



Measurement of RF Emissions from a Model P10T H22 Dual Wireless Transmitter

For	Shure Incorporated 5800 West Touhy Avenue Niles, IL 60714
P.O. Number	4500480167
Date Tested	September 24-26, 2019
Test Personnel	Richard E. King
Test Specification	FCC "Code of Federal Regulations" Title 47 Part 15, Subpart C, Section 15.236 And Part 74 Subpart H, Section 74.861 ISED RSS-210, Annex G ISED 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 Setup and Operation	5
3.1.	General Description	5
3.1.1.	Power Input.....	5
3.1.2.	Peripheral Equipment	5
3.1.3.	Signal Input/Output Leads	5
3.1.4.	Grounding	5
3.2.	Operational Mode	5
3.3.	EUT Modifications.....	6
4.	Test Facility and Test Instrumentation	6
4.1.	Shielded Enclosure.....	6
4.2.	Test Instrumentation.....	6
4.3.	Calibration Traceability	6
4.4.	Measurement Uncertainty	6
5.	Test Procedures	7
5.1.	Radiated Measurements	7
5.1.1.	Requirements.....	7
5.1.1.1	FCC 15.236	7
5.1.1.2	FCC 74.861	7
5.1.1.3	ISED RSS-210.....	7
5.1.2.	Procedures.....	8
5.1.3.	Results	9
5.1.3.1	FCC 74.861, FCC 15.236 and ISED RSS-210.....	9
6.	Other Test Conditions	9
6.1.	Test Personnel and Witnesses	9
6.2.	Disposition of the EUT	9
7.	Conclusions.....	9
8.	Certification.....	9
9.	Equipment List.....	10

**THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE
WRITTEN APPROVAL OF ELITE ELECTRONIC ENGINEERING INCORPORATED.**

REVISION HISTORY

Revision	Date	Description
—	03 OCT 2019	Initial release

Measurement of RF Emissions from a Dual Wireless Transmitter, Model No. P10T H22

1. INTRODUCTION

1.1. Scope of Tests

This report presents the results of the RF emissions measurements performed on a Dual Wireless Transmitter, Model No. P10T H22, Serial No. no serial number was given, (hereinafter referred to as the Equipment Under Test (EUT)). The EUT was designed to transmit at approximately 518-584MHz using a Shure model UAB-518-582 external antenna. The EUT was manufactured and submitted for testing by Shure Incorporated located in Niles, IL.

1.2. Purpose

The test series was performed to determine if the EUT would meet selected requirements of FCC Part 74, Subpart H, Section 861, for low power auxiliary station. Testing was performed in accordance with ETSI EN 300 422-1 v1.4.2 and IEEE C63.26-2015.

The test series was also performed to determine if the EUT would meet selected requirements of FCC Part 15, Subpart C, Section 236 for wireless microphones. Testing was performed in accordance with ETSI EN 300 422-1 v1.4.2 and IEEE C63.10-2013.

The test series was also performed to determine if the EUT would meet selected requirements of ISSED RSS-210 Annex G for low power radio apparatus operating in the television bands. Testing was performed in accordance with ETSI EN 300 422-1 v1.4.2 and RSS-Gen.

1.3. Deviations, Additions and Exclusions

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

1.4. EMC Laboratory Identification

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

1.5. Laboratory Conditions

The temperature at the time of the test was 24.1°C and the relative humidity was 26% and the atmospheric pressure was 1014.6 mb.

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 74, Subpart H, Section 861, dated 1 October 2019
- Federal Communications Commission "Code of Federal Regulations", Title 47, Part 2, dated 1 October 2019
- Federal Communications Commission "Code of Federal Regulations", Title 47, Part 15, Subpart C, Section 236, dated 1 October 2019
- ETSI EN 300 422-1 V1.4.2 (2011-08) "Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical

characteristics and methods of measurement "

- IEEE C63.10-2013 "American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices"
- IEEE C63.26-2015 "American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services Accredited by the American National Standards Institute"
- Federal Communications Commission Office of Engineering and Technology Laboratory Division Basis Certification Requirements for Wireless Microphones dated December 13, 2017
- Innovation, Science, and Economic Development Canada, RSS-210, Spectrum Management and Telecommunications, Radio Standards, Specification, License-Exempt Radio Apparatus: Category I Equipment, Issue 9, August 2016
- Innovation, Science, and Economic Development Canada, RSS-Gen, Spectrum Management and Telecommunications, Radio Standards, Specification, General Requirements for Compliance of Radio Apparatus, Issue 4, March 2019

3. EUT SETUP AND OPERATION

3.1. General Description

The EUT is a Shure Incorporated, Dual Wireless Transmitter, Model No. P10T H22. A block diagram of the EUT setup is shown as Figure 1.

3.1.1.Power Input

The EUT obtained 115V 60Hz power via a 3- wire, 2m long, unshielded power cord.

3.1.2.Peripheral Equipment

No peripheral equipment was submitted with the EUT.

3.1.3.Signal Input/Output Leads

The following interconnect cables were submitted with the EUT:

Item	Description
Ethernet cable	2 meter long Ethernet cable
2 (¼) RCA audio jacks	½ meter long RCA cables with a 600 OHM load
2 XLR audio jacks	1 meter long XLR cables with a 2K Ohm load

3.1.4.Grounding

The EUT was grounded only through the third wire of its input power cord.

3.2. Operational Mode

For all tests, the EUT was placed on a 150cm high non-conductive stand. The EUT was energized.

All emissions tests were performed separately in the following modes:

H22:

FCC Part 15.236:

Tx @ 518MHz, 10mW

Tx @ 551MHz, 10mW

Tx @ 584MHz, 10mW

FCC Part 74.861

Tx @ 551MHz, 10mW, 50mW, 100mW

ISED RSS 210 Annex G:

Tx @ 518MHz, 10mW, 50mW, 100mW

Tx @ 551MHz, 10mW, 50mW, 100mW

Tx @ 584MHz, 10mW, 50mW, 100mW

3.3. EUT Modifications

No modifications were required for compliance to the requirements.

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 C63.4-2014 for site attenuation.

4.2. Test Instrumentation

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

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

4.3. Calibration Traceability

Test equipment is maintained and calibrated on a regular basis with a calibration interval not greater than two years. All calibrations are traceable to the International System Units (SI) through 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.

Values of Expanded Measurement Uncertainty (95% Confidence) are presented below:

Measurement Type	Expanded Measurement Uncertainty
Conducted disturbance (mains port) (150 kHz – 30 MHz)	2.7
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1
Radiated disturbance (electric field strength on an open area test site or alternative test site) (6 GHz – 18 GHz)	3.2

5. TEST PROCEDURES

5.1. Radiated Measurements

5.1.1. Requirements

5.1.1.1 FCC 15.236

Per 15.236(g), emissions outside of the band from one megahertz below to one megahertz above the carrier frequency shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08). Per ETSI EN 300 422-1 v1.4.2 section 8.4, the power of the spurious emissions from an ETSI EN 300 422-1 transmitter shall not exceed the following limits:

State	Frequency		
	47MHz to 74MHz 87.5MHz to 137MHz 174 to 230MHz 470MHz to 862MHz	Other Frequencies below 1000MHz	Frequencies above 100MHz
Operation	4nW or -54dBm	250nW or -36dBm	1uW or -30dBm
Standby	2nW or -57dBm	2nW or -57dBm	20nW or -47dBm

Note: In addition, per the Federal Communications Commission Office of Engineering and Technology Laboratory Division, Basis Certification Requirements for Wireless Microphones dated December 13, 2017, section IV, Additional Specific Guidance for Unlicensed (Part 15) Wireless Microphones, paragraph (d), compliance with the emission limits shall be demonstrated using a QP detector below 1GHz and an average detector above 1GHz.

5.1.1.2 FCC 74.861

Per 74.861(d)(4)(ii), for the 653-657 MHz, 941.5-944 MHz, 944-952 MHz, 952.850-956.250 MHz, 956.45-959.85 MHz, 1435-1525 MHz, 6875-6900 MHz and 7100-7125 MHz bands and per 74.861(e)(7) the low power auxiliary stations operating in the 600MHz duplex band and the bands allocated for TV broadcasting, digital emissions outside of the band from one megahertz below to one megahertz above the carrier frequency shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08). Per ETSI EN 300 422-1 v1.4.2 section 8.4, the power of the spurious emissions from an ETSI EN 300 422-1 transmitter shall not exceed the following limits:

State	Frequency		
	47MHz to 74MHz 87.5MHz to 137MHz 174 to 230MHz 470MHz to 862MHz	Other Frequencies below 1000MHz	Frequencies above 100MHz
Operation	4nW or -54dBm	250nW or -36dBm	1uW or -30dBm
Standby	2nW or -57dBm	2nW or -57dBm	20nW or -47dBm

Note: In addition, per the Federal Communications Commission Office of Engineering and Technology Laboratory Division, Basis Certification Requirements for Wireless Microphones dated December 13, 2017, section III, Additional Specific Guidance for Licensed Wireless Microphones Under Part 74 paragraph (c), compliance with the emission limits shall be demonstrated using an average detector.

5.1.1.3 ISSED RSS-210

Per RSS-210, Annex G, the transmitter unwanted emissions shall meet the requirements of ETSI EN 300 422-1 V1.4.2 (2011-08). Per ETSI EN 300 422-1 v1.4.2 section 8.4, the power of the spurious emissions from an ETSI EN 300 422-1 transmitter shall not exceed the following limits:

State	Frequency		
	47MHz to 74MHz 87.5MHz to 137MHz 174 to 230MHz 470MHz to 862MHz	Other Frequencies below 1000MHz	Frequencies above 100MHz
Operation	4nW or -54dBm	250nW or -36dBm	1uW or -30dBm
Standby	2nW or -57dBm	2nW or -57dBm	20nW or -47dBm

Note: Compliance with the emission limits shall be demonstrated using a QP detector below 1GHz and an average detector above 1GHz.

5.1.2.Procedures

All tests were performed in a 32ft. x 20ft. x 18ft. hybrid ferrite-tile/anechoic absorber lined test chamber. The walls and ceiling of the shielded chamber are lined with ferrite tiles. Anechoic absorber material is installed over the ferrite tile. The floor of the chamber is used as the ground plane. The chamber complies with CISPR 16 for site attenuation.

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

1. Preliminary radiated measurements were performed to determine the frequencies where the significant emissions might be found. The EUT was placed on a 1.5 meter high, non-conductive stand and set to transmit. With the EUT at one set position and the measurement antenna at a set height (i.e. without maximizing), the radiated emissions were measured using a peak detector and automatically plotted. The broadband measuring antenna was positioned at a 3 meter distance from the EUT. This data was then automatically plotted up through the tenth harmonic of the transmit frequency of the EUT. All preliminary tests were performed separately with the EUT operating in the modes listed in paragraph 3.2.
 2. All significant broadband and narrowband signals found in the preliminary sweeps were then maximized. For all measurements below 1GHz, a bilog antenna was used as the measurement antenna. A quasi-peak detector was used for FCC 15.236 tests and an average detector was used for FCC 74.861 tests. For all measurements above 1GHz, a horn antenna was used as the measurement antenna. An average detector was used for all tests above 1GHz.
 3. To ensure that maximum emission levels were 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 antennas are 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.
- 1) The equivalent power was determined from the field intensity levels measured at 3 meters using the substitution method. To determine the emission power, another antenna was set in place of the EUT and connected to a calibrated signal generator. (A tuned dipole was used for all measurements below 1GHz and a double ridged waveguide antenna was used for all measurements above 1GHz.) The output of the signal generator was adjusted to match the received level at the spectrum analyzer. The signal level was recorded. The reading was corrected to compensate for cable loss, as required, and for frequencies above 1GHz, increased by the gain of the waveguide. See attached Figure.

5.1.3.Results

5.1.3.1 FCC 74.861, FCC 15.236 and ISSED RSS-210 H22 Band:

The plots of the peak preliminary spurious radiated emissions and the final tabular spurious quasi-peak and average radiated emissions results are presented on pages 16 through 81. All spurious radiated 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 in Figure 2.

6. OTHER TEST CONDITIONS

6.1. Test Personnel and Witnesses

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

6.2. Disposition of the EUT

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

7. CONCLUSIONS

It was determined that the Shure Incorporated Dual Wireless Transmitter, Model No. P10T H22, Serial No. no serial number was given, did fully meet the spurious radiated emissions requirements of the FCC "Code of Federal Regulations" Title 47, Part 15, Subpart C, Section 15.236 and Part 74, Subpart H, Section 74.861 when tested per ETSI EN 300 422-1 V1.4.2 (2011-08) and IEEE C63.26-2014.

The Shure Incorporated Dual Wireless Transmitter, Model No. P10T H22, did also fully meet the spurious emissions requirements of the ISSED RSS-210, Annex G when tested per ETSI EN 300 422-1 V1.4.2 (2011-08), IEEE C63.10-2014, and RSS-Gen.

8. CERTIFICATION

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

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

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

9. EQUIPMENT LIST

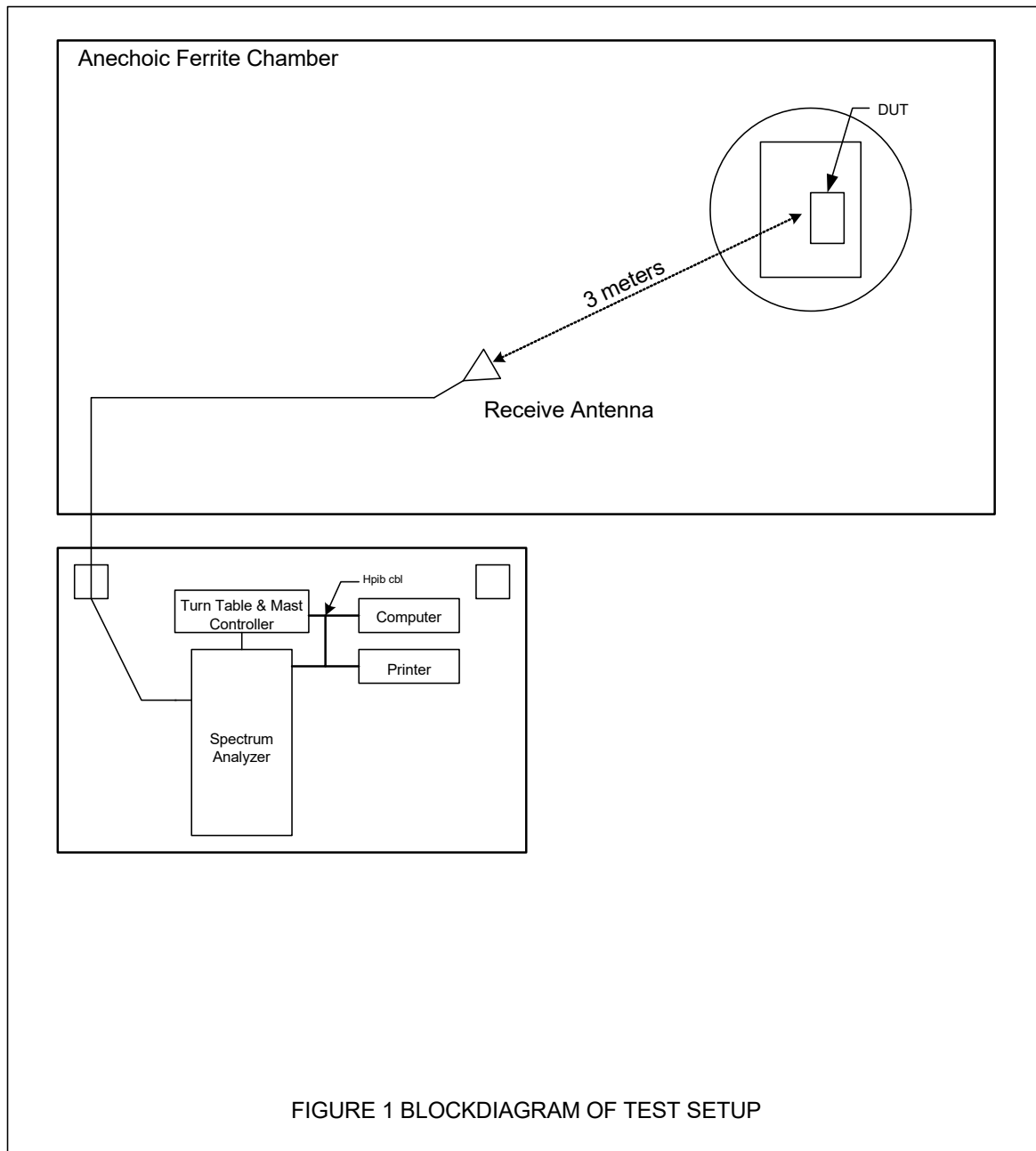
Table 9-1 Equipment List

Eq ID	Equipment Description	Manufacturer	Model No.	Serial No.	Frequency Range	Cal Date	Due Date
CDY0	WORKSTATION	ELITE	WORKSTATION		WINDOWS 7	N/A	
GSE0	SIGNAL GENERATOR (40GHZ)	ROHDE & SCHWARZ	SMB100A	175137	100KHZ-40GHZ	8/21/2019	8/21/2020
NDQ0	TUNED DIPOLE ANTENNA	EMCO	3121C-DB4	311	400-1000MHZ	5/8/2018	5/8/2020
NTA2	BILOG ANTENNA	TESEQ	6112D	28040	25-1000MHz	12/20/2018	12/20/2019
NWQ0	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS LINDGREN	3117	66657	1GHZ-18GHZ	5/31/2018	5/31/2020
NWQ2	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS LINDGREN	3117	66659	1GHZ-18GHZ	3/22/2018	3/22/2020
RBG3	EMI ANALYZER	ROHDE & SCHWARZ	ESW44	101592	2HZ-44GHZ	2/20/2019	2/20/2020

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.



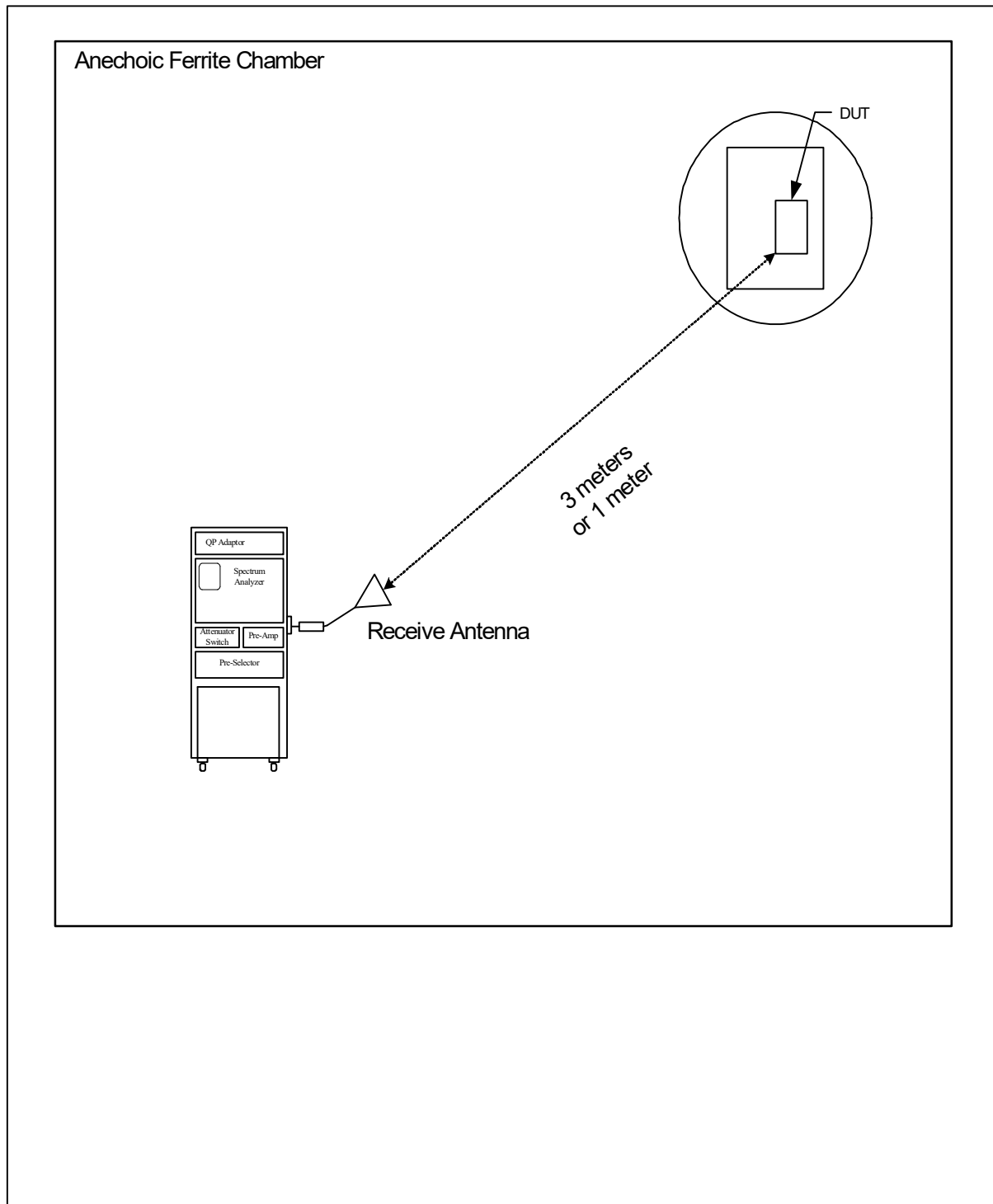


Figure 2



EUT



Figure 3



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



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

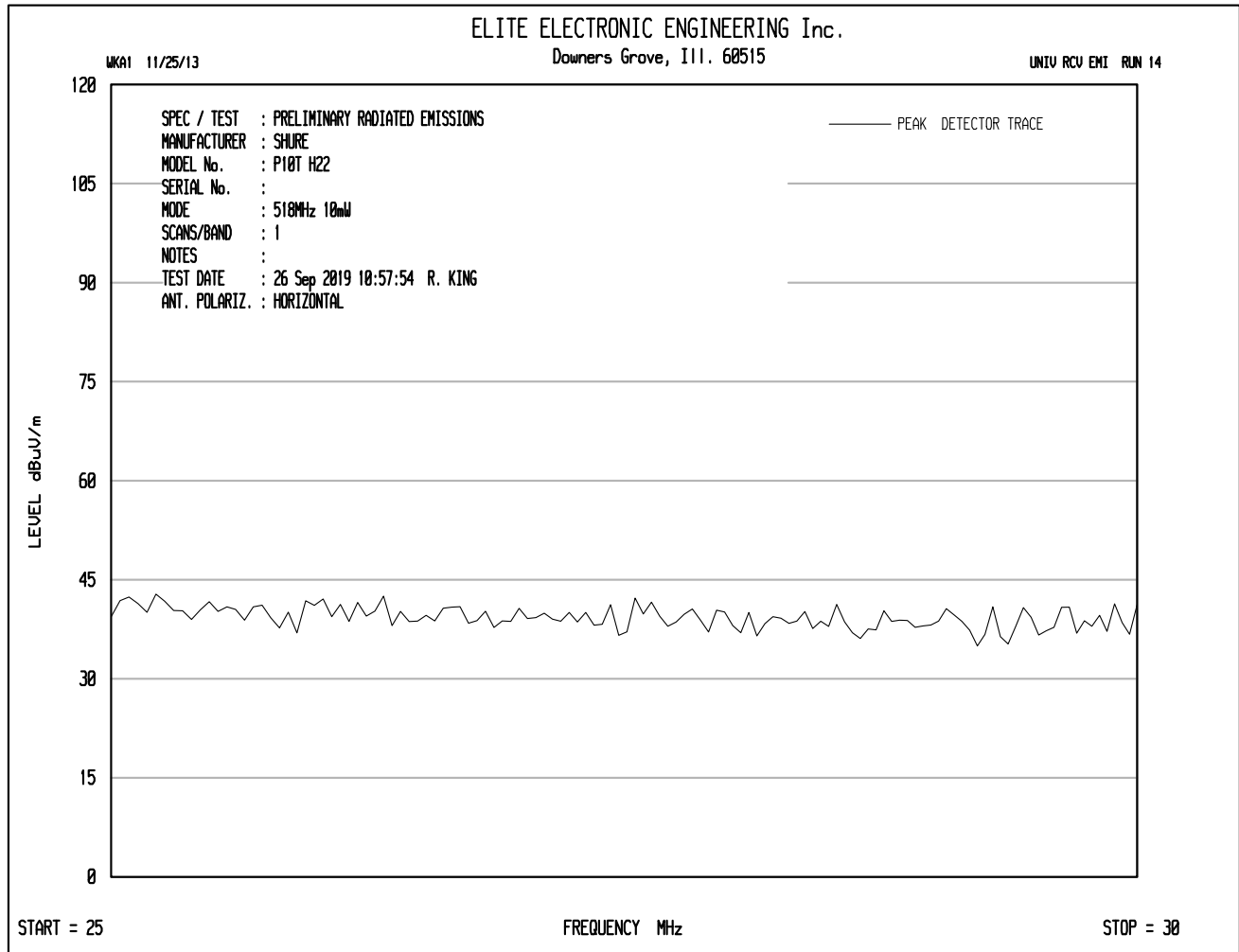
Figure 4

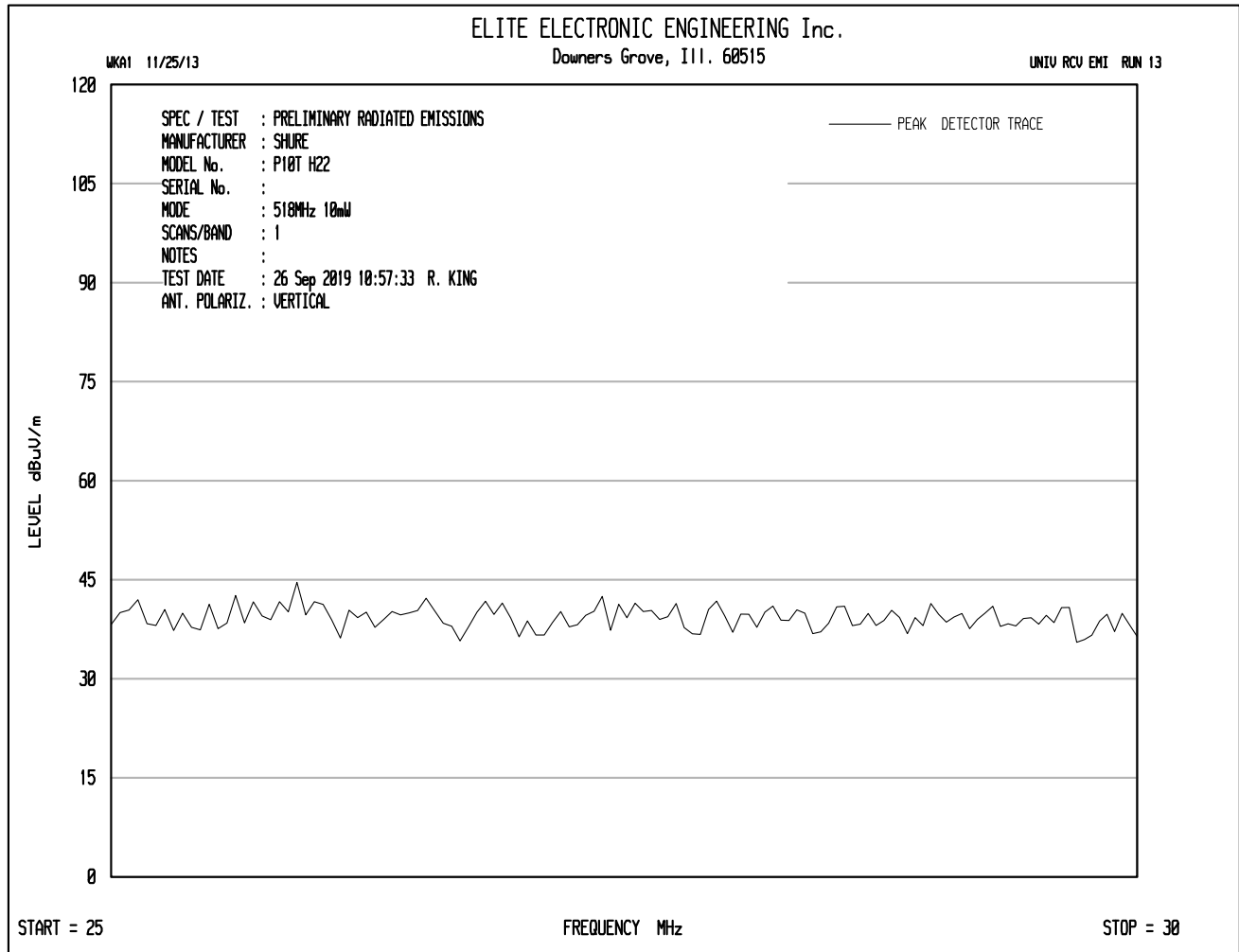


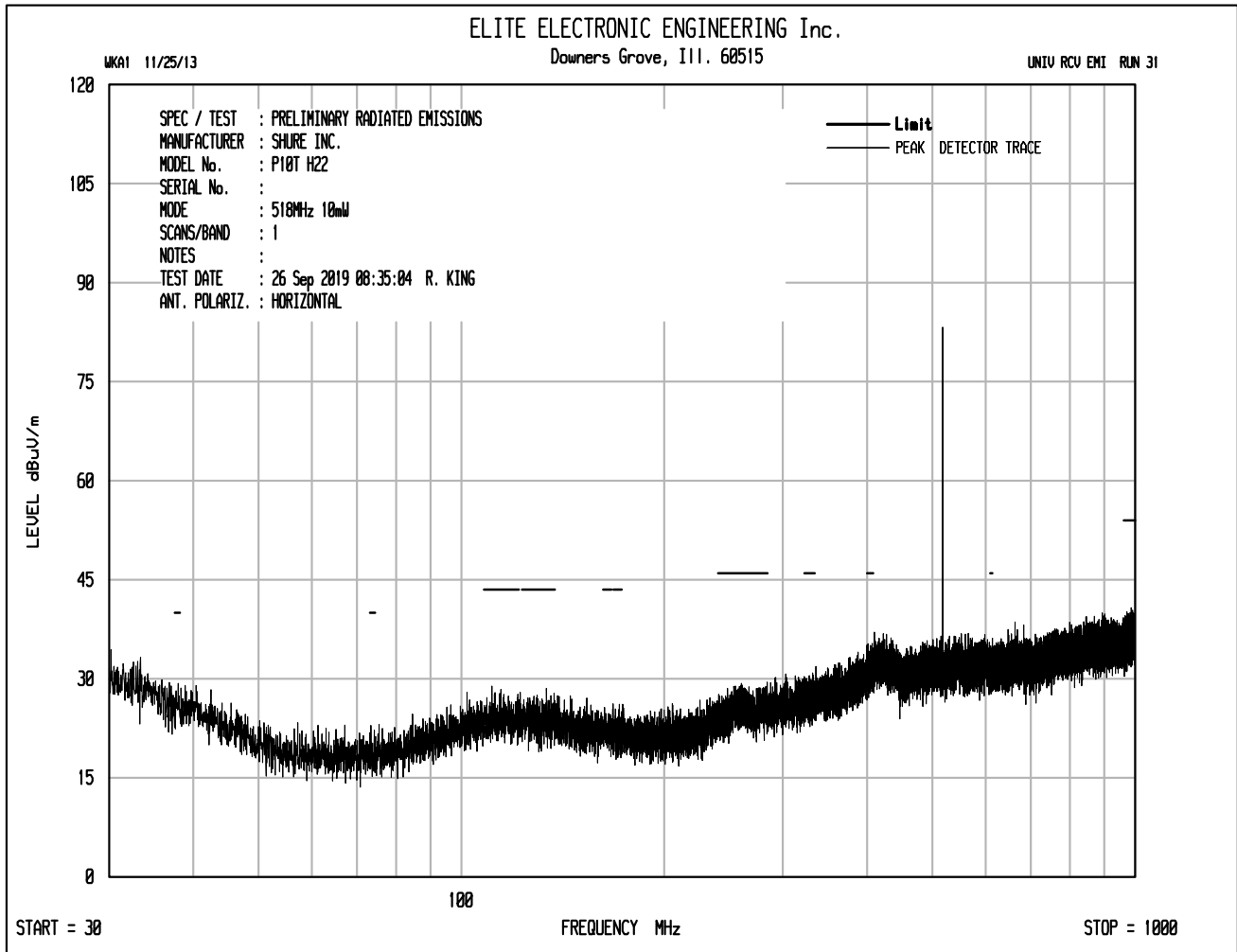
Test Setup for Radiated Emissions, Above 1GHz – Horizontal Polarization

