



Measurement of RF Interference from a
M/N: A29100-0001 SPX Genfare WiFi Module with
Radome antenna, M/N: ANT-2.4-WRT-SMA, and
Molex antenna, M/N: 47950-0011

For SPX Genfare
751 Pratt Blvd.
Elk Grove Village, IL 60007

P.O. Number 8000002657
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Test Personnel Mark Longinotti
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Subpart C, Section 15.247 for Digital Modulation
Intentional Radiators Operating within the band
2400-2483.5MHz
FCC "Code of Federal Regulations" Title 47, Part 15,
Subpart 15B, Section 15.109 for Receivers
Industry Canada RSS-210
Industry Canada RSS-GEN

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TABLE OF CONTENTS

PARAGRAPH	DESCRIPTION OF CONTENTS	PAGE NO.
1	INTRODUCTION	4
1.1	Scope of Tests	4
1.2	Purpose.....	4
1.3	Deviations, Additions and Exclusions	4
1.4	EMC Laboratory Identification	4
1.5	Laboratory Conditions.....	4
2	APPLICABLE DOCUMENTS	4
3	EUT SET-UP AND OPERATION	5
3.1	General Description	5
3.1.1	Power Input	5
3.1.2	Peripheral Equipment.....	5
3.1.3	Interconnect Cables	5
3.1.4	Grounding.....	5
3.2	Software.....	5
3.3	Operational Mode	6
3.4	EUT Modifications.....	6
4	TEST FACILITY AND TEST INSTRUMENTATION	7
4.1	Shielded Enclosure	7
4.2	Test Instrumentation	7
4.3	Calibration Traceability	7
4.4	Measurement Uncertainty.....	7
5	TEST PROCEDURES.....	7
5.1	Receiver.....	7
5.2	Transmitter.....	8
5.2.1	Duty Cycle Factor Measurements	8
5.2.1.1	Requirements	8
5.2.1.2	Procedures	8
5.2.1.3	Results	8
5.2.2	Radiated Spurious Emissions Measurements In the Restricted Bands.....	9
5.2.2.1	Requirements	9
5.2.2.2	Procedures	9
5.2.2.3	Results.....	10
5.2.3	Band Edge Compliance.....	10
5.2.3.1	Requirements	10
5.2.3.2	Procedures	10
5.2.3.3	Results.....	10
6	CONCLUSIONS	11
7	CERTIFICATION	11
8	ENDORSEMENT DISCLAIMER	11
9	EQUIPMENT LIST.....	12



REVISION HISTORY

Revision	Date	Description
—	06/04/2014	Initial release
A	06/20/2014	<p>Redpine WiFi Module, M/N: RS-9110-N-11-22 was replaced with SPX Genfare WiFi Module, M/N: A29100-0001 throughout the report.</p> <p>Section 3.2 Software:</p> <p>Changed firmware version from RS.CN.22.24.SPX.FCC.UART to RS.CN.22.24.RFTEST.UT.1.4.2_Test.</p> <p>Page 24 and 26:</p> <p>Changed 20Long to 20Log.</p> <p>5.2.1.2 Procedures:</p> <ul style="list-style-type: none">a. The EUT was placed on the non-conductive stand and set to transmit continuously. <p>Was replaced with:</p> <ul style="list-style-type: none">a. The EUT was placed on the non-conductive stand. A laptop computer was placed in the test chamber with the EUT. The EUT was programmed to set up a TCP network. The EUT continuously sent messages. The laptop computer joined the network and displayed the messages that it received wirelessly from the EUT.



Measurement of RF Emissions from Model No. A29100-0001 SPX Genfare WiFi Module with Radome antenna, M/N: ANT-2.4-WRT-SMA, and Molex antenna, M/N: 47950-0011

1 INTRODUCTION

1.1 Scope of Tests

This document represents the results of the series of radiated emissions in restricted bands measurements performed on a Model No. A29100-0001 SPX Genfare WiFi Module with Radome antenna, M/N: ANT-2.4-WRT-SMA, and Molex antenna, M/N: 47950-0011, (hereinafter referred to as the EUT). The EUT is a digital modulation transceiver. The transceiver was designed to transmit and receive in the 2400-2483.5 MHz band using a removable external antenna. The EUT was submitted for testing by SPX Genfare located in Elk Grove Village, IL.

1.2 Purpose

The SPX Genfare WiFi module, Model No. A29100-0001, originally received a Grant of Equipment Authorization from the FCC, FCC Identifier: XF6-RS9110N1122, and a Technical Acceptance Certificate from Industry Canada, IC: 8407A-RS9110N1122, using different external antennas.

The purpose of this test was to determine if the SPX Genfare WiFi module, Model No. A29100-0001, meets the radiated emissions in restricted bands 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 Radome antenna, M/N: ANT-2.4-WRT-SMA, and a Molex antenna, M/N: 47950-0011.

The purpose of this test was also to determine if the SPX Genfare WiFi module, Model No. A29100-0001, meets the radiated emissions in restricted bands requirements of the Industry Canada Radio Standards Specification, RSS-210 Annex 8, for transmitters when tested with a Radome antenna, M/N: ANT-2.4-WRT-SMA, and a Molex antenna, M/N: 47950-0011.

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 National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP Lab Code: 100278-0.

1.5 Laboratory Conditions

The temperature at the time of the test was 22C and the relative humidity was 19%.

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, Subparts B and 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, April 9, 2013
- Industry Canada RSS-210, Issue 8, December 2010, "Spectrum Management and

Telecommunications Radio Standards Specification, Low-power License-exempt radio communication devices (All Frequency Bands): Category I Equipment”

- Industry Canada RSS-GEN, Issue 3, December 2010, “Spectrum Management and Telecommunications Radio Standards Specification, General Requirements and Information for the Certification of radio communication equipment”

3 EUT SET-UP AND OPERATION

3.1 General Description

The EUT is a Model No. A29100-0001 SPX Genfare WiFi Module with Radome antenna, M/N: ANT-2.4-WRT-SMA, and Molex antenna, M/N: 47950-0011. A block diagram of the EUT setup is shown as Figure 1 and Figure 2.

3.1.1 Power Input

The EUT was powered with 5VDC via 2 wires of a standard USB cable.

3.1.2 Peripheral Equipment

The following peripheral equipment was submitted with the EUT:

Item	Description
Laptop computer	External to the test chamber. The laptop computer was running hyper terminal to place the EUT in the correct mode.
Digital Optical System	Messtechnik optoRS232-HS fiber optic to RS-232 converter inside the test chamber
Digital Optical System	Messtechnik optoRS232-HS fiber optic to RS-232 converter external to the test chamber
Radome antenna	WRT Compact Radome Antenna, Model No.: ANT-2.4-WRT-SMA, connected to the antenna port of the EUT
Molex antenna	Model No.: 47950-0001, connected to the antenna port of the EUT

3.1.3 Interconnect Cables

The following interconnect cables were submitted with the EUT:

Item	Description
Serial cable	Connected to the RS-232 port of the EUT. The serial cable was used to provide communications between the EUT and the laptop computer (via the RS-232 to fiber optic converters).
USB cable	Connected to the USB port of the EUT. Two of the wires of the USB cable were used to provide 5VDC to the EUT.

3.1.4 Grounding

The EUT was not grounded during testing.

3.2 Software

For duty cycle tests, the EUT had firmware version RS.CN.22.GENR.UT.4.7.1 loaded onto the device. For radiated emissions tests, the EUT had firmware version RS.CN.22.24.RFTEST.UT.1.4.2_Test loaded onto the device.

3.3 Operational Mode

For all tests, the EUT was placed on an 80cm high non-conductive stand. The EUT was energized. The unit was programmed to operate in one of the following modes:

Molex antenna:

802.11b DSSS

- Transmit at 2412MHz (Channel 1), 2 Mb/sec
- Transmit at 2442MHz (Channel 7), 2 Mb/sec
- Transmit at 2462MHz (Channel 11), 2 Mb/sec

802.11b CCK

- Transmit at 2412MHz (Channel 1), 11 Mb/sec
- Transmit at 2442MHz (Channel 7), 11 Mb/sec
- Transmit at 2462MHz (Channel 11), 11 Mb/sec

802.11g

- Transmit at 2412MHz (Channel 1), 54 Mb/sec
- Transmit at 2442MHz (Channel 7), 54 Mb/sec
- Transmit at 2462MHz (Channel 11), 54 Mb/sec

802.11n

- Transmit at 2412MHz (Channel 1), 65 Mb/sec
- Transmit at 2442MHz (Channel 7), 65 Mb/sec
- Transmit at 2462MHz (Channel 11), 65 Mb/sec

Radome antenna:

802.11b DSSS

- Transmit at 2412MHz (Channel 1), 2 Mb/sec
- Transmit at 2442MHz (Channel 7), 2 Mb/sec
- Transmit at 2462MHz (Channel 11), 2 Mb/sec

802.11b CCK

- Transmit at 2412MHz (Channel 1), 11 Mb/sec
- Transmit at 2442MHz (Channel 7), 11 Mb/sec
- Transmit at 2462MHz (Channel 11), 11 Mb/sec

802.11g

- Transmit at 2412MHz (Channel 1), 54 Mb/sec
- Transmit at 2442MHz (Channel 7), 54 Mb/sec
- Transmit at 2462MHz (Channel 11), 54 Mb/sec

802.11n

- Transmit at 2412MHz (Channel 1), 65 Mb/sec
- Transmit at 2442MHz (Channel 7), 65 Mb/sec
- Transmit at 2462MHz (Channel 11), 65 Mb/sec

3.4 EUT Modifications

In order to meet the radiated emissions in restricted bands requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart C, Section 15.247 the following modifications were made to the EUT:

- When tested with the Molex antenna, M/N: 47950-0001, the output power from the EUT was reduced to 37.6mW when in the transmit at 2462MHz (Ch. 11), 802.11g, 54 Mb/sec mode
- When tested with the Molex antenna, M/N: 47950-0001, the output power from the EUT was reduced to 40mW when in the transmit at 2412MHz (Ch. 1), 802.11b, DSSS, 2 Mb/sec



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. All equipment was calibrated per the instruction manuals supplied by the manufacturer.

Conducted emission tests were performed with a spectrum analyzer in conjunction with a quasi-peak adapter. Radiated emissions were performed with a spectrum analyzer. This receiver allows measurements with the bandwidths specified by the FCC and with the quasi-peak and average detector functions. The spectrum analyzer bandwidth was 120kHz for the 30MHz to 1000MHz radiated emissions data.

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

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

5 TEST PROCEDURES

5.1 Receiver

Per the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart B, Section 15.101(b), receivers operating above 960MHz are exempt from complying with the technical provisions of part 15.

Per Industry Notice 2012-DRS0126, Regulatory Standards Notice – Changes to RSS-Gen Issue 3 and RSS-310 Issue 3, section 2.2.3 of RSS-Gen Issue 3 now states that: "Only radiocommunication receivers operating in stand-alone mode within the band 30-960 MHz and scanner receivers are subject to Industry Canada requirements, as described above. All other receivers are excluded from any Industry Canada certification, testing, labeling and reporting requirements." Since the receiver operates above 960MHz, the receiver is exempt



from complying with the technical provisions of the RSS standards.

5.2 Transmitter

5.2.1 Duty Cycle Factor Measurements

5.2.1.1 Requirements

Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

5.2.1.2 Procedures

- b. The EUT was placed on the non-conductive stand. A laptop computer was placed in the test chamber with the EUT. The EUT was programmed to set up a TCP network. The EUT continuously sent messages. The laptop computer joined the network and displayed the messages that it received wirelessly from the EUT.
- c. A double ridged waveguide antenna was positioned at a 3 meter distance from the EUT. The output of the antenna was connected to the input of a spectrum analyzer.
- d. The center frequency of the spectrum analyzer was set to the transmit frequency of the EUT.
- e. The frequency span of the spectrum analyzer was set to 0Hz so that the time domain trace of the transmitted pulse of the EUT was displayed on the spectrum analyzer.
- f. The sweep time of the spectrum analyzer was adjusted so that the beginning and end of a single pulse could be seen on the display of the spectrum analyzer.
- g. The single sweep function of the spectrum analyzer was used multiple times to determine the maximum pulse width of the EUT.
- h. The maximum pulse width display of the spectrum analyzer was recorded and then plotted using a 'screen dump' utility.
- i. The sweep time of the spectrum analyzer was then adjusted to 100msec.
- j. The single sweep function of the spectrum analyzer was used multiple times to determine the maximum number of transmitted pulses that occurred in a 100msec time period.
- k. The maximum number of pulses transmitted in a 100msec time period was recorded and then plotted using a 'screen dump' utility.
- l. The duty cycle correction was calculated using the following equation:

$$\text{Duty Cycle Correction Factor (dB)} = \text{D.C. (dB)}$$
$$\text{D.C. (dB)} = 20 \times \log [((\text{pulse width (msec)}) \times (\#\text{pulses in a 100msecperiod})) / 100\text{msec}]$$

5.2.1.3 Results

Duty cycle plots are shown on pages 23 through 32. The following duty cycle factors were calculated for the various modes of operation:

Mode	Duty Cycle Correction Factor
802.11b (DSSS), 2 Mb/sec	-41.9dB
802.11b (CCK), 11 Mb/sec	-41.9dB
802.11g, 54 Mb/sec	-41.6dB
802.11n, 65 Mb/sec	-41.7dB



5.2.2 Radiated Spurious Emissions Measurements In the Restricted Bands

5.2.2.1 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

5.2.2.2 Procedures

Radiated measurements were performed in a 32ft. x 20ft. x 14ft. high shielded enclosure. 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 final open field emission tests were then manually performed over the frequency range of 30MHz to 25GHz.

- 1) 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 axis 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 re-measured 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 peak reading was converted to an average reading by adding the duty cycle correction factor to the peak reading. These readings must be no greater than the limits specified in 15.209(a).

5.2.2.3 Results

Preliminary radiated emissions plots with the EUT transmitting at low frequency, middle frequency, and high frequency with the WRT Compact Radome Antenna, Model No.: ANT-2.4-WRT-SMA, are shown on pages 33 through 128. Final radiated emissions data are presented on data pages 129 through 152. 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 Figure 3 through Figure 6.

Preliminary radiated emissions plots with the EUT transmitting at low frequency, middle frequency, and high frequency with the Molex antenna, Model No.: 47950-0001, are shown on pages 153 through 248. Final radiated emissions data are presented on data pages 249 through 272. 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 Figure 7 through Figure 10.

5.2.3 Band Edge Compliance

5.2.3.1 Requirements

Per 15.247(d), the radiated emissions which fall in the restricted band beginning at 2483.5 MHz must meet the general limits of 15.209(a).

5.2.3.2 Procedures

- 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.

5.2.3.3 Results

Pages 273 through 280 show the band-edge compliance results with the EUT transmitting at low frequency,



middle frequency, and high frequency with the WRT Compact Radome Antenna, Model No.: ANT-2.4-WRT-SMA. As can be seen from the data, the radiated emissions at the high end band edge are within the general limits.

Pages 281 through 288 show the band-edge compliance results with the EUT transmitting at low frequency, middle frequency, and high frequency with the Molex antenna, Model No.: 47950-0001. As can be seen from the data, the radiated emissions at the high end band edge are within the general limits.

6 CONCLUSIONS

It was determined that the SPX Genfare WiFi Module, M/N: A29100-0001, with Radome antenna, M/N: ANT-2.4-WRT-SMA, digital modulation transceiver, did fully meet the radiated emissions in restricted bands 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 and the radiated emissions in restricted bands requirements of the Industry Canada Radio Standards Specification, RSS-210 Annex 8, for transmitters.

It was also determined that the SPX Genfare WiFi Module, M/N: A29100-0001, with Molex antenna, M/N: 47950-0001, did fully meet the radiated emissions in restricted bands 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 and the radiated emissions in restricted bands requirements of the Industry Canada Radio Standards Specification, RSS-210 Annex 8, for transmitters with the following modifications:

- The output power from the EUT was reduced to 37.6mW when in the transmit at 2462MHz (Ch. 11), 802.11g, 54 Mb/sec mode
- The output power from the EUT was reduced to 40mW when in the transmit at 2412MHz (Ch. 1), 802.11b, DSSS, 2 Mb/sec

7 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.

8 ENDORSEMENT DISCLAIMER

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



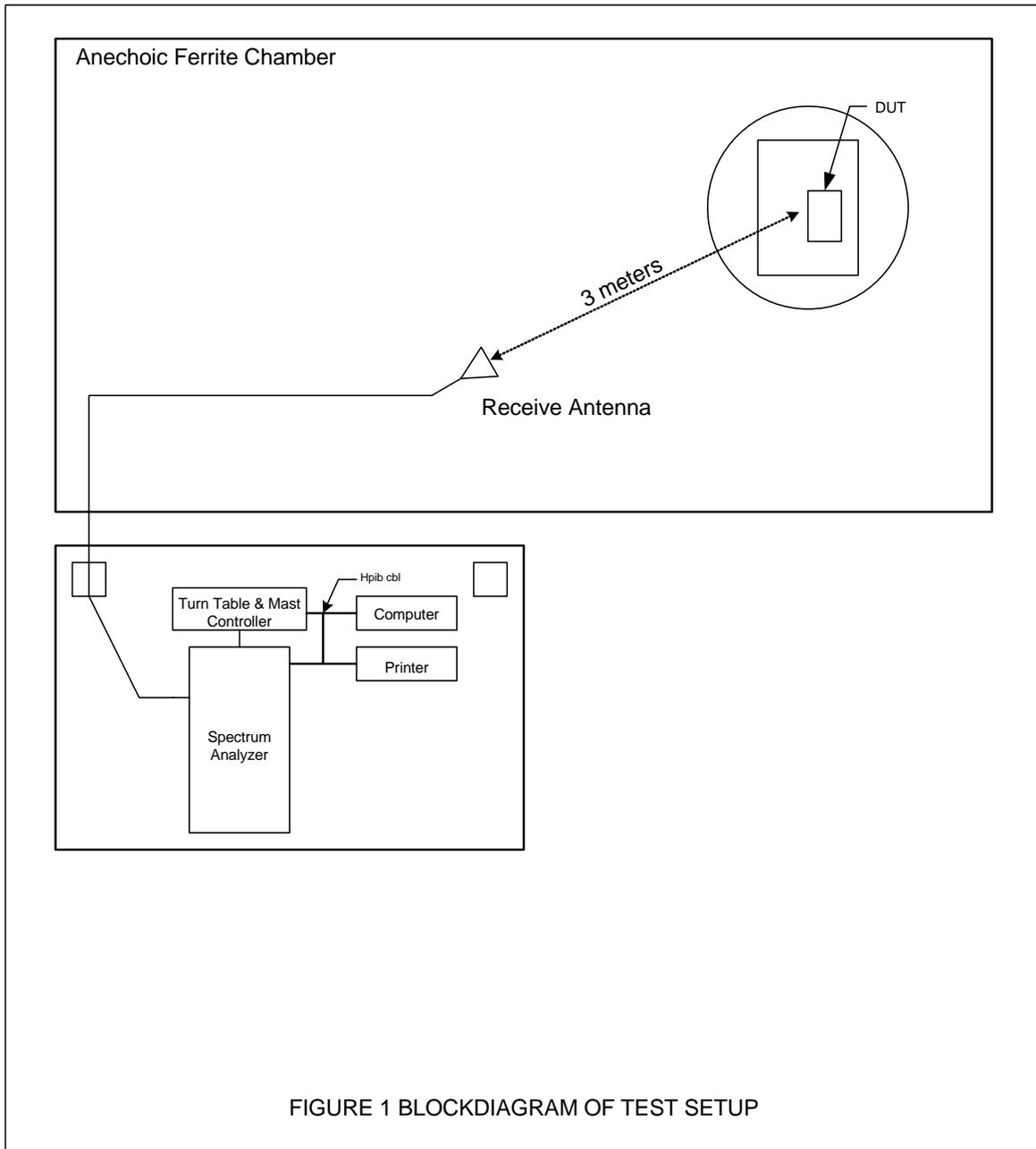
9 EQUIPMENT LIST

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
APW3	PREAMPLIFIER	PLANAR ELECTRONICS	PE2-35-120-5R0-10-12	PL2924	1GHZ-20GHZ	10/8/2013	10/8/2014
CDX7	COMPUTER	ELITE	WORKSTATION			N/A	
CDY0	WORKSTATION	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
NWQ1	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS-LINDGREN	3117	66655	1GHZ-18GHZ	3/11/2014	3/11/2015
RBB0	EMI TEST RECEIVER 20HZ TO 40 GHZ.	ROHDE & SCHWARZ	ESIB40	100250	20 HZ TO 40GHZ	3/11/2014	3/11/2015
SES1	24VDC POWER SUPPLY	P TRANS	FS-32024-1M	002	18-27VDC	NOTE 1	
XOB2	ADAPTER	HEWLETT PACKARD	K281C,012	09407	18-26.5GHZ	NOTE 1	
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.



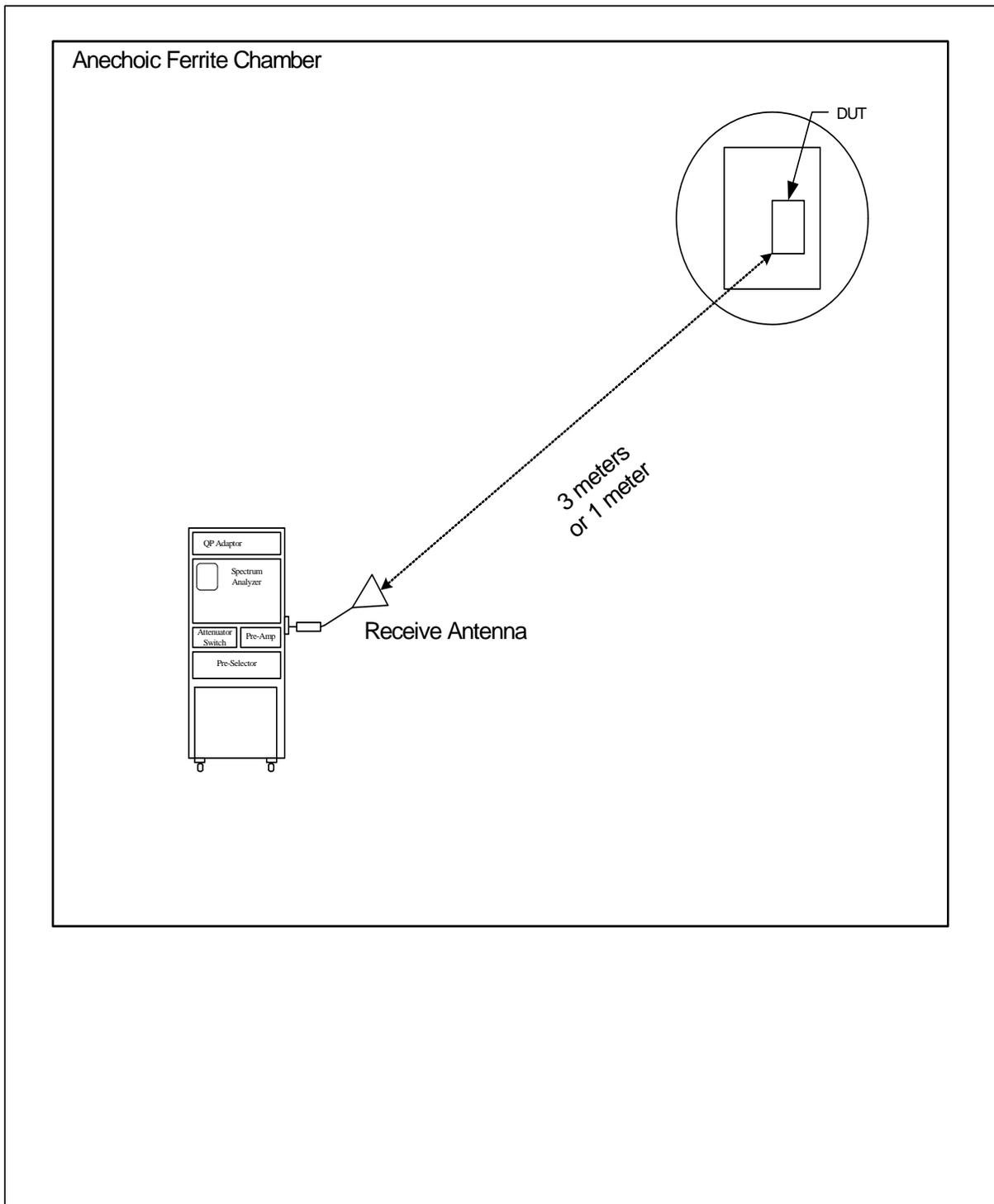


Figure 2: BLOCK DIAGRAM OF TEST SETUP FOR RADIATED EMISSIONS ABOVE 18GHZ

Figure 3



Test Setup for Radiated Emissions – Radome Antenna

Figure 4

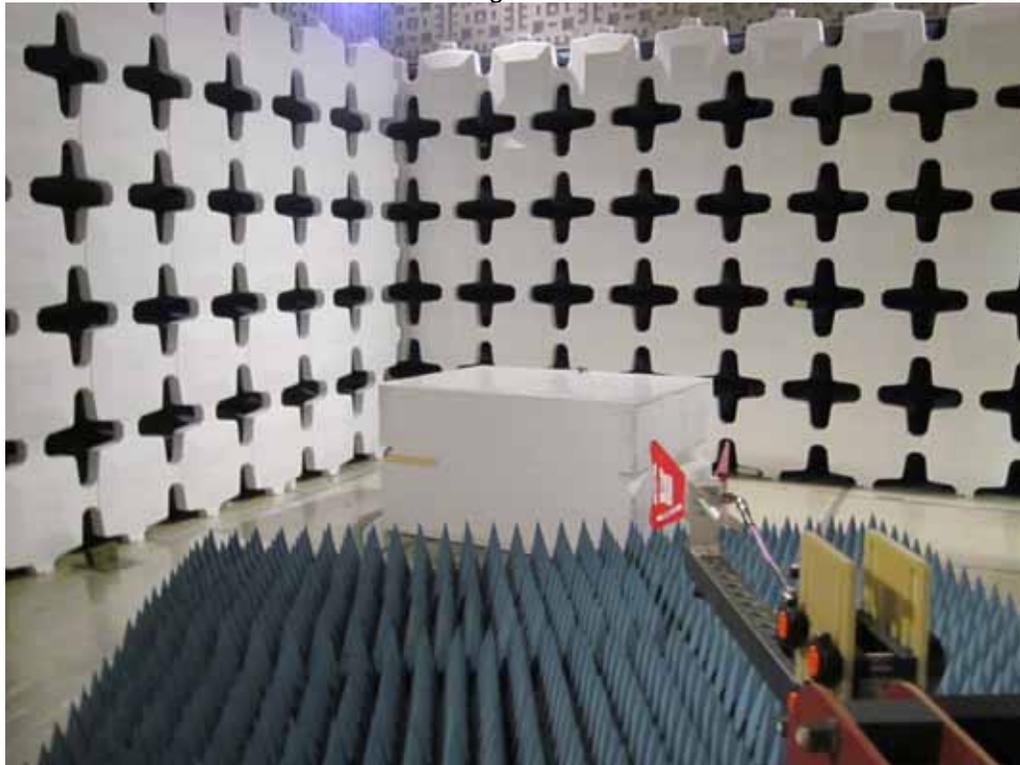


Test Setup for Radiated Emissions, Radome Antenna – 30MHz to 1GHz, Horizontal Polarization

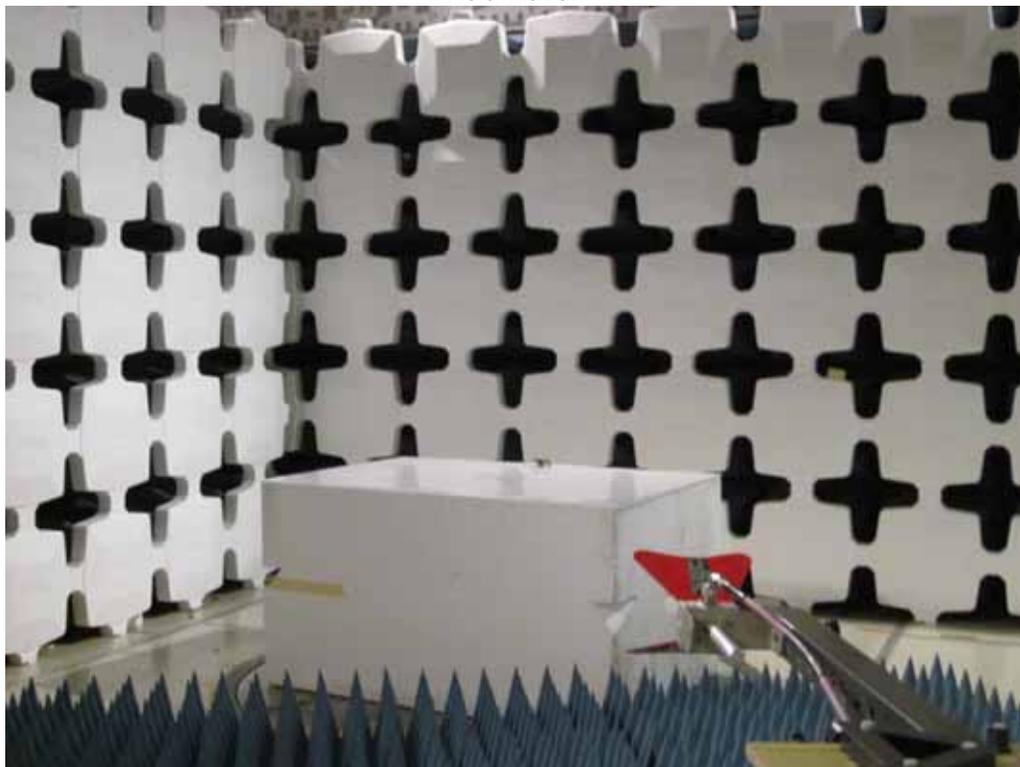


Test Setup for Radiated Emissions, Radome Antenna – 30MHz to 1GHz, Vertical Polarization

Figure 5



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



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

Figure 6

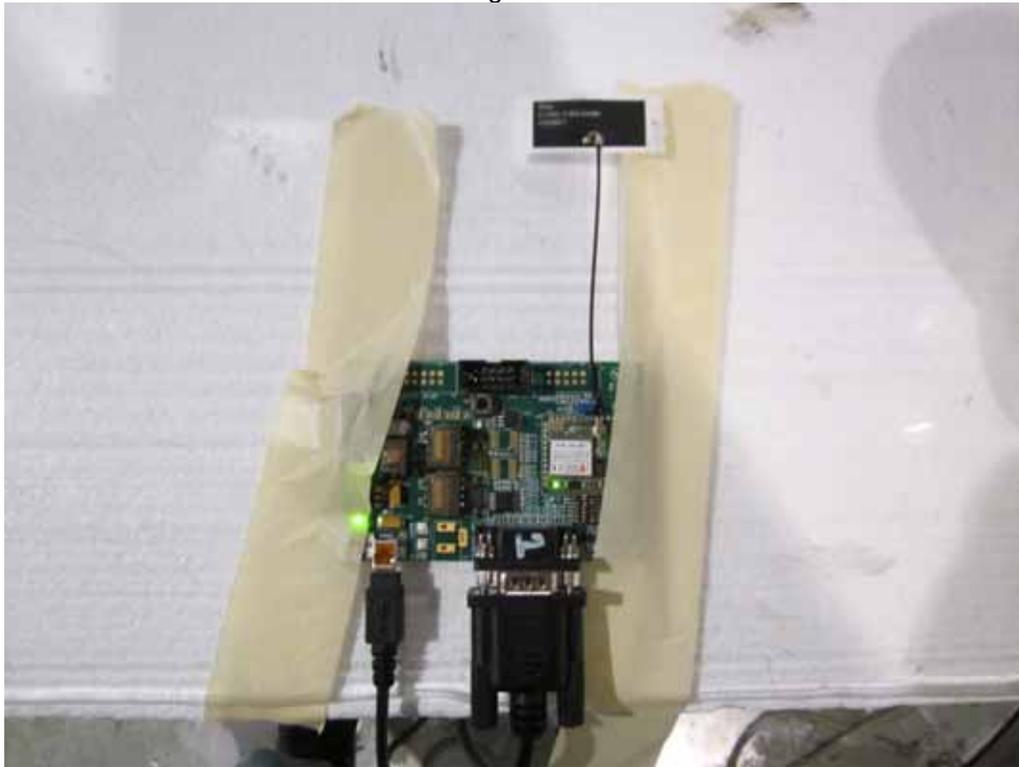


Test Setup for Radiated Emissions, Radome Antenna – 18GHz to 25GHz, Horizontal Polarization



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

Figure 7



Test Setup for Radiated Emissions – Molex Antenna

Figure 8

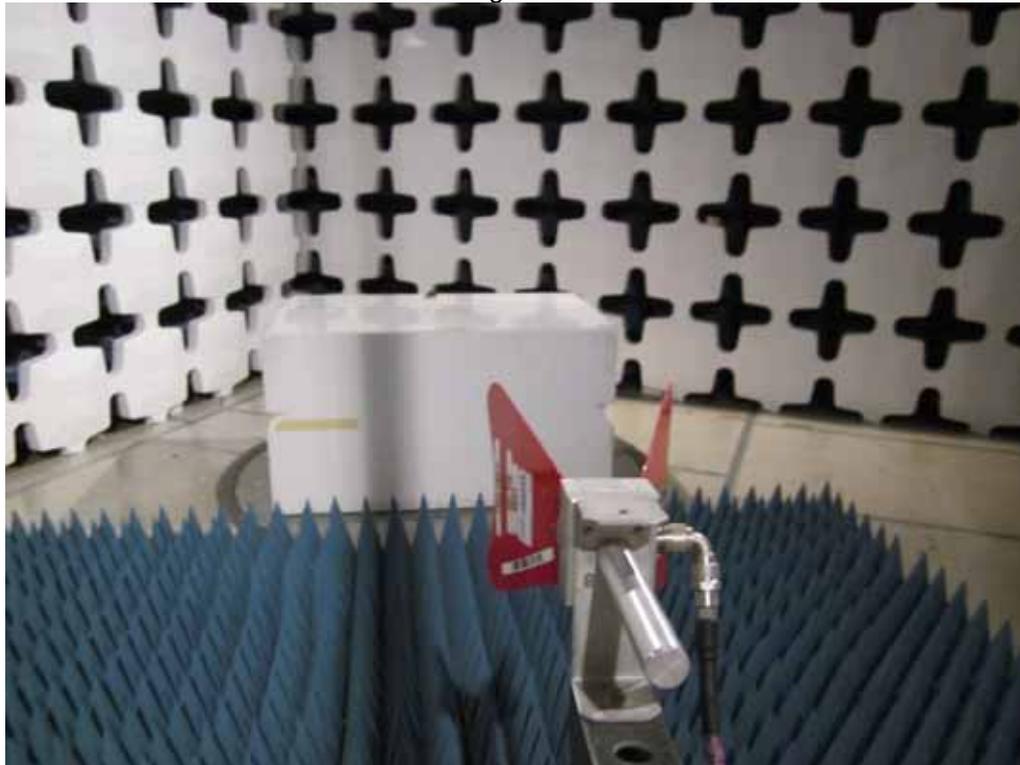


Test Setup for Radiated Emissions, Molex Antenna – 30MHz to 1GHz, Horizontal Polarization

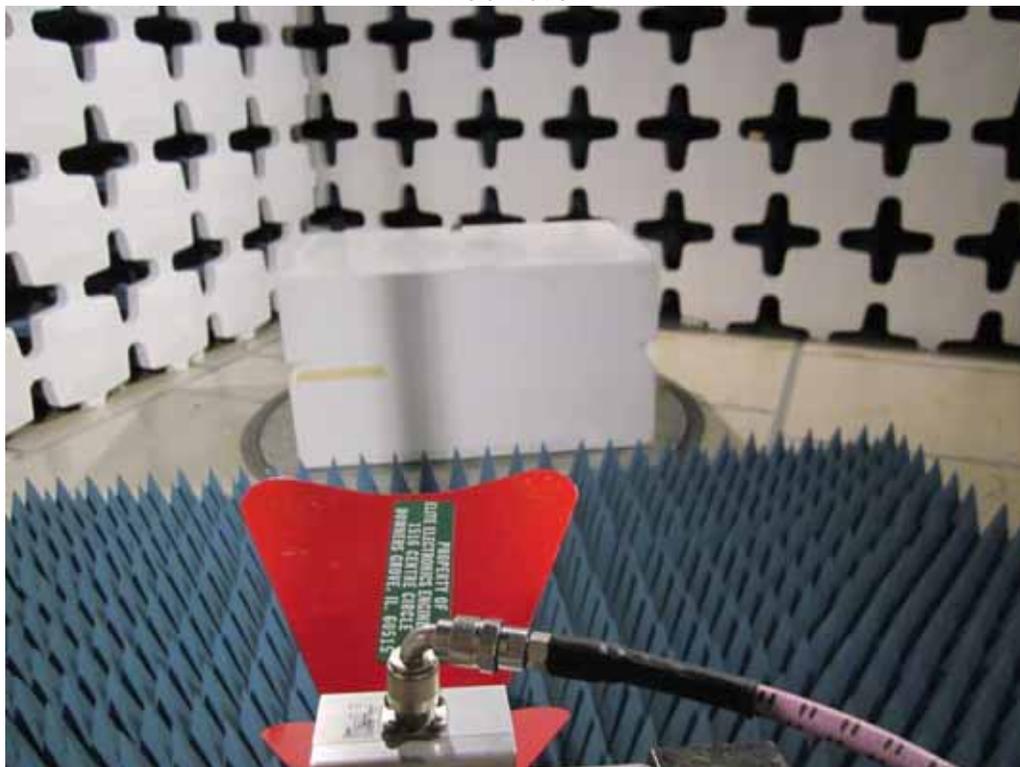


Test Setup for Radiated Emissions, Molex Antenna – 30MHz to 1GHz, Vertical Polarization

Figure 9



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



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

Figure 10



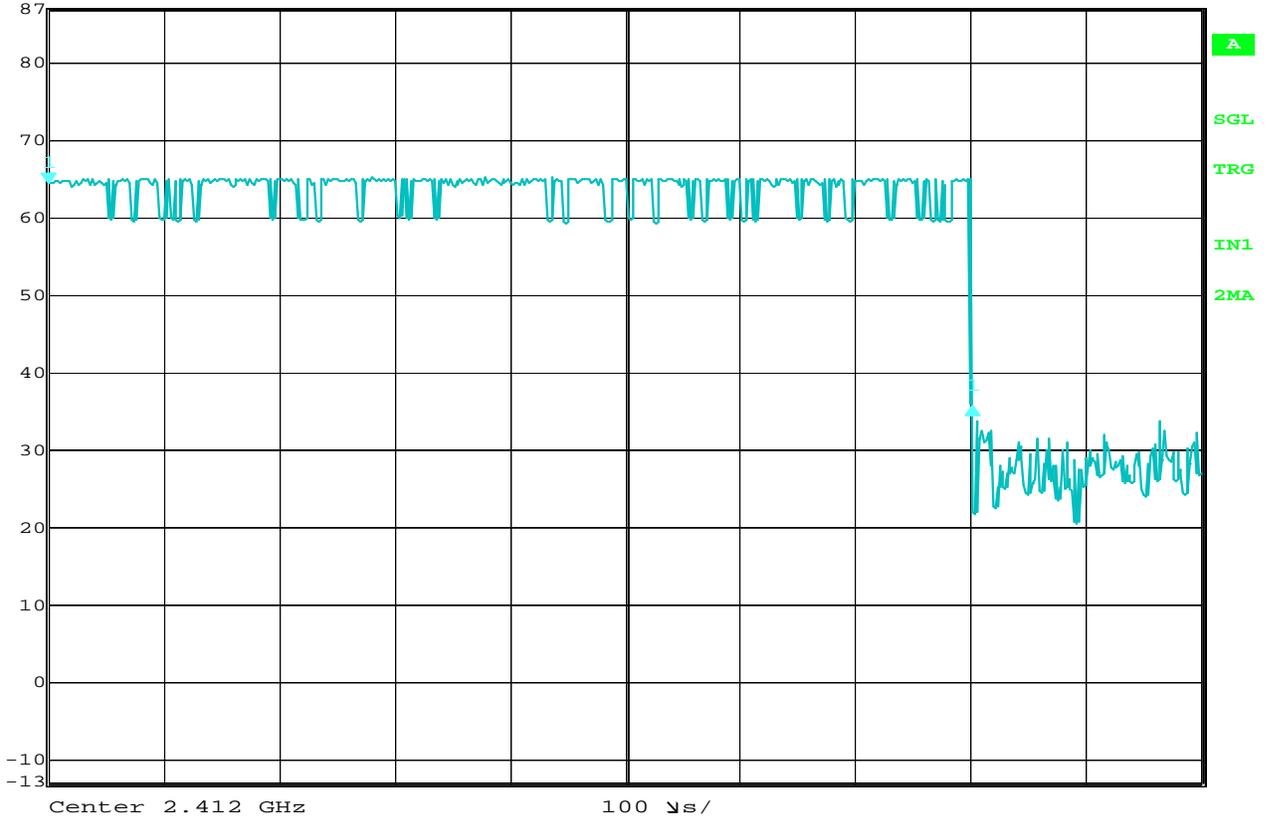
Test Setup for Radiated Emissions, Molex Antenna – 18GHz to 25GHz, Horizontal Polarization



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



Ref Lvl	Delta 1 [T2]	RBW	1 MHz	RF Att	10 dB
87 dBmV	-28.85 dB	VBW	1 MHz		
	801.603206 us	SWT	1 ms	Unit	dBmV



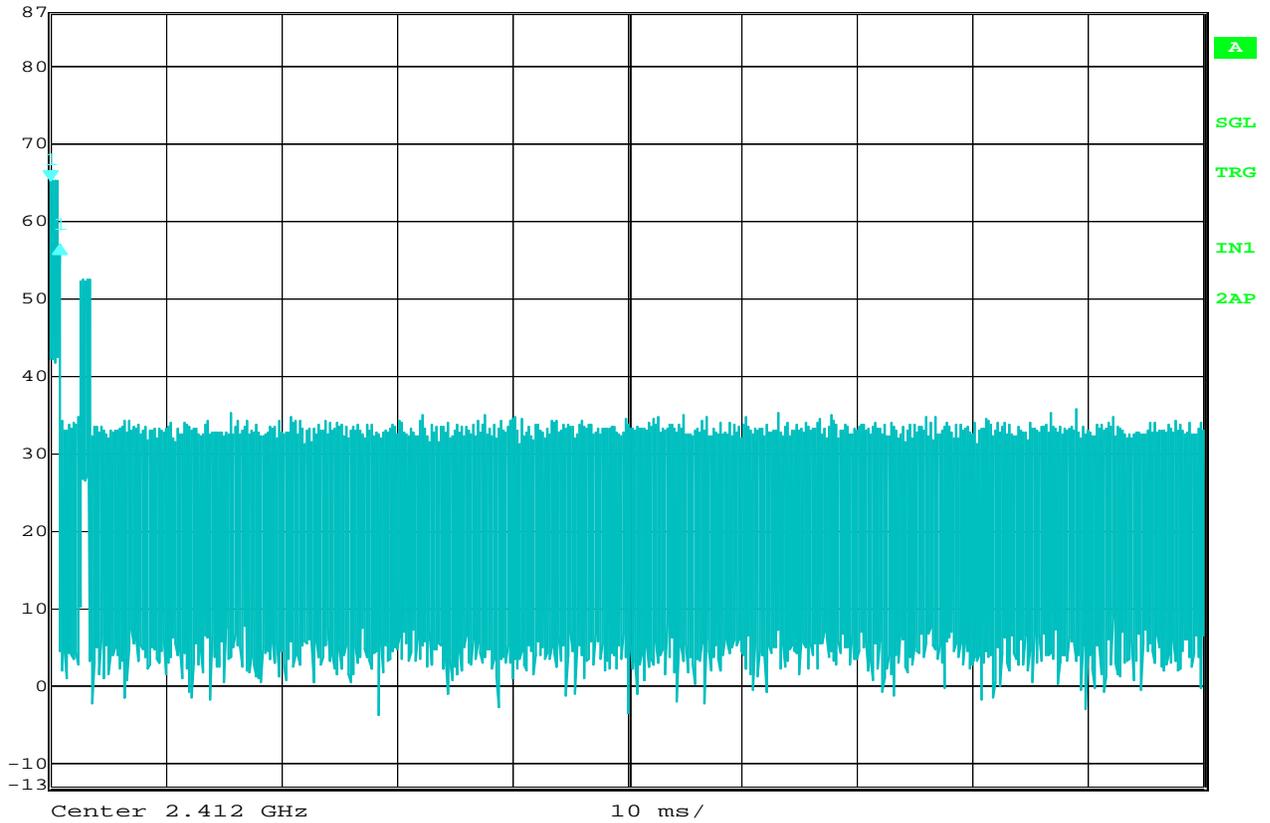
Date: 9.APR.2014 09:24:39

DUTY CYCLE FACTOR

MANUFACTURER	: SPX Genfare
MODEL NUMBER	: WiFi Module, SPX Genfare P/N: A29100-0001
SERIAL NUMBER	: None Assigned
TEST MODE	: Tx @ 2412MHz (Ch. 1) 802.11b, 2Mb/sec (DSSS)
TEST PARAMETERS	: Pulse width = 800musec
EQUIPMENT USED	: RBB0, NWQ1



Delta 1 [T2] RBW 1 MHz RF Att 10 dB
 Ref Lvl -8.20 dB VBW 1 MHz
 87 dBμV 801.603206 μs SWT 100 ms Unit dBμV



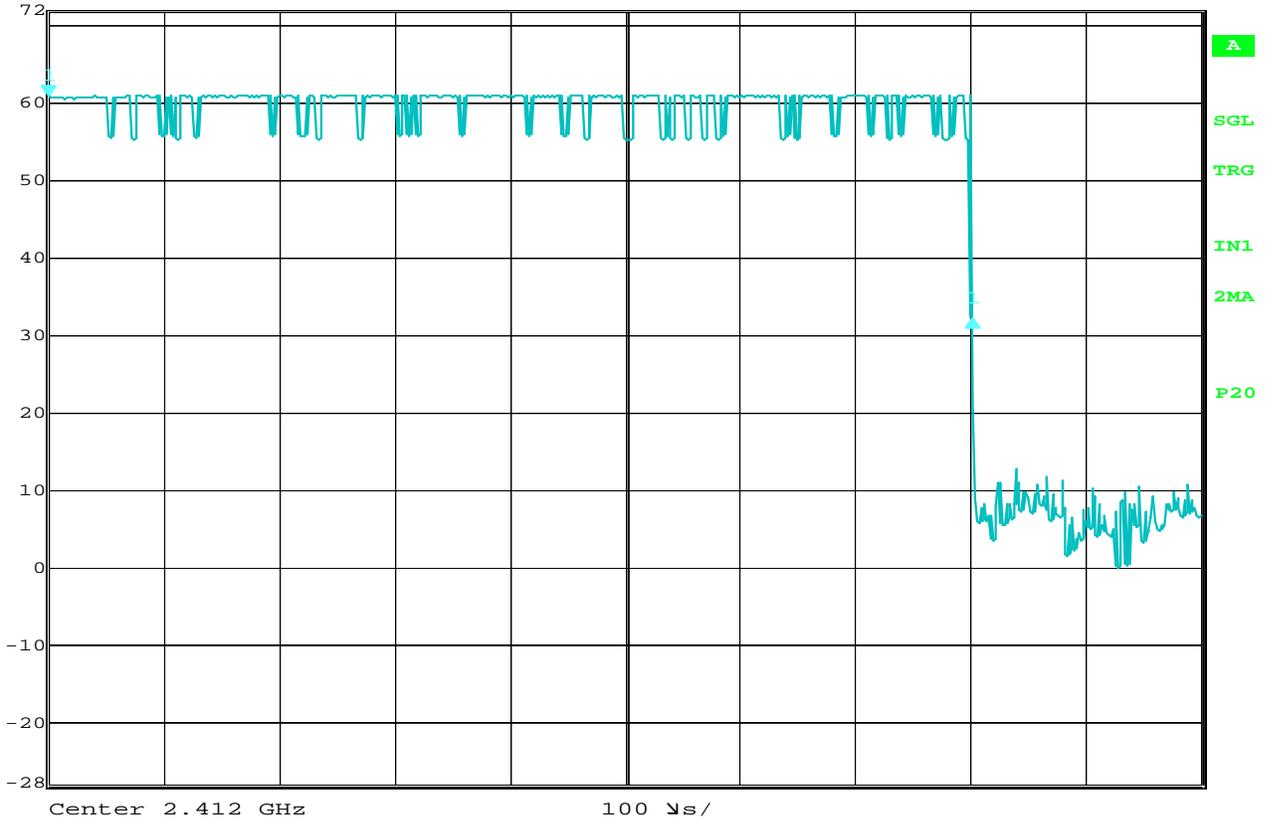
Date: 9.APR.2014 09:28:03

DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11b, 2Mb/sec (DSSS)
 TEST PARAMETER : Duty Cycle = 20 log (pulse width x number of pulses in 100msec)/100msec
 : Duty Cycle = 20 log (800usec x 1)/100msec
 TEST PARAMETERS : Pulse width = -41.9dB
 EQUIPMENT USED : RBB0, NWQ1
 NOTES : Lower pulse is from laptop computer communicating with WiFi module



Delta 1 [T2] RBW 1 MHz RF Att 0 dB
 Ref Lvl -28.82 dB VBW 1 MHz
 72 dBV 801.603206 μ s SWT 1 ms Unit dBV



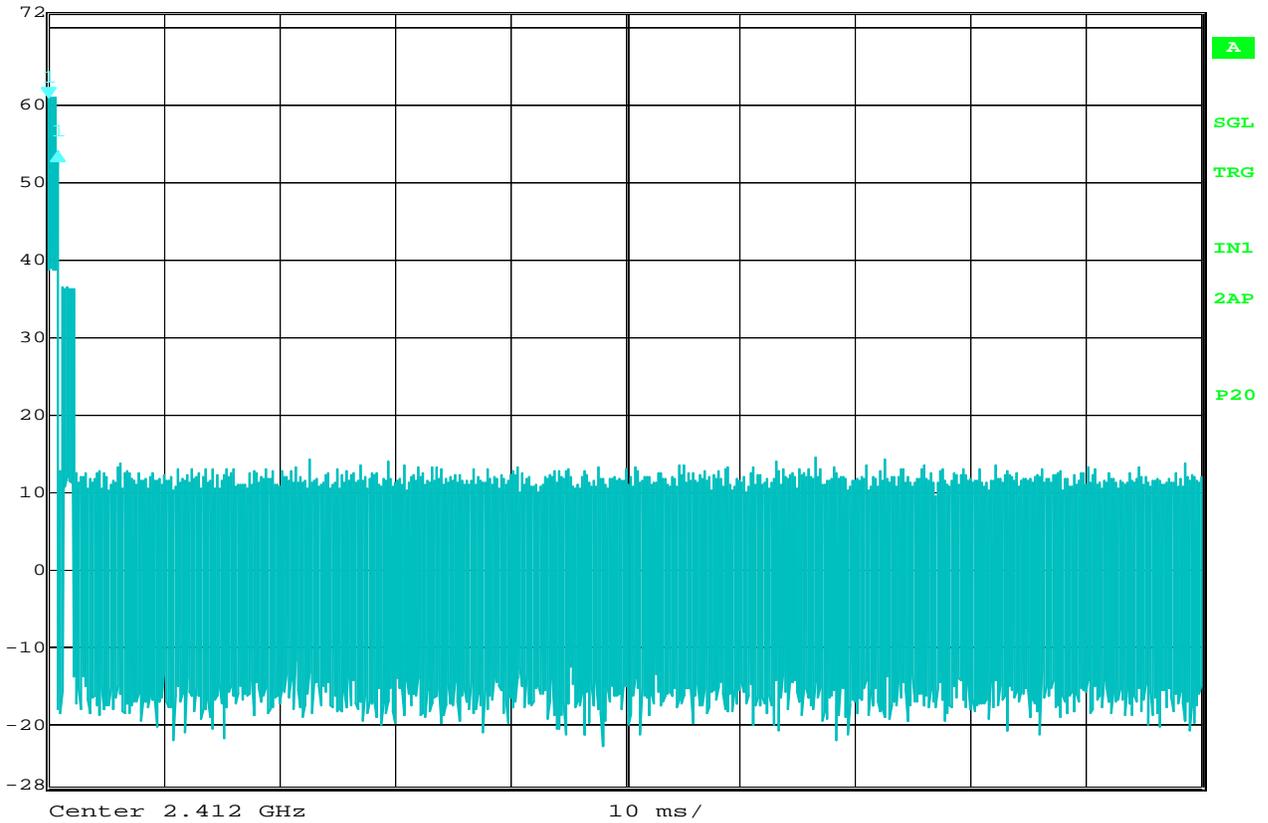
Date: 9.APR.2014 12:13:15

DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11b, CCK 11Mb/sec
 TEST PARAMETER : Pulse Width is 800msec
 EQUIPMENT USED : RBB0, NWQ1
 NOTES :



Delta 1 [T2] RBW 1 MHz RF Att 0 dB
 Ref Lvl -6.92 dB VBW 1 MHz
 72 dBV 801.603206 us SWT 100 ms Unit dBV



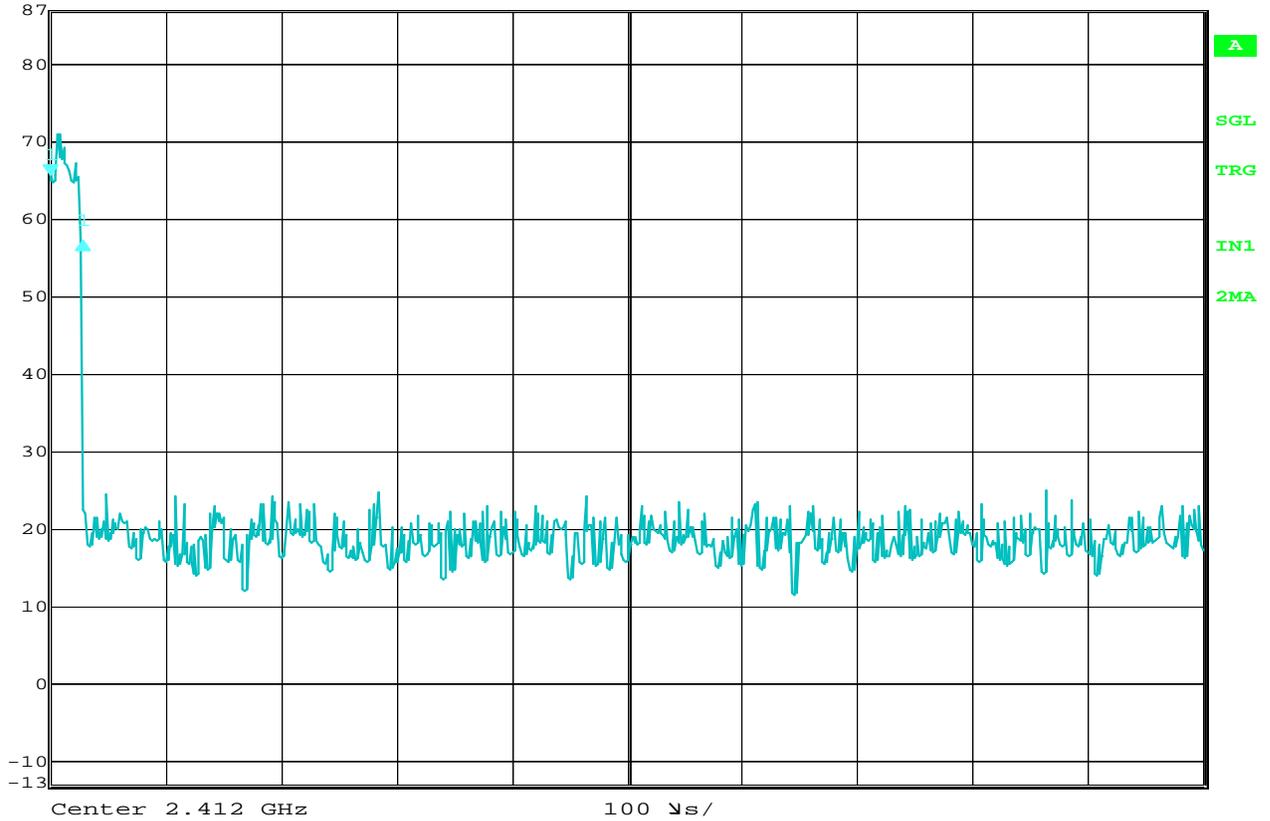
Date: 9.APR.2014 12:15:00

DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11b, CCK 11Mb/sec
 TEST PARAMETER : Duty Cycle = 20 log (pulse width x number of pulses in 100msec)/100msec
 : Duty Cycle = 20 log (800usec x 1)/100msec
 TEST PARAMETERS : Pulse width = -41.9dB
 EQUIPMENT USED : RBB0, NWQ1
 NOTES :



	Delta 1 [T2]	RBW	1 MHz	RF Att	0 dB
Ref Lvl	-8.45 dB	VBW	1 MHz		
87 dB μ V	28.056112 μ s	SWT	1 ms	Unit	dB μ V



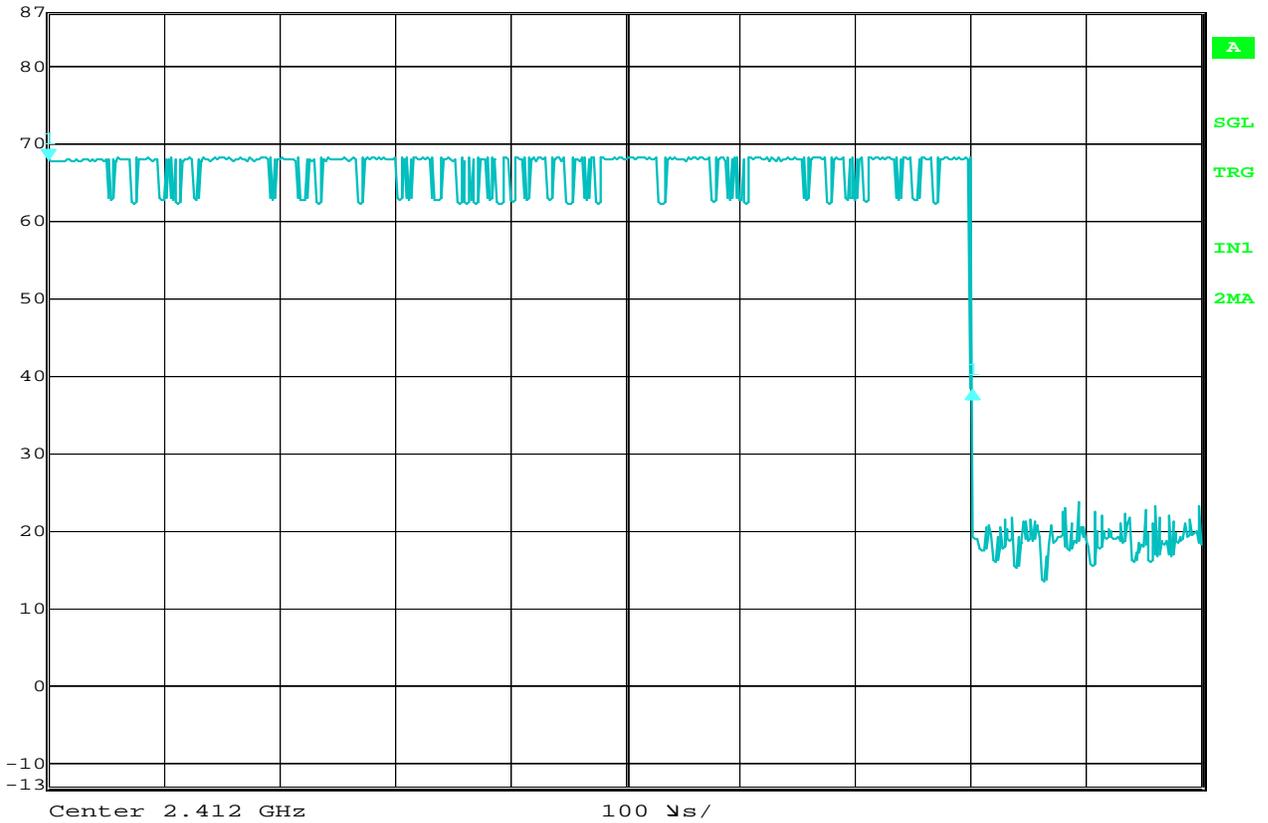
Date: 9.APR.2014 15:05:49

DUTY CYCLE FACTOR

MANUFACTURER	: SPX Genfare
MODEL NUMBER	: WiFi Module, SPX Genfare P/N: A29100-0001
SERIAL NUMBER	: None Assigned
TEST MODE	: Tx @ 2412MHz (Ch. 1) 802.11g, 54Mb/sec
TEST PARAMETER	: Pulse width #1 = 28.1usec
EQUIPMENT USED	: RBB0, NWQ1
NOTES	:



Delta 1 [T2] RBW 1 MHz RF Att 0 dB
 Ref Lvl -29.68 dB VBW 1 MHz
 87 dBV 801.603206 μ s SWT 1 ms Unit dBV



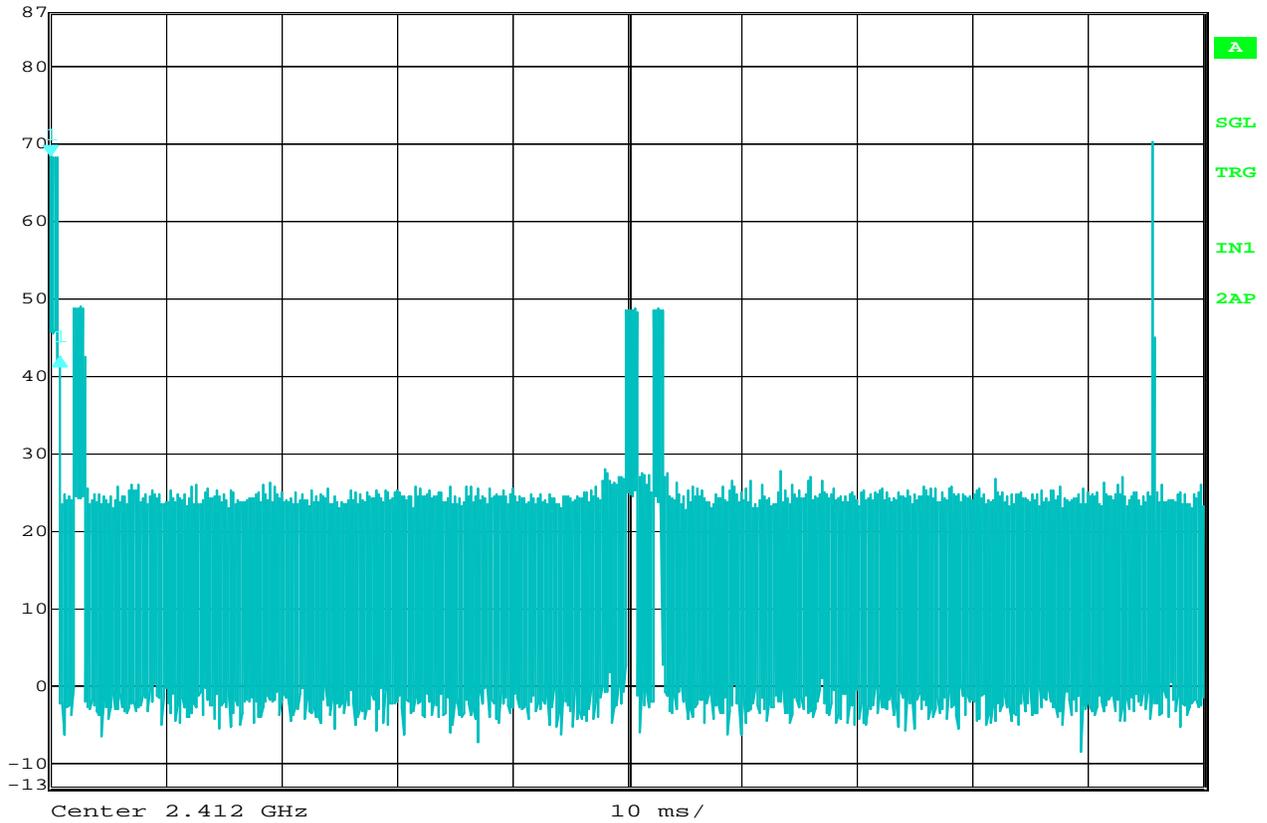
Date: 9.APR.2014 15:06:58

DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11g, 54Mb/sec
 TEST PARAMETER : Pulse width #2 = 801.6usec
 EQUIPMENT USED : RBB0, NWQ1
 NOTES :



