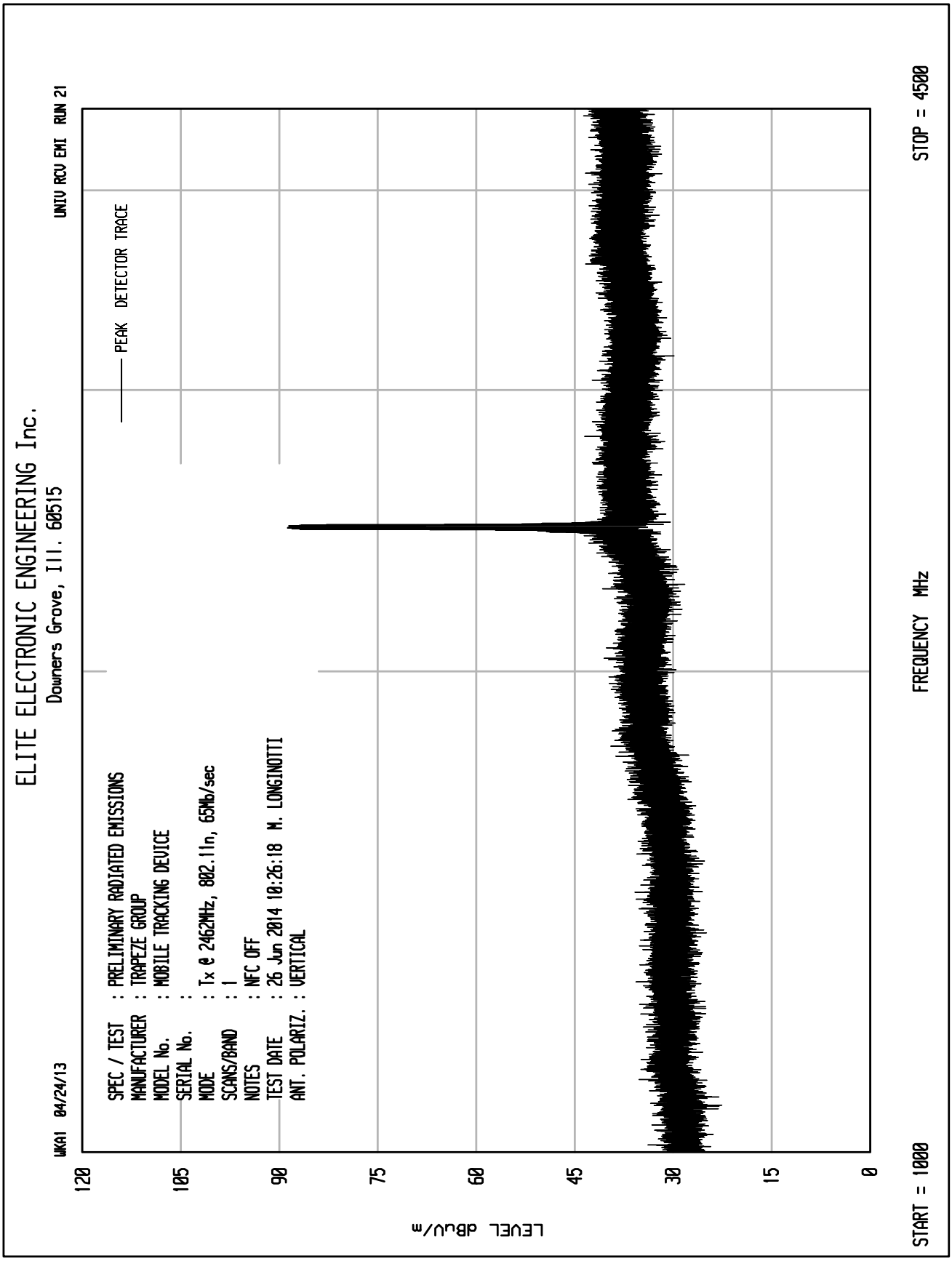

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 4
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:45:11 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

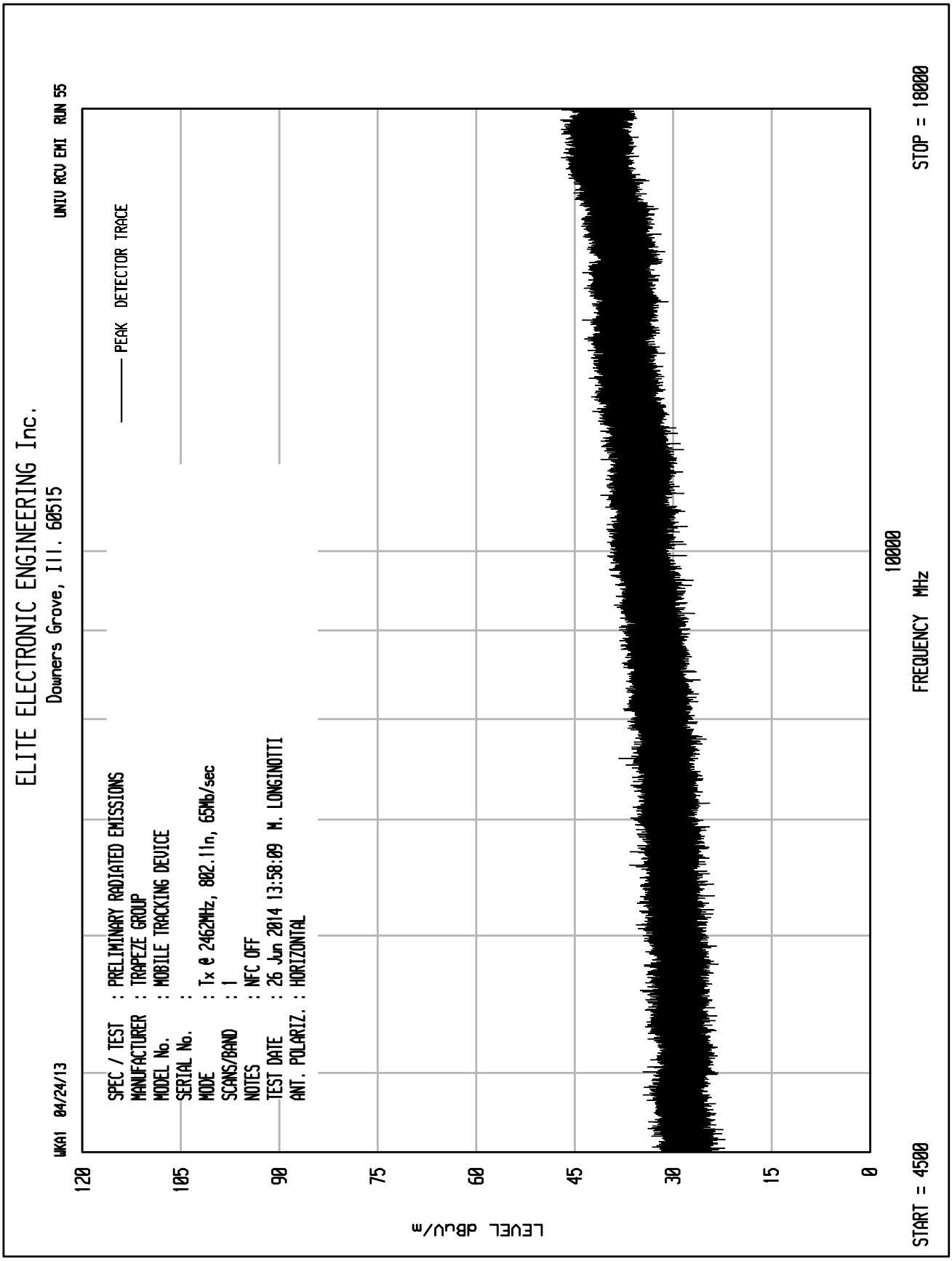

WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 3
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11g 54Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:33:58 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

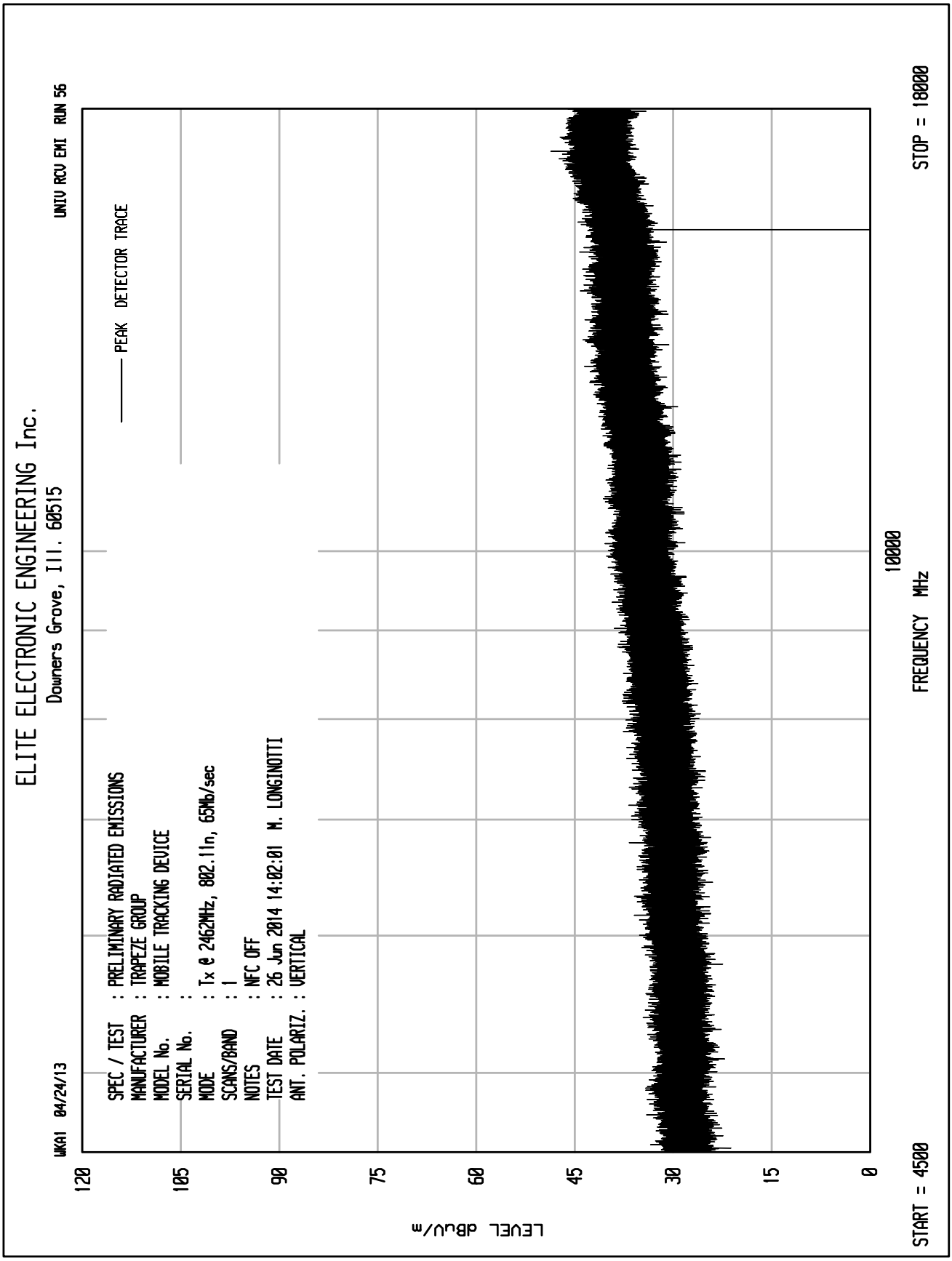

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 19
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 09:57:16 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