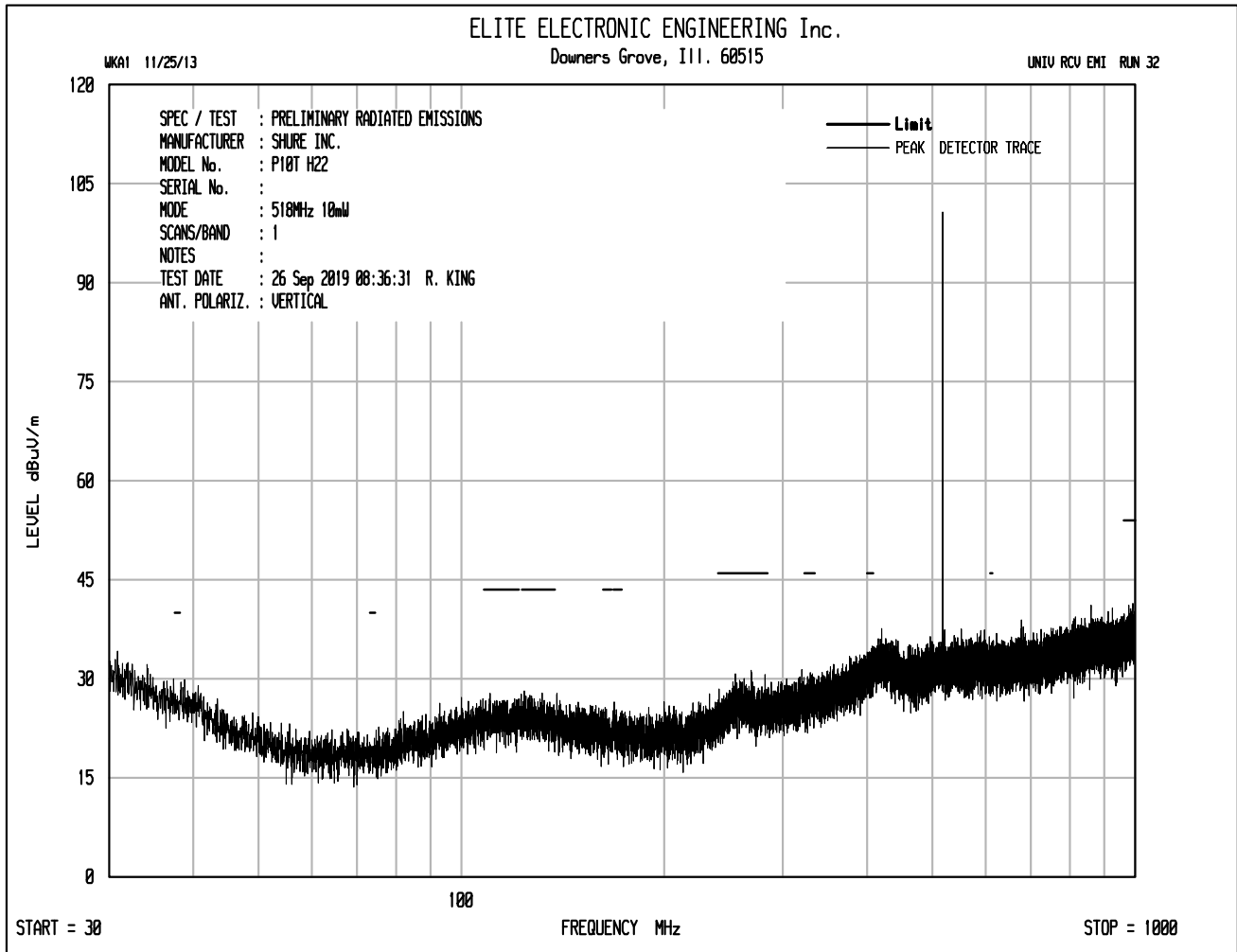


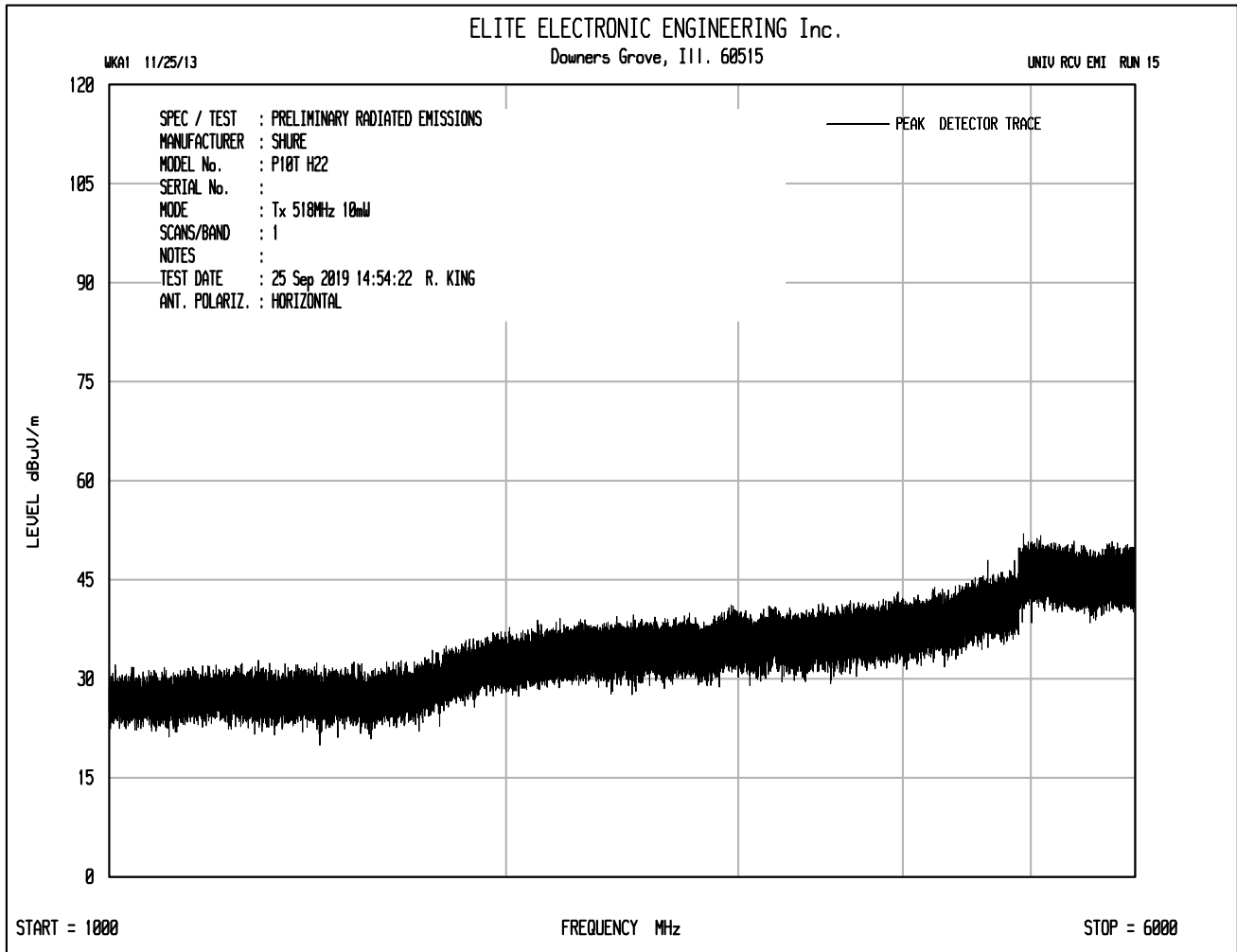
Test Setup for Radiated Emissions, Above 1GHz – Vertical Polarization