Delta 1 [T2] RBW 1 MHz RF Att 0 dB
 Ref Lvl -26.12 dB VBW 1 MHz
 87 dBμV 801.603206 μs SWT 100 ms Unit dBμV



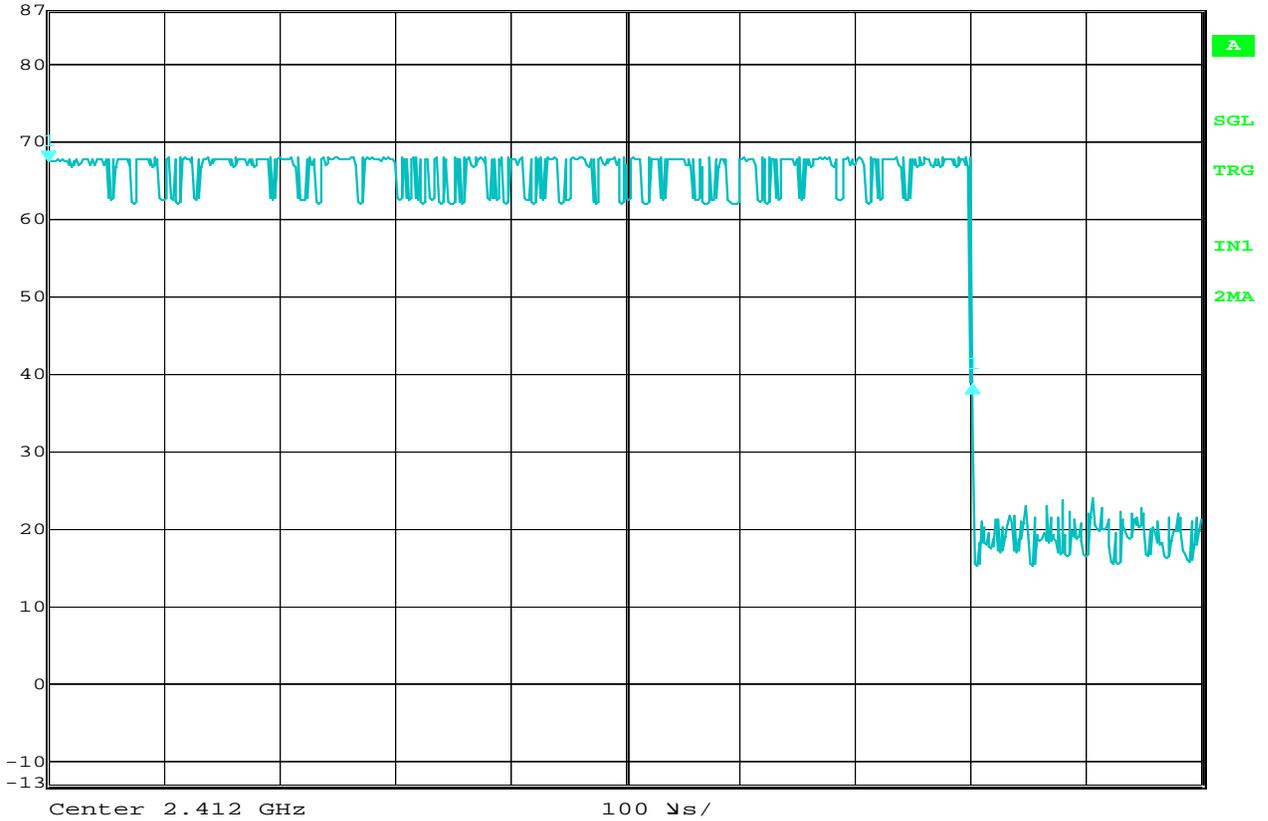
Date: 9.APR.2014 15:09:22

DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11g, 54Mb/sec
 TEST PARAMETER : Duty cycle factor = $20 \log ((\text{pulse width \#1} \times \# \text{ pulses}) + (\text{pulse width \#2} \times \# \text{ pulses}))/100\text{msec}$
 : Duty cycle factor = $20 \log ((801.6\text{usec} \times 1)) + (28.1\text{usec} \times 1))/100\text{msec}$
 : Duty Cycle factor = -41.6dB
 EQUIPMENT USED : RBB0, NWQ1
 NOTES : Lower amplitude pulses are from the PC that is communicating with the WiFi Module



Ref Lvl	Delta 1 [T2]	RBW	1 MHz	RF Att	0 dB
87 dBμV	-28.69 dB	VBW	1 MHz		
	801.603206 μs	SWT	1 ms	Unit	dBμV



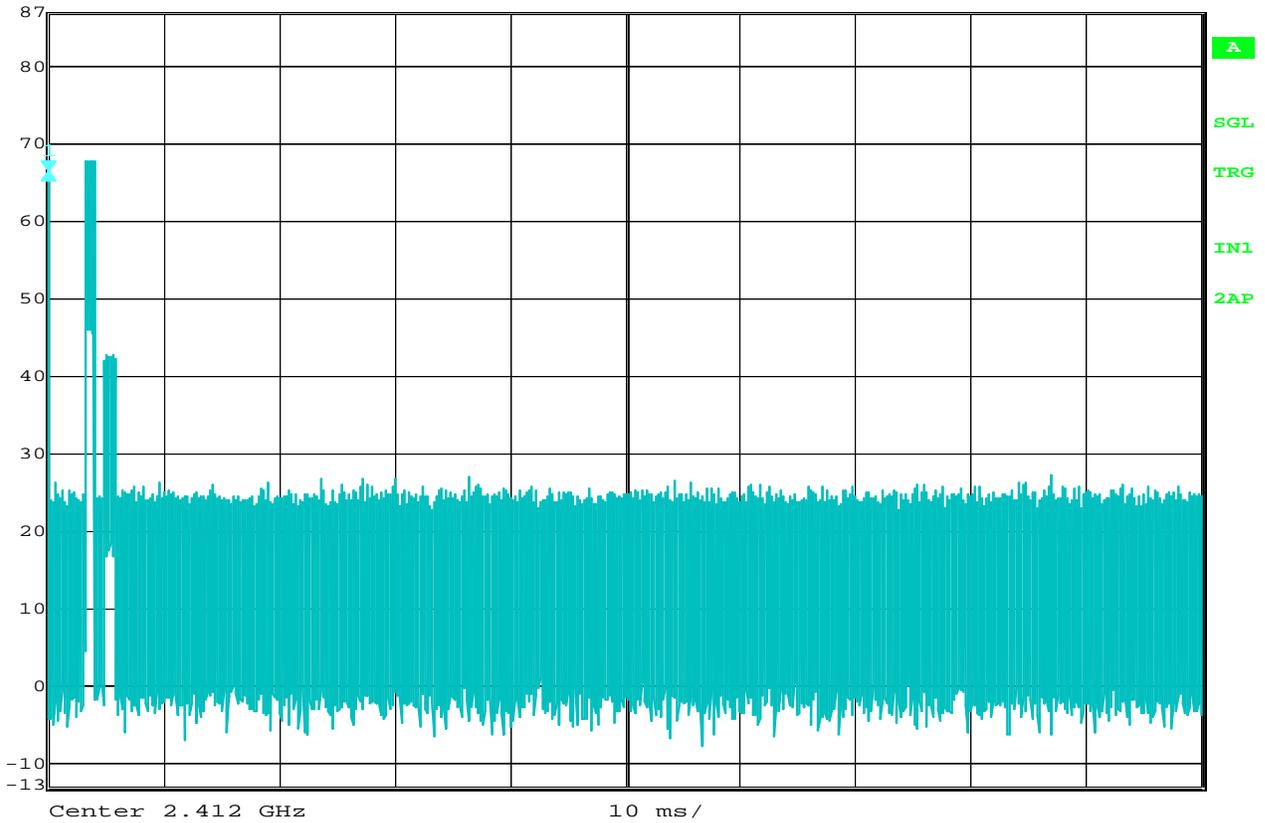
Date: 9.APR.2014 15:41:26

DUTY CYCLE FACTOR

MANUFACTURER	: SPX Genfare
MODEL NUMBER	: WiFi Module, SPX Genfare P/N: A29100-0001
SERIAL NUMBER	: None Assigned
TEST MODE	: Tx @ 2412MHz (Ch. 1) 802.11n, 65Mb/sec
TEST PARAMETER	: Pulse #1 width = 801.6usec
EQUIPMENT USED	: RBB0, NWQ1
NOTES	:



Delta 1 [T2] RBW 1 MHz RF Att 0 dB
 Ref Lvl 0.00 dB VBW 1 MHz
 87 dBV 21.643287 us SWT 100 ms Unit dBV



Date: 9.APR.2014 15:40:10

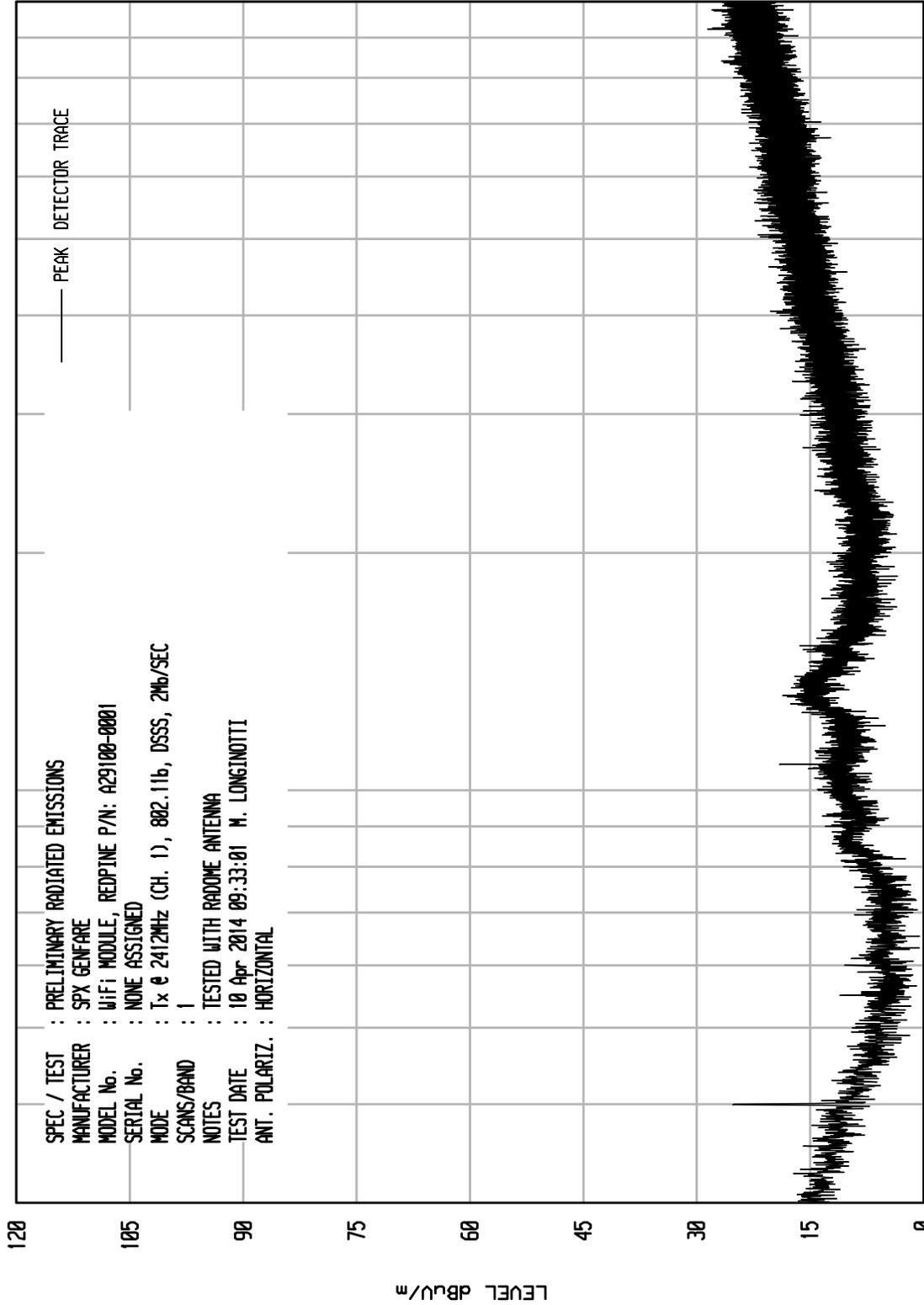
DUTY CYCLE FACTOR

MANUFACTURER : SPX Genfare
 MODEL NUMBER : WiFi Module, SPX Genfare P/N: A29100-0001
 SERIAL NUMBER : None Assigned
 TEST MODE : Tx @ 2412MHz (Ch. 1) 802.11n, 65Mb/sec
 TEST PARAMETER : Duty Cycle Factor = $20 \times \log \left(\frac{\text{pulse \#1 width} \times \# \text{ pulses} + (\text{pulse \#2 width} \times \# \text{ pulses})}{100\text{msec}} \right)$
 : Duty Cycle Factor = $20 \times \log \left(\frac{(21.64\text{usec} \times 1) + (801.6\text{usec} \times 1)}{100\text{msec}} \right)$
 : Duty Cycle Factor = -41.7dB
 EQUIPMENT USED : RBB0, NWQ1
 NOTES :

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UNIV RCU ENI RUN 58

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:33:01 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

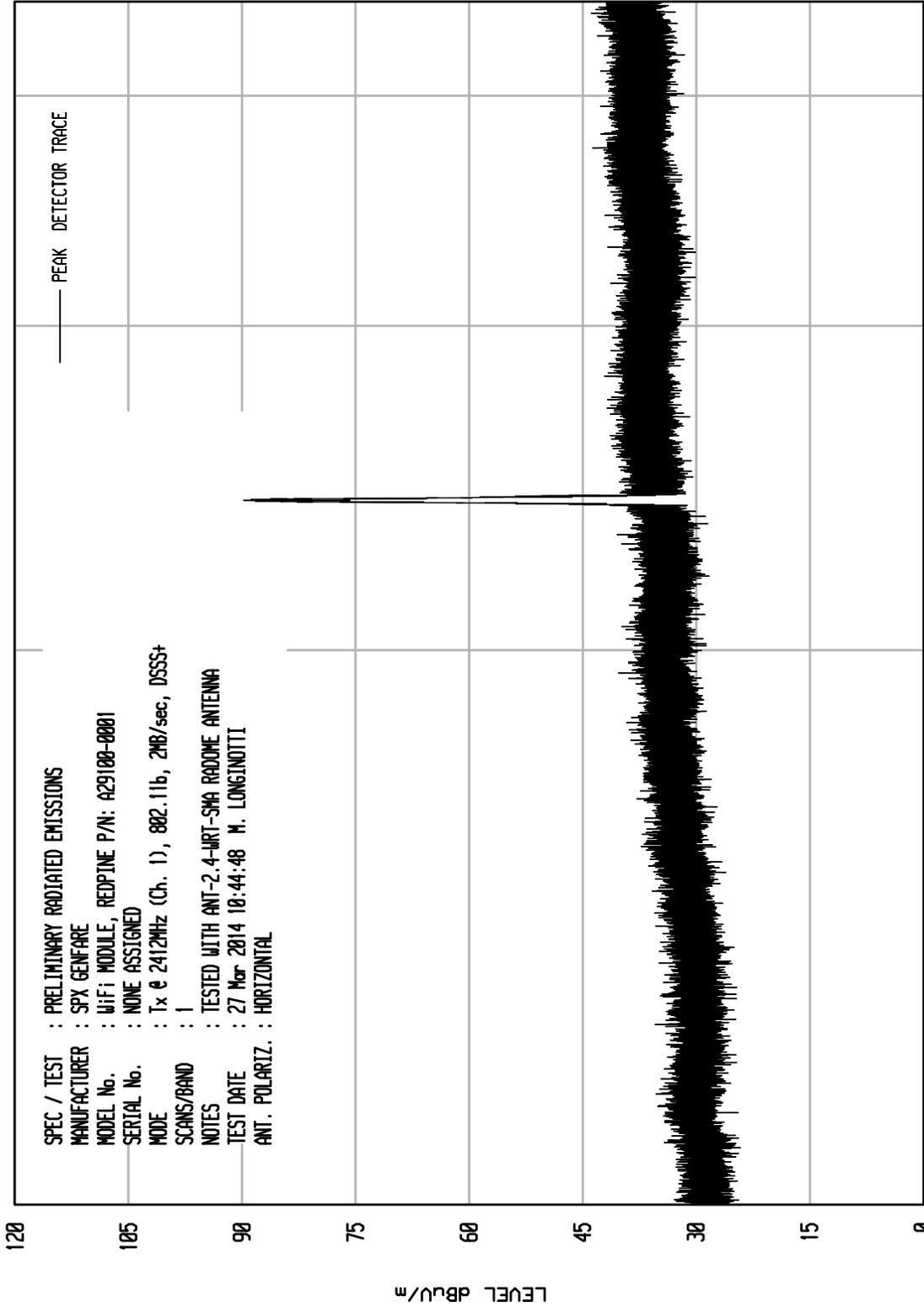


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UNIV RCU ENI RUN 1

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, 2MB/sec, DSSS+
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 10:44:48 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

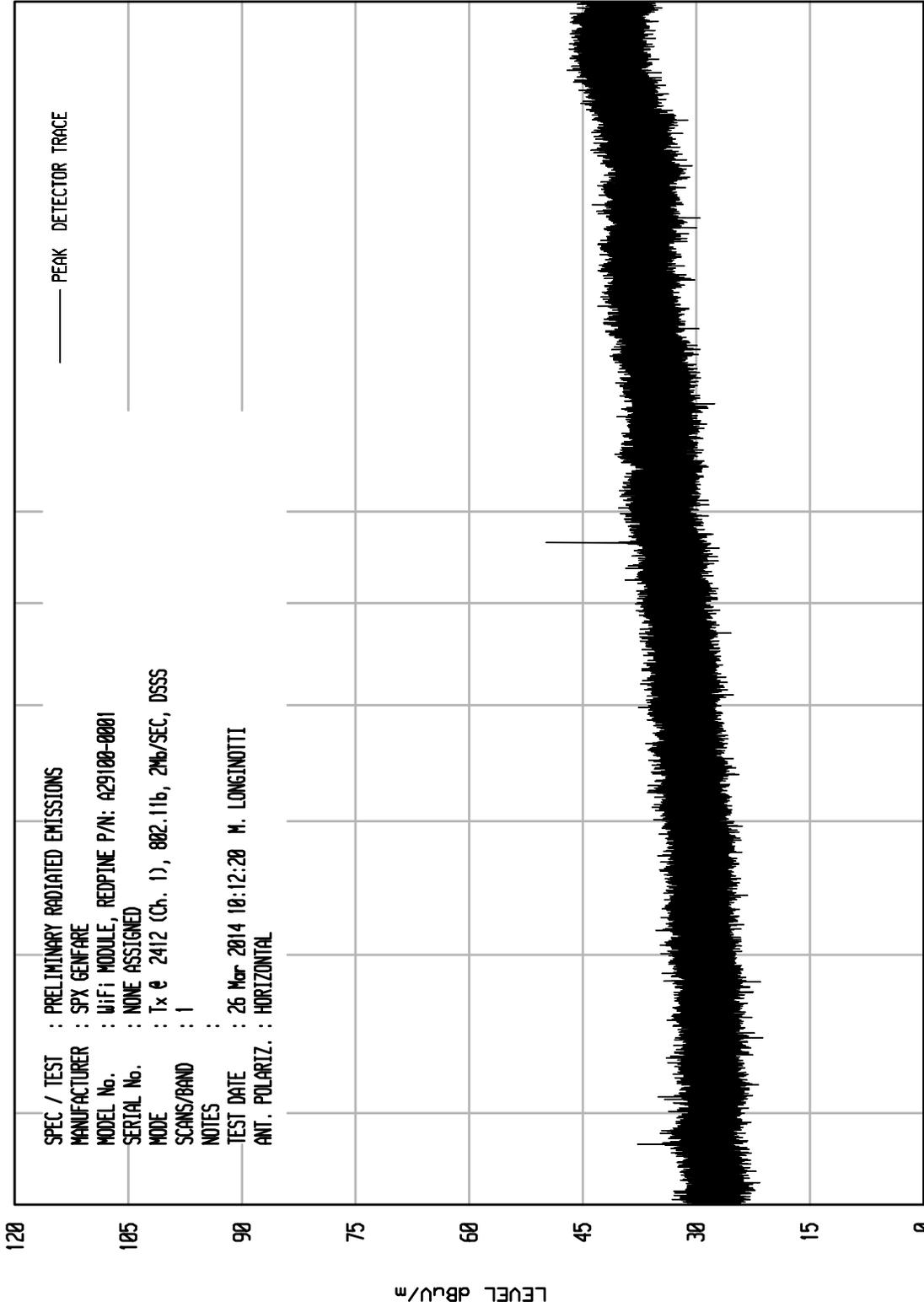
START = 1000

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UNIV RCV EMI RUN 3

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11b, 2Mbps/SEC, DSSS
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 10:12:20 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 18000

10000
FREQUENCY MHz

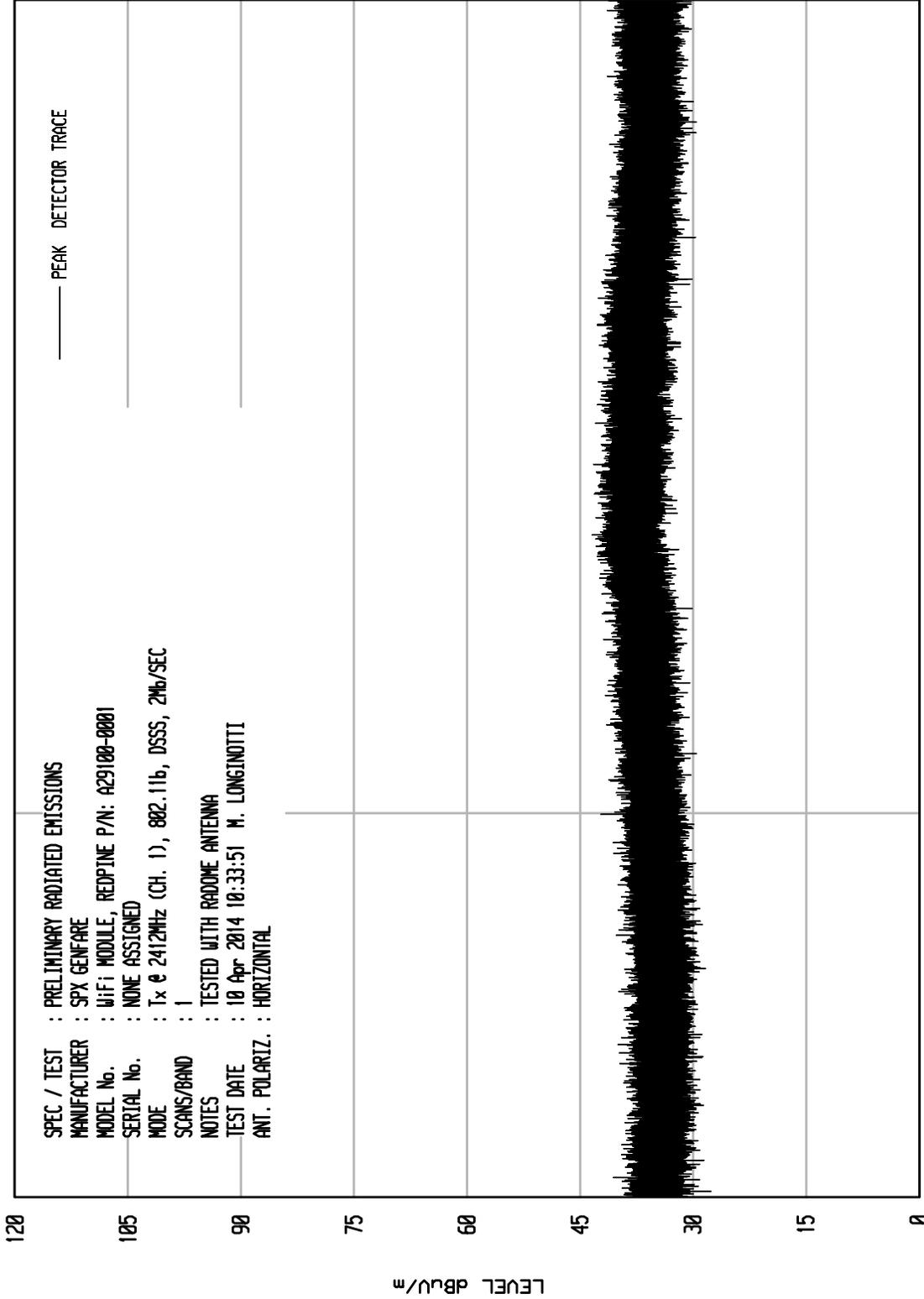
START = 4500

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UNIV RCV EMI RUN 2

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:33:51 M. LONGIUNOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

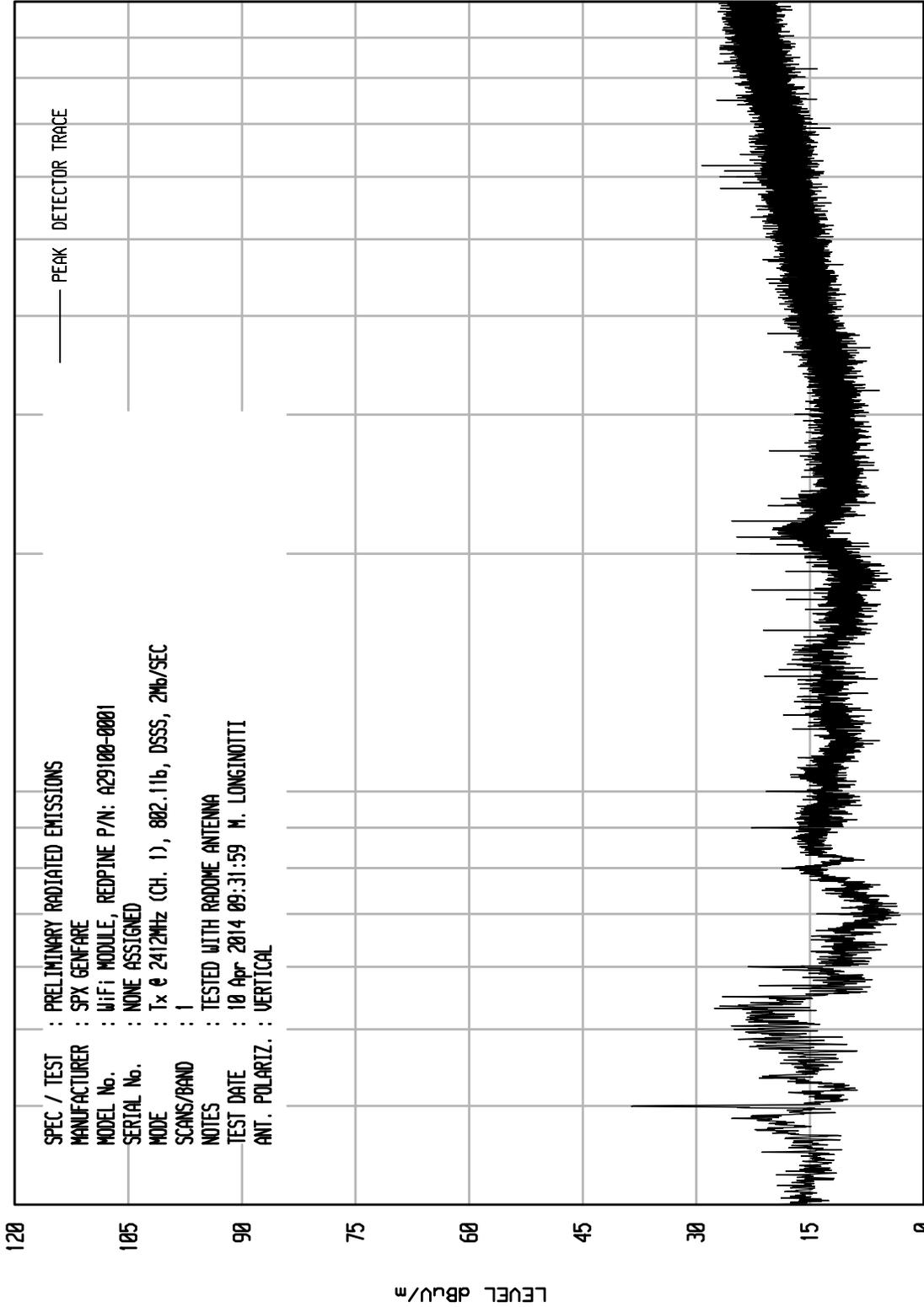


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UNIU RCJ ENI RUN 57

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120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

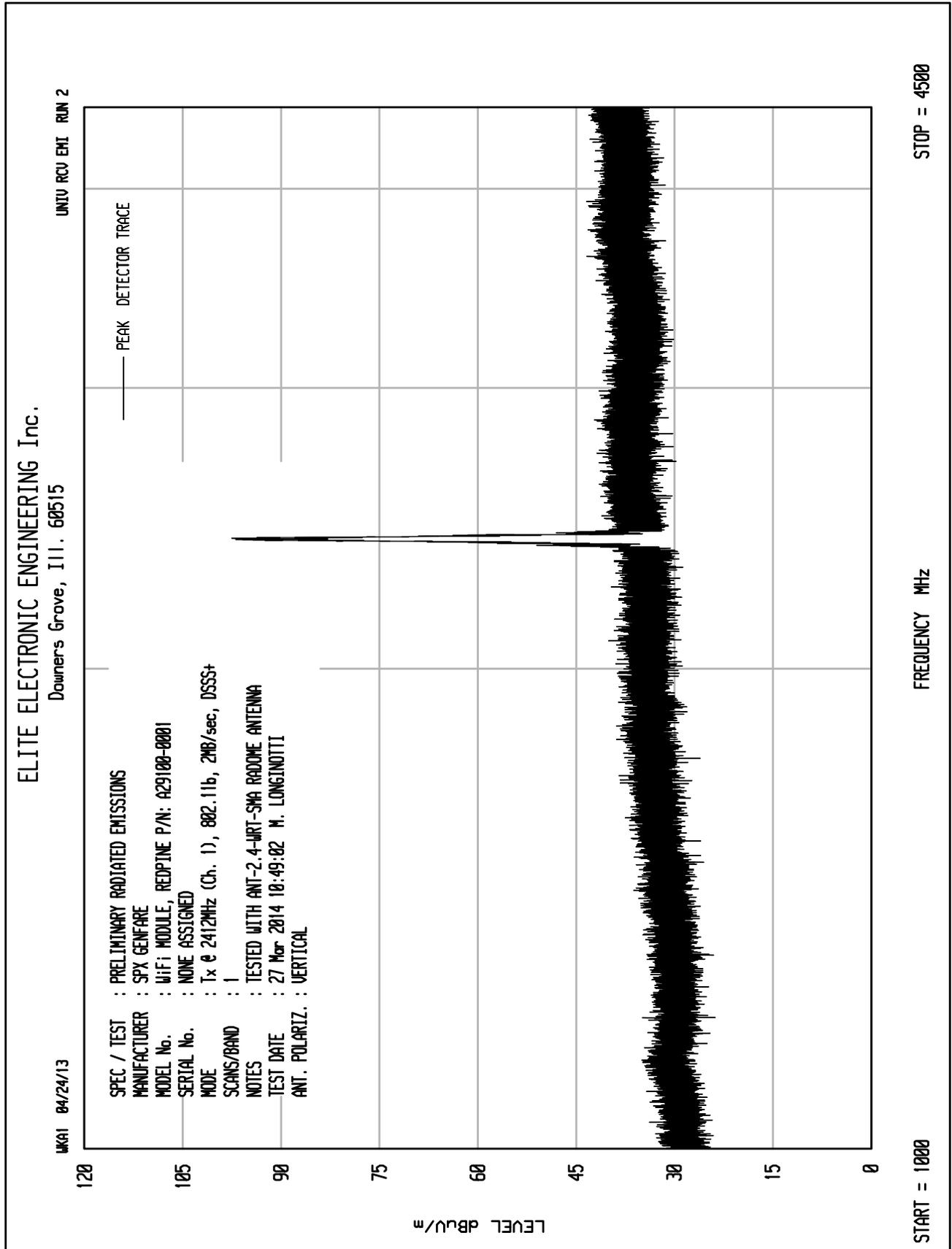
MODE : Tx @ 2412MHz (CH. 1), 802.11b, DSSS, 2Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:31:59 M. LONGINOTTI

ANT. POLARIZ. : VERTICAL



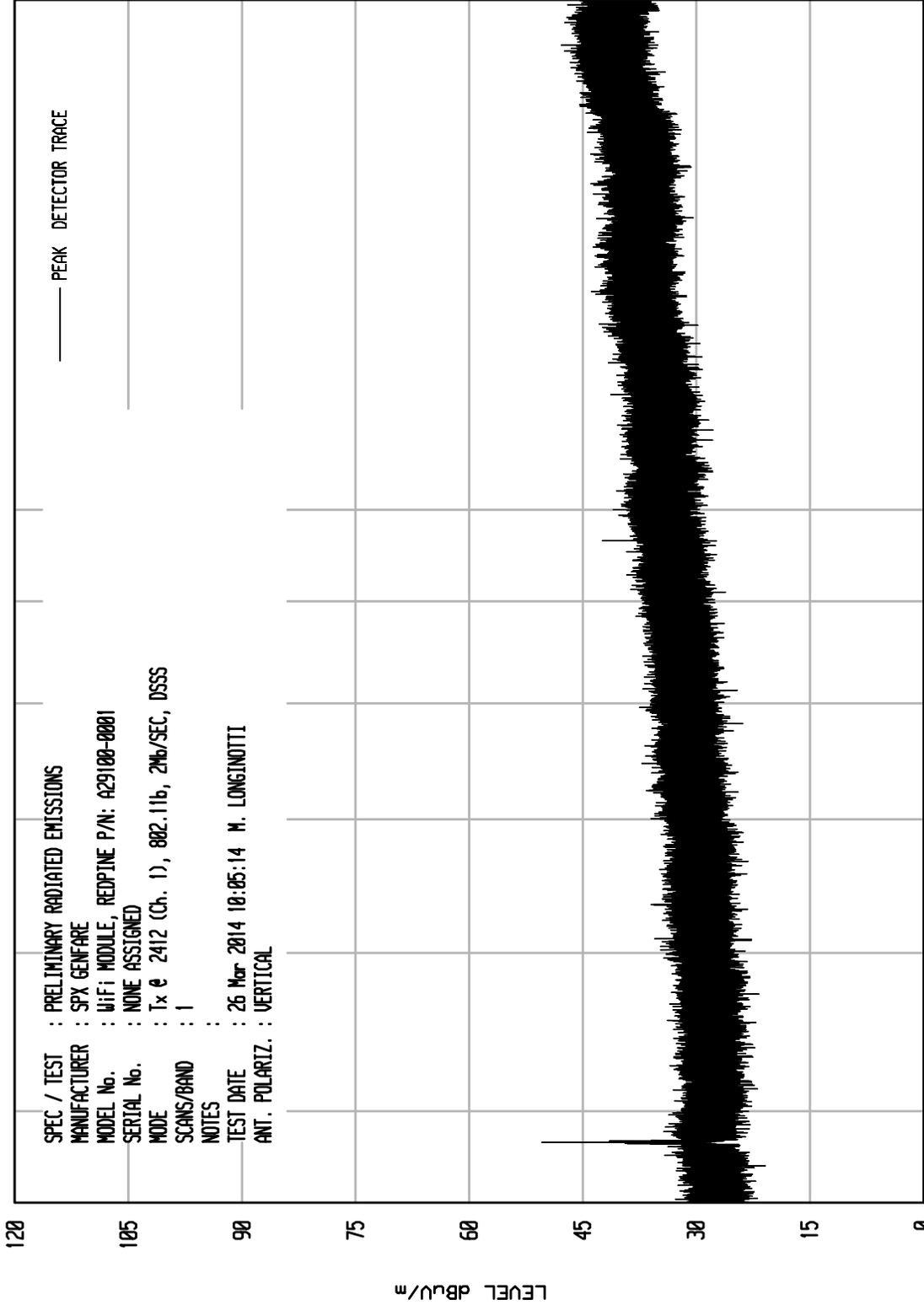


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UNIV RCV ENI RUN 2

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STOP = 18000

10000
FREQUENCY MHz

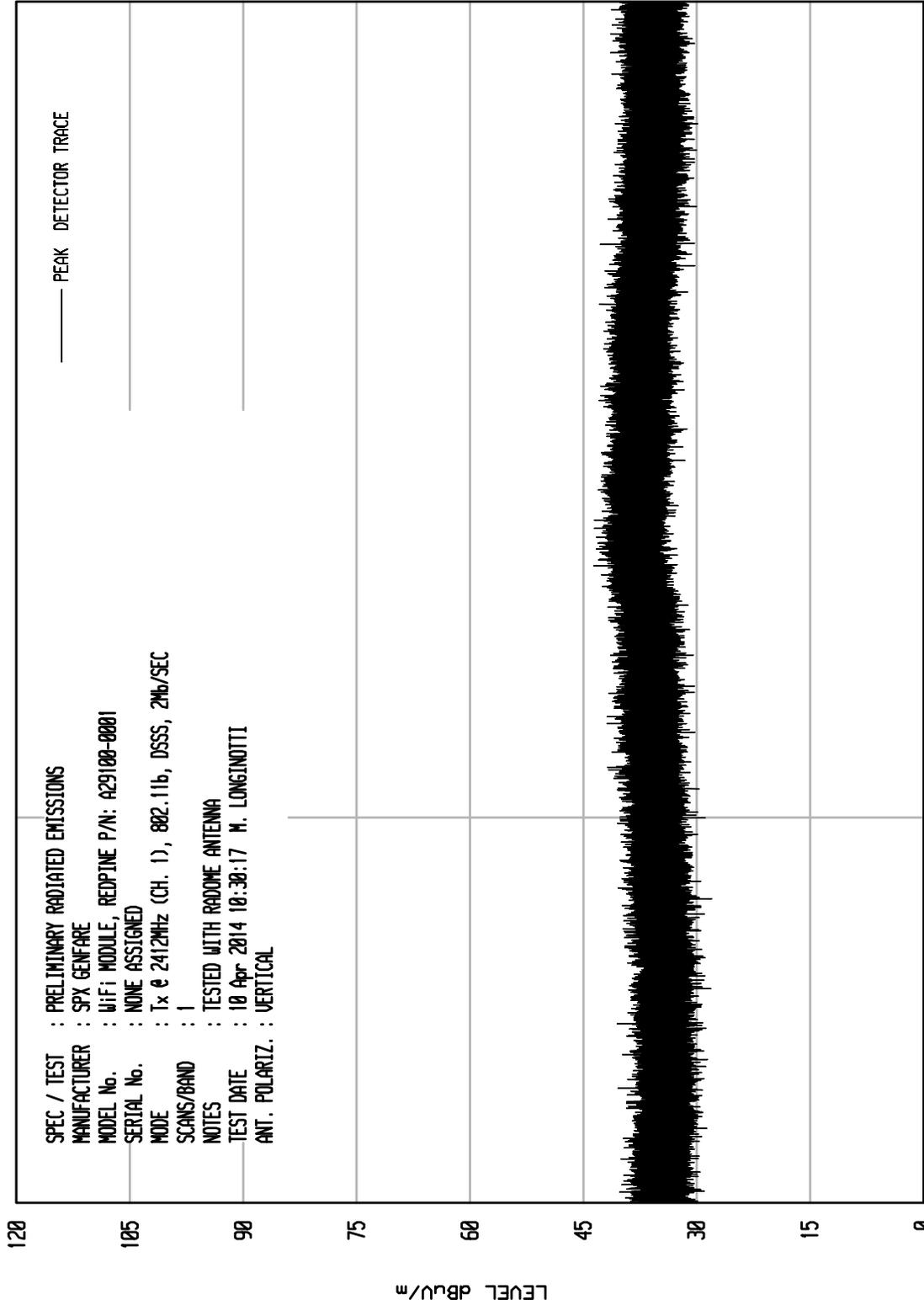
START = 4500

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UNIV RCV EMI RUN 1

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:30:17 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

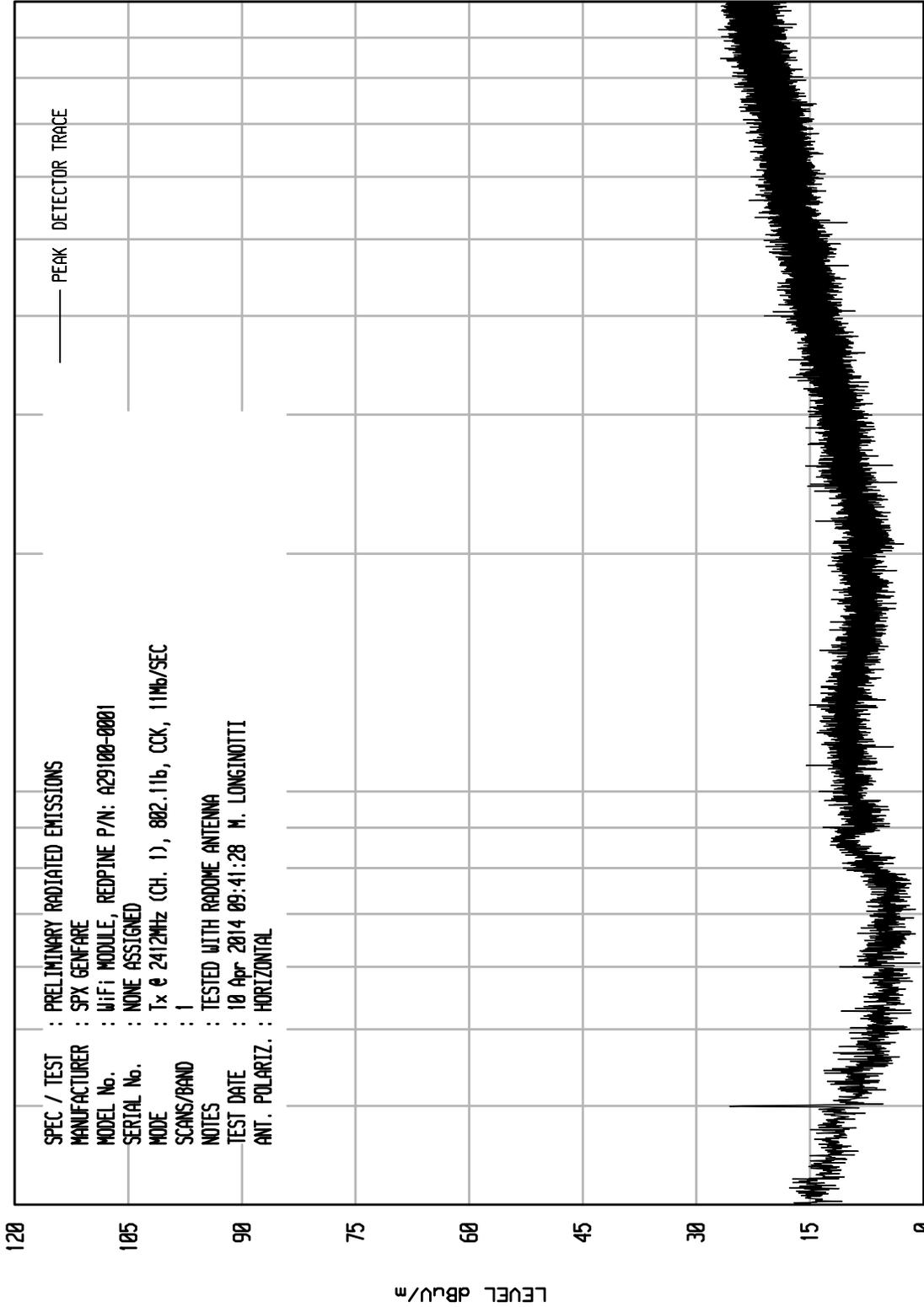
FREQUENCY MHz

START = 18000

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UNIU RCJ ENI RUN 64

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120

105

90

75

60

45

30

15

0

LEVEL dBu/m

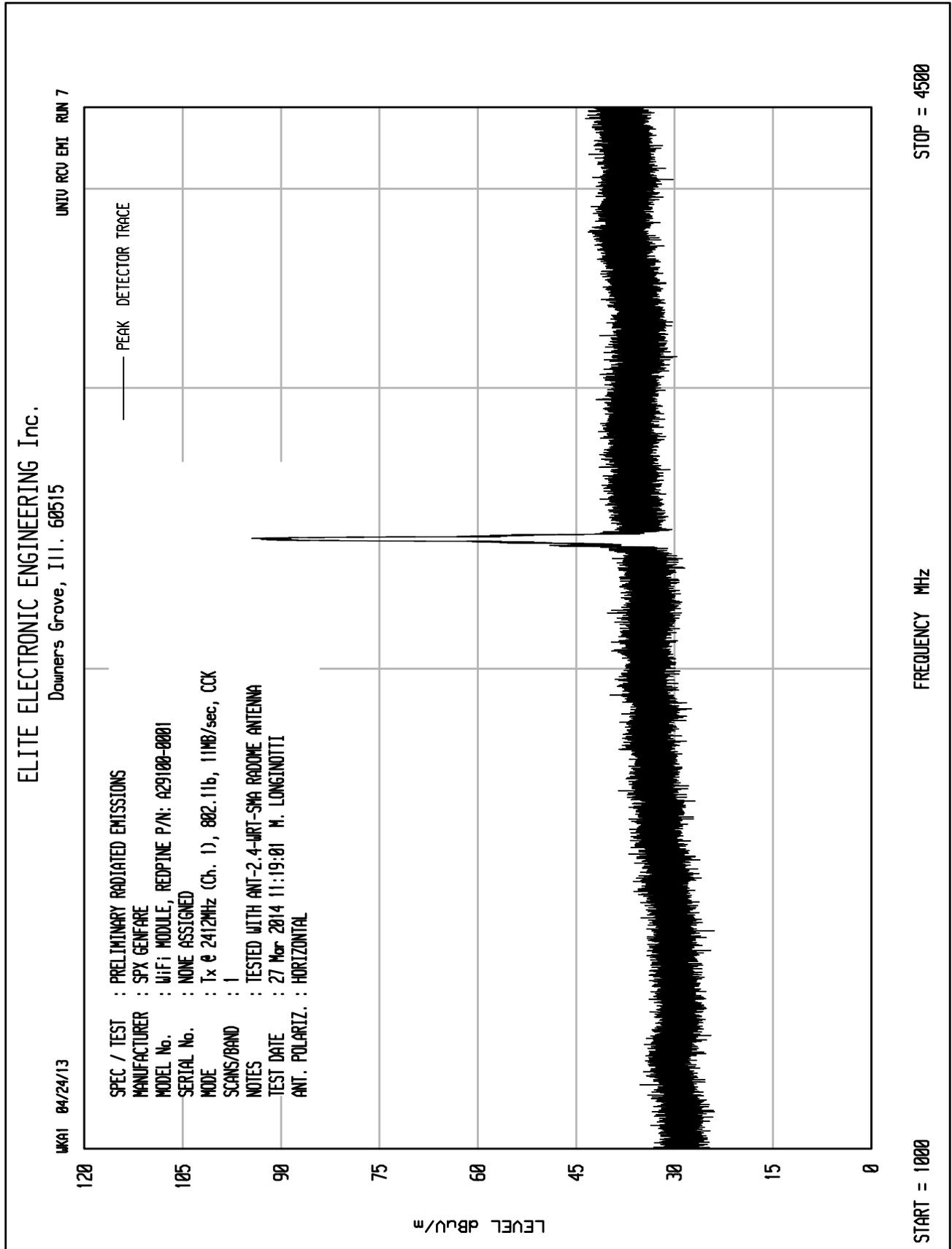
100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:41:28 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL



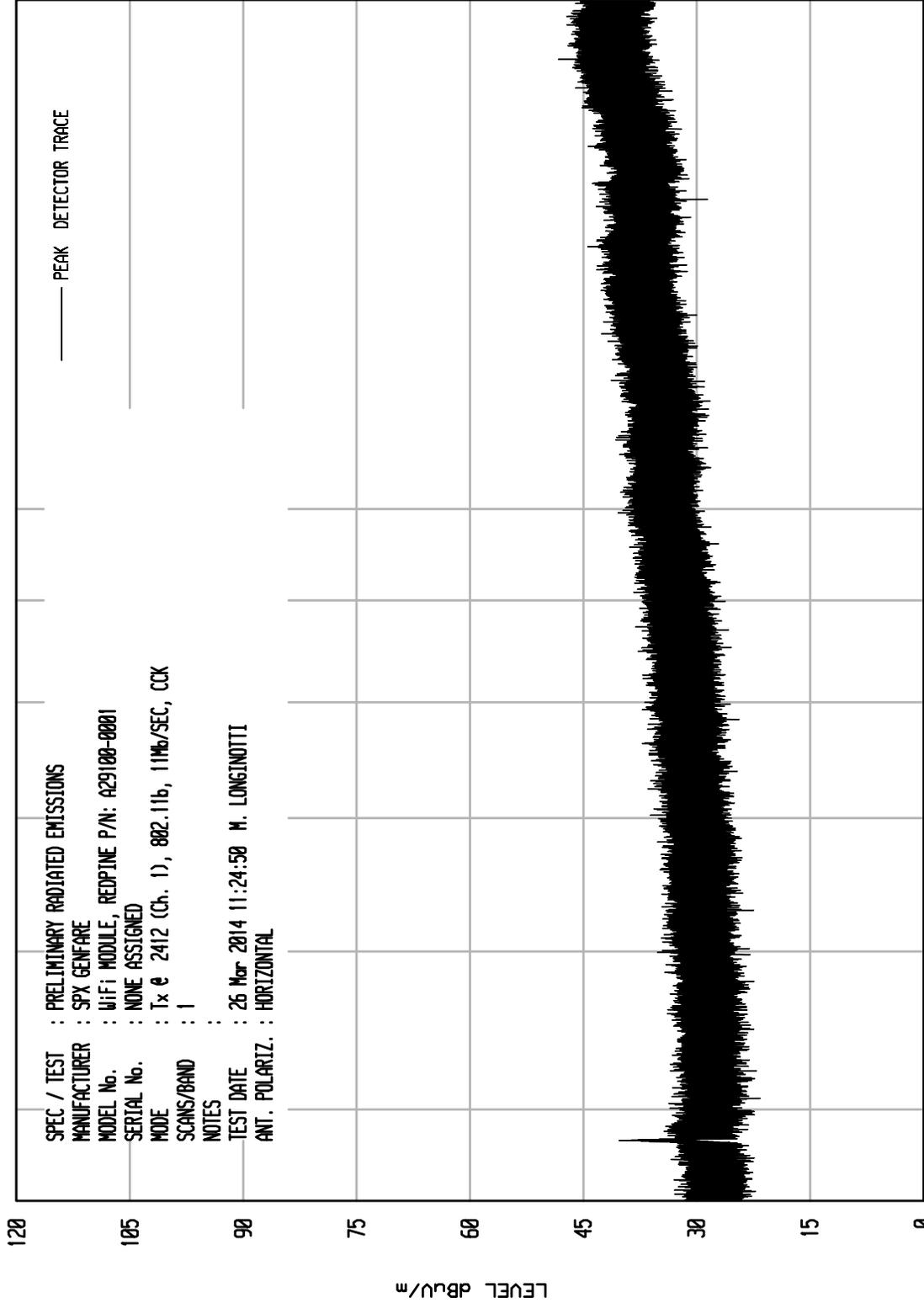


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UNIV RCV ENI RUN 4

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11b, 11Mbps/SEC, CCK
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 11:24:50 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

START = 4500 STOP = 18000
 FREQUENCY MHz

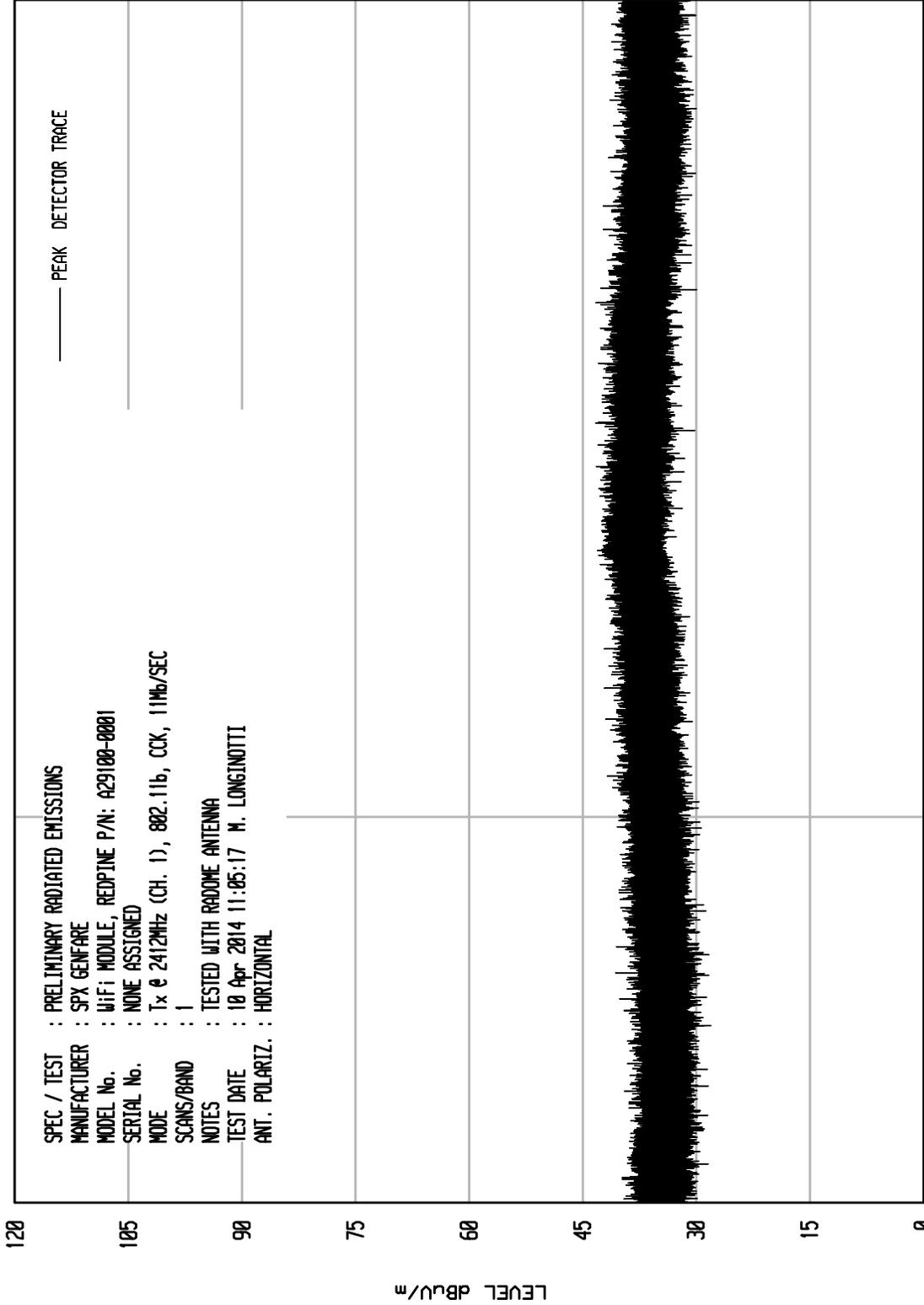


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UNIV RCV EMI RUN 7

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:05:17 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

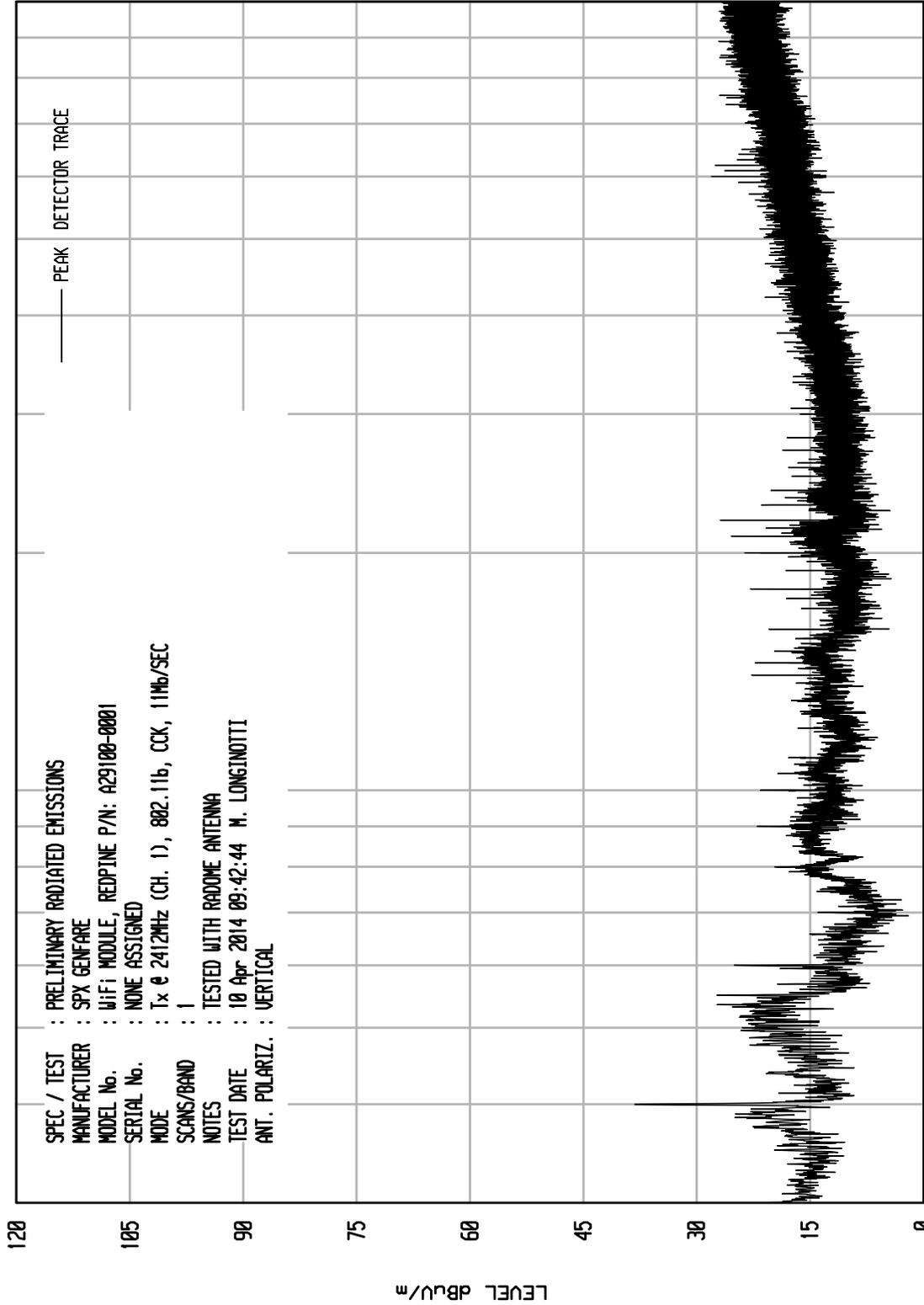
START = 18000

LEVEL dBu/m

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UNIV RCU ENI RUN 65

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

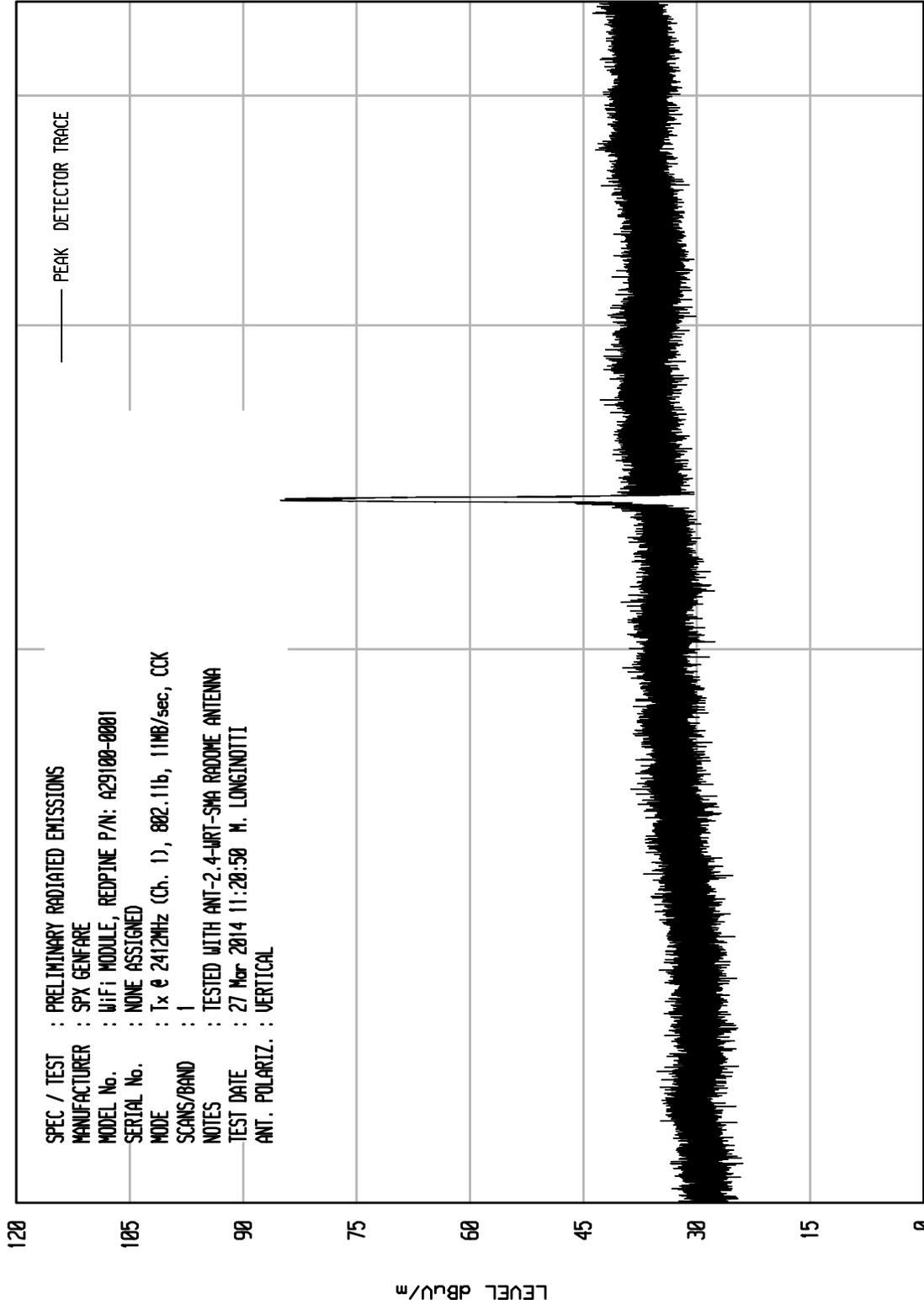
START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:42:44 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