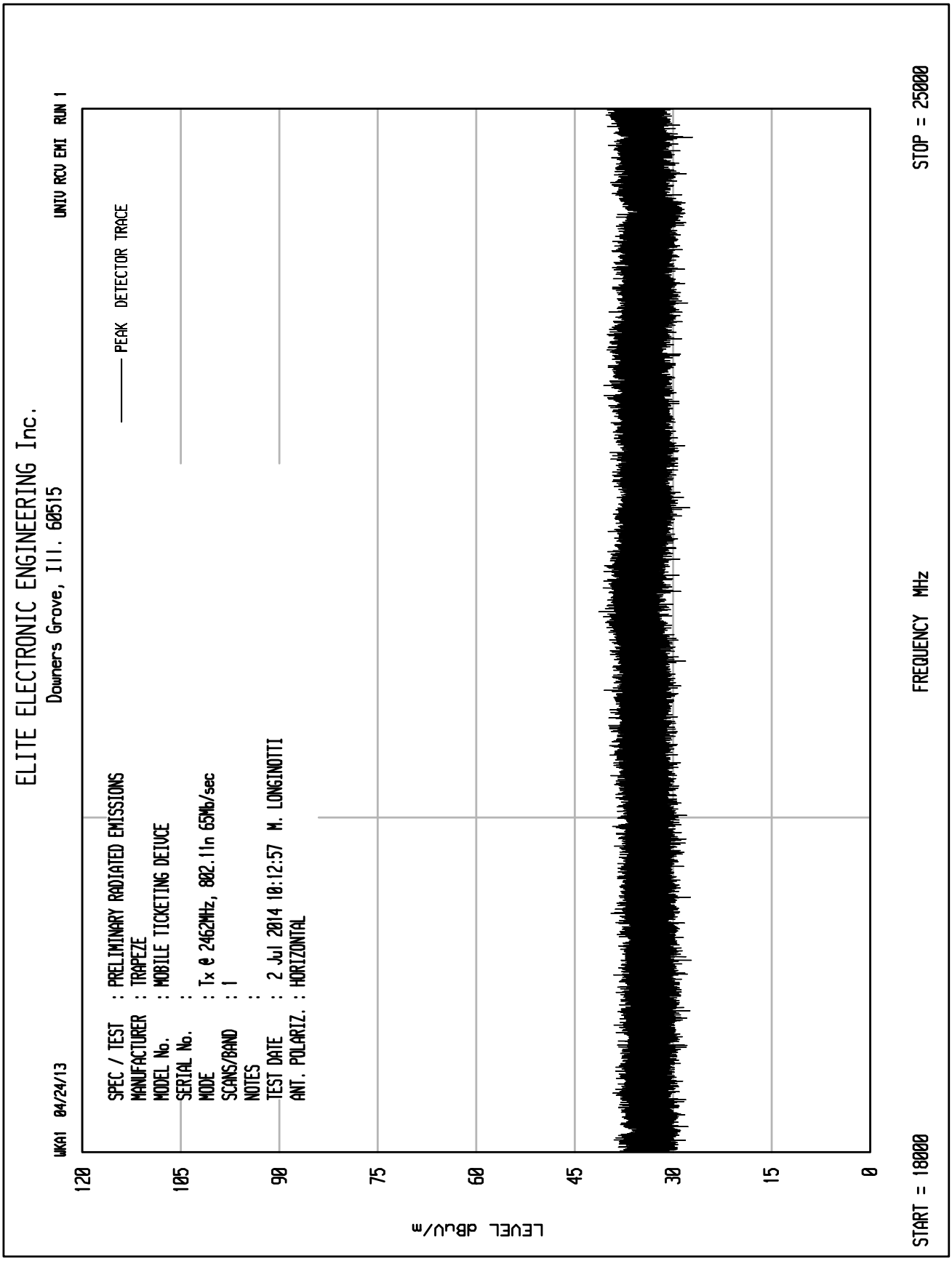

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 20
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:00:46 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 30
100
FREQUENCY MHz
STOP = 1000

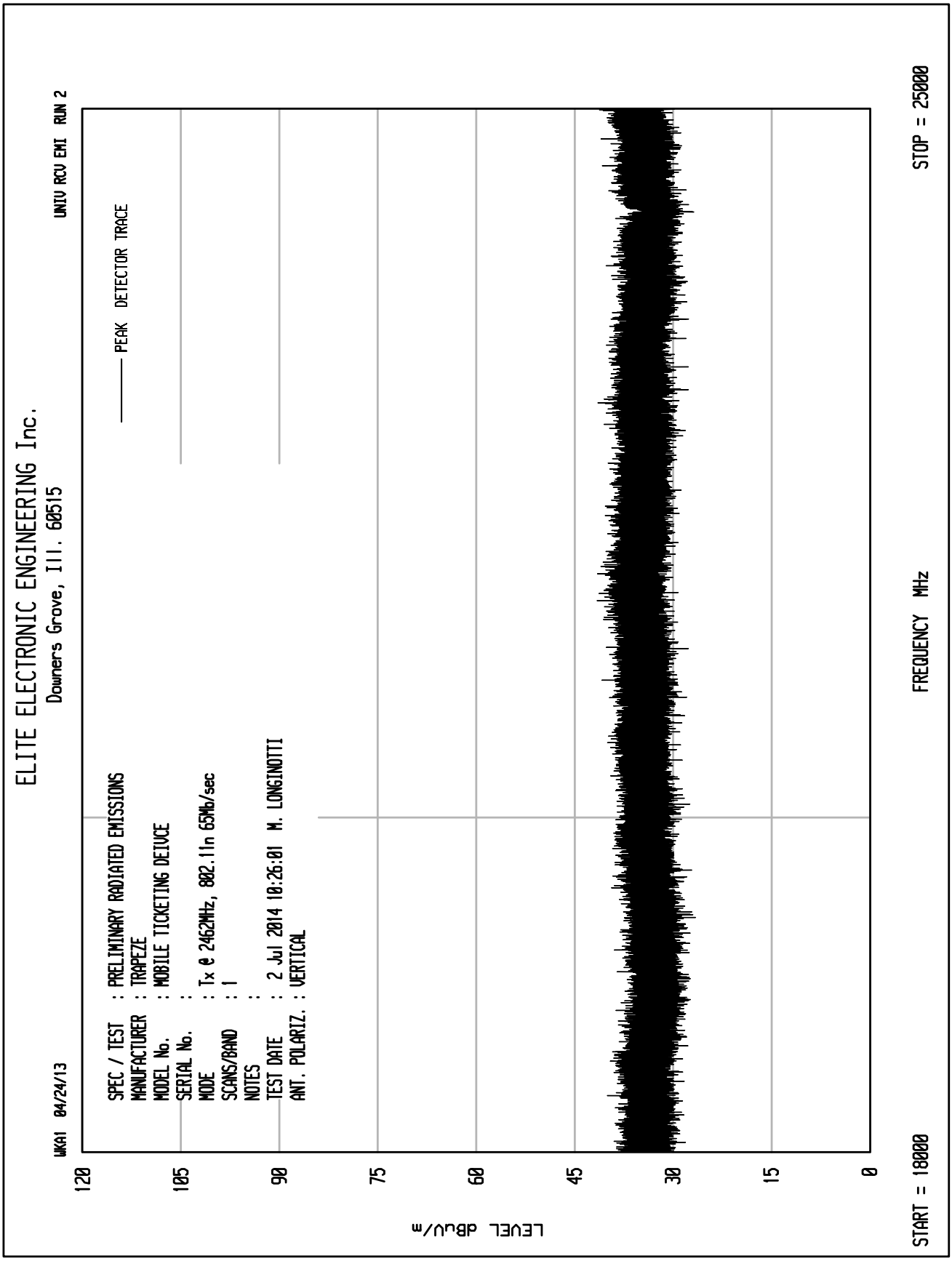

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 22
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:27:58 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 21
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 10:26:18 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 1000
FREQUENCY MHz
STOP = 4500


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 55
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 13:58:09 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 56
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE GROUP
MODEL No. : MOBILE TRACKING DEVICE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n, 65Mb/sec
SCANS/BAND : 1
NOTES : NFC OFF
TEST DATE : 26 Jun 2014 14:02:01 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 4500
10000
FREQUENCY MHz
STOP = 18000


WKA1 04/24/13
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
UNIV RCV EMI RUN 1
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:12:57 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 04/24/13
UNIV RCV EMI RUN 2
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : TRAPEZE
MODEL No. : MOBILE TICKETING DEIVCE
SERIAL No. :
MODE : Tx @ 2462MHz, 802.11n 65Mb/sec
SCANS/BAND : 1
NOTES :
TEST DATE : 2 Jul 2014 10:26:01 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4824.00	H	49.3	Ambient	3.7	34.8	-39.0	48.8	276.8	5000.0	-25.1
4824.00	V	48.9	Ambient	3.7	34.8	-39.0	48.4	264.3	5000.0	-25.5
12060.00	H	49.1	Ambient	6.1	39.1	-38.6	55.7	610.6	5000.0	-18.3
12060.00	V	49.2	Ambient	6.1	39.1	-38.6	55.8	617.6	5000.0	-18.2
14472.00	H	47.7	Ambient	6.6	39.9	-37.9	56.4	657.4	5000.0	-17.6
14472.00	V	47.8	Ambient	6.6	39.9	-37.9	56.5	665.0	5000.0	-17.5
19296.00	H	34.5	Ambient	2.2	40.4	-27.9	49.2	287.0	5000.0	-24.8
19296.00	V	34.5	Ambient	2.2	40.4	-27.9	49.2	287.0	5000.0	-24.8

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4824.00	H	36.3	Ambient	3.7	34.8	-39.0	35.8	62.0	500.0	-18.1
4824.00	V	36.0	Ambient	3.7	34.8	-39.0	35.5	59.9	500.0	-18.4
12060.00	H	36.1	Ambient	6.1	39.1	-38.6	42.7	136.7	500.0	-11.3
12060.00	V	36.0	Ambient	6.1	39.1	-38.6	42.6	135.1	500.0	-11.4
14472.00	H	35.0	Ambient	6.6	39.9	-37.9	43.7	152.3	500.0	-10.3
14472.00	V	35.0	Ambient	6.6	39.9	-37.9	43.7	152.3	500.0	-10.3
19296.00	H	20.8	Ambient	2.2	40.4	-27.9	35.5	59.3	500.0	-18.5
19296.00	V	22.9	Ambient	2.2	40.4	-27.9	37.6	75.5	500.0	-16.4