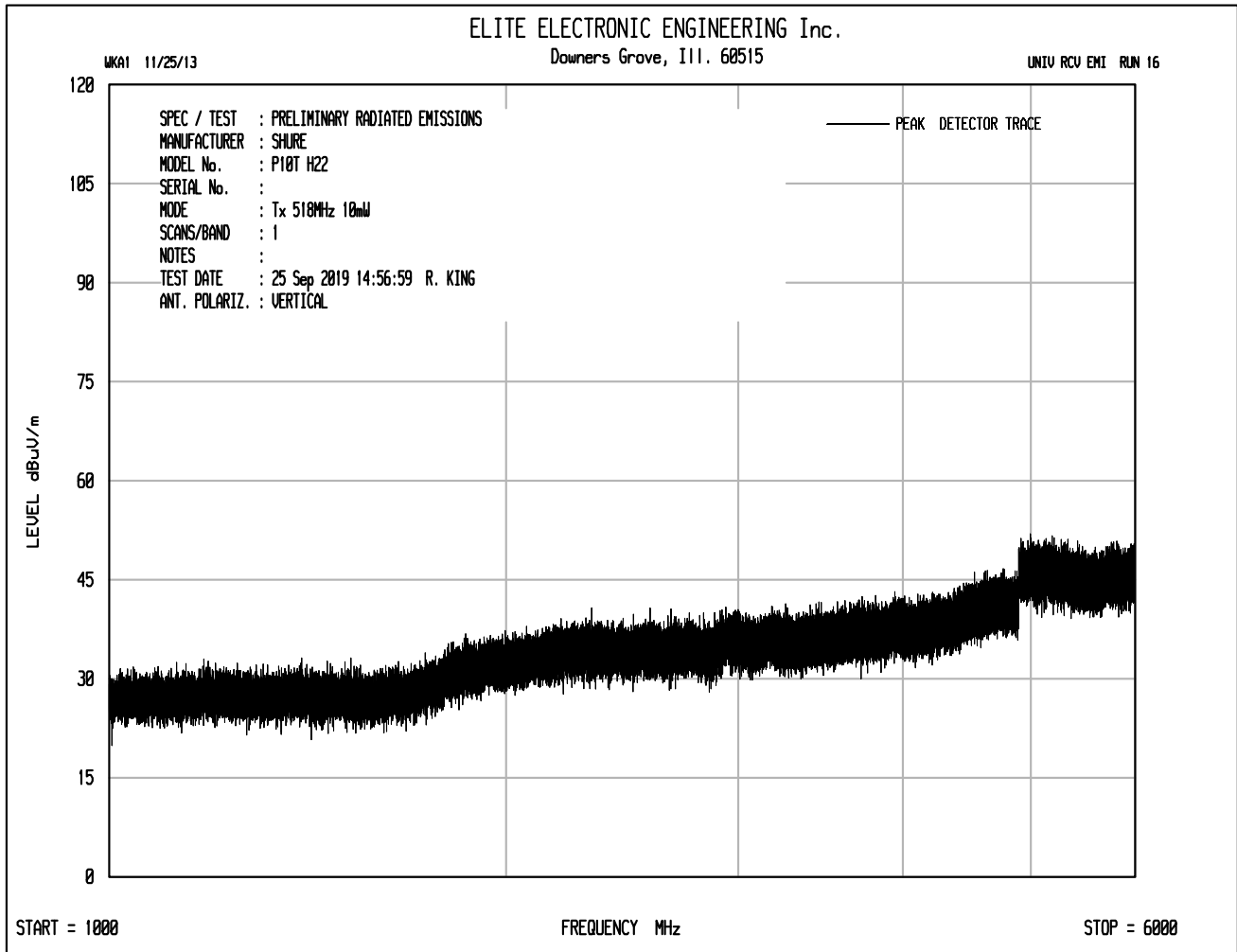


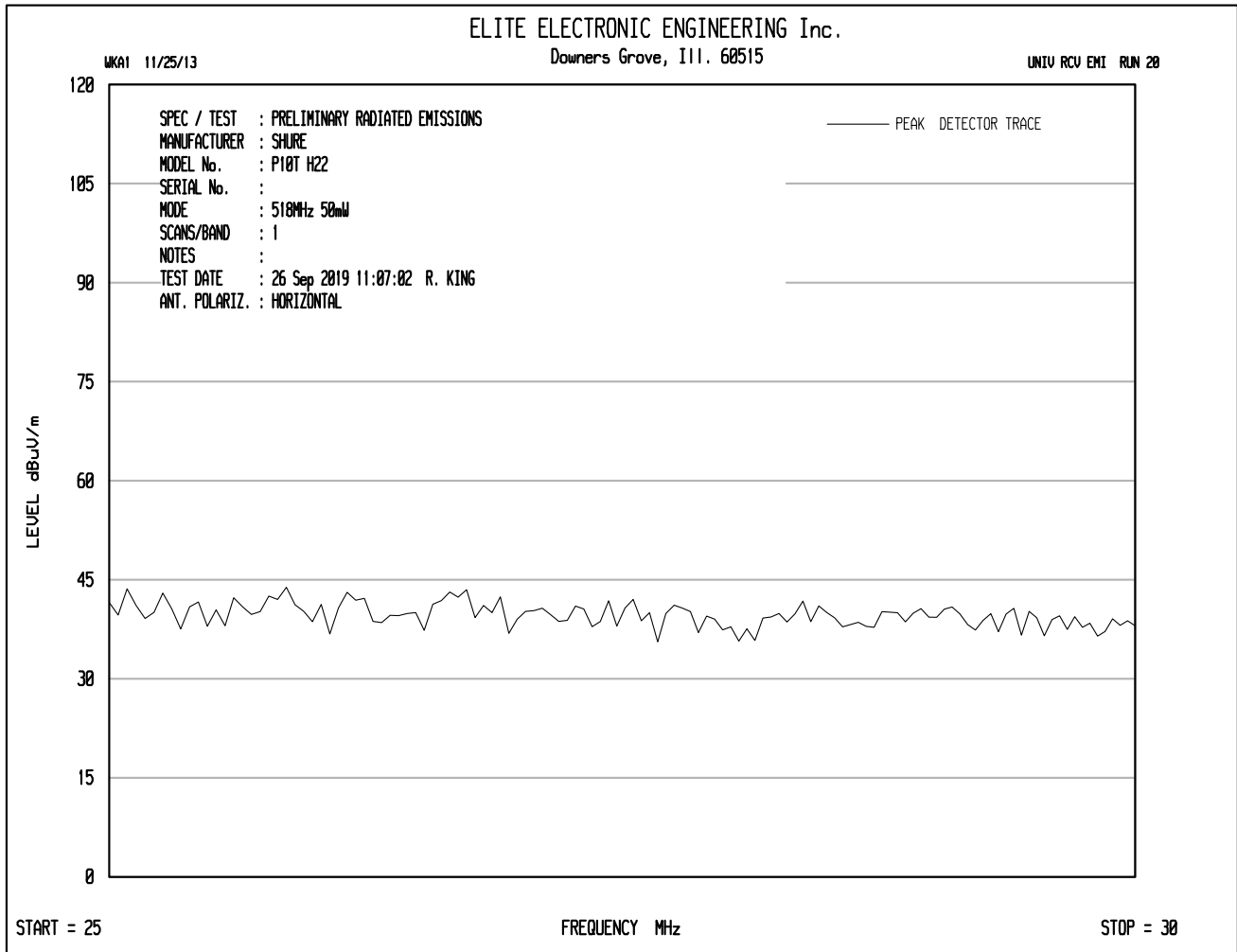


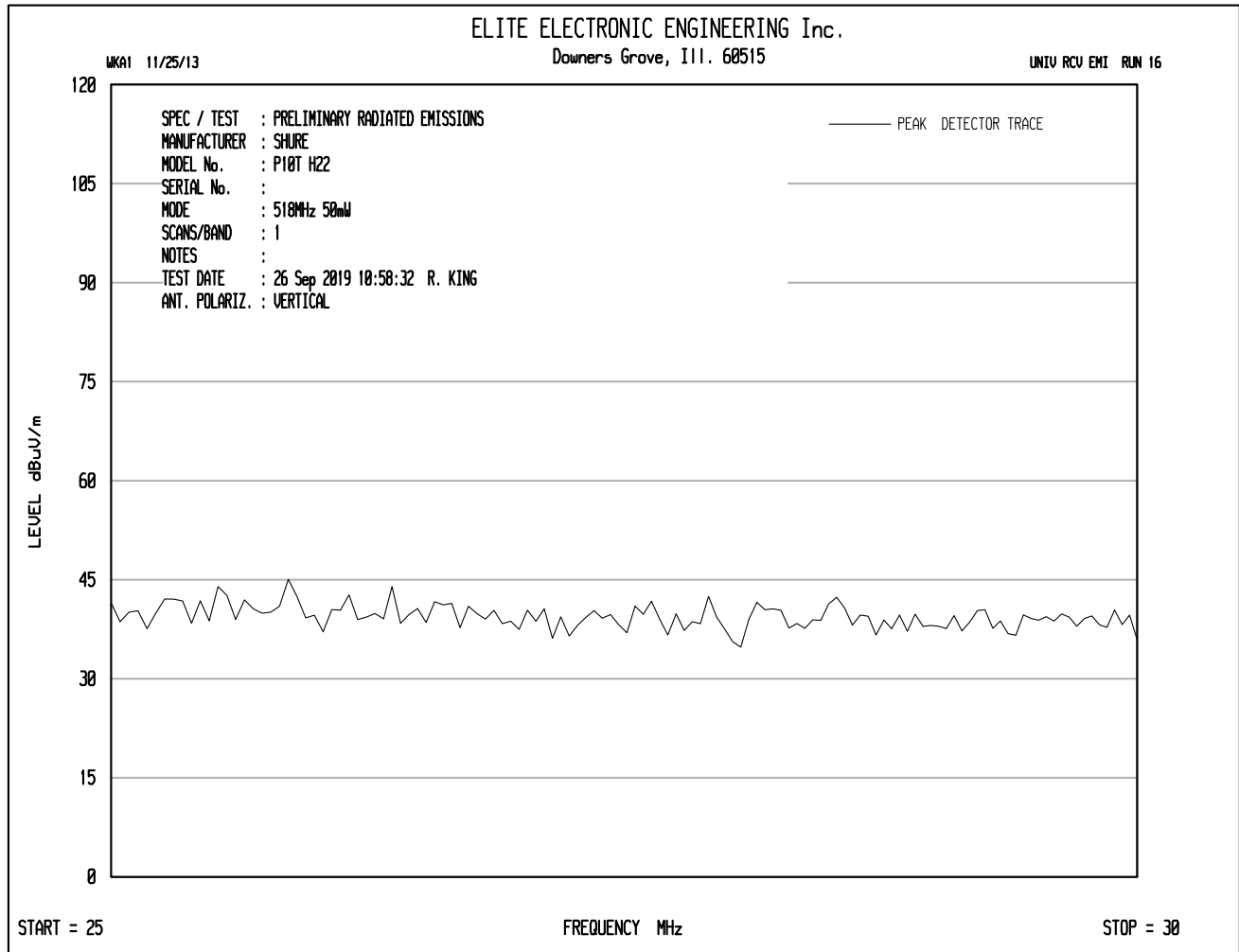


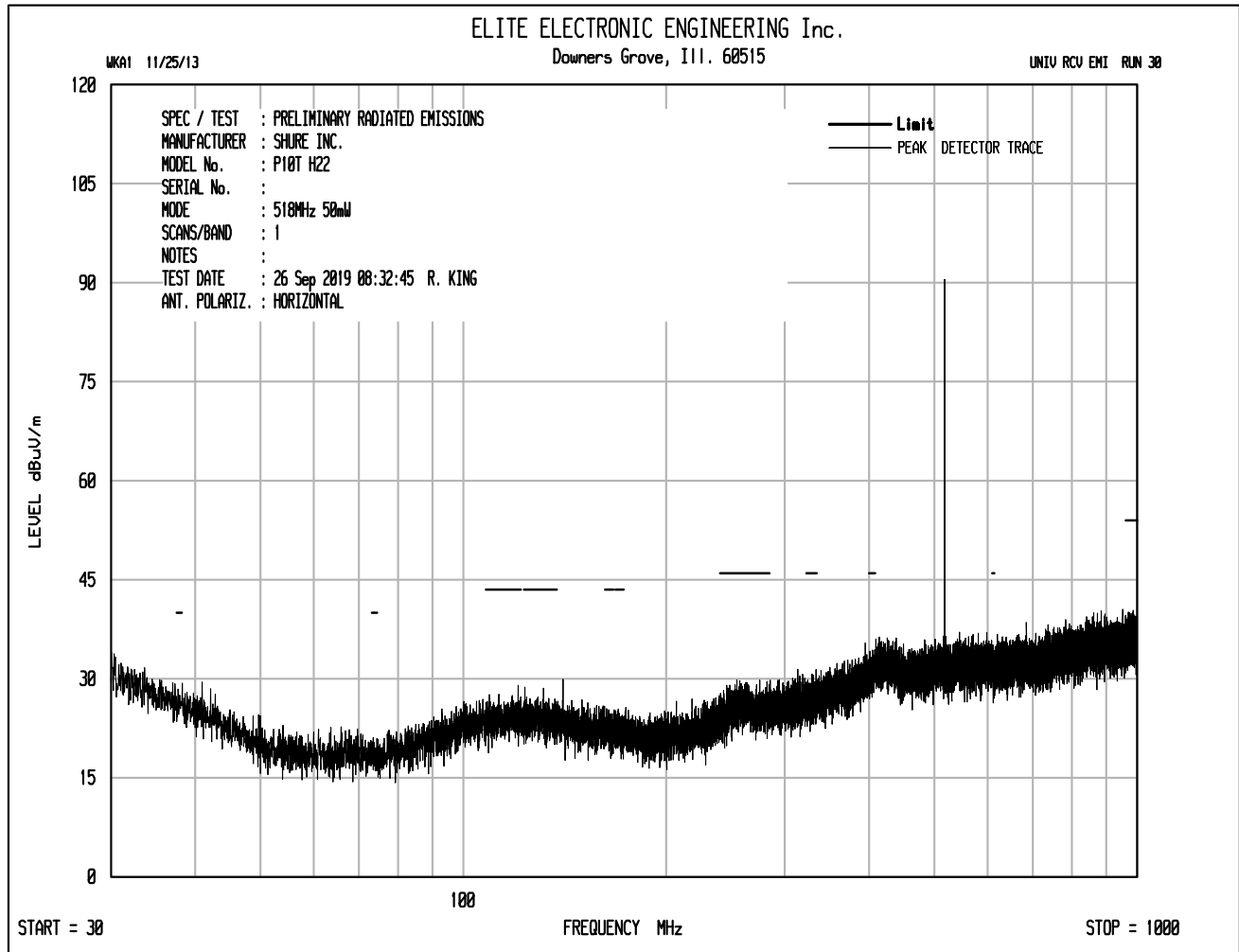


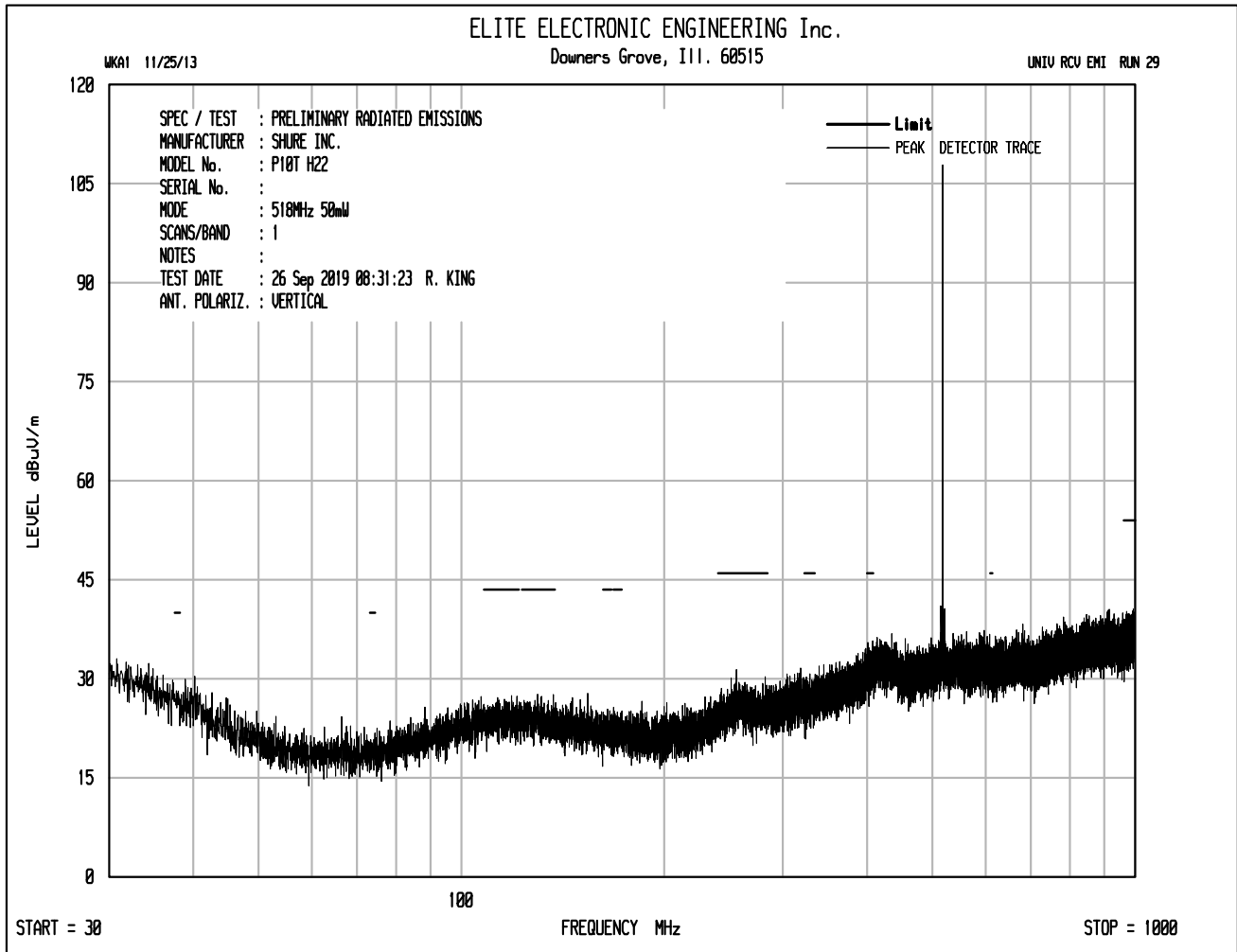


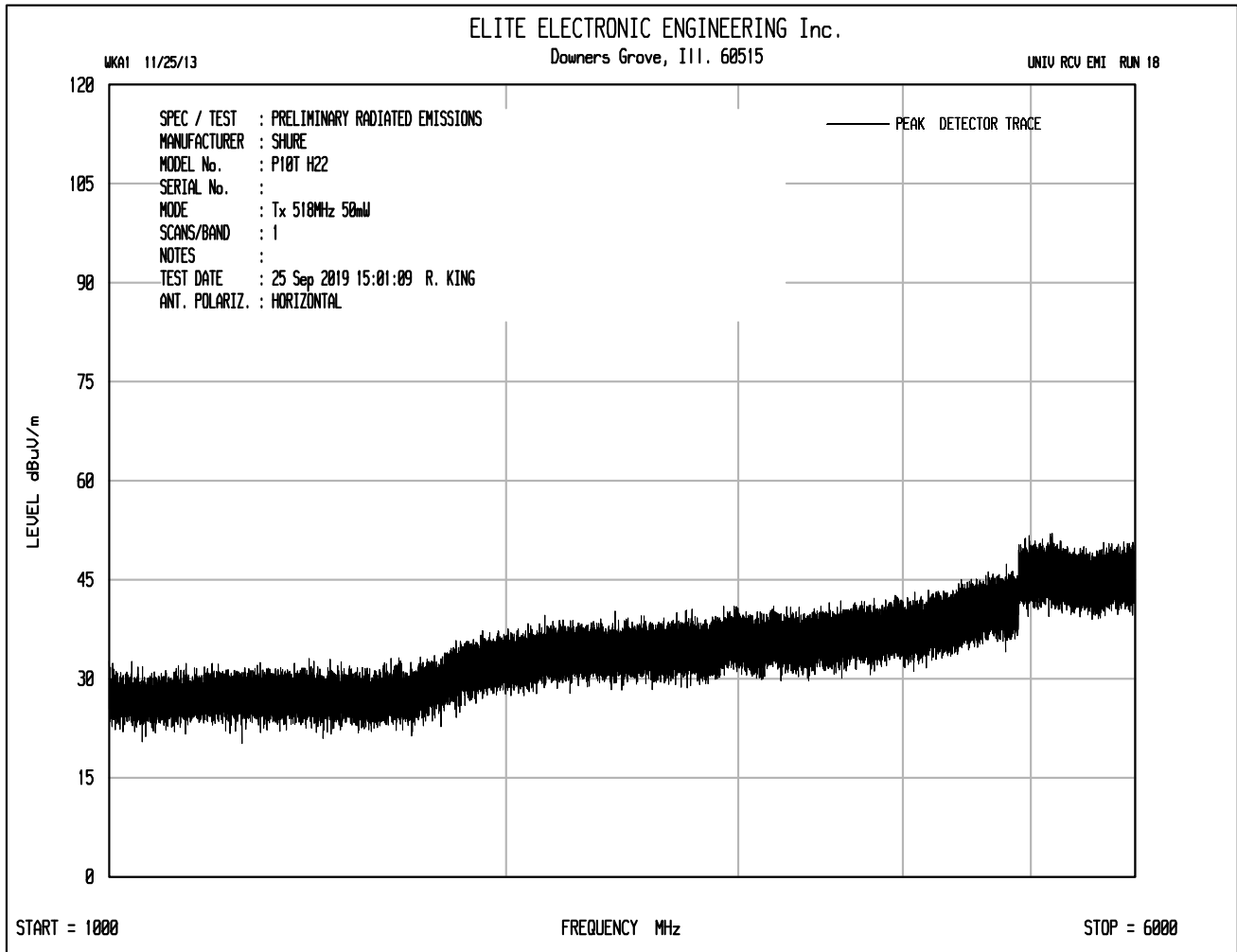


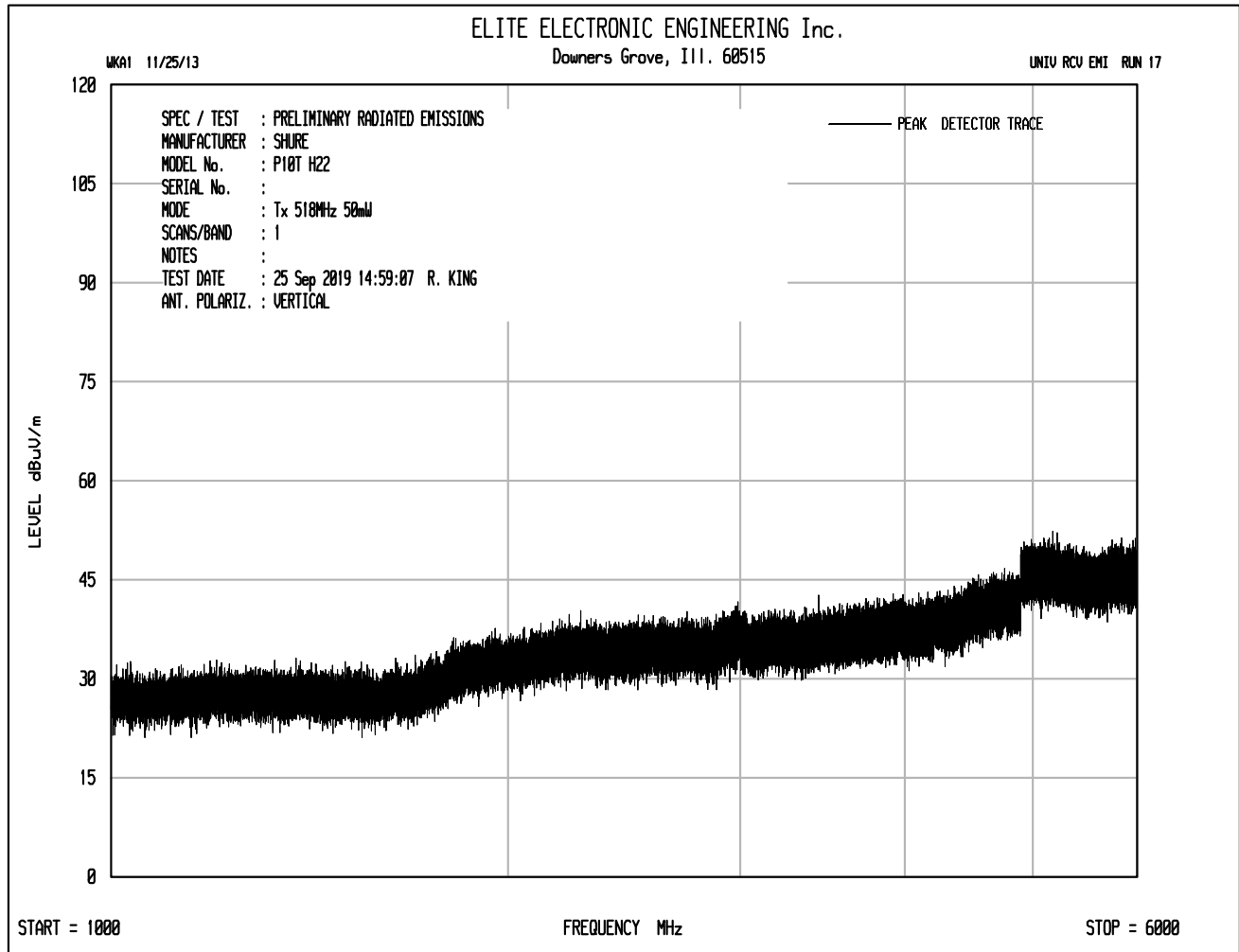


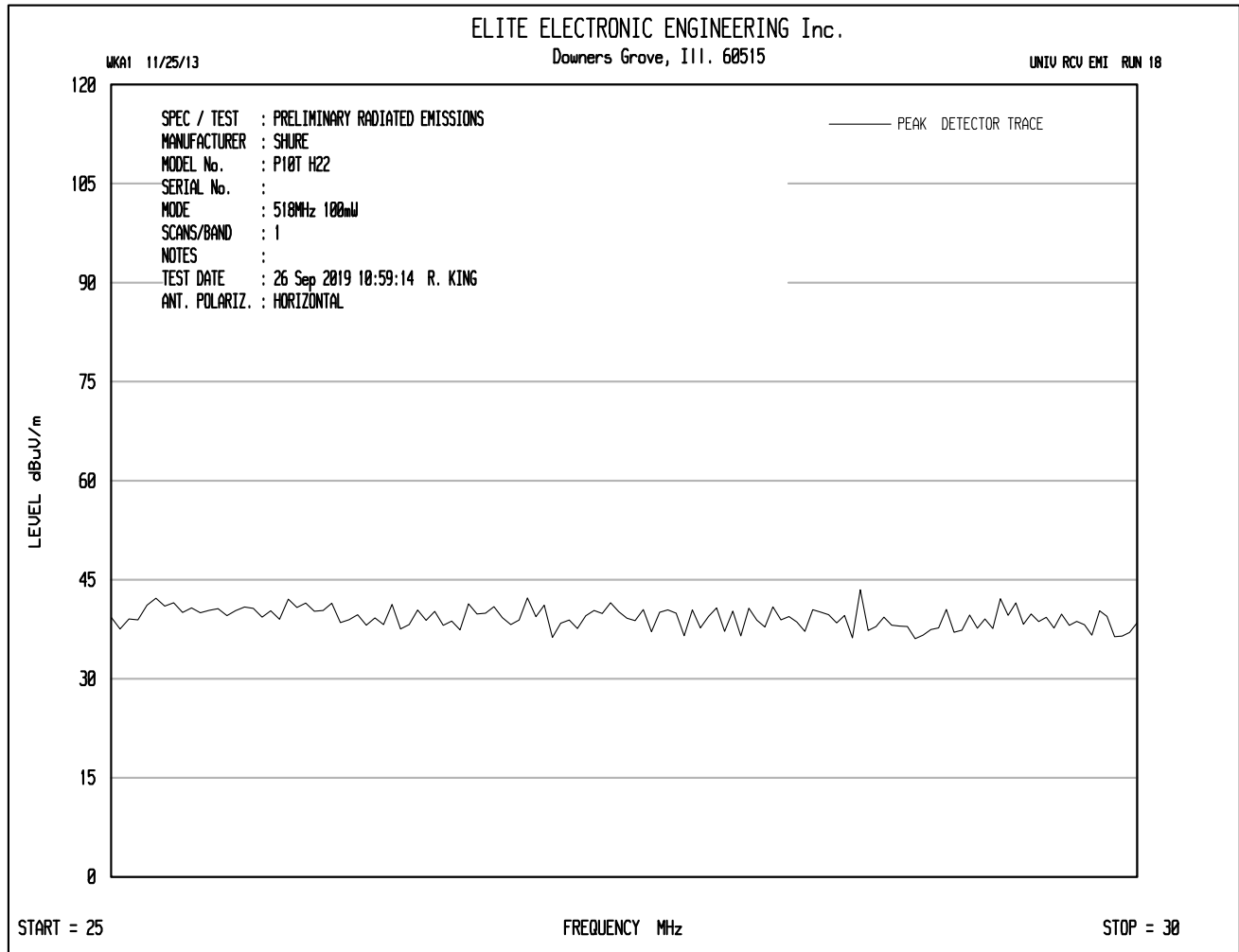


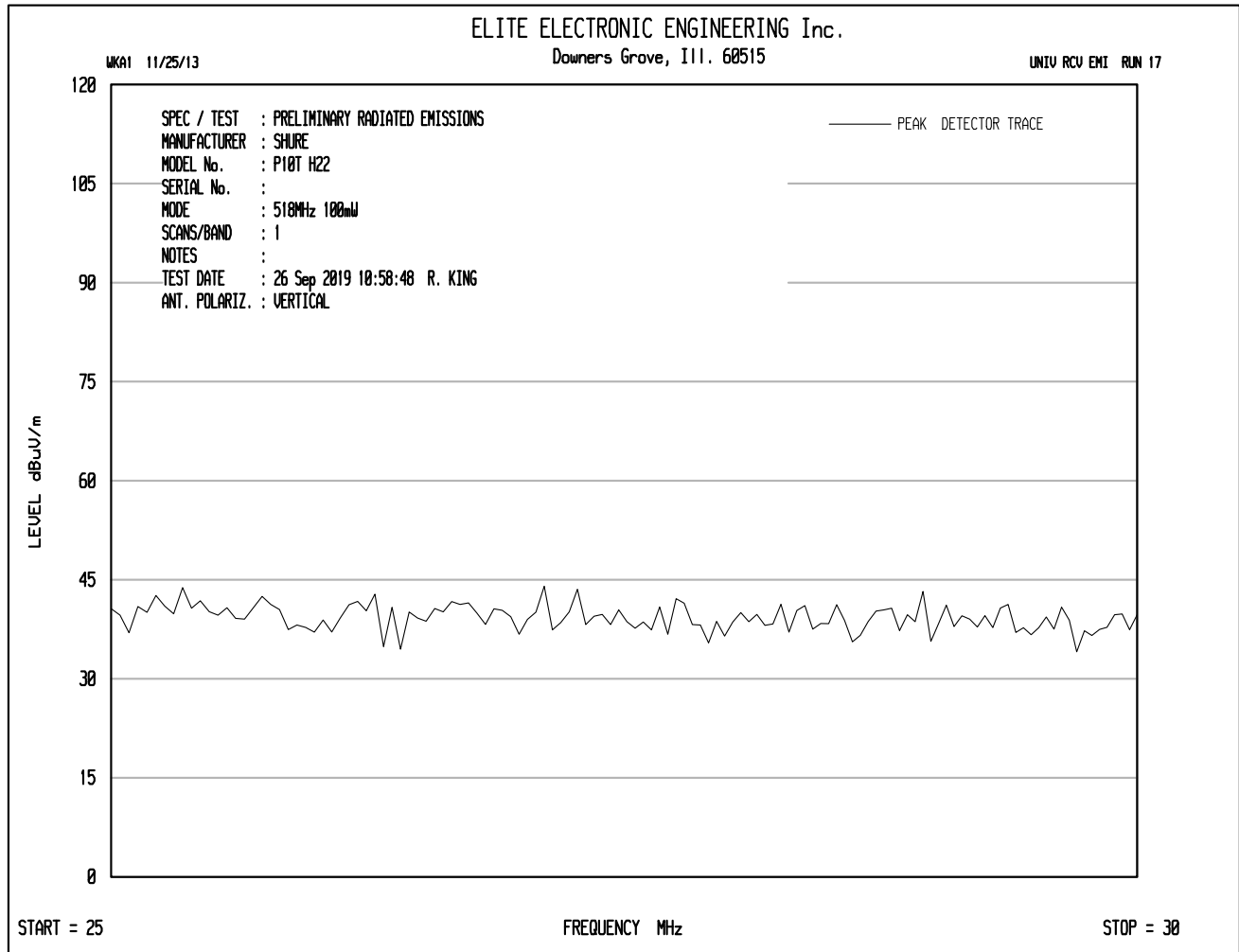


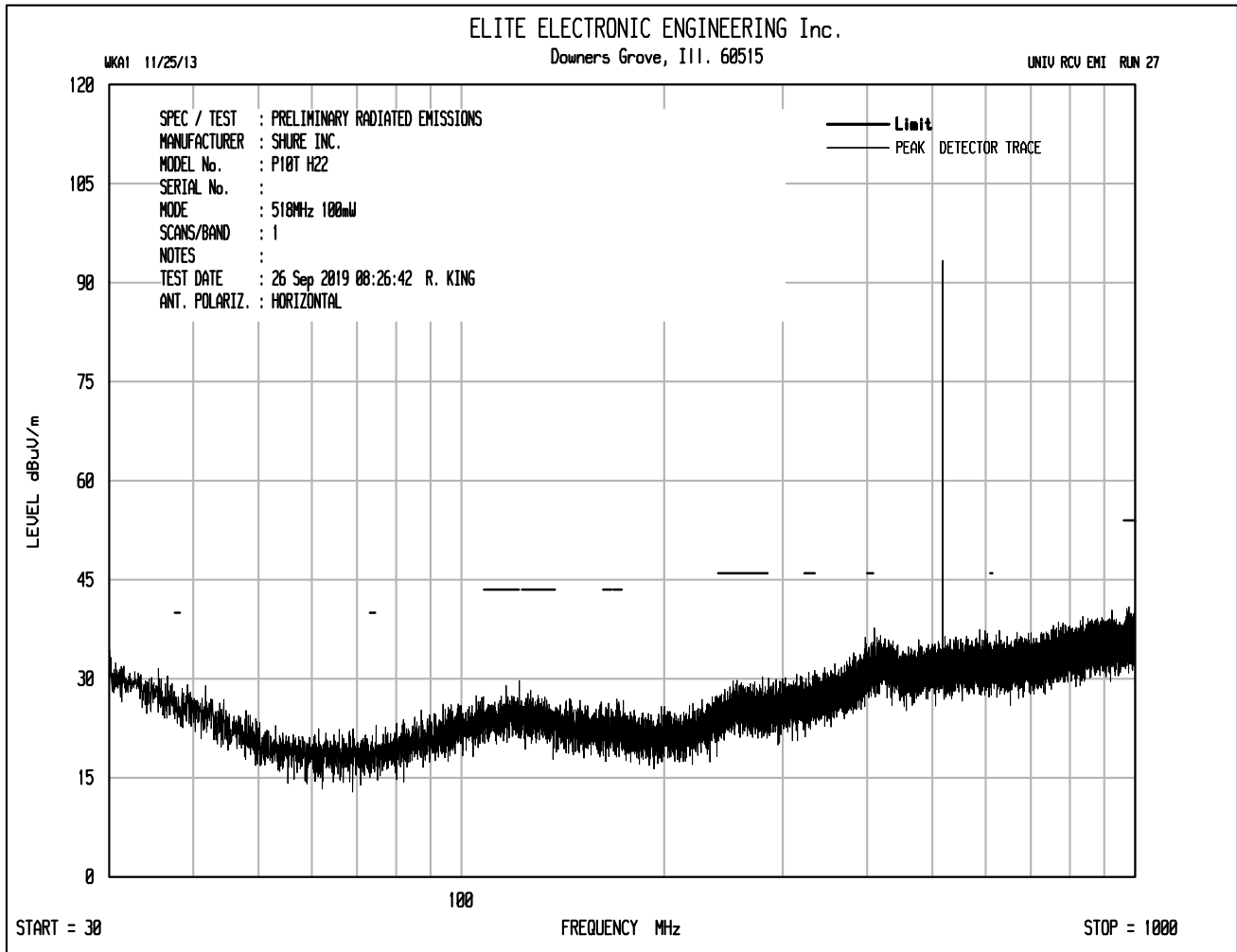


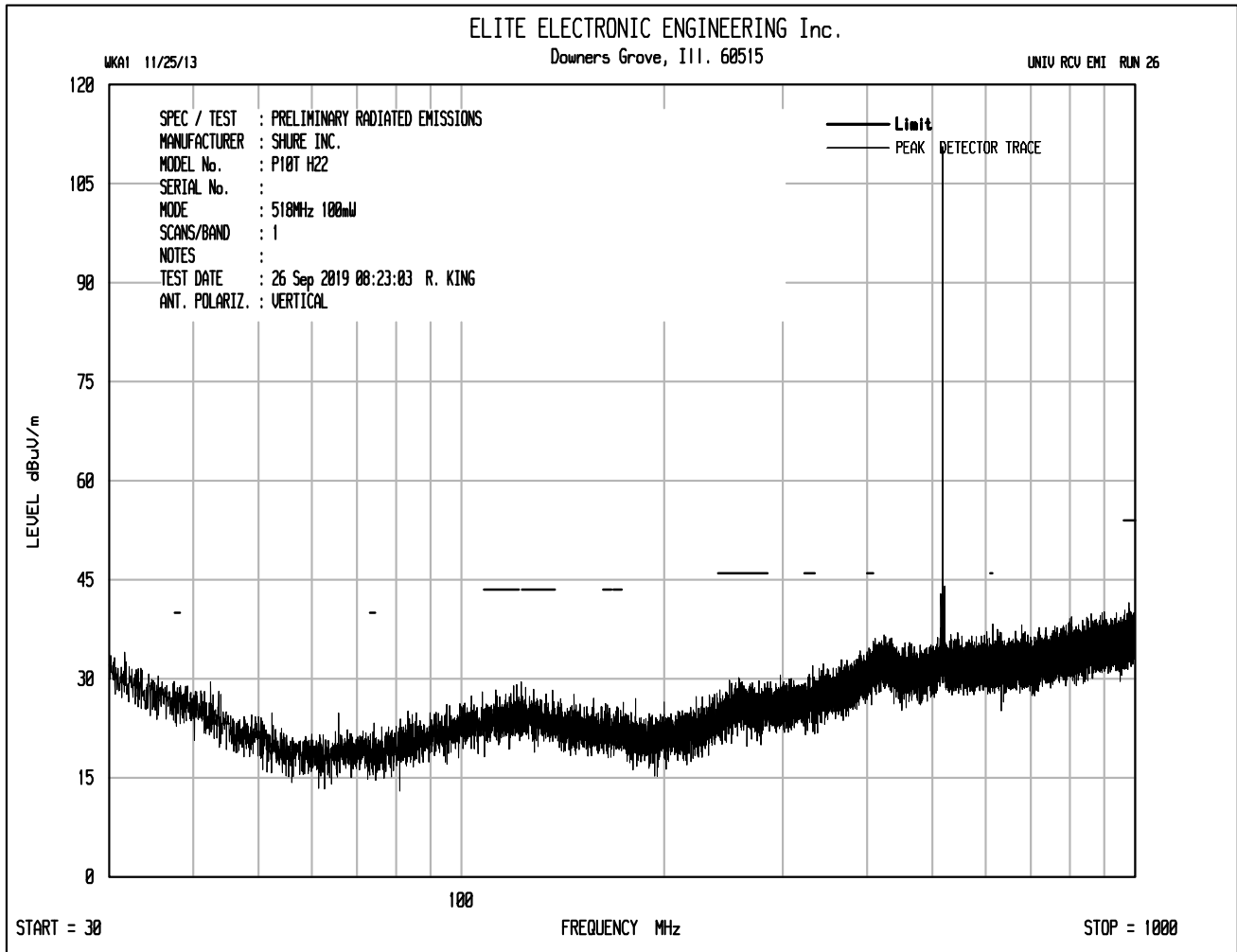


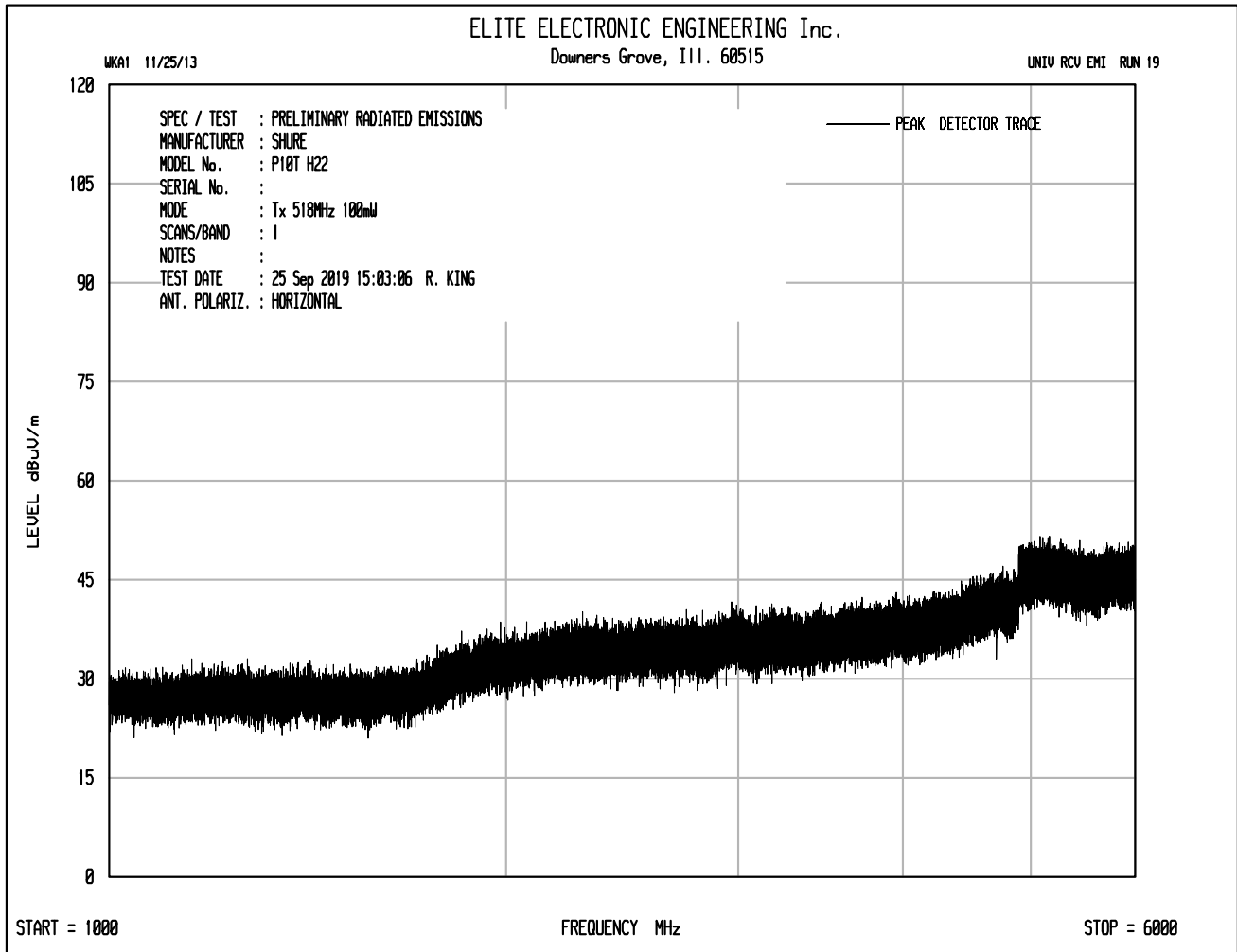


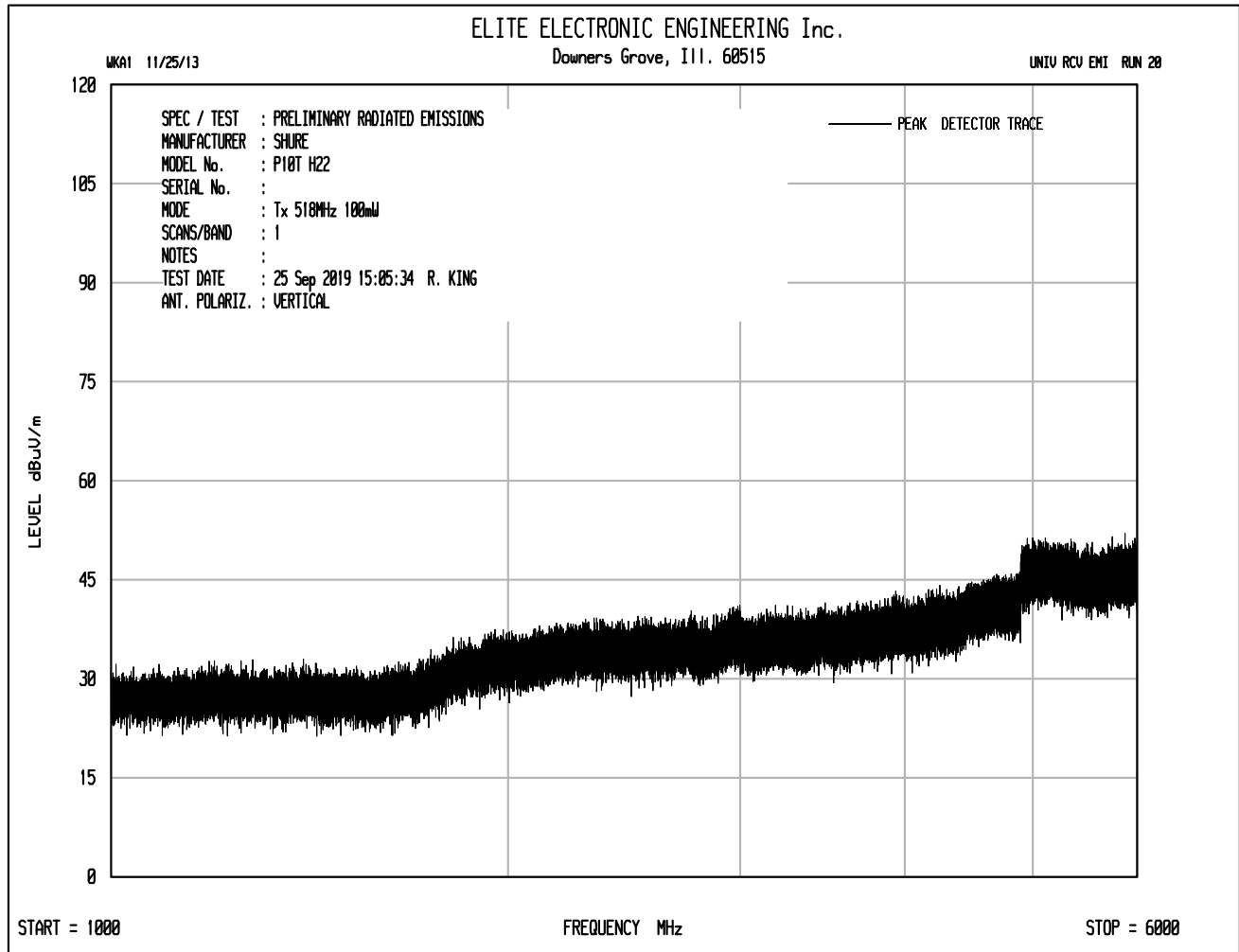


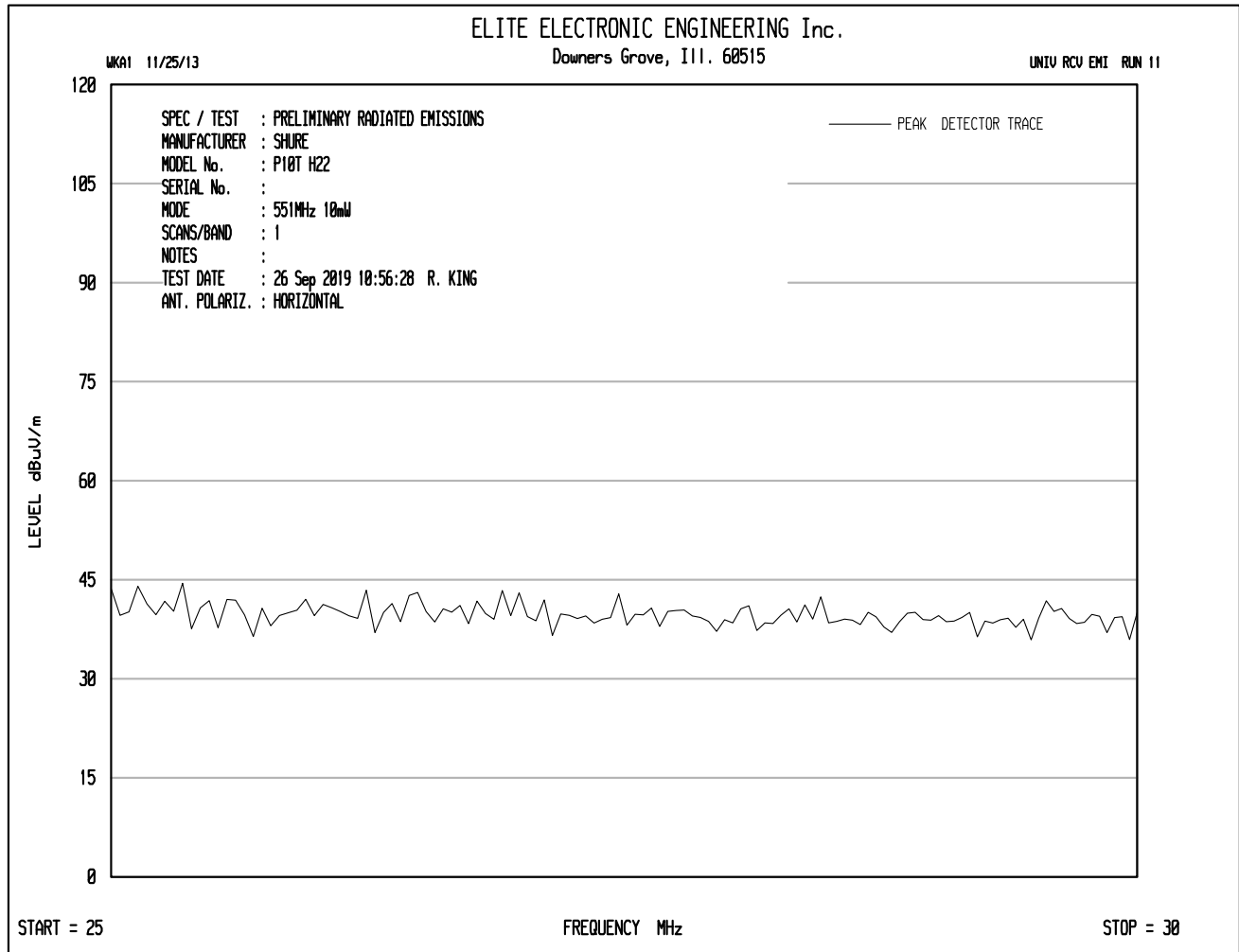


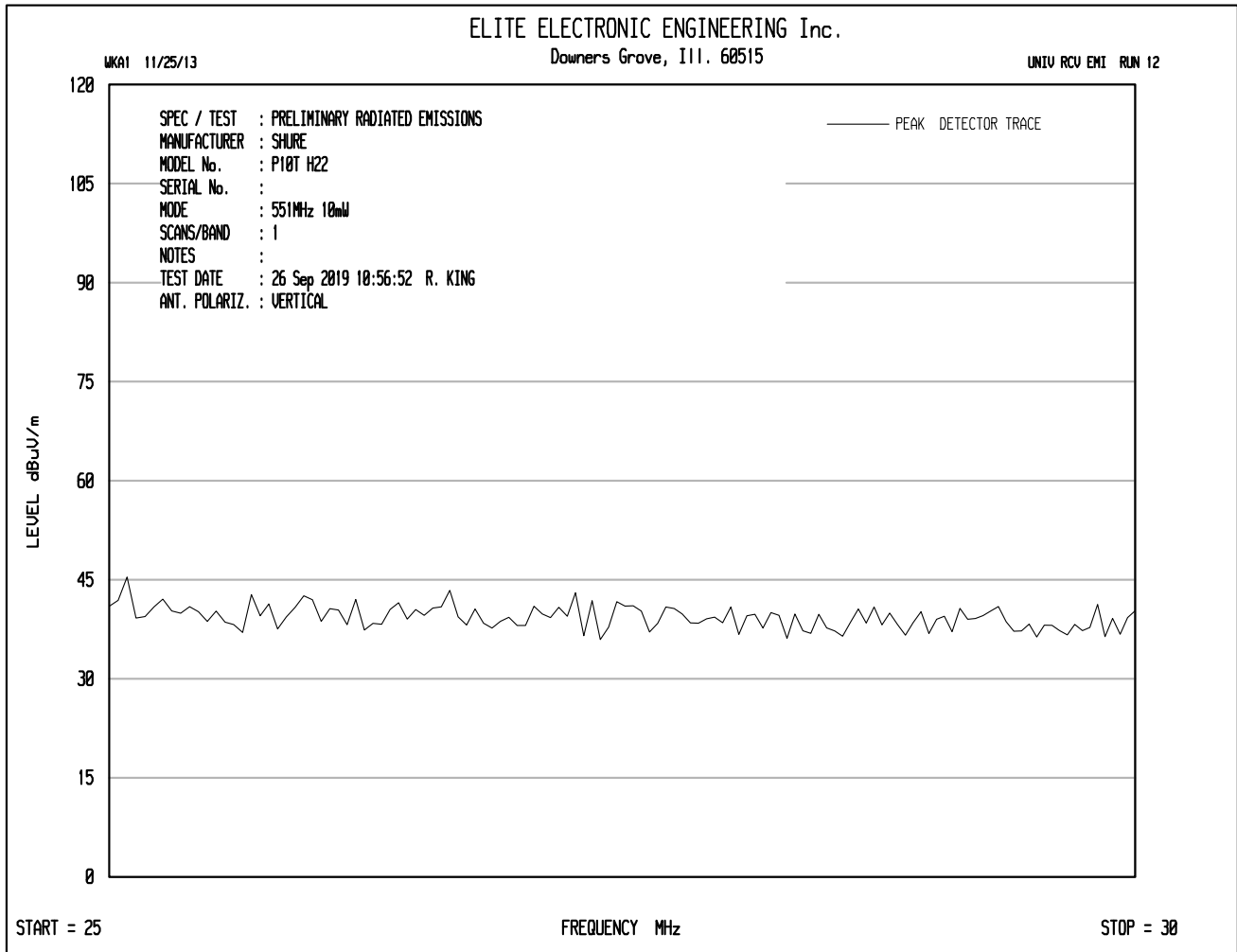


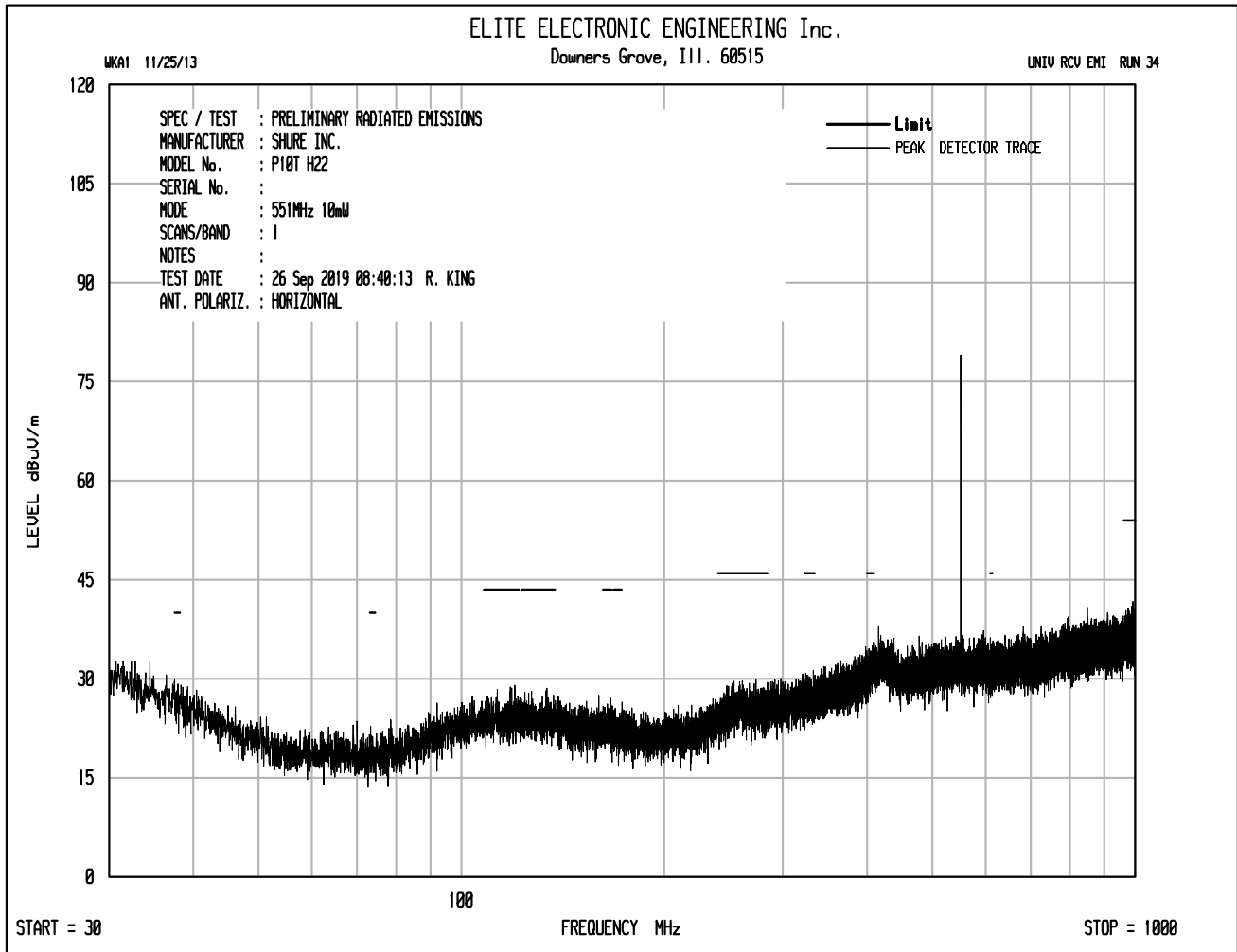


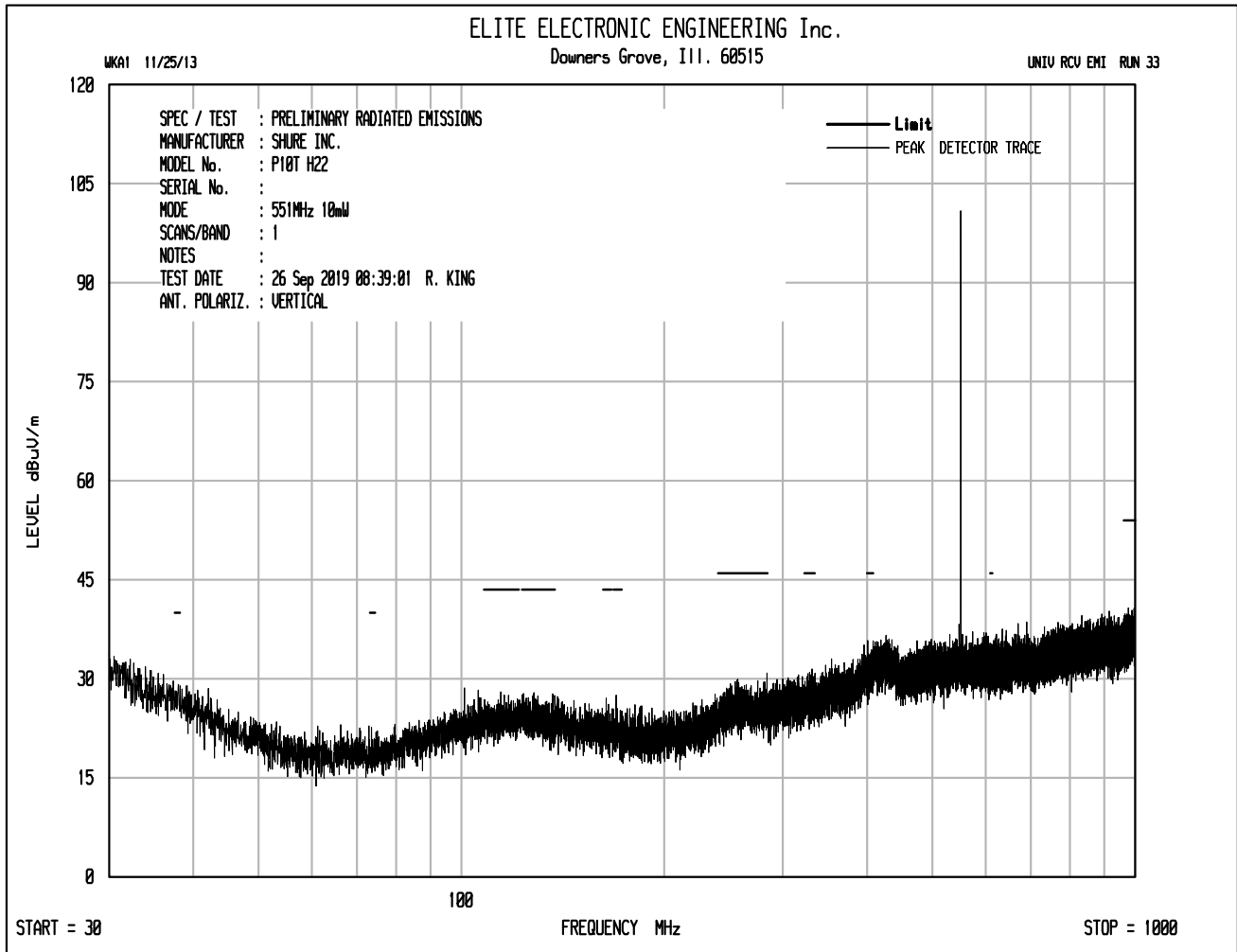


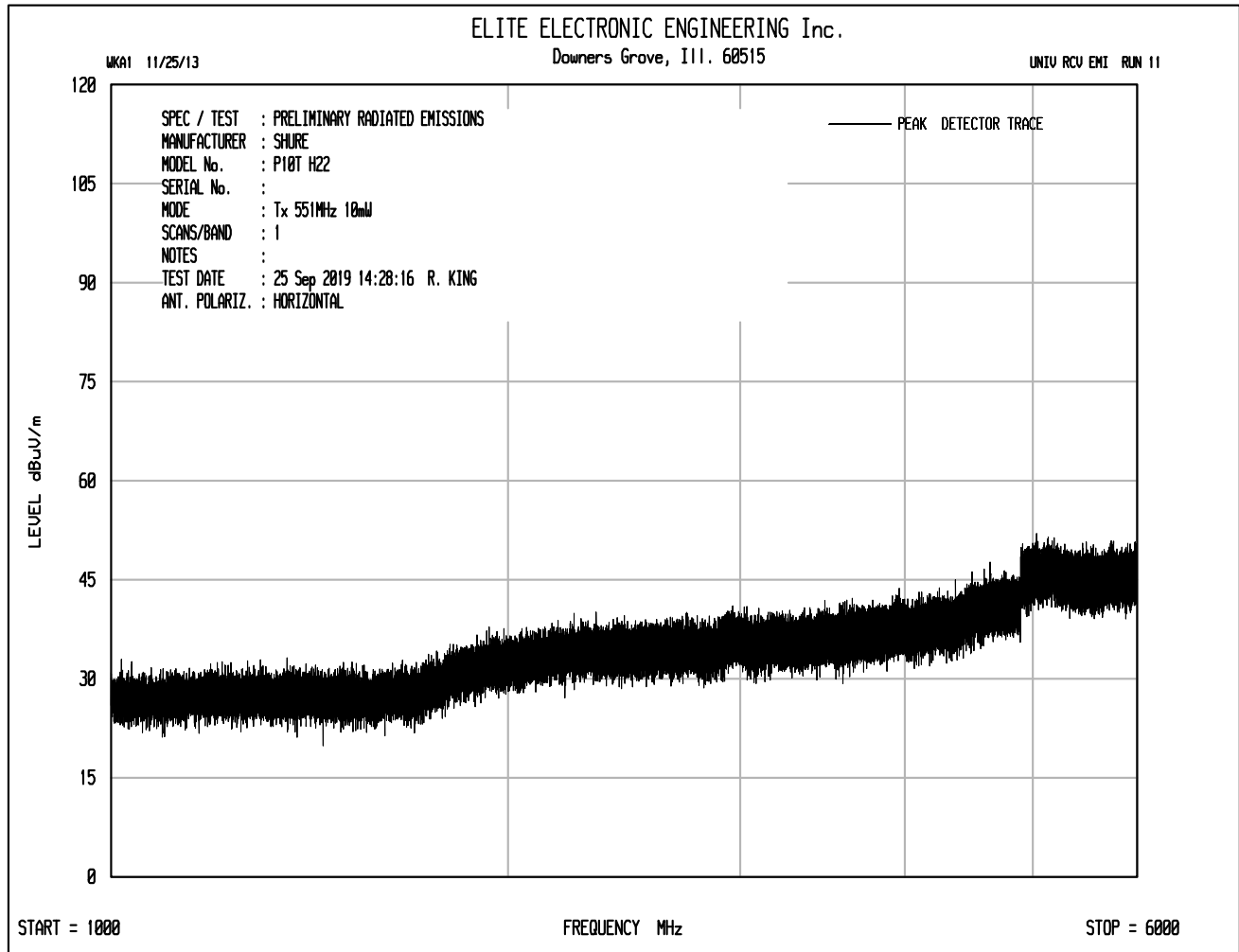


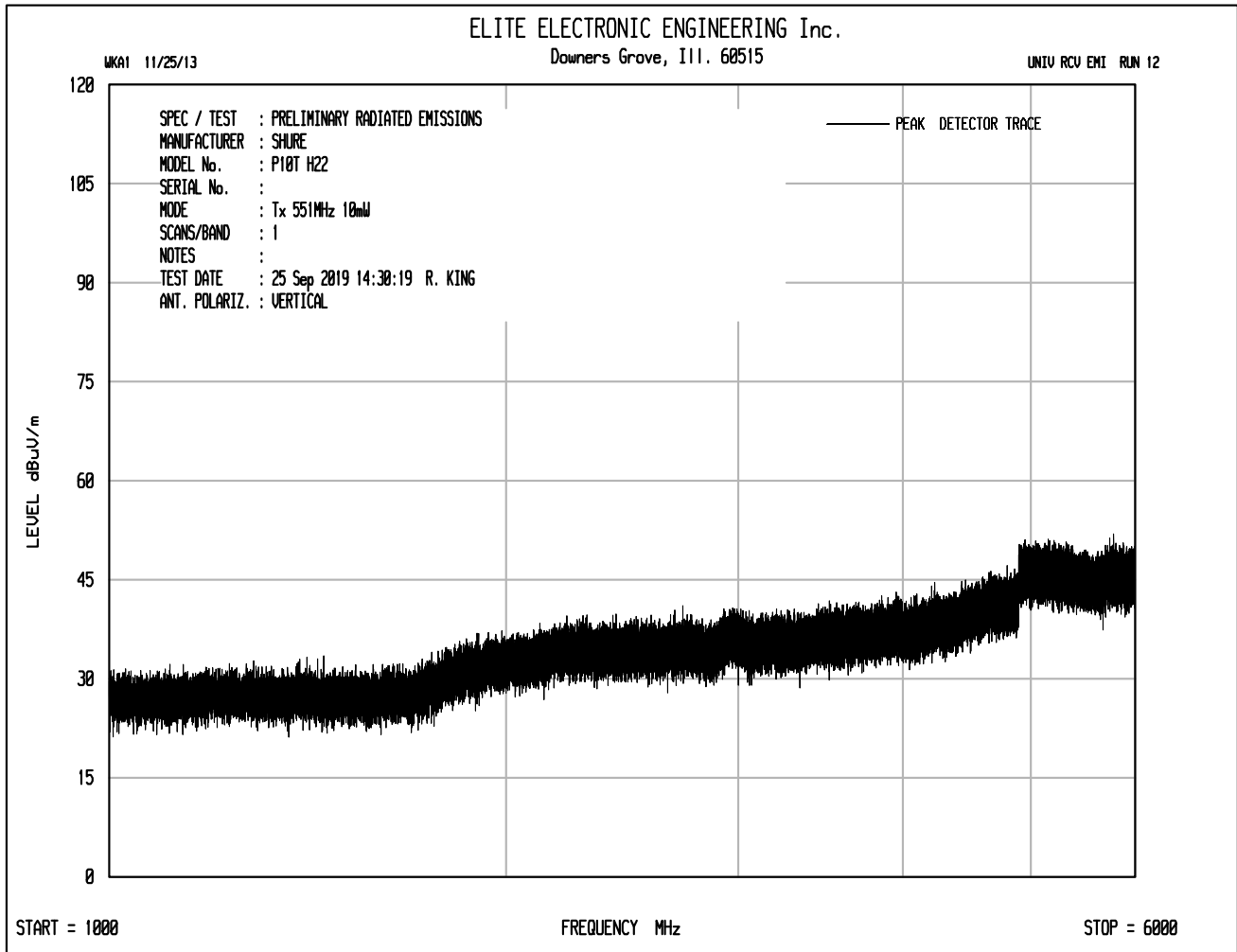


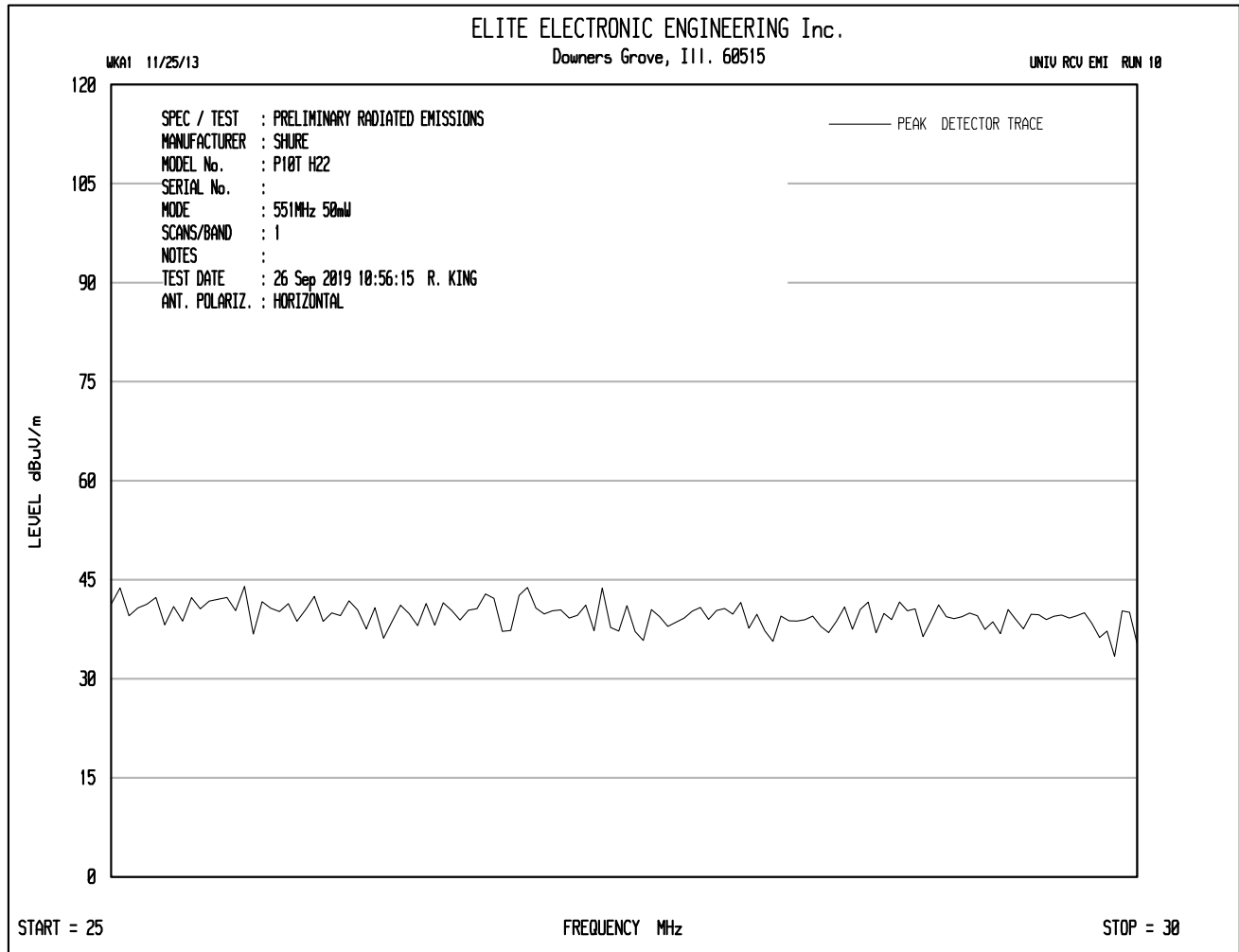


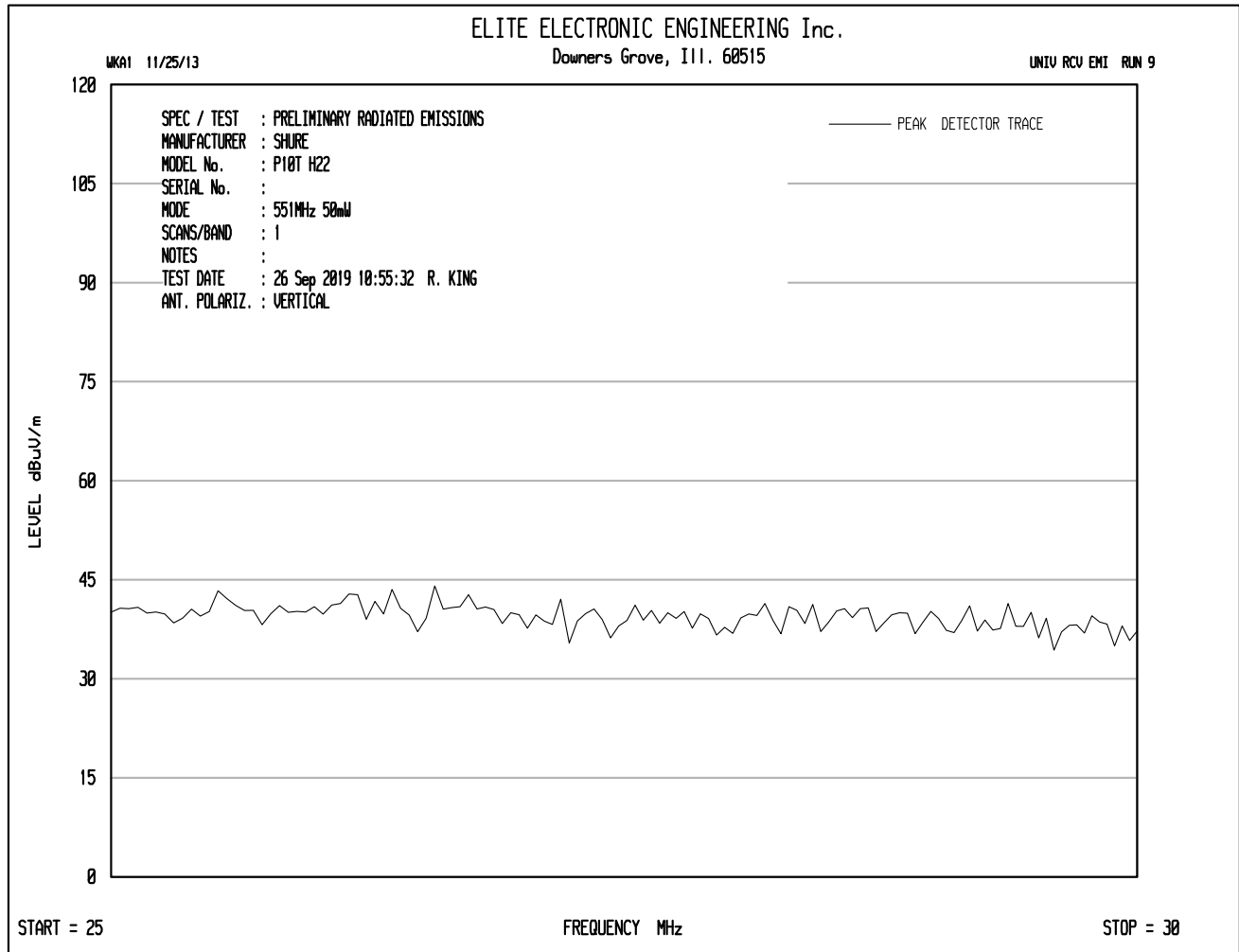


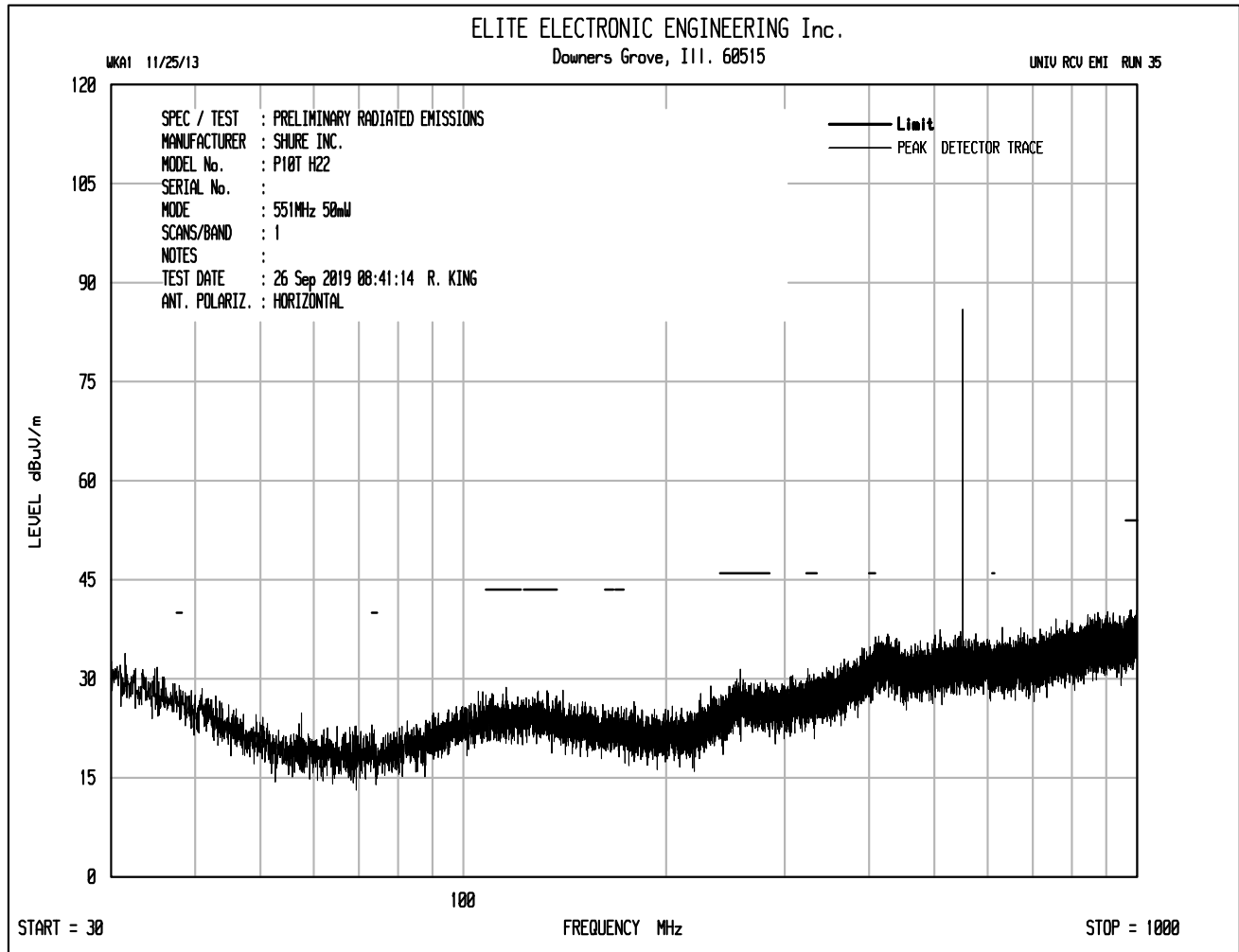


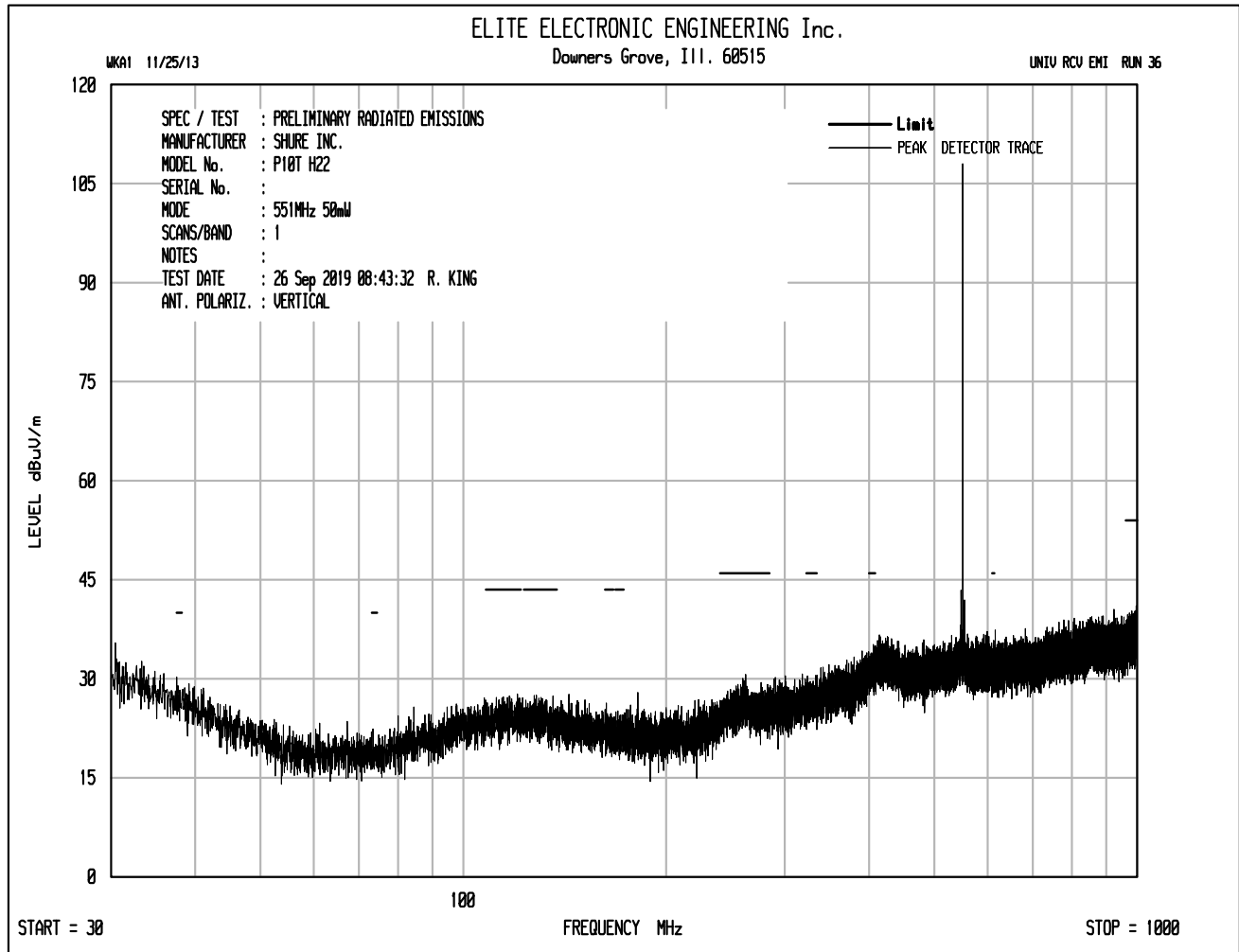


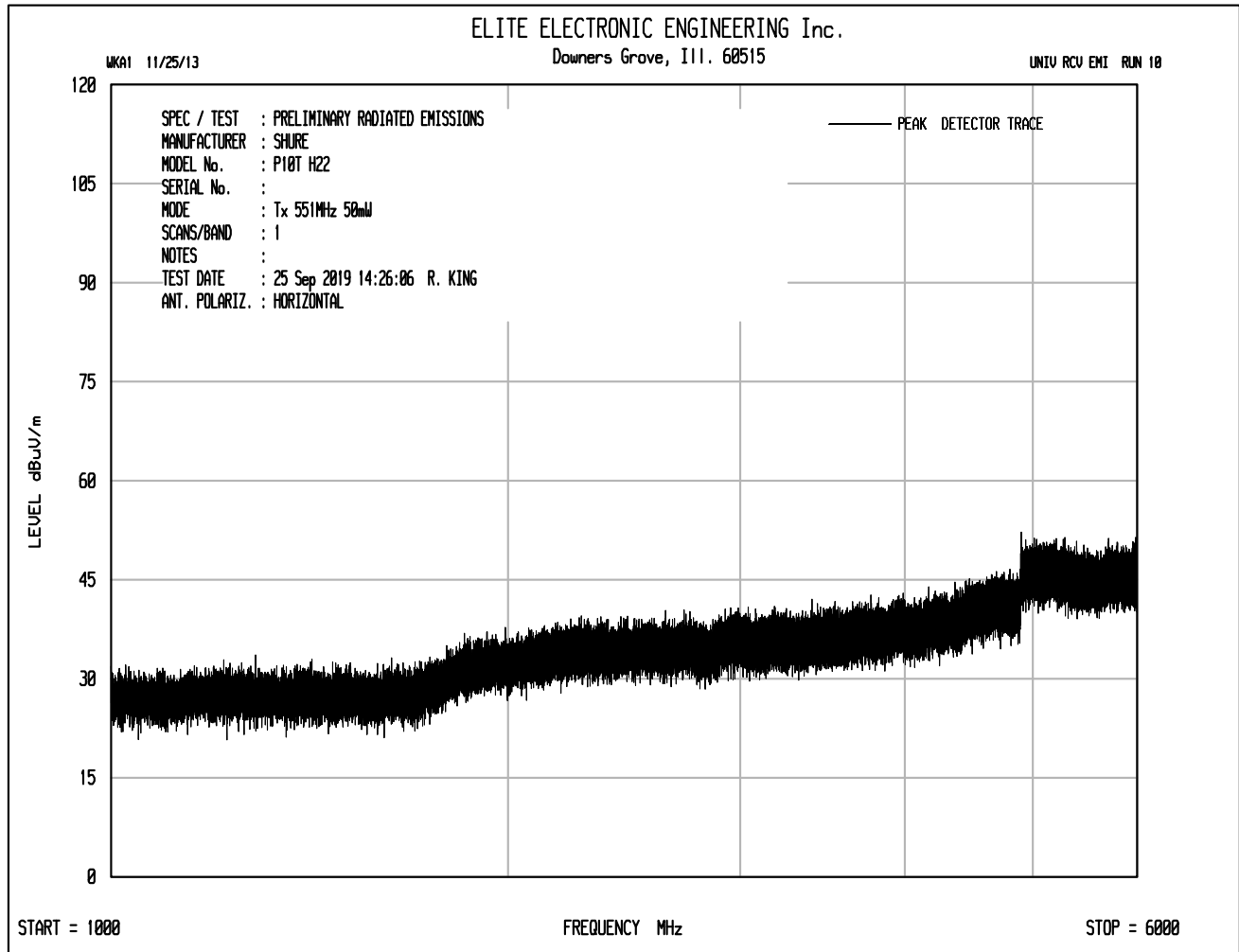


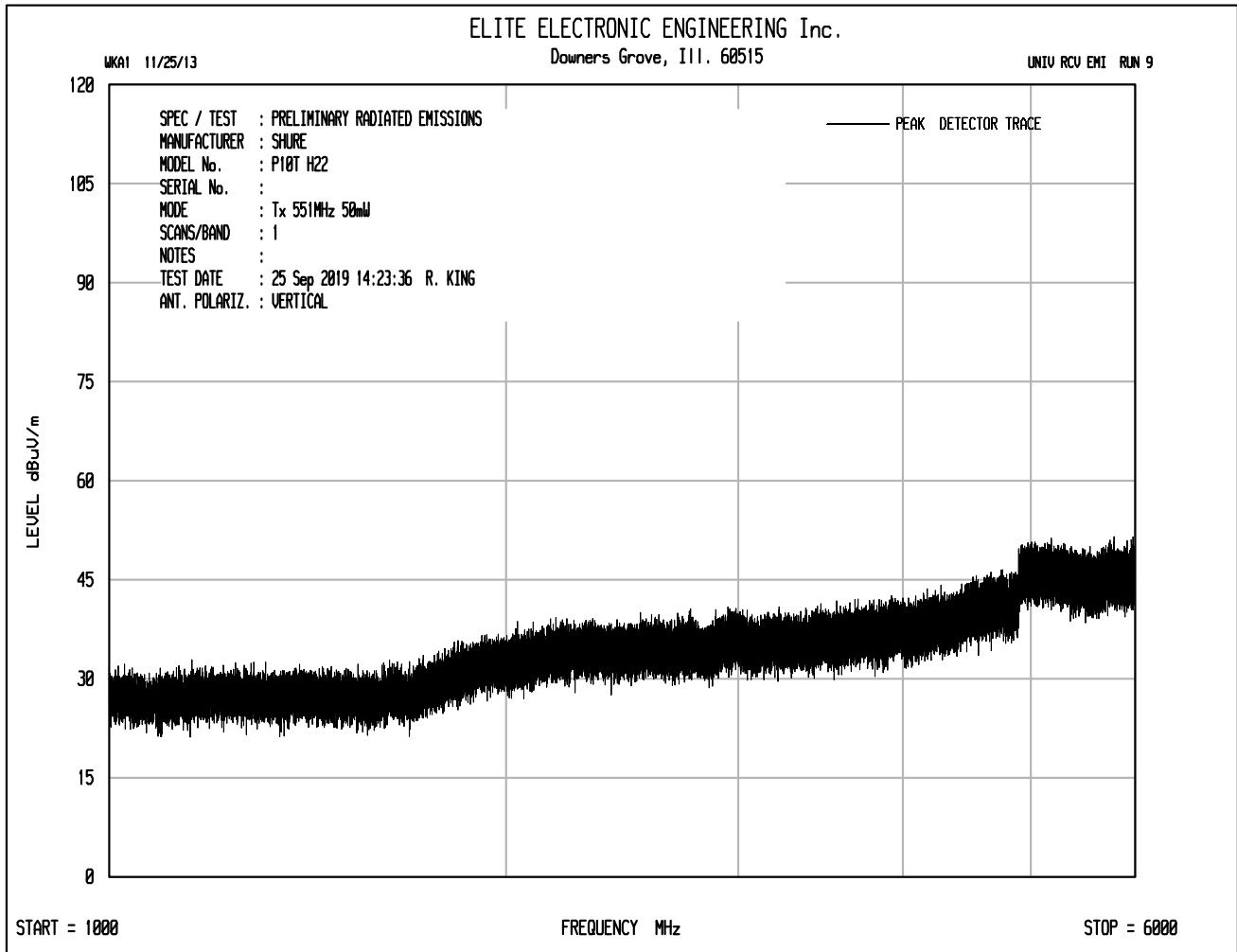


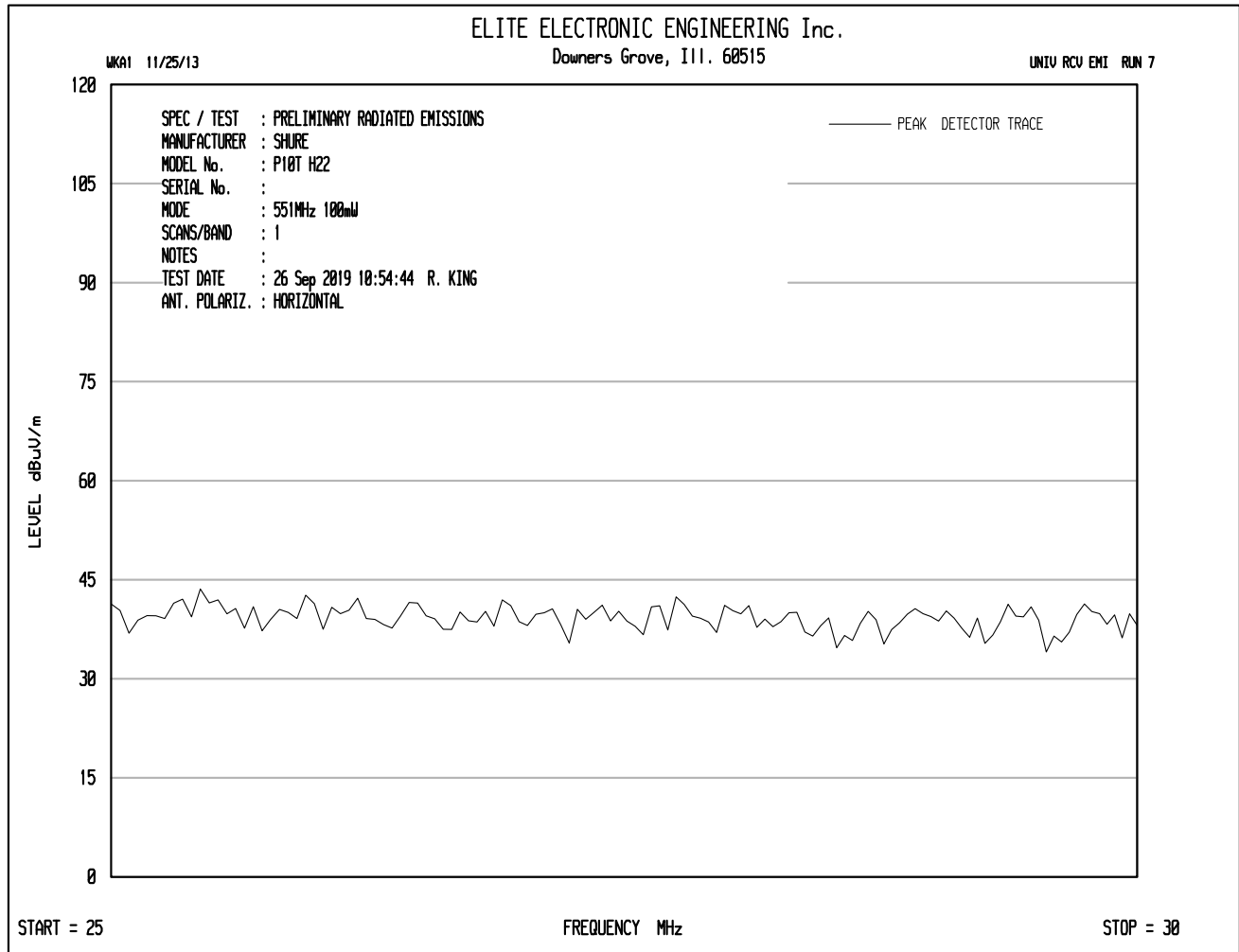


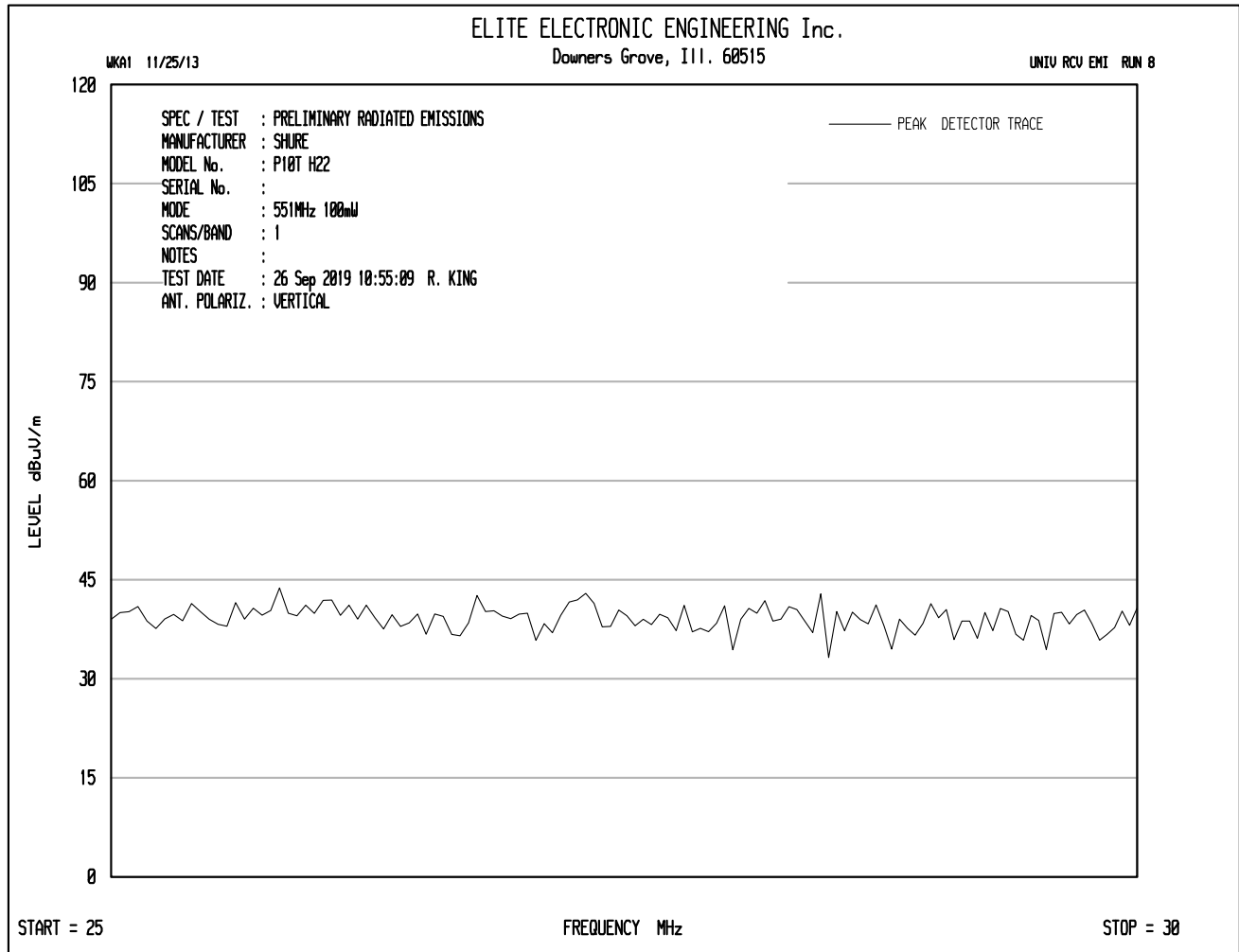


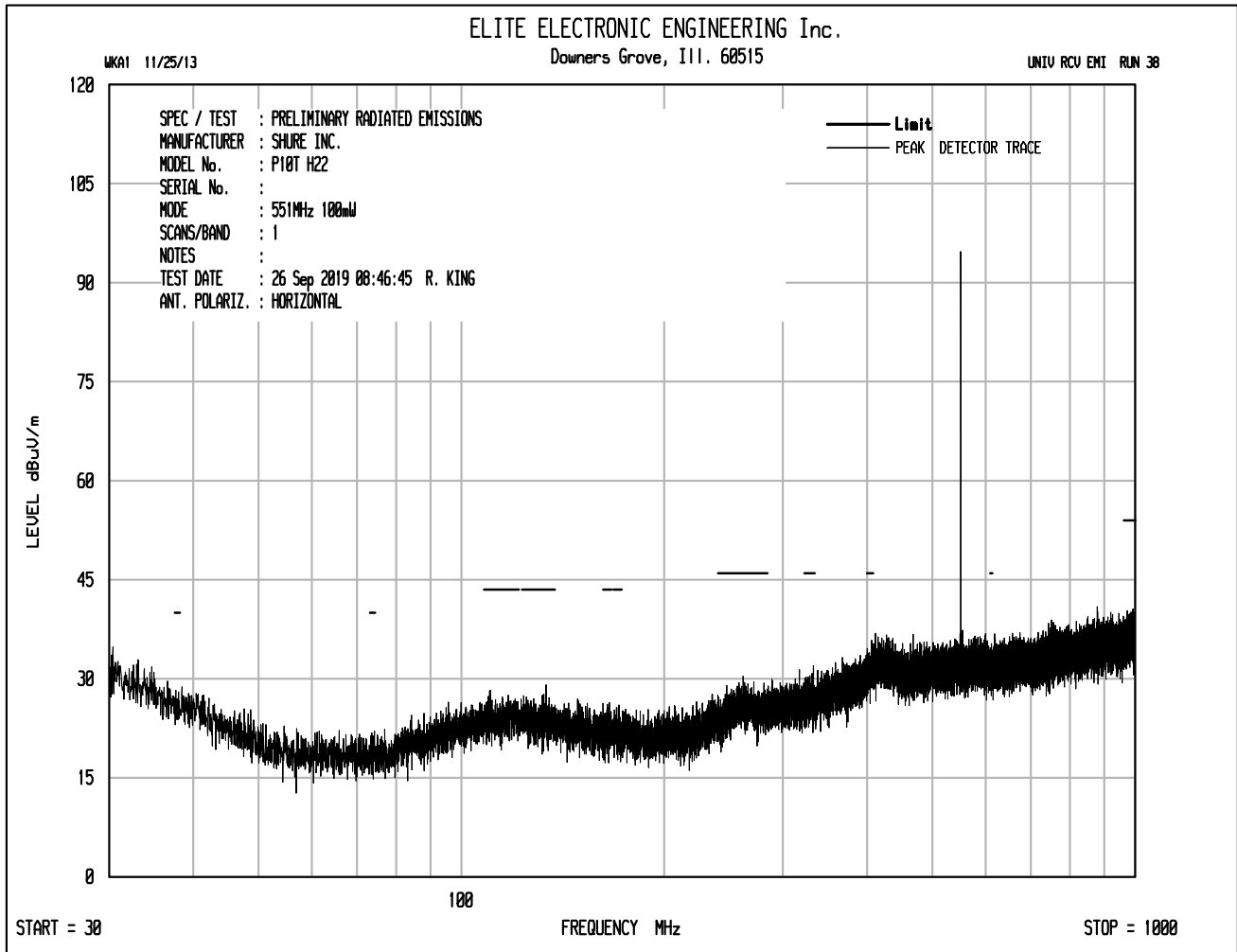


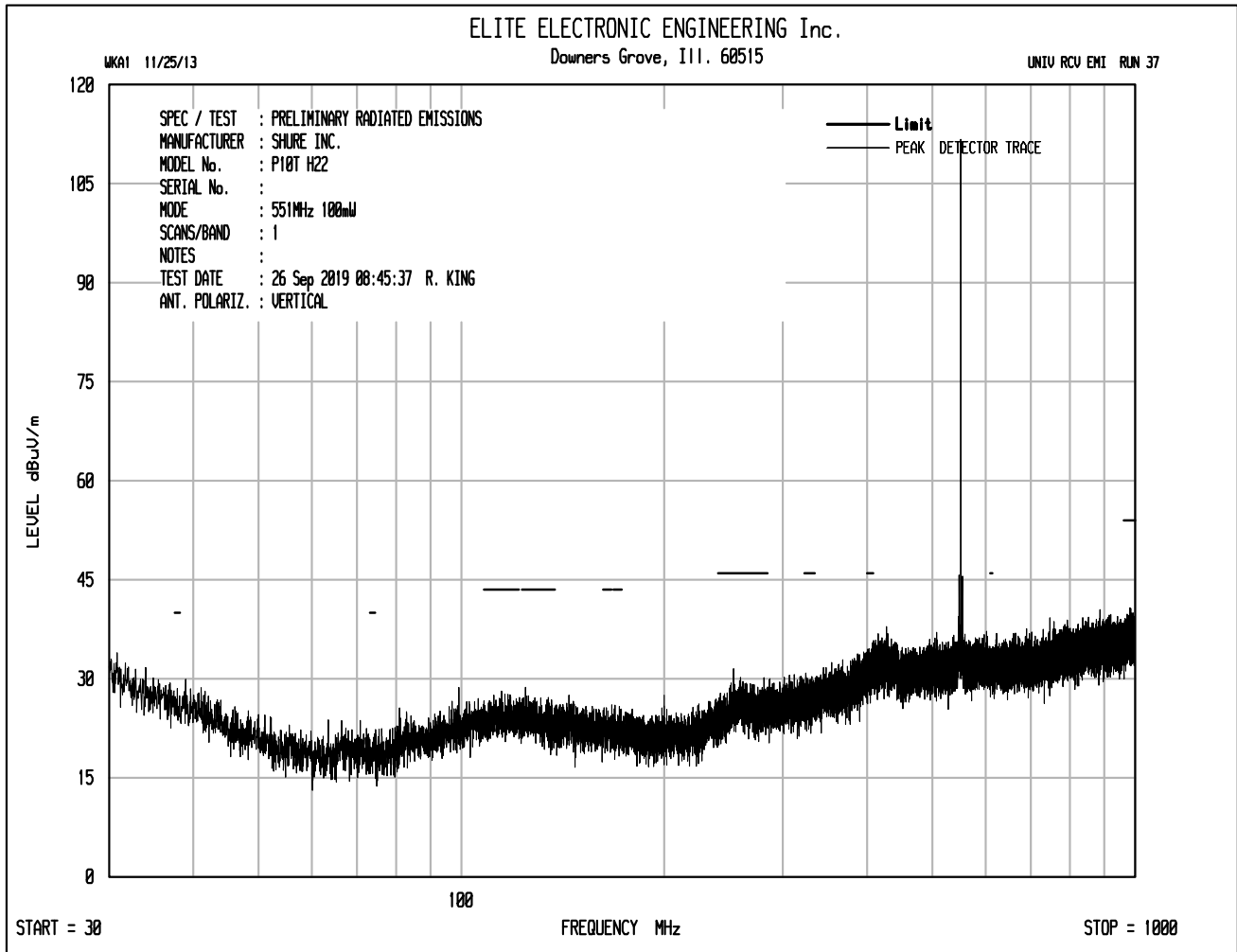


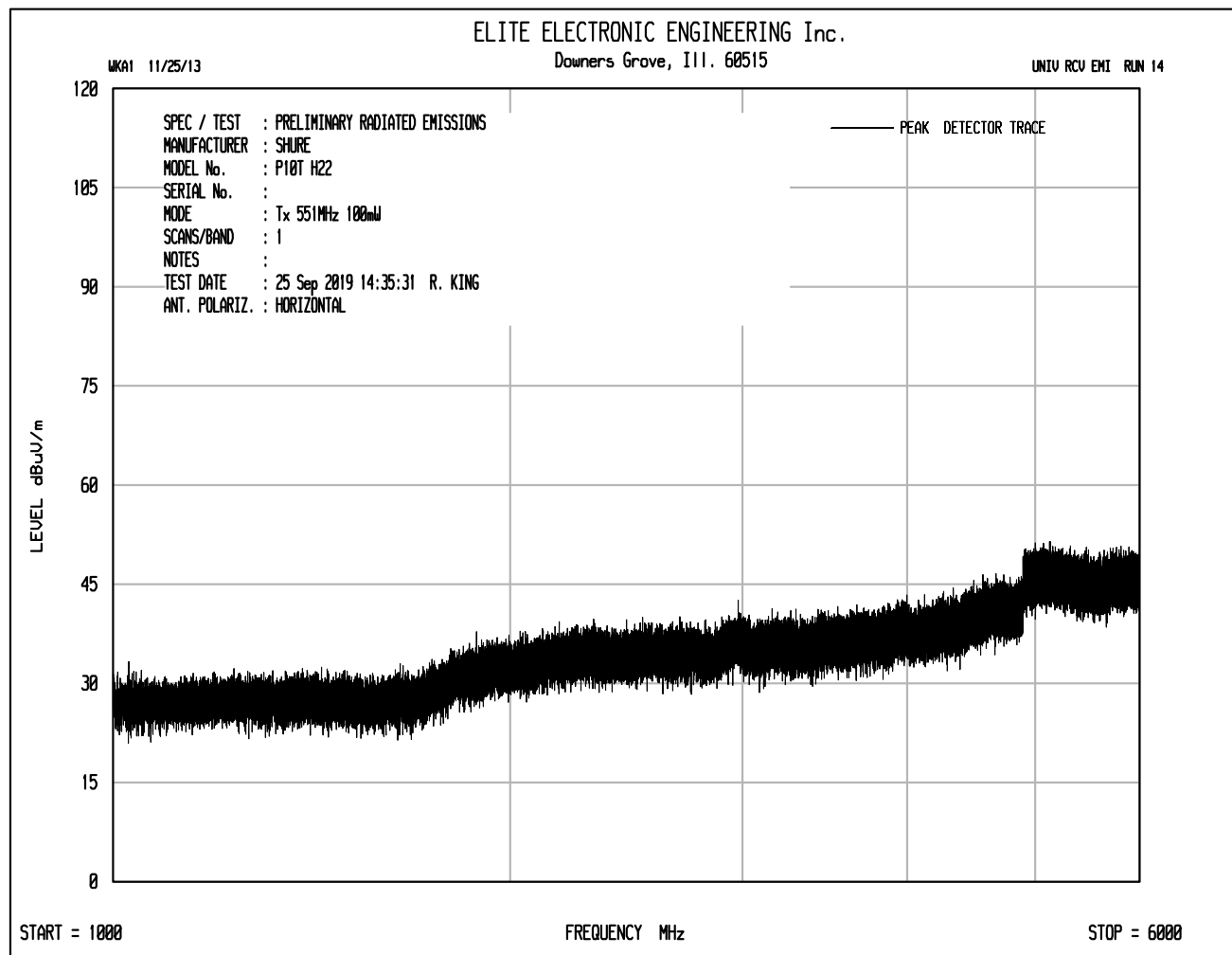


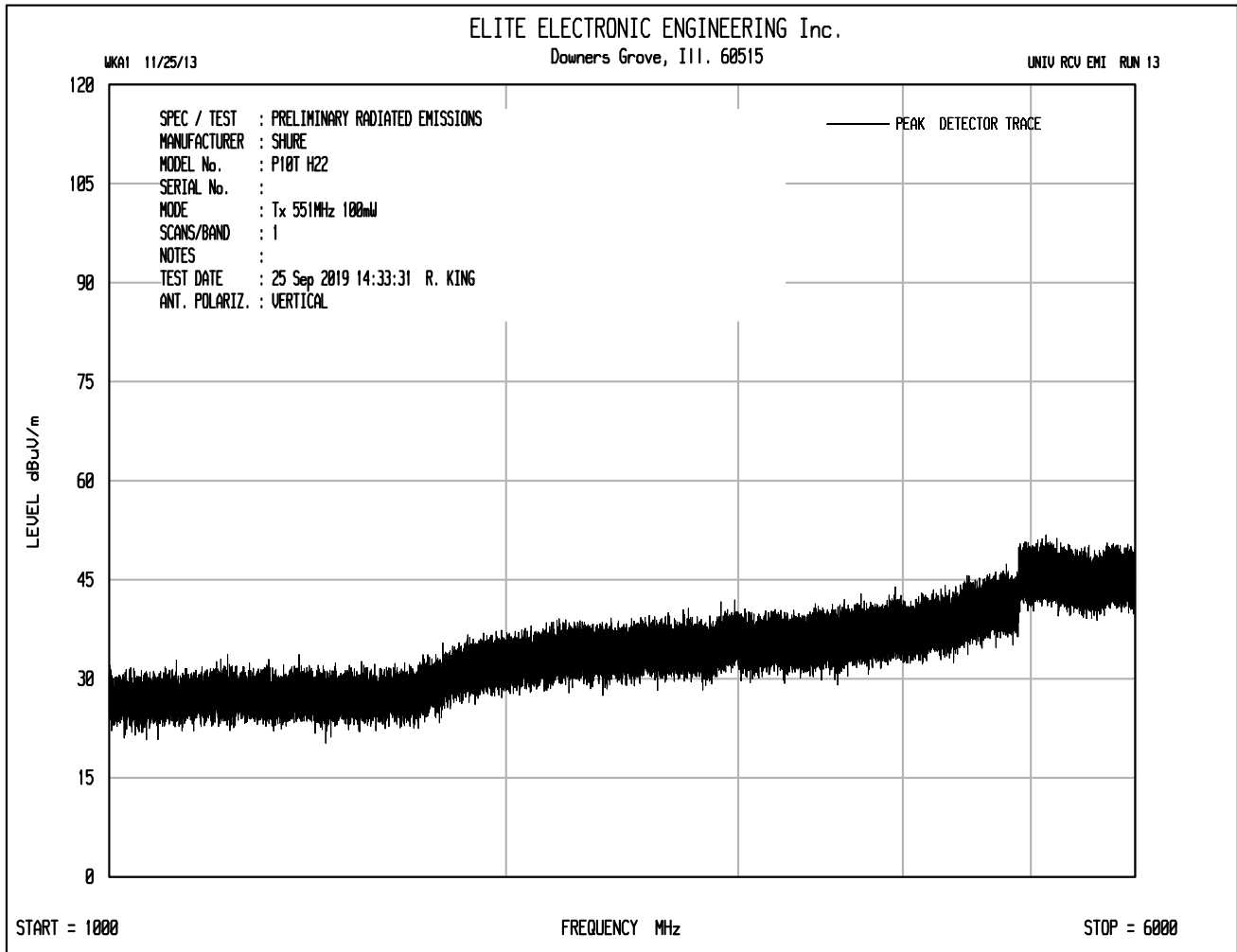


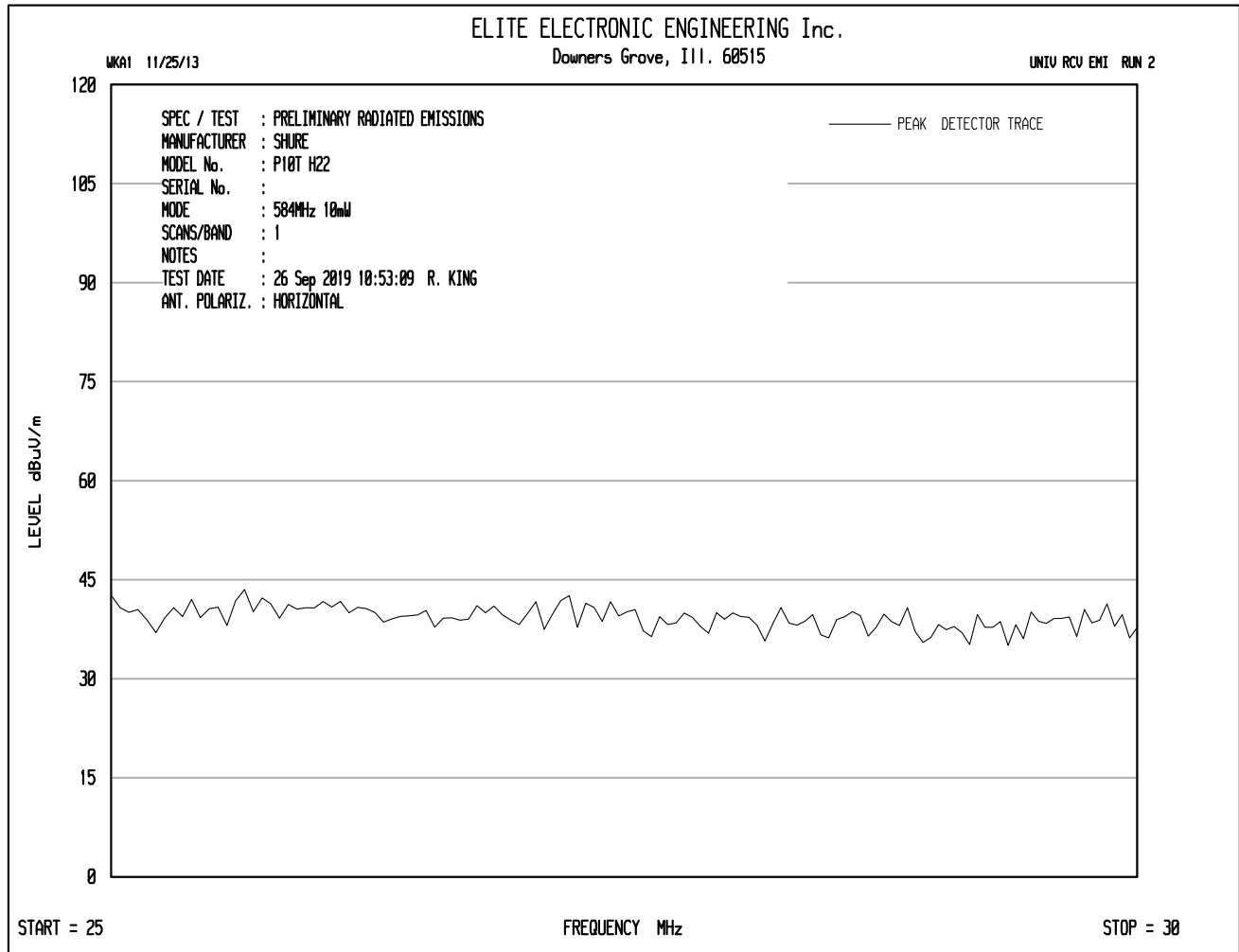


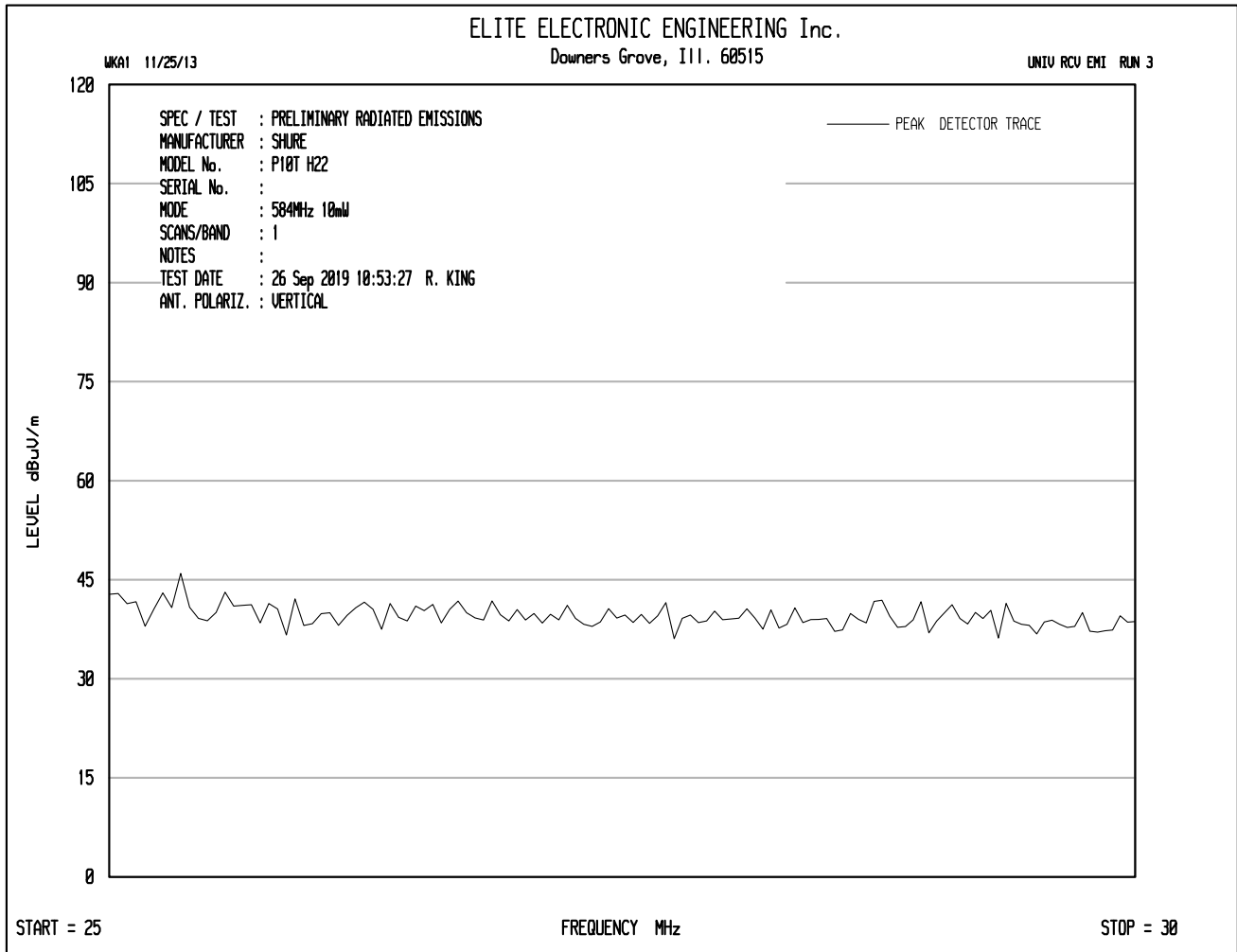


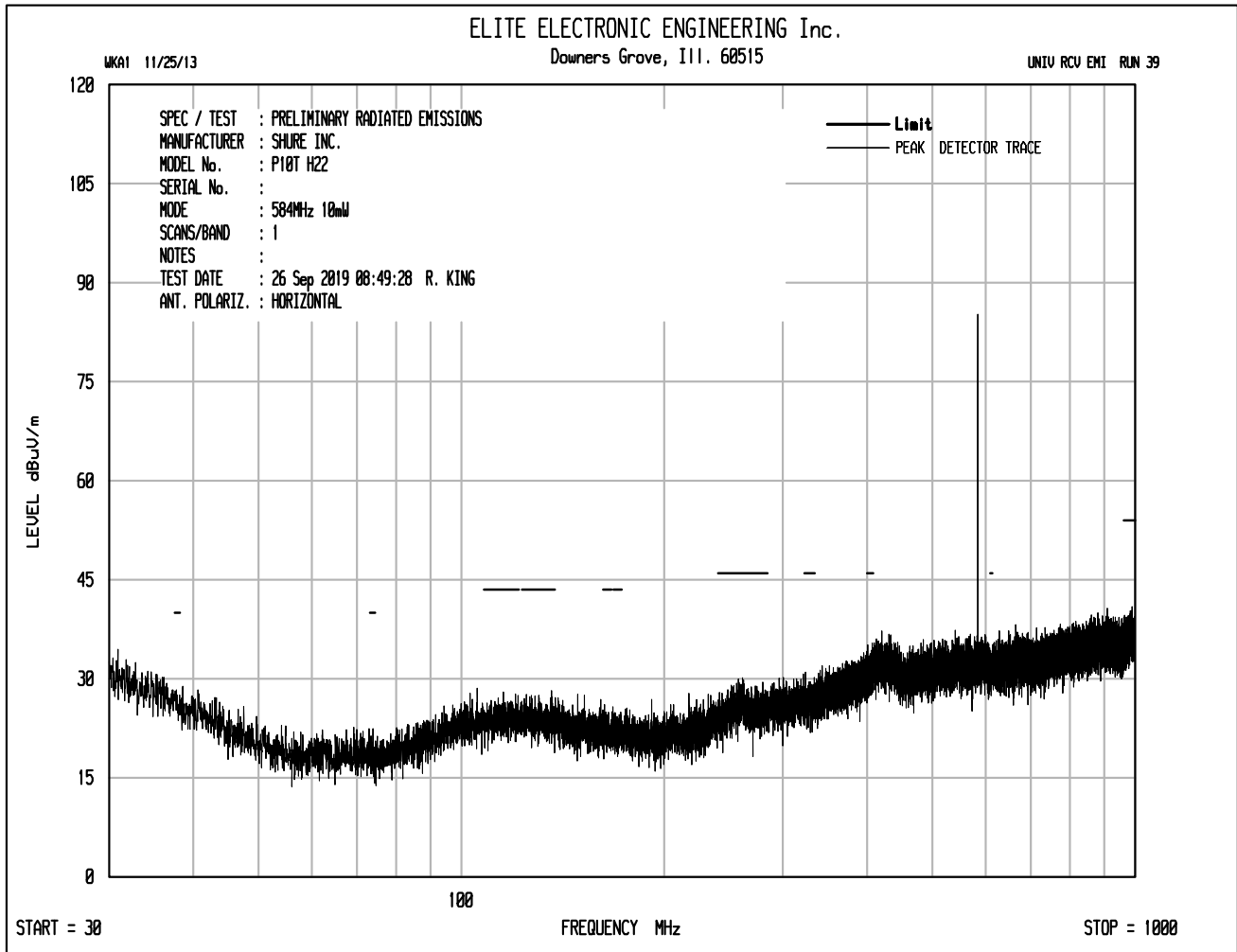


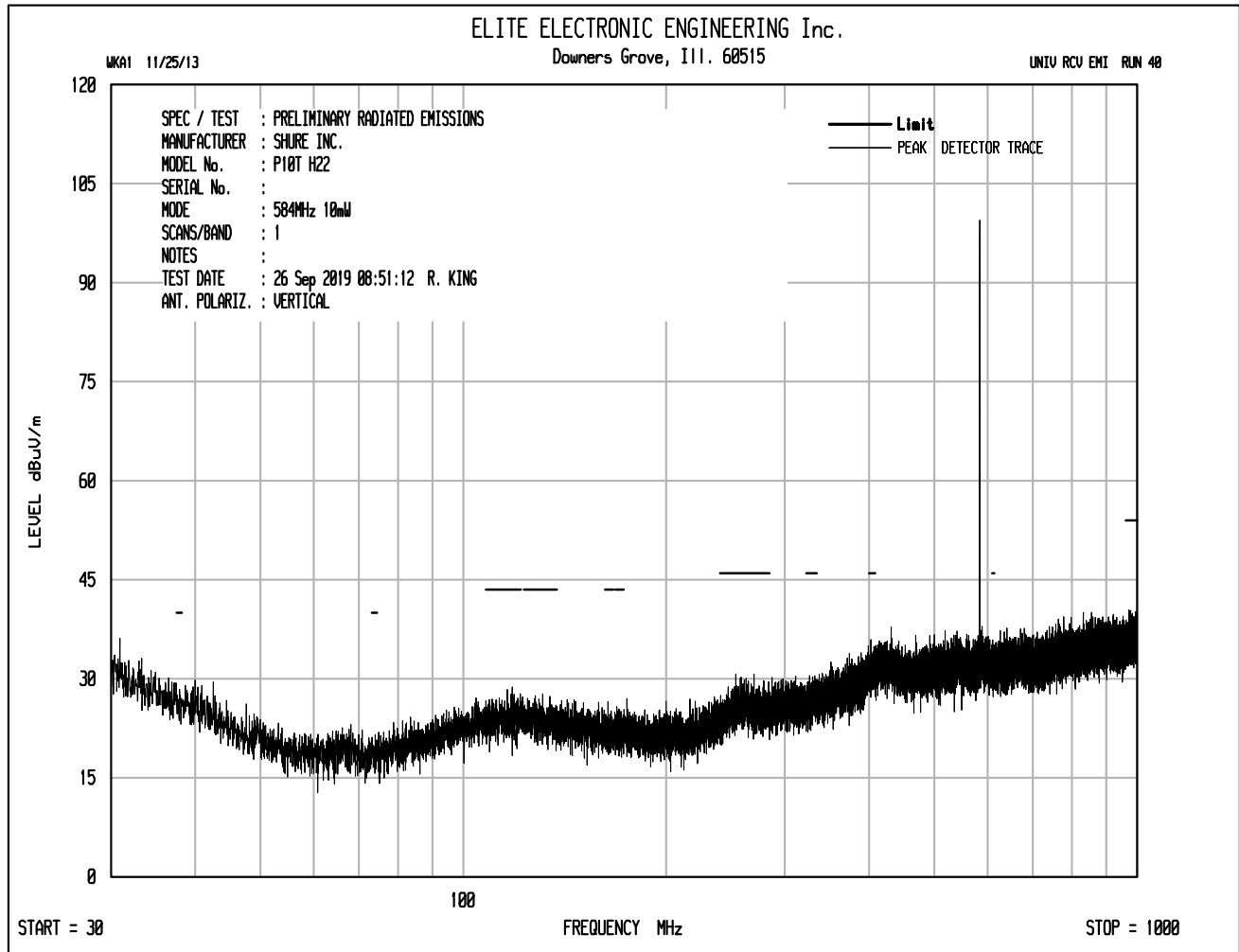


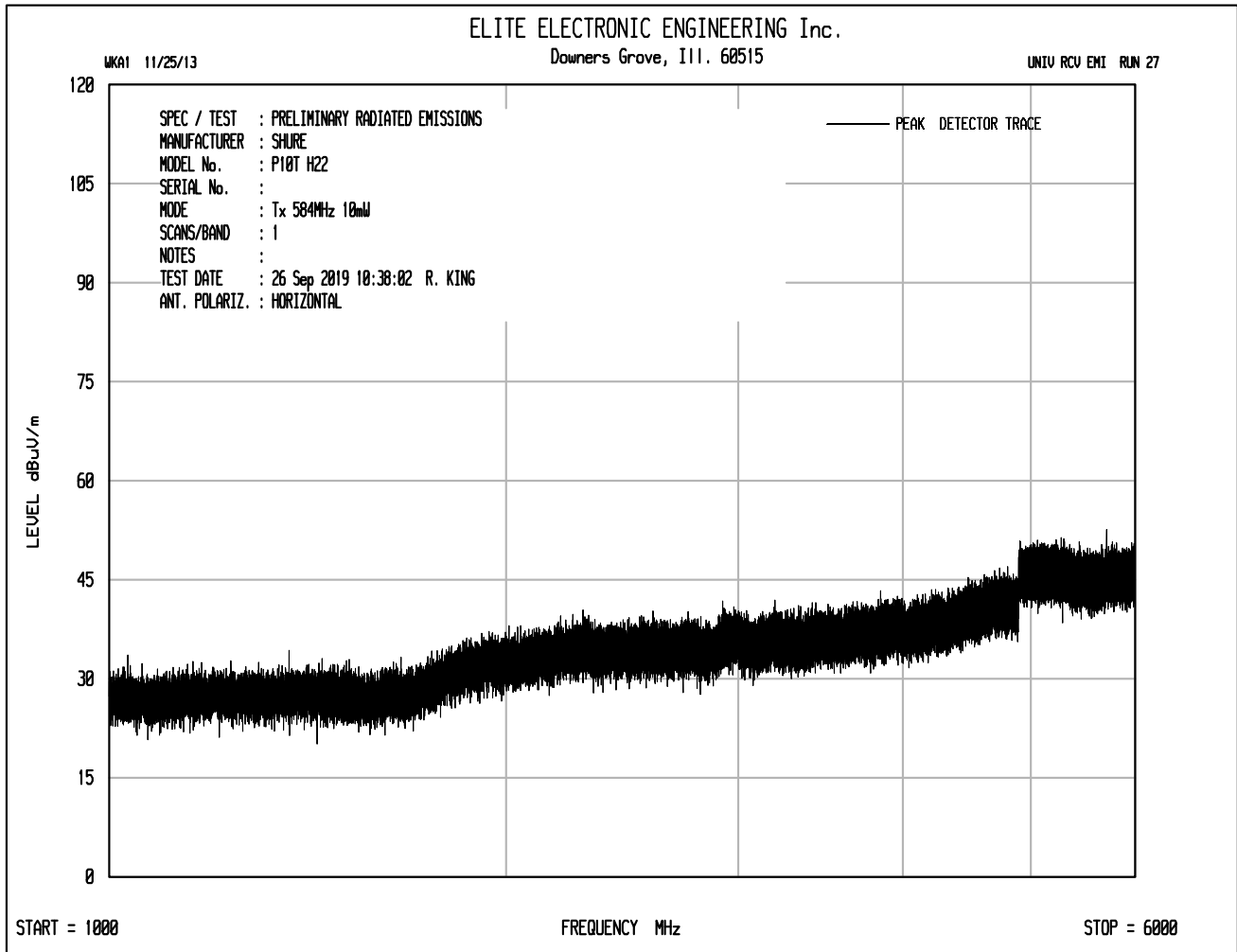


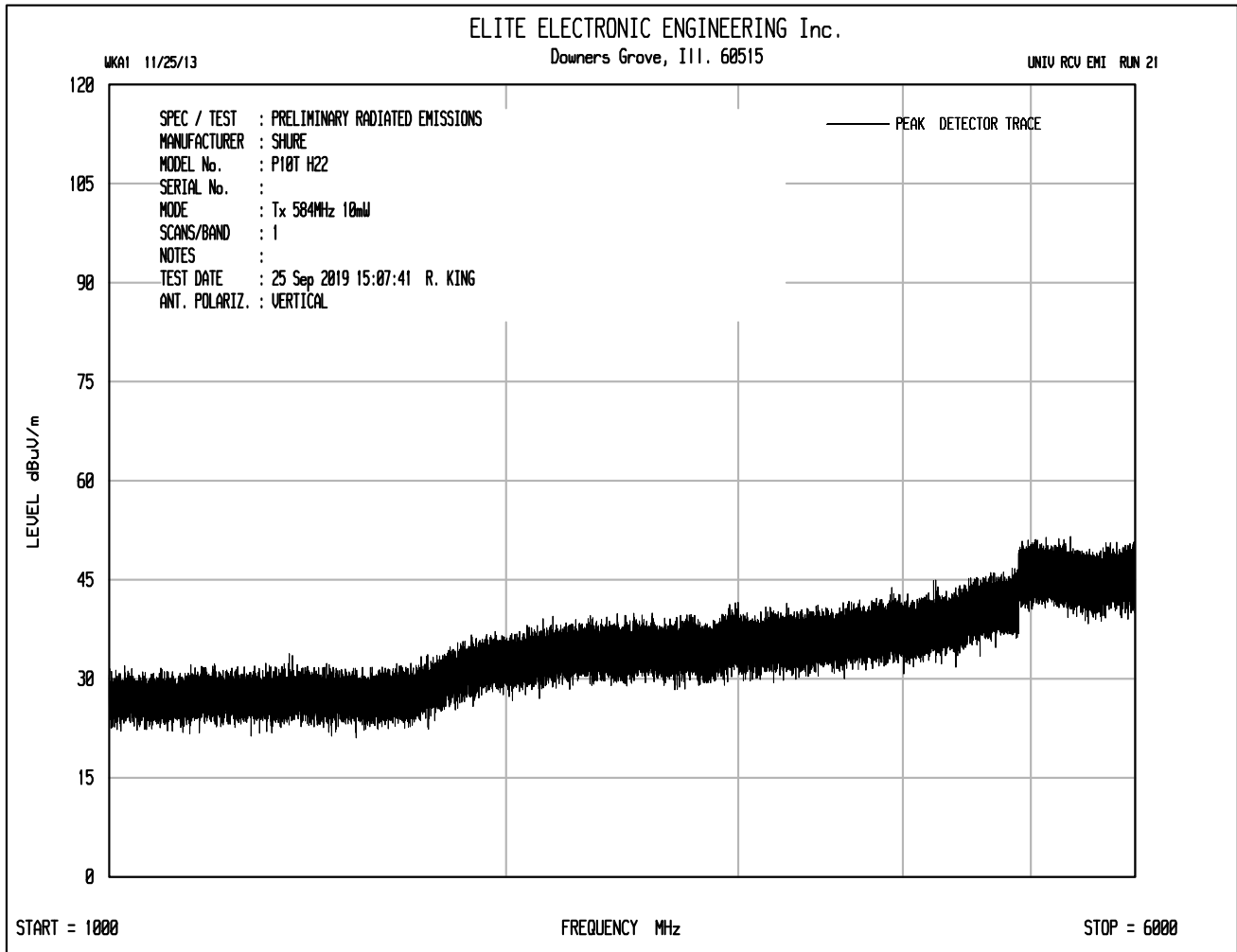


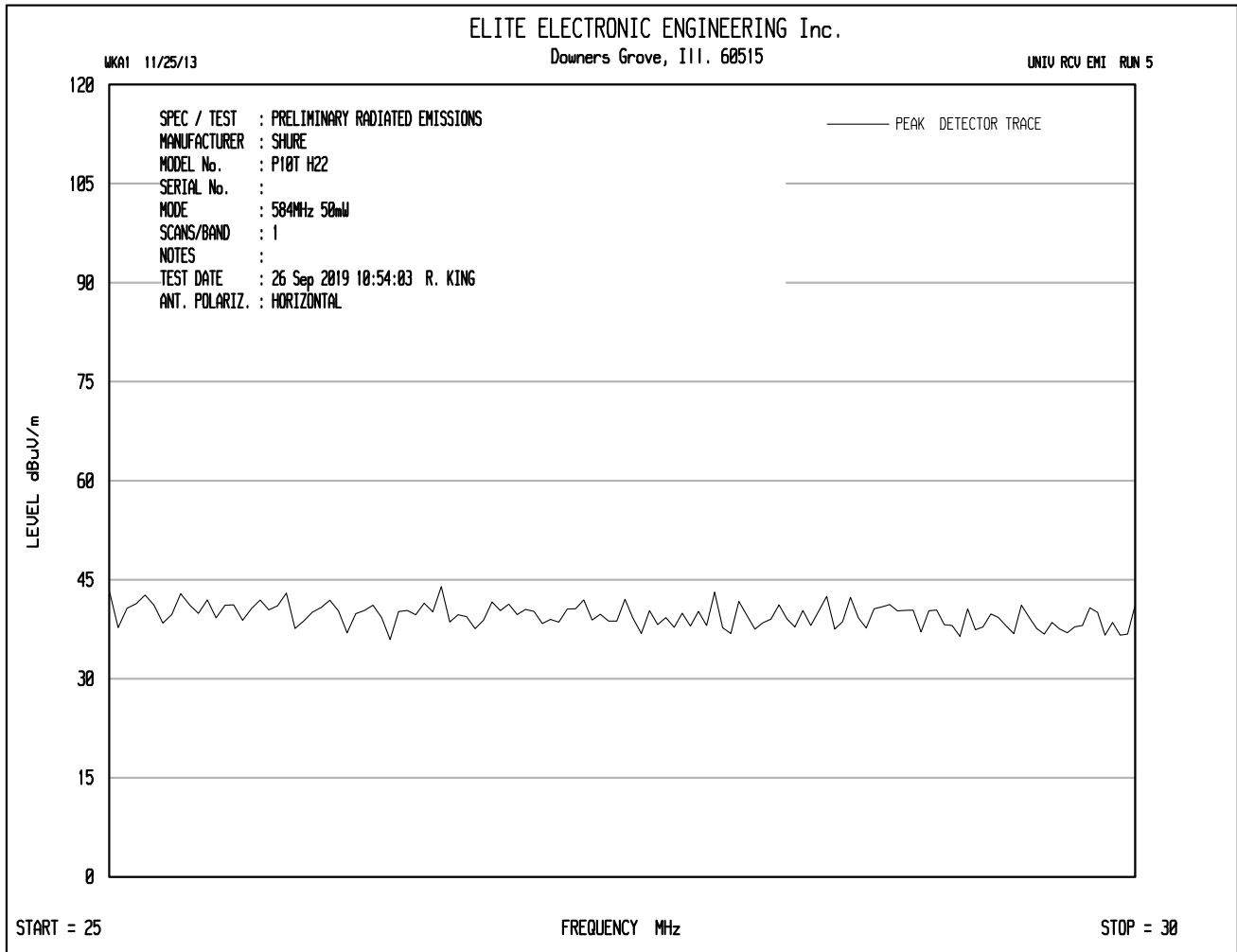


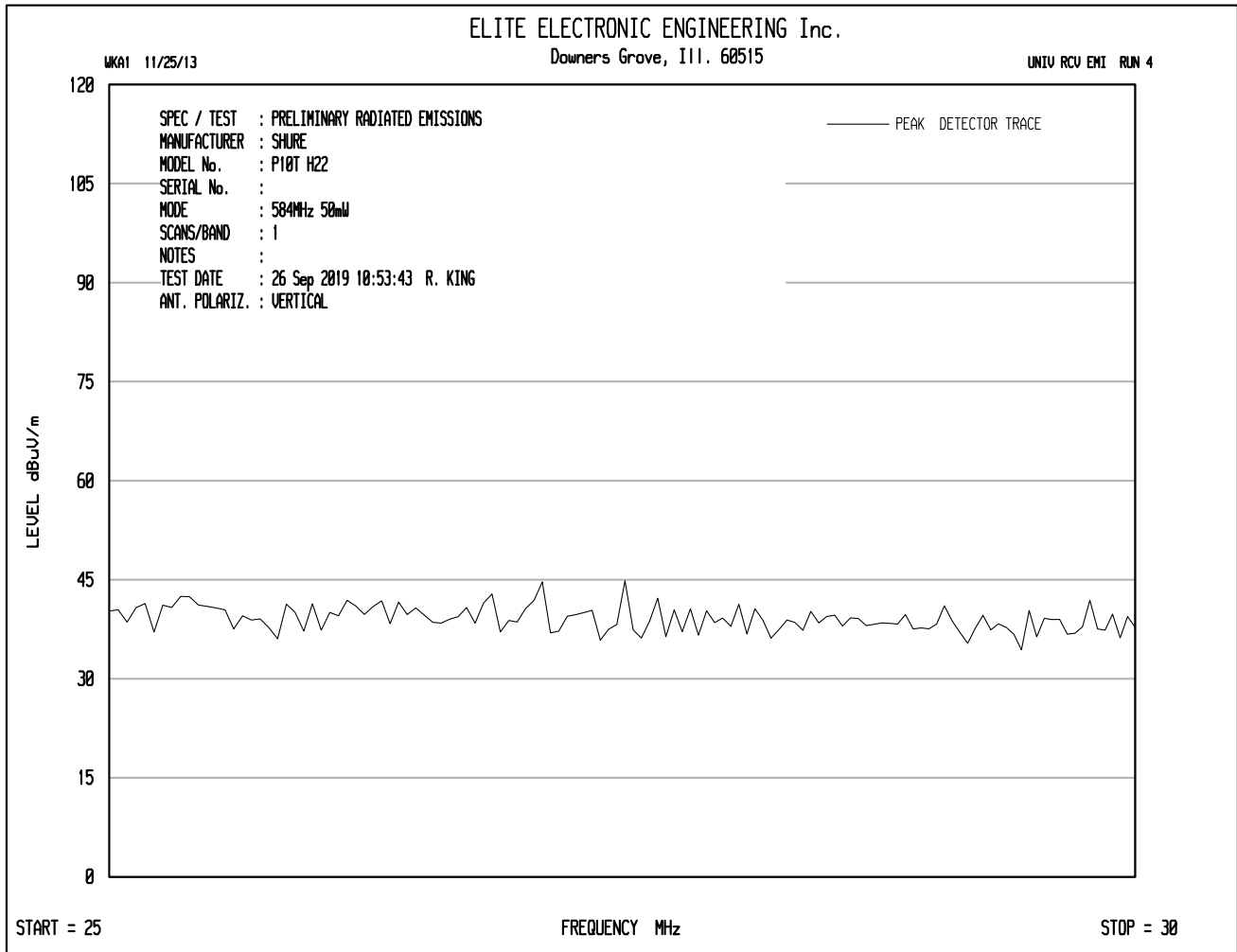


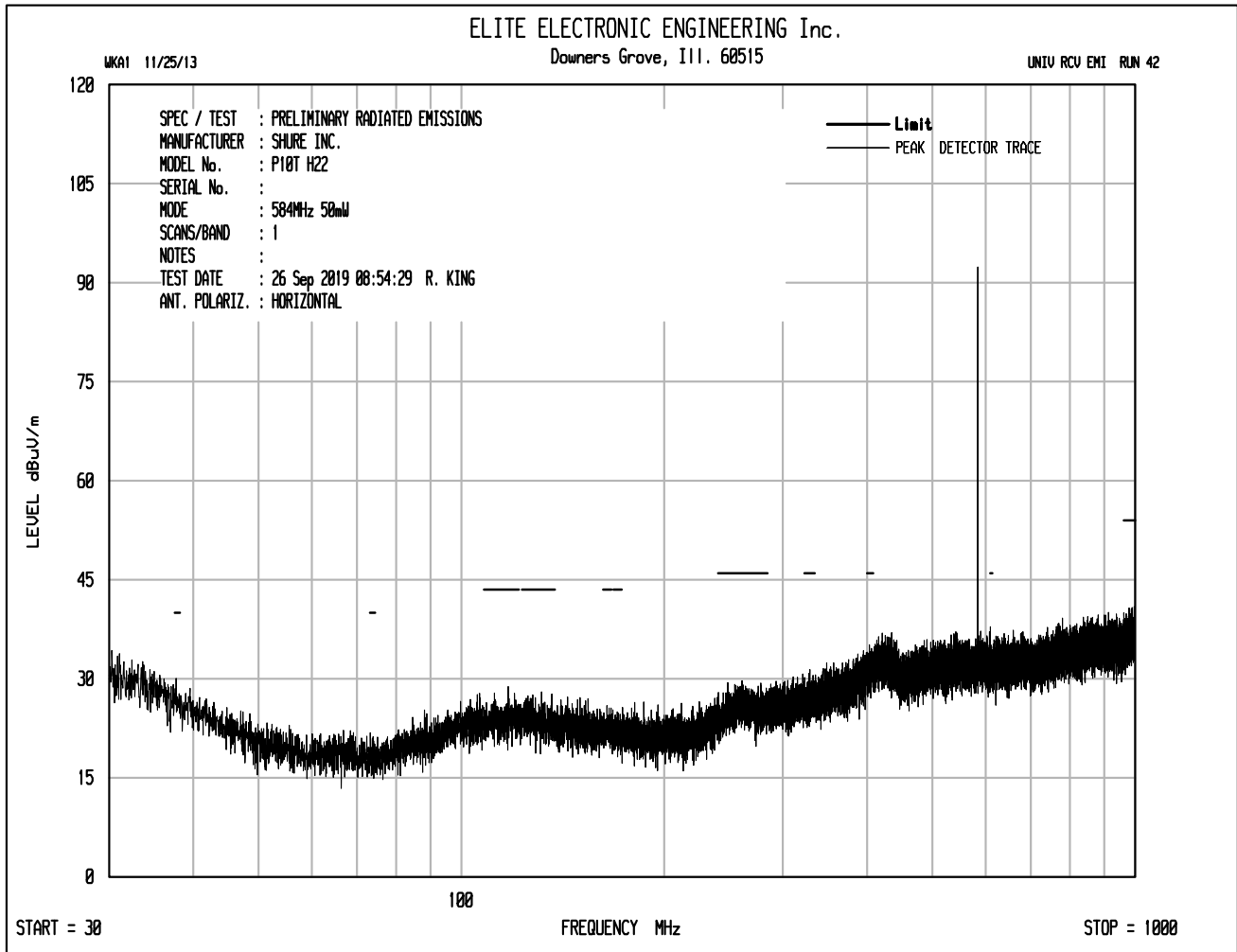


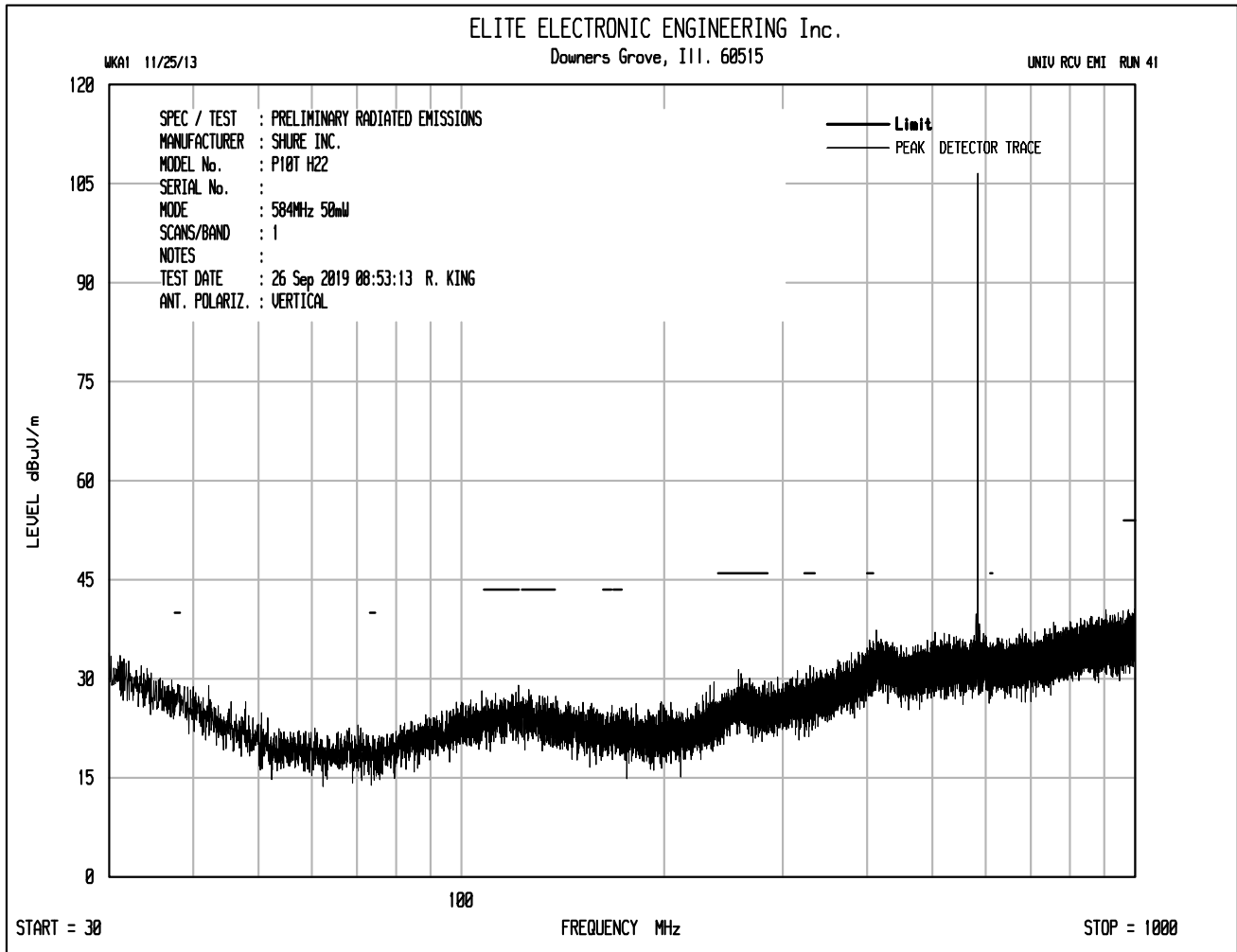


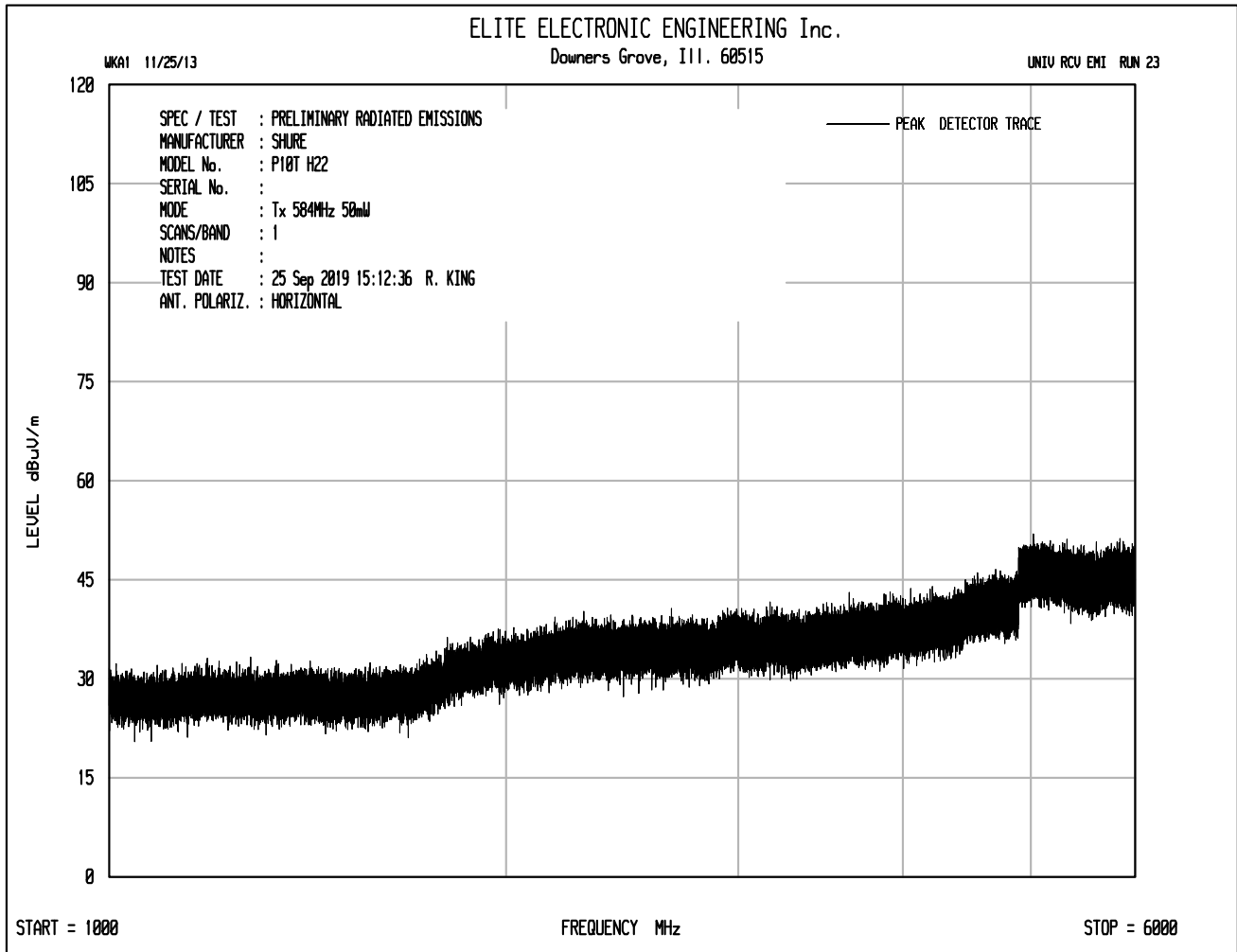


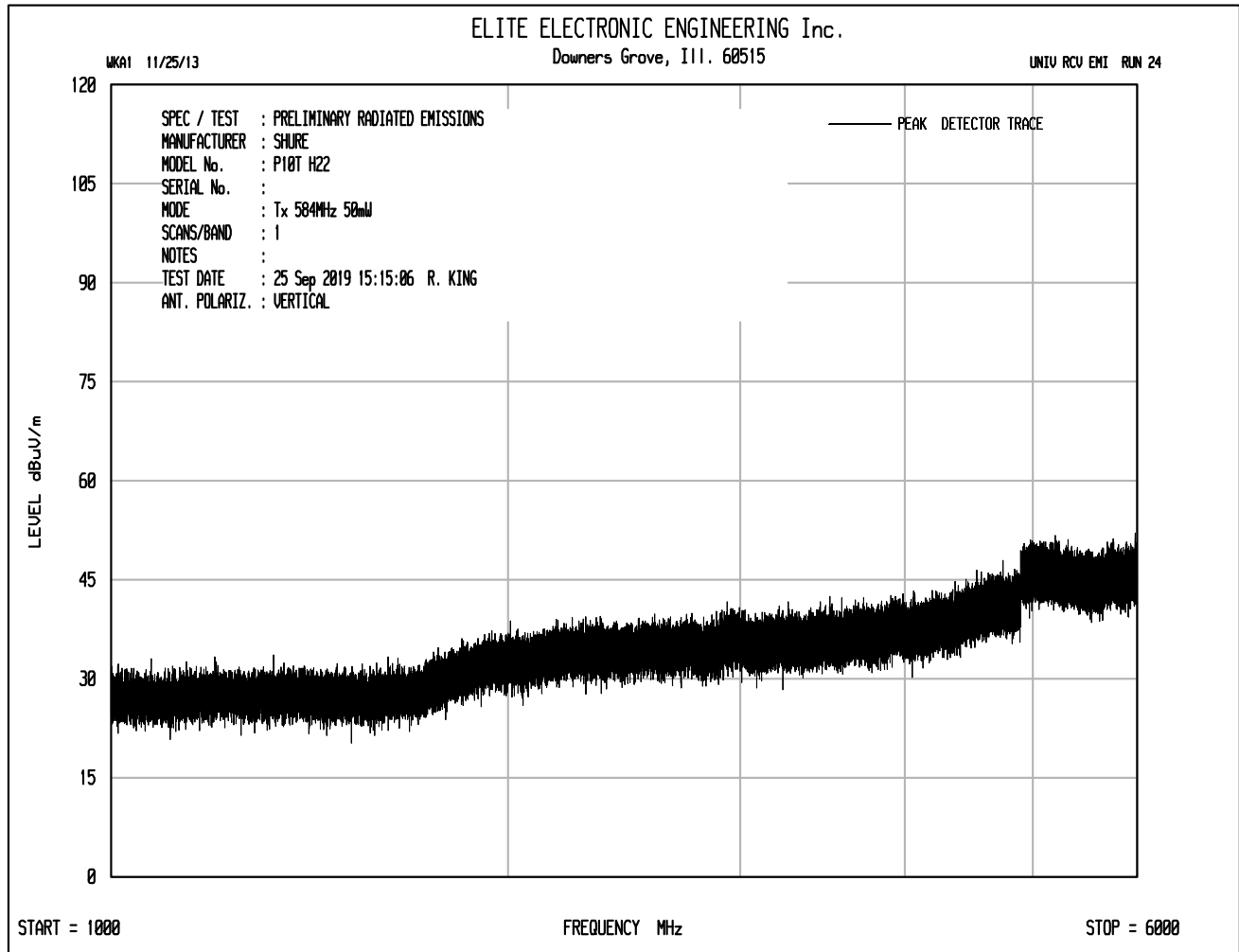


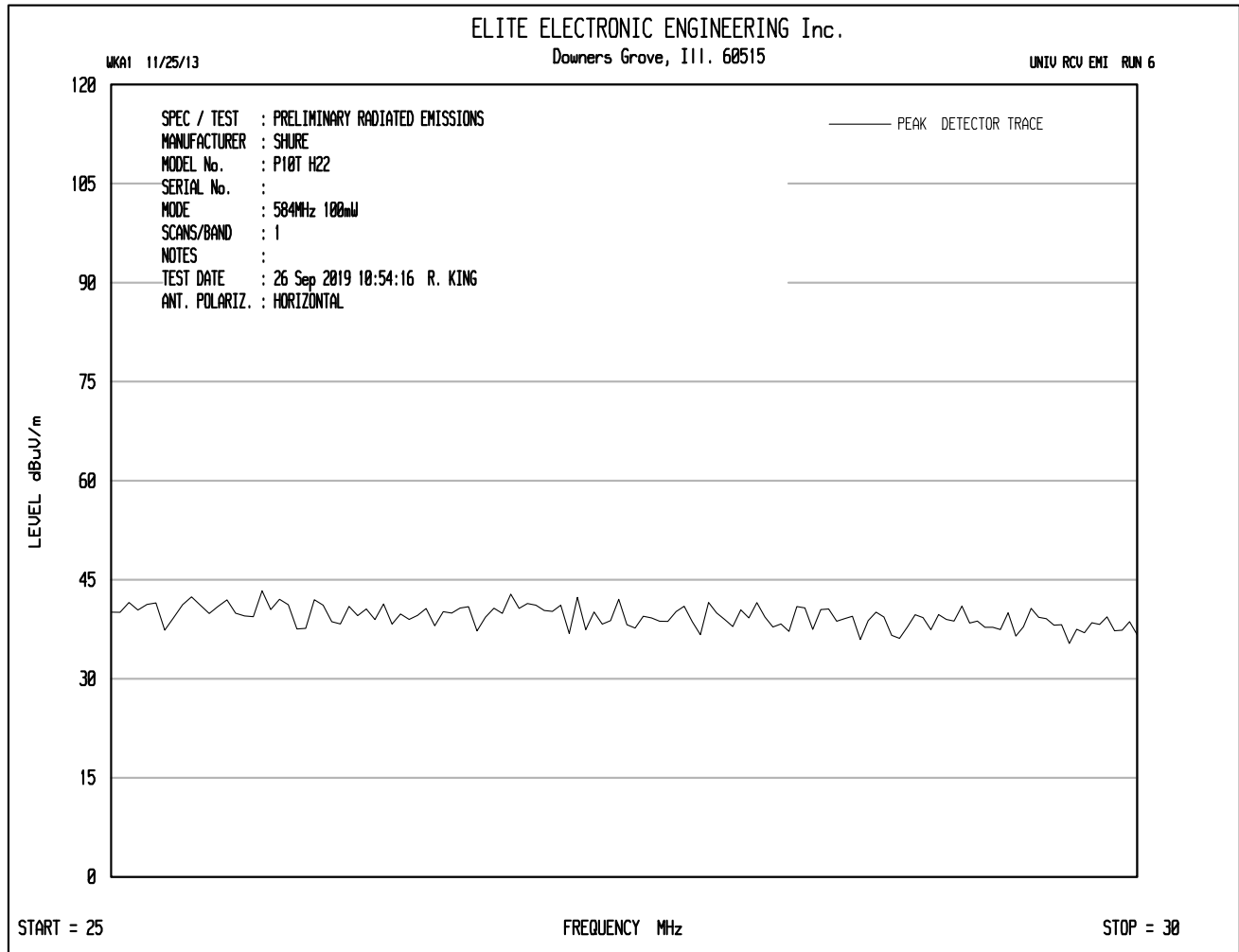


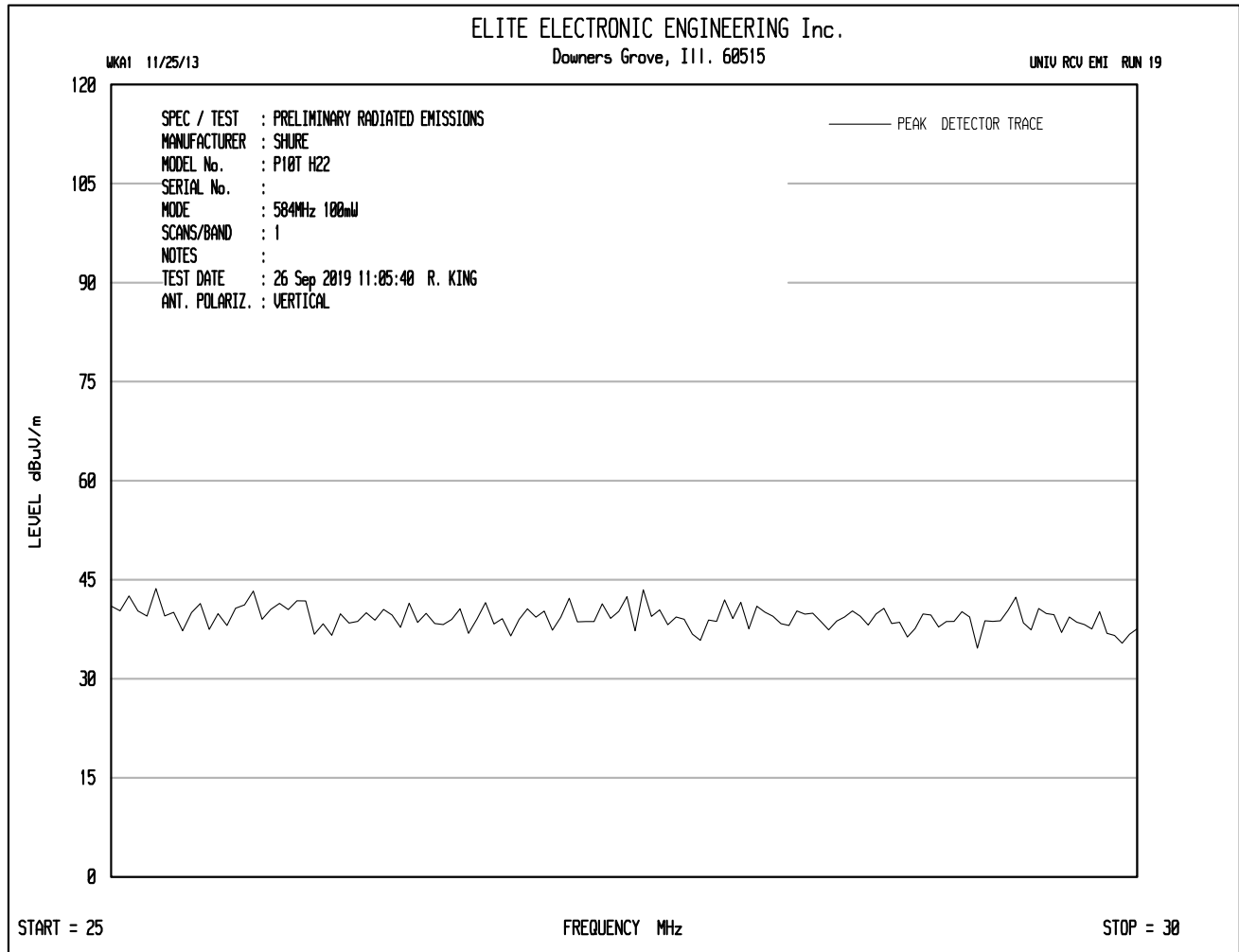


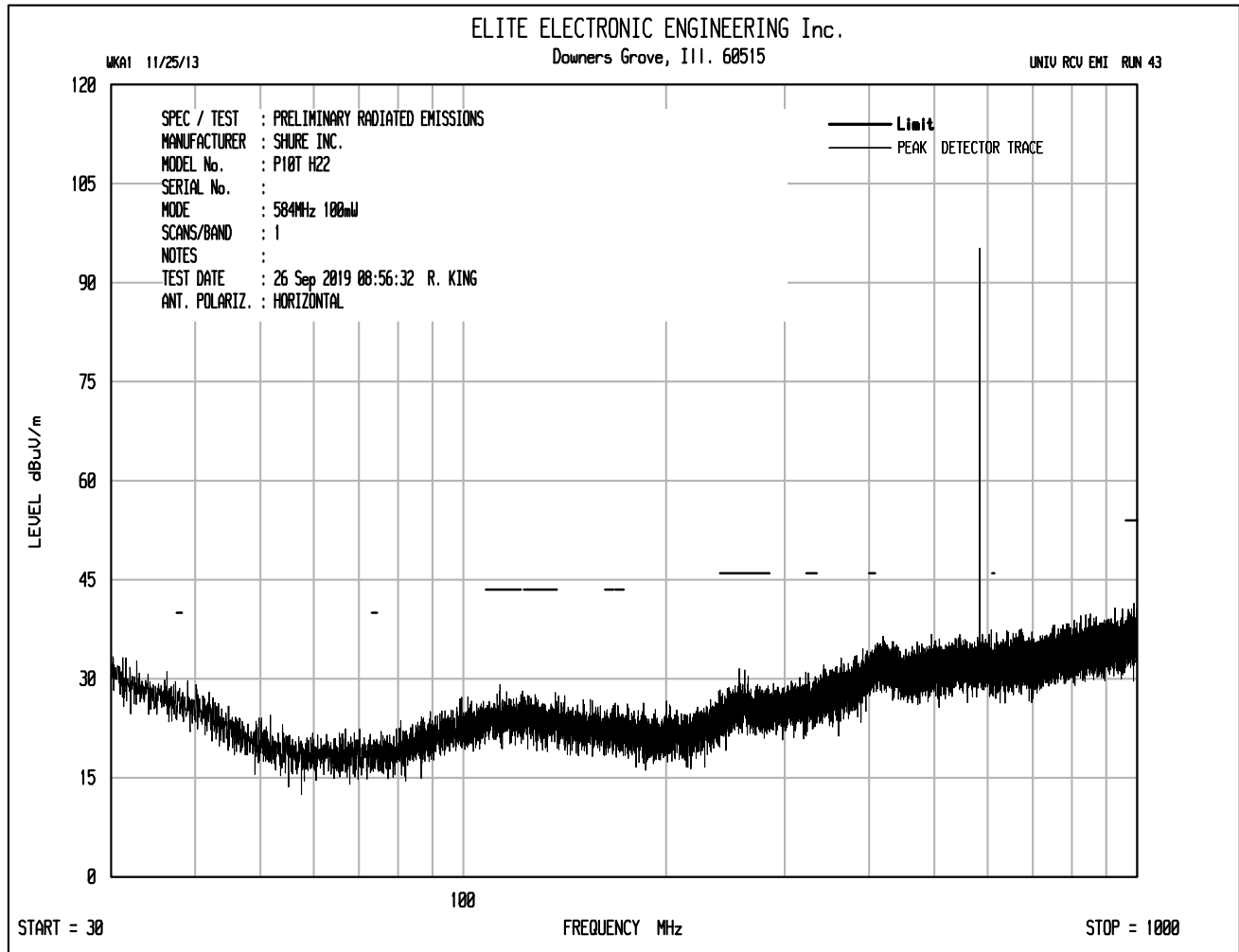


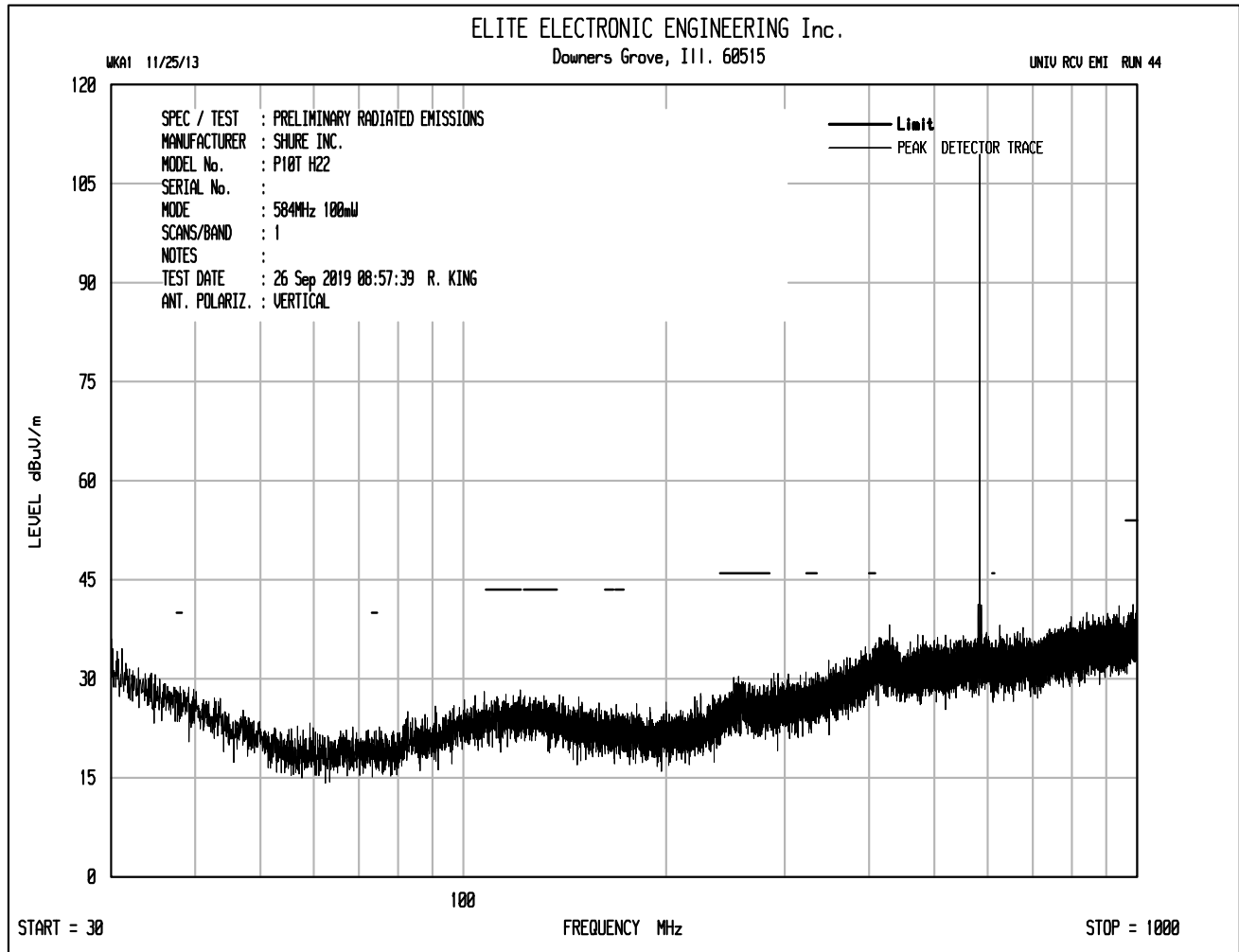


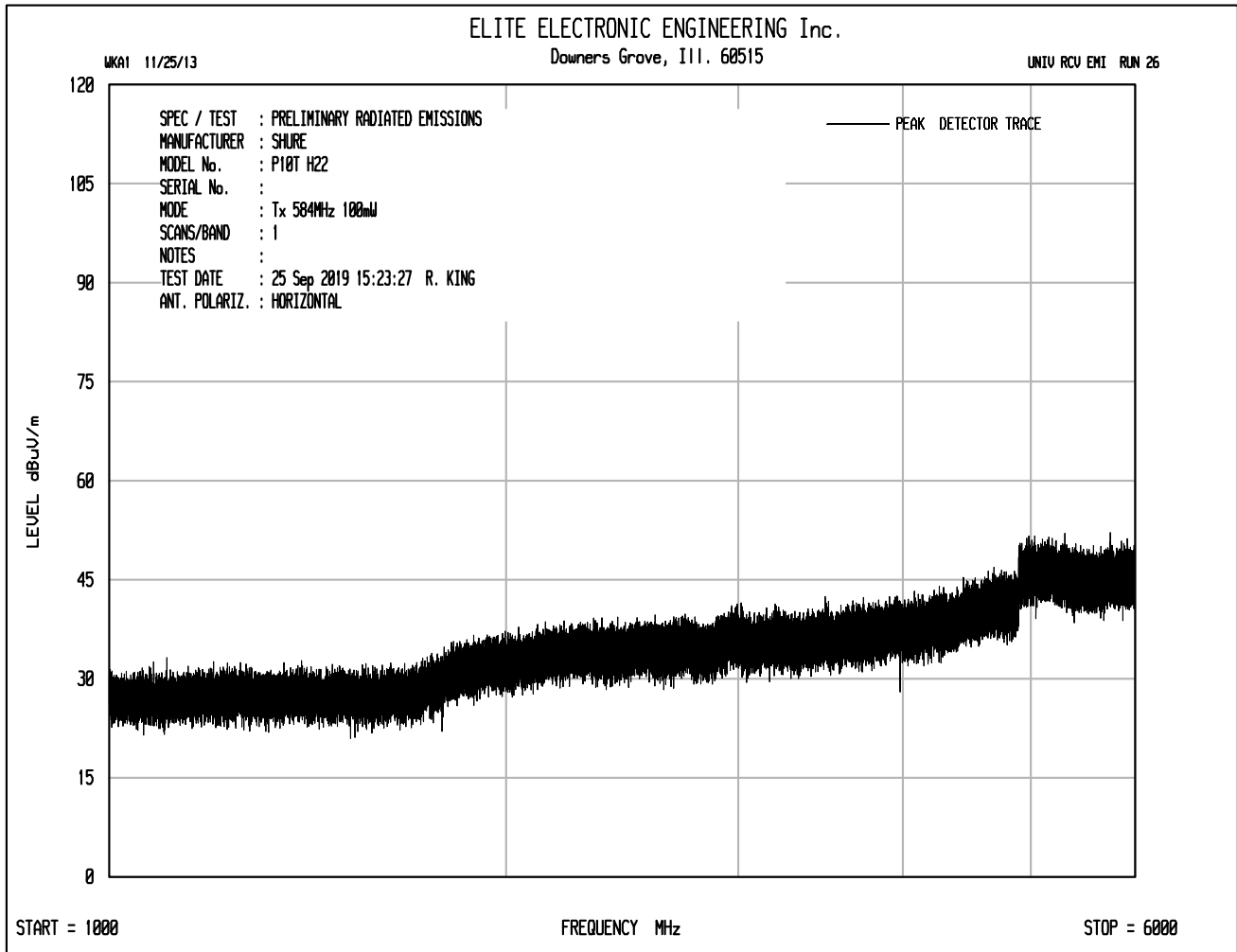


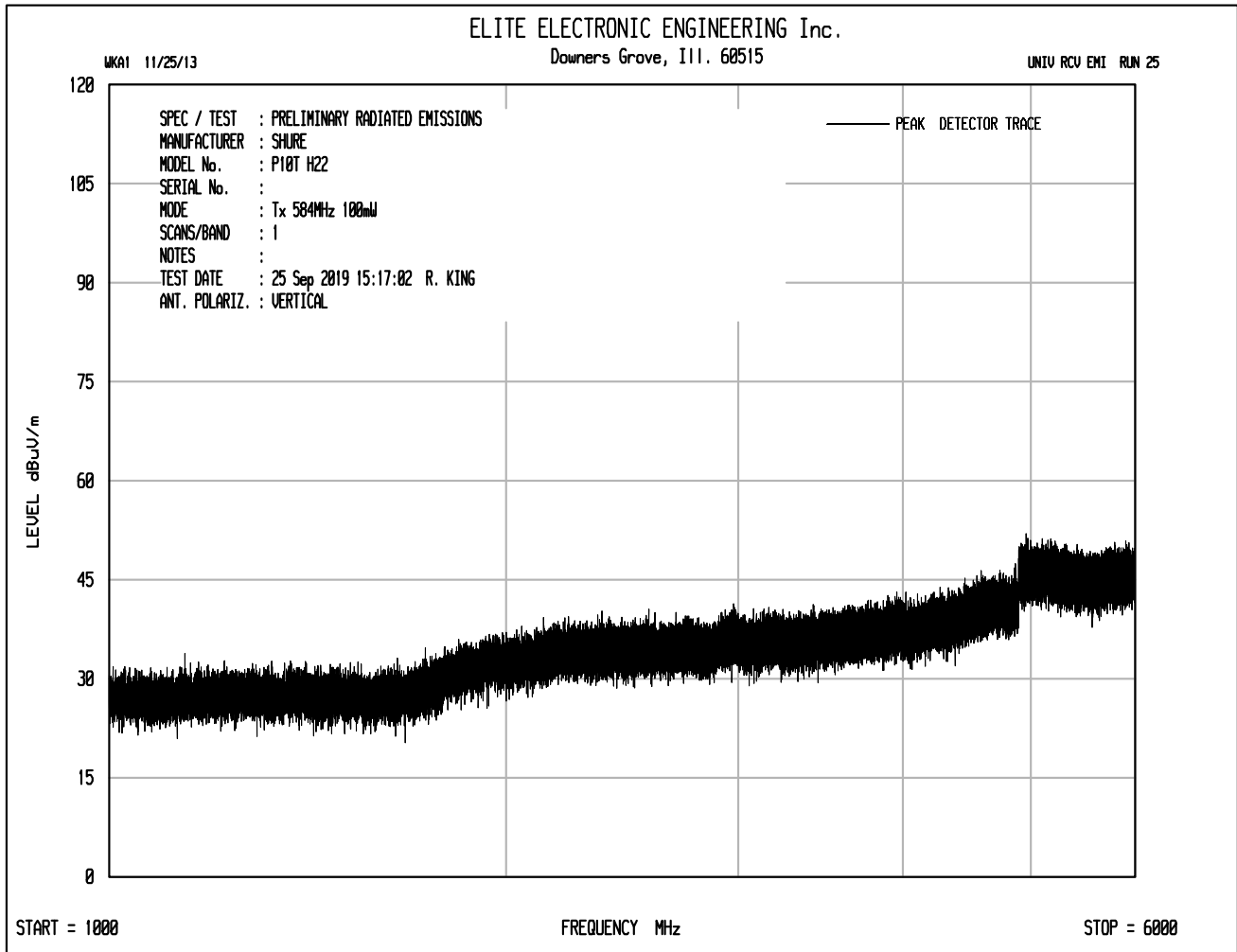














MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 15.236(g) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 518MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1036.00	H	0.0	Ambient	-68.4	2.7	2.2	-67.9	-30.0	-37.9
1036.00	V	-0.3	Ambient	-67.0	2.7	2.2	-66.5	-30.0	-36.5
1554.00	H	-0.5	Ambient	-69.2	5.7	2.7	-66.2	-30.0	-36.2
1554.00	V	-0.5	Ambient	-66.3	5.7	2.7	-63.3	-30.0	-33.3
2072.00	H	-0.1	Ambient	-65.7	4.6	3.1	-64.2	-30.0	-34.2
2072.00	V	-0.2	Ambient	-64.1	4.6	3.1	-62.6	-30.0	-32.6
2590.00	H	0.7	Ambient	-65.3	6.1	3.6	-62.8	-30.0	-32.8