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UNIV RCV EMI RUN 8

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, 11MB/sec, CCK
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 11:20:50 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

FREQUENCY MHz

START = 1000

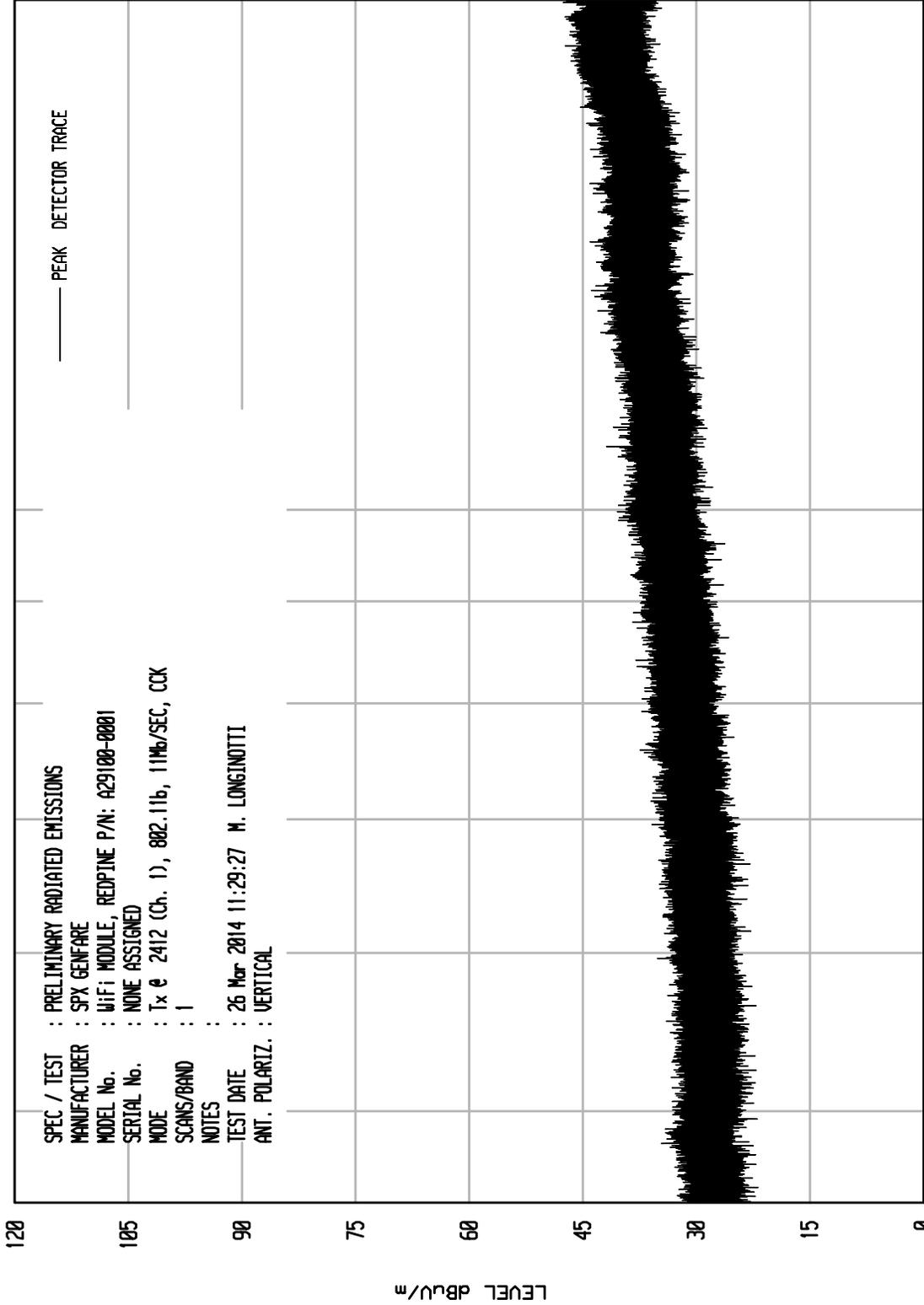


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UNIV RCV ENI RUN 5

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11b, 11Mbps/SEC, CCK
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 11:29:27 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 18000

FREQUENCY MHz

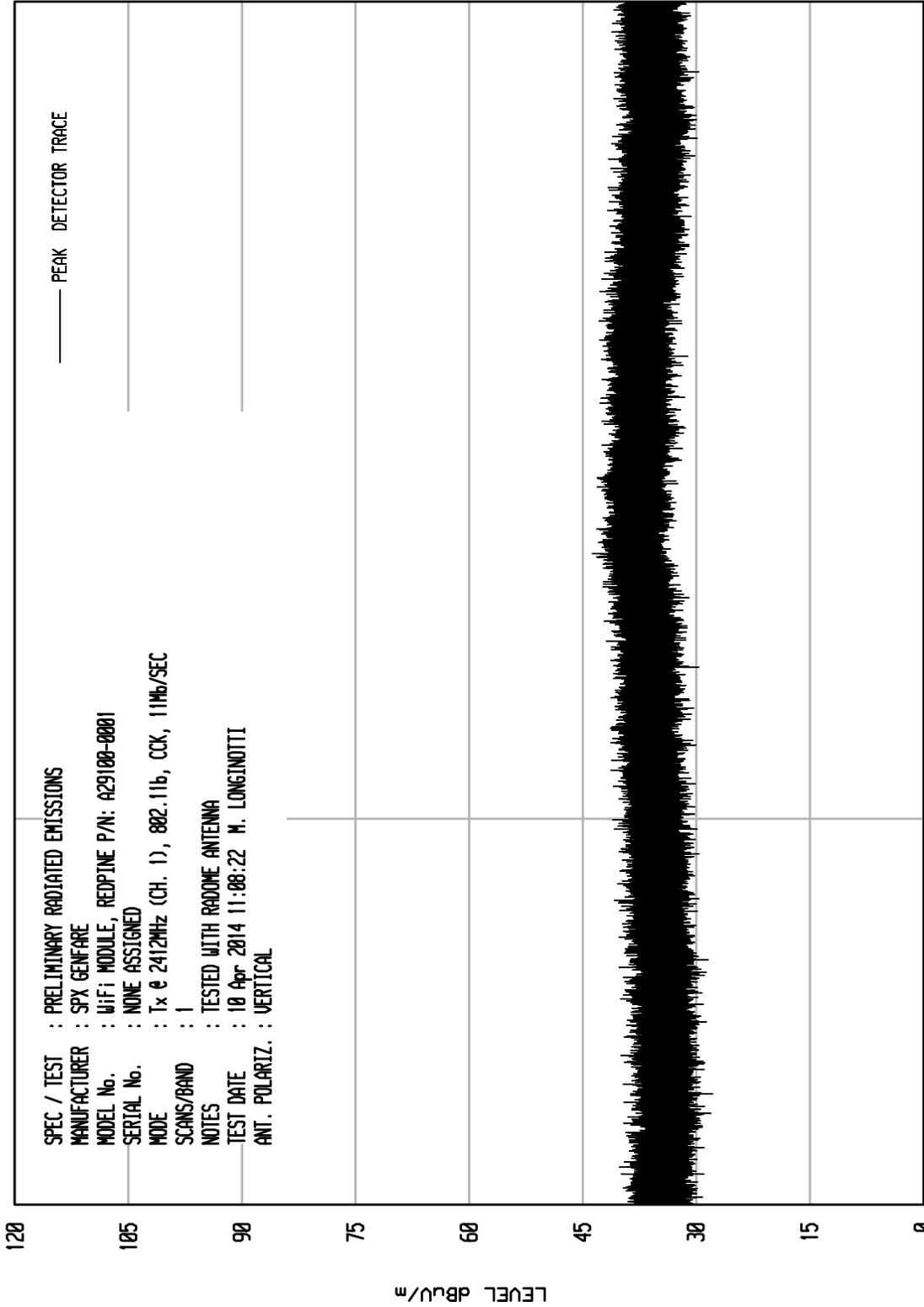
START = 4500

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UNIV RCV EMI RUN 8

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:08:22 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

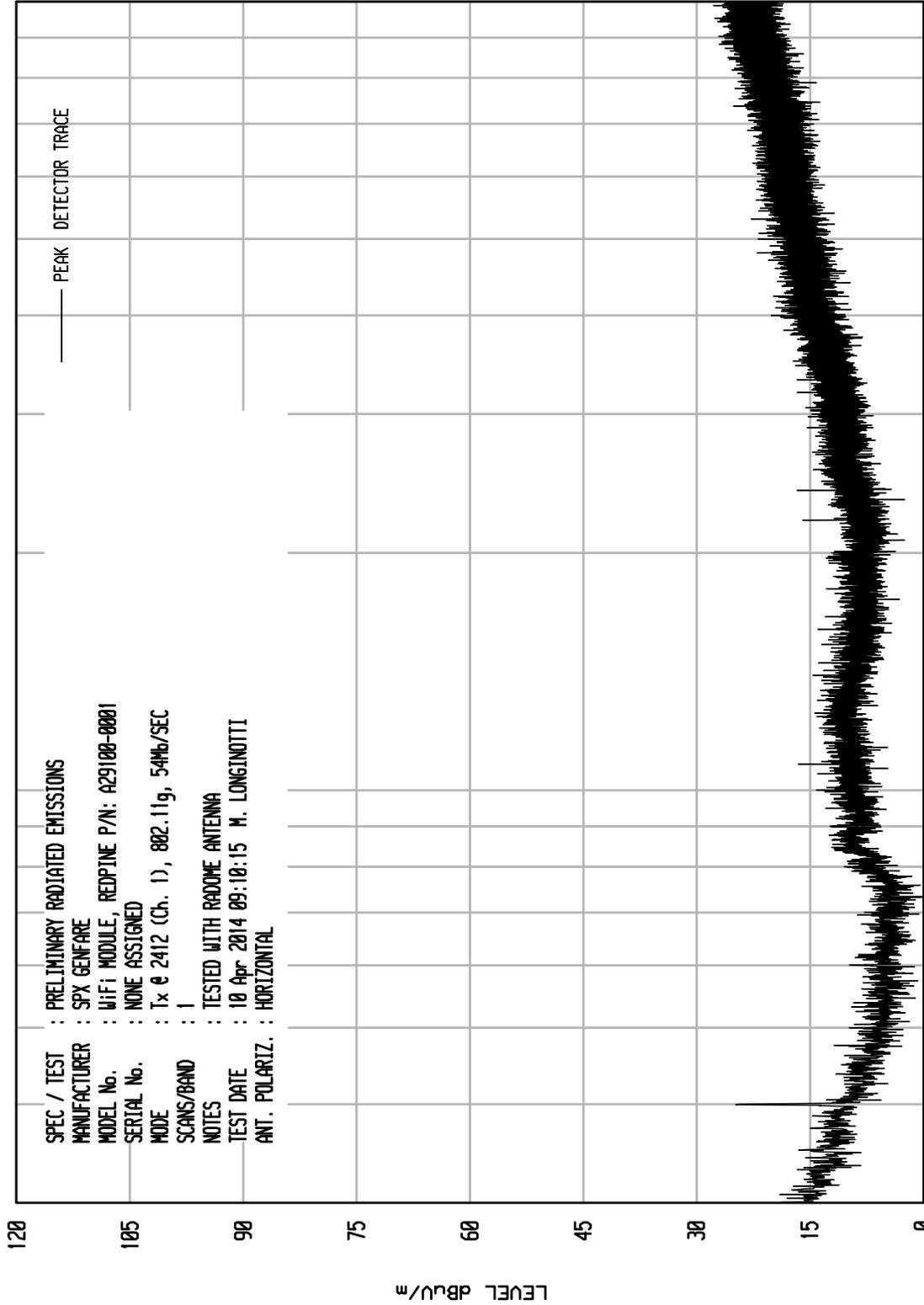


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UNIV RCU ENI RUN 44

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

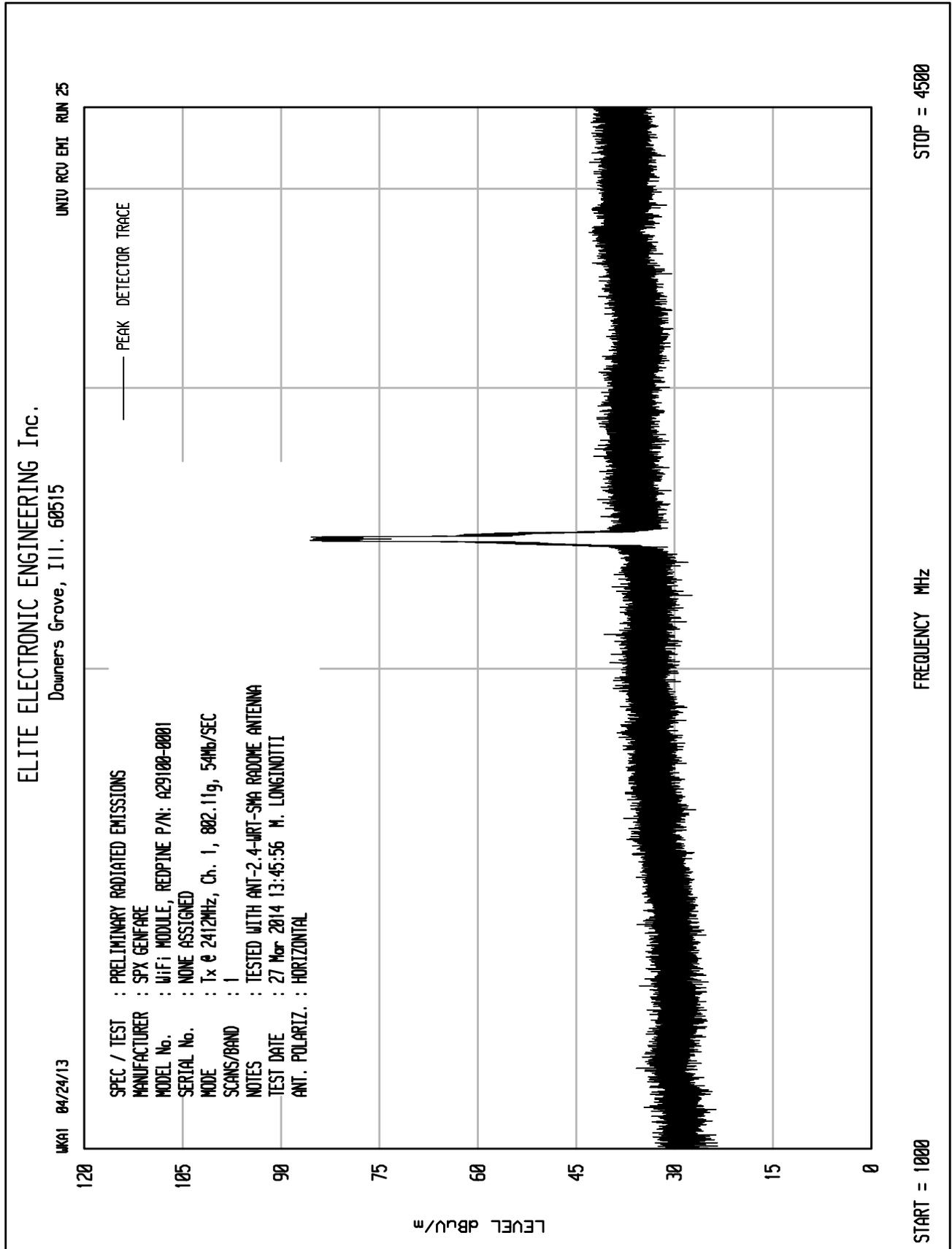
MODE : Tx @ 2412 (Ch. 1), 802.11g, 54Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:10:15 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL



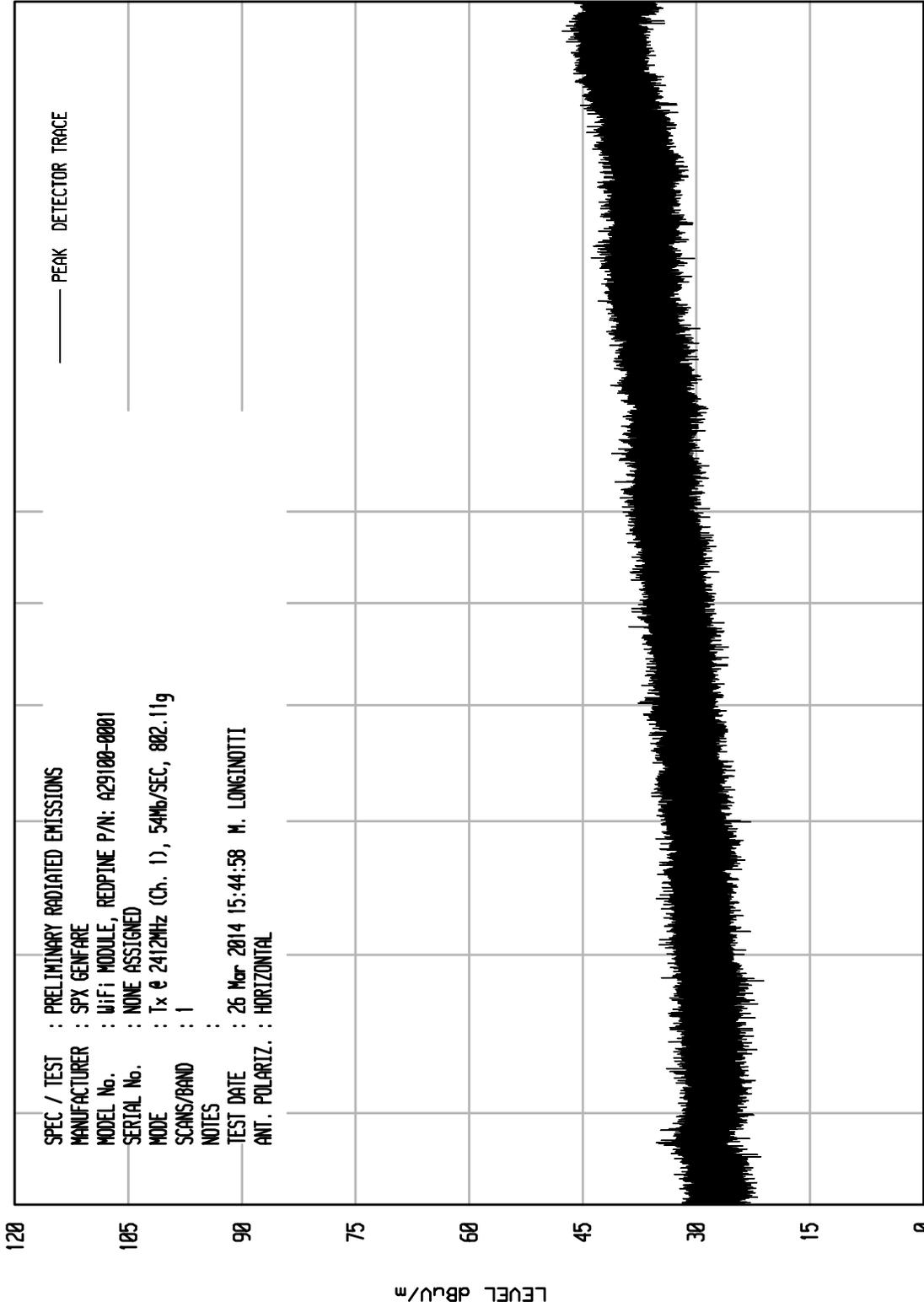


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UNIV RCV ENI RUN 15

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 54Mb/SEC, 802.11g
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 15:44:58 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

120
 105
 90
 75
 60
 45
 30
 15
 0
 LEVEL dBu/m

10000

FREQUENCY MHz

STOP = 18000

START = 4500

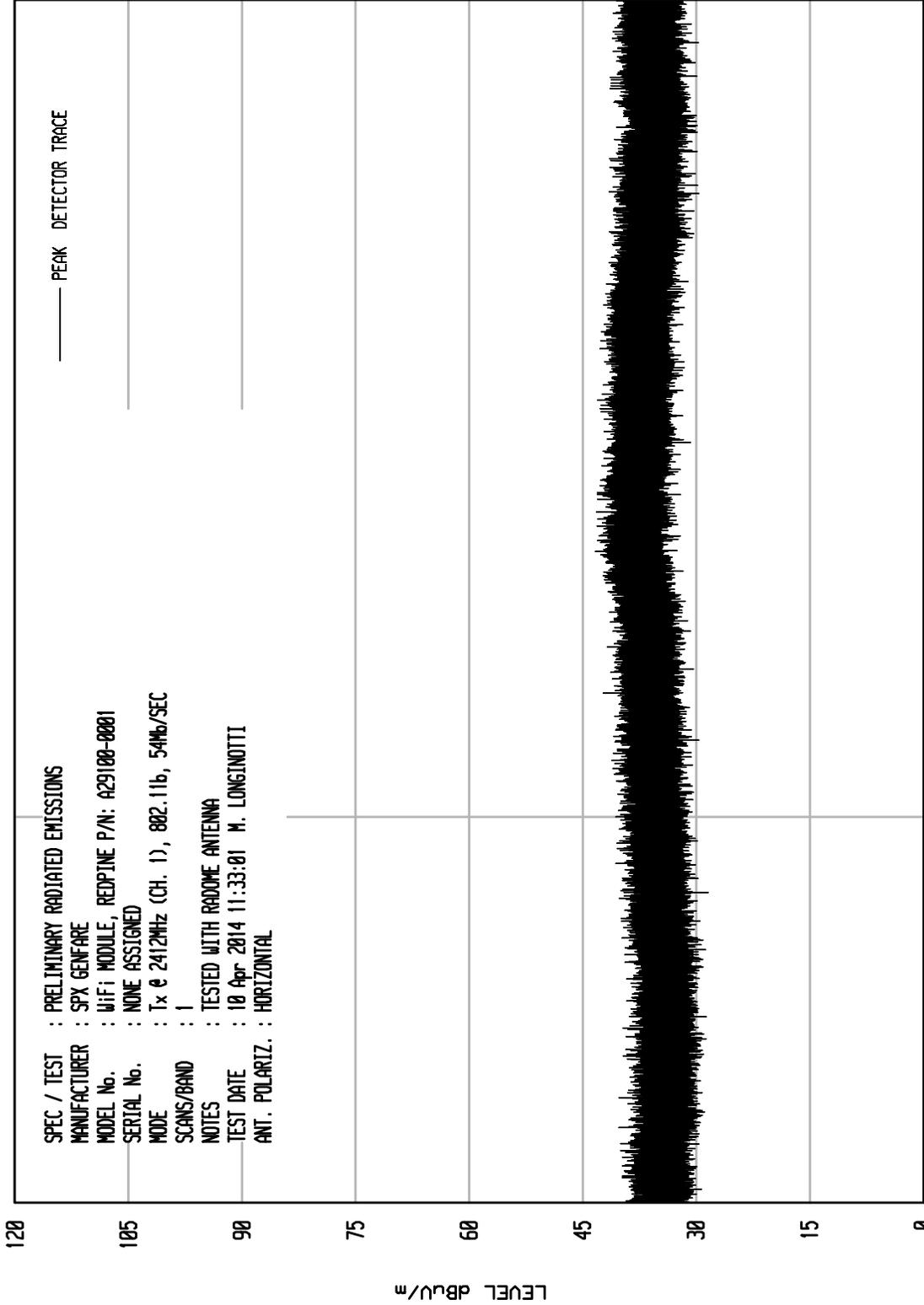


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV EMI RUN 13

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:33:01 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

120
 105
 90
 75
 60
 45
 30
 15
 0

LEVEL dBu/m

STOP = 25000

FREQUENCY MHz

START = 18000

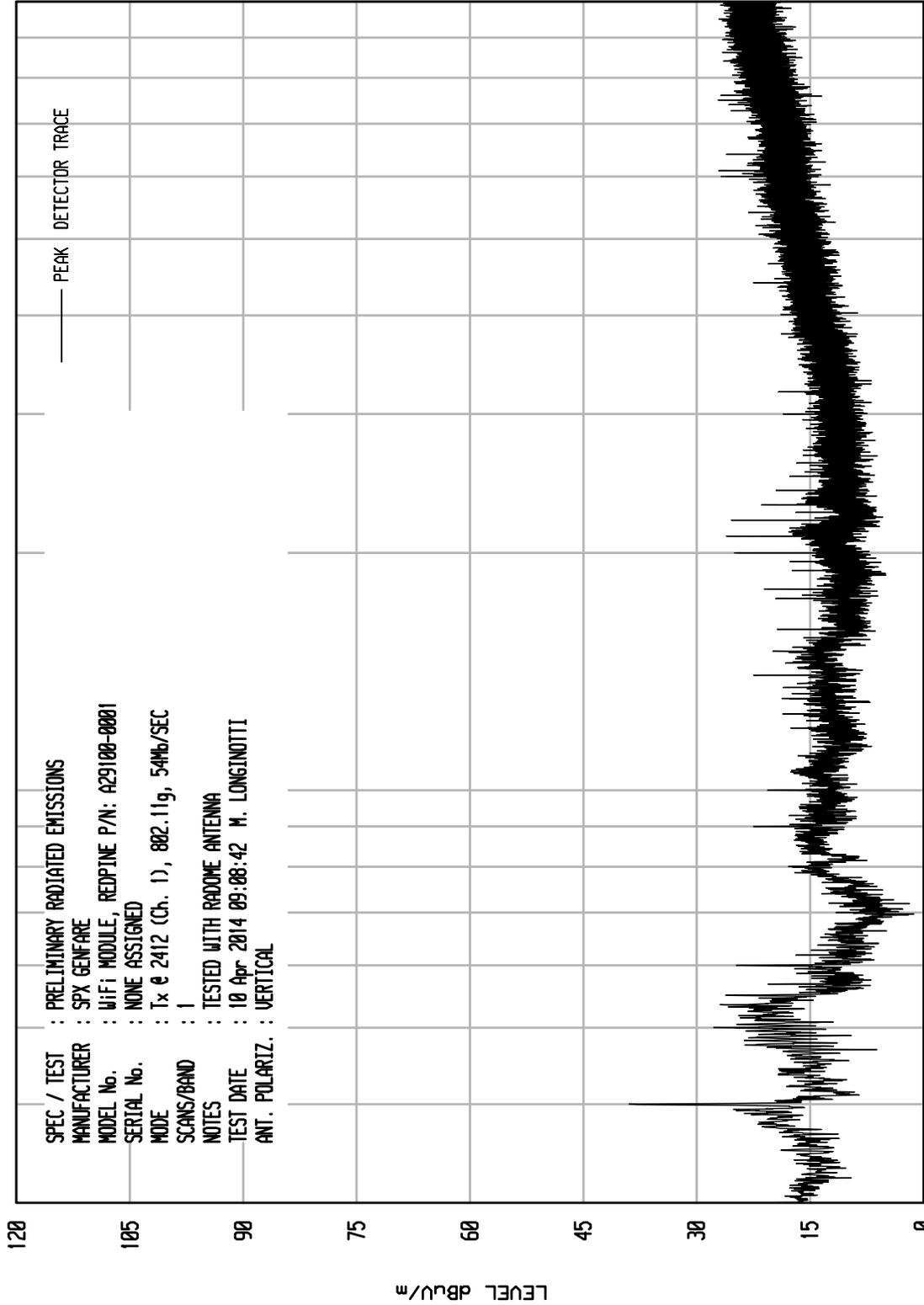


ELITE ELECTRONIC ENGINEERING Inc.

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UNIU RCU ENI RUN 43

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

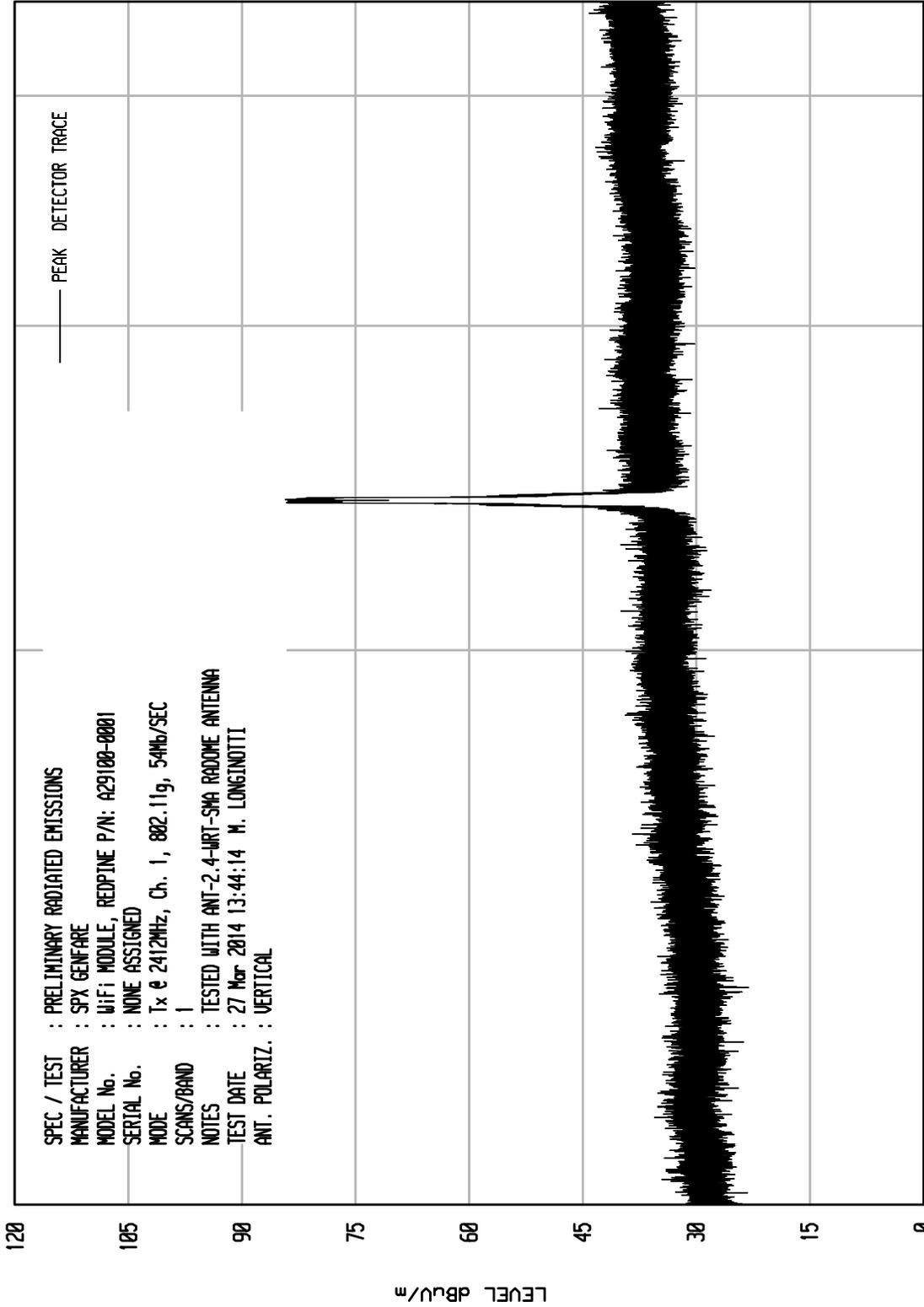
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11g, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:08:42 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU ENI RUN 24

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz, Ch. 1, 802.11g, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 13:44:14 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

FREQUENCY MHz

START = 1000

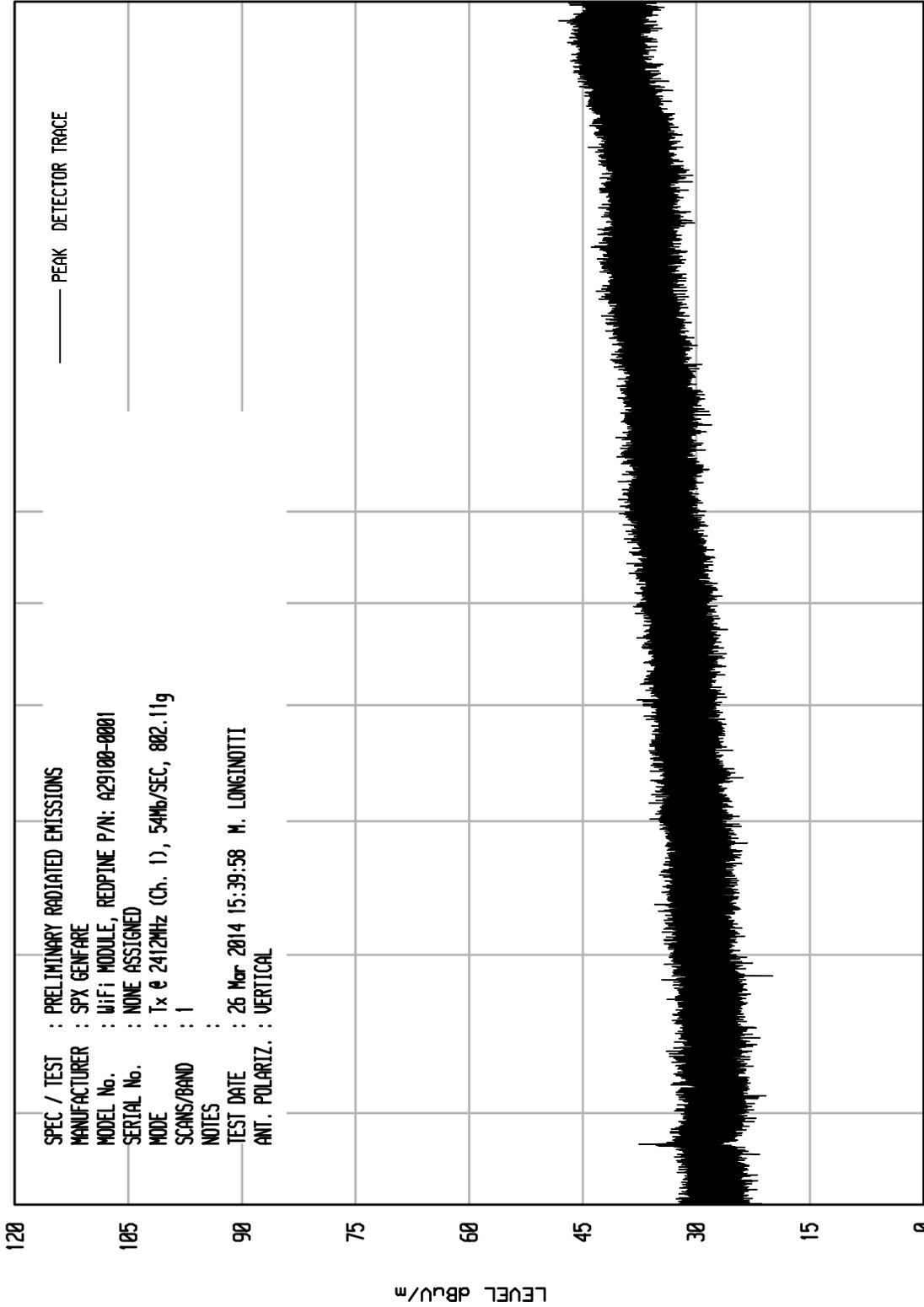
LEVEL dBu/m

ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV ENI RUN 14

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 54Mbps/SEC, 802.11g
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 15:39:58 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

120
 105
 90
 75
 60
 45
 30
 15
 0

LEVEL dBµV/m

10000
FREQUENCY MHz

STOP = 18000

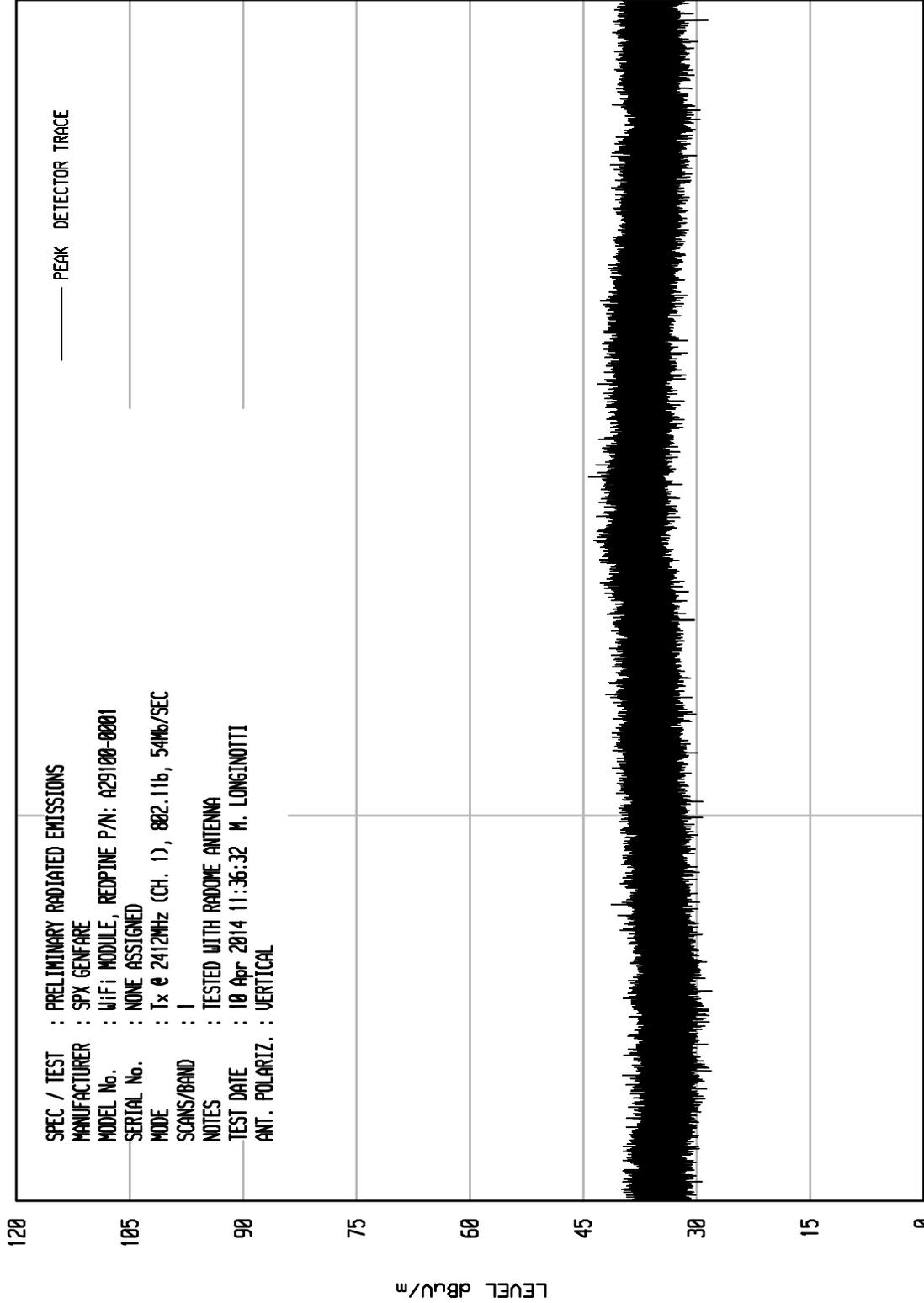
START = 4500

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UNIV RCV EMI RUN 14

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:36:32 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

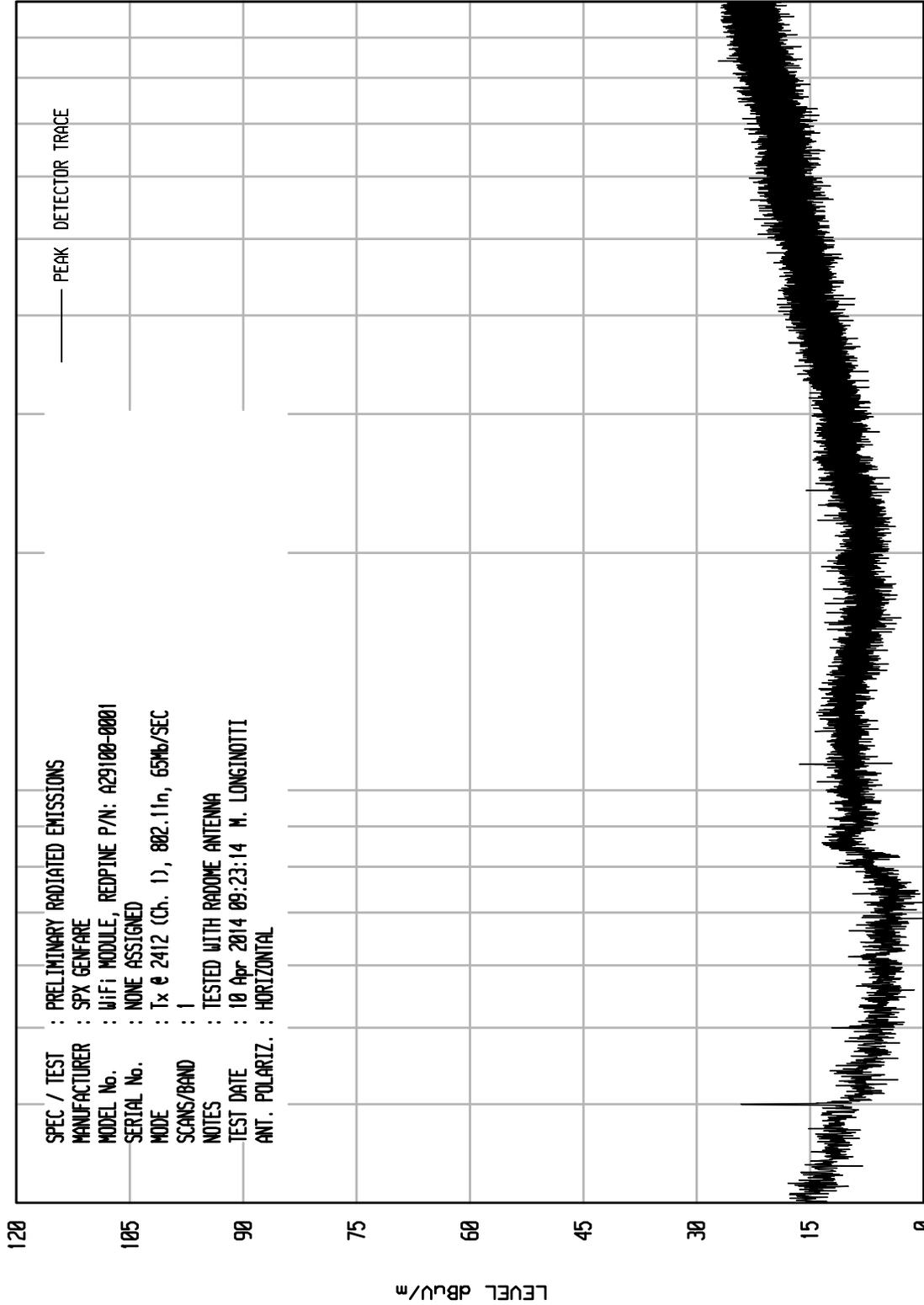
FREQUENCY MHz

START = 18000

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UNIU RCJ ENI RUN 50

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11n, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:23:14 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

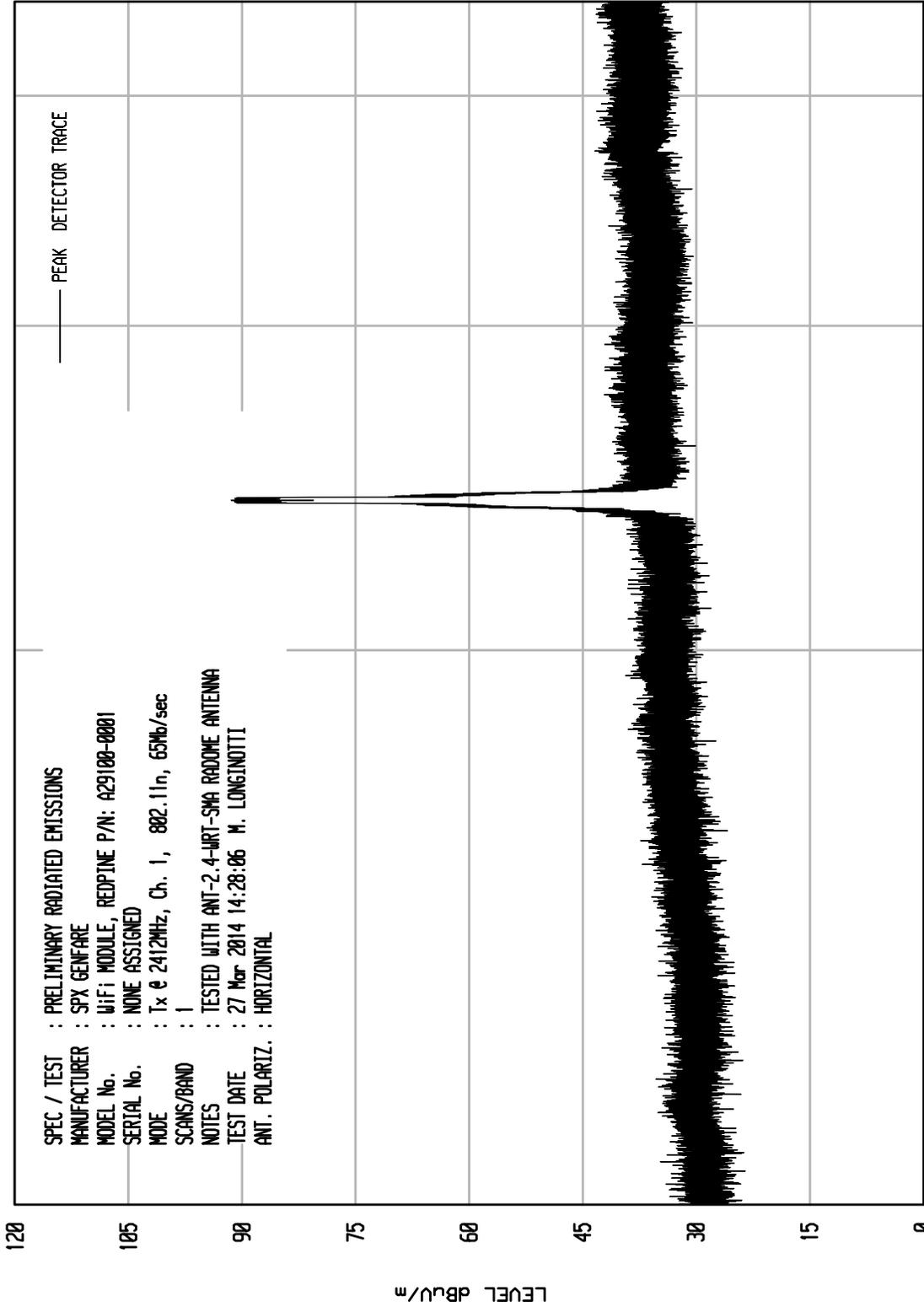


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV ENI RUN 30

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz, Ch. 1, 802.11n, 65Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 14:28:06 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

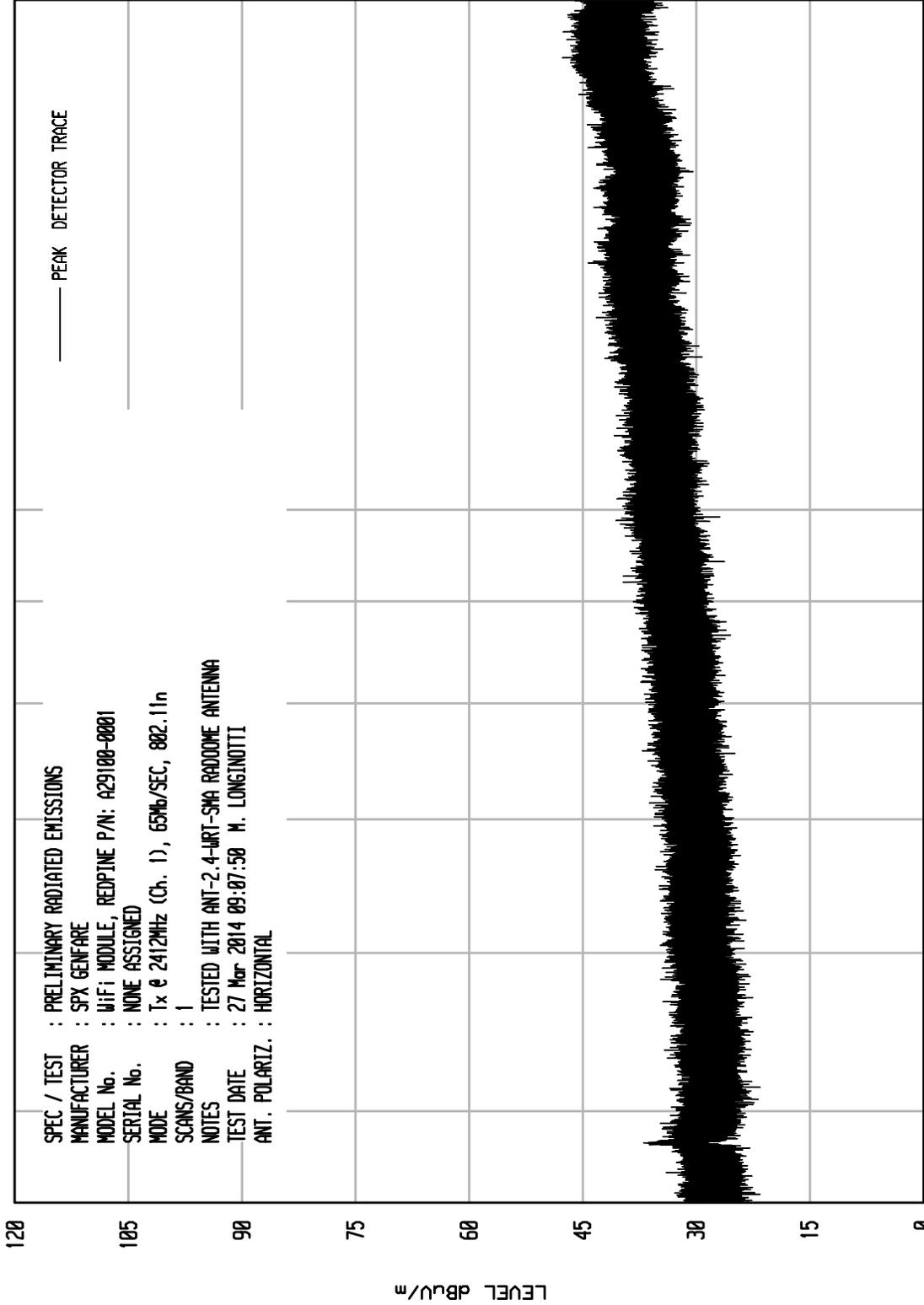
START = 1000

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UNIV RCV EMI RUN 21

UKA1 04/24/13



FREQUENCY MHz

STOP = 18000

START = 4500

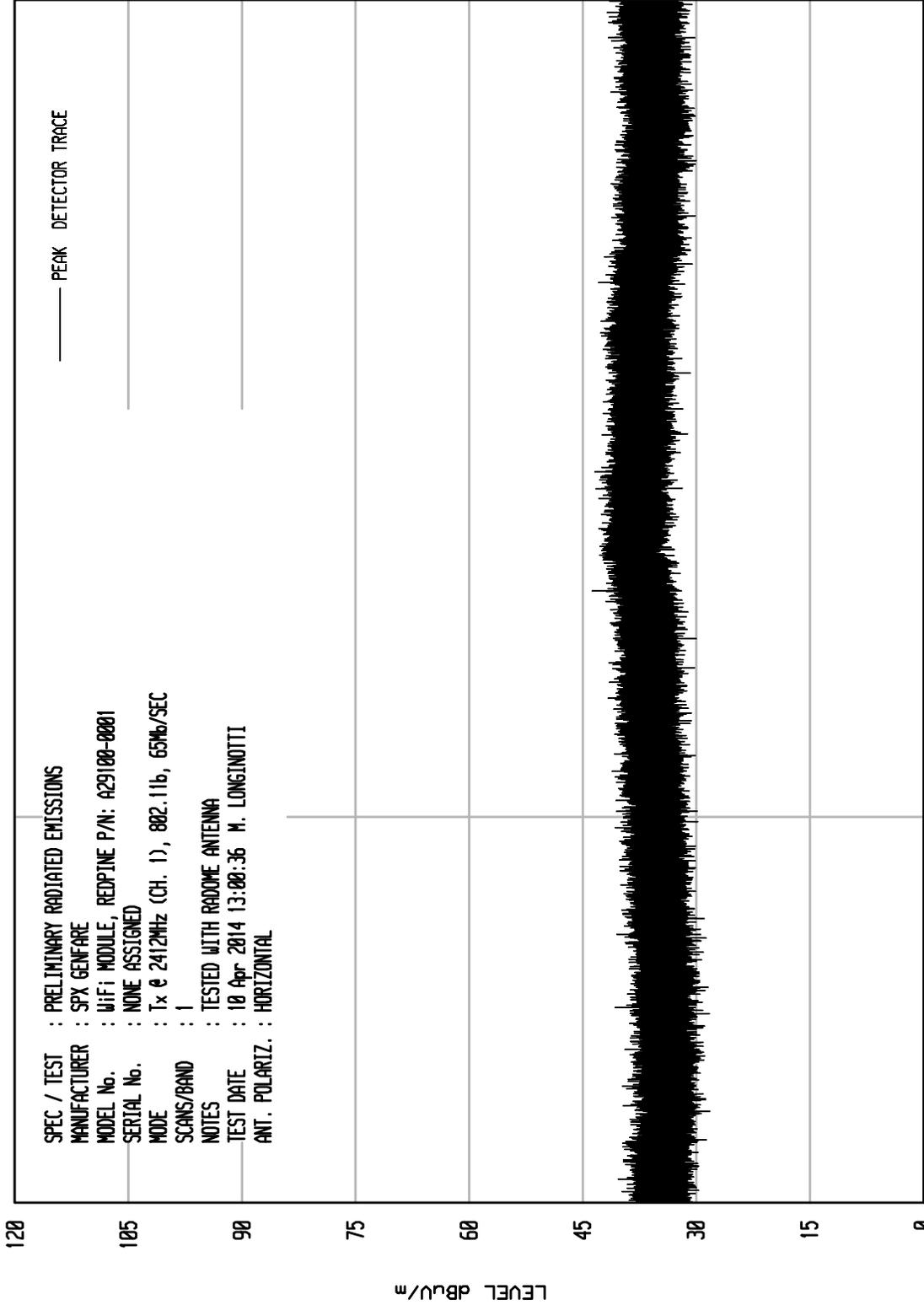


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UNIV RCV EMI RUN 21

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:00:36 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

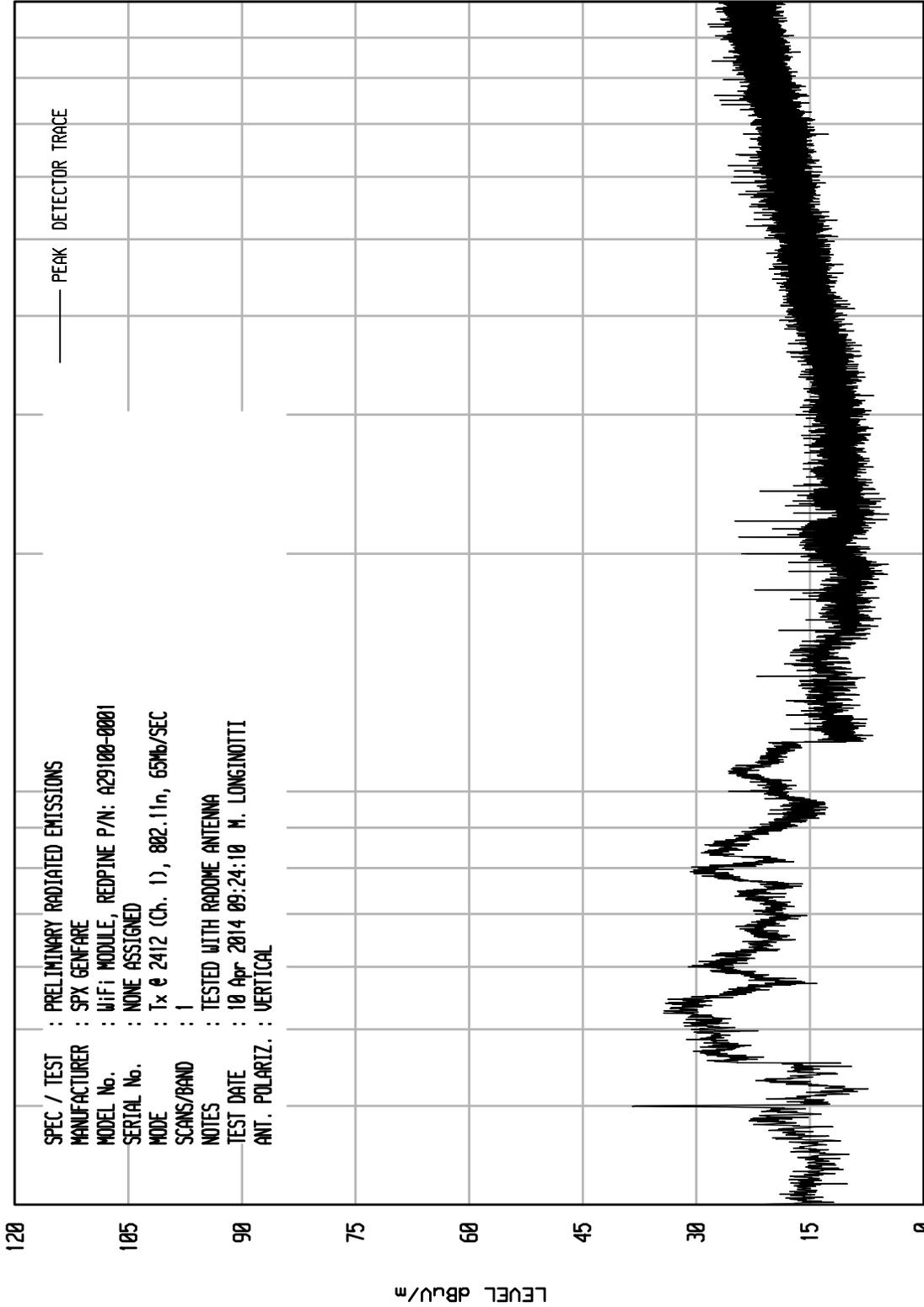


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UNIU RCJ ENI RUN 51

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

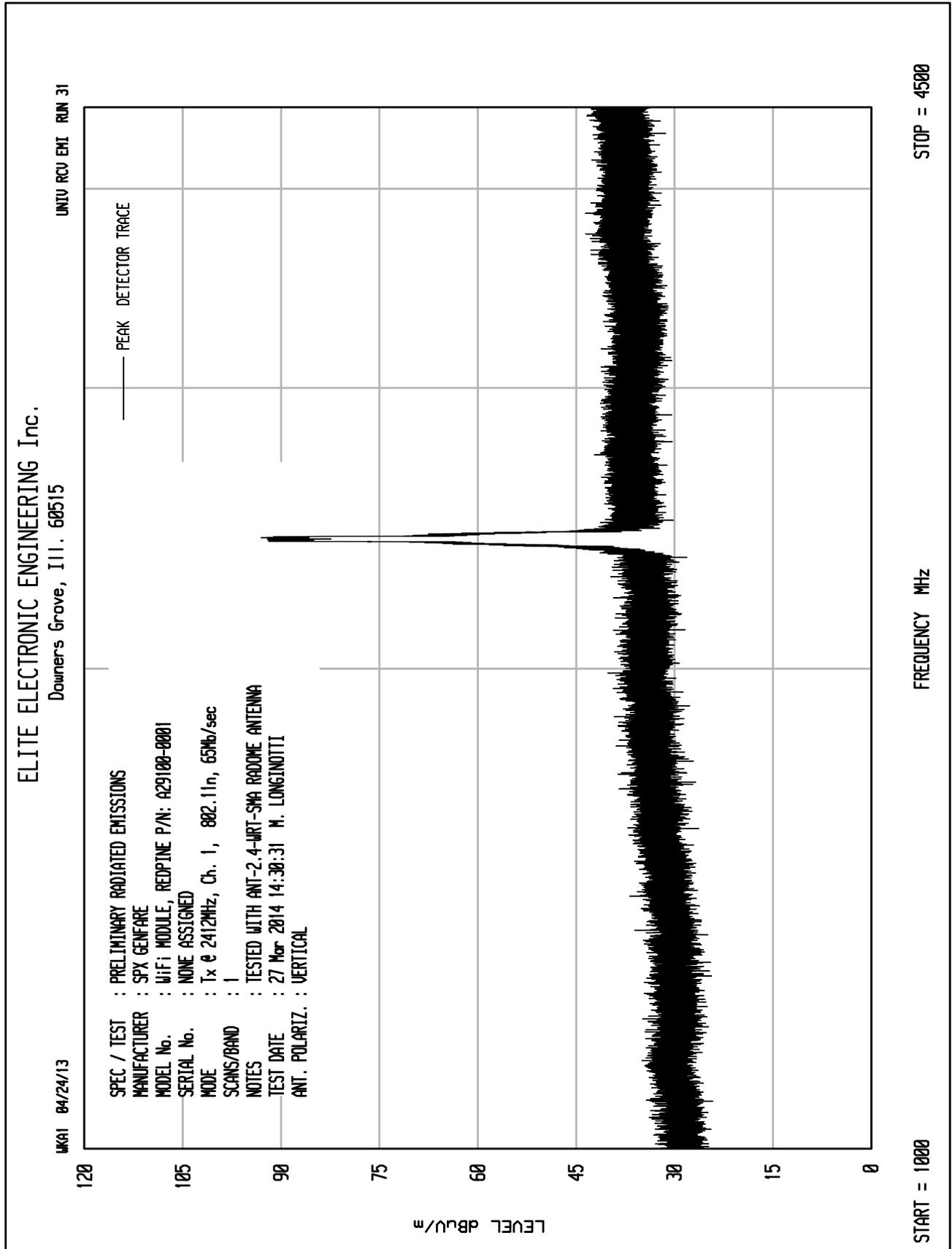
100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412 (Ch. 1), 802.11n, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:24:10 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL