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4824.00	H	49.5	Ambient	3.7	34.8	-39.0	49.0	283.2	5000.0	-24.9
4824.00	V	49.0	Ambient	3.7	34.8	-39.0	48.5	267.4	5000.0	-25.4
12060.00	H	49.1	Ambient	6.1	39.1	-38.6	55.7	610.6	5000.0	-18.3
12060.00	V	49.5	Ambient	6.1	39.1	-38.6	56.1	639.3	5000.0	-17.9
14472.00	H	48.5	Ambient	6.6	39.9	-37.9	57.2	720.8	5000.0	-16.8
14472.00	V	47.6	Ambient	6.6	39.9	-37.9	56.3	649.8	5000.0	-17.7
19296.00	H	34.5	Ambient	2.2	40.4	-27.9	49.2	287.0	5000.0	-24.8
19296.00	V	33.8	Ambient	2.2	40.4	-27.9	48.5	264.8	5000.0	-25.5

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4824.00	H	36.1	Ambient	3.7	34.8	-39.0	35.6	60.6	500.0	-18.3
4824.00	V	36.1	Ambient	3.7	34.8	-39.0	35.6	60.6	500.0	-18.3
12060.00	H	36.1	Ambient	6.1	39.1	-38.6	42.7	136.7	500.0	-11.3
12060.00	V	36.1	Ambient	6.1	39.1	-38.6	42.7	136.7	500.0	-11.3
14472.00	H	35.0	Ambient	6.6	39.9	-37.9	43.7	152.3	500.0	-10.3
14472.00	V	35.0	Ambient	6.6	39.9	-37.9	43.7	152.3	500.0	-10.3
19296.00	H	23.6	Ambient	2.2	40.4	-27.9	38.3	81.8	500.0	-15.7
19296.00	V	22.2	Ambient	2.2	40.4	-27.9	36.9	69.6	500.0	-17.1

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4824.00	H	49.2	Ambient	3.7	34.8	-39.0	48.7	273.6	5000.0	-25.2
4824.00	V	49.3	Ambient	3.7	34.8	-39.0	48.8	276.8	5000.0	-25.1
12060.00	H	49.1	Ambient	6.1	39.1	-38.6	55.7	610.6	5000.0	-18.3
12060.00	V	49.5	Ambient	6.1	39.1	-38.6	56.1	639.3	5000.0	-17.9
14472.00	H	47.5	Ambient	6.6	39.9	-37.9	56.2	642.4	5000.0	-17.8
14472.00	V	47.8	Ambient	6.6	39.9	-37.9	56.5	665.0	5000.0	-17.5
19296.00	H	34.5	Ambient	2.2	40.4	-27.9	49.2	287.0	5000.0	-24.8
19296.00	V	34.3	Ambient	2.2	40.4	-27.9	49.0	280.5	5000.0	-25.0

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4824.00	H	36.1	Ambient	3.7	34.8	-39.0	35.6	60.6	500.0	-18.3
4824.00	V	36.0	Ambient	3.7	34.8	-39.0	35.5	59.9	500.0	-18.4
12060.00	H	36.1	Ambient	6.1	39.1	-38.6	42.7	136.7	500.0	-11.3
12060.00	V	36.1	Ambient	6.1	39.1	-38.6	42.7	136.7	500.0	-11.3
14472.00	H	34.9	Ambient	6.6	39.9	-37.9	43.6	150.6	500.0	-10.4
14472.00	V	35.0	Ambient	6.6	39.9	-37.9	43.7	152.3	500.0	-10.3
19296.00	H	23.7	Ambient	2.2	40.4	-27.9	38.4	82.8	500.0	-15.6
19296.00	V	22.7	Ambient	2.2	40.4	-27.9	37.4	73.8	500.0	-16.6

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4874.00	H	49.3	Ambient	3.7	34.9	-39.0	48.9	278.3	5000.0	-25.1
4874.00	V	49.6	Ambient	3.7	34.9	-39.0	49.2	288.1	5000.0	-24.8
7311.00	H	48.7	Ambient	4.7	35.6	-39.0	50.0	316.8	5000.0	-24.0
7311.00	V	48.5	Ambient	4.7	35.6	-39.0	49.8	309.6	5000.0	-24.2
12185.00	H	48.4	Ambient	6.1	39.2	-38.5	55.2	572.3	5000.0	-18.8
12185.00	V	48.4	Ambient	6.1	39.2	-38.5	55.2	572.3	5000.0	-18.8
19496.00	H	34.4	Ambient	2.2	40.4	-27.8	49.2	287.2	5000.0	-24.8
19496.00	V	33.9	Ambient	2.2	40.4	-27.8	48.7	271.1	5000.0	-25.3

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4874.00	H	36.5	Ambient	3.7	34.9	-39.0	36.1	63.8	500.0	-17.9
4874.00	V	36.2	Ambient	3.7	34.9	-39.0	35.8	61.6	500.0	-18.2
7311.00	H	35.60	Ambient	4.7	35.6	-39.0	36.9	70.1	500.0	-17.1
7311.00	V	36.0	Ambient	4.7	35.6	-39.0	37.3	73.4	500.0	-16.7
12185.00	H	35.6	Ambient	6.1	39.2	-38.5	42.4	131.1	500.0	-11.6
12185.00	V	35.7	Ambient	6.1	39.2	-38.5	42.5	132.6	500.0	-11.5
19496.00	H	23.0	Ambient	2.2	40.4	-27.8	37.8	77.3	500.0	-16.2
19496.00	V	22.4	Ambient	2.2	40.4	-27.8	37.2	72.1	500.0	-16.8

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4874.00	H	49.5	Ambient	3.7	34.9	-39.0	49.1	284.8	5000.0	-24.9
4874.00	V	49.4	Ambient	3.7	34.9	-39.0	49.0	281.5	5000.0	-25.0
7311.00	H	49.0	Ambient	4.7	35.6	-39.0	50.3	327.9	5000.0	-23.7
7311.00	V	48.8	Ambient	4.7	35.6	-39.0	50.1	320.4	5000.0	-23.9
12185.00	H	48.6	Ambient	6.1	39.2	-38.5	55.4	585.7	5000.0	-18.6
12185.00	V	48.1	Ambient	6.1	39.2	-38.5	54.9	552.9	5000.0	-19.1
19496.00	H	34.4	Ambient	2.2	40.4	-27.8	49.2	287.2	5000.0	-24.8
19496.00	V	34.0	Ambient	2.2	40.4	-27.8	48.8	274.3	5000.0	-25.2

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4874.00	H	36.3	Ambient	3.7	34.9	-39.0	35.9	62.3	500.0	-18.1
4874.00	V	36.3	Ambient	3.7	34.9	-39.0	35.9	62.3	500.0	-18.1
7311.00	H	36.00	Ambient	4.7	35.6	-39.0	37.3	73.4	500.0	-16.7
7311.00	V	36.0	Ambient	4.7	35.6	-39.0	37.3	73.4	500.0	-16.7
12185.00	H	35.7	Ambient	6.1	39.2	-38.5	42.5	132.6	500.0	-11.5
12185.00	V	35.7	Ambient	6.1	39.2	-38.5	42.5	132.6	500.0	-11.5
19496.00	H	23.0	Ambient	2.2	40.4	-27.8	37.8	77.3	500.0	-16.2
19496.00	V	22.1	Ambient	2.2	40.4	-27.8	36.9	69.7	500.0	-17.1

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4874.00	H	49.2	Ambient	3.7	34.9	-39.0	48.8	275.1	5000.0	-25.2
4874.00	V	50.5	Ambient	3.7	34.9	-39.0	50.1	319.5	5000.0	-23.9
7311.00	H	48.9	Ambient	4.7	35.6	-39.0	50.2	324.2	5000.0	-23.8
7311.00	V	48.6	Ambient	4.7	35.6	-39.0	49.9	313.2	5000.0	-24.1
12185.00	H	48.4	Ambient	6.1	39.2	-38.5	55.2	572.3	5000.0	-18.8
12185.00	V	49.0	Ambient	6.1	39.2	-38.5	55.8	613.3	5000.0	-18.2
19496.00	H	35.0	Ambient	2.2	40.4	-27.8	49.8	307.7	5000.0	-24.2
19496.00	V	34.7	Ambient	2.2	40.4	-27.8	49.5	297.3	5000.0	-24.5

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4874.00	H	36.3	Ambient	3.7	34.9	-39.0	35.9	62.3	500.0	-18.1
4874.00	V	36.2	Ambient	3.7	34.9	-39.0	35.8	61.6	500.0	-18.2
7311.00	H	36.00	Ambient	4.7	35.6	-39.0	37.3	73.4	500.0	-16.7
7311.00	V	36.0	Ambient	4.7	35.6	-39.0	37.3	73.4	500.0	-16.7
12185.00	H	35.7	Ambient	6.1	39.2	-38.5	42.5	132.6	500.0	-11.5
12185.00	V	35.7	Ambient	6.1	39.2	-38.5	42.5	132.6	500.0	-11.5
19496.00	H	23.0	Ambient	2.2	40.4	-27.8	37.8	77.3	500.0	-16.2
19496.00	V	22.2	Ambient	2.2	40.4	-27.8	37.0	70.5	500.0	-17.0

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Total dBuV/m at 3m	Total uV/m at 3 m	Limit uV/m at 3 m	Margin (dB)
4924.00	H	47.1	Ambient	4.9	34.5	-40.2	46.3	205.9	5000.0	-27.7
4924.00	V	47.2	Ambient	4.9	34.5	-40.2	46.4	208.3	5000.0	-27.6
7386.00	H	46.8	Ambient	6.2	35.4	-39.8	48.6	270.7	5000.0	-25.3
7386.00	V	46.2	Ambient	6.2	35.4	-39.8	48.0	252.6	5000.0	-25.9
12310.00	H	47.7	Ambient	8.0	38.9	-39.4	55.2	577.9	5000.0	-18.7
12310.00	V	47.4	Ambient	8.0	38.9	-39.4	54.9	558.2	5000.0	-19.0
19696.00	H	35.1	Ambient	2.2	40.4	-27.8	49.9	312.1	5000.0	-24.1
19696.00	V	34.0	Ambient	2.2	40.4	-27.8	48.8	274.9	5000.0	-25.2
22158.00	H	34.2	Ambient	2.2	40.6	-28.5	48.5	267.2	5000.0	-25.4
22158.00	V	35.1	Ambient	2.2	40.6	-28.5	49.4	296.3	5000.0	-24.5

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11b, 11Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4924.00	H	34.0	Ambient	4.9	34.5	-40.2	33.2	45.6	500.0	-20.8
4924.00	V	34.0	Ambient	4.9	34.5	-40.2	33.2	45.6	500.0	-20.8
7386.00	H	33.50	Ambient	6.2	35.4	-39.8	35.3	58.5	500.0	-18.6
7386.00	V	33.5	Ambient	6.2	35.4	-39.8	35.3	58.5	500.0	-18.6
12310.00	H	34.2	Ambient	8.0	38.9	-39.4	41.7	122.1	500.0	-12.2
12310.00	V	34.2	Ambient	8.0	38.9	-39.4	41.7	122.1	500.0	-12.2
19696.00	H	23.1	Ambient	2.2	40.4	-27.8	37.9	78.4	500.0	-16.1
19696.00	V	22.6	Ambient	2.2	40.4	-27.8	37.4	74.0	500.0	-16.6
22158.00	H	21.9	Ambient	2.2	40.6	-28.5	36.2	64.8	500.0	-17.7
22158.00	V	22.7	Ambient	2.2	40.6	-28.5	37.0	71.1	500.0	-16.9