2590.00	V	0.5	Ambient	-63.9	6.1	3.6	-61.4	-30.0	-31.4
3108.00	H	1.2	Ambient	-63.8	7.2	4.0	-60.6	-30.0	-30.6
3108.00	V	1.2	Ambient	-62.8	7.2	4.0	-59.6	-30.0	-29.6
3626.00	H	1.9	Ambient	-63.8	8.2	4.3	-59.9	-30.0	-29.9
3626.00	V	1.9	Ambient	-62.5	8.2	4.3	-58.6	-30.0	-28.6
4144.00	H	2.2	Ambient	-61.5	9.0	4.5	-57.0	-30.0	-27.0
4144.00	V	2.2	Ambient	-61.1	9.0	4.5	-56.6	-30.0	-26.6
4662.00	H	3.4	Ambient	-60.0	9.3	4.8	-55.5	-30.0	-25.5
4662.00	V	3.4	Ambient	-59.6	9.3	4.8	-55.1	-30.0	-25.1
5180.00	H	7.0	Ambient	-56.7	10.1	5.0	-51.6	-30.0	-21.6
5180.00	V	7.1	Ambient	-57.9	10.1	5.0	-52.8	-30.0	-22.8

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By:

Richard E. King

Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 15.236(g) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 551MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1102.00	H	-1.1	Ambient	-68.4	3.3	2.3	-67.4	-30.0	-37.4
1102.00	V	-1.1	Ambient	-67.0	3.3	2.3	-66.0	-30.0	-36.0
1653.00	H	-0.8	Ambient	-69.2	5.4	2.8	-66.6	-30.0	-36.6
1653.00	V	-0.8	Ambient	-66.3	5.4	2.8	-63.7	-30.0	-33.7
2204.00	H	0.4	Ambient	-65.7	5.1	3.3	-63.9	-30.0	-33.9
2204.00	V	0.4	Ambient	-64.1	5.1	3.3	-62.3	-30.0	-32.3
2755.00	H	0.4	Ambient	-65.3	6.5	3.7	-62.5	-30.0	-32.5
2755.00	V	0.4	Ambient	-63.9	6.5	3.7	-61.1	-30.0	-31.1
3306.00	H	1.1	Ambient	-63.8	7.7	4.1	-60.2	-30.0	-30.2
3306.00	V	1.2	Ambient	-62.8	7.7	4.1	-59.2	-30.0	-29.2
3857.00	H	1.3	Ambient	-63.8	8.6	4.4	-59.6	-30.0	-29.6
3857.00	V	1.4	Ambient	-62.5	8.6	4.4	-58.3	-30.0	-28.3
4408.00	H	2.1	Ambient	-61.5	9.1	4.7	-57.1	-30.0	-27.1
4408.00	V	2.1	Ambient	-61.1	9.1	4.7	-56.7	-30.0	-26.7
4959.00	H	7.2	Ambient	-60.0	10.0	4.9	-54.9	-30.0	-24.9
4959.00	V	7.3	Ambient	-59.6	10.0	4.9	-54.5	-30.0	-24.5
5510.00	H	6.4	Ambient	-56.7	10.4	5.2	-51.5	-30.0	-21.5
5510.00	V	6.4	Ambient	-57.9	10.4	5.2	-52.7	-30.0	-22.7

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By:

Richard E. King

Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 15.236(g) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 584MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1168.00	H	-1.0	Ambient	-68.4	3.2	2.4	-67.6	-30.0	-37.6
1168.00	V	-1.1	Ambient	-67.0	3.2	2.4	-66.2	-30.0	-36.2
1752.00	H	-0.8	Ambient	-69.2	4.9	2.9	-67.2	-30.0	-37.2
1752.00	V	-0.4	Ambient	-66.3	4.9	2.9	-64.3	-30.0	-34.3
2336.00	H	0.7	Ambient	-65.7	5.6	3.4	-63.5	-30.0	-33.5
2336.00	V	0.4	Ambient	-64.1	5.6	3.4	-61.9	-30.0	-31.9
2920.00	H	1.2	Ambient	-65.3	6.9	3.8	-62.3	-30.0	-32.3
2920.00	V	1.6	Ambient	-63.9	6.9	3.8	-60.9	-30.0	-30.9
3504.00	H	1.6	Ambient	-63.8	8.1	4.2	-59.9	-30.0	-29.9
3504.00	V	1.6	Ambient	-62.8	8.1	4.2	-58.9	-30.0	-28.9
4088.00	H	1.6	Ambient	-63.8	8.9	4.5	-59.4	-30.0	-29.4
4088.00	V	1.7	Ambient	-62.5	8.9	4.5	-58.1	-30.0	-28.1