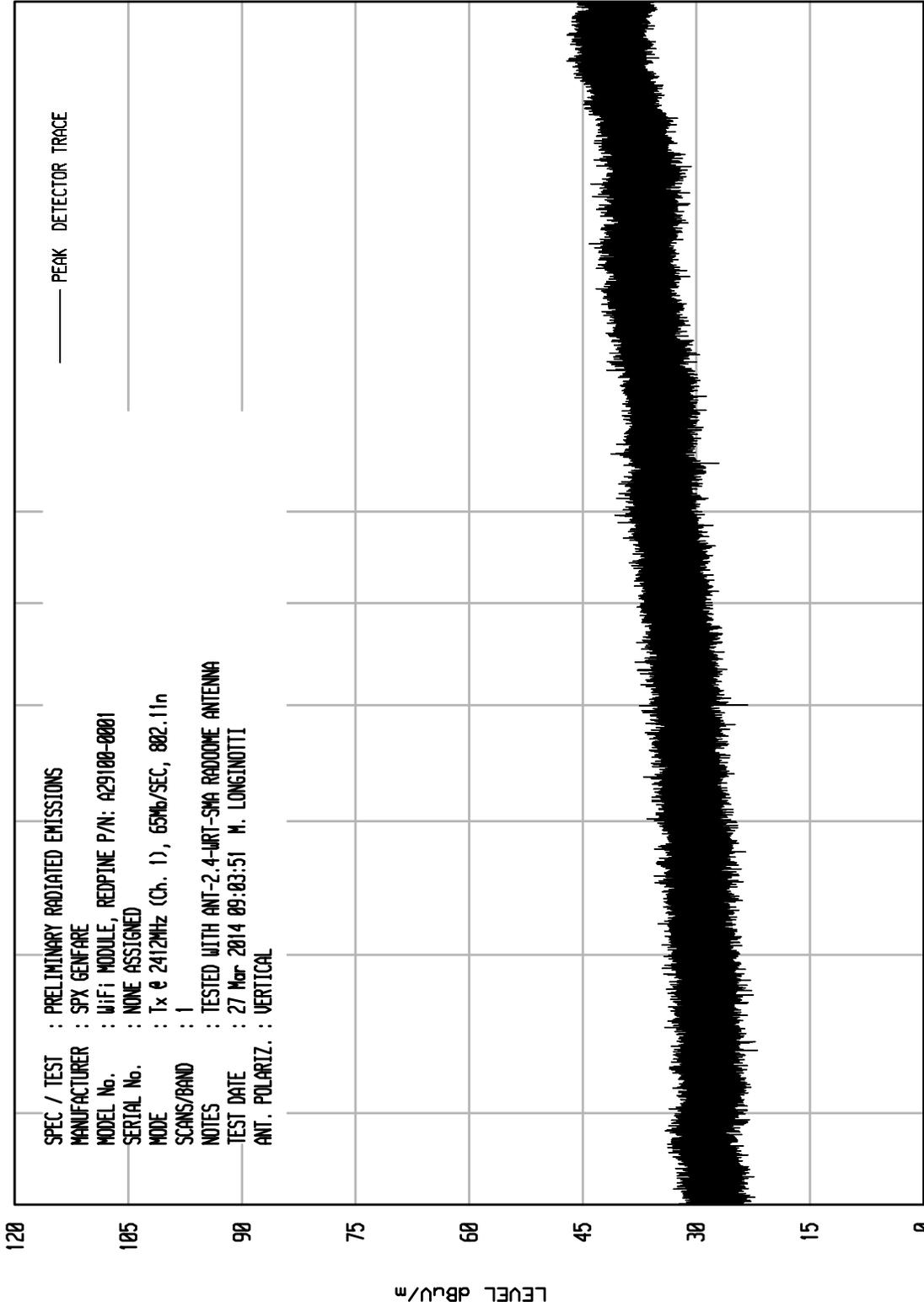


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UNIV RCV ENI RUN 28

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 65Mb/SEC, 802.11n
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 09:03:51 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

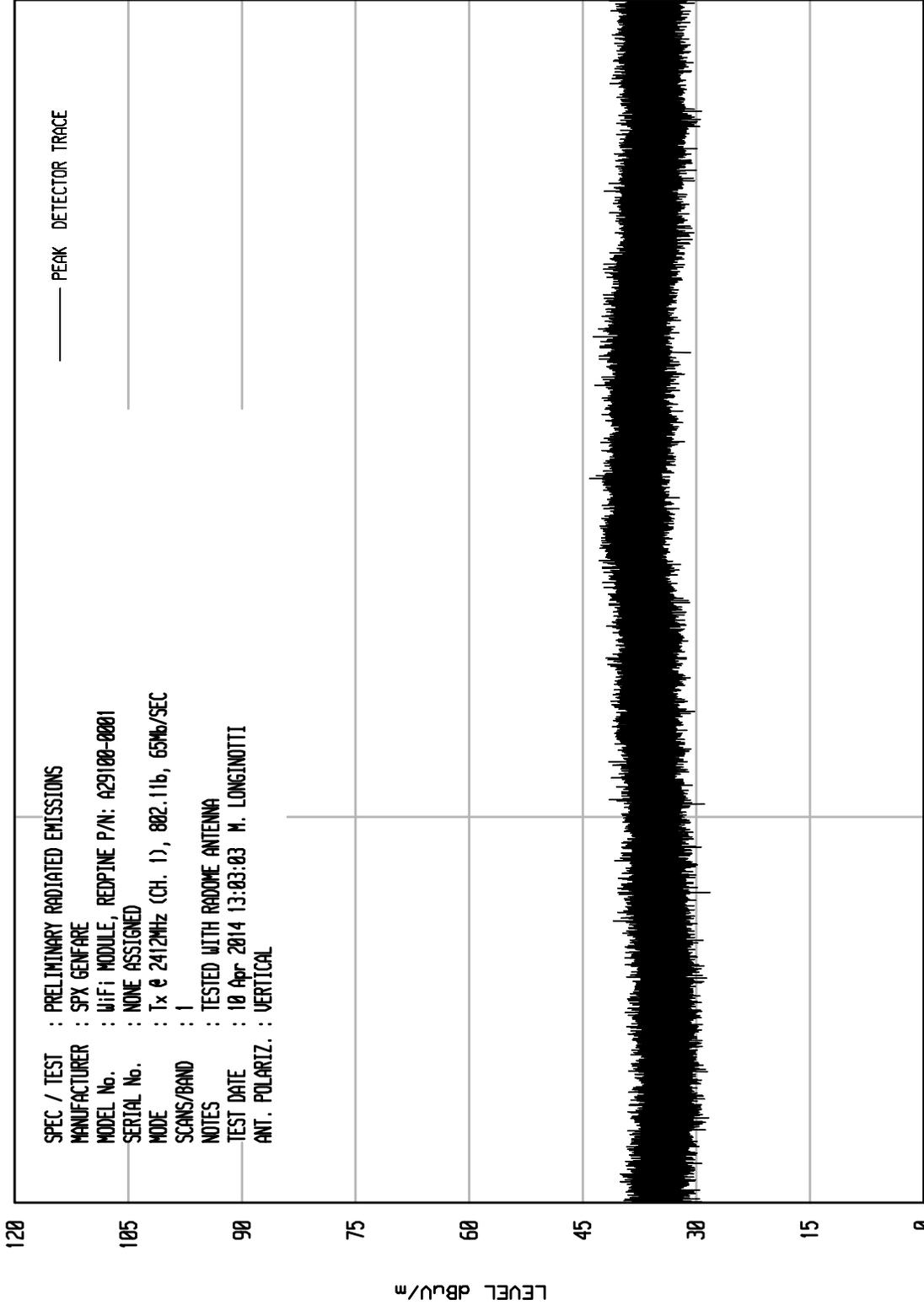


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UNIV RCU EMI RUN 22

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:03:03 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

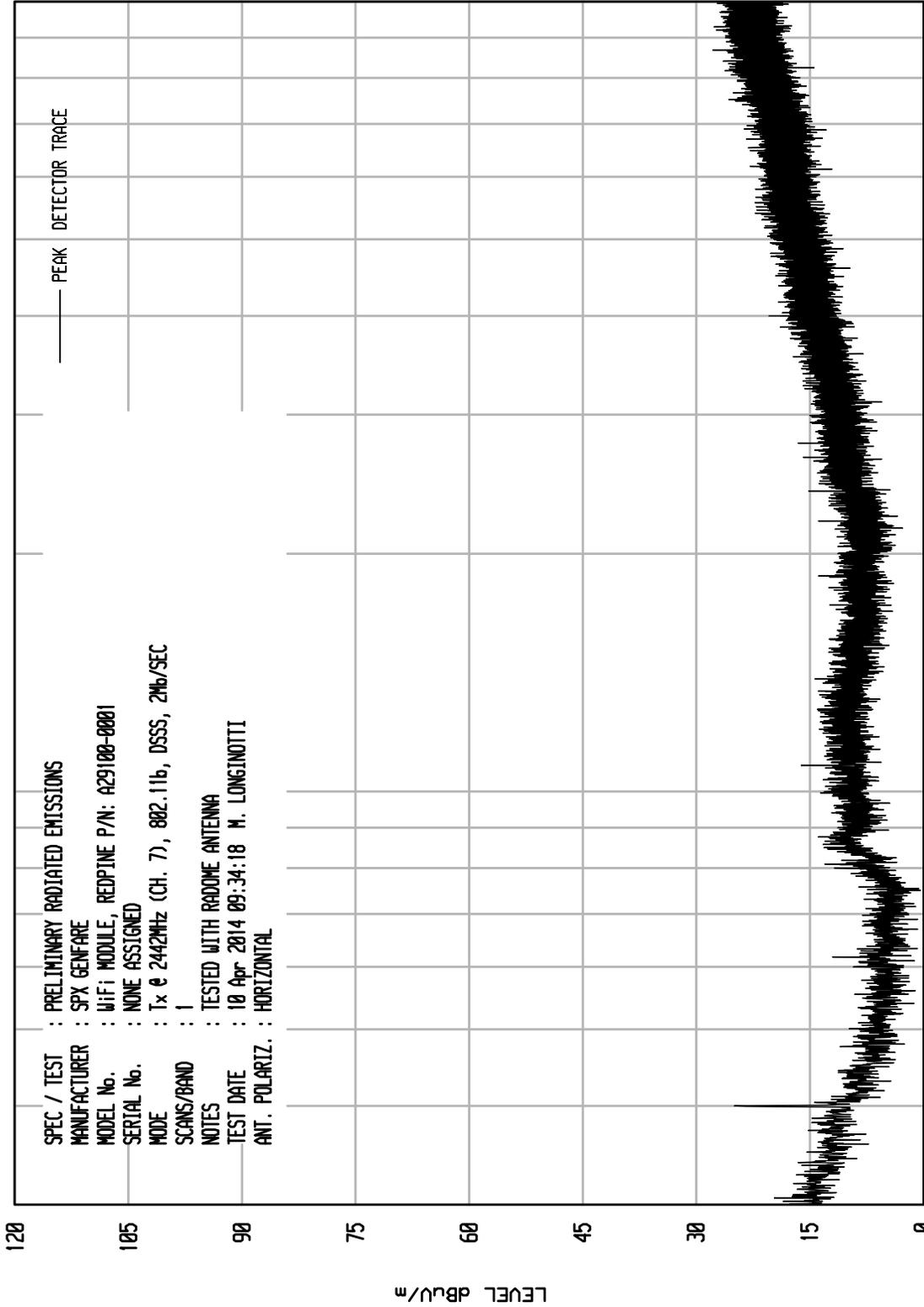


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UNIV RCU ENI RUN 59

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBµV/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

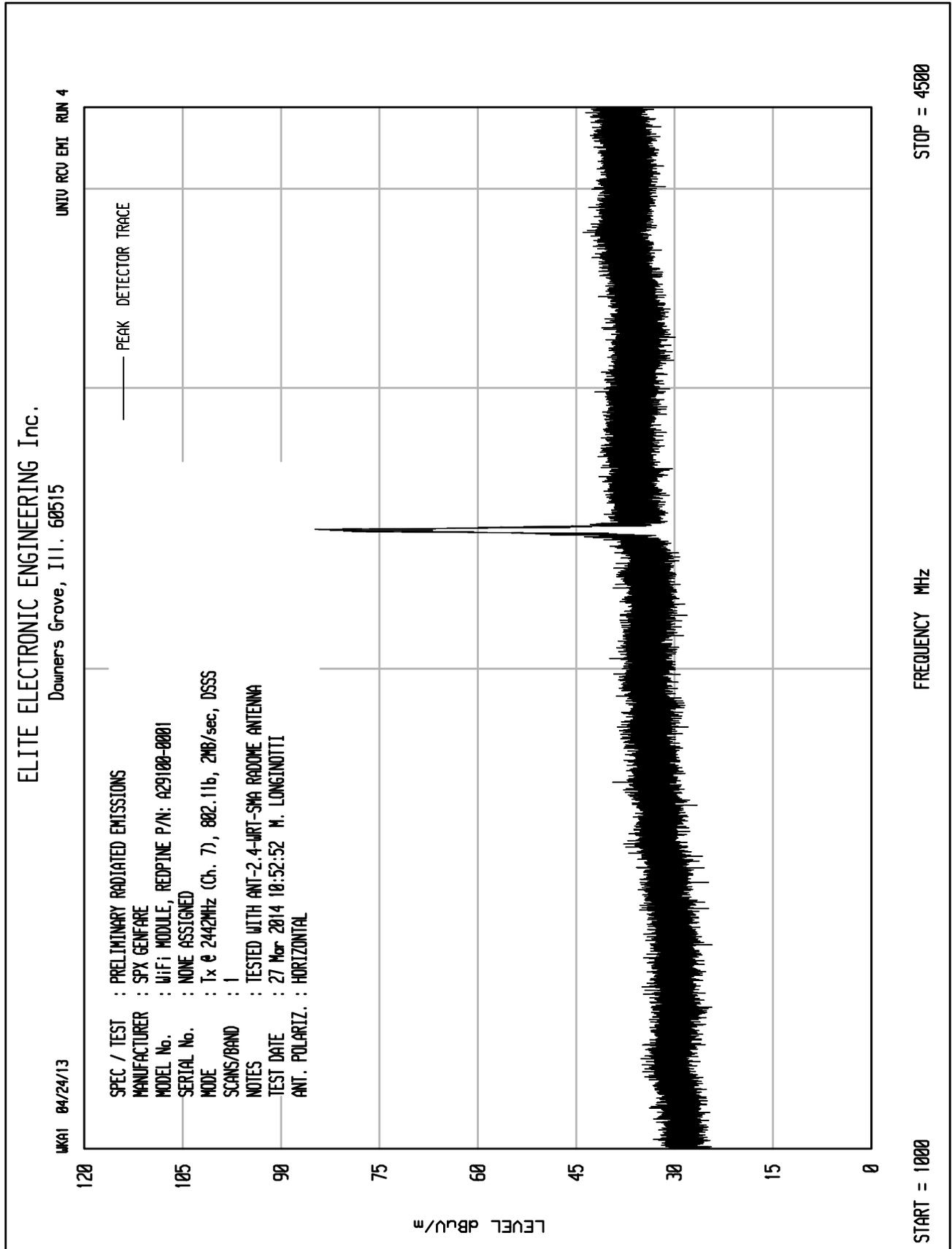
MODE : Tx @ 2442MHz (Ch. 7), 802.11b, DSSS, 2Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:34:18 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL



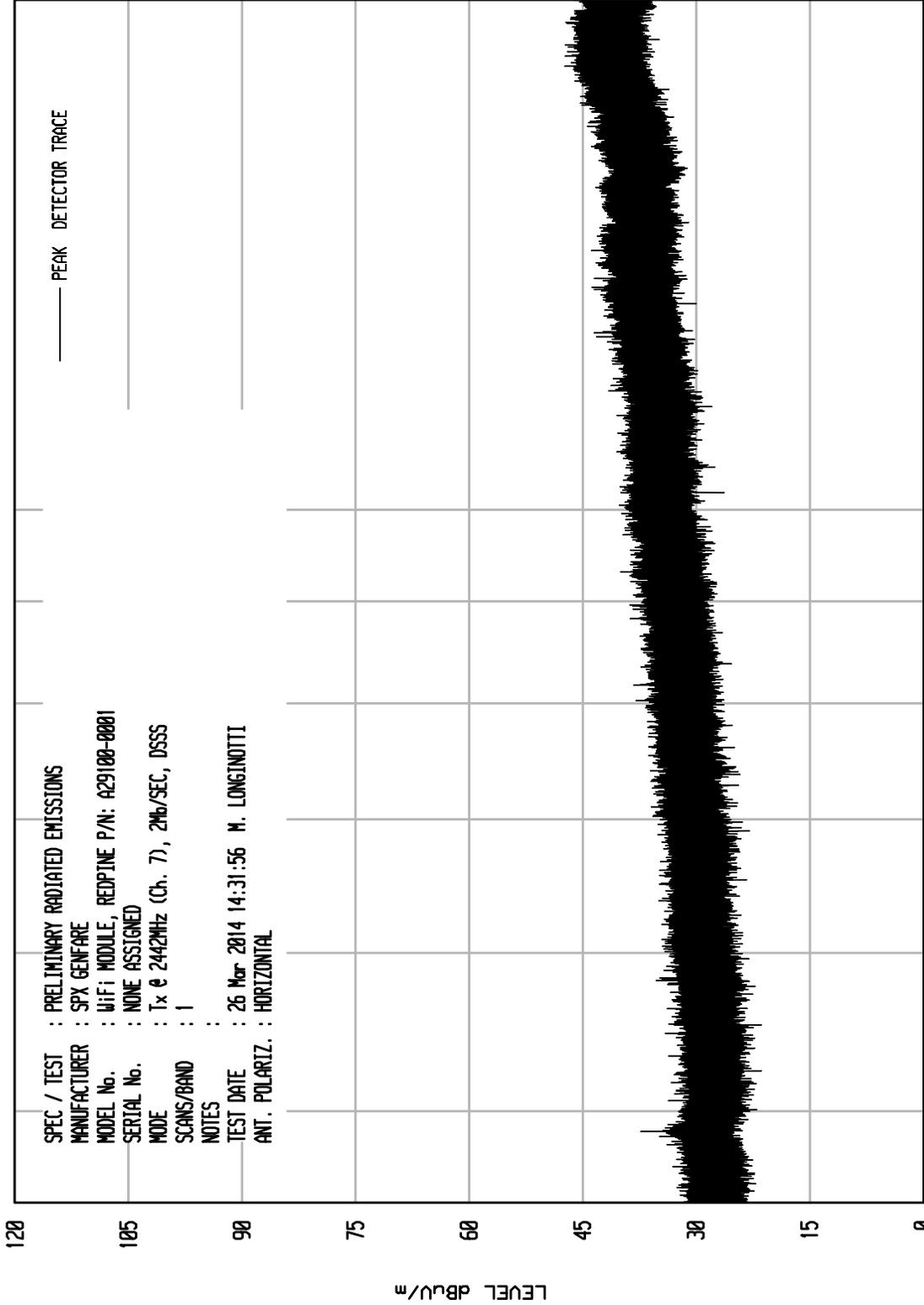


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UNIV RCV ENI RUN 10

UKA1 04/24/13



10000
FREQUENCY MHz

STOP = 18000

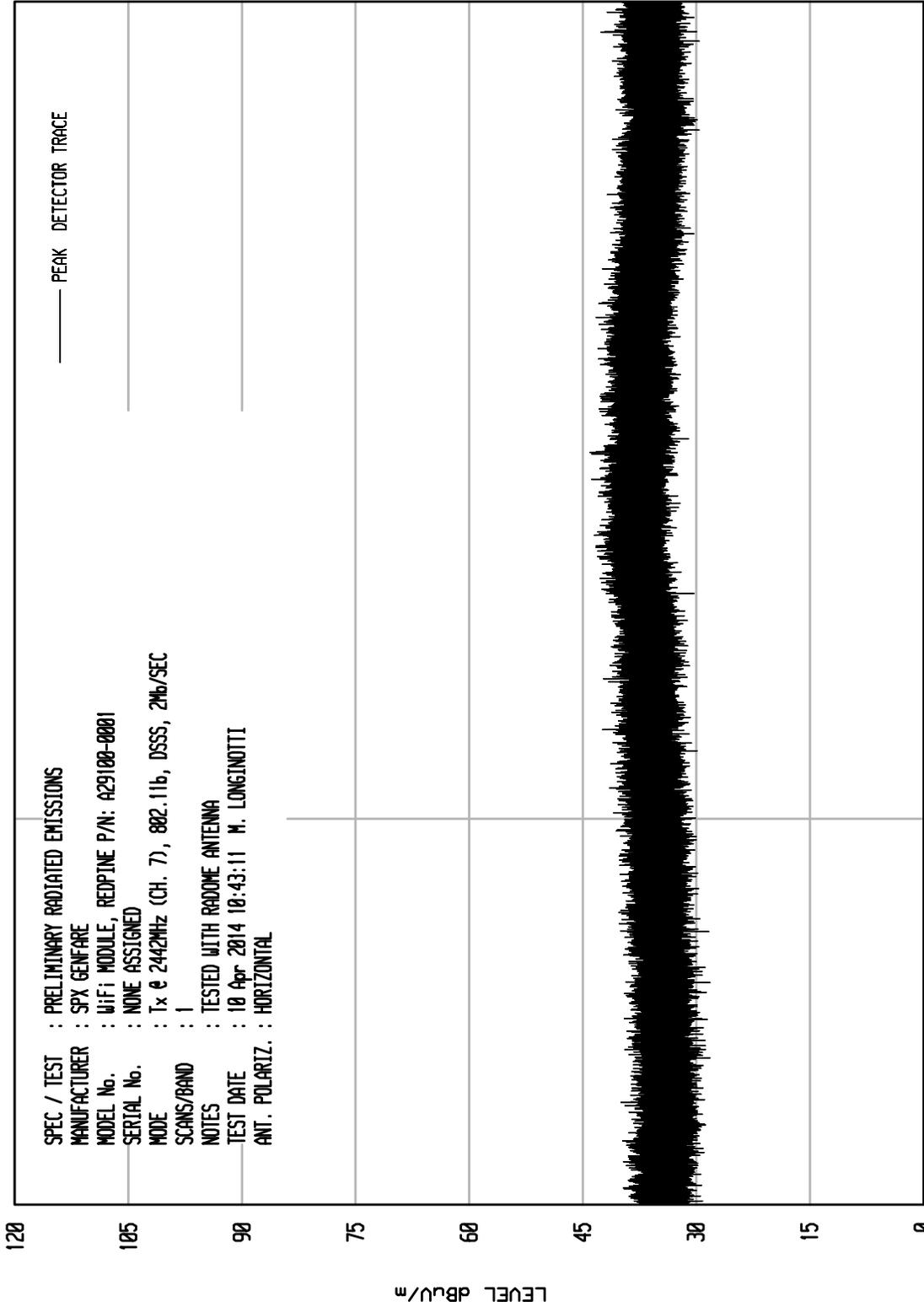
START = 4500

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UNIV RCV EMI RUN 3

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, DSSS, 2Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:43:11 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

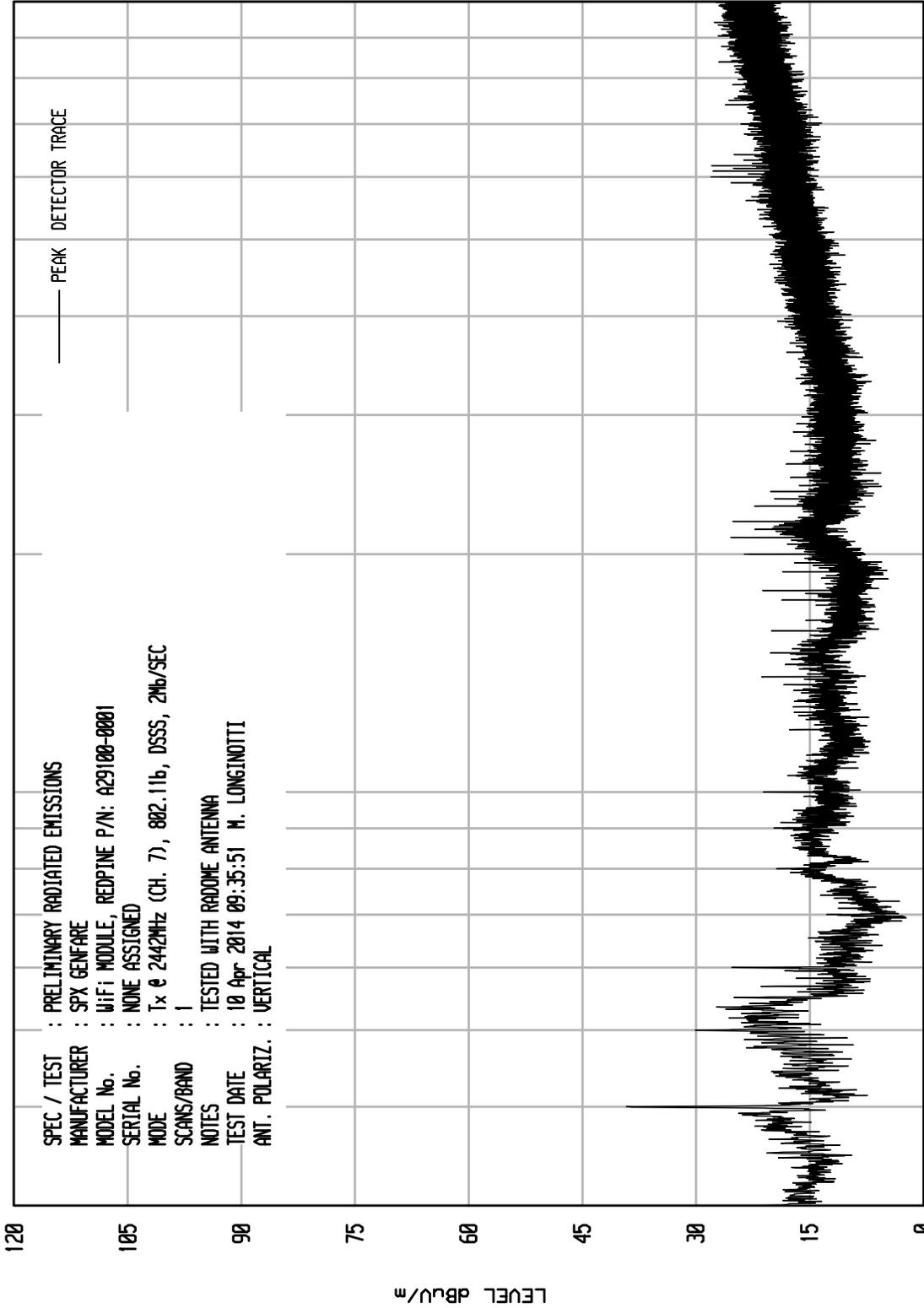
FREQUENCY MHz

START = 18000

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UNIV RCU ENI RUN 61

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

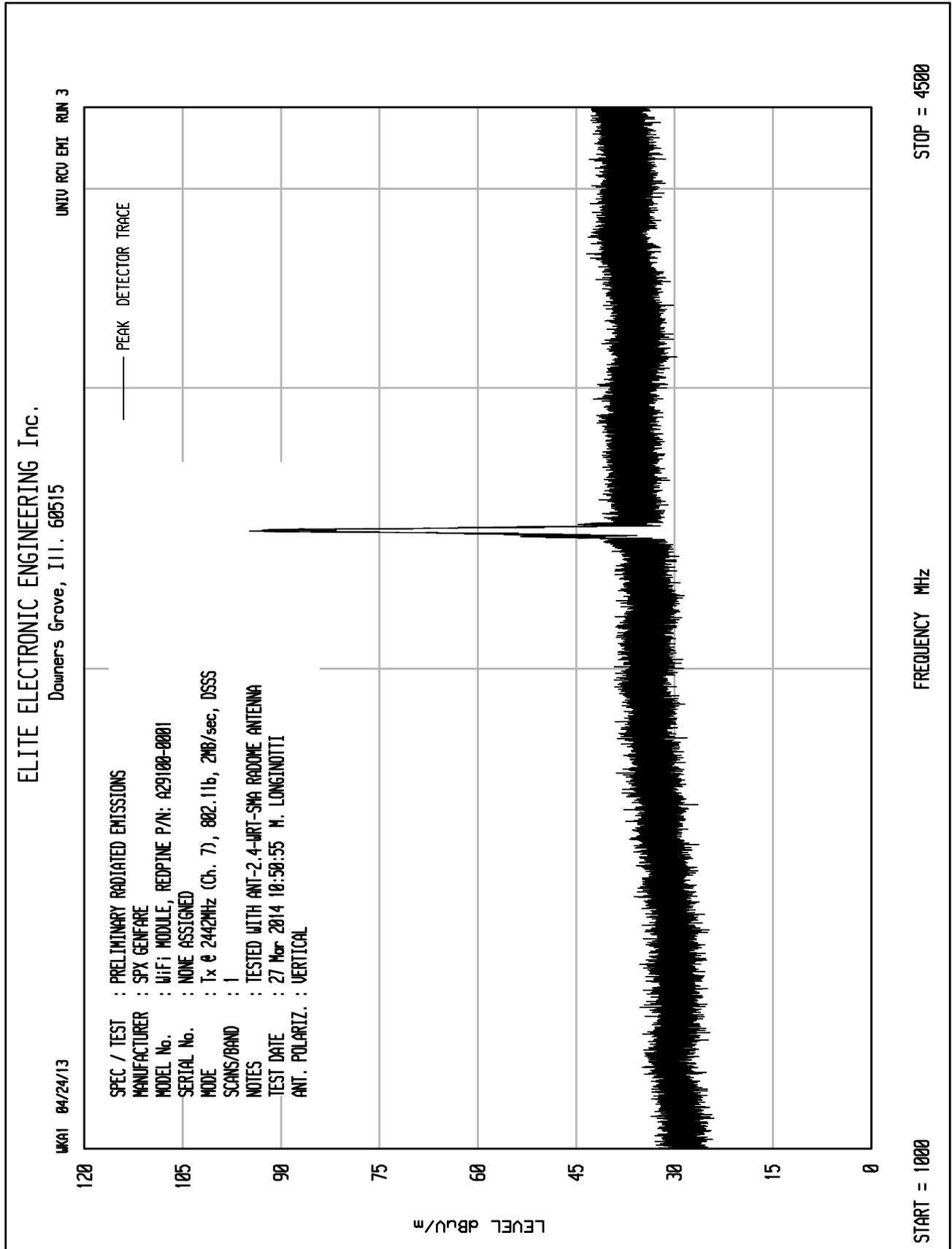
100

FREQUENCY MHz

STOP = 1000

START = 30

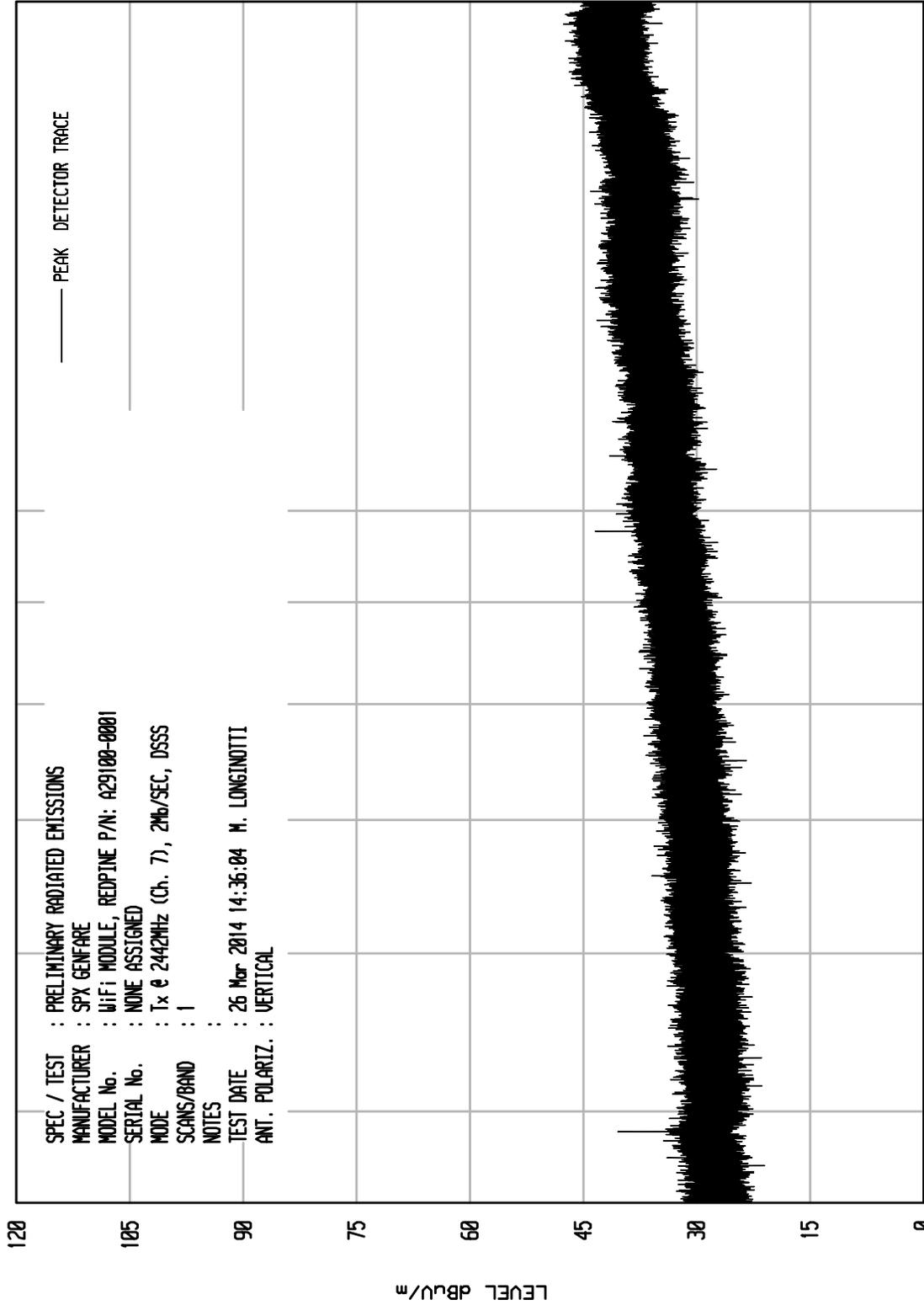
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (CH. 7), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:35:51 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL



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UNIV RCV ENI RUN 11

UKA1 04/24/13



120
105
90
75
60
45
30
15
0

LEVEL dBu/m

10000
FREQUENCY MHz

STOP = 18000

START = 4500

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 2Mb/SEC, DSSS
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 14:36:04 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

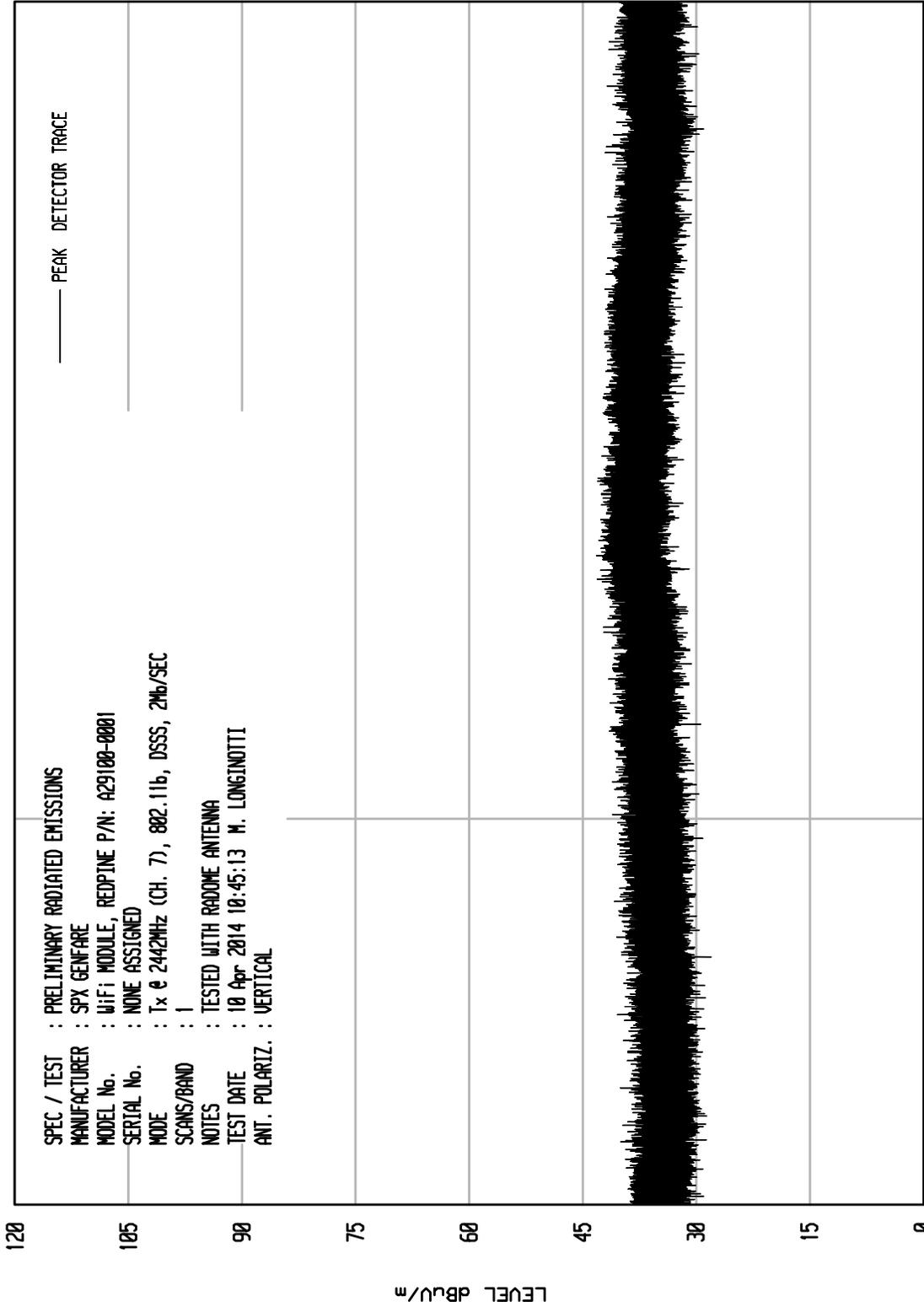


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV ENI RUN 4

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:45:13 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

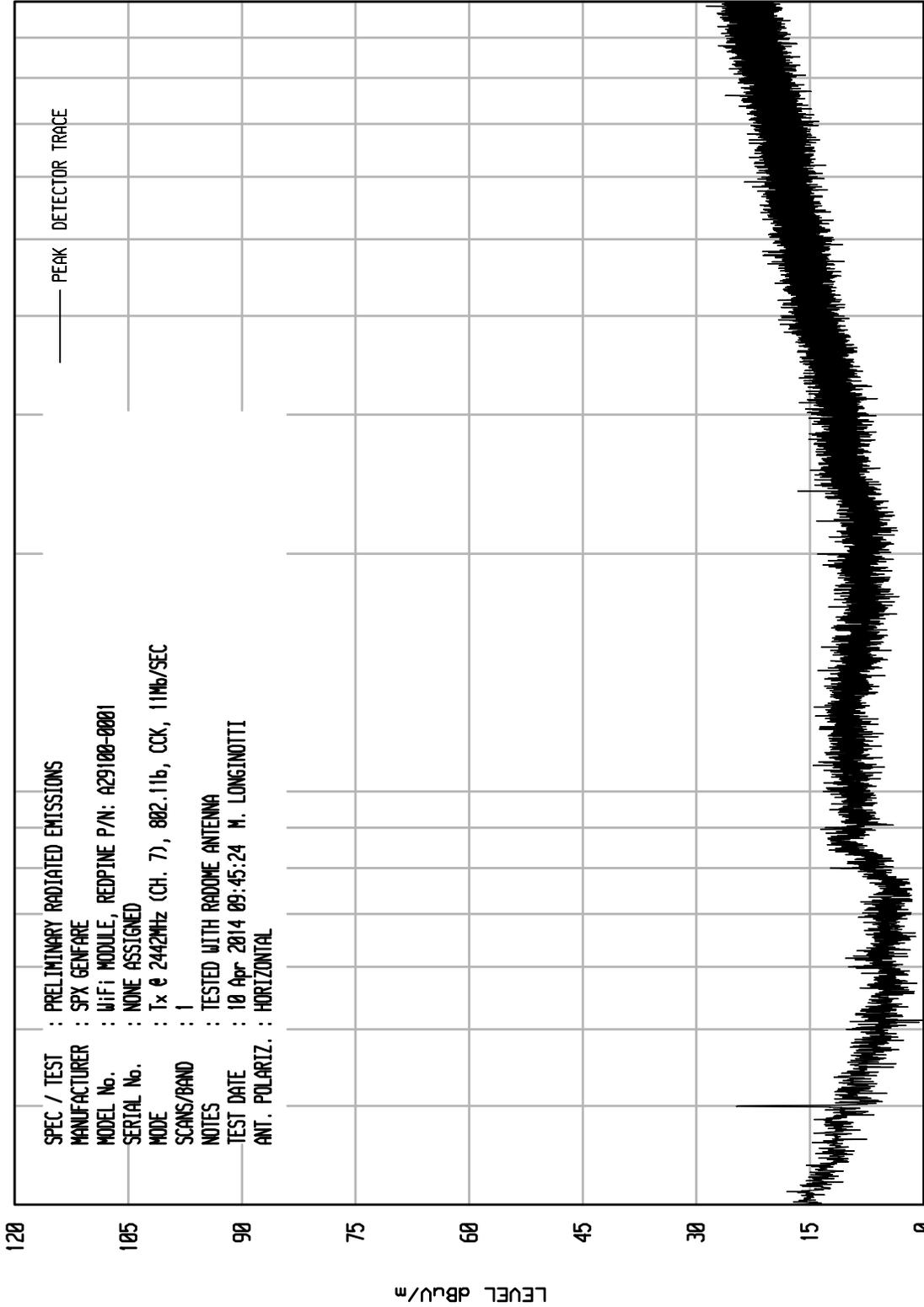


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UNIU RCJ ENI RUN 67

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBµV/m

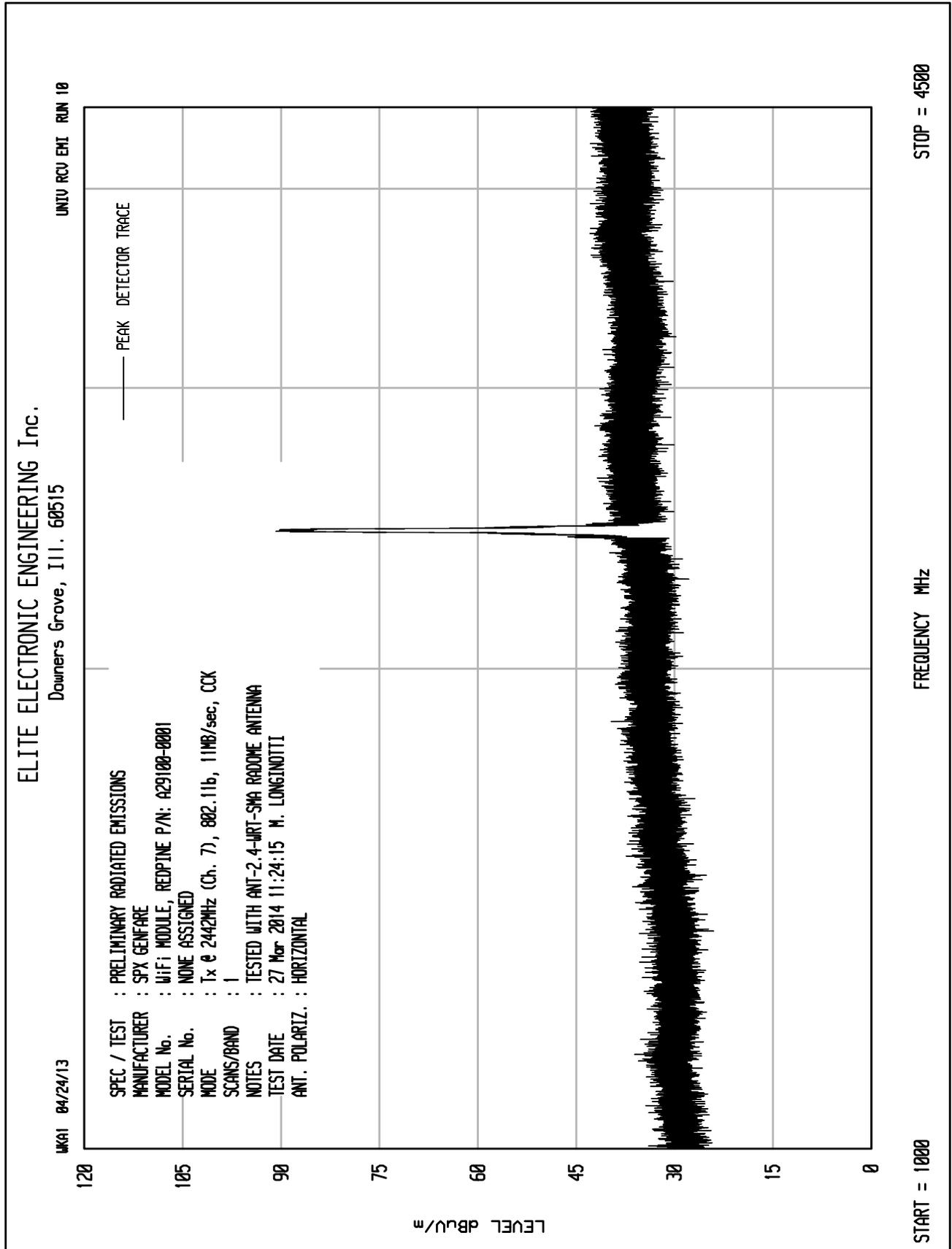
100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:45:24 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL



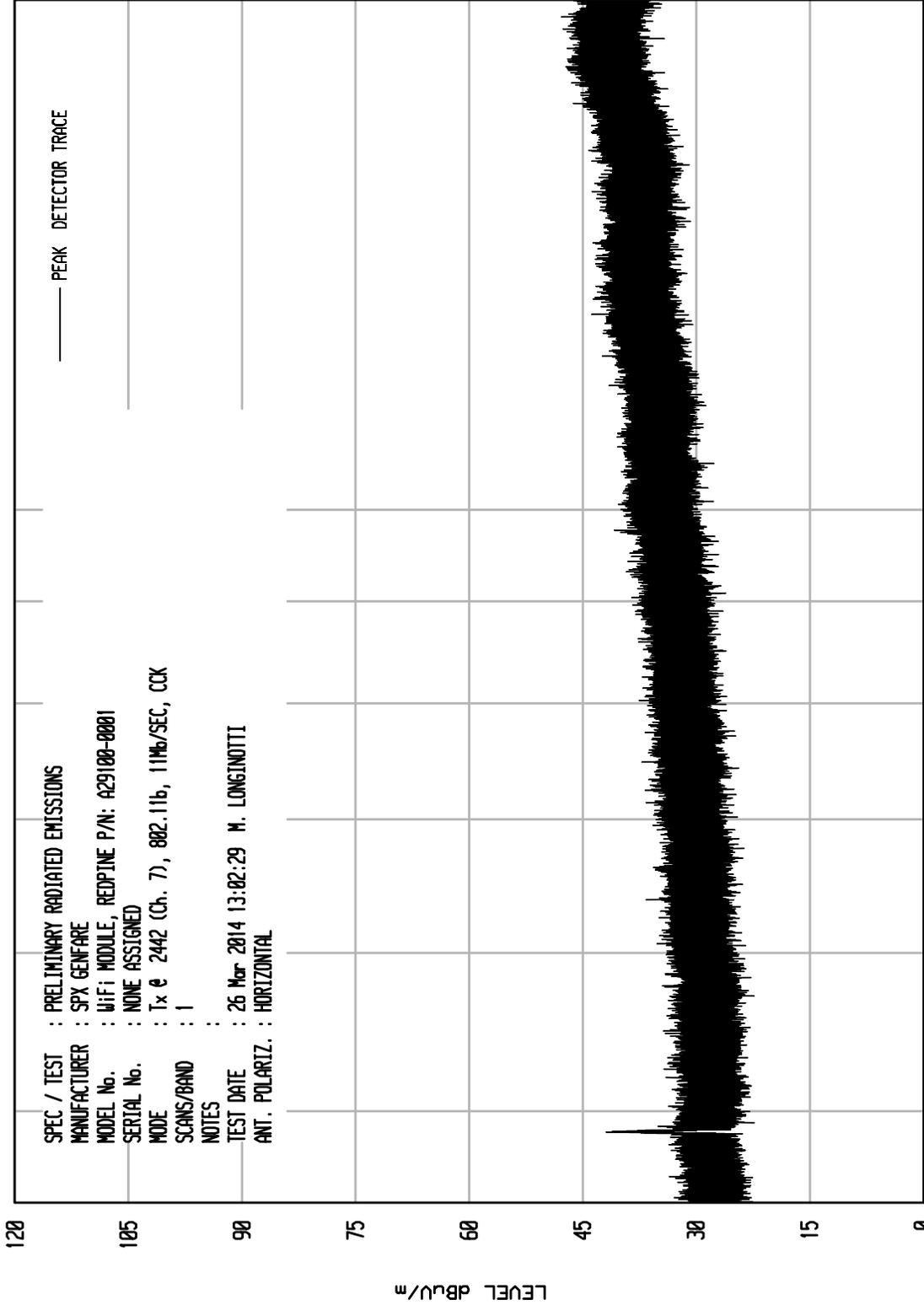


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV ENI RUN 7

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442 (Ch. 7), 802.11b, 11Mbps/SEC, CCK
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 13:02:29 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 18000

FREQUENCY MHz

START = 4500

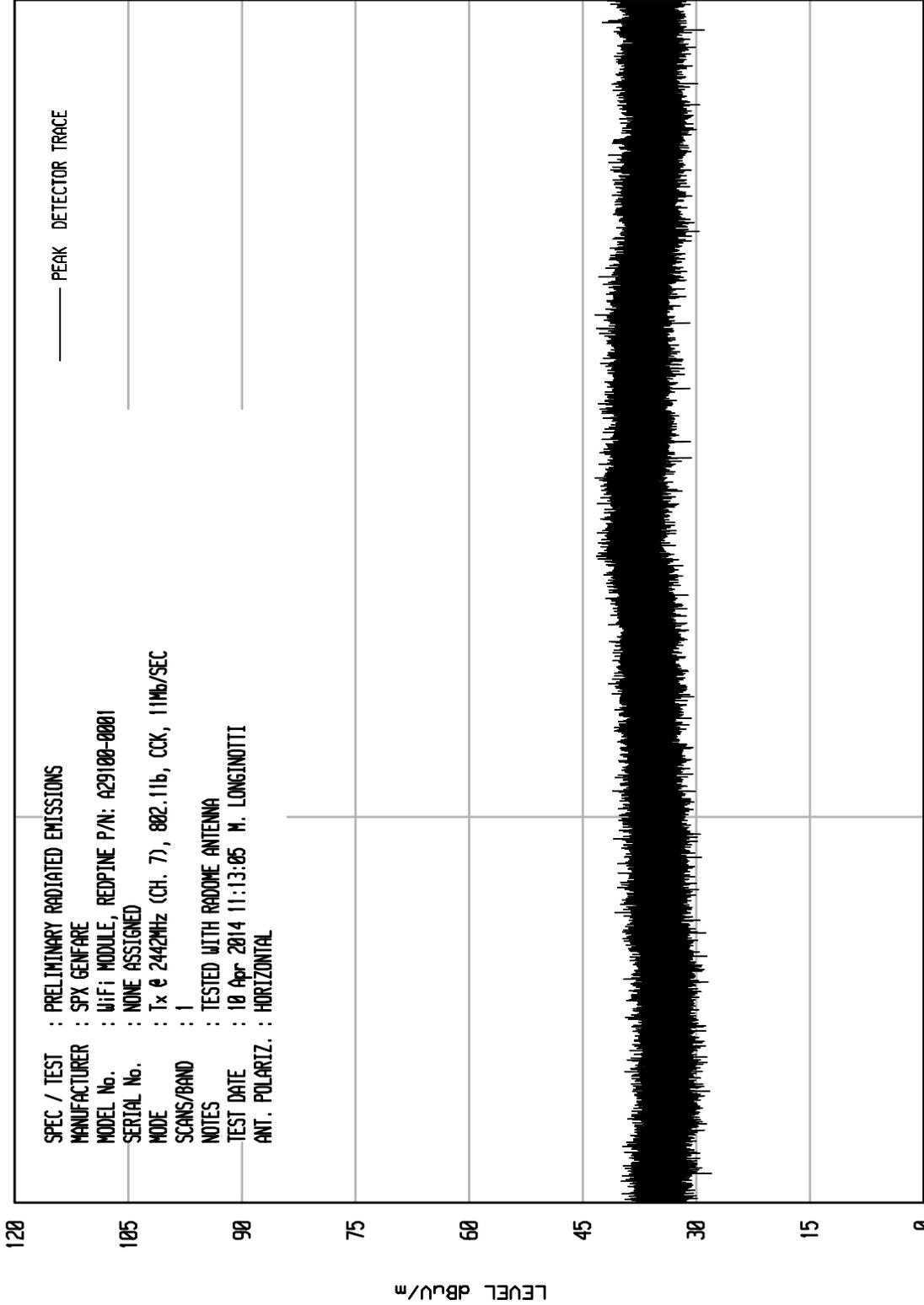


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Downers Grove, Ill. 60515

UNIV RCU EMI RUN 9

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:13:05 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBµV/m

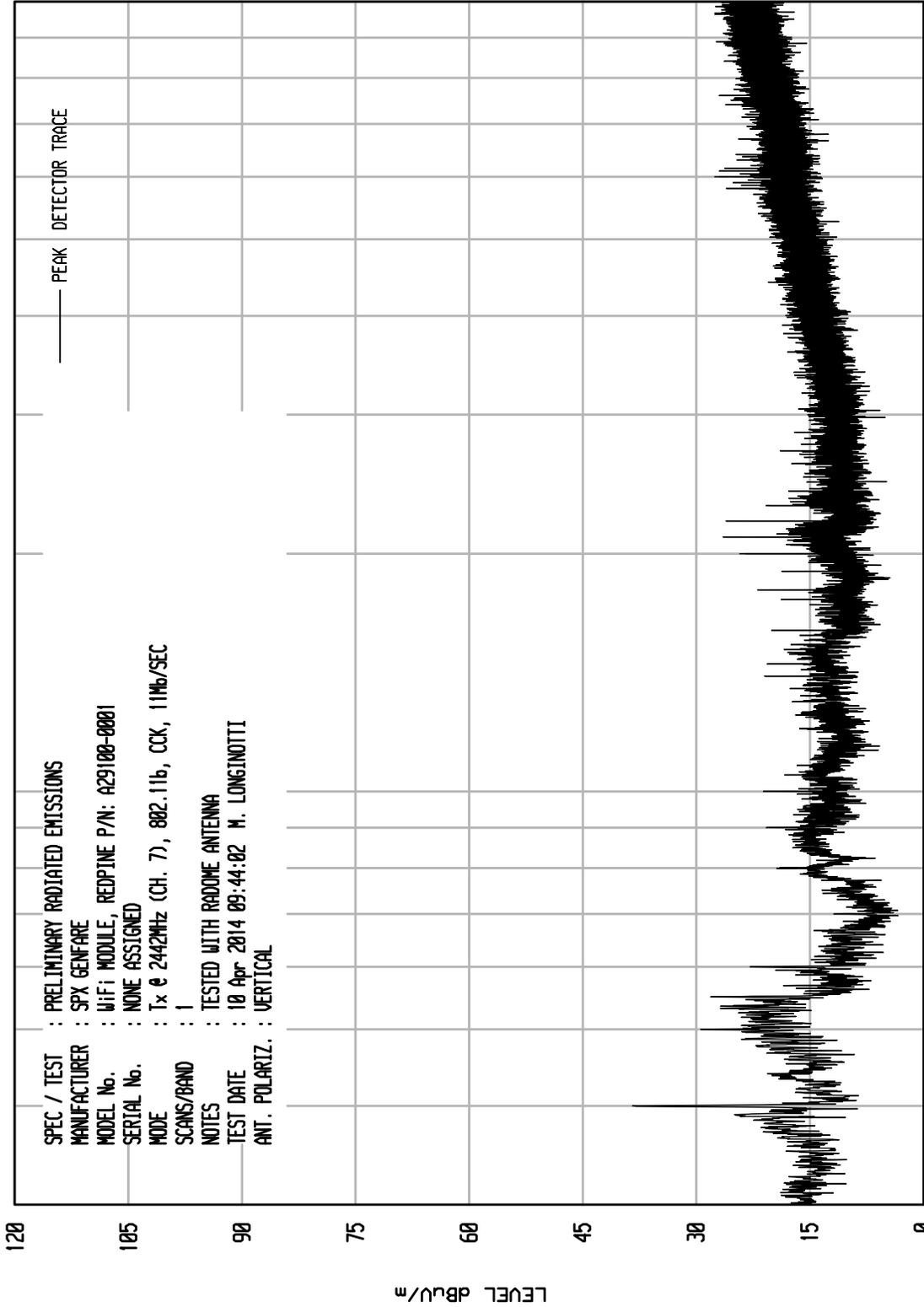


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UNIV RCU ENI RUN 66

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

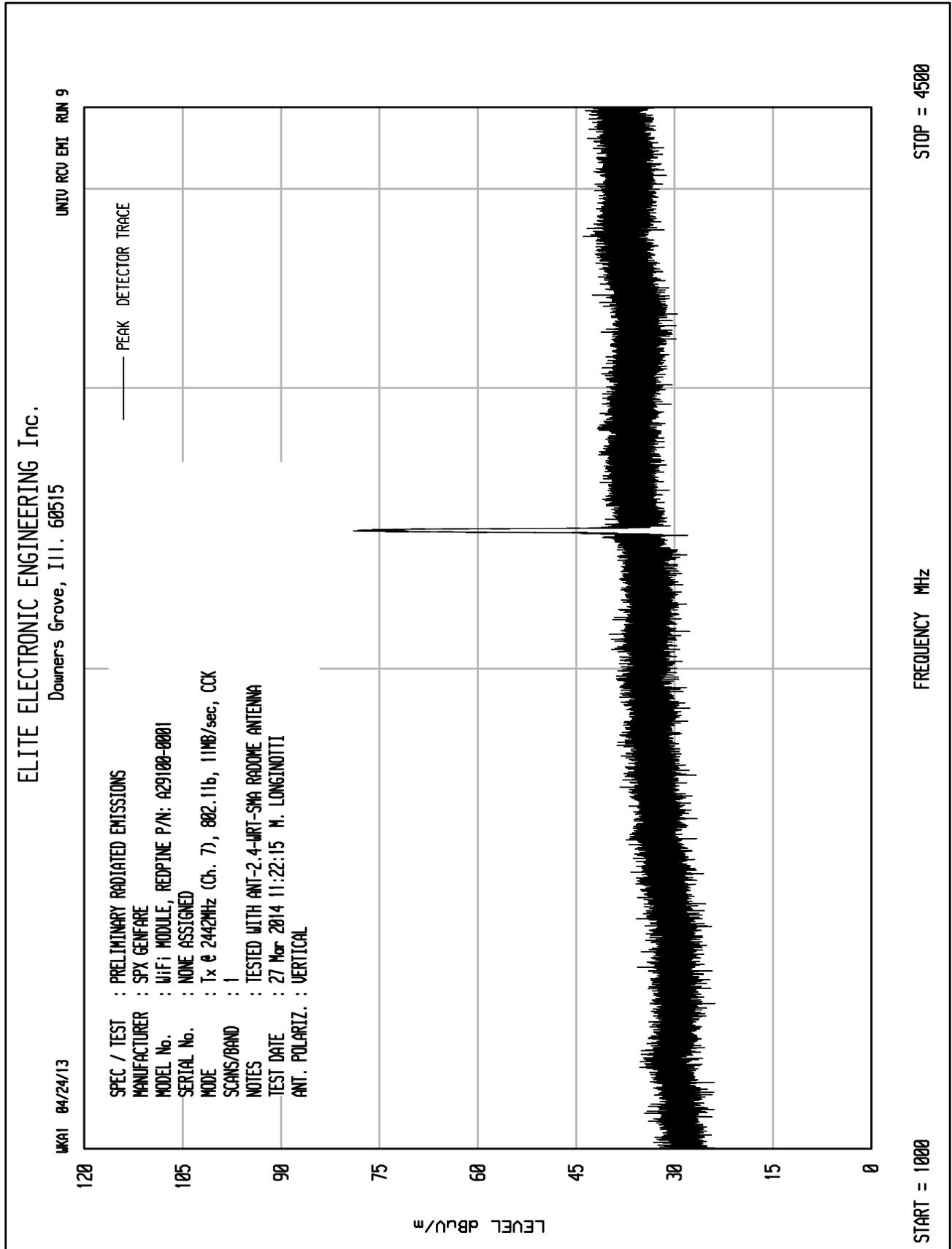
MODE : Tx @ 2442MHz (CH. 7), 802.11b, CCK, 11Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:44:02 M. LONGINOTTI

ANT. POLARIZ. : VERTICAL



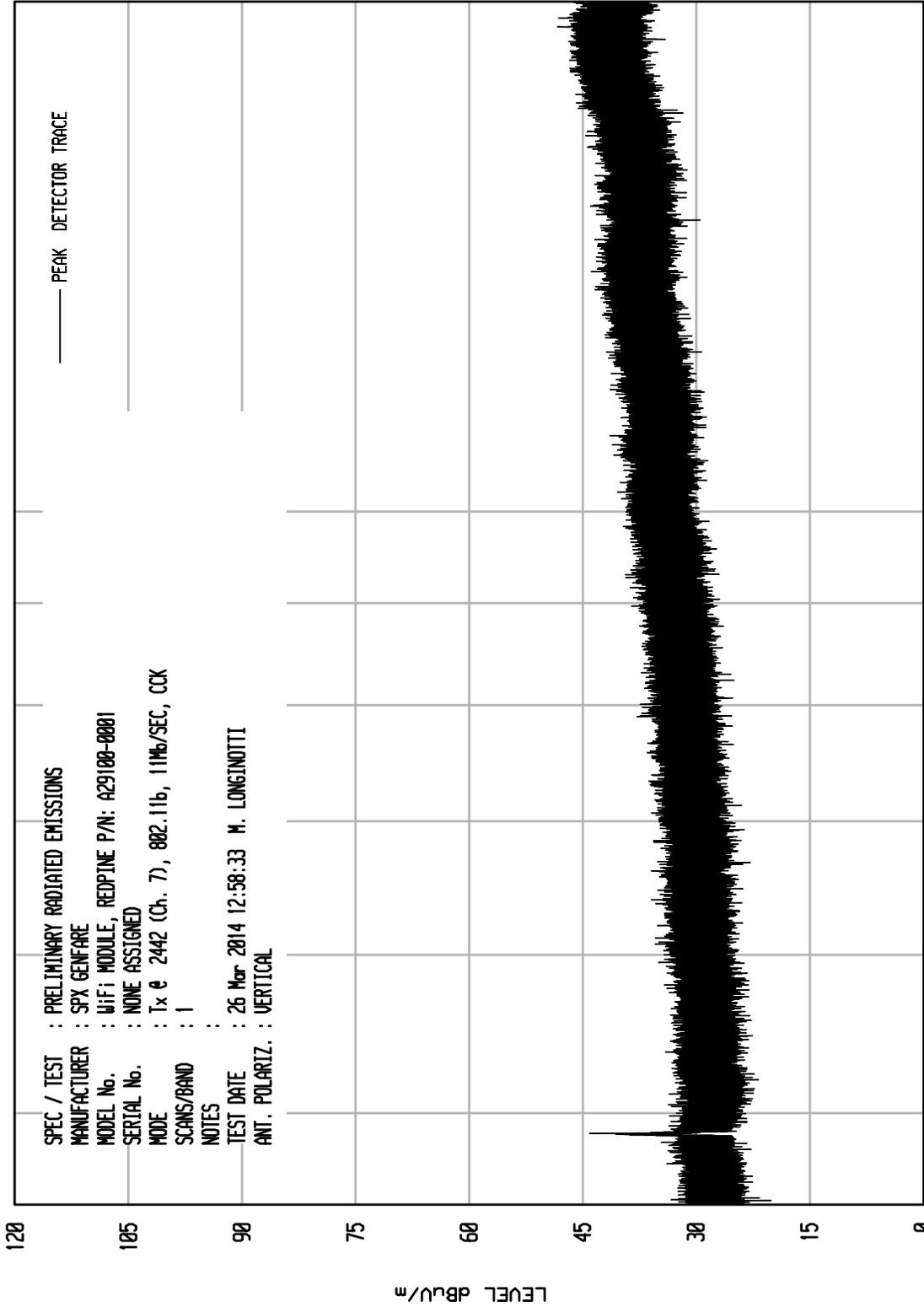


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UNIV RCV ENI RUN 6

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442 (Ch. 7), 802.11b, 11Mbps/SEC, CCK
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 12:58:33 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