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4924.00	H	47.2	Ambient	4.9	34.5	-40.2	46.4	208.3	5000.0	-27.6
4924.00	V	47.4	Ambient	4.9	34.5	-40.2	46.6	213.1	5000.0	-27.4
7386.00	H	46.8	Ambient	6.2	35.4	-39.8	48.6	270.7	5000.0	-25.3
7386.00	V	46.7	Ambient	6.2	35.4	-39.8	48.5	267.6	5000.0	-25.4
12310.00	H	46.7	Ambient	8.0	38.9	-39.4	54.2	515.0	5000.0	-19.7
12310.00	V	46.9	Ambient	8.0	38.9	-39.4	54.4	527.0	5000.0	-19.5
19696.00	H	34.2	Ambient	2.2	40.4	-27.8	49.0	281.4	5000.0	-25.0
19696.00	V	34.3	Ambient	2.2	40.4	-27.8	49.1	284.6	5000.0	-24.9
22158.00	H	33.7	Ambient	2.2	40.6	-28.5	48.0	252.2	5000.0	-25.9
22158.00	V	33.9	Ambient	2.2	40.6	-28.5	48.2	258.1	5000.0	-25.7

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11g, 54Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

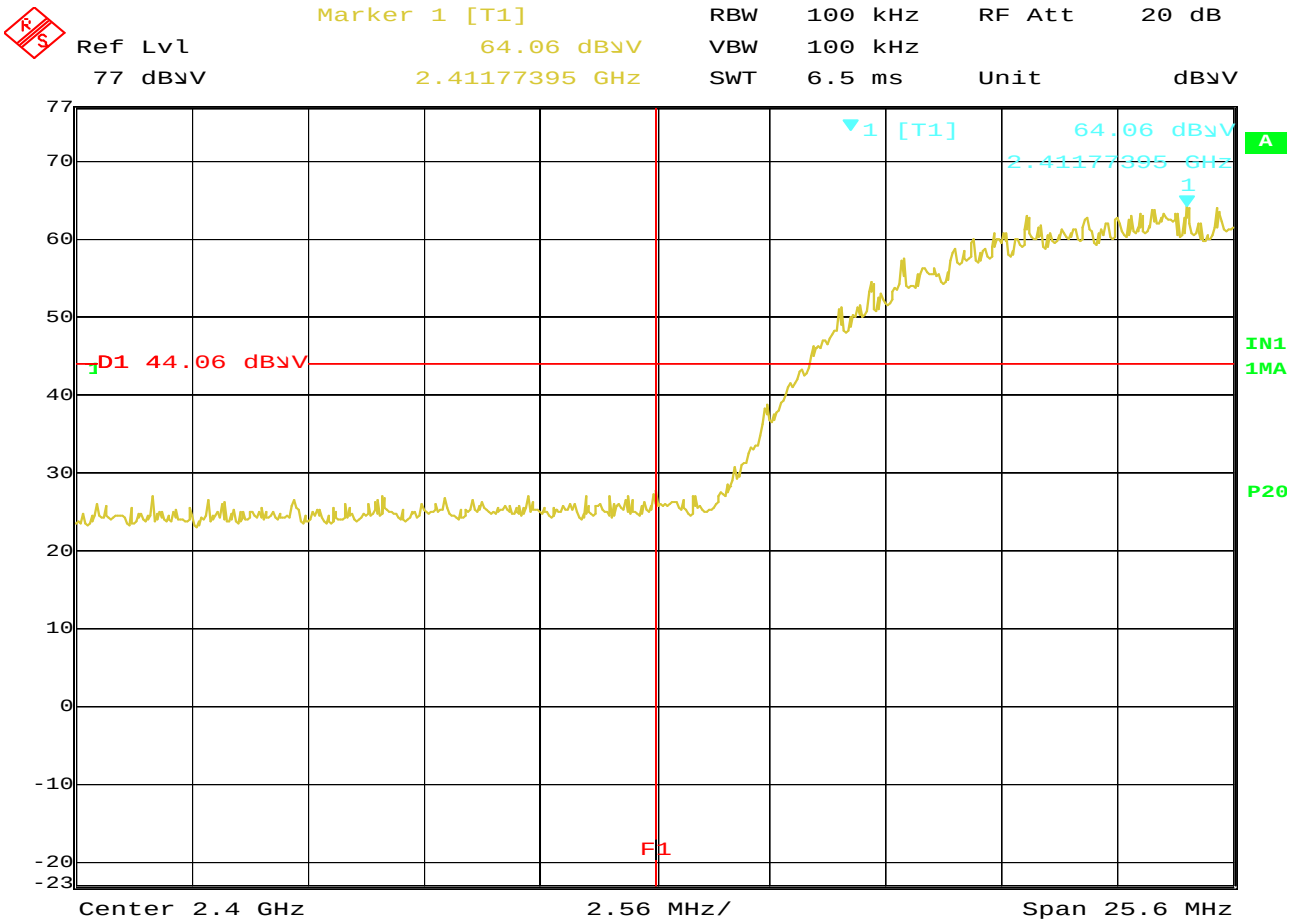
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4924.00	H	34.1	Ambient	4.9	34.5	-40.2	33.3	46.1	500.0	-20.7
4924.00	V	34.0	Ambient	4.9	34.5	-40.2	33.2	45.6	500.0	-20.8
7386.00	H	33.50	Ambient	6.2	35.4	-39.8	35.3	58.5	500.0	-18.6
7386.00	V	33.5	Ambient	6.2	35.4	-39.8	35.3	58.5	500.0	-18.6
12310.00	H	34.2	Ambient	8.0	38.9	-39.4	41.7	122.1	500.0	-12.2
12310.00	V	34.2	Ambient	8.0	38.9	-39.4	41.7	122.1	500.0	-12.2
19696.00	H	23.2	Ambient	2.2	40.4	-27.8	38.0	79.3	500.0	-16.0
19696.00	V	22.5	Ambient	2.2	40.4	-27.8	37.3	73.2	500.0	-16.7
22158.00	H	21.8	Ambient	2.2	40.6	-28.5	36.1	64.1	500.0	-17.8
22158.00	V	22.2	Ambient	2.2	40.6	-28.5	36.5	67.1	500.0	-17.4

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Peak Readings in Restricted Bands (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4924.00	H	47.0	Ambient	4.9	34.5	-40.2	46.2	203.5	5000.0	-27.8
4924.00	V	47.8	Ambient	4.9	34.5	-40.2	47.0	223.2	5000.0	-27.0
7386.00	H	45.5	Ambient	6.2	35.4	-39.8	47.3	233.0	5000.0	-26.6
7386.00	V	46.3	Ambient	6.2	35.4	-39.8	48.1	255.5	5000.0	-25.8
12310.00	H	47.1	Ambient	8.0	38.9	-39.4	54.6	539.3	5000.0	-19.3
12310.00	V	46.8	Ambient	8.0	38.9	-39.4	54.3	521.0	5000.0	-19.6
19696.00	H	34.0	Ambient	2.2	40.4	-27.8	48.8	274.9	5000.0	-25.2
19696.00	V	33.7	Ambient	2.2	40.4	-27.8	48.5	265.6	5000.0	-25.5
22158.00	H	34.4	Ambient	2.2	40.6	-28.5	48.7	273.4	5000.0	-25.2
22158.00	V	33.7	Ambient	2.2	40.6	-28.5	48.0	252.2	5000.0	-25.9

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : June 16, 2014 through July 2, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mb/sec
Notes : Test Distance is 3 meters
Notes : Average Readings in Restricted Bands

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4924.00	H	34.0	Ambient	4.9	34.5	-40.2	33.2	45.6	500.0	-20.8
4924.00	V	34.0	Ambient	4.9	34.5	-40.2	33.2	45.6	500.0	-20.8
7386.00	H	33.30	Ambient	6.2	35.4	-39.8	35.1	57.2	500.0	-18.8
7386.00	V	33.3	Ambient	6.2	35.4	-39.8	35.1	57.2	500.0	-18.8
12310.00	H	34.1	Ambient	8.0	38.9	-39.4	41.6	120.7	500.0	-12.3
12310.00	V	34.2	Ambient	8.0	38.9	-39.4	41.7	122.1	500.0	-12.2
19696.00	H	22.5	Ambient	2.2	40.4	-27.8	37.3	73.2	500.0	-16.7
19696.00	V	22.2	Ambient	2.2	40.4	-27.8	37.0	70.7	500.0	-17.0
22158.00	H	22.1	Ambient	2.2	40.6	-28.5	36.4	66.3	500.0	-17.5
22158.00	V	22.4	Ambient	2.2	40.6	-28.5	36.7	68.7	500.0	-17.2