4672.00	H	2.9	Ambient	-61.5	9.3	4.8	-57.0	-30.0	-27.0
4672.00	V	2.9	Ambient	-61.1	9.3	4.8	-56.6	-30.0	-26.6
5256.00	H	6.0	Ambient	-60.0	10.1	5.1	-55.0	-30.0	-25.0
5256.00	V	6.1	Ambient	-59.6	10.1	5.1	-54.6	-30.0	-24.6
5840.00	H	5.7	Ambient	-56.7	10.5	5.4	-51.6	-30.0	-21.6
5840.00	V	5.5	Ambient	-57.9	10.5	5.4	-52.8	-30.0	-22.8

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By:

Richard E. King

Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 518MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1036.00	H	0.0	Ambient	-67.0	2.7	2.2	-66.4	-30.0	-36.4
1036.00	V	-0.3	Ambient	-67.0	2.7	2.2	-66.4	-30.0	-36.4
1554.00	H	-0.5	Ambient	-67.8	5.7	2.7	-64.8	-30.0	-34.8
1554.00	V	-0.5	Ambient	-67.4	5.7	2.7	-64.4	-30.0	-34.4
2072.00	H	-0.1	Ambient	-63.3	4.6	3.1	-61.8	-30.0	-31.8
2072.00	V	-0.2	Ambient	-61.8	4.6	3.1	-60.3	-30.0	-30.3
2590.00	H	0.7	Ambient	-60.9	6.1	3.6	-58.4	-30.0	-28.4
2590.00	V	0.5	Ambient	-61.0	6.1	3.6	-58.5	-30.0	-28.5
3108.00	H	1.2	Ambient	-60.1	7.2	4.0	-56.8	-30.0	-26.8
3108.00	V	1.2	Ambient	-59.8	7.2	4.0	-56.5	-30.0	-26.5
3626.00	H	1.9	Ambient	-59.9	8.2	4.3	-55.9	-30.0	-25.9
3626.00	V	1.9	Ambient	-58.6	8.2	4.3	-54.7	-30.0	-24.7
4144.00	H	2.2	Ambient	-58.0	9.0	4.5	-53.5	-30.0	-23.5
4144.00	V	2.2	Ambient	-57.9	9.0	4.5	-53.4	-30.0	-23.4
4662.00	H	3.4	Ambient	-55.9	9.3	4.8	-51.4	-30.0	-21.4
4662.00	V	3.4	Ambient	-55.8	9.3	4.8	-51.3	-30.0	-21.3
5180.00	H	7.0	Ambient	-51.4	10.1	5.0	-46.3	-30.0	-16.3
5180.00	V	7.1	Ambient	-51.2	10.1	5.0	-46.1	-30.0	-16.1

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 518MHz
UNIT : H22
NOTES : 50 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1036.00	H	-0.5	Ambient	-68.4	2.7	2.2	-67.9	-30.0	-37.9
1036.00	V	-0.5	Ambient	-67.0	2.7	2.2	-66.5	-30.0	-36.5
1554.00	H	-1.2	Ambient	-69.2	5.7	2.7	-66.2	-30.0	-36.2
1554.00	V	-1.2	Ambient	-66.3	5.7	2.7	-63.3	-30.0	-33.3
2072.00	H	-0.2	Ambient	-65.7	4.6	3.1	-64.2	-30.0	-34.2
2072.00	V	0.0	Ambient	-64.1	4.6	3.1	-62.6	-30.0	-32.6
2590.00	H	0.7	Ambient	-65.3	6.1	3.6	-62.8	-30.0	-32.8
2590.00	V	0.8	Ambient	-63.9	6.1	3.6	-61.4	-30.0	-31.4
3108.00	H	1.0	Ambient	-63.8	7.2	4.0	-60.6	-30.0	-30.6
3108.00	V	1.4	Ambient	-62.8	7.2	4.0	-59.6	-30.0	-29.6
3626.00	H	1.7	Ambient	-63.8	8.2	4.3	-59.9	-30.0	-29.9
3626.00	V	1.6	Ambient	-62.5	8.2	4.3	-58.6	-30.0	-28.6
4144.00	H	1.7	Ambient	-61.5	9.0	4.5	-57.0	-30.0	-27.0
4144.00	V	1.8	Ambient	-61.1	9.0	4.5	-56.6	-30.0	-26.6
4662.00	H	3.1	Ambient	-60.0	9.3	4.8	-55.5	-30.0	-25.5
4662.00	V	2.7	Ambient	-59.6	9.3	4.8	-55.1	-30.0	-25.1
5180.00	H	6.5	Ambient	-56.7	10.1	5.0	-51.6	-30.0	-21.6
5180.00	V	6.9	Ambient	-57.9	10.1	5.0	-52.8	-30.0	-22.8

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 518MHz