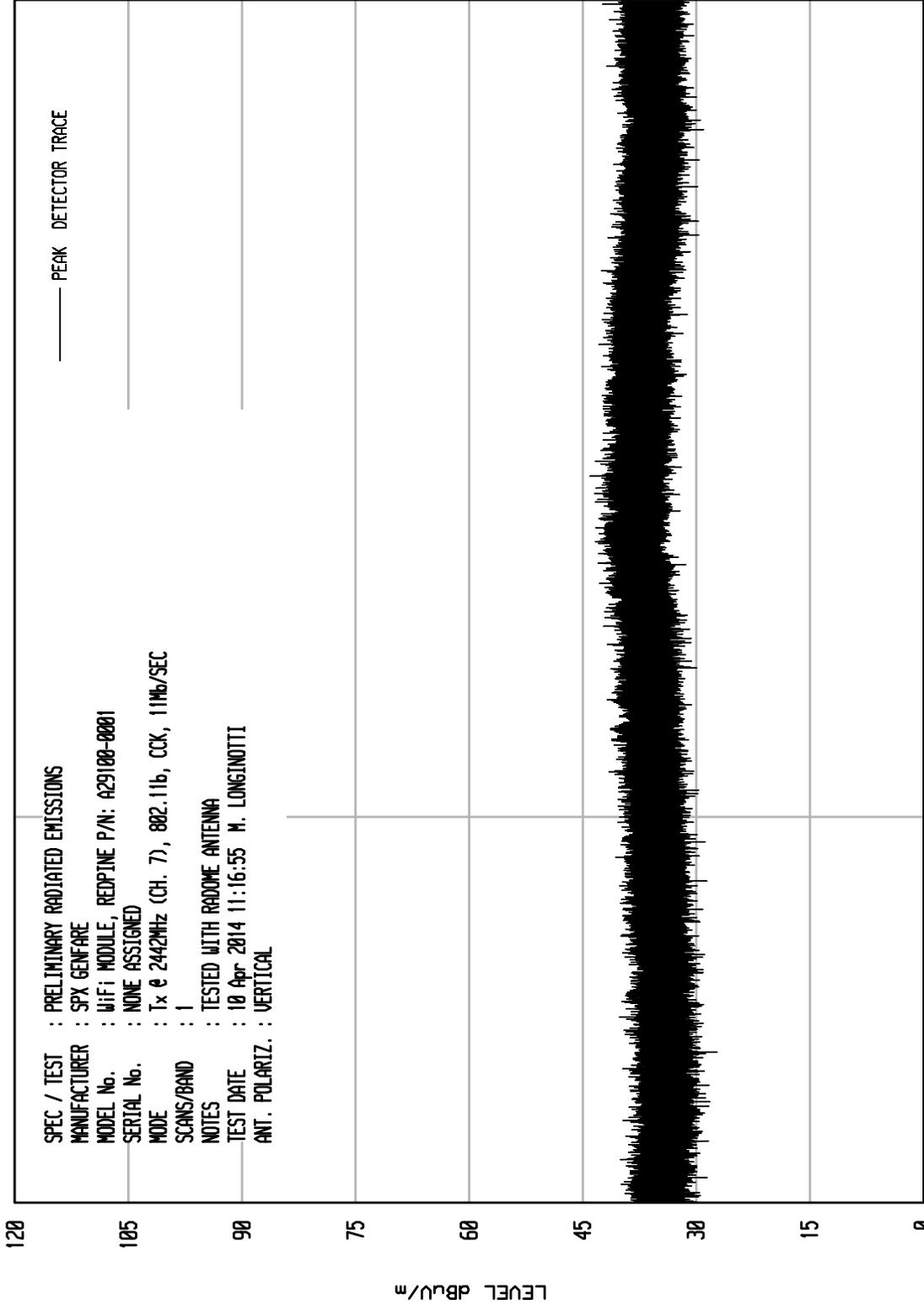
START = 4500 10000 STOP = 18000
 LEVEL dBµV/m FREQUENCY MHz

ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV EMI RUN 10

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:16:55 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

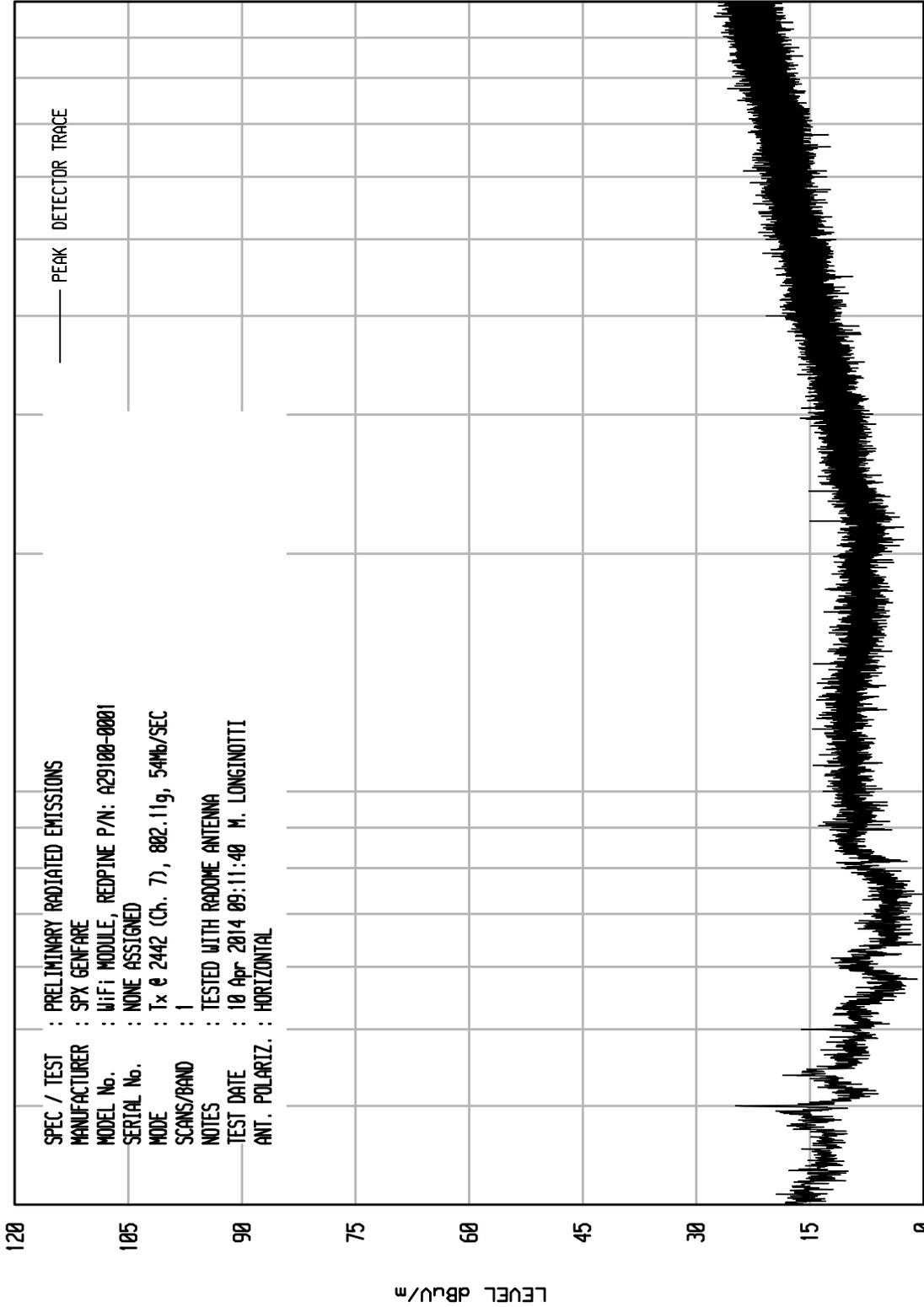


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UKA1 04/24/13

UNIV RCU ENI RUN 45



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

MODE : Tx @ 2442 (Ch. 7), 802.11g, 54Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:11:40 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL

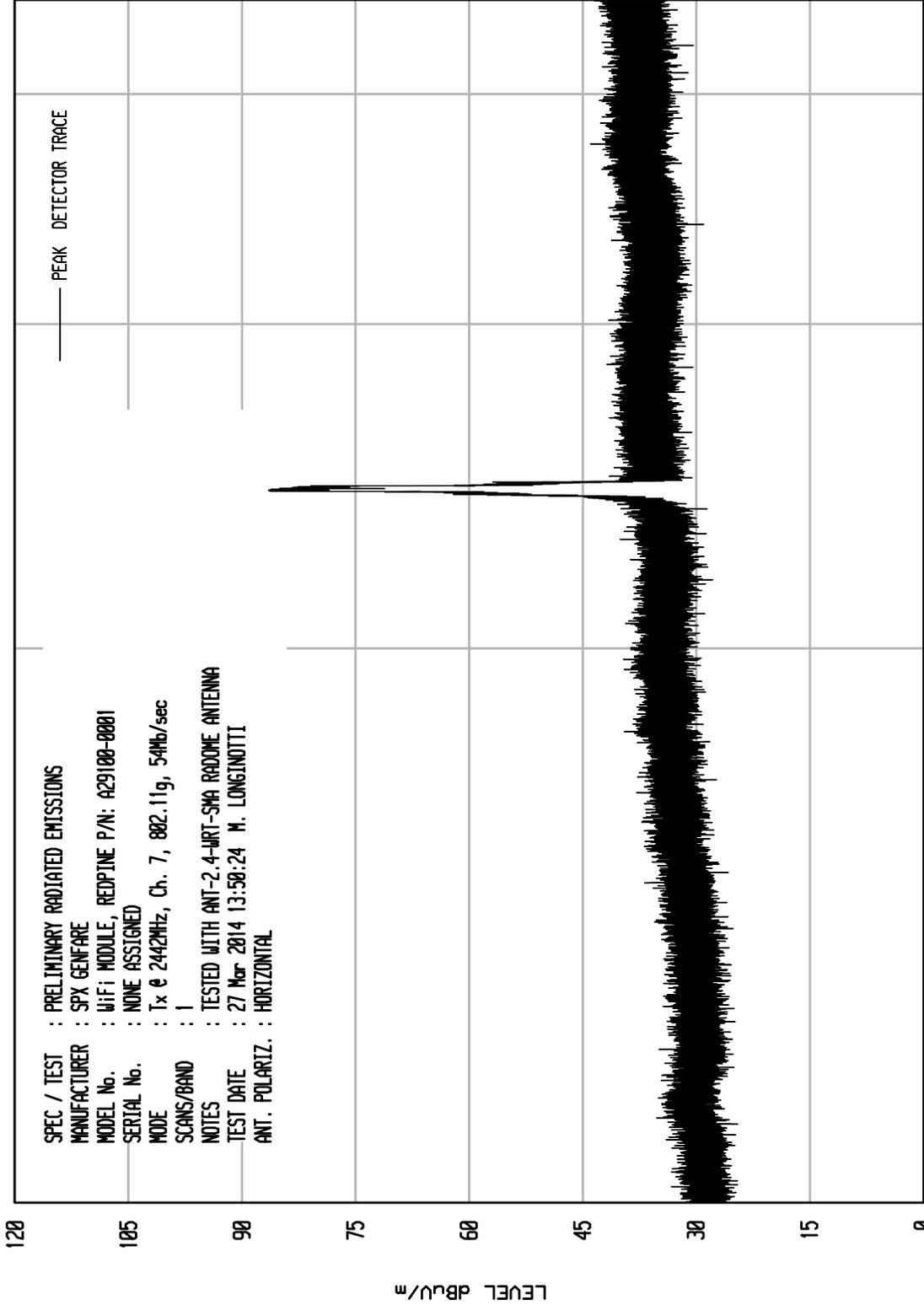


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 26

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz, Ch. 7, 802.11g, 54Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 13:50:24 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

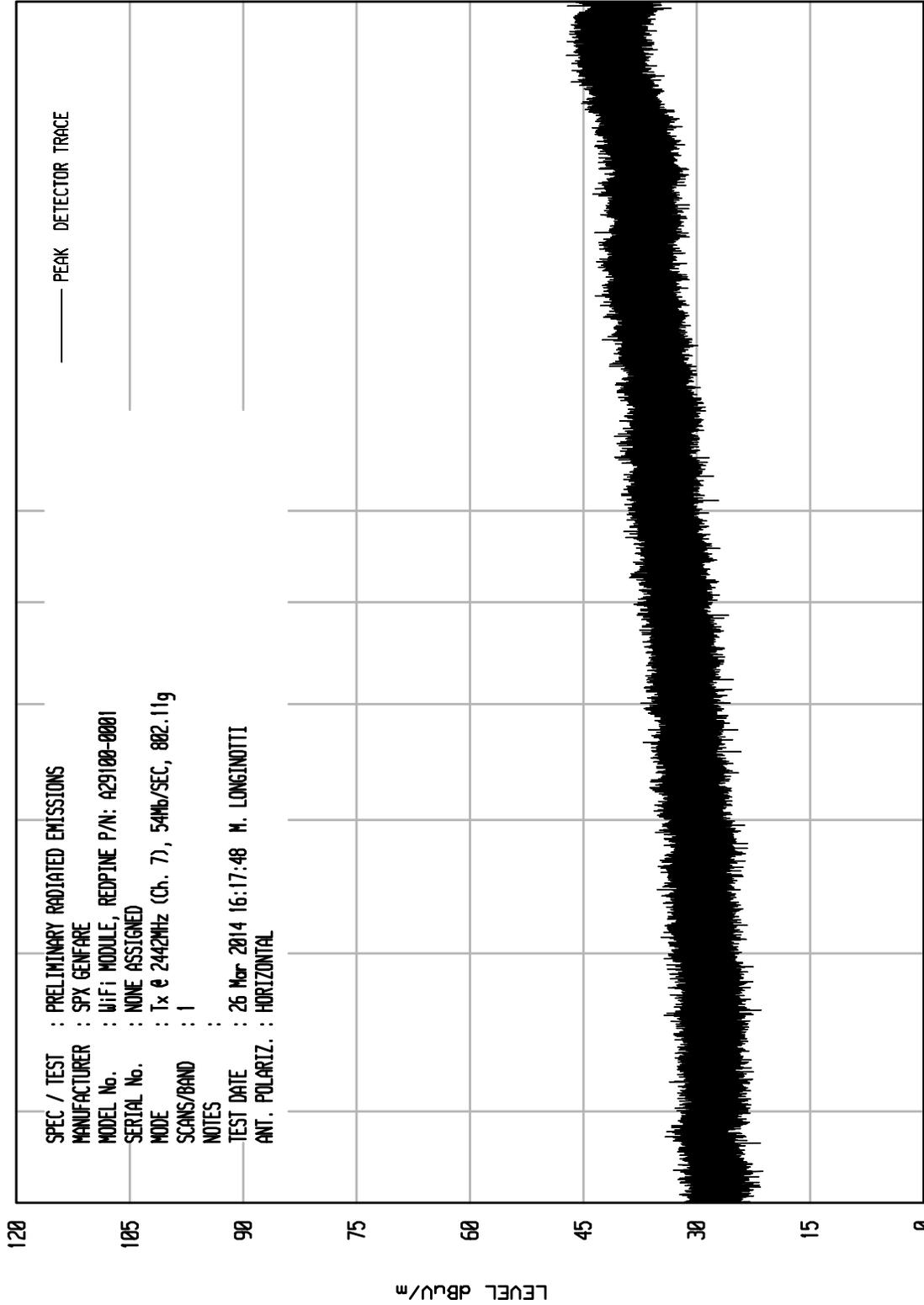
FREQUENCY MHz

START = 1000

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UNIU RCV EMI RUN 17

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 54Mb/SEC, 802.11g
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 16:17:48 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

START = 4500 STOP = 18000
 FREQUENCY MHz

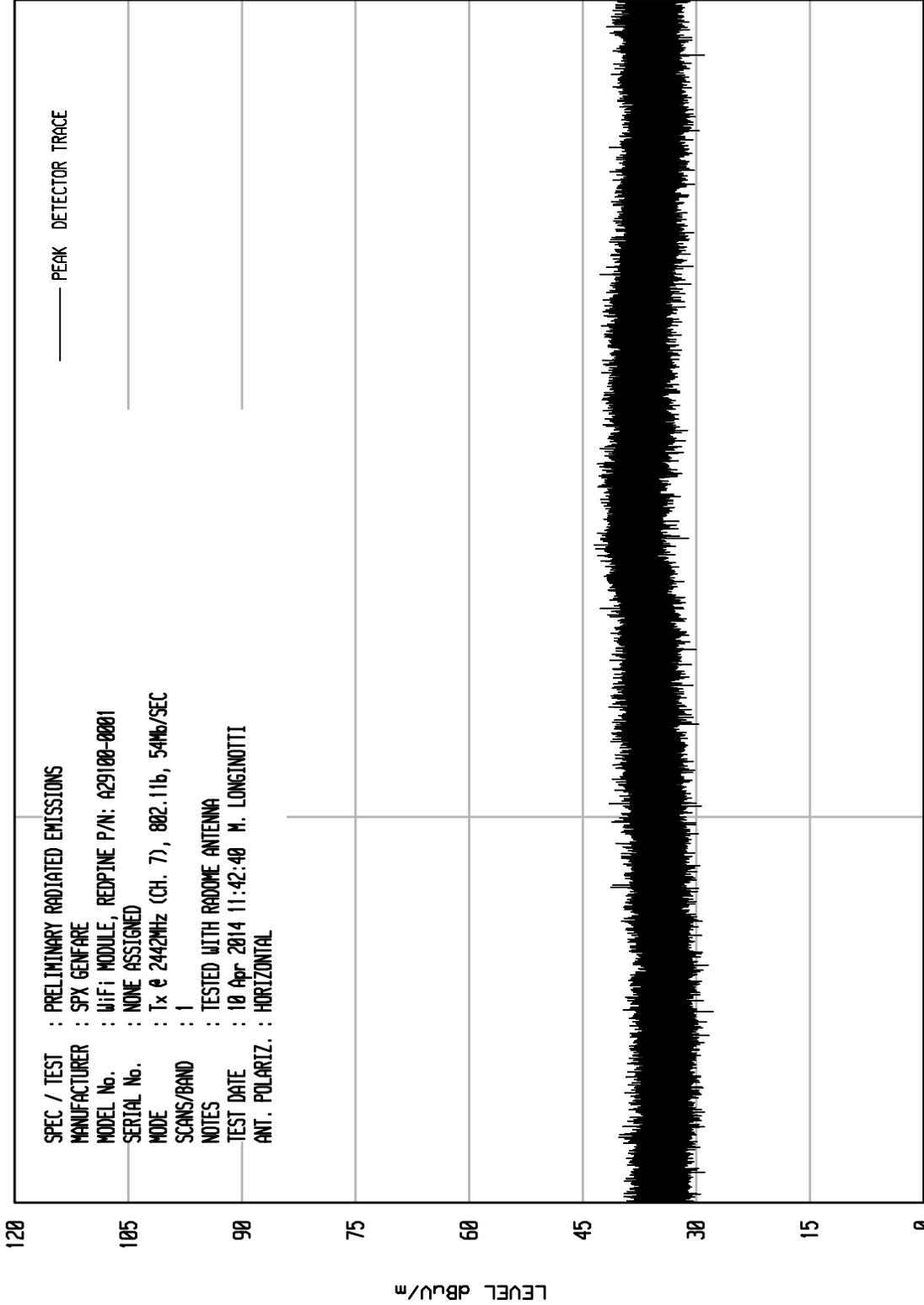


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCU EMI RUN 17

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:42:40 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

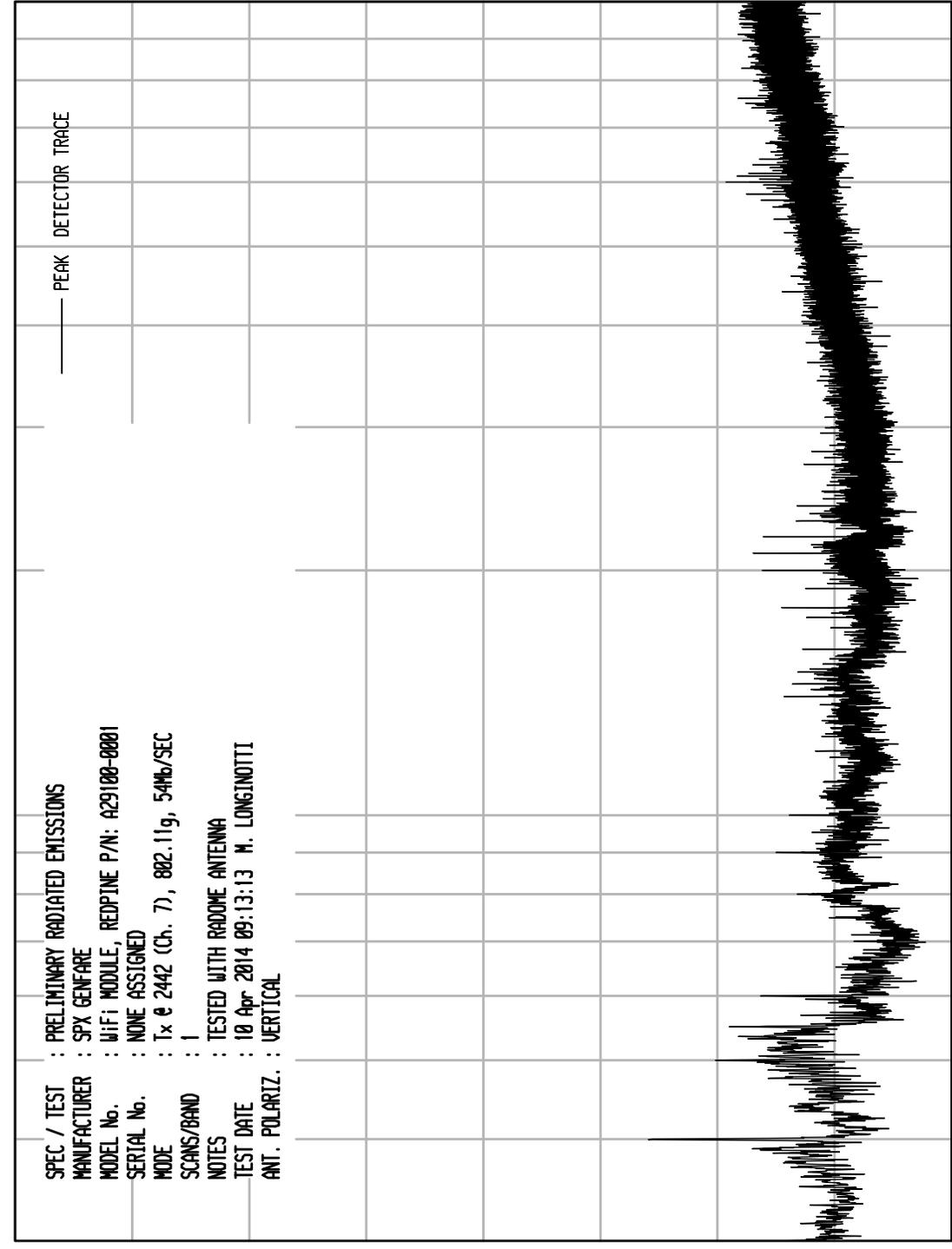


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UNIV RCU ENI RUN 46

UKA1 04/24/13

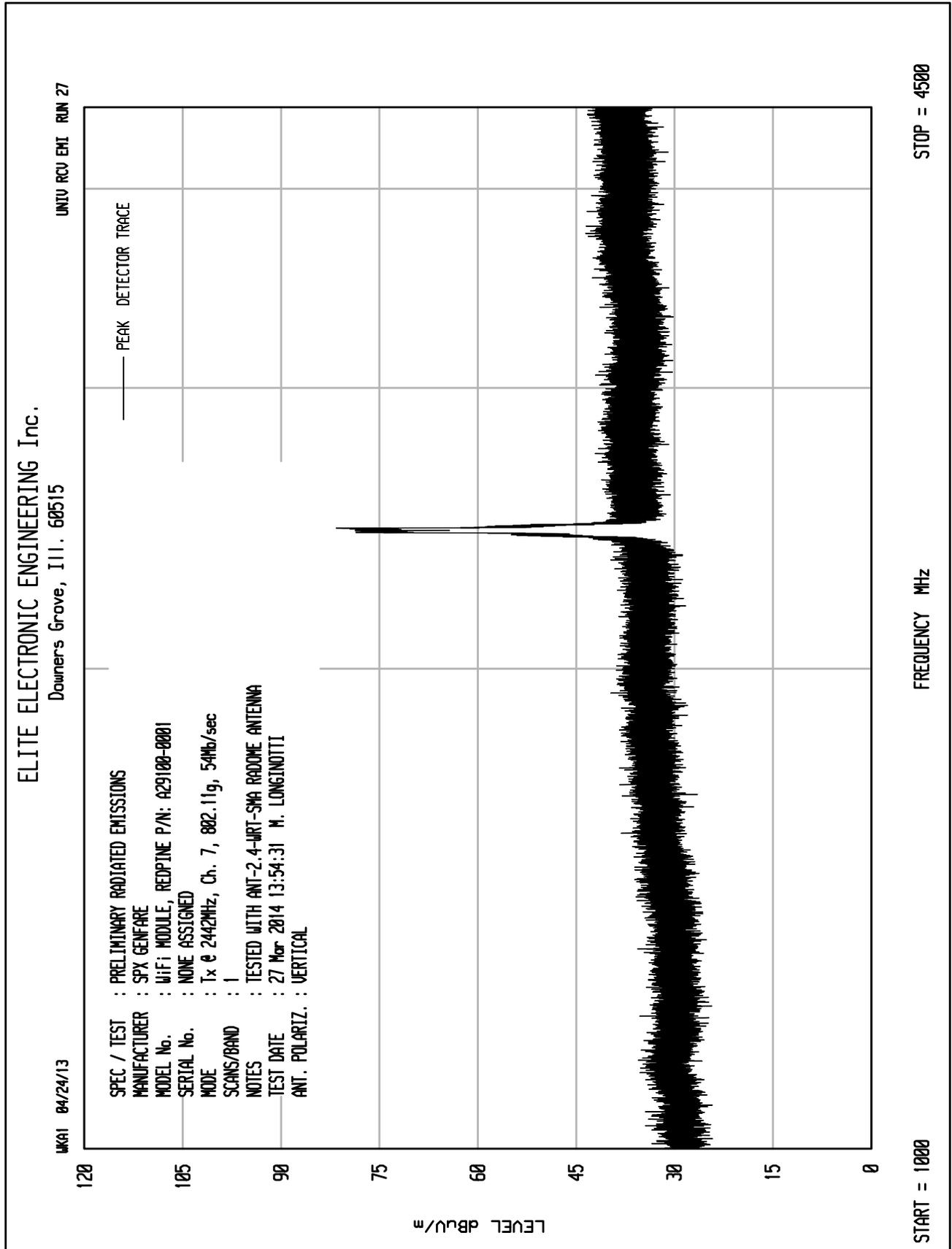


120
105
90
75
60
45
30
15
0

LEVEL dBu/m

START = 30
STOP = 1000
FREQUENCY MHz

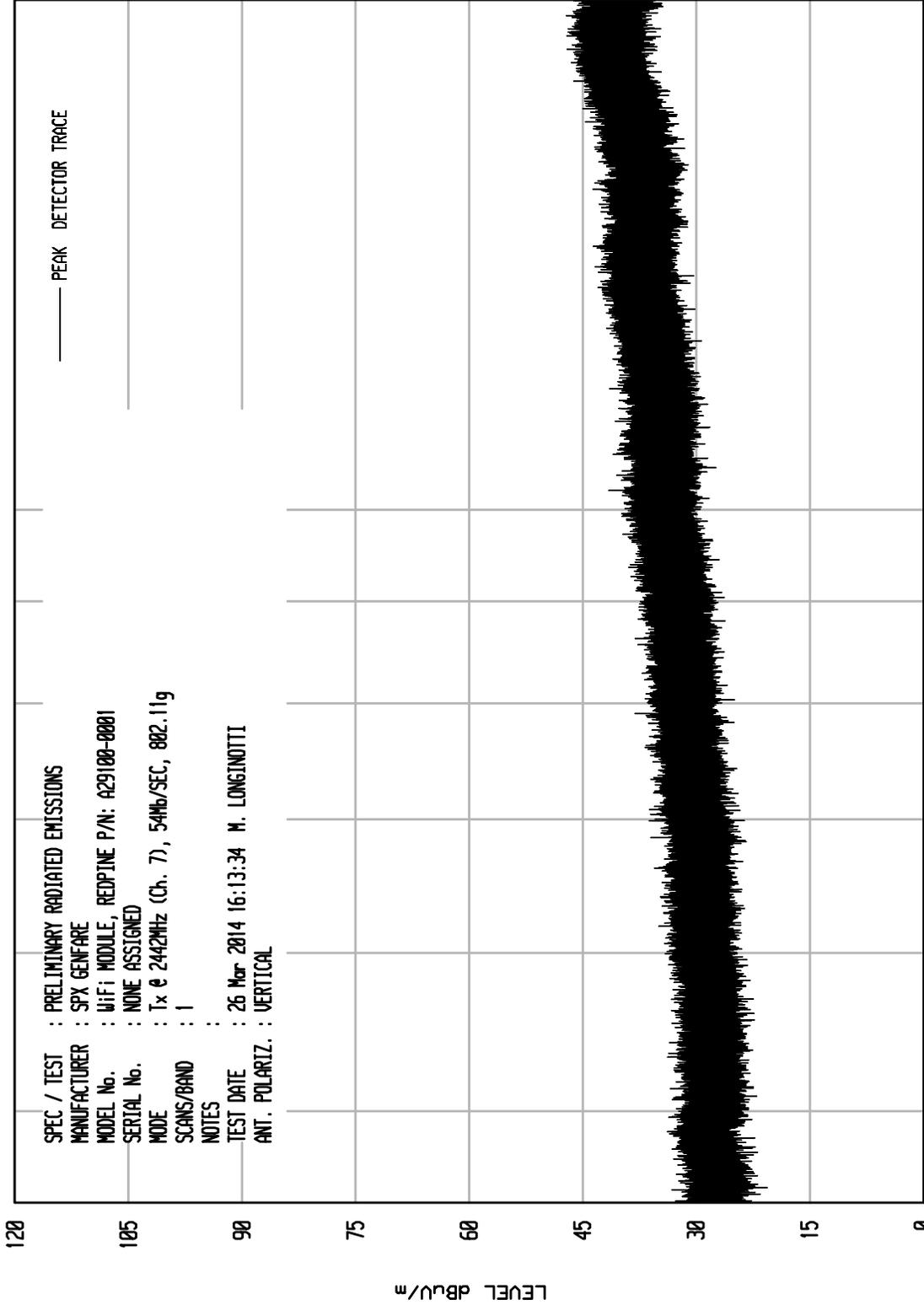
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442 (Ch. 7), 802.11g, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:13:13 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL



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UNIV RCV ENI RUN 16

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 54Mb/SEC, 802.11g
 SCANS/BAND : 1
 NOTES :
 TEST DATE : 26 Mar 2014 16:13:34 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 10000

10000
FREQUENCY MHz

START = 4500

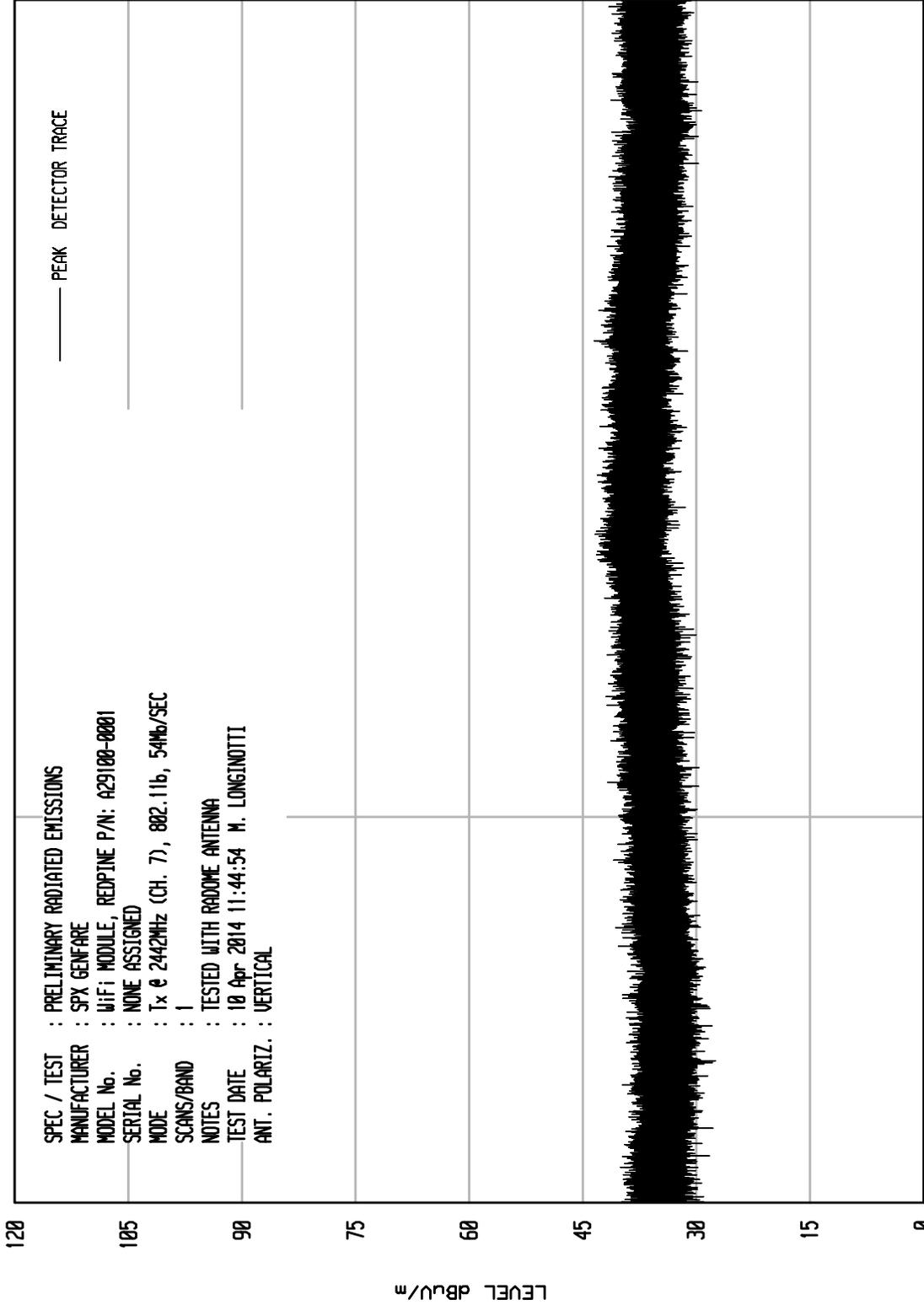


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV EMI RUN 18

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:44:54 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

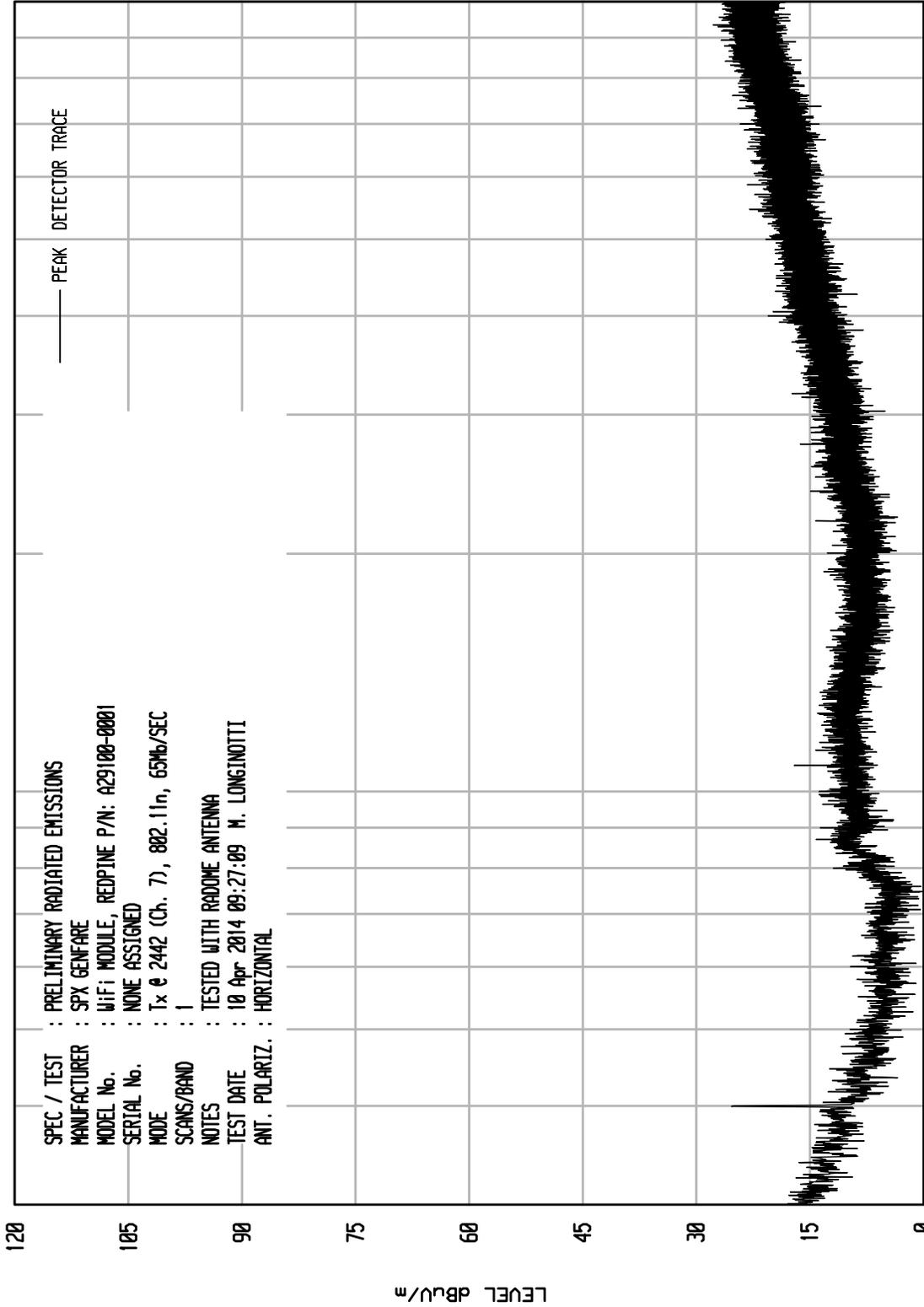


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UNIU RCU ENI RUN 54

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

MODE : Tx @ 2442 (Ch. 7), 802.11n, 65Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:27:09 M. LONGINOTTI

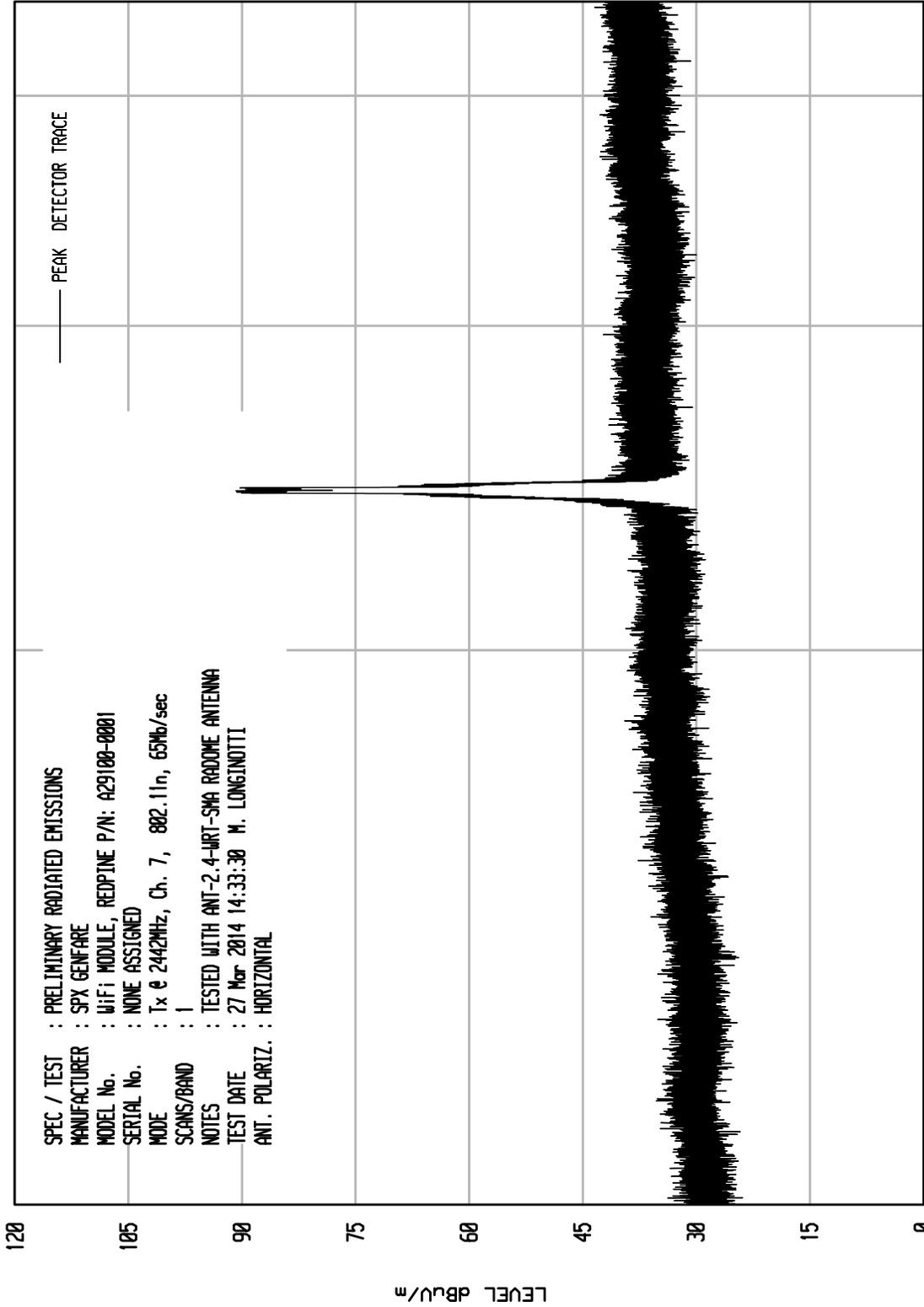
ANT. POLARIZ. : HORIZONTAL

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UNIV RCU EMI RUN 33

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz, Ch. 7, 802.11n, 65Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 14:33:30 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

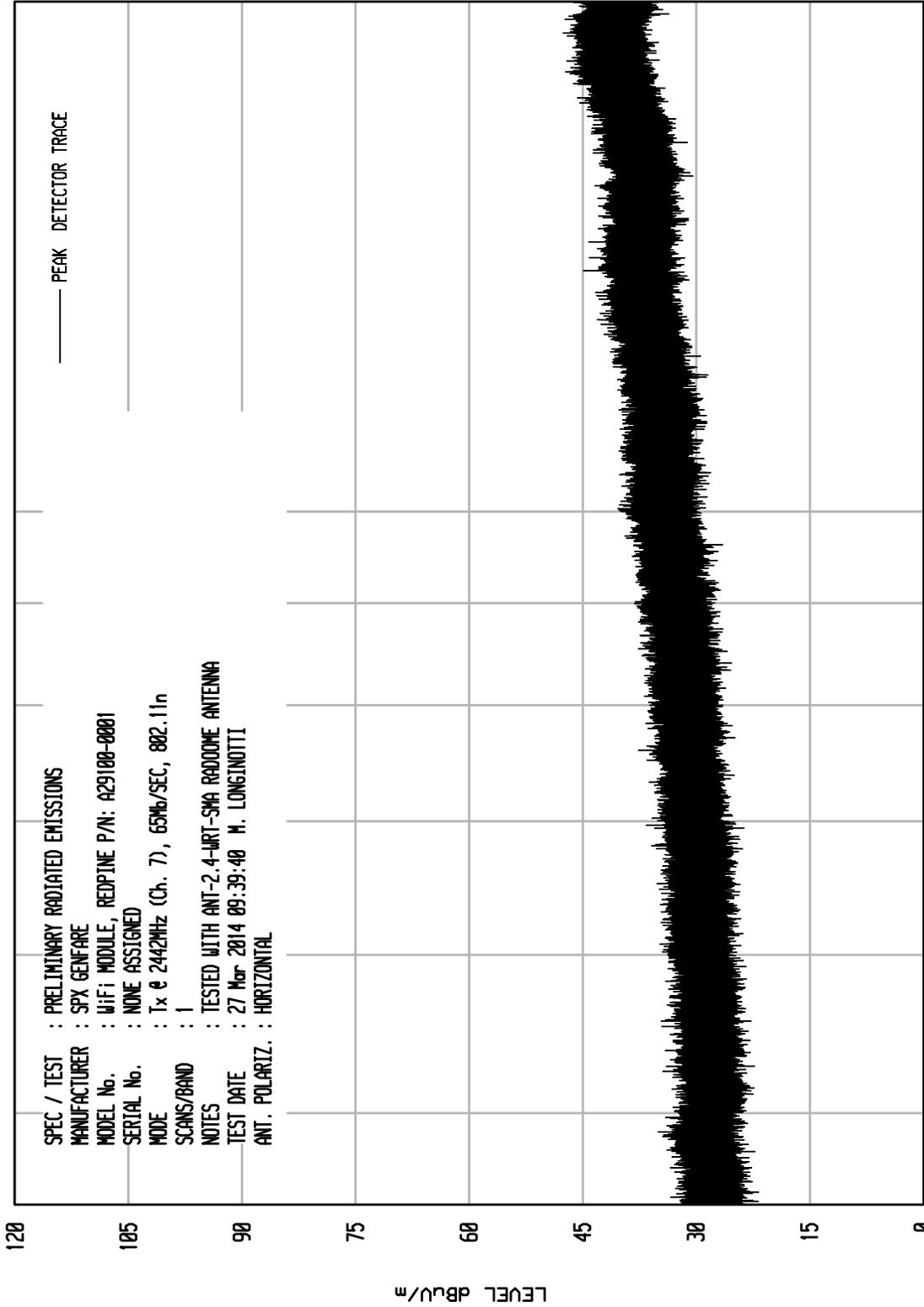
START = 1000

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UNIV RCV ENI RUN 22

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 65Mb/SEC, 802.11n
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADIOME ANTENNA
 TEST DATE : 27 Mar 2014 09:39:40 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 18000

10000
FREQUENCY MHz

START = 4500

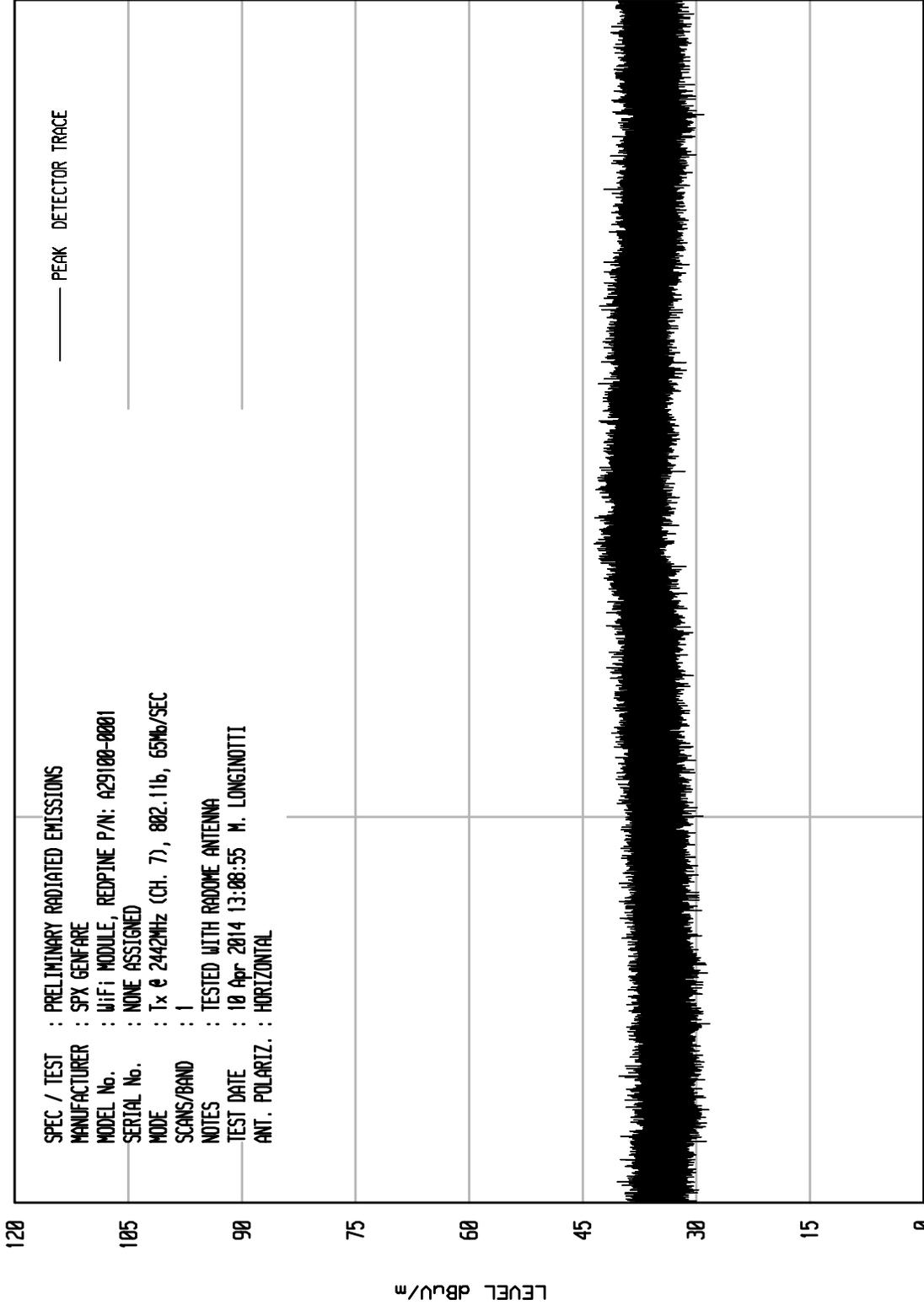


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UNIV RCU EMI RUN 23

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:08:55 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

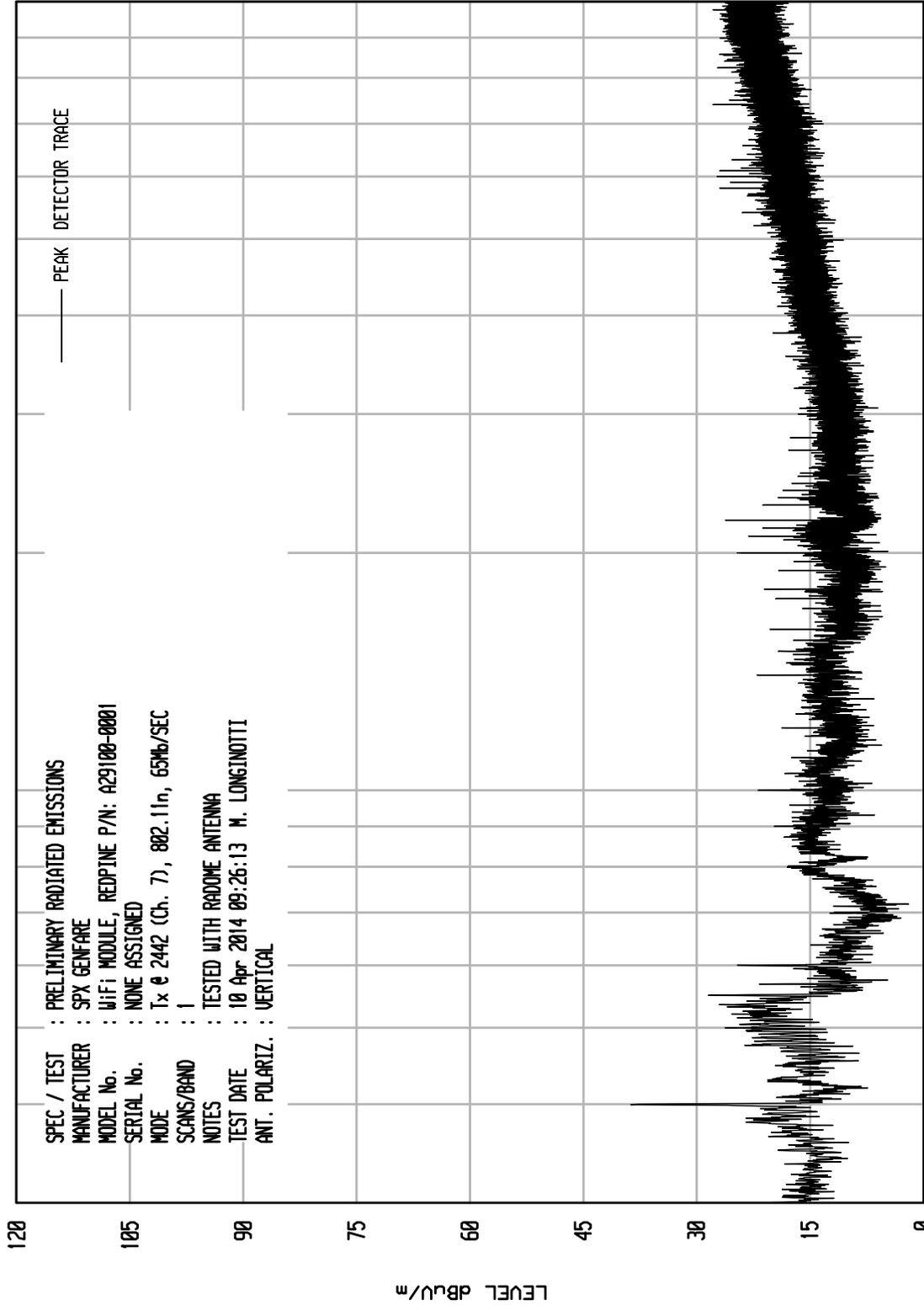


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UNIV RCU ENI RUN 53

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120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442 (Ch. 7), 802.11n, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:26:13 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

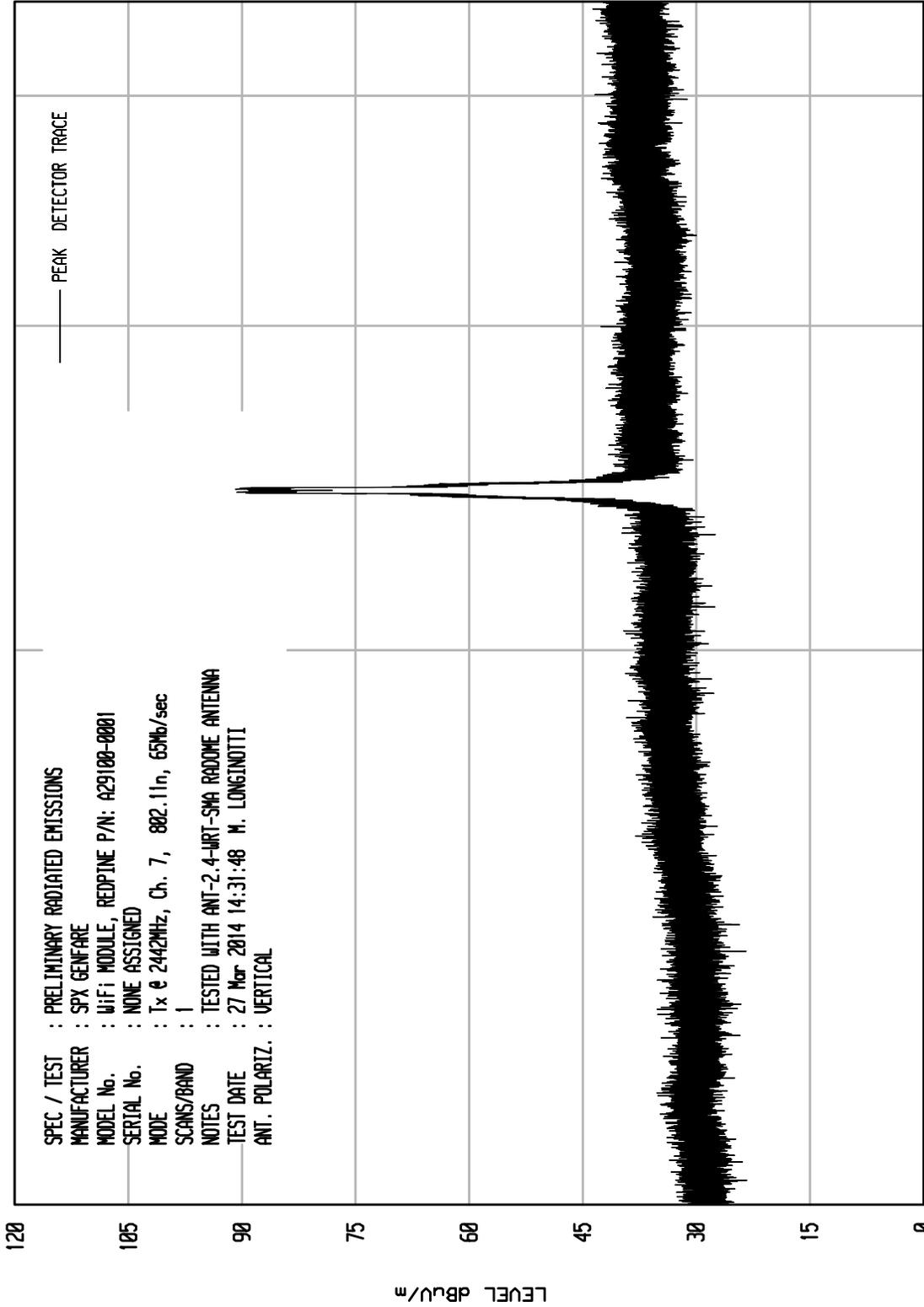


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UNIV RCU EMI RUN 32

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz, Ch. 7, 802.11n, 65Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 14:31:48 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

FREQUENCY MHz

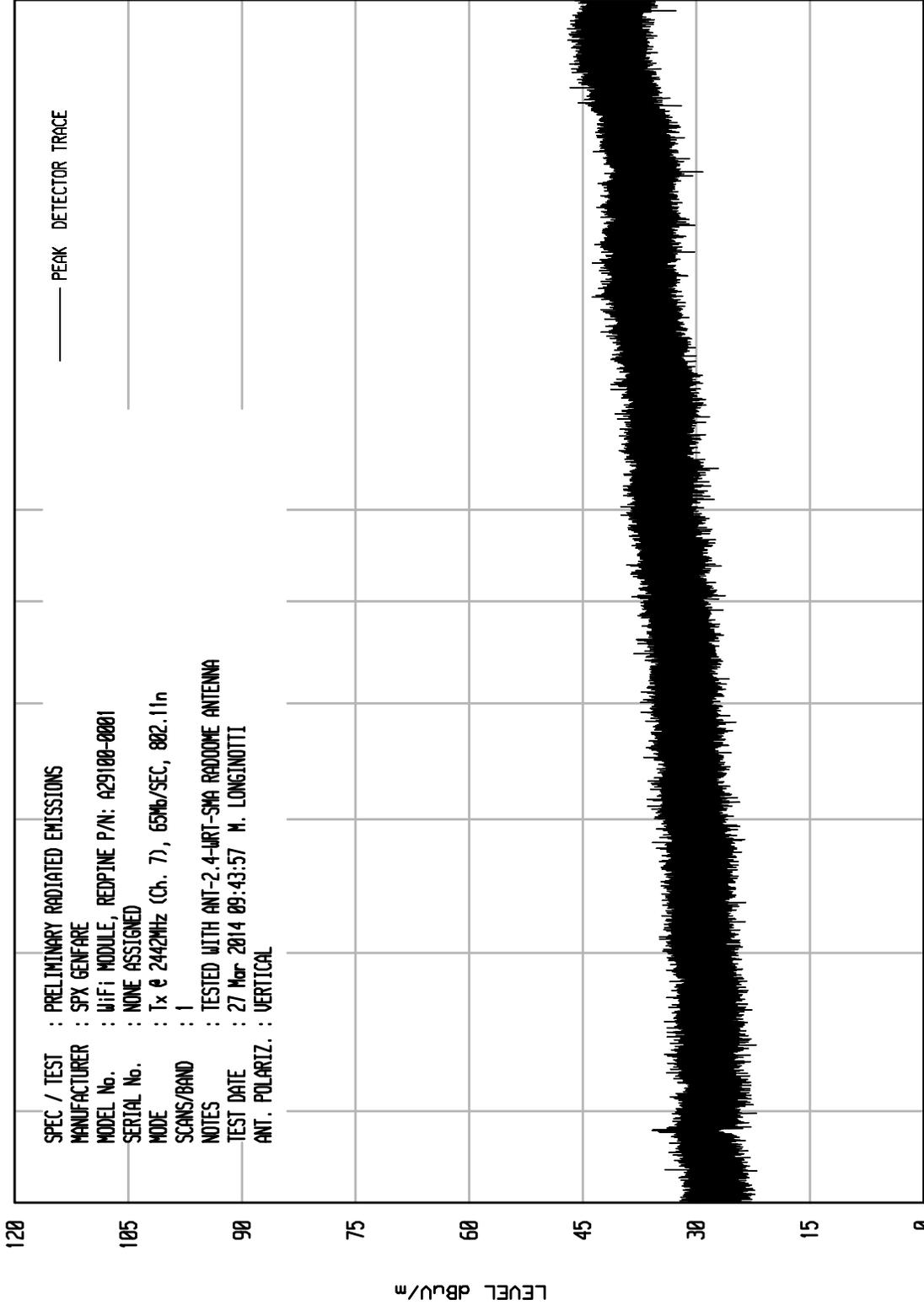
START = 1000

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UNIV RCV EMI RUN 23

UKA1 04/24/13



10000
FREQUENCY MHz

STOP = 18000

START = 4500

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 65Mb/SEC, 802.11n
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 09:43:57 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