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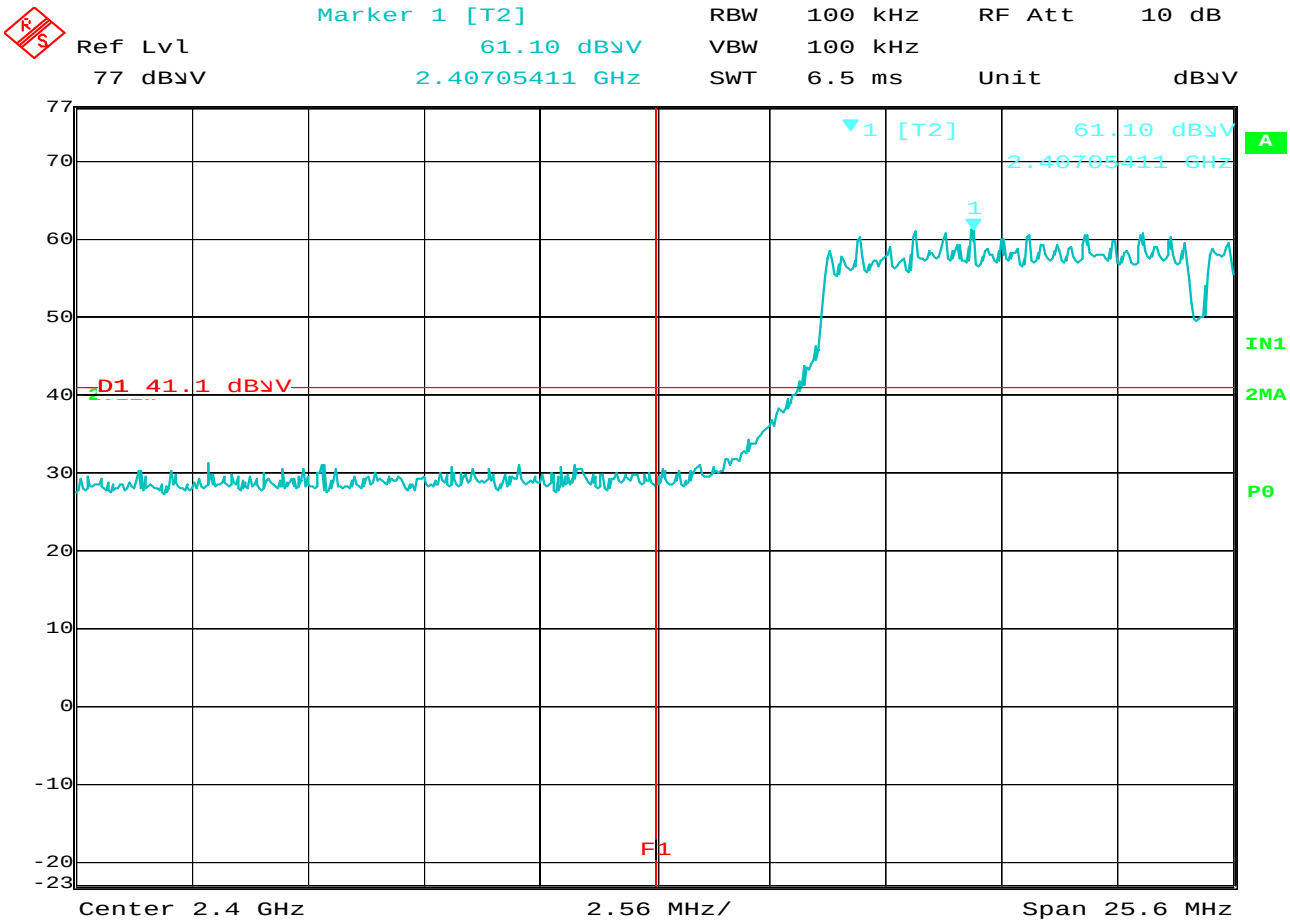
Band Edge Requirements

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	Band Edge Emissions
NOTES	:	Frequency Line (F1) represents the low band edge (2400MHz). Display line (D1) represents the 20dB down point
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

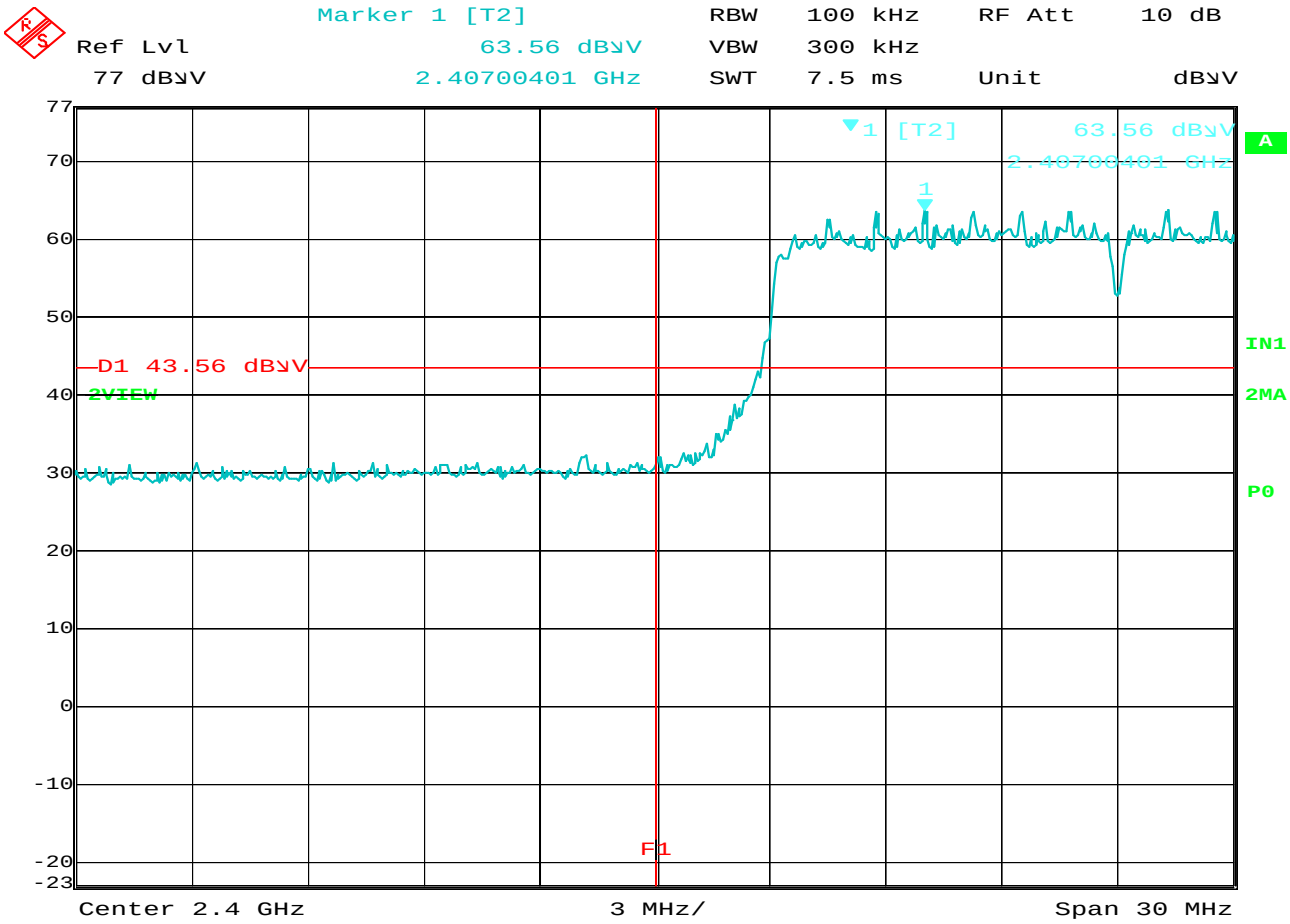


Date: 17.JUN.2014 11:19:34

Band Edge Requirements

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	Band Edge Emissions
NOTES	:	Frequency Line (F1) represents the low band edge (2400MHz). Display line (D1) represents the 20dB down point
EQUIPMENT USED	:	RBA0, NWQ1

NOTES



Date: 17.JUN.2014 14:36:03

Band Edge Requirements

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	Band Edge Emissions
NOTES	:	Frequency Line (F1) represents the low band edge (2400MHz). Display line (D1) represents the 20dB down point
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11b, 11Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Peak readings (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
2483.50	H	28.5		2.7	32.3	0.0	63.5	1498.1	5000.0	-10.5
2483.50	V	31.0		2.7	32.3	0.0	66.0	1997.7	5000.0	-8.0

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11b, 11Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
2483.50	H	13.2		2.7	32.3	0.0	48.2	257.4	500.0	-5.8
2483.50	V	13.4		2.7	32.3	0.0	48.4	263.4	500.0	-5.6

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11g, 54Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Peak readings (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
2483.50	H	24.6		2.7	32.3	0.0	59.6	956.2	5000.0	-14.4
2483.50	V	26.1		2.7	32.3	0.0	61.1	1136.4	5000.0	-12.9

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11g, 54Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Average Readings

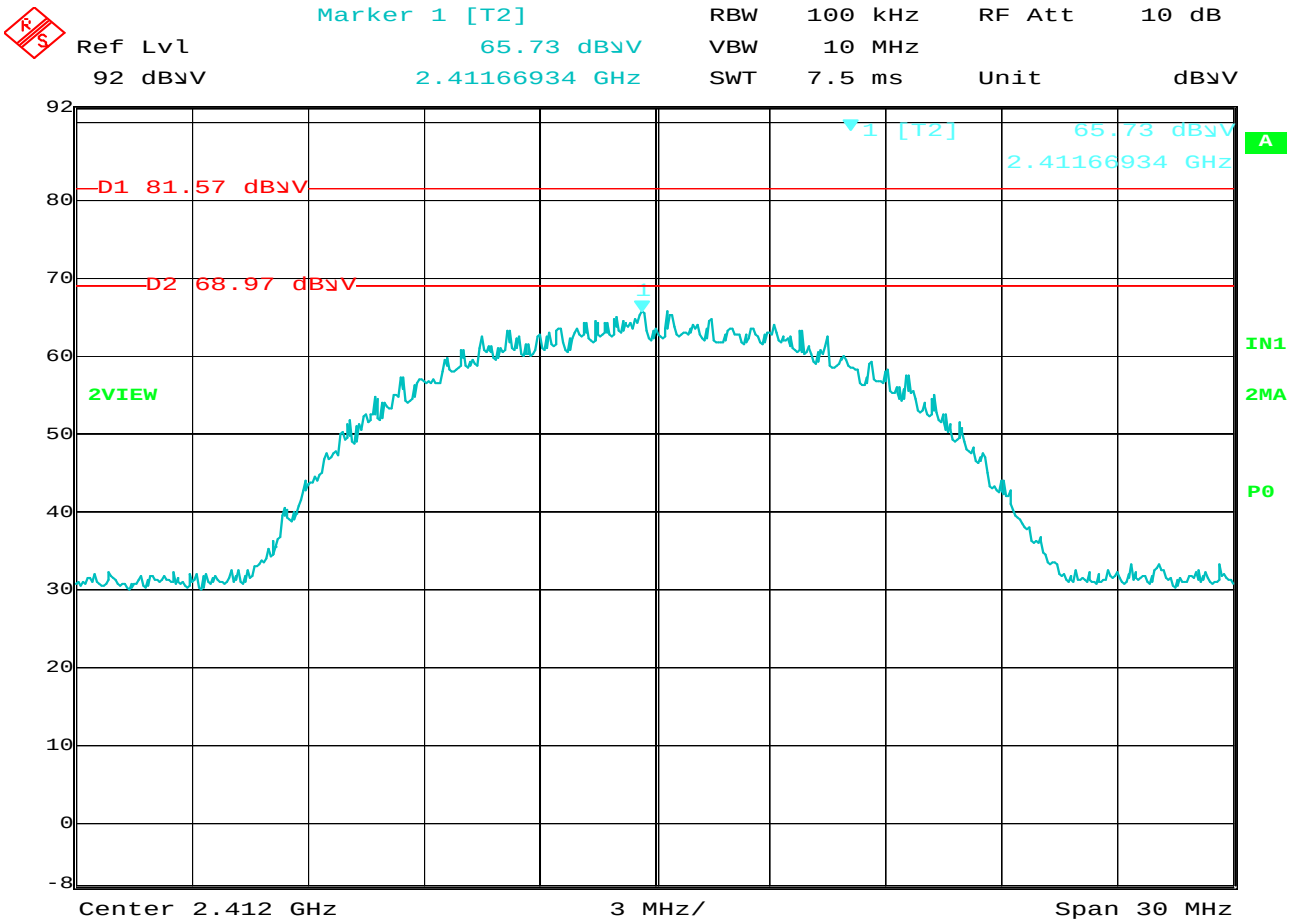
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
2483.50	H	13.2		2.7	32.3	0.0	48.2	257.4	500.0	-5.8
2483.50	V	13.4		2.7	32.3	0.0	48.4	263.4	500.0	-5.6