UNIT : H22
NOTES : 100 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1036.00	H	-0.5	Ambient	-67.6	2.7	2.2	-67.0	-30.0	-37.0
1036.00	V	-0.6	Ambient	-67.2	2.7	2.2	-66.6	-30.0	-36.6
1554.00	H	-0.8	Ambient	-68.1	5.7	2.7	-65.1	-30.0	-35.1
1554.00	V	-0.9	Ambient	-67.8	5.7	2.7	-64.8	-30.0	-34.8
2072.00	H	0.0	Ambient	-63.2	4.6	3.1	-61.7	-30.0	-31.7
2072.00	V	0.5	Ambient	-61.1	4.6	3.1	-59.6	-30.0	-29.6
2590.00	H	1.0	Ambient	-60.6	6.1	3.6	-58.1	-30.0	-28.1
2590.00	V	0.8	Ambient	-60.7	6.1	3.6	-58.2	-30.0	-28.2
3108.00	H	1.2	Ambient	-60.0	7.2	4.0	-56.8	-30.0	-26.8
3108.00	V	1.5	Ambient	-59.5	7.2	4.0	-56.3	-30.0	-26.3
3626.00	H	1.7	Ambient	-60.1	8.2	4.3	-56.2	-30.0	-26.2
3626.00	V	1.6	Ambient	-59.0	8.2	4.3	-55.0	-30.0	-25.0
4144.00	H	1.7	Ambient	-58.5	9.0	4.5	-54.0	-30.0	-24.0
4144.00	V	1.9	Ambient	-58.2	9.0	4.5	-53.7	-30.0	-23.7
4662.00	H	3.1	Ambient	-56.2	9.3	4.8	-51.7	-30.0	-21.7
4662.00	V	2.7	Ambient	-56.5	9.3	4.8	-52.0	-30.0	-22.0
5180.00	H	6.5	Ambient	-51.8	10.1	5.0	-46.8	-30.0	-16.8
5180.00	V	6.6	Ambient	-51.7	10.1	5.0	-46.6	-30.0	-16.6

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 551MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1102.00	H	-1.1	Ambient	-67.4	3.3	2.3	-66.3	-30.0	-36.3
1102.00	V	-1.1	Ambient	-66.7	3.3	2.3	-65.7	-30.0	-35.7
1653.00	H	-0.8	Ambient	-67.8	5.4	2.8	-65.2	-30.0	-35.2
1653.00	V	-0.8	Ambient	-66.8	5.4	2.8	-64.3	-30.0	-34.3
2204.00	H	0.4	Ambient	-62.2	5.1	3.3	-60.3	-30.0	-30.3
2204.00	V	0.4	Ambient	-61.8	5.1	3.3	-60.0	-30.0	-30.0
2755.00	H	0.4	Ambient	-61.0	6.5	3.7	-58.2	-30.0	-28.2
2755.00	V	0.4	Ambient	-60.7	6.5	3.7	-57.9	-30.0	-27.9
3306.00	H	1.1	Ambient	-60.0	7.7	4.1	-56.4	-30.0	-26.4
3306.00	V	1.2	Ambient	-59.9	7.7	4.1	-56.3	-30.0	-26.3
3857.00	H	1.3	Ambient	-61.7	8.6	4.4	-57.4	-30.0	-27.4
3857.00	V	1.4	Ambient	-59.3	8.6	4.4	-55.0	-30.0	-25.0
4408.00	H	2.1	Ambient	-57.7	9.1	4.7	-53.2	-30.0	-23.2
4408.00	V	2.1	Ambient	-57.7	9.1	4.7	-53.3	-30.0	-23.3
4959.00	H	7.2	Ambient	-51.4	10.0	4.9	-46.3	-30.0	-16.3
4959.00	V	7.3	Ambient	-51.0	10.0	4.9	-45.9	-30.0	-15.9
5510.00	H	6.4	Ambient	-51.4	10.4	5.2	-46.3	-30.0	-16.3
5510.00	V	6.4	Ambient	-51.4	10.4	5.2	-46.3	-30.0	-16.3

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 551MHz
UNIT : H22
NOTES : 50 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1102.00	H	-1.1	Ambient	-67.4	3.3	2.3	-66.4	-30.0	-36.4
1102.00	V	-1.1	Ambient	-66.8	3.3	2.3	-65.7	-30.0	-35.7
1653.00	H	-0.8	Ambient	-67.8	5.4	2.8	-65.2	-30.0	-35.2
1653.00	V	-0.8	Ambient	-66.8	5.4	2.8	-64.2	-30.0	-34.2
2204.00	H	0.5	Ambient	-62.1	5.1	3.3	-60.3	-30.0	-30.3
2204.00	V	0.4	Ambient	-61.9	5.1	3.3	-60.0	-30.0	-30.0
2755.00	H	0.9	Ambient	-60.4	6.5	3.7	-57.7	-30.0	-27.7