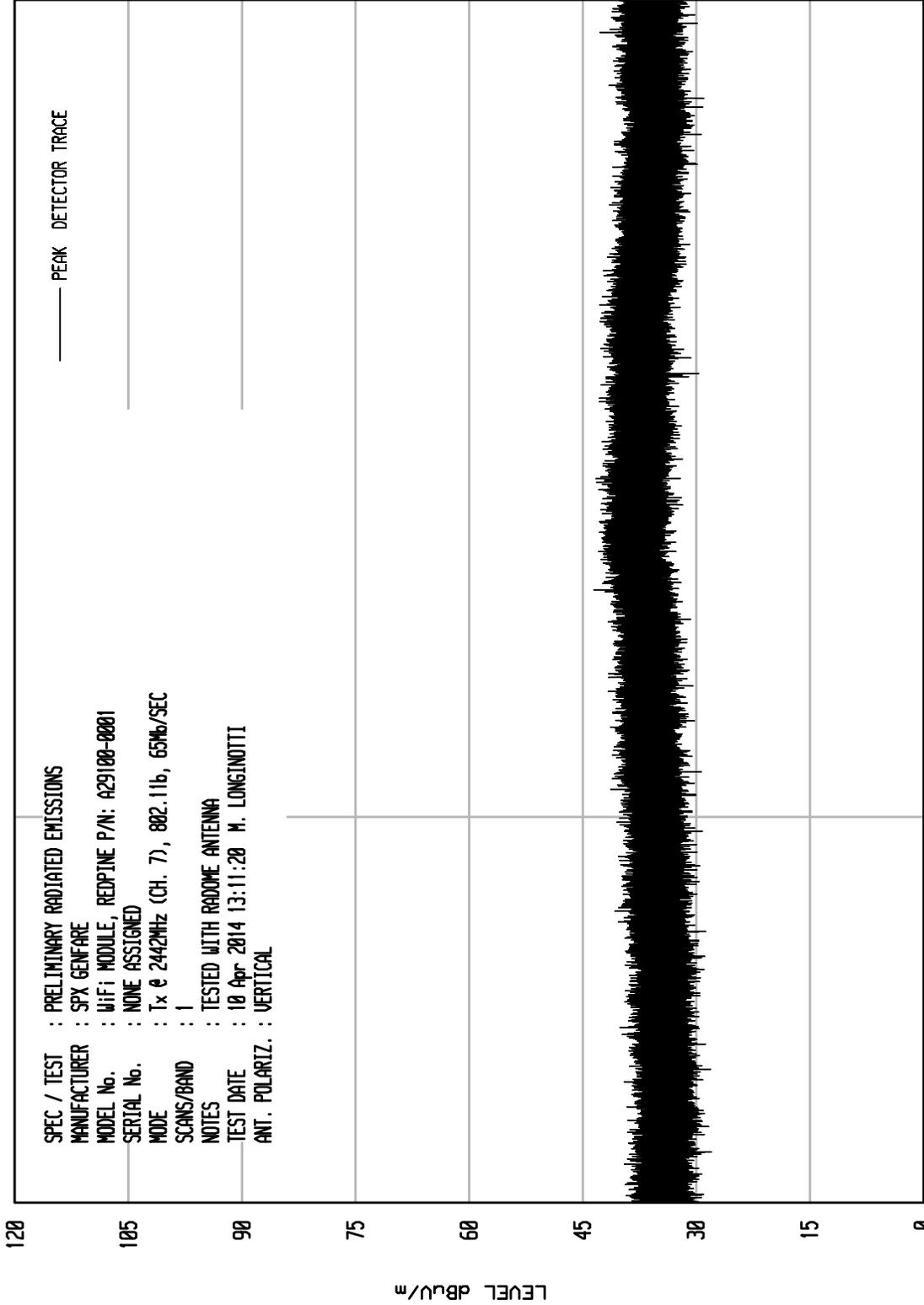


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UNIV RCV EMI RUN 24

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2442MHz (Ch. 7), 802.11b, 65Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:11:20 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

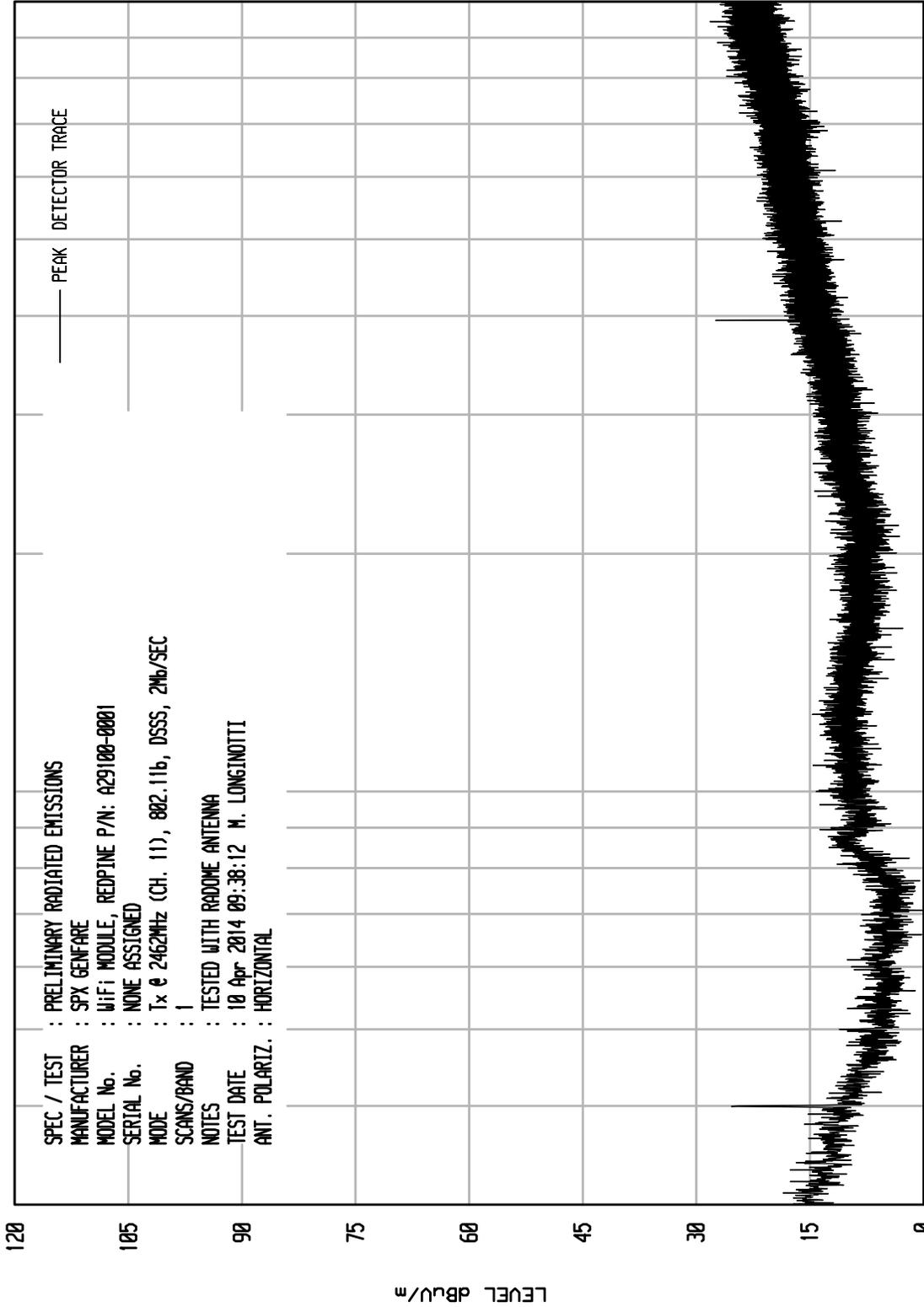


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UNIV RCU ENI RUN 63

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBµV/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

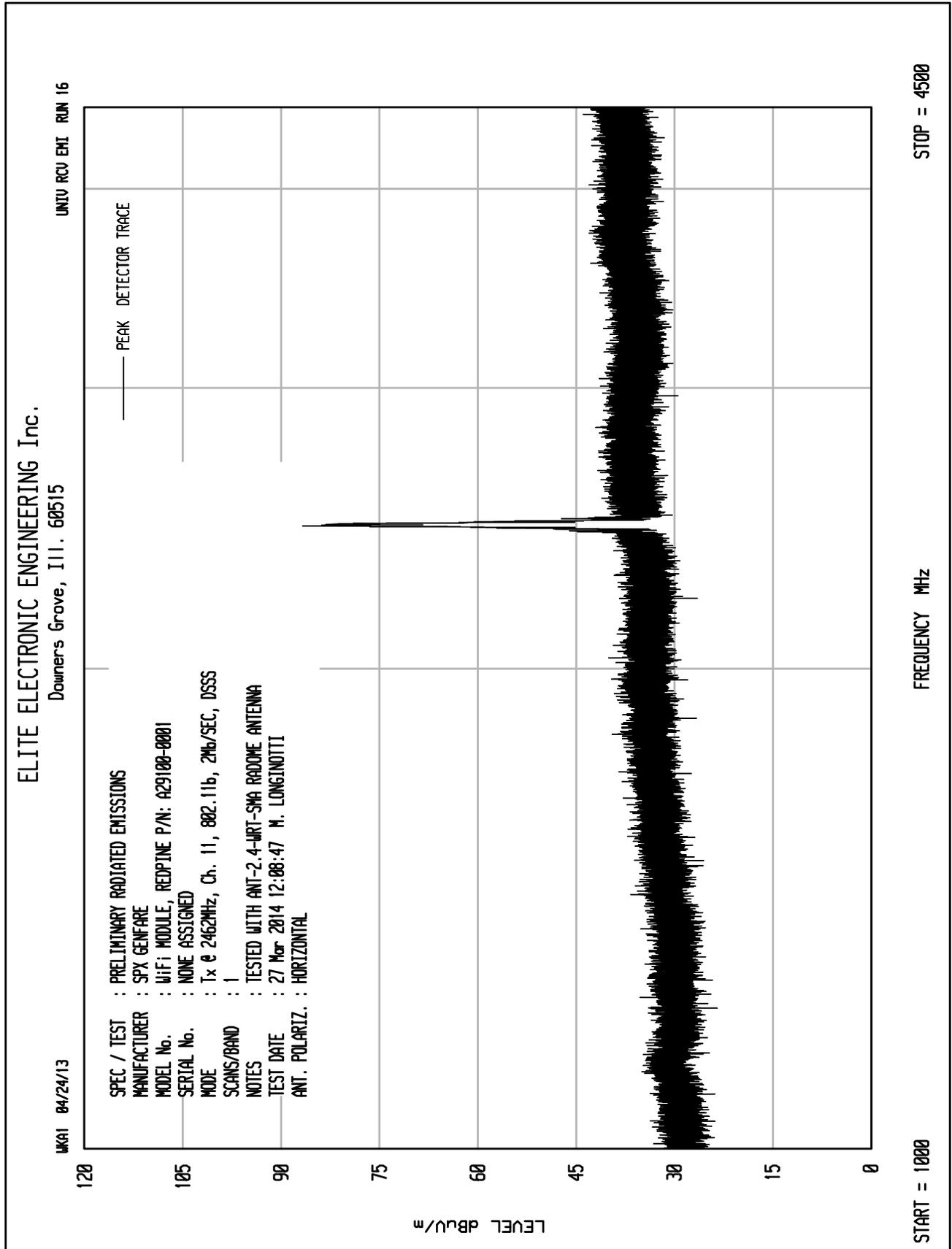
MODE : Tx @ 2462MHz (Ch. 11), 802.11b, DSSS, 2Mbps/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:38:12 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL

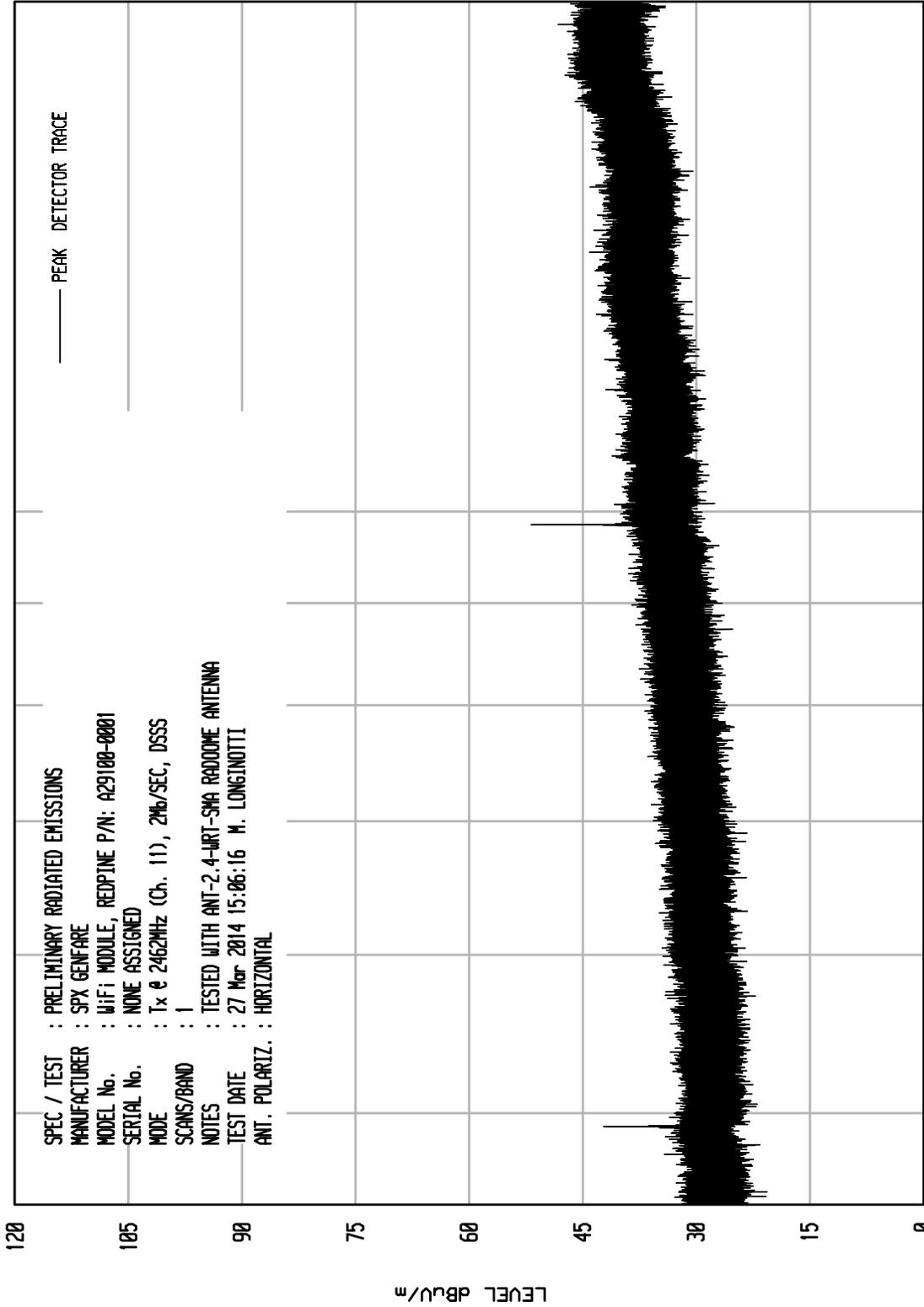


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Downers Grove, Ill. 60515

UNIV RCV EMI RUN 27

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 2Mb/SEC, DSSS
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-URT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 15:06:16 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 18000

10000
FREQUENCY MHz

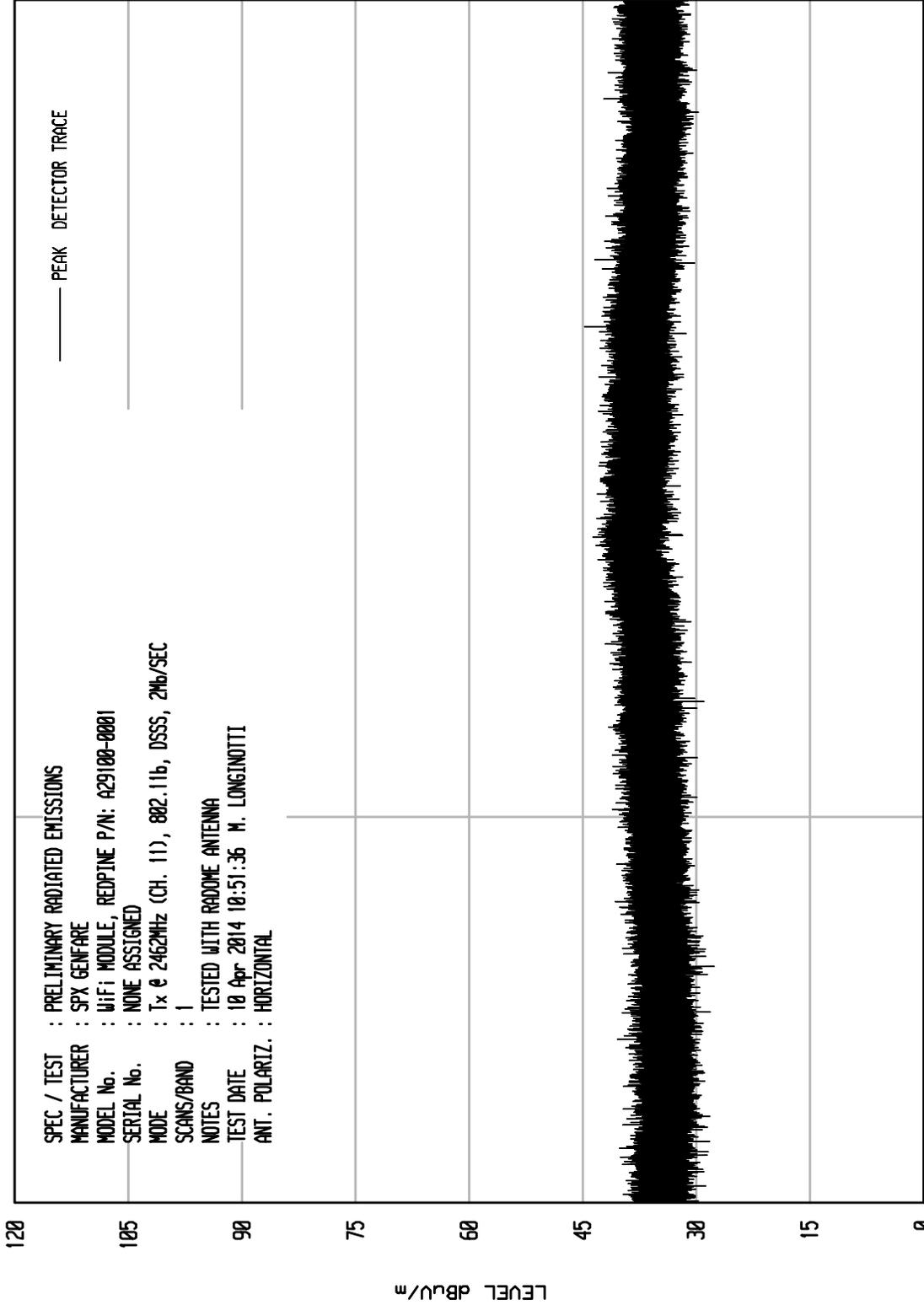
START = 4500

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UNIV RCV EMI RUN 5

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (CH. 11), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:51:36 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

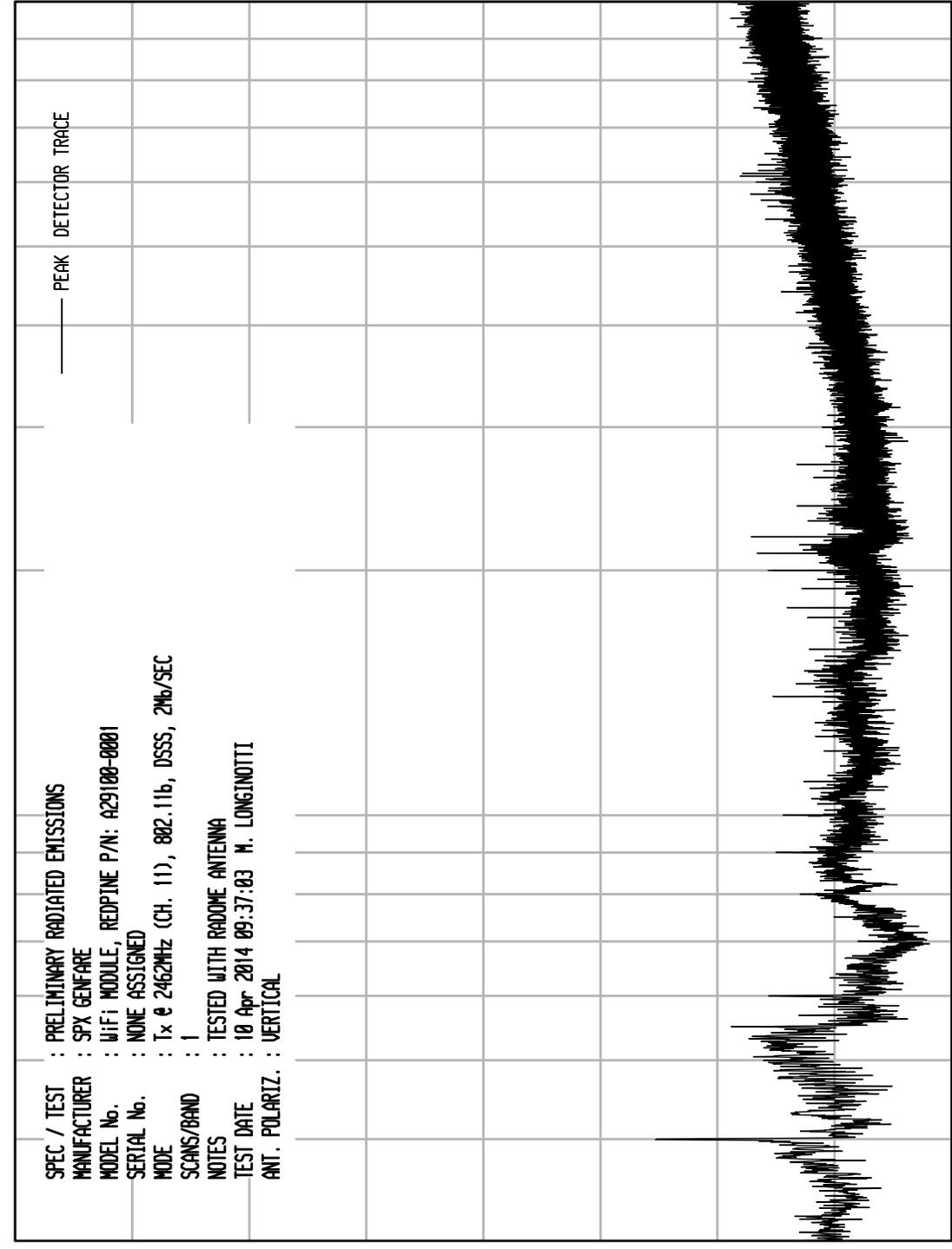


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UNIV RCU ENI RUN 62

UKA1 04/24/13



120
105
90
75
60
45
30
15
0

LEVEL dBu/m

START = 30
STOP = 1000
FREQUENCY MHz

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (CH. 11), 802.11b, DSSS, 2Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:37:03 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

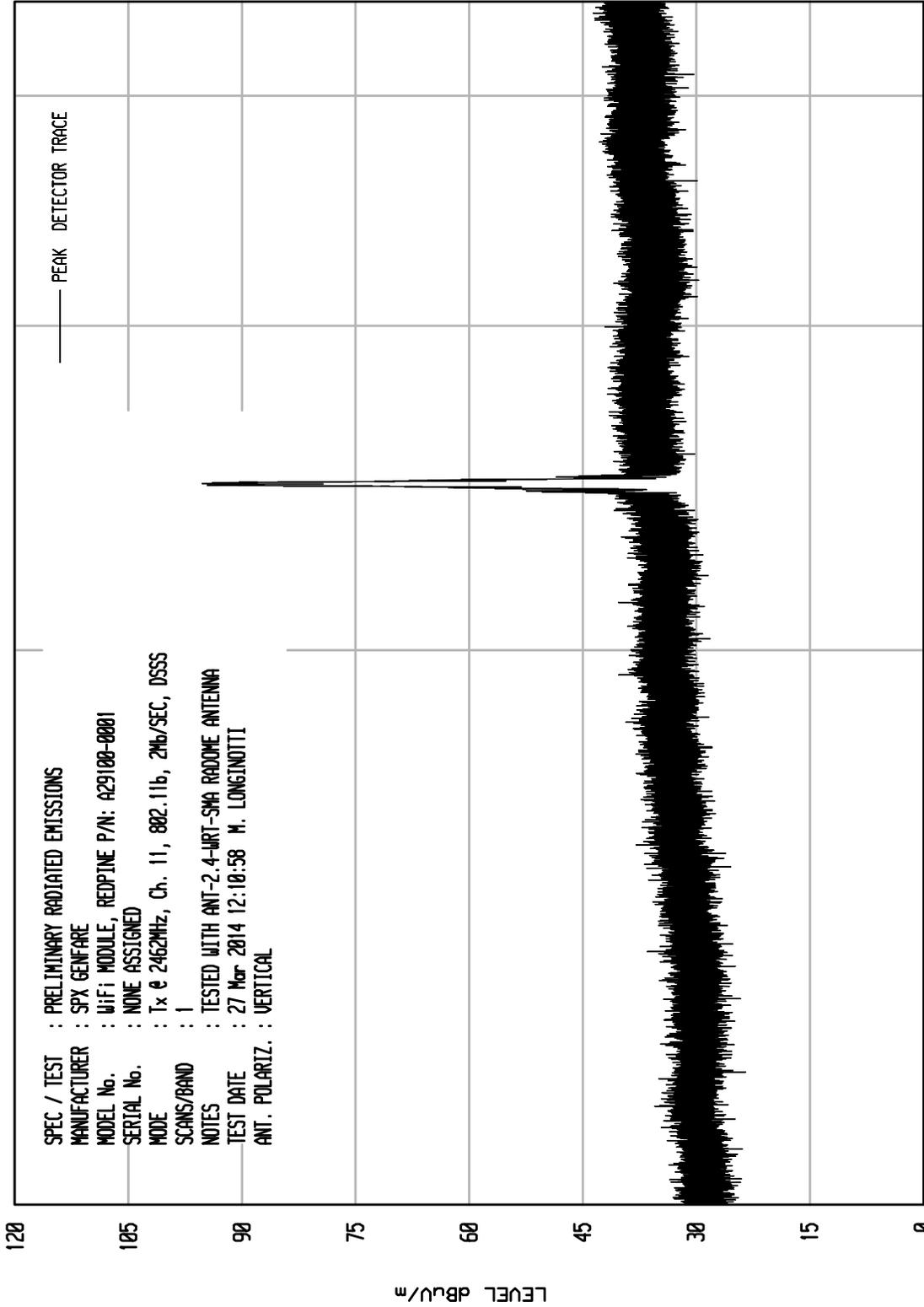


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UNIV RCV EMI RUN 17

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz, Ch. 11, 802.11b, 2Mb/SEC, DSSS
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 12:10:58 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

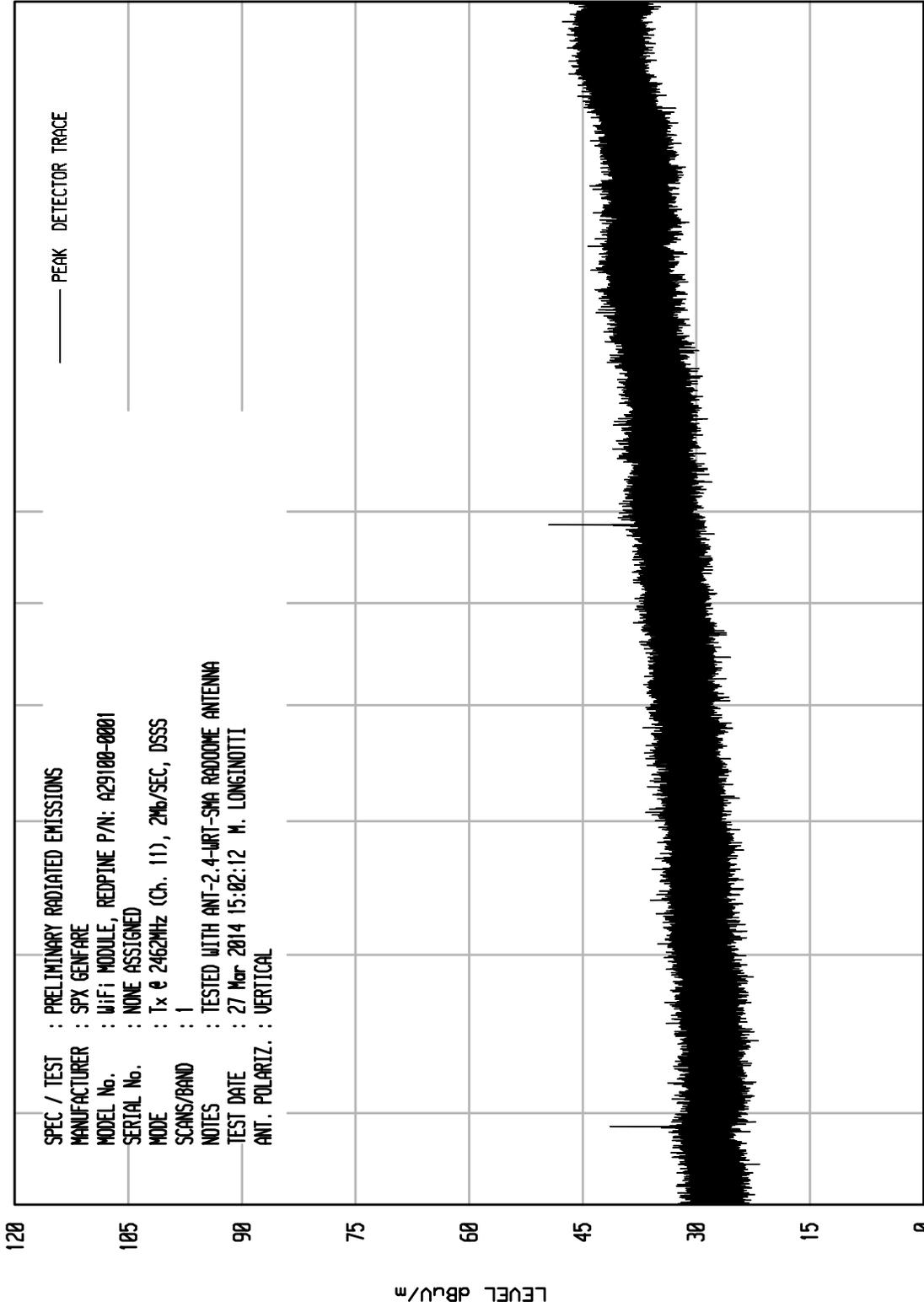
FREQUENCY MHz

START = 1000

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UNIV RCV ENI RUN 26

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 2Mb/SEC, DSSS
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADIOME ANTENNA
 TEST DATE : 27 Mar 2014 15:02:12 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

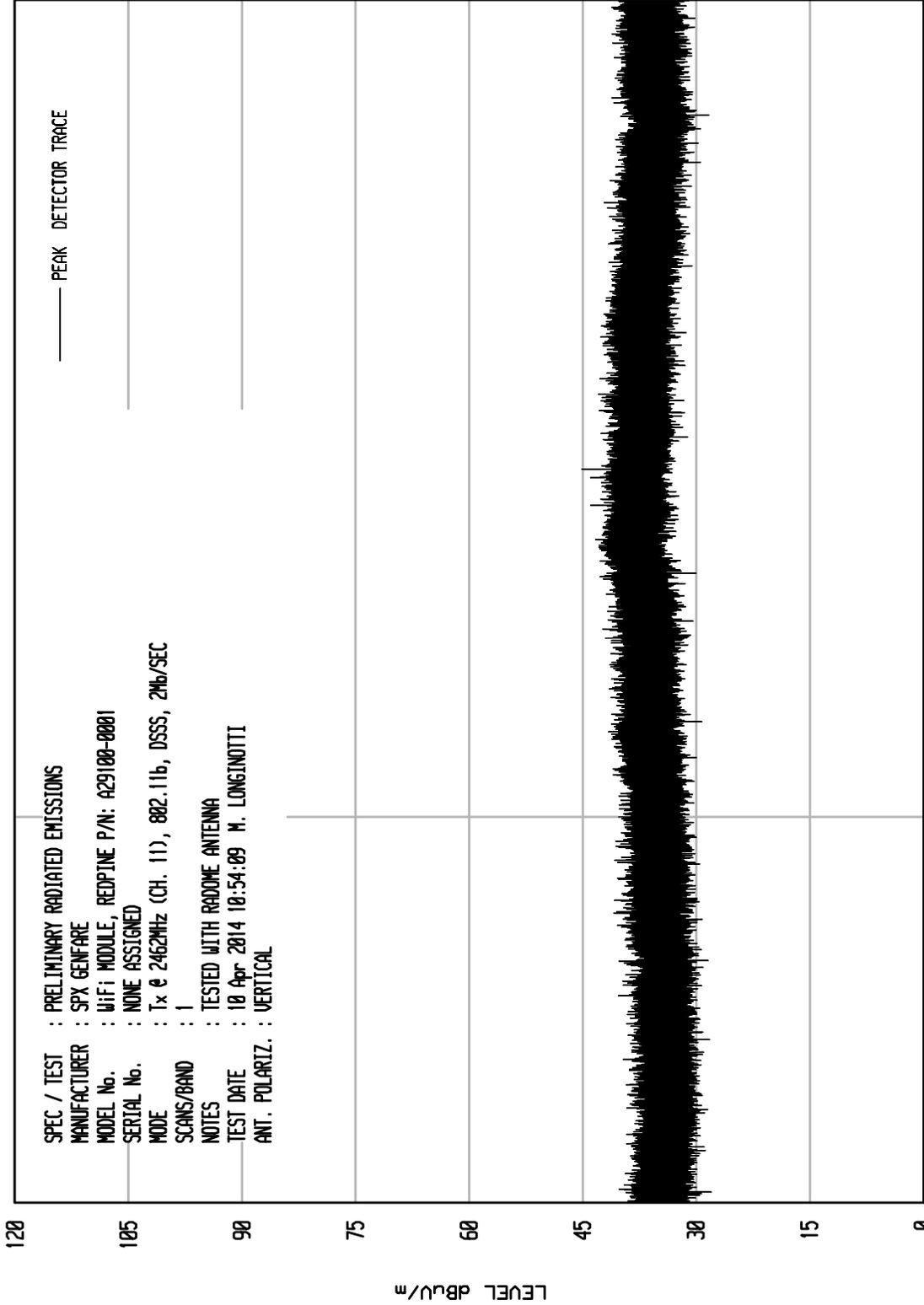
START = 4500 10000 STOP = 18000
 LEVEL dBu/m FREQUENCY MHz

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UNIV RCV ENI RUN 6

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11b, DSSS, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 10:54:09 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

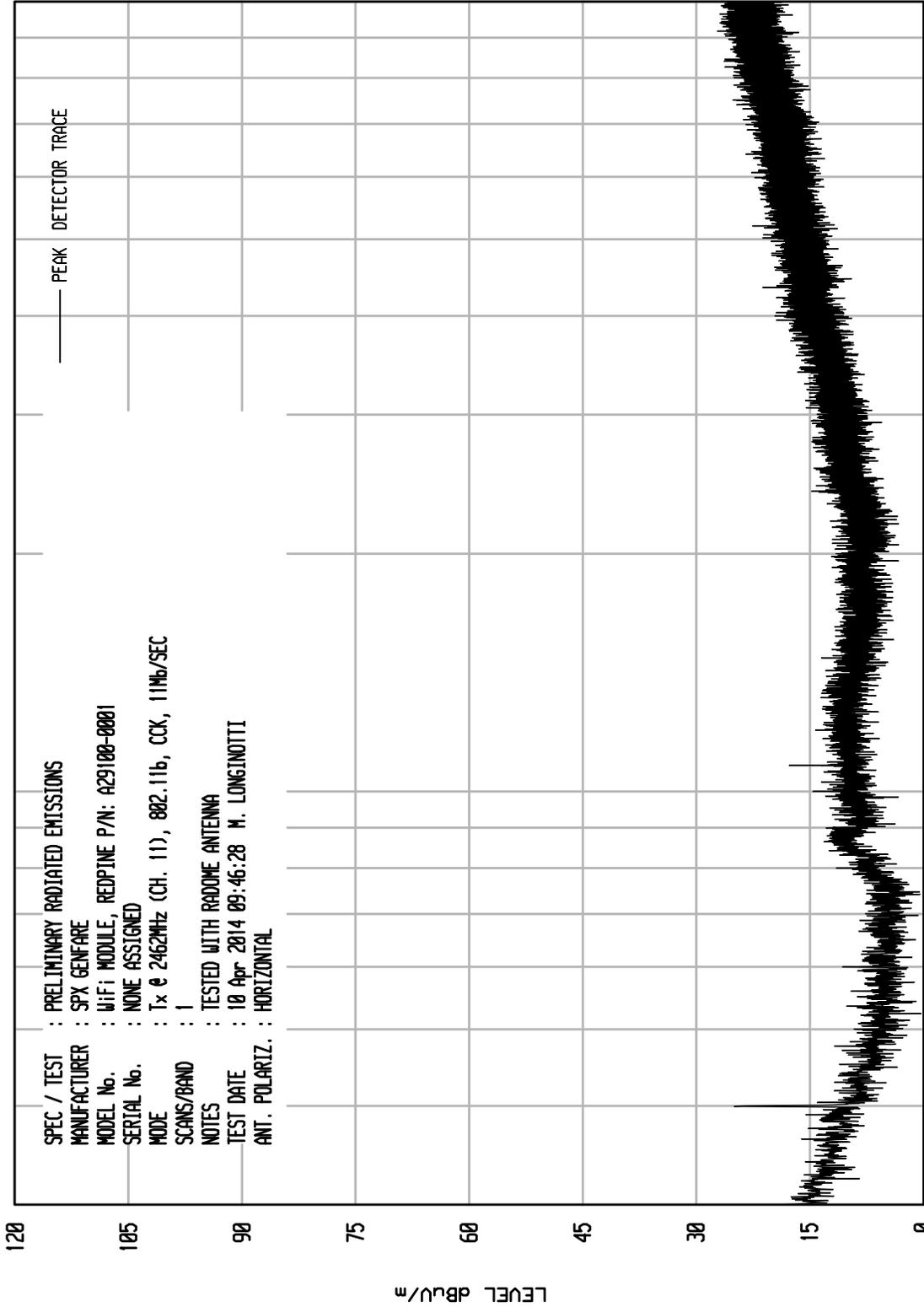


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UNIV RCU ENI RUN 68

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (CH. 11), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:46:28 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

120
 105
 90
 75
 60
 45
 30
 15
 0
 LEVEL dBu/m

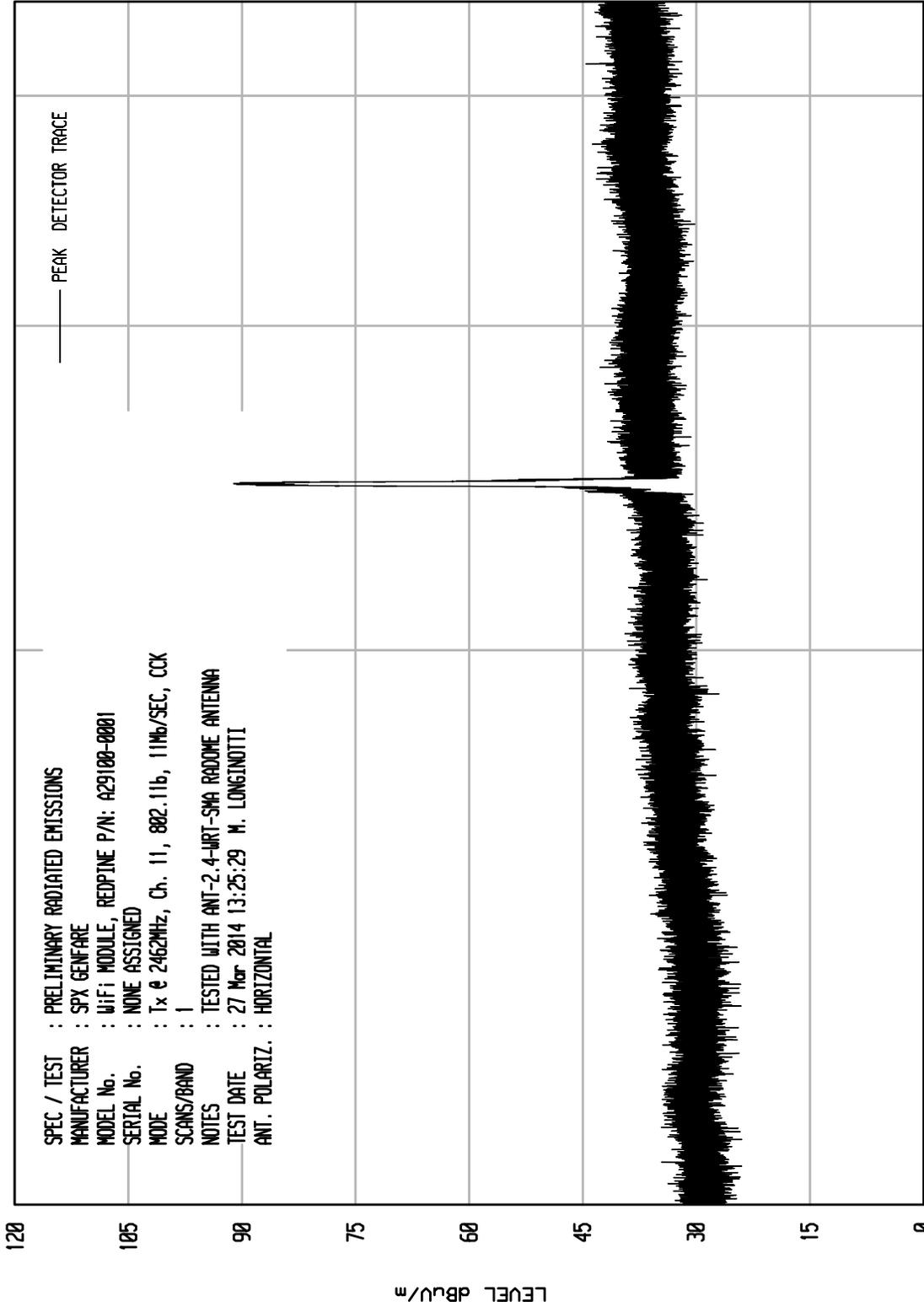
START = 30
 100
 FREQUENCY MHz
 STOP = 1000

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UNIV RCV ENI RUN 22

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz, Ch. 11, 802.11b, 11Mb/SEC, CCK
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 13:25:29 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

START = 1000

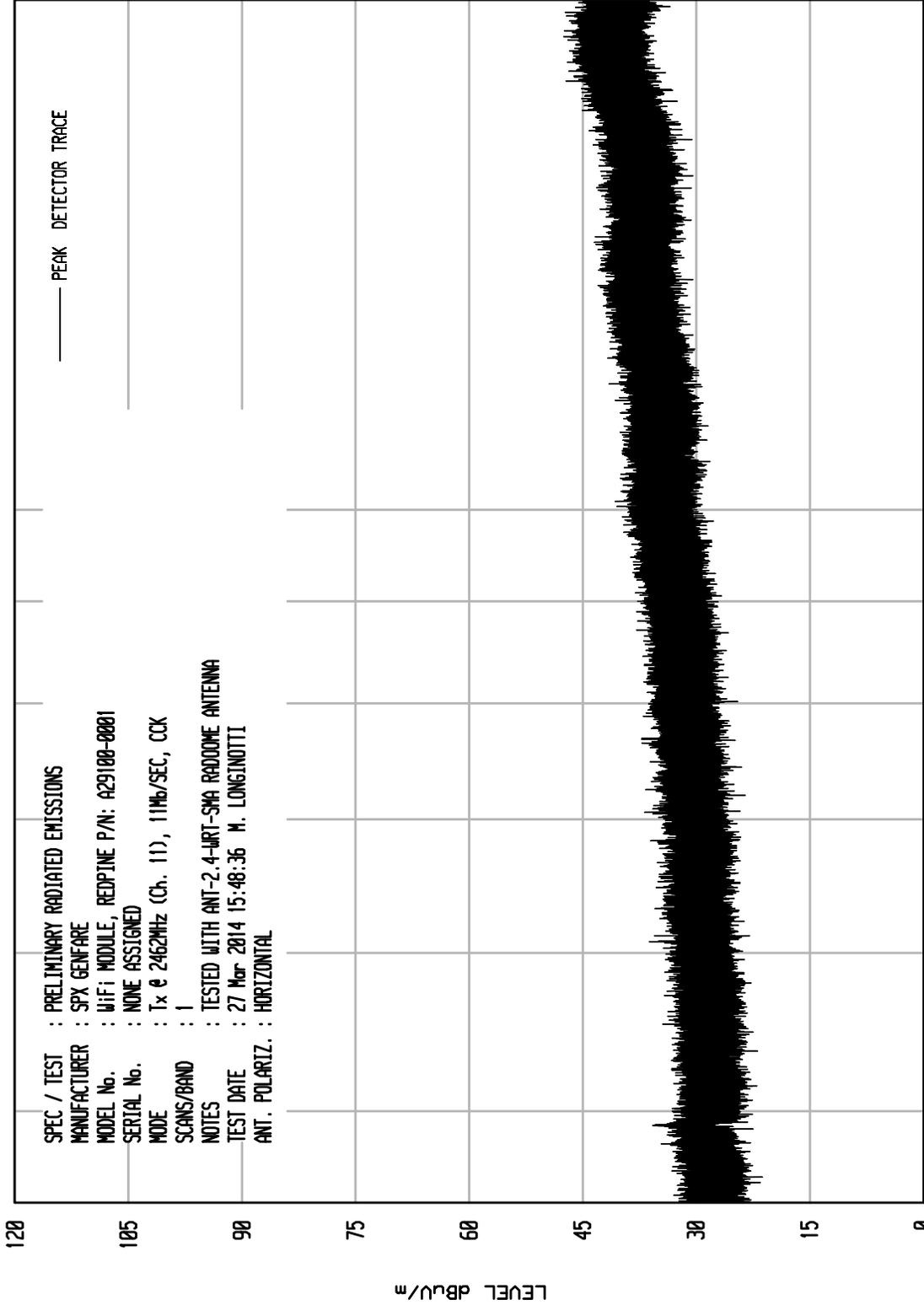


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UNIV RCV EMI RUN 29

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 11Mb/SEC, CCK
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 15:48:36 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

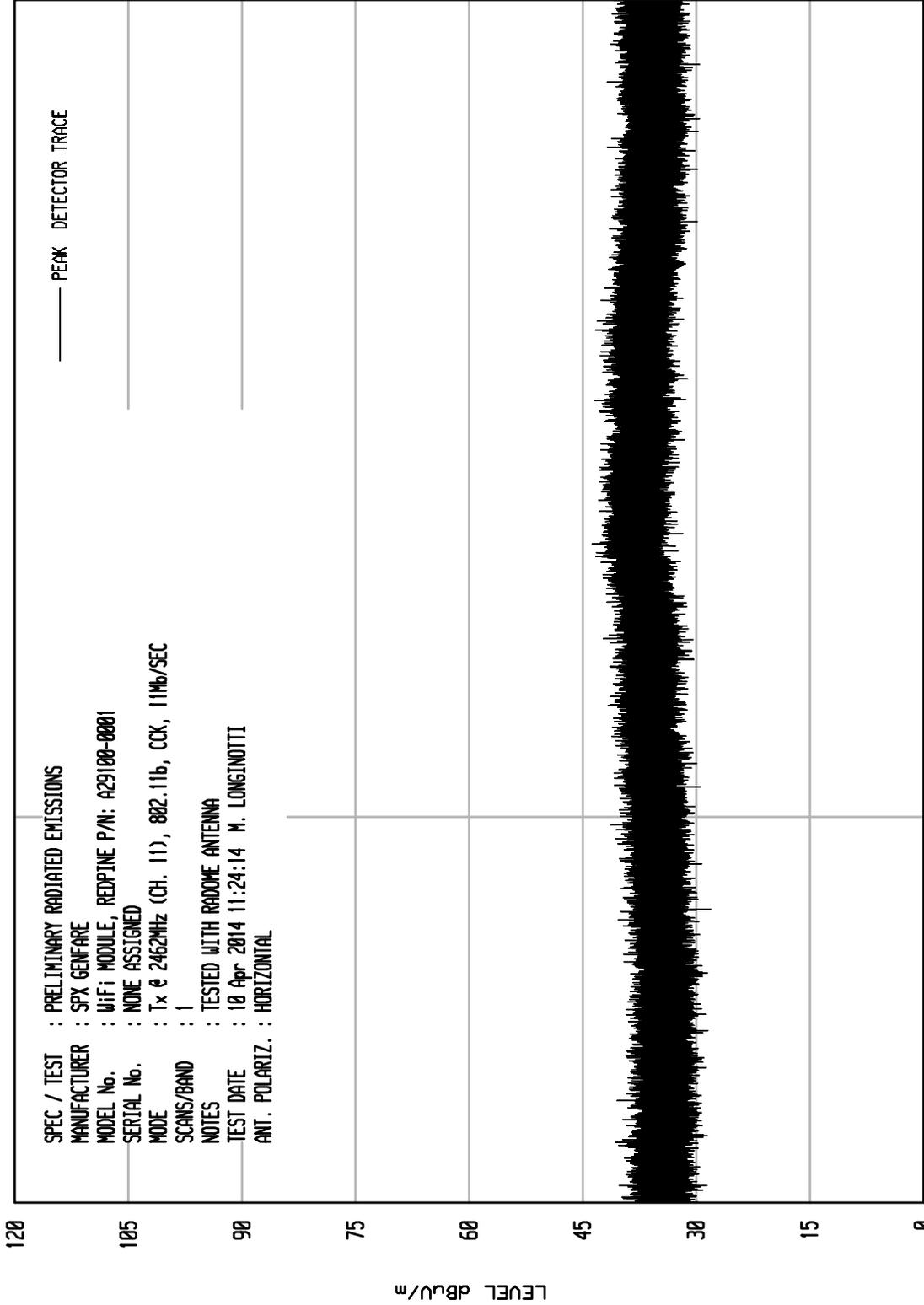


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UNIV RCV EMI RUN 11

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:24:14 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

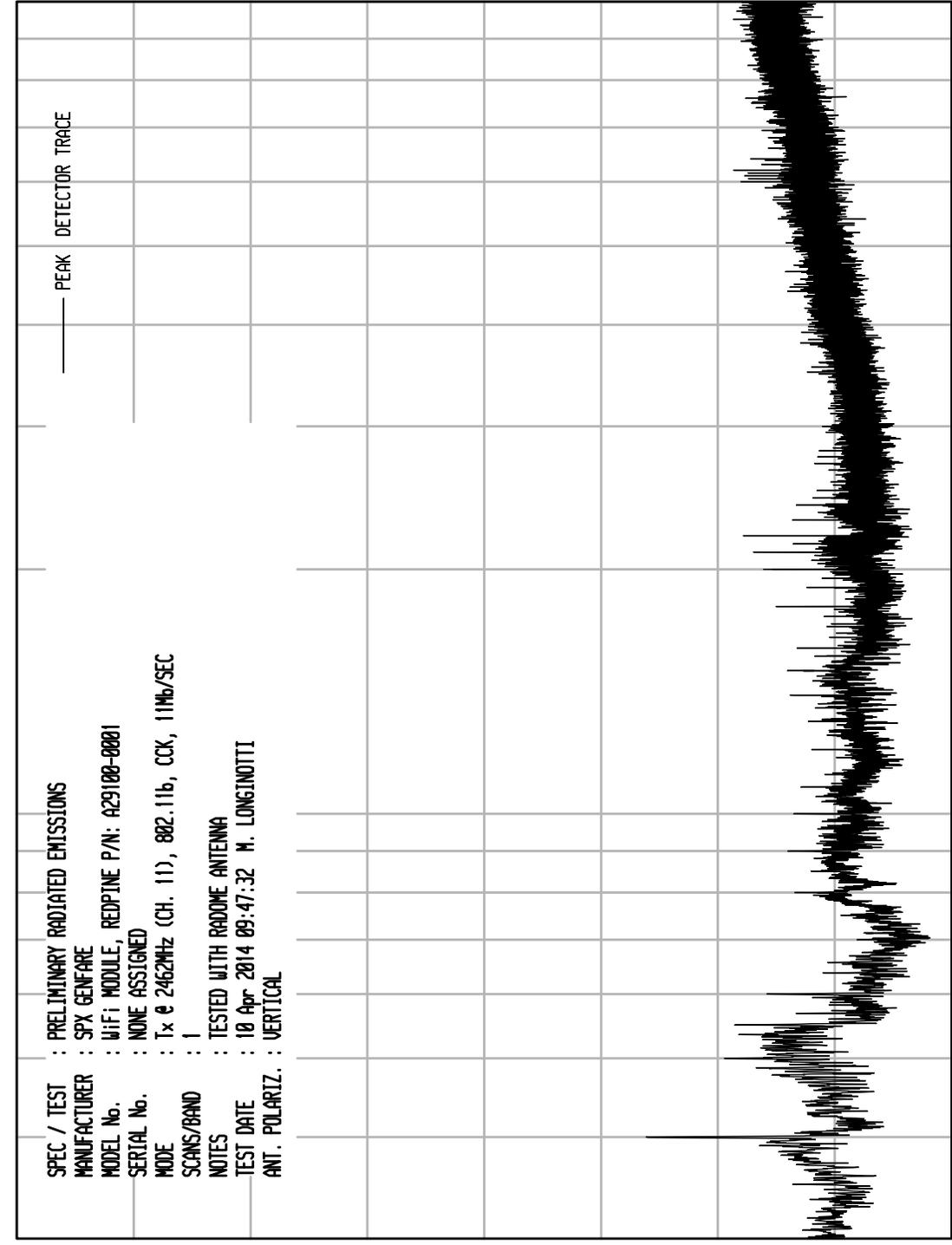


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UNIV RCU ENI RUN 69

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

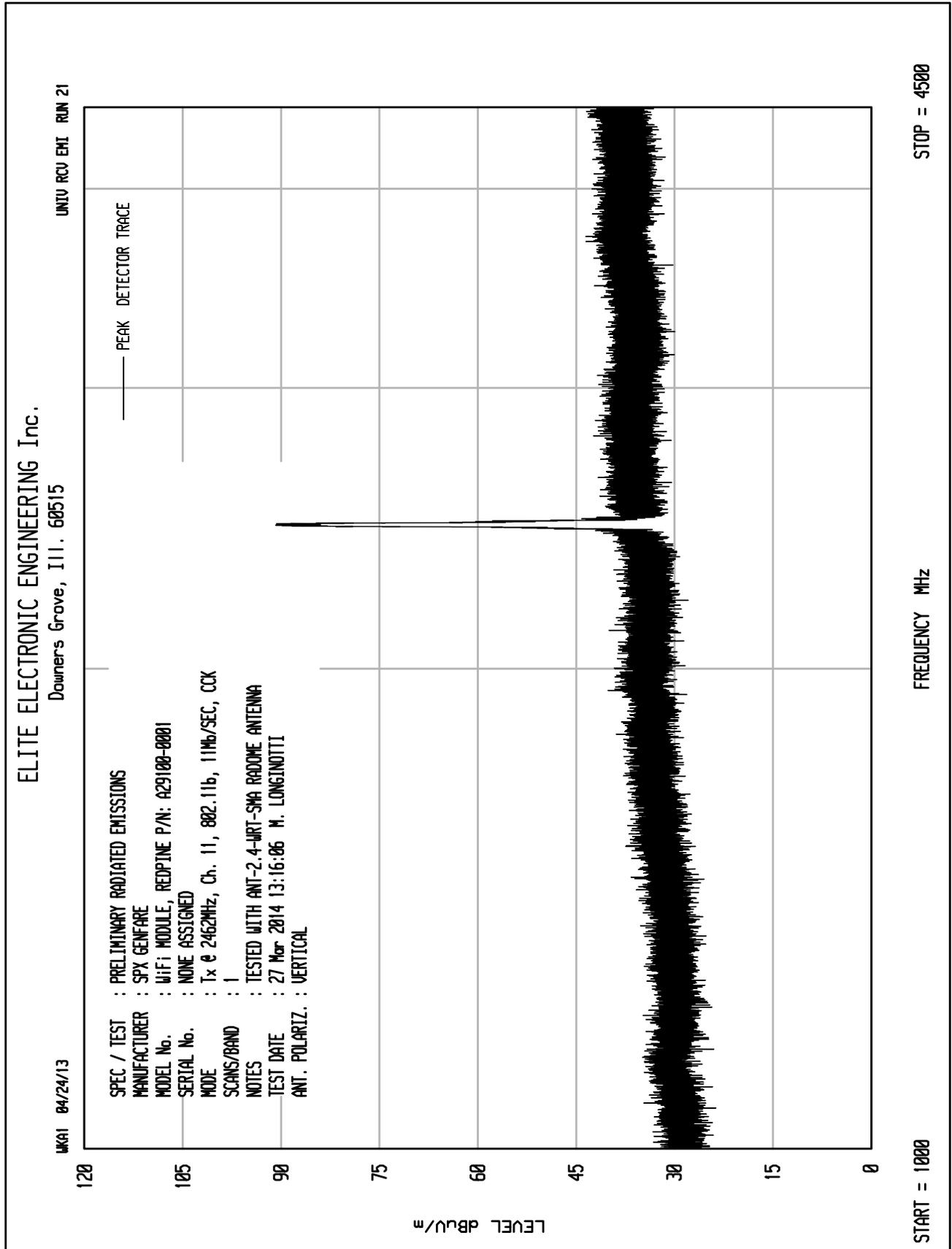
100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (CH. 11), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:47:32 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

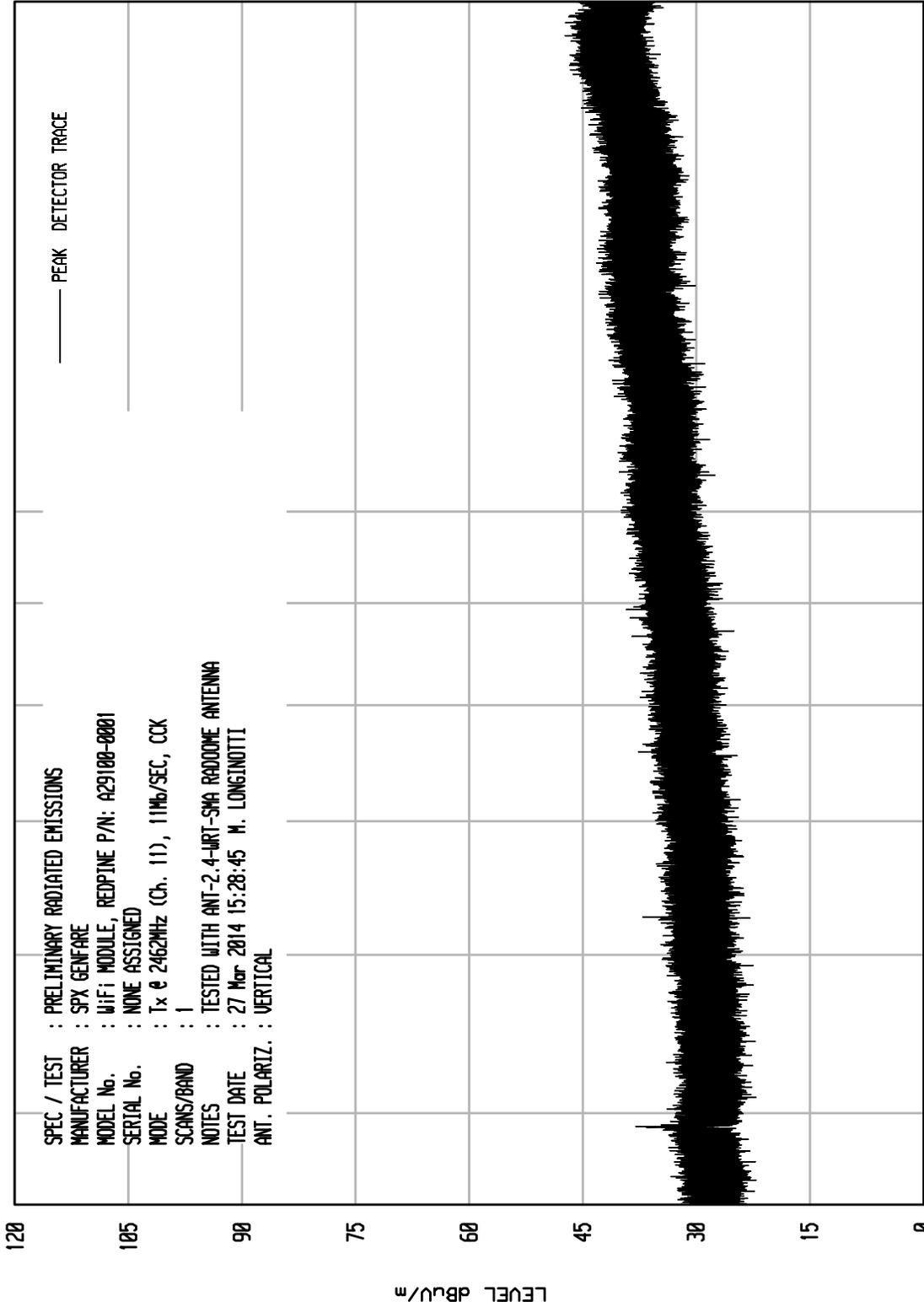


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV ENI RUN 28

UKA1 04/24/13



10000
FREQUENCY MHz

STOP = 18000

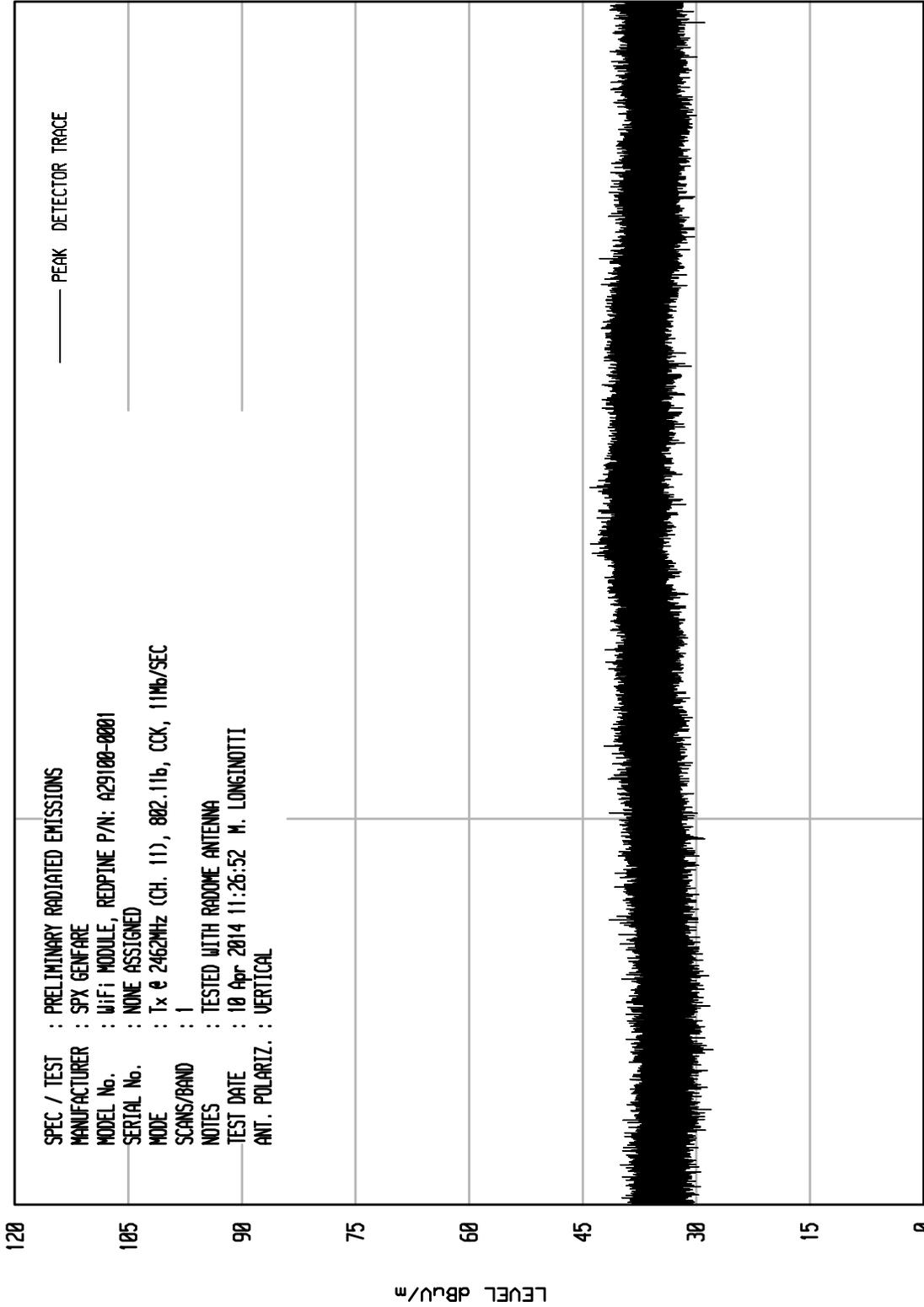
START = 4500

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UNIV RCV EMI RUN 12

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11b, CCK, 11Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 11:26:52 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