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11n, 65Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Peak readings (1MHz RBW)

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
2483.50	H	25.5		2.7	32.3	0.0	60.5	1060.6	5000.0	-13.5
2483.50	V	25.1		2.7	32.3	0.0	60.1	1012.8	5000.0	-13.9

Manufacturer : Trapeze
EUT : Mobile Ticketing Device
Model No. : 50T0157
Mode : Transmit at 2462MHz, 802.11n, 65Mb/sec
Test Specification : FCC 15.247 Band Edge (high end)
Date : June 16, 2014 through July 2, 2014
Test Distance : 3 meters
Note : Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
2483.50	H	13.2		2.7	32.3	0.0	0.0	48.2	257.4	500.0
2483.50	V	13.3		2.7	32.3	0.0	0.0	48.3	260.3	500.0

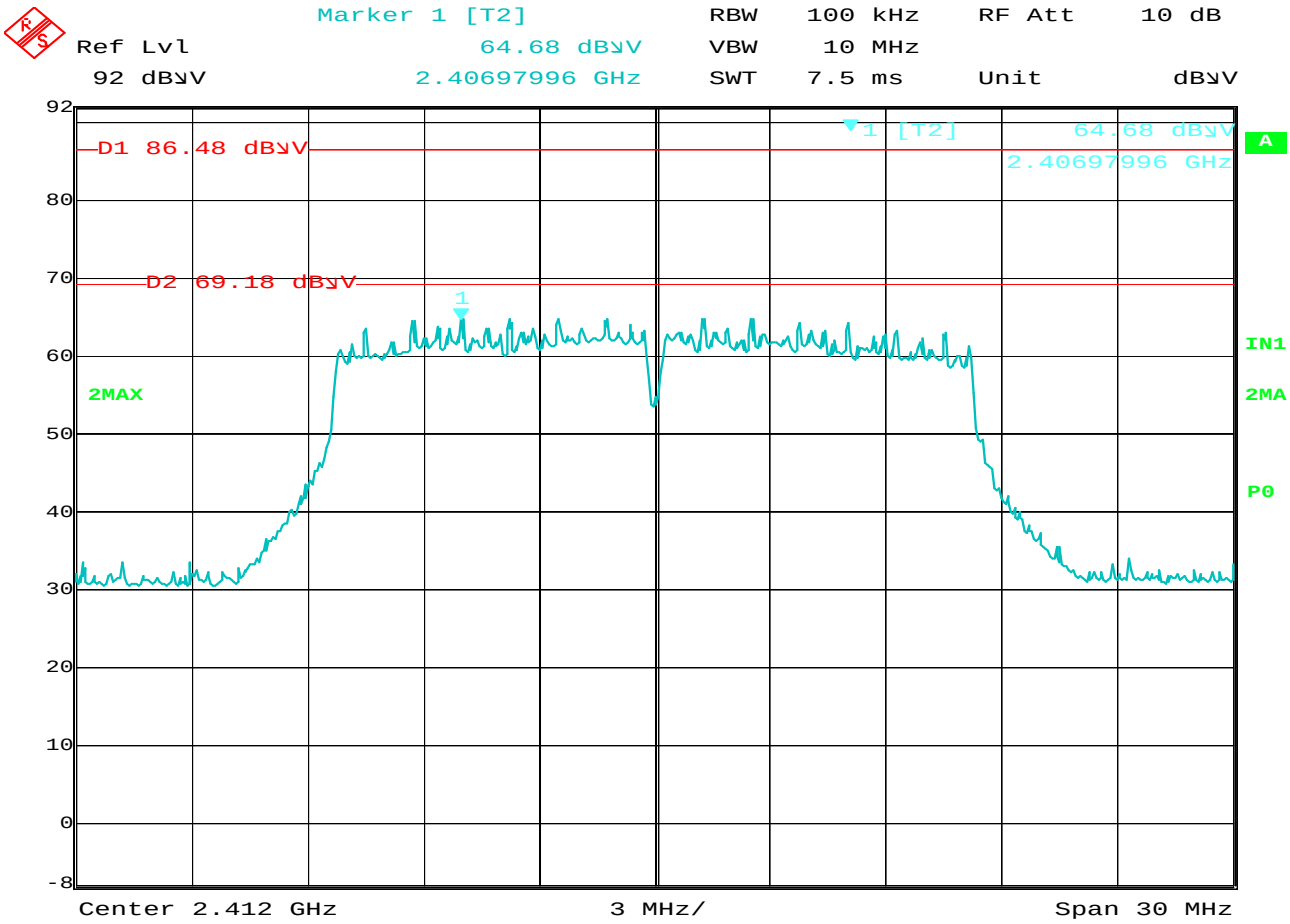


Date: 18.JUN.2014 07:54:54

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 20.6dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (20.6dBm – 8.0dBm = 12.6dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

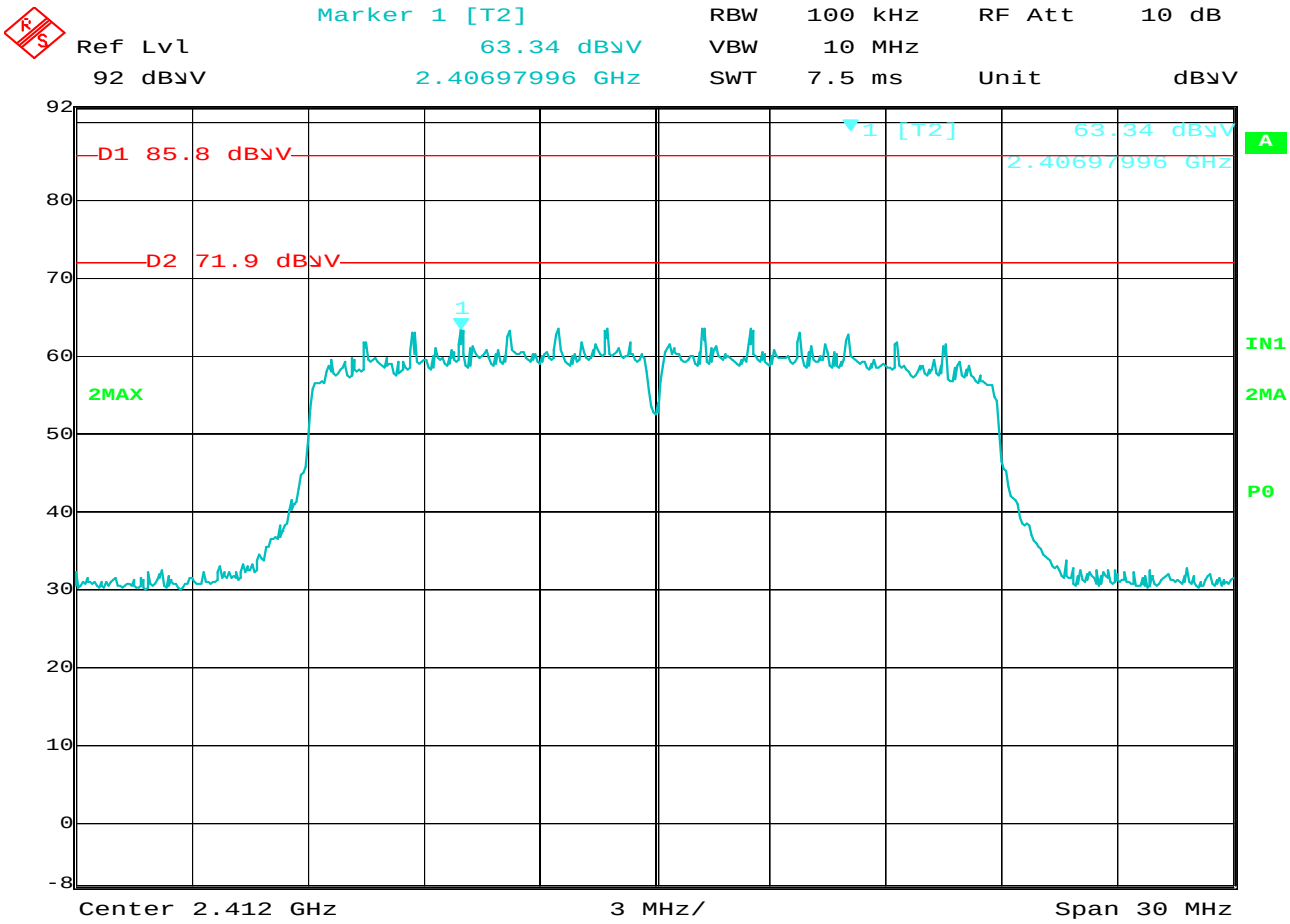


Date: 18.JUN.2014 08:07:22

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 25.3dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (25.3dBm – 8.0dBm = 17.3dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