2755.00	V	0.9	Ambient	-60.2	6.5	3.7	-57.4	-30.0	-27.4
3306.00	H	1.1	Ambient	-59.9	7.7	4.1	-56.4	-30.0	-26.4
3306.00	V	1.1	Ambient	-60.0	7.7	4.1	-56.4	-30.0	-26.4
3857.00	H	1.4	Ambient	-61.6	8.6	4.4	-57.3	-30.0	-27.3
3857.00	V	1.4	Ambient	-59.2	8.6	4.4	-55.0	-30.0	-25.0
4408.00	H	1.4	Ambient	-58.3	9.1	4.7	-53.9	-30.0	-23.9
4408.00	V	1.3	Ambient	-58.5	9.1	4.7	-54.1	-30.0	-24.1
4959.00	H	7.3	Ambient	-51.3	10.0	4.9	-46.2	-30.0	-16.2
4959.00	V	7.3	Ambient	-51.1	10.0	4.9	-46.0	-30.0	-16.0
5510.00	H	6.4	Ambient	-51.4	10.4	5.2	-46.2	-30.0	-16.2
5510.00	V	6.4	Ambient	-51.4	10.4	5.2	-46.3	-30.0	-16.3

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 551MHz
UNIT : H22
NOTES : 100 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1102.00	H	-1.1	Ambient	-67.4	3.3	2.3	-66.4	-30.0	-36.4
1102.00	V	-1.0	Ambient	-66.7	3.3	2.3	-65.6	-30.0	-35.6
1653.00	H	-0.7	Ambient	-67.7	5.4	2.8	-65.1	-30.0	-35.1
1653.00	V	-0.6	Ambient	-66.6	5.4	2.8	-64.0	-30.0	-34.0
2204.00	H	0.4	Ambient	-62.2	5.1	3.3	-60.3	-30.0	-30.3
2204.00	V	0.4	Ambient	-61.8	5.1	3.3	-60.0	-30.0	-30.0
2755.00	H	0.9	Ambient	-60.4	6.5	3.7	-57.7	-30.0	-27.7
2755.00	V	1.0	Ambient	-60.2	6.5	3.7	-57.4	-30.0	-27.4
3306.00	H	1.2	Ambient	-59.9	7.7	4.1	-56.3	-30.0	-26.3
3306.00	V	1.2	Ambient	-59.9	7.7	4.1	-56.4	-30.0	-26.4
3857.00	H	1.4	Ambient	-61.6	8.6	4.4	-57.3	-30.0	-27.3
3857.00	V	1.5	Ambient	-59.2	8.6	4.4	-55.0	-30.0	-25.0
4408.00	H	2.1	Ambient	-57.6	9.1	4.7	-53.2	-30.0	-23.2
4408.00	V	2.1	Ambient	-57.7	9.1	4.7	-53.3	-30.0	-23.3
4959.00	H	2.1	Ambient	-56.5	10.0	4.9	-51.4	-30.0	-21.4
4959.00	V	2.1	Ambient	-56.2	10.0	4.9	-51.1	-30.0	-21.1
5510.00	H	6.4	Ambient	-51.4	10.4	5.2	-46.2	-30.0	-16.2
5510.00	V	6.4	Ambient	-51.4	10.4	5.2	-46.2	-30.0	-16.2

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 584MHz
UNIT : H22
NOTES : 10 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1168.00	H	-1.0	Ambient	-66.7	3.2	2.4	-65.9	-30.0	-35.9
1168.00	V	-1.1	Ambient	-65.8	3.2	2.4	-64.9	-30.0	-34.9
1752.00	H	-0.8	Ambient	-66.3	4.9	2.9	-64.3	-30.0	-34.3
1752.00	V	-0.4	Ambient	-64.1	4.9	2.9	-62.1	-30.0	-32.1
2336.00	H	0.7	Ambient	-61.5	5.6	3.4	-59.2	-30.0	-29.2
2336.00	V	0.4	Ambient	-61.5	5.6	3.4	-59.3	-30.0	-29.3
2920.00	H	1.2	Ambient	-60.4	6.9	3.8	-57.4	-30.0	-27.4
2920.00	V	1.6	Ambient	-59.8	6.9	3.8	-56.7	-30.0	-26.7
3504.00	H	1.6	Ambient	-59.8	8.1	4.2	-55.9	-30.0	-25.9
3504.00	V	1.6	Ambient	-59.5	8.1	4.2	-55.6	-30.0	-25.6
4088.00	H	1.6	Ambient	-58.6	8.9	4.5	-54.2	-30.0	-24.2
4088.00	V	1.7	Ambient	-58.4	8.9	4.5	-54.0	-30.0	-24.0
4672.00	H	2.9	Ambient	-56.4	9.3	4.8	-51.9	-30.0	-21.9
4672.00	V	2.9	Ambient	-56.3	9.3	4.8	-51.8	-30.0	-21.8
5256.00	H	6.0	Ambient	-52.3	10.1	5.1	-47.3	-30.0	-17.3
5256.00	V	6.1	Ambient	-52.2	10.1	5.1	-47.2	-30.0	-17.2