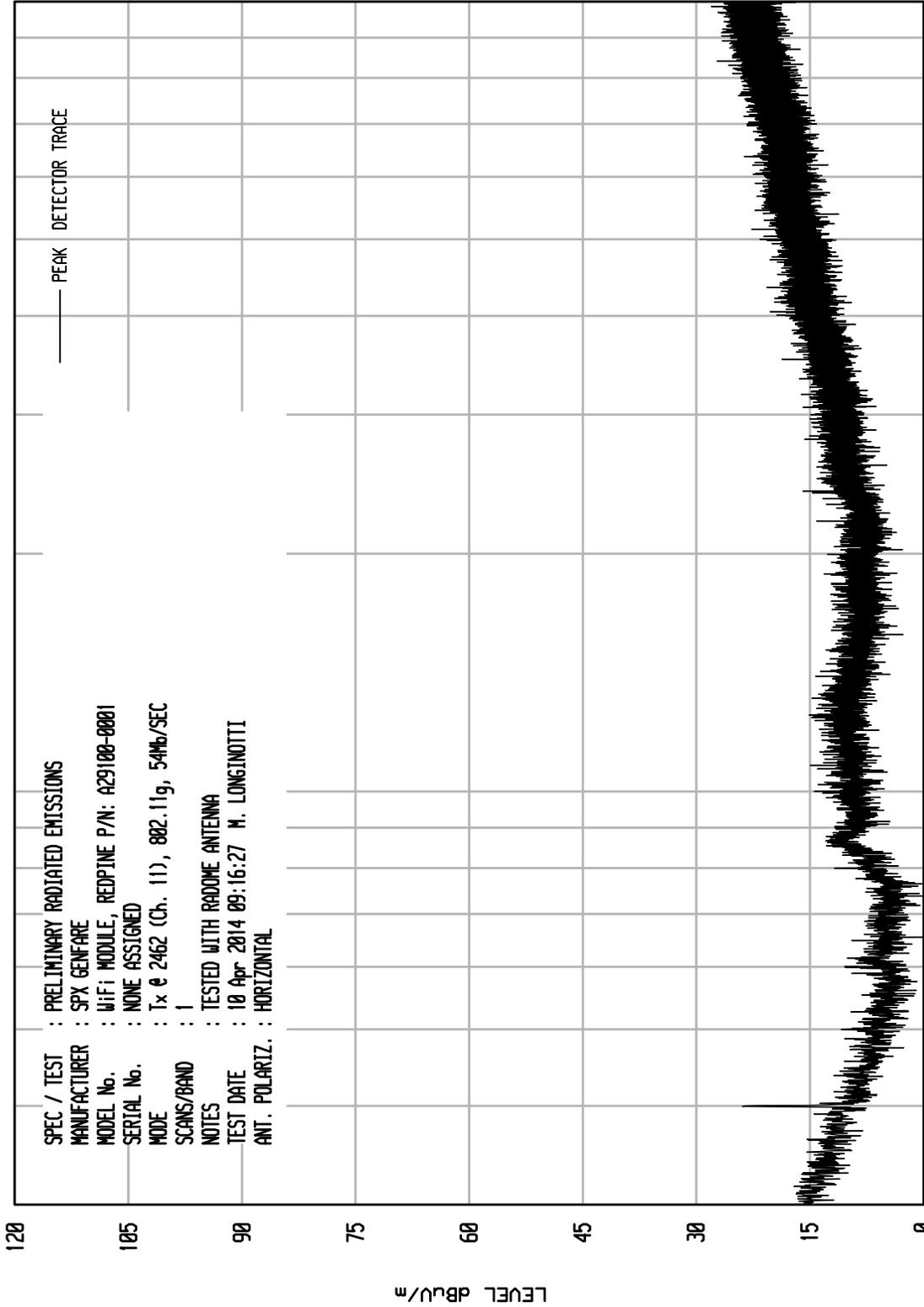


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCU ENI RUN 48

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

MODE : Tx @ 2462 (Ch. 11), 802.11g, 54Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:16:27 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL

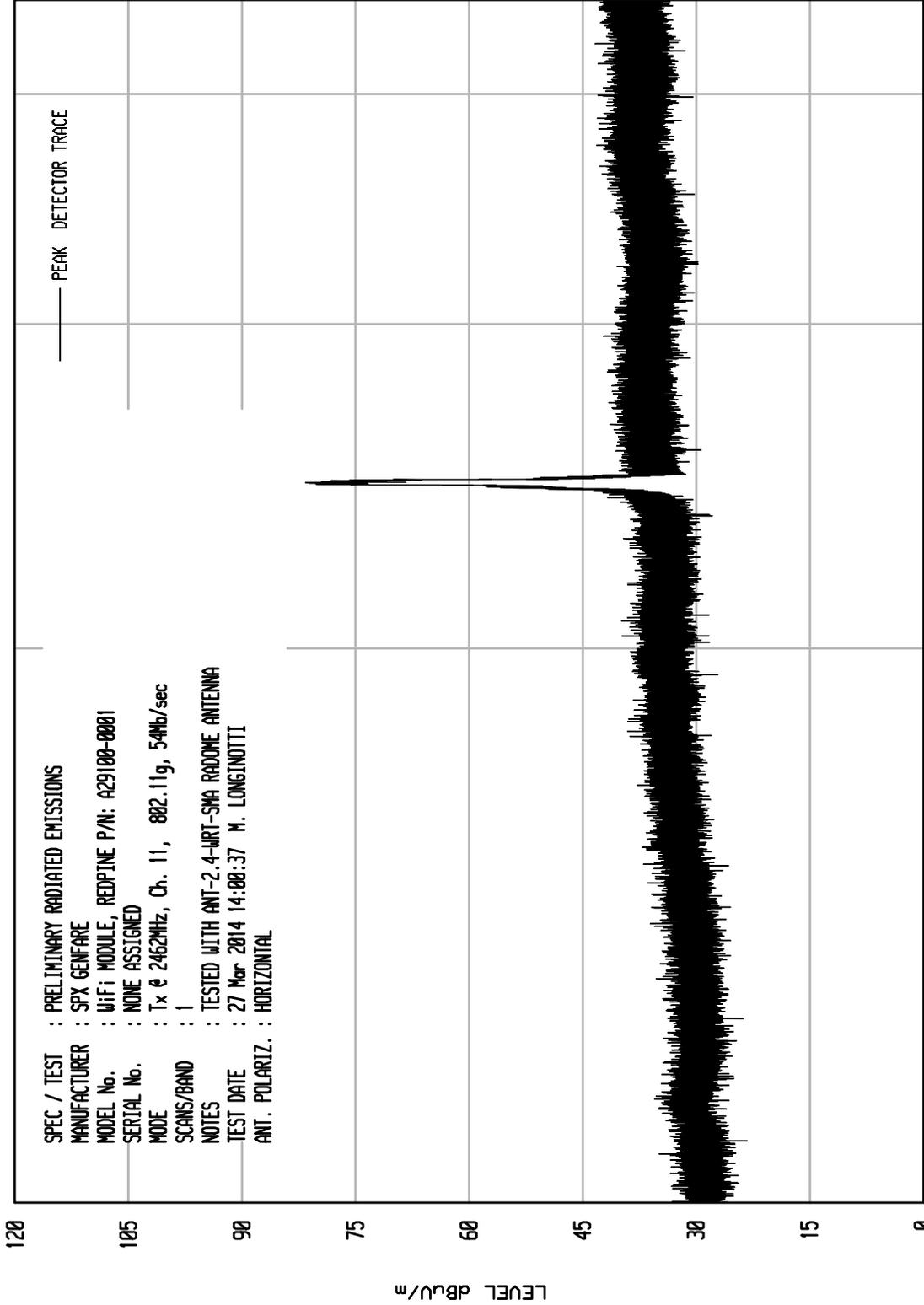


ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV EMI RUN 29

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz, Ch. 11, 802.11g, 54Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 14:00:37 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

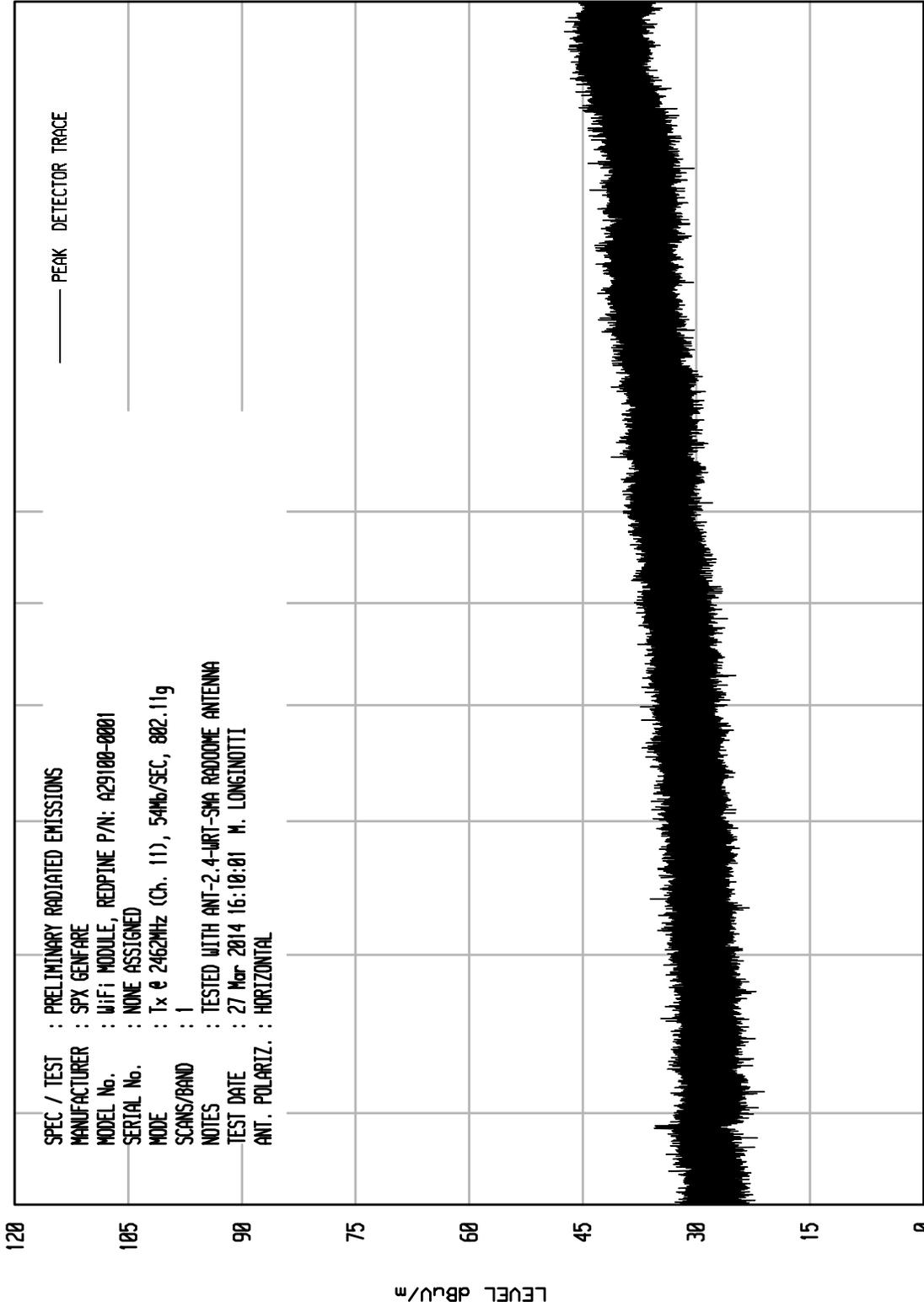
START = 1000

ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCV ENI RUN 30

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 54Mb/SEC, 802.11g
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-URT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 16:10:01 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 18000

FREQUENCY MHz

START = 4500

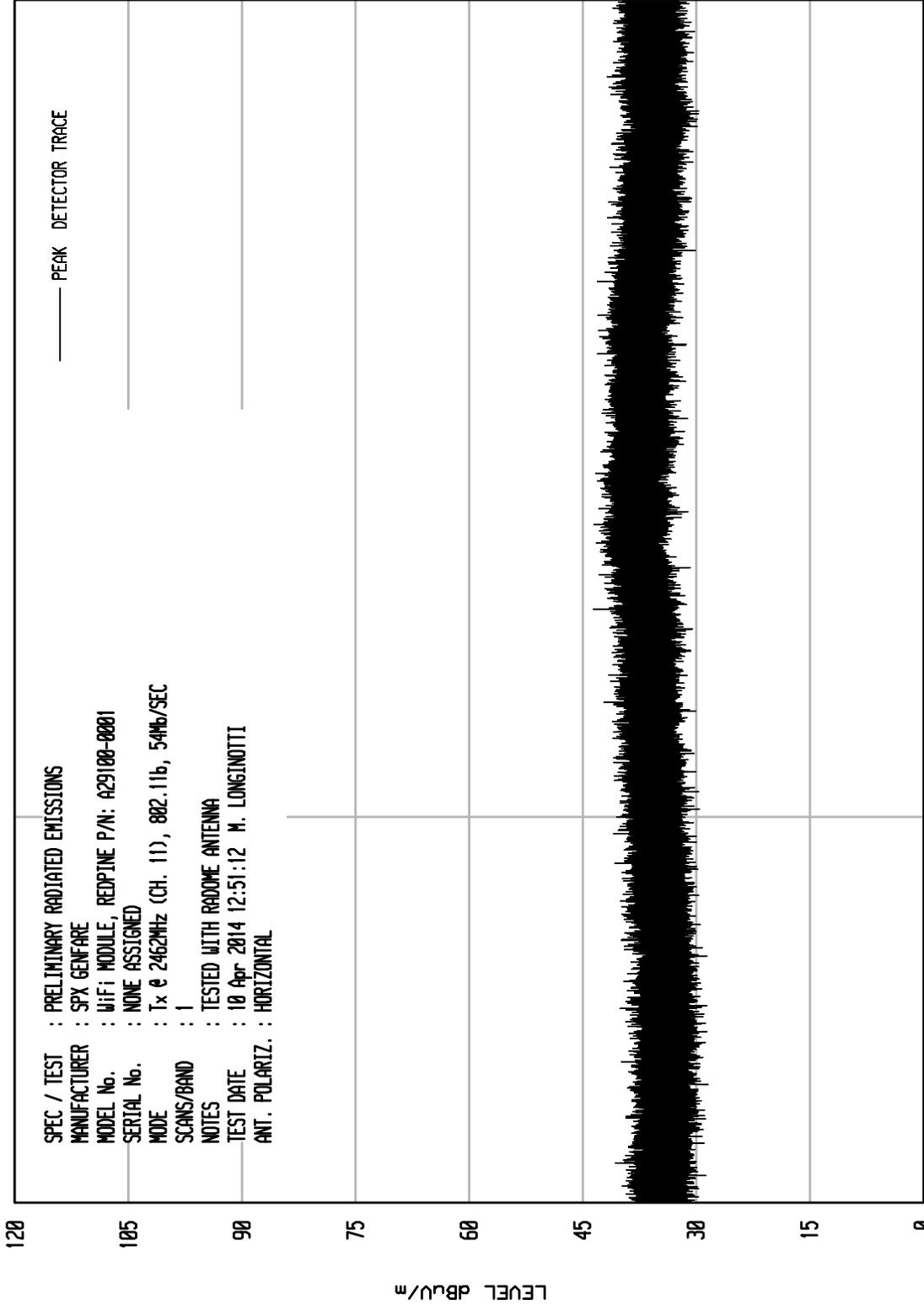


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 19

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (CH. 11), 802.11b, 54Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 12:51:12 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

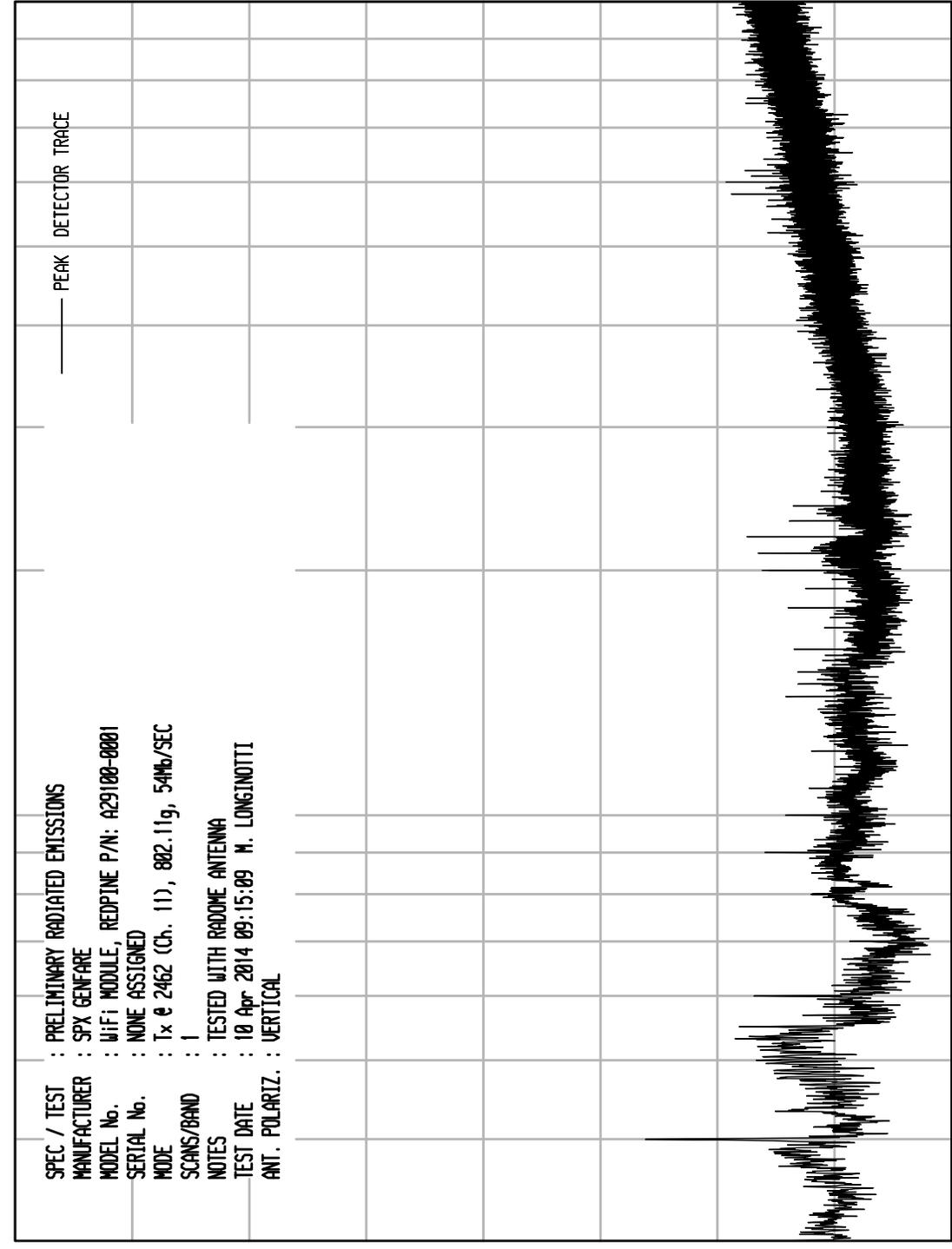


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UNIU RCJ ENI RUN 47

UKA1 04/24/13



120
105
90
75
60
45
30
15
0

LEVEL dBu/m

START = 30
STOP = 1000
FREQUENCY MHz

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WIF1 MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462 (Ch. 11), 802.11g, 54Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 09:15:09 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

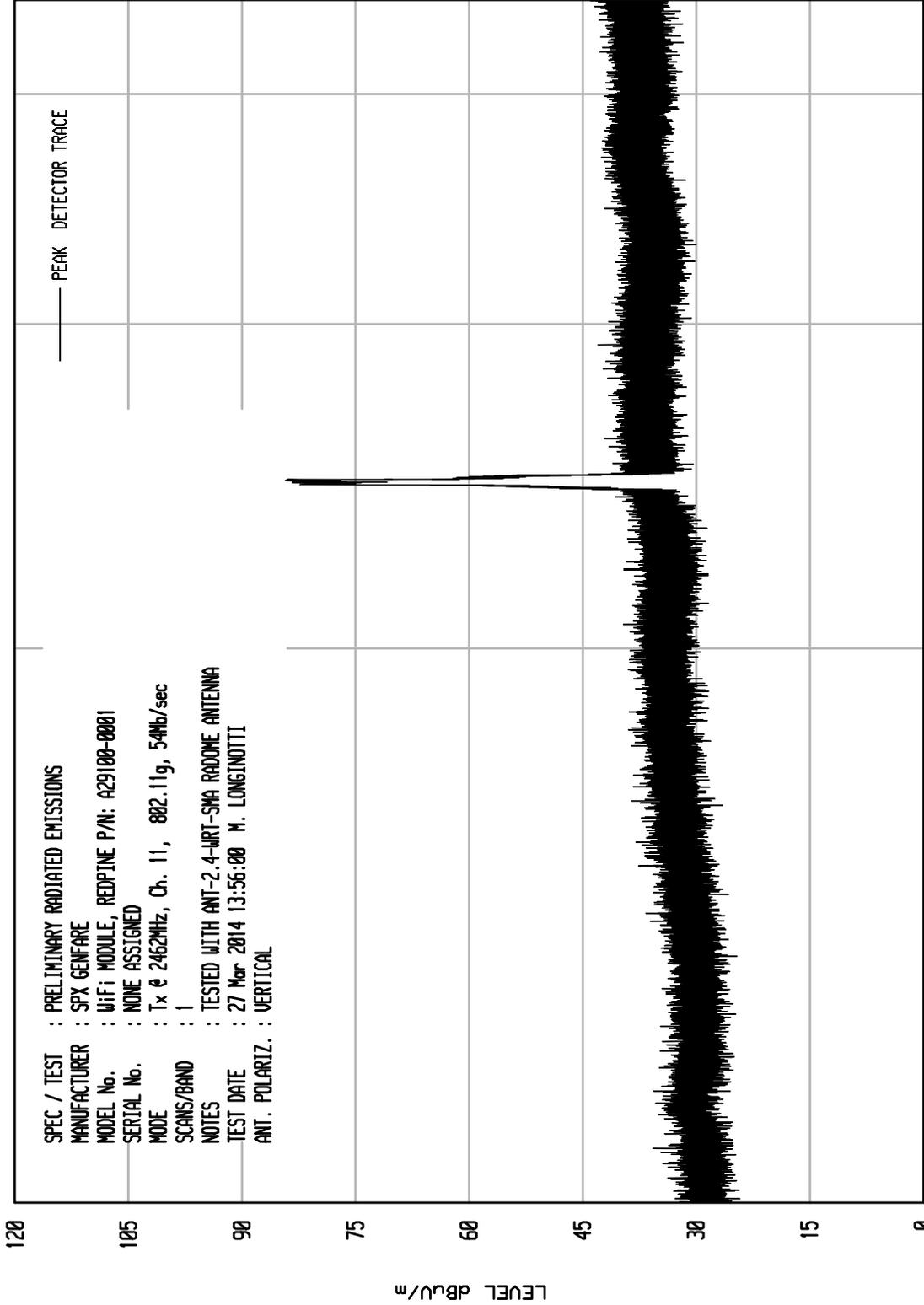


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UNIV RCV ENI RUN 28

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SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz, Ch. 11, 802.11g, 54Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 13:56:00 M. LONGJINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

FREQUENCY MHz

START = 1000

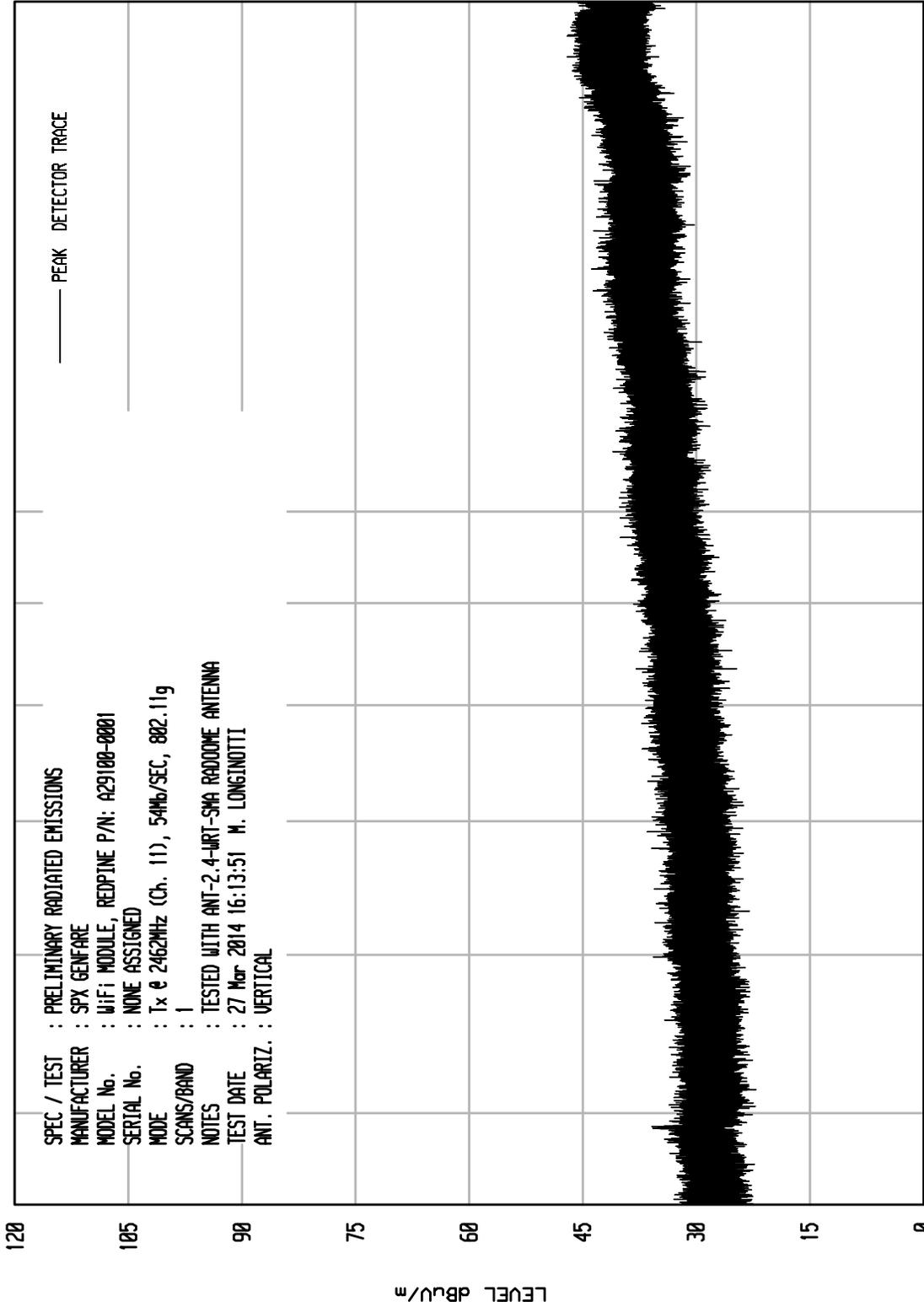


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UNIV RCV EMI RUN 31

UKA1 04/24/13



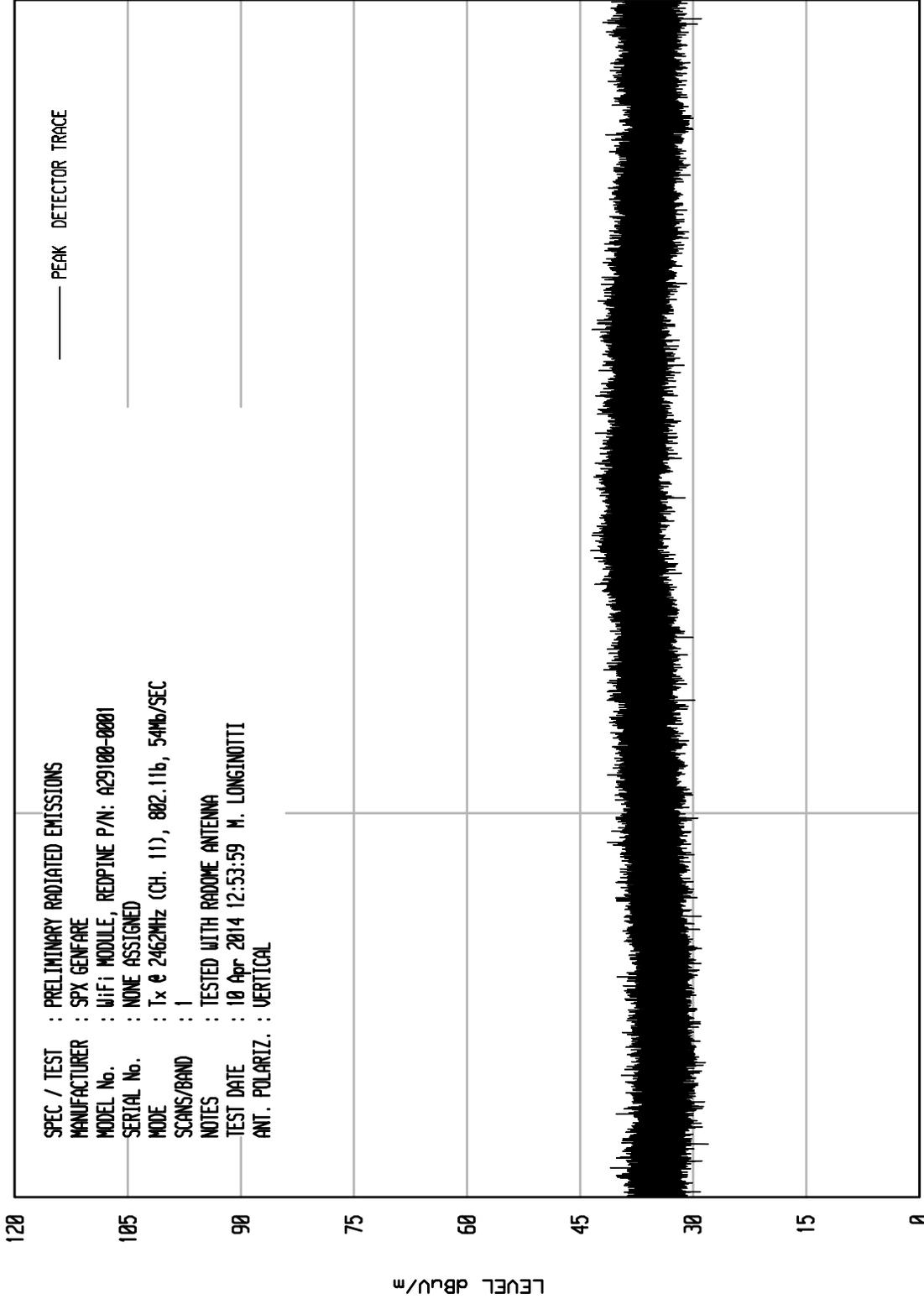
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 54Mb/SEC, 802.11g
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 16:13:51 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

ELITE ELECTRONIC ENGINEERING Inc.

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UNIV RCU EMI RUN 28

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11b, 54Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 12:53:59 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

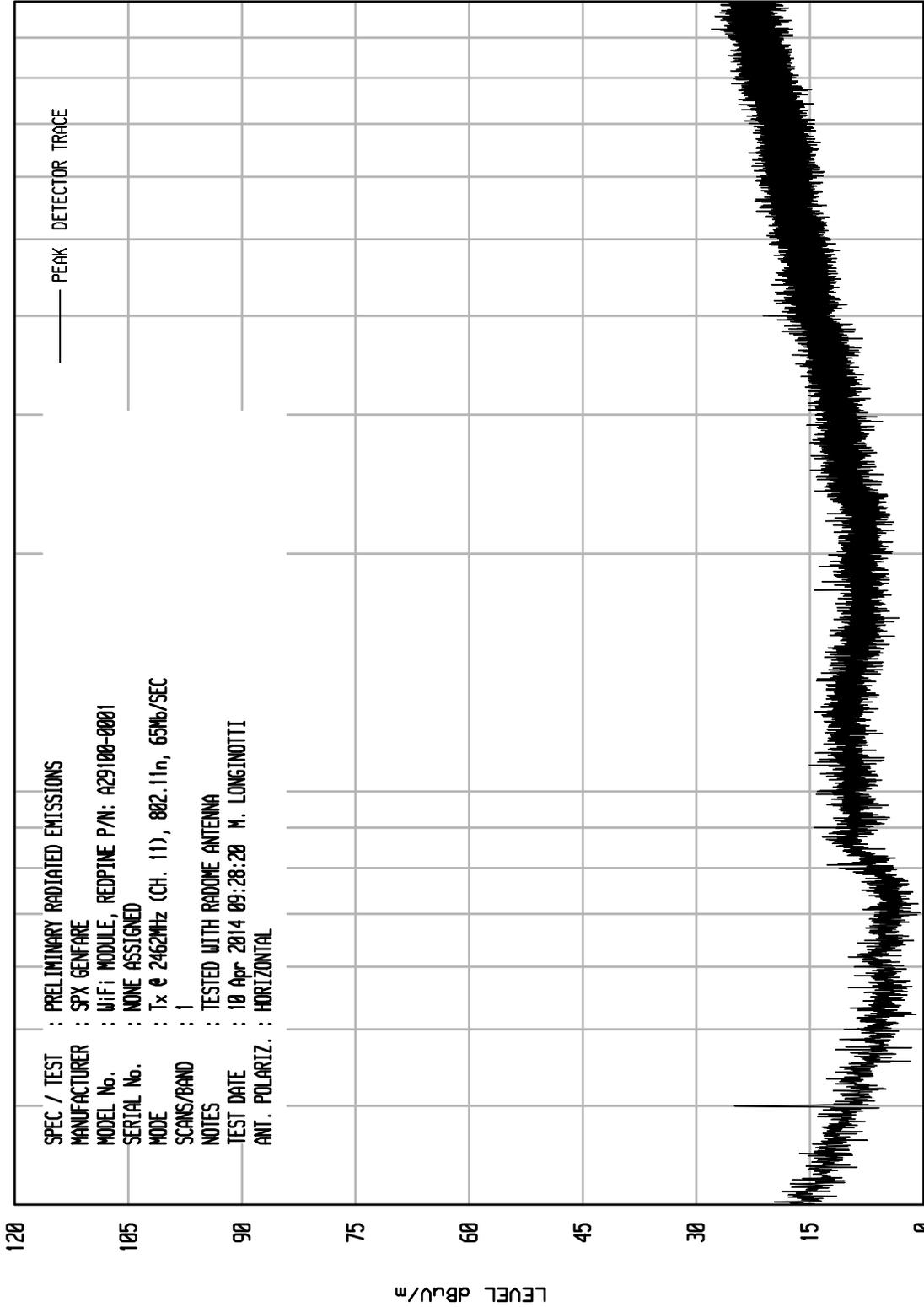


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UNIV RCU ENI RUN 55

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBµV/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

MODE : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mbps/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:28:20 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL

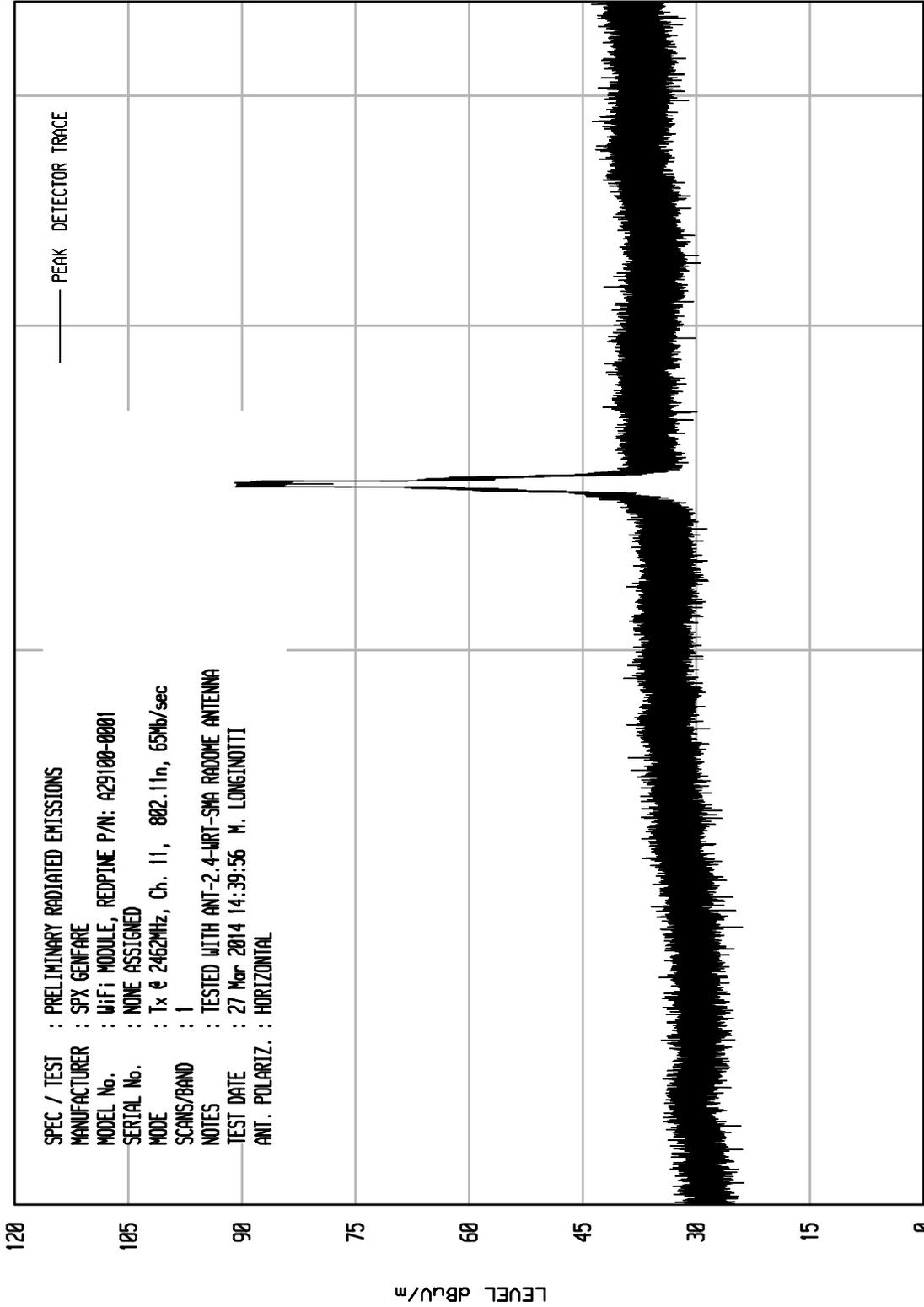


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UNIV RCU EMI RUN 36

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz, Ch. 11, 802.11n, 65Mb/sec
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADOME ANTENNA
 TEST DATE : 27 Mar 2014 14:39:56 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

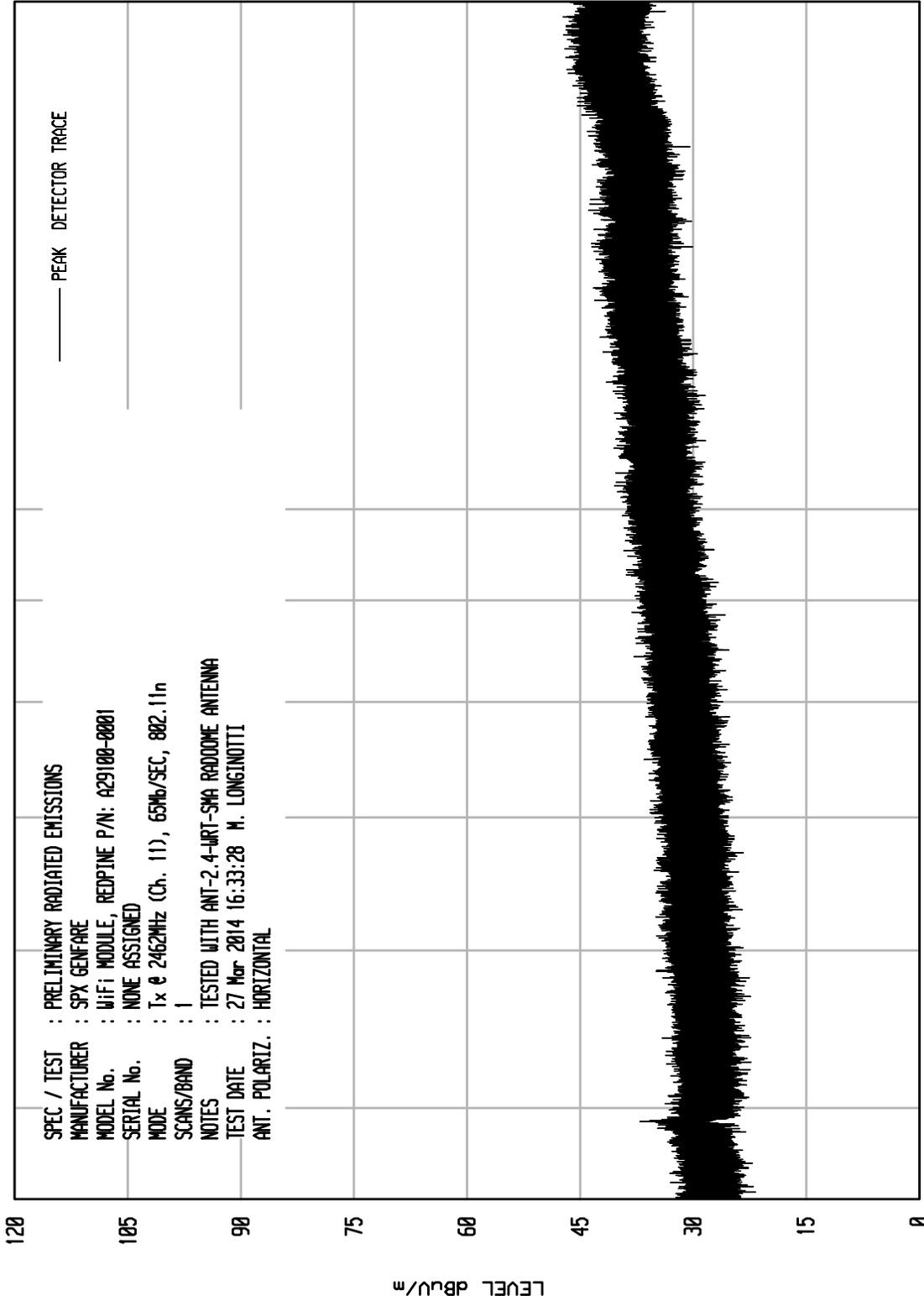
START = 1000

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UNIV RCV ENI RUN 32

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 65Mb/SEC, 802.11n
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 16:33:28 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 10000

10000
FREQUENCY MHz

START = 4500

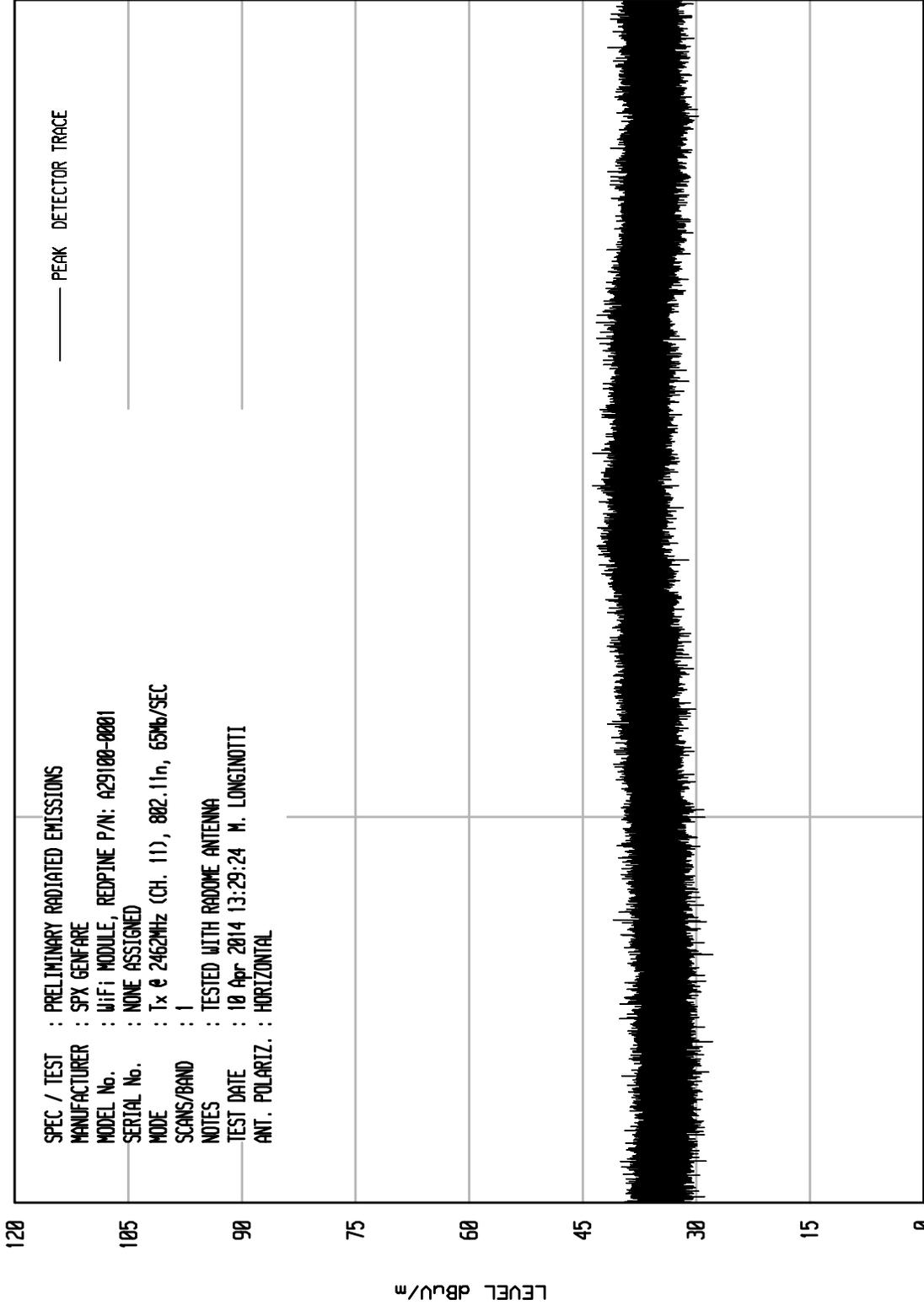


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UNIV RCU EMI RUN 25

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:29:24 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000

LEVEL dBu/m

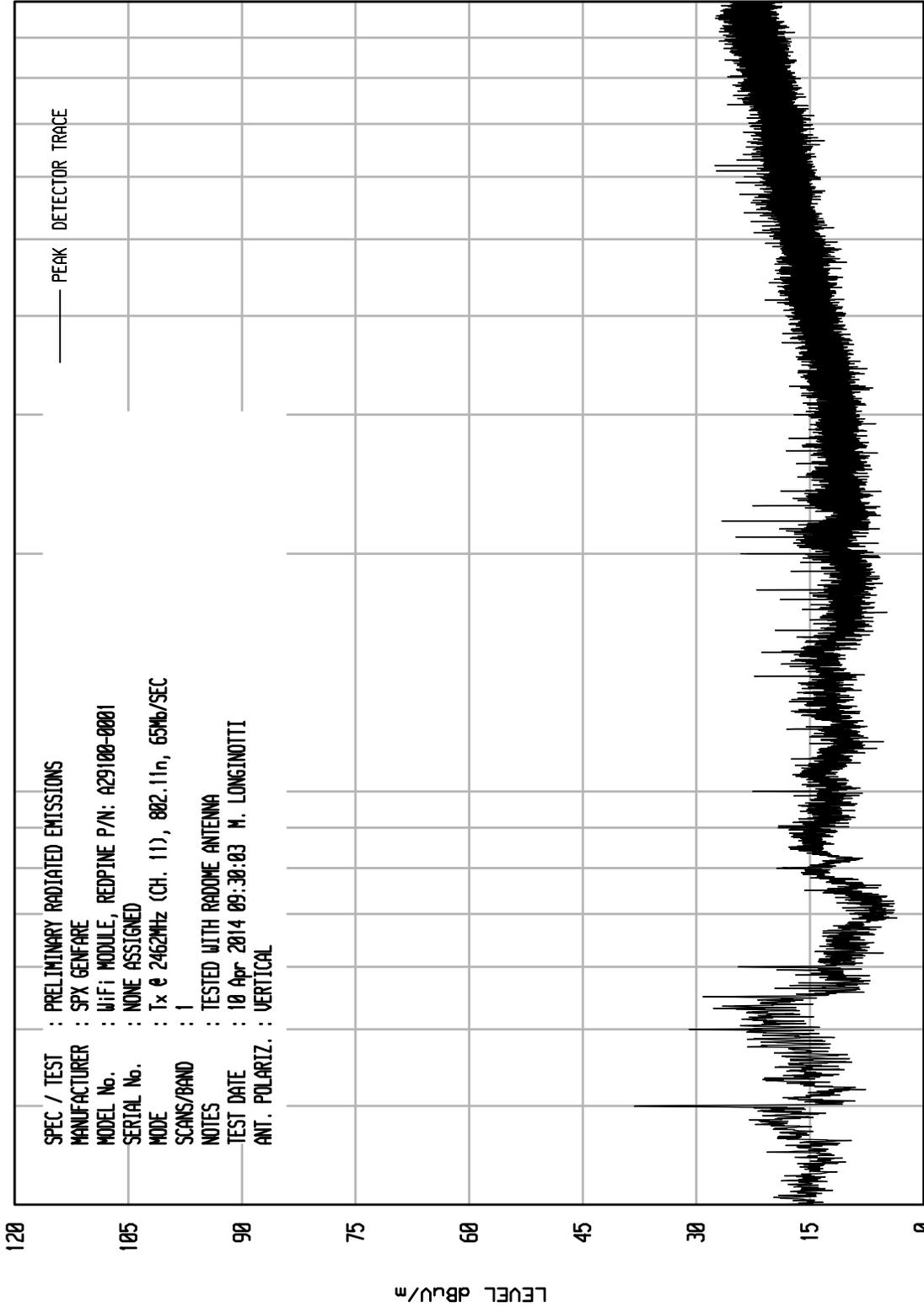


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UNIV RCU ENI RUN 56

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

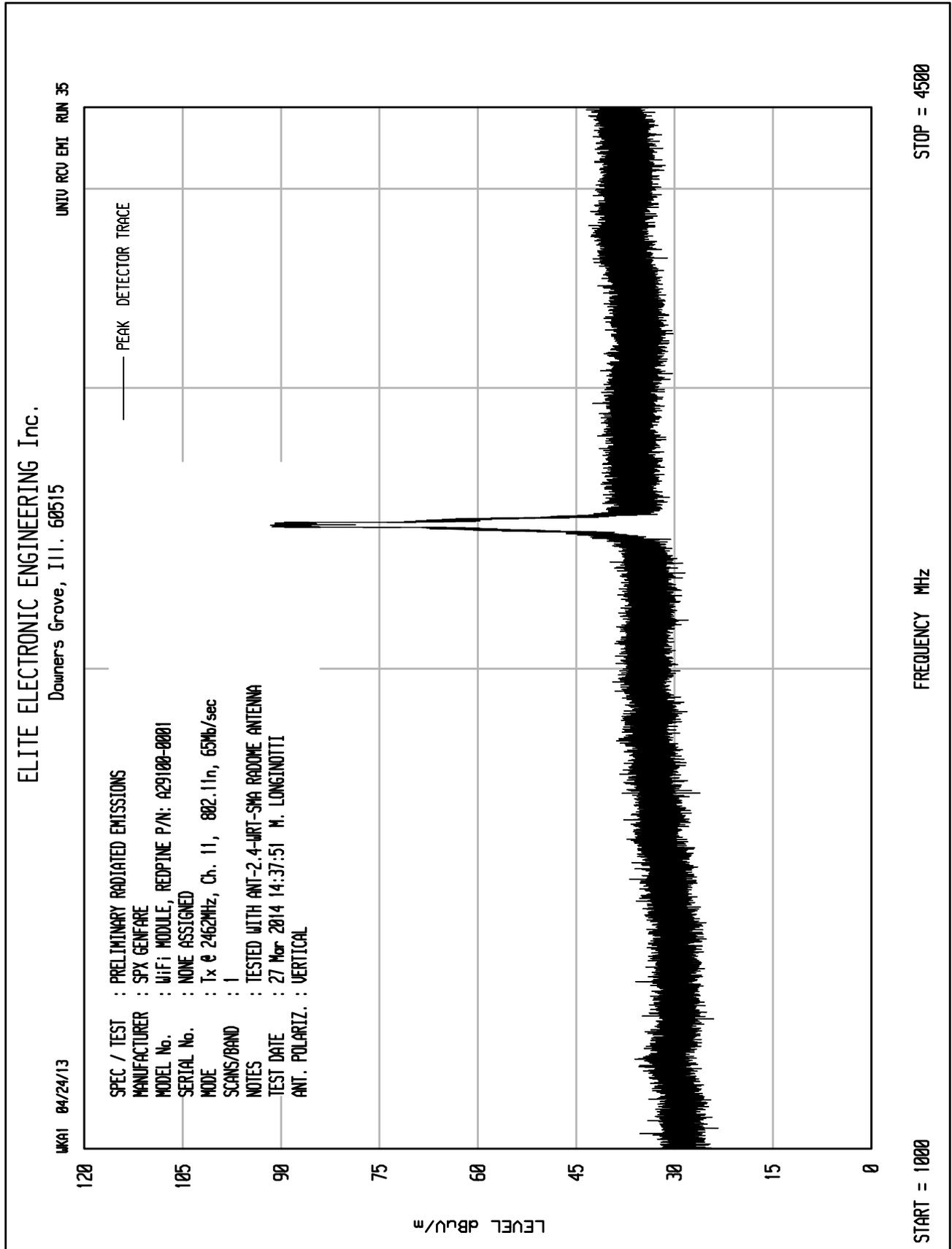
MODE : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mbps/SEC

SCANS/BAND : 1

NOTES : TESTED WITH RADOME ANTENNA

TEST DATE : 10 Apr 2014 09:30:03 M. LONGINOTTI

ANT. POLARIZ. : VERTICAL



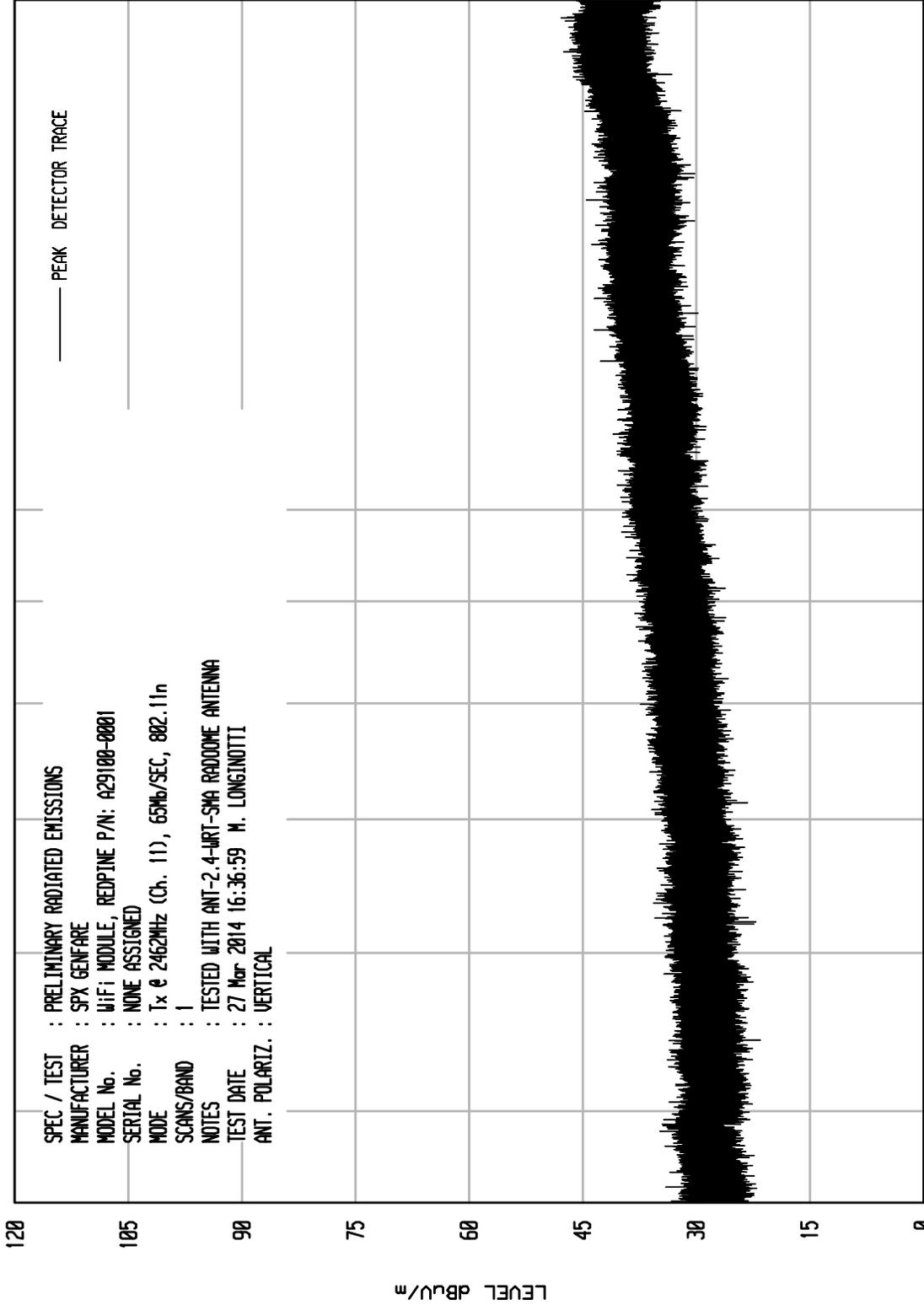


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV EMI RUN 33

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 65Mb/SEC, 802.11n
 SCANS/BAND : 1
 NOTES : TESTED WITH ANT-2.4-WRT-SMA RADDOME ANTENNA
 TEST DATE : 27 Mar 2014 16:36:59 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

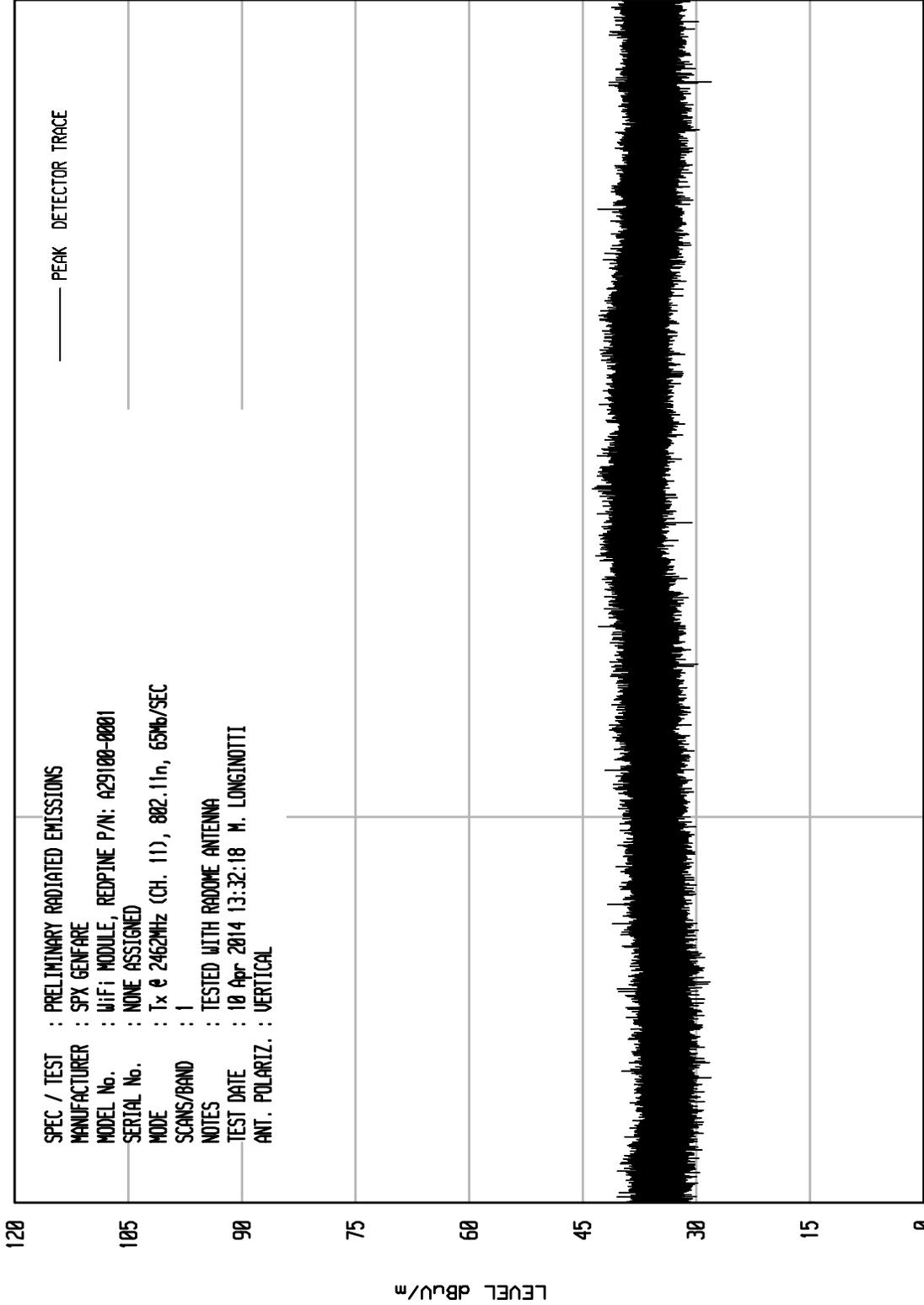


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 26

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2462MHz (Ch. 11), 802.11n, 65Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH RADOME ANTENNA
 TEST DATE : 10 Apr 2014 13:32:18 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11b, DSSS, 2Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	60.9		4.8	34.8	-40.1	60.5	1054.8	5000.0	-13.5
4824.00	V	59.6		4.8	34.8	-40.1	59.2	908.2	5000.0	-14.8
12060.00	H	46.0	Ambient	8.0	39.1	-39.6	53.5	471.0	5000.0	-20.5
12060.00	V	46.2	Ambient	8.0	39.1	-39.6	53.7	482.0	5000.0	-20.3
14472.00	H	46.5	Ambient	8.7	39.9	-39.9	55.2	573.8	5000.0	-18.8
14472.00	V	46.5	Ambient	8.7	39.9	-39.9	55.2	573.8	5000.0	-18.8
19296.00	H	35.4	Ambient	2.2	40.4	-27.9	50.1	318.3	5000.0	-23.9
19296.00	V	35.6	Ambient	2.2	40.4	-27.9	50.3	325.7	5000.0	-23.7