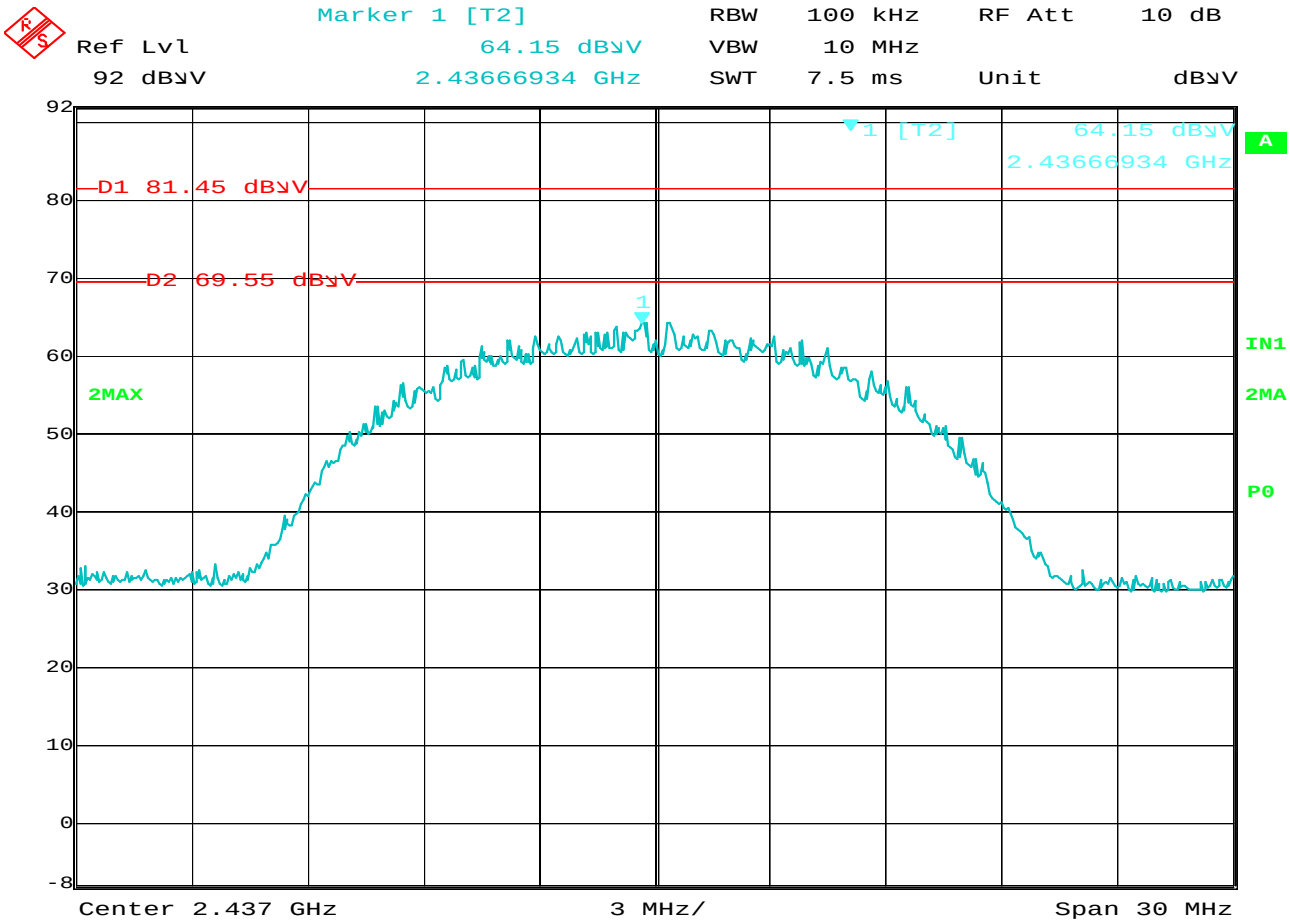


Date: 18.JUN.2014 08:15:17

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2412MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 21.9dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (21.9dBm – 8.0dBm = 13.9dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

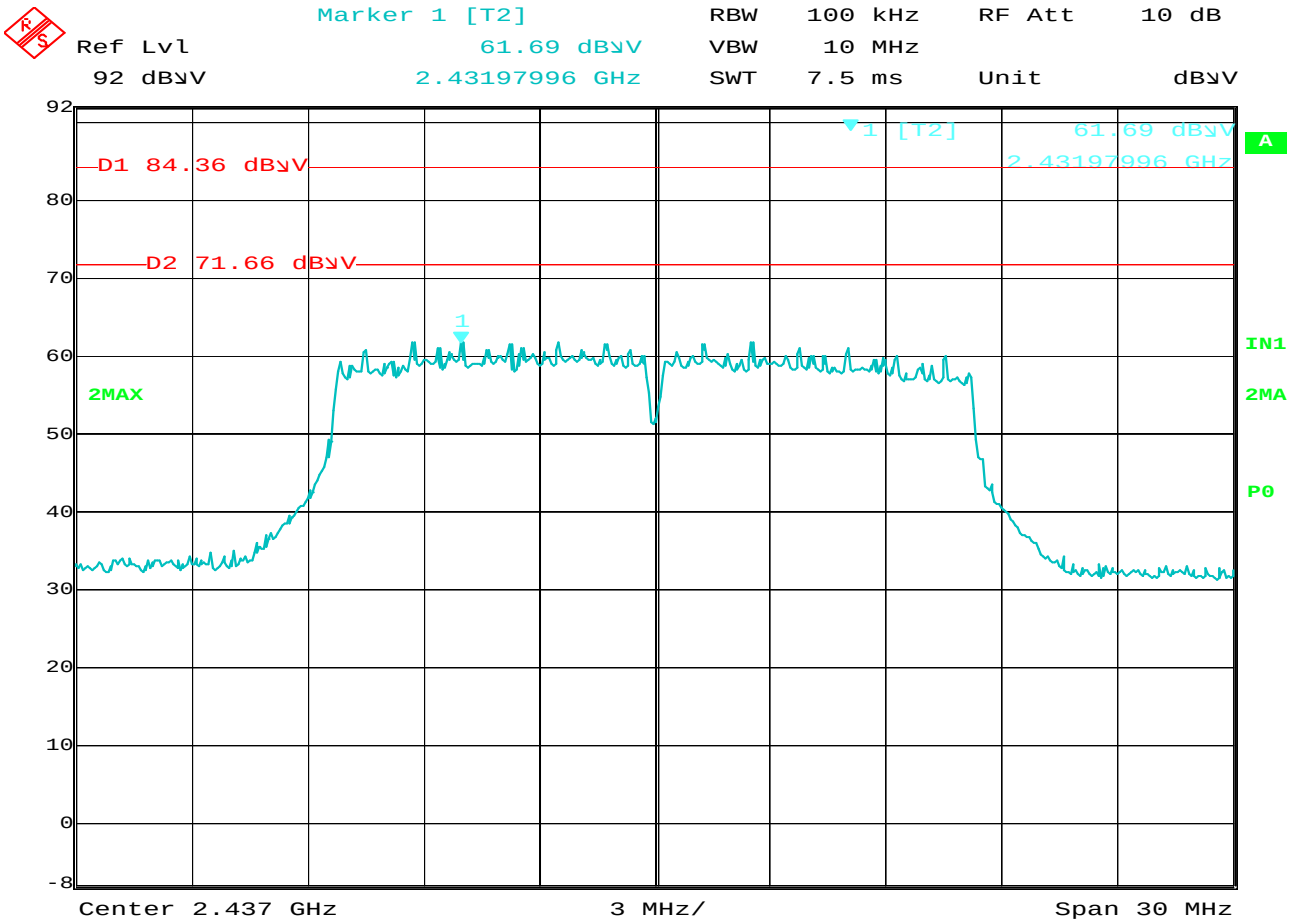


Date: 18.JUN.2014 08:23:00

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 19.9dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (19.9dBm – 8.0dBm = 11.9dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

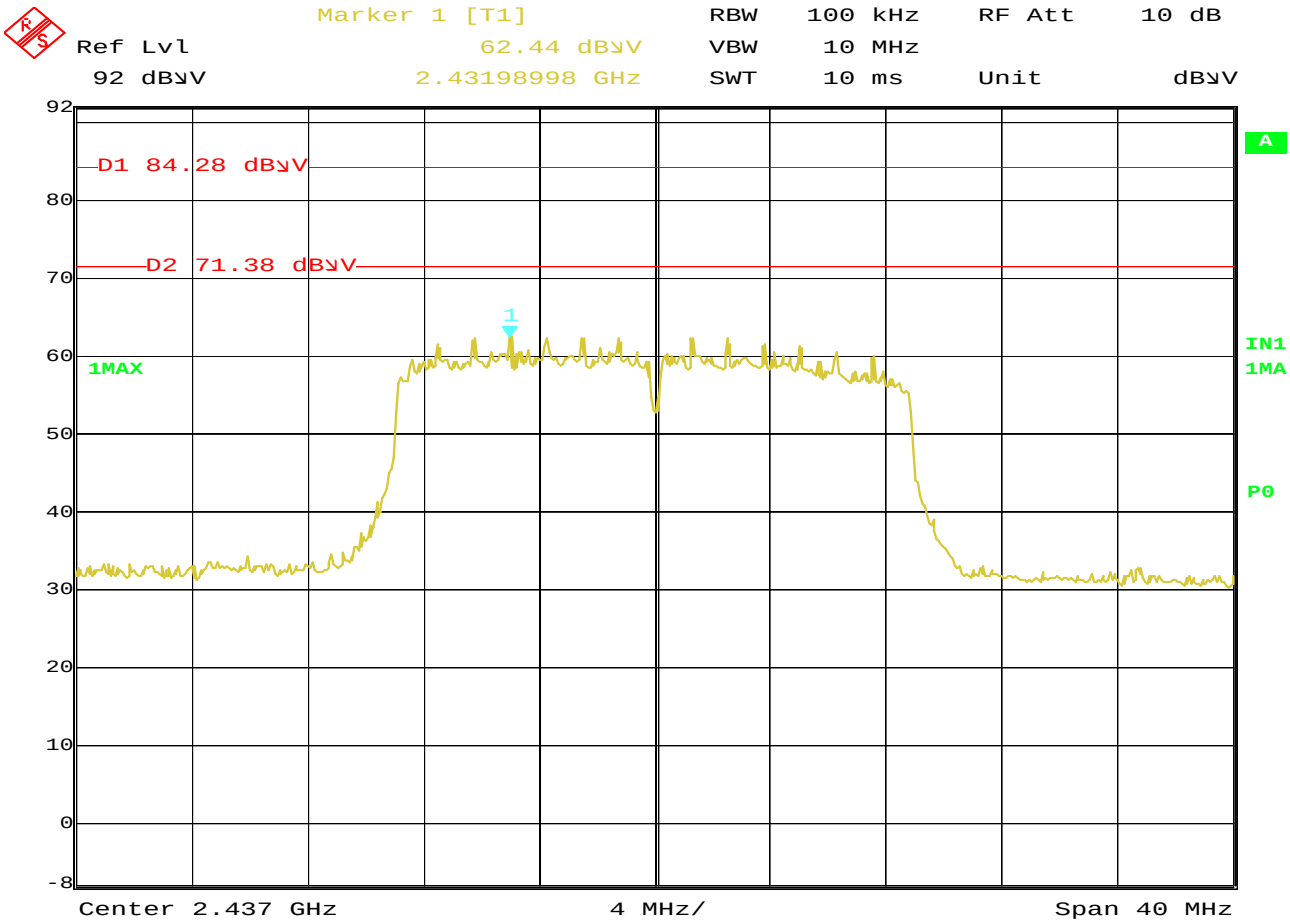


Date: 18.JUN.2014 08:56:57

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 20.7dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (20.7dBm – 8.0dBm = 12.7dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