5840.00	H	5.7	Ambient	-52.5	10.5	5.4	-47.3	-30.0	-17.3
5840.00	V	5.5	Ambient	-52.6	10.5	5.4	-47.5	-30.0	-17.5

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 584MHz
UNIT : H22
NOTES : 50 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1168.00	H	-1.0	Ambient	-66.7	3.2	2.4	-65.9	-30.0	-35.9
1168.00	V	-1.0	Ambient	-65.8	3.2	2.4	-64.9	-30.0	-34.9
1752.00	H	-0.6	Ambient	-66.1	4.9	2.9	-64.1	-30.0	-34.1
1752.00	V	-0.2	Ambient	-63.8	4.9	2.9	-61.8	-30.0	-31.8
2336.00	H	0.7	Ambient	-61.5	5.6	3.4	-59.2	-30.0	-29.2
2336.00	V	0.4	Ambient	-61.5	5.6	3.4	-59.3	-30.0	-29.3
2920.00	H	1.3	Ambient	-60.3	6.9	3.8	-57.3	-30.0	-27.3
2920.00	V	1.7	Ambient	-59.7	6.9	3.8	-56.6	-30.0	-26.6
3504.00	H	1.6	Ambient	-59.8	8.1	4.2	-55.9	-30.0	-25.9
3504.00	V	1.7	Ambient	-59.3	8.1	4.2	-55.5	-30.0	-25.5
4088.00	H	1.6	Ambient	-58.6	8.9	4.5	-54.2	-30.0	-24.2
4088.00	V	1.9	Ambient	-58.2	8.9	4.5	-53.8	-30.0	-23.8
4672.00	H	2.7	Ambient	-56.6	9.3	4.8	-52.0	-30.0	-22.0
4672.00	V	3.1	Ambient	-56.1	9.3	4.8	-51.5	-30.0	-21.5
5256.00	H	6.4	Ambient	-51.9	10.1	5.1	-46.9	-30.0	-16.9
5256.00	V	6.1	Ambient	-52.2	10.1	5.1	-47.2	-30.0	-17.2
5840.00	H	5.5	Ambient	-52.7	10.5	5.4	-47.5	-30.0	-17.5
5840.00	V	6.0	Ambient	-52.2	10.5	5.4	-47.0	-30.0	-17.0

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King



MANUFACTURER : Shure Incorporated
MODEL NO. : P10T H22
SPECIFICATION : FCC 74.861(e)(7) Spurious Radiated Emissions
DATE : September 24-26, 2019
MODE : Transmit at 584MHz
UNIT : H22
NOTES : 100 mW nominal power

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Limit dBm	Margin dB
1168.00	H	-0.5	Ambient	-66.1	3.2	2.4	-65.3	-30.0	-35.3
1168.00	V	-0.5	Ambient	-65.2	3.2	2.4	-64.4	-30.0	-34.4
1752.00	H	0.0	Ambient	-65.4	4.9	2.9	-63.4	-30.0	-33.4
1752.00	V	0.1	Ambient	-63.6	4.9	2.9	-61.6	-30.0	-31.6
2336.00	H	1.0	Ambient	-61.2	5.6	3.4	-59.0	-30.0	-29.0
2336.00	V	1.0	Ambient	-60.9	5.6	3.4	-58.7	-30.0	-28.7
2920.00	H	1.9	Ambient	-59.7	6.9	3.8	-56.7	-30.0	-26.7
2920.00	V	1.8	Ambient	-59.6	6.9	3.8	-56.6	-30.0	-26.6
3504.00	H	1.9	Ambient	-59.4	8.1	4.2	-55.6	-30.0	-25.6
3504.00	V	1.9	Ambient	-59.1	8.1	4.2	-55.2	-30.0	-25.2
4088.00	H	2.2	Ambient	-58.0	8.9	4.5	-53.6	-30.0	-23.6
4088.00	V	2.1	Ambient	-58.0	8.9	4.5	-53.6	-30.0	-23.6
4672.00	H	3.2	Ambient	-56.1	9.3	4.8	-51.6	-30.0	-21.6
4672.00	V	3.2	Ambient	-55.9	9.3	4.8	-51.4	-30.0	-21.4
5256.00	H	6.5	Ambient	-51.8	10.1	5.1	-46.8	-30.0	-16.8
5256.00	V	6.5	Ambient	-51.8	10.1	5.1	-46.8	-30.0	-16.8
5840.00	H	6.0	Ambient	-52.1	10.5	5.4	-47.0	-30.0	-17.0
5840.00	V	6.0	Ambient	-52.1	10.5	5.4	-47.0	-30.0	-17.0

ERP (dBm) = Matched Sig. Gen. Reading (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: *Richard E. King*
Richard E. King