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11b, DSSS, 2Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	60.9		4.8	34.8	-40.1	-41.9	18.6	8.5	500.0	-35.4
4824.00	V	59.6		4.8	34.8	-40.1	-41.9	17.3	7.3	500.0	-36.7
12060.00	H	46.0	Ambient	8.0	39.1	-39.6	-41.9	11.6	3.8	500.0	-42.4
12060.00	V	46.2	Ambient	8.0	39.1	-39.6	-41.9	11.8	3.9	500.0	-42.2
14472.00	H	46.5	Ambient	8.7	39.9	-39.9	-41.9	13.3	4.6	500.0	-40.7
14472.00	V	46.5	Ambient	8.7	39.9	-39.9	-41.9	13.3	4.6	500.0	-40.7
19296.00	H	35.4	Ambient	2.2	40.4	-27.9	-41.9	8.2	2.6	500.0	-45.8
19296.00	V	35.6	Ambient	2.2	40.4	-27.9	-41.9	8.4	2.6	500.0	-45.6

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11b, CCK, 11Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	58.9		4.8	34.8	-40.1	58.5	837.9	5000.0	-15.5
4824.00	V	56.5		4.8	34.8	-40.1	56.1	635.6	5000.0	-17.9
12060.00	H	45.8	Ambient	8.0	39.1	-39.6	53.3	460.3	5000.0	-20.7
12060.00	V	45.7	Ambient	8.0	39.1	-39.6	53.2	455.0	5000.0	-20.8
14472.00	H	46.4	Ambient	8.7	39.9	-39.9	55.1	567.2	5000.0	-18.9
14472.00	V	46.9	Ambient	8.7	39.9	-39.9	55.6	600.8	5000.0	-18.4
19296.00	H	34.7	Ambient	2.2	40.4	-27.9	49.4	293.7	5000.0	-24.6
19296.00	V	35.7	Ambient	2.2	40.4	-27.9	50.4	329.5	5000.0	-23.6

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11b, CCK, 11Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	58.9		4.8	34.8	-40.1	-41.9	16.6	6.7	500.0	-37.4
4824.00	V	56.5		4.8	34.8	-40.1	-41.9	14.2	5.1	500.0	-39.8
12060.00	H	45.8	Ambient	8.0	39.1	-39.6	-41.9	11.4	3.7	500.0	-42.6
12060.00	V	45.7	Ambient	8.0	39.1	-39.6	-41.9	11.3	3.7	500.0	-42.7
14472.00	H	46.4	Ambient	8.7	39.9	-39.9	-41.9	13.2	4.6	500.0	-40.8
14472.00	V	46.9	Ambient	8.7	39.9	-39.9	-41.9	13.7	4.8	500.0	-40.3
19296.00	H	34.7	Ambient	2.2	40.4	-27.9	-41.9	7.5	2.4	500.0	-46.5
19296.00	V	35.7	Ambient	2.2	40.4	-27.9	-41.9	8.5	2.6	500.0	-45.5

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11g, 54Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	57.1		4.8	34.8	-40.1	56.7	681.1	5000.0	-17.3
4824.00	V	53.2		4.8	34.8	-40.1	52.8	434.7	5000.0	-21.2
12060.00	H	45.9	Ambient	8.0	39.1	-39.6	53.4	465.6	5000.0	-20.6
12060.00	V	45.5	Ambient	8.0	39.1	-39.6	53.0	444.7	5000.0	-21.0
14472.00	H	46.3	Ambient	8.7	39.9	-39.9	55.0	560.7	5000.0	-19.0
14472.00	V	46.4	Ambient	8.7	39.9	-39.9	55.1	567.2	5000.0	-18.9
19296.00	H	38.3	Ambient	2.2	40.4	-27.9	53.0	444.5	5000.0	-21.0
19296.00	V	38.9	Ambient	2.2	40.4	-27.9	53.6	476.3	5000.0	-20.4

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11g, 54Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	57.1		4.8	34.8	-40.1	-41.6	15.1	5.7	500.0	-38.9
4824.00	V	53.2		4.8	34.8	-40.1	-41.6	11.2	3.6	500.0	-42.8
12060.00	H	45.9	Ambient	8.0	39.1	-39.6	-41.6	11.8	3.9	500.0	-42.2
12060.00	V	45.5	Ambient	8.0	39.1	-39.6	-41.6	11.4	3.7	500.0	-42.6
14472.00	H	46.3	Ambient	8.7	39.9	-39.9	-41.6	13.4	4.7	500.0	-40.6
14472.00	V	46.4	Ambient	8.7	39.9	-39.9	-41.6	13.5	4.7	500.0	-40.5
19296.00	H	38.3	Ambient	2.2	40.4	-27.9	-41.6	11.4	3.7	500.0	-42.6
19296.00	V	38.9	Ambient	2.2	40.4	-27.9	-41.6	12.0	4.0	500.0	-42.0

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11n, 65 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	56.2		4.8	34.8	-40.1	55.8	614.0	5000.0	-18.2
4824.00	V	55.4		4.8	34.8	-40.1	55.0	560.0	5000.0	-19.0
12060.00	H	46.3	Ambient	8.0	39.1	-39.6	53.8	487.6	5000.0	-20.2
12060.00	V	46.5	Ambient	8.0	39.1	-39.6	54.0	498.9	5000.0	-20.0
14472.00	H	45.8	Ambient	8.7	39.9	-39.9	54.5	529.3	5000.0	-19.5
14472.00	V	45.7	Ambient	8.7	39.9	-39.9	54.4	523.3	5000.0	-19.6
19296.00	H	37.3	Ambient	2.2	40.4	-27.9	52.0	396.2	5000.0	-22.0
19296.00	V	38.2	Ambient	2.2	40.4	-27.9	52.9	439.4	5000.0	-21.1

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2412MHz (Ch. 1), 802.11n, 65Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	56.2		4.8	34.8	-40.1	-41.7	14.1	5.0	500.0	-39.9
4824.00	V	55.4		4.8	34.8	-40.1	-41.7	13.3	4.6	500.0	-40.7
12060.00	H	46.3	Ambient	8.0	39.1	-39.6	-41.7	12.1	4.0	500.0	-41.9
12060.00	V	46.5	Ambient	8.0	39.1	-39.6	-41.7	12.3	4.1	500.0	-41.7
14472.00	H	45.8	Ambient	8.7	39.9	-39.9	-41.7	12.8	4.4	500.0	-41.2
14472.00	V	45.7	Ambient	8.7	39.9	-39.9	-41.7	12.7	4.3	500.0	-41.3
19296.00	H	37.3	Ambient	2.2	40.4	-27.9	-41.7	10.3	3.3	500.0	-43.7
19296.00	V	38.2	Ambient	2.2	40.4	-27.9	-41.7	11.2	3.6	500.0	-42.8

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11b, DSSS, 2 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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)
4884.00	H	63.7		4.9	34.9	-40.2	63.3	1465.6	5000.0	-10.7
4884.00	V	60.5		4.9	34.9	-40.2	60.1	1014.0	5000.0	-13.9
7326.00	H	49.4		6.2	35.6	-39.8	51.4	372.3	5000.0	-22.6
7326.00	V	47.6	Ambient	6.2	35.6	-39.8	49.6	302.6	5000.0	-24.4
12210.00	H	46.1	Ambient	8.0	39.2	-39.5	53.8	491.5	5000.0	-20.1
12210.00	V	46.1	Ambient	8.0	39.2	-39.5	53.8	491.5	5000.0	-20.1
19536.00	H	35.4	Ambient	2.2	40.4	-27.8	50.2	322.4	5000.0	-23.8
19536.00	V	37.0	Ambient	2.2	40.4	-27.8	51.8	387.7	5000.0	-22.2

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11b, DSSS, 2 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4884.00	H	63.7		4.9	34.9	-40.2	-41.9	21.4	11.8	500.0	-32.6
4884.00	V	60.5		4.9	34.9	-40.2	-41.9	18.2	8.1	500.0	-35.8
7326.00	H	49.4		6.2	35.6	-39.8	-41.9	9.5	3.0	500.0	-44.5
7326.00	V	47.6	Ambient	6.2	35.6	-39.8	-41.9	7.7	2.4	500.0	-46.3
12210.00	H	46.1	Ambient	8.0	39.2	-39.5	-41.9	11.9	3.9	500.0	-42.0
12210.00	V	46.1	Ambient	8.0	39.2	-39.5	-41.9	11.9	3.9	500.0	-42.0
19536.00	H	35.5	Ambient	2.2	40.4	-27.8	-41.9	8.4	2.6	500.0	-45.6
19536.00	V	37.0	Ambient	2.2	40.4	-27.8	-41.9	9.9	3.1	500.0	-44.1

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11b, CCK, 11 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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)
4884.00	H	62.4		4.9	34.9	-40.2	62.0	1261.9	5000.0	-12.0
4884.00	V	60.5		4.9	34.9	-40.2	60.1	1014.0	5000.0	-13.9
7326.00	H	48.8	Ambient	6.2	35.6	-39.8	50.8	347.5	5000.0	-23.2
7326.00	V	46.6	Ambient	6.2	35.6	-39.8	48.6	269.7	5000.0	-25.4
12210.00	H	46.6	Ambient	8.0	39.2	-39.5	54.3	520.6	5000.0	-19.6
12210.00	V	46.4	Ambient	8.0	39.2	-39.5	54.1	508.8	5000.0	-19.8
19536.00	H	35.9	Ambient	2.2	40.4	-27.8	50.7	341.6	5000.0	-23.3
19536.00	V	35.5	Ambient	2.2	40.4	-27.8	50.3	326.2	5000.0	-23.7

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11b, CCK, 11 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4884.00	H	62.4		4.9	34.9	-40.2	-41.9	20.1	10.1	500.0	-33.9
4884.00	V	60.5		4.9	34.9	-40.2	-41.9	18.2	8.1	500.0	-35.8
7326.00	H	48.8	Ambient	6.2	35.6	-39.8	-41.9	8.9	2.8	500.0	-45.1
7326.00	V	46.6	Ambient	6.2	35.6	-39.8	-41.9	6.7	2.2	500.0	-47.3
12210.00	H	46.6	Ambient	8.0	39.2	-39.5	-41.9	12.4	4.2	500.0	-41.5
12210.00	V	46.4	Ambient	8.0	39.2	-39.5	-41.9	12.2	4.1	500.0	-41.7
19536.00	H	35.9	Ambient	2.2	40.4	-27.8	-41.9	8.8	2.7	500.0	-45.2
19536.00	V	35.5	Ambient	2.2	40.4	-27.8	-41.9	8.4	2.6	500.0	-45.6

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11g, 54 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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)
4884.00	H	59.0		4.9	34.9	-40.2	58.6	853.1	5000.0	-15.4
4884.00	V	57.1		4.9	34.9	-40.2	56.7	685.5	5000.0	-17.3
7326.00	H	47.5	Ambient	6.2	35.6	-39.8	49.5	299.2	5000.0	-24.5
7326.00	V	46.6	Ambient	6.2	35.6	-39.8	48.6	269.7	5000.0	-25.4
12210.00	H	45.7	Ambient	8.0	39.2	-39.5	53.4	469.4	5000.0	-20.5
12210.00	V	46.5	Ambient	8.0	39.2	-39.5	54.2	514.7	5000.0	-19.7
19536.00	H	33.9	Ambient	2.2	40.4	-27.8	48.7	271.3	5000.0	-25.3
19536.00	V	35.5	Ambient	2.2	40.4	-27.8	50.3	326.2	5000.0	-23.7

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11g, 54 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4884.00	H	59.0		4.9	34.9	-40.2	-41.6	17.0	7.1	500.0	-37.0
4884.00	V	57.1		4.9	34.9	-40.2	-41.6	15.1	5.7	500.0	-38.9
7326.00	H	47.5	Ambient	6.2	35.6	-39.8	-41.6	7.9	2.5	500.0	-46.1
7326.00	V	46.6	Ambient	6.2	35.6	-39.8	-41.6	7.0	2.2	500.0	-47.0
12210.00	H	45.7	Ambient	8.0	39.2	-39.5	-41.6	11.8	3.9	500.0	-42.1
12210.00	V	46.5	Ambient	8.0	39.2	-39.5	-41.6	12.6	4.3	500.0	-41.3
19536.00	H	33.9	Ambient	2.2	40.4	-27.8	-41.6	7.1	2.3	500.0	-46.9
19536.00	V	35.5	Ambient	2.2	40.4	-27.8	-41.6	8.7	2.7	500.0	-45.3

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11n, 65 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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)
4884.00	H	59.1		4.9	34.9	-40.2	58.7	863.0	5000.0	-15.3
4884.00	V	57.4		4.9	34.9	-40.2	57.0	709.6	5000.0	-17.0
7326.00	H	47.9	Ambient	6.2	35.6	-39.8	49.9	313.3	5000.0	-24.1
7326.00	V	47.5	Ambient	6.2	35.6	-39.8	49.5	299.2	5000.0	-24.5
12210.00	H	45.8	Ambient	8.0	39.2	-39.5	53.5	474.8	5000.0	-20.4
12210.00	V	46.5	Ambient	8.0	39.2	-39.5	54.2	514.7	5000.0	-19.7
19536.00	H	35.1	Ambient	2.2	40.4	-27.8	49.9	311.5	5000.0	-24.1
19536.00	V	36.5	Ambient	2.2	40.4	-27.8	51.3	366.0	5000.0	-22.7

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2442MHz (Ch. 7), 802.11n, 65 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4884.00	H	59.1		4.9	34.9	-40.2	-41.7	17.0	7.1	500.0	-37.0
4884.00	V	57.4		4.9	34.9	-40.2	-41.7	15.3	5.8	500.0	-38.7
7326.00	H	47.9	Ambient	6.2	35.6	-39.8	-41.7	8.2	2.6	500.0	-45.8
7326.00	V	47.5	Ambient	6.2	35.6	-39.8	-41.7	7.8	2.5	500.0	-46.2
12210.00	H	45.8	Ambient	8.0	39.2	-39.5	-41.7	11.8	3.9	500.0	-42.1
12210.00	V	46.5	Ambient	8.0	39.2	-39.5	-41.7	12.5	4.2	500.0	-41.4
19536.00	H	35.1	Ambient	2.2	40.4	-27.8	-41.7	8.2	2.6	500.0	-45.8
19536.00	V	36.5	Ambient	2.2	40.4	-27.8	-41.7	9.6	3.0	500.0	-44.4

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11b, DSSS, 2 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	55.0		4.9	34.9	-40.2	54.7	541.2	5000.0	-19.3
4924.00	V	56.3		4.9	34.9	-40.2	56.0	628.5	5000.0	-18.0
7386.00	H	47.3	Ambient	6.2	35.7	-39.8	49.4	294.1	5000.0	-24.6
7386.00	V	47.5	Ambient	6.2	35.7	-39.8	49.6	300.9	5000.0	-24.4
12310.00	H	46.7	Ambient	8.0	39.2	-39.4	54.5	533.1	5000.0	-19.4
12310.00	V	48.8	Ambient	8.0	39.2	-39.4	56.6	678.9	5000.0	-17.3
19696.00	H	34.6	Ambient	2.2	40.4	-27.8	49.4	294.6	5000.0	-24.6
19696.00	V	35.0	Ambient	2.2	40.4	-27.8	49.8	308.5	5000.0	-24.2
22158.00	H	36.3	Ambient	2.2	40.6	-28.5	50.6	340.2	5000.0	-23.3
22158.00	V	35.8	Ambient	2.2	40.6	-28.5	50.1	321.2	5000.0	-23.8

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11b, DSSS, 2 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	55.0		4.9	34.9	-40.2	-41.9	12.8	4.3	500.0	-41.2
4924.00	V	56.3		4.9	34.9	-40.2	-41.9	14.1	5.1	500.0	-39.9
7386.00	H	47.3	Ambient	6.2	35.7	-39.8	-41.9	7.5	2.4	500.0	-46.5
7386.00	V	47.5	Ambient	6.2	35.7	-39.8	-41.9	7.7	2.4	500.0	-46.3
12310.00	H	46.7	Ambient	8.0	39.2	-39.4	-41.9	12.6	4.3	500.0	-41.3
12310.00	V	48.8	Ambient	8.0	39.2	-39.4	-41.9	14.7	5.5	500.0	-39.2
19696.00	H	34.6	Ambient	2.2	40.4	-27.8	-41.9	7.5	2.4	500.0	-46.5
19696.00	V	35.0	Ambient	2.2	40.4	-27.8	-41.9	7.9	2.5	500.0	-46.1
22158.00	H	36.3	Ambient	2.2	40.6	-28.5	-41.9	8.7	2.7	500.0	-45.2
22158.00	V	35.8	Ambient	2.2	40.6	-28.5	-41.9	8.2	2.6	500.0	-45.7

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11b, CCK, 11 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	55.7		4.9	34.9	-40.2	55.4	586.6	5000.0	-18.6
4924.00	V	57.4		4.9	34.9	-40.2	57.1	713.4	5000.0	-16.9
7386.00	H	46.5	Ambient	6.2	35.7	-39.8	48.6	268.2	5000.0	-25.4
7386.00	V	47.6	Ambient	6.2	35.7	-39.8	49.7	304.4	5000.0	-24.3
12310.00	H	46.7	Ambient	8.0	39.2	-39.4	54.5	533.1	5000.0	-19.4
12310.00	V	46.5	Ambient	8.0	39.2	-39.4	54.3	521.0	5000.0	-19.6
19696.00	H	35.0	Ambient	2.2	40.4	-27.8	49.8	308.5	5000.0	-24.2
19696.00	V	34.8	Ambient	2.2	40.4	-27.8	49.6	301.5	5000.0	-24.4
22158.00	H	35.5	Ambient	2.2	40.6	-28.5	49.8	310.3	5000.0	-24.1
22158.00	V	36.4	Ambient	2.2	40.6	-28.5	50.7	344.2	5000.0	-23.2

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11b, CCK, 11 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	55.7		4.9	34.9	-40.2	-41.9	13.5	4.7	500.0	-40.5
4924.00	V	57.4		4.9	34.9	-40.2	-41.9	15.2	5.7	500.0	-38.8
7386.00	H	46.5	Ambient	6.2	35.7	-39.8	-41.9	6.7	2.2	500.0	-47.3
7386.00	V	47.6	Ambient	6.2	35.7	-39.8	-41.9	7.8	2.4	500.0	-46.2
12310.00	H	46.7	Ambient	8.0	39.2	-39.4	-41.9	12.6	4.3	500.0	-41.3
12310.00	V	46.5	Ambient	8.0	39.2	-39.4	-41.9	12.4	4.2	500.0	-41.5
19696.00	H	35.0	Ambient	2.2	40.4	-27.8	-41.9	7.9	2.5	500.0	-46.1
19696.00	V	34.8	Ambient	2.2	40.4	-27.8	-41.9	7.7	2.4	500.0	-46.3
22158.00	H	35.5	Ambient	2.2	40.6	-28.5	-41.9	7.9	2.5	500.0	-46.0
22158.00	V	34.4	Ambient	2.2	40.6	-28.5	-41.9	6.8	2.2	500.0	-47.1

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11g, 54 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	55.8		4.9	34.9	-40.2	55.5	593.4	5000.0	-18.5
4924.00	V	53.6		4.9	34.9	-40.2	53.3	460.6	5000.0	-20.7
7386.00	H	48.0	Ambient	6.2	35.7	-39.8	50.1	318.8	5000.0	-23.9
7386.00	V	45.9	Ambient	6.2	35.7	-39.8	48.0	250.3	5000.0	-26.0
12310.00	H	46.0	Ambient	8.0	39.2	-39.4	53.8	491.8	5000.0	-20.1
12310.00	V	46.5	Ambient	8.0	39.2	-39.4	54.3	521.0	5000.0	-19.6
19696.00	H	34.9	Ambient	2.2	40.4	-27.8	49.7	305.0	5000.0	-24.3
19696.00	V	34.8	Ambient	2.2	40.4	-27.8	49.6	301.5	5000.0	-24.4
22158.00	H	36.5	Ambient	2.2	40.6	-28.5	50.8	348.2	5000.0	-23.1
22158.00	V	36.5	Ambient	2.2	40.6	-28.5	50.8	348.2	5000.0	-23.1

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11g, 54 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	55.8		4.9	34.9	-40.2	-41.6	13.9	4.9	500.0	-40.1
4924.00	V	53.6		4.9	34.9	-40.2	-41.6	11.7	3.8	500.0	-42.3
7386.00	H	48.0	Ambient	6.2	35.7	-39.8	-41.6	8.5	2.7	500.0	-45.5
7386.00	V	45.9	Ambient	6.2	35.7	-39.8	-41.6	6.4	2.1	500.0	-47.6
12310.00	H	46.0	Ambient	8.0	39.2	-39.4	-41.6	12.2	4.1	500.0	-41.7
12310.00	V	46.5	Ambient	8.0	39.2	-39.4	-41.6	12.7	4.3	500.0	-41.2
19696.00	H	34.9	Ambient	2.2	40.4	-27.8	-41.6	8.1	2.5	500.0	-45.9
19696.00	V	34.8	Ambient	2.2	40.4	-27.8	-41.6	8.0	2.5	500.0	-46.0
22158.00	H	36.5	Ambient	2.2	40.6	-28.5	-41.6	9.2	2.9	500.0	-44.7
22158.00	V	36.5	Ambient	2.2	40.6	-28.5	-41.6	9.2	2.9	500.0	-44.7

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Peak Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11n, 65 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

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	51.8		4.9	34.9	-40.2	51.5	374.4	5000.0	-22.5
4924.00	V	55.1		4.9	34.9	-40.2	54.8	547.4	5000.0	-19.2
7386.00	H	45.9	Ambient	6.2	35.7	-39.8	48.0	250.3	5000.0	-26.0
7386.00	V	44.2	Ambient	6.2	35.7	-39.8	46.3	205.8	5000.0	-27.7
12310.00	H	46.1	Ambient	8.0	39.2	-39.4	53.9	497.5	5000.0	-20.0
12310.00	V	43.0	Ambient	8.0	39.2	-39.4	50.8	348.2	5000.0	-23.1
19696.00	H	30.8	Ambient	2.2	40.4	-27.8	45.6	190.2	5000.0	-28.4
19696.00	V	33.1	Ambient	2.2	40.4	-27.8	47.9	247.9	5000.0	-26.1
22158.00	H	32.2	Ambient	2.2	40.6	-28.5	46.5	212.2	5000.0	-27.4
22158.00	V	32.7	Ambient	2.2	40.6	-28.5	47.0	224.8	5000.0	-26.9

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : SPX Genfare
 Model No. : A29100-0001
 Serial No. : None Assigned
 Test Specification : FCC-15.247(d), Spurious Radiated Emissions in Restricted Bands
 Date : March 26, 2014 through April 11, 2014
 Mode : Transmit at 2462MHz (Ch. 11), 802.11n, 65 Mb/sec
 Notes : Tested with Radome Antenna, M/N: ANT-2.4-WRT-SMA
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (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	51.8		4.9	34.9	-40.2	-41.9	9.6	3.0	500.0	-44.4
4924.00	V	55.1		4.9	34.9	-40.2	-41.9	12.9	4.4	500.0	-41.1
7386.00	H	45.9	Ambient	6.2	35.7	-39.8	-41.9	6.1	2.0	500.0	-47.9
7386.00	V	44.2	Ambient	6.2	35.7	-39.8	-41.9	4.4	1.7	500.0	-49.6
12310.00	H	46.1	Ambient	8.0	39.2	-39.4	-41.9	12.0	4.0	500.0	-41.9
12310.00	V	43.0	Ambient	8.0	39.2	-39.4	-41.9	8.9	2.8	500.0	-45.0
19696.00	H	30.8	Ambient	2.2	40.4	-27.8	-41.9	3.7	1.5	500.0	-50.3
19696.00	V	33.1	Ambient	2.2	40.4	-27.8	-41.9	6.0	2.0	500.0	-48.0
22158.00	H	32.2	Ambient	2.2	40.6	-28.5	-41.9	4.6	1.7	500.0	-49.3
22158.00	V	32.7	Ambient	2.2	40.6	-28.5	-41.9	5.1	1.8	500.0	-48.8

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$

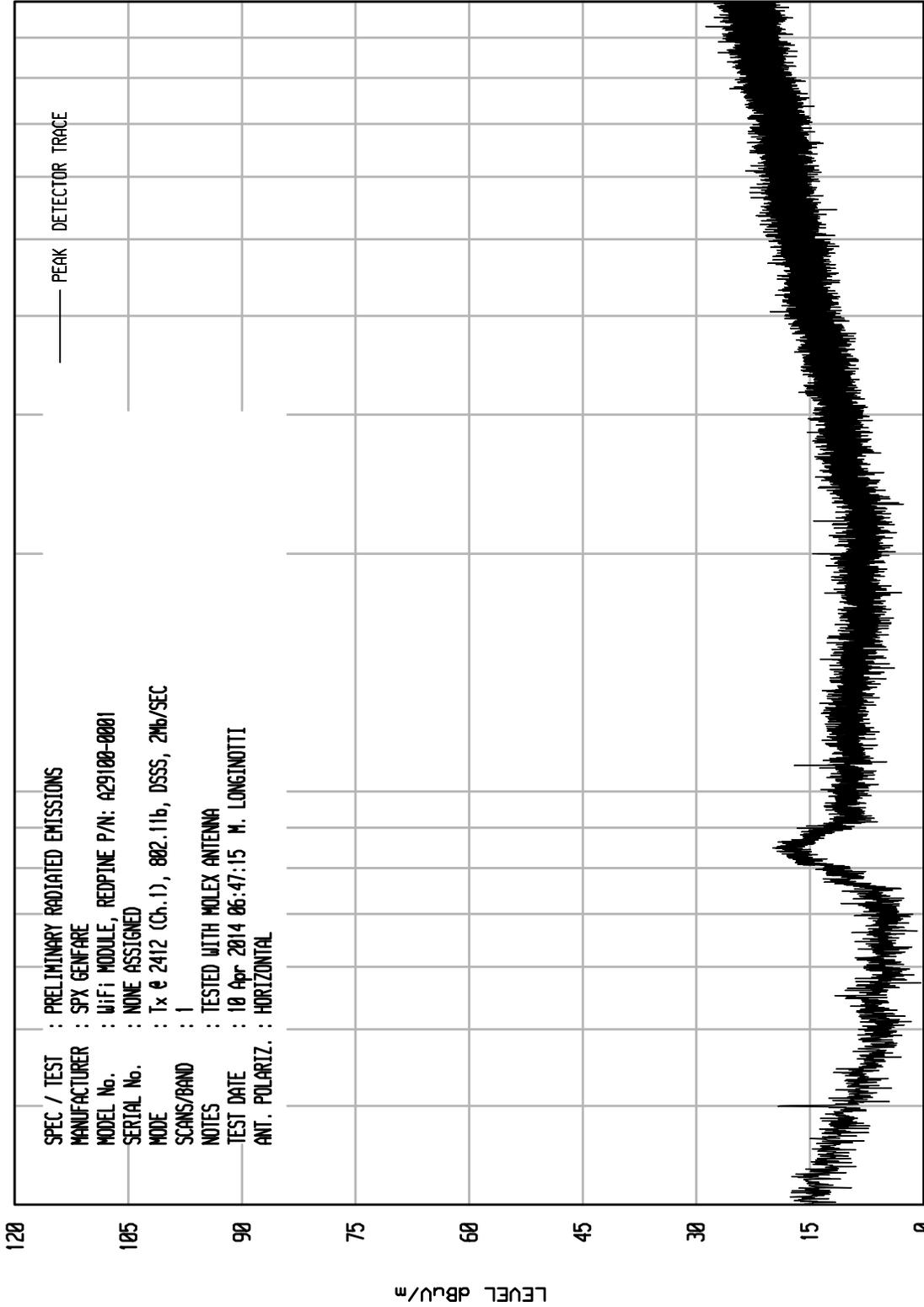


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV ENI RUN 2

UKA1 04/24/13



120

105

90

75

60

45

30

15

0

LEVEL dBu/m

100

FREQUENCY MHz

STOP = 1000

START = 30

SPEC / TEST : PRELIMINARY RADIATED EMISSIONS

MANUFACTURER : SPX GENFARE

MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001

SERIAL No. : NONE ASSIGNED

MODE : Tx @ 2412 (Ch.1), 802.11b, DSSS, 2Mb/SEC

SCANS/BAND : 1

NOTES : TESTED WITH MOLEX ANTENNA

TEST DATE : 10 Apr 2014 06:47:15 M. LONGINOTTI

ANT. POLARIZ. : HORIZONTAL

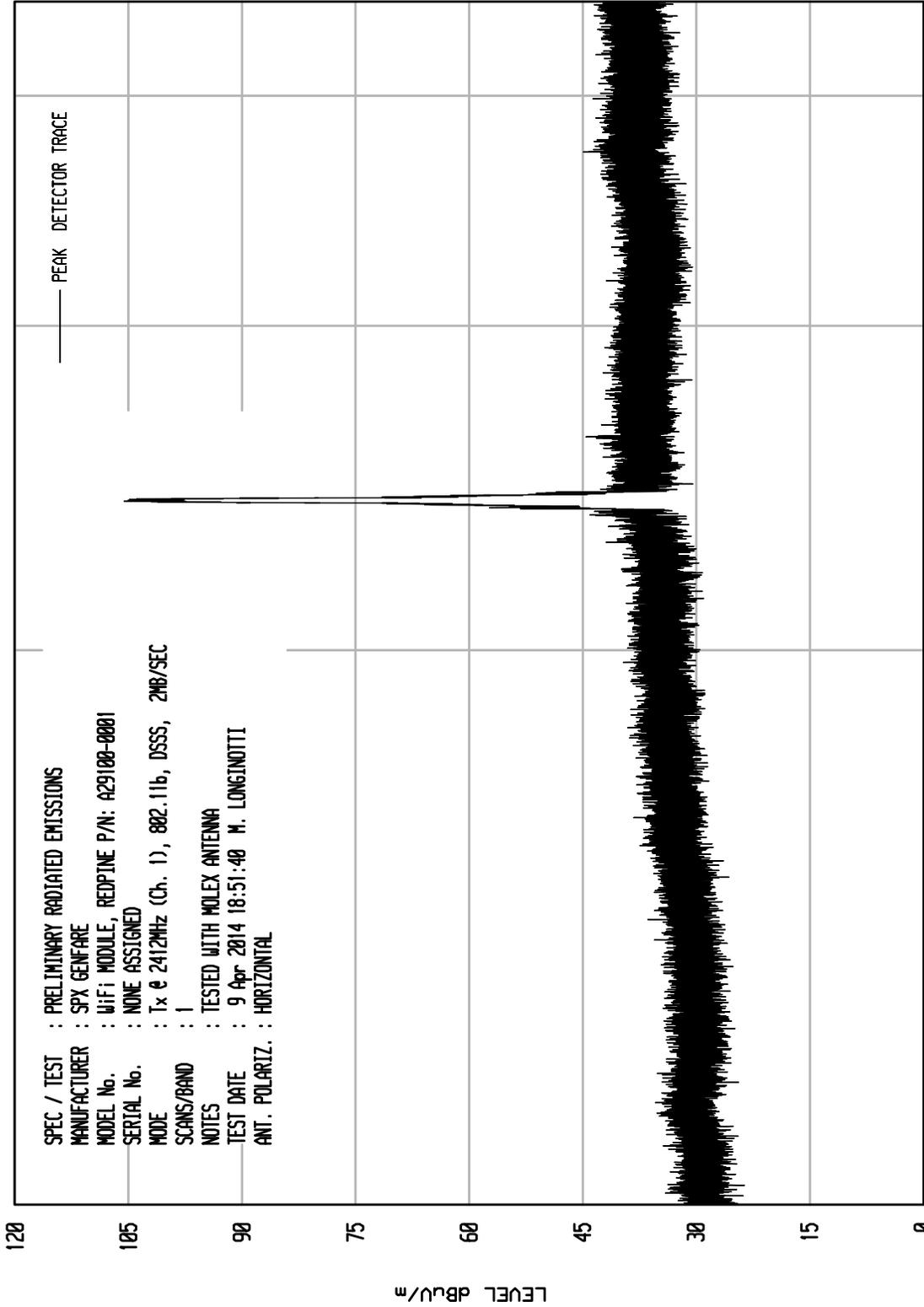


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 25

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, DSSS, 2MB/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 9 Apr 2014 18:51:40 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

START = 1000

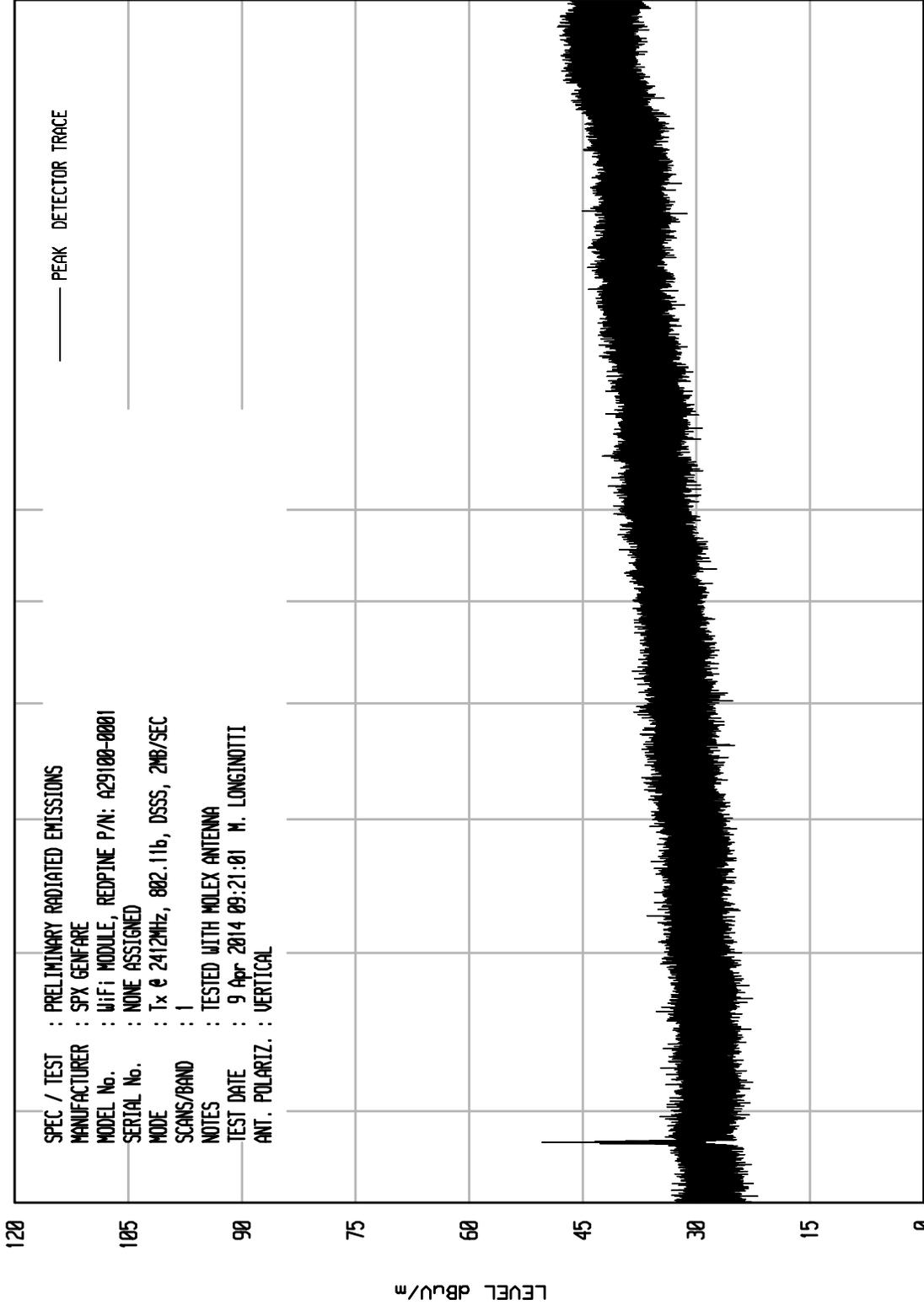


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCV ENI RUN 2

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz, 802.11b, DSSS, 2MB/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 9 Apr 2014 09:21:01 M. LONGIUNOTTI
 ANT. POLARIZ. : VERTICAL

START = 4500 STOP = 18000
 FREQUENCY MHz

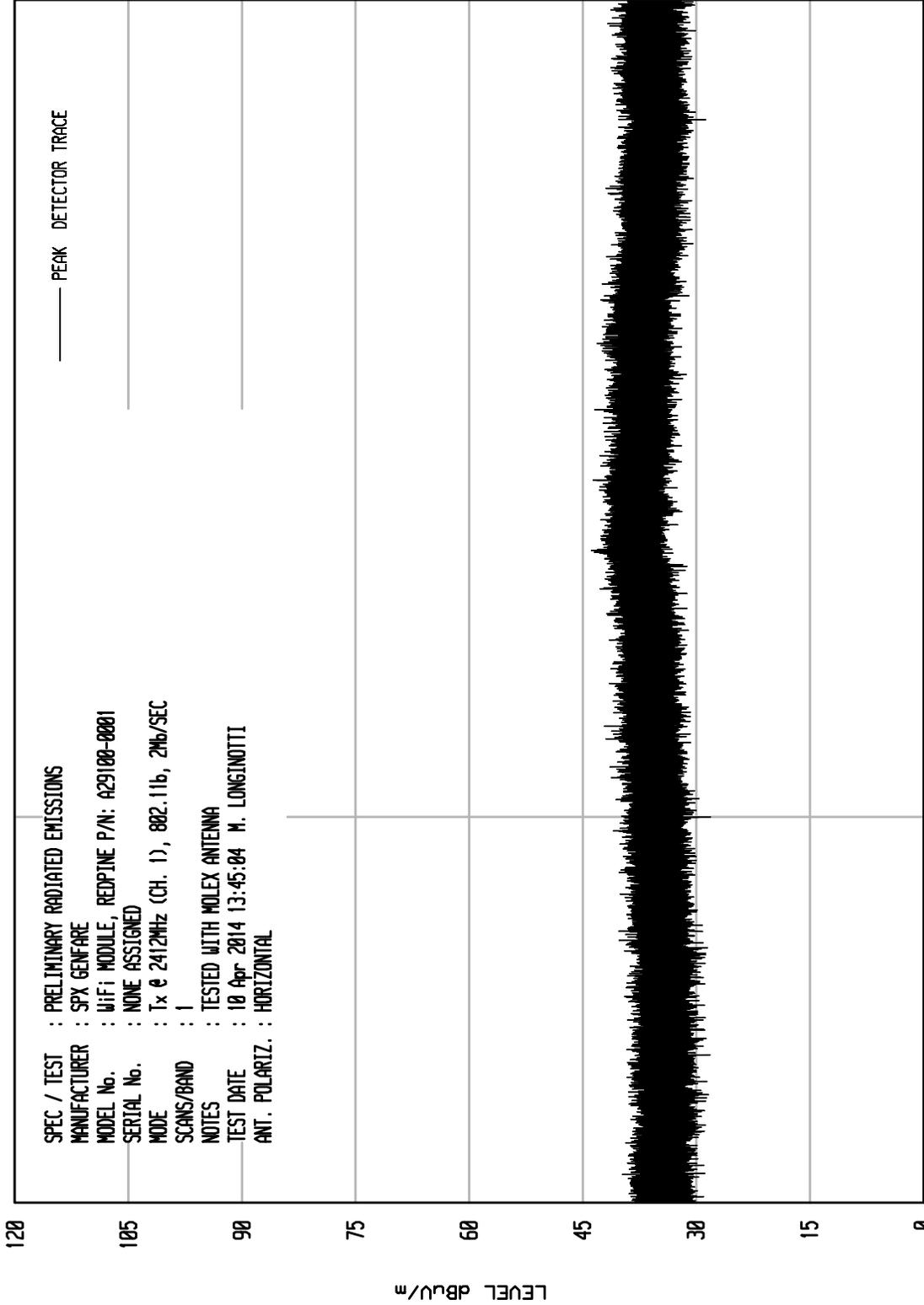


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 27

UKA1 04/24/13

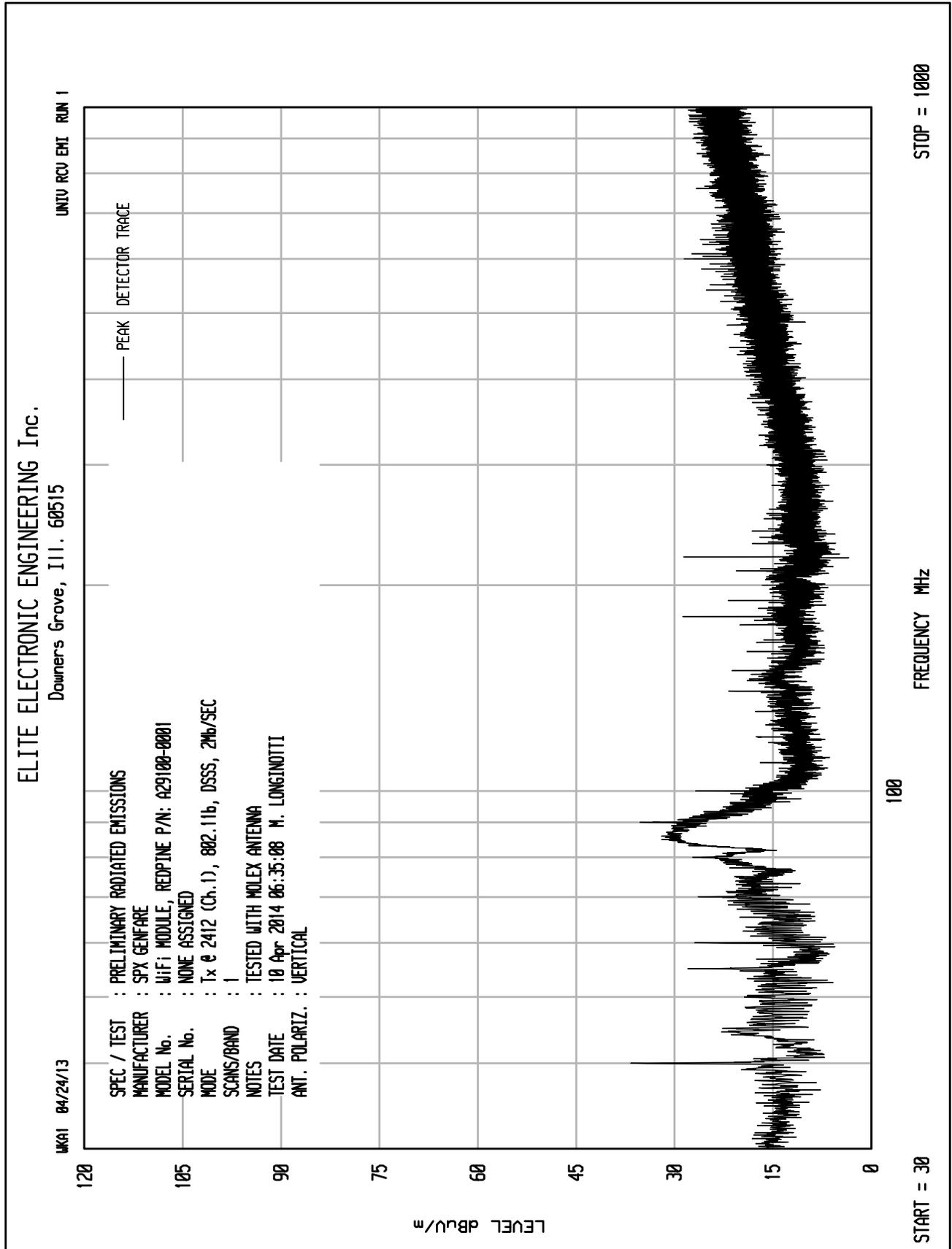


SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (CH. 1), 802.11b, 2Mb/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 10 Apr 2014 13:45:04 M. LONGINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 25000

FREQUENCY MHz

START = 18000



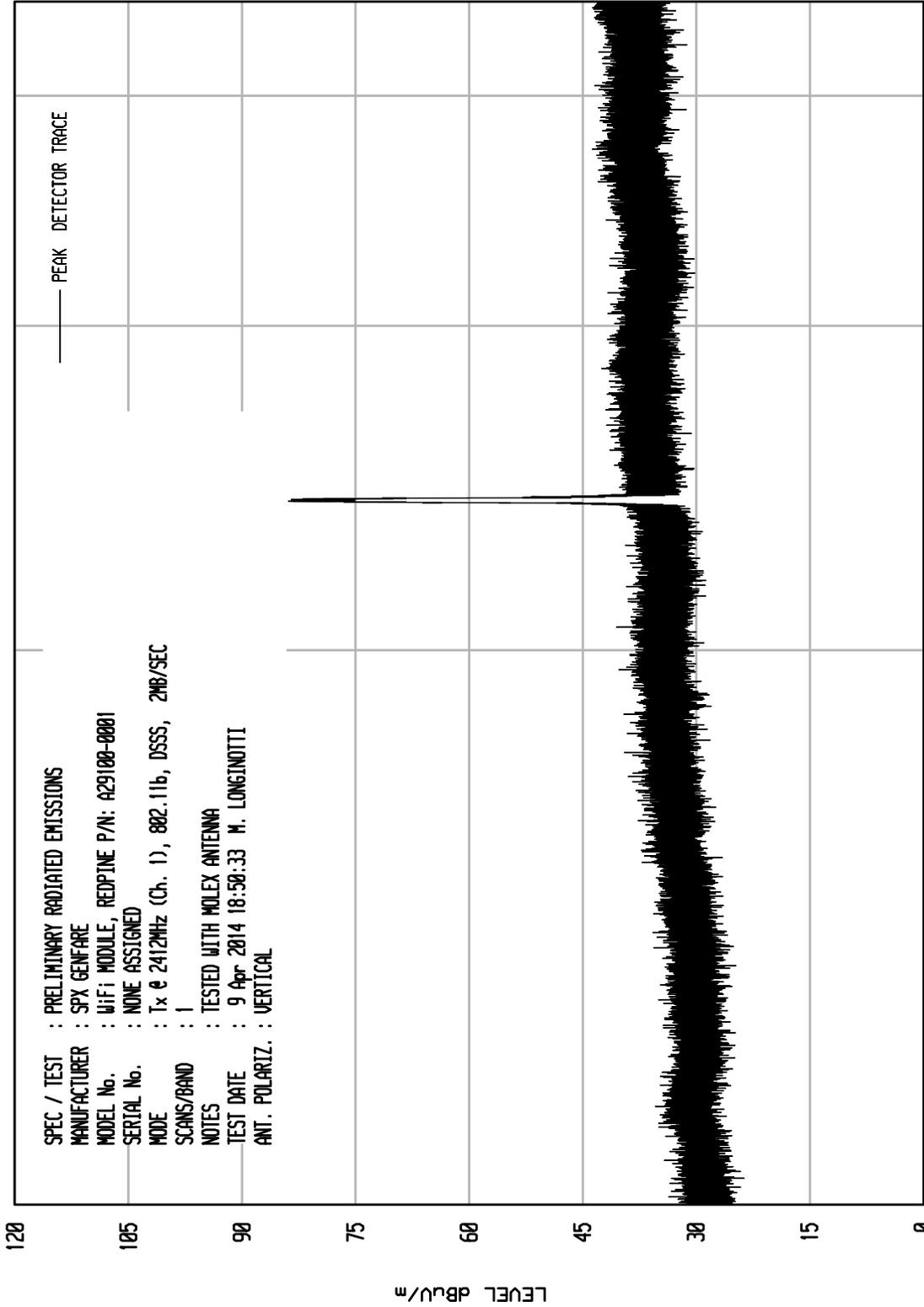


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 24

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, DSSS, 2MB/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 9 Apr 2014 18:50:33 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 4500

FREQUENCY MHz

START = 1000

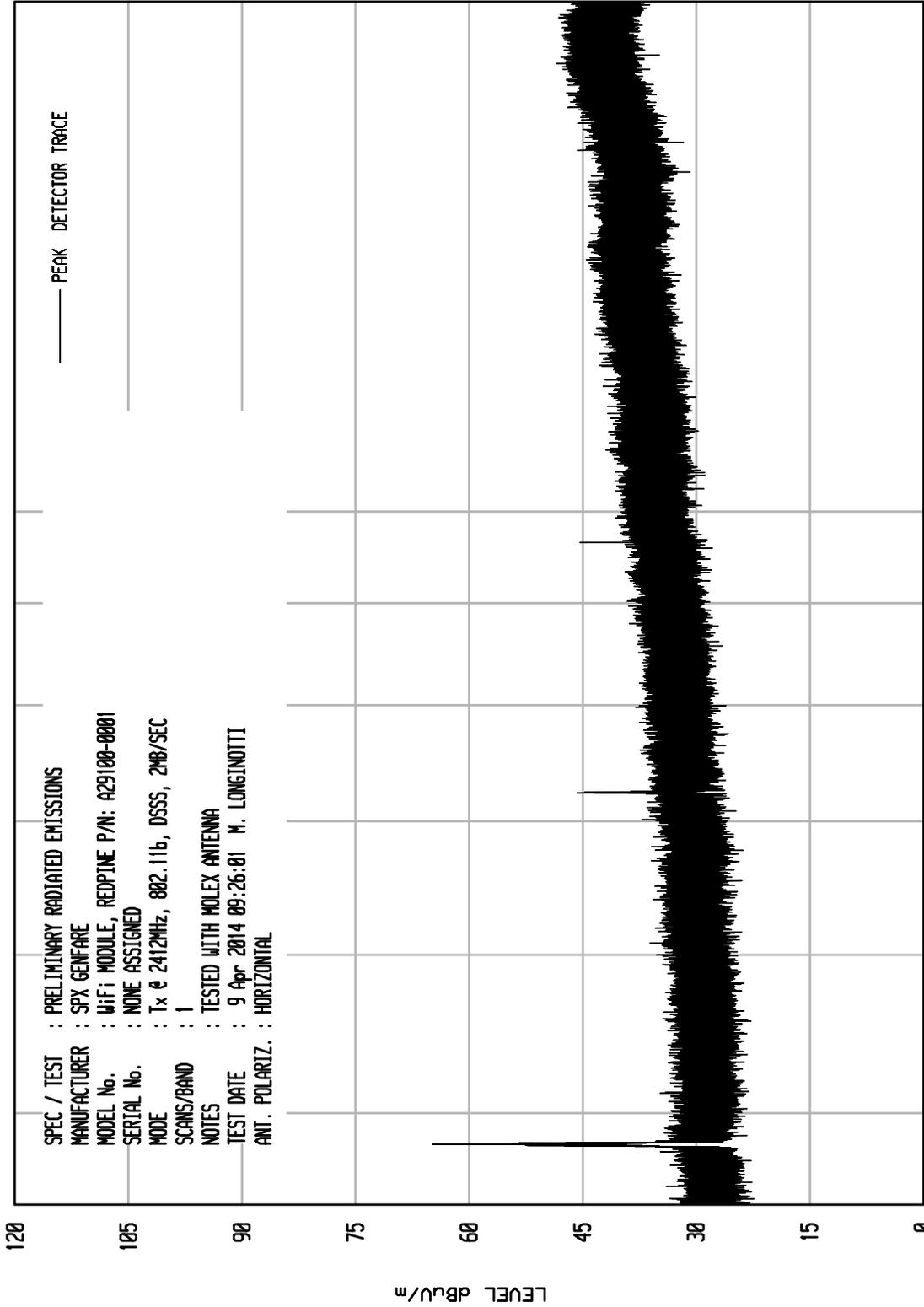


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU ENI RUN 3

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SPX GENFARE
MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
SERIAL No. : NONE ASSIGNED
MODE : Tx @ 2412MHz, 802.11b, DSSS, 2MB/SEC
SCANS/BAND : 1
NOTES : TESTED WITH MOLEX ANTENNA
TEST DATE : 9 Apr 2014 09:26:01 M. LONGJINOTTI
ANT. POLARIZ. : HORIZONTAL

START = 4500
STOP = 18000
FREQUENCY MHz

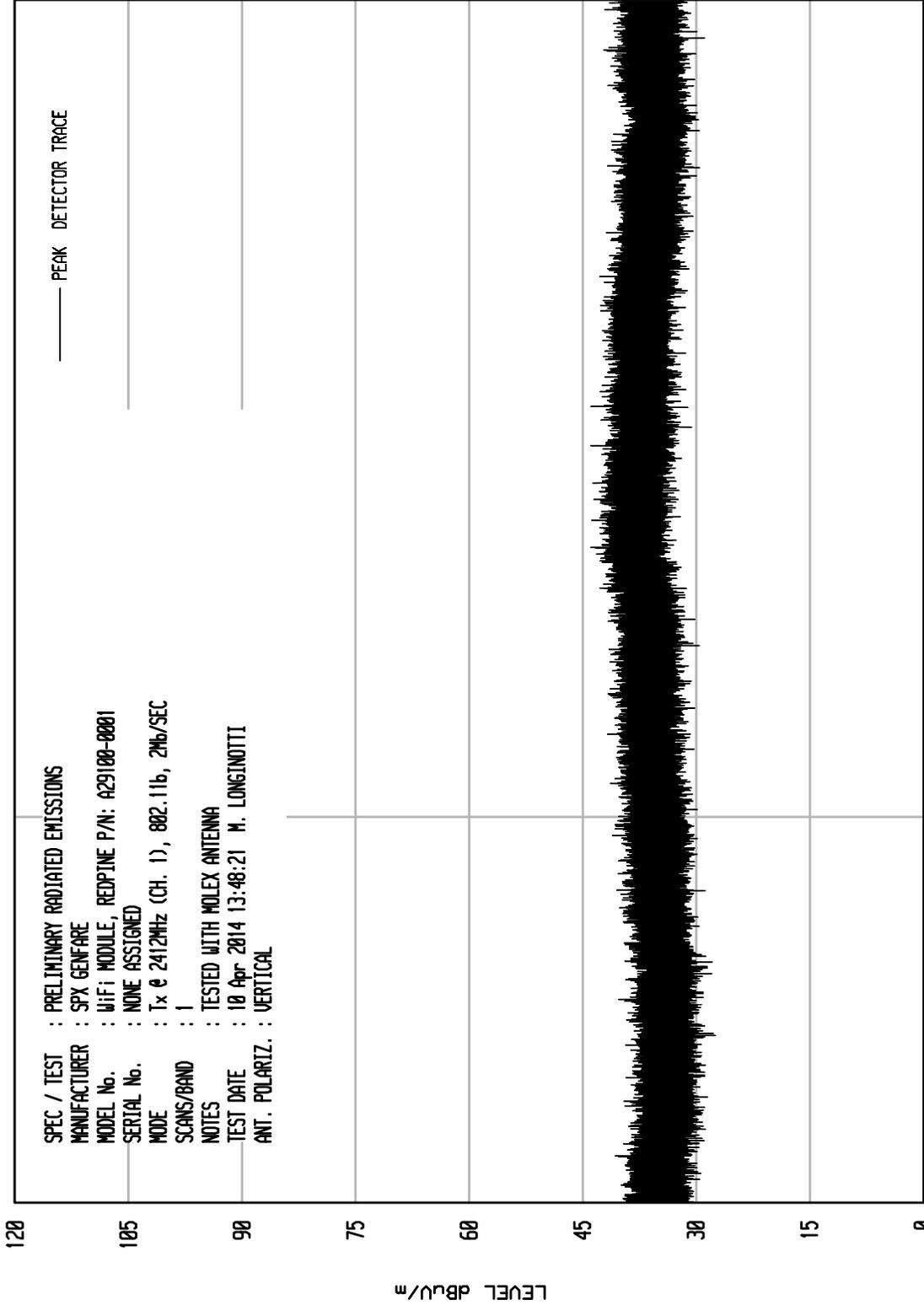


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 28

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, 2Mbps/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 10 Apr 2014 13:48:21 M. LONGINOTTI
 ANT. POLARIZ. : VERTICAL

STOP = 25000

FREQUENCY MHz

START = 18000

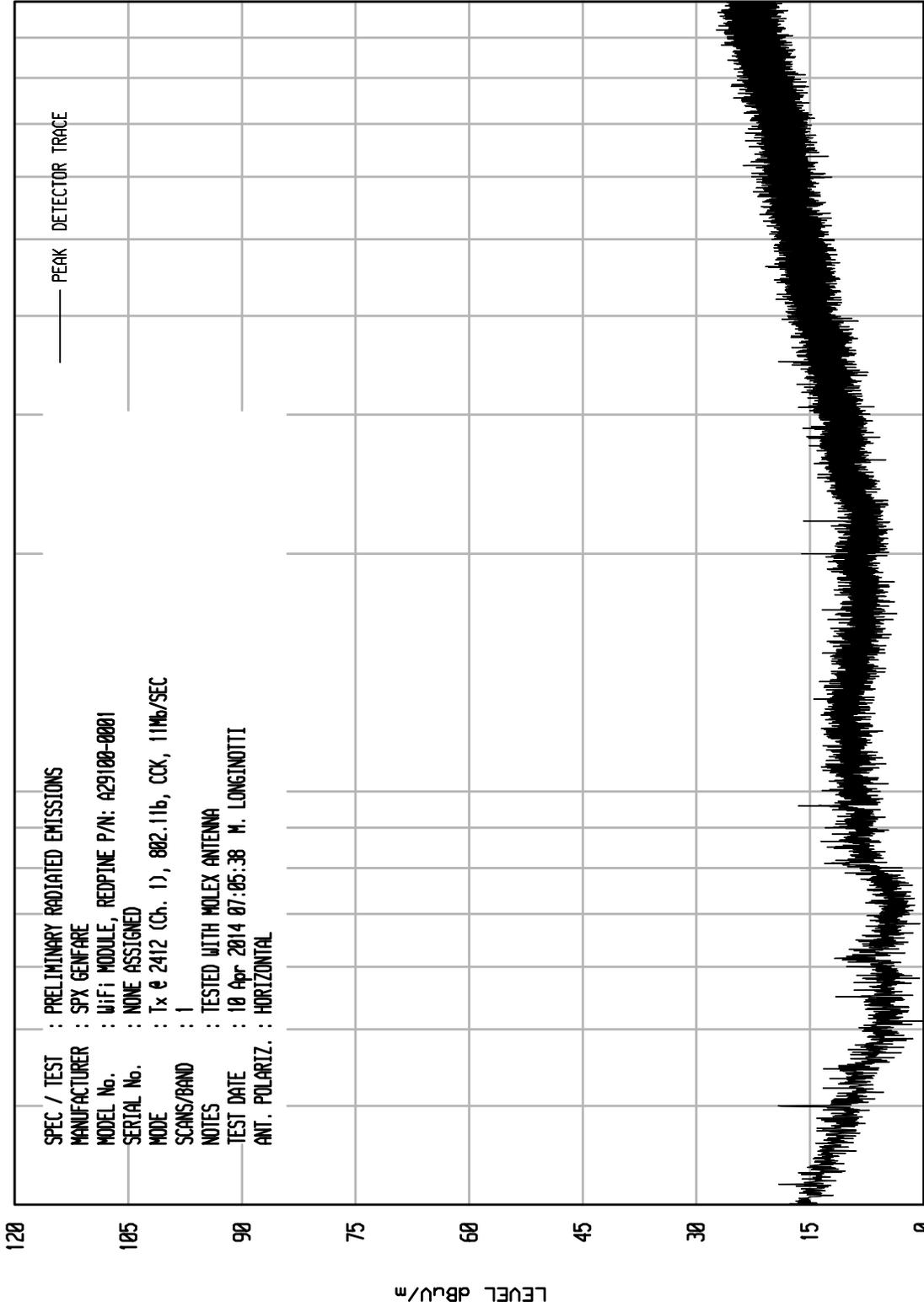
LEVEL dBu/m



ELITE ELECTRONIC ENGINEERING Inc.
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UNIU RCV EMI RUN 12

UKA1 04/24/13



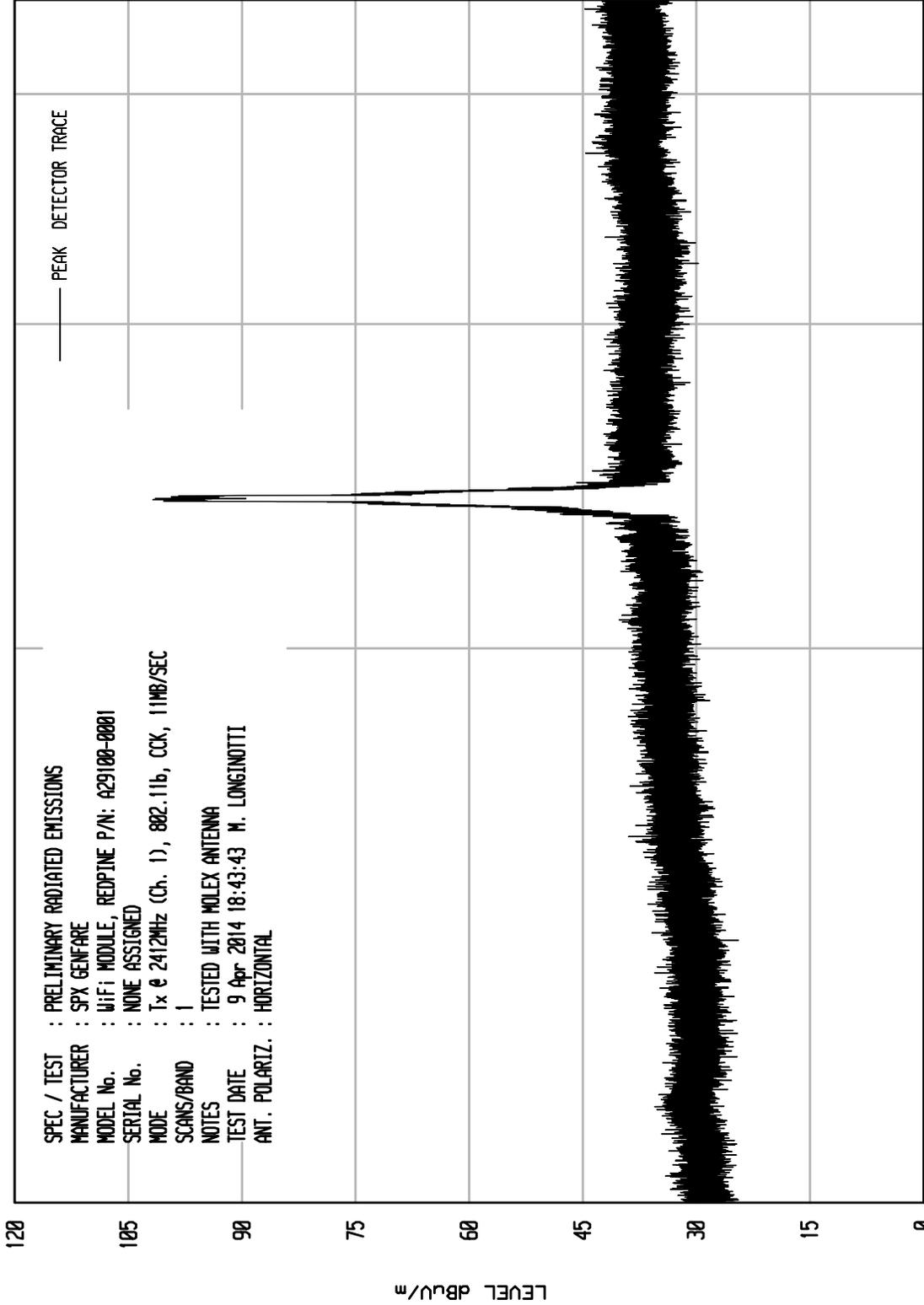


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU EMI RUN 21

UKA1 04/24/13



SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
 MANUFACTURER : SPX GENFARE
 MODEL No. : WiFi MODULE, REDPINE P/N: A29100-0001
 SERIAL No. : NONE ASSIGNED
 MODE : Tx @ 2412MHz (Ch. 1), 802.11b, CCK, 11MB/SEC
 SCANS/BAND : 1
 NOTES : TESTED WITH MOLEX ANTENNA
 TEST DATE : 9 Apr 2014 18:43:43 M. LONGJINOTTI
 ANT. POLARIZ. : HORIZONTAL

STOP = 4500

FREQUENCY MHz

START = 1000