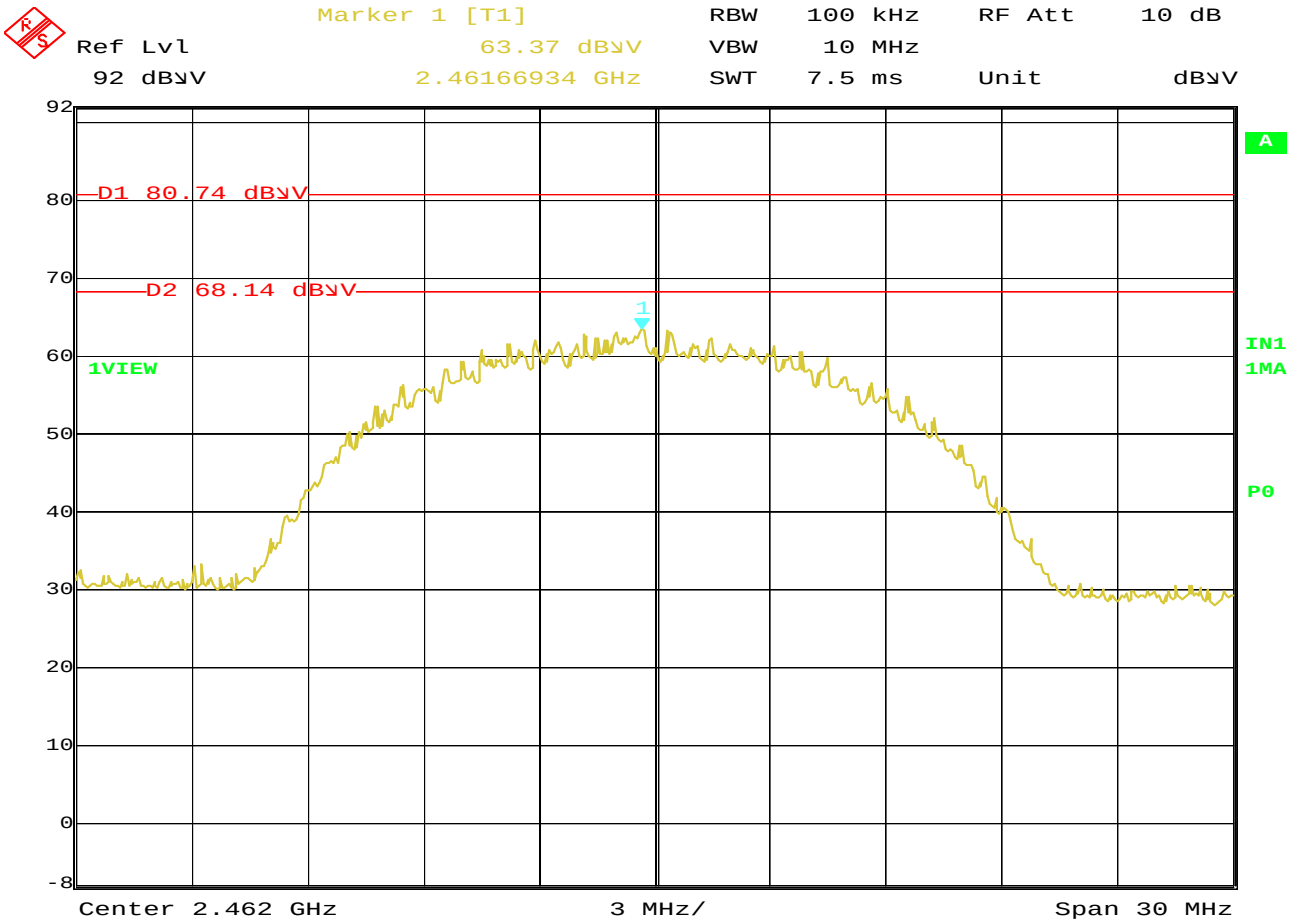


Date: 1.JUL.2014 14:27:50

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2437MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 20.9dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (20.9dBm – 8.0dBm = 12.9dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

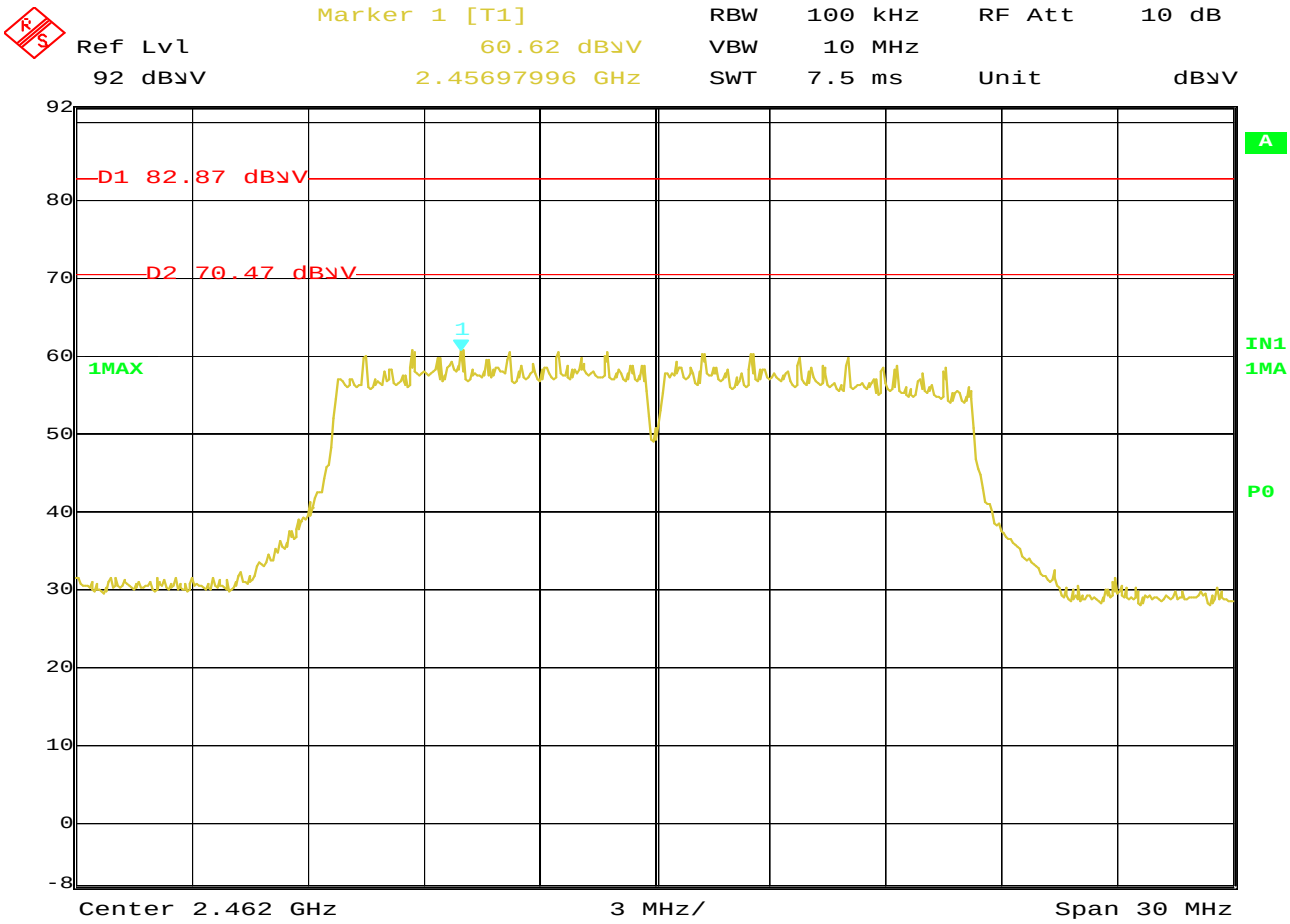


Date: 2.JUL.2014 06:17:19

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11b, 11Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 20.6dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (20.6dBm – 8.0dBm = 12.6dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES

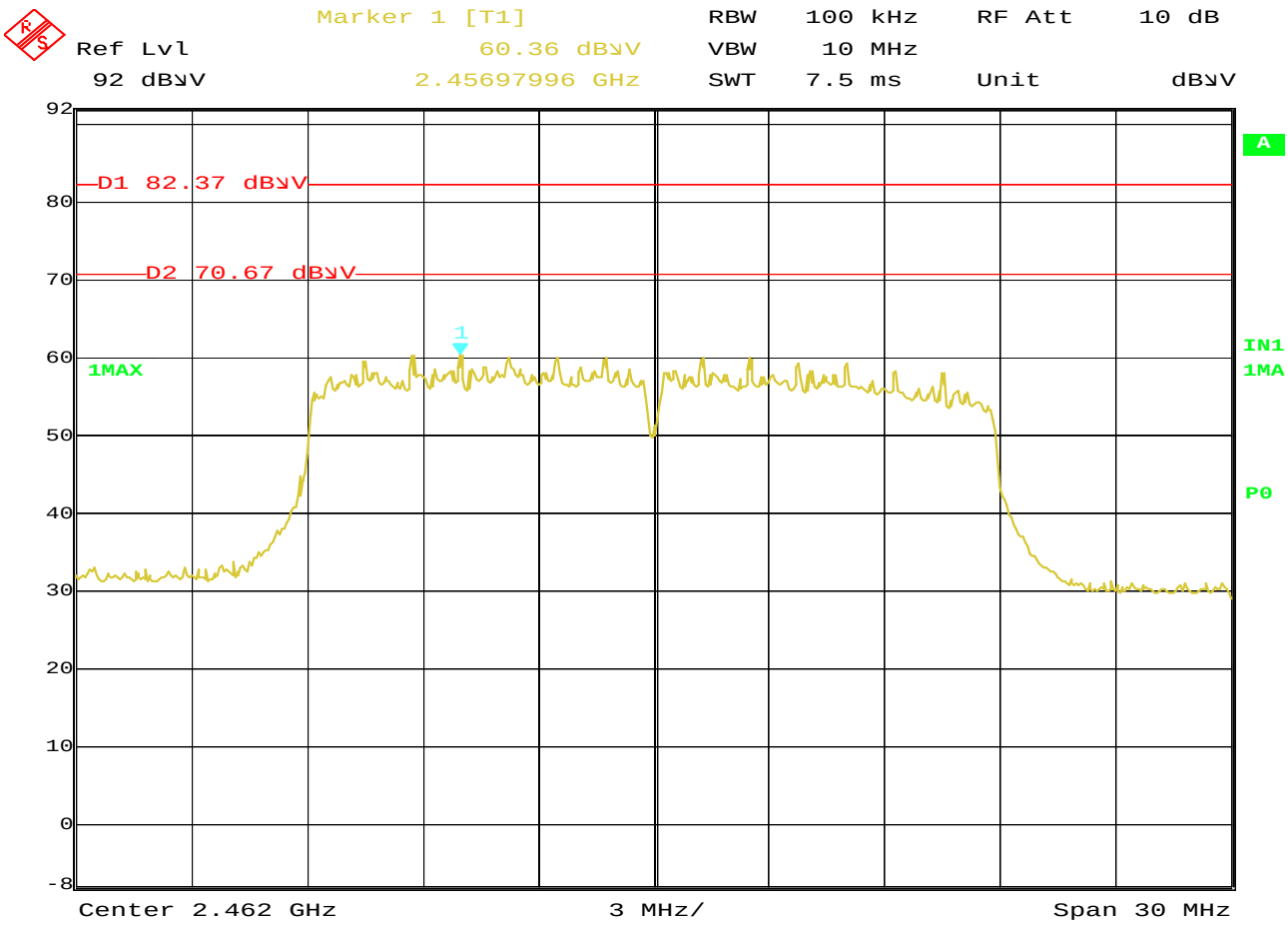


Date: 2.JUL.2014 06:28:13

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11g, 54Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 20.4dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (20.4dBm – 8.0dBm = 12.4dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES



Date: 2.JUL.2014 07:00:46

15.247(e) Power Spectral Density (PSD)

MANUFACTURER	:	Trapeze Group
MODEL NUMBER	:	Mobile Ticketing Device
SERIAL NUMBER	:	
TEST MODE	:	Tx @ 2462MHz, 802.11n, 65Mb/sec
TEST PARAMETERS	:	Display Line 1 (D1) represents the EIRP reading of 19.7dBm in a 10MHz RBW. Display Line 2 (D2) represents the 8.0dBm PSD limit (19.7dBm – 8.0dBm = 11.7dB down).
EQUIPMENT USED	:	RBA0, NWQ1

NOTES